



**Room Assessments**  
**- Tools for Strategic Asset Management**

SAM RAGUSA

SENIOR FACILITIES CONSULTANT, AQUENTA CONSULTING  
DIRECTOR, RAGUSA ASSET MANAGEMENT

aQuenta  
CONSULTING

# Presentation Outline

---

- Background
- Beyond Condition Assessments and Backlog Maintenance
- Room Assessments take into account:
  - Condition
  - Functionality
  - Risk
  - Strategic Importance
- Using Room Assessments to align your asset management plans with the Institution's Strategic Priorities
- Questions

# Room Assessments

---

## NOT NEW – JUST DOCUMENTED

- Part of an Institution's Strategic Planning
- Asset Management Plan is

a review of the buildings and infrastructure on all campuses to ensure

- that the facilities are fit for their current purpose; and
- that they will meet the future strategic needs of the Institution for teaching, learning and research.

# What is it about?

---

## ROOM ASSESSMENTS

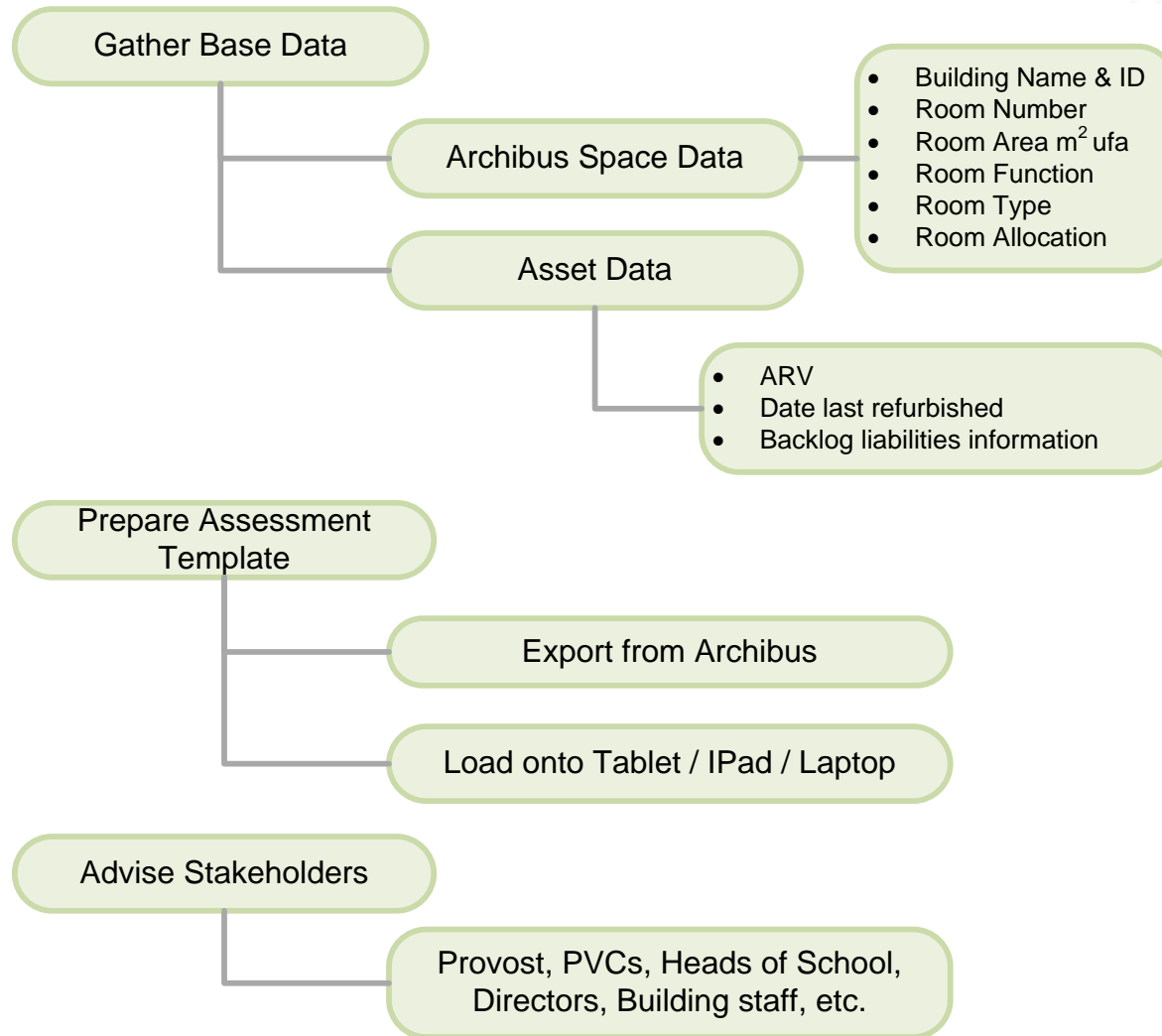
- Are at the core of Strategic Asset Management Plan
- Feed into the Maintenance Plan and together with
  - Space Planning and Utilisation Data,
  - Capital Planning and Site Planning Data.
- Determine funding needs for facilities to meet the University's Strategic Objectives.
- Required to respond to requests from DEEWR and to participate in the Benchmark Surveys conducted by TEFMA .

