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HERA ENGINEERING

Hera Engineering
101 Albert Street OSD

Schematic Design Report

Revision 0

Multiplex Construction

June 19, 2026

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1 Introduction

1.1 Purpose of Report

This report sets out the updated structural schematic deign principles as documented at 50%DD stage of the proposed for the Albert Street Over Station Development (**OSD**), and the approach to the various building elements.

The report should be read in conjunction with the RBG Project Design Criteria Report, Hera Design Note and Structural 50%DD Drawings attached in **Appendix A**, and the Hera Design Note in **Appendix B** that explains the main changes from the previous design and the resulting pile loads.

1.2 Site Details

The proposed Albert Street OSD is located on Lot 2 of the Albert Street Station site for Cross River Rail (**CRR**). The site is located opposite the proposed Albert Street CRR Station. The site is noted as FOSD Lot 2 on the map below in **Figure 1**.

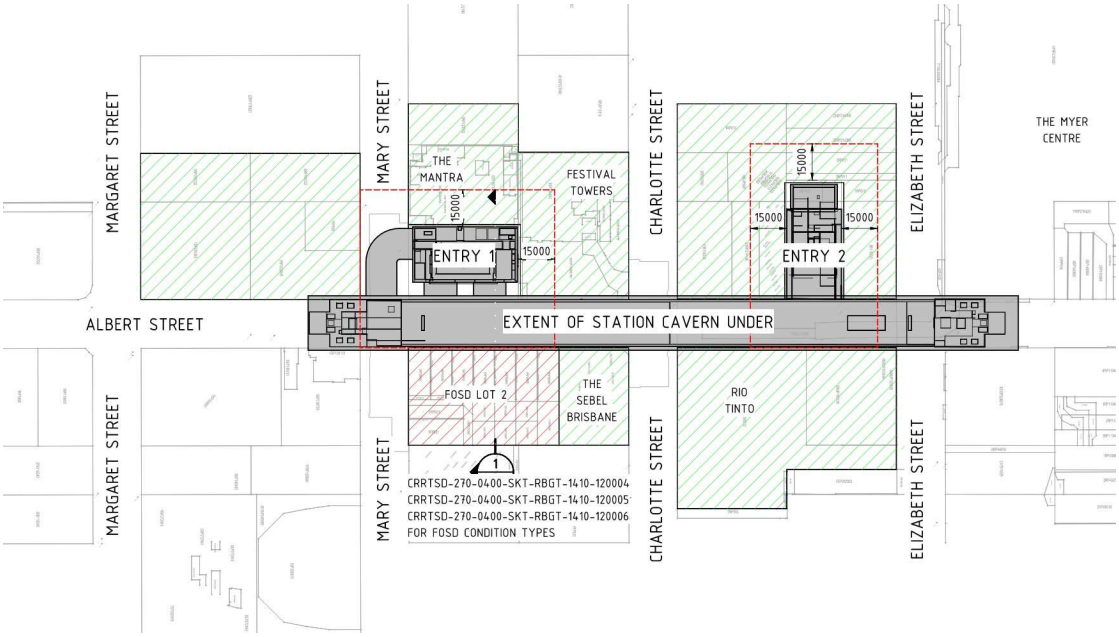


Figure 1 - Site Map

The site abuts the CRR Station Cavern that runs under Albert Street and sits between Mary Street and the Brisbane Sebel development. Two developments abut the Northern boundary, being 110 Mary Street and 119 Charlotte Street. Refer to Figure 2 below.



Figure 2 - Site Plan

The development site is currently occupied by the temporary CRR acoustic shed. The acoustic shed has a typical slab on grade with a minimum 300mm thickness with a top surface level of RL +4.0m. The slab thickness is up to 600mm thick in some locations and is supported off ground beams up to 1200mm deep.

1.3 Proposed Development

The proposed development is anticipated to comprise a predominantly commercial tower above Podium retail and basement parking. Level 1 will be the main commercial lobby. The commercial tower will be split into four rises, Low, Mid, High and Sky Rise. Above the last commercial level (L39) will be a Destination Rooftop with an external terrace.

The building will include one basement level over the full site, containing the Loading Facilities with the car parking and localised plant areas. A mezzanine level will house the End of Trip facilities and will sit between Ground floor and L1. The finished floor level of Basement 1 is currently proposed at RL -1.0m, and RL = -1.5m.



Figure 3 - Proposed Architectural Tower Render

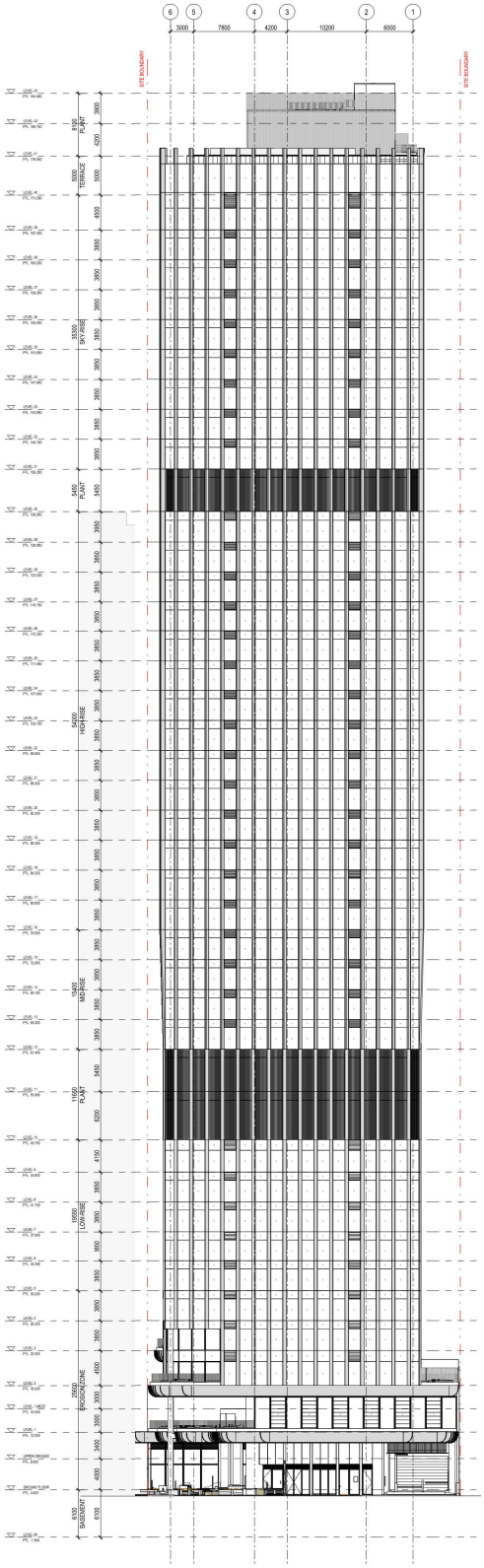


Figure 4 - Proposed Architectural Elevation

1.4 Cross River Rail Assets

The development site is adjacent to and partially over major CRR Assets associated with the Albert Street Station. The major adjoining asset of most importance is the Station Cavern that runs under Albert Street. This cavern sits just under the site boundary to Albert Street. The cavern is a mined arched structure with its base at circa RL -30m and its crown at circa RL -13m. There are duct and escape passages below the cavern that link back to the primary station structure located on the opposite side of Albert Street.

Figure 5 illustrates the location of the cavern and station relative to the development site.

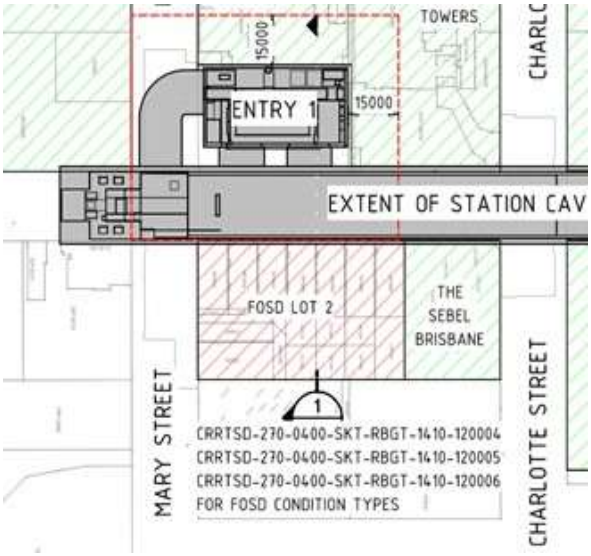


Figure 5 - Development Site and CRR Assets

Figure 6 below illustrates a section through the development site and the adjacent cavern and station structure. The extent of the proposed basement on the development site is also illustrated.

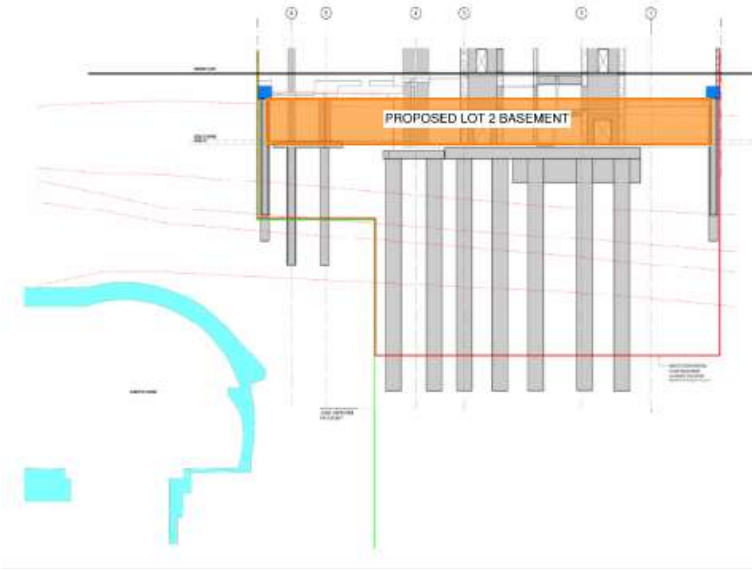


Figure 6 - Section through Proposed Development site and CRR Assets

The development site is currently occupied by an acoustic shed as part of the construction of the Albert Street Station. Within the shed is a 12m diameter temporary access shaft that extends down to nearly RL -30m. This access shaft links to two temporary adit shafts that curve and join to the station cavern.

The acoustic shed, access shaft and connecting adits are all temporary structures. Upon completion of the station, we understand that the acoustic shed and its base slab will be removed with the founding piles to remain for their extent below the Proposed Lot 2 Basement, as discussed further in Section 1.6. The adits and the access shaft have been backfilled with 3MPa mass concrete.

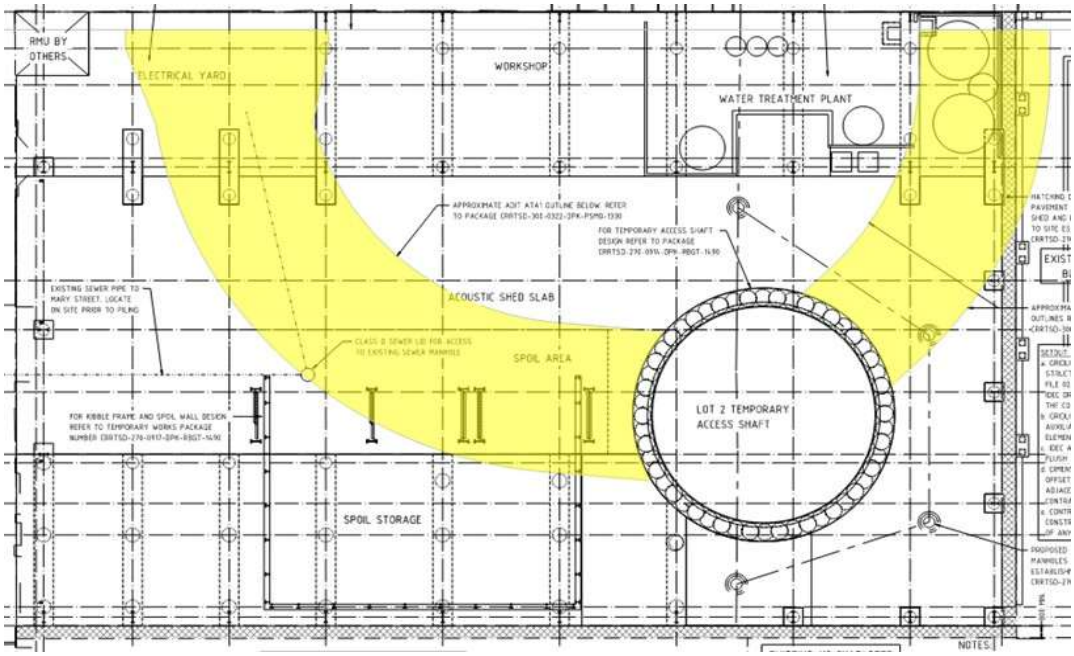


Figure 7 - Acoustic Shed, Access Shaft and Temporary Adits

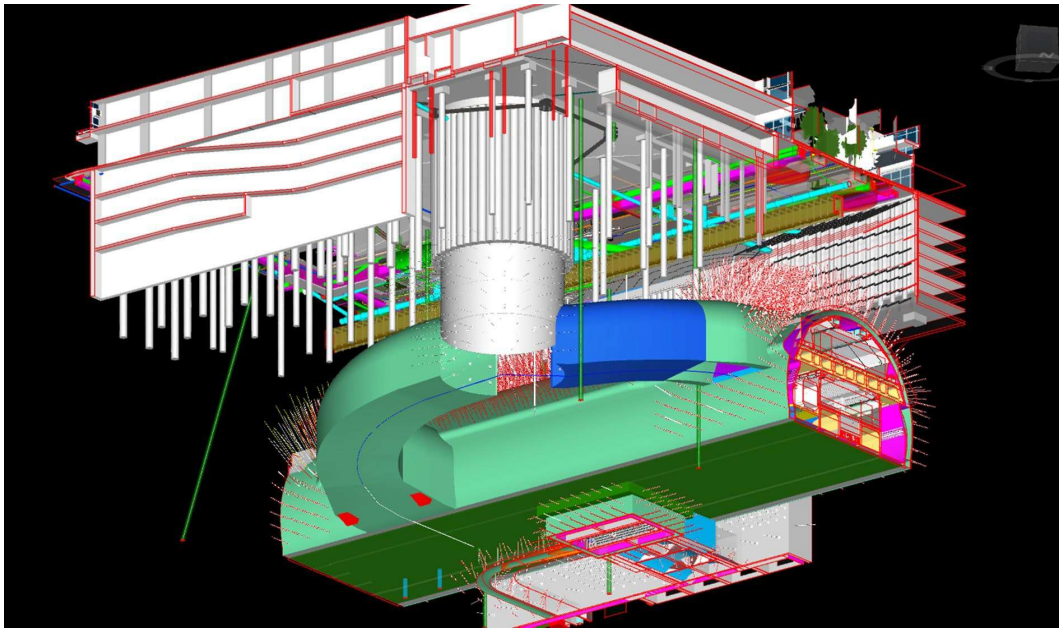


Figure 8 - Extract of Digital Model below Lot 2

1.5 Proximity to Cross River Rail Assets

As discussed in Section 1.4, there is a raft of existing temporary and permanent CRR Assets both within and adjacent to the development site. The below Proximity Diagrams show the approximate as-built locations of the CRR Assets that are to fully or partially remain post-completion of the station, including the temporary acoustic shed foundations, shaft, adits and CRR cavern against the proposed development structure based on the current proposed schematic design structural solution.

These have been produced for the current proposed development Basement 1 finished floor level RL -1.5m, above the no excavation level RL -8.0m, and for the no excavation level RL -20m. The structure for each CRR Asset and structure for the proposed development has been shaded with a different colour to illustrate their proximity to each other both in the plan and section. The shaft and adit structure is shaded green; the acoustic shed structure is shaded red; CRR Cavern is shaded aqua blue, and the proposed development structure is shaded blue.

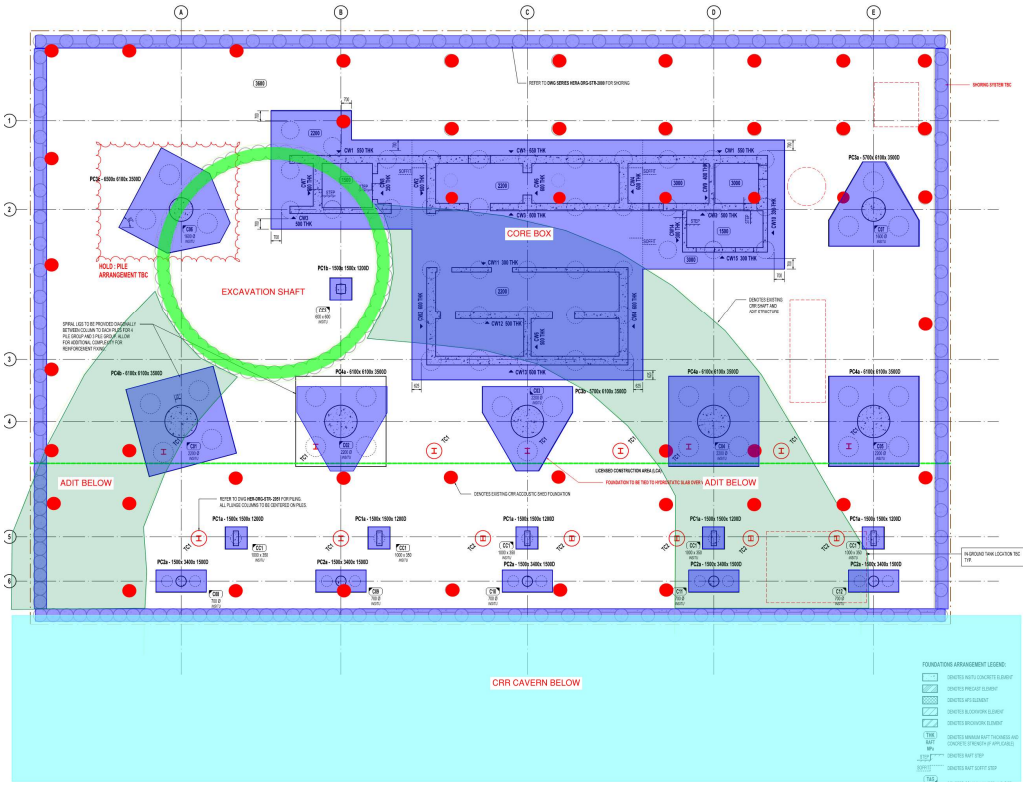


Figure 9 - CRR Asset and Proposed Development Structure Proximity Diagram – RL -1.5m

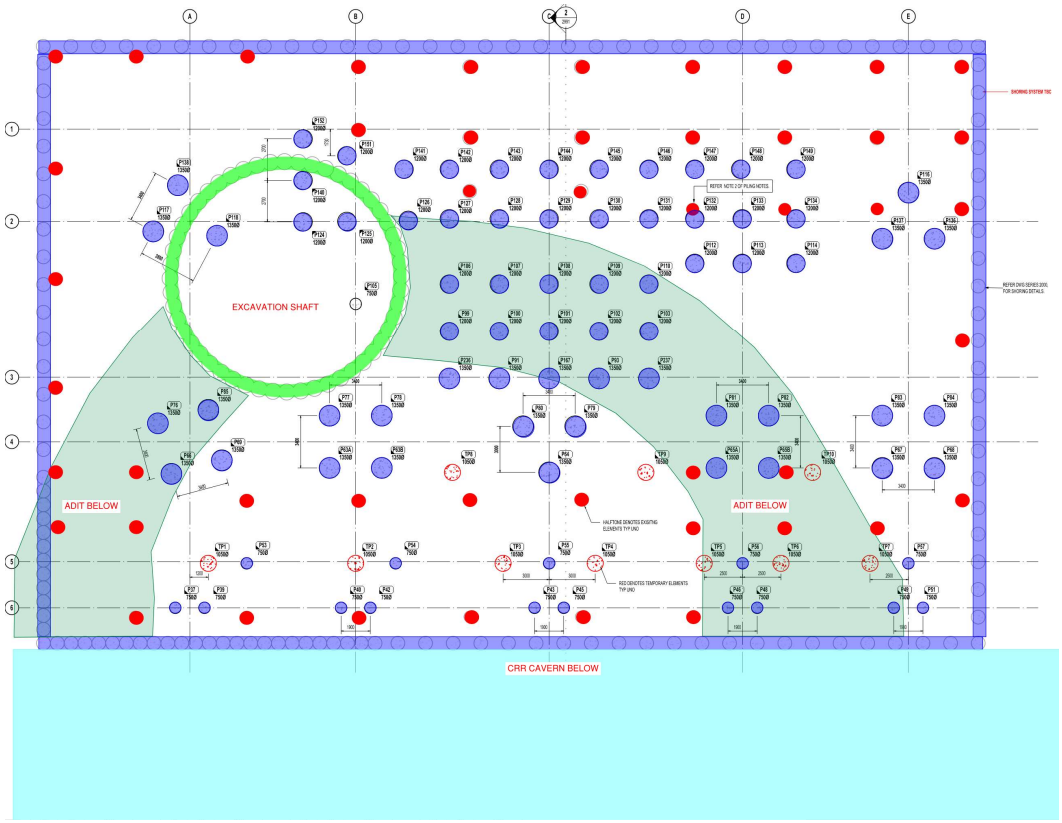


Figure 10 - CRR Asset and Proposed Development Structure Proximity Diagram – RL -8.0m

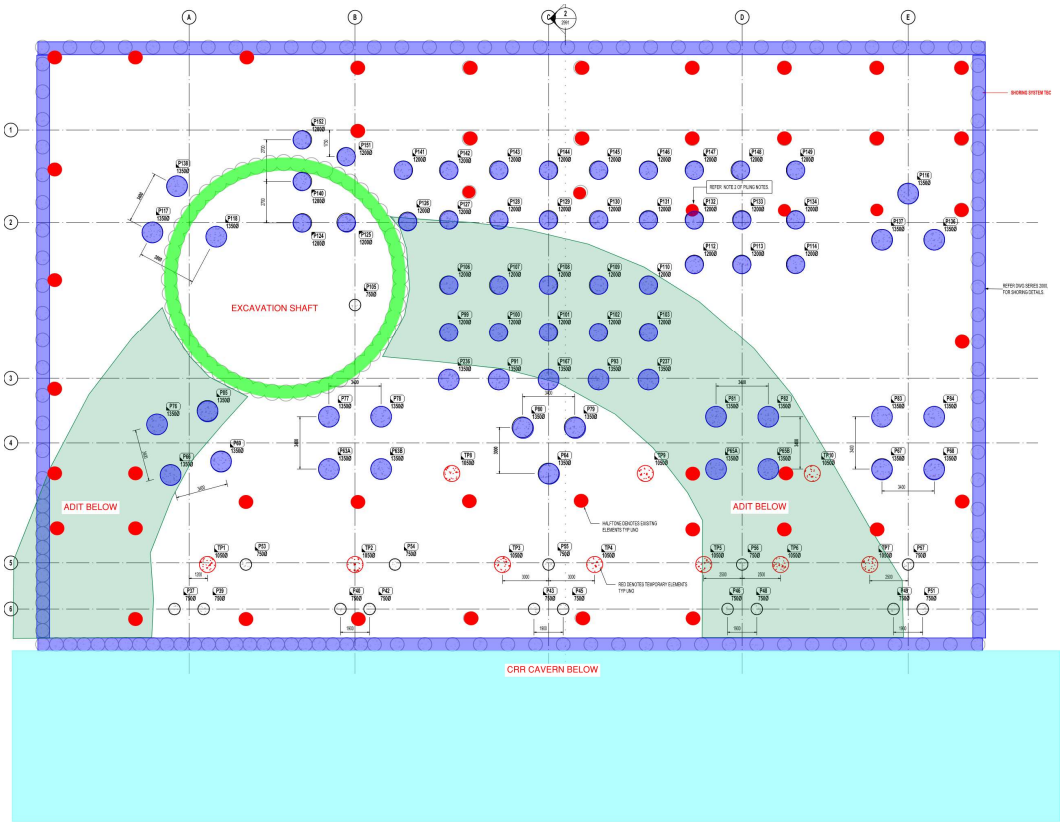


Figure 11 - CRR Asset and Proposed Development Structure Proximity Diagram – RL -20m

As per **Figure 9**, generally, once inboard of the proposed shoring wall, the majority of the current proposed development structure is clear of the acoustic shed piles, provided the piles are demolished down to the bulk excavation level. There is currently one clash in the core pile cap between the acoustic shed piles and proposed core piles, which has been nominated to be removed.

For the perimeter of the development's basement, there are some acoustic shed piles that clash with the proposed 1200mm shoring zone. Further demolition of the acoustic shed piles or coordination of the proposed soldier piles will be required to resolve these clashes.

As per **Figure 11**, there are clashes between proposed bored piers and the adits. The final depth of the bored piers is subject to the founding rock strength and achieving the CRR Cavern stress criteria, however the current geotechnical modelling allows for piling through the adit and into the high strength rock below. It is anticipated that piling through the adit roof and base is permitted, however piling through the adit wall is to be avoided. To complete the pile design, a final as-built survey of the adit structure is required.

Further, advice from a piling contractor and geotechnical consultant is required to determine the best methodology of drilling through the adit structure.

2 Referenced Documents

2.1 Standards and Codes

The following Standards and Codes are applicable for the design of the structural elements:

- National Construction Code of Australia – 2022.
- AS1170.0:2002 General Principles (Up to and Including Amdt 5).
- AS1170.1:2002 Imposed Loads (Up to and Including Amdt 2).
- AS1170.2:2021 Wind Code.
- AS1170.4:2007 Earthquake Code (Up to and Including Amdt 2).
- AS3600:2018 Concrete Structures (Up to and Including Amdt 2).
- AS3735:2001 Concrete Structures Retaining Liquid (Up to and Including Supp1).
- AS3700-2018 Masonry Structures.
- AS4100-2020 Steel Structures (Up to and Including Amdt 1).
- AS4678:2002 Earth-retaining structures (Up to and Including Amdt 2).
- AS2327-2017 Composite Structures – Simply Supported Beams (Up to and Including Amdt 1).
- AS2159-2009 Piling – Design and Installation (Up to and Including Amdt 1).

Any code referenced in this report is to be interpreted as the revisions specified above.

2.2 Referenced Cross River Rail Reports

The following reports have been used to assess the CRR effects:

- Design Manual – Stations CRRTSD-000-0401-MAN-RBGT-1470-191101
- Design Manual – Driven Tunnels CRRTSD-000-0300-MAN-PSMQ-1320-100044
- Geotechnical Interpretive Report (GIR) CRRTSD-000-351DPK-PSMQ-1120-000100
- Hydrogeological Interpretive Report (HIR) CRRTSD-000-0354-RPT-PSMQ-1120-040028
- Albert Street Temporary Access Shaft – Rev C CRRTSD_270-0460-DAN-PSMQ-1120
- Factual Report on Geotechnical Investigation Cross River Rail-Tunnel, Stations, and Development – Douglas Partners – CRRTSD- 97335.00.IFI.00.01
- Albert Street Station Main and Northern Entrance Shafts – CRRTSD-270-0940-DAN-PSMQ-1490-230078
- Station Cavern and Adit Loads – CRRTSD-000-0401- DAN-RBGT-1490-190380
- Albert Street Station Utilities Assessment -CRRTSD-000-0352-DAN-PSMQ-1124-060063
- Geotechnical Interpretive Report (GIR) – CRRTSD-000-0351-RPT-PSMQ-1120-030021
- Albert Street Station – CRRTSD-270-0904-DPK-RBGT-1490-000100
- Albert Street Lot 2: Temporary Retention and Bulk Excavation – CRRTSD-270-0914-DPK-RBGT-1490-231400
- Albert Street Station Design of Acoustic Shed and Foundations - CRRTSD-270-0904-DPK-RBGT-1490-000100
- Permanent Works Design report – Permanent Lining (Tunnel- Albert Street) – CRRTSD-300-0323-RPT-PSMQ-1330-190089

2.3 Design Criteria Report

The proposed design criteria for the Project are set out in a separate report – Design Criteria Report Albert Street OSD 22131S-RBG-ZZ-XX-RP-ST-00001, by Robert Bird Group. Hera have not amended the design criteria of the project, and as such reference should still be made to this report for the adopted design criteria.

2.4 Geotechnical

EDG Consulting has been appointed as the Project Geotechnical Engineers. The site, as noted above, is currently fully covered by an acoustic shed as part of the CRR site works. There are adjoining buildings on two sides of the site, and the Station Cavern is under construction under the Albert Street frontage of the site. As such, the geotechnical input is based on a desktop review of all available existing geotechnical studies in the site proximity. A physical site investigation for verification purposes is proposed when the site is handed over to the applicant.

Please refer to the Stage 1 EDG Geotechnical Engineering Report for further information.

2.4.1 Summary of Anticipated Ground Conditions

Based on available geotechnical investigation data, as referenced within the EDG Geotechnical Engineering Report, the general geological stratigraphy described by EDG for the development site and proposed basement includes potential uncontrol or controlled surface fill material and/or soft to firm

alluvium underlain by residual soils overlying various Neranleigh-Fernvale Group (NFG) weathered rock.

Based on the geotechnical cross sections developed by EDG, extremely weathered rock (NFG5) is expected at approximately RL-6.5 with potential localised areas of residual soil. NFG3 rock is expected between RL-15 and RL-10 and NFG2/1 below RL-15.

Two of the interpreted geotechnical sections from the EDG Report have been shown below for reference. The section in Figure 13 is cut along the site boundary, looking towards The Sebel. The top of the extremely weathered rock (NFG5) looks to be highest on the development site closest to Albert Street and then gradually drops away as you move away from the Albert Street elevation towards the 110 Mary and 119 Charlotte boundaries.

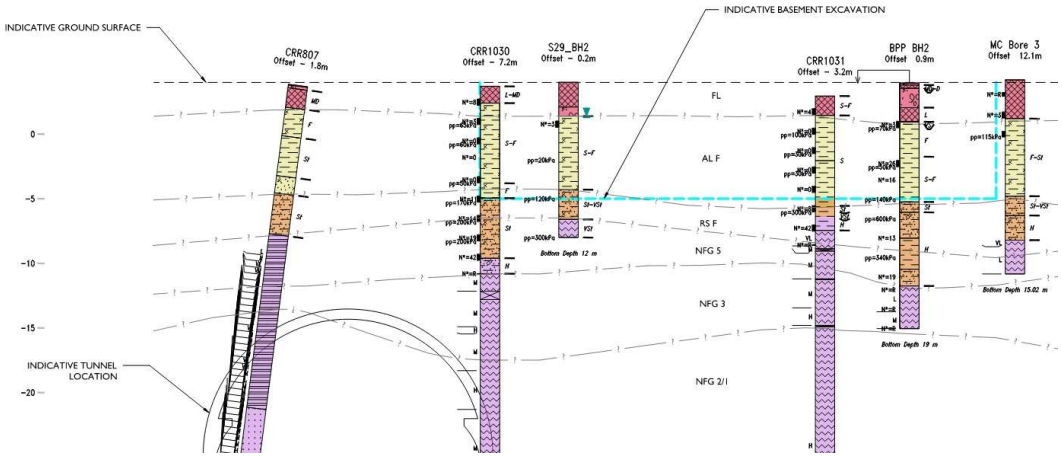


Figure 12 - EDG Interpreted Geotechnical Section B – Looking towards The Sebel

The section in **Figure 13** is cut along the Albert Street boundary looking towards the CRR Cavern

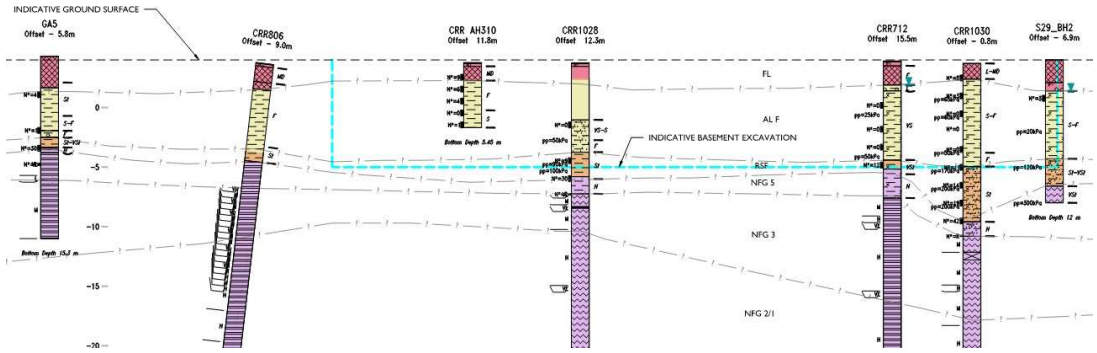


Figure 13 - EDG Interpreted Geotechnical Section D – Looking towards Albert Street

2.4.2 Excavation

The proposed bulk excavation level for the development is RL -1.5m which complies with the Licence Construction Area and RL -8.0m maximum excavation level constraint discussed in the above Sections.

Detailed excavation will be required for the building pad, raft and pile cap footings, in-ground services and tanks. Secondary shoring, potentially in the form of sheet piles, or temporary batters, will be needed to enable detailed excavation to the deeper pile caps were located above the rock in the residual soil layer. A Survey of the existing footings and in-ground services will be required following the demolition of the existing acoustic shed slab. Existing footings clashing with proposed footings, in-ground services and tank locations will need to be removed and, where directed, backfilled with mass concrete (weak mix). Detailed excavation for new footings will then be saw-cut through low-strength rock/weak mix concrete.

2.4.3 Anticipated Groundwater Conditions

Groundwater levels taken from available geotechnical engineering boreholes indicate groundwater levels are quite variable across the site and are typically below the lowest proposed development Basement B1 level with anticipated levels between RL-5m to RL-10m. This is mainly due to the basement treatment to adjacent 110 Mary, Festival Towers, and CRR station having drained basement systems. Sebel has a partial single-tanked basement.

A temporary perched water table exists within the fill materials within the top 1m to 3m of the site, which is very likely linked to the tidal flow of the Brisbane River. **Figure 14** below indicates this.

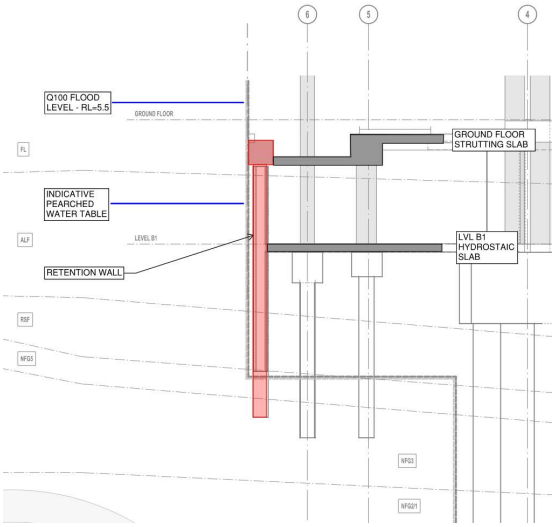


Figure 14 – Typical Basement Section Showing Water Tables

Based on the above, a hydrostatic shoring wall is proposed around the perimeter to control groundwater infiltration into the basement, but will no longer create a cut off into the NGF3 and NGF5 layers. Therefore, the B1 slab has been designed as a hydrostatic slab spanning between pile caps and the retention walls, and will provide the required water cut-off to the basement. The waterproofing methodology of the retention system will be resolved with the specialist D&C contractor.

Further, advice from the Geotechnical Engineer is required on the extent of groundwater seepage along with additional investigations following the demolition of the existing basement slab/end of the bulk excavation, at which time pumps and sumps can be appropriately sized and located. The drainage system is to be designed with an effective means of access for inspection, cleaning and maintenance.

2.4.4 Proposed Future Investigations

EDG and Hera have provided input into the proposed future geotechnical investigations to be undertaken once the site has been cleared.

2.4.5 Vibration

Heilig and Partners have been appointed to assess the anticipated vibration during construction using the 50%DD pile design and layout, and the proposed monitoring. This is based on the current CRR vibration criteria indicated below, according to Table 2 from the report *IMP 101 Albert Street May 2026 V1*.

Asset	Permissible Vibration Criterion	Proposed Screening Vibration Criterion
Amenity	1 to 2mm/s	2 mm/s
Cross River Rail Assets	50 to 200 mm/s	50 mm/s
Tunnels and caverns	5 mm/s	5 mm/s

Table 2- Proposed vibration criteria for semi continuous vibration for sensitive receivers

Figure 15 – CRR Vibration Criteria

3 Materials

3.1 Proposed Concrete Mixes

Typical concrete grades are listed below, with consideration for cement replacement additives to meet the Environmental Sustainability Design (**ESD**) targets of the Project. It is anticipated to receive an average global warming potential value from the ESD consultant to which an assessment on the various concrete grades and their contribution to the ESD score card can be made.

Creep coefficients and shrinkage strain limits will be developed in line with the recommendations of AS3600. Horizontal elements will likely be controlled by shrinkage strain properties. Vertical elements will be sensitive to creep/Young's Modulus as the building is susceptible to shortening effects. Below are the current concrete properties used in the design.

Material	Unit Weight [kN/m^3]	E [MPa]	Creep Coeff	Dry Shrinkage
N100	24.5	42200	1.5	0.0008
N80	24.5	39600	1.7	0.0008
N65	24.5	37400	2.0	0.0008
N50	24.5	34800	2.4	0.0008
N40	24.5	32800	2.8	0.0008

The following concrete grades have been used in the design:

- Piles: 65MPa to 80MPa
- Columns 80MPa to 40MPa
- Core Walls: 65MPa to 40MPa
- Slabs: 40MPa
- Diaphragm slabs: 50MPa

Exposure classifications are developed for reinforced concrete elements in accordance with AS 3600 Section 4.3. The Project is within 50km of the coastline.

- Elements in contact with the ground = TBC pending Geotechnical engineering advice.
- Internal above-ground elements = A2.
- External above-ground elements = B1

3.2 Structural Steel

Structural steel is to be in accordance with AS 4100, AS 4131 and AS 2312. Minimum grades will vary between components, between 300 and 450.

Corrosivity Category C1 and C3 will be used for internal and external structural steel, respectively. These shall be considered in specifying coating requirements or assessing to a mild steel corrosion rate nominated in AS 4312. External steelwork will be coated either in hot dip galvanising or a paint system, subject to architectural finish requirements. Exposed steelwork will be subject to periodic inspection and maintenance regimes.

The extent and specification of fire rating systems to the structural steel is subject to Fire Engineering advice. It is expected that at least primary steelwork will require protection.

3.3 Reinforcement

Reinforcement steel is to be in accordance with AS 4671:2009. Hera have made allowance for the use of InfraBuild Sense600 reinforcement for vertical elements with no tension and crack control requirements.

4 Proposed Structure

4.1 Shoring and Retention System

The retention system shall be designed to limit lateral movement at the site boundaries and to provide stability to the required basement excavation. It shall be designed as the permanent retention system and to resist the boundary surcharges as set out in **Figure 16** below.

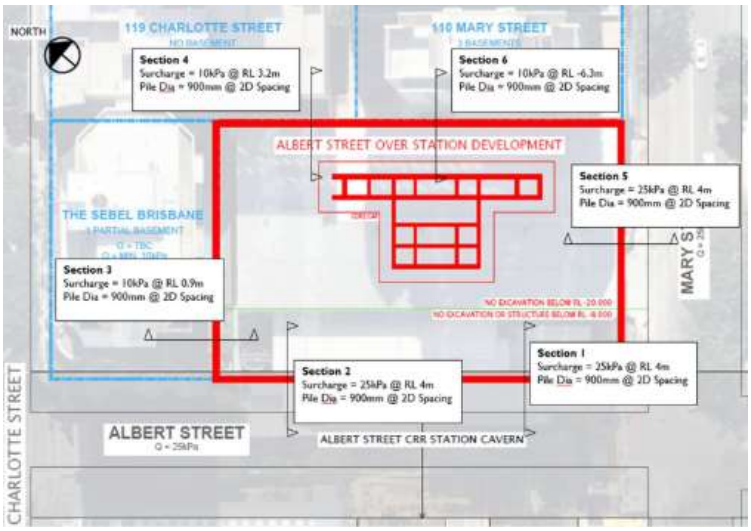


Figure 16 – Retention Wall Boundary Surcharge Loads

The effect of vertical ground movement has been limited to 15mm, and has been assessed using the spring stiffness according to **Figure 17** below. A sensitivity of +-20% has been applied as an upper and lower bound to the pile stiffness to assess the load distribution between the core and retention walls. A detailed analysis of this study will be added to future revisions of the report.

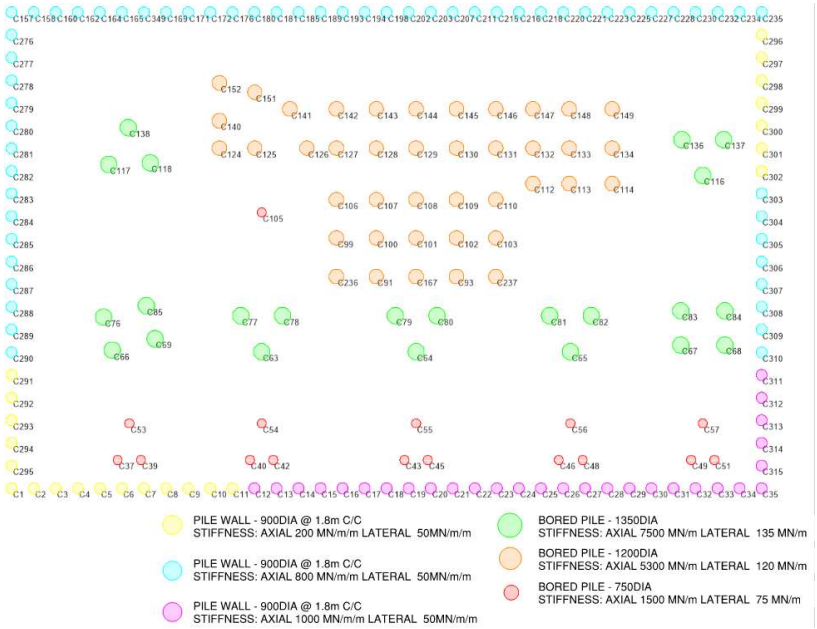


Figure 17 – Pile Spring Stiffness

The retention system shall be designed in accordance with the codes and standards listed in the Design Criteria Report, together with other relevant Australian Standards. The retention wall shall be designed to resist a full hydrostatic load in addition to soil dead and live load surcharges with the water level at the 1% ARI flood level of RL 5.5m.

The shoring system is to comprise bored cast-in-place reinforced concrete piles. Currently, 900mm diameter soldier piles have been investigated to the Albert Street, Mary Street and 119 Charlotte/110Mary basement elevations at 1800mm centres. 600mm diameter contiguous piles have been investigated to the Sebel basement elevation. Final set out of piles to be reviewed against existing acoustic shed piles as discussed in Section 1.6. A permanent reinforced concrete shotcrete wall shall be constructed progressively between the soldier piles. Geotechnical engineer to confirm maximum excavation lifts. The piles to the Albert Street face and 10m of the return faces to the Brisbane Sebel and to Mary Street are not to extend below RL -8.0m. (in the Licence Construction Area) as illustrated in **Figure 18** below.

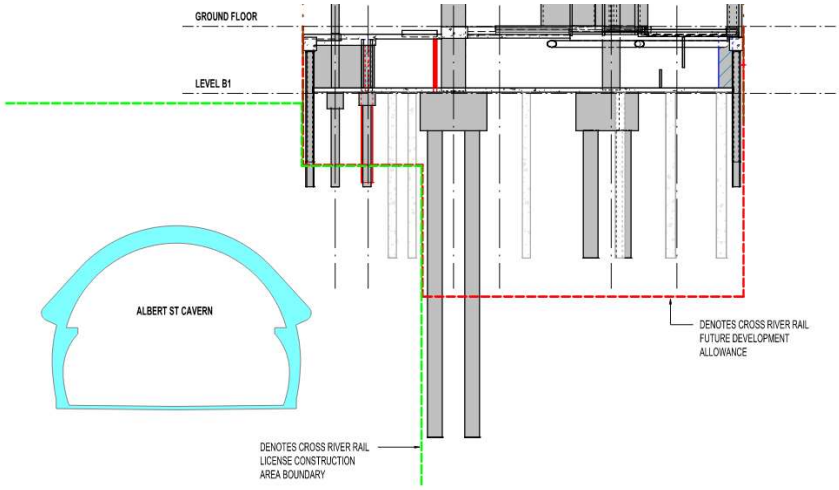


Figure 18 – Basement Section with Licence Construction Area

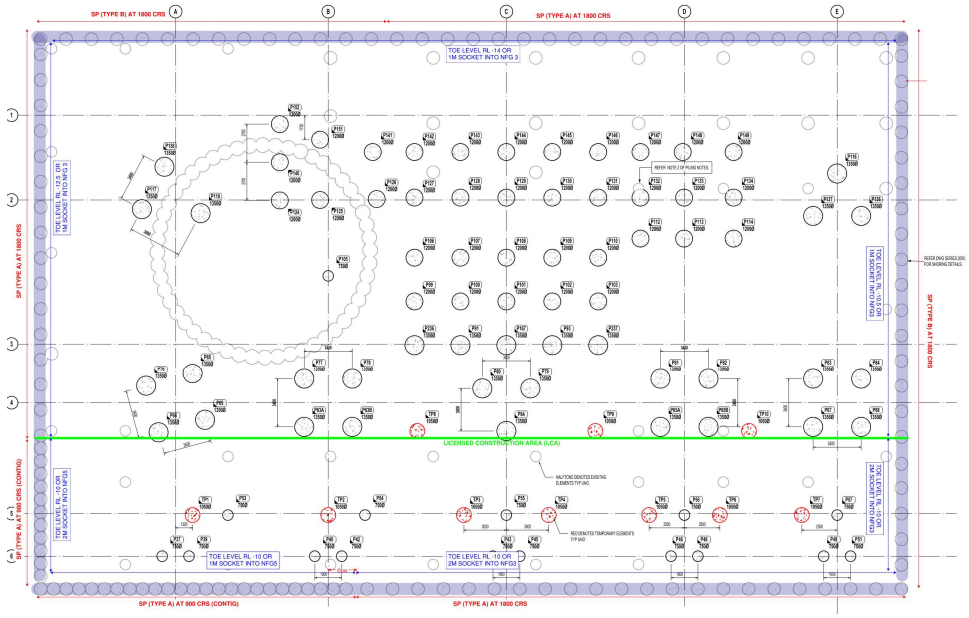


Figure 19 – Shoring Pile Diameters Spacing and Embedment Depths

The shoring system is to be internally strutted with no rock anchors (temporary or permanent). Internal struts are to support the capping beam, in turn, supports the soldier piles. The geotechnical engineer is to model the combined system to demonstrate predicted maximum displacements and determine if one or two rows of internal strutting is required.

The shoring system will be braced at the capping beam level by a strutting slab supported on temporary steel plunge columns along Albert Street which will also act as a construction deck, and temporary steel struts on the remaining boundaries. **Figure 20** below shows the current propping arrangement.

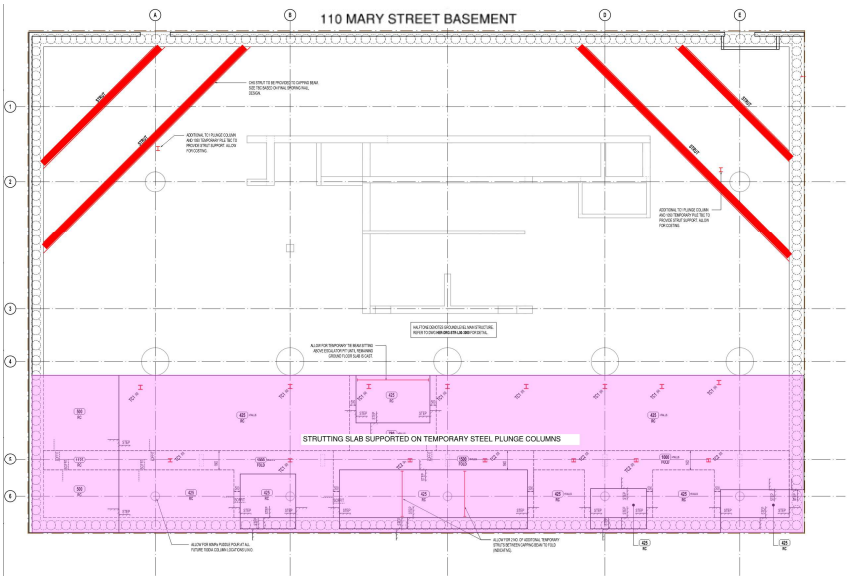


Figure 20 – Strutting Slab and Temporary Props

The large span of the capping beam along the 110 Mary Street boundary has been assessed based on an existing three level basement that extends deeper the B1 level, and the adjacent site of 120 Mary Street single level basement, with an influence line that again extends deeper than the B1 level. Therefore, there is no imposed or out-of-balance load placed on the basement retention, or capping beam required to spanning between the temporary steel props.

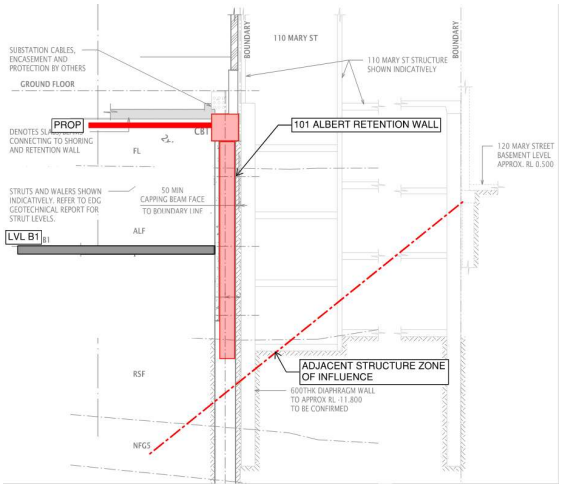


Figure 21 – 110 Mary Street Basement Section

4.1.1 Zone of Influence Requirements

The proposed basement to the OSD requires an excavation of circa 10m [6.5m deep basement + 3,5m deep foundations] maximum at the boundary. The zone of influence for the retention system based on the geotechnical conditions will not exceed twice the retained height [20m]. Based on this there are no listed heritage buildings in the influence zone to the retention system.

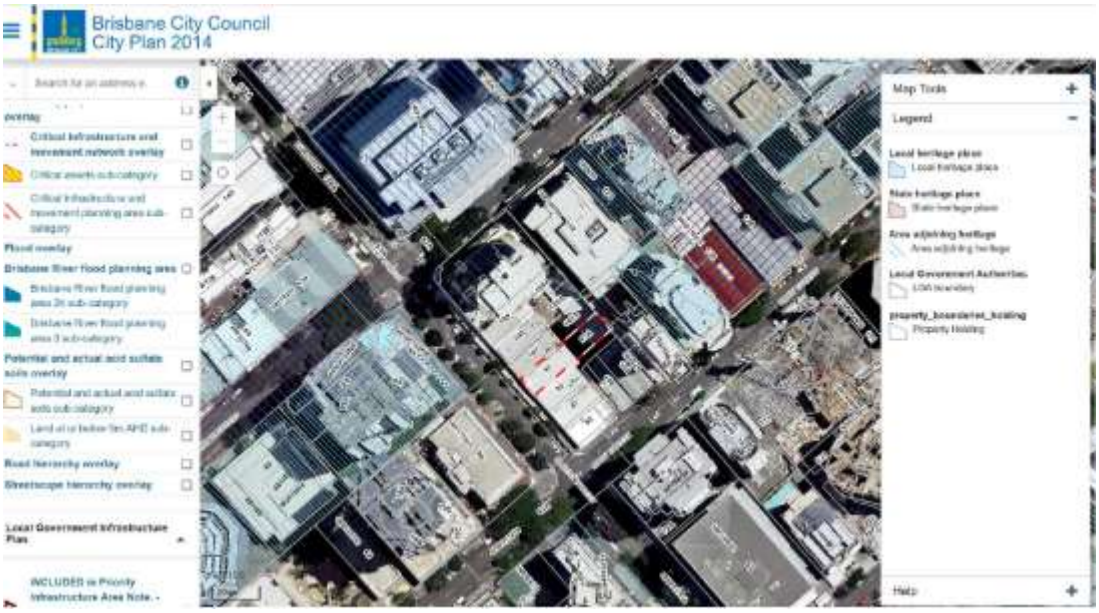


Figure 22 – City Plan Hertitage Listed Overlay

4.1.2 Groundwater Response

Based on available groundwater information EDG have advised that the typical long term groundwater level could range between RL-4m AHD and RL-10 AHD. Based on groundwater level RL-4m, sump elevation RL-6m and localized zones of more permeable material, preliminary groundwater inflow analysis shows potential inflow quantities of maximum 20m^3/day, subject to the additional geotechnical investigation.

Once a reliable inflow rate has been determined the temporary dewatering design can be finalised.

4.2 Foundation System

The proposed foundation system comprises bored piles sized to limit movements in response to the CRR Cavern design criteria, and the tower loads and displacement criteria.

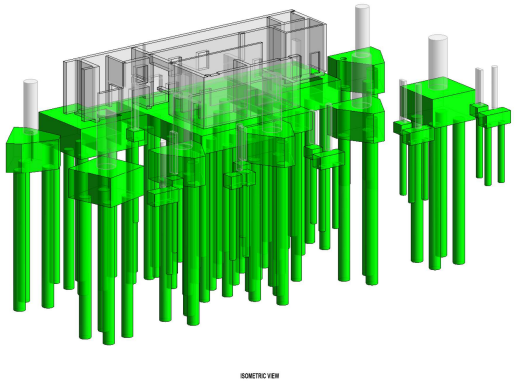


Figure 23 - Proposed Foundation Isometric

Pile diameters and concrete strengths are as follows and indicated in **Figure 24** below, with current pile toe RL's.

- Orange – 750 Dia, 50MPa
- Blue – 1200Dia, 65MPa
- Red – 1350Dia, 80MPa

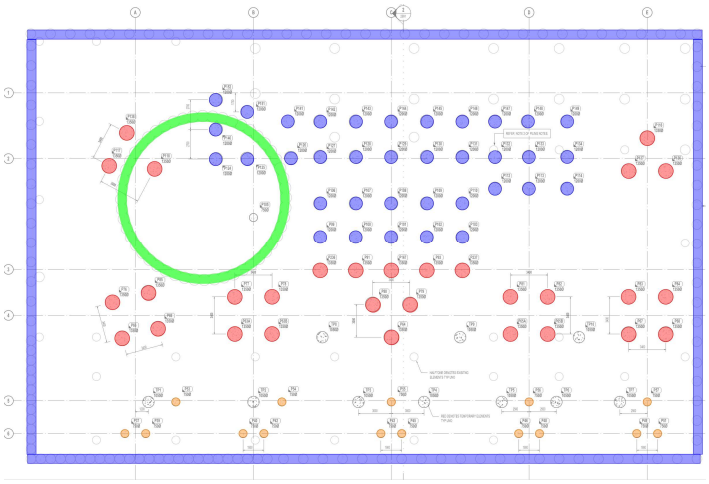


Figure 24 - Proposed Foundation Layout

Design Criteria for the piles will be covered by the geotechnical consultant as per the Design Criteria Report.

A geotechnical assessment of the normal stress on the cavern lining and cavern vertical and horizontal distortion based on the proposed building vertical and lateral loads has been undertaken by EDG, using pile loads as per schedule 24111-HERA-C-PILE LOADS, and 24111-SK019-A-PILE LOADS KEYPLAN. The loading criteria has been expanded into separate load case combinations using factors from the Australian Standard AS1170.0, in conjunction with the 10% contingency listed in DS-03. These are:

- Combination 1 = 1.1 * [G + 0.7Q] (short term)
- Combination 2 = 1.1 * [G + 0.4Q] (long term)
- Combination 3 = 1.1 * [G + 0.4Q + 0.64W]
- Combination 4 = 1.1 * [G + 0.3Q + 0.5EQ]

The proposed bored piers are likely to be installed from the existing site level. A suitable piling matt will be required. Specifications for this will be examined by the piling contractor and reviewed by the geotechnical engineer.

4.2.1 Future Pile Removal

To satisfy the TMR requirements regarding the future removal of any piles that sit outside the RL-12m boundary along Albert Street without damage to the existing TMR asset, the following pile design criteria has been implemented:

1) Piles to extend into the NFG3 rock layer for greater capacity and reduced diameter.
2) Pile reinforcement designed and detailed to extend over the full length of pile to enable extraction without potential concrete breakage.
3) Pile reinforcement to have top couplers to enable placement of a lifting eye to enable extraction.
4) Pile skin friction capacity to be limited to the reinforcement tension capacity to enable extraction.
5) Pile diameters not to exceed 750mm to reduce amount of future potential breakage and potential vibration onto existing TMR asset, should breakage be required.

4.3 Tower Lateral Load Resisting System

The Lateral Stability System consists of a cantilevered concrete corebox extending the full height of the building. The corebox is built up from a series of concrete shear walls around the lifts and lobbies with interconnecting coupling beams. To achieve the key requirements of the development, the corebox has been offset to the side of the typical floor plate furthest from Albert Street and CRR cavern, as illustrated in **Figure 25** below.

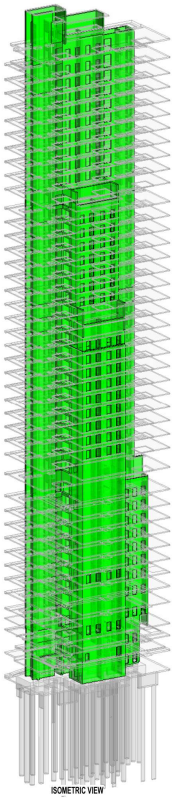


Figure 25 - 3D View of the Lateral Stability System

The corebox, as shown in **Figure 26**, reduces in size with the termination of the low-rise (LR) lift shaft at Level 10 (the last floor served Level 9), mid-rise (MR) lift shaft at Level 22 (the last floor served Level 19), high-rise (HR) lift shaft at Level 30 (the last floor served Level 29), and sky-rise (SR) and goods lift (GL) lift shafts at Roof (the last floor served Level 39).

The corebox is currently under a VM process to reduce the extent of the jump form to help improve the programme and cycle time. This involves changing certain walls to precast, and to disengage them from the lateral load resisting capacity of the tower, by removing header beams linked to the corebox.

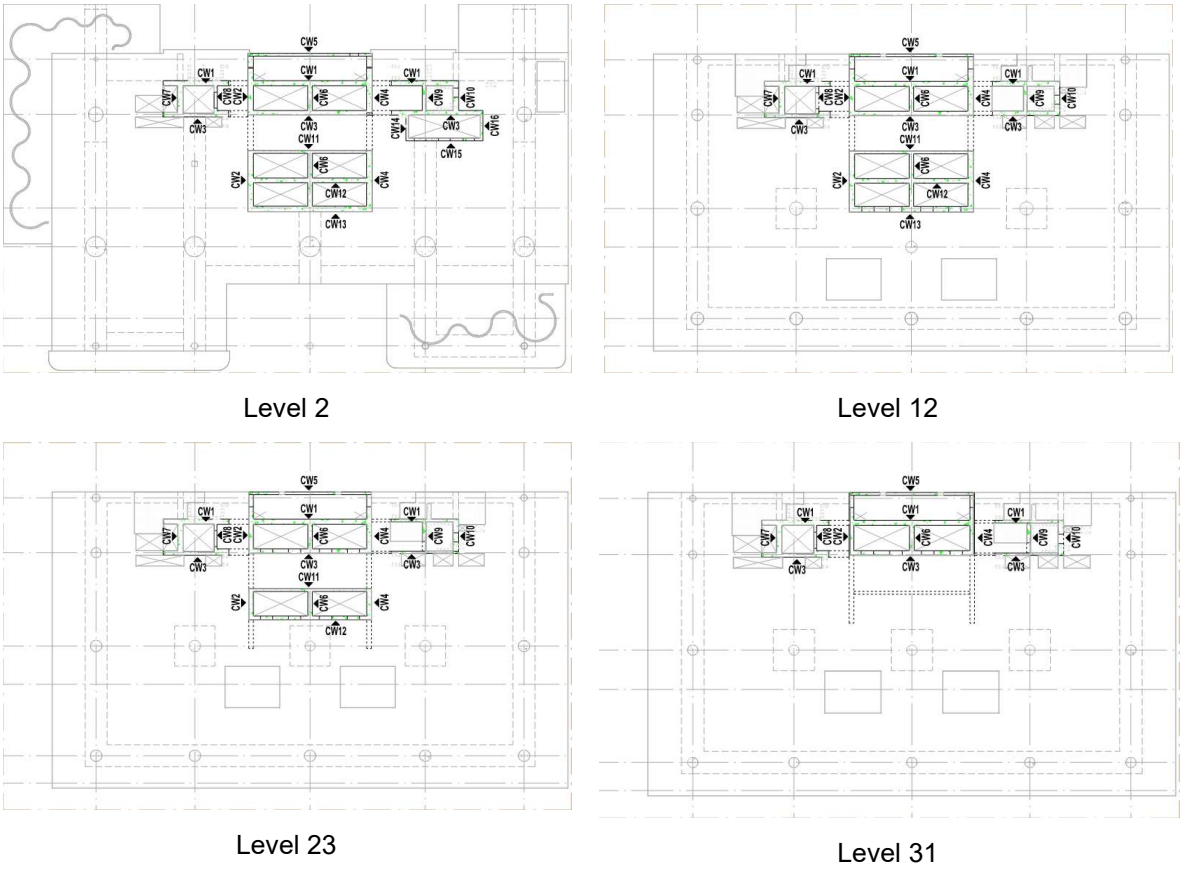


Figure 26 - Various Corebox Arrangements

In order to respond to the site constraints and achieve the tower column positions being located outside of the RL -8.0m maximum excavation zone, a critical building transfer occurs to the base of the low rise office floors in the Y-direction where the Albert Street tower column grid shifts inboard via raking columns between Levels 10 and 3 as shown in **Figure 27** below. To help balance the gravity loads and avoid large net tension/diaphragm forces in the floor plates, and large overturning moments in the core walls, the opposite column on grid 2 are inclined away from Albert Street.

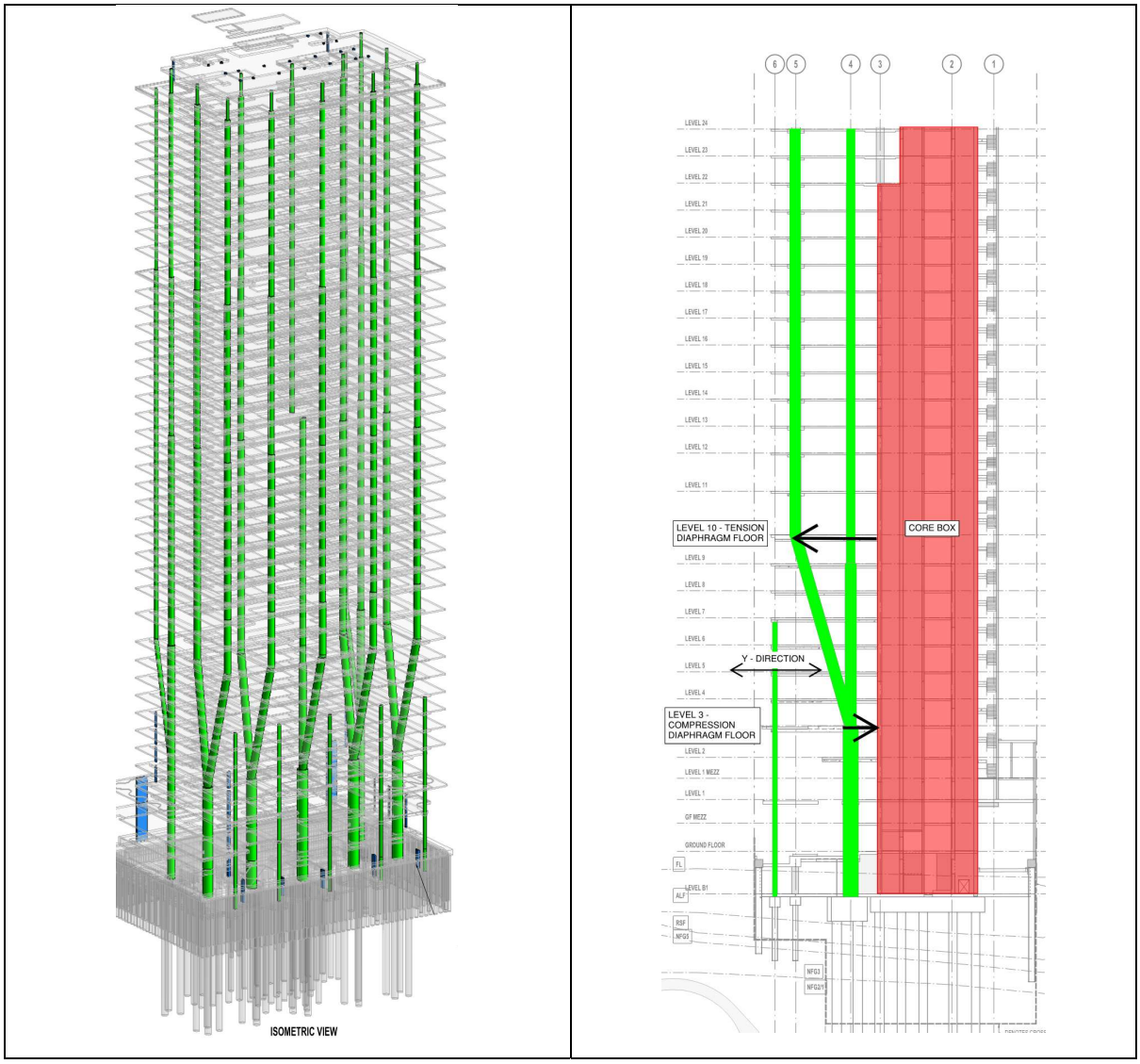


Figure 27 - 3D View and Section of the Single Directional Building Transfer

The building transfer has been adopted to shift the tower columns and tower load away from the CRR cavern.

The building transfers induce significant horizontal forces through the floor structure at Level 10, where the columns begin to rake and at Level 3, where the columns straighten, requiring diaphragm transfer structure at both noted levels as discussed further in Section 4.4. The induced horizontal forces strut and tie through the diaphragm transfer structure. The Direction-Y building transfer induces shear forces and moments on the core, adding additional local and global stresses to the corebox and foundations. Due to the critical nature of the building transfer, the corebox and tower columns participating in the lateral resistance of the building shall be designed to a Ductility Factor of $\mu = 1$, which aims to maintain elastic behaviour during a seismic event.

The corebox is supported off a large pile cap and diameter bored piers, as discussed in Section 5.2 with the aim to use the bored piers to transfer the lateral load from the corebox into the medium to high-strength rock.

