	Lane	-11				T	Ť		Area Runoff			I Hartreen I	Total	1						Gutter Flov	- 67		ALCULATION				Ť				Jaloba Canadh							Inlet By-pass		
Inlet	1,00,00	ation	Station	Offset	Decise	Duneff	Area	Time of	Intensity	1 0000	Runoff	Upstream	Total Gutter	Thoroughfare	Inlet Type:	Manning's	Long	Cenum	Cross Slope	Amorated Wiles	ression	Danding M	/idth/Spread	Donth of	Gutter Flow	Max Allowable Flow	Depressed Gutter Sectio	Section D	evond Depressio		Inlets Capacity onveyance	Ratio of	Equivalent	Length Red	audend I	Inlet	Clave	met by-pass	To	
iniet	Aligni	nment	Station	Uliset	Design	Runoff Coeff	Area	Concentration	intensity	Area	Kunon	Bypass C*A	Flow	Type	On Grade/	E.	Long	Crown		Depth	1		(Actual)		T	Based on Max. Allowable			Wetted Pe		Section Beyond	-	100				Flow	C*A	Inlet	Remarks
ID.					Frequency	"C"	10	Concentration	8		Q.	(Column 39	Flow	Туре	Sag	Coefficient "n"	Slope "S"	туре	of Pavement "Sx"	Depth ">"	Width "W"	(Allow)	(19)7(6)363(8)5	(Allow)	(Actual)	Ponding Width	Area Wetted P	er Area	Wetted Pe	Section		Depression flow to Total Flow	Cross Slope	Required	Actual	Capacity	Q _{bvDass}	CA	met	Kemarks
								(min)	(in/hr)	(25)	(cfs)		(cfs)		odg	"	(ft/ft)		(ft/ft)	(f+)	/f+\	lallow	Tactual	Yallow	Yactual	(cfs)	161 ² 1 161	H ₀	(f+)	Section	Depression	to rotarriow		L _{req'd}	(ft)	(cfs)	(cfS)	1	10	
2			2	::41:			.7	(11101)	(in/hr)	(ac)	11	Upstream Inlet)	12	14	15	16	17	10	10	30	21	22	22	24	25	(CIS)	(ft²) (ft)	(ft²)	(ft)	NW 21	22	22	S _e (ft/ft)	(ft)	36	27	20	20	40	- 41
Δ1Λ	Gem	Drive	5+04.03	14.50 L	100	0.50	A1A	10.0	9.80	1.54	7.55	12	7.5	Residential Concrete	On Grade	0.0175	0.017	Straight Crown	0.036	0.50	2.00	14.00	9.9	0.50	0.36	7.50	1,14 2.08	1.14	7.9	65.24	26.43	0.712	0.21	11.8	15.0	13.36	0,0	0.00	40	41
A1A			4+77.80	14.50 R	100	0.50	A1B	10.0	9.80	2.39	11.71		11.7	Residential Concrete	On Grade		0.017		0.036	0.50	2.00	14.00	11.8	0.50 0.50	0.36	11.64	1.27 2.08	1.14	9.8	78.08	45.65	0.631	0.19	15.0	15.0 15.0	11.69	0.0	0.00		
A2A		**************	1+94.78	14.50 L	100	0.50	A2A	10.0	9.80	1.03	5.05			Residential Concrete	On Grade		0.017	Straight Crown Straight Crown	0.036	0.50	2.00	14.00	8.6	0.50	0.36	5.02		0.78	6.6	56.12	15.93	0.779	0.13	9.5	10.0	5.71	0.0	0.00		
A2B		Drive	1+12.45	14.50 R	100	0.50	A2B	10.0	9.80	1.03	7.20	+	5.0 7.2	Residential Concrete	On Grade		0.007	Straight Crown		0.50	2.00	14.00	11.5	0.50	0.36	7.16	1.05 2.08 1.26 2.08	1.64	9.5	76.53	43.07	0.640	0.20	9.3	10.0	8.46	0.0	0.00	***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			4+69.95	14.50 L				2010		1.49			7.3	Residential Concrete	Sag		0.007	Straight Crown	0.036						0.36	7.16			9.6		43.77	0.637		8.2		8.45	0.0			
A3A A3B		************	4+58.95	14.50 L 14.50 R	100	0.50	A3B A3B	10.0	9.80	1.49	7.30	0.10	7.3 8.3	Residential Concrete	Sag	0.0175	0.007	Straight Crown	0.036	0.50	2.00	14.00 14.00	11.6 12.2	0.50	0.36	8.24	1.26 2.08 1.30 2.08	1.66	10.2	76.96 81.13	50.98	0.614	0.20	8.8	10.0	9.07	0.0	0.00		······
