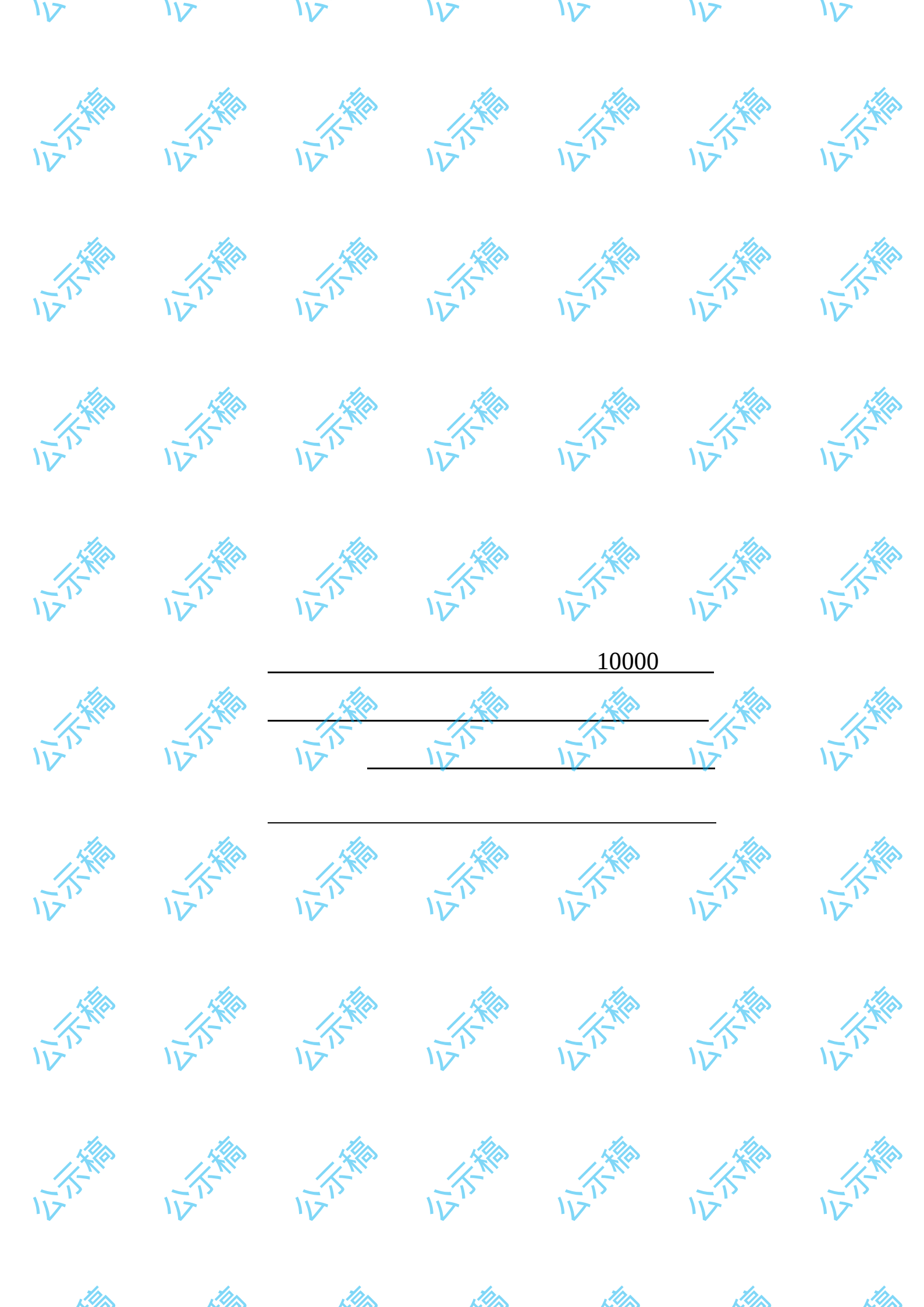




10000

	10000		
	2310-440224-04-01-840317		
	XZO-2		
	<u>113</u>	<u>53</u>	<u>21.452</u>
	C3061		30
			306
	□		
/		/	2310-440224-04-01-840317
	4000		100
%	2.5		14
		m ²	32251.97
	2015		
	[2016]36		

2015 11



1-1

	1 2024 7 2022 2010 [2010] 122 2310-440224-04-01-840317
	2 XZO-2 113 ° 53'21.452 " 24 ° 59'5.543 " 2010-2020 2014-2030

	
	1-2
	323
	106
	4.5
	9
	323
	8
	3 “ ”
	3.1 “ ”
	2020 71
	“1+3+N” “1”
	“3” “ ” “N” 1912
	471 “ ”

“ ”

35

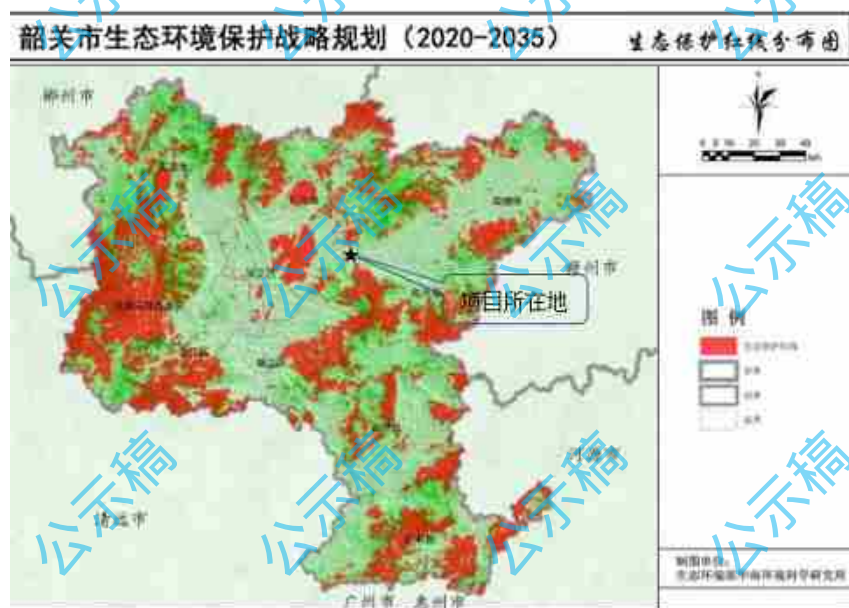
2

4	2	88		
	“	”		4
		0	17	
	ZH44022420003			
	3			
	YS4402243110001			
	YS4402243210012			
5				
	YS4402242310001			
		6		
	1-1			
	ZH44022420003			

		1-1.	/	1-1.	
		1-2.	/	1-2.	
		1-3.	/	1-3.	
		1-4.	/		
		2-1.	/	2-1.	
		2-2.	/	2-2.	
		2-3.	/	2-3.	
		3-1.	/	3-1.	
		3-2.	/	3-2.	
		GB 25466-2010		3-3.	
		3-3.	/	3-4.	
		3-4.	/		

		4-1.	/		4-1.
	YS44022 4311000 1				
	YS44022 4321001 2				

	YS44022 4231000 1		
	1. 2.	1. 2.	
“ ”			
3.3			
XZO-2			
10km			
2020-2035			



1-3

3.4

1.

GB3095-2012

2.

“ ”

GB3838-2002

GB18918-2002 B

DB44/26-2001

3.

GB3096-2008 3

GB12348-2008 3

3.5

4

 $\angle$

“

”

 $\succ$

2021 10

1-2

2021 10

“

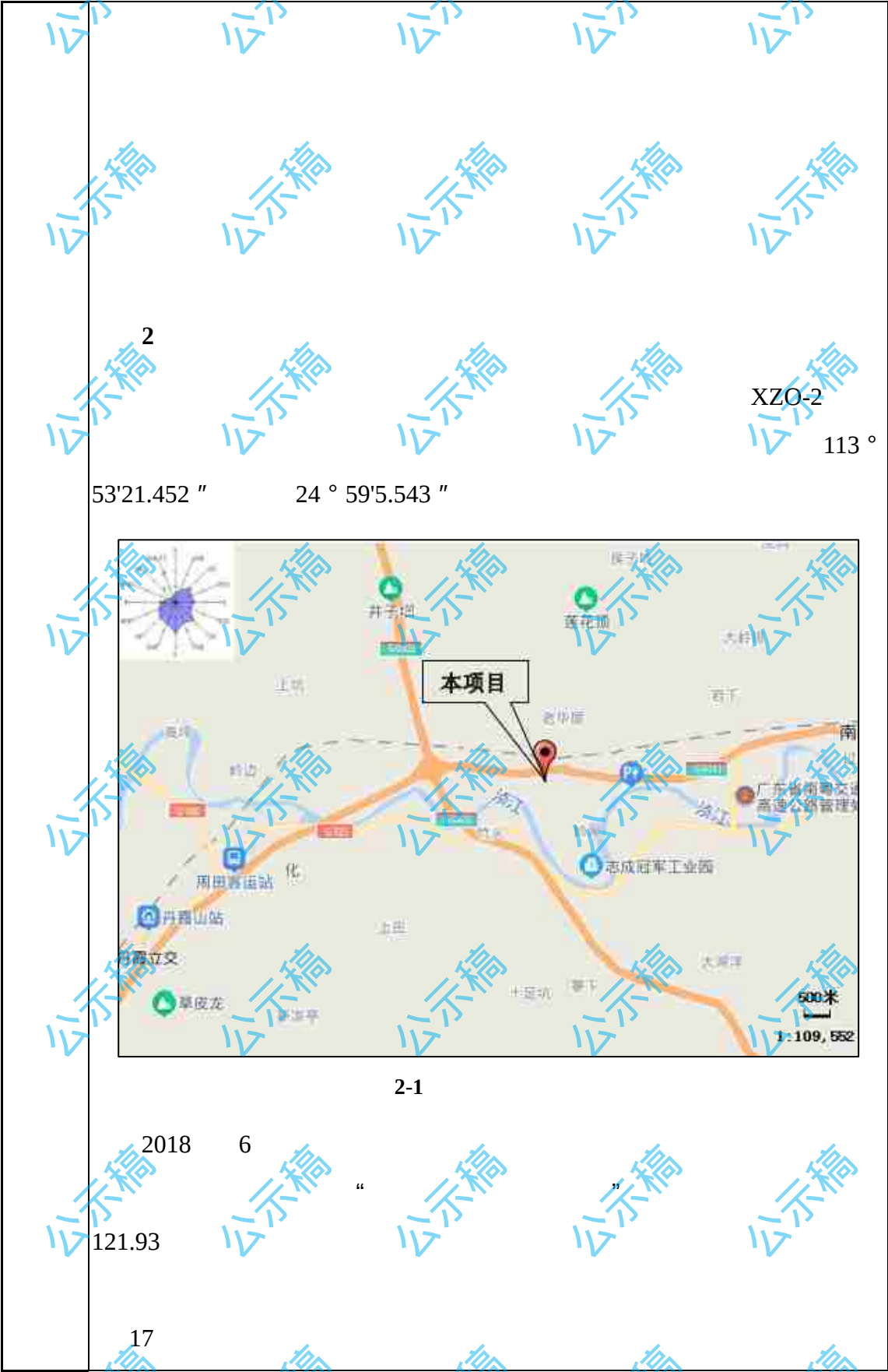
"

