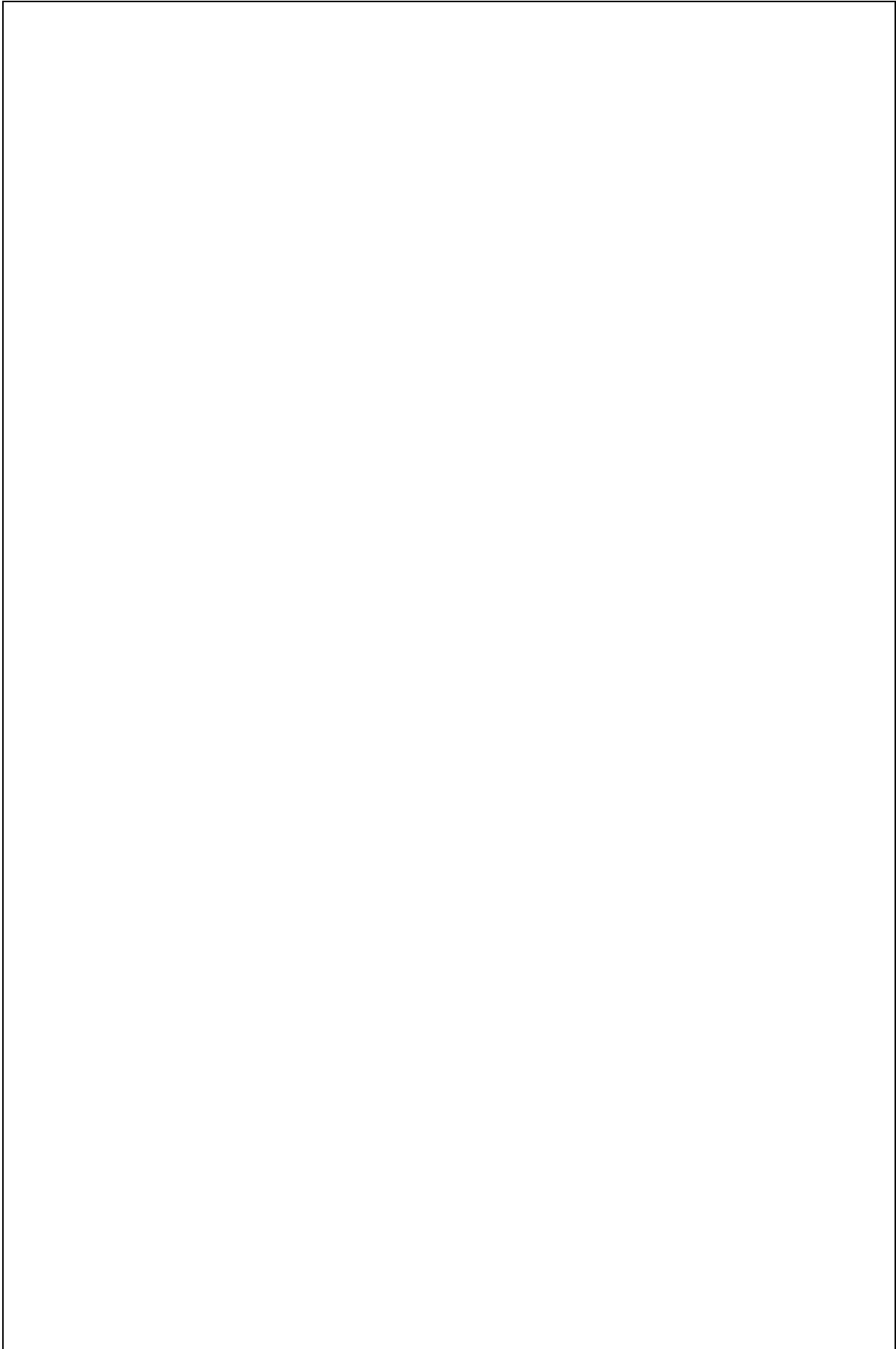


	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	99
	40
	300 8 2400
	1 3 40
	2017 11 2018 12 1
	42151 650 % 1.54
	45720 695 % 1.52

--	--

	<p>1</p> <p>2 GB16297-1996 2</p> <p>3 GB12348-2008 3</p>



2-1

			mg/	/	t/a	
	1		285	4.8	136.8	576h/72d
			310	3.2	99.2	384h/48d
			350	2.0	70	240h/30d
			230	10.0	230	1200h/150d
			380	3.2	121.6	384h/48d

			3000t/a	3000t/a	
		24666.8m ²			
		9907m ²	1	1	
		225m ²			/
		3 " + + " " 3 " + " 1 "	2 3 +	3 2 +	
		1			
		150t/d + +MBR			
		100m ²			
		150m ²			

2-3

	1		GMP	2	2
	2		GMP	2	2
	3		GMP	1	1
	4		LHSZ800B	1	1
	5		FG200B		

	32		300t/h		2	2
	33		/		3	3

2-4

2-4

		/	kg	kg	kg
		/	48000	667	652
		/	33600	467	456
		/	48000	667	652
		/	7200	100	97.8
			90000	1250	122.5
		/	28800	600	594
		/	41600	867	858
		/	22400	467	462
		/	6400	133	132
			112000	2333	2310
		/	6400	133	129
		/	96000	2000	1940
		/	16000	333	323
		/	3200	67	65
			82000	1708	1657
		/	4000		128
		/	40000	1333	1280
		/	20000	667	640
		/	2000	66.7	64
			7000	1567	1504
			0800	66.7	66