ADP are the Vertical Transportation Consultant for the development. The lift pit overrun requirements will be coordinated with the final pile cap top of footing level and arrangement. The aim is to avoid folding the pile cap around the pits in order to minimise construction joints and complex and congested reinforcement detailing to the folds. The final design to be further developed during the Detailed Design Stage with the intent to produce the most optimum pile cap arrangement possible. We expect the final pile cap top of footing level will be at similar or higher RL to that currently documented, subject to final lift requirements.

The result of combining the building transfer and offset core is a lateral stability system with higher loads and horizontal movement than that of a conventional building which would only generally see wind or seismic loads. The horizontal movement limits for combined effects of dead load, live load, and serviceability wind load or single effect of serviceability wind are discussed within the Design Criteria Report.

4.3.1 Dynamic Performance and Lateral Movement

The current modal behaviour of the tower is indicated below.

- Tx – 5.52s
- Ty – 8.85s
- Tz – 3.26s

These values were used to assess the revised wind loading received from RWDI due to the building change from steel to concrete. The resulting loads increase marginally by 3% in the critical wind direction, but produced pile loads that were still within the loads using in the cavern assessment.

The maximum tower displacement is 145mm which compared to H/500 = 345mm maximum allowable displacement.

4.4 Diaphragm Floors

The critical building transfer that is facilitated via raking columns between Levels 3 and 10 requires a transfer diaphragm structure connecting the top and base of the raking columns to the corebox. The proposed transfer diaphragm structure has been shown below for levels 3 and 10.

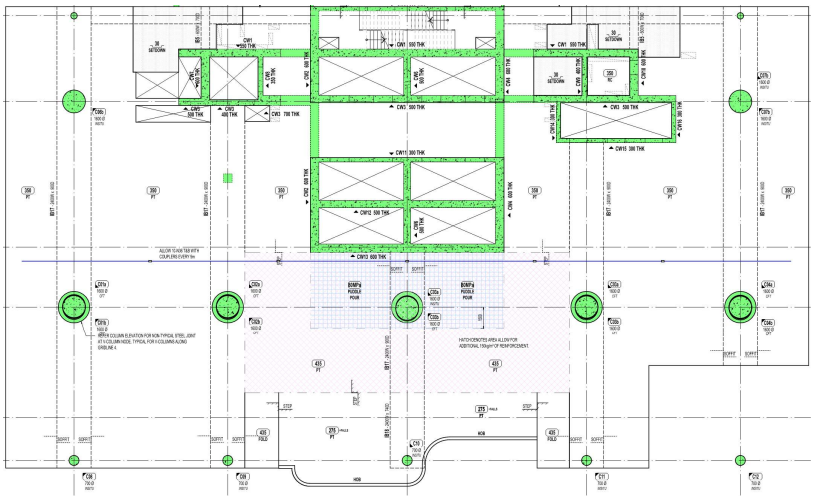


Figure 28 - Plan View of the Level 3 Diaphragm Structure

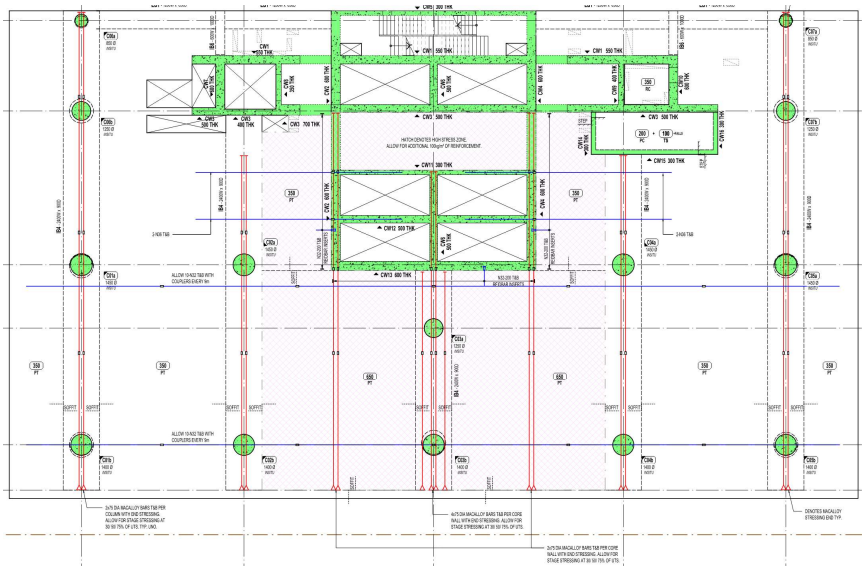


Figure 29 - Plan View of the Level 10 Diaphragm Structure

The level 3 diaphragm floor is predominantly in compression which requires a thickened slab and 80MPa puddle pour on the southern portion of the core to transfer the in-plane into the shear walls. Level 10 in predominantly in tension which requires Macalloy Stress Bar cast on each column line via downstand beams, and tied into the core wall to transfer the net out-of-balance tension loads. Large diameter coupler connections to the Y-Direction shear walls transfer the shear forces. **Figure 30** below shows the load path and approximate diaphragm forces.

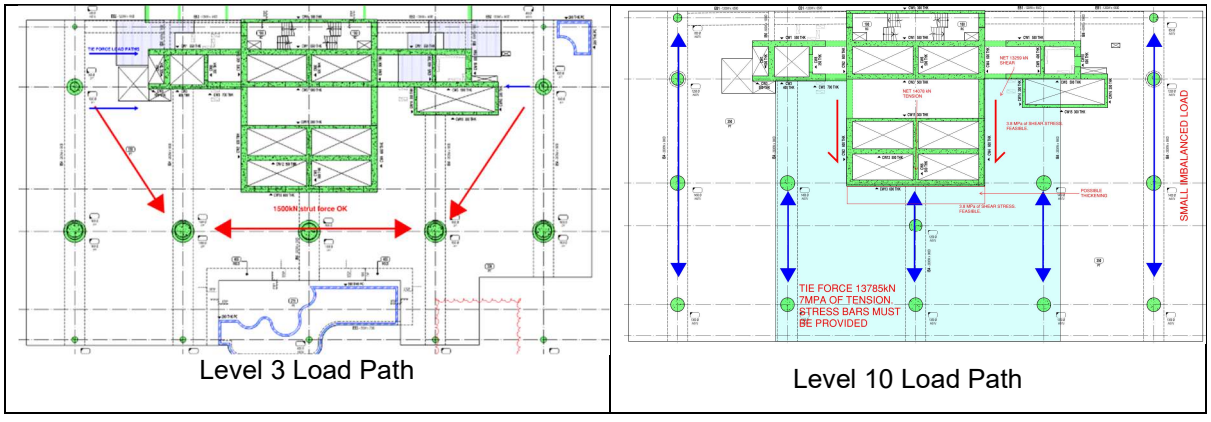


Figure 30 - Level 3 & 10 Load Path

4.5 Raking Column Connections

The set-out of raking CFT columns, vertical columns and transfer diaphragm structure at their intersecting points or nodes is critical to avoid any eccentric actions being introduced into the structural systems. Typically, at node locations, all members should intersect at their centre points, which is centre of column and centre of downstand beam to fully engage the stress bars. **Figure 31 and 32** below show the typical V-column junction is section and elevation to illustrate this.

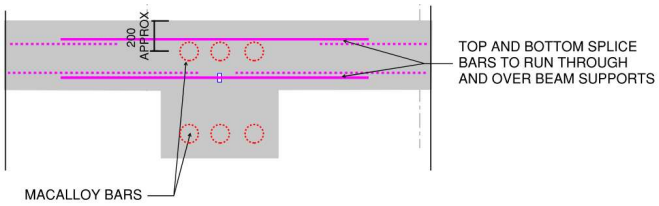


Figure 31 – Typical Downstand Beam Section

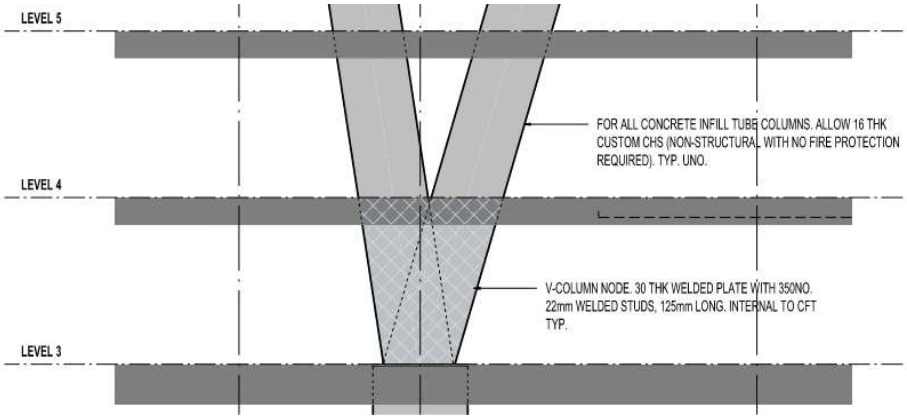
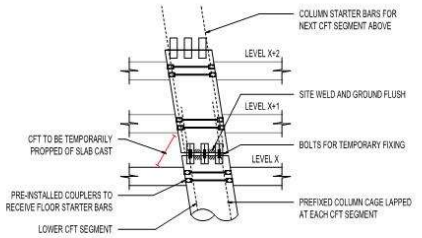


Figure 32 – Typical Raking Column CFT Junction

The current design of the CFT, V-junction is a concrete filled welded steel node with internal studs to resist the horizontal shear forces. In-situ concrete column reinforcement below and CFT column reinforcement above will be connected using couplers. Additional notes and proposed construction methodology are shown below.

CFT V-COLUMN NOTE:
1. REFER COLUMN ELEVATION FOR ADDITIONAL REINFORCEMENT AT V-COLUMN JUNCTIONS ON LEVEL 3.
2. ALLOW FOR CFT TUBE TO COME IN SEGMENTS OF 2 LEVELS FROM LEVEL 3 AND ABOVE.
3. ALL COLUMN CAGES TO BE PRE-FIXED INTERNAL TO THE CFT AND SPLICED ABOVE SLAB LEVEL AT LEVELS 5, 7 AND 9. ALL JOINTS TO BE WELDED PPBW GROUND FLUSH. REFER TENTATIVE CONSTRUCTION METHODOLOGY DIAGRAM.
4. ALLOW FOR 32 NO. OF N20 BOTTOM COUPLERS AND 32 NO. OF N32 TOP COUPLERS FOR STARTER BARS TO BEAM LEVELS 4 TO 9 WHERE CFT RUNS THROUGH FLOOR LEVELS.
5. ALLOW ADDITIONAL TEMPORARY PROPS TO SUPPORT CFT COLUMN UNTIL LEVEL 10 IS CONSTRUCTED AND GAIN FULL STRENGTH.



TENTATIVE CONSTRUCTION METHODOLOGY OF CFT V-COLUMNS
NOT TO SCALE

4.5.1 Gravity Lean

As a side core tower lateral movements under gravity need to be considered. Hera are part way through this analysis which will be concluded in 100%DD.

4.6 Gravity Load Resisting System

Gravity loads in the tower are resisted conventionally by columns and core walls. See **Figure 27**. The core walls are traditional reinforced concrete and will most likely be jump-formed as is the prevailing practice locally. Core wall thickness decreases up the tower according to demand, with the primary external walls being 600mm thick at the tower base and decreasing incrementally throughout the tower. The minimum achievable wall thicknesses are yet to be determined and will be subject to a lateral displacement study.

There are three distinct groups of columns throughout the development as summarized below:

Basement Columns - extend only up to underside of ground level and are traditional reinforced concrete of primarily rectangular shape in the order of 1000x300mm.

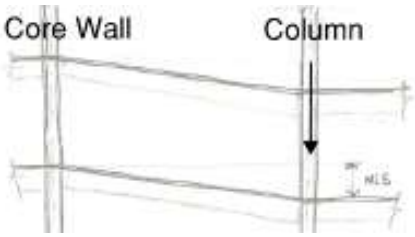
Podium Columns - continue to as high as the underside of level 7. These are conventional reinforced concrete through the basements to ground level in the order of 700 diameter, typically on grid 6.

Tower Columns – continue from footing through the tower. These are conventional reinforced concrete through the basements to level 3 in the order of 2200mm diameter, above which they convert to concrete filled steel tubes ranging from 1600mm diameter to 900mm diameter, followed by conventional columns above level 10 ranging from 1450mm diameter to 850mm diameter.

4.6.1 Axial Shortening

Axial shortening is the vertical movement or strain of the columns under gravity loads, relative to the equivalent core movements. The column axial stresses are typically much higher than the core due to their smaller area, and therefore will experience greater axial shortening. Axial shortening in concrete is also dependant on the type of cement used, the aggregate, the construction sequence, the age of the concrete when it is loaded, and the general humidity of the environment. These movements will take place of a period of say, 30years, although 60% of the movement is likely to happen in the first 6 months after load application.

This relative movement between columns and cores causes the floors adjacent to gradually move downwards over time. They will end up with additional slope towards the edges of the building. Additionally, the vertical deflection of the slabs themselves needs to be included.



This total movement extent needs to be limited to avoid damages to the floor finishes, partitions, and perimeter cladding and façade elements.

Axial shortening is a relevant consideration for any structure. It often begins governing gravity system design for towers above 30-40 storeys or beyond 150m. At approximately 172m effective height, the development is of a height that axial shortening can influence vertical element design/geometry. The large spans and relatively heavy loading associated with a commercial tower produce column columns in excess of 160MN, further highlighting the need to consider axial shortening.

Mitigation measures to overcome the effects of axial shortening include:

- The use of low shrinkage concrete such as Aspire,
- Pre-setting of the formwork to the expected axial shortening values.

The final axial shortening analysis will be added to the final revision of this report.

4.7 Floor Plate Systems

4.7.1 Basements

Basement B1 is designed as a 400thk hydrostatic slab to resist an ultimate uplift pressure of 70kPa. The slab spans between the pile caps with ligatures tying the pile cap to slab. Water bars and hydrophilic strips will be required at all construction joints.

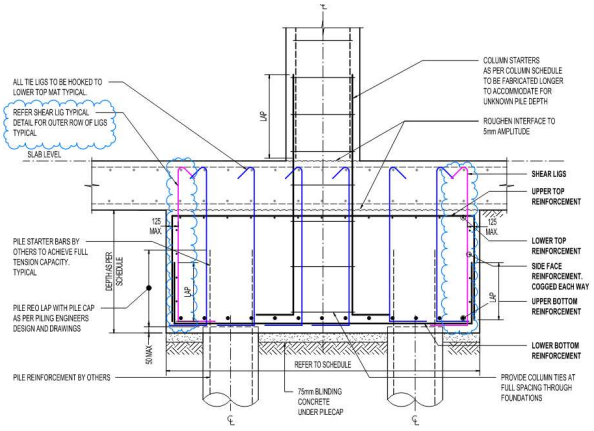


Figure 33 – Typical Hydrostatic Slab Connection to Pile Cap

Ground floor slab various in thickness and designed a post tensioned slab to resist the strutting load from the retention walls, high temporary construction loads, and final retail loads.

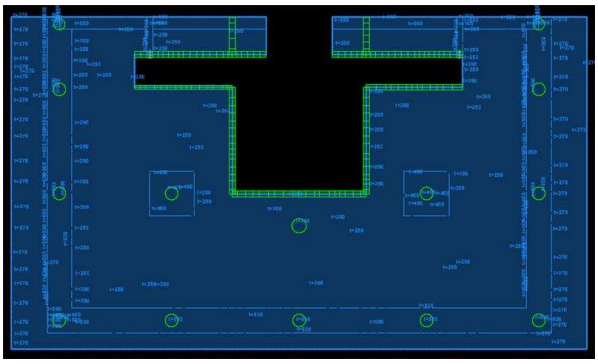
4.7.2 Podium

The Podium levels are designed as one-way spanning 275mm thick PT slabs between 700deep PT beams on the column line. The beams provide support for the slab, and resist the in-plane diaphragm forces from the inclined columns.

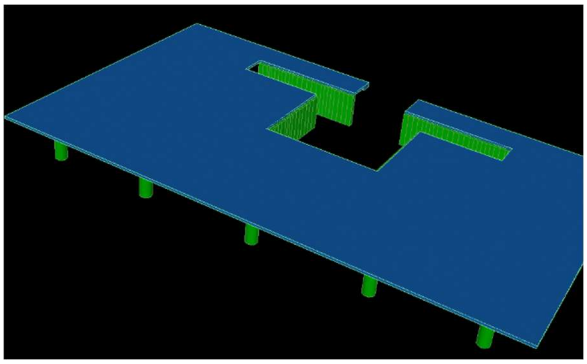
4.7.3 Typical Tower Floors

The typical office floors are designed as 250thk PT slabs with a 2400mm wide x 550mm deep band beam around the perimeter, and 4400mm x 4400mm x 400deep drop panels on the internal columns.

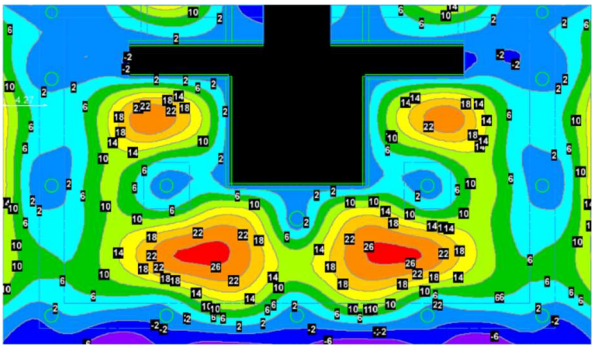
Figure 34 below shows the various design parameters for a typical slab.



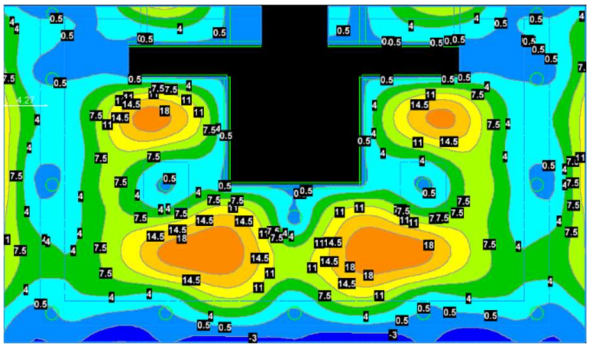
RAM Concept Geometry Input



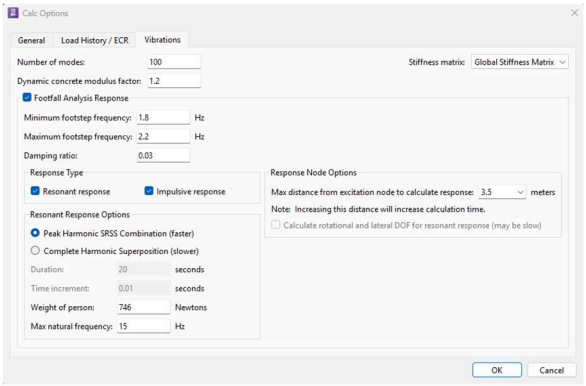
RAM Concept Isometric View



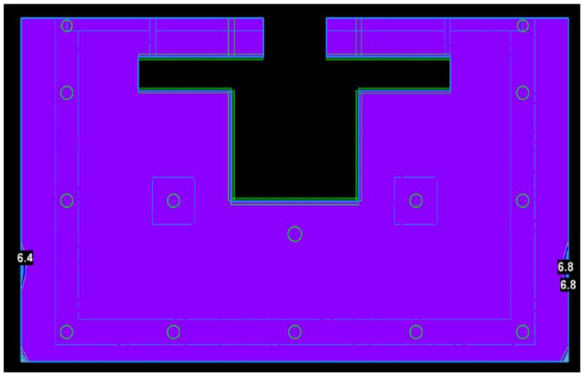
Longterm Deflections



Incremental Deflections



Vibration Inputs



Vibration Exceeding RF6 (less than 10% of lettable floor area)

Figure 34 – Typical Office Design Parameters

4.8 Floor Vibration

The preferred structural floor plate system shall be designed to achieve a multiplying factor for exposure to continuous vibration (Response Factor) of RF 6 for 90% of the Lettable Floor Area, with no areas exceeding RF8 for general office floors and retail areas in accordance with the recommendations of SCI P354.

4.9 Construction Sequence

The sequence of works of the primary structural elements will be as follows:

1) INSTALL SHORING AND CAPPING BEAM.

2) INSTALL PILING AND DUMMY PLUNGE COLUMNS.

3) CAST GROUND PROPPIING SLAB.

4) INSTALL TEMP STEEL PROPS.

5) EXCAVATE TO B1.

6) EXCAVATE BATTERS TO BOTTOM OF CORE RAFT AND PILE CAPS.

7) POUR CORE RAFT AND PILE CAPS

8) INSTALL CORE JUMP FORM.

9) POUR VOID FORMER MATERIAL AROUND BATTERS.

10) CAST HYDROSTATIC SLAB.

11) JUMP CORE

12) CAST GROUND FLOOR

13) REMOVE TEMP STEEL PROPS

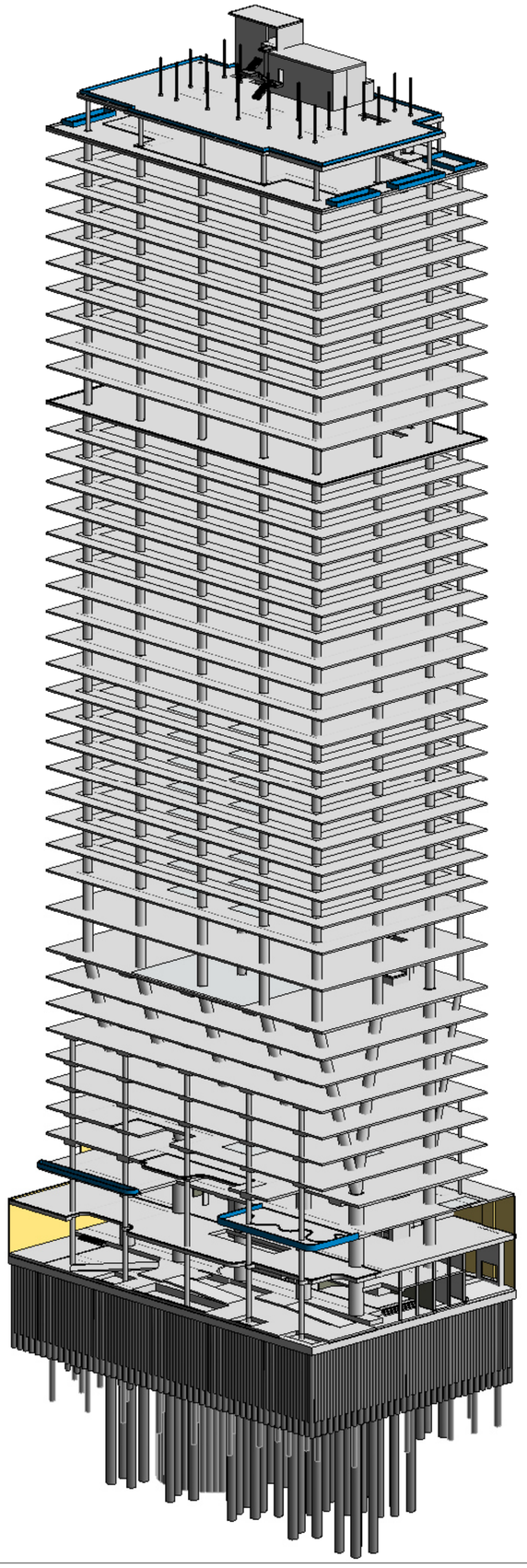
14) REMOVE TEMP STEEL PLUNGE COLUMNS

15) CONTINUE WITH TYPICAL FLOOR SEQUENCE

5 Appendix

Appendix A Hera Structural Schematic Drawings

Appendix B Hera Design Note



101 ALBERT STREET

101 ALBERT STREET, BRISBANE
CITY QLD 4000

SHEET LIST

No.	SHEET NAME
1000	COVER SHEET
1002	NOTES AND SPECIFICATIONS - SHEET 1
1003	NOTES AND SPECIFICATIONS - SHEET 2
1004	NOTES AND SPECIFICATIONS - SHEET 3
1005	TENDER NOTES AND DETAILS
1006	PROJECT LEGENDS AND ABBREVIATIONS
1010	PROJECT SCHDULES
2051	PILING GENERAL ARRANGEMENT PLAN
2500	FOUNDATION - ISOMETRIC VIEW
2501	FOUNDATION - GENERAL ARRANGEMENT PLAN
2901	GROUND LEVEL PROPPING SLAB
2990	BUILDING SECTION - GRID E
2991	BUILDING SECTION - GRID C
3900	LOADING PLANS - SHEET 1
3901	LOADING PLANS - SHEET 2
3902	LOADING PLANS - SHEET 3
3903	LOADING PLANS - SHEET 4
3904	LOADING PLANS - SHEET 5
3905	LOADING PLANS - SHEET 6
3906	LOADING PLANS - SHEET 7
3907	LOADING PLANS - SHEET 8
3908	LOADING PLANS - SHEET 9
4000	COLUMN ELEVATION - KEY PLAN
4001	COLUMN ELEVATION - SHEET 01
4002	COLUMN ELEVATION - SHEET 02
4003	COLUMN ELEVATION - SHEET 03
4004	COLUMN ELEVATION - SHEET 04
4005	COLUMN ELEVATION - SHEET 05
4006	COLUMN ELEVATION - SHEET 06
4007	COLUMN ELEVATION - SHEET 07
4008	COLUMN ELEVATION - SHEET 08
4009	COLUMN ELEVATION - SHEET 09
4010	COLUMN ELEVATION - SHEET 10
4011	COLUMN ELEVATION - SHEET 11
4012	COLUMN ELEVATION - SHEET 12
4013	COLUMN ELEVATION - SHEET 13
4100	CORE WALL ELEVATION - KEY PLAN
4101	CORE WALL ELEVATION - SHEET 01
4102	CORE WALL ELEVATION - SHEET 02
4103	CORE WALL ELEVATION - SHEET 03
4104	CORE WALL ELEVATION - SHEET 04
4105	CORE WALL ELEVATION - SHEET 05
4106	CORE WALL ELEVATION - SHEET 06
4107	CORE WALL ELEVATION - SHEET 07
4108	CORE WALL ELEVATION - SHEET 08
4109	CORE WALL ELEVATION - SHEET 09
4110	CORE WALL ELEVATION - SHEET 10
4111	CORE WALL ELEVATION - SHEET 11
4112	CORE WALL ELEVATION - SHEET 12
4113	CORE WALL ELEVATION - SHEET 13
4114	CORE WALL ELEVATION - SHEET 14
4115	CORE WALL ELEVATION - SHEET 15
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4118	CORE WALL ELEVATION - SHEET 18
4119	CORE WALL ELEVATION - SHEET 19
4120	CORE WALL ELEVATION - SHEET 20
4121	CORE WALL ELEVATION - SHEET 21
4122	CORE WALL ELEVATION - SHEET 22
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4124	CORE WALL ELEVATION - SHEET 24
4125	CORE WALL ELEVATION - SHEET 25
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4131	CORE WALL ELEVATION - SHEET 31
4132	CORE WALL ELEVATION - SHEET 32
4133	CORE WALL ELEVATION - SHEET 33
4134	CORE WALL ELEVATION - SHEET 34
4300	PRECAST WALL ELEVATION - KEY PLAN
4301	PRECAST WALL ELEVATION - SHEET 01
4500	STAIR ELEVATION - KEY PLAN
4501	STAIR ELEVATION - SHEET 01
4502	STAIR ELEVATION - SHEET 02
4503	STAIR ELEVATION - SHEET 03
4504	STAIR ELEVATION - SHEET 04
4505	STAIR ELEVATION - SHEET 05

SHEET LIST

No.	SHEET NAME
8000	INSITU WALL DETAILS - SHEET 1
8001	INSITU WALL DETAILS - SHEET 2
8002	INSITU WALL DETAILS - SHEET 3
8010	PRECAST WALL DETAILS - SHEET 1
8011	PRECAST WALL DETAILS - SHEET 2
8012	PRECAST WALL DETAILS - SHEET 3
8013	PRECAST WALL DETAILS - SHEET 4
8014	PRECAST WALL DETAILS - SHEET 5
8020	BLOCKWORK WALL DETAILS - SHEET 1
8021	BLOCKWORK WALL DETAILS - SHEET 2
8022	BLOCKWORK WALL DETAILS - SHEET 3
8023	BLOCKWORK WALL DETAILS - SHEET 4
8024	BLOCKWORK WALL DETAILS - SHEET 5
8120	SUSPENDED SLAB DETAILS - SHEET 1
8121	SUSPENDED SLAB DETAILS - SHEET 2
8122	SUSPENDED SLAB DETAILS - SHEET 3
8123	SUSPENDED SLAB DETAILS - SHEET4
8124	SUSPENDED SLAB DETAILS - SHEET 5
8125	SUSPENDED SLAB DETAILS - SHEET 6
8200	COLUMN DETAILS - SHEET 1
8300	STAIR DETAILS - SHEET 1
B01-3000	BASEMENT LEVEL 01 LOADING - GENERAL ARRANGEMENT PLAN ON HOLD
B01-3001	BASEMENT LEVEL 01 LOADING - PART PLANS
L00-3000	GROUND LEVEL - GENERAL ARRANGEMENT PLAN
L00-3001	GROUND LEVEL - PART PLAN
L0M-3000	MEZZANINE - GENERAL ARRANGEMENT PLAN
L01-3000	LEVEL 1 OFFICE LOBBY - GENERAL ARRANGEMENT PLAN
L1M-3000	LEVEL 1 MEZZANINE SERVICES - GENERAL ARRANGEMENT PLAN
L02-3000	LEVEL 2 LOW RISE - GENERAL ARRANGEMENT PLAN
L03-3000	LEVEL 3 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN
L04-3000	LEVEL 4 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN
L05-3000	LEVEL 5 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN
L06-3000	LEVEL 6 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN
L07-3000	LEVEL 7 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN
L08-3000	LEVEL 8 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN
L09-3000	LEVEL 9 LOW RISE - GENERAL ARRANGEMENT PLAN
L10-3000	LEVEL 10 PLANT - GENERAL ARRANGEMENTPLAN
L11-3000	LEVEL 11 PLANT - GENERAL ARRANGEMENT PLAN
L12-3000	LEVEL 12-19 MID RISE TYPICAL - GENERAL ARRANGEMENT PLAN
L20-3000	LEVEL 20 MID RISE TRANSFER - GENERAL ARRANGEMENT PLAN
L21-3000	LEVEL 21 HIGH RISE OVERRUN - GENERAL ARRANGEMENT PLAN
L22-3000	LEVEL 22 HIGH RISE LMR - GENERAL ARRANGEMENT PLAN
L23-3000	LEVEL 23-29 HIGH RISE TYPICAL - GENERAL ARRANGEMENT PLAN
L30-3000	LEVEL 30 PLANT - GENERAL ARRANGEMENT PLAN
L30-3001	LEVEL 30 PLANT - PART PLAN
L31-3000	LEVEL 31 SKY RISE - GENERAL ARRANGEMENT PLAN
L31-3001	LEVEL 32-39 SKY RISE TYPICAL - GENERAL ARRANGEMENT PLAN
L40-3000	LEVEL 40 ROOF - GENERAL ARRANGEMENT PLAN
L41-3000	LEVEL 41 PLANT - GENERAL ARRANGEMENT PLAN
L41-3001	LEVEL 41 PLANT - PART PLAN
L42-3000	LEVEL 42 PLANT - GENERAL ARRANGEMENT PLAN
L43-3000	LEVEL 43 CROWN - GENERAL ARRANGEMENT PLAN

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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DRAWING TITLE
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PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
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	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-1000
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200

GENERAL NOTES

1. THESE DRAWINGS ARE THE WORK OF 'HERA ENGINEERING' ('THE STRUCTURAL ENGINEER') AND SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, OTHER CONSULTANTS' DRAWINGS, SPECIFICATIONS AND OTHER WRITTEN INSTRUCTIONS ISSUED DURING THE COURSE OF THE PROJECT.

2. THESE DRAWINGS HAVE BEEN PREPARED FROM INFORMATION AVAILABLE AT THE TIME OF THE ISSUE. AS INFORMATION MAY BE THE SUBJECT OF CHANGE DURING THE COURSE OF THE PROJECT, THE CONTRACTOR IS TO ADVISE THE ENGINEER AND SUPERINTENDENT WHERE DISCREPANCIES OCCUR. THE CONTRACTOR MUST GIVE ADVANCE NOTICE AND ALLOW SUFFICIENT TIME FOR THE DISCREPANCY TO BE RESOLVED PRIOR TO PROCEEDING WITH THE WORK.

3. DO NOT SCALE DRAWING, WORK TO FIGURED DIMENSIONS. FOR FINAL SETOUT OF THE PROJECT. THE CONTRACTOR SHALL CHECK OR OBTAIN ALL DIMENSIONS RELEVANT TO SETTING OUT THE SITE FROM THE RELEVANT CONSULTANT.

4. ALL DIMENSION ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

5. SPECIFICATIONS OR SPECIFIC INSTRUCTIONS ON DRAWINGS TAKE PRECEDENCE OVER THESE NOTES.

6. CONCRETE PROFILES IN THE GENERAL ARRANGEMENT PLAN ARE OUR INTERPRETATION OF THE ARCHITECTURAL INTENT AND SHOW THE MINIMUM REQUIRED STRUCTURAL THICKNESS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE DRAWINGS AND IDENTIFY ANY DISCREPANCIES BETWEEN THE STRUCTURAL AND ARCHITECTURAL DRAWINGS, INCLUDING BUT NO LIMITED TO THE THICKNESS OF STRUCTURAL ELEMENTS, LOCATIONS OF STEPS, FALL AND FOLDS ETC.
   DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO HERA ENGINEERING A MINIMUM OF 7 DAYS PRIOR TO COMMENCEMENT OF FORMWORK CONSTRUCTION FOR RESOLUTION.

7. PLANS SHALL BE READ IN CONJUNCTION WITH RELEVANT SECTIONS AND DETAILS FOR ADDITIONAL REINFORCEMENT WHICH MAY NOT BE SHOWN ON PLAN.

8. PENETRATIONS FOR SERVICES SHOWN IN THESE DRAWINGS ARE BASED ON INFORMATION AVAILABLE AT THE TIME OF THE ISSUE. THE CONTRACTOR MUST REFER ANY DISCREPANCY TO THE ENGINEER AND SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK.

9. CONSTRUCTION FROM THESE DRAWINGS IS NOT TO COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES.

10. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT (AND LATEST) AUSTRALIAN STANDARDS AND WITH ORDINANCES OF THE RELEVANT AUTHORITIES.

11. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE STRUCTURE, AND ANY ASSOCIATED EXCAVATION, AND ENSURE NO PART IS OVERSTRESSED. THE DESIGN AND CERTIFICATION OF ALL FORMWORK AND TEMPORARY PROPPING IS THE RESPONSIBILITY OF THE CONTRACTOR.

12. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR CLASSES OF SURFACE FINISHES.

13. REFER TO ARCHITECT FOR WATERPROOFING DETAILS.

14. REFER TO ARCHITECT FOR TERMITE PROTECTION.

15. REFER TO ARCHITECT AND/OR BUILDING SURVEYOR FOR FIRE PROTECTION REQUIREMENTS.

16. THE CONTRACTOR IS TO OBTAIN DESIGN ADVICE FROM A SUITABLY QUALIFIED ENGINEER REGARDING DEMOLITION, RETROFITTING, TEMPORARY WORKS, HEALTH & SAFETY AND NUISANCE. THIS HAS BEEN REFERRED TO AS THE "CONTRACTOR'S ENGINEER" THROUGHOUT THE REMAINING NOTES.

17. WHERE 'HERA ENGINEERING' HAVE BEEN ENGAGED TO PERFORM SITE INSPECTIONS AND PROVIDE STRUCTURAL CERTIFICATION, INSPECTIONS ARE TO BE PERFORMED BY A DULY APPOINTED INSPECTOR FROM OUR OFFICE. THE INSPECTOR IS TO BE GIVEN A MINIMUM OF 48 HOURS NOTICE THAT AN INSPECTION IS REQUIRED.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT SUFFICIENT TOLERANCES ARE PROVIDED AND INTEGRATED THROUGHOUT ALL ELEMENTS OF THE WORKS.

19. ALL NON-LOAD BEARING ELEMENTS SHALL BE KEPT CLEAR OF THE STRUCTURE SOFFIT BY AN ALLOWANCE DETERMINED FROM SPAN/250 OR CANTILEVER/125 BUT NOT LESS THAN 20mm, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

20. THE BCA STRUCTURAL IMPORTANCE LEVEL HAS BEEN DETERMINED AS: IMPORTANCE LEVEL III

21. REFER TO LOADING PLANS FOR ALL PERMANENT/SUPERIMPOSED DEAD LOADS AND IMPOSED LIVE LOADS.

22. WIND LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH AS1170.2 BASED ON THE FOLLOWING DESIGN CRITERIA:

ANNUAL PROBABILITY OF EXCEEDANCE:	**1:1000**
REGION:	**B**
TERRAIN CATEGORY:	**4**
REGIONAL WIND SPEED V 1000 (m/s):	**60**
REGIONAL WIND SPEED V 50 (m/s):	**44**
REGIONAL WIND SPEED V 25 (m/s):	**39**
SHIELDING M:	**1.0**
TOPOGRAPHIC M:	**1.0**

23. WIND LOADING FOR FAÇADE AND GLAZING DESIGN SHALL BE DETERMINED BY THE SPECIALIST CONTRACTOR USING THE ABOVE FACTORS AND IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.

24. EARTHQUAKE LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH AS1170.4 BASED ON THE FOLLOWING DESIGN CRITERIA:

EARTHQUAKE DESIGN CATEGORY:	**III**
ANNUAL PROBABILITY OF EXCEEDANCE:	**1:1000**
PROBABILITY FACTOR Kp:	**1.3**
HAZARD FACTOR	**0.08**
SITE SUB-SOIL CLASS:	**C**
STRUCTURAL DUCTILITY FACTOR μ:	**1**
STRUCTURAL PERFORMANCE FACTOR Sp:	**0.77**

25. THE GEOTECHNICAL ENGINEERING INVESTIGATION
    PERFORMED BY:
    REPORT:
    DATE:

EARTHWORKS NOTES

1. CONTRACTOR SHALL ENGAGE A GEOTECHNICAL ENGINEER TO REVIEW AND APPROVE STRUCTURAL DRAWINGS PRIOR TO CONSTRUCTION AND ADVISE IF ANY SPECIFIC SITE PREPARATION IS REQUIRED TO ANY FOUNDATION ELEMENT.

2. REFER TO THE SITE SPECIFIC GEOTECHNICAL ENGINEERING REPORT PLUS ANY OTHER ADDITIONAL GEOTECHNICAL INFORMATION FOR REQUIREMENTS. THE CONTRACTOR SHALL PREPARE THE SITE IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT.

3. CONTRACTOR SHALL IDENTIFY ALL EXISTING SERVICES PRIOR TO COMMENCEMENT. CONTRACTOR SHALL ENSURE MINIMUM CLEARANCES TO ALL EXISTING IN GROUND SERVICES ARE MAINTAINED IN ACCORDANCE WITH LOCAL COUNCIL AND STATUTORY BODY REQUIREMENTS, AND TAKE SUITABLE PRECAUTIONS TO ENSURE SERVICES ARE NOT DAMAGED BY WORKS.

4. EMBANKMENTS SHALL BE CUT TO GEOTECHNICAL SPECIFICATIONS AND BE PROTECTED BY CATCH DRAIN OR OTHER METHODS SO THAT SURFACE RUN OFF DOES NOT ENTER THE EXCAVATION. ALL EMBANKMENTS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER.

5. THE CONTRACTOR SHALL ENSURE (BY CONSULTING A GEOTECHNICAL ENGINEER) THAT THE GROUND WATER IS SUFFICIENTLY BELOW THE FOOTING BASE TO ALLOW THE SPECIFIC COMPACTION TO BE ACHIEVED AND ENSURE THE SITE IS FREE OF SURFACE WATER. IF DEWATERING IS REQUIRED, REFER TO GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXCAVATIONS IN A STABLE CONDITION, WITHOUT AFFECTING ADJACENT PROPERTIES OR SERVICES. WHERE REQUIRED, TEMPORARY SHORING OR GROUT INJECTION (BY CONTRACTOR) SHALL BE PROVIDED TO THE SIDES OF EXCAVATIONS.

7. CONTAMINATED MATERIAL SHALL BE IDENTIFIED AND REMOVED FROM SITE AS APPROPRIATE IN ACCORDANCE THE RELEVANT AUTHORITY REQUIREMENTS. CONTAMINATED MATERIALS TO BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH THE RELEVANT AUTHORITY REQUIREMENTS.

8. UNLESS STATED OTHERWISE IN THE GEOTECHNICAL REPORT, ALL TOPSOIL, VEGETATION AND DELETERIOUS MATTER SHALL BE STRIPPED FROM THE SITE TO A MINIMUM DEPTH OF 150mm.

9. IMPORTED FILL SHALL BE CLEAN, COHESIONLESS SAND, FREE FROM SILT OR ORGANIC MATERIAL WITH NOT MORE THAN 5% BY WEIGHT OF MATERIAL FINER THAT 0.075mm AND ZERO PLASTICITY INDEX. CONTRACTOR SHALL NOT RE-USE MATERIAL EXCAVATED FROM SITE FOR BACKFILL UNLESS APPROVED BY GEOTECHNICAL ENGINEER.

10. FILL MATERIAL TEST CERTIFICATES SHALL BE SUPPLIED TO THE GEOTECHNICAL ENGINEER FOR APPROVAL.

11. GEOTECHNICAL ENGINEER'S APPROVAL MUST BE RECEIVED PRIOR TO USING RECLAIMED SITE MATERIAL AS FILL.

12. UNLESS STATED OTHERWISE IN THE GEOTECHNICAL REPORT, ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 250mm TO 95% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289. CONTRACTOR TO PROVIDE COMPACTION TEST RESULTS PRIOR TO CONCRETE POUR.

13. THE CONTRACTOR SHALL ENSURE THAT THE SELECTED COMPACTION METHOD WILL NOT DAMAGE ADJACENT STRUCTURES.

14. THE CONTRACTOR SHALL ADVISE THE GEOTECHNICAL ENGINEER AND HERA ENGINEERING IMMEDIATELY IF SITE CONDITIONS DO NOT MATCH THOSE STATED WITHIN THE GEOTECHNICAL REPORT.

PILE CAP NOTES

1. PILE CAPS AND CENTRE OF INDIVIDUAL PILES OR CENTROID OF PILE GROUPS SHALL BE LOCATED CENTRALLY TO COLUMN OR WALL OVER U.N.O. AND DIMENSIONED ON THE STRUCTURAL DRAWINGS.

2. PILE CAPS TO EXTEND A MINIMUM OF 200mm PAST THE FACE OF PILES UNDER AND COLUMNS/WALLS OVER U.N.O ON STRUCTURAL DRAWINGS.

3. IF REQUIRED, PROVIDE 75mm BLINDING CONCRETE UNDER ALL RAFTS AND PILE CAPS.

4. PROVIDE 40MM KEY STRIP FOOTINGS, CAPPING BEAMS OR GROUND BEAMS WHICH CONNECT TO ANY PILE CAPS. ENSURE INTERFACE IS CLEAN AND INTENTIONALLY ROUGHENED TO AN AMPLITUDE OF 5mm. PROVIDE STARTER BARS, COUPLER BARS OR DRILLED AND GROUTED BARS AS PER THE DETAIL DRAWINGS, SHOULD DETAIL DRAWINGS NOT SHOW REQUIRED REINFORCEMENT DETAIL THEN CONSULT HERA ENGINEERING FOR DIRECTION.

5. BUILDER TO ENSURE TEMPORARY STABILITY OF EXCAVATION AND ADJACENT STRUCTURES AND PROVIDE TEMPORARY SHORING AS REQUIRED.

6. ENSURE ALL WALL AND COLUMN STARTER BARS ARE CAST INTO THE PILE CAP IN ACCORDANCE WITH THE STRUCTURAL DRAWINGS.

PILE NOTES

1. PILES SHOWN ON THE PLAN ARE INDICATIVE ONLY. A SPECIALIST PILING ENGINEER SHALL UNDERTAKE PILE DESIGN. ALTERNATIVE PILE DESIGNS MUST BE SUBMITTED TO 'HERA ENGINEERING' FOR APPROVAL DURING THE TENDER PERIOD. THE CONTRACTOR SHALL ENSURE THAT THE PILING METHODOLOGY IS SUITABLE TO LIMIT THE RISK OF DAMAGE TO ADJACENT STRUCTURES.

2. THE PILING CONTRACTOR IS RESPONSIBLE FOR THE PILING SET OUT. THE CONTRACTOR SHALL LIAISE WITH THE ARCHITECT TO OBTAIN THE PILES SET OUT PLAN.

3. PILED FOUNDATIONS SHALL BE DESIGNED IN ACCORDANCE WITH AS2159 AND REQUIREMENTS STATED IN THE GEOTECHNICAL AND ENVIRONMENTAL REPORTS.

4. PILED FOUNDATIONS SHALL BE DESIGNED FOR LOADINGS AND LOAD COMBINATIONS SPECIFIED IN AS/NZS1170 (PART 0,1,2 AND 4) AND ON THE STRUCTURAL DRAWINGS / SPECIFICATION. THE PILE LOADS SPECIFIED EXCLUDE THE SELF WEIGHT OF THE PILE AND DOWNDRAG.

5. WHERE PILE SPACING IS SUCH THAT INTERACTION BETWEEN PILES MAY OCCUR, THE CONTRACTOR SHALL UNDERTAKE ANALYSIS TO VERIFY PILE GROUP PERFORMANCE CONSIDERING INTERACTION EFFECTS.

6. THE CONTRACTOR SHALL DESIGN PILES ASSUMING AN DESIGN AXIAL LOAD AS SPECIFIED ON THE STRUCTURAL DRAWINGS. IF NO AXIAL LOADING IS SPECIFIED ON THE DRAWINGS, THE CONTRACTOR SHALL ISSUE AN RFI TO HERA ENGINEERING.

7. THE CONTRACTOR SHALL DESIGN PILES ASSUMING A MINIMUM DESIGN SHEAR OF 5% OF THE MAXIMUM ULTIMATE AXIAL LOAD SPECIFIED ON THE DRAWINGS, IN ALL POSSIBLE DIRECTIONS, OR THE SHEAR LOAD SPECIFIED ON THE STRUCTURAL DRAWINGS - WHICHEVER IS GREATER. IF NO SHEAR LOADING IS SPECIFIED ON THE DRAWINGS, THE CONTRACTOR SHALL ISSUE AN RFI TO HERA ENGINEERING.

8. THE CONTRACTOR SHALL DESIGN PILES ASSUMING A MINIMUM DESIGN MOMENT EQUIVALENT TO THE ULTIMATE AXIAL LOAD SPECIFIED ON THE DRAWINGS APPLIED WITH A MINIMUM ECCENTRICITY OF 5% OF THE PILE DIAMETER , IN ALL POSSIBLE DIRECTIONS, OR THE MOMENT SPECIFIED ON THE STRUCTURAL DRAWINGS - WHICHEVER IS GREATER. IF NO MOMENT IS SPECIFIED ON THE DRAWINGS, THE CONTRACTOR SHALL ISSUE AN RFI TO HERA ENGINEERING.

9. THE PILE CONTRACTOR SHALL TAKE INTO ACCOUNT CONSTRUCTION TOLERANCES IN COMPLIANCE WITH AS 2159 REQUIREMENTS. ANY ECCENTRICITY AND THE RESULTING ACTIONS FROM THESE TOLERANCES MUST BE BORNE BY THE PILES, WHICH SHOULD BE DESIGNED ACCORDINGLY.

10. THE CONTRACTOR SHALL DESIGN FOR ALL TEMPORARY DESIGN CASES REQUIRED DURING FABRICATION, TRANSPORTATION AND INSTALLATION.

11. FOR AT LEAST 5000mm BELOW THE UNDERSIDE OF PILE CAP CONCRETE PILES SHALL BE DESIGNED AS COLUMNS IN ACCORDANCE WITH AS3600 AND SHALL HAVE SUITABLY SIZED LIGATURES AND MINIMUM 1% LONGITUDINAL REINFORCEMENT.

12. CONCRETE PILE REINFORCEMENT SHALL BE 100% DEVELOPED INTO PILE CAPS UNLESS A LOWER DEVELOPMENT IS SPECIFIED BY THE PILING ENGINEER. CONSTRUCTION JOINTS BETWEEN PILES AND PILE CAPS SHALL BE THOROUGHLY CLEANED AND SUITABLY PREPARED PRIOR TO POURING OF PILE CAPS.

13. THE INSTALLED PILES SHALL CARRY THE SERVICE AND ULTIMATE DESIGN LOADS SPECIFIED ON THE DRAWINGS AND COMPLY WITH THE FOLLOWING TOP OF PILE SETTLEMENTS UNDER THE PILE WORKING LOADS:

- MAXIMUM ALLOWABLE DIFFERENTIAL SETTLEMENT OF ADJACENT PILES WITHIN A GROUP = 3mm (INCLUDING ELASTIC SHORTENING).
- MAXIMUM ALLOWABLE DIFFERENTIAL SETTLEMENT OF PILES WITHIN A STRIP FOOTING = GREATER OF 5mm (INCLUDING ELASTIC SHORTENING) OR SPAN/1000.
- MAXIMUM ALLOWABLE SETTLEMENT OF A PILE OR PILE GROUP = 20mm.
- MAXIMUM ALLOWABLE DIFFERENTIAL SETTLEMENT OF ADJACENT PILE GROUPS = GREATER OF10mm (INCLUDING ELASTIC SHORTENING) OR SPAN/500.

14. THE EXISTING GROUND CONDITIONS SHALL BE INSPECTED AND VERIFIED BY THE CONTRACTOR TO ENSURE THE SUITABILITY OF THE PROPOSED PILING METHODOLOGY. THE CONTRACTOR SHALL IMPLEMENT ANY REQUIRED CHANGES DUE TO GROUND CONDITIONS.

15. THE CONTRACTOR SHALL ENSURE PILES ARE INSTALLED FROM A SUITABLE CONSTRUCTION PLATFORM TO SUIT THE EXISTING LEVELS, GROUND CONDITIONS AND ADJACENT STRUCTURES.

16. THE CONTRACTOR SHALL ENSURE THE CENTERLINE OF ALL PILES IS WITHIN 75mm OF SETOUT DIMENSION. THE PILE CUTOFF LEVEL SHALL BE 50mm ABOVE THE UNDERSIDE OF THE PILE CAPS UNLESS SPECIFIED OTHERWISE BY THE PILING ENGINEER.

17. PILES LOCATIONS AND CUTOFF LEVELS SHALL BE SURVEYED ON SITE. ANY DISCREPANCY OR DAMAGE TO PILES DURING INSTALLATION SHALL BE REPORTED TO 'HERA ENGINEERING' FOR REVIEW PRIOR TO CONSTRUCTION OF PILE CAPS.

18. THE CONTRACTOR SHALL VERIFY THAT THE INSTALLED PILES ACHIEVE THE SPECIFIED PERFORMANCE REQUIREMENTS VIA PILE TESTING IN ACCORDANCE WITH AS 2159. A PROPOSED PILE TESTING PLAN STATING THE PLANNED PERCENTAGE OF PILES SUBJECTED TO STATIC AND DYNAMIC TESTING SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECTIFICATION, REDESIGN AND IMPLEMENTATION OF CHANGES REQUIRED DUE TO OUT OF TOLERANCE PILES, DAMAGED PILES OR PILES WHICH DO NOT MEET THE TESTING ACCEPTANCE CRITERIA.

20. THE CONTRACTOR SHALL ENSURE THAT DISPLACEMENT PILES ARE INSTALLED USING A METHOD SUCH THAT LATERAL PRESSURES, DISPLACEMENTS AND VIBRATIONS INDUCED INTO THE SURROUNDING SOILS ARE MINIMISED AND ADJACENT STRUCTURES ARE NOT DAMAGED DURING PILE INSTALLATION. WHERE APPROPRIATE CONDITION AND VIBRATION MONITORING SHALL BE UNDERTAKEN.

21. THE CONTRACTOR SHALL ENSURE THAT BORED PILES ARE SELF SUPPORTING OR PROVIDE A SUITABLE TEMPORARY LINING AND/OR DISPLACEMENT FLUID TO PREVENT WALL COLLAPSE.

REINFORCED CONCRETE NOTES

GENERAL:

1. CONCRETE WORKMANSHIP AND MATERIALS SHALL COMPLY WITH AS 3600 AND OTHER RELEVANT AUSTRALIAN STANDARDS.

2. ANY CONCRETE WHICH DOES NOT MEET THE APPROVAL OF THE ENGINEER BECAUSE OF POUR DISCONTINUITY, POOR MATERIALS, VARIATION IN MATERIALS, POOR COMPACTION OR MIXING, UNSUITABLE FORMWORK, OR UNSUITABLE FORMWORK, OR UNSUITABLE SURFACE FINISH SHALL BE DEMOLISHED AND REBUILT.

3. CONCRETE SIZES ARE MINIMUM SIZES AND DO NOT INCLUDE FINISHES. NO REDUCTION IN THICKNESS DUE TO FALLS OR TOPPING IS PERMITTED. BEAM DEPTHS INCLUDE SLAB THICKNESS, IF ANY. BEAMS AND SLAB SHALL BE POURED MONOLITHICALLY UNLESS NOTED OTHERWISE.

4. PROVIDE 25mm x 25mm CHAMFER TO ALL CORNERS, UNLESS OTHERWISE NOTED IN THE DRAWINGS.

5. CONSTRUCTION JOINTS SHALL ONLY BE USED WHERE SHOWN ON THESE DRAWINGS OR SPECIFICALLY APPROVED BY 'HERA ENGINEERING'. CONSTRUCTION JOINTS ARE TO BE INTENTIONALLY ROUGHENED WITH A MINIMUM AMPLITUDE OF 5mm, FULLY EXPOSING THE AGGREGATE MATRIX.

6. NO HOLES, PENETRATIONS, OR CHASES (INCLUDING PIPES AND CONDUITS) OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE PLACED IN CONCRETE MEMBERS WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.

7. PROVIDE AN APPROVED 0.2mm POLYTHENE VAPOR BARRIER FOR SLABS, BEAMS AND THICKENINGS CAST AGAINST THE GROUND.

8. EMBEDDED CONDUITS AND PIPING SHALL BE BETWEEN THE TOP AND BOTTOM AND SHALL NOT INTERFERE WITH REINFORCEMENT. CONDUITS GREATER THAN 25mm DIAMETER CAST INTO CONCRETE MEMBERS SHALL BE SPACED AT A MAXIMUM DISTANCE POSSIBLE AND UNDER NO CIRCUMSTANCES CLOSER THAN A CLEAR SPACING OF TWICE THE LARGER CONDUIT DIAMETER FROM PARALLEL REINFORCEMENT OR ANY OTHER CONDUIT.

9. THE MAXIMUM HEIGHT OF POUR FOR CONCRETE ELEMENTS SHALL NOT EXCEED 2m UNLESS THE ENGINEER HAS APPROVED ALTERNATIVE METHOD OF PLACEMENT.

10. CONCRETE SHALL BE THOROUGHLY COMPACTED USING MECHANICAL VIBRATION. WHERE POSSIBLE POUR SLABS ON GROUND USING VIBRATING SCREEDS.

11. WHEN THE EXTERNAL TEMPERATURE EXCEEDS 35C, THE EXPOSED SURFACE OF CONCRETE SHALL BE SPRAYED WITH A FINE FILM OF APPROVED ALIPHATIC ALCOHOL DURING CONCRETE PLACEMENT AND FINISHING IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

12. CURING OF CONCRETE SHALL BE ACHIEVED BY THE APPLICATION OF WATER TO, OR THE RETENTION OF WATER IN, THE FRESHLY CAST CONCRETE, AND SHALL COMMENCE AS SOON AS PRACTICABLE (2 HOURS MAX) AFTER THE FINISHING OF ANY UNFORMED SURFACES HAS BEEN COMPLETED. WHERE RETENTION OF WATER IN THE FRESH CONCRETE RELIES ON THE APPLICATION TO EXPOSED SURFACES OF SPRAYED MEMBRANE FORMING CURING COMPOUNDS, THE COMPOUNDS USED SHALL COMPLY WITH AS 3799. EXTERNAL SURFACES SHALL BE CURED FOR A MINIMUM OF 7 DAYS, INTERNAL SURFACES SHALL BE CURED FOR A MINIMUM OF 3 DAYS.

13. FRESHLY CAST CONCRETE SHALL BE PROTECTED FROM THE EFFECT OF RAIN, RUNNING WATER AND FREEZING OR DRYING PRIOR TO HARDENING. DURING THE INITIAL CURING PERIOD THE CONCRETE SHALL BE PROTECTED FROM FREEZING OR DRYING.

14. UNLESS SPECIFIED OTHERWISE IN THE PROJECT DOCUMENTATION AND APPROVED BY OUR OFFICE, MINIMUM STRIPPING TIMES FOR IN-SITU CONCRETE FORMWORK SHALL COMPLY WITH SECTION 5.4.3 (TABLE 5.4.1) OF AS3610-'FORMWORK FOR CONCRETE'. STRIPPING AND BACKPROPPING OF ANY CONCRETE ELEMENT SHALL NOT OCCUR UNTIL CONCRETE REACHED 75% OF SPECIFIED VALUE OF THE CHARACTERISTIC COMPRESSIVE STRENGTH AT 28 DAYS (f'c) AS PROVEN BY TESTING.

15. UNLESS SPECIFIED OTHERWISE IN THE PROJECT DOCUMENTATION AND APPROVED BY OUR OFFICE, THE MINIMUM NUMBER OF LEVELS OF SUPPORT TO BE IN PLACE DURING THE TIME OF EACH POUR ON A FLOOR SHALL BE IN ACCORDANCE WITH SECTION 5.4.4 (TABLE 5.4.3) OF AS3610-'FORMWORK FOR CONCRETE'.

16. MASONRY WALLS SHALL NOT BE BUILT ON SUSPENDED ELEMENTS UNTIL REMOVAL OF ALL FORMS AND PROPS.

17. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR CLASSES OF SURFACE FINISHES.

FORMWORK:

1. ALL FORMWORK SHALL COMPLY WITH AS 3610.

2. FORMWORK AND BACKPROPPING SHALL BE DESIGNED AND CERTIFIED BY A TEMPORARY WORKS ENGINEER IN ACCORDANCE WITH RELEVANT STANDARDS AND STATUTORY BODY REQUIREMENTS.

3. FORMWORK CLASS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL REQUIREMENTS AND AS 3610.

4. STRUCTURAL DECKING SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S'S SPECIFICATION.

CONCRETE:

1. CONCRETE MIX SPECIFICATION
   (UNLESS SPECIFIED OR APPROVED OTHERWISE BY 'HERA ENGINEERING'):
   MAXIMUM AGGREGATE SIZE: 20mm
   MAXIMUM WATER:CEMENT RATIO: 0.5
   SLUMP: 80mm
   BASIC DRYING SHRINKAGE STRAIN: 600x10-6 AT 56 DAYS
   MINIMUM PORTLAND CEMENT CONTENT: 330kg/m3
   NO CHLORIDE SHALL BE USED
   CHARACTERISTIC COMPRESSIVE STRENGTH (f'c) AT 28 DAYS: REFER TABLE BELOW:

ELEMENT	**STRENGTH GRADE**
BLINDING	15 MPa
RAFTS	80 MPa U.N.O
GROUND BEAMS	65 MPa U.N.O
PILE CAPS	80 MPa
HYDROSTATIC SLAB	50 MPa
COLUMNS	REFER SCHEDULE
CORE WALLS	REFER SCHEDULE
IN SITU WALLS (EXCL. CORE)	40 MPa U.N.O
PRECAST WALLS (EXCL. CORE)	REFER SCHEDULE
SUSPENDED BEAMS	40 MPa U.N.O
SUSPENDED SLAB	40 MPa U.N.O
INSITU STAIRS	40 MPa

2. THE PROPOSED MIX DESIGN WITH THE 7 AND 28 DAYS TARGET STRENGTHS AND THE BASIC SHRINKAGE STRAIN AT 56 DAYS SHALL BE SUBMITTED FOR REVIEW PRIOR TO POURING ANY CONCRETE. MIX DESIGN SHALL NOTE ANY PROPOSED ADMIXTURES.

3. ANY CONCRETE WHICH IS UNSUITABLE FROM THE POINT OF VIEW OF SEGREGATION, FINES CONTENT, OR WORKABILITY, SHALL BE DISMISSED FROM SITE.

4. ALL CONCRETE SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH AS1379 AND AS1012. IF TESTING CARRIED OUT IN ACCORDANCE WITH THE ABOVE CODES DO NOT PASS, THE ENGINEER SHALL BE CONSULTED.

REINFORCEMENT

1. ALL WALL REINFORCEMENT IS TO BE EACH FACE UNLESS NOTED OTHERWISE.

2. ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS4671 AND AS3600 AND SHALL BE FIXED AS SHOWN ON THESE DRAWINGS.

3. REINFORCEMENT IS INDICATED BY THE FOLLOWING SYMBOLS:
   - N DEFORMED BAR GRADE 500N
   - Y DEFORMED BAR GRADE 400N
   - R HOT ROLLED PLAIN ROUND BAR GRADE 250N
   - W PLAIN WIRE GRADE 500L
   - SL SQUARE MESH GRADE 500L
   - RL RECTANGULAR MESH GRADE 500L
   - TM TRENCH MESH GRADE 500L

4. TEST CERTIFICATES OF THE REINFORCEMENT USED SHALL BE PROVIDED BY A NATA ACCREDITED LABORATORY.

5. REINFORCEMENT SHALL BE FREE FROM LOOSE MILL SCALE, RUST, MUD, OIL, GREASE OR OTHER NON-METALLIC COATING, AND FREE FROM KINKS OR OTHER DEFECTS, IMMEDIATELY PRIOR TO PLACEMENT OF CONCRETE.

6. FABRICATE, BEND AND WELD IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3600 ABD SA TS 101, THE DRAWINGS AND THE RELEVANT PROJECT SPECIFICATION AS APPLICABLE.

7. HOOKS AND COGS SHALL COMPLY WITH AS3600 UNLESS NOTED OTHERWISE. ALL PULL OUT BARS SHALL BE TEMPCORE BARS OR APPROVED EQUIVALENT.

8. COLD BENDING OF BARS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER. CORRECT MINIMUM DIAMETER FORMERS ARE TO BE USED IN ACCORDANCE WITH AS3600.

9. HOT BENDING OF BARS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER. HOT BENDING CAN ONLY BE PERFORMED BY A CERTIFIED WELDER AND SHALL NOT BE HEATED ABOVE 400 DEGREES. THERMAL CRAYONS SHALL BE USED TO ENSURE COMPLIANCE WITH THIS TEMPERATURE LIMIT. TEST CERTIFICATES OF AFFECTED AREA TO BE OBTAINED AND SUBMITTED TO ENGINEER FOR REVIEW.

10. ANY REINFORCEMENT WELDING SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE STRUCTURAL DRAWINGS AND AS 1554.3. CONTRACTOR TO GAIN HERA ENGINEERING APPROVAL IN WRITING PRIOR TO ANY ADDITIONAL WELDING OF REINFORCEMENT.

11. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED DURING CONCRETING USING SUPPORT AND SPACER BARS AND APPROVED BAR CHAIRS (PLASTIC OR PLASTIC TIPPED METAL CHAIRS) IN ACCORDANCE WITH AS/NZS 2425:2015 AT 800 x 800mm MAXIMUM CENTRES, AND ANNEALED IRON WIRE NOT LESS THAN 1.25mm DIAMETER. MINIMUM STRENGTH TO BE 120kg. BAR CHAIRS SHALL BE PROVIDED ALONG THE EDGES OF ALL CONSTRUCTION JOINTS. STOP ENDS SHALL NOT BE USED TO MAINTAIN THE COVERS.

12. FOR ALL EXTERNAL CONCRETE ELEMENTS (THOSE EXPOSED TO WEATHER, RAIN AND WATER PENETRATION), PROVIDE FULLY PLASTIC BAR CHAIRS. TIE WIRE SHALL NOT BE NAILED TO THE FORMS, REINFORCING BARS SHALL NOT BE USED TO KEEP FORMS APART AND A THROUGH TIE SYSTEM SHALL BE USED TO TIE FORMS.

13. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION.

14. LAP REINFORCEMENT ONLY AT LOCATIONS SHOWN ON THE DRAWINGS. LAP LENGTHS TO REINFORCEMENT BARS TO BE AS NOTED ON THE RELEVANT DRAWINGS. WHERE LARGER BAR LAPS WITH SMALLER BAR LAP LENGTH TO BE FOR THE LARGER BAR.

15. IF DISTRIBUTION IS REQUIRED FOR CHAIRING OR STABILISING PURPOSES IT DOES NOT CONTRIBUTE TO ANY DESIGN REINFORCEMENT RATES. DISTRIBUTION REINFORCEMENT IF REQUIRED TO BE N12 AT 300 CENTRES WITH 450 LAP.

16. ALL FITMENTS SHALL BE PROVIDED WITH AS 3600 COMPLIANT BENDS HOOKS AND/OR COGS.

17. REINFORCEMENT SPACING NOMINATED ON DRAWINGS IS TO ASSIST SCHEDULER AND STEEL FIXER TO ASSESS TOTAL NUMBER OF BARS REQUIRED. WHERE BARS PLACED IN ACCORDANCE WITH SPACING NOMINATED FOUL WITH OTHER STRUCTURAL REQUIREMENTS, LOCALLY ADJUSTING SPACING BY RELOCATING BARS TO ENABLE ASSEMBLY OF REINFORCEMENT. ENGINEER IS TO BE CONSULTED IN THE EVENT THAT REINFORCEMENT NEEDS TO BE CUT ON SITE PRIOR TO CONTINUING.

18. MINIMUM COVER TO REINFORCEMENT SHALL BE AS NOTED IN THE TABLE BELOW.

ELEMENT	**COVER**	
	EXTERNAL	**INTERNAL**
BLINDING	-	-
PAD AND STRIP FOOTINGS	60	60
GROUND BEAMS	60	60
RAFT	60	60
PILE CAPS	75	75
HYDROSTATIC SLAB	50	50
COLUMNS	40	30
CORE WALLS	40	30
IN SITU WALLS (EXCL. CORE)	40	30
PRECAST WALLS (EXCL. CORE)	40	30
SUSPENDED BEAMS	40	30
SUSPENDED SLABS	40	30
INSITU STAIRS	40	30

19. COVER IS THE CLEAR DISTANCE BETWEEN ANY REINFORCING (INCLUDING LIGATURES/FITMENTS) AND THE FACE OF THE CONCRETE ELEMENT.

