

ITEM-94 CCL 10/12/19 - EMERGENCY MANAGEMENT CENTRE

REPORT BY: GOVERNANCE
CONTACT: DIRECTOR GOVERNANCE / MANAGER LEGAL

PURPOSE

To seek approval for a Local Emergency Operations Centre within the City Administration Centre (CAC) at 12 Stewart Avenue, Newcastle West.

RECOMMENDATION

That Council:

- 1 Approves the construction of the Local Emergency Operations Centre (LEOC) as shown in the Level 6 Plan and Renders at **Attachment A**.

KEY ISSUES

- 2 City of Newcastle (CN) is required to provide executive support facilities for the Local Emergency Management Committee and the Local Emergency Operations Controller in its area as outlined in the State Emergency and Rescue Management Act 1989 (SERM Act).
- 3 A LEOC is a centre for coordination of operations and support, during an emergency or natural disaster such as an east coast low storm event, catastrophic bushfire or earthquake. It is a facility from which a Local Emergency Operations Controller can ensure the timely provision of support to affected communities by either:
 - i) Planning for an impending event in the pre-impact phase;
 - ii) Monitoring an operation;
 - iii) Coordinating support to a Combat Agency; or
 - iv) Controlling an emergency operation (where there is no combat agency or at the combat agency's request or when directed by the relevant Minister).
- 4 The LEOC needs to provide a large flexible space for approximately 25 personnel from multiple city emergency and functional agencies including (Police, Fire, SES, Ambulance, Health, City of Newcastle, Disaster Welfare Services, Transport, Environment, Utilities, Telecommunications, Public information etc) and other member organisations to be used during significant emergency or disaster events.
- 5 The Newcastle LEOC is located on the first floor of the CN owned building located at 75 Elizabeth Street Tighes Hill. The building, which also houses the Newcastle SES Unit, is likely to be demolished within the next few years due to its age and condition.

- 6 The poor condition and functionality of the LEOC was raised on 3 October 2018 by Deputy Local Emergency Operations Controller Chief Inspector Gerard Lawson. It was noted that the LEOC has been identified as unsuitable for emergency operations as the existing arrangement doesn't comply with current industry standards and isn't compatible with the technology used by the partnering emergency services.
- 7 The proposed LEOC will be established on Level 6 of CN's CAC at 12 Stewart Avenue, Newcastle West.
- 8 The co-location of the LEOC at CN's new CAC enables a fit for purpose LEOC facility with all necessary IT and AV infrastructure, furniture and support facilities at a central location which is immediately opposite the Newcastle Interchange.
- 9 The proposed LEOC requires enriched communications technology for both internal and external parties with a secured power supply in case of an outage.
- 10 The LEOC must be physically and environmentally secure and survivable in an emergency and will contain both open common areas and closed workspaces. The proposed LEOC will also provide multiple centralised viewing screens (a Video Wall) that will require streaming including (but not limited to):
 - i) Traffic feeds
 - ii) Weather Feeds
 - iii) Fire Feeds
 - iv) News Feeds
- 11 Two 500kVA diesel generators (1,600 amps in total) are located on the Level 6 car park at 12 Stewart Avenue. These generators are equivalent in size to the Ausgrid substation supplying electricity to the building.
- 12 The key elements of the proposed LEOC include **(Attachment A)**:
 - i) Area 4 - 8 seat dedicated video conference meeting room capability with wireless presentation and network connectivity and 65-inch screen.
 - ii) Area 14 - 16 seat video conferencing facility with wireless presentation, free to air TV connectivity for news coverage, weather, traffic cameras etc, server and 4x65 inch screens, whiteboard and one mobile 86-inch screen.
 - iii) Area 15 - 16 seat video conferencing facility with wireless presentation, free to air TV connectivity for news coverage, weather, traffic cameras etc, server, whiteboard and 86-inch screen.
 - iv) Area 6 - 8 dedicated workstations, 12 seat elevated bench seating, whiteboards and 86-inch screen.