# What is it about?

TABLE 1 – BASE DATA AND OUTCOMES

Base Data Inputs	Room Assessment Outcomes
Building Name and Building ID	Condition Assessment including <ul style="list-style-type: none"> <li>• estimates for Backlog Maintenance;</li> <li>• calculation of the Facility Condition Index;</li> </ul>
Room No	
Room Area m <sup>2</sup> ufa	
Room Function and Room Function Code	Risk Assessment
Room Type (Current) and Room Type Code	Assessment of Strategic Importance of the Assets
Room Allocation (to element)	Functionality Assessments

Preparing for the Room Assessments



Review Assessment  
Guidelines

Condition Assessment Guidelines

Risk Assessment Guidelines

Assessing Strategic Importance

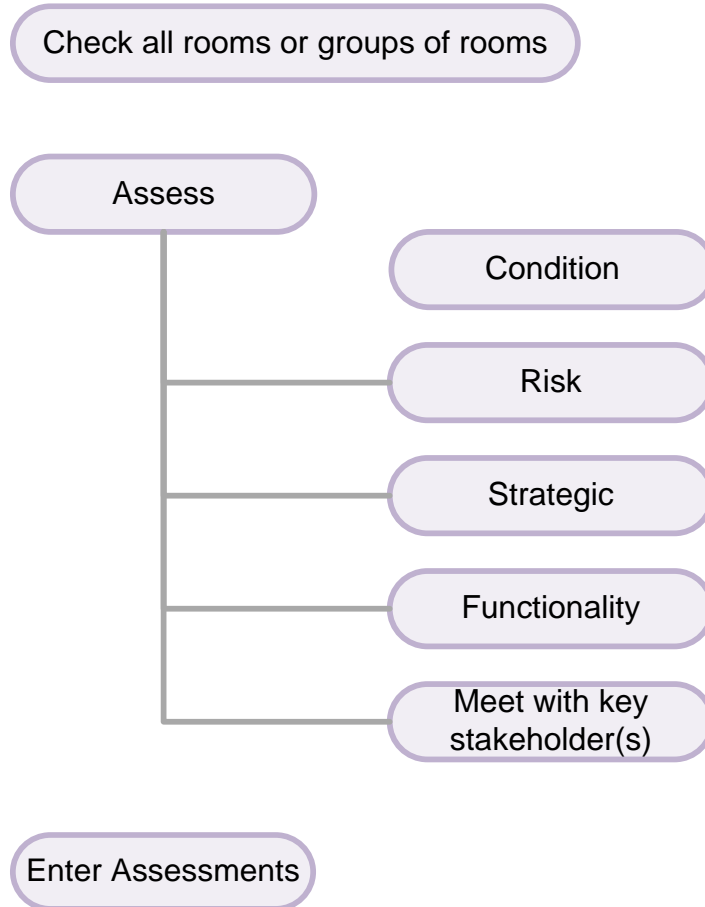
Functionality Assessment Guidelines

Desktop

Review available data for obvious errors

Note any corrections on Assessment Template

Walk through Assessment





Complete Assessment

Review Information

Check all fields are complete

Check for any obvious anomalies

Update data on system

Thank Stakeholders / Building Occupants

Reporting

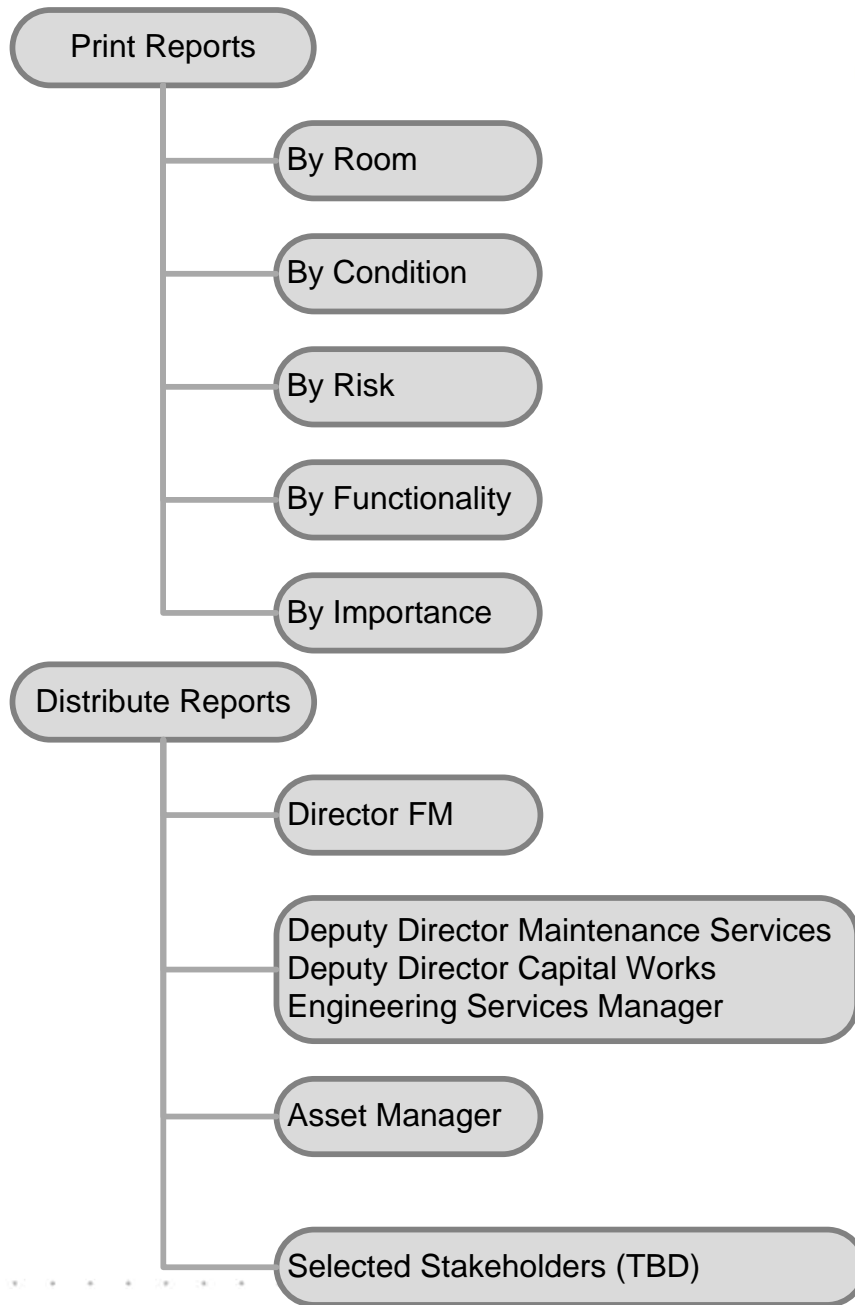


TABLE 2 – CONDITION ASSESSMENT

Condition Status	General Description	Rating
