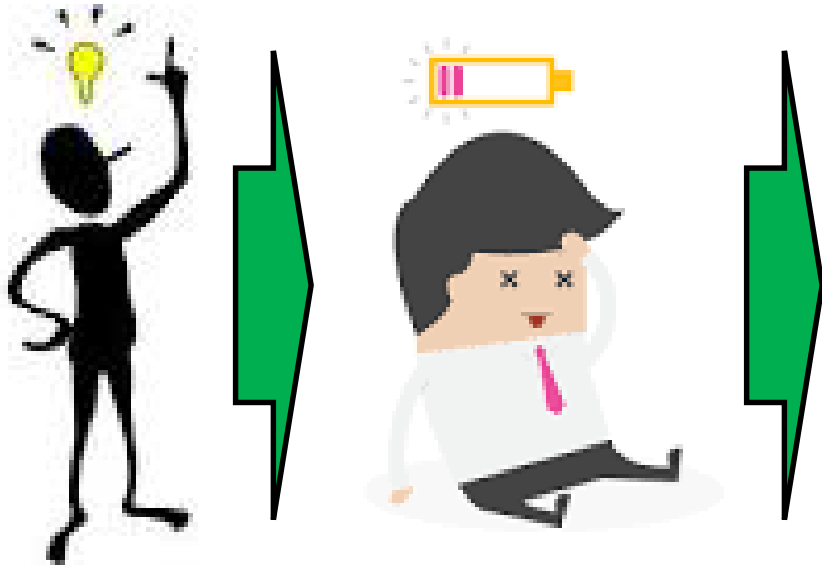


How to design your hybrid suite....