- v) Areas 14 and 15 have the capability to open to one 32 seat room or open further to also incorporate Areas 4 and 6.
- vi) Power and data including high-speed Wi-Fi access.
- vii) Two diesel powered generators capable on indefinitely powering 100% of the building load (provided by 12 Stewart Avenue building owner).
- viii) Backup uninterrupted power supply (UPS) ensuring comms infrastructure is able to continue during generator start up time in case of a blackout.
- ix) Commercial kitchen to prepare food during a city-wide blackout.
- x) Controlled secure access preventing unauthorised entry.
- xi) Multi-function devices capable of high-speed printing and scanning.
- xii) On-site parking (provided by 12 Stewart Avenue building owner).
- xiii) Breakaway spaces.
- xiv) Tea point and fridges.
- xv) Secure toilet and shower facilities (provided by 12 Stewart Avenue building owner).

13 The proposed LEOC complies with the NSW Government Emergency Operations Centre Policy 2013 (NSW EOC Policy).

FINANCIAL IMPACT

- 14 The budget required for the LEOC includes all design, project management and construction fit out fees.
- 15 The LEOC is a separate project to the relocation of staff from three buildings in the Civic Precinct to 12 Stewart Avenue and requires \$1.8 million (inc 15% contingency) to be allocated in the Building, Structures and Places Portfolio works program for adoption at the December Quarterly Review. Minimal operational expenditure will be generated by the work given the majority of costs will be capitalised.
- 16 The area required to construct the LEOC has been created by reducing the size of the reception and visitor waiting areas on Level 6, removing a furniture storage room, and increasing the size of the staff training room / boardroom, from the preliminary design included in the design tender in October 2018.
- 17 An LEOC within CN's CAC at 12 Stewart Avenue provides a cost-effective delivery model through co-location with CN administration spaces, compared to the cost associated with the temporary upgrade of the existing Tighes Hill premises or construction of a new standalone LEOC.

COMMUNITY STRATEGIC PLAN ALIGNMENT

18 The LEOC aligns with the following Newcastle 2030 Strategic Plan (Plan) directions:

Protected Environment

2.3b Support individuals and communities to prepare, respond and recover from emergency events.

Vibrant, Safe and Active Public Spaces

3.3 Safe and activated places used by people day and night

IMPLEMENTATION PLAN/IMPLICATIONS

19 The LEOC is a requirement of CN's Emergency Management Plan finalised in November 2018 (refer to **Attachment D**).

RISK ASSESSMENT AND MITIGATION

20 Management of the interrelationships between CN administration and LEOC members accessing and utilising the LEOC area during times of emergency will be managed through effective staff and LEOC member training as well as demarcation of spaces during times of a significant emergency event. Typically, eight CN staff are required to be onsite during the operation of a LEOC.

RELATED PREVIOUS DECISIONS

21 Nil.

CONSULTATION

22 Councillors were briefed by the Chief Executive Officer (CEO) on 21 November 2017 on the deficiencies of the Tighes Hill LEOC area and its building. This included multiple structural concerns related to the age of the building, lack of lift access, stairways that are non-compliant with the Australian Standard, lack of secure parking for emergency service vehicles, lack of emergency power, lack of basic emergency service furnishings and technology to enable a coordinated city led response to an emergency or natural disaster.

23 The view of the Deputy Local Emergency Operations Controller that the LEOC was no longer a suitable location was communicated in an email by the CN CEO to Ward 1 Councillors on 9 October 2018.

24 The Minister for Police and Emergency Services was briefed on 13 November 2019 regarding the condition of the Tighes Hill LEOC and proposed relocation to the Council Administration Centre at 12 Stewart Avenue.

25 The Local Emergency Management Committee (LEMC) endorsed the proposed location at 12 Stewart Avenue Newcastle West on 28 November 2019, citing it as

a great enhancement to the City's LEOC capabilities. They have also noted the increased hazards and frequency of emergency events in the local government area.