132

660

660

30.6

385

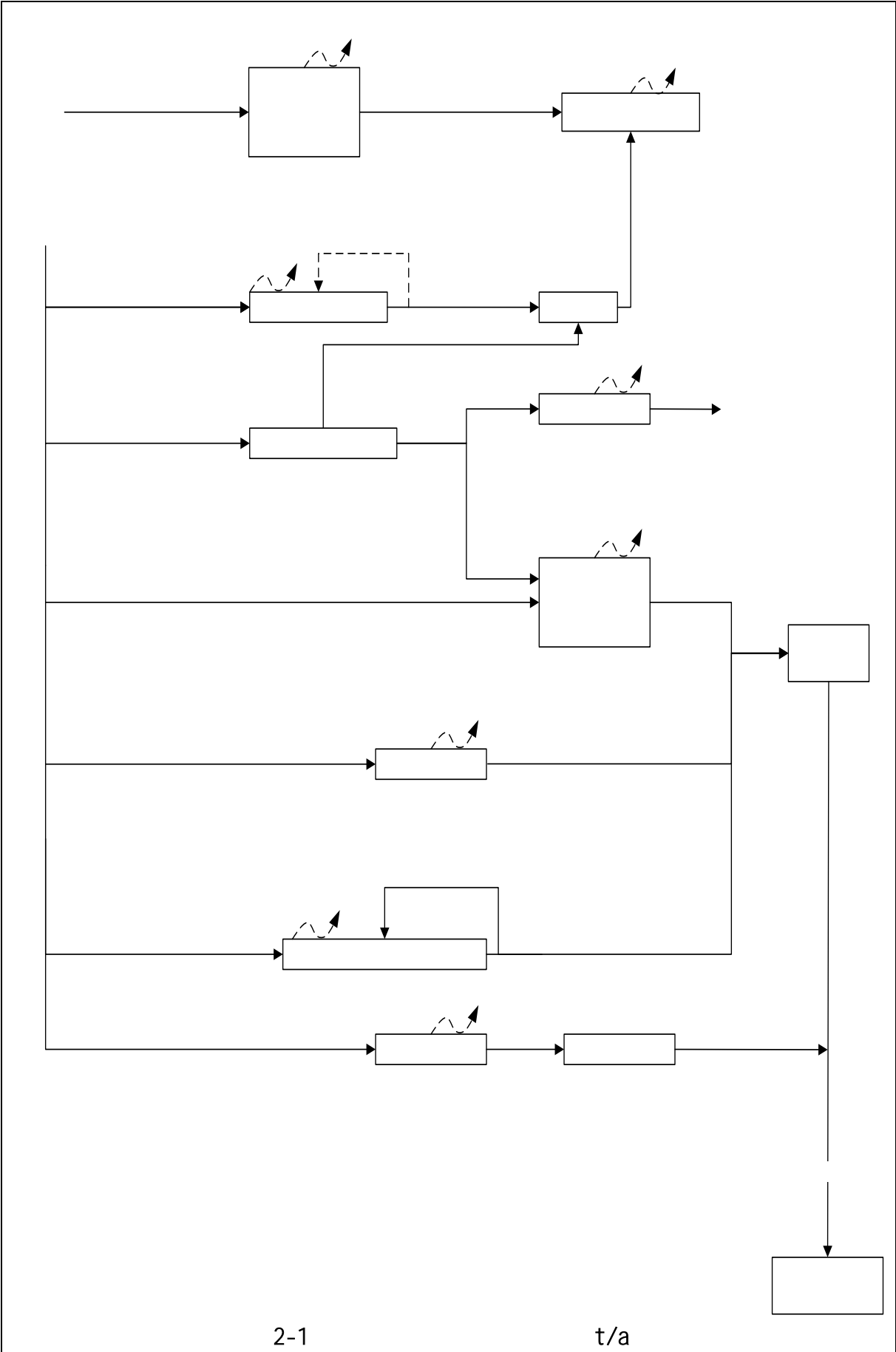
2940

523

327

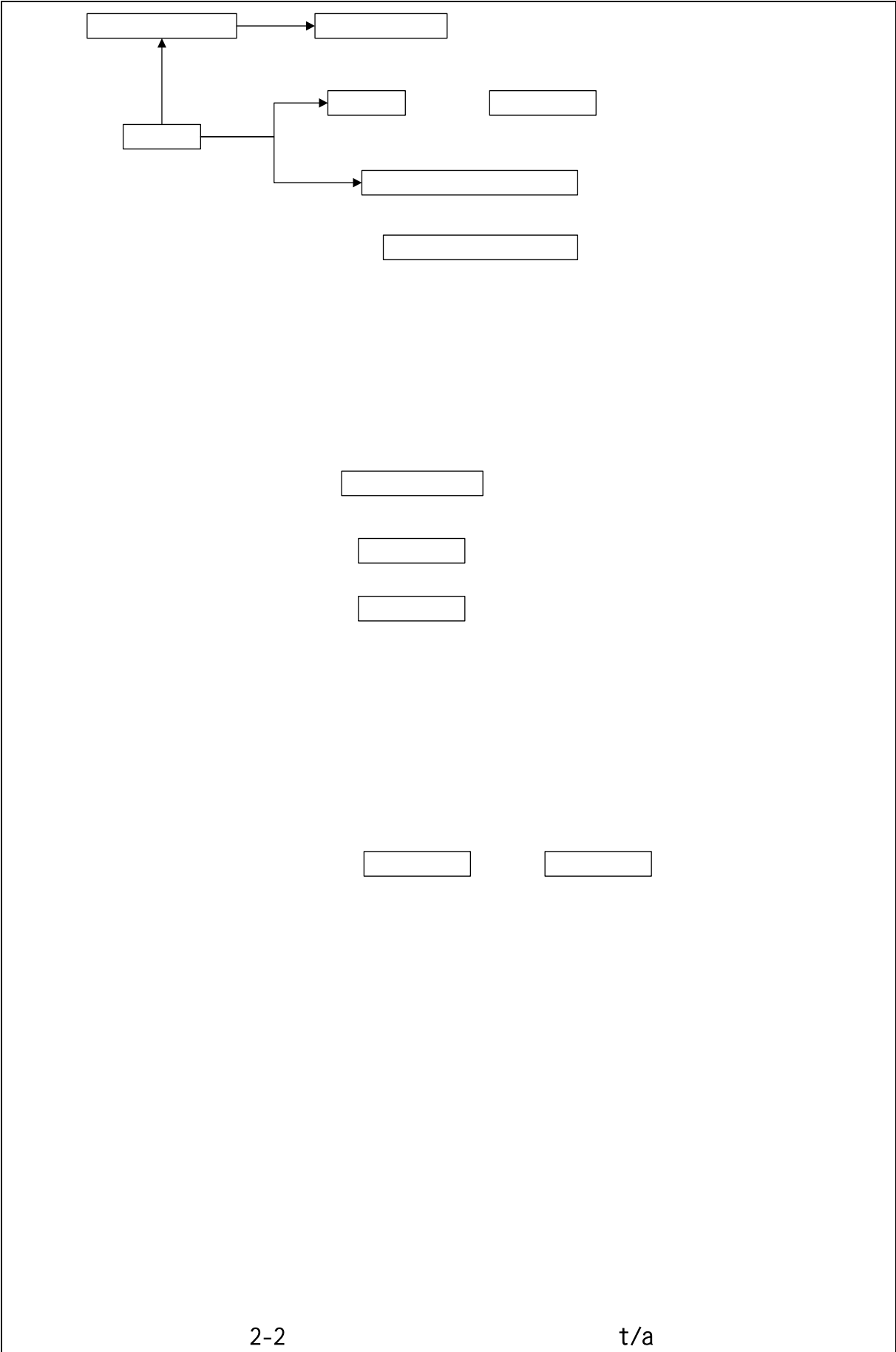
327