			1+80.00									0.10			On Condo			Straight Crown							0.36	2.78			4.2			0.894								
B1A B1B		Drive Drive	1+80.00	14.50 L 14.50 R	100	0.50 0.50	B1A B1B	10.0	9.80 9.80	0.57 2.24	2.79 10.98		2.8	Residential Concrete Residential Concrete	On Grade On Grade		0.028	Straight Crown	0.036	0,50	2.00	14.00 14.00	6.2 10.4	0.50 0.50	0.36	10.91	0.88 2.08 1.18 2.08	0.32	8.4	41.90 68.55	4.95 30.88	0.894	0.26 0.21	8.0 16.3	10.0 15.0	4.70 9.01	0.0 1.97	0.00	B21B	
			6+55.49	32.00 L	100	0.30	B2.1A	10.0	9.80	0.43	2.93		2.0	Minor Divided Arterial			0.028	Straight Crown	0.036	***************	2.00	12.00	11.3	0.50	0.36	2 91	0.91 2.07	0.86	9.4	44.76	15.00	0.749		6.7	10.0	7.48	0.00	0.00	BZIB	
B2.1/		1000	6+58.89	32.00 E	100	0.75	1	10.0	9.80		2.58	0.20	4.5	Minor Divided Arterial	On Grade		0.009	Straight Crown		0.50			12.0		-	3.38	11 12 12		10.0			+	0.21	8.2	10.0		0.00			
B2.18			4+90.50			0.73	B2.1B	10.0	9.80	0.35	****	0.20			On Grade		0.009	Straight Crown		0.50	2.00	12.00		0.50	0.36	2.08		1.00	8.0	47.13 40.49	18.29 9.93	0.720	0.20	5.6		7.28 8.19		0.00	***************************************	
B2.2/			4+94.40	32.00 R	100	0.71	B2.2A B2.2B	10.0	9.80	0.30	2.10		2.1	Minor Divided Arterial	On Grade		0.009	Straight Crown	0.020	0.50		12.00 12.00	10.0 10.8	0.50 0.50	0.36	2.08		0.63	8.8	43.05	12.84	0.803		6.2	10.0 10.0	7.94	0.00	0.00		
B2.28			3+70.28	32.00 L 32.00 R	100	0.90	B2.2B B2.3A	10.0	9.80	0.33	2.54 2.91		2.5	Minor Divided Arterial	On Grade		0.009	Straight Crown	0.020	0.50	2.00	12.00	11.3	0.50	0.36	2.89	0.89 2.07 0.91 2.07	0.77	9.3	44.67	14.88	0.750	0.21 0.21	6.7	10.0	7.94	0.00	0.00		
B2.3/ B2.38			3+70.28		100	0.90		10.0	9.80			·		Minor Divided Arterial	On Grade			Straight Crown			2.00		9.6	0.50	0.36	1.84			7.6			0.750		5.2	10.0	**********	0.00	********************		
	****************	***************************************	1+77.50	32.00 L		0.50	B2.3B	10.0	9.80	0.21	1.85		1.9	Minor Divided Arterial	On Grade		0.009	Straight Crown	0.020	0.50	2.00	12.00 14.00		0.50	0.36	2.92		0.57	4.5	39.26	8.67		0.22	7.9	10.0	8.60	0.00	0.00		
B3A	Contract Con		1+77.50	14.50 R	100	0.50	B3A	10.0	9.80	0.60	2.94		2.9	Residential Concrete	On Grade		*******	Straight Crown	0.036	0.50	2.00		6.5	0.50 0.50	0.36	6.48	*************************	0.37	6.6	43.65	5.95	0.880	0.26		15.0	5.12 10.42		0.00		
B3B	Peddie	le Lane	6+30.00	14.50 L	100		B3B B4A	10.0	12 10011110000111000011100	1.33	6.52		6.5	Residential Concrete	On Grade		0.028	Straight Crown	0.036	0.50		14.00	8.6			3.02	1.05 2.08	0.78	0.0	56.12	15.94		0.23	12.3			0.00	0.00		
B4A B4B	Sappnir	re Road	6+30.00	14.50 L 14.50 R	100	0.50	B4B	10.0	9.80 9.80	0.62	3.04	-	3.0	Residential Concrete	On Grade		0.016 0.016	Straight Crown	0.036	0.50	2.00	14.00	8.4	0.50	0.36	4.63	0.94 2.08	0.48	6.4	47.16	8.25	0.851	0.25	9.0	10.0	6.53 5.93	0.00	0.00		
