



STAWELL

UNDERGROUND

PHYSICS LAB

CoEPP-CAASTRO Dark Matter

31 Jan 2017

SUPL update – Jeremy Mould

SUPL partners

- University of Melbourne
- Swinburne University
- University of Adelaide
- ANU
- ANSTO
- Northern Grampians Shire Council

SUPL Schedule 2017

Dec 2016 AMEC Foster Wheeler design complete

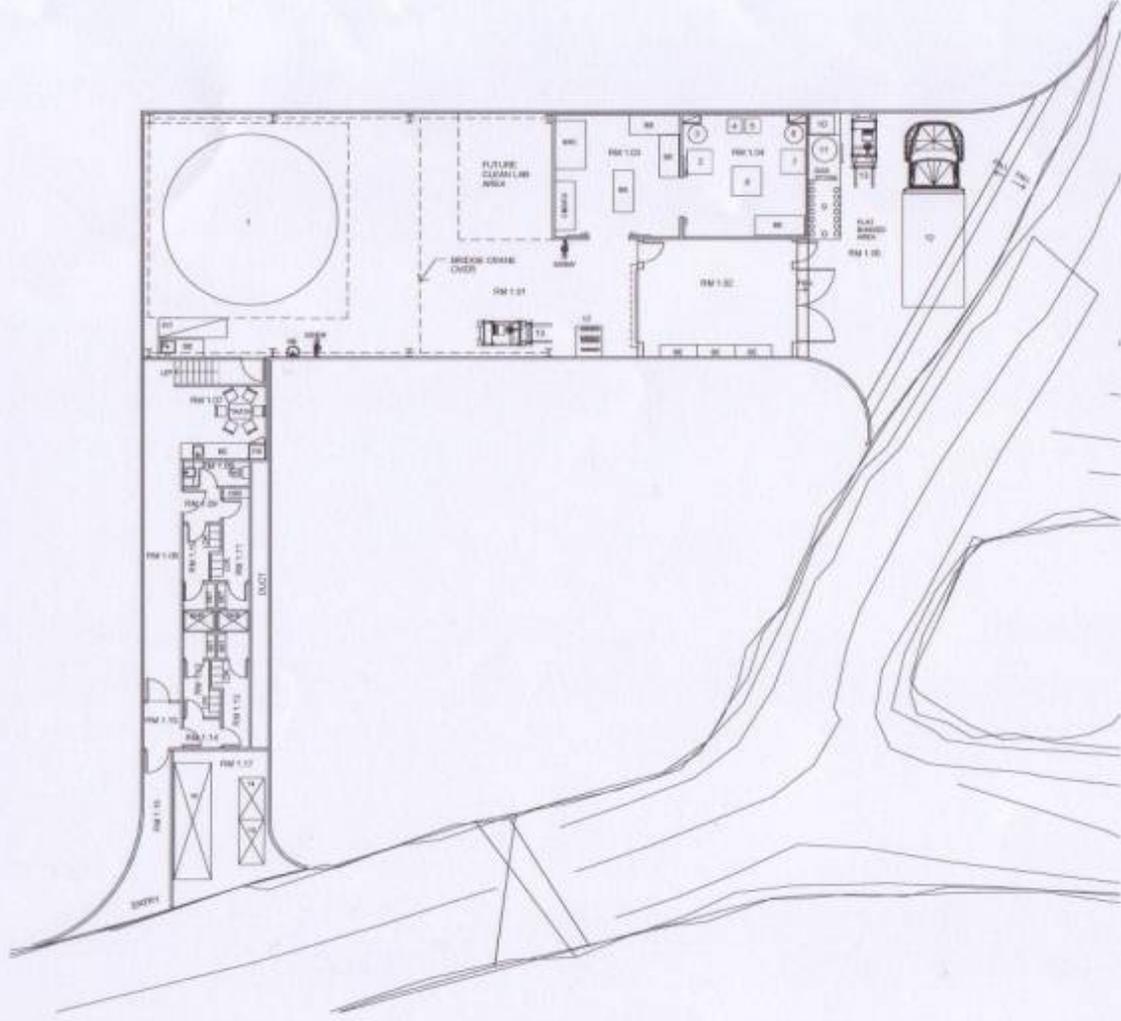
Jan 2017 Tenders for construction called