Rob Whiteman
Superintendent Radiographer

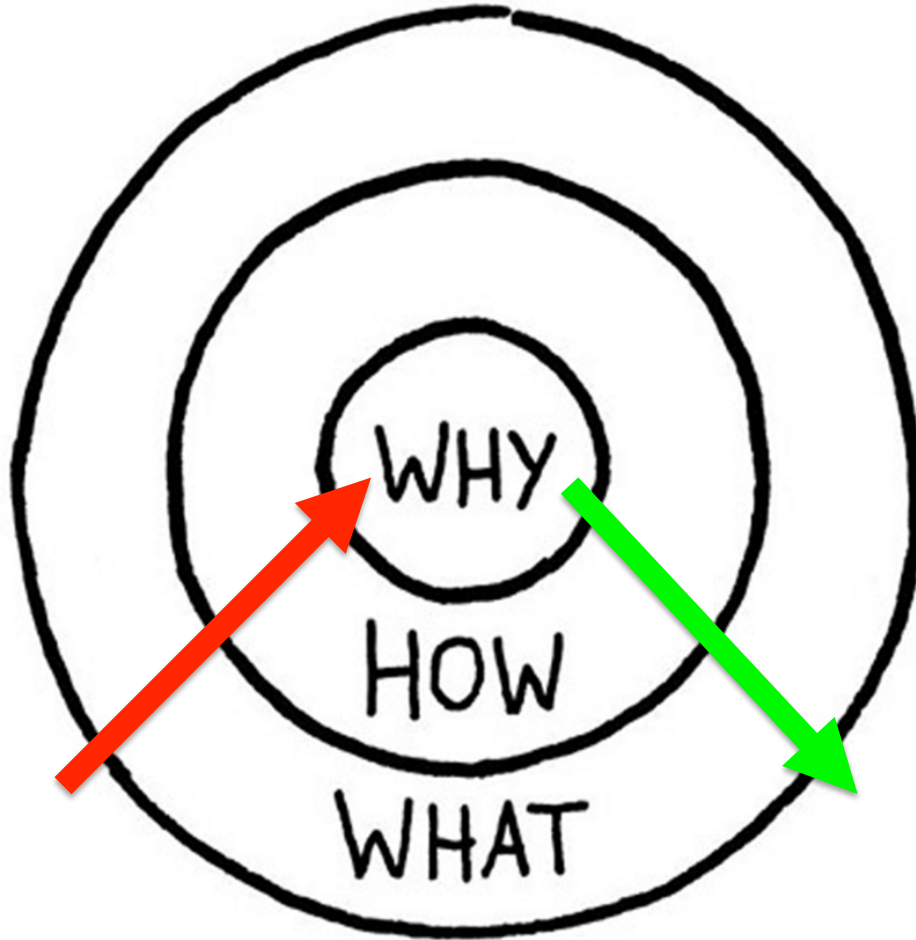


The plan

- Nail the communication
- Understand the process
- Use the legislation to your benefit
- Ensure it fulfils your needs
- Pearl's of wisdom



Communication



Why – The Purpose

How – The Process

What – The Result

Simon Sinek – TED Talks



Who is “them”

Estates

Scrub
Teams

Projects
Team

Finance

Procurement

Cardiologists

Radiologists

Surgeons

Radiographers

Equipment
Manufacturer

Anaesthetics

IT/PACS
Team

Management



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Remember These:

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Ignore at your peril

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Ignore at your peril

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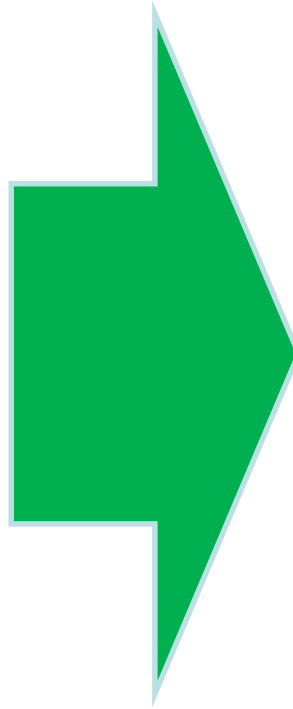
Management



The WHY

“The PURPOSE”

- Better patient care
- Safer service
- List efficiency
- Increased staff cohesion
- Trust image and status
- Service requirement



- In theatre environment
- Better imaging equipment
- Appropriate staff
- Options to convert
- Moving sick patients
- “Waiting to send”
- Brand new kit and options



- MHRA 2013 (NHSCB/A04/P/a, page 10)

“The availability of hybrid endovascular theatre, or the firm plans for installation within a short timescale”

- MHRA 2010 (Joint Working Group to produce guidance on delivering an Endovascular Aneurysm Repair (EVAR) Service)

“EVAR facilities should ideally be sited within or directly adjacent to an existing theatre complex”

“High quality imaging equipment is crucial”

- GIRFT 2018 (National Vascular Surgery and Interventional Radiology)

“Vascular Hubs to provide rapid access to theatre for ruptured AAA, within 30 minutes.... ideally in a hybrid theatre. Timeline: - By July 2018 for existing hubs”

- NICE 2016 Major trauma: assessment and initial management February 2016 NICE (NG39)

“Availability of interventional radiology within 60 minutes of referral”



Business case – The Hard Bit

- Trust format – fit “the Strategy”
- Tell the story – Pro’s & Cons
- Risk of doing nothing
- What you need, not what you want
- Do all the leg work
- Options, locations, costs, staffing models, timetables etc



“The PROCESS” – The Fun Bit

- Design the space
 - Engagement of all clinicians and estates teams
 - Realistic budget
 - What does the future look like
- Kit selection
 - Fit your demands and needs
 - The extra bits you forget



Theatre Usage

- What are you using it for / may use it for?

Vascular procedures

- EVAR (TEVAR, FEVAR and F-TEVAR)
- Below the aortic bifurcation stenting, visceral, and other peripheral vascular

Cardiac procedures

- TAVR
- Transcatheter Mitral
- Other structural heart procedures
- PCI procedures
- Hybrid EP procedures

Neuro & spine procedures

- Minimally invasive surgical spinal fixation
- Vertebroplasty
- 3D navigated spinal instrumentation
- AVM treatment, stroke treatments, aneurysm clipping/coiling

Other applications

- Trauma surgery
- Thoracic surgery
- Oncology procedures
- Urology procedures

New concepts

- Robotic Hybrid Suite
- MR OR
- CT OR

What flow do you need / want?