66	99		
66			
99			
.....			
66	99	66	
	35 /		
		99	
66		99	
66			

		“ ”	
	“ “ ”	3	
	7	2021	[2021]461
	1	“	“
	2	“ ”	“
	8	“ ”	
		2021 45	“ ”

	“ ”
	“ ”
	“ ”
	2021 368
“ ”	“ ”
8	“ ” “ ”
1	“ ”
“ ”	“ ”
2022 1363	2022 >
	2021 45
	“ ”
	2021 368
“ ”	“ ”
“ ”	“ ”
“ ”	“ ”

	1
	10
40GWh	AGM
/	60
	160 KVA
	650
	4000
	XZO-2
	10000
“	”
	10000
	2021
16	“
	30 58
	306 ”
	“ ”



2010 339 2015

463.91

32251.97 m²

8.58%

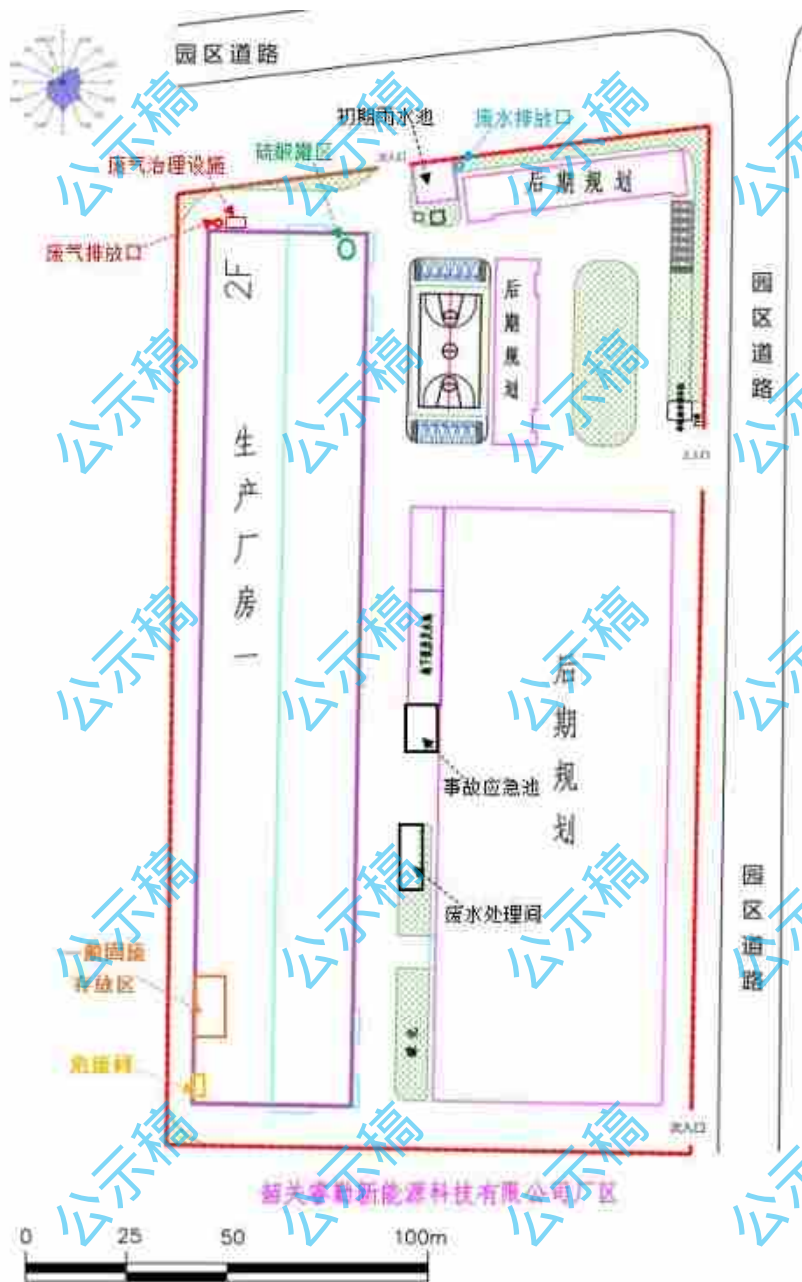
9200m²

	3.1		
	2-1		
		8720.26m ² 2F 17.2m 17440.52m ² 4	
			DW001
		1 90m ² 180m ³	
		1 100m ² 240m ³	
		1 224m ²	
		2	
		1F 30m ²	
		20m DA001	
		90m ² +	
			10m ²

3.2

3

2-3



2-3

GB50187-2012

GBZ1-2010

3.3

2-2

涉

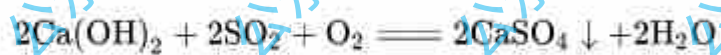
保

3.4

1

2-3

2-3				
		10000	t/a	/155±5g/m ² ·mm
2-4 GB/T 28535-2018				
1				
2		g/m ² ·mm		155.0±7
3		%		≤1
4		KN/m		≥0.42d
5		Ω·dm ²		≤0.00050d
6		%		≥90
7		Um		≤22
8		mm/5min		≥75
9		mm/24h		≥620
10		%		≤3.00
11		ml/g		≤5
12		%		≤0.005
13		%		≤0.003
2				
2-5				
2-5				
1		10200	t/a	1000t
2		198	t/a	37% 18m ³ 18 m ³
3		800	t/a	60t



PAM

$$\text{C}_3\text{H}_5\text{NO}_n$$

PAC

$$\begin{bmatrix} \text{Al} & \text{OH} & 3 \\ \text{OH} & n\text{Cl}_{6-n} \end{bmatrix}_m$$
$$\text{AlCl}_3$$

