28/07/2022

**K25 Productions PTY LTD**
LEVEL 32
580 GEORGE STREET,
SYDNEY NSW 2000
AUSTRALIA

**ATTENTION:** Charlie Revai & David Watts

# STRUCTURAL DESIGN CERTIFICATE FOR TEMPORARY STRUCTURES

| | |
|---|---|
| **PROJECT:** | The Fall Guy |
| **STRUCTURE:** | 135m (L) x 18m (H) Container Wall with Timber Framing |
| **LOCATION:** | P5 Sydney Olympic Park Car Park - Hill Road and, Holker St, Sydney Olympic Park NSW 2127 |
| **DURATION:** | 3rd October 2022 – 28th February 2023 |

We Event Engineering, being professional Chartered Structural Engineers within the meaning of the National Construction Code (NCC) of Australia, confirm that we have been appointed as the engineers responsible for the Structural Certification of the above project. We certify that the design, subject to the limitations listed within this certificate, is in accordance with the relevant provisions of the standard building codes of Australia, accepted engineering practice and principles and the design methods for *Temporary Demountable Structures* as per the *Guidance on Procurement, Design and Use of Temporary Demountable Structures* (Institution of Structural Engineers, 2017).

**We advise that the maximum design 3 second wind gust speed for the above structure is 37m/s, in accordance with the minimum requirements set forth by AS1170.2:2011 (Clause 2.3) Should the wind speed approach this speed, the safety steps identified within this certificate must be implemented.**

We note that this certification is effective only for the dates specified and that further review and certification will be required if the design is modified in any way. This certificate shall not be construed as relieving any other party of their responsibilities, liabilities or contractual obligations. This certificate is applicable only for this installation and relies upon all other risk assessments, WHS requirements and job safety statements associated with this project.

**Damian Ferrari**
B.Eng (Civil) (Hons)
B.Env.Sc
**STRUCTURAL ENGINEER**

**Morgan Sheehy**
MEng (Hons I) Tech Cert Eng (Civil)
MIEAust CPEng NER 3468223 (Civil & Structural)
APEC Engineer IntPE(Aus) RPEQ 14767
PE 657 (Civil Engineer)
**SENIOR ENGINEER**

## 1. REFERENCED STANDARDS

| | | |
|---|---|---|
| **1.1.** | **ABCB:2015** | Temporary Structures Standard; |
| **1.2.** | **AS1170.0:2002** | General principles; |
| **1.3.** | **AS1170.1:2002** | Permanent, imposed and other actions; |
| **1.4.** | **AS1170.2:2011** | Wind actions; |
| **1.5.** | **AS1720.1:2010** | Timber structures; |
| **1.6.** | **AS3600:2018** | Concrete Structures; |
| **1.7.** | **AS4100:1998** | Steel Structures; |
| **1.8.** | **IStructE:2017** | Temporary Demountable Structures. |

## 2. ATTACHMENTS

| Att. No. | Title Reference | Issued By | No. Pages |
|---|---|---|---|
| 1 | Fall Guy Container Wall - 220728-EE22 463-FG-CW REV A | Event Engineering | 2 |

## 3. DESIGN LIMITATIONS & REQUIREMENTS

**3.1. Maximum Loading:**

**3.1.1. Dead:**

**3.1.1.1.** Timber cladding: 0.25kPa (25kg/m);

**3.1.2. Live:**

**3.1.2.1.** Container Roof Access: 0.75kPa (75kg/m);

**3.2. Minimum Ballast:** *Refer to attached drawing for ballast arrangement.*

**3.2.1.** 175 Tonne total;

**3.3. Member Specifications:**

**3.3.1.** 20 & 40-Foot Shippings with concrete levelling plinth;

**3.3.2.** Builders plastic to be placed below concrete;

**3.4. Minimum Fixings:**

**3.4.1.** Containers to be secured in accordance with attached technical drawings;

**3.5. Catenary Loading:** No catenaries to be fixed to structures without review and approval by engineer;

**3.6. Rigging:** Certified rigging technicians must install and sign-off on all rigging;

**3.7. Bearing Capacity:** Minimum bearing capacity shall be 150kPa;

**3.8. Spreader Plates:** To be provided beneath all structural support struts;

**3.9. Workshop Drawings:** Shall be submitted for engineer's written approval prior to any additional fabrication or further modifications;