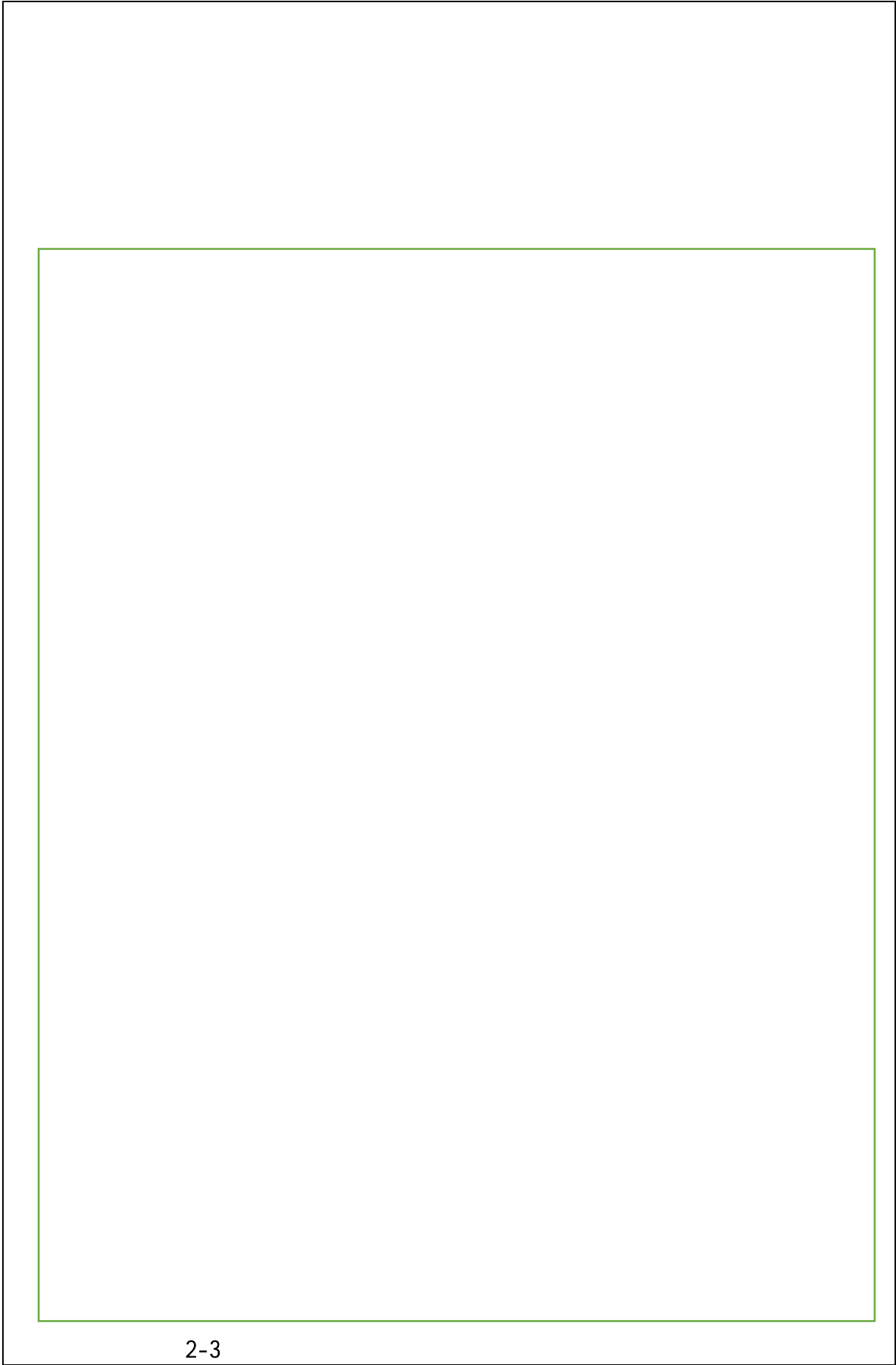
294

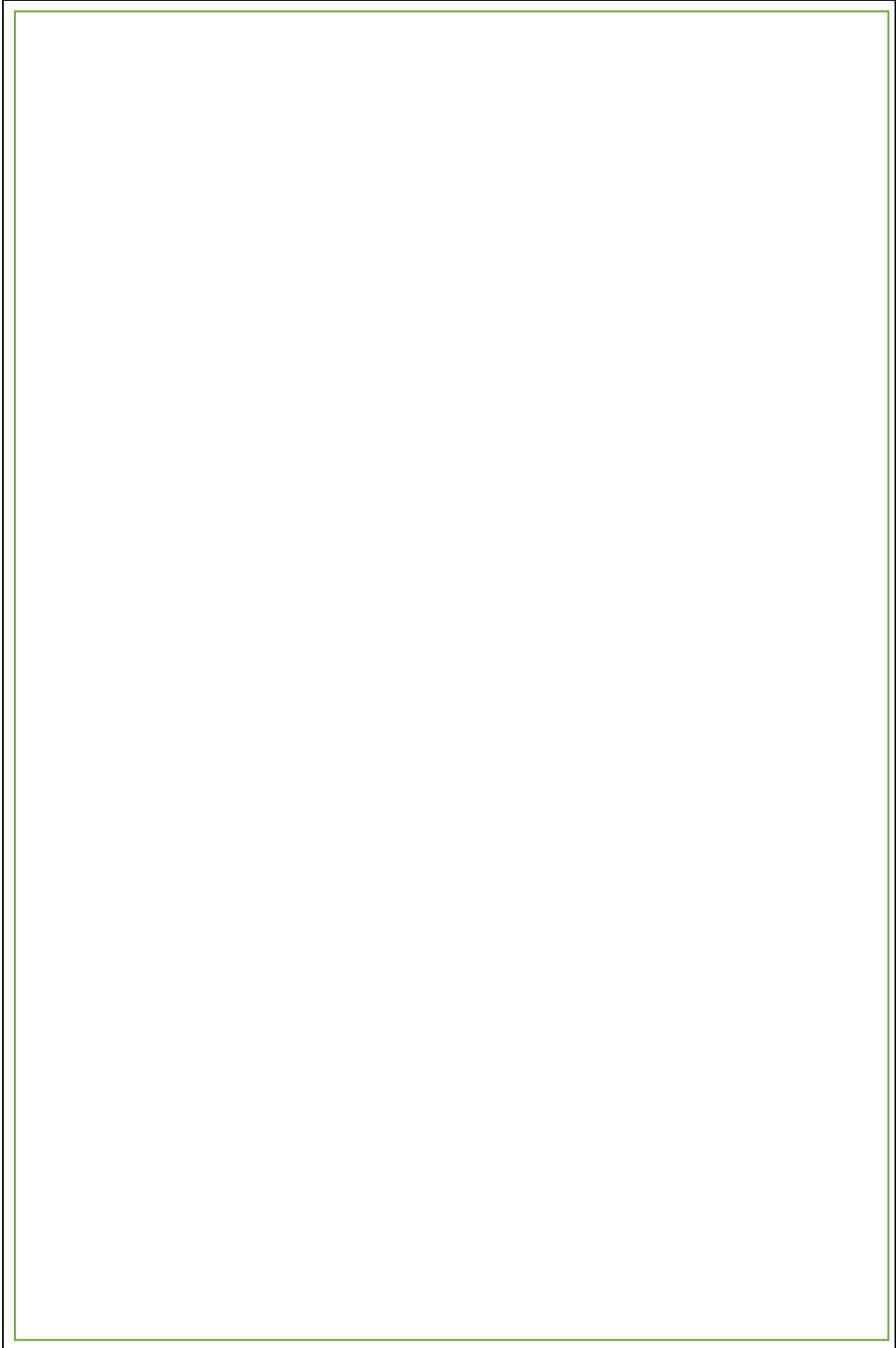


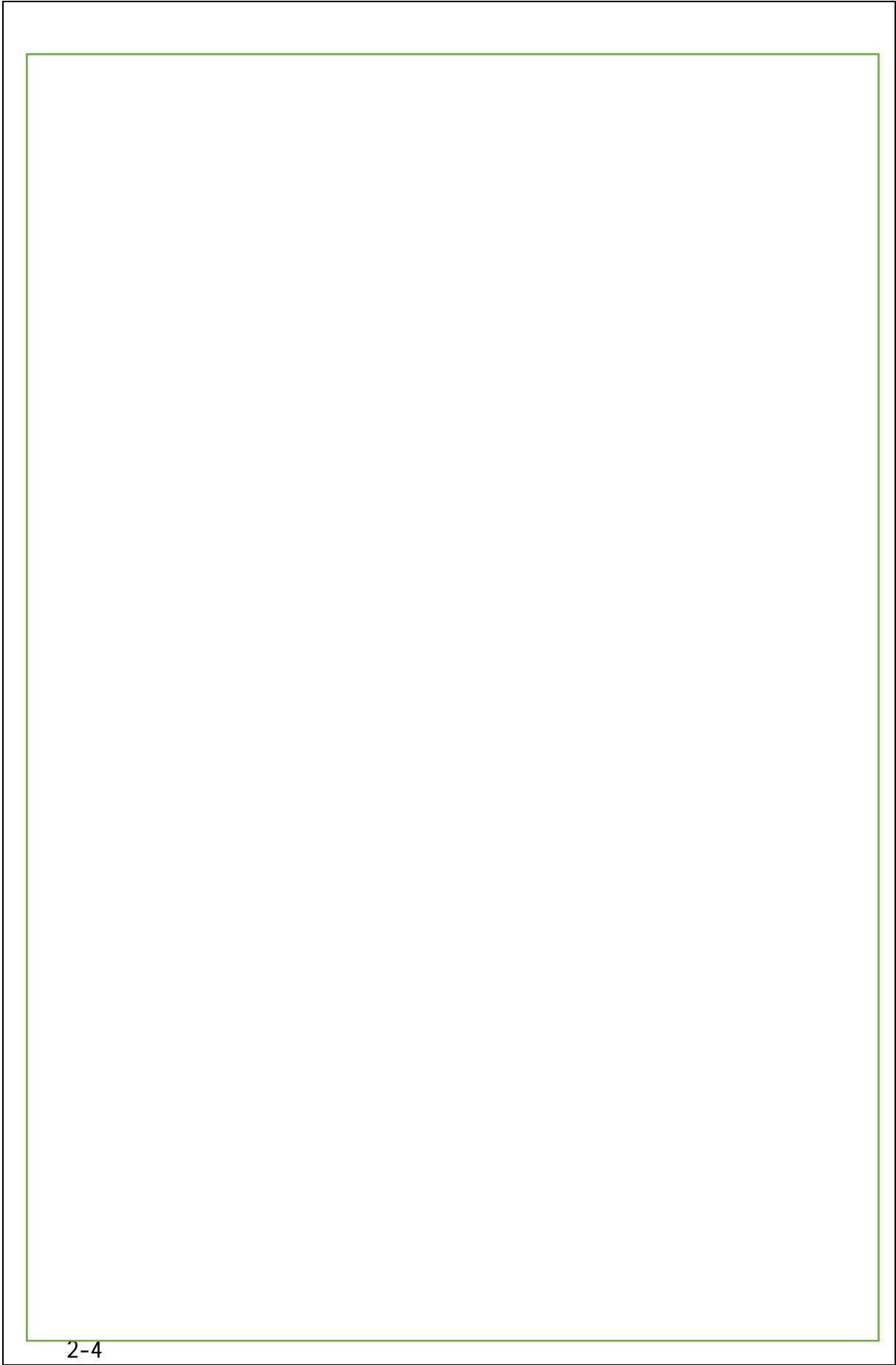
2-1

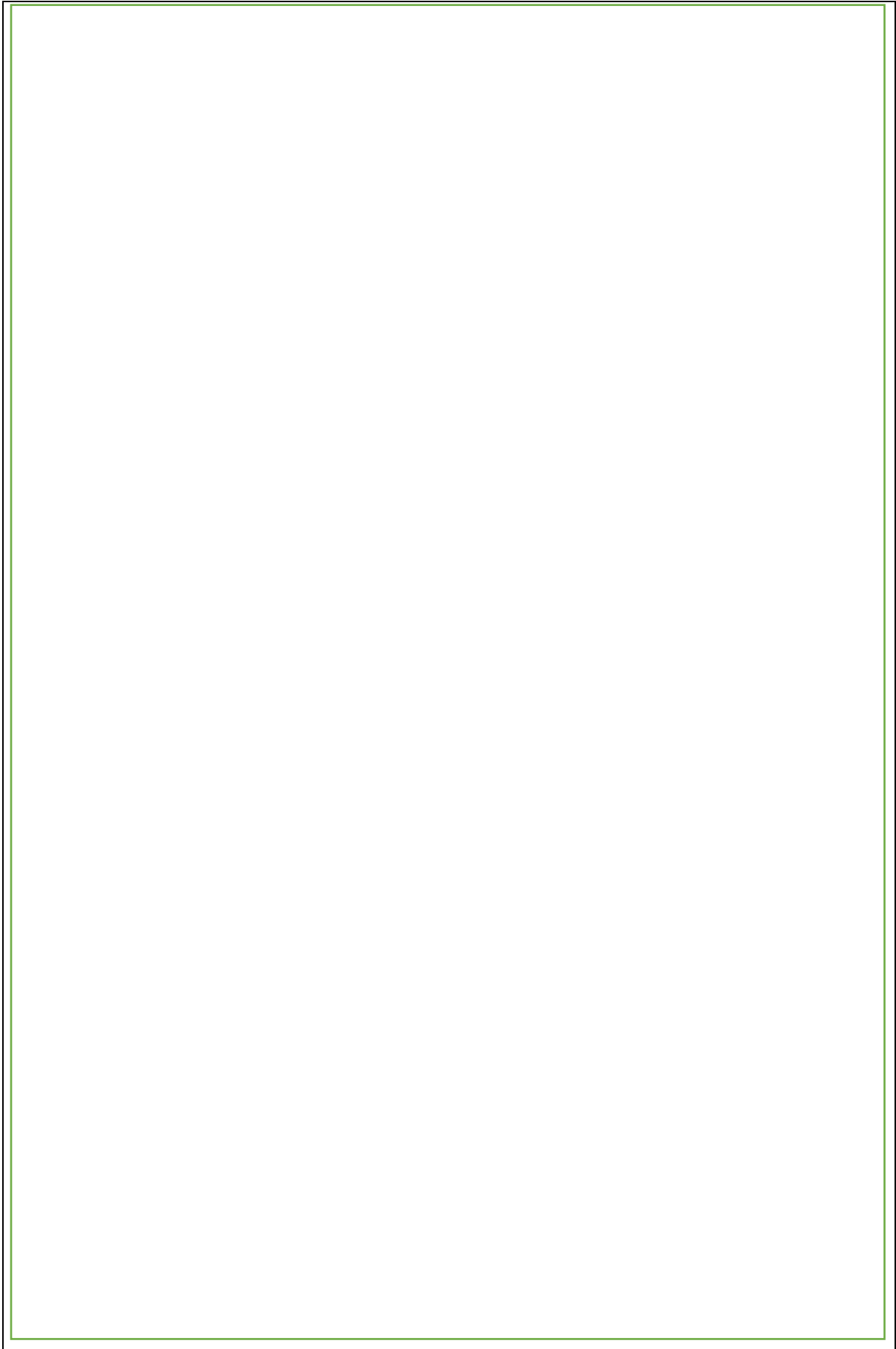