B48 B5A	Sappnir	ire Road	2+08.00		100	0.50 0.50	B5A	10.0	9.80	0.95	4.66 5.78		4.7	Residential Concrete	On Grade		0.016	Straight Crown	0.036	0.50	2.00	14.00	9.1	0.50	0.36	······································	1.03 2.08 1.08 2.08	0.73	6.4	54.78 59.44	14.62 19.45	0.789	0.23		10.0 10.0	5.64	0.00	0.00	A3B	
B5A B5B	Sappnir	re Road	2+08.00	14.50 L					9.80				5.8	Residential Concrete	On Grade			Straight Crown	*********************	0.50		14.00	9.1	0.50		5.75			7.1				0.22	10.1			0.15	0.01		
		ire Road Quail	1+42.28	14.50 R 32.00 L	100	0.50 0.90	B5B C1A	10.0	9.80	0.31	6.32 2.73	·	6.3	Residential Concrete	On Grade		0.016	Straight Crown	0.036	0,50	2.00	14.00 12.00	11.6	0.50	0.36	6.28	1.10 2.08 0.92 2.07	0.98	9.6	61.42 45.79	21.70 16.38	0.739	0.22	10.6 6.1	10.0	5.48 8.96	0.84	0.09	A3B	F. d Vallet (1916)
C1A											***************************************	-	2.7	Minor Divided Arterial	On Grade			Straight Crown	0.020		2.00			0.50											10.0			0.00		Future Inlet (Ultimate
C1B			1+42.28	32.00 R	100	0.90	C1B C2A	10.0	9.80 9.80	0.24	2.12 4.85		2.1	Minor Divided Arterial	On Grade		0.007	Straight Crown	0.020	0.50	2.00	12.00	10.5 9.3	0.50 0.50	0.36	2.10	0.88 2.07 1.10 2.08	0.73	8.5 7.3	42.33 60.94	11.99	0.779	0.21	5.3 7.3	10.0	9.64	0.0	0.00		Future Inlet (Ultima
C2A		y Way	1+45.50	14.50 L		0.50						-	4.9	Residential Concrete	Sag	0.0175		Straight Crown	0.036	0.50		14.00	210			4.82					21.15	0.742			************	6.07		0.00		
C2B C3A			1+45.50 2+02.56	14.50 R	100	0.50	C2B C3A	10.0	9.80	0.27	6.96 1.32	-	7.0	Residential Concrete	Sag	0.0175	0.010	Straight Crown		0.50	2.00	14.00	10.7 6.1	0.50	0.36	6.92	1.20 2.08 0.87 2.08	0.31	8.7	70.18 41.19	33.21 4.57	0.679	0.21	9.1	10.0	7.44 3.23	0.0	0.00		
		Drive		14.50 L									1.3	Residential Concrete	Sag	0.0175	0.007	Straight Crown	0.036	0.50		14.00		0.50	*****************	1.31			4.1					1.2						
C3B	Upal	Drive	2+02.56	14.50 R	100	0.50	C3B	10.0	9.80	0.19	0.93		0.9	Residential Concrete	Sag	0.0175	0.007	Straight Crown	0.036	0.50	2.00	14.00	5.4	0.50	0.36	0.93	0.81 2.08	0.20	3.4	36.98	2.66	0.933	0.27		10.0	2.65	0.0	0.00		
OSA			0.0004	75.05.	100	0.50	OSA	10.0	9.80	0.95	4.66	-	4.7	Channel	Drop	0.0350	0.010			0.50				0.50	0.50							<u> </u>		4.3	20.0	21.83	0.0	0.00		
B2			9+08.24	76.85 L	100	0.50	B2	10.0	9.80	0.84	4.12		4.1	Channel	Drop	0.0350	0.010			0.50				0.50	0.50									3.8	12.0	13.10	0.0	0.00		5 1 1 1 1 N 1 1 1 1 1 1 1 1 1 1 1 1 1 1
C1			1+65.76	50.50 L	100	0.50	C1	10.0	9.80	0.68	3.33		3.3	Channel	Drop	0.0350	0.010			0.50				0.50	0.50									3.1	12.0 25.0	13.10	0.0	0.00		Future Inlet (Ultima
C2	Ruby	y Way	1+43.03	34.50 L	100	0.61	C1&C2	10.0	9.80	1.99	11.91		11.9	Channel	Drop	0.0350	0.010			0.50	4			0.50	0.50									10.9	25.0	27.29	0.0	0.00		