20. MAINTAIN COVER TO REINFORCEMENT AT ALL CHAMFERS, DRIP GROOVES, REGLETS ETC.

FOUNDATION NOTES

1. REFER TO THE GEOTECHNICAL ENGINEERING REPORT SPECIFIED IN THE GENERAL NOTES, PLUS ANY ADDENDUM REPORTS ISSUED THEREAFTER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FULLY UNDERSTAND THE REPORT AND IMPLEMENT ALL RECOMMENDATIONS WITHIN.

2. THE CONTRACTOR SHALL ENGAGE AND PAY AN APPROVED TESTING AUTHORITY TO VERIFY THE ADEQUACY OF FOUNDATION MATERIAL IN ALL FOOTINGS PRIOR TO PLACEMENT OF CONCRETE. PERTH SAND PENETROMETER TESTING IS PERMITTED, AND MUST BE CARRIED OUT IN ACCORDANCE WITH AS 1289.

3. ALL FOUNDATIONS ARE SUBJECT TO RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. IF SOIL CONDITIONS ARE DEEMED BY THE GEOTECHNICAL ENGINEER (IN CONSULTATION WITH 'HERA ENGINEERING') TO BE UNSUITABLE FOR THE CURRENT STRUCTURAL DESIGN, ADDITIONAL GROUND IMPROVEMENT STRATEGIES AND/OR REDESIGN OF FOUNDATIONS MAY BE NECESSARY. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR ANY ADDITIONAL WORK (IF REQUIRED) TO ACHIEVE ADEQUATE SOIL CONDITIONS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER AND 'HERA ENGINEERING'.

4. LOOSE MATERIAL AND WATER SHALL BE CLEANED OUT OF THE FOUNDATION. FORM WORK TO BE USED WHERE THE SIDES OF THE FOUNDATION ARE NOT STABLE.

5. ALL WALLS AND COLUMNS SHALL BE CONCENTRIC WITH THE SUPPORTING FOOTINGS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

6. UNLESS STATED OTHERWISE IN THE STRUCTURAL DRAWINGS, FOOTINGS NEAR BOUNDARIES MUST NOT BE LOCATED HIGHER OR LOWER THAN FOOTINGS OF ADJACENT PROPERTIES.

7. FOR ANY FOOTINGS THAT ENCROACH THE SITE BOUNDARY, CONTRACTOR MUST OBTAIN APPROVAL FROM RELEVANT AUTHORITY PRIOR TO PROCEED WITH WORKS IN THAT AREA.

8. WHERE AN EXCAVATION IS REQUIRED OR EXISTS BELOW THE BASE OF A FOOTING THE SIDE OF THE EXCAVATION SHALL BE LOCATED AWAY FROM EDGE OF FOOTING BY THE SAME DISTANCE THAT THE EXCAVATION IS BELOW FOOTING BASE. WHERE THIS CANNOT BE ACHIEVED, 'HERA ENGINEERING' SHALL BE CONTACTED FOR FURTHER DIRECTION.

9. DO NOT BACKFILL RETAINING WALLS (OTHER THAN CANTILEVER WALLS) UNTIL ALL ADJACENT STRUCTURAL ELEMENTS HAVE BEEN CONSTRUCTED TO THE SATISFACTION OF THE ENGINEER (INCLUDING MEETING SPECIFIED CONCRETE STRENGTHS).

10. REFER WATERPROOFING SPECIALIST DETAILS FOR ALL WATERPROOFING BENEATH HYDROSTATIC SLAB.

A	ISSUED FOR 50% DD	JH	SD	26.03.2026
REV	DESCRIPTION	BY	APP	DATE

SCAN TO CHECK CURRENT REVISION

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DRAWING TITLE
NOTES AND SPECIFICATIONS - SHEET 1

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-1002	A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

MASONRY NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH AS 3700 AND OTHER RELEVANT AUSTRALIAN STANDARDS.

2. MASONRY UNITS TO HAVE A MINIMUM CHARACTERISTIC UNCONFINED STRENGTH AS FOLLOWS:

MASONRY TYPE	**STRENGTH GRADE**
CLAY BRICK	12 MPa
CONCRETE BLOCK	15 MPa

3. MASONRY MINIMUM DURABILITY REQUIREMENTS:

EXPOSURE	LOCATION	SALT ATTACK RESISTANCE GRADE	DURABILITY CLASS	MORTAR CLASS	TIES FOR CAVITY WALLS
ANY/MILD	INTERIOR/ EXTERIOR /GROUND CONTACT	PROTECTED	R3	R3	GALVANIZED
ANY	INTERIOR/ CONTACT WITH GROUND	EXPOSURE	R4	R4	GALVANIZED STAINLESS STEEL
INDUSTRIAL	WITHIN 1km OF MAJOR INDUSTRAL COMPLEX	EXPOSURE	R4	R4	GALVANIZED STAINLESS STEEL
MARINE	FROM 1km UP TO 10km FROM A COASTLINE	GENERAL PURPOSE	R3	R3	GALVANIZED STAINLESS STEEL
SEVERE MARINE	UP TO 1km FROM A COASTLINE	EXPOSURE	R4	R4	GALVANIZED STAINLESS STEEL

4. MORTAR MIX TO BE UNIFORMLY MIXED IN ACCORDANCE WITH AS2701.
   MORTAR RATIO SPECIFICATION:

MORTAR CLASS	CEMENT (GB/GF)	BUILDING LIME	SAND	WATER THICKENER
M3	1	1	6	OPTIONAL
M4	1	0.5	4.5	OPTIONAL

5. CORE FILL GROUT SPECIFICATION (UNLESS NOTED OTHERWISE):
   MAXIMUM AGGREGATE SIZE: 10mm
   SLUMP: 230mm
   CHARACTERISTIC COMPRESSIVE STRENGTH (f'c) AT 28 DAYS: 20 MPa
   MINIMUM CEMENT CONTENT = 300kg/m3

6. WALL TIES FOR CAVITY WALLS AND MASONRY VENEER WALLS SHALL BE AS FOLLOWS:
   - TYPE A MEDIUM DUTY FOR CAVITY UP TO 75mm.
   - TYPE A HEAVY DUTY FOR CAVITY OVER 75mm.
   - 50mm MINIMUM EMBEDMENT INTO THE MORTAR JOINT.
   - 15mm MINIMUM COVER FROM ANY EXPOSED SURFACE.
   - 600mm MAX TIES SPACING IN EACH DIRECTION FOR CAVITY UP TO 75mm.
   - 600mm HORIZONTAL SPACING, 344 VERTICAL SPACING FOR CAVITY OVER 75mm.
   - 300mm MAX TIES SPACING FROM LATERAL SUPPORT OR VERTICAL JOINT.

7. THE CONTRACTOR SHALL CONFIRM ACOUSTIC REQUIREMENTS IN RELATION TO TIES DURING THE TENDER STAGE AND PRIOR TO COMMENCEMENT OF ANY WORKS.

8. FOR LOAD BEARING, UNGROUTED HOLLOW BLOCKWORK, THE TOP COURSE SHALL BE SOLID BLOCKS.

9. FOR MASONRY WALLS ON SUSPENDED SLABS NOT LOCATED DIRECTLY OVER WALLS UNDER, PROVIDE 2-RW7 RODS FOR THE FIRST THREE BED JOINTS ABOVE SLAB. FOR MASONRY WALLS OVER OPENING, PROVIDE 2-RW7 RODS FOR THE FIRST TWO BED JOINTS ABOVE OPENING AND LAP PAST OPENING. TYPICAL LAP 450mm.

10. PROVIDE SLIP JOINTS BETWEEN THE TOP OF LOADBEARING MASONRY WALLS AND THE UNDERSIDE OF CONCRETE SLABS. ENSURE TOP OF WALLS ARE FINISHED LEVEL AND SMOOTH. SLIP JOINTS SHALL CONSIST OF 2 LAYERS OF RIGID DPC.

11. NON-LOADBEARING MASONRY WALLS SHALL BE SEPARATED FROM CONCRETE ABOVE BY 25mm GAP. PROVIDE JOINT FILLER TO THE ARCHITECTS' DETAILS. PROVIDE APPROVED RESTRAINT AT SOFFIT OF SLAB OVER AT 600mm CENTRES CAPABLE OF VERTICAL BUT NOT HORIZONTAL MOVEMENT.

12. REFER TO STRUCTURAL DRAWINGS FOR LINTEL DETAILS AND TYPICAL DETAILS AROUND OPENINGS. THE MAXIMUM HEIGHT OF POUR SHALL NOT EXCEED 1.2m UNLESS THE ENGINEER HAS APPROVED ALTERNATIVE METHOD OF PLACEMENT.

13. ALL WALLS TO BE KEPT STABLE AT ALL STAGES OF CONSTRUCTION AND NOT BE OVER STRESSED AT ANY TIME.

14. NO MASONRY WALLS SHALL BE BUILT ON SUSPENDED ELEMENTS UNTIL SUSPENDED ELEMENTS HAVE BEEN STRIPPED AND PROPS ARE REMOVED.

15. CAVITY WIDTH BETWEEN MASONRY WALLS SHALL NOT EXCEED 100mm AND SHALL NOT BE SMALLER THAN 40mm UNLESS NOTED OTHERWISE. KEEP CAVITY CLEAN AND CLEAR OF OBSTRUCTIONS.

16. PROVIDE VERTICAL JOINTS AS FOLLOWS
   - AS SHOWN ON ARCHITECTURAL AND STRUCTURAL DRAWINGS
   - TO MATCH ANY MOVEMENT JOINT IN THE CONCRETE (MASONRY ABOVE AND BELOW)
   - BRICKWORK: AT 12.0m MAXIMUM CENTRES, AND 6.0m MAXIMUM FROM CORNERS IN ALL WALLS.
   - BLOCKWORK: AT 8.0m MAXIMUM CENTRES, AND 6.0m MAXIMUM FROM CORNERS IN ALL WALLS.

17. ALL WALLS SHALL BE TIED OR BONDED AT THEIR INTERSECTIONS.

18. WATERPROOFING AND FIREPROOFING SHALL BE IN ACCORDANCE WITH ARCHITECTURAL DETAILS AND WITH SUPPLEMENTARY REQUIREMENTS AS DETAILED ON THE STRUCTURAL DRAWINGS

19. WEEPHOLES SHALL BE PROVIDED WHEREVER IT IS NECESSARY TO DRAIN MOISTURE FROM OR THROUGH MASONRY CONSTRUCTION.

20 SOLID AND CORE MASONRY UNITS SHALL BE LAID ON A FULL BED OF MORTAR. HOLLOW UNITS SHALL BE FACE-SHELL BEDDED.

21. RAKING OF JOINTS IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM ENGINEER.

22. WET ALL CORES PRIOR TO POURING GROUT.

23. WHERE MASONRY ANCHORS ARE TO BE LOCATED IN HOLLOW BLOCK WORK CORES SHALL BE GROUT FILLED.

24. NO CHASES, RECESSES OR HOLES SHALL BE MADE WITHOUT THE APPROVAL OF THE ENGINEER. IN PARTICULAR HORIZONTAL CUTTING AND CHASING OF LOADBEARING MASONRY WALLS IS NOT PERMITTED.

25. RETAINING WALLS SHALL BE PROPPED DURING BACKFILLING OPERATIONS.

REINFORCED MASONRY NOTES

1. REINFORCEMENT SHALL CONFORM TO AS4671 AND COMPLY WITH THE 'REINFORCED CONCRETE - REINFORCEMENT' SECTION OF THESE NOTES.

2. EXTREME CARE MUST BE TAKEN TO CORRECTLY POSITION STARTER BARS IN FOOTINGS IN ACCORDANCE WITH DETAILS.

3. VERTICAL WALL REINFORCEMENT SHALL BE TIED TO STARTER BARS AND RESTRAINED AT TOP OF WALL IN ACCORDANCE WITH THE DETAILS SO THAT IT IS NOT DISTURBED DURING GROUT FILLING.

4. FACE SHELLS AND CROSS WEBS TO BE FULLY BEDDED.

5. WALL SHALL BE PROPPED DURING BACKFILLING OPERATIONS.

6. FULLY GROUT ALL CORES IN REINFORCED WALLS, UNLESS NOTED OTHERWISE.

7. WET ALL CORES PRIOR TO POURING GROUT.

8. FILL CORES TO A MAXIMUM OF 3m IN HEIGHT FOR ANY ONE POUR. ALL GROUT POURS TO STOP 25mm BELOW TOP OF BLOCKS.

9. GROUT TO BE THOROUGHLY COMPACTED TO ENSURE COMPLETE FILLING OF ALL CORES.

10. PROVIDE CLEAN-OUT OPENINGS TO ALL CORES FOR INSPECTION AND TYING OF REINFORCEMENT.

11. ALL CORES TO BE CLEANED OUT AFTER EACH DAY'S LAYING.

PRECAST PANEL NOTES

1. PRECAST CONCRETE SHALL CONFORM TO THE RELEVANT REQUIREMENTS STATED WITHIN CONCRETE NOTES AND SPECIFICATION. THE FOLLOWING CONTAIN ONLY ADDITIONAL REQUIREMENTS FOR PRECAST CONCRETE.

2. PANEL THICKNESS SHOWN IN THESE DRAWINGS ARE THE MINIMUM REQUIRED STRUCTURAL THICKNESS. ANY ADDITIONAL REBATES, GROOVES OR FEATURES REQUIRED BY THE ARCHITECT ARE ADDITIONAL.

3. THE PANEL DIMENSIONS AND PROFILES SHALL BE OBTAINED FROM THE ARCHITECTURAL DRAWINGS. IN CASE OF DISCREPANCY BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS HERA ENGINEERING AND ARCHITECT SHALL BE CONTRACTED FOR FURTHER INSTRUCTION.

4. THESE PANELS HAVE BEEN DESIGNED FOR IN-SERVICE LOADS ACTING WHEN THE PANEL IS IN ITS FINAL POSITION AND CONNECTED INTO THE COMPLETED STRUCTURE. THE PRECAST CONTRACTOR SHALL COMPLETE DESIGN OF THE PANEL AND ALL ASSOCIATED LIFTING POINTS, LIFTING EQUIPMENT, STRONGBACKS AND PROPS FOR ALL TEMPORARY LOAD CASES DURING FABRICATION, TRANSPORTATION AND TEMPORARY INSTALLATION CASES.

5. THE PRECAST CONTRACTOR SHALL:
   a. PREPARE AND SUBMIT A COPY OF THE SHOP DRAWINGS TO 'HERA ENGINEERING' FOR APPROVAL PRIOR TO CASTING. SHOP DRAWINGS TO BE PREPARED IN ACCORDANCE WITH AS3850.
   b. EXPLICITLY NOTIFY HERA ENGINEERING VIA AN RFI FOR ANY DISCREPANCY BETWEEN THE STRUCTURAL DRAWINGS AND THE SHOP DRAWINGS.
   c. ALLOW 14 DAYS FOR HERA ENGINEERING REVIEW OF SHOP DRAWINGS
   d. BE RESPONSIBLE FOR THE ERECTION AND TEMPORARY PROPPING OF THE PANELS. ANY ADDITIONAL REINFORCEMENT NECESSARY FOR THE LIFTING AND INSTALLATION OPERATION SHALL BE DESIGNED AND INSTALLED BY THE CONTRACTOR AND SHOWN ON THE SHOP DRAWINGS.
   e. SUPPLY ALL CAST-IN LIFTING POINTS, FERRULES AND STRONGBACKS AS REQUIRED. ALL LIFTING POINTS SHALL BE INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION AND SHOWN DIMENSIONED ON THE SHOP DRAWINGS.
   f. GUARANTEE COMPATIBILITY OF THE BOND BREAKER WITH THE APPLIED FINISH
   g. PROVIDE SUITABLE THIN WALL, GALVANIZED DUCT GROUT TUBES FOR STARTER BARS.

6. SHOP PRODUCED PRECAST PANELS SHALL HAVE RIGID FORMWORK USING REPETITIVE PROCEDURES AND INTENSE COMPACTION, AND A DEMONSTRATED PROCESS CONTROL SYSTEM INCLUDING SUPERVISION SHALL BE IN PLACE.

7. ALL PRECAST FACES IN CONTACT WITH CAST-INSITU CONCRETE SHALL HAVE MECHANICALLY ROUGHENED SURFACES IN ACCORDANCE WITH AS 3600. ROUGHENING TO HAVE MINIMUM 5mm AMPLITUDE.

8. PANELS SHALL NOT HAVE CONSTRUCTION JOINTS UNLESS OTHERWISE APPROVED BY HERA ENGINEERING.

9. PANELS SHALL BE FULLY IDENTIFIABLE AND TRACEABLE. MARKINGS SHALL NOT BE VISIBLE IN FINAL CONDITION.

10. THE PRECAST CONTRACTOR SHALL HAVE A SUITABLE QA/QC PROCEDURE IN PLACE TO ENSURE ALL PANELS ARE WITHIN TOLERANCE AND CONFORM TO THE SHOP DRAWINGS, DRAWINGS AND CODE REQUIREMENTS PRIOR TO RELEASE FROM YARD.

11. PANELS SHALL BE LIFTED AND HANDLED IN ACCORDANCE WITH AS 3850 AND RELEVANT STATUTORY BODY (WORKSAFE) REQUIREMENTS USING CERTIFIED LIFTING EQUIPMENT. PANELS TO BE INSTALLED WITHIN SPECIFIED TOLERANCE AND PROPPED UNTIL FINAL DESIGN CONDITION IS ACHIEVED. TEMPORARY WORKS ENGINEER APPROVAL SHALL BE GRANTED PRIOR TO THE REMOVAL OF PROPS.

12. ALL PANELS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa AND A MINIMUM FLEXURAL TENSILE STRENGTH OF 3.4 MPa AT THE TIME OF LIFTING, UNLESS NOTED OTHERWISE.

13. WHERE PANELS ARE TEMPORARILY SUPPORTED ON SHIMS THE GAP IS TO BE FULLY GROUTED WITH A WATER PROOF NON-SHRINK GROUT IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. FIRE PROOFING, WEATHERPROOFING, FLASHING AND SEALANTS TO JOINTS TO BE IN ACCORDANCE WITH ARCHITECTURAL DETAILS.

14. GROUTING TO GROUT TUBE SHALL BE NON-SHRINK, FLOWABLE GROUT WITH A COMPRESSION STRENGTH EQUAL TO OR GREATER THAN THE CONCRETE PANEL STRENGTH.

15. ANY PANELS DAMAGED DURING FABRICATION, TRANSPORTATION AND/OR ERECTION SHALL BE REJECTED, UNLESS INFORMED OTHERWISE BY 'HERA ENGINEERING' AFTER INSPECTION OF DAMAGED PANELS.

16. PANELS DESIGNED TO RETAIN SOIL SHALL BE PROPPED DURING THE BACKFILLING OPERATION. BACKPROPPING TO REMAIN IN PLACE UNTIL WALL IS TIED INTO SUPPORTING STRUCTURE OVER AND SUPPORT HAS ACHIEVED FULL DESIGN STRENGTH.

REINFORCED BLOCKWORK NOTES

1. ALL MASONRY SHALL COMPLY WITH AS3700 AND THE PROJECT SPECIFICATION.

2. CONCRETE MASONRY UNITS TO HAVE A MINIMUM CHARACTERISTIC UNCONFINED STRENGTH OF 15MPa IN ACCORDANCE WITH AS2733.

3. MASONRY UNITS TO BE BEDDED IN FRESHLY PREPARED MORTAR UNIFORMLY MIXED IN THE RATIO OF ONE (1) PART CEMENT, ONE (1) PART LIME AND SIX (6) PARTS SAND, CONFORMING TO AS2701 'BRICKIES LOAM' SHALL NOT BE USED.

4. GROUT SHALL HAVE A COMPRESSIVE STRENGTH (f'c) OF 20 MPa AT 28DAYS, A SLUMP OF 125mm IN A 150mm SLUMP CONE, A MAXIMUM AGGREGATE SIZE OF 10mm AND BE IN ACCORDANCE WITH AS3700.

5. DEFORMED BAR REINFORCEMENT SHALL CONFORM TO AS4671.

6. EXTREME CARE MUST BE TAKEN TO CORRECTLY POSITION STARTER BARS IN FOOTINGS IN ACCORDANCE WITH DETAILS.

7. REFER TO THE MASONRY DRAWINGS FOR DETAILS ON VERTICAL CONTROL JOINTS.

8. ALL WALL INTERSECTIONS SHALL BE FULLY BONDED OR TIED UNLESS NOTED OTHERWISE.

9. PROVIDE CLEAN-OUT OPENINGS TO ALL CORES FOR INSPECTION AND TYING OF REINFORCEMENT.

10. FACE SHELLS AND CROSS WEBS TO BE FULLY BEDDED.

11. ALL CORES TO BE CLEANED OUT AFTER EACH DAYS LAYING.

12. VERTICAL WALL REINFORCEMENT SHALL BE TIED TO STARTER BARS AND RESTRAINED AT TOP OF WALL IN ITS REQUIRED LOCATION IN ACCORDANCE WITH THE DETAILS SO AS NOT TO MOVE DURING GROUT FILLING OF THE WALL.

13. WET ALL CORES PRIOR TO POURING GROUT.

14. FULLY GROUT ALL CORES IN REINFORCED WALLS, UNLESS NOTED OTHERWISE.

15. GROUT TO BE THOROUGHLY COMPACTED TO ENSURE COMPLETE FILLING OF ALL CORES.

16. FILL CORES TO A MAXIMUM OF 3m IN HEIGHT FOR ANY ONE POUR. ALL GROUT POURS TO STOP 25mm BELOW TOP OF BLOCKS.

17. WALL SHALL BE PROPPED DURING BACKFILLING OPERATIONS.

18. UNLESS NOTED OR SHOWN OTHERWISE ON THE DRAWINGS THERE ARE TO BE NO CHASES OR RECESSES PERMITTED IN THE MASONRY WALLS WITHOUT THE PRIOR APPROVAL OF HERA ENGINEERING.

19. USE OF 'H' BLOCKS ARE PREFERRED FOR RETAINING WALL CONSTRUCTION.

POST TENSIONED CONCRETE NOTES

1. POST TENSIONED CONCRETE SHALL CONFORM TO THE RELEVANT REQUIREMENTS STATED WITHIN CONCRETE NOTES AND SPECIFICATION. THE FOLLOWING CONTAIN ONLY ADDITIONAL REQUIREMENTS FOR POST TENSIONED CONCRETE.

2. FOR DESIGN AND CONSTRUCT CONTRACTS, POST TENSIONING SHALL BE DESIGNED IN ACCORDANCE WITH AS3600.

3. THE CONTRACTOR SHALL:
   a. PREPARE AND SUBMIT A COPY OF THE SHOP DRAWINGS TO 'HERA ENGINEERING' FOR APPROVAL. SHOP DRAWINGS TO BE PREPARED IN ACCORDANCE WITH AS3600.
   b. EXPLICITLY NOTIFY HERA ENGINEERING VIA AN RFI FOR ANY DISCREPANCY BETWEEN THE STRUCTURAL DRAWINGS AND THE SHOP DRAWINGS.
   c. ALLOW 14 DAYS FOR HERA ENGINEERING REVIEW OF SHOP DRAWINGS

4. MATERIALS SHALL BE AS FOLLOWS:
   a. TENDONS SHALL BE WIRE, STRAND OR BAR AS PER THE STRUCTURAL DRAWINGS AND IN ACCORDANCE WITH AS3600 AND AS4672, AND SHALL BE UNDAMAGED AND FREE OF SURFACE IMPERFECTION OR CONTAMINATION. ALL STRANDS SHALL BE SEVEN WIRE EXTRA HIGH TENSILE GRADE, STRESS RELIEVED LOW RELAXATION TO AS4672.1. MINIMUM BREAKING LOADS:
      - 12.7mm TENDONS = 184kN
      - 15.2mm TENDONS = 250kN
   b. GROUT SHALL BE IN ACCORDANCE WITH AS3600 AND BE:
      - MAXIMUM WATER:CEMENT RATIO OF 0.49 WITH MAXIMUM SHRINKAGE OF 1% AT 24HOURS OR
      - SUITABLE COMMERCIAL EPOXY GROUT WITH COMPRESSIVE STRENGTH GREATER THAN 40MPa
   c. DUCTS SHALL BE GALVANISE STEEL WITH A SUITABLE THICKNESS TO RETAIN CROSS SECTION AND RESIST ABRASION. FRICTION FACTOR IS CALCULATED ASSUMING 75mmX19mm DUCT A CURVATURE COEFFICIENT OF 0.2 AND ANGULAR COEFFICIENT OF 0.02.
   d. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND SUPPLY OF ALL ANTI-BURSTING REINFORCEMENT AND PERFORMANCE OF THE ANCHORAGES. ANCHORAGES SHALL BE COMPLIANT WITH AS1314 AND HAVE DOCUMENTED PROOF LOAD TESTING PERFORMANCE.
   e. CONCRETE SHALL BE IN ACCORDANCE WITH AS3600 AND BE:
      - MAXIMUM WATER:CEMENT RATIO OF 0.46
      - CEMENT CONTENT FOR EARLY AGE TRANSFER STRENGTH OF 320kg/m3
      - CONCRETE SHRINKAGE OF 700 MICROSTRAIN MAXIMUM TESTED IN ACCORDANCE WITH AS 1012 AT 56 DAYS
   f. FORMWORK SHALL BE FREE OF PRE-CAMBER. FORMWORK AND SCAFFOLDING SHALL BE ADEQUATELY EXTENDED BEYOND THE TENDON ANCHORAGE TO PROVIDE SPACE FOR EDGE STRESSING OPERATION

5. DUCTS SHALL BE INSTALLED IN ACCORDANCE WITH STRUCTURAL DRAWINGS AND SHALL BE SUPPORTED AT 1000mm CENTRES, WITH A VERTICAL TOLERANCE OF +/- 5mm. MINIMUM CONCRETE COVER TO ALL DUCTS TO BE 25mm UNLESS NOTED OTHERWISE. DRAPED DIMENSIONS ARE MEASURED FROM THE CONCRETE SOFFIT TO THE UNDERSIDE OF DUCT. ANCHORAGE DIMENSIONS ARE CONSIDERED FROM CONCRETE SOFFIT TO CENTRE LINE OF DUCT. TENDON DRAPE BETWEEN POINTS NOMINATED ARE PARABOLIC. IN CASE OF CONFLICT BETWEEN LOCATION OF TENDONS AND REINFORCEMENT OR CONDUIT THE TENDON PROFILE SHALL GOVERN. SPACING OF TENDONS MAY BE ADJUSTED SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER. DUCTS SHALL BE FULLY SEALED AND WATERPROOF AND HAVE SUITABLE OPENINGS, VENTS AND DRAIN HOLES AS REQUIRED.

6. TENDONS SHALL BE INSTALLED AND PROTECTED FROM DAMAGE DURING INSTALLATION TO ENSURE THEY ARE FREE OR DAMAGE AND HAVE A SUITABLE SURFACE FINISH NOT IMPAIR BOND TO CONCRETE OR GROUT.

7. ANCHORAGES SHALL BE FIRMLY ATTACHED TO THE TENDON AND DUCT, INSTALLED SQUARE TO THE TENDON AND IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.

8. CARE MUST BE TAKEN TO PREVENT DAMAGE OR MOVEMENT OF ANY OF THE COMPONENTS DURING CONCRETE PLACEMENT. CARE SHALL BE TAKEN DURING PLACING AND COMPACTING OF CONCRETE AROUND ANCHORAGES TO ENSURE THAT FULL COMPACTION IS ACHIEVED AND THAT NO PART OF THE ANCHORAGE OR TENDON OR THEIR ANCILLARIES ARE MOVED FROM ITS CORRECT POSITION.

9. CONTRACTOR TO SUPPLY METHODOLOGY ADOPTED FOR ALL STRESSING OPERATIONS AND EQUIPMENT DETAILS AT LEAST 3 DAYS BEFORE ANY STRESSING OPERATION. ALL JACKS AND GAUGES SHALL BE CALIBRATED WITHIN +/- 3% ACCURACY BY A NATA APPROVED LABORATORY NO MORE THAN 6 MONTHS BEFORE BEING USED ON SITE, RESULTS TO BE SUPPLIED TO HERA ENGINEERING FOR REVIEW UPON REQUEST.

10. JACKING SHALL BE AS FOLLOWS UNO:
   - PRIOR TO INITIAL STRESSING CONCRETE SHALL BE TESTED TO ACHIEVE 7MPa MINIMUM COMPRESSIVE STRENGTH. 25% INITIAL STRESSING SHALL BE APPLIED WITHIN 24 HOURS OF CASTING ONCE 7MPa STRENGTH IS ACHIEVED.
   - PRIOR TO FINAL STRESSING CONCRETE SHALL BE TESTED TO ACHIEVE 22MPa MINIMUM COMPRESSIVE STRENGTH. FINAL STRESSING SHALL BE APPLIED WITHIN 4 DAYS OF CASTING ONCE 22MPa STRENGTH IS ACHIEVED.
   - PRETENSIONED TENDONS: 0.8 x BREAKING LOAD
   - STRESS RELIEVED POST-TENSIONED TENDONS: 0.85 x BREAKING LOAD
   - NON-STRESS RELIEVED POST-TENSIONED TENDONS AND BARS: 0.75 x BREAKING LOAD

11. MAXIMUM TOLERANCE ON TENDON EXTENSION SHALL BE +/- 10%. EXTENSIONS SHALL BE SENT TO ENGINEER FOR REVIEW, AND DISCREPANCIES INVESTIGATED AND RECTIFIED PRIOR TO GROUTING DUCTS AND CUTTING TENDONS.

12. FLOOR ABOVE CAN NOT BE CAST UNTIL FINAL TENSIONING HAS BEEN APPLIED TO THE FLOOR BELOW

13. TENDONS THAT ARE COUPLED TO ARE NOT TO BE GROUTED UNTIL THE SECOND TENDON HAS HAD ITS FINAL STRESS APPLIED. TENDONS TO BE FULLY GROUTED AS SOON AS POSSIBLE AND WITHIN 28 DAYS FROM POURING, AND SHALL BE COMPLETED WHEN THE AMBIENT TEMPERATURE IS ABOVE 5 DEGREES. DUCTS SHALL BE CLEANED AND FREE OF BLOCKAGES AND LEAKS. GROUT SHALL FLOW FROM VENTS WITHOUT AIR BUBBLES AND VENTS PROGRESSIVELY SEALED AND CAPPED. FLOOR SHALL NOT BE SUBJECTED TO ADDITIONAL LOADING WITHIN 24HOURS OF PLACEMENT OF GROUT.

14. TENDONS MAY BE CUT SUBJECT TO ENGINEER'S APPROVAL OF EXTENSIONS AND ONCE GROUT HAS ACHIEVED FULL STRENGTH.

15. ANCHORAGE RECESS ARE TO BE FILLED WITH APPROVED SAND EPOXY MORTAR AND FINISHED IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS FOLLOWING COMPLETED INSTALLATION OF ANCHORAGES AND TENDONS.

16. 6 No. CONCRETE SAMPLES SHALL BE TAKEN FOR EACH POUR FOR TESTING (FROM LAST 50m³ POURED). CONCRETE TEST CYLINDERS ARE TO BE STORED AND AIR-CURED ON SITE, IN ACCORDANCE WITH AS3600 CLAUSE 17.6.2.8. TEST RESULTS SHALL BE SUBMITTED TO HERA ENGINEERING PRIOR TO STRESSING.

TEMPORARY WORKS NOTES

1. THE STRUCTURE HAS BEEN DESIGNED BY HERA ENGINEERING FOR THE IN-SERVICE LOADS ACTING WHEN THE STRUCTURE IS COMPLETE. HERA ENGINEERING HAS NOT BEEN ENGAGED TO UNDERTAKE TEMPORARY WORKS ENGINEERING EXCEPT FOR THE ITEMS EXPLICITLY NOTED AND FULLY DETAILED ON HERA ENGINEERING DRAWINGS. TEMPORARY WORKS ENGINEERING INCLUDES ALL CONSIDERATION OF ALL LOADING CONDITIONS OTHER THEN THE FINAL, AS-BUILT CONDITION, INCLUSIVE OF BUT NOT LIMITED TO THE FOLLOWING:

- CONSIDERATION OF LOADS OR ACTIONS ON STRUCTURAL ELEMENTS DURING FABRICATION, TRANSPORT, INSTALLATION AND CONSTRUCTION
- CONSTRUCTION SEQUENCING
- DEMOLITION
- EARTHWORKS, DEWATERING AND TEMPORARY RETENTION
- TEMPORARY PROPPING AND SHORING DESIGN
- FORMWORK DESIGN
- DESIGN OF SLAB FOR ADDITIONAL PENETRATIONS REQUIRED FOR CONSTRUCTION EQUIPMENT INCLUDING CRANES, HOISTS AND CONCRETE PUMPS
- TEMPORARY EQUIPMENT LOADING ON STRUCTURAL ELEMENTS INCLUDING CRANES, HOISTS, CONCRETE PUMPS AND WHEELED VEHICLES
- EARLY LOADING OF CONCRETE ELEMENTS (PRIOR TO ATTAINMENT OF 28 DAY DESIGN STRENGTH)
- TEMPORARY SCREEN, SAFETY BARRIER OR SCAFFOLD DESIGN
- JUMPFORM DESIGN AND ASSESSMENT OF CANTILEVERING CORES, WALLS AND COLUMNS WHEN JUMPFORMS ARE UTILISED
- VIBRATION ASSESSMENT
- MONITORING

2. THE CONTRACTOR SHALL ENGAGE AND PAY FOR A PROFESSIONAL TEMPORARY WORKS ENGINEER TO DESIGN, INSPECT AND CERTIFY ALL TEMPORARY WORKS.

3. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DESIGN, SUPPLY, INSTALLATION AND REMOVAL OF ALL TEMPORARY WORKS REQUIRED DURING THE CONSTRUCTION PROCESS.

4. THE CONTRACTOR SHALL ENSURE SUITABLE TEMPORARY WORKS DRAWINGS AND METHODOLOGY STATEMENTS ARE COMPLETED AS NECESSARY. ALL TEMPORARY WORKS CONTRACTOR ENGINEERING DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR INFORMATION TO ENSURE IT IS IN GENERAL ACCORDANCE WITH THE FINAL DESIGN INTENT.

5. THE CONTRACTOR SHALL CONFIRM ALL EXISTING STRUCTURES AND CONDITIONS ON SITE, AND IF THERE ARE FOUND TO BE DISCREPANCIES WITH THESE DRAWINGS (AND OTHER PROJECT DOCUMENTATION), NOTIFY ENGINEER AND WAIT FOR INSTRUCTION.

6. THE CONTRACTOR SHALL ENSURE THAT THE STRUCTURE IS ADEQUATELY BRACED TO PREVENT ANY HORIZONTAL MOVEMENT OR DEFLECTIONS. IF REQUIRED BY THE PREFERRED CONSTRUCTION SEQUENCE, PRE-LOADING OF STRUCTURAL ELEMENTS MAY BE REQUIRED TO LIMIT DEFLECTION.

7. THE STRUCTURE SHALL BE ADEQUATELY BRACED DURING CONSTRUCTION. ALL VERTICAL AND HORIZONTAL DISPLACEMENTS AND MOVEMENTS SHALL BE LIMITED AND MONITORED DURING CONSTRUCTION TO ENSURE THE STRUCTURE IS NOT SUBJECTED TO STRESS ABOVE THE FINAL DESIGN INTENT WHILE THE STRUCTURE IS BEING TEMPORARILY SUPPORTED.

8. THE CONTRACTOR SHALL SECURELY NEEDLE, TOM, PROP AND BRACE ALL EXISTING RETAINING WALLS, BEAMS, WALLS, COLUMNS AND OTHER STRUCTURE AS NECESSARY TO PREVENT ANY MOVEMENT AND TO ENSURE SAFETY OF PERSONS DURING CONSTRUCTION.

9. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE STRUCTURE, AND ANY ASSOCIATED EXCAVATION, AND ENSURE NO PART IS OVERSTRESSED DUE TO CONSTRUCTION METHODOLOGY OR EQUIPMENT USED DURING INSTALLATION. THE DESIGN AND CERTIFICATION OF ALL FORMWORK AND TEMPORARY PROPPING IS THE RESPONSIBILITY OF THE CONTRACTOR.

10. ALL PROPRIETARY EQUIPMENT ASSOCIATED WITH TEMPORARY WORKS, CONSTRUCTION AND INSTALLATION METHODOLOGIES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.

DEMOLITION NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, OTHER CONSULTANTS' DRAWINGS, SPECIFICATIONS AND OTHER WRITTEN INSTRUCTIONS ISSUED DURING THE PROJECT. THE EXTENT OF DEMOLITION SHOWN ON THESE DRAWINGS IS INDICATIVE ONLY. REFER TO ARCHITECT'S DRAWINGS FOR SETOUT INFORMATION.

2. EXISTING STRUCTURAL ELEMENTS ARE SHOWN INDICATIVELY BASED ON EXISTING DRAWINGS, ARCHITECTURAL DRAWINGS AND SITE SURVEY INFORMATION. CONTRACTOR SHALL VERIFY EXISTING STRUCTURAL CONDITIONS PRIOR TO COMMENCEMENT OF WORK AND NOTIFY HERA ENGINEERING IN WRITING OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF WORKS.

3. THE STRUCTURE HAS BEEN DESIGNED BY HERA ENGINEERING FOR THE IN-SERVICE LOADS ACTING WHEN THE STRUCTURE IS COMPLETE. HERA ENGINEERING HAS NOT BEEN ENGAGED TO UNDERTAKE TEMPORARY WORKS ENGINEERING EXCEPT FOR THE ITEMS EXPLICITLY NOTED AND FULLY DETAILED ON HERA ENGINEERING DRAWINGS.

4. THE CONTRACTOR SHALL ALLOW FOR IN HIS PRICE ALL COSTS ASSOCIATED WITH ANY WORKS PERTAINING TO THE DEMOLITION AND REMOVAL OF THE EXISTING STRUCTURE.

5. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE SAFE DEMOLITION AND THE OVERALL STABILITY OF THE STRUCTURE WHILST DEMOLITION OCCURS. THE CONTRACTOR SHALL SELECT DEMOLITION METHODS AND APPROPRIATE TOOLING WHICH DO NOT DAMAGE OR DISTURB RETAINED EXISTING STRUCTURES.

6. THE CONTRACTOR SHALL ENGAGE & PAY FOR A SUITABLY QUALIFIED ENGINEER TO ACT AS THE CONTRACTORS ENGINEER TO ASSESS AND VERIFY ALL EXISTING STRUCTURES AND TEMPORARY SUPPORTS, DEVELOP SUITABLE CONSTRUCTION PROCEDURES TO ALLOW SAFE DEMOLITION AND TEMPORARY STABILITY, AND PROVIDE SIGN OFF TEMPORARY WORKS OF THE STRUCTURE THROUGHOUT ALL STAGES OF WORKS.

7. THE CONTRACTOR IS TO PROVIDE THE CONTRACTORS ENGINEER AND THE DEMOLITION CONTRACTOR THE ENGINEERING DRAWINGS FOR INFORMATION.

8. THE CONTRACTOR IS TO HAVE A CONSTRUCTION PROCEDURES AND DRAWINGS PREPARED WITH APPROPRIATE ADVICE FROM THE CONTRACTORS ENGINEER AND SUBMITTED TO THE CLIENT AND HERA ENGINEERING FOR GENERAL REVIEW TO ENSURE IT IS ACCORDANCE WITH THE DESIGN INTENT FOR PERMANENT WORKS AS DOCUMENTED IN THESE DRAWINGS.

9. THE CONTRACTORS SHALL SECURE ALL LOOSE AND UNSTABLE BUILDING COMPONENTS PRIOR TO AND DURING DEMOLITION.

10. CUTTING OF EXISTING CONCRETE AND MASONRY SHALL BE COMPLETED TO MINIMISE CRACKING AT CORNERS, TYPICALLY BY DRILLING CORE HOLES AT CORNERS PRIOR TO CUTTING. LOCALISED MINOR CRACKING MAY OCCUR AT CORNERS WHERE RE-ENTRANT BARS ARE NOT PRESENT, WHERE THIS OCCURS HERA ENGINEERING SHALL BE CONSULTED.

11. CUTTING OF EXISTING STEELWORK SHALL BE COMPLETED TO ENSURE NO LOCALISED STRESSES. SHARP EDGES SHALL BE REMOVED AND RE-ENTRANT CORNERS SHAPED NOTCH FREE TO A RADIUS OR AT LEAST 10Mmm.

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REV	DESCRIPTION	BY	APP	DATE

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DRAWING TITLE
NOTES AND SPECIFICATIONS - SHEET 2

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-1003	A

DRAWINGS ARE TO BE PRINTED IN COLOUR

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STEELWORK NOTES

STRUCTURAL STEELWORK

1. ALL MATERIALS, FABRICATION, WELDING AND ERECTION SHALL COMPLY WITH AS 4100, AS 1554, AS 1252 AND OTHER RELEVANT AUSTRALIAN STANDARDS. THE CONTRACTOR SHALL OBTAIN A CERTIFICATE OF COMPLIANCE FROM THE STEEL SUPPLIER WITH THE RELEVANT AUSTRALIAN STANDARD
2. AS 5131 CONSTRUCTION CATEGORY:

   - SERVICE CATEGORY **SC1**
   - FABRICATION CATEGORY **FC2**
   - CONSTRUCTION CATEGORY **CC3**

MATERIALS AND FABRICATION

1. ANY IMPORTED STEEL MUST COMPLY WITH THE LATEST REVISION OF AS 4100 AND ASI TECHNICAL NOTE 5. CONTACT ENGINEER IF UNSURE. CONTRACTOR MUST SEEK ENGINEER APPROVAL DURING THE TENDER STAGE IF PROPOSING USE OF IMPORTED STEEL.
2. THE DESIGN, SUPPLY AND INSTALLATION OF METAL STUDWALL AND SECONDARY STEELWORK REQUIRED TO SUPPORT/CONNECT THE FAÇADE TO THE BASE STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE ALLOWED FOR AT TENDER.
3. MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF AS 4100. COLD FORMED SECTIONS SHALL BE IN ACCORDANCE WITH AS 4600. MATERIALS GRADE SHALL BE AS PER THE TABLE BELOW U.N.O ON THE DRAWINGS:

TYPE OF STEEL	GRADE
UNIVERSAL BEAMS, UNIVERSAL COLUMNS, PARALLEL FLANGE CHANNELS, ANGLES, FLATS TO AS/NZS 3679.1.300	300
HOT ROLLED PLATES, FLOOR PLATES AND SLABS TO AS/NZS 3678350	350
HOLLOW SECTIONS TO AS 4100, AS/NZS 4600 & AS 1163 CIRCULAR HOLLOW SECTIONS RECTANGULAR HOLLOW SECTIONS SQUARE HOLLOW SECTIONS	 350 450 450
COLD FORMED PURLINS AND GIRTS TO AS/NZS 4680 AND AS 1397	1.0 BMT GRADE AS/NZS 4680 / G550 1.2 BMT GRADE AS/NZS 4680 / G500 1.5, 1.9, 2.4, 3.0 BMT GRADE AS/NZS 4680 / G450
WELDED SECTIONS TO AS/NZS 3679.2	300
STAINLESS STEEL TO AS 1449	316
STEEL RAILS TO AS 1085.1	(ONE GRADE ONLY)
TENSILE STUDS (STEEL TO STEEL) TO AS/NZS 1554.2	410
SHEAR STUDS (COMPOSITE SLAB TO STEEL) TO AS/NZS 1554.2	380
BOLTS, NUTS AND WASHERS TO AS 1252	SNUG TIGHT GRADE 8.8

4. COSTS OR DELAYS ASSOCIATED WITH UNAVAILABILITY OF MATERIALS SHALL BE BORNE BY THE CONTRACTOR. SUBSTITUTION OF MATERIALS SHALL ONLY BE ALLOWED WITH THE APPROVAL HERA ENGINEERING.
5. STEELWORK SPECIFICATIONS UNLESS NOTED OTHERWISE:
   - ALL CLEAT PLATES SHALL BE MINIMUM 10mm THICK.
   - ALL BOLTS SHALL BE MINIMUM M20 8.8/S. USE WASHERS UNDER ALL NUTS. USE HARDENED OR PLATE WASHERS UNDER OVERSIZED OR SLOTTED HOLES
   - ALL FOUNDATION HOLDING DOWN BOLTS SHALL BE M20 8.8/S.
   - ALL FILLET WELDS SHALL BE 6mm CONTINUOUS CATEGORY SP WITH E49XX MILD STEEL ELECTRODES.
   - ALL BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELD CATEGORY SP.
6. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AT LEAST 14 DAYS PRIOR TO COMMENCEMENT OF FABRICATION. STEELWORK FABRICATION NOT TO COMMENCE WITHOUT ENGINEER'S APPROVAL. SHOP DETAILER MUST REFER TO LATEST ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND SETOUTS. THE CONTRACTOR SHALL EXPLICITLY NOTIFY HERA ENGINEERING VIA AN RFI FOR ANY DISCREPANCY BETWEEN THE STRUCTURAL DRAWINGS AND THE SHOP DRAWINGS. THIS IS A COURTESY REVIEW AND DOES NOT RELIEVE PARTIES OF THEIR RESPONSIBILITIES.
7. ALL MEMBERS TO BE IN ONE LENGTH U.N.O. WHERE FABRICATION REQUIRE ADDITIONAL SPLICING NOT SHOWN ON DRAWINGS CONTACT ENGINEER FOR APPROVAL.
8. FIXINGS FOR ARCHITECTURAL ELEMENTS SHALL BE PROVIDED AND SHALL NOT WEAKEN STRUCTURAL MEMBERS. IF IN DOUBT CONSULT ENGINEER.
9. ALL SHS AND RHS MEMBERS SHALL BE SEALED AT BOTH ENDS WITH 6mm PLATES UNLESS NOTED OTHERWISE. PROVIDE BREATHER HOLES IN ALL GALVANISED SECTIONS.
10. ALL WELDS SHALL BE COMPLETED AND TESTED IN ACCORDANCE WITH AS1554. WHERE REQUESTED BY ENGINEER, APPLICABLE WELD PROCEDURE SPECIFICATION, WELD PROCEDURE QUALIFICATION RECORD AND WELDER QUALIFICATION RECORD SHALL BE AVAILABLE FOR INSPECTION.
11. ALL STEELWORK SHALL BE SHOP WELDED EXCEPT WHERE SITE WELDS ARE SPECIFIED ON THE STRUCTURAL DRAWINGS.
12. NDT OF WELDS SHALL BE UNDERTAKEN BY A NATA APPROVED LEVEL 2 TECHNICIAN, AND TEST REPORTS MADE AVAILABLE FOR INSPECTION UPON REQUEST. IF DEFECTS ARE FOUND REPAIR SHALL BE COMPLETED USING A SUITABLE PROCEDURE AND HERA ENGINEERING CONSULTED TO PROPOSE REVISED SCOPE OF TESTING. SCOPE OF TESTING SHALL GENERALLY BE AS FOLLOWS U.N.O:

WELD CATEGORY	WELD TYPE	VISUAL SCANNING	VISUAL EXAM	MAGNETIC TEST	ULTRASONIC TEST
SP, SHOP	FILLET WELD	100%	20%	10%	NIL
SP, SHOP	BUTT WELD	100%	50%	NIL	10%
SP, SITE	FILLET WELD	100%	20%	25%	NIL
SP, SITE	BUTT WELD	100%	50%	NIL	100%

13. ALL FABRICATED STRUCTURAL STEEL SHALL BE CHECKED TO ENSURE THEY ARE WITHIN TOLERANCES SPECIFIED IN AS4100 OR TIGHTER TOLERANCES AS NOTED ON THE DRAWINGS. REFER TO STRUCTURAL DRAWINGS FOR CAMBER AND SHEAR STUDS
14. THE LENGTH OF ALL BOLTS SHALL BE SUCH THAT AT LEAST ONE CLEAR THREAD SHOWN ABOVE THE NUT. AT LEAST ONE THREAD PLUS THE THREAD RUN OUT IS CLEAR BENEATH THE NUT AFTER TIGHTENING.
15. WELDING OF CAPTIVE NUTS TO STEELWORK SHALL BE GRADE 4.6S, CLASS 5 NUTS. THE ELECTRODES USED SHALL BE COMPATIBLE WITH THE CHEMISTRY OF STEEL INVOLVED.
16. THE CONTRACTOR SHALL OBTAIN FOR EACH BOLT TEST AND COMPLIANCE CERTIFICATES (FROM NATA ACCREDITED LABORATORY) IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARD.
17. BOLTED CONNECTIONS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:

BEAM DEPTH	NUMBER OF BOLTS	SIZE OF BOLTS	CLEAT SIZE	WELD SIZE
UP TO 250	2	M16 8.8/S	10	6
BETWEEN 250-360	3	M16 8.8/S	10	6
BETWEEN 360-460	4	M20 8.8/S	12	6
BETWEEN 510-610	5	M20 8.8/S	16	6

18. THE CONTRACTOR SHALL ENSURE THAT ALL STEELWORK IS TEMPORARILY BRACED DURING ALL STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL ENGAGE AND PAY FOR A PROFESSIONAL ERECTION SEQUENCING ENGINEER TO CERTIFY ALL TEMPORARY WORKS

ERECTION

19. ALL MEMBERS SHALL BE ERECTED WITHIN TOLERANCES SPECIFIED IN AS4100 OR TIGHTER TOLERANCES AS NOTED ON THE DRAWINGS AND BE FREE FROM TWIST AND DISTORTIONS. NATURAL CAMBER UPWARD.
20. THE BOLTING PROCEDURE SHALL BE AS FOLLOWS:

CATEGORY	BOLT GRADE	METHOD OF TENSIONING	BOLT STANDARD	MINIMUM TENSILE STRENGTH (fuf) MPa
4.6/S	4.6	SNUG TIGHT	AS1111	400
8.8/S	8.8	SNUG TIGHT	AS1252	830
8.8/TB	8.8	FULL TENSIONING	AS1252	830
8.8/TF	8.8	FULL TENSIONING	AS1252	830

NOTES:
- /TB AND /TF BOLTS SHALL BE INSTALLED USING EITHER THE PART-TURN METHOD OR THE DIRECT-TENSION INDICATOR METHOD AS PER SECTION 15 OF AS4100. CONTACT SURFACES SHALL BE IN CLEAN, AS ROLLED CONDITION.
- LOAD INDICATING WASHERS SHALL BE USED TO CONFIRM TIGHTENING OF BOLTS IN TF AND TB CONNECTIONS.
- HARDENED WASHER SHALL BE USED UNDER THE BOLT HEAD OR NUT, WHICHEVER IS ROTATED.
- DO NOT RE-USE FULLY TENSIONED BOLTS.

21. ALL BASE PLATES SHALL BE GROUTED WITH 15-50mm APPROVED NON-SHRINKABLE GROUT WITH 50MPa MINIMUM COMPRESSIVE STRENGTH U.N.O. GROUTING SHALL NOT BE CARRIED OUT UNTIL THE STRUCTURE IS ALIGNED, LEVELED, PLUMBED AND ADEQUATELY BRACED.
22. ALL STEELWORK BELOW GROUND SHALL BE ENCASED BY 75mm OF CONCRETE, IN ADDITION TO SURFACE TREATMENT. ENCASED STEELWORK SHALL BE WRAPPED IN SL52 HARD DRAWING WIRE FABRIC LAPPED 300mm, MINIMUM COVER OF 50mm TO REINFORCEMENT.
23. ROOF BRACING SHALL BE SUPPORTED FROM EVERY SECOND PURLIN WITH HOOK FIXED THROUGH THE PURLIN WEB.
24. ALL ROOF AND WALL BRACING SHALL BE FULLY TENSIONED. ALL RODS TO HAVE TURNBUCKLES OR APPROVED SIMILAR DEVICES.

ANCHOR NOTES

1. ALL ANCHORS TO BE IN ACCORDANCE WITH AS 4100 AND AS 5216.
2. ALL ANCHORS INTO STEEL, MASONRY AND CONCRETE SUBSTRATE SHALL BE INSTALLED IN STRICT ADHERENCE TO THE MANUFACTURER'S SPECIFICATION. THIS INCLUDES BUT IS NOT LIMITED TO DRILL TYPE, HOLE DIAMETER, CLEAN OUT REQUIREMENTS, CHEMICAL SETTING REQUIREMENTS AND TORQUE REQUIREMENTS.
3. SUBSTITUTION OF ANCHOR TYPE OR MANUFACTURER IS ONLY ALLOWED WITH THE EXPRESS, WRITTEN PERMISSION OF HERA ENGINEERING.
4. ALL ANCHOR CONDITIONS, INCLUDING BUT NOT LIMITED TO BASE MATERIAL TYPE, STRENGTH AND THICKNESS, ANCHOR EDGE DISTANCES AND SPACING ETC SHALL BE CONFIRMED AS IN ACCORDANCE WITH MINIMUM MANUFACTURER'S REQUIREMENTS AND HERA ENGINEERING DRAWINGS. HERA ENGINEERING SHALL BE CONSULTED IN THE EVENT OF ANY DISCREPANCY. IF REQUIRED EXISTING SUBSTRATE SHALL BE TESTED TO ENSURE MINIMUM CAPACITY IS ACHIEVED.
5. ANCHORS SHALL HAVE FIRE PROTECTION RATING SIMILAR TO THE MINIMUM REQUIREMENTS OF THE PARTS BEING CONNECTED. WHERE CONNECTED PARTS ARE IN SEPARATE FIRE COMPARTMENTS SUITABLE INSULATION SHALL BE PROVIDED.

PURLIN GIRTS AND ROOFSHEETING

1. ALL PURLINS AND GIRTS SHALL BE LYSAGHT OR STRAMIT SECTIONS. THE STRUCTURAL ENGINEER SHALL APPROVE ALTERNATIVE PRODUCTS. INSTALLATION AND MANUFACTURING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
2. MINIMUM Z450 GALVANISE COATING FOR COLD FORM STEEL IN AGGRESSIVE ENVIRONMENT (1km FROM ROUGH SURF, INDUSTRIAL AREA AND CALM SALT WATER). Z350 MINIMUM IN ALL OTHER AREAS.
3. BOLT SHALL BE AS FOLLOWS:

PURLIN/GIRT SECTION SIZE	BOLT SPECIFICATION	METHOD OF TENSIONING
100, 150, 200 250,FP23019	2-M12 4.6/S	SNUG TIGHT (55Nm TORQUE)
300, 350	2-M16 4.6/S	SNUG TIGHT (55Nm TORQUE)

4. CLEAT SHALL BE AS FOLLOWS, WHERE 'A' DENOTES CLEAR GAP BETWEEN PURLIN BOTTOM FLANGE AND TOP OF SUPPORTING STEEL MEMBER:

'A'	CLEAT SIZE
50-150	10 PLATE
150-200	65 x 5 EA
200-300	75 x 5 EA
MORE THAN 300	CONTACT ENGINEER

5. REFER TO LYSAGHT OR STRAMIT SPECIFICATION FOR LAPPING DETAILS. MINIMUM LAPS SHALL BE 15% OF THE LONGEST SPAN.
6. SHEETING SHALL BE FIXED TO ALL PURLINS AND GIRTS.
7. UNLESS SPECIFIED IN THE STRUCTURAL DRAWINGS, BRIDGING SHALL BE LOCATED AT MAXIMUM CENTRES OF 20 x THE SECTION DEPTH OR 4m, WHICHEVER IS LESS.
8. GIRTS SHALL BE VERTICALLY SUPPORTED VIA GIRTS HANGER.
9. CONTRACTOR TO ALLOW FOR TRIMMING PURLINS TO HIPS, VALLEY, OPENING, BOX GUTTERS, FLASHING, END OF SHEETING AND THE LIKE NOT SHOWN ON PLAN.
10. ANY LOAD SUSPENDED FROM THE PURLINS SHALL BE FIXED TO THE PURLINS WEB ONLY.

SURFACE TREATMENT AND FINISHES

1. ALL STEELWORK SHALL BE ALL PROTECTED IN ACCORDANCE THE PROJECT SPECIFICATIONS AND AS2312-1-2014.
2. GALVANISING SHALL BE IN ACCORDANCE WITH AS4680.
3. ALL BOLTS, NUTS, WASHER, CAST IN FERRULES AND HOLDING DOWN BOLTS SHALL BE HOT DIPPED GALVANIZED TO AS1214 AND AS1650.
4. ALL STEELWORK TO BE TREATED AS FOLLOWS UNLESS NOTED OTHERWISE:

LOCATION	SURFACE PREPARATION	MINIMUM TREATMENT
ALL ENCASED STEELWORK	HAND TOOL CLEANED - THE SURFACE SHALL BE FREE OF LOOSE RUST AND LOOSE RUST AND LOOSE MILL SCALE AT TIME OF DELIVERY.	NIL
ALL FIRE-SPRAYED STEELWORK	FLAME OR POWER TOOL CLEANED - THE SURFACE SHALL BE FREE OF ALL RUST AND LOOSE MILL SCALE AT TIME OF DELIVERY.	NIL
EXTERNAL	ABRASIVE BLAST CLEANED TO CLASS 2.5 STANDARD.	INORGANIC ZINC SILICATE TO 75 MICRONS OR HOT DIP GALVANISED TO 600 G/M
INTERNAL	ABRASIVE BLAST CLEANED TO CLASS 2.5 STANDARD.	RED OXIDE ZINC PHOSPHATE TO 75 MICRONS
BELOW GROUND	ABRASIVE BLAST CLEANED TO CLASS 2.5 STANDARD.	IN ADDITION TO ABOVE, 2 COATS OF BITUMEN-BASED PRISMATIC TO 400 MICRONS
MASONRY CAVITY	ABRASIVE BLAST CLEANED TO CLASS 2.5 STANDARD.	HOT DIP GALVANISED TO 600 G/M
SITE WELDS	POWER TOOL CLEANED - THE SURFACE SHALL BE FREE OF ALL RUST AND LOOSE WELD MATERIAL	EPOXY ZINC TO 75 MICROGRAMS
STITCH WELDS	POWER TOOL CLEANED - THE SURFACE SHALL BE FREE OF ALL RUST AND LOOSE WELD MATERIAL	EPOXY ZINC TO 75 MICROGRAMS. SEAL UNWELDED SECTION WITH SIKAFLEX SEALANT OR SIMILAR APPROVED PRIOR TO PAINTING
NUTS, BOLTS, WASHERS	CORROSION FREE COATED IN OIL AND IN SERVICEABLE CONDITION	HOT DIP GALVANISED TO AS1214 AND AS1650.

FIRE PROTECTION NOTES

1. RESPONSIBILITY FOR SPECIFICATION OF FIRE PROTECTION PERIOD RESTS WITH THE BUILDING SURVEYOR. REFER TO BUILDING SURVEYOR AND ARCHITECTURAL DOCUMENTATION FOR REQUIRED FIRE RATING PERIODS.
2. STRUCTURAL CONCRETE ELEMENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED TO ACHIEVE THE REQUIRED FRP IN ACCORDANCE WITH NCC REQUIREMENTS AS DOCUMENTED IN THE BCA CONSULTANTS NCC COMPLIANCE REPORT AND ANY ASSOCIATED PERFORMANCE SOLUTIONS.
3. STEELWORK MEMBERS ARE DENOTED AS FLOOR SUPPORTING LOADBEARING, ROOF SUPPORTING LOADBEARING OR FACADE SUPPORTING NON LOAD BEARING MEMBERS TO ALLOW ASSESSMENT OF REQUIRED FIRE PROOFING SPECIFICATION TO MEET THE NCC FRP REQUIREMENTS AS SET OUT WITHIN THE BCA CONSULTANTS NCC COMPLIANCE REPORT AND ANY ASSOCIATED PERFORMANCE SOLUTIONS.
4. WHERE SPECIFIED BY THE BUILDING SURVEYOR OR ARCHITECTURAL DOCUMENTATION, JOINTS BETWEEN ELEMENTS SUCH AS MASONRY WALLS OR PRECAST ELEMENTS SHALL BE SEALED WITH A SUITABLE FIRE PROOF SEALANT.
5. WHERE REQUIRED, FIRE PROTECTION OF STRUCTURAL STEELWORK SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
   - USE A SUITABLE, PROPRIETARY FIRE RATED PLASTER OR SPRAYED COATING TO ACHIEVE LIMITING TEMPERATURE OF 520 DEGREES C FOR REQUIRED FIRE RATING PERIOD WITH AVAILABLE PRODUCT DATA AND PROVEN TEST DATA. SELECTED SYSTEM TO BE APPROVED BY BUILDING SURVEYOR, ARCHITECT/SUPERINTENDENT AND ENGINEER.
   - FIRE PROTECTION TO BE INSTALLED/APPLIED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
   - ALL PRIMARY STEEL MEMBERS DIRECTLY OR INDIRECTLY SUPPORTING FLOORS, STAIRS, WALLS OR COLUMNS REQUIRE FIRE PROTECTION UNLESS NOTED OTHERWISE
   - ALL CONNECTIONS OF FIRE PROTECTED STEEL BEAMS SHALL BE FIRE PROTECTED UNLESS NOTED OTHERWISE
   - WHEN TWO STEEL MEMBERS WITH DIFFERENT FIRE PROTECTION REQUIREMENT ARE IN CONTACT (THROUGH CONNECTIONS, SIMPLE CONTACT OR PROXIMITY OF LESS THAN 10MM), THE MEMBER WITH THE LOWER PROTECTION REQUIREMENT SHALL HAVE THE SAME PROTECTION AS THE OTHER MEMBER FOR A LENGTH EQUAL TO THE MAXIMUM MEMBER SECTION DIMENSION OR 200MM, WHICHEVER IS GREATER.

EARTHING AND BONDING NOTES

1. ALL ELECTRICAL CONTINUITY AND EARTHING TERMINALS FOR CONCRETE REINFORCEMENT AND STRUCTURAL STEELWORK SHALL BE DOCUMENTED AND INSPECTED BY THE EARTHING AND BONDING SPECIALIST.
2. ALL ELECTRICAL ISOLATION REQUIRED SHALL BE PROVIDED BY EARHTING AND BONDING SPECIALIST.
3. ALL DISSIMILAR METALS SHALL BE ISOLATED WITH NYLON WASHERS OR APPROVED QUIVALENT.

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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DRAWING TITLE
NOTES AND SPECIFICATIONS - SHEET 3

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-1004
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

TENDER NOTES

1. THESE DRAWINGS ARE ISSUED FOR DESIGN DEVELOPMENT AS AN INDICATION OF THE EXTENT OF WORKS ONLY. THEY ARE NOT A COMPLETE CONSTRUCTION SET OF DRAWINGS. THE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE RATES MEMO.

2. REINFORCEMENT RATES OR REINFORCEMENT SHOWN ON DRAWINGS ARE BASED ON THE CURRENT PROJECT DESIGN STATUS AND ARE NOT FINAL, IFC REINFORCEMENT OR RATES. HERA ENGINEERING HAS PROVIDED A STRUCTURAL TENDER ALLOWANCE FACTOR WHICH MUST BE APPLIED TO AS DRAWN REINFORCEMENT OR RATES TO ALLOW FOR STRUCTURAL ENGINEERING DESIGN CHANGES ONLY. THE CONTRACTOR SHALL THEN APPLY A FURTHER SUITABLE CONTINGENCY AND/OR UNCERTAINTY FACTORS WHICH THEY DEEM APPROPRIATE TO ACCOUNT FOR ANY POTENTIAL SOURCE OF REINFORCEMENT INCREASE OTHER THAN STRUCTURAL ENGINEERING DESIGN CHANGES. THIS FACTOR SHOULD BE IN ACCORDANCE WITH GOOD PRACTISE COST ESTIMATION BASED ON THE CURRENT LEVEL OF PROJECT DEFINITION.

3. TO DETERMINE THE FULL EXTENT OF WORK, THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND OTHER CONTRACT DOCUMENTS, THE GENERAL NOTES, IN PARTICULAR BUT NOT LIMITED TO 'TENDER NOTES' AND 'TEMPORARY WORKS NOTES'. ALLOW FOR ALL ITEMS SHOWN ON ARCHITECTURAL AND OTHER DRAWINGS AS NOT ALL ITEMS ARE SHOWN ON THE STRUCTURAL DRAWINGS.

4. SHOULD ANY AMBIGUITY, ERROR, OMISSIONS, DISCREPANCY, INCONSISTENCY OR OTHER FAULT EXIST OR SEEM TO EXIST IN THE DOCUMENTS, IMMEDIATELY NOTIFY THE SUPERINTENDENT IN WRITING.

5. **GENERAL:** AREA, VOLUMES & TONNAGES IN THESE SCHEDULES ARE AN APPROXIMATE TAKE OFF FOR INFORMATION PURPOSES ONLY, HERA RECOMMENDS QUANTITY SURVEYOR TO APPROPRIATE ALLOWANCES FOR PRELIMINARY PURPOSES UNO. RATES SHOWN ON THE DRAWINGS ARE FOR THE FINAL STRUCTURE IN PLACE AND DO NOT ALLOW FOR ANY TEMPORARY OR CONSTRUCTION RELATED LOADING UNLESS SPECIFICALLY NOTED OTHERWISE.
   ONLY BARS REQUIRED TO ACHIEVE STRUCTURAL CODE COMPLIANCE ARE SHOWN OR INCLUDED IN RATES.
   REINFORCEMENT RATES DO NOT INCLUDE ALLOWANCE INCLUDING BUT NOT LIMITED TO:
   - REINFORCEMENT FOR SAFETY REQUIREMENTS - ADDITIONAL LACERS, SPACERS, BUILDERS BARS, CONSTUCTION MESH ETC.
   - SITE STOCK REQUIREMENTS
   - WASTAGE
   - TEMPORARY WORKS LOADS (EG SCREENS, LOADING BAYS, CRANE TIES ETC)
   - CONSTRUCTION JOINTS AND OTHER SEQUENCING REQUIREMENTS
   - ROLLING MARGIN
   - CONTRACTOR REINFORCEMENT PLACEMENT PREFERENCES
   - SPECIFIC PT SYSTEMS AND MATERIALS TO PT CONTRACTOR'S SPECIFICATION (EG ANTIBURST, PAN-TRIMMERS ETC)
   - TRIMMER OF SERVICES PENETRATIONS
   - REINFORCEMENT FOR PLINTHS, KERBS AND HOBS COUPLERS AND THREADED BARS

6. **SLAB REINF:** TONNAGES DO NOT ACCOUNT FOR HOBS, UPSTANDS, DOWNSTANDS AND THE LIKE, WASTAGE (INCL. ROLLING MARGINS), REINFORCEMENT CHAIRS SPACER AND TRIMMER REINFORCEMENT, BISCUIT POUR REINFORCEMENT, PT ANTIBURST COILS (IF APPLICABLE) AND LAPPING OF LACER BARS. HERA RECOMMENDS INCREASING THE TONNAGE VALUE AS SPECIFIED IN NOTE 5. TO ALLOW FOR THIS.