March Excavation at 1 km level

May-October Construction

November SUPL opening

December Commissioning begins



- RM 1.01 Main experimental lab
- RM 1.02 Cleaning area/entrance
- RM 1.03 Gammacell room 1
- RM 1.04 Gammacell room 2
- RM 1.05 Loading bay
- RM 1.06 Shower room
- RM 1.07 Staff
- RM 1.08 WC
- RM 1.09 AL 1
- RM 1.10 Main clean change
- RM 1.11 Fume discharge
- RM 1.12 Main city change
- RM 1.13 Fume city change
- RM 1.14 AL 2
- RM 1.15 AL 3
- RM 1.16 Corridor
- RM 1.17 Plant
- RM 2.01 Plant

- EQUIPMENT LEGEND**
- 1 Subse equipment
 - 2 Pb Caddy & Gammacell Detector
 - 3 LAD Detector
 - 4 Radiation
 - 5 Radiation
 - 6 LAD Detector
 - 7 Pb Caddy & Gammacell Detector
 - 8 Acrylic detector cover
 - 9 Gas tolex
 - 10 Counter
 - 11 LAD Detector
 - 12 Trap
 - 13 Fume discharge
 - 14 Waste tank
 - 15 Portable water tank
 - 16 Filter
 - 17 Shower off

- NOTE LEGEND**
- SC Bench
 - SEC Dry safety cabinet
 - CEB Cloakroom
 - ODGCC Cell culture cupboard
 - FA Fridge
 - HW Hand wash basin
 - LCK Locker
 - LIT Light wall pt
 - WET Wash
 - DRY Dryer
 - SI Sink
 - SHWR Shower and eye wash
 - TACH Table & chairs