- 26 The LEMC consists of members from emergency and functional agencies including CN, Ambulance Service of NSW, Fire and Rescue NSW, Marine Rescue NSW, NSW Police Force, NSW Rural Fire Service, NSW State Emergency Service, Port Authority of NSW, Agriculture and Animal Services, Telecommunication Services, Citizens Radio Emergency Services Teams, Department of Defence, Department of Education and Communities, Department of Finance, Services and Innovation, Environment Protection Authority, Department of Premier and Cabinet, Hunter Water Corporation, NSW Department of Planning and Environment, NSW Family and Community Services, NSW Health, and Transport NSW.

BACKGROUND

- 27 The NSW EOC Policy defines an Emergency Operations Centre as a Centre established under the State Emergency and Rescue Management Act at a state, regional or local level as a Centre for communication, and as a Centre for coordination of operations and support, during an emergency.
- 28 The location provides flexibility in space usage as required by an LEOC with the ability to close down areas for increased security or concentration or open up rooms to support a larger floor plate for management of significant emergencies.
- 29 In times of emergency events the proposed LEOC can occupy up to 400sqm of internal floor space with 3 meeting rooms and a workspace, as required. Outside of this and coordinated with CN administration, the LEOC members can utilise the LEOC facilities for training and meetings as required.

Power

- 30 Two 500kVA diesel generators (1,600 amps in total) are located on the Level 6 car park at 12 Stewart Avenue. These generators are equivalent in size to the Ausgrid substation supplying electricity to the building. Together these provide 100% backup to the entire building.
- 31 Each generator has 800 litres of diesel. Accompanying the generators is a 2,000 litre external diesel tank that automatically fills each generator's onboard tank when required. Both the generators and the main tank can be filled while the generators are running.
- 32 The combined 1,600 litres of diesel would allow the 12 Stewart Avenue building to run at full load for 24 hours. To date the building's maximum demand has not reached 600 amps so the practical run time is closer to three days. In case of an emergency or natural disaster, it is probable that other tenants in the building would choose not to attend the site and therefore the run time is closer to 5 days.

- 33 The generators automatically load shed meaning when the building load is below 80% of one generator's capacity (640 amps), it will shut down until the load increases and then restart, providing further theoretical run time.

Communications

- 34 The proposed LEOC requires enriched communications technology for both internal and external parties with backup uninterruptable power supply (UPS) to operate during the startup time of the onsite diesel generators when an outage occurs.

- 35 The LEOC requires multiple centralised viewing screens (Video Wall) as well as mobile viewing screens that require streaming including (but not limited to):

- i) Traffic feeds
- ii) Weather feeds
- iii) Fire feeds
- iv) News feeds

- 36 The proposed LEOC will provide the capability to duplicate any of the viewing screens to any screens within the CAC and therefore be able to "take over" a larger portion of the building in case of a natural disaster with a long recovery time such as an earthquake.

- 37 The most feature-rich portion of the CN network, the access layer, is where the end-user devices, such as PCs, printers, wireless access points and mobile devices are connected. This access layer will provide the required security, quality of service and trust boundary. To ensure that the LEOC is not comprised the LEOC must run over a resilient network, by providing additional communication networks that can be dynamically converged upon by control protocols. The use of high-speed wireless local area networks will provide a secondary backup layer. These layers will provide both voice and video capabilities.

- 38 The LEOC will also require communication capabilities be provided to allow emergency personal working in the field to engage with the LEOC.

Alternate locations

- 39 The City's LEOC has operated from the Tighes Hill facility for approximately 30 years, most notably during the June 2007 Pasha Baulker storm which saw more than 105,000 homes lose power for three days in the face of 300mm of rainfall and 124km/h winds. It was most recently required on 12 November 2019 in response to catastrophic fire conditions at the request of the State Emergency Operations Controller. Due to the unsuitable condition of the Tighes Hill facility, a temporary LEOC had to be set up from the City Library.