7. **PT STRANDS:** TONNAGES DO NOT ACCOUNT FOR DRAPE AND WASTED STRANDS. HERA RECOMMENDS QUANTITY SURVEYOR TO APPROPRIATE ALLOWANCES TO ACCOUNT FOR THIS.

8. **PT PAN REINFORCEMENT:** TONNAGES PROVIDED ARE FOR A CONVENTIONAL EDGE STRESSED SLAB. FOR PAN STRESSED SLABS (NON-TRANSFER ELEMENTS) HERA RECOMMENDS TO MAKE AN ALLOWANCE OF 50kg PER PAN WITH TYPICAL 12.7mm STRAND TENDONS.
   THE NUMBER OF PANS MAY BE SUBJECT TO FINAL TENDON CONFIGURATION, PENETRATIONS, CONSTRUCTION JOINTS, POUR SEQUENCING, STRESSING LENGTH LIMITATIONS AND OTHER DETAILED DESIGN PARAMETERS.

9. **WALL REINFORCEMENT:** TONNAGES DO NOT ACCOUNT FOR WASTAGE (INCL. ROLLING MARGINS), REINFORCEMENT CHAIRS AND TRIMMER REINFORCEMENT AND SLAB STARTER REINFORCEMENT. HERA RECOMMENDS INCREASING THE REINFORCEMENT TONNAGE VALUE AS SPECIFIED IN NOTE 5. TO ALLOW FOR THIS WALL TIES AND SLAB STARTER REINFORCEMENT IS TO BE ACCOUNTED FOR AS SEPARATE ITEMS TO THESE TONNAGES.

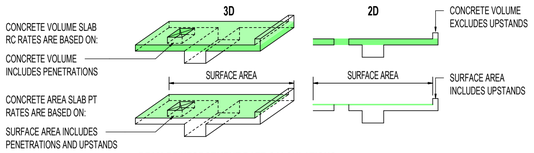
10. **TEMPORARY OPENINGS:** CONTRACTOR SHALL APPLY SUITABLE ALLOWANCE FOR INFILL OF TEMPORARY OPENINGS WITHIN ALL SLABS AND WALLS FOR ADDITIONAL REINFORCEMENTS AND COUPLER BARS. REFER TYPICAL SLAB INFILL DETAILS ON DWG HER-DRG-STR-8124 AND RATES MEMO.

11. **STEELWORK:** CONTRACTOR SHALL APPLY A SUITABLE ALLOWANCE FOR SPLICES, JOINTS, CLEATS, CONNECTIONS, FIXINGS, GUSSETS AND THE LIKE IS APPLIED. RATES HAVE NOT BEEN INCLUDED FOR SECONDARY STEEL. ADDITIONALLY ALLOWANCE SHALL BE MADE FOR PROVISION OF APPROPRIATE SECONDARY STEEL FRAMING TO SUPPORT NON-STRUCTURAL ELEMENTS, INCLUDING BUT NOT LIMITED TO:
   - NON-LOADBEARING FACADES (GLAZING, CLADDING ETC)
   - PARTITION WALLS
   - OPERABLE WALLS
   - GLAZED ROOFS, SKYLIGHTS, FLASHINGS ETC
   - PLANT PLATFORMS/SUPPORTS
   - CEILINGS AND BULKHEADS
   - EXTERNAL MASONRY
   - SOUND AND LIGHTING EQUIPMENT
   - SUSPENDED SERVICES
   - FOR ALL LIGHTWEIGHT STRUCTURAL STEEL NOT SCOPED ON PLAN, APPLY 60kg/m² RATE FOR COSTING ALLOWANCE.

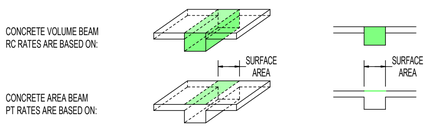
12. **BUILDABILITY:** CONTRACTOR TO MAKE SUFFICIENT ALLOWANCE FOR ADDITIONAL COMPLEXITY OF WORKS WHERE APPLICABLE THROUGHOUT THE PROJECT AND COSTS INVOLVED WITH EXISTING CONDITIONS AND OBSTRUCTIONS IN GROUND. KEY BUILDABILITY NOTES PROVIDED THROUGHOUT THE 50DD STRUCTURAL DOCUMENTATION PACKAGE.

13. **ALL QUANTITIES SHOULD BE CHECKED AND VERIFIED BY A QUALIFIED QUANTITY SURVEYOR, AND A CONTINGENCY WHICH IS SUITABLE FOR THE STAGE OF DESIGN DEVELOPMENT SHOULD BE APPLIED IN ACCORDANCE WITH GENERAL ESTIMATING PRINCIPALS. FOR EXAMPLE AACE RECOMMENDED PRACTICE 18R-97.**

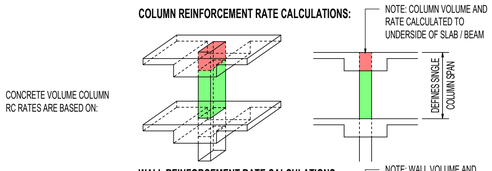
SLAB REINFORCEMENT RATE CALCULATIONS:



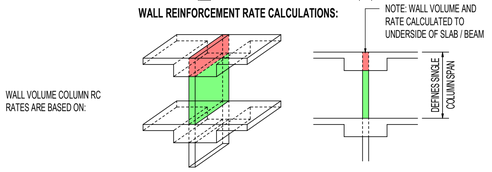
BEAM REINFORCEMENT RATE CALCULATIONS:

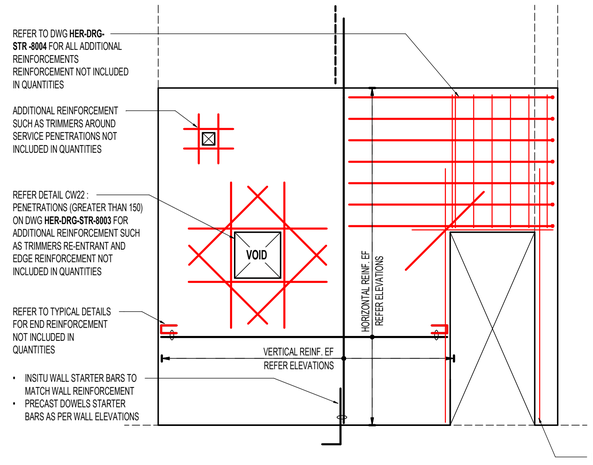


COLUMN REINFORCEMENT RATE CALCULATIONS:



WALL REINFORCEMENT RATE CALCULATIONS:



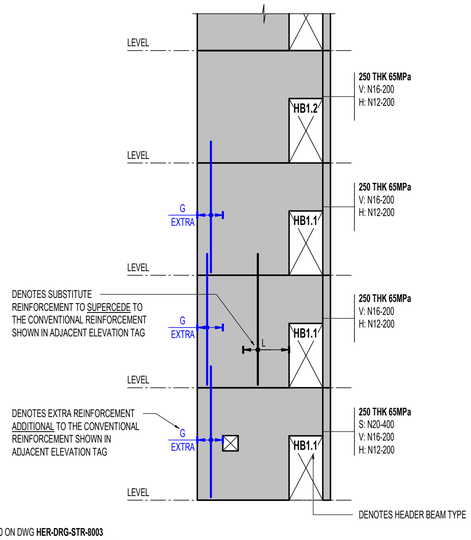


TYPICAL WALL DETAIL

NOT TO SCALE

NOTE: ELEVATION IS FOR ILLUSTRATIVE PURPOSES ONLY AND NOT RELATED TO PROJECT

HEADER BEAM PENETRATIONS NOT INCLUDED FOR 50%DD. CONTRACTOR TO MAKE SUFFICIENT ALLOWANCE FOR FUTURE PENETRATIONS WITHIN HEADER BEAMS.

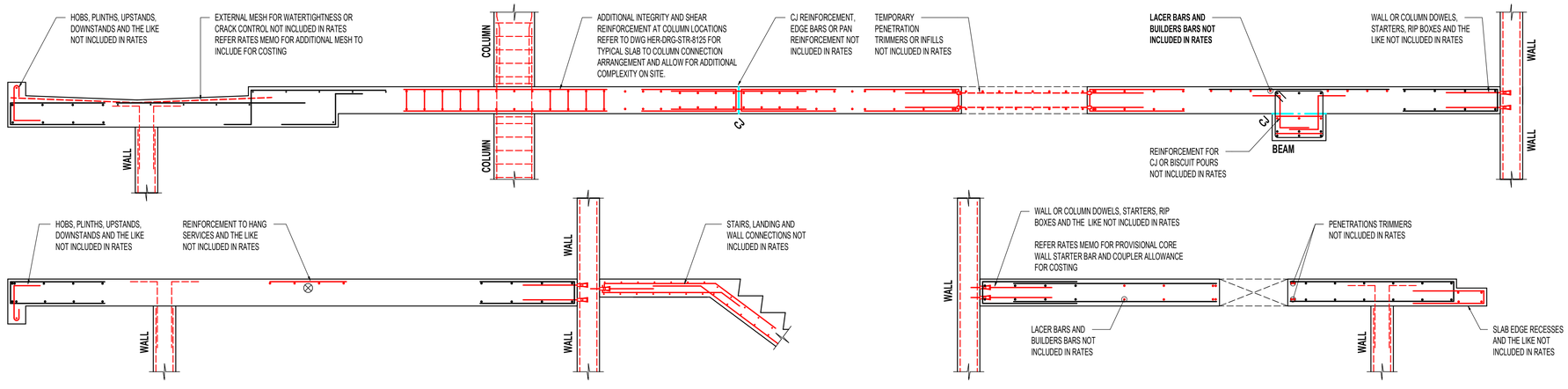


TYPICAL WALL ELEVATION

NOT TO SCALE

STRUCTURAL TENDER ALLOWANCE %

NOTE: ELEVATION IS FOR ILLUSTRATIVE PURPOSES ONLY AND NOT RELATED TO PROJECT



TYPICAL SLAB SECTIONS SHOWING REINFORCEMENT NOT INCLUDED IN RATES

NOT TO SCALE

NOTE: SECTIONS ARE NOT RELATED TO PROJECT AND ARE FOR ILLUSTRATIVE PURPOSES ONLY

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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DRAWING TITLE
TENDER NOTES AND DETAILS

PROJECT STATUS
FOR DESIGN DEVELOPMENT

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As indicated	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-1005
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200

GENERAL LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN(TBC) MAXIMUM
- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS DESC. MPa — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG, L x W or Ø, SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINTS

NOTE: PROVIDE NOMINAL 10mm WIDE FLEXIBLE ISOLATION JOINT TYPICAL, LOCAL TO ALL SLAB ABUTMENTS WITH CONCRETE COLUMNS, CAVITY AND BLOCK WALLS. JOINT TO BE FULL DEPTH FILLED WITH APPROVED COMPRESSIBLE FILLER ALL SEALED TO ARCHITECT'S SPECIFICATION UNO.

- RL XX.XX — DENOTES LEVEL AND FACE OF MEASUREMENT
- POUR 1 — DENOTES SLAB POUR NUMBER
- RAMP — DENOTES RAMP UP
- DENOTES STAIR UP
- DENOTES STAIR BOTTOM
- DENOTES STAIR TOP
- P1 — DENOTES PRECAST PANEL TYPE
- SP1 — DENOTES PRECAST PANEL STITCH PLATE
- DENOTES SPECIAL BOLTED CONNECTION
- DENOTES SITE WELDED CONNECTION
- DENOTES CAST IN CONNECTION
- DENOTES WELDED MOMENT CONNECTION
- DENOTES BOLTED MOMENT CONNECTION
- DENOTES MEMBER SPLICE CONNECTION
- DENOTES VERTICAL BRACING
- N# — DENOTES CONNECTION TAG NUMBER REFER TO COORESPONDING NUMBERED STEEL CONNECTION DETAILS
- SCn — DENOTES STEEL COLUMN NUMBER
- Bn — DENOTES STEEL FRAMING NUMBER (ABREVIATIONS VARY)
- Bn C S — DENOTES STEEL BEAM NUMBER CAMBER AND STUDS (IF SHOWN)
- RL XX.XX — DENOTES LEVEL AND FACE OF MEASUREMENT
- DENOTES PROPPING MARKER
- DENOTES CENTERLINE
- HOLD: — AREAS CLOUDED RED OR RED TEXT INDICATES ITEMS IS TO BE CONFIRMED (TBC) OR ON HOLD UNTIL FURTHER ADVICE IS RECEIVED
- AREAS CLOUDED BLUE INDICATES A REVISION CLOUD.

GENERAL

ABBREVIATIONS

ALT	- ALTERNATE
DWG	- DRAWING
EQ	- EQUAL
LB	- LOAD BEARING
TBC	- TO BE CONFIRMED
SIM	- SIMILAR
TYP	- TYPICAL
REQD	- REQUIRED
UNO	- UNLESS NOTED OTHERWISE
GA	- GENERAL ARRANGEMENT
NSOP	- NOT SHOWN ON PLAN
NSOE	- NOT SHOWN ON ELEVATION
NTS	- NOT TO SCALE
NLB	- NON LOAD BEARING
MIN	- MINIMUM
MAX	- MAXIMUM
VRS	- VARIES
PL	- PLATE
HDG	- HOT DIP GALVANIZED
OPP	- OPPOSITE
CRS	- CENTRES
CL	- CENTRELINE
NOM	- NOMINAL
O/A	- OVERALL
EW	- EACH WAY
EF	- EACH FACE
NF	- NEAR FACE
FF	- FAR FACE
SF	- SIDE FACE
T	- TOP
C	- CENTRAL
B	- BOTTOM
T&B	- TOP AND BOTTOM
HORIZ.	- HORIZONTAL
VERT.	- VERTICAL
REINF.	- REINFORCEMENT

FOUNDATIONS

ABBREVIATIONS

PC	- PILE CAP
PF	- PAD FOOTING
RF	- RAFT FOOTING
SF	- STRIP FOOTING
GB	- GROUND BEAM
CCB	- CAPPING BEAM
P	- PILE
DP	- DRIVEN PILE
SP	- SCREW PILE
BP	- BORED PIER

SLABS / BEAMS

ABBREVIATIONS

RC	- REINFORCED CONCRETE
PT	- POST TENSIONED
PC	- PRECAST
CB	- CONCRETE BEAM
CCB	- CONCRETE CAPPING BEAM
PB	- PRECAST BEAM
L1CB1	- LEVEL & BEAM NUMBER
BDK	- BONDEK
CDK	- CONDECK
KF	- KINGFLOR
HC	- HOLLOWCORE
TS	- TOPPING SLAB
SOG	- SLAB ON GROUND
HOB	- CONCRETE HOB
CU	- CONCRETE UPSTAND
CD	- CONCRETE DOWNSTAND
CR	- CONCRETE EDGE REBATE
FOLD	- SLAB FOLD
ET	- EDGE THICKENING
ST	- SLAB THICKENING

SHORING

ABBREVIATIONS

RL	- REDUCED LEVEL
ARL	- ANCHOR REDUCED LEVEL
CCB	- CONCRETE CAPPING BEAM
CCBL	- CAPPING BEAM LEVEL
FFL	- FINISHED FLOOR LEVEL
SFL	- STRUCTURAL FLOOR LEVEL
EGL	- EXISTING GROUND LEVEL
AHD	- AUSTRALIAN HEIGHT DATUM
NGL	- NATURAL GROUND LEVEL
BEL	- BULK EXCAVATION LEVEL

TYPICAL DETAIL TAGS

ABBREVIATIONS

RTD	- RETAINING DETAILS
FDD	- FOOTING DETAILS
GSD	- GROUND SLAB DETAILS
CCD	- CONCRETE COLUMN DETAILS
WLD	- WALL DETAILS
SSD	- SUSPENDED SLAB DETAILS
STD	- FRAMING DETAILS

SLAB CONNECTION DETAIL TYPES

- SB1 — DENOTES SLAB STARTER BAR CONNECTION TYPE 1
- SB2 — DENOTES SLAB STARTER BAR CONNECTION TYPE 2
- SB3 — DENOTES SLAB STARTER BAR CONNECTION TYPE 3
- SB4 — DENOTES SLAB STARTER BAR CONNECTION TYPE 4
- SB5 — DENOTES SLAB STARTER BAR CONNECTION TYPE 5
- SB6 — DENOTES SLAB STARTER BAR CONNECTION TYPE 6

WALLS

ABBREVIATIONS

CW#	- CORE NUMBER & WALL NUMBER
CW	- INSITU CONCRETE WALL
CU	- INSITU CONCRETE UPSTAND
PW	- PRECAST CONCRETE WALL
PU	- PRECAST CONCRETE UPSTAND
SW	- SHORING WALL
AW	- AFS LOGICWALL
BW	– BLOCKWORK/BRICKWORK WALL
BWP	– BLOCKWORK/BRICKWORK PIER
BU	- BLOCKWORK UPSTAND
RW	- RETAINING WALL
PJ	- PANEL JOINT

FRAMING MEMBERS

USAGE ABBREVIATIONS

B	- BEAM
DR	- DROPPER
FB	- FLY BRACE
FT	- FASCIA TRUSS
G	- GIRT
H	- HANGER
HB	- HORIZONTAL CROSS BRACE
HR	- HIP RAFTER
J	- JOIST
LB	- LIFTING BEAM
M	- MULLION
OR	- OUTRIGGER
P	- PURLIN
PF	- PORTAL FRAME
R	- RAFTER
RA	- RAKING ANGLE
RC	- RAKING CHANNEL
S	- STRUT
SA	- SHELF ANGLE
SB	- STUB COLUMN
SC	- STEEL COLUMN
STR	- STAIR STRINGER
T	- TIE
TB	- TRIMMER BEAM
TP	- TRIMMER PURLIN
TR	- TRUSS
WB	- WIND BEAM
WH	- WALL HEAD
VB	- VERTICAL CROSS BRACE
VR	- VALLEY RAFTER

LOCATION NOTATIONS

(O)	- MEMBER OVER
(U)	- MEMBER UNDER
(B)	- MEMBER BEHIND
(NF)	- NEAR FACE
(FF)	- FAR FACE
(EF)	- EACH FACE

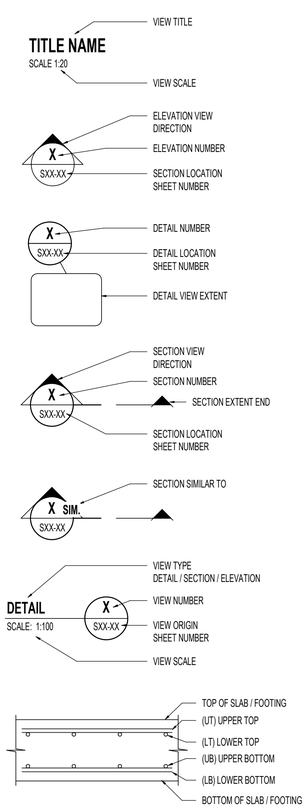
WELD ABBREVIATIONS

CFW	- CONTINUOUS FILLET WELD
FPBW	- FULL PENETRATION BUTT WELD
FSBW	- FULL STRENGTH BUTT WELD
PPBW	- PARTIAL PENETRATION BUTT WELD

MEMBER PROFILE ABBREVIATIONS

BT	- DENOTES UNIVERSAL BEAM TEE
CHS	- DENOTES CIRCULAR HOLLOW SECTION
CT	- DENOTES UNIVERSAL COLUMN TEE
EA	- DENOTES EQUAL ANGLE
F	- DENOTES FLAT BAR
PF	- DENOTES PARALLEL FLANGE CHANNEL
RHS	- DENOTES RECTANGULAR HOLLOW SECTION
RD	- DENOTES ROUND BAR
SHS	- DENOTES SQUARE HOLLOW SECTION
SB	- DENOTES SQUARE BAR
TF	- DENOTES TAPERED FLANGE BEAM
UA	- DENOTES UNEQUAL ANGLE
UB	- DENOTES UNIVERSAL BEAM
UC	- DENOTES UNIVERSAL COLUMN
WB	- DENOTES WELDED BEAM
WC	- DENOTES WELDED COLUMN
C	- DENOTES COLD FORM C SECTION
Z	- DENOTES COLD FORM Z SECTION

VIEW REFERENCING

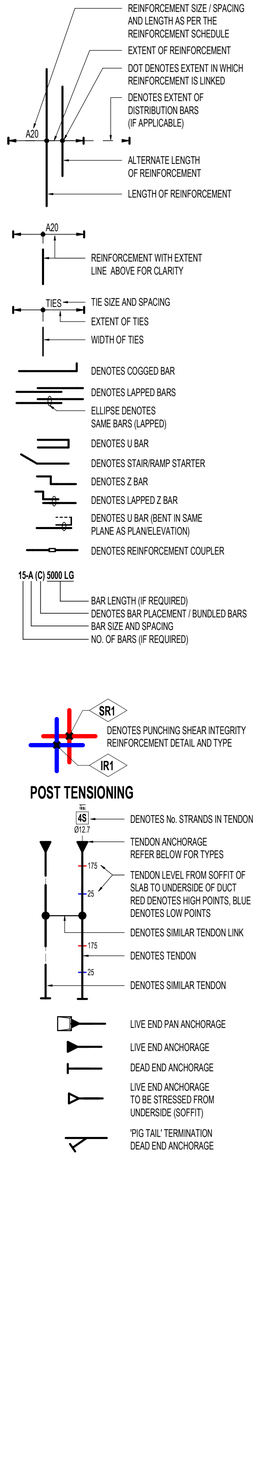


LAYING SEQUENCE (UNLESS NOTED OTHERWISE)

BARS REQUIRED IN OTHER SEQUENCE / EXTRA LAYERS ARE TAGGED ON PLAN OR SCHEDULE AS - (L1) 1ST LAYER, (L2) 2ND LAYER, (L3) 3RD LAYER ETC

BARS TO BE VERTICALLY STACKED (UNO)
MAXIMUM BUNDLES OF 2 BARS (UNO)
PROVIDE SPACERS BETWEEN LAYERS TO MATCH USING THE LARGEST BAR SIZE (UNO)
(SPACERS NOT INCLUDED IN TENDER RATES)
eg. 8-A (L1) = 8 x N12-300 BARS IN THE 1ST LAYER
8-A (L2) = 8 x N12-300 BARS IN THE 2ND LAYER

REINFORCEMENT



POST TENSIONING

VERTICAL ELEMENTS LAP TABLE
(WALLS, HEADER BEAMS & COLUMNS)

BAR SIZE	MIN CONCRETE STRENGTH (MPa)			COG/HOOK LENGTH
	40	50	≥ 65	
N12	450	450	350	170
N16	650	600	500	205
N20	850	800	650	245
N24	1100	950	850	295
N28	1350	1200	1050	345
N32	1600	1450	1250	395
N36	1900	1700	1500	440
N40	2150	1950	1750	490

COG LENGTH BASED ON 5 x BAR DIAMETER PIN MAX

HORIZONTAL ELEMENTS LAP TABLE
(SLABS & BEAMS)

BAR SIZE	BOTTOM	TOP		COG/HOOK LENGTH
		CONC. < 300 THK	CONC. > 300 THK	
N12	450	450	550	170
N16	650	650	800	205
N20	900	900	1100	245
N24	1100	1100	1400	295
N28	1350	1350	1750	345
N32	1600	1600	2050	395
N36	1900	1900	2500	440
N40	2150	2150	2800	490

COG LENGTH BASED ON 5 x BAR DIAMETER PIN MAX

REINFORCEMENT MARK SCHEDULE

MARK	SIZE	MARK	SIZE
A	N10	F	N28
B	N12	G	N32
C	N16	H	N36
D	N20	J	N40
E	N24		

ALL WALL REINFORCEMENT IS TO BE EACH FACE UNO.
(C) DENOTES CENTRAL REINFORCEMENT.
ALL REINF. TAGS SPACING IS SHOWN IN cm
EG. D20 DENOTES N20-200; B15 DENOTES N12-150

SLAB ON GROUND REINFORCEMENT SCHEDULE

SLAB THICKNESS	REINFORCEMENT	
	INTERNAL	EXTERNAL
UP TO 100	SL72	SL82
101-150	SL82	SL92
151-250	SL92 (T & B)	SL92 (T & B)

GROUT TUBE SCHEDULE (UNO)

BAR SIZE	GROUT TUBE SIZE
N20	50Ø
N24	60Ø
N28	70Ø
N32	70Ø

REINFORCEMENT TIE TYPE SCHEDULE

TYPE	L/G ARRANGEMENT	TYPE	L/G ARRANGEMENT
T1		-	
T2		CT2	
T3		CT3	
T4		CT4	
T5		CT5	
T6		CT6	
T7		CT7	

≥200 THK PRECAST DOWEL LAP TABLE (UNO)

BAR SIZE	MIN CONCRETE STRENGTH (MPa)		
	40	≥ 50	COG
N12	350	350	170
N16	500	500	205
N20	650	600	245
N24	800	700	295
N28	950	850	345
N32	1200	1100	395
N36	1500	1350	440
N40	1850	1650	490

COG LENGTH BASED ON 5 x BAR DIAMETER PIN MAX

<200 THK PRECAST DOWEL LAP TABLE (UNO)

BAR SIZE	MIN CONCRETE STRENGTH (MPa)		
	40	≥ 50	COG
N12	350	350	170
N16	500	500	205
N20	650	600	245
N24	850	750	295
N28	1100	1000	345
N32	1400	1250	395
N36	1700	1550	440
N40	2050	1850	490

COG LENGTH BASED ON 5 x BAR DIAMETER PIN MAX

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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DRAWING TITLE
PROJECT LEGENDS AND ABBREVIATIONS

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-1006
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

CONCRETE COLUMN RATES SCHEDULE

COLUMN MARK	CONCRETE STRENGTH	TYPE	LENGTH	WIDTH or Ø	STARTERS (S)	VERTICAL (V)	HORIZONTAL (H)	BAR ARRANGEMENT (A)	COMMENTS
CC1	50MPa	INSITU	1000	350					
CC2	50MPa	INSITU	300	300					
CC3	50MPa	INSITU	600	600					
CC4	50MPa	INSITU		450					
CC5	50MPa	INSITU	300	300					
CC7	50MPa	PRECAST	2400	500					
CC8	50MPa	INSITU	400	400					

NOTE: REFER TO RATES MEMO FOR REINFORCEMENT RATES

WALL SCHEDULE

MARK	CONCRETE STRENGTH	TYPE	WIDTH	REINFORCEMENT (EF UNO)		
				VERTICAL	HORIZONTAL	DOWELS
BW1	20MPa	BLOCKWORK	190	N16-200 (C)	N16-400 (C)	-
BW2	20MPa	NLB BLOCKWORK	190	N12-200 (C)	N12-400 (C)	-
BW3	20MPa	BLOCKWORK	290	N16-200 (C)	N16-400 (C)	-
BW4	20MPa	NLB BLOCKWORK	290	N12-200 (C)	N12-400 (C)	-
BW6	20MPa	NLB BLOCKWORK	140	N12-400 (C)	N12-400 (C)	-
CU1	40MPa	INSITU UPSTAND	150	N12-200 (C)	N12-200 (C)	-
PCU1	50MPa	PRECAST UPSTAND	200	N12-200	N12-200	N20-400 (C)
W1	40MPa	INSITU	200	N12-200	N12-200	N20-400 (C)
W2	40MPa	INSITU	250	N16-200	N12-200	N20-400 (C)
W3	40MPa	INSITU	300	N16-200	N12-200	-
W4	40MPa	INSITU	350	N16-200	N16-200	-
W5	40MPa	INSITU	400	N20-200	N20-200	-

NOTE: WALL SCHEDULE PROVIDED FOR PRICING INFORMATION ONLY.
FINAL CONCRETE GRADE AND REINFORCEMENTS SUBJECT TO
DETAILED DESIGN.

CONCRETE BEAM SCHEDULE

MARK	CONCRETE STRENGTH	WIDTH	DEPTH	REINFORCEMENT				COMMENTS
				BOTTOM	TOP	LIGS	SIDE FACE	
EB1		1200	650					
EB2		1200	600					
EB3		1200	550					
EB5		900	600					
EB6		1200	540					
EB7		1200	700					
IB1		2400	550					
IB2		2400	600					
IB3		2400	650					
IB4		2400	900					
IB5		600	700					
IB6		600	1000					
IB7		500	600					
IB8		2400	700					
IB9		2400	1000					
IB10		2400	840					
IB11		900	600					
IB12		900	540					
IB14		3000	650					
IB16		2400	440					
IB17		2400	900					PRESTRESSED TRANSFER BEAM. REFER PLAN FOR DETAILS.
IB18		2400	740					
IB19		2400	540					
IB20		2400	750					
IB21		2400	800					
IB22		2400	850					

NOTE: REFER TO RATES MEMO FOR REINFORCEMENT RATES

PILE CAP SCHEDULE

MARK	CONCRETE STRENGTH	LENGTH	WIDTH	DEPTH	REINFORCEMENT					COMMENTS
					LOWER BOTTOM	UPPER BOTTOM	LOWER TOP	UPPER TOP	SIDE FACE	
PC1a	80MPa	1500	1500	1200						
PC1b	80MPa	1500	1500	1200						
PC2a	80MPa	3400	1500	1500						
PC3a	80MPa	6100	5700	3500						
PC3b	80MPa	6100	5700	3500						
PC4a	80MPa	6100	6100	3500						
PC4b	80MPa	6100	6100	3500						

NOTE: REFER TO RATES MEMO FOR REINFORCEMENT RATES

CONCRETE CAPPING BEAM SCHEDULE

MARK	CONCRETE STRENGTH	WIDTH	DEPTH	REINFORCEMENT				COMMENTS
				BOTTOM	TOP	LIGS	SIDE FACE	
CB1	50MPa	1200	1200					

NOTE: CAPPING BEAM WIDTH TBC BASED ON FINAL SHORING PILE SIZE (TBC)
REFER TO RATES MEMO FOR REINFORCEMENT RATES

GROUND TEMPORARY STEEL PLUNGE COLUMN SCHEDULE

MARK	SIZE	COMMENTS
TC1	310 UC 158	ALLOW 24NO. 19mm DIA, 120 LG WELDED STUDS PER COLUMN
TC2	310 UC 158	PLATED. ALLOW 2x16 THK PLATES FSBW TO FULL LENGTH OF UC ALLOW 32NO. 19mm DIA, 120LG WELDED STUDS PER COLUMN

NOTE: FOR ALL PLUNGE COLUMNS, ALLOW 1.5m ADDITIONAL LENGTH FOR SOCKETING INTO PILES TYPICAL.

STEEL MEMBER SCHEDULE

MARK	SIZE	COMMENTS

STEEL COLUMN SCHEDULE

MARK	SIZE	COMMENTS
ST1	200 UC 59.5	

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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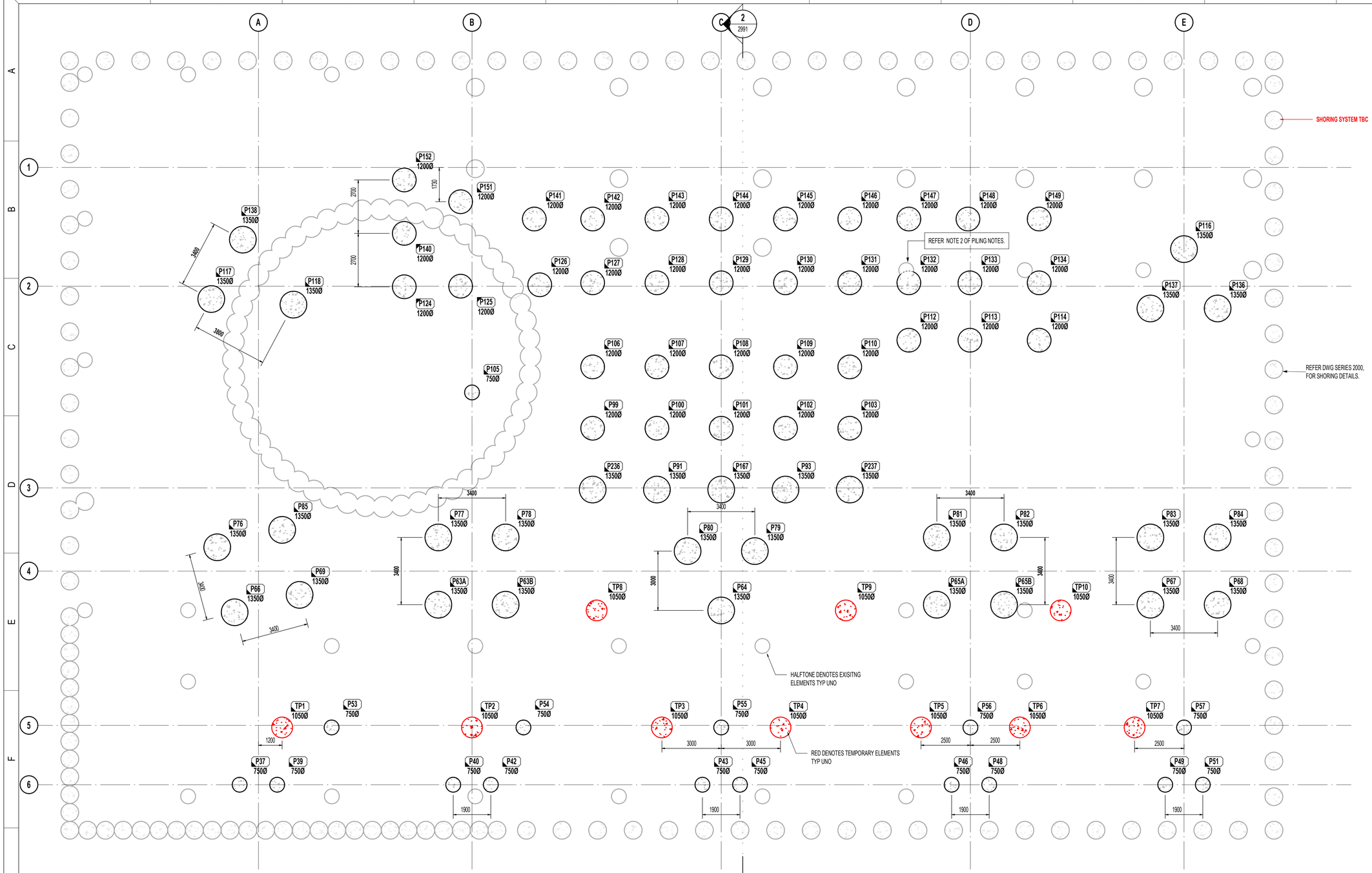
DRAWING TITLE
PROJECT SCHDULES

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-1010
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



PILING NOTES:

1. ALL PILE TOE LEVELS SHOWN IN PILE SCHEDULE BASED ON GEOTECHNICAL ENGINEER'S INPUT FOR 50% DD FINAL TOE LEVELS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER.
2. CONTRACTOR TO ALLOW FOR ADDITIONAL COST FOR REMOVAL OF EXISTING PILES WHERE REQUIRED.
3. CONTRACTOR TO ALLOW FOR DEBONDING OF PILES AS REQUIRED FOR PILES WITHIN ZONE OF INFLUENCE TO NEIGHBOURING STRUCTURES BASED ON GEOTECHNICAL ADVICE.

PILE SCHEDULE

MARK	SIZE	PILE TOE LEVEL (mRL)
P37	750	-12.000
P39	750	-12.000
P40	750	-12.000
P42	750	-12.000
P43	750	-11.000
P45	750	-11.000
P46	750	-10.000
P48	750	-10.000
P49	750	-10.000
P51	750	-10.000
P53	750	-12.000
P54	750	-12.000
P55	750	-11.000
P56	750	-10.000
P57	750	-10.000
P63A	1350	-32.800
P63B	1350	-32.800
P64	1350	-32.700

PILE SCHEDULE

MARK	SIZE	PILE TOE LEVEL (mRL)
P65A	1350	-32.700
P65B	1350	-32.700
P66	1350	-32.500
P67	1350	-32.800
P68	1350	-32.800
P69	1350	-32.500
P76	1350	-32.500
P77	1350	-32.800
P78	1350	-32.800
P79	1350	-32.700
P80	1350	-32.700
P81	1350	-32.700
P82	1350	-32.700
P83	1350	-32.800
P84	1350	-32.800
P85	1350	-32.500
P91	1350	-32.000

PILE SCHEDULE

MARK	SIZE	PILE TOE LEVEL (mRL)
P93	1350	-32.000
P99	1200	-30.400
P100	1200	-30.400
P101	1200	-30.400
P102	1200	-30.400
P103	1200	-30.400
P105	750	-12.800
P106	1200	-30.400
P107	1200	-30.400
P108	1200	-30.400
P109	1200	-30.400
P110	1200	-30.400
P112	1200	-30.900
P113	1200	-29.500
P114	1200	-29.500
P116	1350	-16.500
P117	1350	-32.800

PILE SCHEDULE

MARK	SIZE	PILE TOE LEVEL (mRL)
P118	1350	-32.800
P124	1200	-34.800
P125	1200	-31.400
P126	1200	-31.400
P127	1200	-31.400
P128	1200	-31.400
P129	1200	-31.400
P130	1200	-31.400
P131	1200	-31.400
P132	1200	-30.000
P133	1200	-30.000
P134	1200	-30.000
P136	1350	-16.500
P137	1350	-16.500
P138	1350	-32.800
P140	1200	-34.800
P141	1200	-30.000

PILE SCHEDULE

MARK	SIZE	PILE TOE LEVEL (mRL)
P142	1200	-30.000
P143	1200	-30.000
P144	1200	-30.000
P145	1200	-30.000
P146	1200	-30.000
P147	1200	-30.000
P148	1200	-30.000
P149	1200	-30.000
P151	1200	-30.000
P152	1200	-30.000
P167	1350	-32.000
P236	1350	-32.000
P237	1350	-32.000

PILE SCHEDULE

MARK	SIZE	PILE TOE LEVEL (mRL)
TP1	1050	-12.000
TP2	1050	-12.000
TP3	1050	-11.100
TP4	1050	-11.000
TP5	1050	-10.000
TP6	1050	-10.000
TP7	1050	-10.000
TP8	1050	-12.000
TP9	1050	-11.000
TP10	1050	-10.000

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
PILING GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

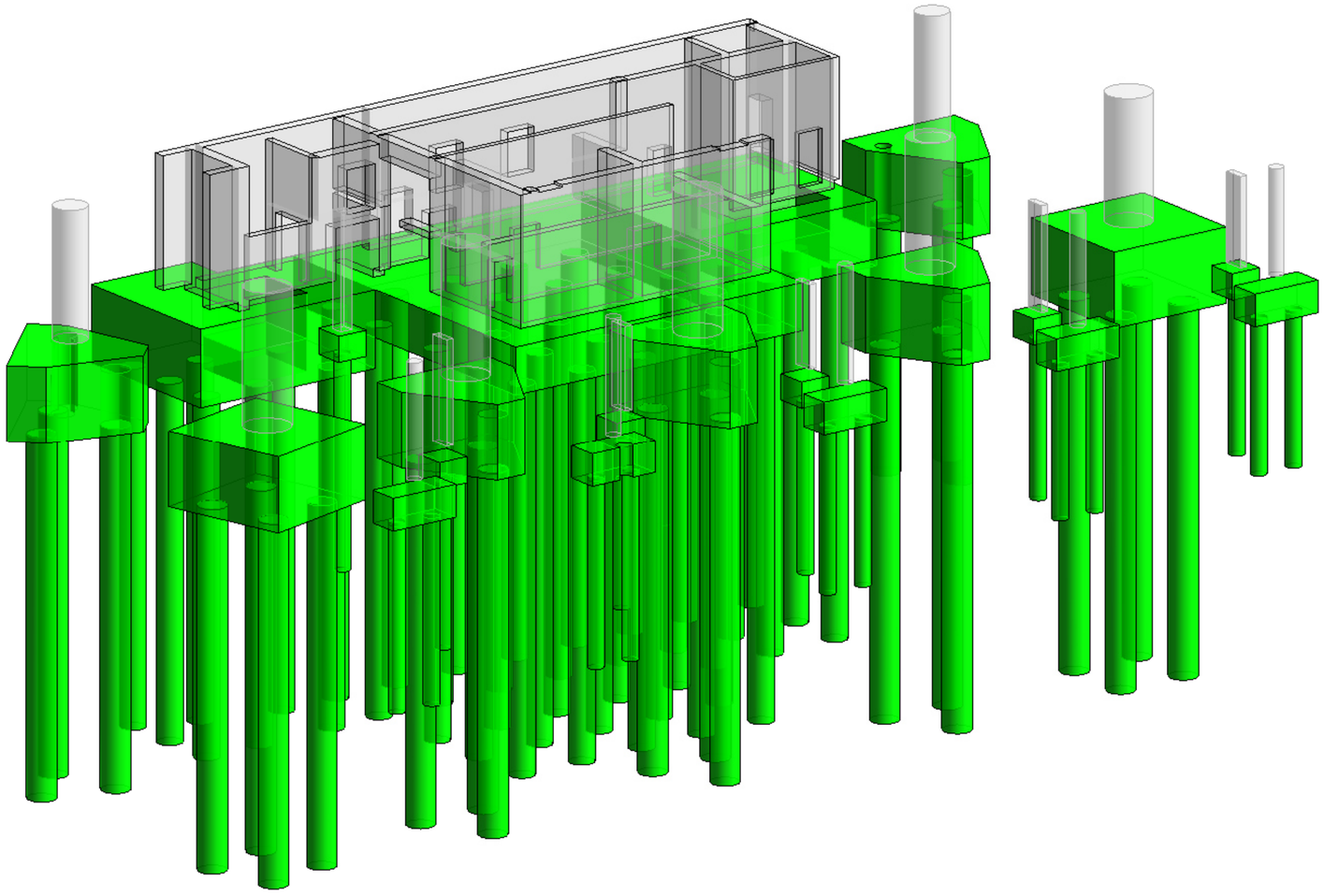
PROJECT NUMBER 24111

DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-2051

REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200



ISOMETRIC VIEW

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
FOUNDATION - ISOMETRIC VIEW

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-2500	A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

REFER TO **DWG SERIES HERA-DRG-STR-2000** FOR SHORING

SHORING SYSTEM TBC

3600

700

2200

CW1 550 THK

CW7 600 THK

1500

STEP

CW8 350 THK

CW2 600 THK

SOFFIT

CW4 600 THK

CW6 600 THK

3000

CW9 400 THK

CW10 300 THK

CW3 500 THK

CW14 300 THK

CW15 300 THK

PC3c - 6500x 6100x 3500D

C06
1600 Ø
INSITU

HOLD : PILE ARRANGEMENT TBC

PC3a - 5700x 6100x 3500D

C07
1600 Ø
INSITU

PC1b - 1500x 1500x 1200D

CC3
600 x 600
INSITU

CW11 300 THK

CW12 500 THK

CW13 600 THK

CW6 500 THK

625

SPIRAL LIGS TO BE PROVIDED DIAGONALLY BETWEEN COLUMN TO EACH PILES FOR 4 PILE GROUP AND 3 PILE GROUP. ALLOW FOR ADDITIONAL COMPLEXITY FOR REINFORCEMENT FIXING.

DENOTES EXISTING CRR SHAFT AND ADIT STRUCTURE

PC4b - 6100x 6100x 3500D

15°

C01
2200 Ø
INSITU

PC4a - 6100x 6100x 3500D

C02
2200 Ø
INSITU

C03
2200 Ø
INSITU

PC3b - 5700x 6100x 3500D

C04
2200 Ø
INSITU

C05
2200 Ø
INSITU

TC1

LICENSED CONSTRUCTION AREA (LCA)

FOUNDATION TO BE TIED TO HYDROSTATIC SLAB OVER WITH SHEAR TIES. DETAILS TBC.

DENOTES EXISTING CRR ACCOUSTIC SHED FOUNDATION

REFER TO DWG **HER-DRG-STR- 2051** FOR PILING.
ALL PLUNGE COLUMNS TO BE CENTERED ON PILES.

PC1a - 1500x 1500x 1200D

CC1
1000 x 350
INSITU

TC2

PC2a - 1500x 3400x 1500D

C08
700 Ø
INSITU

C09
700 Ø
INSITU

C10
700 Ø
INSITU

C11
700 Ø
INSITU

C12
700 Ø
INSITU

IN-GROUND TANK LOCATION TBC TYP.

FOUNDATIONS ARRANGEMENT LEGEND:

- DENOTES INSITU CONCRETE ELEMENT
- DENOTES PRECAST ELEMENT
- DENOTES AFS ELEMENT
- DENOTES BLOCKWORK ELEMENT
- DENOTES BRICKWORK ELEMENT
- THK / RAFT / MPa — DENOTES MINIMUM RAFT THICKNESS AND CONCRETE STRENGTH (IF APPLICABLE)
- STEP — DENOTES RAFT STEP
- SOFFIT — DENOTES RAFT SOFFIT STEP
- TAG / L x W or Ø / SLANTED — DENOTES COLUMN NUMBER AND SIZE
- CnWn n THK — DENOTES WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION
- SCn — DENOTES STEEL COLUMN NUMBER

FOUNDATIONS LOAD ARRANGEMENT LEGEND:

- DENOTES INSITU CONCRETE ELEMENT
- DENOTES PRECAST ELEMENT
- DENOTES AFS ELEMENT
- DENOTES BLOCKWORK ELEMENT
- DENOTES BRICKWORK ELEMENT
- SFn/PFn LD01 — DENOTES FOUNDATION NUMBER AND LOAD I.D.
- TAG / LD01 — DENOTES COLUMN NUMBER AND LOAD I.D.
- CnWn LD01 — DENOTES WALL NUMBER AND LOAD I.D.

Fy, My, Fz, Mz, Fx, Mx

RIGHT HAND RULE APPLIES

LOAD COMBINATION SYMBOL

REFER TO SEPARATE LOAD DOCUMENT NUMBER XXXX REVISION XXX FOR LOADS.

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
FOUNDATION - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

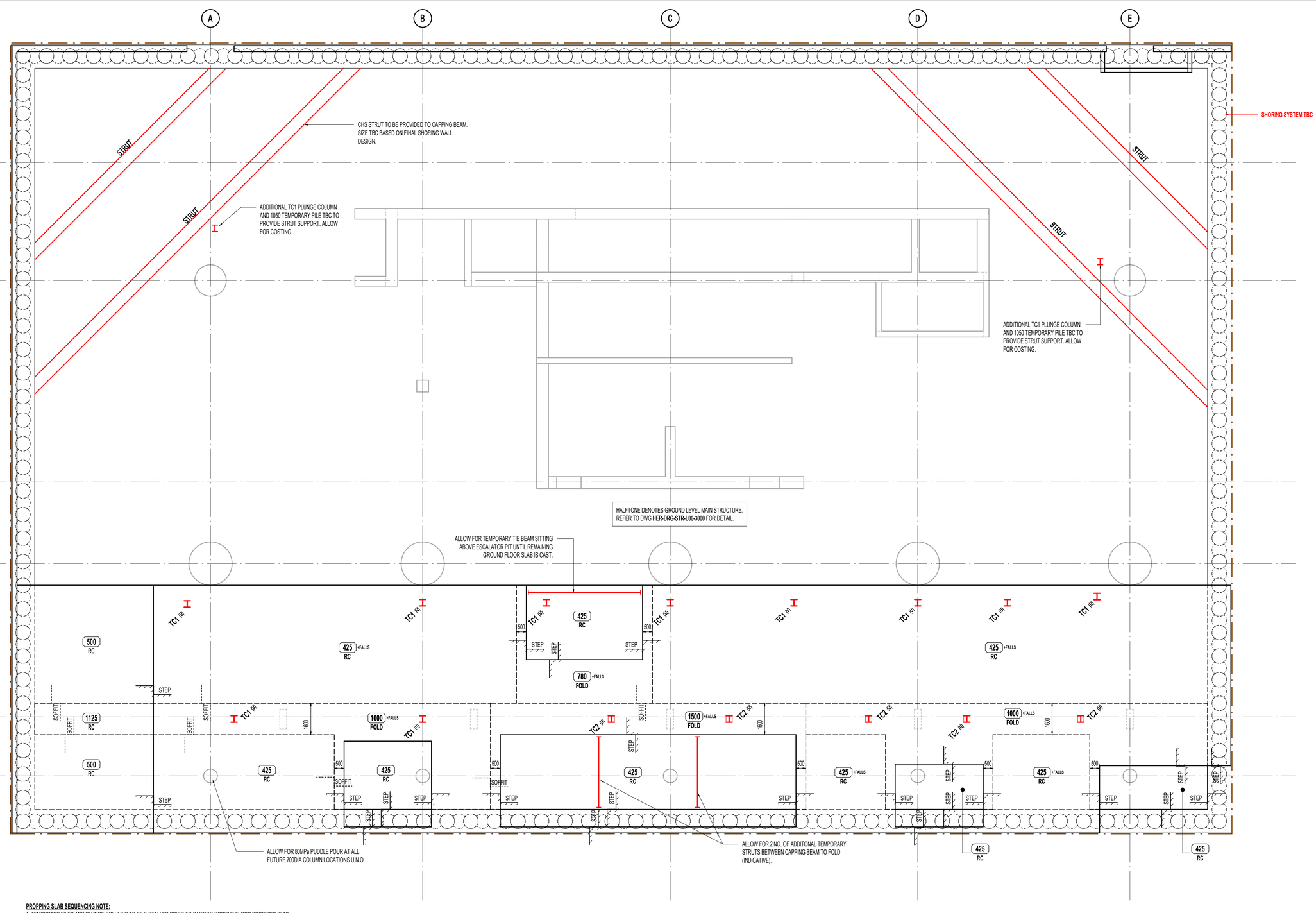
SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 | DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-2501 | REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



PROPPING SLAB SEQUENCING NOTE:

1. TEMPORARY PILES AND PLUNGE COLUMNS TO BE INSTALLED PRIOR TO CASTING GROUND FLOOR PROPPING SLAB
2. GROUND FLOOR PROPPING SLAB TO BE CAST AND USED AS CONSTRUCTION PLATFORM
3. EXCAVATE DOWN BULK EXCAVATION LEVEL TO CONSTRUCT FOUNDATIONS AND BASEMENT 1 SLAB
4. BUILD PERMANENT BASEMENT 1 COLUMNS TO SUPPORT GROUND FLOOR SLAB. FORMWORK PROPS TO REMAIN AS REQUIRED.
5. CUT PLUNGE COLUMNS AND MAKE GOOD CUT SURFACES. DETAILS TBC.

TRUE NORTH | PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
GROUND LEVEL PROPPING SLAB

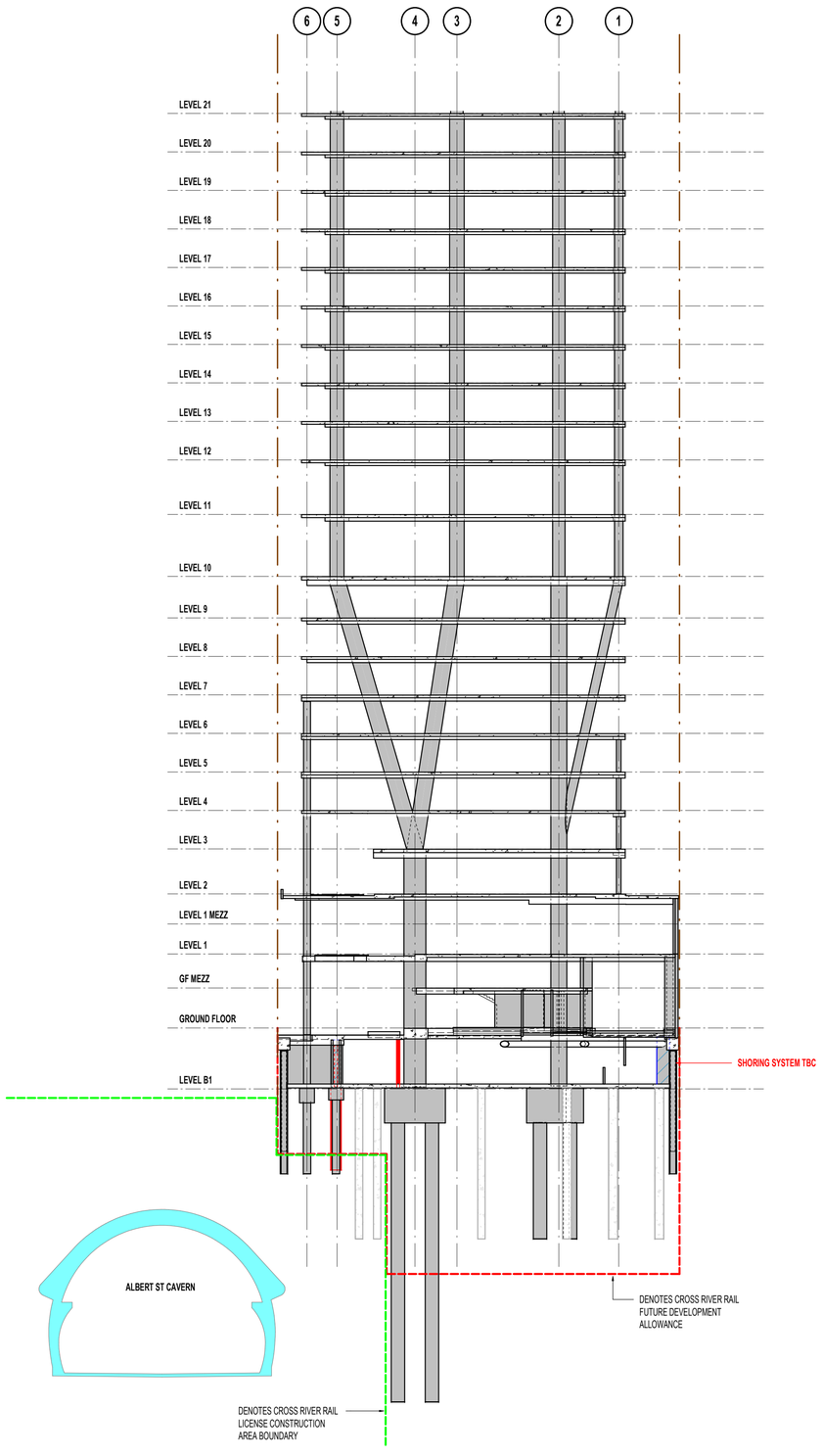
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 | DWG SIZE A1

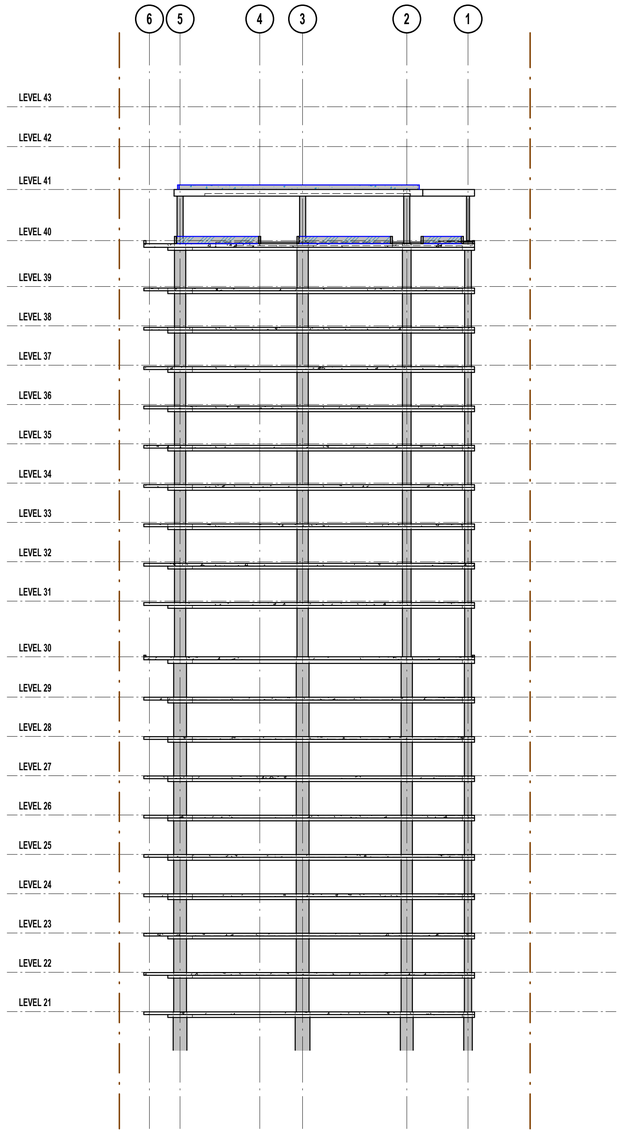
DRAWING NUMBER HER-DRG-STR-2901 | REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200



SECTION - GRID E

SCALE 1 : 300



SECTION - GRID E CONTINUED

SCALE 1 : 300

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
BUILDING SECTION - GRID E

PROJECT STATUS
FOR DESIGN DEVELOPMENT

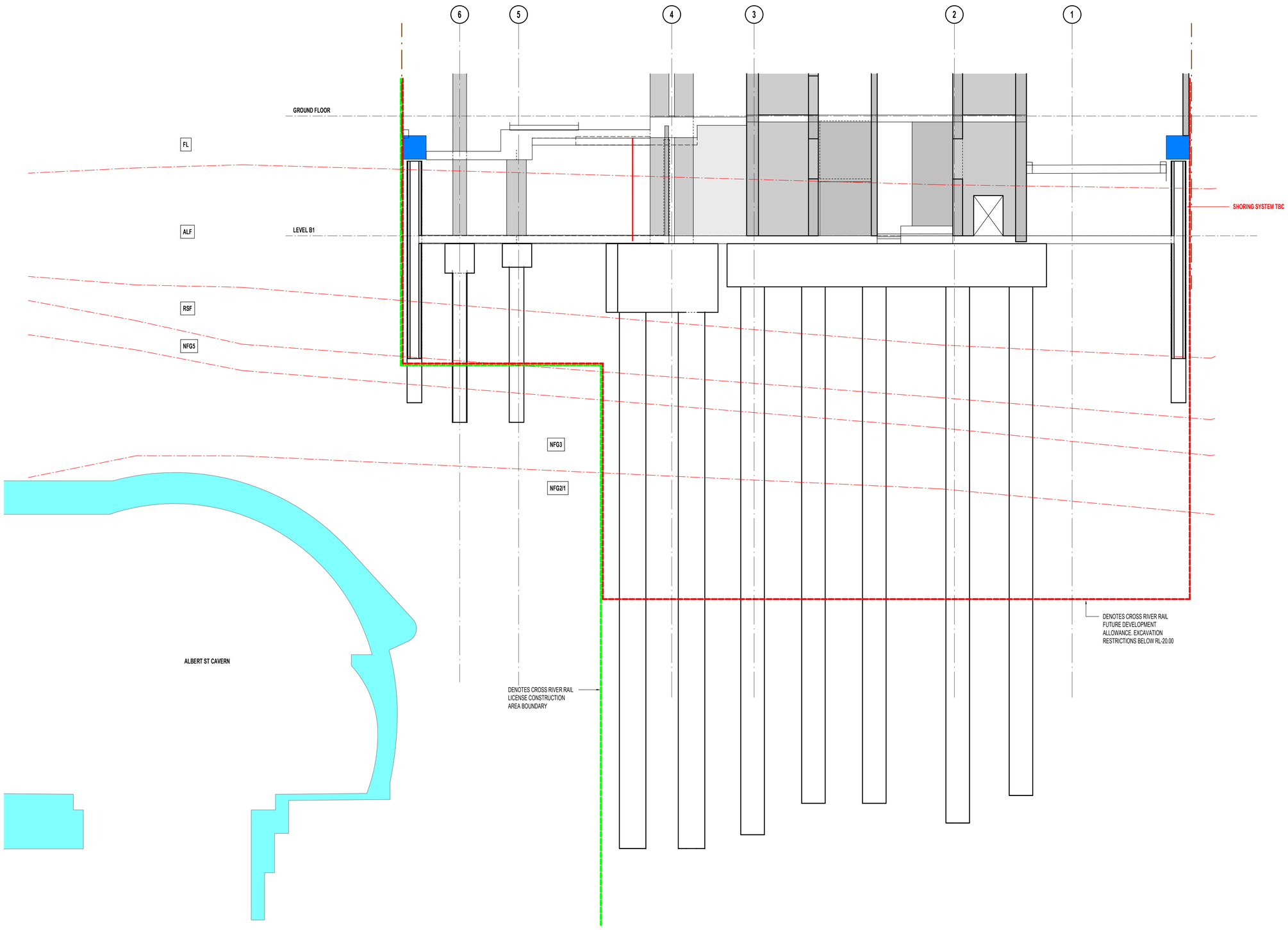
SCALE		
1 : 300	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-2990	A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



SECTION - GRID C
SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
BUILDING SECTION - GRID C

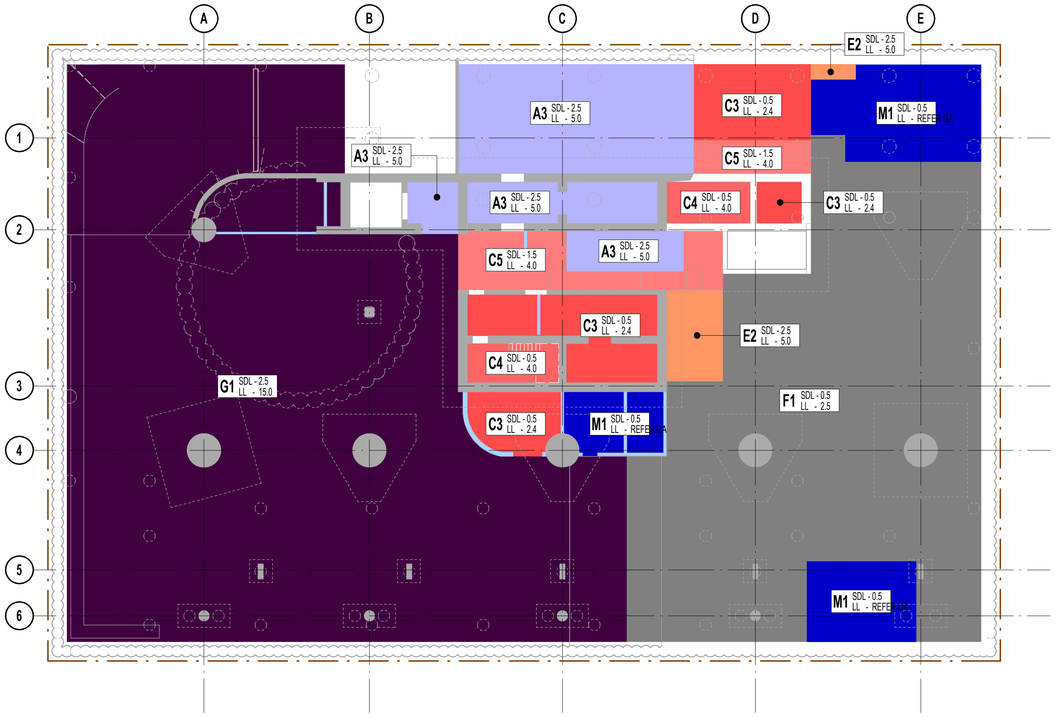
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-2991	A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



BASEMENT LEVEL 01 - LOADING PLAN

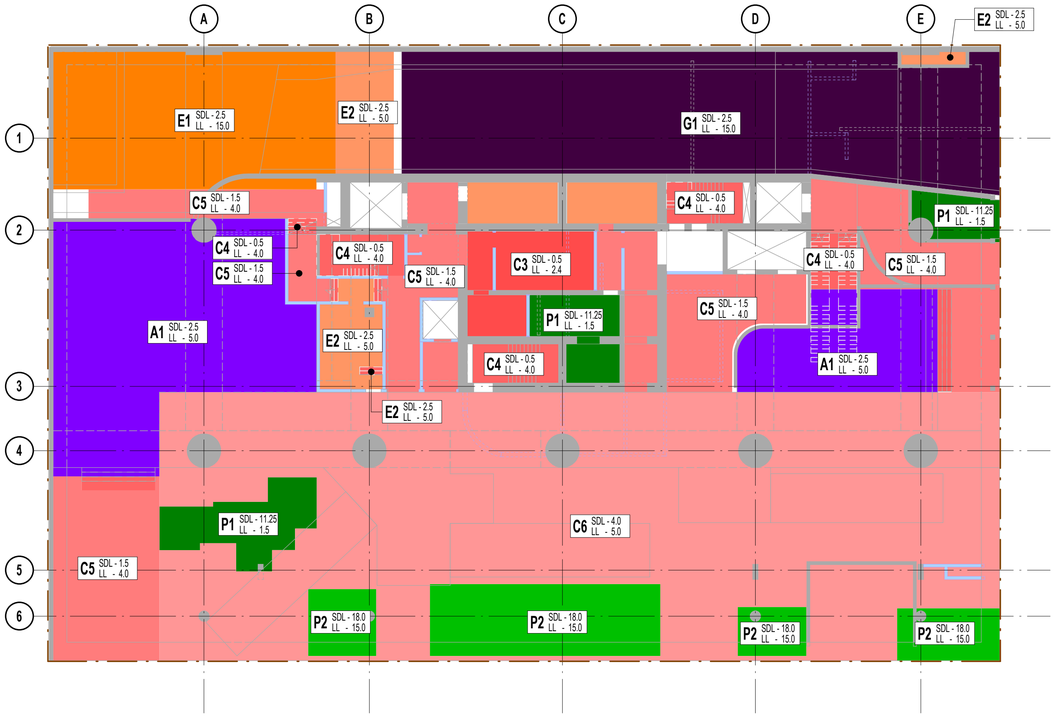
SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES + CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