Excellent	Asset has no defects; condition and appearance are as new.	5
Good	Asset exhibits superficial wear and tear, minor defects, minor signs of deterioration to surface finishes; does not require major maintenance; no major defects exist.	4
Fair	Asset is in average condition; deteriorated surfaces require attention; services are functional, but require attention; backlog maintenance work exists.	3
Poor	Asset has deteriorated badly; serious structural problems; general appearance is poor with eroded protective coatings; elements are defective, services are frequently failing; and a significant number of major defects exist.	2
Very Poor	Asset has failed; is not operational and is unfit for occupancy or normal use.	1

Table 3 – Modified Rating Scale

Condition Status	CR	FCI	OCR
Excellent	5.00	1.00	5.00
Excellent	4.50	0.99	4.50
Excellent	4.01	0.98	4.01
Good	4.00	0.96	4.00
Good	3.80	0.95	3.80
Good	3.60	0.93	3.60
Good	3.40	0.92	3.40
Good	3.20	0.91	3.20
Good	3.10	0.90	3.10
Fair	3.00	0.89	3.00
Fair	2.75	0.87	2.75
Fair	2.60	0.86	2.60
Fair	2.50	0.85	2.50
Poor	2.40	0.84	2.40
Poor	2.20	0.82	2.20
Poor	2.00	0.80	2.00
Very Poor	1.90	0.79	1.90
Very Poor	1.00	0.50	1.00