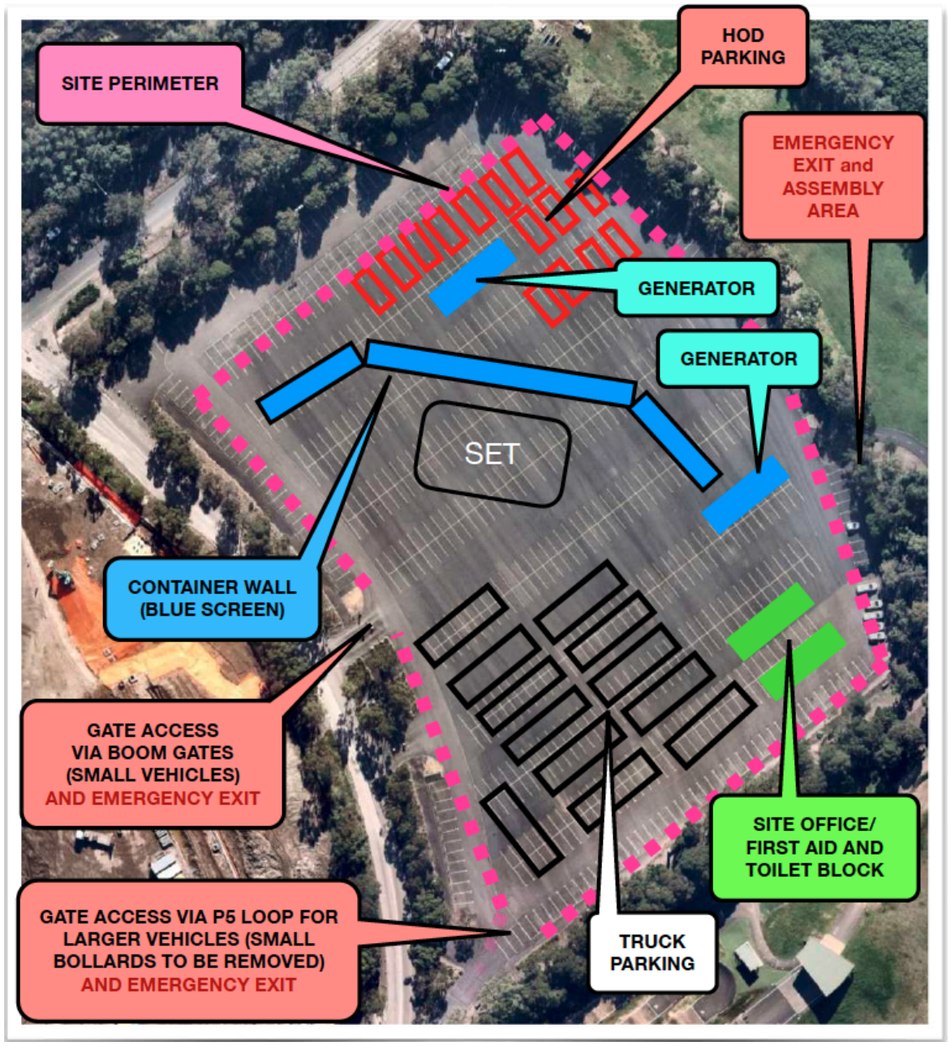
**3.10. Wind Management Plan:**

**3.10.1.** The wind speed must be measured on site by an anemometer or the nearest weather station;

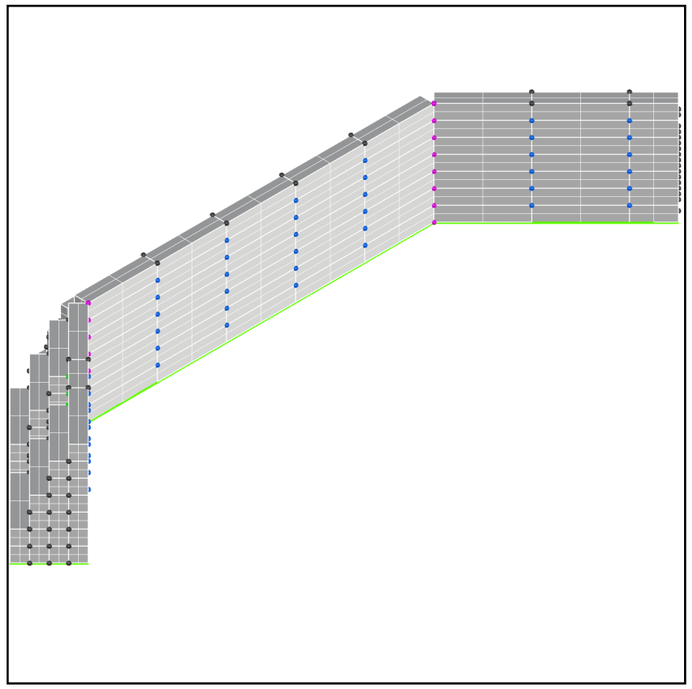
**3.10.2.** If the wind speed approaches 20m/s, personnel must go on standby to implement an evacuation;