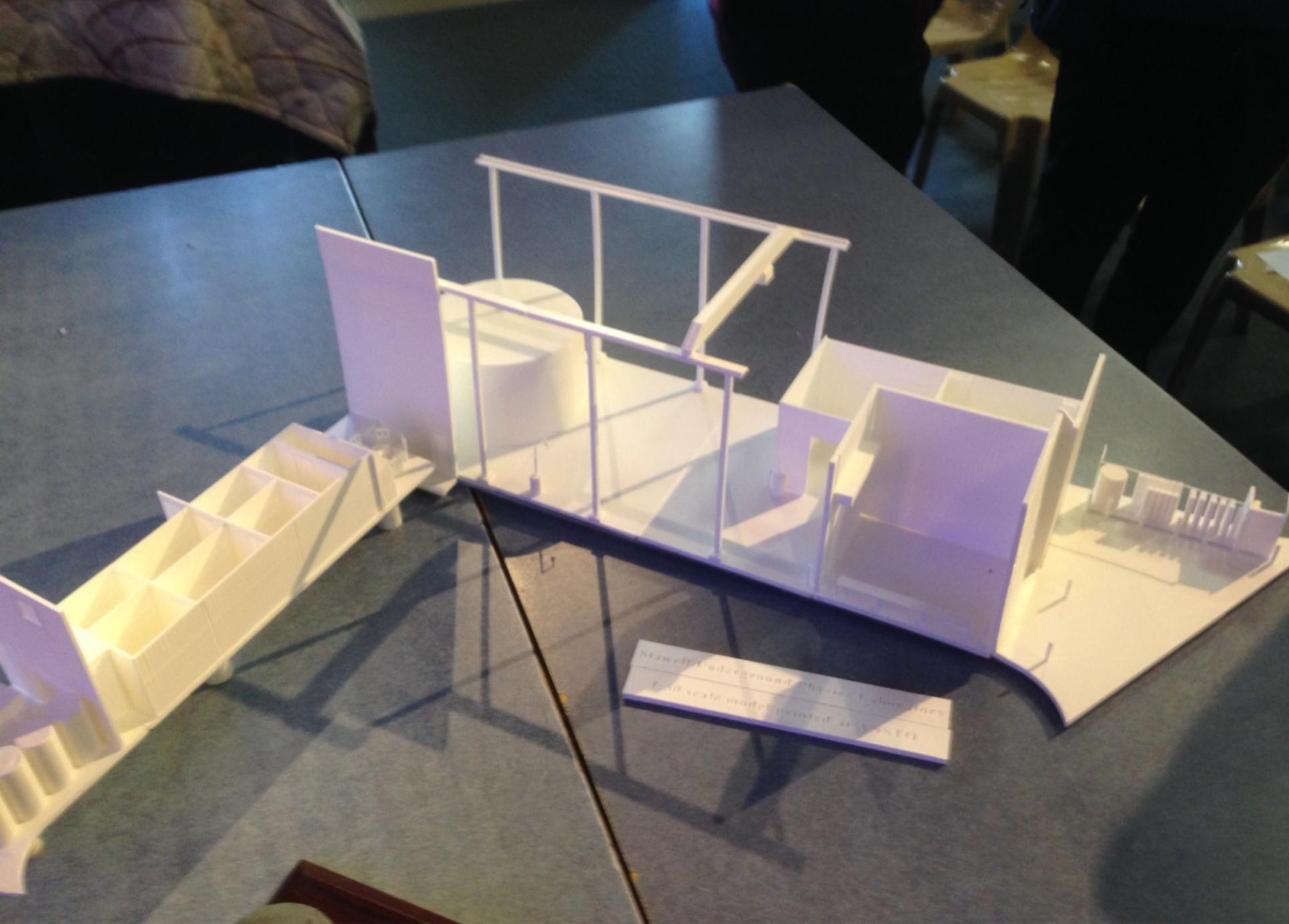
EPT FLOOR PLAN

Warrumbidgee Shire Council
 Ground Physics Laboratory

Project No: EPT00001
 Draw No: 501-A-1.102
 Scale: 1:100
 Sheet No: 47
 Plot Date: 24/08/16
 Rev: A0

Amec Foster Wheeler Design Architecture
 Level 15, 200 Collins Street Melbourne VIC 3000
 Tel: 03 9493 1000
 www.amec.com