Things T	Remarks
Part	Remarks
May	
Part	
Second S	
1	
March Marc	
*** \$\curspace************************************	
Part	
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Mile 14-16	
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Part	
101439 949.037 74.02 1 24 RCT 3.44 6.26 5.00	
Secondary Seco	
1-48/88/7 1-49/88/6 6.13 1 36	
148.857 149.84 6.13 1 36 167 717 642 6.75 6.7	
Start Star	
2+90.06	
2+90.66	
1493.29 1593.79 1 24 RCP 3.14 6.28 0.50 0.013 32.05 32.05 32.05 0.013 32.05 32.05 32.05 0.013 32.05 32.0	
Storm Drain	
Storm Drain	
Storm Drail Line SD-B2 Storm Drail Line	
Storm Drain Line SD-B2.1A 0+26.17	
0+26.17 0+00.00 26.17 1 21 RCP 2.41 5.50 0.44 0.013 533.12 532.18 0.036 B2.1A 0.43 0.70 0.3 10 10 9.8 2.93 30.11 Yes 1.22 0.36 0.0002 0.01 526.33 526.32 0.00 0.02 Inlet at Beginning of Line 0 0.03 526.36 537.62 11.26	
Storm Drain Line SD-B2.1B	
0+52.49	
Storm Drain Line SD-82.2A 0+26.15	
Storm Drain Line SD-B2.2B	
0+53.63 0+00.00 53.63 1 21 RCP 2.41 5.50 0.44 0.013 531.38 530.45 0.017 B2.2B 0.39 0.66 0.3 10 10 9.8 2.54 20.84 Yes 1.06 0.85 0.0002 0.01 525.26 525.25 0.00 0.02 Inlet at Beginning of Line 0 0.02 525.28 535.86 10.58 Storm Drain Line SD-B2.3A	
0+73.46 0+47.34 26.12 1 21	
0+35.94 0+00.00 35.94 1 21 RCP 2.41 5.50 0.44 0.013 530.15 529.83 0.009 B2.3B 0.21 0.90 0.2 0.5 10.52 100 9.7 4.72 14.95 Yes 1.96 0.31 0.0004 0.01 524.37 524.35 0.02 0.06 60 Wye 0.35 0.05 524.42 Storm Drain Line SD-B2.3B	
0+52.57 0+00.00 52.57 1 21 RCP 2.41 5.50 0.44 0.013 530.51 530.15 0.007 B2.3B 0.21 0.90 0.2 0.2 10 100 9.8 1.85 13.16 Yes 0.77 1.14 0.0002 0.01 526.96 526.96 0.00 0.01 Inlet at Beginning of Line 0 0.01 526.98 535.01 8.03 Storm Drain Line SD-B3B	
0+20.51 0+00.00 20.51 1 21 RCP 2.41 5.50 0.44 0.013 531.88 531.51 0.018 B3B 1.33 0.50 0.7 10 10 9.8 6.52 21.20 Yes 2.71 0.13 0.005 0.01 526.03 526.02 0.00 0.11 Inlet at Beginning of Line 0 0.14 526.17 536.38 10.21	
Storm Drain Line SD-B4A 0+20.57	
Storm Drain Line SD-B4B O+16.80	
Storm Drain Line SD-BSA O+19.64	
Storm Drain Line SD-BSB 0+27.93	
Future Storm Drain Line SD-C1 (Ultimate Condition)	Future Strom Line - Ultimate Condition