Storage space / plant rooms in and out of theatre

Do you need an anaesthetic room?

Control room / viewing area

Scrub prep areas

Do not compromise on space!!!!

New concepts

- Robotic Hybrid Suite
- MR OR
- CT OR

Pioneering

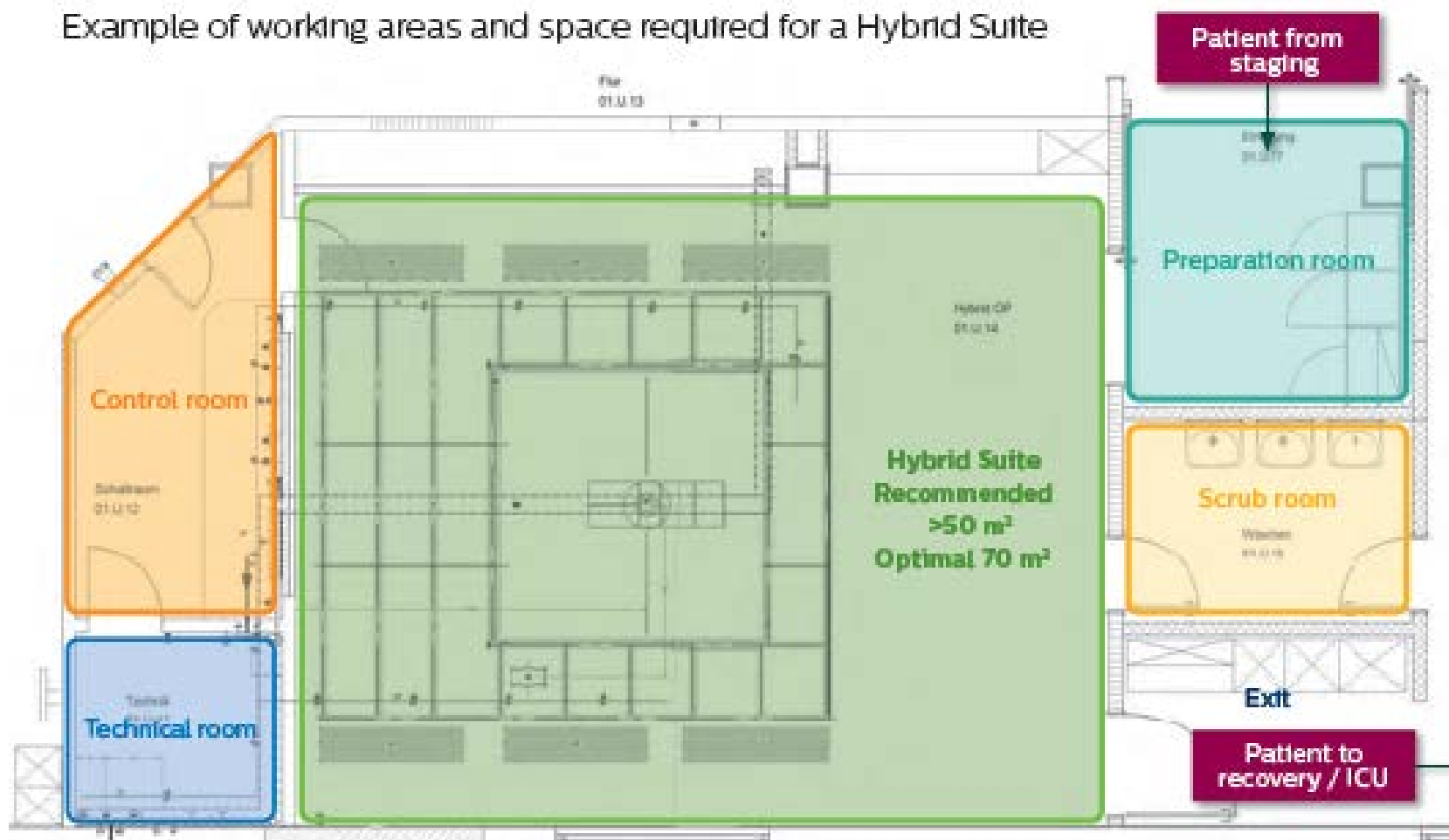
- Exam room ideally > 70m²

- Minimum of 50m²