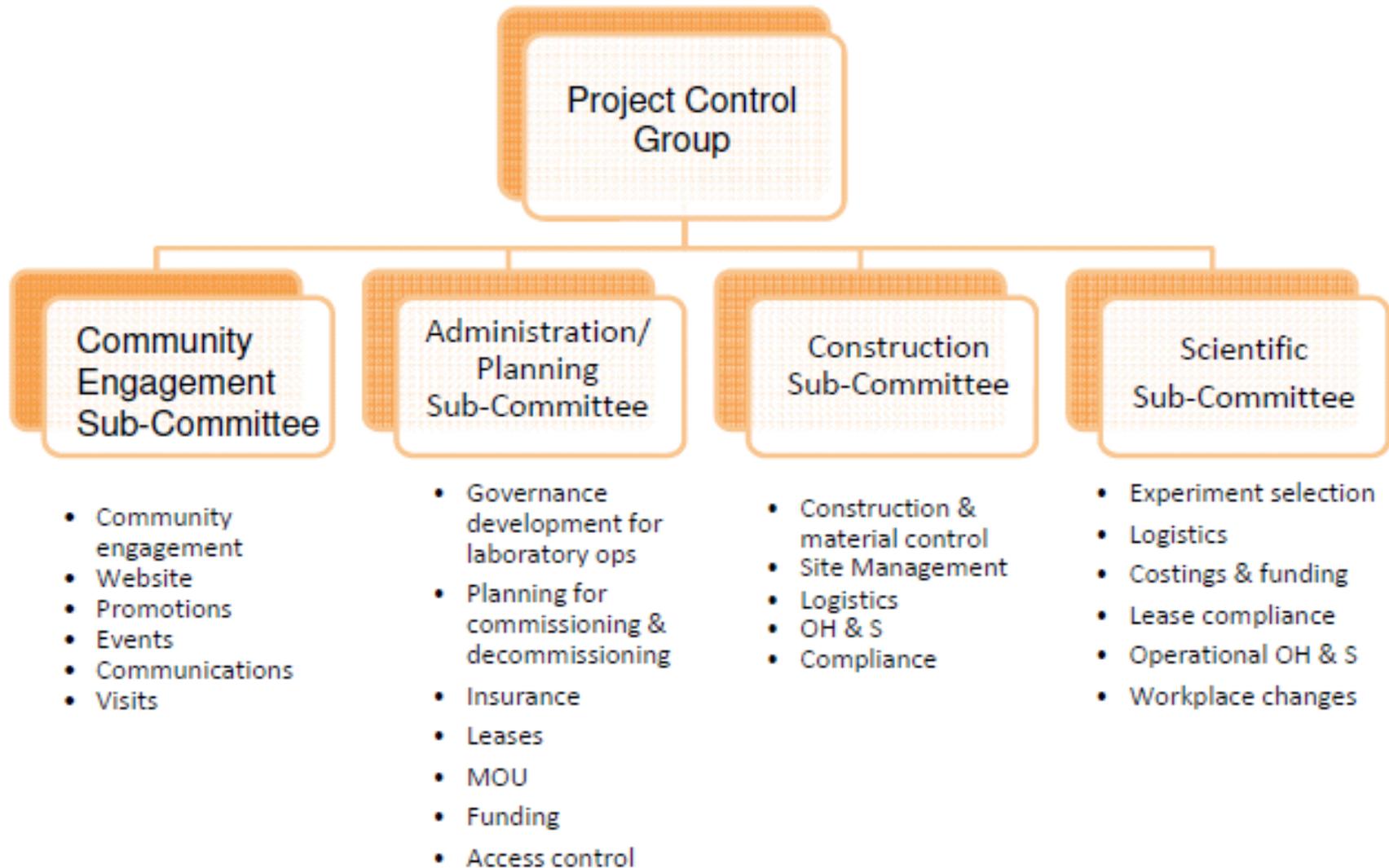




Stawell Microfluidic Physics Laboratory
Full scale model printed at XPS-Ed

Project Governance

(final design & construction phases)



Current issues

- Current users: SABRE & ANSTO
- Future experiments ?
- Stawell Gold Mine transition
- “Care and maintenance”
- Letter of support

Letter of support

Dear Mr Manivasagasivam

Our colleagues at the universities signing below wish to express our ongoing strong support for the establishment of the Stawell Underground Physics Laboratory (SUPL), as flagged in Australia's Draft 2016 National Research Infrastructure Roadmap. We note the central role that you and the North Grampians Shire Council are playing in overseeing the construction of this important new component of Australia's national research infrastructure.

Being the only deep underground facility of this type in the Southern Hemisphere, SUPL will play a fundamental and unique role in the major international scientific effort to understand the nature of the elusive Dark Matter. In addition to this, many new areas of pure and applied research requiring such an underground facility can be pursued in the physical, astronomical, material, and life sciences.

As with all major scientific facilities worldwide, there would be substantial spin-offs for local industry in the provision of supporting infrastructure, and the local community in the form of jobs and international publicity.

In summary, SUPL represents an outstanding opportunity for Australia to become a major international player in the search for dark matter and in other areas of science and technology that require a state of the art underground facility. We give SUPL our strong support and look forward to fruitful collaborations with our Australian colleagues.

Yours sincerely Neil Spooner Sheffield
Paschal Elahi UWA
Yasuhiro Kishimoto U Tokyo
Tom Thorpe U Hawaii
Kentaro Miuchi U Kobe

Chung Lin Shan Xinjiang Astr Observatory
Steen Hansen Copenhagen University
James Diacomis UNSW
Masashi Tanaka Waseda
H Schmitz UQ