- 40 The City Library is not a suitable long-term option due to:

- i) Insufficient size
- ii) Lack of suitable IT and AV equipment
- iii) Lack of emergency power
- iv) Lack of an area to prepare meals for 25 people
- v) Inability to secure the area without impacting on public access to the City Library
- vi) Lack of secure parking for emergency services vehicles
- vii) Lack of breakout areas
- viii) Lack of shower facilities

OPTIONS

Option 1

41 The recommendation as at Paragraph 1. This is the recommended option.

Option 2

42 Not proceed with endorsing the delivery of the LEOC. This is not the recommended option.

REFERENCES

ATTACHMENTS

Item 94 Attachment A: Level 6 Plan (North and South Towers) and Renders

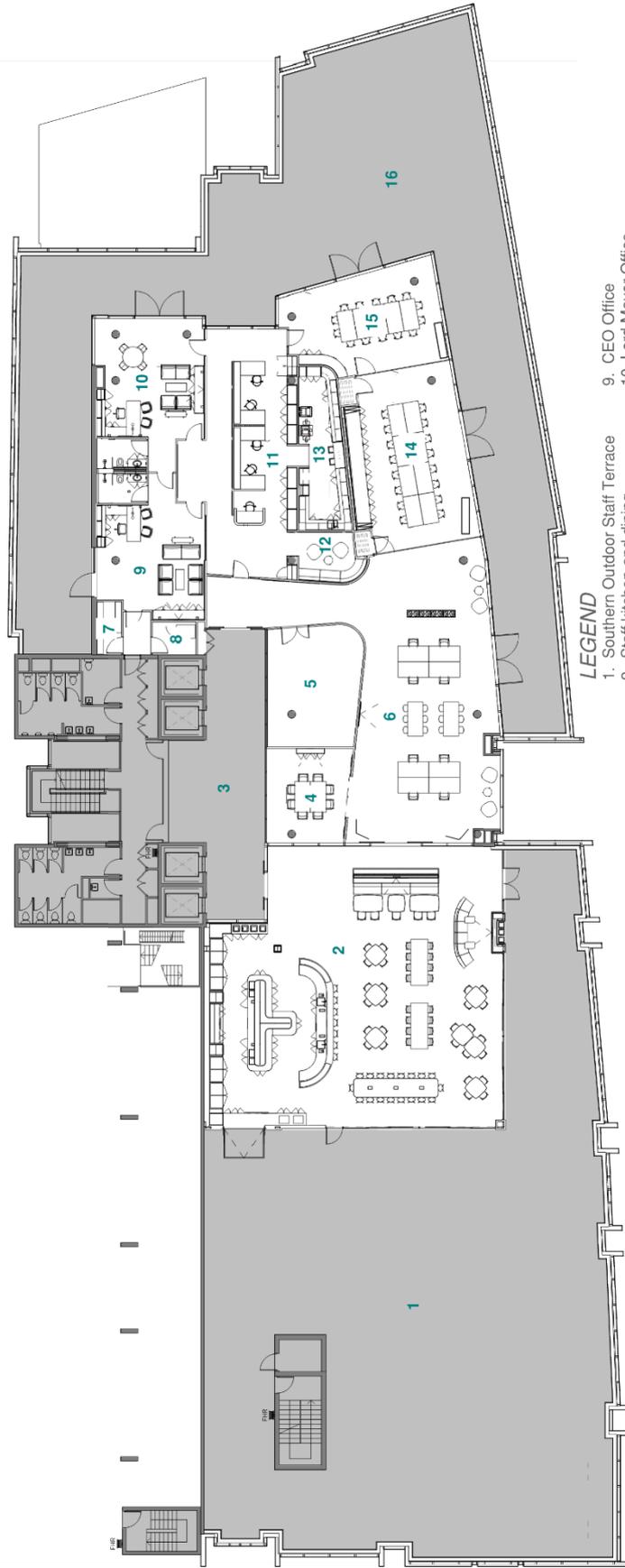
Item 94 Attachment B: NSW Legislation – State Emergency and Rescue Management Act 1989 No 165
<https://www.legislation.nsw.gov.au/#/view/act/1989/165>