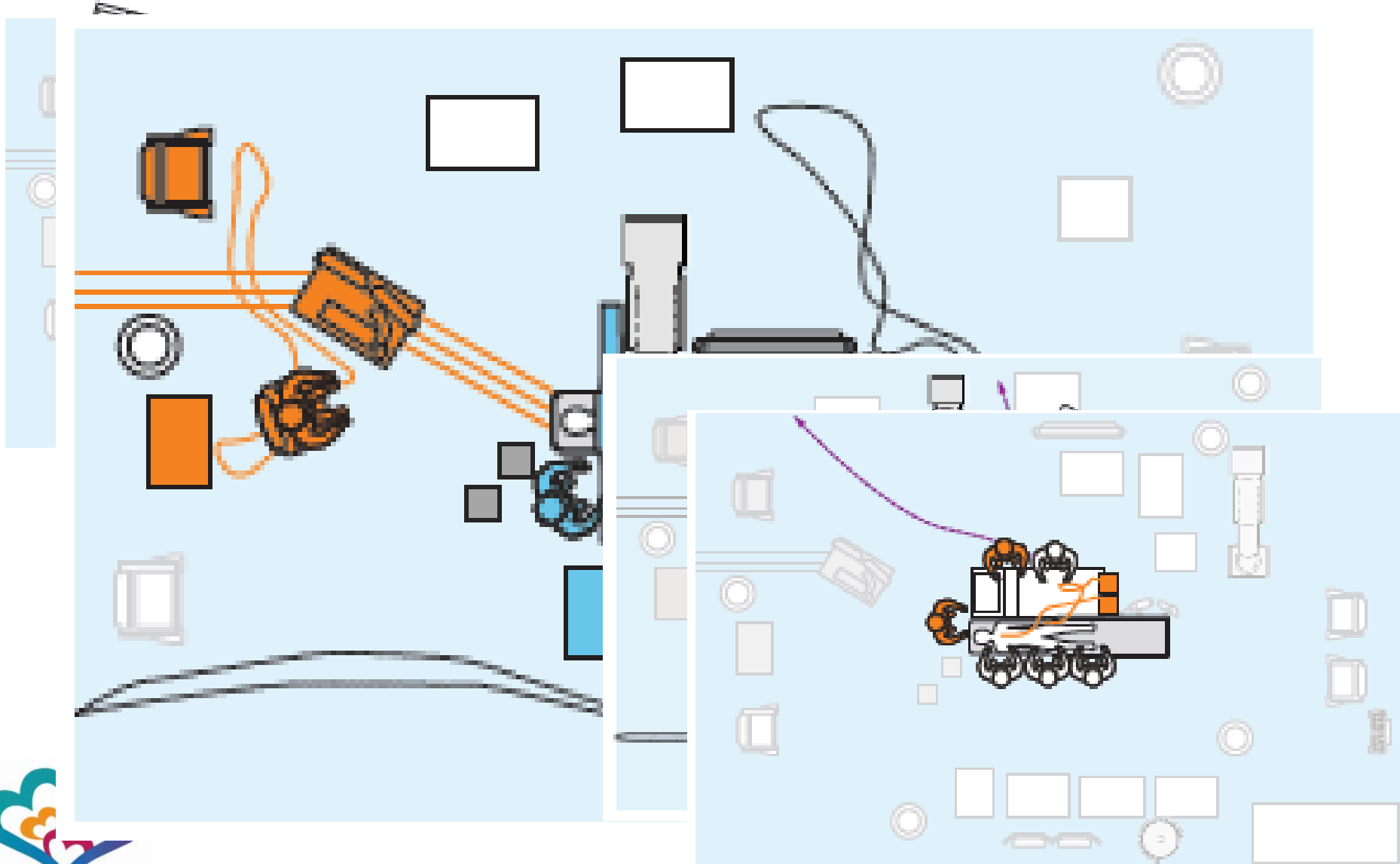


Theatre Design

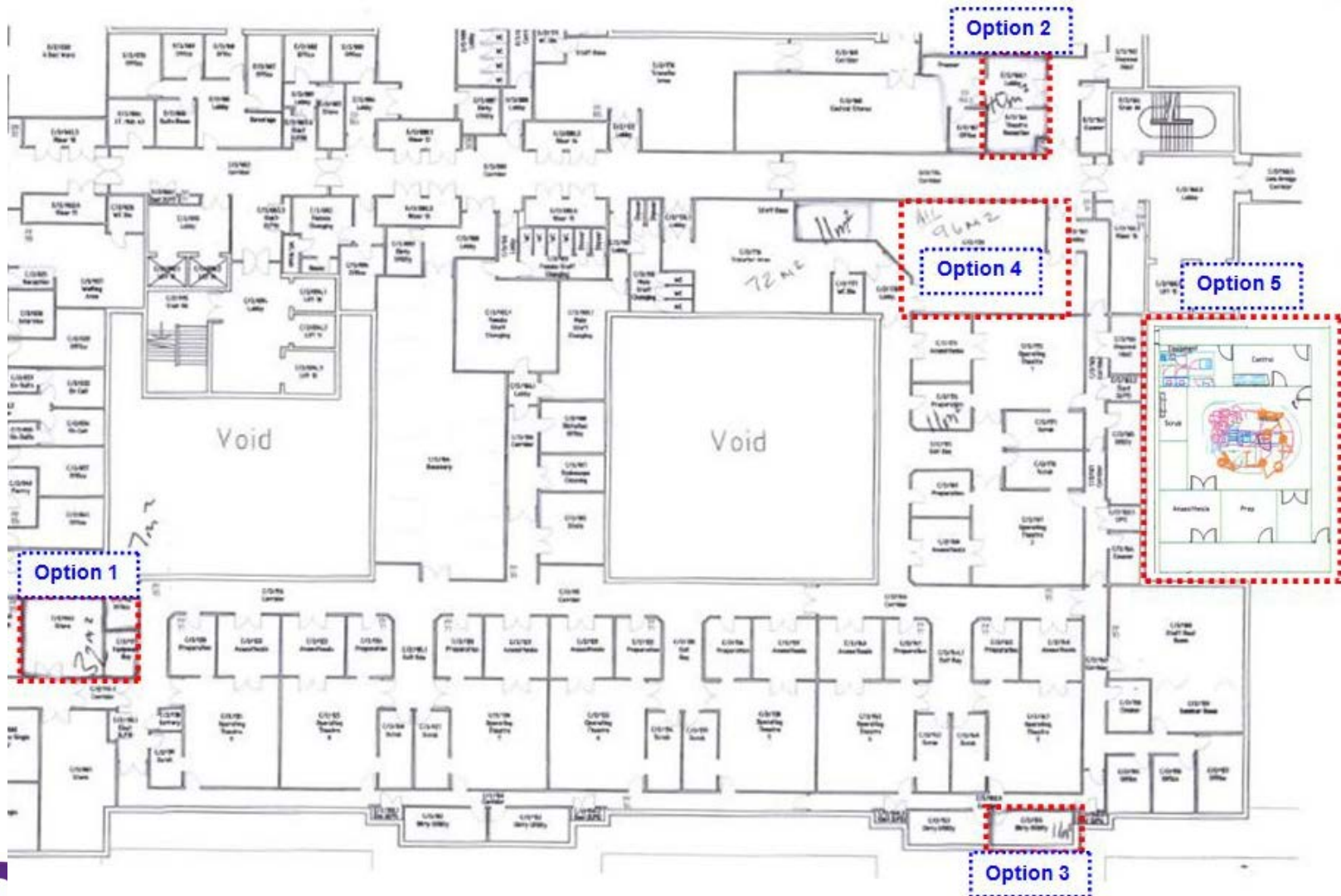
Example of working areas and space required for a Hybrid Suite