**3.10.3.** If the wind speed approaches 22m/s, all non-essential personnel must be evacuated;

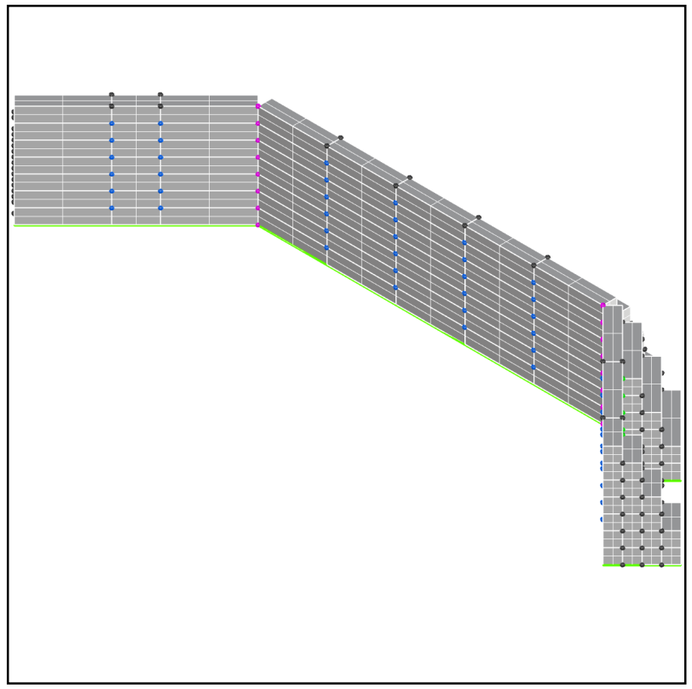
**3.10.4.** If the wind speed approaches 25m/s, all structures must be abandoned and all personnel moved within a permanent structure of importance level 2-4 as specified within the BCA.