Item 94 Attachment C: NSW Government Emergency Operations Centre Policy Document 2013
<https://www.emergency.nsw.gov.au/Documents/publications/policies/Emergency-Operations-Centre-Policy.pdf>

Item 94 Attachment D: Emergency Management Plan 2019
<https://www.newcastle.nsw.gov.au/Newcastle/media/Emergency-1-2-3/City-of-Newcastle-Local-Emergency-Management-Plan-16-July-2019.pdf>

Item 94 Attachment A

design development
staff kitchen & outdoor terrace, offices & administration, LEOC, training & LMRR facilities
level 6 floor plan



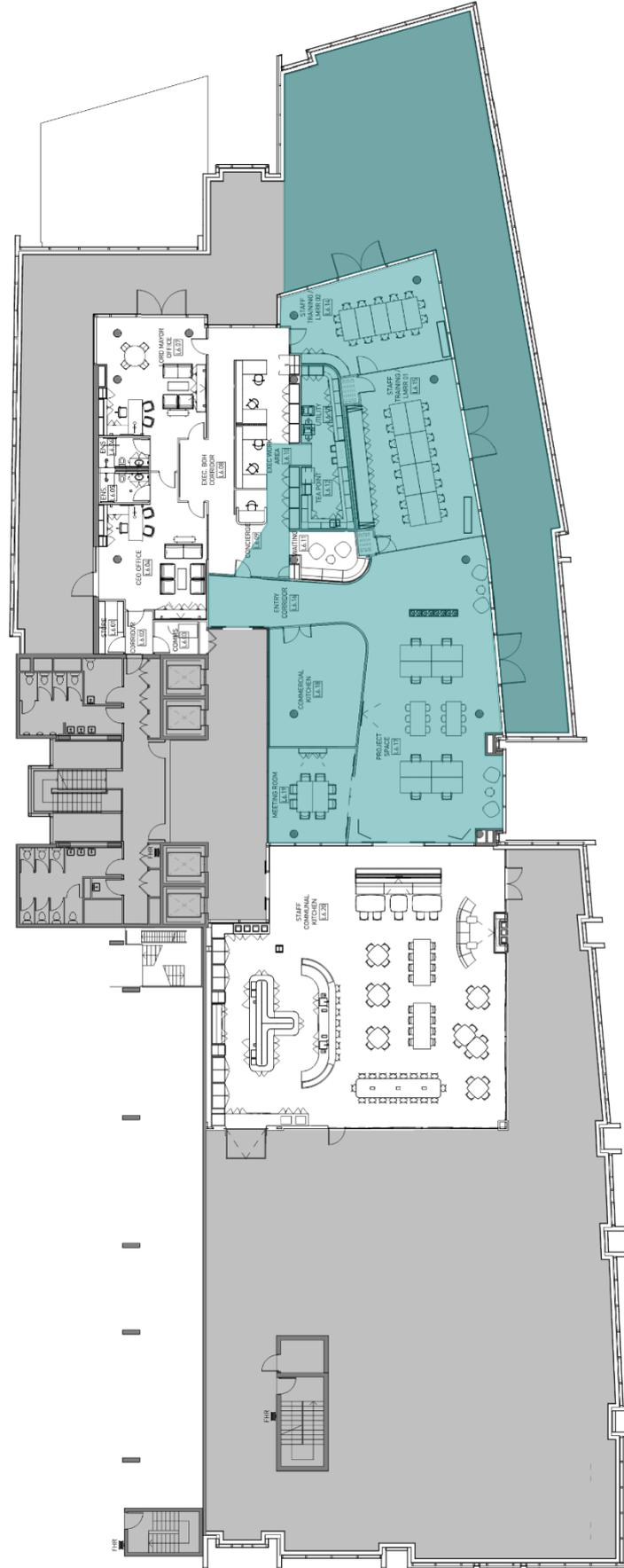
LEGEND

- 1. Southern Outdoor Staff Terrace
- 2. Staff kitchen and dining
- 3. Lift Foyer
- 4. 8 seat LEOC meeting room
- 5. 24/7 Kitchen facilities
- 6. LEOC workstations
- 7. Cleaners Storage
- 8. IT Comms rack room
- 9. CEO Office
- 10. Lord Mayor Office
- 11. Executive Administration
- 12. Visitor waiting area
- 13. Tea point and printing facilities
- 14. 16 seat LEOC operations room/LMRR1
- 15. 16 seat LEOC operations room/LMRR2
- 16. Outdoor terrace