$$[\text{Al}_2]$$

230-500

120-230

300-350

NaOH

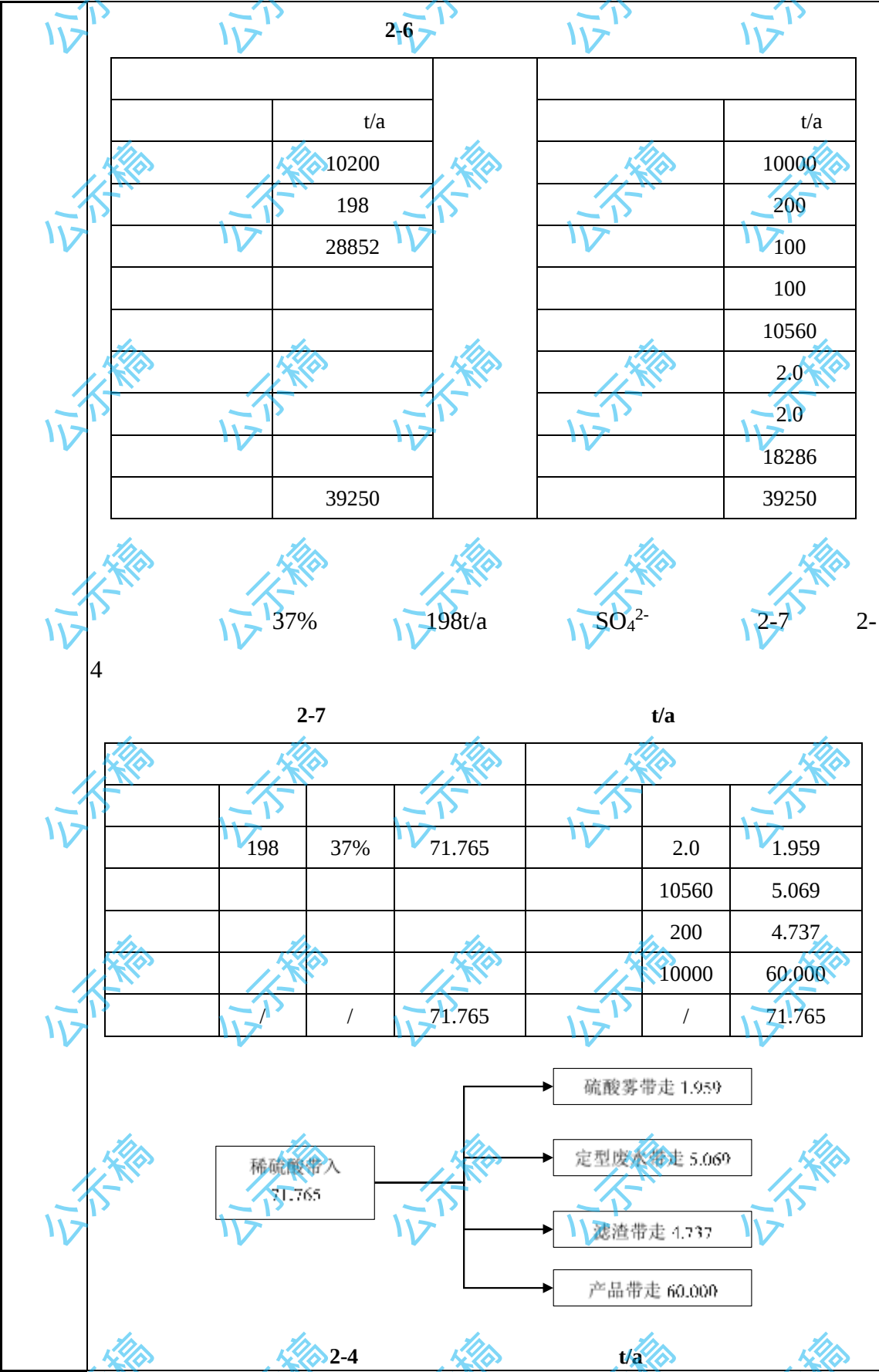
2.130 g/cm³

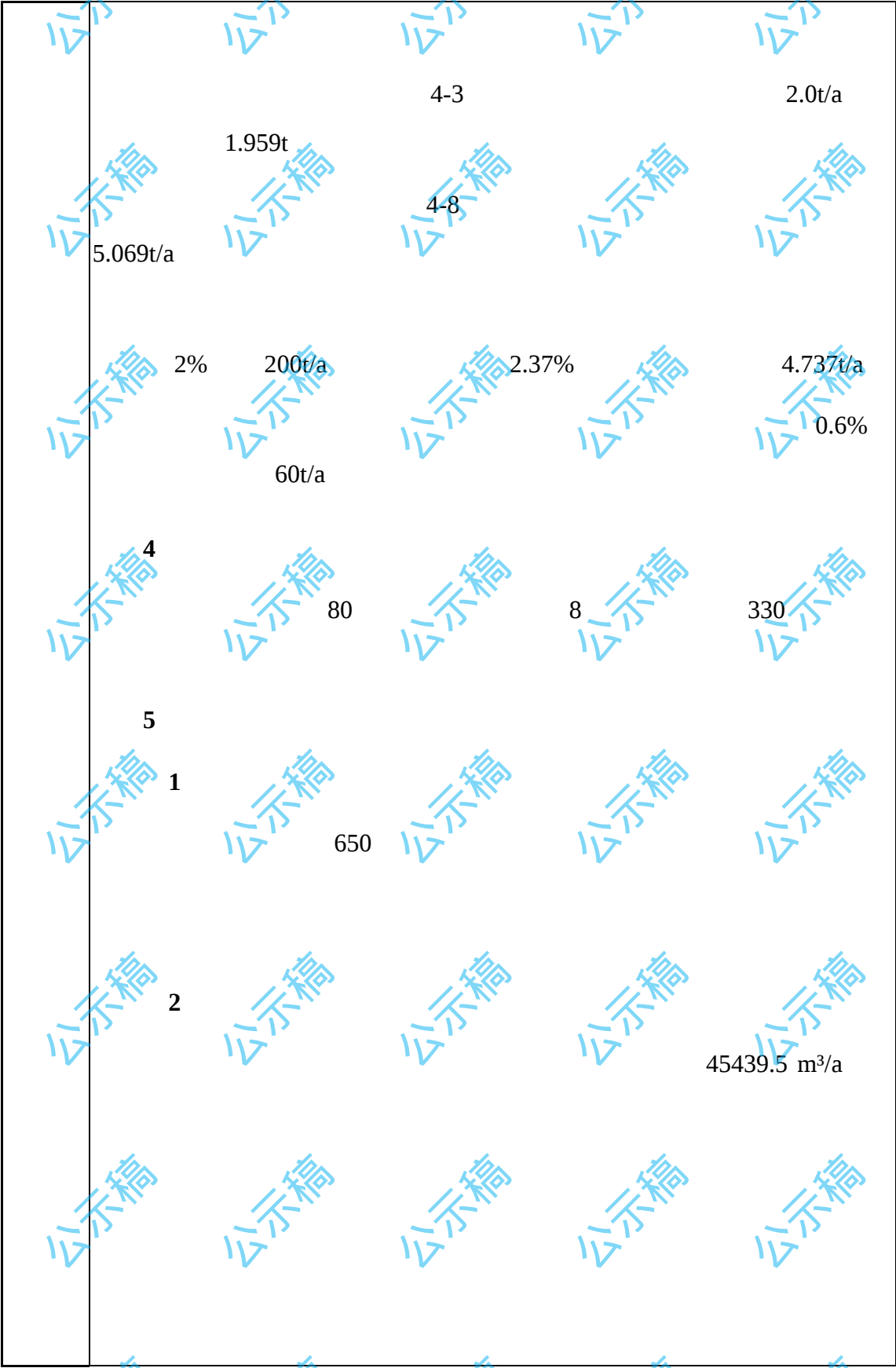
318.4

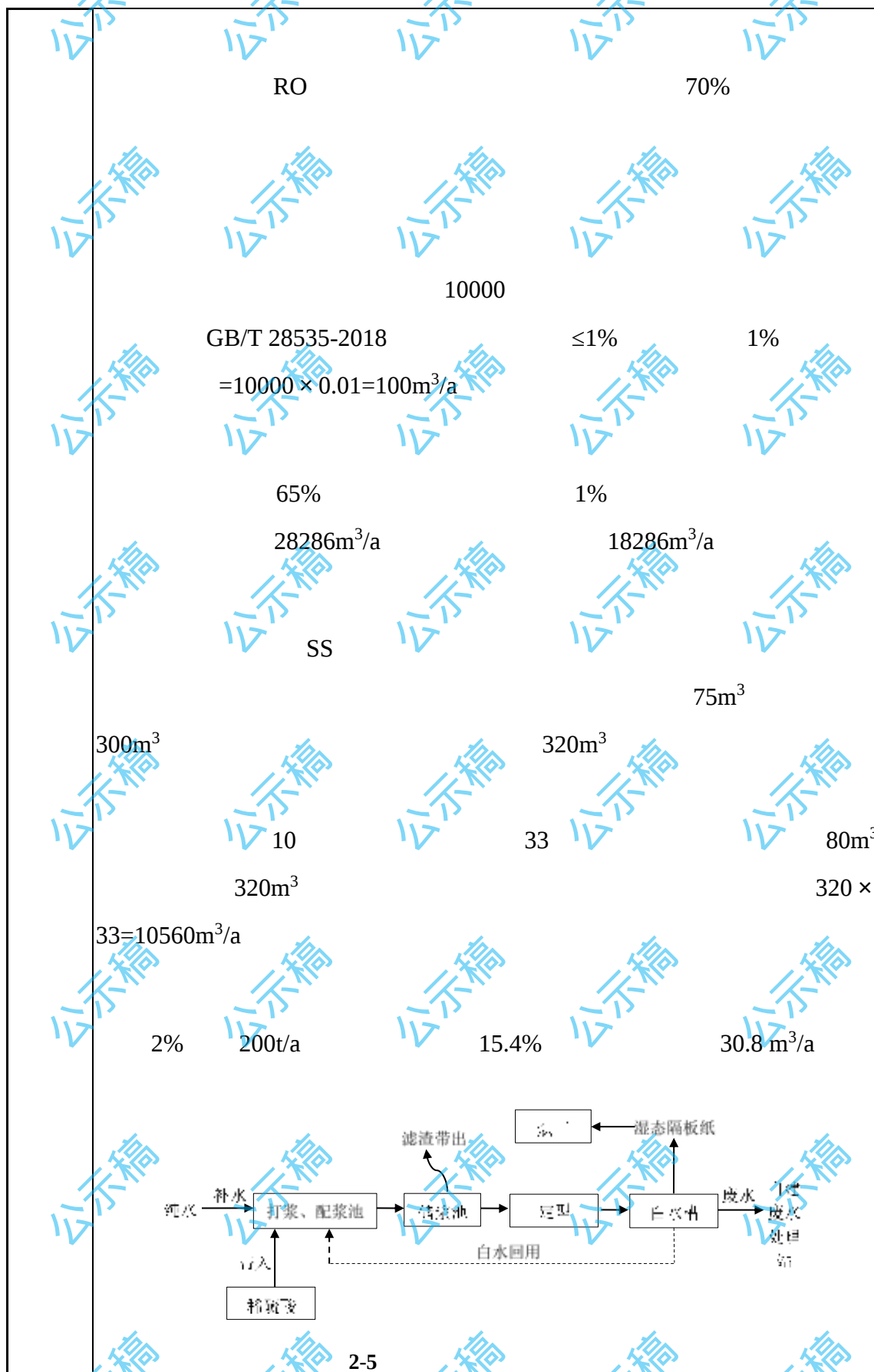
1390

 0.70kg/m^3 0.75kg/m^3

V% 5-15

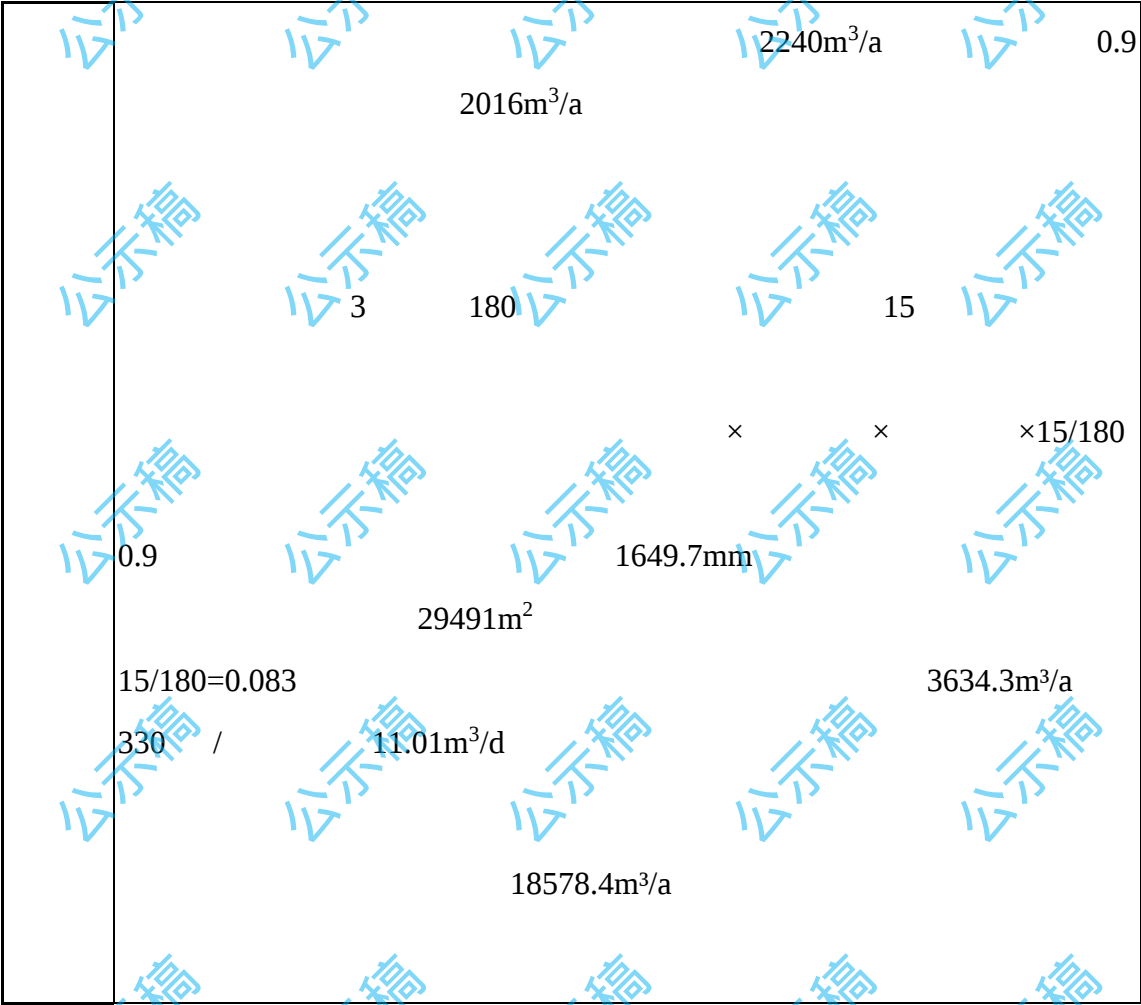


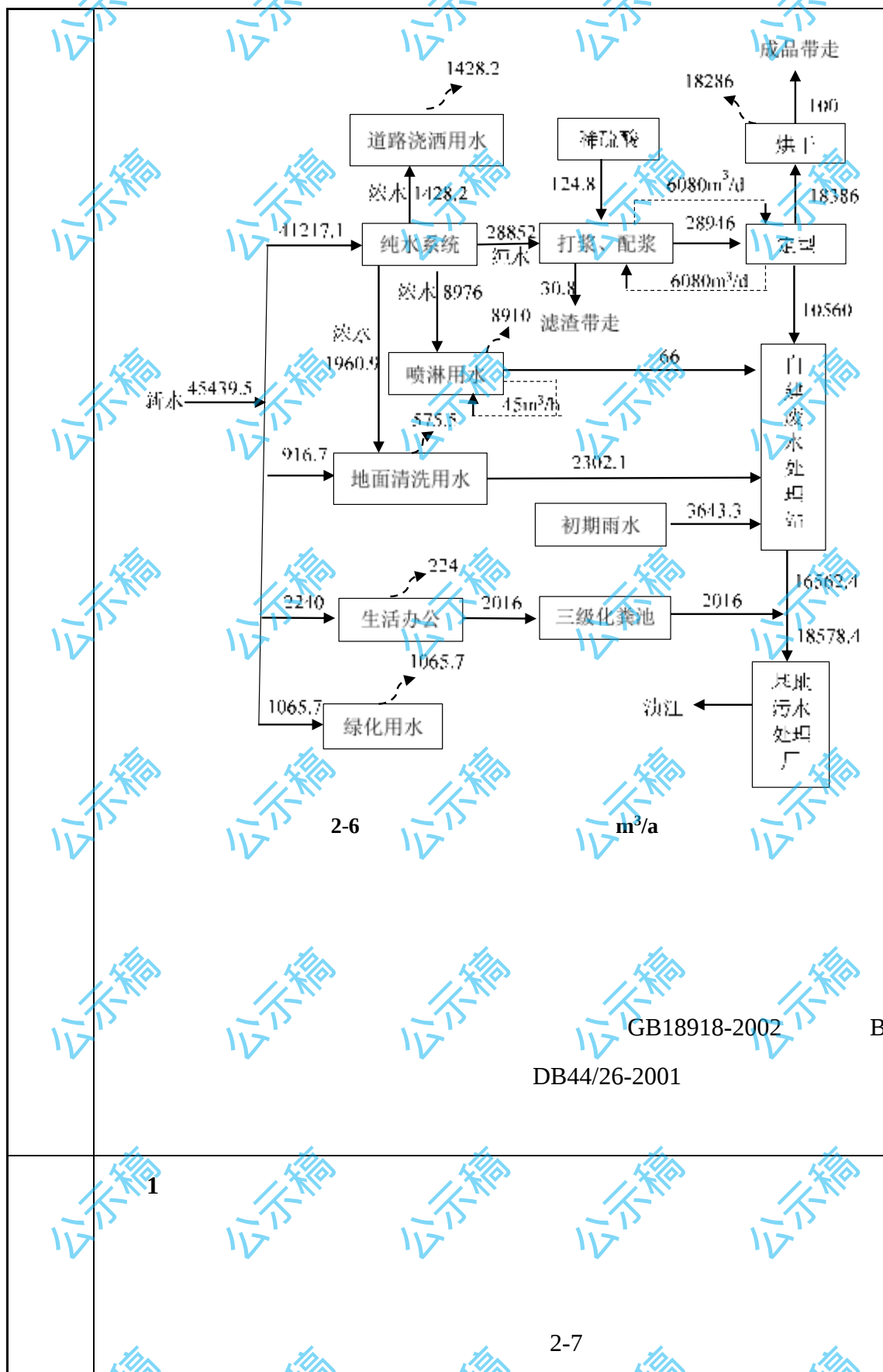


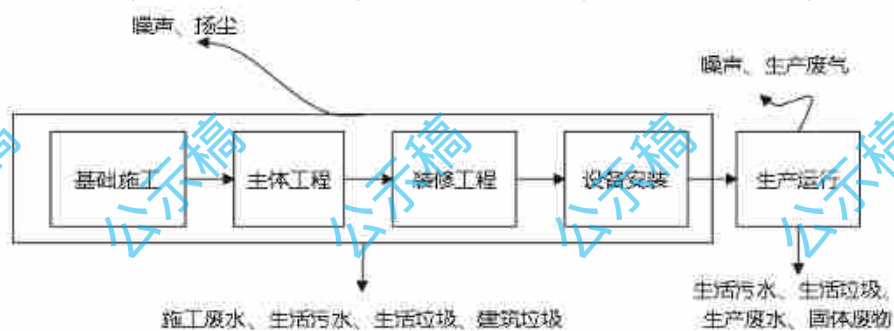


	-	=100+18286+10560+30.8-124.8	37%
198t	124.8t	=28852m ³ /a	41217.1m ³ /a
	124.9m ³ /d	12365.1m ³ /a	
		1/d	
GB50015-2019			
1L/	· m ²	8720.26m ²	
8.72m ³ /	2877.6m ³ /a		
	916.7m ³ /a		
		160	
		2023	90
	2.5%		
45m ³ /h	27m ³ /d	8910m ³ /a	
	6m ³ /	66m ³ /a	30
			8976m ³ /a
		3700m ²	2
	3	DB44/T1461.3-2021	
	2L/m ² .d		172
		4.33m ³ /d	330
1428.2m ³ /a		2760.89m ²	
3		DB44/T1461.3-2021	
2L/m ² .d		172	

	3.23m ³ /d	330	1065.7m ³ /a
		80	
	922	3	DB44/T1461.3-2021
	2240m ³ /a		28m ³ / a
3			45439.5m ³ /a
		70%	41217.1m ³ /a
			12365.1m ³ /a
	2877.6m ³ /a	0.8	2302.1m ³ /a
	6.98m ³ /d		
		10	33
		320 × 33=10560m ³ /a	32m ³ /d
	30	6m ³ /	66m ³ /a