t/a

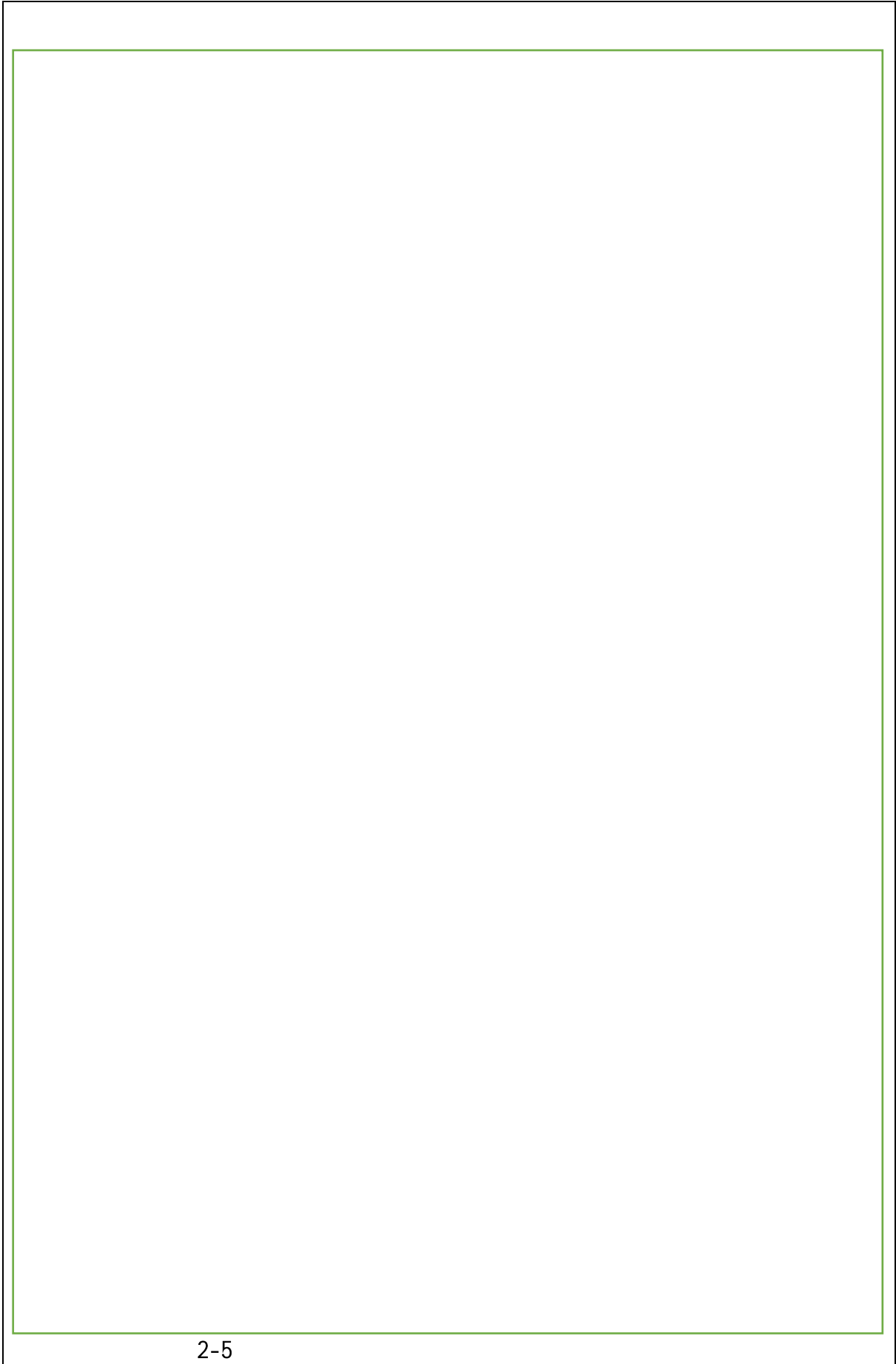


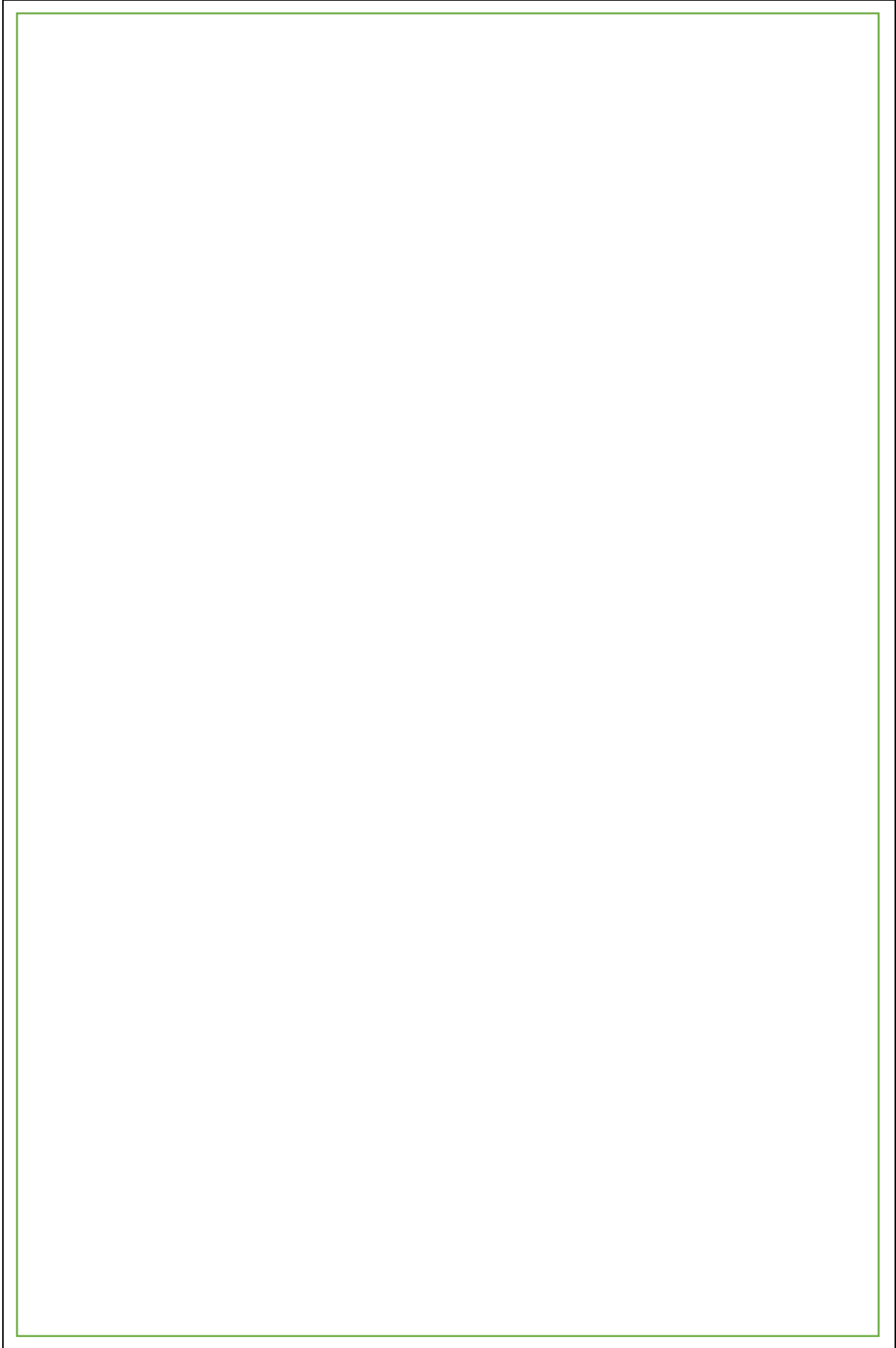


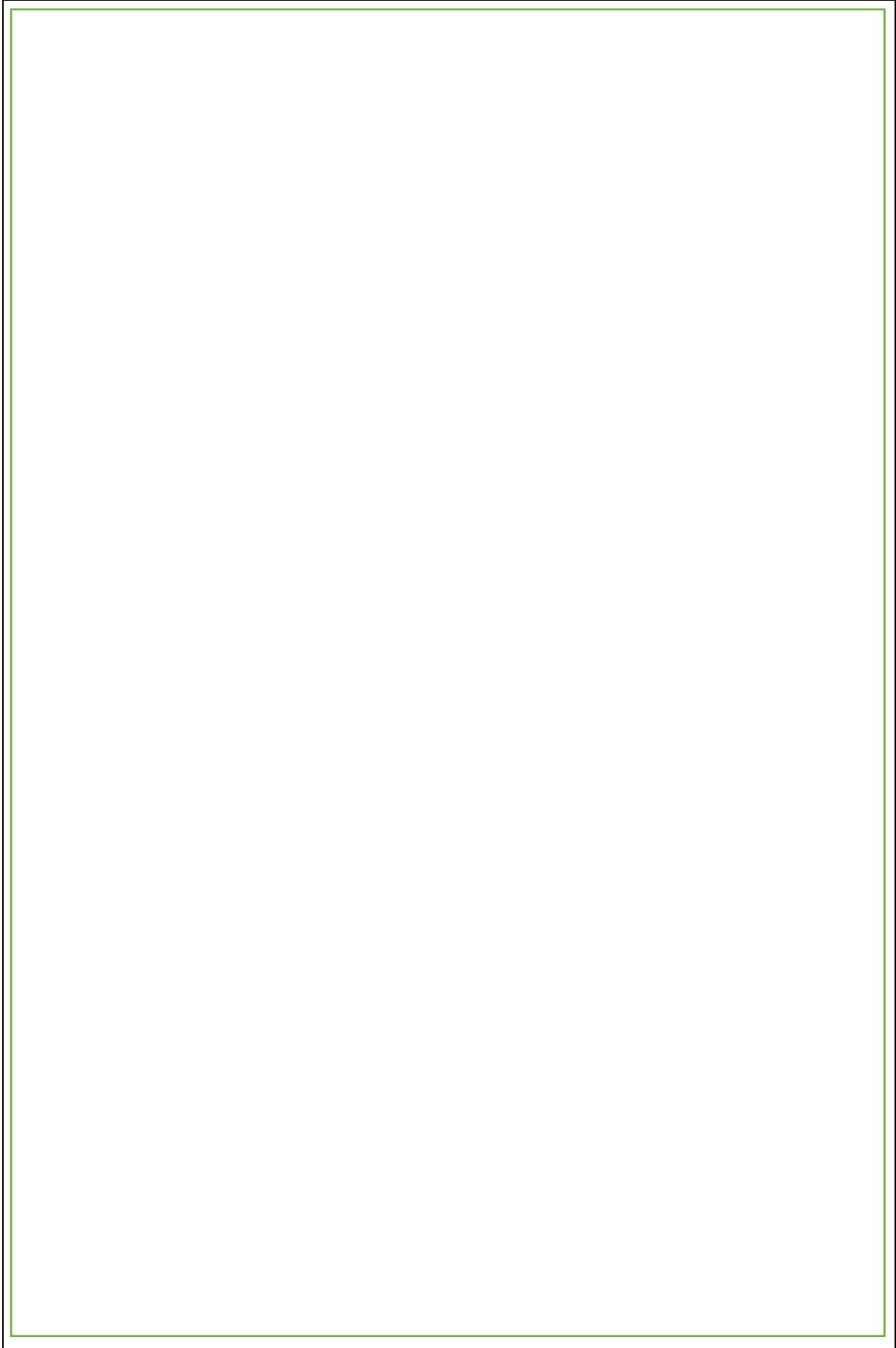