LOADING PLAN SCHEDULE

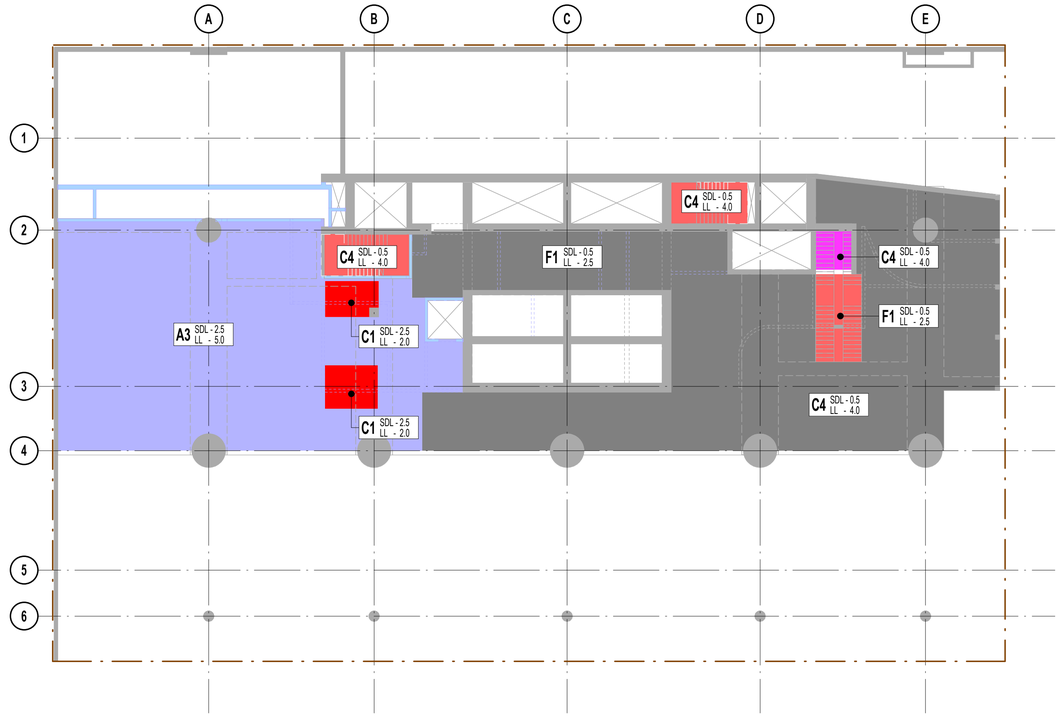
MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS



GROUND LEVEL - LOADING PLAN

SCALE 1 : 200

NOTE: CONSTRUCTION LOADING FROM GRID LINE 4 TO MARY ST BOUNDARY TBC



MEZZANINE - LOADING PLAN

SCALE 1 : 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LOADING PLANS - SHEET 1

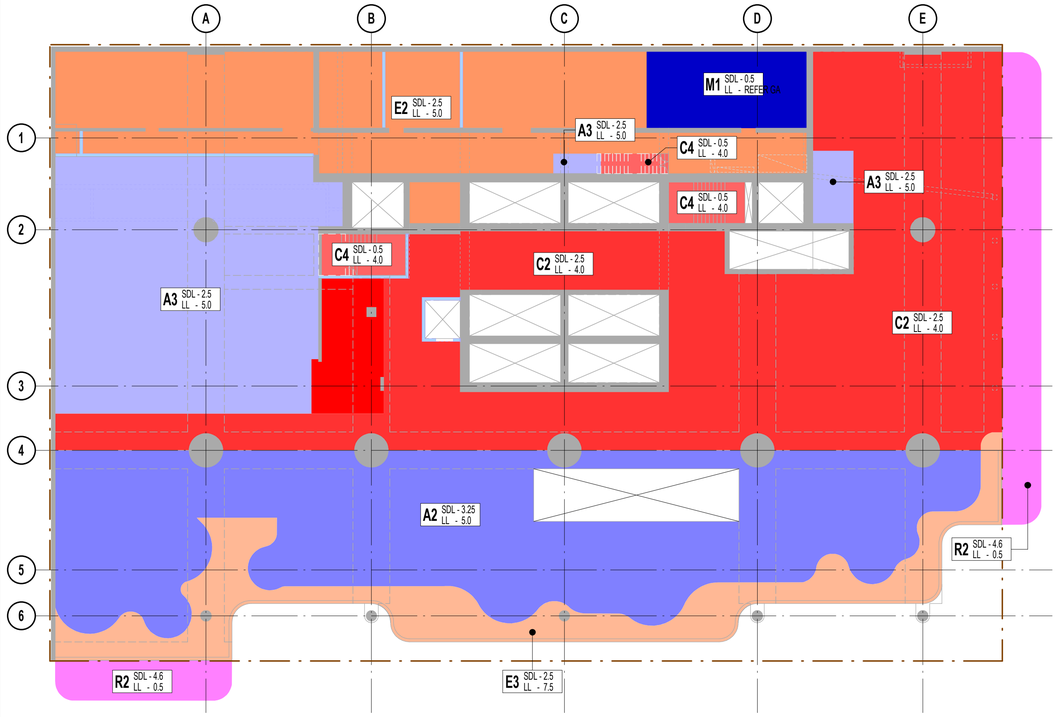
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-3900	A

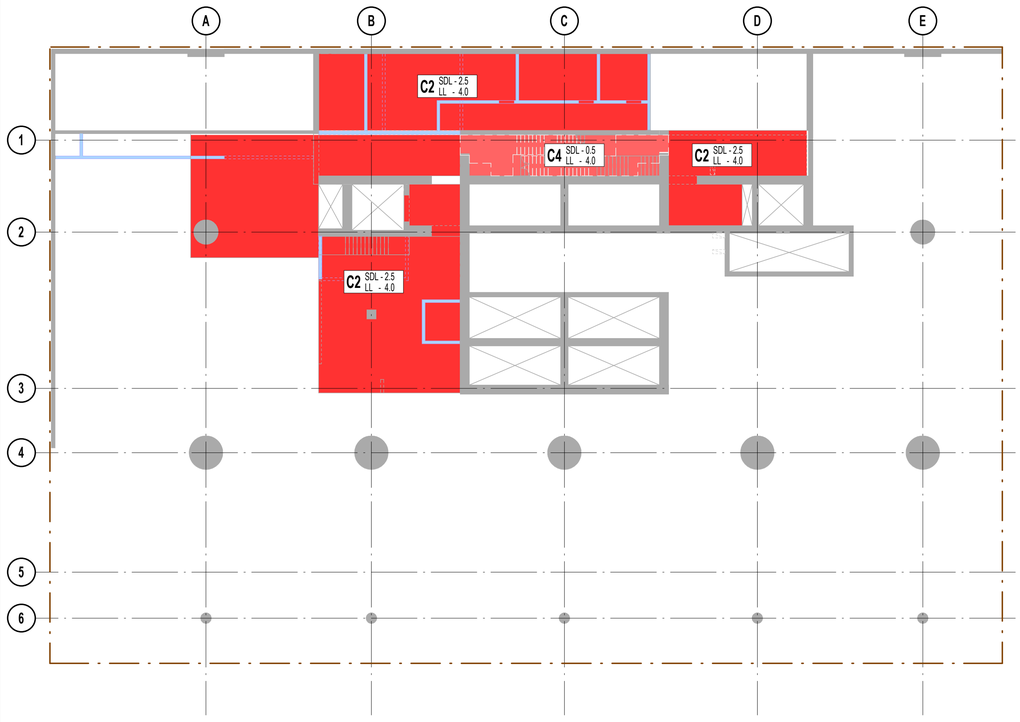
DRAWINGS ARE TO BE PRINTED IN COLOUR

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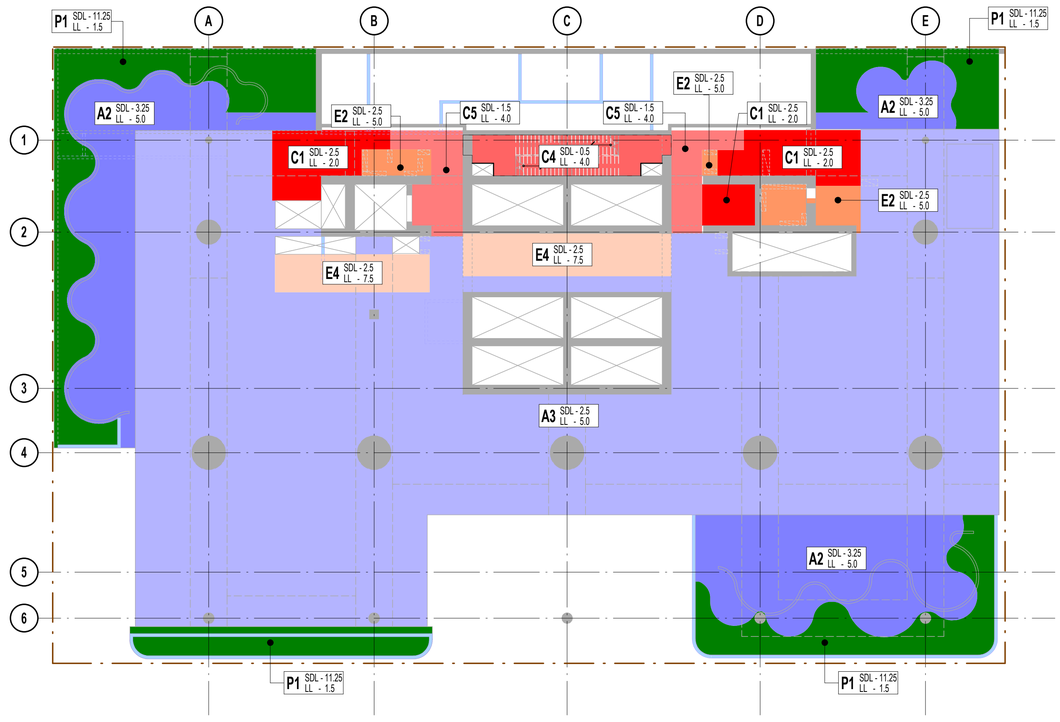
LEVEL 1 OFFICE LOBBY - LOADING PLAN

SCALE 1 : 200



LEVEL 1 MEZZANINE SERVICES - LOADING PLAN

SCALE 1 : 200



LEVEL 2 LOW RISE - LOADING PLAN

SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES + CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS

TRUE NORTH PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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www.multiplex.global/au/

PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LOADING PLANS - SHEET 2

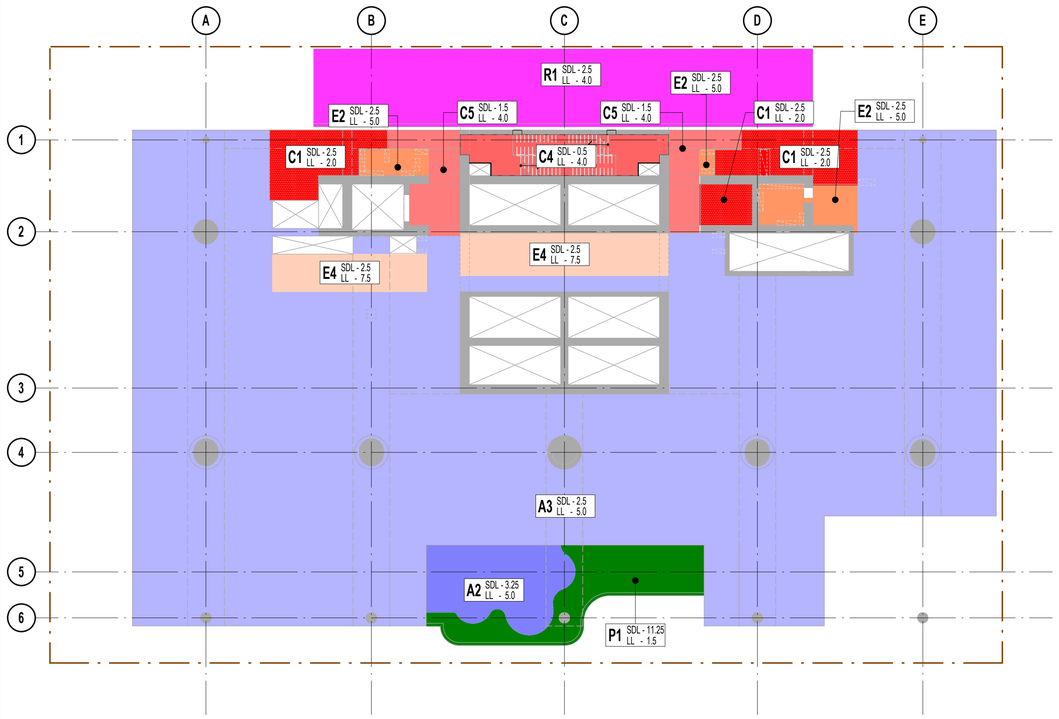
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-3901
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR

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LEVEL 3 LOW RISE RAKING - LOADING PLAN

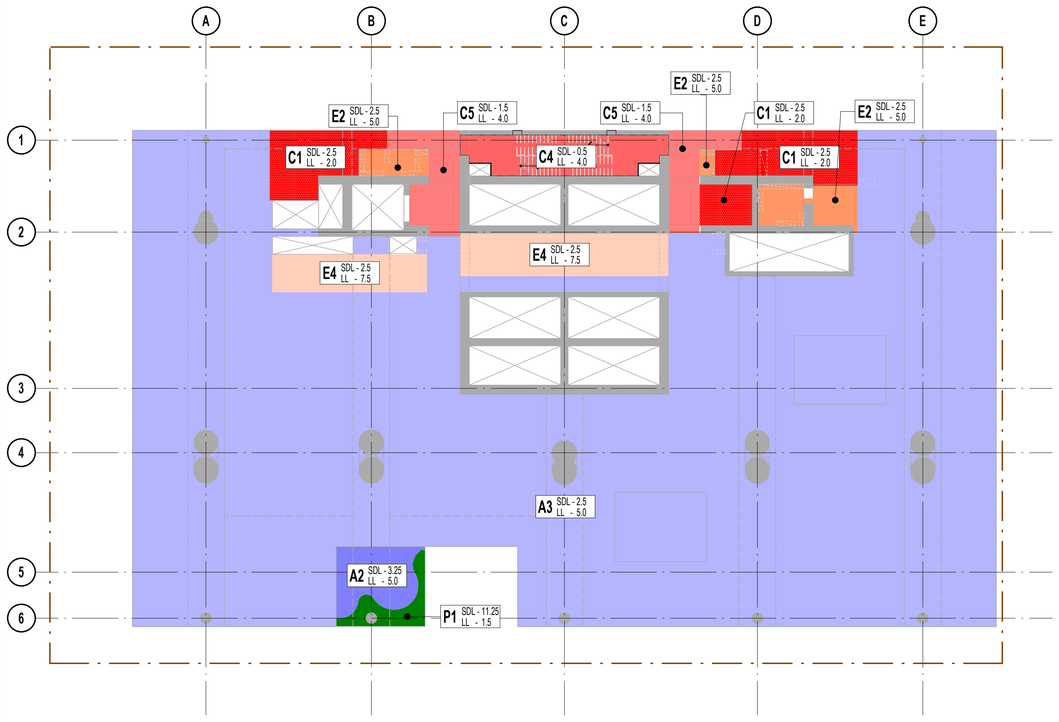
SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES + CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

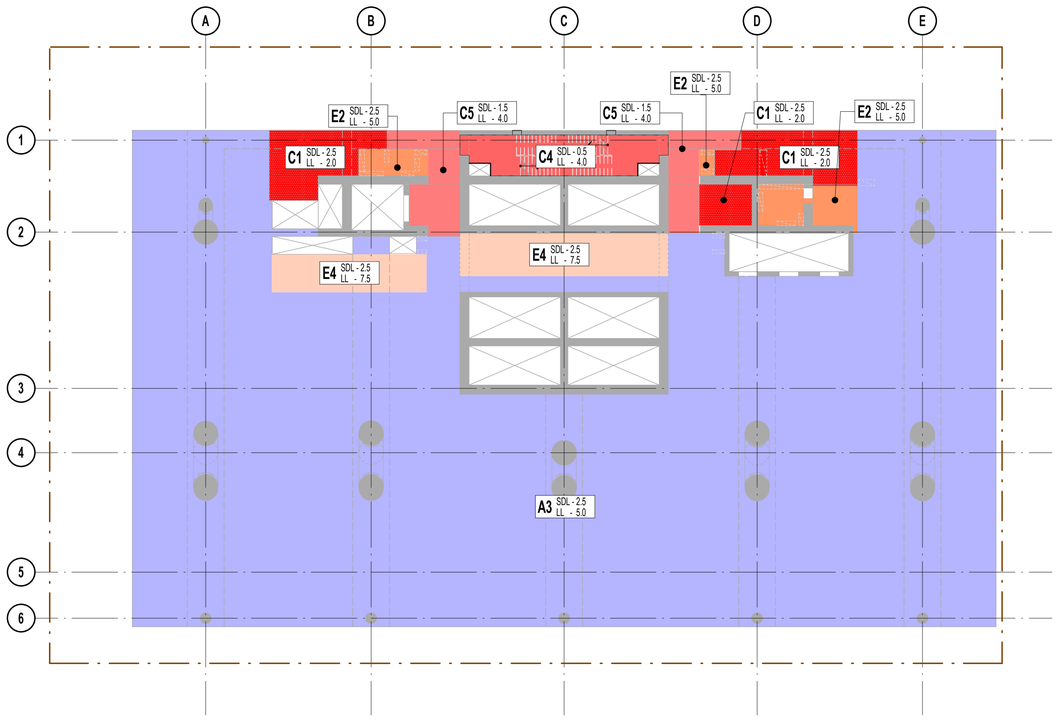
LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS



LEVEL 4 LOW RISE RAKING - LOADING PLAN

SCALE 1 : 200



LEVEL 5 LOW RISE RAKING - LOADING PLAN

SCALE 1 : 200

TRUE NORTH PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

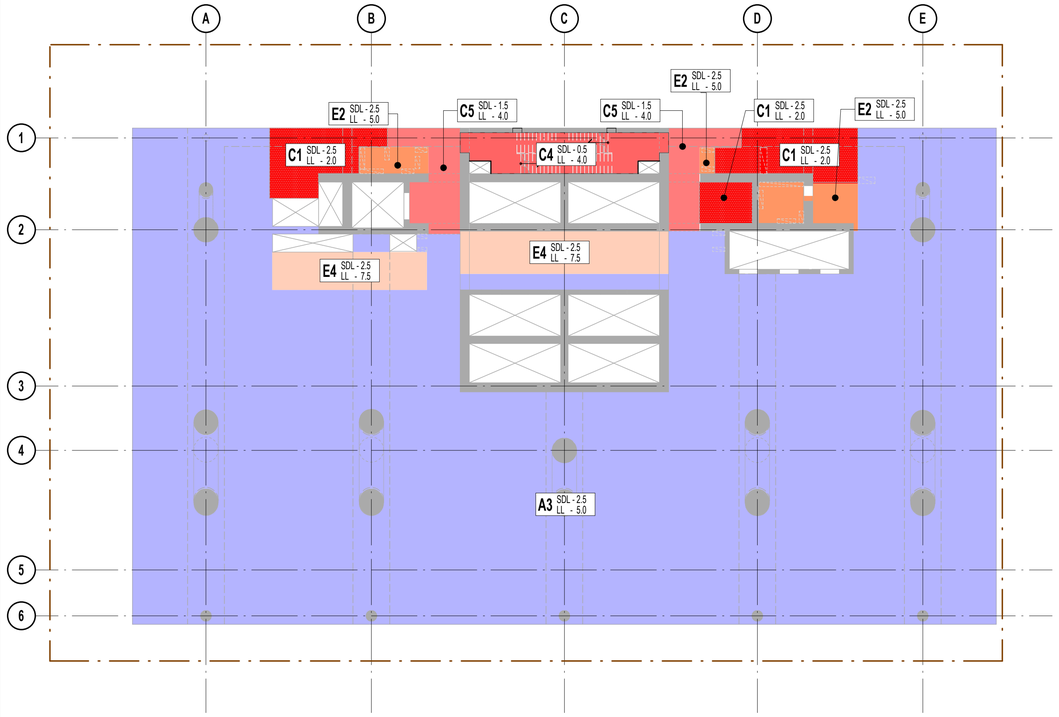
DRAWING TITLE
LOADING PLANS - SHEET 3

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-3902
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



LEVEL 6 LOW RISE RAKING - LOADING PLAN

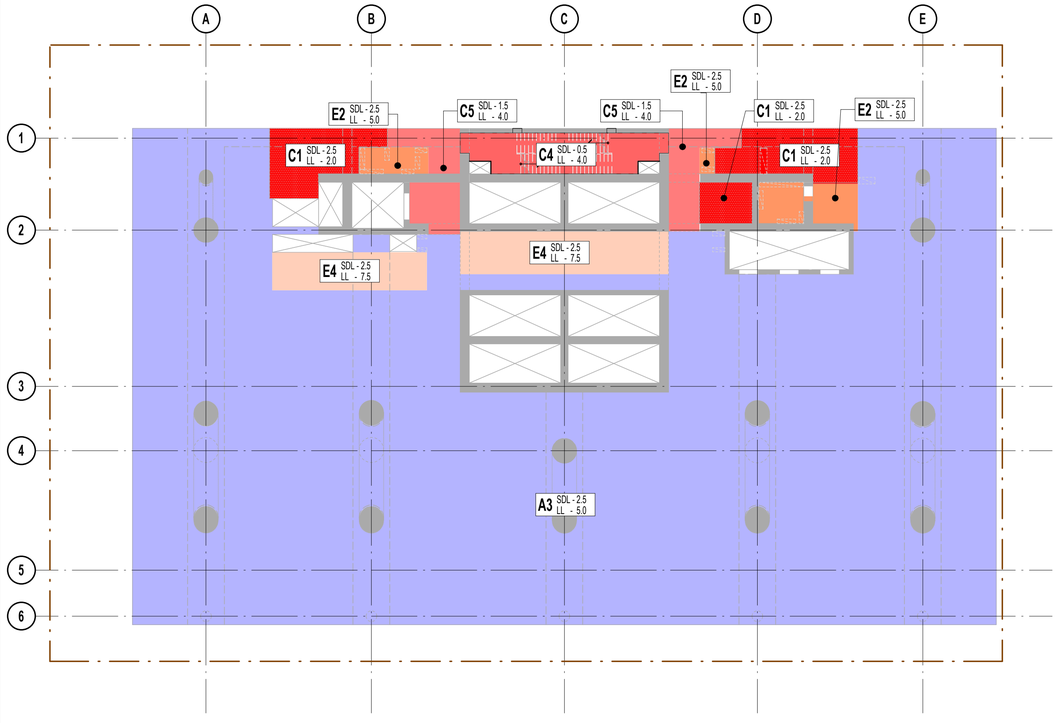
SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES + CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

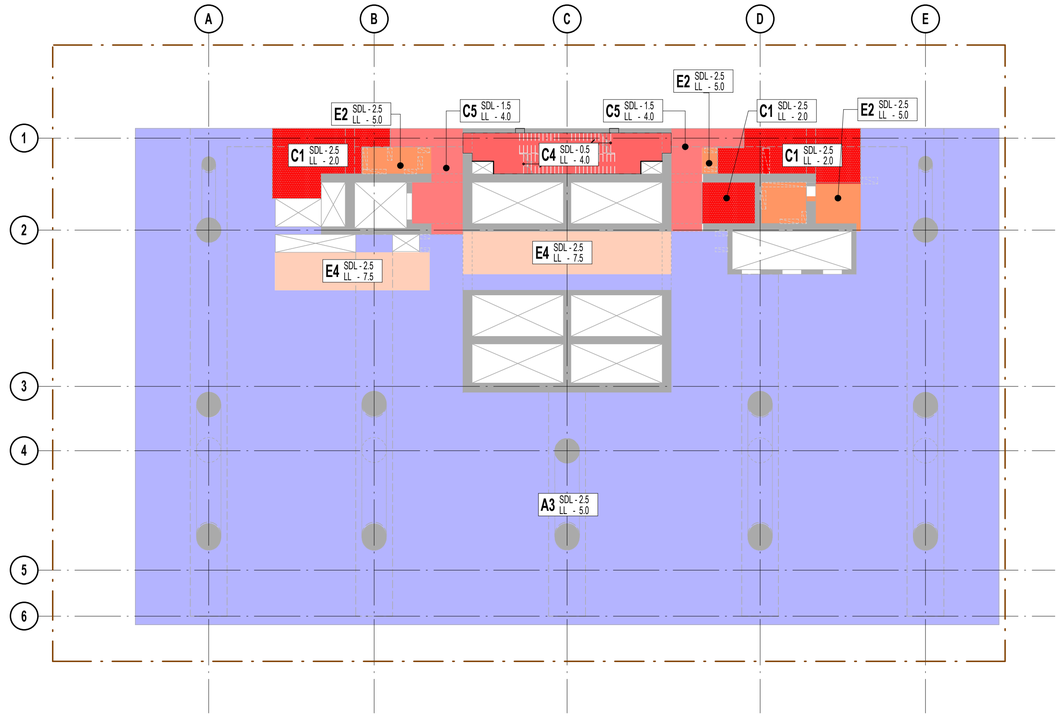
LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS



LEVEL 7 LOW RISE RAKING - LOADING PLAN

SCALE 1 : 200



LEVEL 8 LOW RISE RAKING - LOADING PLAN

SCALE 1 : 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LOADING PLANS - SHEET 4

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111

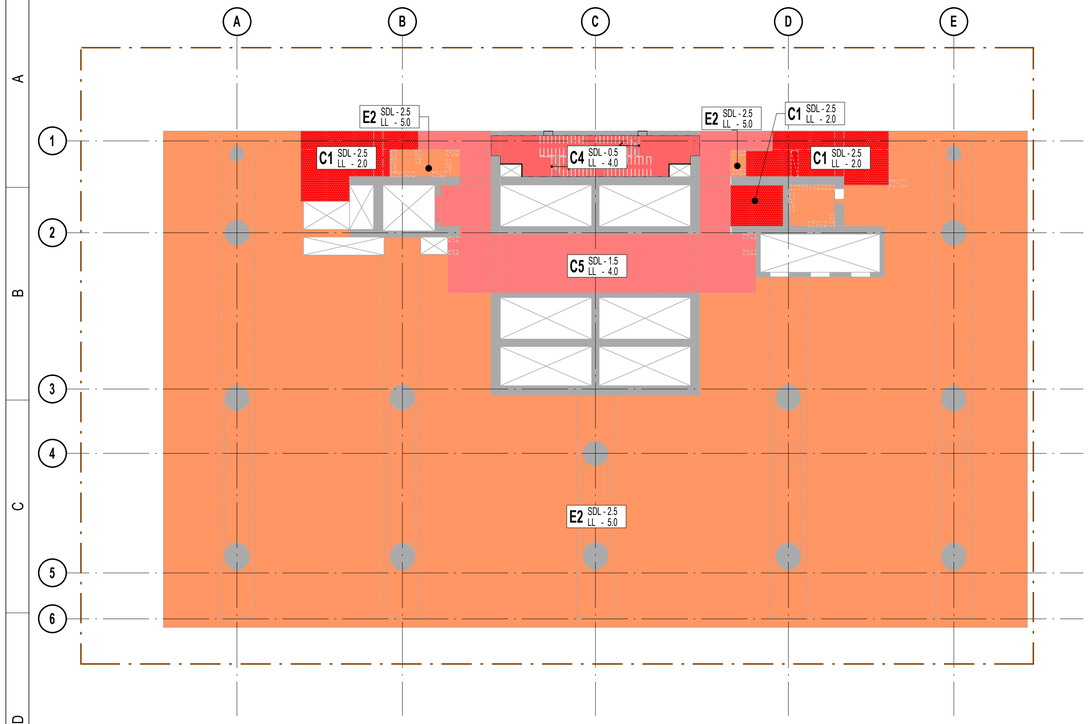
DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-3903

REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR

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LEVEL 9 LOW RISE - LOADING PLAN

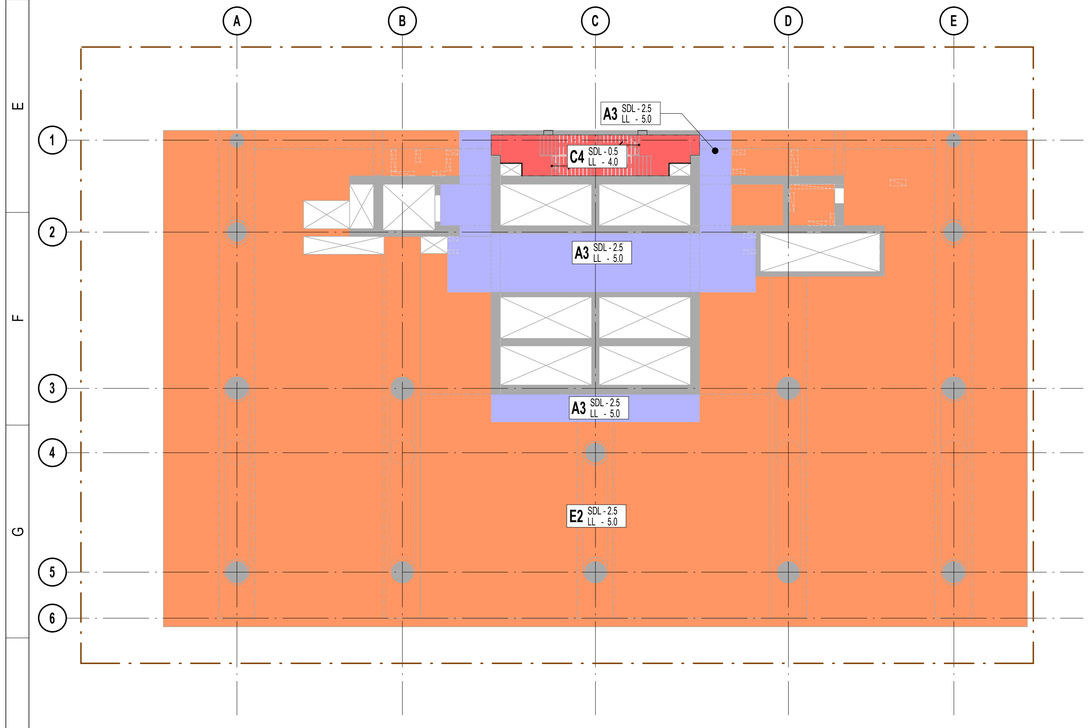
SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES + CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

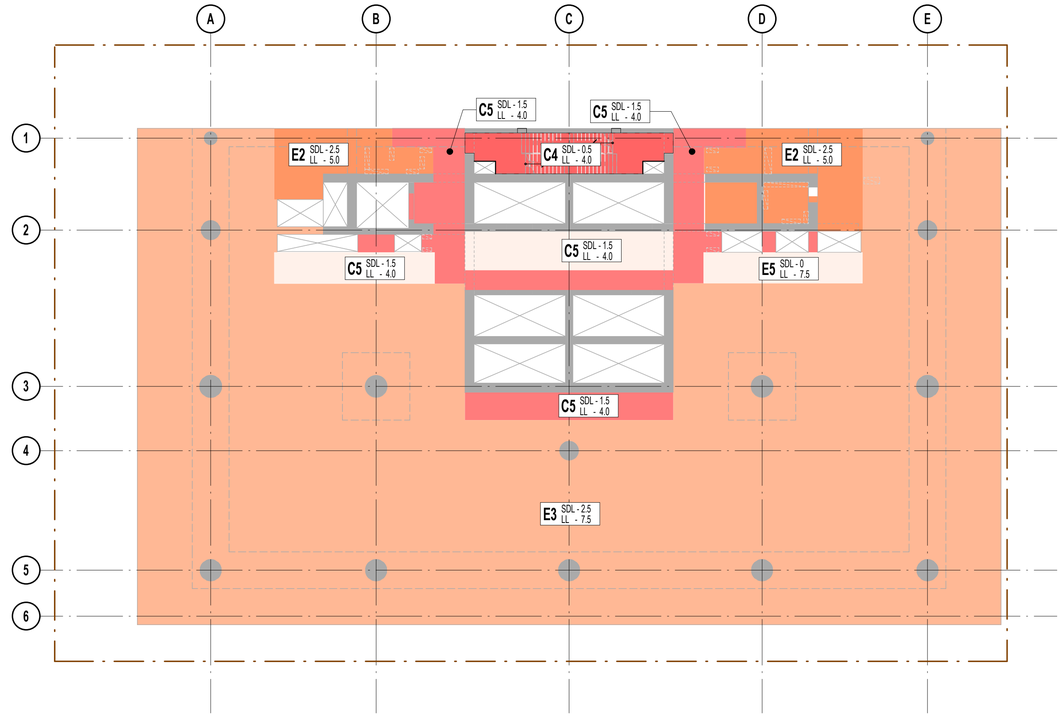
LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS



LEVEL 10 PLANT - LOADING PLAN

SCALE 1 : 200



LEVEL 11 PLANT - LOADING PLAN

SCALE 1 : 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LOADING PLANS - SHEET 5

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111

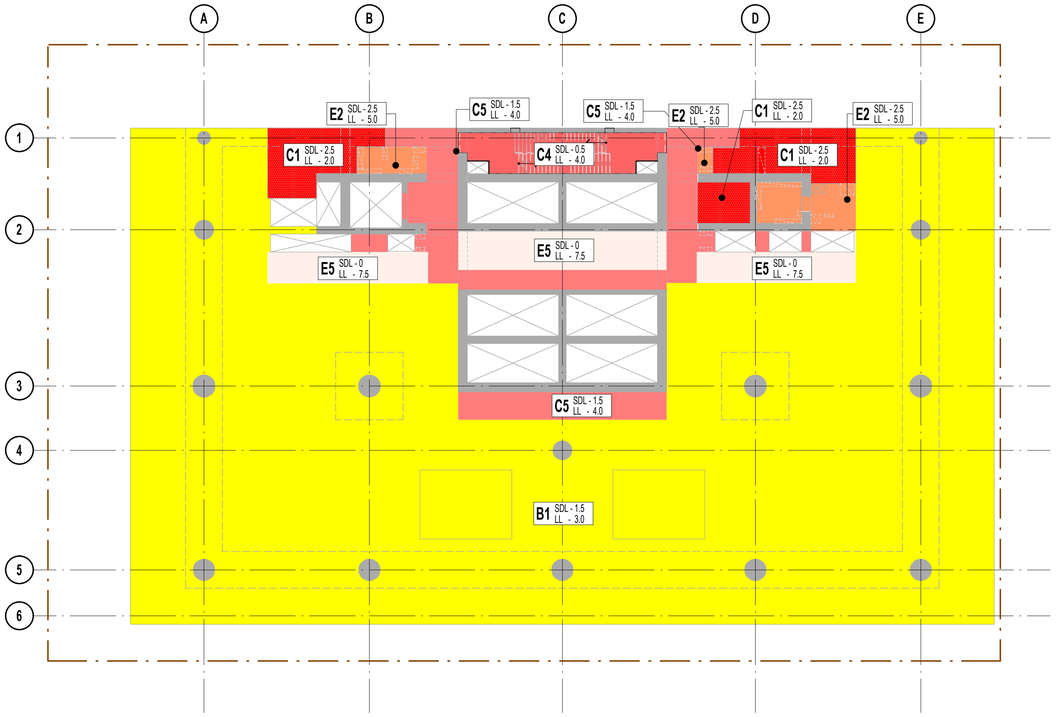
DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-3904

REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



LEVEL 12-19 MID RISE TYPICAL - LOADING PLAN

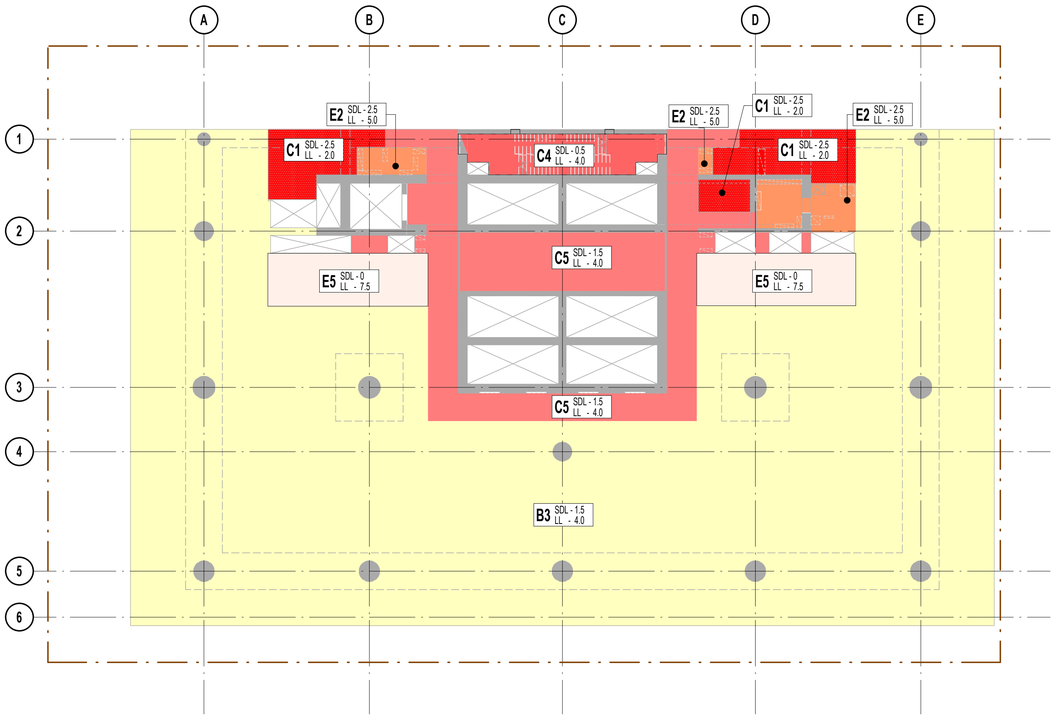
SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES = CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

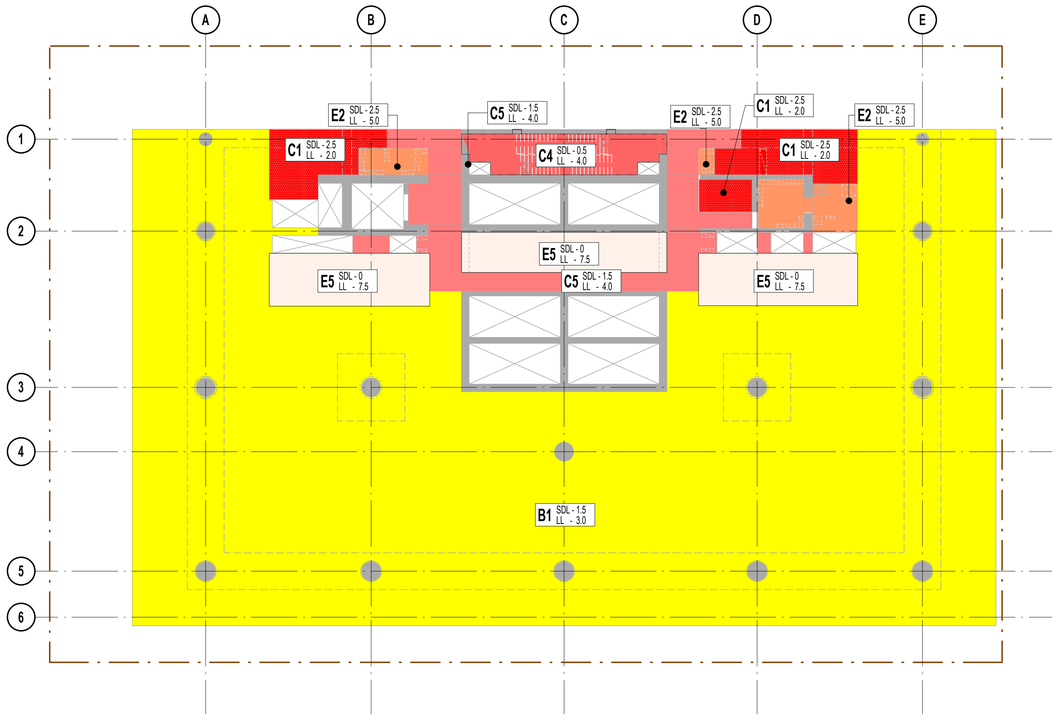
LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS



LEVEL 20 MID RISE TRANSFER - LOADING PLAN

SCALE 1 : 200



LEVEL 21 HIGH RISE OVERRUN - LOADING PLAN

SCALE 1 : 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LOADING PLANS - SHEET 6

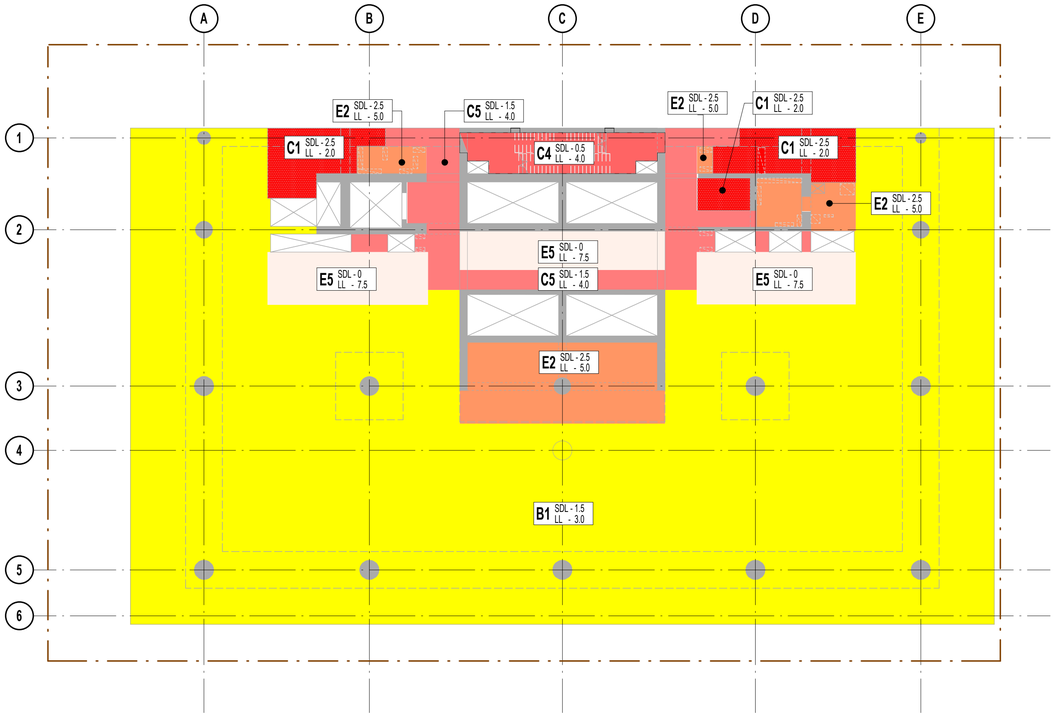
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-3905
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



LEVEL 22 HIGH RISE LMR - LOADING PLAN

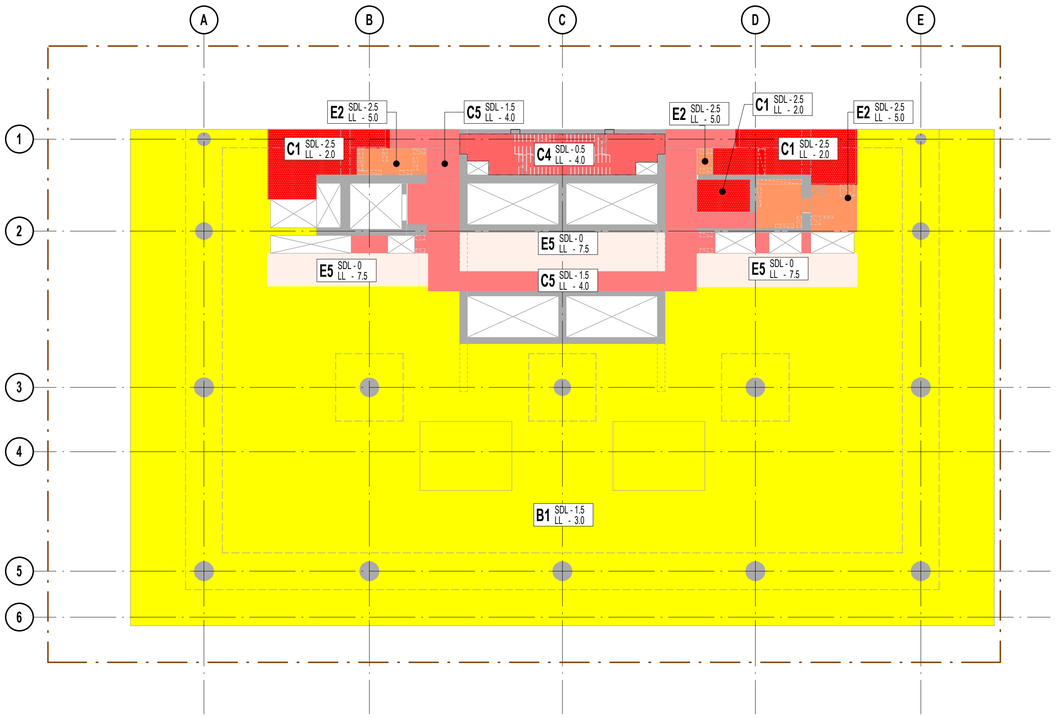
SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES + CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

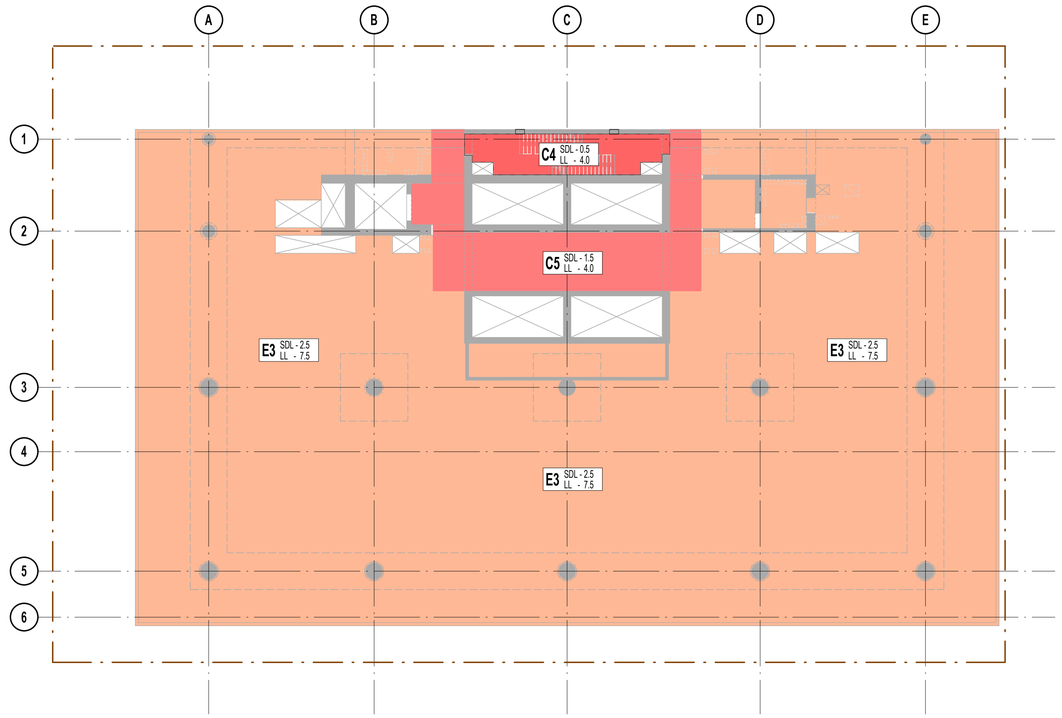
LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS



LEVEL 23-29 HIGH RISE TYPICAL - LOADING PLAN

SCALE 1 : 200



LEVEL 30 PLANT - LOADING PLAN

SCALE 1 : 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LOADING PLANS - SHEET 7

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111

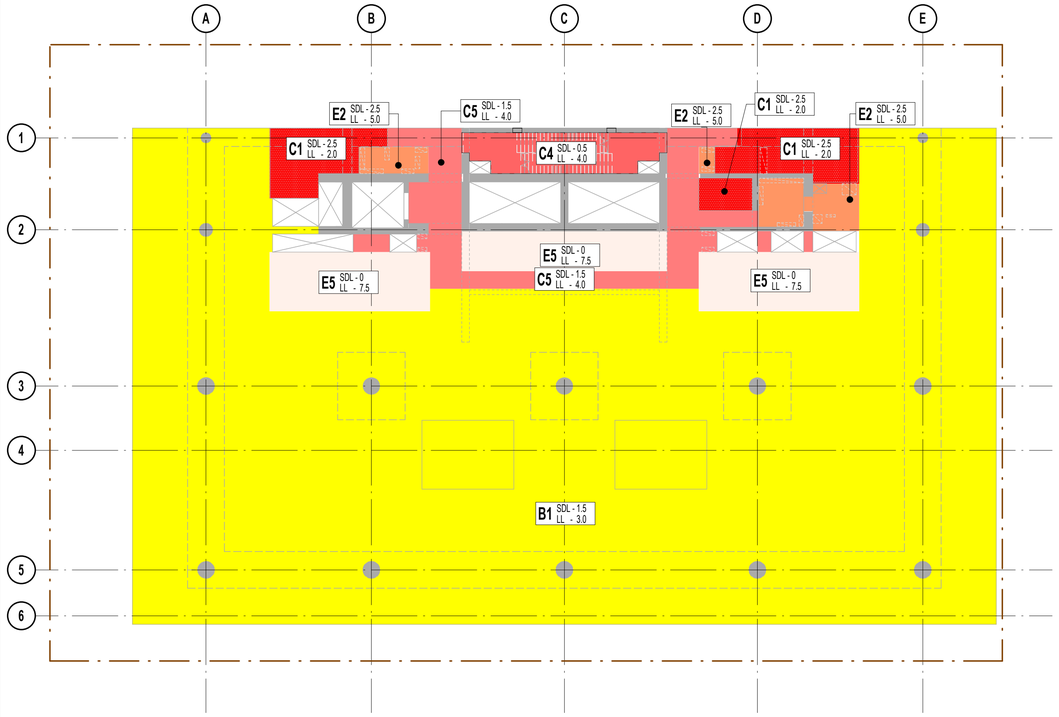
DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-3906

REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR

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LEVEL 31-39 SKY RISE TYPICAL - LOADING PLAN

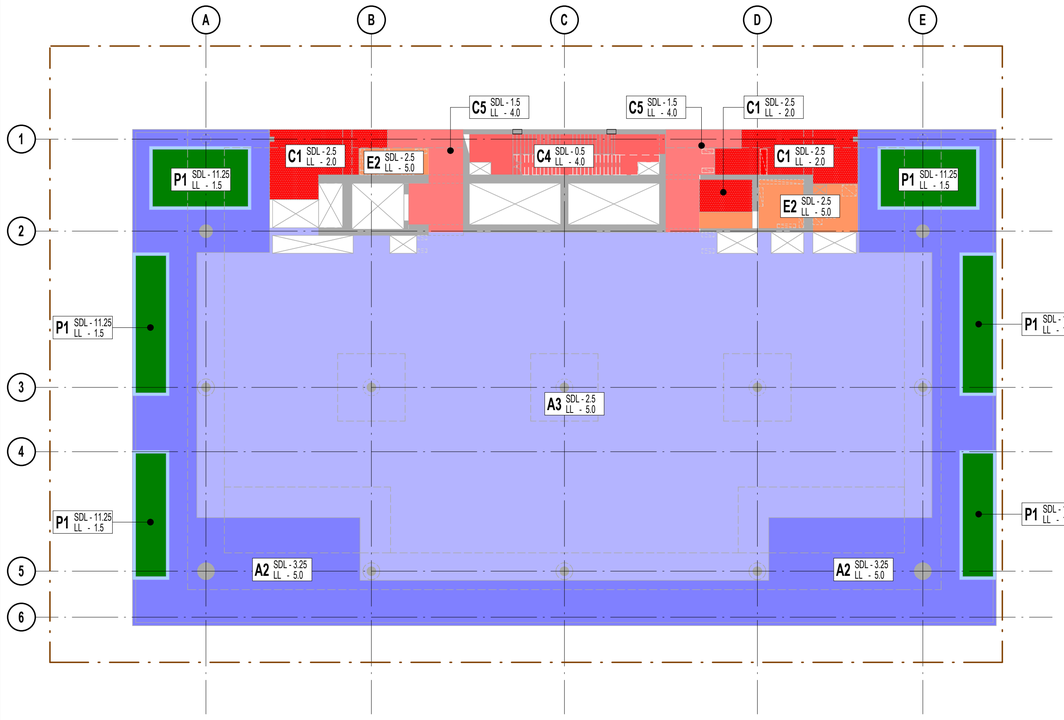
SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES + CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

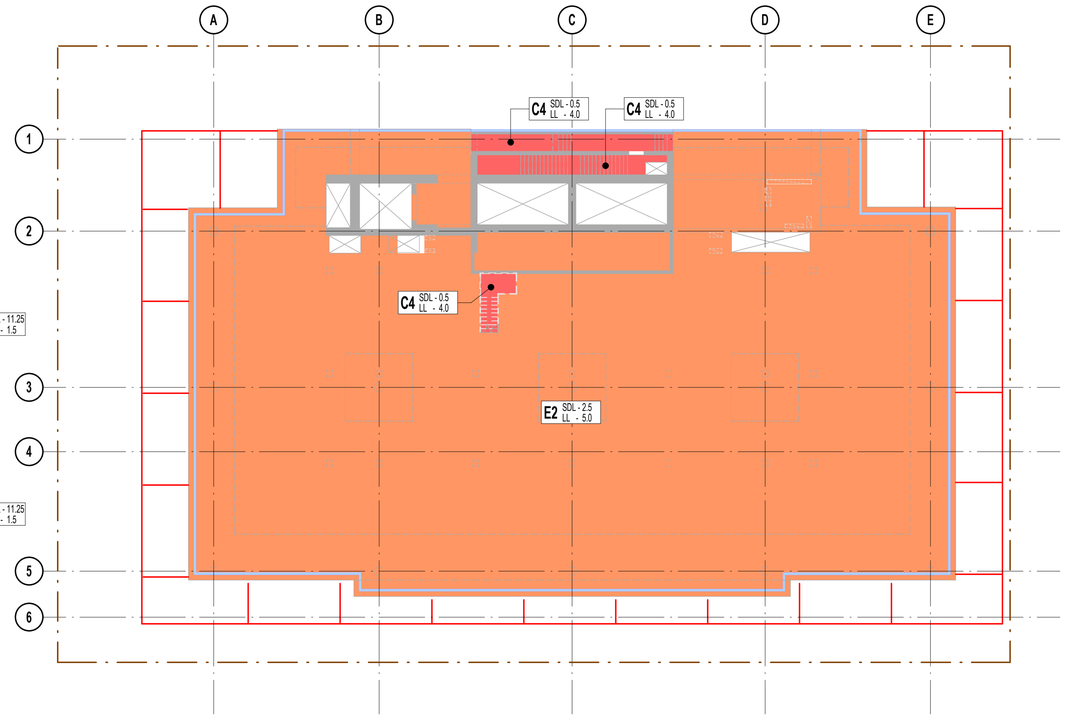
LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS



LEVEL 40 ROOF - LOADING PLAN

SCALE 1 : 200



LEVEL 41 PLANT - LOADING PLAN

SCALE 1 : 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LOADING PLANS - SHEET 8

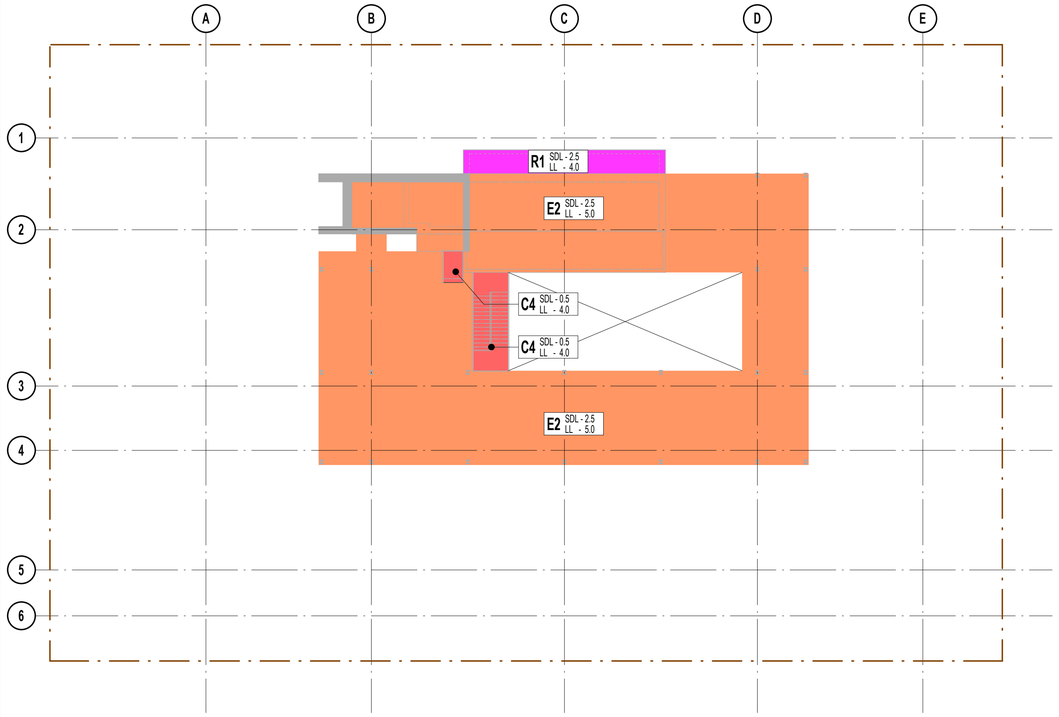
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-3907
REV. No.: A

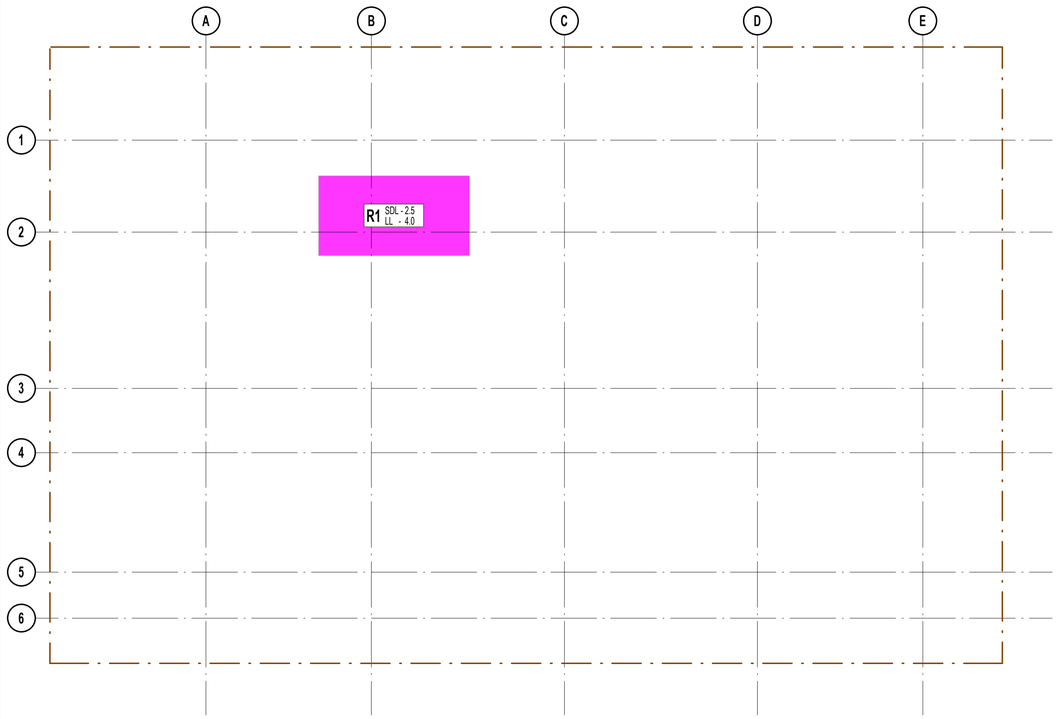
DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



LEVEL 42 PLANT - LOADING PLAN

SCALE 1 : 200



LEVEL 43 CROWN - LOADING PLAN

SCALE 1 : 200

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
(A) DOMESTIC AND RESIDENTIAL ACTIVITIES						
A1		RETAIL	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
A2		MIXED USE TERRACE	3.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL BELOW) • CEILINGS = 0.9/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLASTER BELOW) • FINISH = 1.0 kPa • 80mm MAX FALL = 1.25kPa	5.0	-
A3		MIXED USE INTERNAL	2.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	5.0	-
(B) OFFICES AND WORK AREAS						
B1		COMERCIAL (A)	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B2		COMERCIAL (B)	1.8	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa + 0.3 kPa ADDITIONAL FROM PLANT ROOM BELOW • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	3.0	-
B3		SEMINAR	1.5	• PARTITION AND STUD WALL = 0.5 kPa • SERVICES = 0.3 kPa • CEILINGS = 0.3 kPa • RAISED ACCESS FLOOR/FINISHES = 0.4 kPa	4.0	-
(C) MISCELLANEOUS						
C1		END OF TRIP / TOILET AREAS	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	2.0	-
C2		BACK OF HOUSE	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	4.0	-
C3		STORAGE	0.5	• SERVICES = 0.5 kPa	2.4	FOR EACH METRE OF STORAGE HEIGHT
C4		FIRE STAIRS	0.5	• FLOOR FINISH = 0.5kPa	4.0	-
C5		COMMERCIAL LIFT LOBBIES, CORRIDORS	1.5	• SERVICES = 0.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 0.7 kPa	4.0	-
C6		GROUND FLOOR	4.0	• SERVICES = 0.7 • 60mm AVERAGE SCREED OR CONCRETE TO FALL = 1.5 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	5.0	-
(E) WAREHOUSING AND STORAGE AREAS						
E1		SUBSTATION	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	15.0	BLAST LOADING TO WALLS ASSUMED 2.0 kPa, TBC.
E2		GENERAL PLANT	2.5	• SERVICES + CELING = 2.0 kPa • FLOOR FINISH = 0.5kPa	5.0	ALLOW FOR CONCRETE PLINTH OF 100mm DEPTH BELOW SPECIFIC PLANT MACHINERY AS NOMINATED BY SERVICES ENGINEER. REFER TO SERVICES ENGINEER/ARCHITECT DRAWINGS FOR PLINTH EXTENTS.