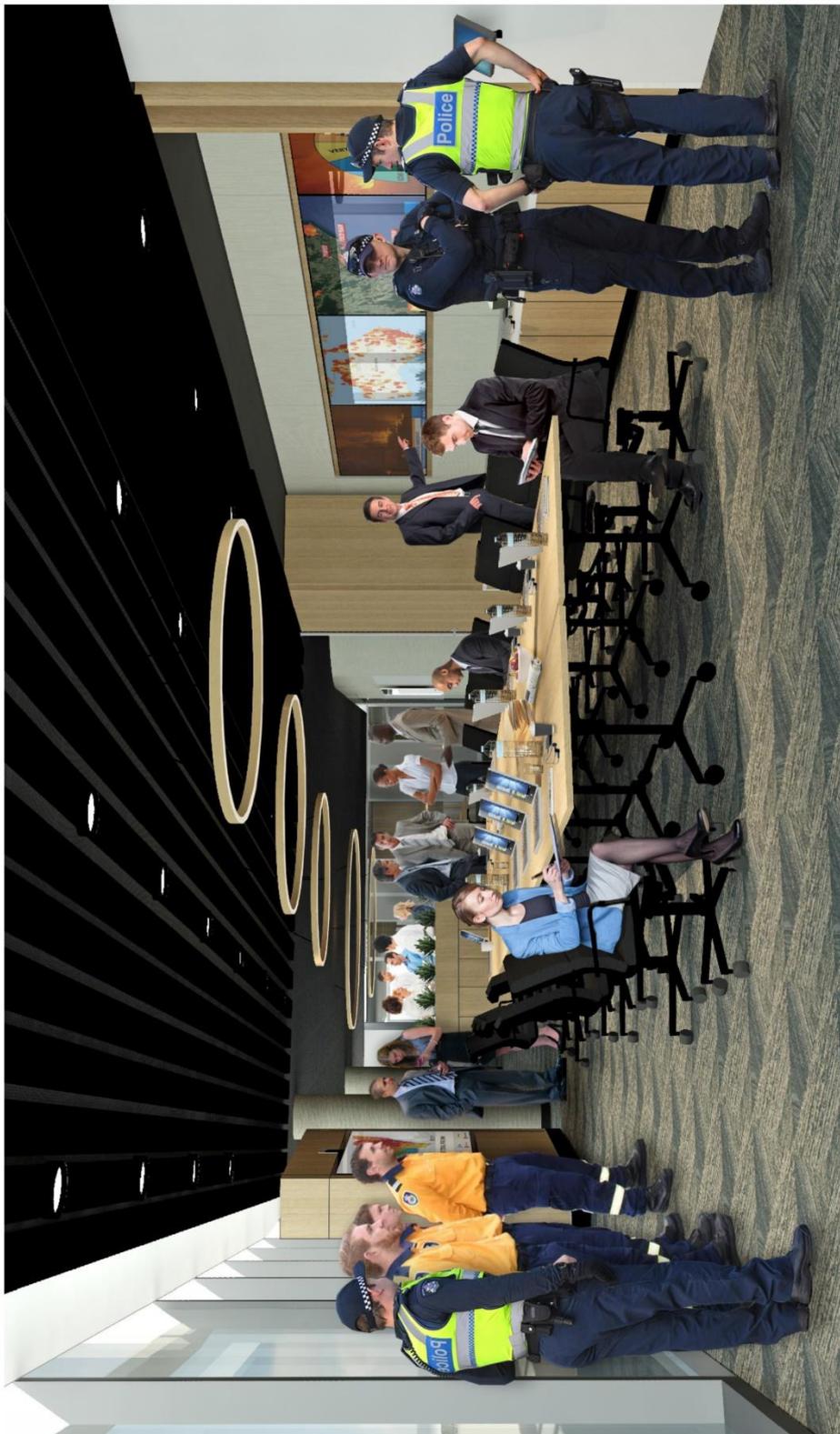
Local Emergency Operation Centre Project (Newcastle West)