# Risk Assessment Guidelines

TABLE 4 – RISK ASSESSMENT

Impact Likelihood	Insignificant	Minor	Moderate	Major	Catastrophic
	1	2	3	4	5
A (Rare)	L	L	L	M	M
B (Unlikely)	L	L	L	M	H
C (Moderate)	L	L	M	H	E
D (Likely)	L	M	M	H	E
E (Almost Certain)	L	M	H	E	E

TABLE 5 – MANAGEMENT RESPONSE TO RISK

Legend	General Description	Risk Rating
E	Extreme risk; immediate action required.	2
H	High risk; senior management attention required.	3
M	Moderate risk; management responsibility must be specified.	4
L	Low risk; manage by routine procedures	5

# Strategic Importance

TABLE 6 – PERFORMANCE STANDARD (STRATEGIC IMPORTANCE)

Performance Standard	Condition Standard	Target Rating
Highly-sensitive functions with critical results or high-profile public building (e.g. Art Museum, Chancellery).	Asset to be in the best possible condition. Only minimal deterioration will be tolerated.	S5
Business operations requiring good public presentation and high-quality working environments.	Asset to be in good condition operationally and aesthetically, benchmarked against industry standards for that particular class of asset.	S4
Functionally focused asset at utility level (e.g. lecture theatres, laboratories, libraries, workshops).	Asset to be in reasonable condition, fully meeting operational requirements.	S3
Functions are ancillary only, with no critical operational role (e.g. storage) or asset has limited life.	Condition needs to meet minimum operational requirements only.	S2
Functions have ceased and asset is dormant pending disposal, demolition, etc.	Condition can be allowed to deteriorate and marginally maintained to meet statutory requirements only.	S1

## Assessing the Strategic Importance

---

CAN BE DIFFICULT AS MANY FACTORS CAN BE CONSIDERED.

- Research facility **linked to a Strategic Goal** of the Institution will obviously have a high strategic importance and will generally have a **Target Rating of 4 or 5**.
- Involves **discussions with Executive** to establish the ranking against other similar assets.
  - Is the Research Space part of the facilities which contribute to a Institution-designated **Area of Strategic Importance (ASI)**; and
  - If research in this ARI has achieved an **Excellence in Research Australia (ERA)** rating.
- **Competition** means that teaching spaces, libraries and even recreational facilities have become important marketing tools.
- The introduction of a **“voucher” system** makes it important to know which spaces are genuinely lifting the profile of the Institution.



# Functionality

TABLE 7 – FUNCTIONALITY ASSESSMENT

Functionality Status	General Description	Rating
Excellent	The functionality of the room or area always meets the operational needs of the users and is likely to continue to do so in the foreseeable future.	F5
Good	The functionality of the room or area almost always meets the operational needs of the users and is likely to continue to do so in the foreseeable future.	F4
Adequate	The functionality of the room or area while not ideal meets the core operational demands placed on it.	F3
Barely Adequate	The functionality of the room or asset fails to meet all the basic operational requirements of the users, but could do so with some refurbishment.	F2
Not Suitable	The functionality of the room or asset fails to meet the basic operational requirements of the users. The asset requires major refurbishment or replacement.	F1

# Walkthrough Assessment

---

The Walkthrough Assessment should be carried out in the shortest time interval which can be easily managed.

- Plan which areas or groups of spaces you are going to do during each walkthrough period.
- Check the timetable for access into teaching spaces.
- Make prior arrangements to gain access to / accompany you into any Restricted Areas.
- Make sure you have keys or access cards with you. Leave spaces as you find them.
- Take a set of A4 plans with you and mark any discrepancies between plan and as you go.
- Benchmark rooms against each other. If too much time between assessments, tend to diverge.
- Enter Assessments into the Template.
- Keep a running overview of the information / assessments that you are entering. If something looks strange it usually is.
- Correct anomalies or make notes against them as you go.