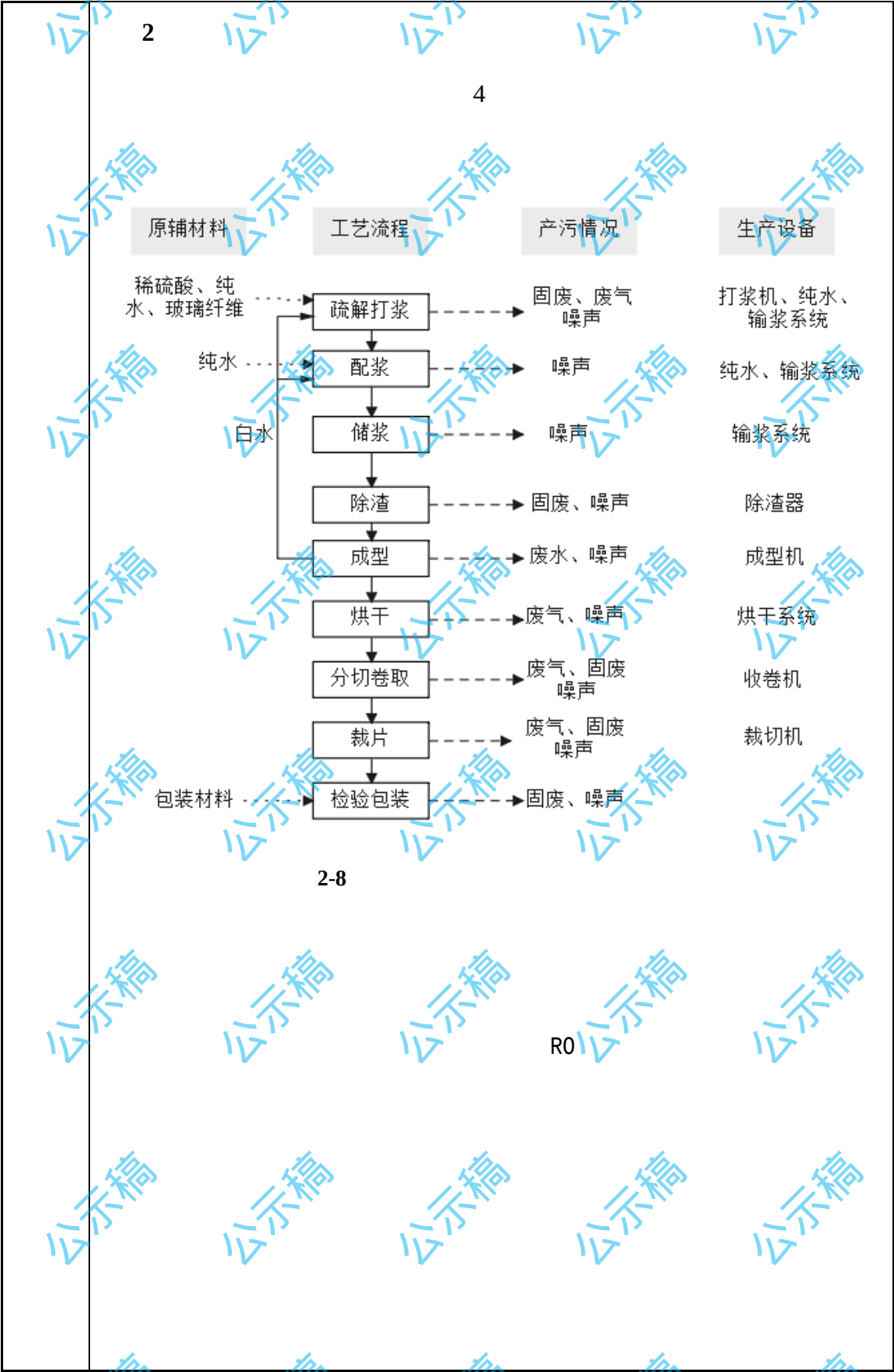
2-7

1

2

3

4



[illegible][illegible][illegible][illegible]

1

2

2024 3 22			
13			
2-9			
1			
2			
3			
4		200 KVAH	
5		150 KVAH	
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16		100 KVAH	
17		200 KVAH	

18		100	KVAH	
19				
20				
21		160	KVAH	
22		650		
2-10				
		COD		
		t/d	t/a	t/a
1		0	0	0
2		289.7	3.48	0.7
3		0	0	0
4		0	0	0
5		149.64	1.796	0.224
6		0	0	0
7		0	0	0
8		0	0	0
9		46.93	0.579	0.116
10		0	0.173	0.022
11		0	0.026	0.005
12		0	0.242	0.03
13		0	0.01	0.001
14		37	0.48	0.06
15		17.07	0.512	0.102
16		73.63	12.61	6.47
17		0	0	0
18		0	0	0
		613.97	19.908	7.73
COD		—	61.55	12.31

2-11						
		SO ₂	NO _x			VOCs
1		0	0	0	0.075	0.006
2		8.4	22.41	0	0	3.24
3		32.77	85.29	12.74	0.0258	0
4		0.12	1.68	0.102	0.017	0
5		0	0	0	0	0
6		0	0	1	0	0
7		0	0	0	0.067	0
8		0	0	0	0.0932	0.27
9		15.1	69.57	9.674	0	0
10		0	0	0	0.1902	0
11		0	0	0.24	0	0
12		0.1	16.2	1.73	0	10.386
13		0	0	0	0	0.07
14		0	0	0.13	0.008	0.2
15		0.18	38.88	3.28	0	9.544
16		0.29	20.53	6.81	0	8.98
17		0	0	0	0.09656	0.261
18		0	0	0	0	2.916
		56.96	254.56	35.706	0.57276	35.873
		224.816	405.081	42.101	0.817	—

2-12			
		t/a	t/a
1		572.99	20
2		149.7	14453.67
3		46179.38	20
4		246.7	75.67
5		6.88	6.88
6		0.2	245.7
7		79.5	40
8		593.2	20.07
9		0	4227.39
10		2647.23	20.035
11		0	13.19
12		25502.67	33413.16
13		0.05	9.03
14		159.14	45.73
15		814.8975	13548.032
16		706.47	39691.84
17		593.1201	20.07
18		11.726	0.9
		78263.8536	105871.367
VOCs			

1

“ ”

2020-2035

2022 1

GB3095-2012

2023

3-1

3-1 2022

		µg/m ³	µg/m ³		
SO ₂		15	60	0.25	
NO ₂		9	40	0.23	
PM ₁₀		32	70	0.46	
PM _{2.5}		19	35	0.54	
CO	95	900	4000	0.23	
O ₃	90	122	160	0.76	

3-1

2023

SO₂

NO₂

PM_{2.5}

PM₁₀

CO 95

O₃ 90

GB3095-2012

2018

NO_x TSP

[2022]37

170m TSP

2021

12 15 12 21 2022 1 20 1 26

NOx	2022	4	24	5	1
3-2					
3-2					
			mg/m ³		%
			0.3	0.130~0.144	48
			0.3	0.0025	0.83
			0.1	0.0025	2.5
			0.25	0.037~0.050	20
			0.1	0.009~0.012	12
TSP	GB3095-2012				
HJ2.2-2018	D				
TSP	0		NOx	NOx TSP	
2					
”					
	2011 29				
	2008 476				
	GB3838-2002				
	2023		2023		11
	34 100%				
2022	2.94%		88.24%		
8.82% 2023					
“	”				

	GB3838-2002				
	3.				
	3		GB3096-2008	3	
	65dB		55dB		
			50m		
	4.				
	5.				
	6.				
	“				
	”				

1	500	GB3095-2012	3-1	2022	1
2	500	“ ”	2011	29	“ ”
3	GB3838	2002	3	500	4
4	50	5	3-3	3-1	

	3-3						
		X	Y			m	
		497	0	30	120	E	436
		/	/			SW	487
	Y						X
							
	3-1						
	1						

					DB 44/27-2001
					GB9078-1996
GB9078-1996					2
“					
[2019]56	”				
					DB44/27-2001
					3-4
		mg/m ³	m	kg/h	
DA001		35	20	1.1*	DB44/27-2001
	1			—	GB9078-1996
	SO ₂	200		—	2
	NO _x	300		—	“ [2019]56 ”
		30		—	
“ * ”		200m		5m	
20m	50%				
					DB 44/27-
2001					

3-5			
		mg/m ³	
		1.0	DB44/27-2001
		1.2	
2			

GB18918-2002								B			
DB44/26-2001											
3-7											
3-7										mg/L	
		pH	SS	CODcr	BOD ₅		TP				
GB18918-2002 B		6~9	≤20	≤60	≤20	≤8	≤1.0	≤ 20			
DB44/26-2001		6~9	≤20	≤40	≤20	≤10	≤0.5	/			
		6~9	≤20	≤40	≤20	≤8	≤0.5	≤ 20			
pH											
3											
GB12523-2011											
≤ 70dB A					≤ 55dB A						
GB12348-2008											
3											
3-8											
3-8										Leq dB A	
3					65			55			
4											
2020 4 29											
GB18599-2020					GB/T39198-2020						
2024					4						

	HJ2025-2012				
	GB18597-2023				
1	18578.4m ³ /a CODcr 0.743t/a NH ₃ -N 0.149t/a				
2	0.50t/a 1.0t/a 2.338t/a 0.25t/a 0.38t/a 0.18t/a 1.50t/a 2.338t/a 0.25t/a 1.5t/a				
	COD				

	1
	2
	3
	4
	5
	COD _{Cr} NH ₃ -N SS BOD ₅

	6
	70~90dB A
	1
	2
	3
	4
	5
	>
	7:00-12:00 14:00-20:00
	GB12523-2011
	12 00 14 00 22 00 6 00

	1
	2
	3
	4



70	130
4	4
250m ³	79m ³
250	7920h
1	20m
DA001	2021
—	
13.6	/ -
GB17820-2018	0.02S / - S
-	2.86 / - 18.7
4-2	
13.6	/ -
2.86	/ -
2	/
18.7	/ -
3400	Nm ³
0.715t	
0.5 t	
2.338t	
50%	50%
b.	
AGM	2023 3

	10000 AGM	
	→ → →	
	→ → →	
1%	2.0t/a	
	1	
0.45m×0.45m	1	
	17-1	
20 /h	30 /h	
Q =	m ² * m * 4	
53m × 2.4m × 1.2m		
Q=53 × 2.4 × 1.2 × 30 × 4=18316.8m ³ /h		
	22000m ³ /h	330
24	17424 m ³ /a	
	2023 538	
3.3-2	90%	
	90% 1.8t	
0.2t/a		
4		
	1 20m	DA001

		HJ 984-2018			
		≥ 90%	90%	HJ991-	
2018		SO ₂	90~99%		
		SO ₂	50%		
		50-70%			
		20842	m ³ /a	+	30%
		7920h			
4-3					
			SO ₂	NO _x	
t/a		0.715	0.500	2.338	2.0
h/a		7920			
	t/a	0.715	0.500	2.338	1.8
	m ³ /a	20824	26293m ³ /h		
	kg/h	0.090	0.063	0.295	0.227
	mg/m ³	3.43	2.40	11.23	8.64
			+	+20m	DA001
	%	30	50	0	90
	t/a	0.500	0.250	2.338	0.18
	kg/h	0.063	0.032	0.295	0.023
	mg/m ³	2.40	1.20	11.23	0.86
	mg/m ³	30	200	300	35
	kg/h	-	-	-	1.1*
	t/a	/	/	/	0.2
	kg/h	/	/	/	0.025
	mg/m ³	/	/	/	1.2
“ * ”		200m	5m		