1+52.42 1+8.92 33.50 1 21 RCP 2.41 5.50 0.44 0.013 529.11 529.01 0.003 0.01 530.59 530.58 0.00 0.03 Inlet at Beginning of Line 0 0.04 530.62 533.39 2.77 1+18.92 0+54.92 64.00 1 21 RCP 2.41 5.50 0.44 0.013 529.01 529.01 0.003 0.01 530.59 530.58 0.00 0.03 Inlet at Beginning of Line 0 0.04 530.62 533.39 2.77 1+18.92 0+54.92 64.00 1 21 RCP 2.41 5.50 0.44 0.013 529.01 528.82 0.003 C1A 0.10 9.7 6.02 8.68 Yes 2.50 0.43 0.00 0.01 MH w/4 5 Change in Pipe Direction 0.42 0.04 0.00 0.00 0.00 0.00 0.01 MH w/0 Change in Pipe Direction 0.05 0.01 530.59 2.89 2.89 <td>Future 5trom Line - Ultimate Condition</td>	Future 5trom Line - Ultimate Condition
	Future 5trom Line - Ultimate Condition Future 5trom Line - Ultimate Condition
Storm Drain Line SD-C 3+99.70 3+83.02 16.68 1 24 RCP 3.14 6.28 0.50 0.013 521.21 520.68 0.032 C2A 0.99 0.50 0.5 10 100 9.8 4.85 40.34 Yes 1.54 0.18 0.0003 0.00 523.37 523.37 0.00 0.04 Inlet at Beginning of Line 0 0.05 523.42 525.77 2.35	
3+83.02 3+76.60 6.42 1 24 RCP 3.14 6.28 0.50 0.013 520.68 520.48 0.032 0.00 0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 0.00 523.35 523.35 0.04 0.04 45 Bend 0.37 0.01 523.37 0.01 523.37 0.01 523.37 0.01 523.35 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.0	
3+56.98 3+36.60 2+82.30 54.30 1 27 RCP 3.98 7.07 0.56 0.013 519.69 519.26 0.008 0.00 0.00 0.00 0.00 0.00 0.00 0.	
2+82.30 2+35.80 46.50 1 36 RCP 7.07 9.42 0.75 0.013 519.26 518.89 0.008 0.00 0.00 0.00 0.00 0.00 0.00	
2+35.80 2+19.06 16.74 1 36 RCP 7.07 9.42 0.75 0.013 518.89 518.75 0.008 C3A 0.27 0.50 0.1 2.6 10.78 100 9.67 24.71 59.66 Yes 3.50 0.08 0.005 0.01 522.64 522.63 0.17 0.19 45 Wye 0.5 0.10 522.74 0.50 0.10 522.74 0.50 0.10 522.74 0.50 0.10 522.74 0.50 0.10 522.74 0.50 0.10 522.74 0.50 0.10 0.10 0.10 0.10 0.10 0.10 0.10	
1+65.03 1+25.38 39.65 1 36 RCP 7.07 9.42 0.75 0.013 515.23 0.007 0.00	
Storm Drain Line SD-C2 0+57.85	
Storm Drain Line SD-C2B	Areas C1A, C1B & C2
0+20.58 0+00.00 20.58 1 21 RCP 2.41 5.50 0.44 0.013 5.21.35 5.20.71 0.031 C2R 1.42 0.50 0.7	Areas C1A, C1B & C2
0+20.58 0+00.00 20.58 1 21 RCP 2.41 5.50 0.44 0.013 521.35 520.71 0.031 C2B 1.42 0.50 0.7 0.7 10 100 9.8 6.96 27.99 Yes 2.89 0.12 0.0006 0.01 523.36 523.35 0.00 0.13 Inlet at Beginning of Line 0 0.00 523.36 525.77 2.41 Storm Drain Line SD-CSA 0+16.74 0+00.00 16.74 1 21 RCP 2.41 5.50 0.44 0.013 520.94 520.13 0.048 0.13 0.048 0.14 0.15 10 100 9.8 1.32 34.86 Yes 0.55 0.51 0.001 0.00 522.74 522.74 0.00 0.00 Inlet at Beginning of Line 0 0.00 522.74 522.74 0.0	Areas C1A, C1B & C2