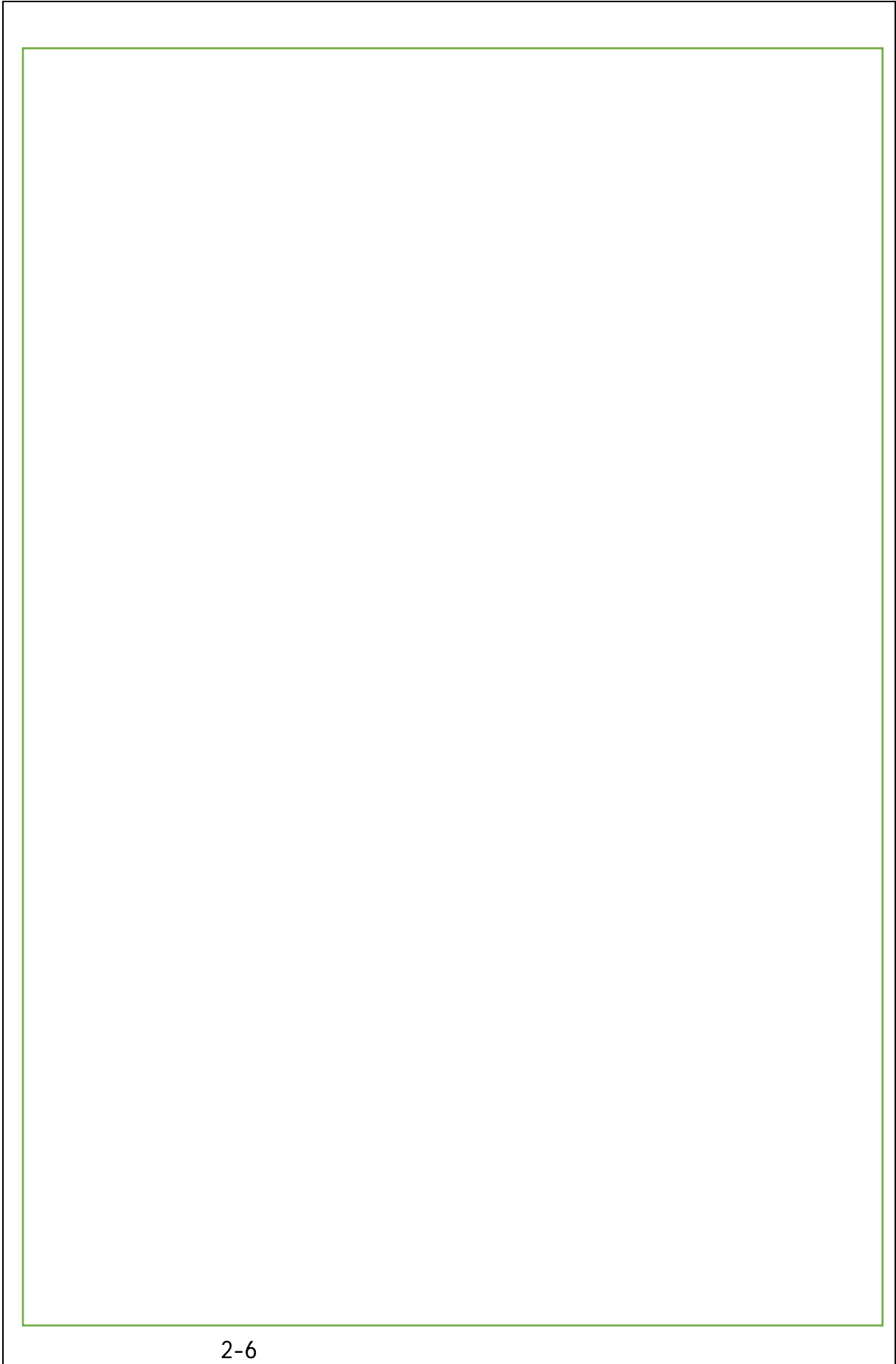


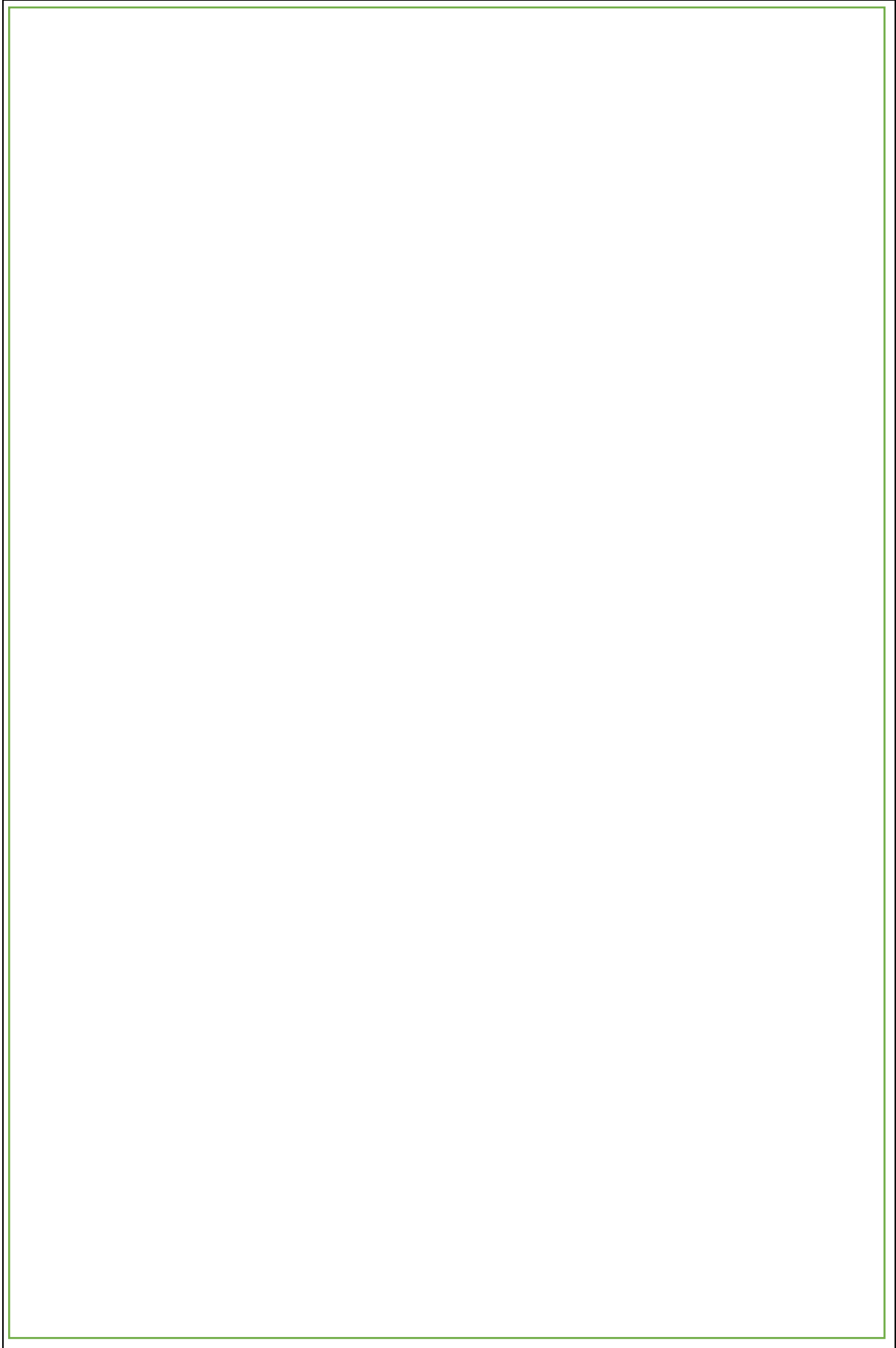


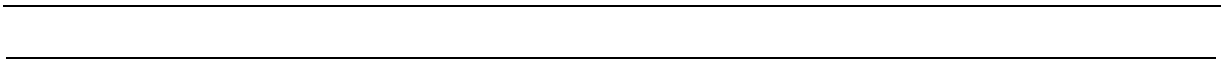