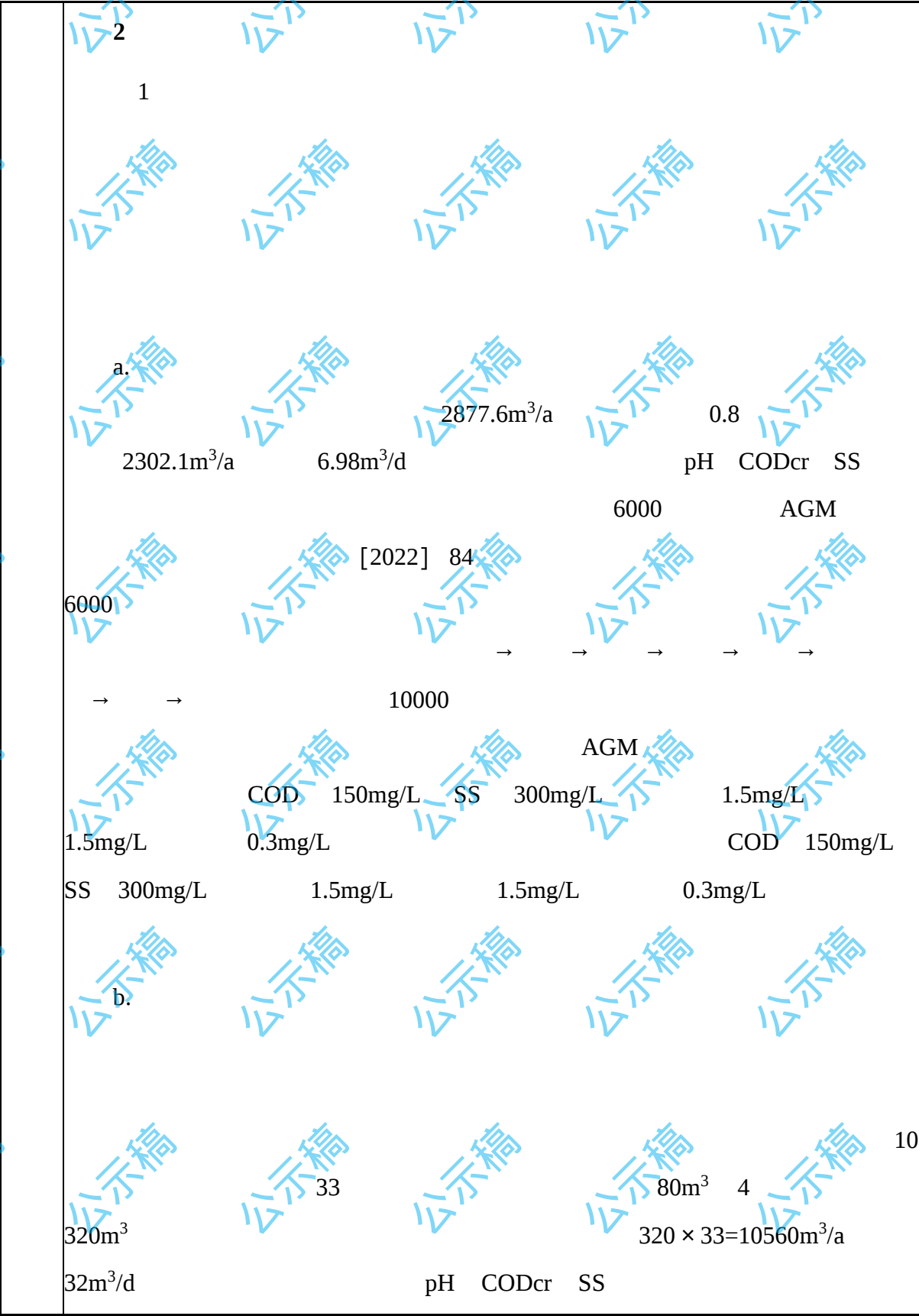
	50%	28m	20m
			“
		DB44/27-2001	[2019]56”
	37%	pH	2~3
			0.5%
			0.05%
		10%	10~90
		80%	-
		2022	56
	0.126kg/h		10000t/a
	1~200 μ m	100 μ m	2
	50%	50%	1.0t/a

4-4						
	t/a			t/a	kg/h	
	1.0		50%	0.5	0.063	
2	NO_x NO_x NO_x HJ1121—2020 14 HJ1121—2020 HJ 984-2018 HJ 984-2018					

3							
4-5							
		1.0	0.5	2.338	0.715	2.0	1.0
h/a		7920					
			/				/
		m ³ /h	/	26293			/
		t/a	0	0.5	2.338	0.715	1.8
		kg/h	/	0.063	0.295	0.09	0.227
		mg/m ³	/	2.4	11.23	3.43	8.64
			/	+ +20m			/
		%	/	DA001			/
		%	/	100		90	/
		%	/	50	0	30	90
		m ³ /h	/	26293			/
		t/a	0	0.25	2.338	0.5	0.18
		kg/h	/	0.032	0.295	0.063	0.023
		mg/m ³	/	1.2	11.23	2.4	0.86
		t/a	1	0	0	0	0.2
		kg/h	0.126	/	/	/	0.025
			/				
		%	50	/			50
		t/a	0.5	0	0	0	0.2
		kg/h	0.063	/	/	/	0.025

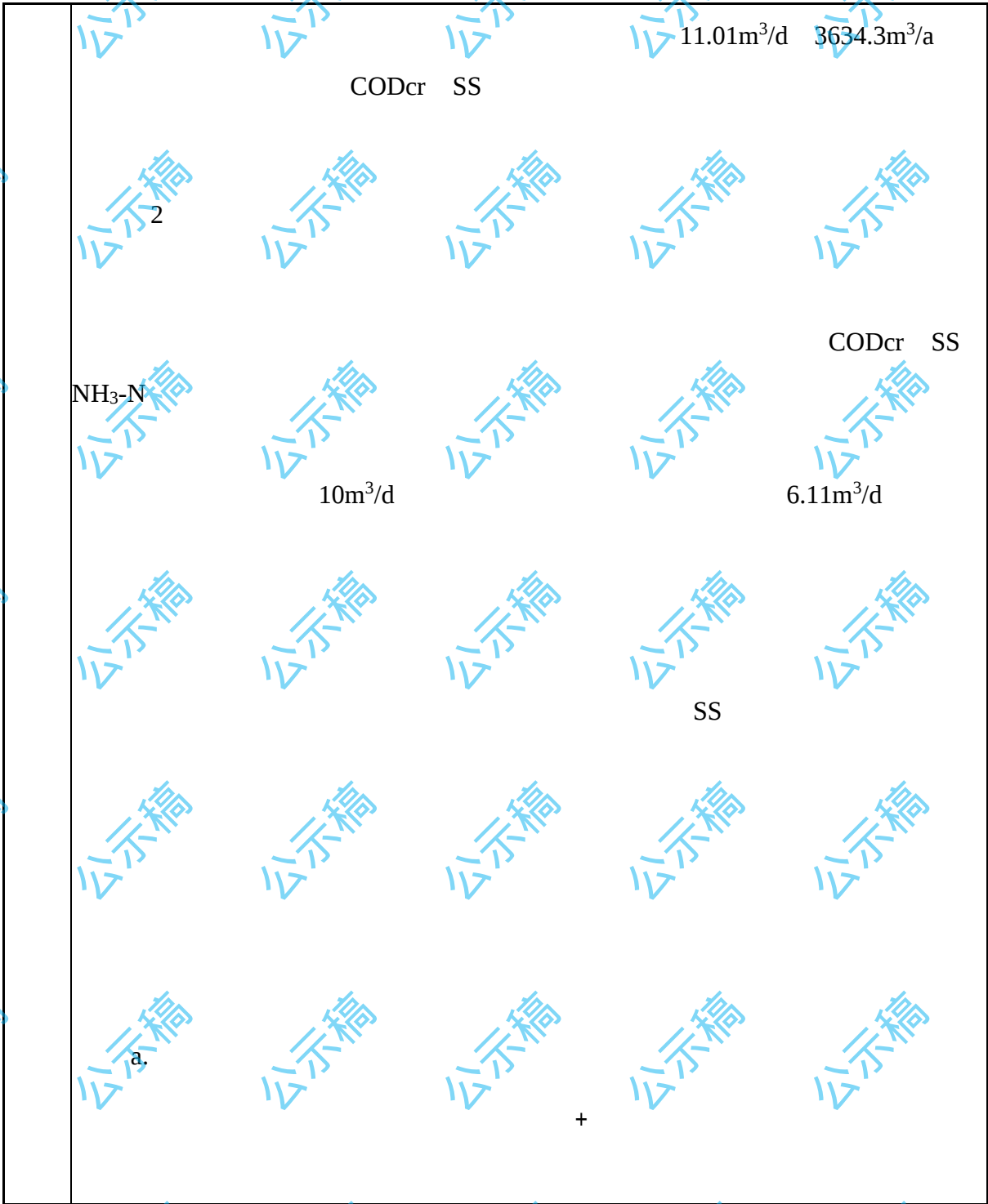
4-6								
				m	m			
DA001	SO2 NOx							“
		E113 °53'1 9.6"	N24° 59'8. 1"	20	0.8m	30		[2019]56 ”
								GB9078- 1996
								DB44/27- 2001
4								
0%								