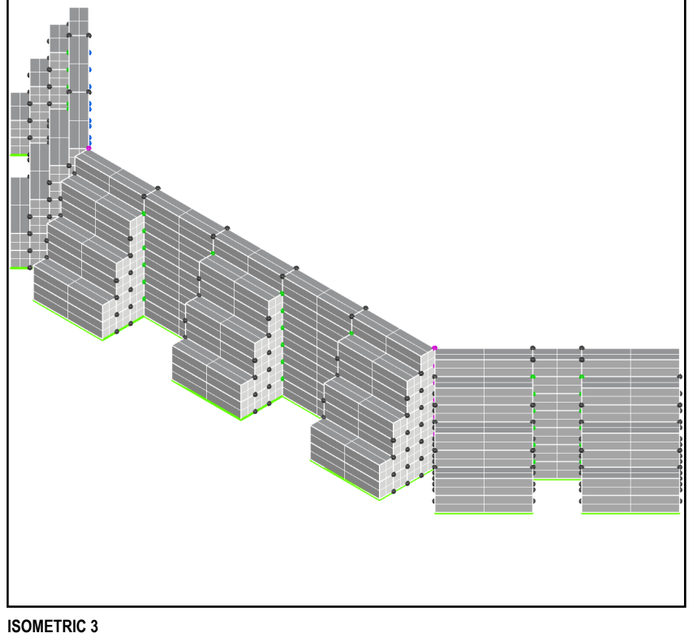

SITE PLAN



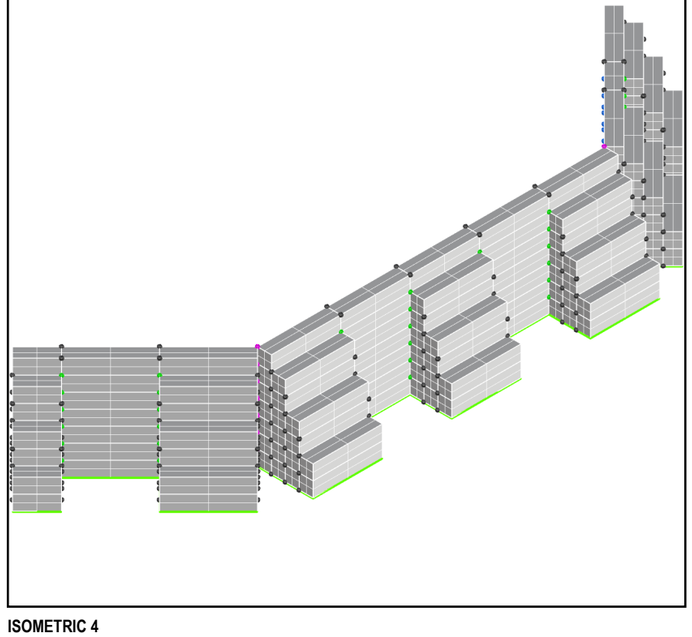
ISOMETRIC 1



ISOMETRIC 2



ISOMETRIC 3



ISOMETRIC 4

DO NOT SCALE DRAWINGS, USE FIGURED DIMENSIONS

| REV. | ISSUE / AMENDMENT | BY | APP. | DATE |
|---|---|---|---|---|
| A | PRELIMINARY | MLS | MS | 28/07/2022 |

EVENT ENGINEERING

ACN 163 597 840
ABN 87 163 597 840
17-19 O'Connor St Chippendale
NSW 2008 Australia
www.eventengineering.com.au



| | | |
|---|---|---|
| DRAWN: | M. L. SHEEHY | 28/07/2022 |
| DESIGNED: | D. FERRARI | 28/07/2022 |
| DRG CHECK: | M. SHEEHY | 28/07/2022 |
| DESIGN CHK: | M. SHEEHY | 28/07/2022 |
| APPROVED: | M. SHEEHY | 28/07/2022 |

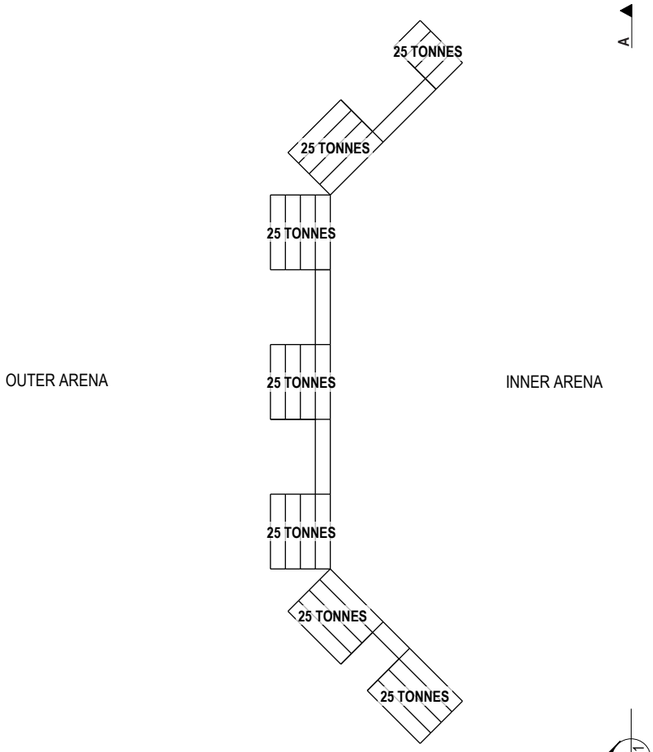
**CLIENT**

**PROJECT**
FALL GUY

**TITLE**
SITE PLAN AND CONTAINER WALL

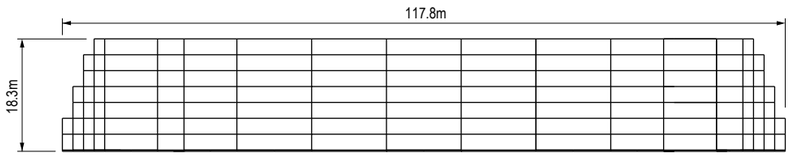
PRELIMINARY

| | | |
|---|---|---|
| | | **DESIGNED** MS |
| **SCALE AT A3** AS SHOWN | **DATE** 28/07/2022 | **DRAWN** MLS |
| **JOB NO.** EE22 463 | **DRAWING NO.** S1.0 | **AMDT.** A |