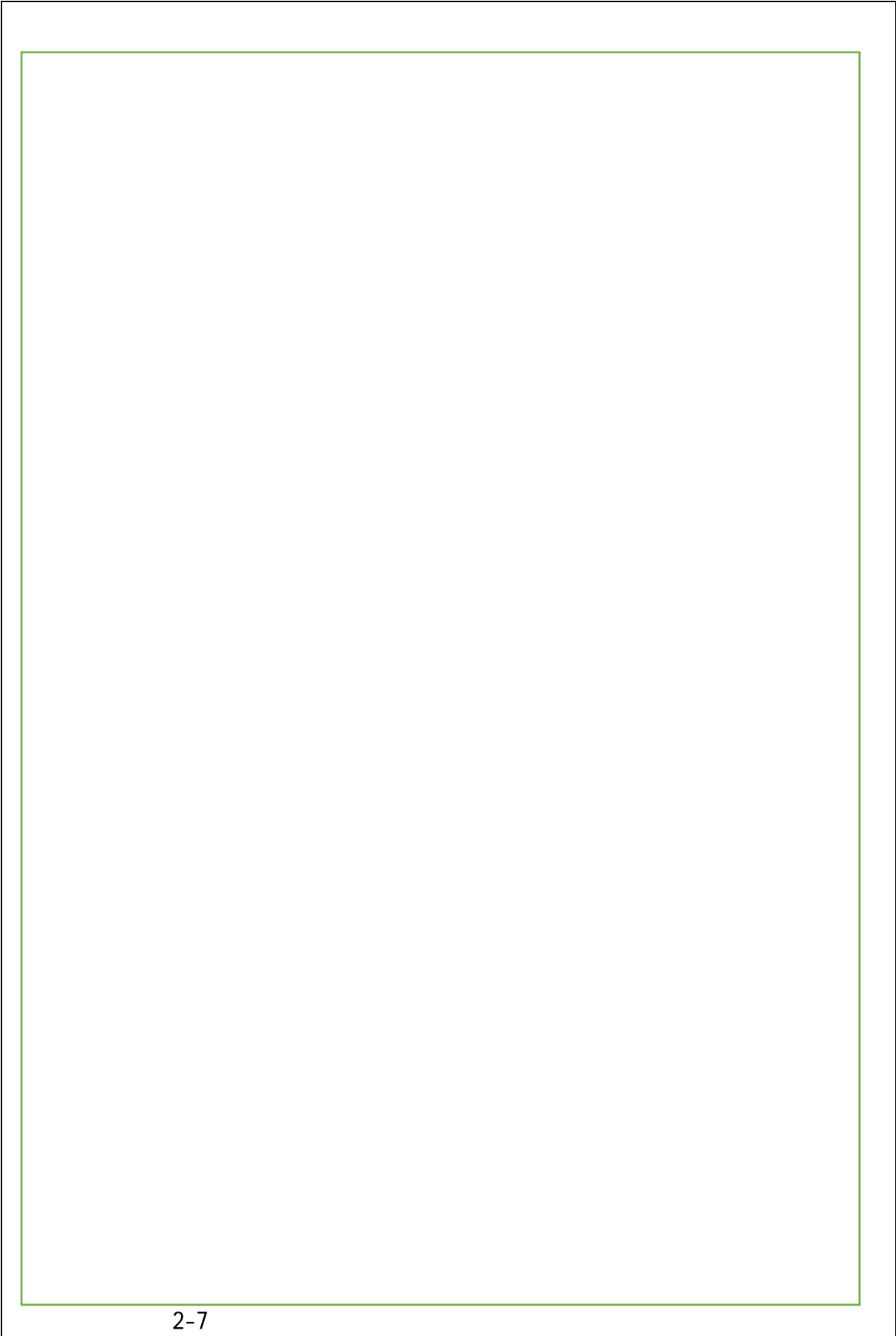


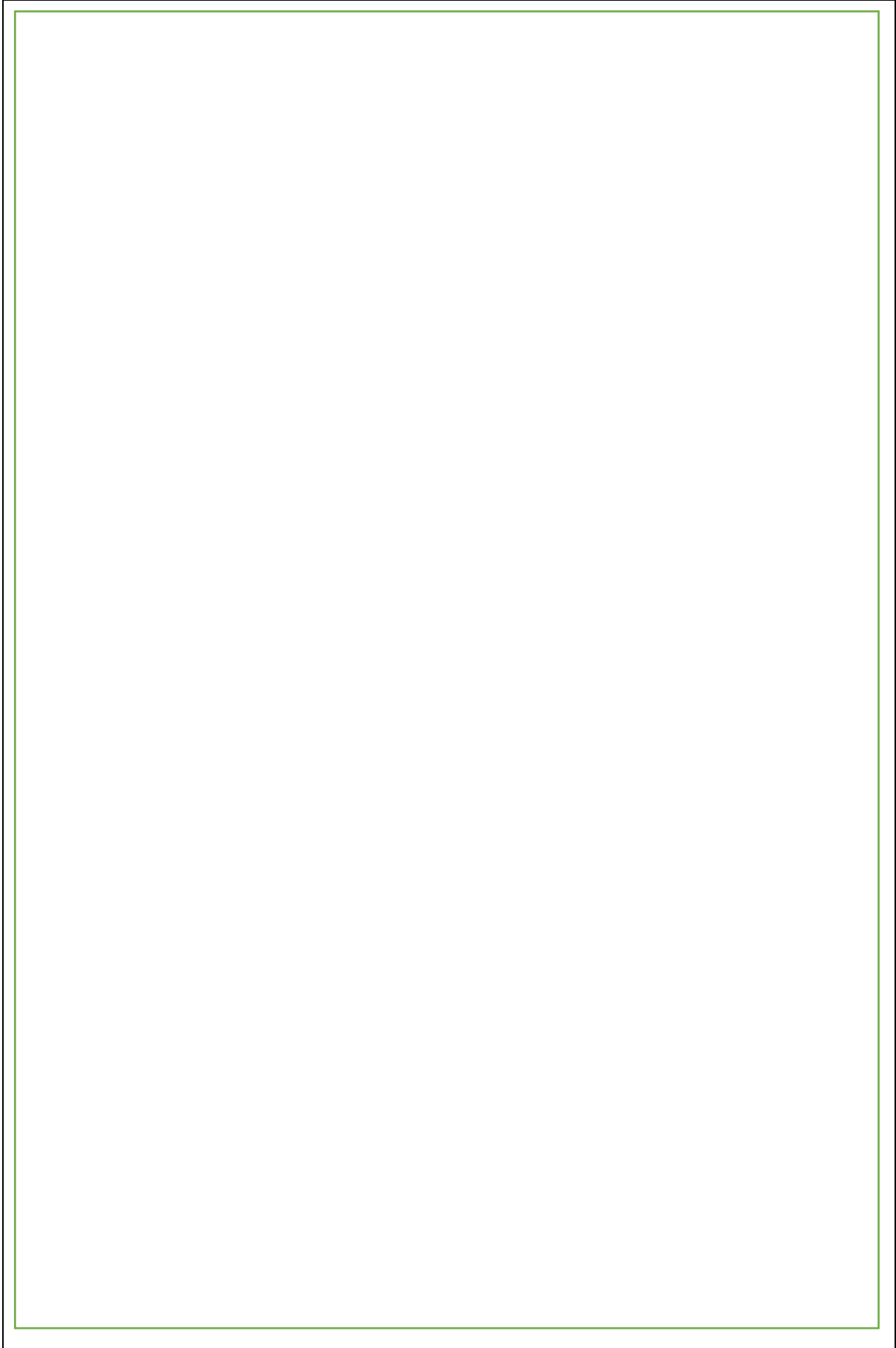


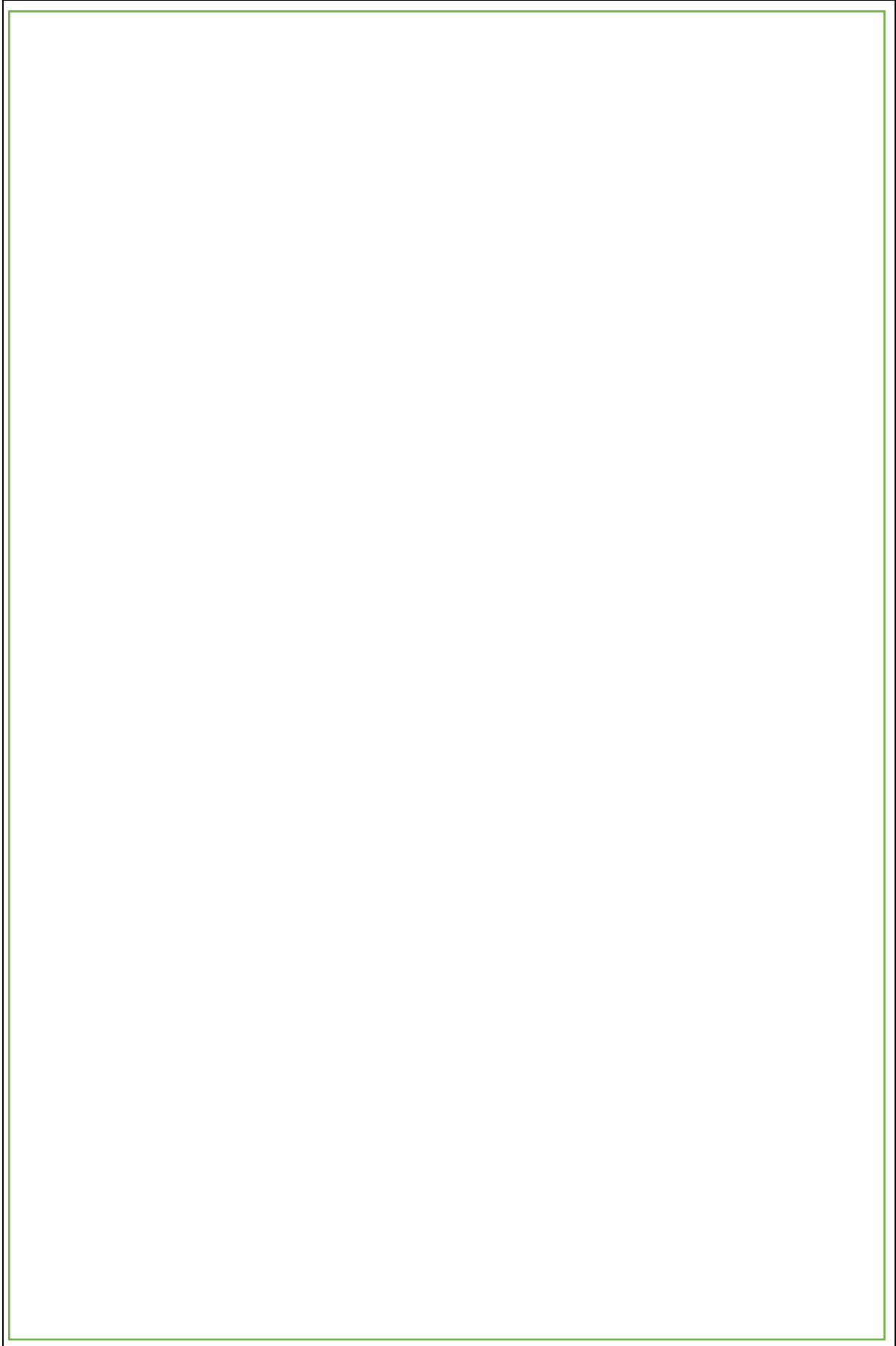












[2018]6

2.