COMPLETE GREEN CELLS ONLY													
Year Last Refurbished	Years since last refurbished	Recommended Refurbishment Cycle Years		Condition	FCI	Risk	Risk Value	Strategic Importance	Strategic Importance	Functionality	Functionality	Priority Rating	
1998	14.72	7	Renew	2.50	0.85	High	3	4	High	3	Adequate	2.02	8/
1998	14.72	7	Renew	3.40	0.92	Low	5	4	High	3	Adequate	1.52	16/
2009	3.21	7		4.00	0.98	Low	5	4	High	3	Adequate	1.41	16/
2009	3.21	7		3.50	0.92	High	3	4	High	3	Adequate	1.71	16/
1998	14.72	7	Renew	3.50	0.92	High	3	4	High	3	Adequate	1.71	16/
1998	14.72	7	Renew	3.00	0.90	Moderate	4	2	Ancillary	3	Adequate	1.56	16/
1998	14.72	7	Renew	3.00	0.90	Low	5	4	High	3	Adequate	1.61	16/

## Use simple analysis to attribute values

---

- Condition yields FCI

=IF(U6="",0.95,VLOOKUP(U6,'Condition Ratings'!\$D\$7:\$F\$24,2))

- Risk yields a “Risk Value”

=IF(W6="", "", IF(W6="Extreme",2,IF(W6="High",3,IF(W6="Moderate",4,IF(W6="Low",5))))))

- Strategic Importance yields an SI Value

=IF(Y6="", "", IF(Y6=5,"Critical",IF(Y6=4,"High",IF(Y6=3,"Functional",IF(Y6=2,"Ancillary",  
IF(Y6=1,"Disposable"))))))))

# Functionality Analysis and Priority Weightings

Functionality Rating	
Excellent	F5
Good	F4
Adequate	F3
Barely Adequate	F2
Not Suitable	F1

- Functionality yields a Functionality Value

=IF(AA6="", "", IF(AA6=5, "Excellent", IF(AA6=4, "Good", IF(AA6=3, "Adequate", IF(AA6=2, "Barely Adequate", IF(AA6=1, "Not Suitable"))))))

Weight %			
45	20	15	20
Condition	Risk Value	Strategic Importance	Functionality

- Overall priority determined by weighting assessments

=IFERROR(IF(AND(U6="", X6="", Y6="", AA6=""), "", 5/(( 'Look Up Tables'!\$H\$6\*(U6)+'Look Up Tables'!\$I\$6\*X6+'Look Up Tables'!\$J\$6\*(5-Y6)+'Look Up Tables'!\$K\$6\*AA6)/100)), "")

Building	Floor	Room	Room Type	Room Type Desc.	Area	Capacity	Floor Type	Year of Completion	Year Last Refurbished	Condition	Risk	Risk Value	Strategic Importance	Functionality	FCI	Cost ID	Inspection Date	Inspector	Notes		
M09	0	0.101	801	Circulation	40.98		Vinyl	1972	1998	3.00	Low	5	4	High	4	Good	0.90	Backlog-Access/Works	16/11/2011	AP	Ramp at door needs to be replaced
M09	0	0.102	301	Undergraduate Laboratory	96.59	19	Concrete	1972	1998	4.00	Moderate	4	3	Functional	4	Good	0.98	Backlog-Maintenance	16/11/2011	AP	
M09	0	0.103	311	Other Specialist Laboratory	93.61	15	Carpet-Tile	1972	1998	3.00	High	3	4	High	3	Adequate	0.90	Other Backlog	16/11/2011	AP	Housekeeping needs attention
M09	0	0.105	101	Office - Academic Staff	9.8		Carpet-Tile	1972	1998	3.00	Low	5	3	Functional	3	Adequate	0.90	Backlog-Refurbishment (Non-Statutory)	16/11/2011	AP	
M09	0	0.106	101	Office - Academic Staff	9.85		Carpet-Tile	1972	1998	3.00	Low	5	3	Functional	3	Adequate	0.90	Backlog-Refurbishment (Non-Statutory)	16/11/2011	AP	
M09	0	0.107	404	Store	1.46		Vinyl	1972	1998	5.00	Low	5	3	Functional	4	Good	1.00	Backlog-Maintenance	16/11/2011	AP	
M09	0	0.108	311	Other Specialist Laboratory	211.32	16	Concrete	1972	1998	2.00	High	3	4	High	2	Barely Adequate	0.80	Backlog-Refurbishment (Non-Statutory)	16/11/2011	AP	Fume hoods are full of junk
M09	0	0.109	403	Workshop	54.04		Concrete	1972	1998	3.00	Moderate	4	3	Functional	3	Adequate	0.90	Backlog-Maintenance	16/11/2011	AP	
M09	0	0.110	404	Store	16		Carpet-Tile	1972	1998	3.00	Low	5	3	Functional	4	Good	0.90	Capital-Renewal	16/11/2011	AP	