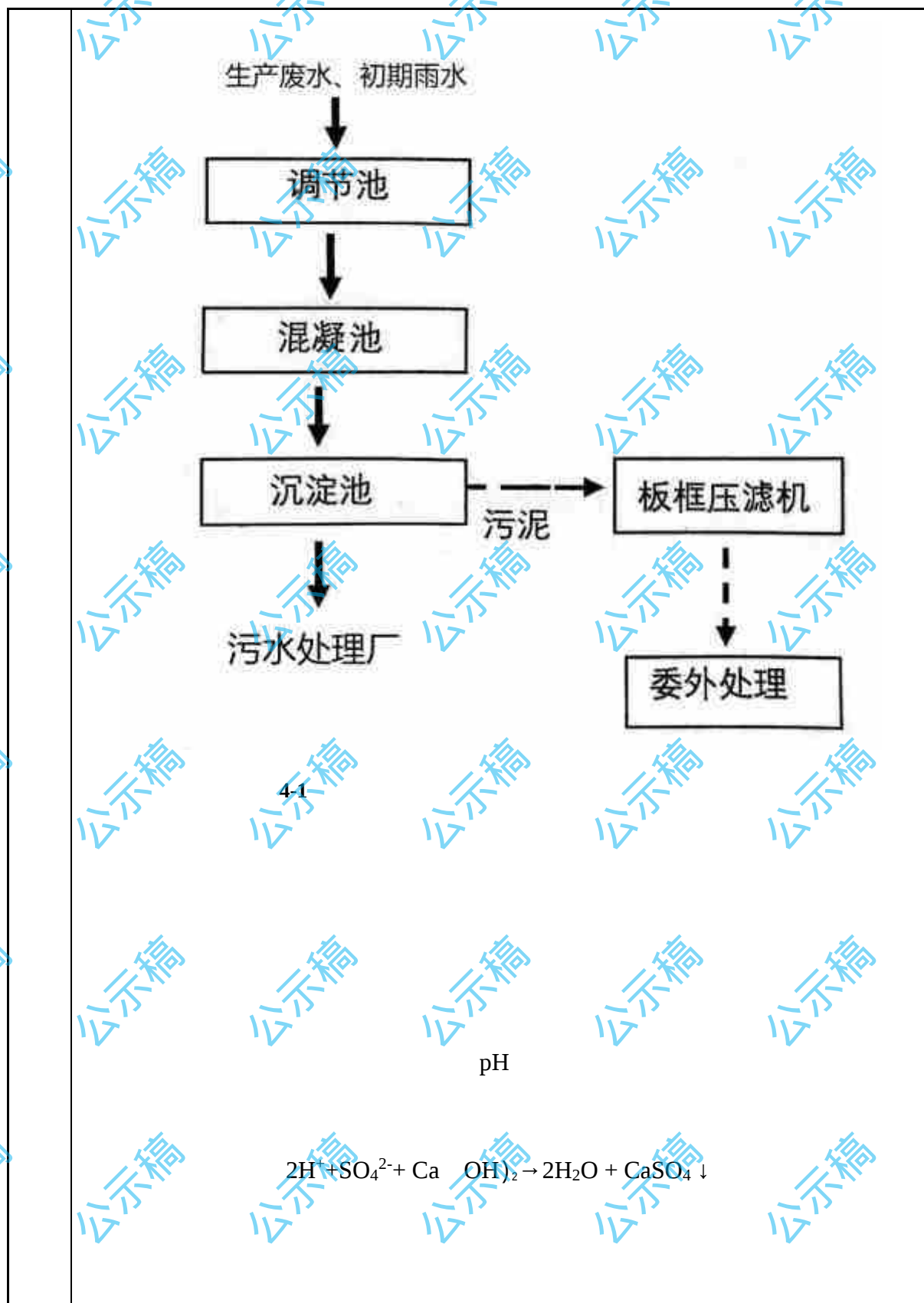
4-7							
DA001			3.43 mg/m ³	0.090kg/h	1h/	1 /	
			2.40 mg/m ³	0.063kg/h			
			11.23 mg/m ³	0.295kg/h			
			8.64 mg/m ³	0.227kg/h			
5	“						
[2019]56	”						
				GB9078-1996	2		
						DB44/27-2001	
DB 44/27-2001							



pH 8~9 SS 500mg/L SO ₄ ²⁻ :2000mg/L								
4-8								
		pH	COD _{cr}	SS	NH ₃ -N	TN	TP	
2302.1m ³ /a	mg/L	/	150	300	1.5	1.5	0.3	/
	t/a	/	0.345	0.691	0.003	0.003	0.001	/
10560m ³ /a	mg/L	4~5	200	350	1.5	13.5	0.5	480
	t/a	/	2.112	3.696	0.016	0.142	0.005	5.069
66m ³ /a	mg/L	8~9	/	500	/	/	/	2000
	t/a	/	/	0.033	/	/	/	0.132
12928.1m ³ /a	mg/L	4~5	190.08	341.86	1.49	11.29	0.46	402.29
	t/a	/	2.457	4.420	0.019	0.146	0.006	5.201
80								
2240m ³ /a								
2016m ³ /a								
90%								
6.11m ³ /d								
2003 181								
COD _{Cr} 300mg/L BOD ₅ 150mg/L SS 200mg/L TN 35mg/L								
NH ₃ -N 25mg/L TP 4mg/L								

BOD ₅												
21%	COD _{Cr}	20%				NH ₃ -N		2%		15%		SS
5												
“ ” SS 30%												
4-9												
			t/a	mg/L	t/a		%		t/a	mg/L	t/a	
	pH	2016		6~9	—		—	2016		6~9	—	
	COD _{cr}			300	0.605		20%			240	0.484	
	BOD ₅			150	0.302		21%			119	0.240	
	SS			200	0.403		60%			80	0.161	
	TN			35	0.071		2%			34.3	0.069	
	NH ₃ -H			25	0.05		2%			24.5	0.049	
	TP			4	0.008		15%			3.5	0.007	





3500m³/d

a.

4-11

		COD _{cr}	BOD ₅	SS	NH ₃ -N	TN	TP	
16562.4 m ³ /a	mg/L	152	/	205	1.49	11.29	0.46	201
	t/a	2.517	/	3.395	0.025	0.187	0.008	3.329
2016m ³ /a	mg/L	240	119	80	24.5	34.3	3.5	/
	t/a	0.484	0.240	0.161	0.049	0.069	0.007	/
18578.4m ³ /a	mg/L	161.5	12.9	191.4	4.0	13.8	0.9	179.2
	t/a	3.001	0.24	3.556	0.074	0.256	0.016	3.329
		500	300	400	—	—	—	—

DB44/26-2001

4-11

b.

+

+A²/O +

	2021 9	2021 1684
	GB18918-2002 B	
	DB44/26-2001	
	“ ”	
		GB18918-2002 B
		DB44/26-2001
		3500m ³ /d
		1600m ³ /d
	56.3m ³ /d	18578.4m ³ /a
	1900m ³ /d	2.96%
	4	
		HJ942-2018

4-12									
	pH COD BOD ₅ SS TP TN			TW0 01		+			
	pH COD SS TP TN			TW0 02		+	DW001		

4-13									
							mg/L	t/a	
						pH	6~9	/	
						COD _{cr}	40	0.743	
						BOD ₅	20	0.372	
						SS	10	0.186	
						NH ₃ -N	8	0.149	
							0.5	0.009	
						TN	20	0.372	

4-14					
			/ mg/L	kg/d	t/a
1	DW001	COD _{Cr}	161.5	9.09	3.001
2		NH ₃ -N	4.6	0.22	0.074
5					

4-15

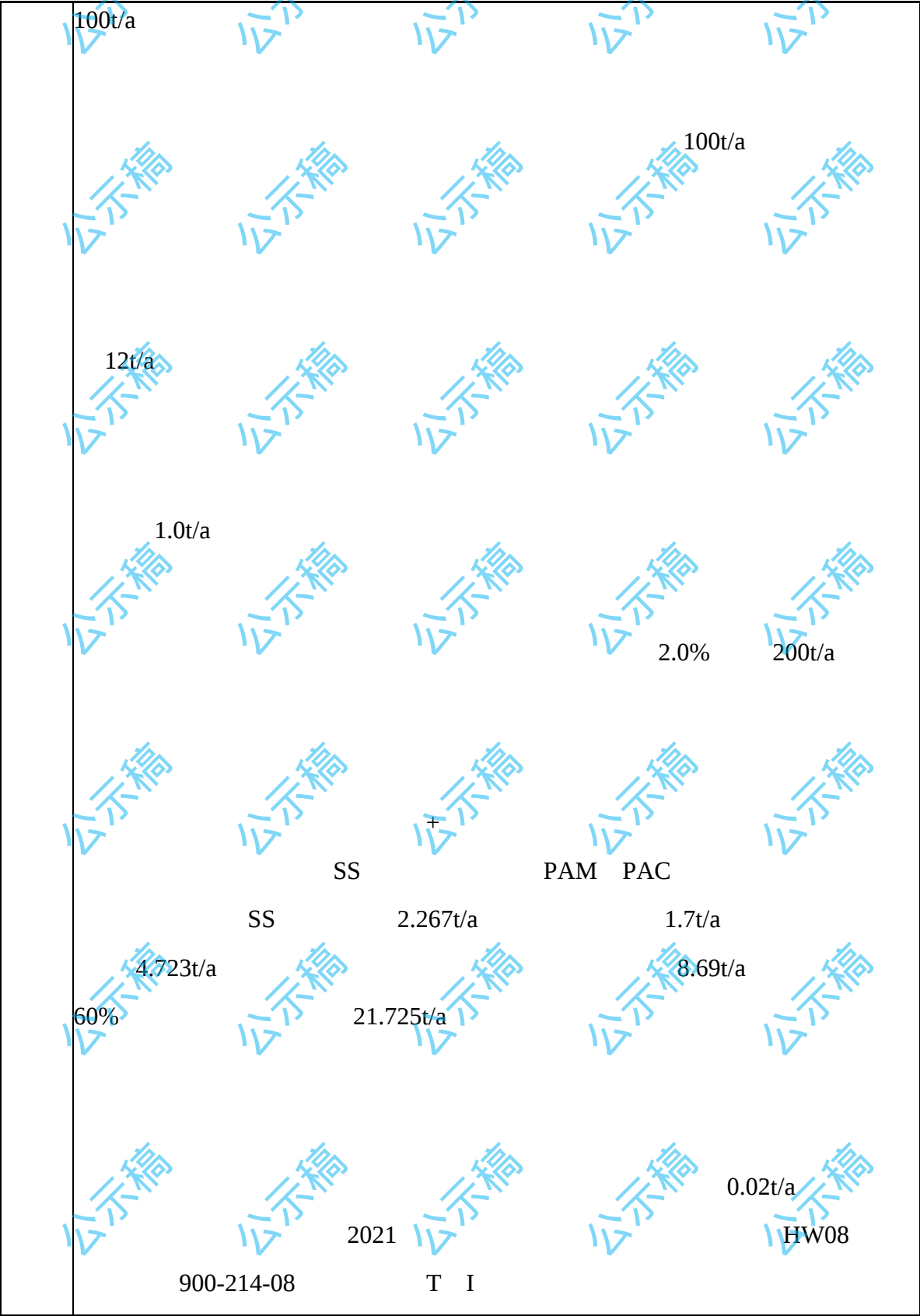
dB A

						/m			/m	/dB A		/dB A	/dB A	
						X	Y	Z						
1			4	80~85		9	194	1	9	66		25	41	7
2			4	80~90		9	210	1	8	72		25	47	
3			4	70~80		9	210	4	8	62		25	37	
4			4	70~75		10	200	9	8	57		25	32	
5			4	75~80		10	165	9	10	60		25	35	
6			4	75~85		10	137	9	10	65		25	40	
7			2	80~85		15	132	15	15	61		25	36	
8			1	65~75		30	212	1	6	59		25	34	
16			1	70~80		52	61	1	1	80		25	55	50
1				/		/	/	/	/	50~60		/	50	2