LOADING PLAN SCHEDULE

MARK	COLOUR	DESCRIPTION	SDL (kPa)	SDL BREAKDOWN (kPa)	LL (kPa)	COMMENTS
E3		PLANT HEAVY	2.5	• SERVICES = 2.0 kPa • FLOOR FINISH = 0.5kPa	7.5	HEAVY PLANT IS ANY AREA THAT REQUIRES EQUIPMENT GREATER THAN 2.5t MAXIMUM UNIT MASS, SUCH AS GENERATORS, CHILLERS, TRANSFORMERS, COOLING TOWERS ETC.
E4		HEAVY LOAD AREA (COMMERCIAL FLOOR)	2.5	• SERVICES = 0.7 kPa • CEILINGS = 0.3 kPa • FLOOR FINISH = 1.5 kPa	7.5	FINAL LOCATIONS TO BE AGREED
(F) LIGHT VEHICLE TRAFFIC AREA						
F1		CARPARKS, RAMPS, BIKE STORE	0.5	• SERVICES = 0.1 kPa • 16mm AVERAGE CONCRETE TO FALL = 0.4kPa	2.5	-
(G) MEDIUM VEHICLE TRAFFIC AREA						
G1		VEHICLE LOADING DOCK AND ACCESS RAMP	2.5	• SERVICES = 2.0 kPa • BOLLARDS AND GATES = 0.5 kPa	15.0	POINT LOAD TO AS 5100. DESIGN TO CONFIRM MAXIMUM GVM EXPECTED FOR LOADING DOCK.
(M) TANK						
M1		TANK	0.5	• 16mm AVERAGE CONCRETE TO FALL = 0.4 kPa • MEMBRANE = 0.1 kPa	REFER GA	TANK CONTAINING EITHER DIESEL OR WATER
M2		BMU WALKWAY	0.5	-	-	MAX 150kN POINT LOAD PER COLUMN
(P) PLANTER AREAS						
P1		GENERAL PLANTER	11.25	• SERVICES = 0.1/0.5 kPa (EXTERNAL/INTERNAL SPACE BELOW) • CEILINGS = 0.8/0.5 kPa (EXTERNAL-GRC/INTERNAL-PLANTERS BELOW) • 80mm MAX FALL = 1.25kPa • 500mm MAX. SOIL DEPTH = 9.0kPa	1.5	9.0kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 7.5kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS
P2		DEEP PLANTER TYPE A	18.0	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 875mm TYP. SOIL DEPTH = 15.75 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
P3		DEEP PLANTER TYPE B	21.6	• SERVICES = 0.5 kPa • CEILINGS = 0.5 kPa • 80 MAX FALLS = 1.25 kPa • 1075mm TYP. SOIL DEPTH = 21.6 kPa	15.0	SOIL LOAD BASED ON 18 kN/m3 SAT. SOIL DENSITY. LOWER GROUND PLANE ALSO SUBJECT TO CONSTRUCTION LOADING OF 15.0 kPa.
(R) ROOFS						
R1		ROOF	2.5	• 100mm AVERAGE SCREED OR CONCRETE TO FALL = 2.5 kPa	4.0	-
R2		STEEL CANOPY	4.6	• SERVICES = 0.1 kPa • CEILINGS = 0.9 kPa • 200mm MAX SOIL DEPTH = 3.6 kPa	0.5	3.6kPa BASED ON 18kN/m3 SAT. SOIL DENSITY FOR STRENGTH CALCULATIONS. 3.0kPa BASED ON 15kN/m3 TO BE USED FOR SERVICEABILITY CALCULATIONS

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
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DRAWING TITLE
LOADING PLANS - SHEET 9

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111

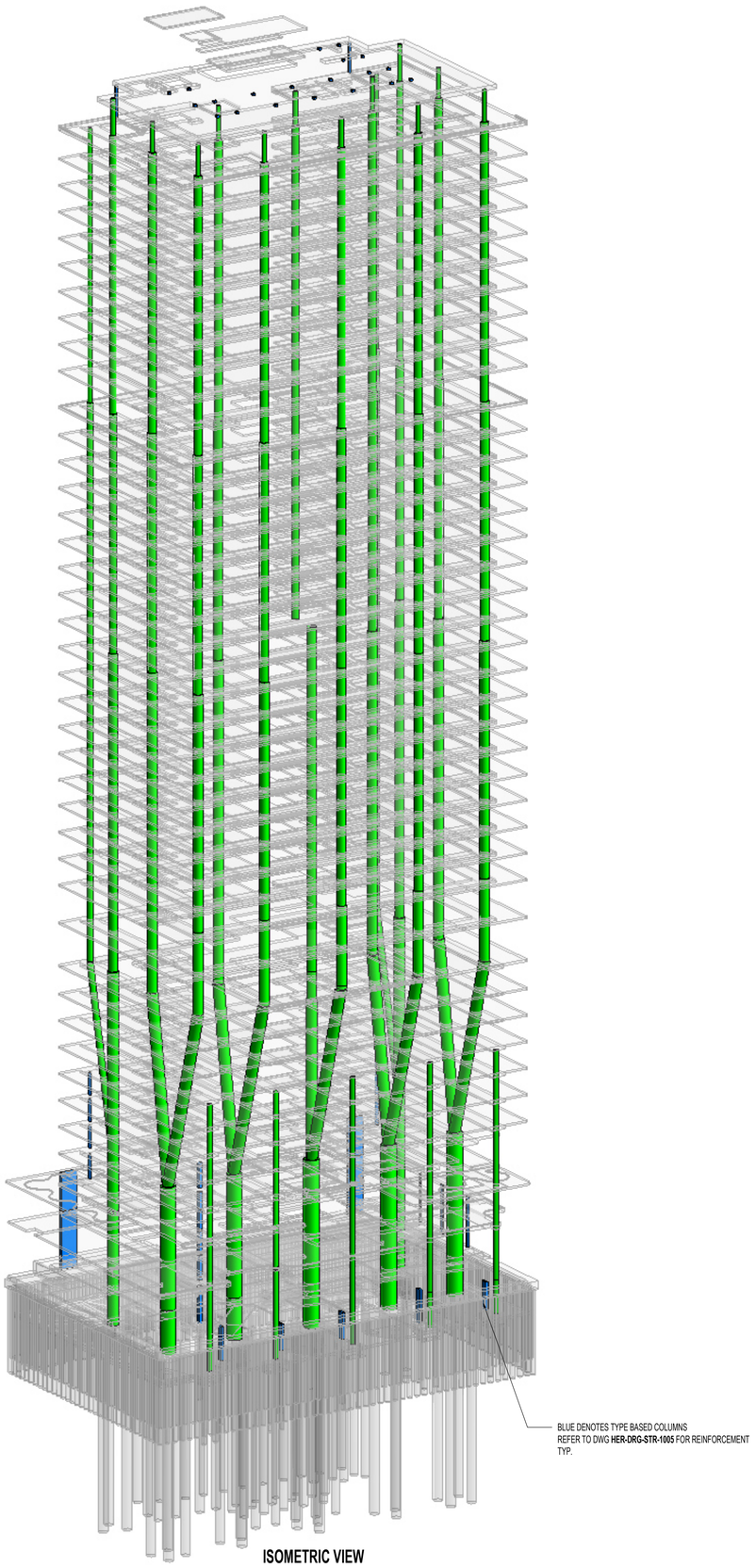
DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-3908

REV. No. A

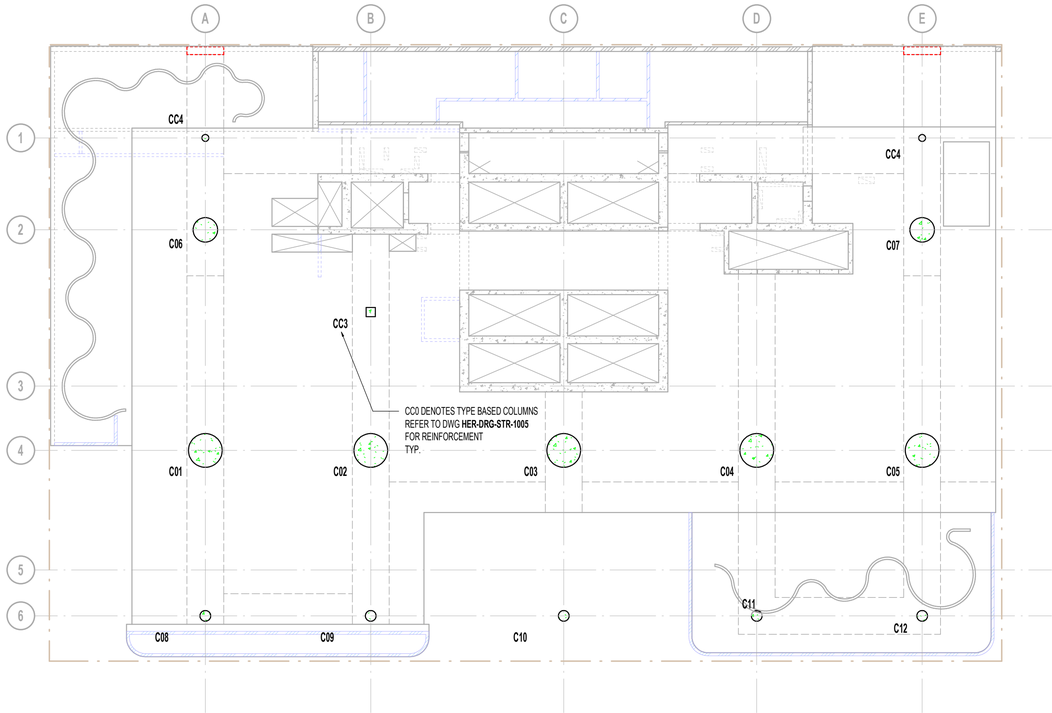
DRAWINGS ARE TO BE PRINTED IN COLOUR

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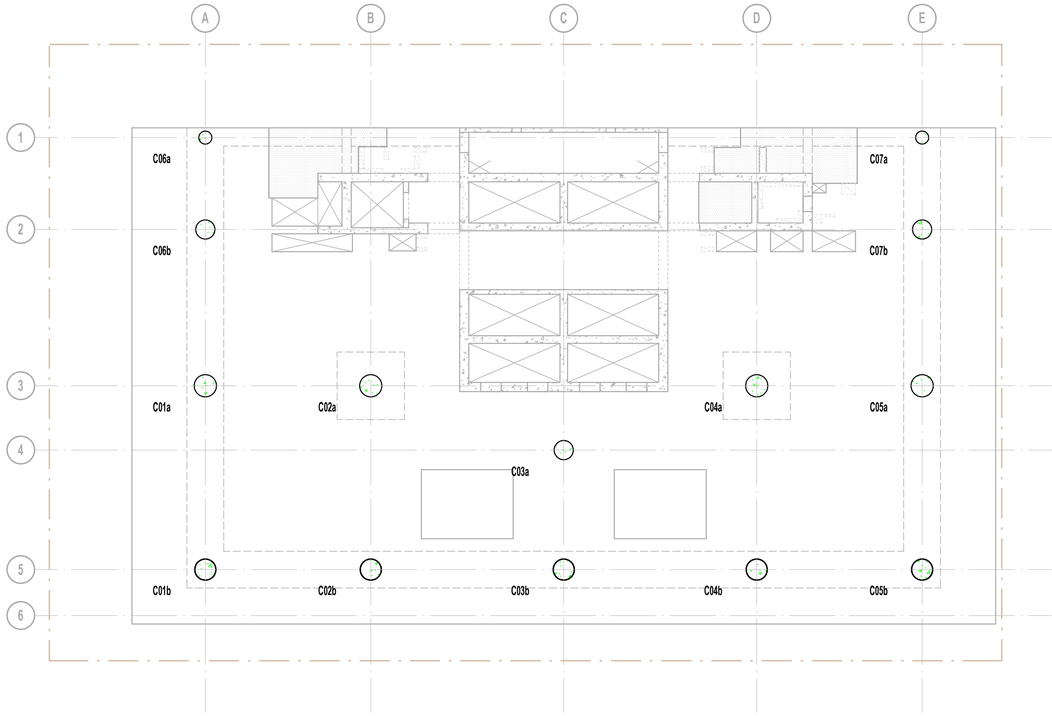


BLUE DENOTES TYPE BASED COLUMNS
REFER TO DWG **HER-DRG-STR-1005** FOR REINFORCEMENT
TYP.

ISOMETRIC VIEW



KEY PLAN - LEVEL 2 SHOWN
SCALE 1 : 200



KEY PLAN - LEVEL 12 SHOWN
SCALE 1 : 200

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
COLUMN ELEVATION - KEY PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

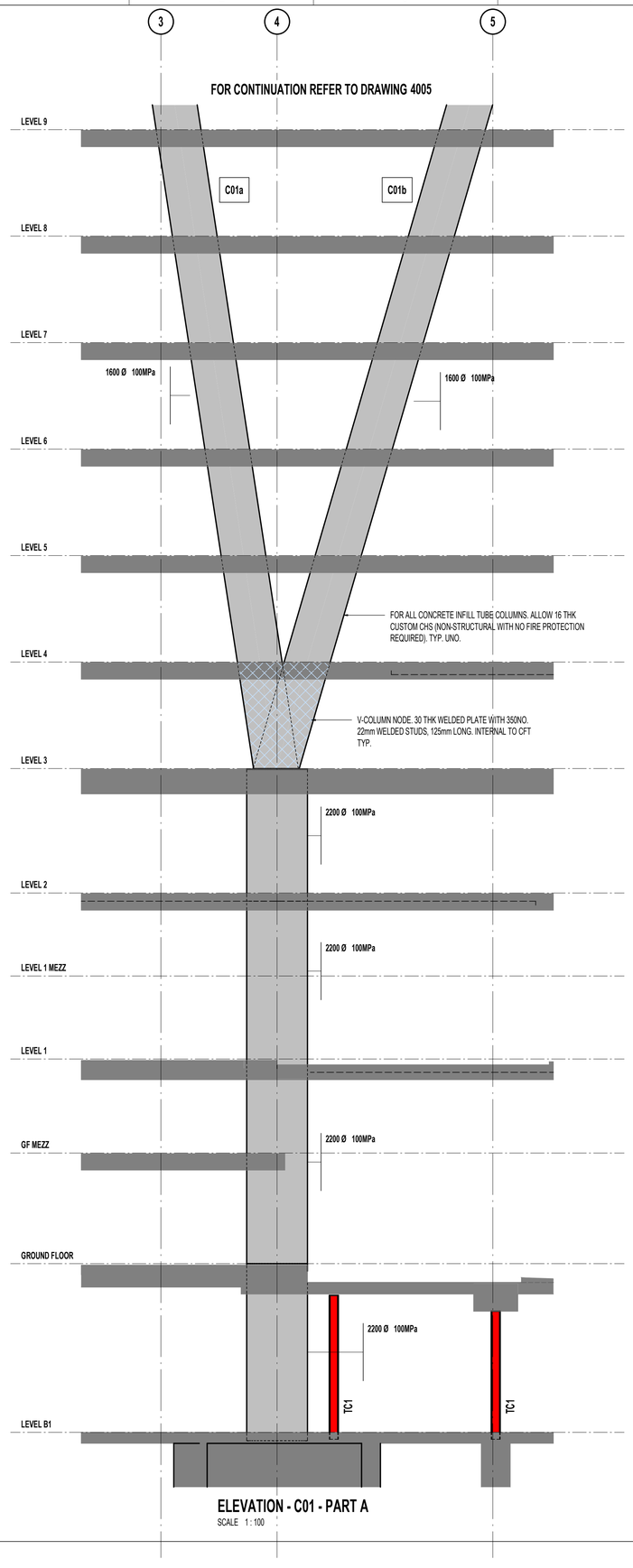
SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-4000	A

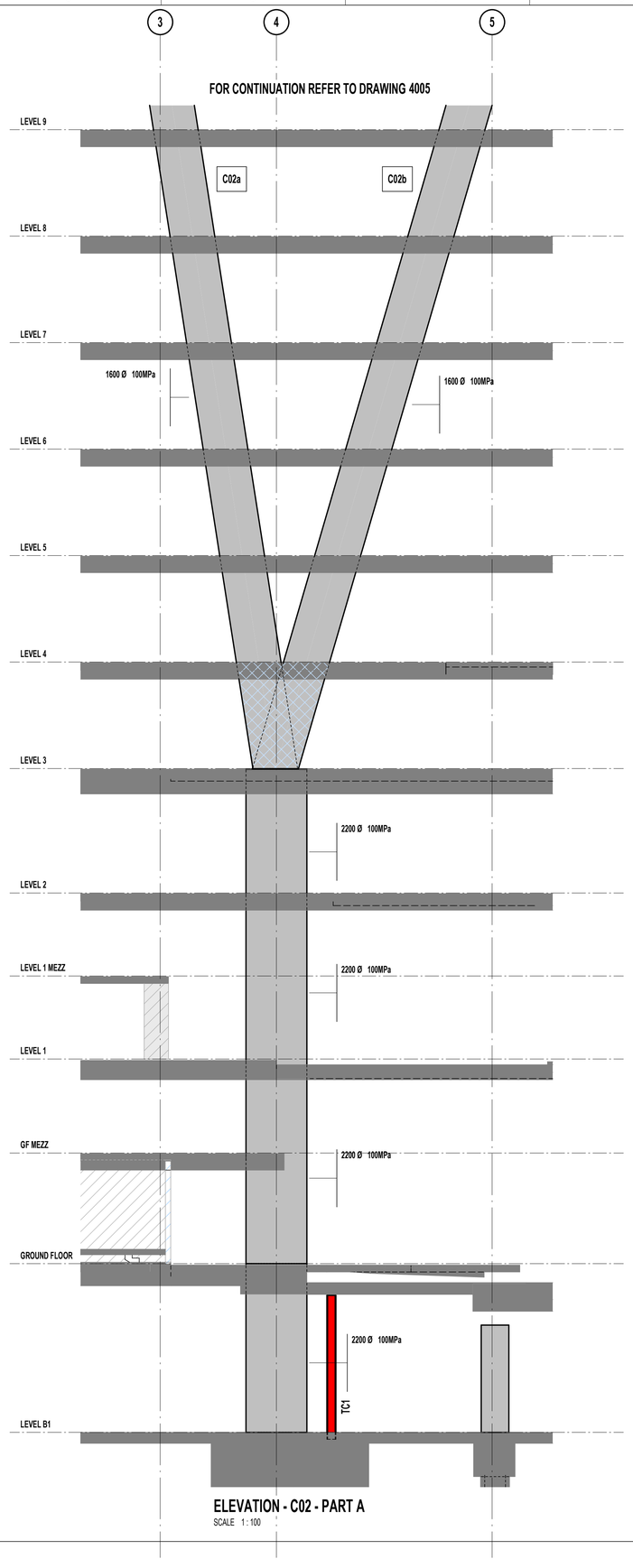
DRAWINGS ARE TO BE PRINTED IN COLOUR

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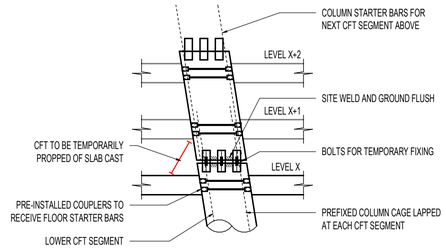
ELEVATION - C01 - PART A

SCALE 1 : 100



ELEVATION - C02 - PART A

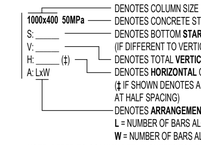
SCALE 1 : 100



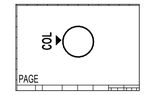
TENTATIVE CONSTRUCTION METHODOLOGY OF CFT V-COLUMNS

NOT TO SCALE

LEGEND



NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

CFT V-COLUMN NOTE:

1. REFER COLUMN ELEVATION FOR ADDITIONAL REINFORCEMENT AT V-COLUMN JUNCTIONS ON LEVEL 3.
2. ALLOW FOR CFT TUBE TO COME IN SEGMENTS OF 2 LEVELS FROM LEVEL 3 AND ABOVE.
3. ALL COLUMN CAGES TO BE PRE-FIXED INTERNAL TO THE CFT AND SPLICED ABOVE SLAB LEVEL AT LEVELS 5, 7 AND 9. ALL JOINTS TO BE WELDED PPBW GROUND FLUSH. REFER TENTATIVE CONSTRUCTION METHODOLOGY DIAGRAM.
4. ALLOW FOR 32 NO. OF N20 BOTTOM COUPLERS AND 32 NO. OF N32 TOP COUPLERS FOR STARTER BARS TO BEAM LEVELS 4 TO 9 WHERE CFT RUNS THROUGH FLOOR LEVELS.
5. ALLOW ADDITIONAL TEMPORARY PROPS TO SUPPORT CFT COLUMN UNTIL LEVEL 10 IS CONSTRUCTED AND GAIN FULL STRENGTH.

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
COLUMN ELEVATION - SHEET 01

PROJECT STATUS
FOR DESIGN DEVELOPMENT

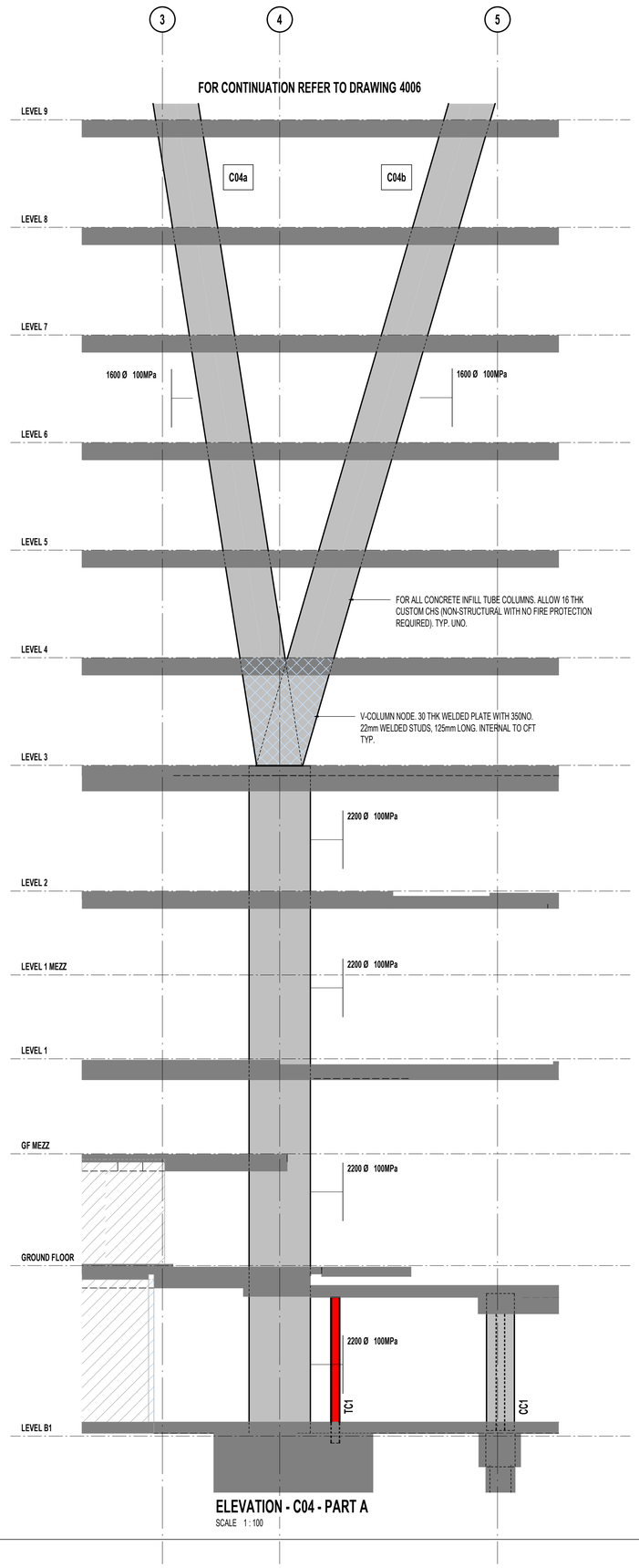
SCALE		
As indicated	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 | DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4001 | REV. No. A

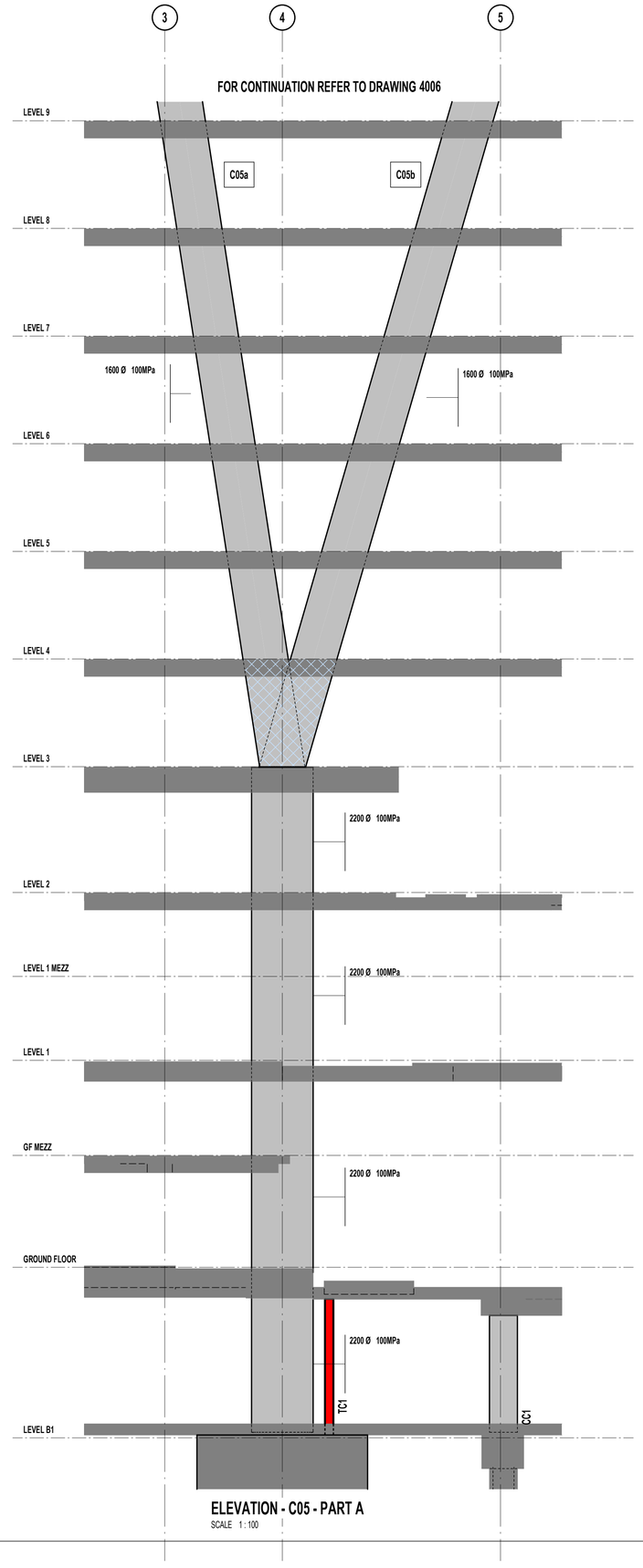
DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



ELEVATION - C04 - PART A

SCALE 1 : 100



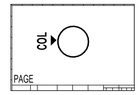
ELEVATION - C05 - PART A

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: (‡) — DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALOING COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

CFT V-COLUMN NOTE:
1. REFER COLUMN ELEVATION FOR ADDITIONAL REINFORCEMENT AT V-COLUMN JUNCTIONS ON LEVEL 3.
2. ALLOW FOR CFT TUBE TO COME IN SEGMENTS OF 2 LEVELS FROM LEVEL 3 AND ABOVE.
3. ALL COLUMN CAGES TO BE PRE-FIXED INTERNAL TO THE CFT AND SPLICED ABOVE SLAB LEVEL AT LEVELS 5, 7 AND 9. ALL JOINTS TO BE WELDED PPBW GROUND FLUSH. REFER TENTATIVE CONSTRUCTION METHODOLOGY DIAGRAM.
4. ALLOW FOR 32 NO. OF N20 BOTTOM COUPLERS AND 32 NO. OF N32 TOP COUPLERS FOR STARTER BARS TO BEAM LEVELS 4 TO 9 WHERE CFT RUNS THROUGH FLOOR LEVELS.
5. ALLOW ADDITIONAL TEMPORARY PROPS TO SUPPORT CFT COLUMN UNTIL LEVEL 10 IS CONSTRUCTED AND GAIN FULL STRENGTH.

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

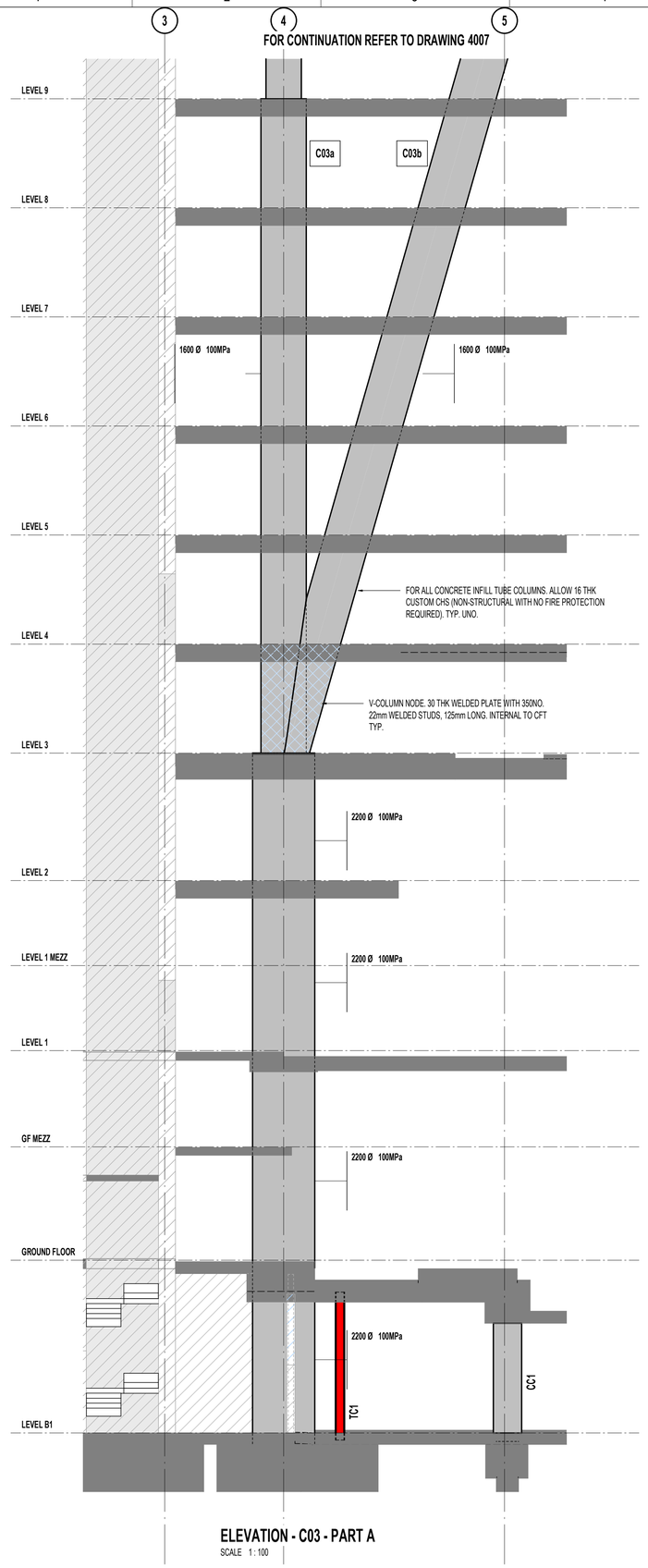
DRAWING TITLE
COLUMN ELEVATION - SHEET 02

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
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	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

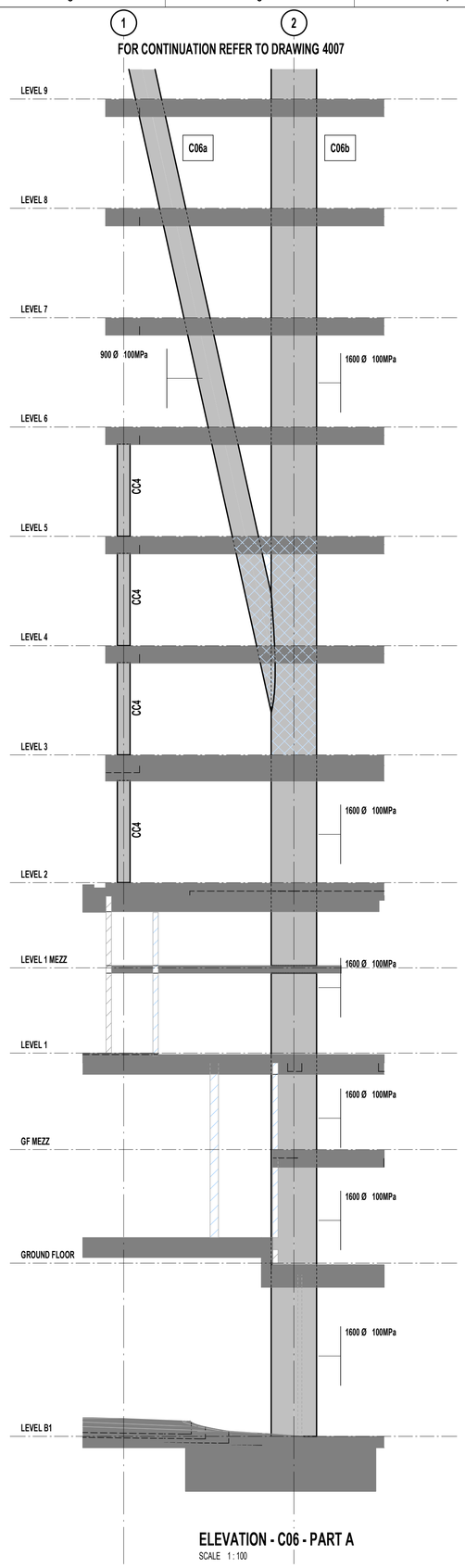
PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4002
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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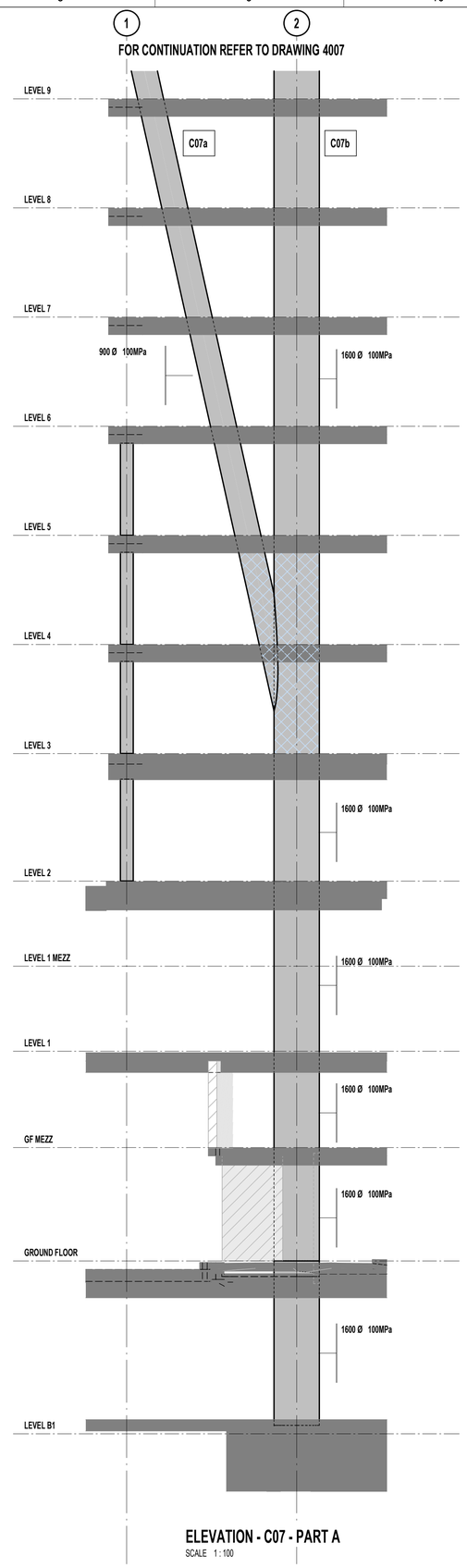
ELEVATION - C03 - PART A

SCALE 1 : 100



ELEVATION - C06 - PART A

SCALE 1 : 100



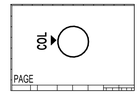
ELEVATION - C07 - PART A

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____ — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: ____ (‡) — DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALONG COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

CFT V-COLUMN NOTE:
1. REFER COLUMN ELEVATION FOR ADDITIONAL REINFORCEMENT AT V-COLUMN JUNCTIONS ON LEVEL 3.
2. ALLOW FOR CFT TUBE TO COME IN SEGMENTS OF 2 LEVELS FROM LEVEL 3 AND ABOVE.
3. ALL COLUMN CAGES TO BE PRE-FIXED INTERNAL TO THE CFT AND SPLICED ABOVE SLAB LEVEL AT LEVELS 5, 7 AND 9. ALL JOINTS TO BE WELDED PPBW GROUND FLUSH. REFER TENTATIVE CONSTRUCTION METHODOLOGY DIAGRAM.
4. ALLOW FOR 32 NO. OF N20 BOTTOM COUPLERS AND 32 NO. OF N32 TOP COUPLERS FOR STARTER BARS TO BEAM LEVELS 4 TO 9 WHERE CFT RUNS THROUGH FLOOR LEVELS.
5. ALLOW ADDITIONAL TEMPORARY PROPS TO SUPPORT CFT COLUMN UNTIL LEVEL 10 IS CONSTRUCTED AND GAIN FULL STRENGTH.

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
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DRAWING TITLE
COLUMN ELEVATION - SHEET 03

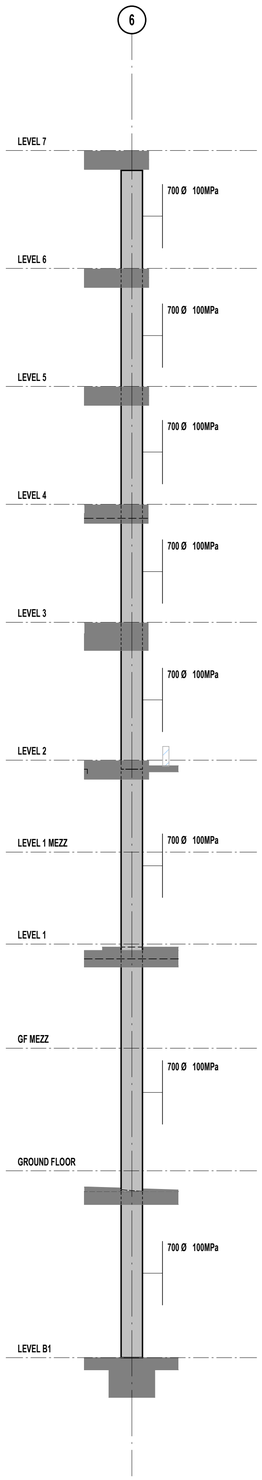
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

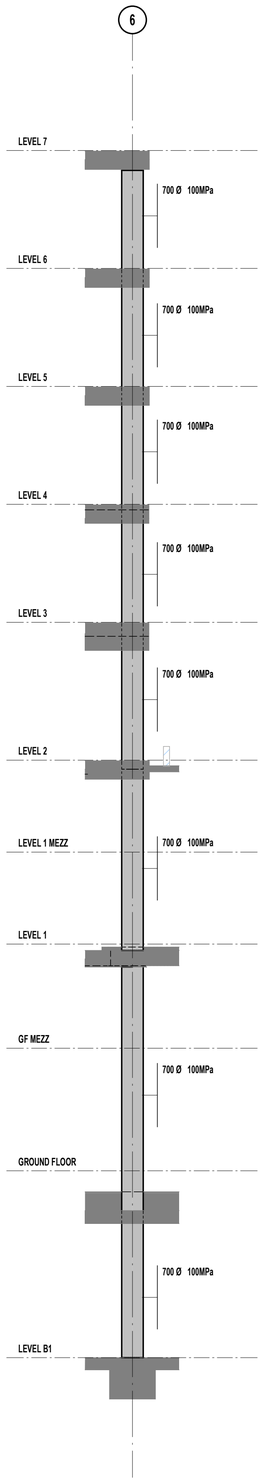
PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-4003	A

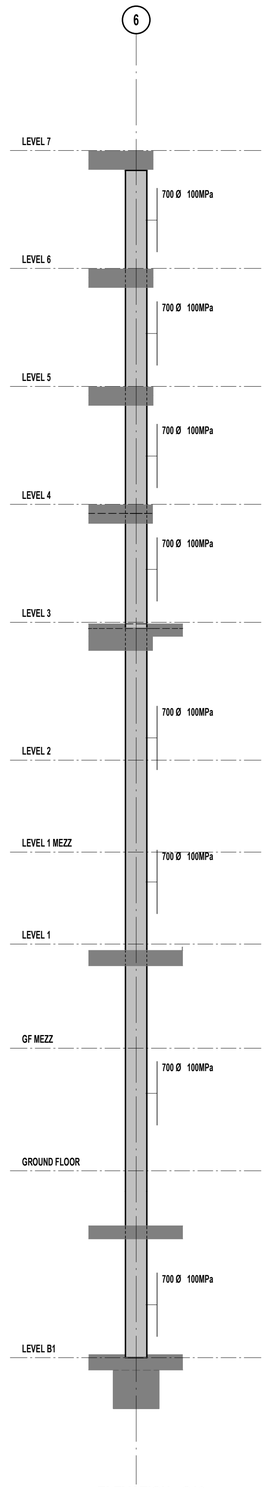
DRAWINGS ARE TO BE PRINTED IN COLOUR
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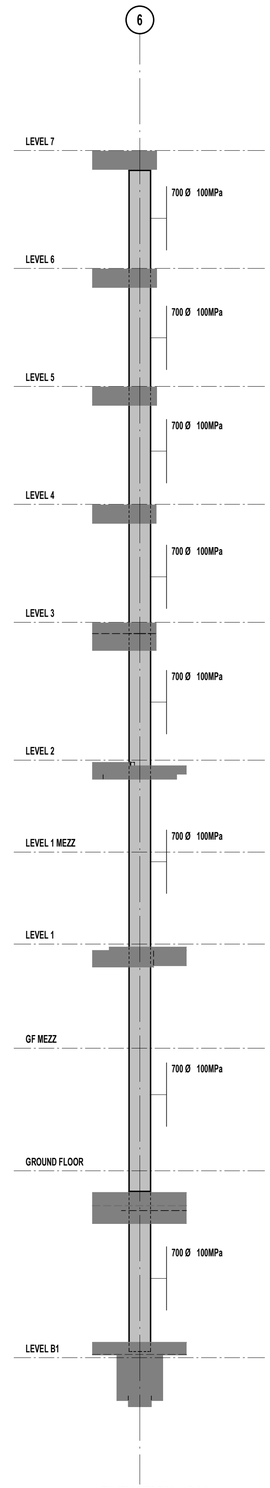
ELEVATION - C08
SCALE 1 : 100



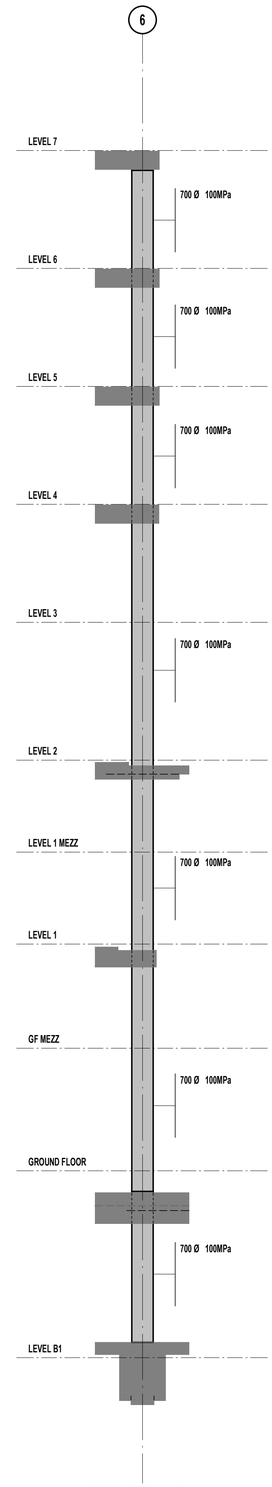
ELEVATION - C09
SCALE 1 : 100



ELEVATION - C10
SCALE 1 : 100



ELEVATION - C11
SCALE 1 : 100

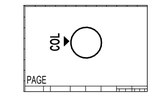


ELEVATION - C12
SCALE 1 : 100

LEGEND

- 1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
- S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: ____ — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: ____ (‡) — DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
- A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
  - **L** = NUMBER OF BARS ALONG COLUMN LENGTH
  - **W** = NUMBER OF BARS ALOING COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
COLUMN ELEVATION - SHEET 04

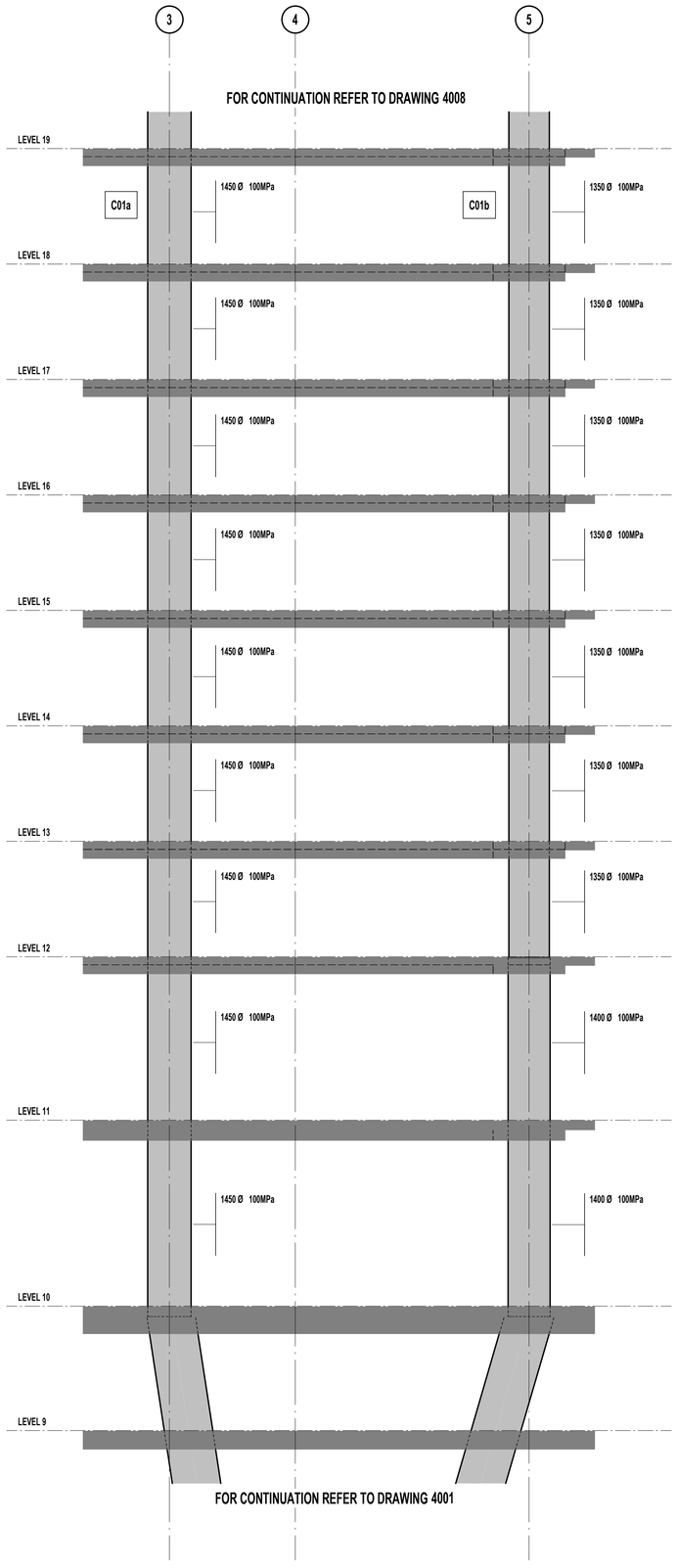
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4004
REV. No. A

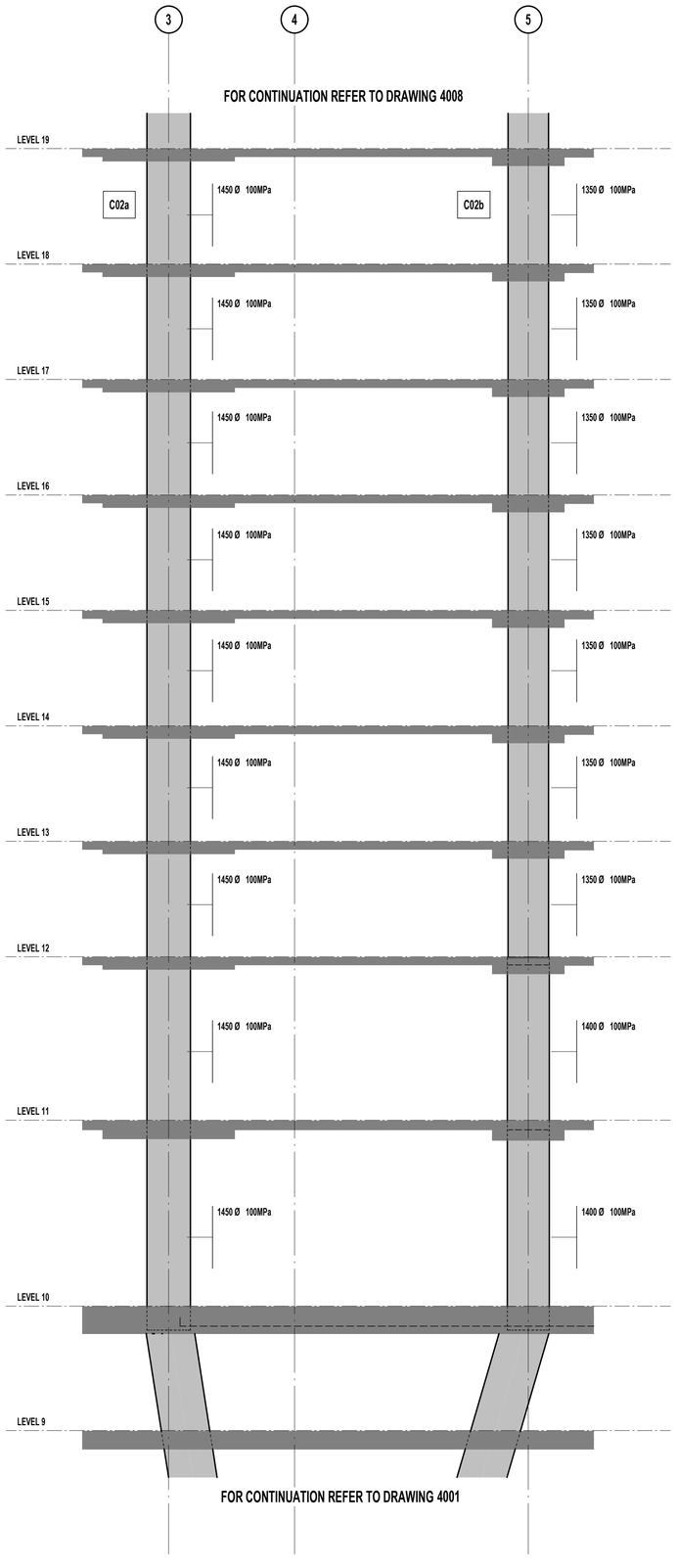
DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



ELEVATION - C01 - PART B

SCALE 1 : 100



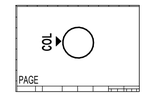
ELEVATION - C02 - PART B

SCALE 1 : 100

LEGEND

- 1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
- S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: ____ — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: ____ (‡) — DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
- A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
  - **L** = NUMBER OF BARS ALONG COLUMN LENGTH
  - **W** = NUMBER OF BARS ALONG COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
COLUMN ELEVATION - SHEET 05

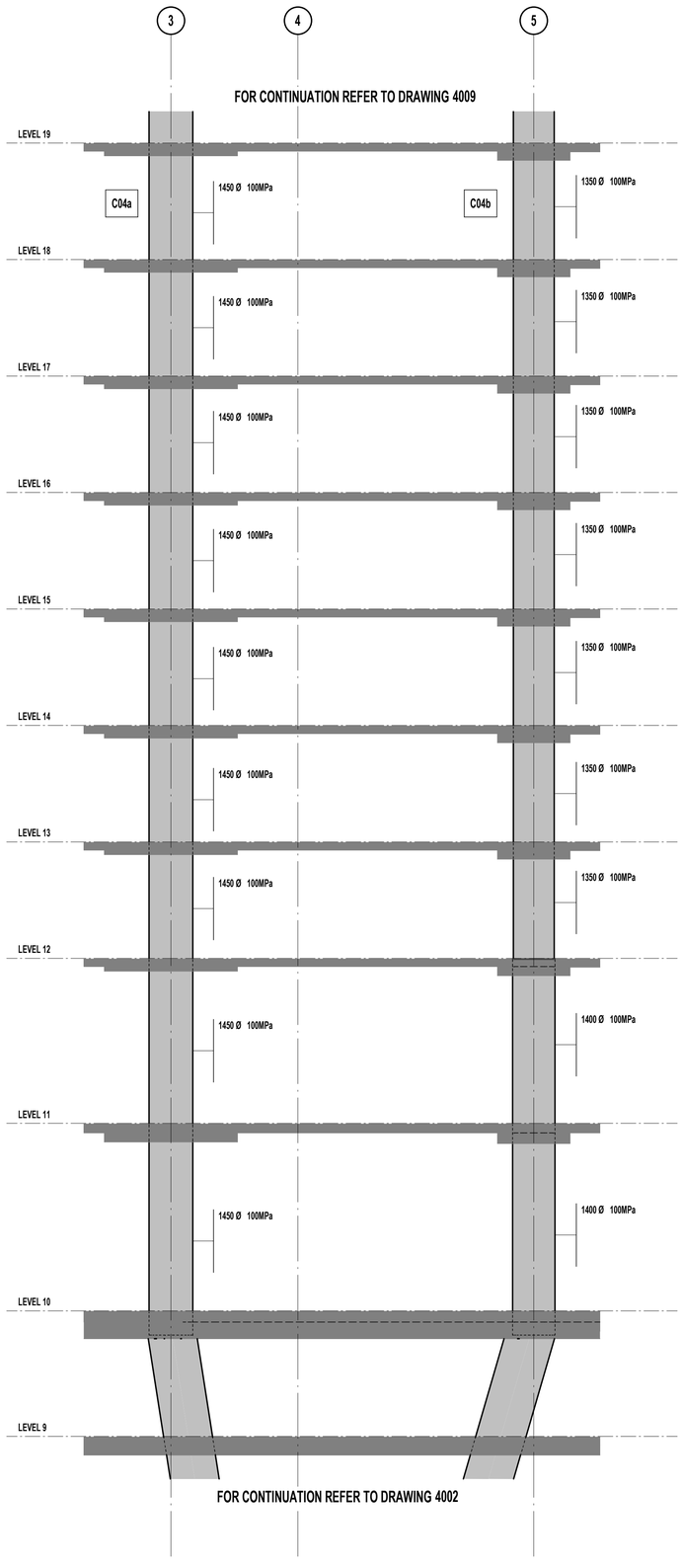
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

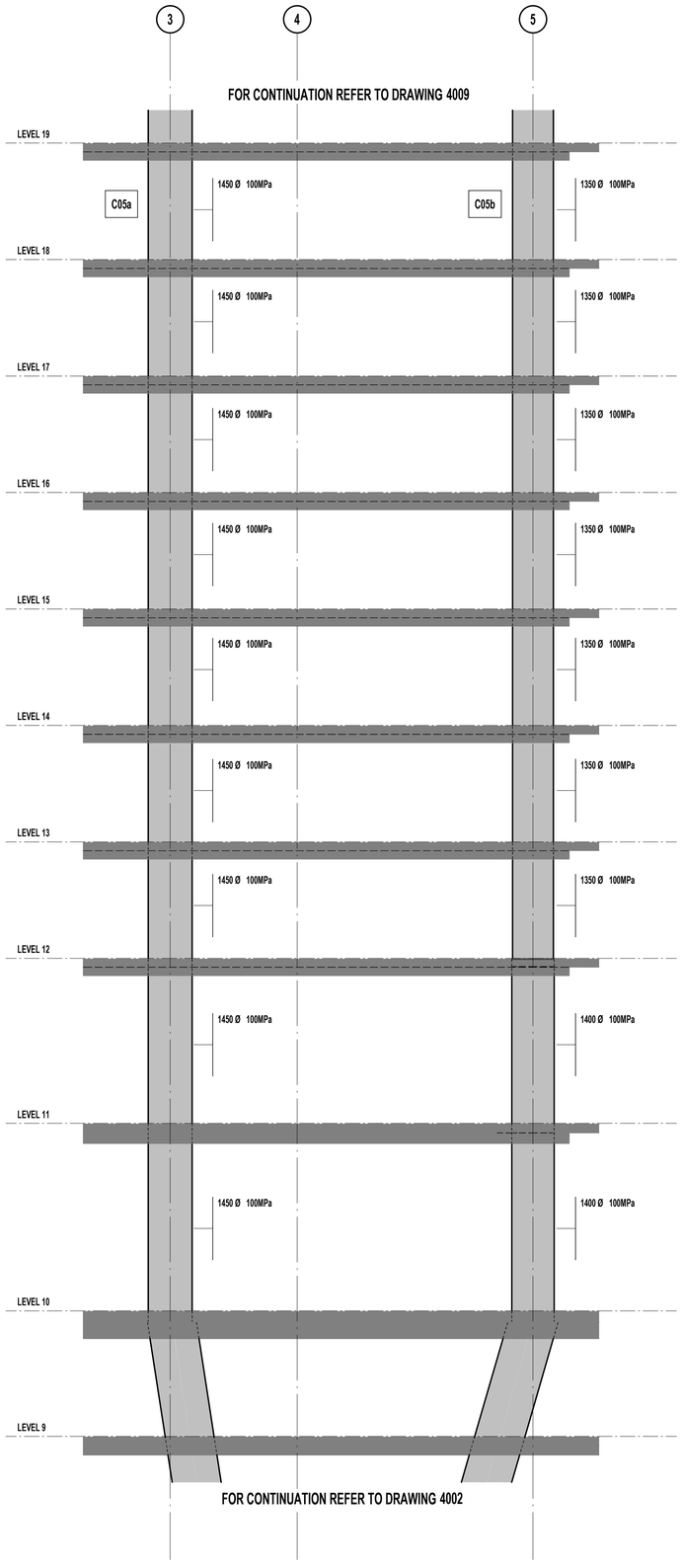
DRAWING NUMBER HER-DRG-STR-4005 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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ELEVATION - C04 - PART B

SCALE 1 : 100



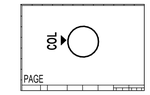
ELEVATION - C5 - PART B

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____ — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: ____ (‡) — DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALOING COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
COLUMN ELEVATION - SHEET 06

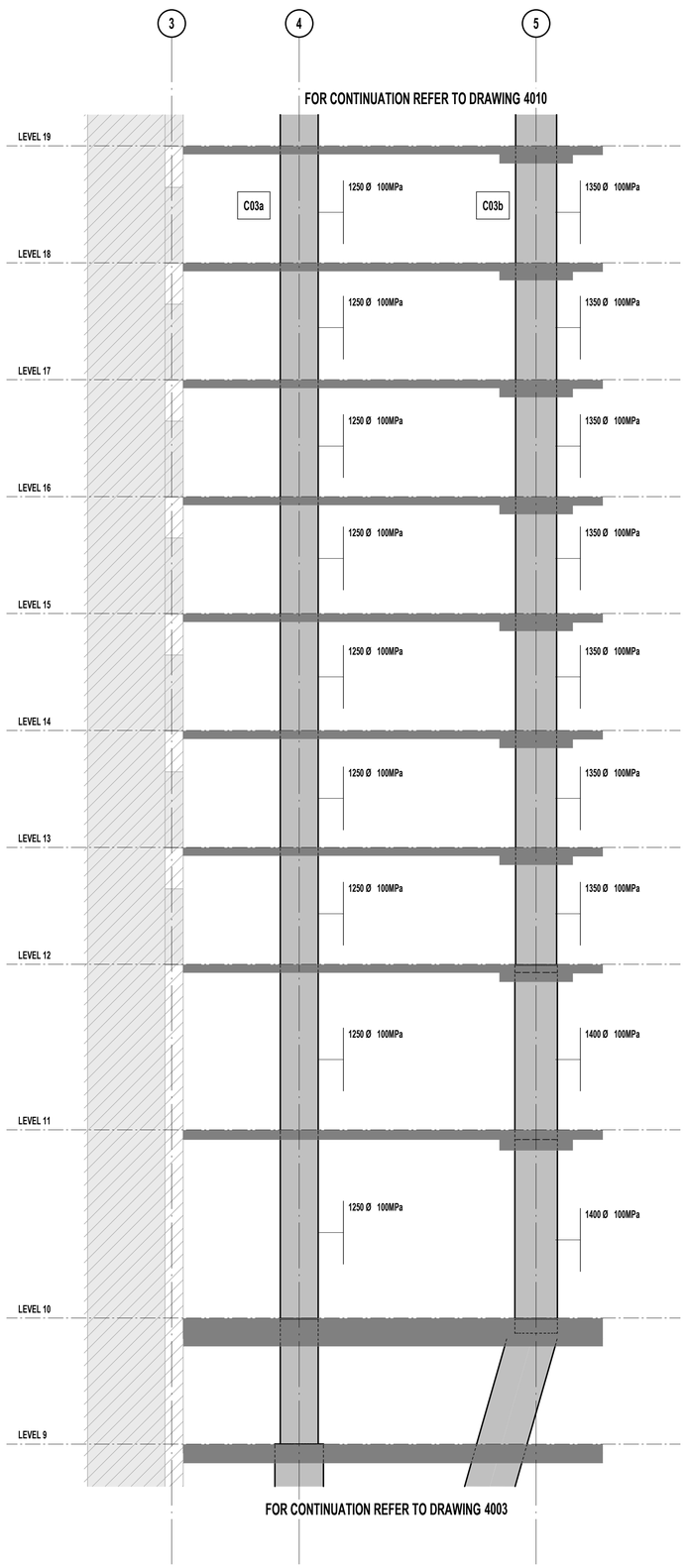
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

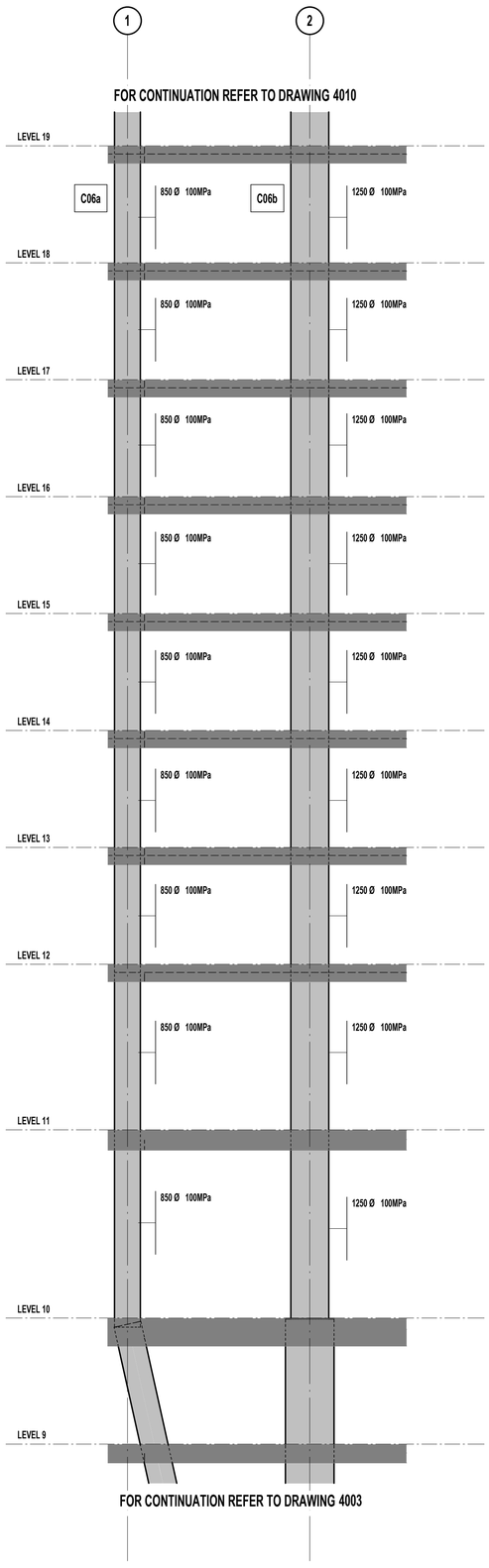
DRAWING NUMBER	REV. No.
HER-DRG-STR-4006	A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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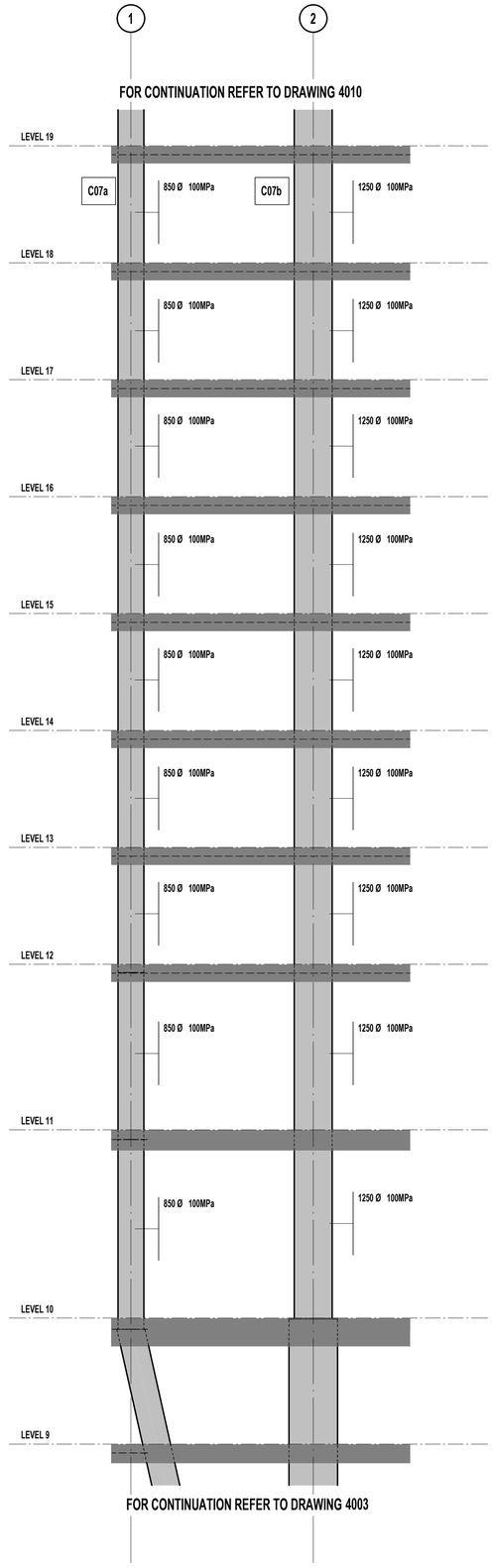
ELEVATION - C03 - PART B

SCALE 1 : 100



ELEVATION - C06 - PART B

SCALE 1 : 100



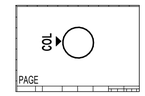
ELEVATION - C07 - PART B

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____
H: ____ (‡) — DENOTES TOTAL **VERTICAL** REINFORCEMENT / DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALONG COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

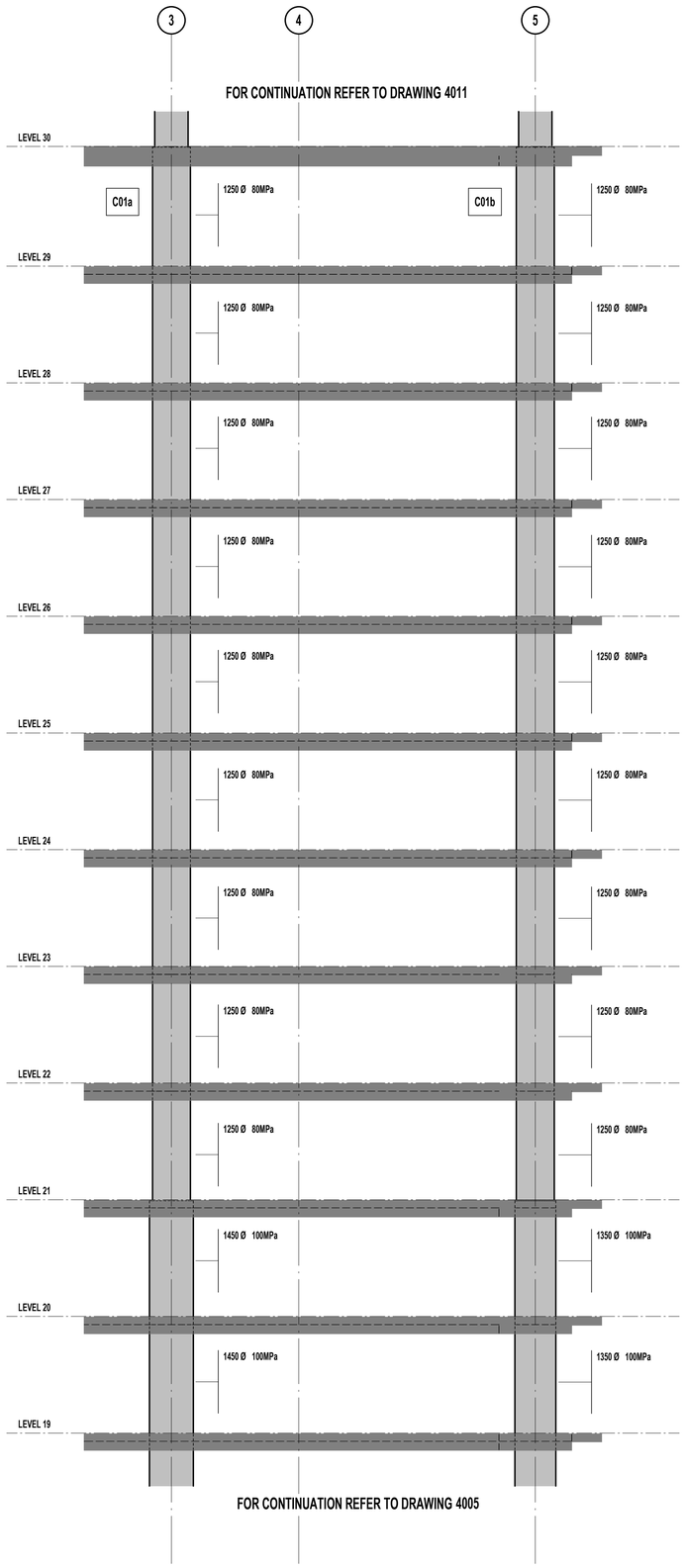
DRAWING TITLE
COLUMN ELEVATION - SHEET 07