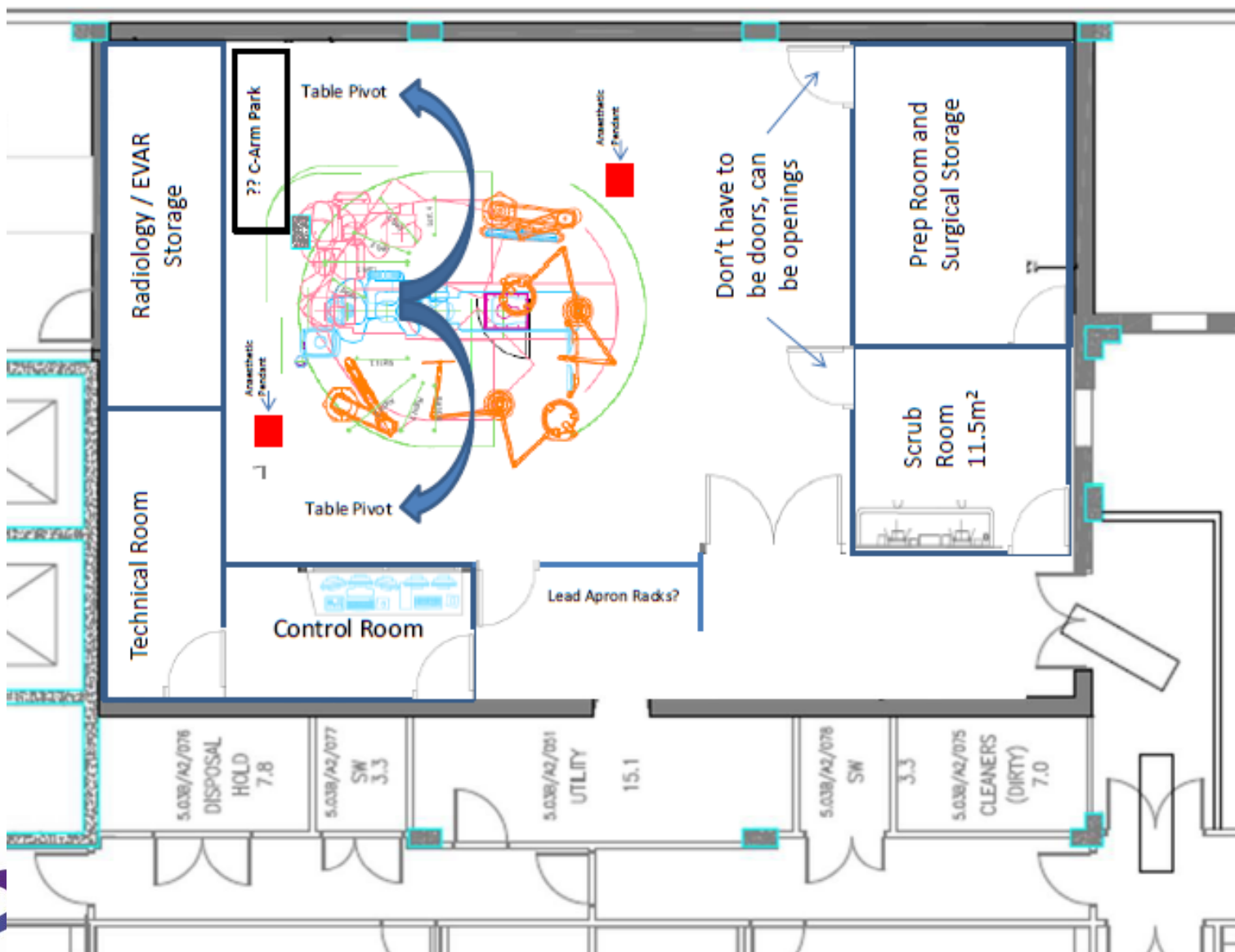
Space, space, space

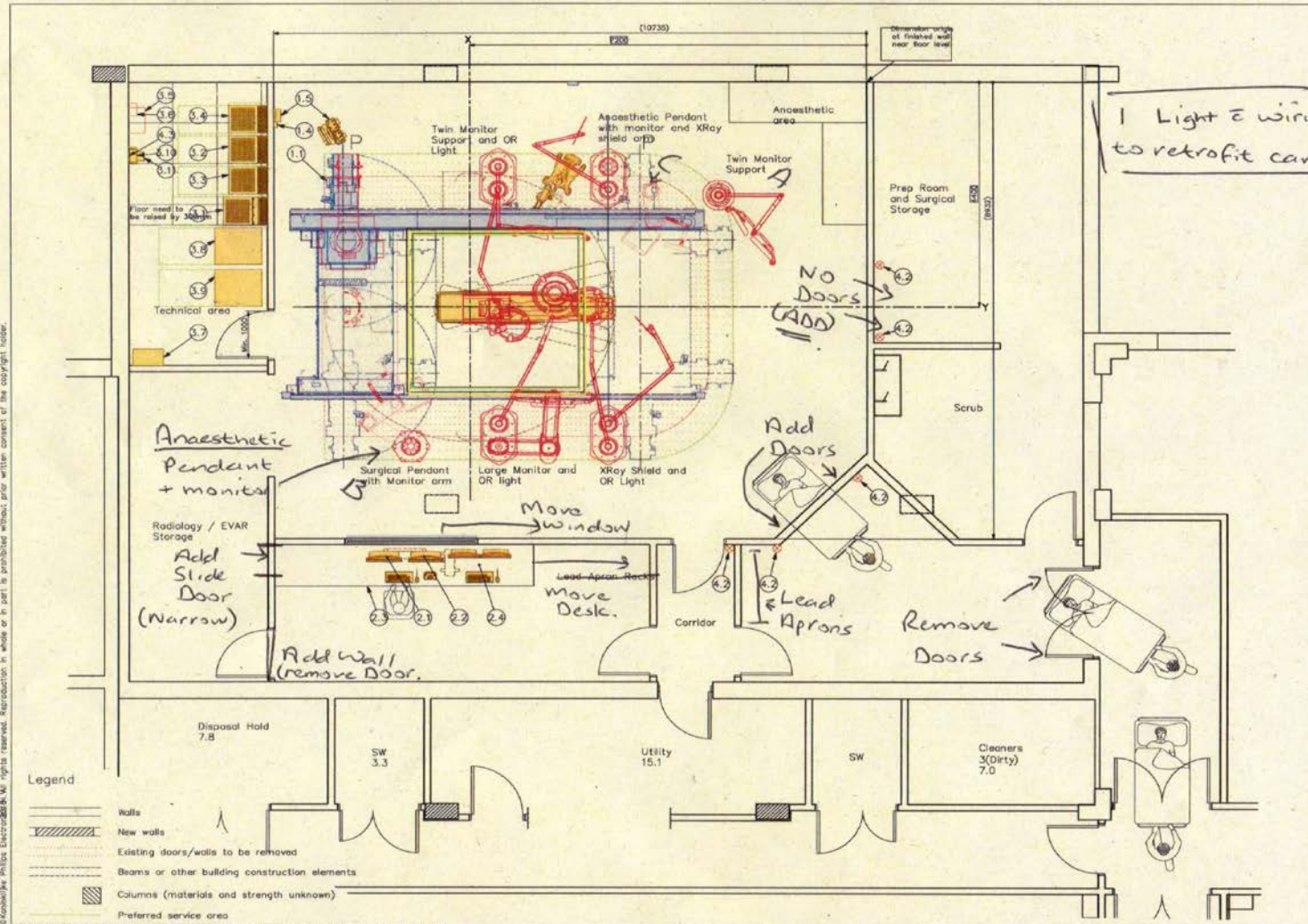


The Location



Your Design





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Legend

- Walls
- New walls
- Existing doors/walls to be removed
- Beams or other building construction elements
- Columns (materials and strength unknown)
- Preferred service area