Location: Level 6, 12 Stewart Avenue, Newcastle West, NSW 2300
 November 2019 | Issue 1

design development
LEOC extent of floor area
level 6

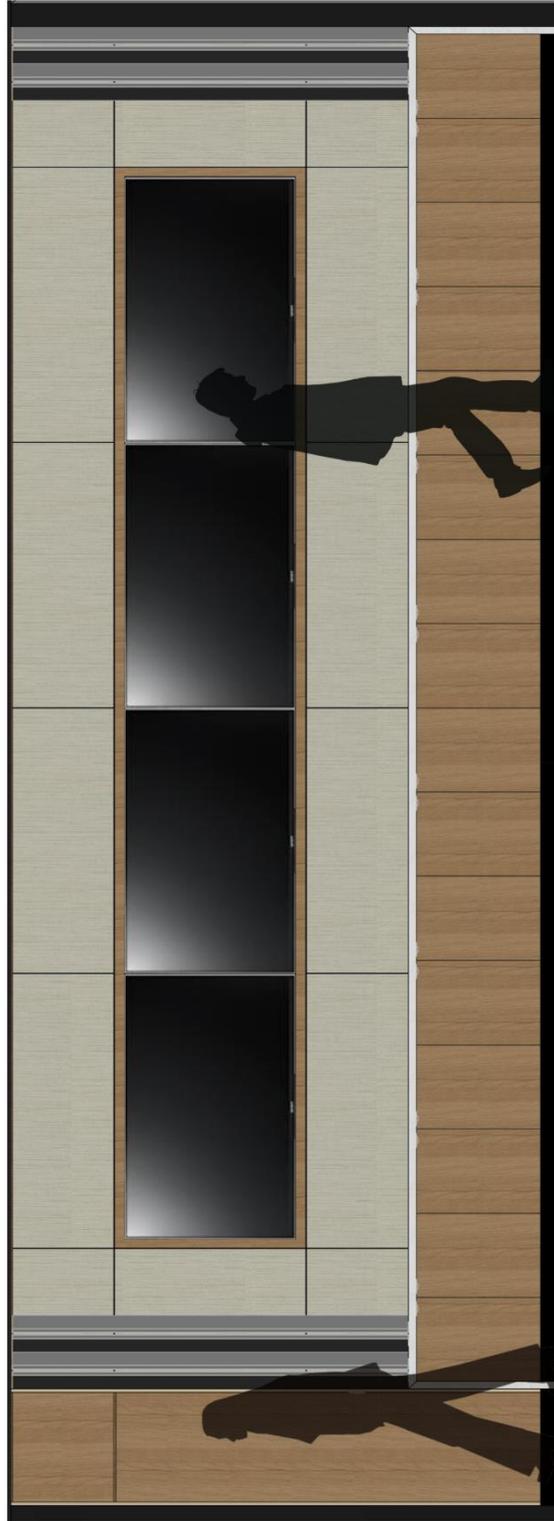


design development
LEOC perspective
level 6



Local Emergency Operation Centre Project (Newcastle West)
Location: Level 6, 12 Stewart Avenue, Newcastle West, NSW 2300
November 2019 | Issue 1

design development
LEOC main operations room screen elevation
level 6



Local Emergency Operation Centre Project (Newcastle West)
Location: Level 6, 12 Stewart Avenue, Newcastle West, NSW 2300
November 2019 | Issue 1