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

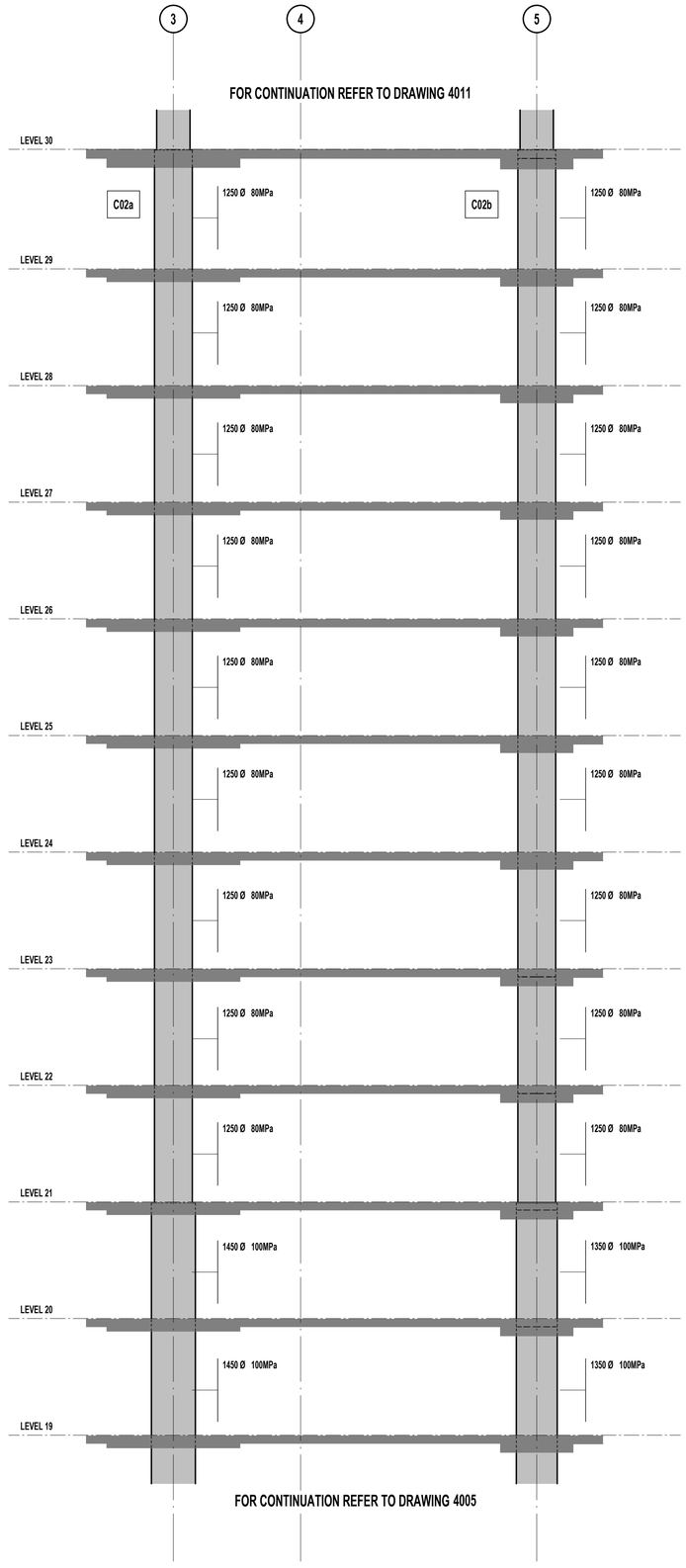
PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4007
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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ELEVATION - C01 - PART C

SCALE 1 : 100



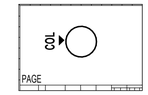
ELEVATION - C02 - PART C

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____
H: ____ (‡) — DENOTES TOTAL **VERTICAL** REINFORCEMENT / DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALOING COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

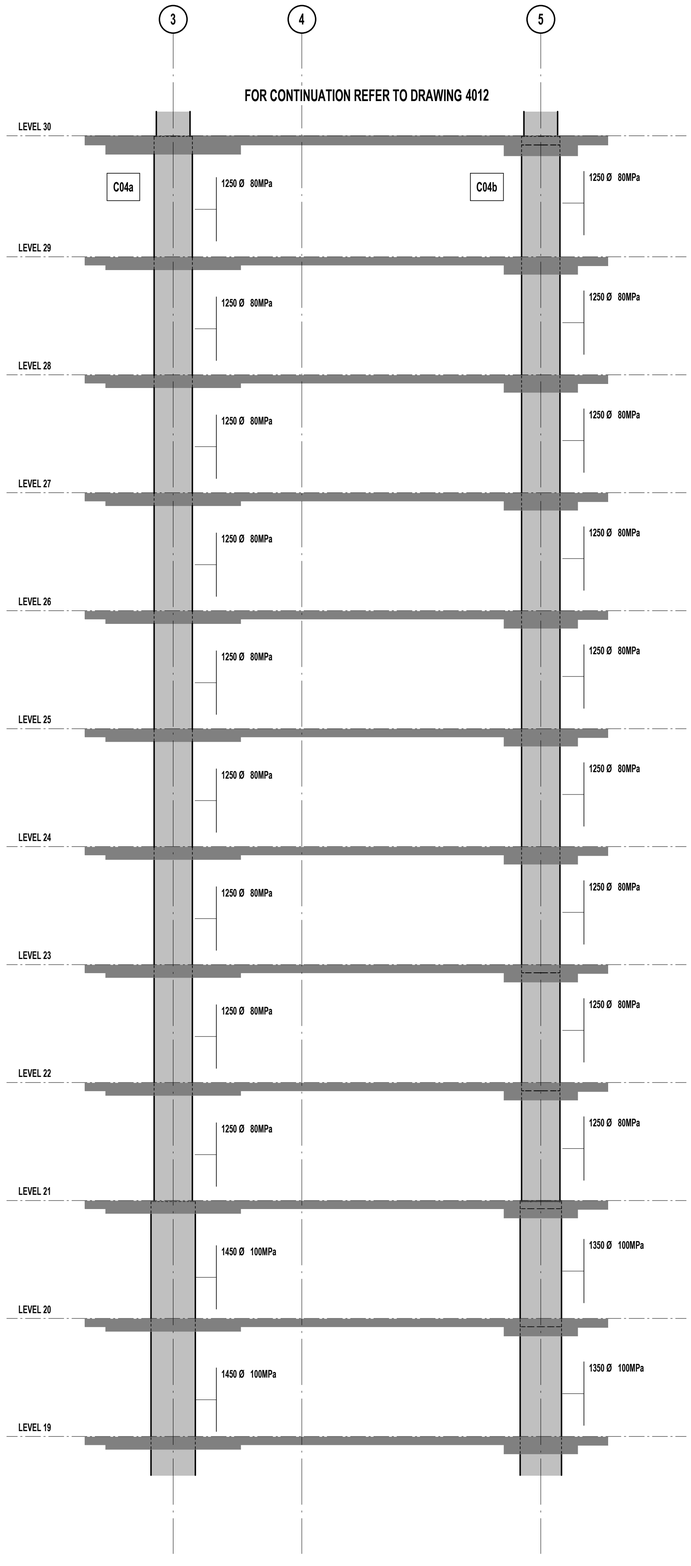
DRAWING TITLE
COLUMN ELEVATION - SHEET 08

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

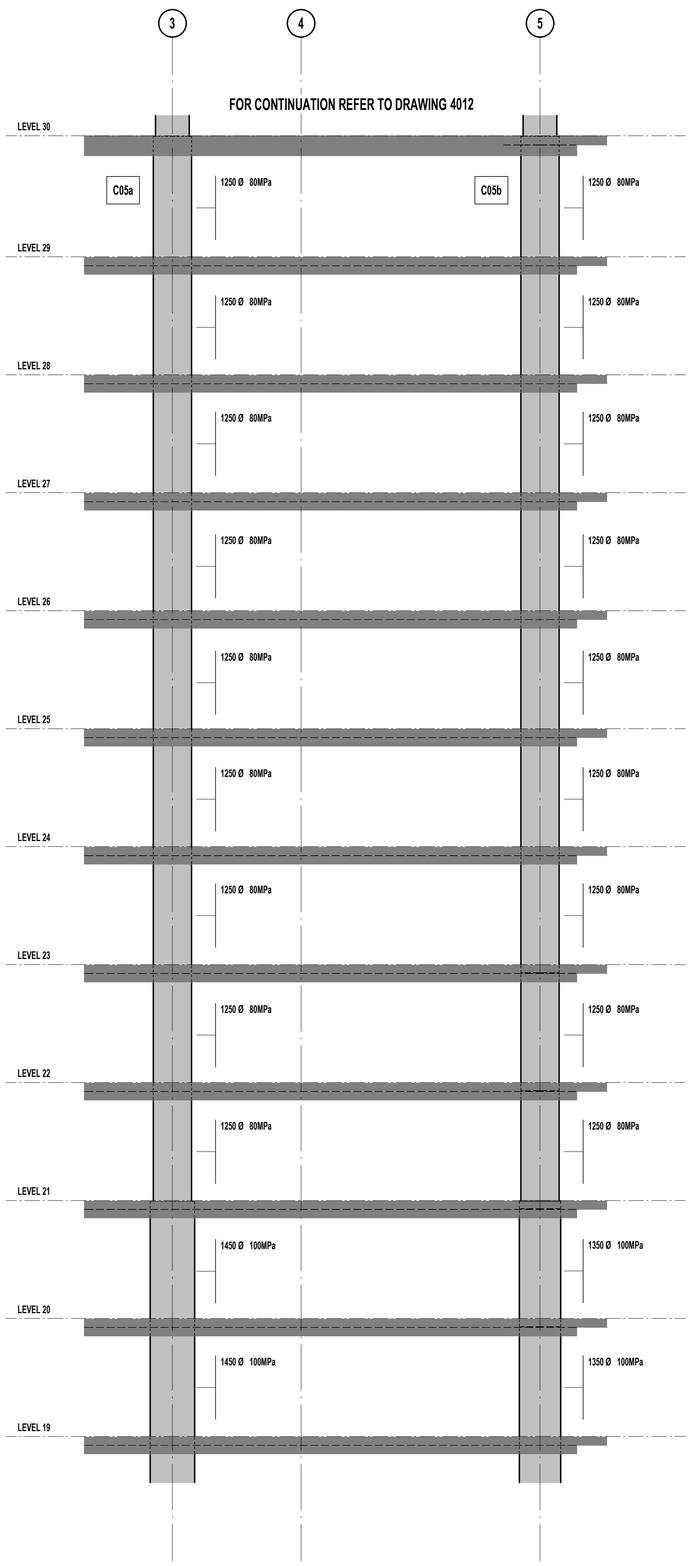
PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4008
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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ELEVATION - C04 - PART C

SCALE 1 : 100



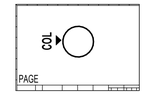
ELEVATION - C05 - PART C

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____ — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: ____ (‡) — DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALOING COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

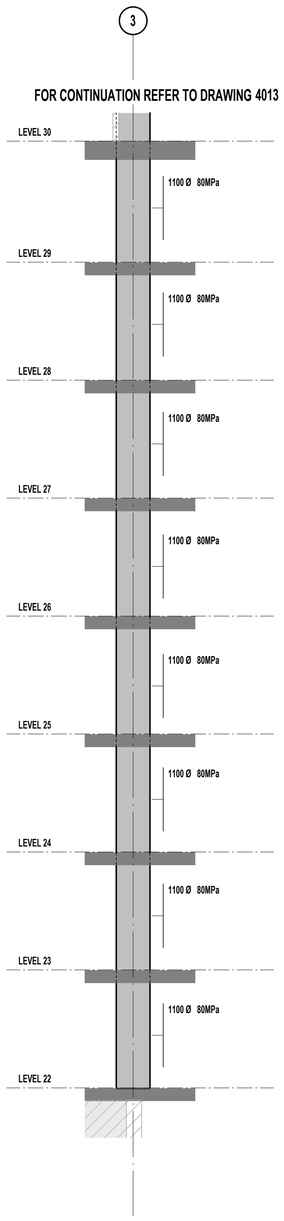
DRAWING TITLE
COLUMN ELEVATION - SHEET 09

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
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	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

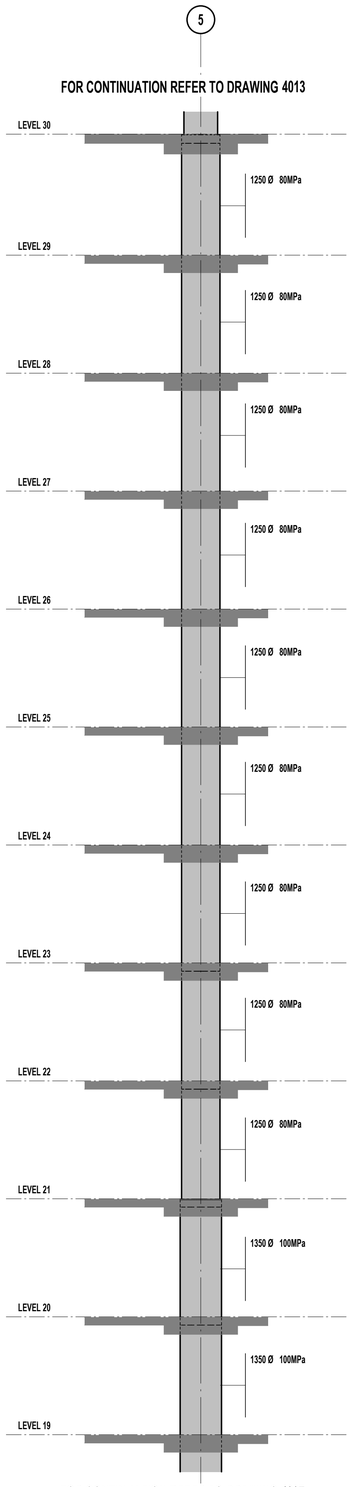
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DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4009
REV. No.: A

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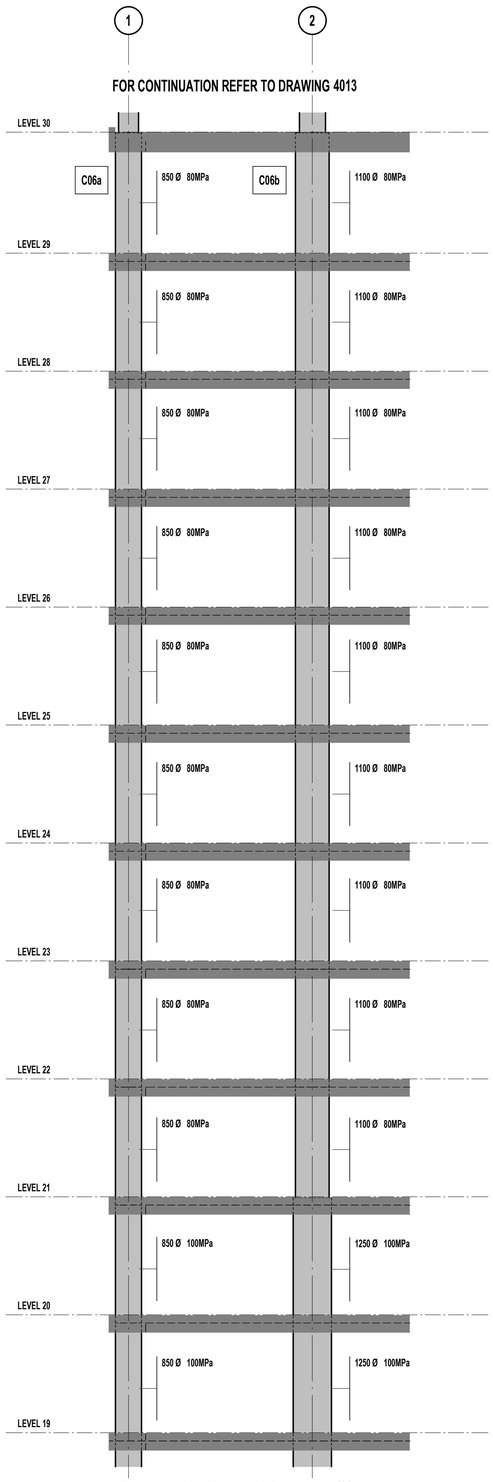
ELEVATION - C15 - PART C

SCALE 1 : 100



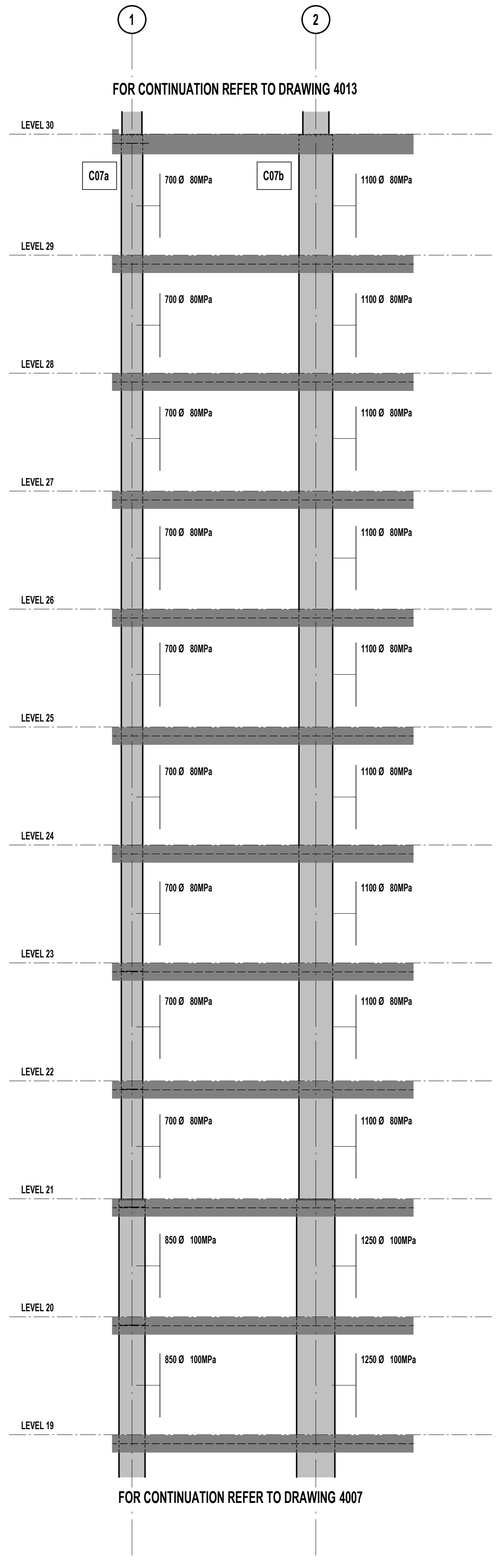
ELEVATION - C03 - PART C

SCALE 1 : 100



ELEVATION - C06 - PART C

SCALE 1 : 100



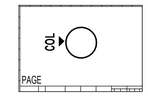
ELEVATION - C07 - PART C

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE; DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____
H: ____ (‡) — DENOTES TOTAL **VERTICAL** REINFORCEMENT; DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALOING COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

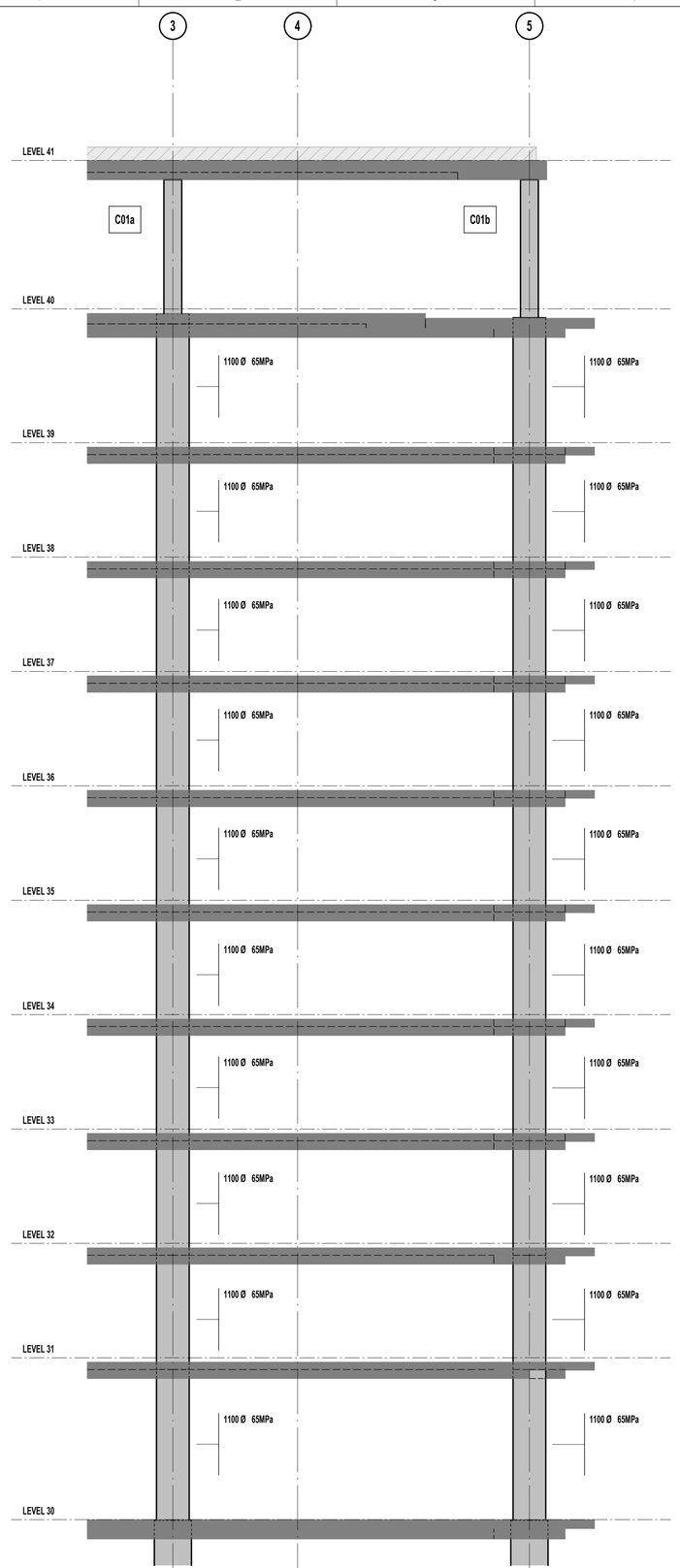
DRAWING TITLE
COLUMN ELEVATION - SHEET 10

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-4010	A

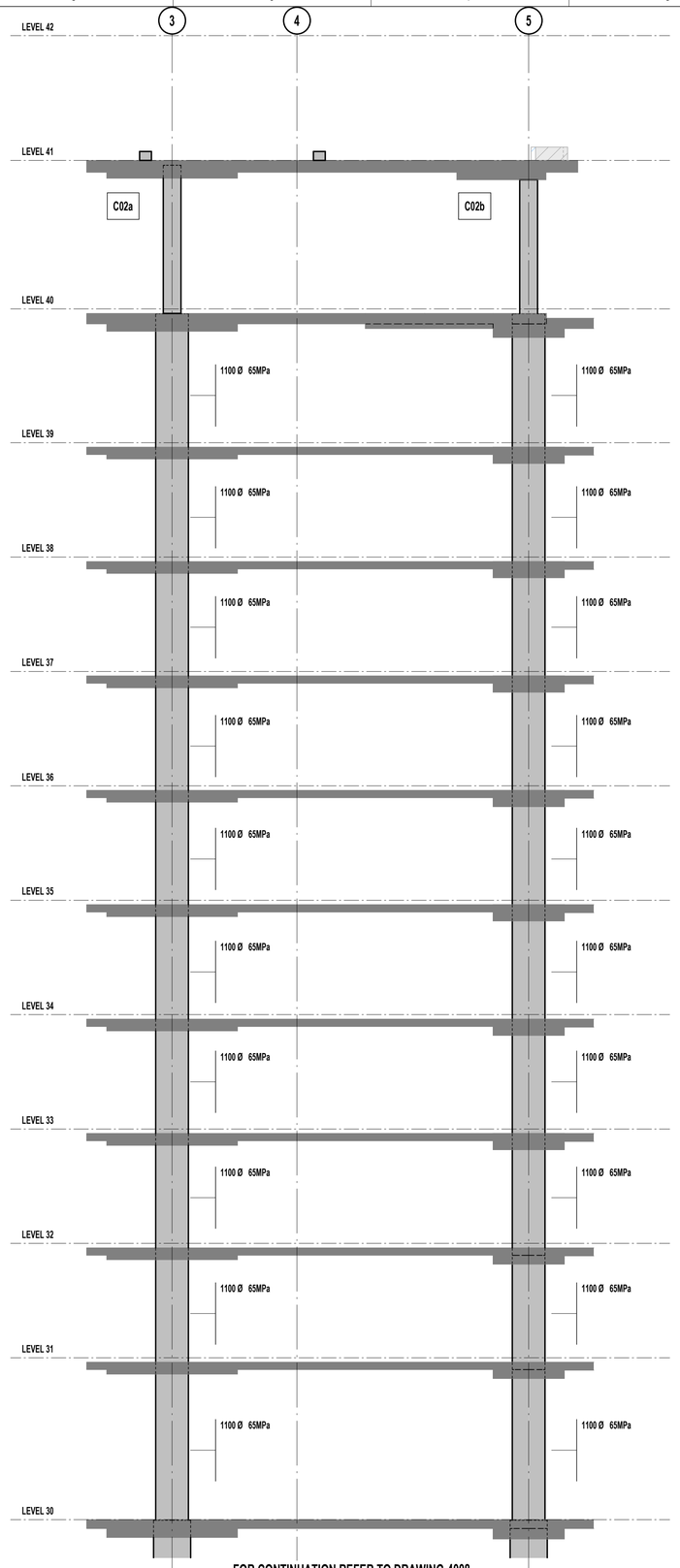
DRAWINGS ARE TO BE PRINTED IN COLOUR
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FOR CONTINUATION REFER TO DRAWING 4008

ELEVATION - C01 - PART D

SCALE 1 : 100



FOR CONTINUATION REFER TO DRAWING 4008

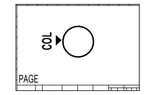
ELEVATION - C02 - PART D

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____ — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: ____ (‡) — DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALONG COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

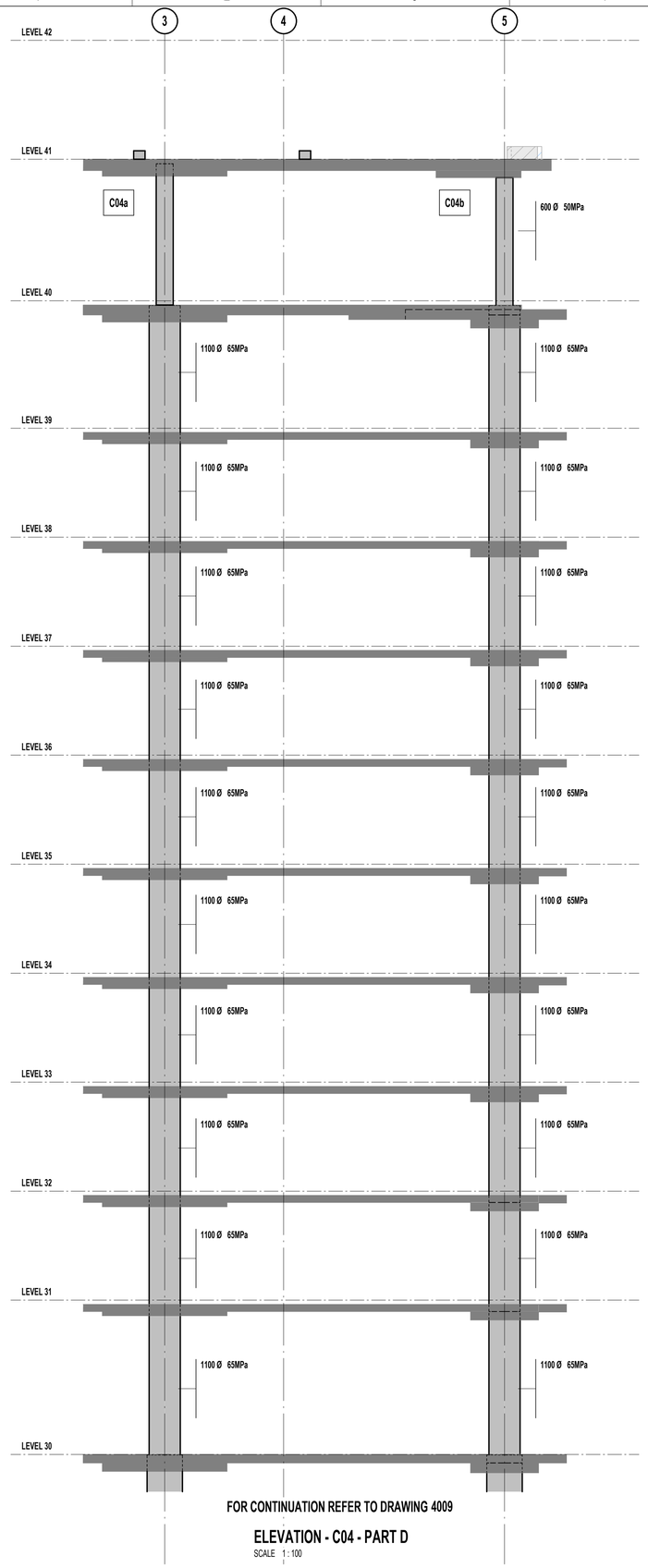
DRAWING TITLE
COLUMN ELEVATION - SHEET 11

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4011
REV. No. A

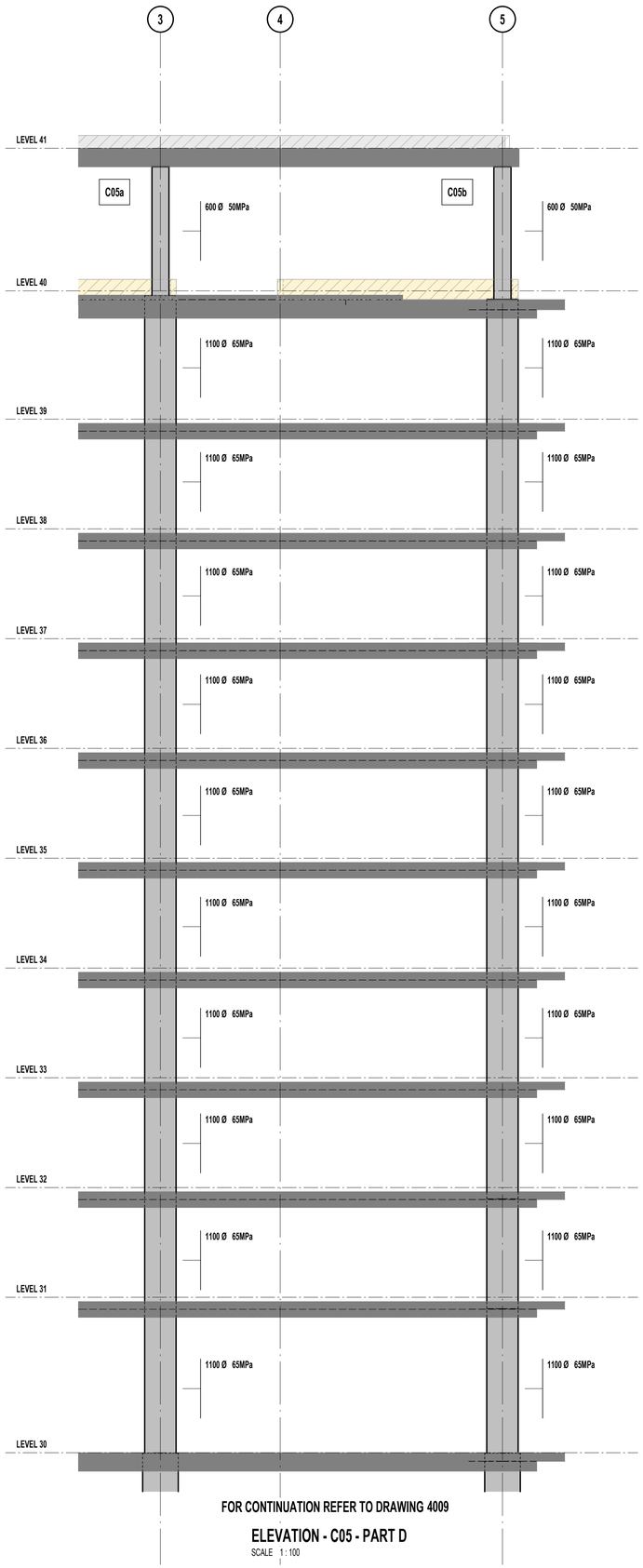
DRAWINGS ARE TO BE PRINTED IN COLOUR
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FOR CONTINUATION REFER TO DRAWING 4009

ELEVATION - C04 - PART D

SCALE 1 : 100



FOR CONTINUATION REFER TO DRAWING 4009

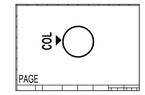
ELEVATION - C05 - PART D

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE; DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____ — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: ____ (‡) — DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALOING COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
COLUMN ELEVATION - SHEET 12

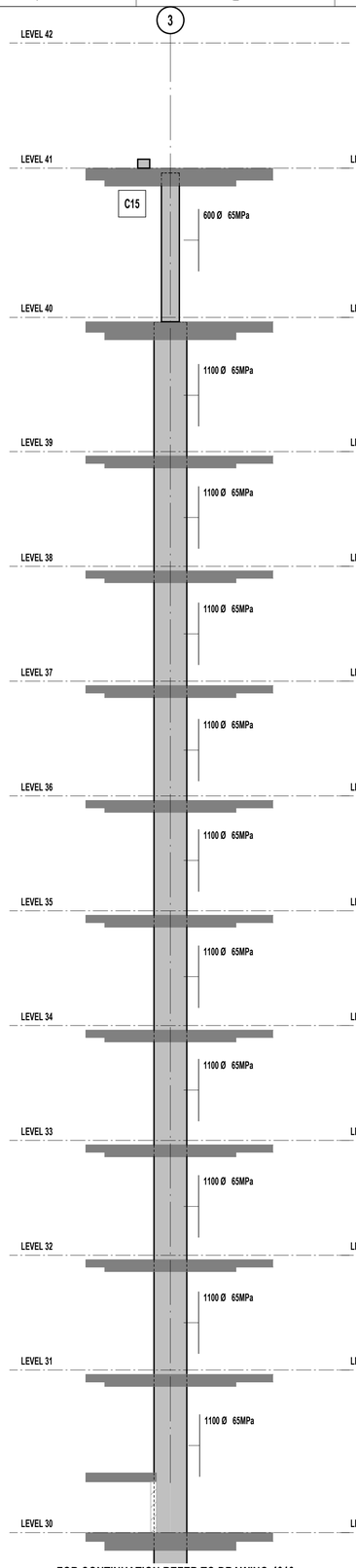
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4012 — REV. No. A

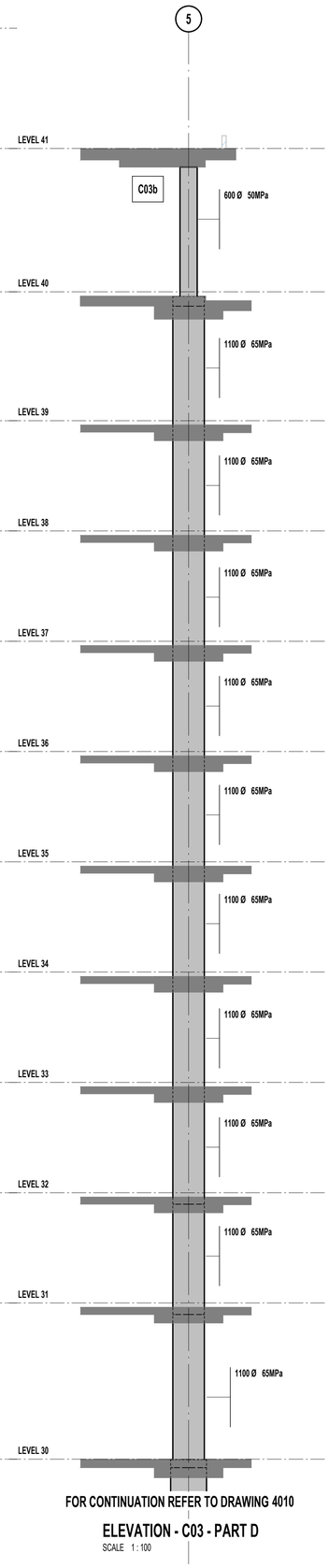
DRAWINGS ARE TO BE PRINTED IN COLOUR
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FOR CONTINUATION REFER TO DRAWING 4010

ELEVATION - C15 - PART D

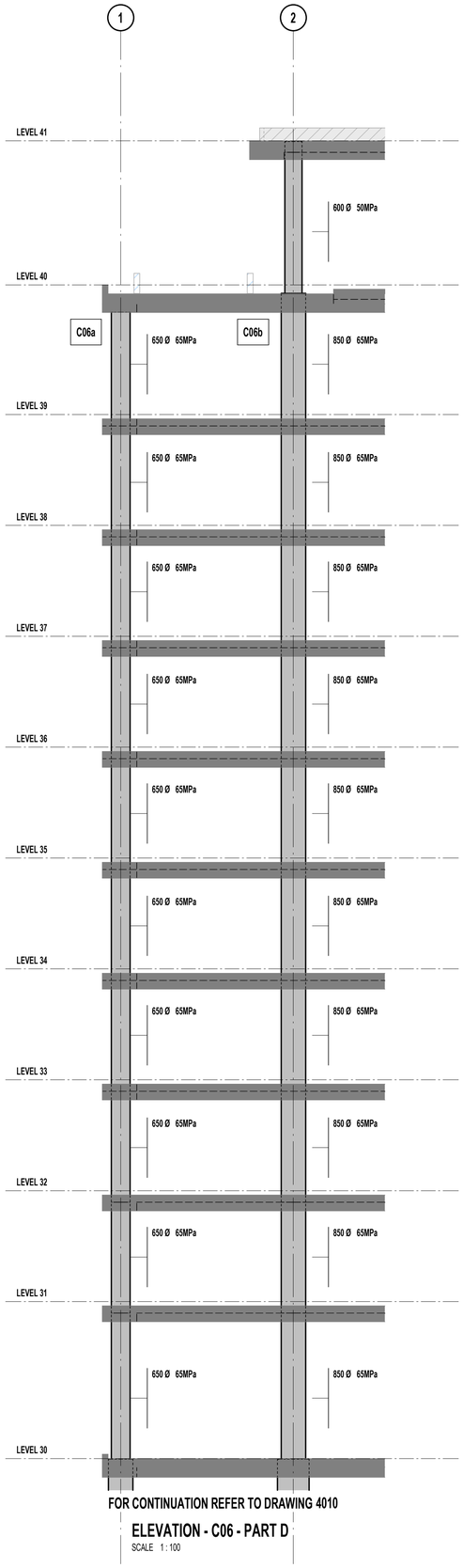
SCALE 1 : 100



FOR CONTINUATION REFER TO DRAWING 4010

ELEVATION - C03 - PART D

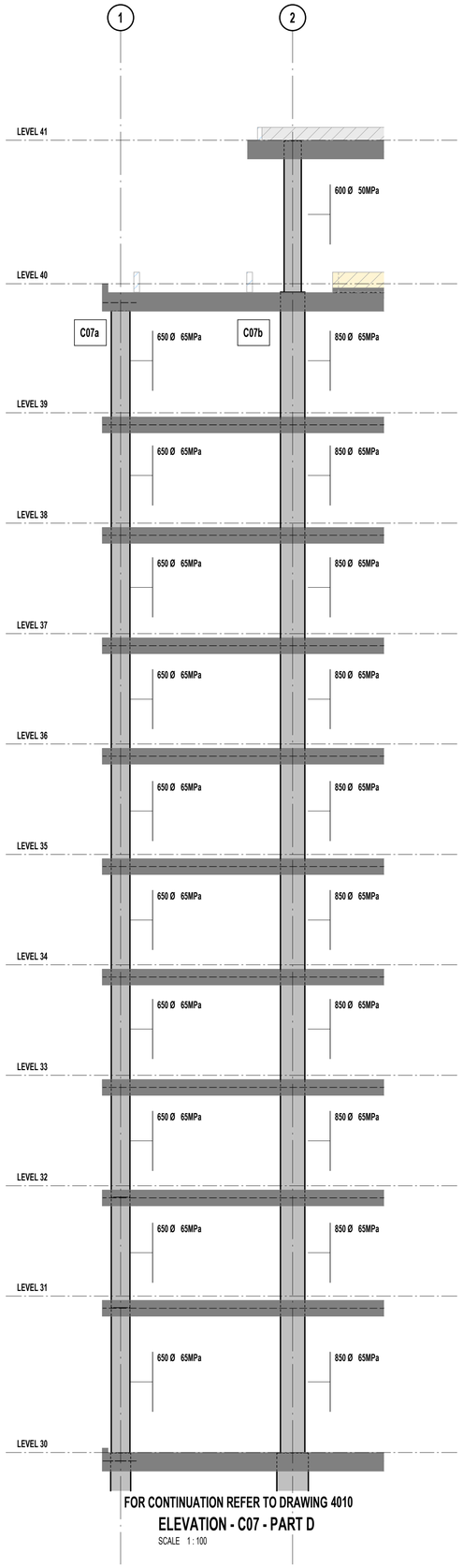
SCALE 1 : 100



FOR CONTINUATION REFER TO DRAWING 4010

ELEVATION - C06 - PART D

SCALE 1 : 100



FOR CONTINUATION REFER TO DRAWING 4010

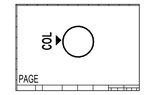
ELEVATION - C07 - PART D

SCALE 1 : 100

LEGEND

1000x400 50MPa — DENOTES COLUMN SIZE / DENOTES CONCRETE STRENGTH
S: ____ — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: ____
H: ____ (‡) — DENOTES TOTAL **VERTICAL** REINFORCEMENT / DENOTES **HORIZONTAL** OR TIE REINFORCEMENT (‡ IF SHOWN DENOTES ADDITIONAL OUTER TIES AT HALF SPACING)
A: LxW — DENOTES **ARRANGEMENT** OF BARS ALONG (LxW)
L = NUMBER OF BARS ALONG COLUMN LENGTH
W = NUMBER OF BARS ALOING COLUMN WIDTH

NOTE: REFER TO COLUMN DETAIL SHEETS FOR FURTHER INFORMATION ON TRANSITIONS, BARS / TIE ARRANGEMENTS AND ADDITIONAL OUTER TIES.



TYPICAL COLUMN ELEVATION DIRECTIONS

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

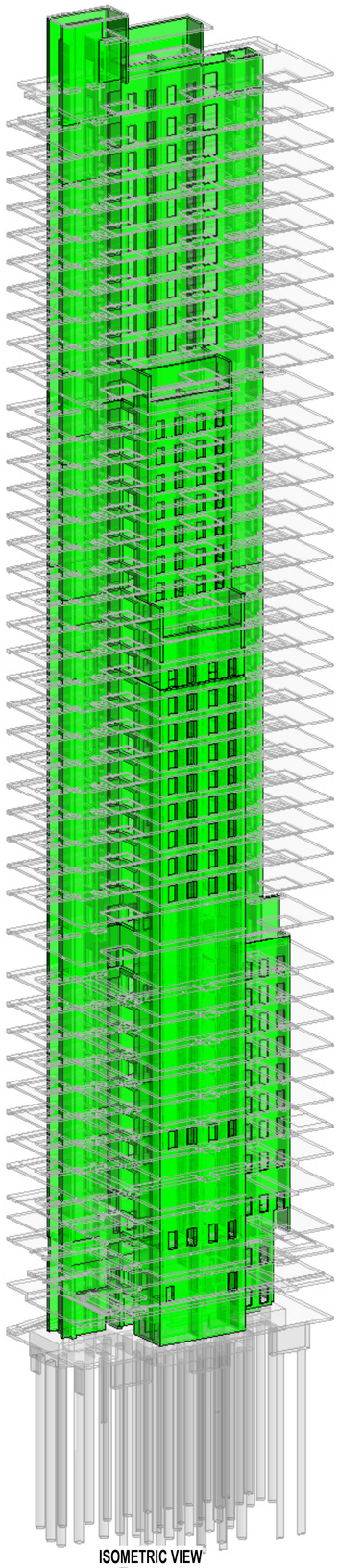
DRAWING TITLE
COLUMN ELEVATION - SHEET 13

PROJECT STATUS
FOR DESIGN DEVELOPMENT

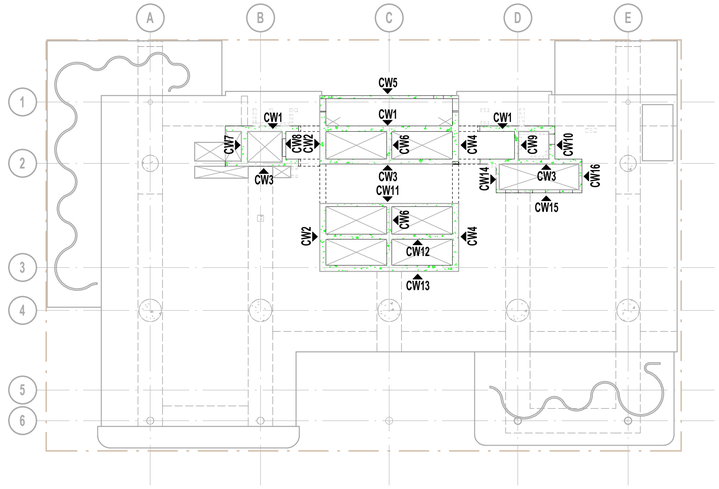
SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4013 — REV. No. A

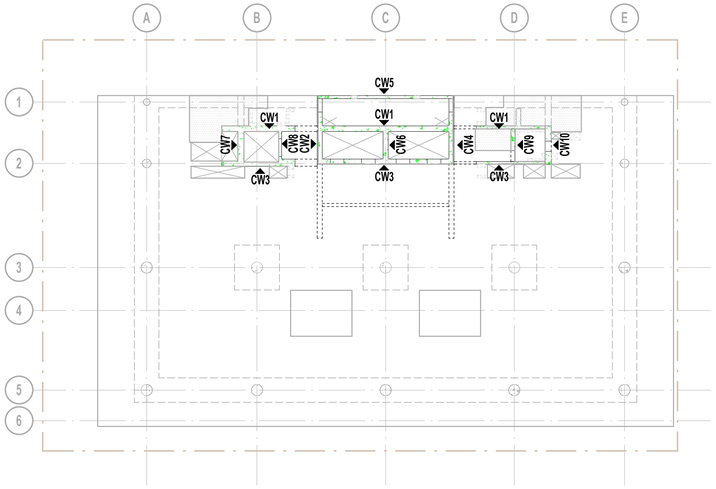
DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



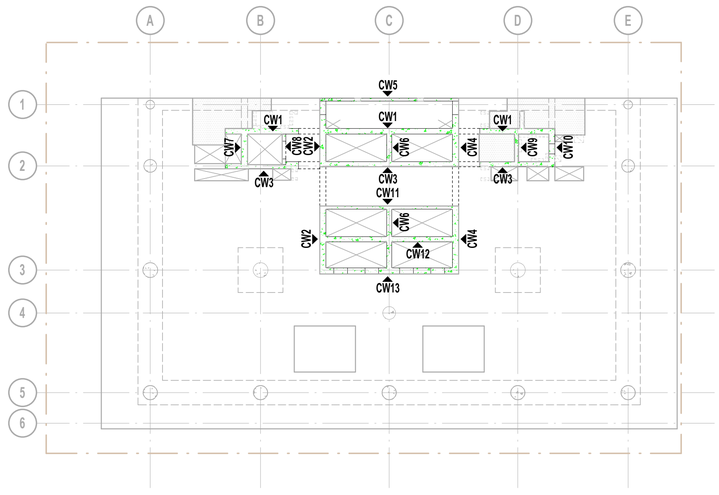
ISOMETRIC VIEW



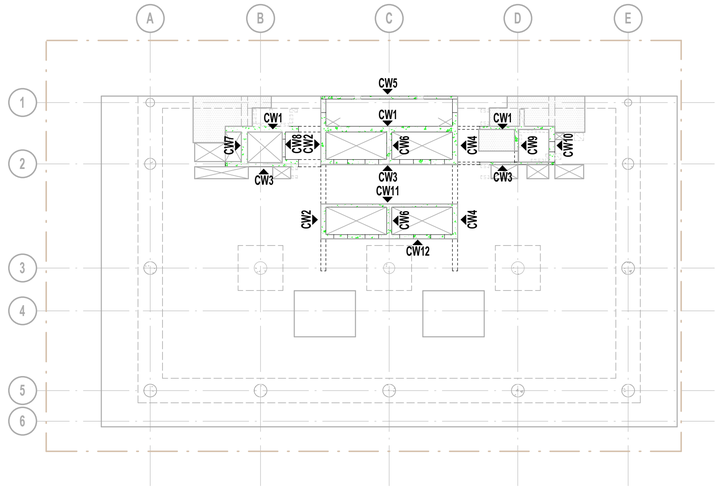
KEY PLAN - LEVEL 2 SHOWN



KEY PLAN - LEVEL 31 SHOWN



KEY PLAN - LEVEL 12 SHOWN



KEY PLAN - LEVEL 23 SHOWN

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - KEY PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

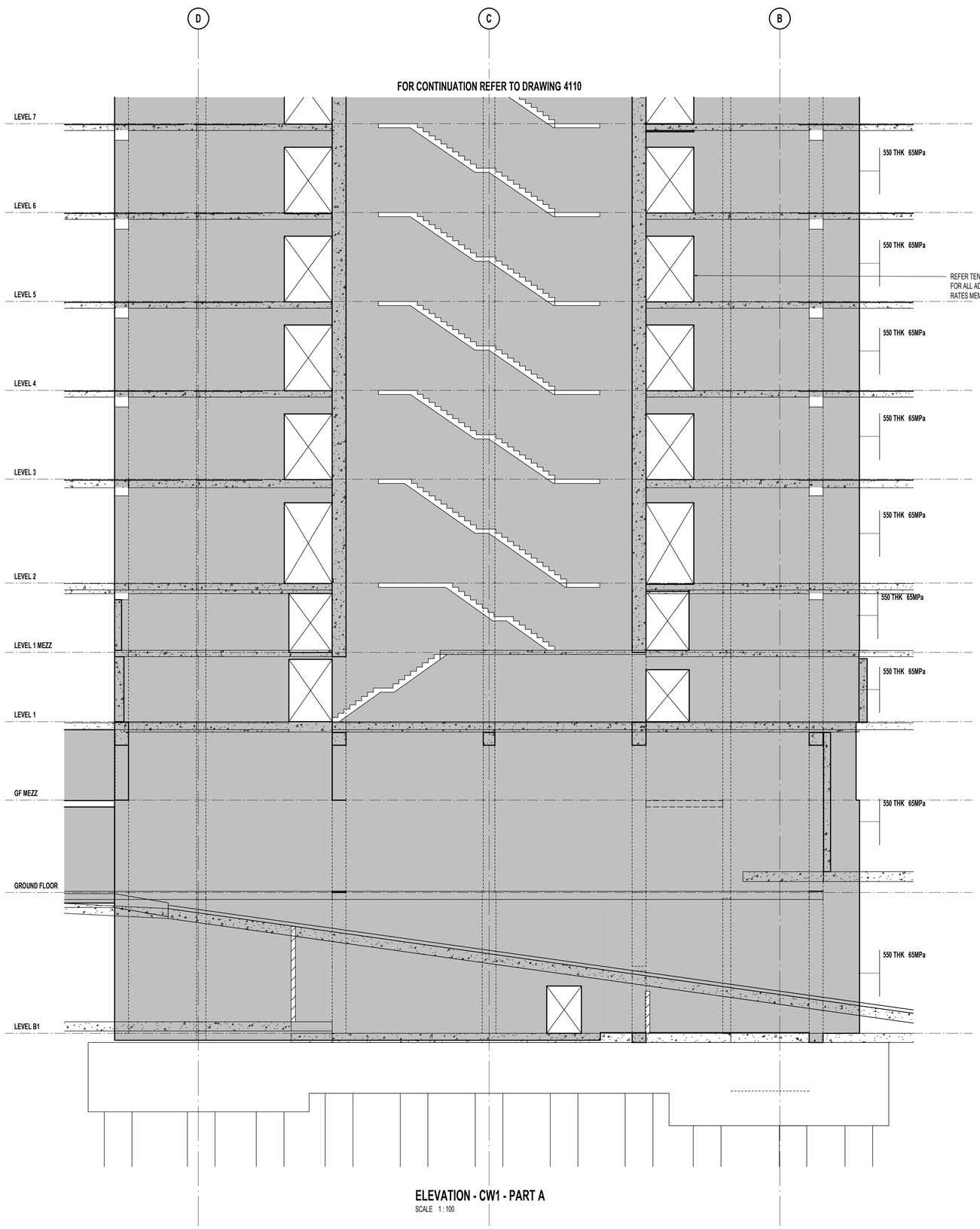
SCALE		
1 : 300	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-4100	A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



ELEVATION - CW1 - PART A

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa — DENOTES WALL THICKNESS; DENOTES CONCRETE STRENGTH
S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: — DENOTES **HORIZONTAL** REINFORCEMENT
T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:
    15-A20 (C) 5000 LG
    - BAR LENGTH (IF REQUIRED)
    - DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - NO. OF BARS (IF REQUIRED)
17. TIE TAG NOTATION:
    12-D20-T2
    - TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

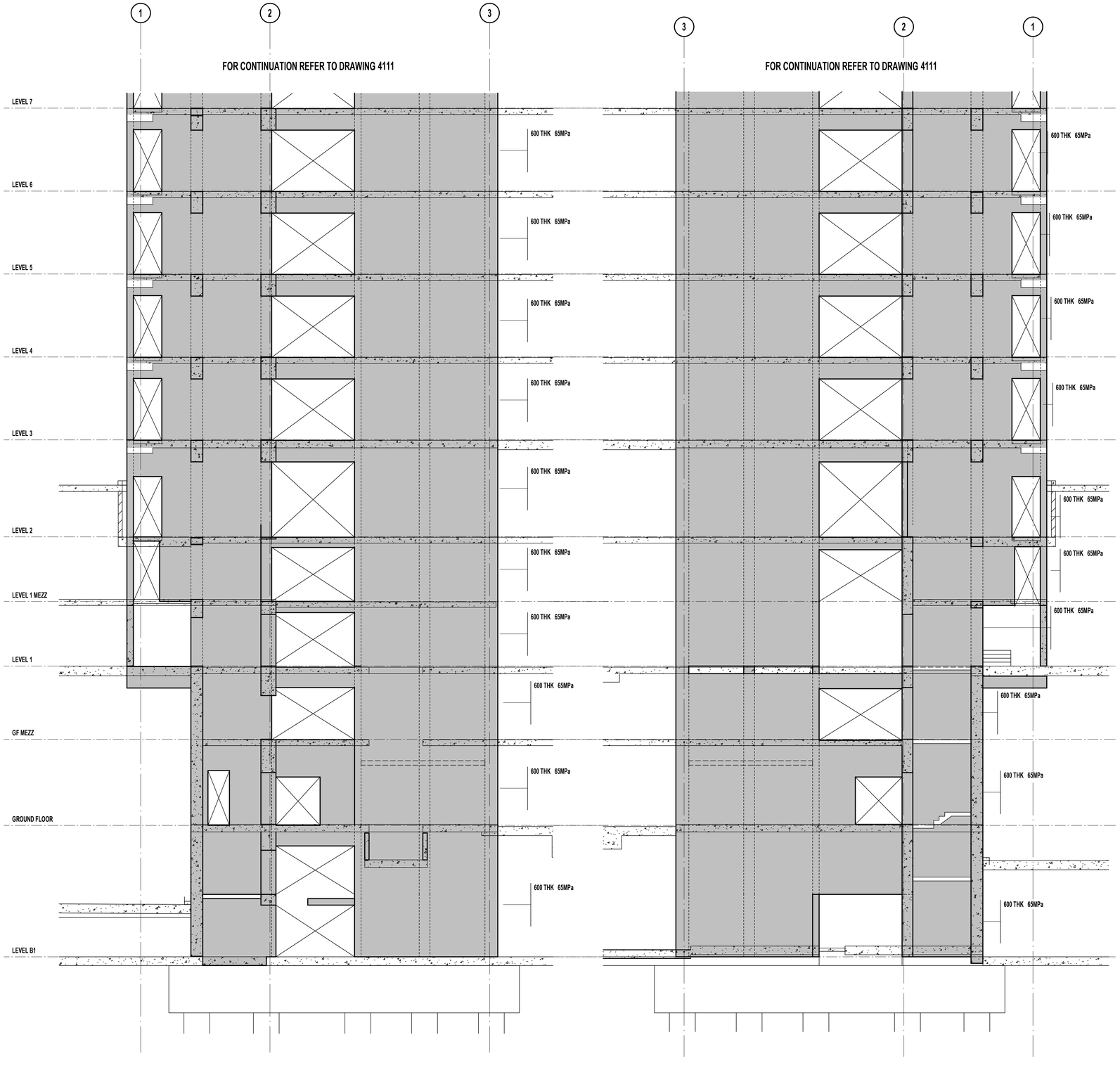
DRAWING TITLE
CORE WALL ELEVATION - SHEET 01

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4101
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW2 - PART A

SCALE 1 : 100

ELEVATION - CW4 - PART A

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST
- 1000x400 50MPa — DENOTES WALL THICKNESS / DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

- L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG
- G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG
- **DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG**
- **DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG**

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE / WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:
    15-A20 (C) 5000 LG
    - BAR LENGTH (IF REQUIRED)
    - DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - NO. OF BARS (IF REQUIRED)
17. TIE TAG NOTATION:
    12-D20-T2
    - TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 02

PROJECT STATUS
FOR DESIGN DEVELOPMENT

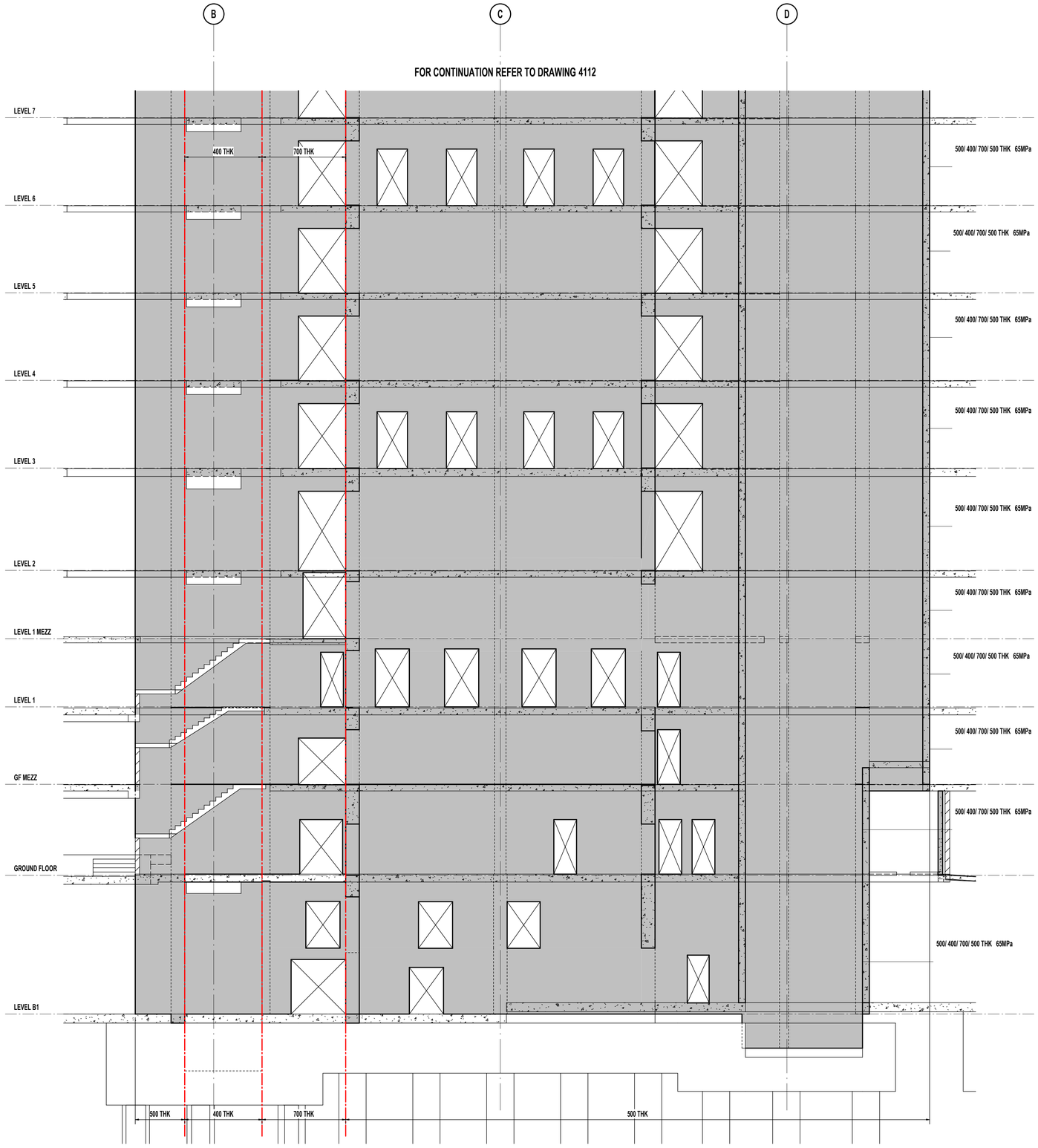
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4102 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200

FOR CONTINUATION REFER TO DRAWING 4112



ELEVATION - CW3 - PART A

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa — DENOTES WALL THICKNESS
S: — DENOTES CONCRETE STRENGTH
V: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
H: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
T: — DENOTES **HORIZONTAL** REINFORCEMENT
DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:
    15-A20 (C) 5000 LG
    - BAR LENGTH (IF REQUIRED)
    - DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - NO. OF BARS (IF REQUIRED)
17. TIE TAG NOTATION:
    12-D20-T2
    - TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 03

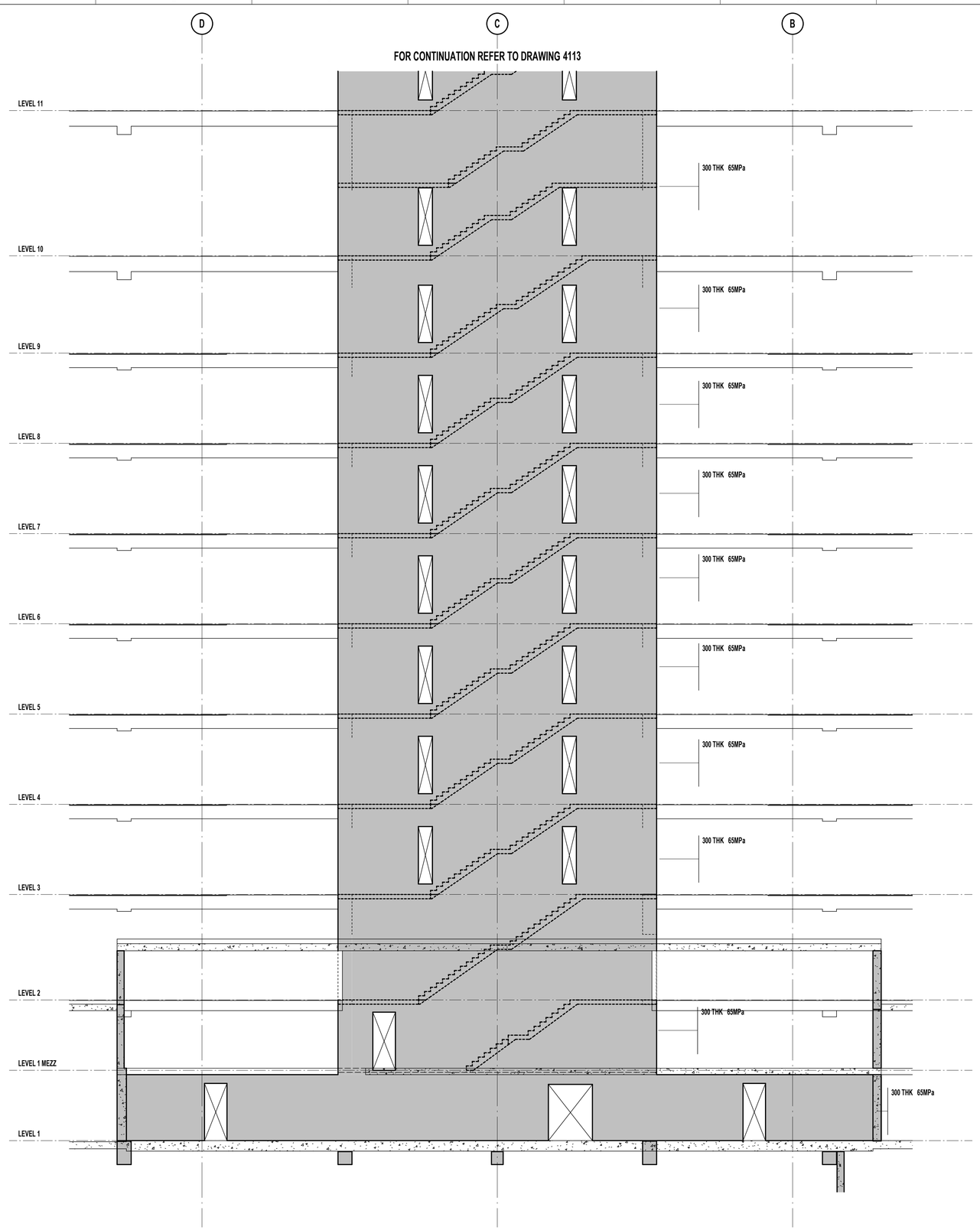
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4103 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW5 - PART A