THIS SHEET IS PART OF THE DOCUMENT SET LISTED ON SHEET C-1 AND SHOULD NOT BE SEPARATED

Project	Azurion 7 C20 Flexmove XL A07 Table
Sheet Subject	Derby City General Hospital
	Derby, United Kingdom
	Hybrid Lab
Drawing	GB-18-00155
	PH-04-2108
	Quote No
	Order No
	Technical ID
A3	1 : 65 mm
Sheet	A-1 / 7



Basic Choices

- C-arm – no other option
- 3 phase power (and UPS!!!!)
- Air flow options – Lamina flow or not
- Floor/ceiling



Imaging Applications

- **Not so basic**, “Extras / toys” do you need

- *Ultrasound* – Echo / IVUS

- *Cone Beam CT* – used by lots of other options

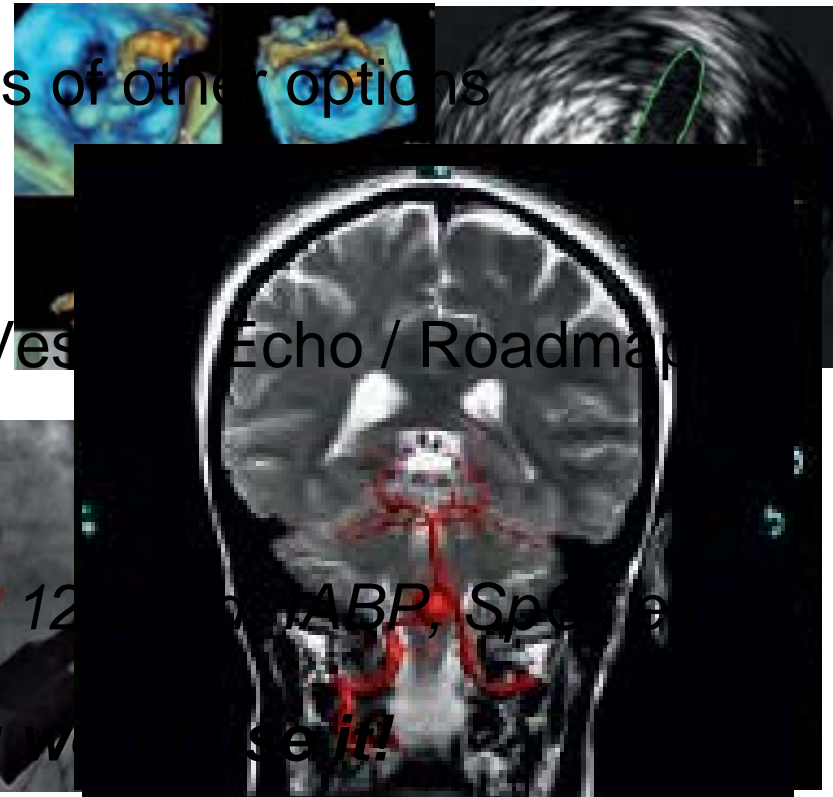
- *Overlay Imaging* – MRI / CT

- *Navigation* – Embolisation / Vessel Echo / Roadmap

- *Dose Awareness System*

- *Haemodynamic Monitoring* – 12 lead ECG, ABP, SpO₂

- **Don't buy everything** – you won't use it!



The Theatre Kit

- Table – Maquet (additional £~200K) or Manufacturer



Endoscopic stacks, microscopes,

- Computers, Chairs, desks, storage units
- Lead Aprons.



Model to play with



And then.....

NHS

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NHS Foundation Trust



Back to the drawing board



“The RESULT” – The Nervous Bit

- Stand back and watch it happen
- Did you / we get it right
- Be prepared for the doubters, inc yourself
- The devil is in the detail
- Don't put off perfection
- Make the most of you Applications Training.





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Pearl's of Wisdom

- Always know your WHY
 - You will be asked to justify your choices
- Stick to your guns
- You are the experts for your service
- Plan for 10, 20, 30 years post
- 7 Ps to Success
- Communication is the key



Questions?

NHS

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