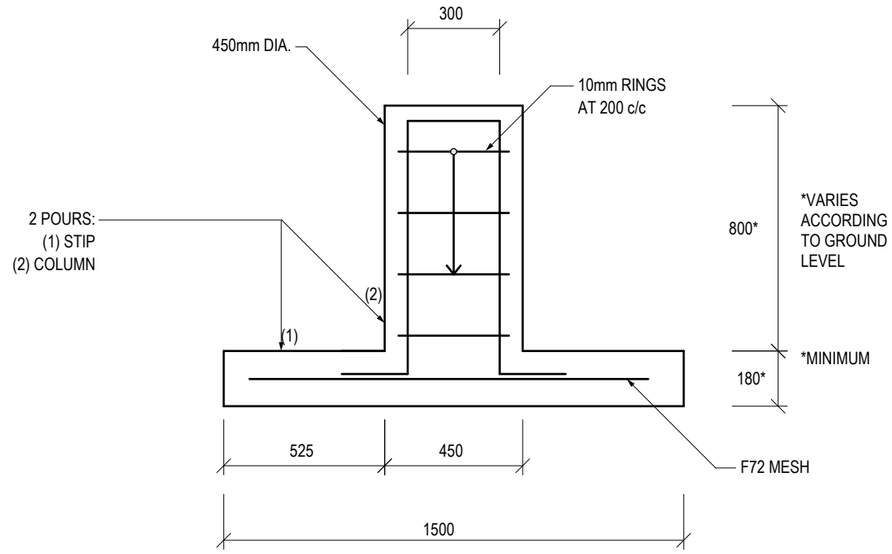



**PLAN VIEW** (1 / 1.1)
SCALE 1:1000

**NOTES**
- FILL BALLAST FROM OUTER CONTAINER FIRST.
- TOTAL BALLAST: 175 TONNES

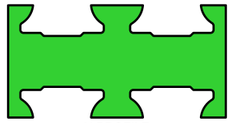



**ELEVATION** (A-A / 1.1)
SCALE 1:1000

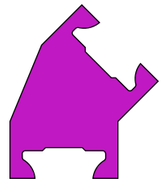



**TYPICAL LEVELING DETAIL** (2 / 1.1)
NTS

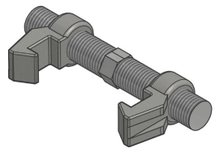
S PROFILE
20mm PLATE



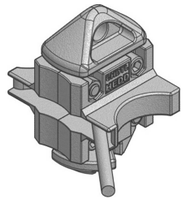
H PROFILE
20mm PLATE



45 PROFILE
20mm PLATE



- BRIDGE LOCK



DOUBLE ENDED TWIST LOCK



| REV. | ISSUE / AMENDMENT | BY | APP. | DATE |
|---|---|---|---|---|
| A | PRELIMINARY | MLS | MS | 28/07/2022 |

EVENT ENGINEERING
ACN 163 597 840
ABN 67 163 597 840
17-19 O'Connor St Chippendale
NSW 2008 Australia
www.eventengineering.com.au



| | | |
|---|---|---|
| DRAWN: | M. L. SHEEHY | 28/07/2022 |
| DESIGNED: | D. FERRARI | 28/07/2022 |
| DRG CHECK: | M. SHEEHY | 28/07/2022 |
| DESIGN CHK: | M. SHEEHY | 28/07/2022 |
| APPROVED: | M. SHEEHY | 28/07/2022 |

**CLIENT**

**PROJECT**
FALL GUY

**TITLE**
CONTAINER WALL
BALLAST PLAN AND GENERAL ARRANGEMENT

**PRELIMINARY**

| | | |
|---|---|---|
| | | **DESIGNED** MS |
| **SCALE AT A3** AS SHOWN | **DATE** 28/07/2022 | **DRAWN** MLS |
| **JOB NO.** EE22 463 | **DRAWING NO.** S1.1 | **AMDT.** A |