General Building Assessment Classification						
Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements	Element Replacement Value	Condition Rating	Element Condition Index	Backlog Estimate
SUBSTRUCTURE	Substructure	01 SB Substructure	764,157.72	5	100.00%	\$0
SUPERSTRUCTURE	Superstructure	02 CL Columns	215,154.96	4.8	99.00%	\$2,152
		03 UF Upper Floors	827,620.70	4.8	99.00%	\$8,276
		04 SC Staircase	108,645.93	3.5	92.00%	\$8,692
		05 RF Roof	777,555.95	2.5	85.00%	\$116,633
	External Fabric & Finishes	06 EW Exterior Walls	612,683.52	3	90.00%	\$61,268
		07 WW Exterior Windows	612,683.52	3	90.00%	\$61,268
		08 ED Exterior Doors	161,671.42	3	90.00%	\$16,167
	INTERIORS	Internal Fabric	09 NW Interior Walls	527,511.56	3.8	95.00%
10 NS Internal Screens			5,046.80	3.8	95.00%	\$252
11 ND Interior Doors			97,436.04	3.8	95.00%	\$4,872
Internal Finishes		12 WF Wall Finishes	115,155.31	3.8	95.00%	\$5,758
		13 FF Floor Finishes	300,365.62	3.8	95.00%	\$15,018
		14 CF Ceiling Finishes	318,976.96	3.8	95.00%	\$15,949
Fittings		15 FT Fitments	916,383.84	3.8	95.00%	\$45,819
		16 SE Special Equipment	4,672.97	3.8	95.00%	\$234

Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements	Element Replacement Value	Condition Rating	Element Condition Index	Backlog Estimate
SERVICES	Plumbing	17 SF Sanitary Fittings	\$264,724	3.6	93.00%	\$18,531
		18 PD Sanitary Plumbing				
		19 WS Water Supply				
		20 GS Gas Services				
	HVAC	21 SH Space Heating	1,475,018.14	3	90.00%	\$147,502
		22 VE Ventilation				
		23 EC Evaporative Cooling				
		24 AC Air Conditioning				
	Fire Protection	25 FP Fire Protection	147,582.48	3	90.00%	\$14,758
	Electrical	26 LP Light & Power	1,376,677.53	3	90.00%	\$137,668
Communications	27 CM Communications		3	90.00%	\$0	
Transport	28 TS Transportation Systems	152,105.09	3	90.00%	\$15,211	
Other	29 SS Special Services					
EXTERNAL WORKS	Central Energy Systems	30 CE Centralised Energy Systems				
	Site Works	32 XP Site Preparation	60,608.39	5	100.00%	\$0
	External Services	33 XR Roads, Footpaths & Paved Areas	68,315.98	3.5	92.00%	\$5,465
		36 XL Landscaping and Improvements	73,832.88	3	90.00%	\$7,383
		37 XK External Stormwater Drainage	38,785.63	3	90.00%	\$3,879
		38 XD External Sewer	40,654.82	3.5	92.00%	\$3,252
		39 XW External Water Supply	33,645.37	3.5	92.00%	\$2,692
		40 XG External Gas	1,401.89	3.5	92.00%	\$112
		41 XF External Fire Protection	23,364.84	3.5	92.00%	\$1,869
		42 XE External Light & Power	30,607.94	3.5	92.00%	\$2,449



Condition Assessment Spreadsheet						
Building Code	Building Name	Campus	Number of Floors	Building Classification	Year Built	Target Condition Standard
M09	Arts and Music	Mt Gravatt	3		Jan 1972	3
Building Area		Performance Indicators				
Area Measure	AREA		Asset Replacement Value	Overall Condition Rating	Facility Condition Index	Backlog Estimate
Gross Floor Area (GFA)	3,750		\$10,995,047	3.4	92.57%	\$816,960
Useable Floor Area (UFA)	2,677					
Building Efficiency	71%					

	ARV	OCR	FCI	Backlog
Sub/Superstructure	\$4,080,174	3.6	93.27%	\$274,457
Interiors	\$2,285,549	3.8	95.00%	\$114,277
Services	\$3,416,107	3	90.23%	\$333,669
External Works	\$371,218	3.4	92.70%	\$27,101
Total w/out fees	\$10,153,047			\$749,504
Adjusted for fees	\$10,995,047	3.4	92.57%	\$816,960

# Questions?