RCP 2.41 5.50 0.44 0.013 519.46 519.29 0.008 C3B 0.19 0.50 0.1 0.1 10 100 9.8 0.93 14.35 Yes 0.39 0.89 0.001 0.00 522.63 522.63 0.00 0.00 Inlet at Beginning of Line 0 0.00 522.63 525.44 2.81

REFER TO DRAINAGE STUDY REPORT FOR FLOW5

REFER TO DRAINAGE STUDY REPORT FOR FLOWS REFER TO DRAINAGE STUDY REPORT FOR FLOWS
 88.00
 169.96
 Yes
 7.00
 6.33
 0.0008
 0.04
 510.34
 510.30
 0.00
 0.76
 Inlet at Beginning of Line
 0
 0.95
 511.29
 522.40
 11.11

 88.00
 169.96
 Yes
 7.00
 8.21
 0.0008
 0.05
 510.11
 510.07
 0.76
 0.76
 30 Bend
 0.25
 0.19
 510.30
 510.30

 88.00
 143.64
 Yes
 7.00
 3.69
 0.0008
 0.02
 510.03
 510.01
 0.76
 0.76
 MH w/ 0 Change in Pipe Direction
 0.05
 0.04
 510.07
 518.11
 8.04

0+20.58 0+00 Storm Drain Line SD-Pond Outfall

2+27.65

1+83.29

0+00.00

1+83.29

1+25.81

1+00.00

44.36 57.48 25.81

 RCP
 12.57
 12.57
 1.00
 0.013
 507.69
 507.07
 0.014

 RCP
 12.57
 12.57
 1.00
 0.013
 507.07
 506.27
 0.014

 RCP
 12.57
 12.57
 1.00
 0.013
 506.27
 506.01
 0.010

GIDEON GROVE - PHASE 2
OF ROCKWALL, ROCKWALL COUNTY, TEXAS

JTILITY NOTE

E EXISTING UTILITIES SHOWN ON THESE PLANS WERE COMPILED FROM VARIOUS URCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF E UTILITY INFORMATION ON THE PLANS. THE CONTRACTOR SHALL CONTACT A TILITY LOCATING SERVICE 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND OF ALL EXISTING UTILITIES AND DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS WITH EXISTING UTILITIES ARE DISCOVERED.

THESE RECORD DRAWINGS ARE BASED ON AS-BUILT DOCUMENTS PROVIDED BY THE CONTRACTOR OR DEVELOPER. FIELD INSPECTION OF CONSTRUCTION, IF REQUIRED FOR COMPLIANCE WITH CERTAIN REGULATORY STANDARDS, WAS NOT PERFORMED BY THE DESIGN ENGINEER. IT IS NOT GUARANTEED THAT THIS DOCUMENT REPRESENTS "AS-BUILT CONDITIONS." 03/22/2022

RESPONSIBILITY NOTE

ALL RESPONSIBILITY FOR THE ADEQUACY OF DESIGN REMAINS WITH THE DESIGN
ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF

PLAT NO.		#	
JOB NO		6126300	
DATE		June 21	
DESIGNER		ML	
CHECKED_	ASR	DRAWN_	ML
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PAPE-DAWSON ENGINEERS