2	
$L_p = L_{p0} - 20 \lg(r/r_0) - \Delta L$	
$L_p \text{ — } r \text{ dB A}$	
$L_{p0} \text{ — } r_0 \text{ dB A}$	
$R \text{ — } m$	
$r_0 \text{ — } m$	
$L \text{ — } \text{dB A}$	
$L_{eq} = 10 \lg \sum 10^{0.1 L_i}$	
$L_{eq} \text{ — } \text{dB A}$	
$L_i \text{ — } i \text{ dB A}$	
49.48	55

2002 23-30dB A 10-25dB A 10dB 15dB A						
4-16						
	/dB A		/m	/dB A		/dB A
	55	70		50.0	2	43.99
	49.4 8	7		50.0	2	44.28
	49.4 8	12		50.0	2	44.09
	49.4 8	10		50.0	2	44.13
/dB A						
50m						
436m						
3						
“ ”						

	4				
		GB12348-2008	3		
	≤ 65dB A	≤ 55dB A			
	4				
	1				
		80		0.5kg/ ·d	
	330		13.2t/a		
	RO				
	0.005t/	0.02t/a			
					1%



T I	8	25kg/	0.02t/a	2.5kg/	0.2t/a	2021
			HW08		900-249-08	
		0.005t/a			2021	
		HW49		900-041-49		
		2				
			4-17			
					t/a	
	1			900-001-S61	13.2	
	2			900-009-S59	0.005	
	3			900-011-S17	100	
	4			900-099-S17	100	
	5			900-005-S17	12	
	6			900-099-S17	1.0	
	7			900-099-S59	200	
	8			900-099-S07	21.725	
	9			HW08	900-214-08	0.02

10			HW08	900-249-08	0.02	
11			HW49	900-041-49	0.005	

4-18

		HW08	900-214-08				
		HW08	900-249-08		10m ²		2t
		HW49	900-041-49				1

3

GB 18599-2020

GB18597-2023

GB18597-2023

GB18597-2023

1m

10⁻⁷cm/s

2mm

10 ⁻¹⁰ cm/s				
4				
5				
4-19				
1				1m 7cm/s
				2mm
2				10 ⁻¹⁰ cm/s

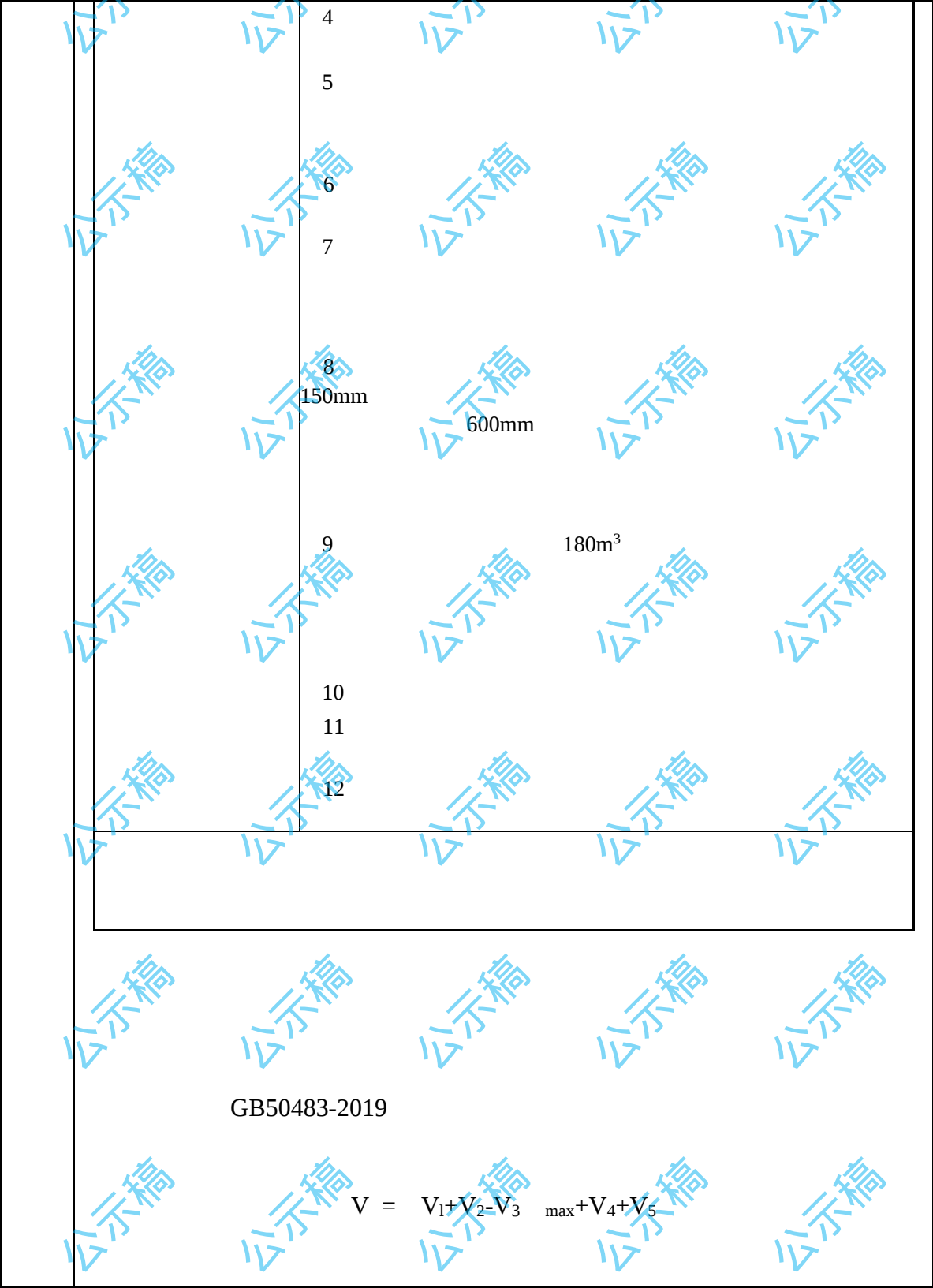
5

1					10^{-7} cm/s 2 mm 10^{-10} cm/s
2					

2

				Q
C.1				
Q				
$Q=q_1/Q_1+q_2/Q_2+...+q_n/Q_n$				
q_1	q_2	...	q_n	t
Q_1	Q_2	...	Q_n	t
Q	1	I		
$Q\geq 1$	Q	1	$1\leq Q$	$10\leq Q$
$Q\geq 100$			2	100
			3	
4-20				
		qn t	Qn t	q/Q
		0.2	2500	0.0001
		0.02	2500	0.00001
		8.52	10	0.852
		1.0	100	0.01
		0.0017	10	0.00017
				0.86228
1.28g/cm ³	37%	18m ³	37%	
DN100	300m	2.355m ³	1.7	
			1	
Q=q _n /Q _n				
0.86228	Q<1	I	“ ”	
3				
100m				

	436m			
	4			
	HJ169-2018			
	GB18218-2018			
	4-21			
		10000		
		XZO-2		
			113 ° 53'21.452 "	24 ° 59'5.543 "
		CO		
		SO _x NO _x		
		1		
		2		
		3		



	V_1 —— 1 18m ³ 80% 14.4m ³ 3.2m 0.6m 19.3m ³ V_1 0m ³ V_2 —— GB50974-2014 10L/s 20L/s GB50974-2014 3.6.2 2 $V_2 = q + q \times 2 \times 3600 = 216m^3$ 144m ³ 72m ³ $V_2 = 216m^3$ V_3 —— V_4 —— $V_4 = 0m^3$ V_5 —— mm F $q = qn/n$ qn —— mm n—— 29491m ² 2.95ha ha 1649.7mm 172 282.95m ³ 240m ³ 300mm 300mm 100m 90m ³ 330 m ³ $V_5 = 0m^3$ 1 180m ³
--	--

	$V = 180\text{m}^3 \quad 144\text{m}^3$	
	5 4-22	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
	6	

	8			
	9			
	HJ819-2017	HJ1121-		
	2020			
	4-23			
			1 /	GB12348-2008 3
	DW001	pH COD BOD ₅ SS TP TN	1 /	DB44/26-2001
	DA001		1 /	“ [2019]56 ” DB 44/27-2001 GB9078-1996 2
			1	DB44/27-2001

		/		
		DA001	+ +20m	“ [2019]56 ” DB 44/27- 2001 GB9078- 1996 2 DB 44/27-2001
		pH COD _{Cr} BOD ₅ TP TN SS		DB44/26- 2001
		pH COD _{Cr} BOD ₅ TP TN SS		
				GB12348-2008 3

1	“ ”
2	
3	
4	
5	
6	

10000

“

”

“

”