[2015]256

2-5

2-6

2-5

	[2018]6		
1	50%	30%	
2			
3			
4			
5			
6		10%	
7			
8			
9			

2-6

	[2015]256		
1			
2	30%		
3	30%		
4	30%		
5			
6			
7			
8			
9			
10			

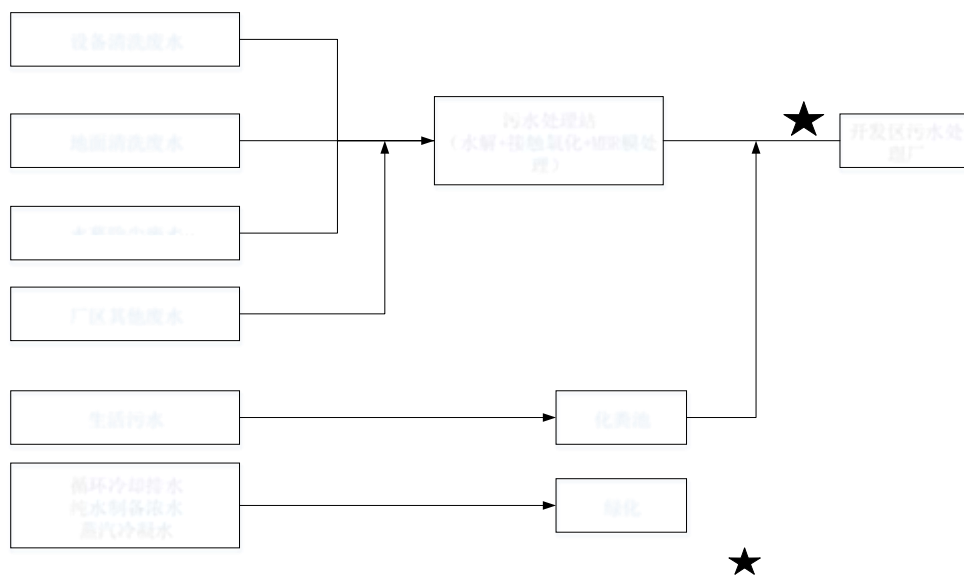
COD

42336.3 / 141t/d

150t/d

3-1

3-1



3-1

3-1

					t/a		
			COD SS		3600		

					800			
					96			
			COD SS		720			

1 15

FQ-05

1 15

FQ-08

2

1

+

2 15

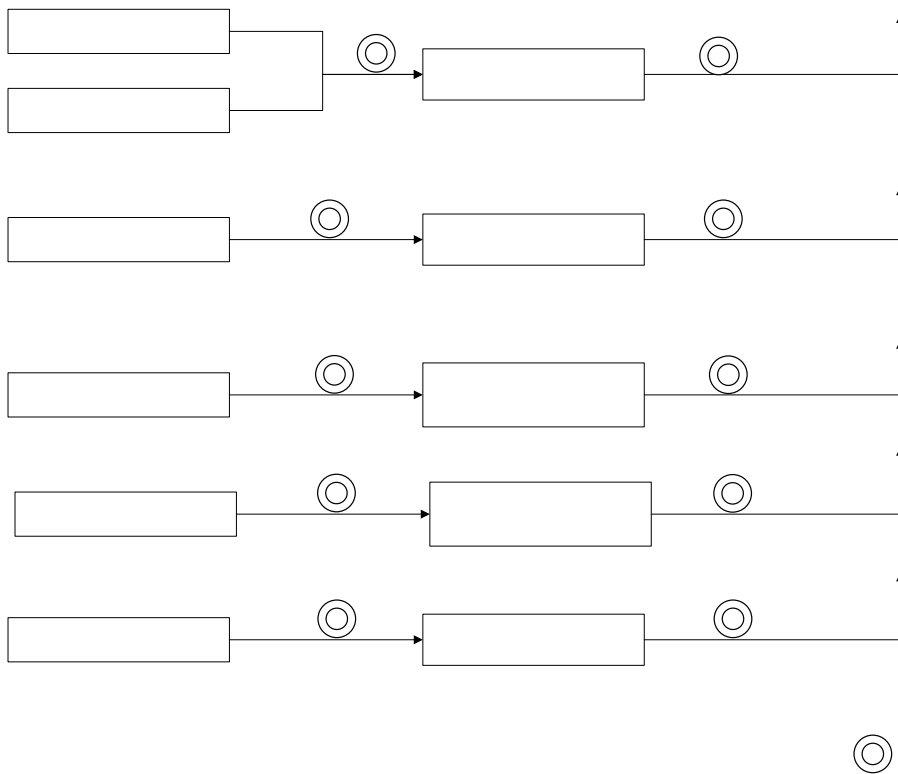
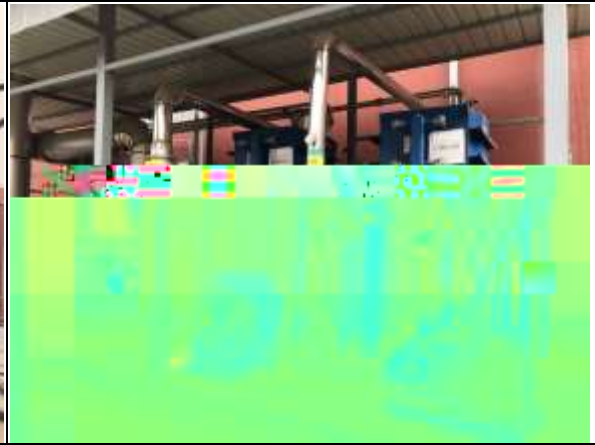
FQ-06 FQ-07

1 15

FQ-04

3-2

3-2



3-2

3-2

				60mi n/d	+15	+15	
				50mi n/d	+15	+15	

1			60mi n/d	+ +15	+ +15
2			60mi n/d	+ +15	+ +15

	/		HW49 900-041-49	0.04	0.03		
			HW02 272-005-02	1.06694	0.95		
			/	0.3	5		
			/	4.5	4		
" "							
45720 695 1.52%							
3-5							
		COD SS NH ₃ -N TP					
		COD SS	100t/d + +MBR	1 +	1 150t/d + +MBR	+	
			1500m ³ /h 4000m ³ /h 100% 99%	1 2	3		550
			4000m ³ /h + 100% 99.5%	2	2	+	580

					15	20
			150m ²	150m ²		
		/	100m ²	100m ²		
	/	/	/			
	/					
	DN150				85	95
					650	695

1

2

1 : 100%
99% + 99.5%
GB16297-1996 15m

2 :
5576t/a

3 :

20-25dB A

3

4

3

:

1

2

99

40

6321

650

“ ”

:

1

;

2

;

+

;

;

(GB16297-1996)

2

3

(GB12348-2008)

3

4

;

;

/

(GB18597-2001)

5

6): 5576 30315

COD 1.586 8.936 NH₃-N 0.032(0.392)

COD 0.558 3.028 NH₃-N 0.032(0.392)

: 0.00506 0.00706)

" "

5

4-1

1	;	
2	; ; + ; (GB16297-1996) 2	; ; + ; (GB16297-1996) 2
3	(GB12348-2008) 3	(GB12348-2008) 3
4	; / ;	; / ;

	(GB18597-2001)	
5		
6	): 5576 30315 COD 1.586 8.936 NH ₃ -N 0.032(0.392) COD 0.558 3.028 NH ₃ -N 0.032(0.392) : 0.00506 0.00706)	5216 / COD _{Cr} 0.871 / SS 0.183 / 0.029 / 0.0028 / 42336.3 / COD _{Cr} 7.070 / SS 1.482 / 0.238 / 0.023 / 0.0047 /

5-1

					/
	pH	pH	GB/T6920-1986	/	pH PHB-1 JSGHEL-YQ-112-2
	COD _{Cr}		HJ 828-2017	4 mg/L	50mL JSGHEL-YQ-115-2
	SS		GB/T11901—1989	4 mg/L	BSA224S JSGHEL-YQ-102
			HJ 535-2009	0.025 mg/L	UV201 JSGHEL-YQ-38
			GB 11893-1989	0.01 mg/L	UV201 JSGHEL-YQ-38
			HJ 637-2018	0.06 mg/L	JLBG-125 JSGHEL-YQ-35
			HJ 836-2017	1.0 mg/m ³	3012H JSGHEL-YQ-8-1 3012H JSGHEL-YQ-8-2 DV215CD JSGHEL-YQ-84
			GB12348-2008	/	AWA6228 JSGHEL-YQ-121-3

(HJ459-2009)

HJ494-2009

HJ493-

2009

HJ/T91-2001

10%
5-2

					%		%			
pH	11	/	11	/	0	/	± 0.1	/		/
CODcr	11	2	2	2	3.57 3.82	0 3.45	20	10		
SS	11	/	/	/	/	/	/	/	/	/
	8	2	2	2	1.09 2.40	0.96 1.81	20	10		
	8	2	2	2	0.88 1.10	0.97 1.03	20	10		
	8	2	2	/	1.10 3.51	/	20	/		/

5-3

					%		%			
pH	11	/	/	/	/	/	/	/		/
CODcr	11	2	/	/	/	/	/	/		/
SS	1	/	/	/	/	/	/	/		/
	8	2	2	2	95.8	102.8	90	105		
	8	2	2	2	105.5	106.8	90	110		
	8	2	/	/	/	/	/	/		/

5-4

		mg/L		mg/L			
pH	/	/	/	/	/		/
CODcr	(GSB 07- 3161-2017 200197)	169± 9		172 164			
	(GSB 07- 3161-2017	50.7± 3.0		51.8 49.2			

	2001108)			
SS	/	/	/	/
	/	/	/	/
	/	/	/	/
	/	/	/	/

GB/T16157-1996
 HJ/T373-2007
 HJ/T55-2000
 HJ/T397-2007
 GB16297
 C
 5-5

							%	%	
		12	4	/	/	/	/	/	/

6-1						
		6-1	2	3-1		
		/	/			
	S1		+ + +MBR	pH COD SS NH3-N TP		4 / 2
	S2	/	/	pH COD SS	/	1 /
	S3					2
6-2						
		6-2	2	3-2		
		/	/			
	Q1	(FQ-04)				3 / 2
	Q2					
	Q3					
	Q4					

(FQ-05)

6-4

	mg/L, pH	
pH	6-9	
	500	
	400	
	35	
	3.0	

GB16297-1996 2

GB16297-1996 7.2

$\bar{1}$

h-

h_1, h_2- 1 2

$$Q=Q_1+Q_2$$

Q-

Q_1, Q_2 1 2

GB16297-1996 7.1

200m

5m



5m

6-5

6-5

50%
15m, 200m
50%

2019 3 21 2019 3 22

75% " "

7-1

7-2

7-1

			/	/	/	%
2019 3 21	1		4.8	0.0667	0.0652	97.8
	2		6.0	0.0667	0.0654	98.0
2019 3 21	1		4.8	0.0667	0.0652	97.8
	2		6.0	0.0667	0.0654	98.0

