

PIPE SCALE DETAILS

JOB: ST GEORGE'S PENANG

PITCH: A 440 @ 27°C (Note temperature!)

DEPARTMENT: Great Organ

DATE: 17th February 2016 (provisional)

TUNING METHOD: Cone & Slot

PRESSURE: 80mm

MANDER ORGANS

INITIALS: JPM

TEMPERAMENT: TBC

No	Stop Name	Pitch	Pipes	Mat	Ears	MW	C ¹	C ¹³	C ²⁵	C ³⁷ G ³²	C ⁴⁹	A ⁵⁸	Remarks
1	Open Diapason	8	58	75%	Small 1-36	4	150	92	55	32	19	14	Front pipes 1-21 Details from DO 1-30 common to Pedal Principal
1a	Dummy front pipes	(4)	6										6 dummy front pipes, details from DO
2	Stopped Diapason	8	58	Tulip			107x85	67x 53.5	42.5x 33.5	26.5x 21	17x 13.5	12x9.5	Stopped Wood Scale 41
3	Principal	4	58	56%	1-24 (small)	4	89	53	32	19	12	8	
4	Fifteenth	2	58	56%	1-12 (small)	4	52	31	19	11.5	7.5	5	
5	Mixture IV 1-8: 1 ¹ / ₃ .1. ² / ₃ . ¹ / ₂ 9-18: 2.1 ¹ / ₃ .1. ² / ₃ 19-30: 2 ² / ₃ .2.1 ¹ / ₃ .1 31-42: 4.2 ² / ₃ .2.1 ¹ / ₃ 43-58: 8.4.2 ² / ₃ .2	1 1/3	232	56%	none	4	(2' 45)	1' 28.5	¹ / ₂ ' 18	¹ / ₄ ' 11.5	¹ / ₈ ' 7	¹ / ₁₆ ' 4.5	
6	Trumpet	8	58	56%			110	85	65	50	39	31	Domed Shallots, scale No.13

DEPARTMENT: Swell Organ**PRESSURE: 80mm****JOB: St George's Penang**

No	Stop Name	Pitch	Pipes	Mat	Ears	MW	C ¹	C ¹³	C ²⁵	C ³⁷ G ³²	C ⁴⁹	A ⁵⁸	Remarks
	Gedackt Basses	8	8	Tulip			107x85						Stopped Wood Scale 41
7	Gedackt	8	9-58	35%	9-42	4	G#=82	70	46	30	20	15	Domed canisters, 51-58 open upper Ø half scale
8	Salicional	8	13-58	56%	13-48	4.5		62	37	23	13	7.5	1-12 from No. 7a. Parallel, slotted
9	Voix Celeste TC	8	13-58	56%	13-48	4.5		60	35	22	12.5	7	Parallel slotted, tuned flat
10	Principal	4	58	56%	1-24 (small)	4	87	52	31	19.5	12	7	
11	Chimney Flute	4	58	35%	1-42	4	67	44	29	19	12.5	10	13-36 internal chimneys ¹ / ₅ Ø length 1.5 x Ø. Domed canisters. 37-56 upper Ø ¹ / ₂ scale
12	Recorder	2	58	35%	1-18	4.5	55	34	20	11.5	7	5	1-24 tapered 1:2, becoming parallel by c49
13	Sesquialtera II 1-58: 2 ² / ₃ .1 ³ / ₅	2 2/3	116	56%	To 1'	4	2 ² / ₃ ' 54 2' 44	1'=27	¹ / ₂ '=17	¹ / ₄ '=105	¹ / ₈ '=7	¹ / ₁₆ '=45	
14	Oboe	8	58	56%			75 B 54	68	55	47	35 C# 34	30	Square end shallots. Scale 13. Bassoons 1-12 & 50-58, rest bell tops with solid domed caps (Details from MB)

DEPARTMENT: Pedal Organ**PRESSURE: 80mm JOB: St George's Penang**

No	Stop Name	Pitch	Pipes	Mat	Ears	MW	C ¹	C ¹³	C ²⁵	F ³⁰	Remarks
15	Bourdon	16	30	Tulip			198 x 163	125 x 103	79 x 65	65 x 54	Bourdon Scale No. 15
16	Principal	8	0								Transmission from Great
17	Trumpet	8	0								Transmission from Great

Voicing Temperature and Pitch: 21°C, A=435.2Hz, 20°C, A=434.5Hz, 19°C=433.7Hz, 18°C=433.0Hz

Pipes will finish up approximately 1/6th of a semitone longer. This does not mean they need to be made longer, but they must NOT be made shorter than usual.

Questions for Aidan, before scales can be finalised:

1. How many front pipes and do they start at bottom C?
2. Do you want wooden basses outside the swell box for the Swell Gedackt, if so, how many?
3. How many of the Swell Oboe need to be bassoon basses? 1-12 currently assumed
4. Do you have any other points to make about the scaling etc?

Penang Oboe 8 (Provisional Scales)

Solid Domed Caps

Note	Scale Top	Scale at Bell/Shank join	Scale Tip	Bell length	Shank length
C1	75	-	13 (Int)	–	2080
B12	54	-	11 (Int)	–	1030
C13	68	30	11 (Int)	225	770
C25	55	25	10(Ext)	125	350
C37	47	20	9	70	155
C49	35	16	8	35	65
C#50	34		8		85
A58	30		8		50

1 – 12, 50 - 58 Bassoons (no bells).