7-2

			%	kPa	m/s	
2019 3 21		/	/	/	2.4	
2019 3 22		/	/	/	2.1	

7-3

7-3

			(mg/L)		
2019 3 21	S1	pH	7.32	7.41	6 9
		COD _{Cr}	149		500
			5.61		35
			0.54		3.0
			35		400
			2.10		/
	S2	pH	7.51		/
		COD _{Cr}	12		/
			9		/
	S3	pH	7.60		/
		COD _{Cr}	16		/
			6		/
2019 3 22	S1	pH	7.35	7.43	6 9
		COD _{Cr}	167		500
			4.40		35
			0.47		3.0
			35		400
			45.9		/
	S2	pH	7.47		/
		COD _{Cr}	14		/
			8		/

2019 3 21

2019 3 22

FQ-04 Q2

FQ-05 Q4

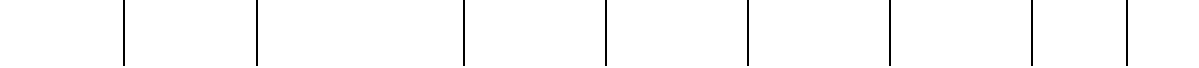
1

+

FQ-06 Q6

2

+ FQ-07 08 FQ-08
 Q10
 16297-1996 2
 16297-1996 2
 92.6% 96.0%
 95.9% 98.3% 1
 + 93.7% 96.0% 2 +
 92.4% 95.0%
 93.8% 97.0%
 7-4 7-5
 7-6 2 3-2
 7-1 7-2
 7-4



Q1

	3	22	mg/m ³								
			kg/h	8.97×10 ⁻³	9.54×10 ⁻³	1.09×10 ⁻²	9.54×10 ⁻³	/	/		
Q4	2019	3	21	mg/m ³	1.2	1.1	1.2	1.2	120		
				kg/h	2.34×10 ⁻⁴	2.26×10 ⁻⁴	2.46×10 ⁻⁴	2.46×10 ⁻⁴	1.75		
FQ-05	2019	3	22	mg/m ³	1.8	1.3	1.6	1.8	120		
				kg/h	3.67×10 ⁻⁴	2.52×10 ⁻⁴	3.25×10 ⁻⁴	3.67×10 ⁻⁴	1.75		
Q5	1	2019	3	21	mg/m ³	15.0	12.5	15.7	15.7	/	/
	+			kg/h	0.134	0.112	0.141	0.141	/	/	
		2019	3	22	mg/m ³	15.6	14.0	15.8	15.8	/	/
				kg/h	0.140	0.126	0.142	0.142	/	/	
Q6	1	2019	3	21	mg/m ³	1.3	1.1	1.2	1.3	120	
	+			kg/h	6.27×10 ⁻³	5.16×10 ⁻³	5.59×10 ⁻³	6.27×10 ⁻³	1.75		
FQ-06		2019	3	22	mg/m ³	1.4	1.7	1.5	1.7	120	
				kg/h	6.51×10 ⁻³	7.96×10 ⁻³	6.95×10 ⁻³	7.96×10 ⁻³	1.75		
Q7	2	2019	3	21	mg/m ³	11.2	10.6	13.5	13.5	/	/
	+			kg/h	4.45×10 ⁻²	4.25×10 ⁻²	5.51×10 ⁻²	5.51×10 ⁻²	/	/	
		2019	3	22	mg/m ³	15.8	15.8	12.9	15.8	/	/
				kg/h	6.38×10 ⁻²	6.26×10 ⁻²	5.25×10 ⁻²	6.38×10 ⁻²	/	/	
Q8	2	2019	3	21	mg/m ³	1.4	1.2	1.3	1.4	120	
					3.39×10 ⁻³	2.91×10 ⁻³	3.05×10 ⁻³	3.39×10 ⁻³	1.75		

+		kg/h						
	FQ-07	2019 3 22	mg/m ³	1.5	1.4	1.1	1.5	120
			kg/h	3.57×10 ⁻³	3.43×10 ⁻³	2.65×10 ⁻³	3.57×10 ⁻³	1.75
Q9	2019 3 21	mg/m ³	13.0	16.0	17.0	17.0	/	/
		kg/h	6.50×10 ⁻²	7.84×10 ⁻²	8.42×10 ⁻²	8.42×10 ⁻²	/	/
	2019 3 22	mg/m ³	13.6	14.4	16.8	16.8	/	/
		kg/h	6.97×10 ⁻²	7.27×10 ⁻²	8.57×10 ⁻²	8.57×10 ⁻²	/	/
Q10	2019 3 21	mg/m ³	1.1	1.1	1.1	1.1	120	
		kg/h	2.88×10 ⁻³	2.95×10 ⁻³	2.88×10 ⁻³	2.95×10 ⁻³	1.75	
FQ-08	2019 3 22	mg/m ³	1.6	1.4	1.3	1.6	120	
		kg/h	4.29×10 ⁻³	3.71×10 ⁻³	2.57×10 ⁻³	4.29×10 ⁻³	1.75	

7-5 kg/h

		2019 3 21			2019 3 22		
	Q1	6.04×10 ⁻³	5.06×10 ⁻³	5.08×10 ⁻³	8.43×10 ⁻³	8.05×10 ⁻³	7.26×10 ⁻³
	FQ-04	3.06×10 ⁻⁴	3.24×10 ⁻⁴	3.06×10 ⁻⁴	3.38×10 ⁻⁴	4.32×10 ⁻⁴	5.38×10 ⁻⁴
	%	94.9	93.6	94.0	96.0	94.6	92.6
	Q3	1.35×10 ⁻²	1.18×10 ⁻²	1.19×10 ⁻²	8.97×10 ⁻³	9.54×10 ⁻³	1.09×10 ⁻²
	Q4	2.34×10 ⁻⁴	2.26×10 ⁻⁴	2.46×10 ⁻⁴	3.67×10 ⁻⁴	2.52×10 ⁻⁴	3.25×10 ⁻⁴

	FQ-05						
	%	98.3	98.1	97.9	95.9	97.4	97.0
Q5	1 +	0.134	0.112	0.141	0.140	0.126	0.142
Q6	1 +	6.27×10^{-3}	5.16×10^{-3}	5.59×10^{-3}	6.51×10^{-3}	7.96×10^{-3}	6.95×10^{-3}
	FQ-06						
	%	95.3	95.4	96.0	95.4	93.7	95.1
Q7	2 +	4.45×10^{-2}	4.25×10^{-2}	5.51×10^{-2}	6.38×10^{-2}	6.26×10^{-2}	5.25×10^{-2}
Q8	2 +	3.39×10^{-3}	2.91×10^{-3}	3.05×10^{-3}	3.57×10^{-3}	3.43×10^{-3}	2.65×10^{-3}
	FQ-07						
	%	92.4	93.2	94.5	94.4	94.5	95.0
Q9		6.50×10^{-2}	7.84×10^{-2}	8.42×10^{-2}	6.97×10^{-2}	7.27×10^{-2}	8.57×10^{-2}
Q10		2.88×10^{-3}	2.95×10^{-3}	2.88×10^{-3}	4.29×10^{-3}	3.71×10^{-3}	2.57×10^{-3}
	FQ-08						
	%	95.6	96.2	96.6	93.8	94.9	97.0

7-6

		kg/h	kg/h	kg/h	
	FQ-04 Q2	5.38×10^{-4}	0.017	1.75	
	FQ-05 Q4	3.67×10^{-4}			
1	+ FQ-06 Q6	7.96×10^{-3}			
2	+	3.57×10^{-3}			

	FQ-07 08			
	FQ-08 010	4.29× 10 ⁻³		

2019 3 21 2019 3 22

59.3dB(A)

GB12348-2008 3

7-7

7-7

				dB(A)	dB(A)		
2019 3 21	Z1	1		55.5	65		
	Z2	1		59.3	65		
	Z3	1		52.3	65		
	Z4	1		52.3	65		
	Z5	1		52.0	65		
	Z6	1		55.8	65		
2019 3 22	Z1	1		59.1	65		
	Z2	1		56.4	65		
	Z3	1		51.9	65		
	Z4	1		51.9	65		
	Z5	1		51.0	65		
	Z6	1		53.2	65		

1

5216 / COD_{Cr}0.871 / SS 0.183 / 0.029 /

0.0028 /

42336.3 / COD_{Cr}7.070 / SS 1.482 /

0.238 / 0.023 /

" "

COD

42336.3 / 141t/d

150t/d

S1

pH7.32 7.41 COD_{cr}167mg/L 5.61mg/L 0.54mg/L 35mg/L

1 15

FQ-05

1 15

FQ-08

2

1

+

2 15

FQ-06 FQ-07

1 15

FQ-04

FQ-04 Q2

FQ-05 Q4

1

+

FQ-06 Q6

2

+

FQ-07 Q8

FQ-08 Q10

16297-1996 2

16297-1996 2

92.6% 96.0%

95.9% 98.3%

1

+

93.7% 96.0%

2

+

92.4% 95.0%

93.8% 97.0%

59.3dB(A)

GB12348-2008 3

/

/

1

2

0.0047 /

" "

" "

1

2

" "

()

():

()

									/			99	
()		[C2720]							/			118° 88' 65" 32° 14' 05"	
		40							40				
									[2017]99				
		2017 11							2018 12 1			/	
												/	
()		42151				()			650	(%)		1.54	
()		45720				()			695	(%)		1.52	
()	/	()	/)	(/		()	/	()	/	()	/
		/							/			/	
									/			2019 5 21	
(		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	/	0.5216	0.5576	/	/	0.5216	0.5576	/	/	4.23363	3.0315	/	+0.5216
	/	167	500	/	/	0.871	1.586	/	/	7.070	8.936	/	+0.871
	/	5.61	35	/	/	0.029	0.032	/	/	0.238	0.392	/	+0.029
	/	35	400	/	/	0.183	0.525	/	/	1.482	6.675	/	+0.183
	/	0.54	3.0	/	/	0.0028	0.003	/	/	0.023	0.063	/	+0.0028
	/	/	120	/	/	0.00407	0.00506	/	/	/	/	/	+0.00407
	/	/	/	/	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/	/	/	/	/