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

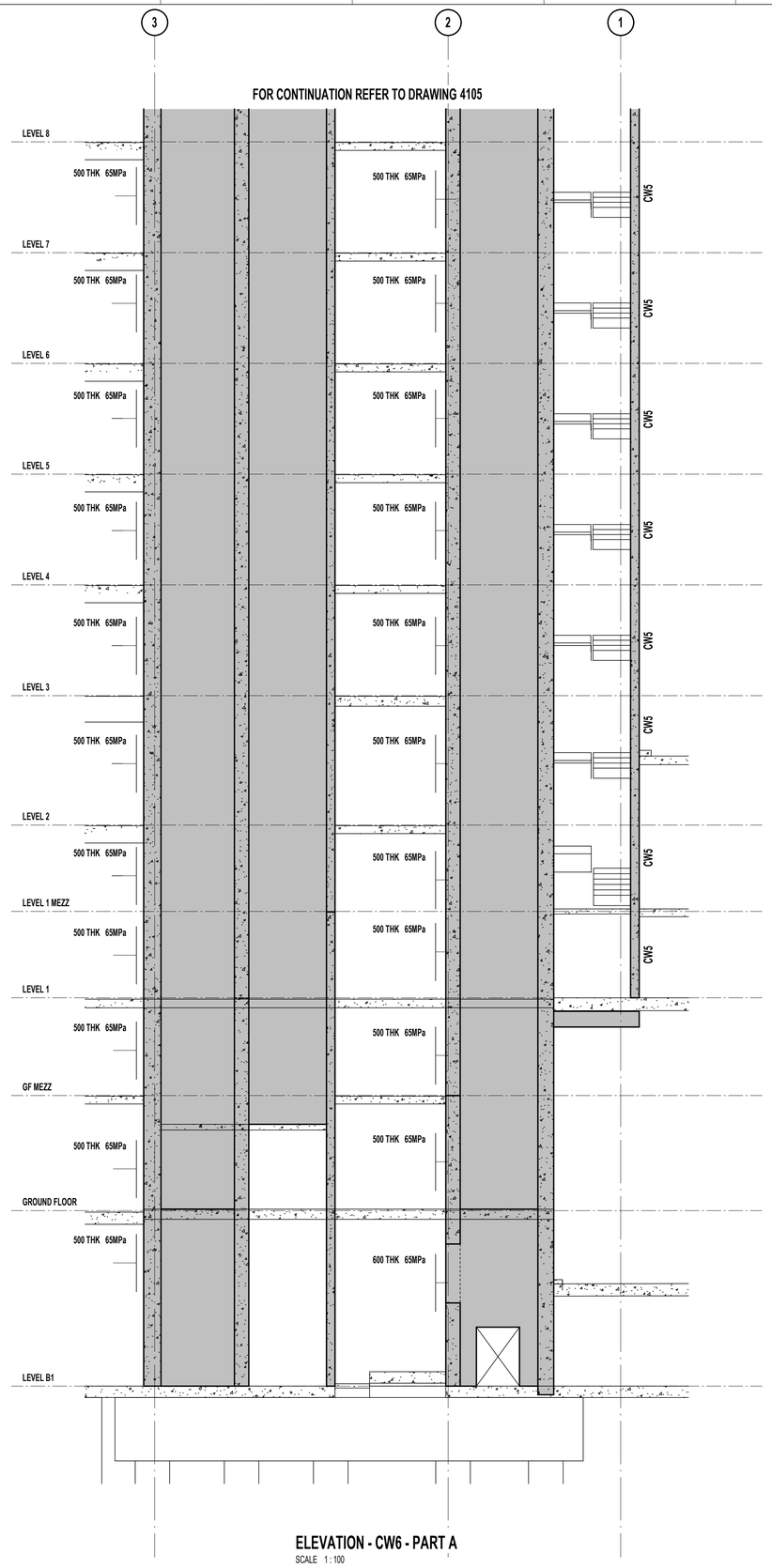
DRAWING TITLE
CORE WALL ELEVATION - SHEET 04

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

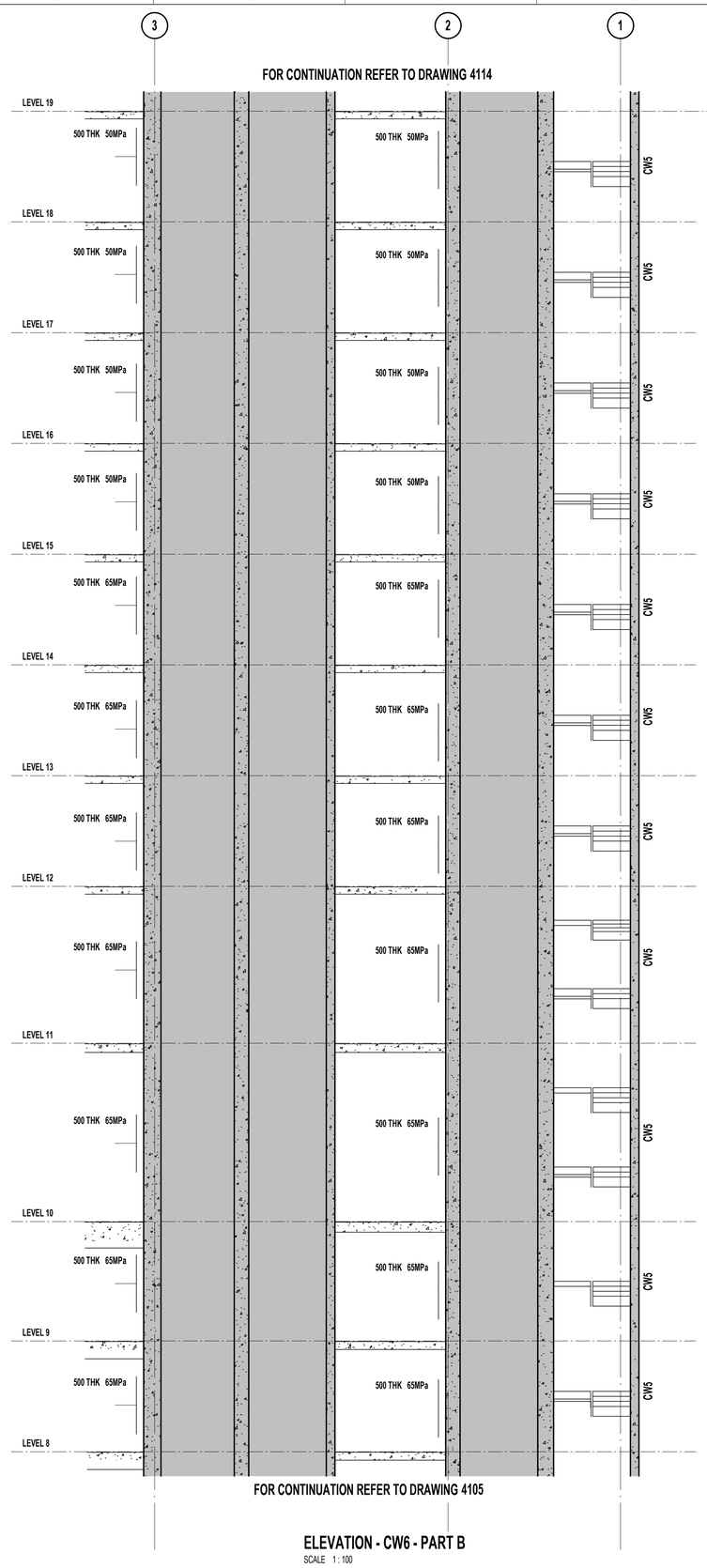
PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4104
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW6 - PART A

SCALE 1 : 100



ELEVATION - CW6 - PART B

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000x400 — DENOTES WALL THICKNESS
- 50MPa — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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CLIENT

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

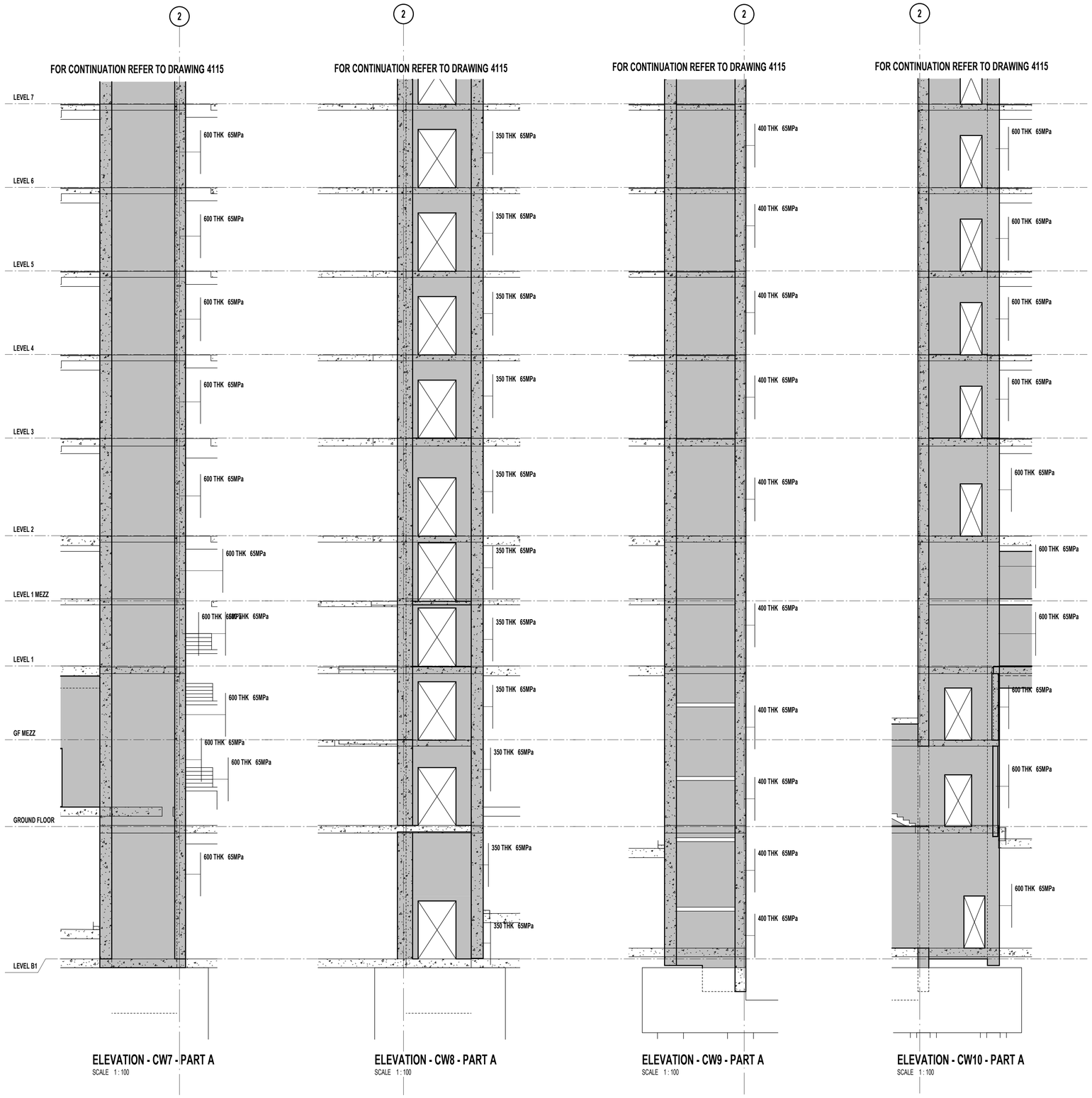
DRAWING TITLE
CORE WALL ELEVATION - SHEET 05

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4105
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW7 - PART A
SCALE 1 : 100

ELEVATION - CW8 - PART A
SCALE 1 : 100

ELEVATION - CW9 - PART A
SCALE 1 : 100

ELEVATION - CW10 - PART A
SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:
    15-A20 (C) 5000 LG
    - BAR LENGTH (IF REQUIRED)
    - DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - NO. OF BARS (IF REQUIRED)
17. TIE TAG NOTATION:
    12-D20-T2
    - TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 06

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4106
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW11 - PART A
SCALE 1 : 100

ELEVATION - CW12 - PART A
SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:
    15-A20 (C) 5000 LG
    - BAR LENGTH (IF REQUIRED)
    - DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - NO. OF BARS (IF REQUIRED)
17. TIE TAG NOTATION:
    12-D20-T2
    - TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 07

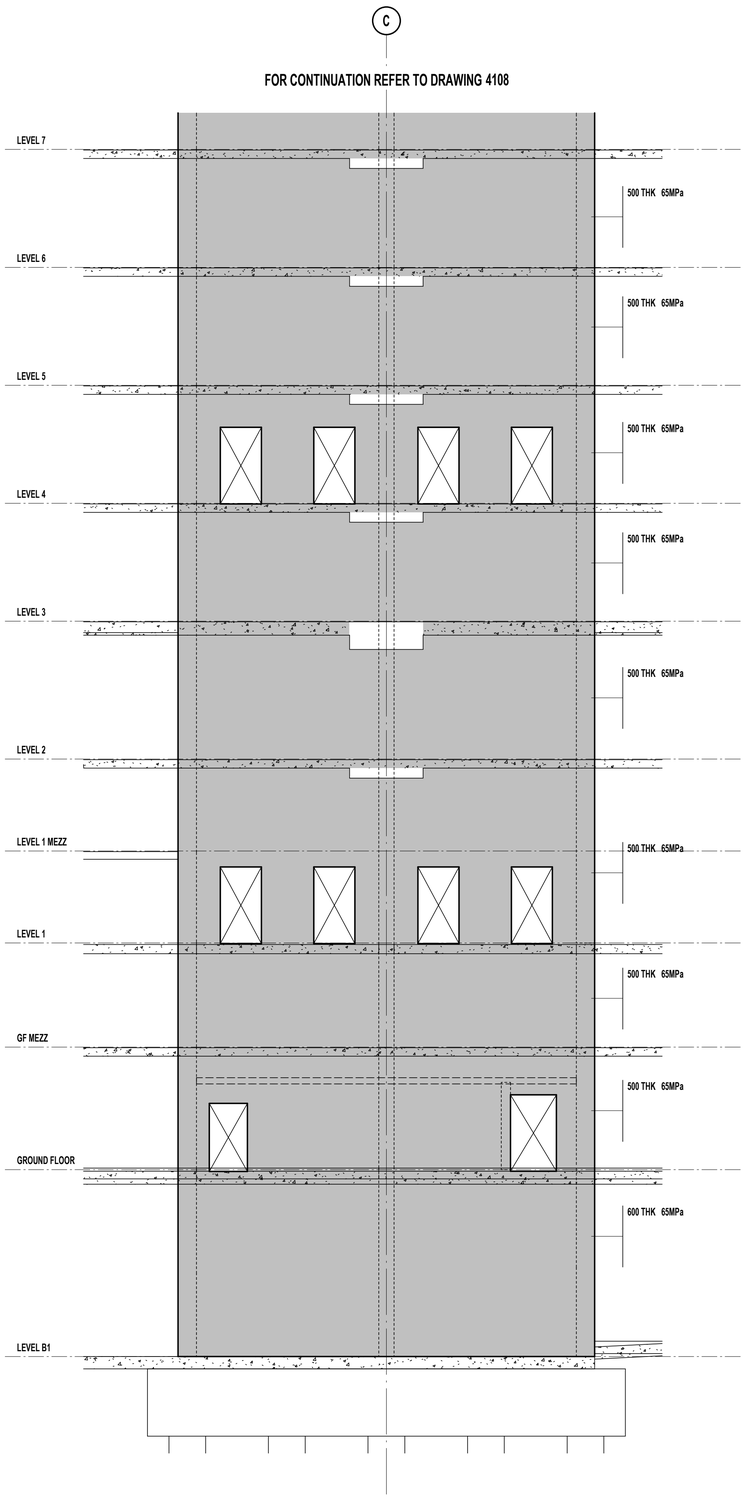
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

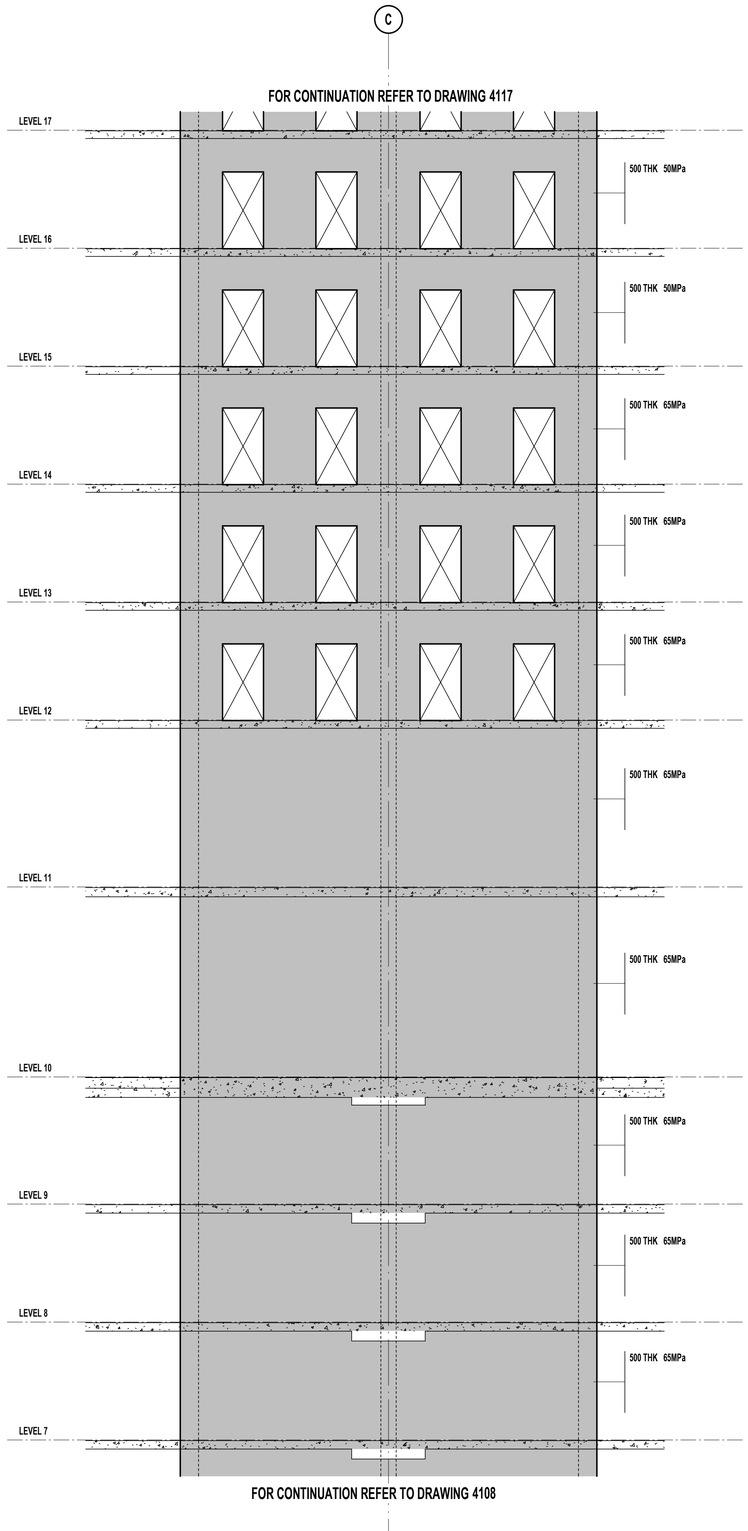
DRAWING NUMBER	REV. No.
HER-DRG-STR-4107	A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW13 - PART A

SCALE 1 : 100



ELEVATION - CW13 - PART B

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- 15 — NO. OF BARS (IF REQUIRED)
- A — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- (C) — BAR PLACEMENT / LAYER (IF REQUIRED)
- 5000 — BAR LENGTH (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- 12 — TOTAL NO. OF TIES (IF REQUIRED)
- D — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- T2 — TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 08

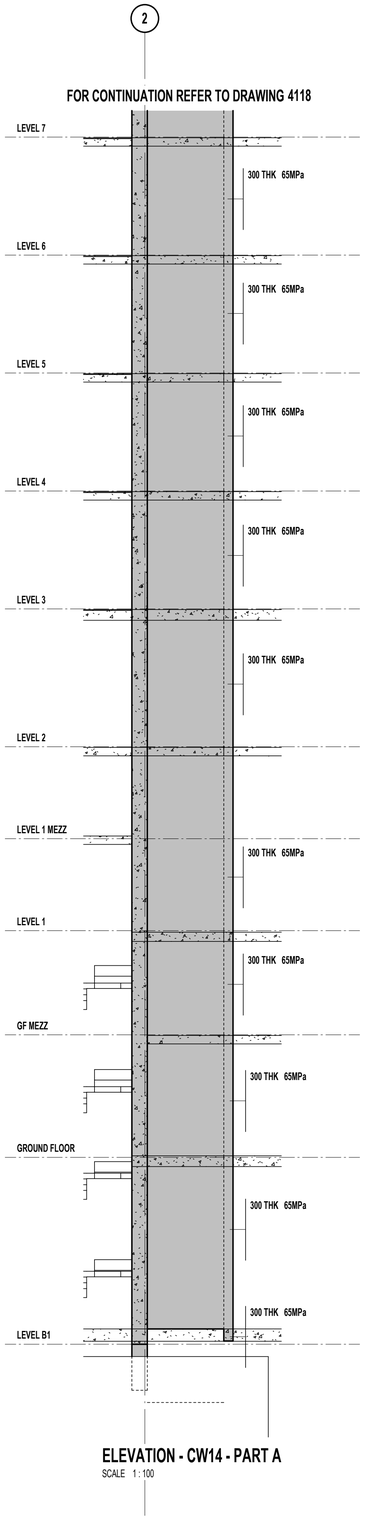
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

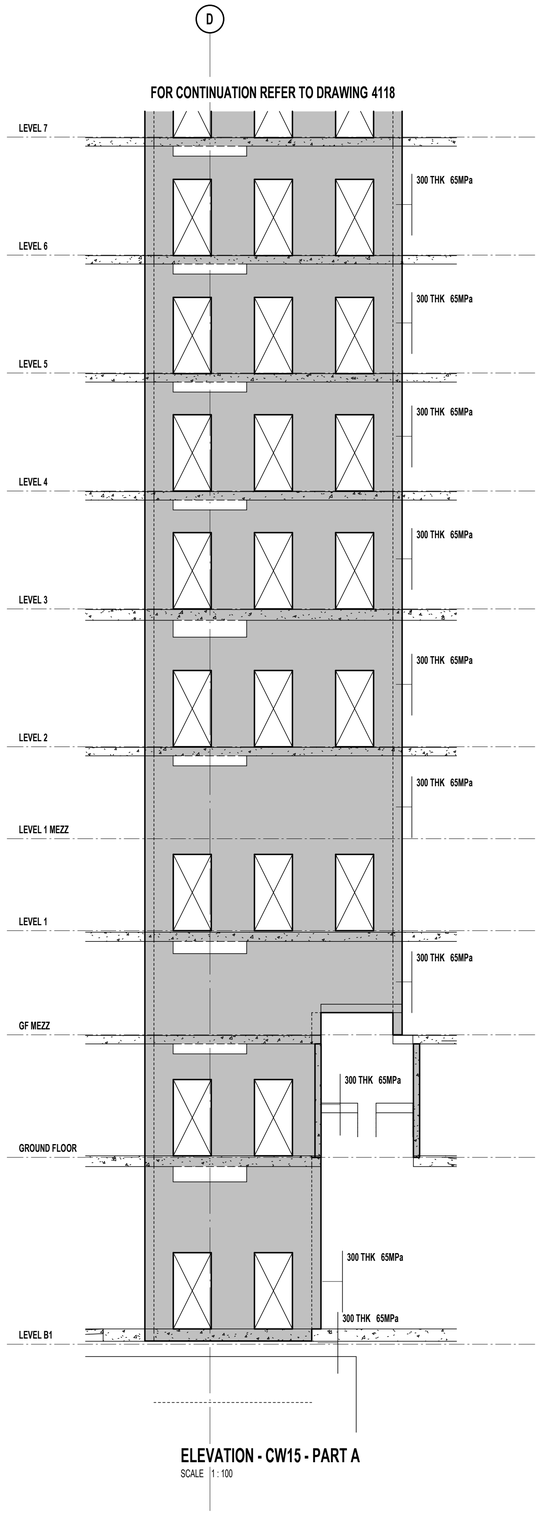
PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4108
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR

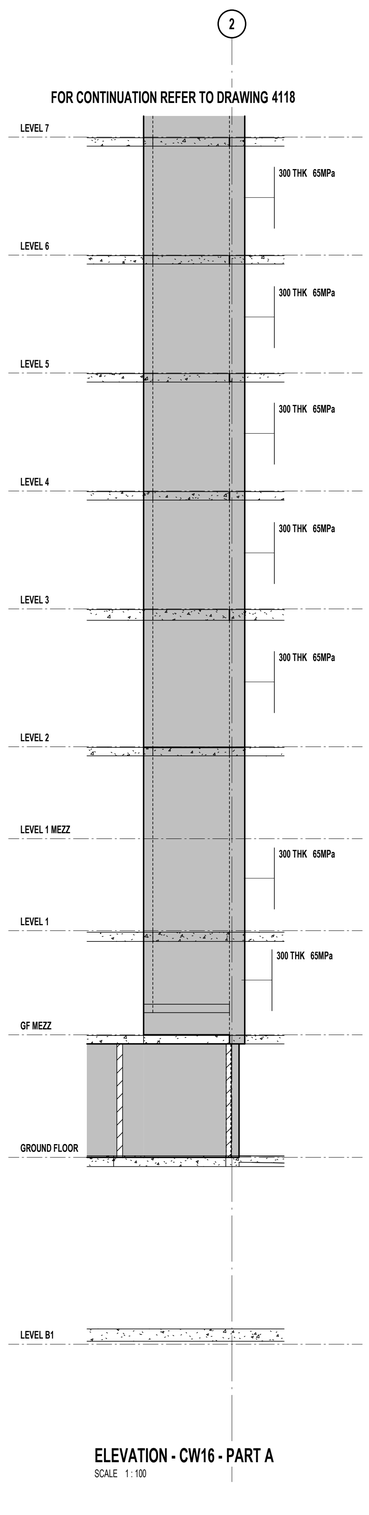
0 10 20 30 40 50 100 150 200



ELEVATION - CW14 - PART A
SCALE 1 : 100



ELEVATION - CW15 - PART A
SCALE 1 : 100



ELEVATION - CW16 - PART A
SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
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11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

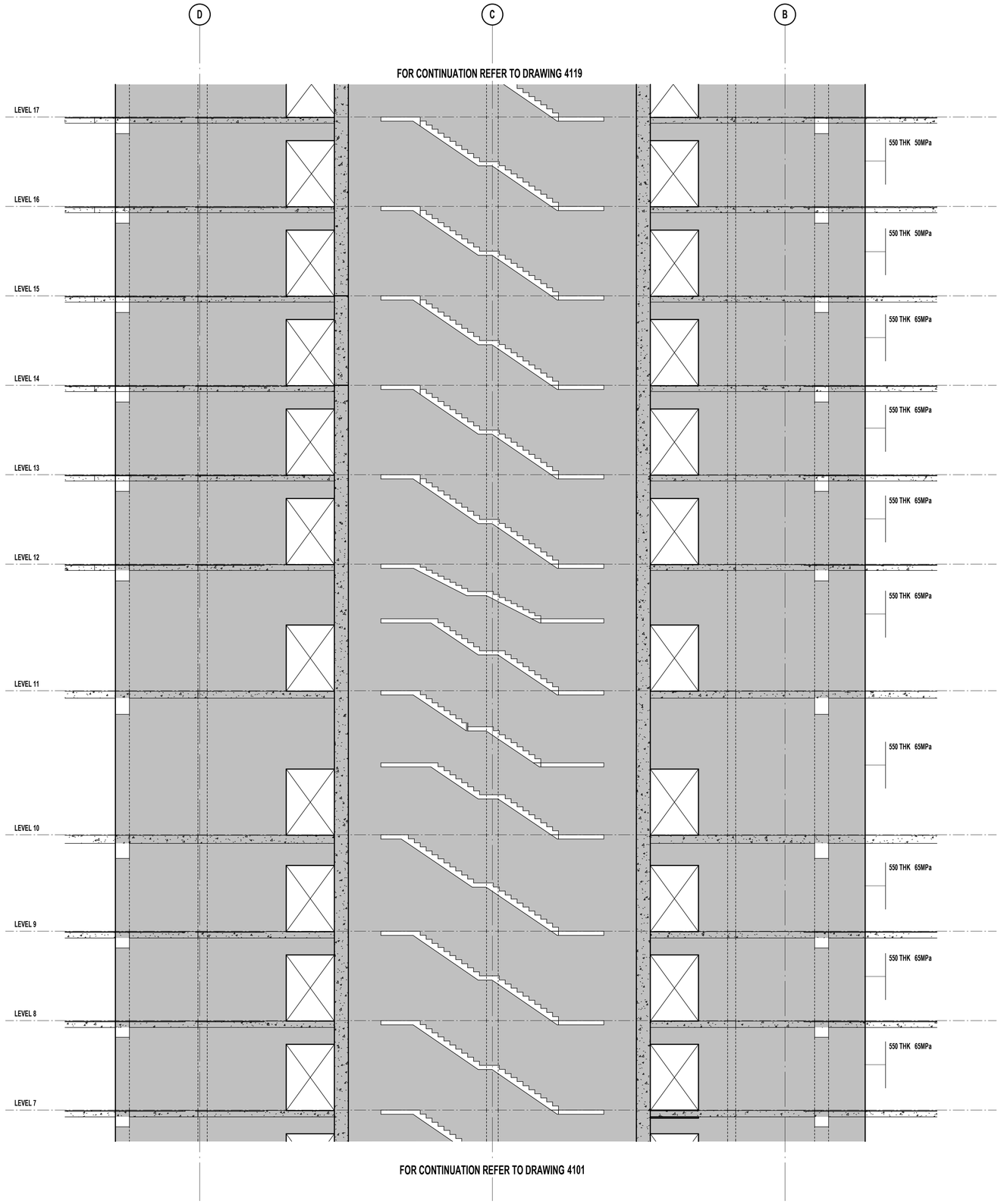
DRAWING TITLE
CORE WALL ELEVATION - SHEET 09

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4109
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW1 - PART B

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:
    15-A20 (C) 5000 LG
    - 15 — BAR LENGTH (IF REQUIRED)
    - A — DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
    - 20 — SPACING (IN cm)
    - (C) — BAR SIZE (REFER SCHEDULE)
    - 5000 — NO. OF BARS (IF REQUIRED)
17. TIE TAG NOTATION:
    12-D20-T2
    - 12 — TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
    - D — SPACING (IN cm)
    - 20 — BAR SIZE (REFER SCHEDULE)
    - T2 — TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

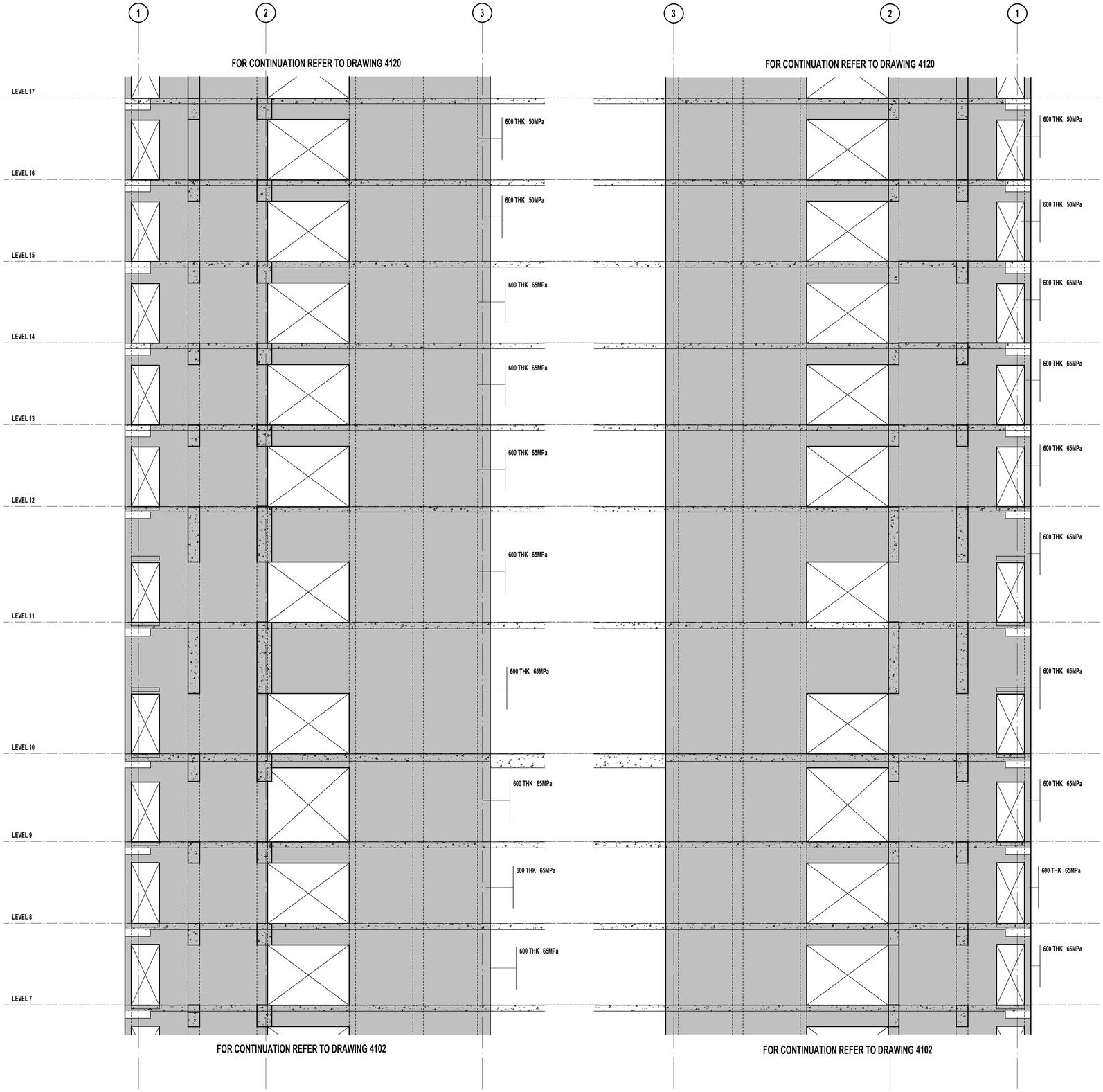
DRAWING TITLE
CORE WALL ELEVATION - SHEET 10

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4110
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW2 - PART B

SCALE 1 : 100

ELEVATION - CW4 - PART B

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000x400 — DENOTES WALL THICKNESS
- 50MPa — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- LG — BAR LENGTH (IF REQUIRED)
- (C) — DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- A20 — SPACING (IN cm)
- 5000 — BAR SIZE (REFER SCHEDULE)
- 15 — NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- T2 — TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- D20 — SPACING (IN cm)
- 12 — BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 11

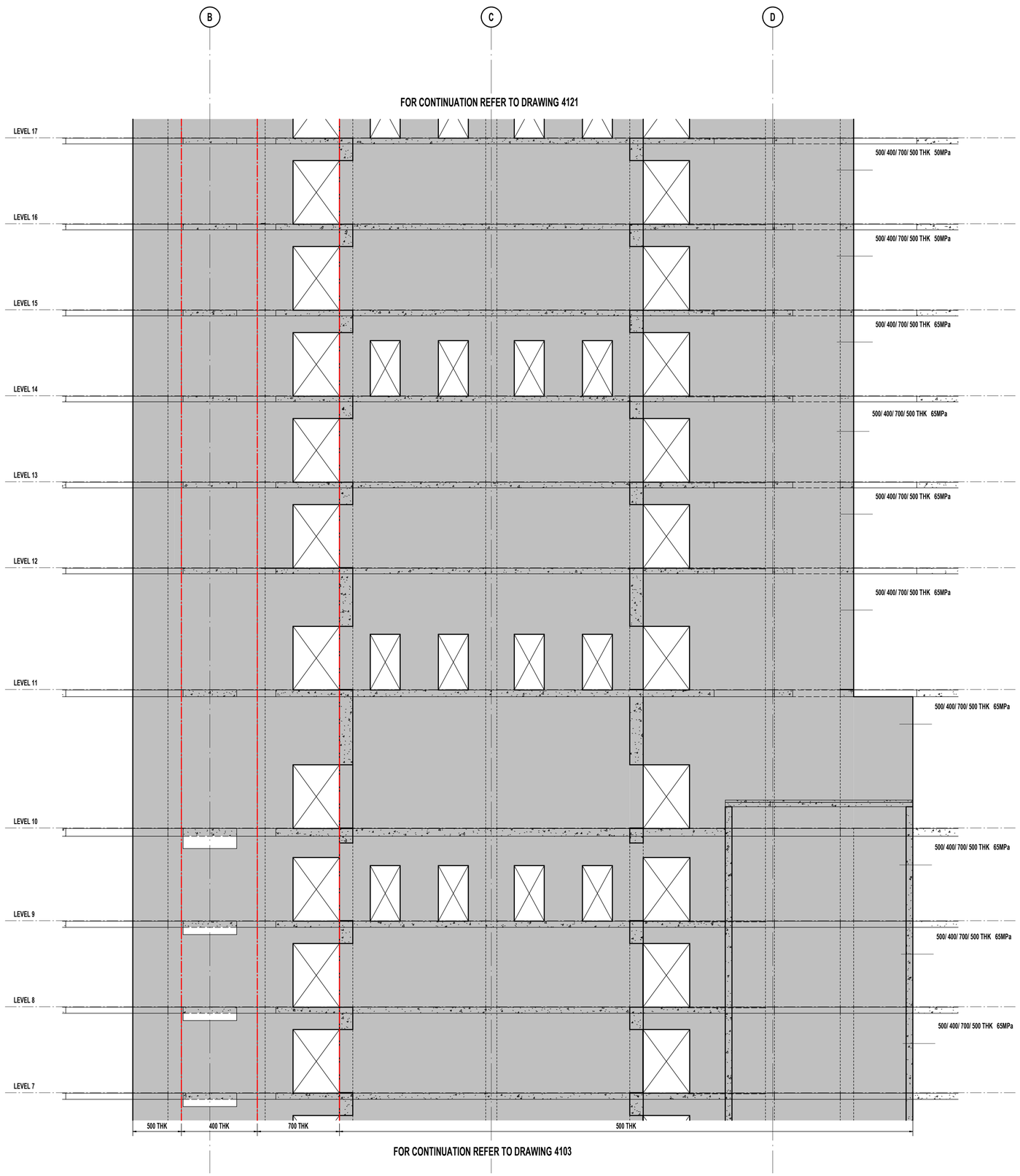
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4111 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW3 - PART B

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-__ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

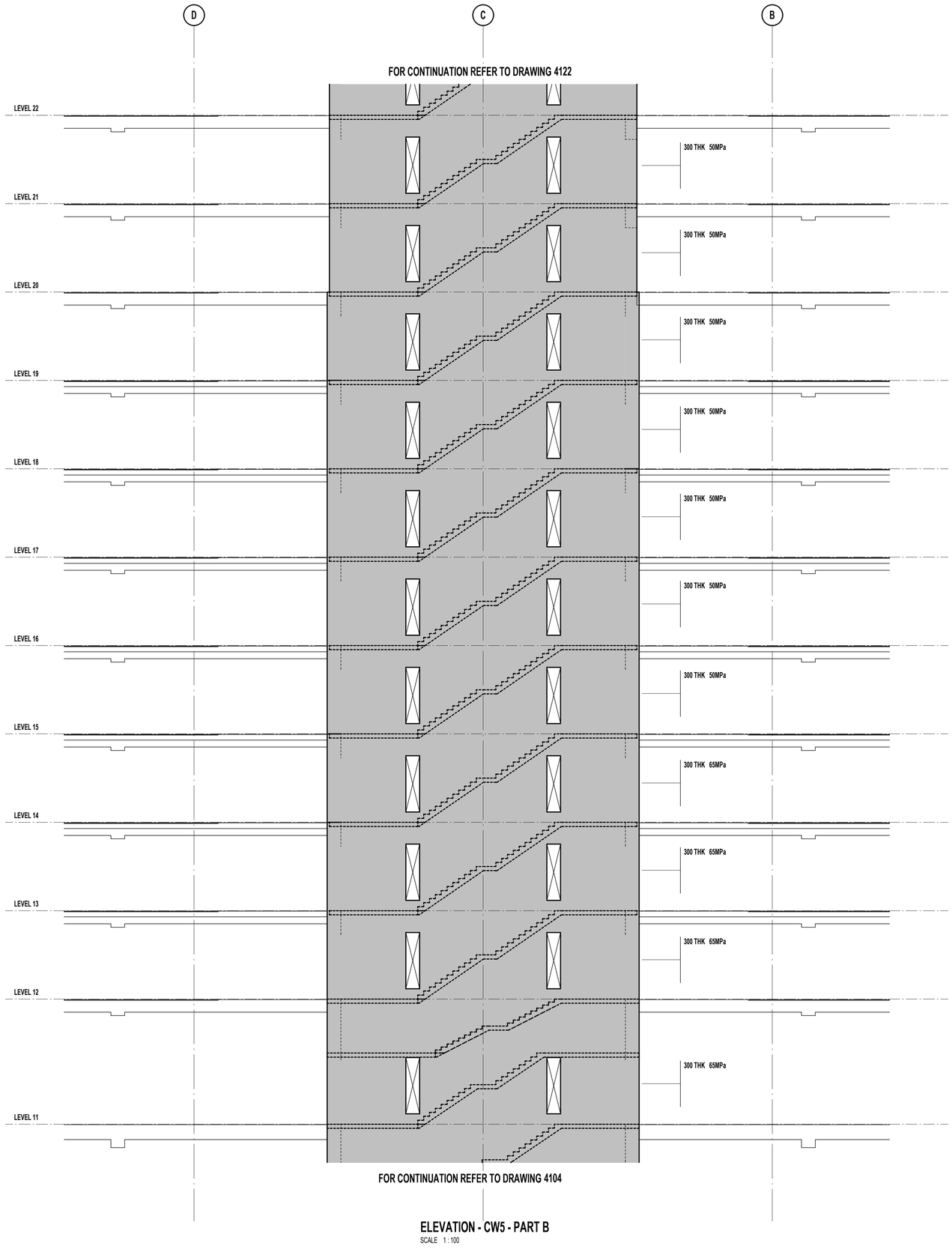
DRAWING TITLE
CORE WALL ELEVATION - SHEET 12

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4112
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW5 - PART B

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- 15 — NO. OF BARS (IF REQUIRED)
- A — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- (C) — DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- 5000 — BAR LENGTH (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- 12 — TOTAL NO. OF TIES (IF REQUIRED)
- D — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- T2 — TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 13

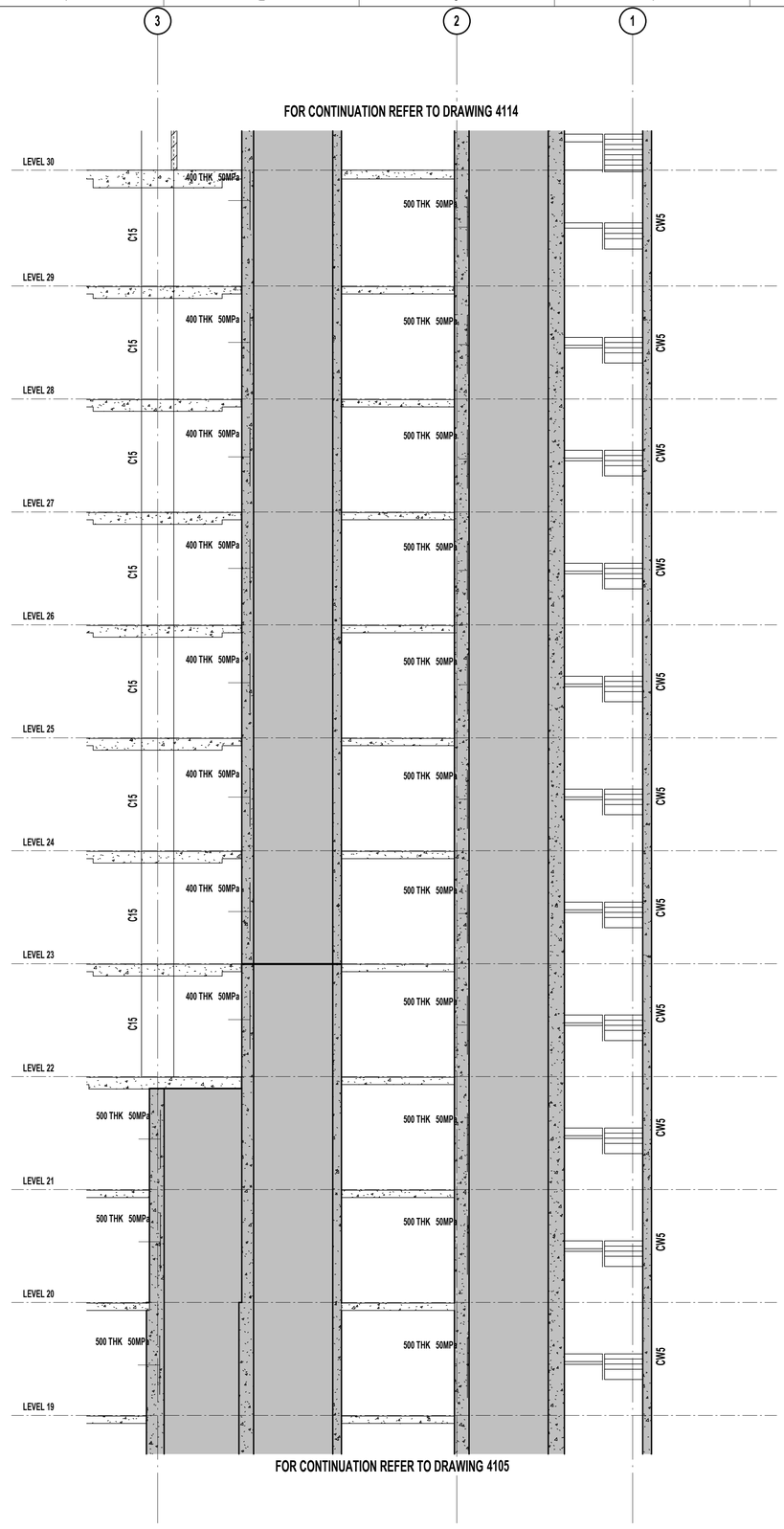
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

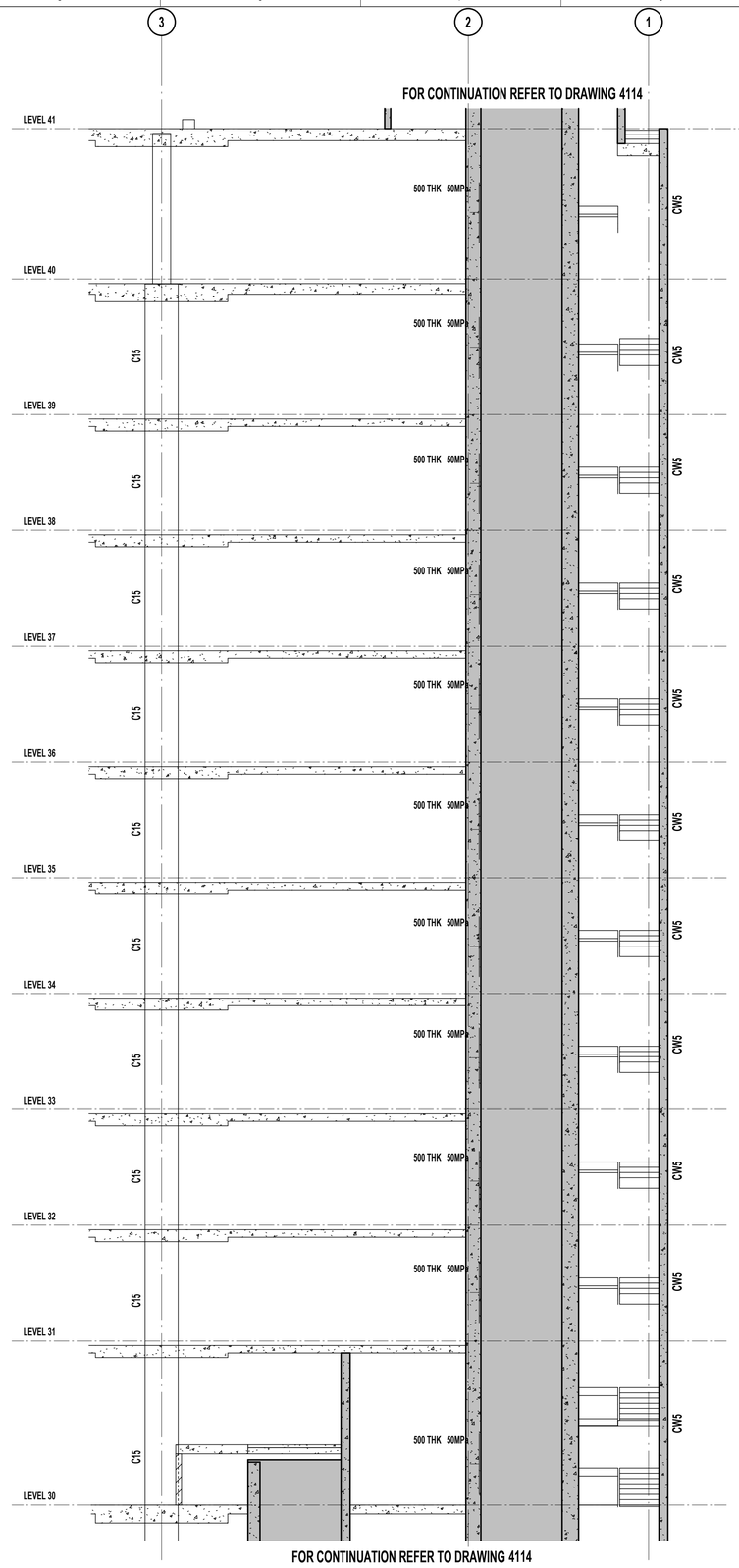
DRAWING NUMBER HER-DRG-STR-4113 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200



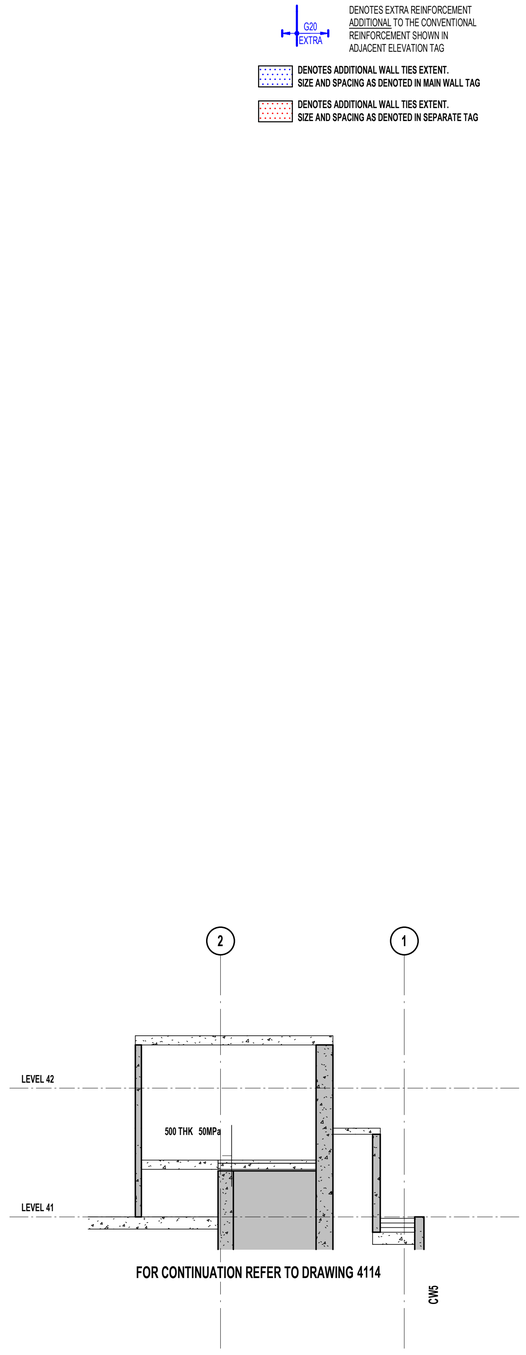
ELEVATION - CW6 - PART C

SCALE 1 : 100



ELEVATION - CW6 - PART D

SCALE 1 : 100



ELEVATION - CW6 - PART E

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa — DENOTES WALL THICKNESS / DENOTES CONCRETE STRENGTH
S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: — DENOTES **HORIZONTAL** REINFORCEMENT
T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE / WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG

- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2

- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 14

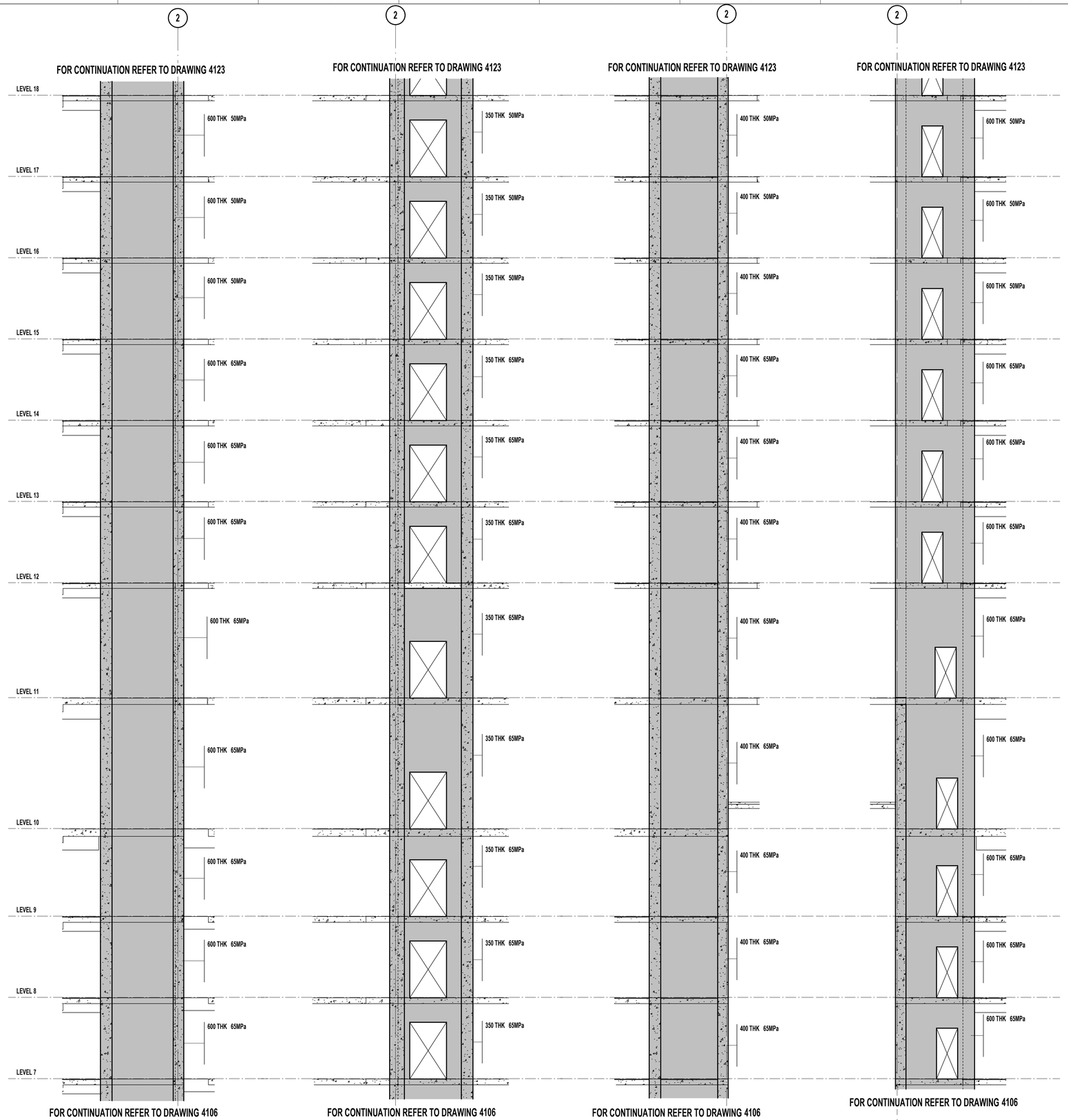
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4114 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW7 - PART B
SCALE 1 : 100

ELEVATION - CW8 - PART B
SCALE 1 : 100

ELEVATION - CW9 - PART B
SCALE 1 : 100

ELEVATION - CW10 - PART B
SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa — DENOTES WALL THICKNESS
S: — DENOTES CONCRETE STRENGTH
V: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
H: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
T: — DENOTES **HORIZONTAL** REINFORCEMENT
DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

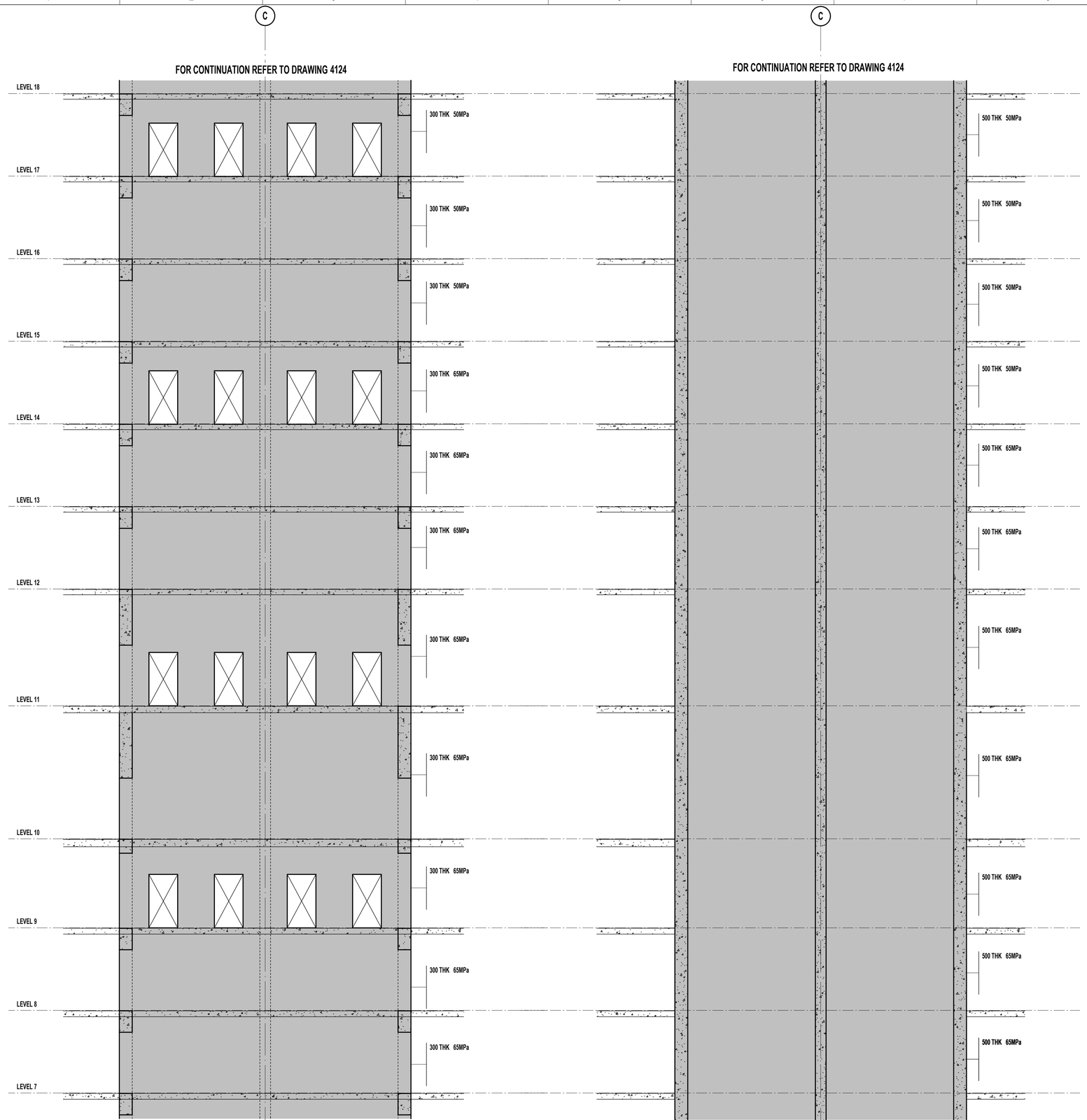
DRAWING TITLE
CORE WALL ELEVATION - SHEET 15

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4115
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW11 - PART B

SCALE 1 : 100

ELEVATION - CW12 - PART B

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 16

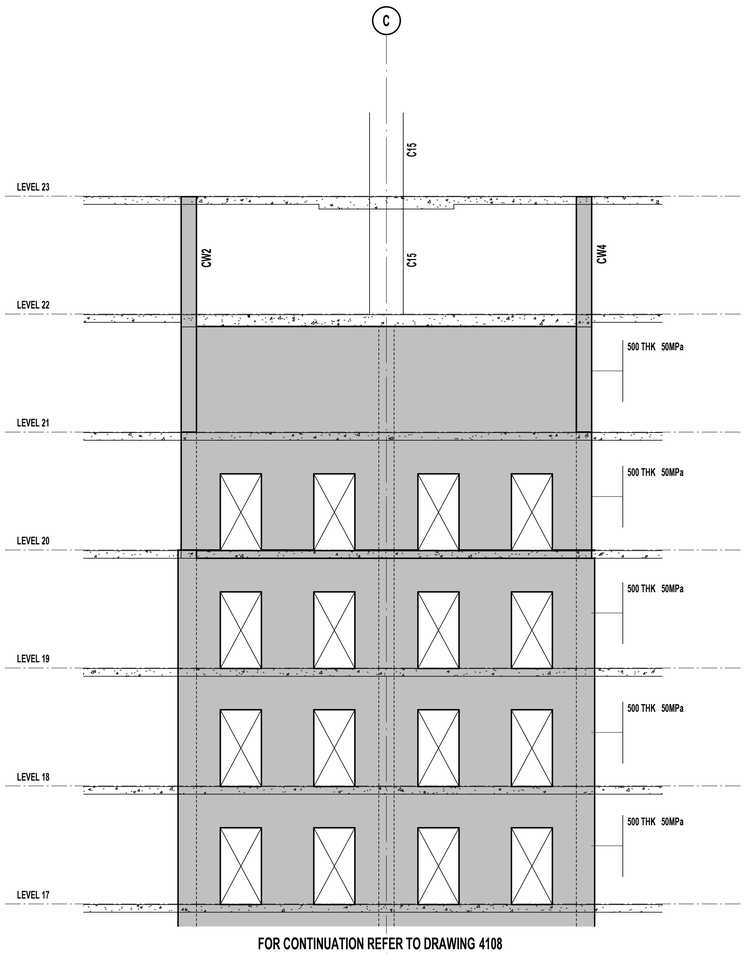
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4116 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW13 - PART C

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 17

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-4117	A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

LEGEND

- DENOTES INSITU
- DENOTES PRECAST
- 1000x400 — DENOTES WALL THICKNESS
- 50MPa — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

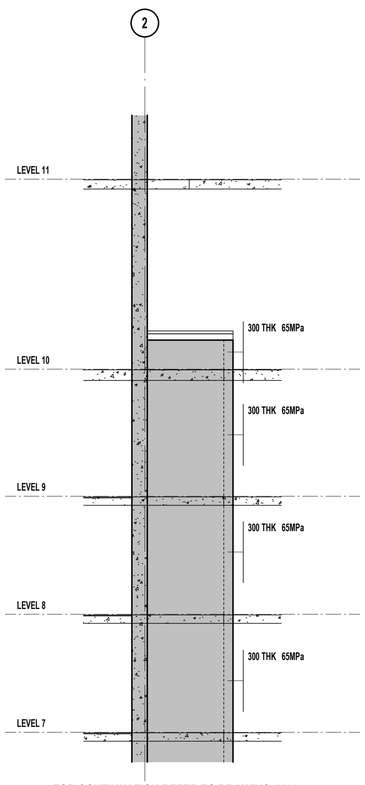
NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

- L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG
- G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG
- **DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG**
- **DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG**

NOTE:
ALLOW FOR COMPLEXITY IN INSTALLATION OF **TYPE A-1** COMPRESSION WALL TIES FROM B1 TO UNDERSIDE OF L11 FOR CORE WALLS.
REFER DWG SERIES HER-DRG-STR-8000 FOR DETAILS.
ADDITIONAL REINFORCEMENTS REQUIRED FOR COMPRESSION WALL TIES INCLUDED IN THE QUANTITIES.

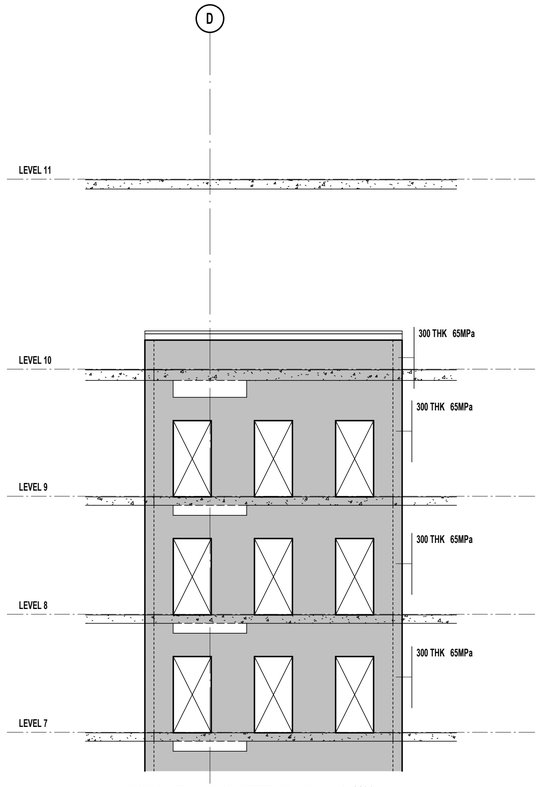
CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:
    15-A20 (C) 5000 LG
    - BAR LENGTH (IF REQUIRED)
    - DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - NO. OF BARS (IF REQUIRED)
17. TIE TAG NOTATION:
    12-D20-T2
    - TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - TOTAL NO. OF TIES (IF REQUIRED)



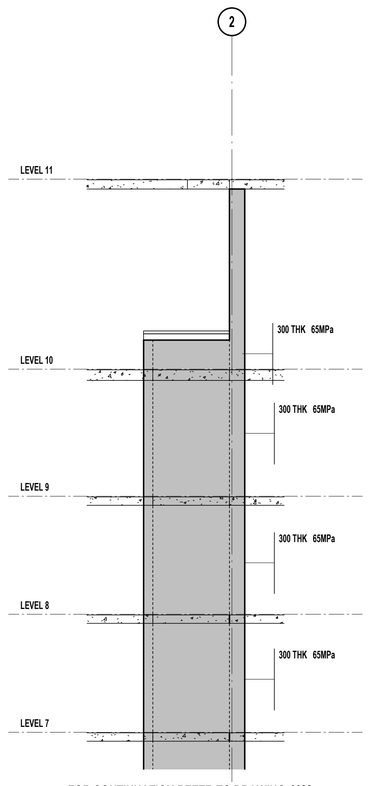
FOR CONTINUATION REFER TO DRAWING 4109

ELEVATION - CW14 - PART B
SCALE 1 : 100



FOR CONTINUATION REFER TO DRAWING 4109

ELEVATION - CW15 - PART B
SCALE 1 : 100



FOR CONTINUATION REFER TO DRAWING 4109

ELEVATION - CW16 - PART B
SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 18

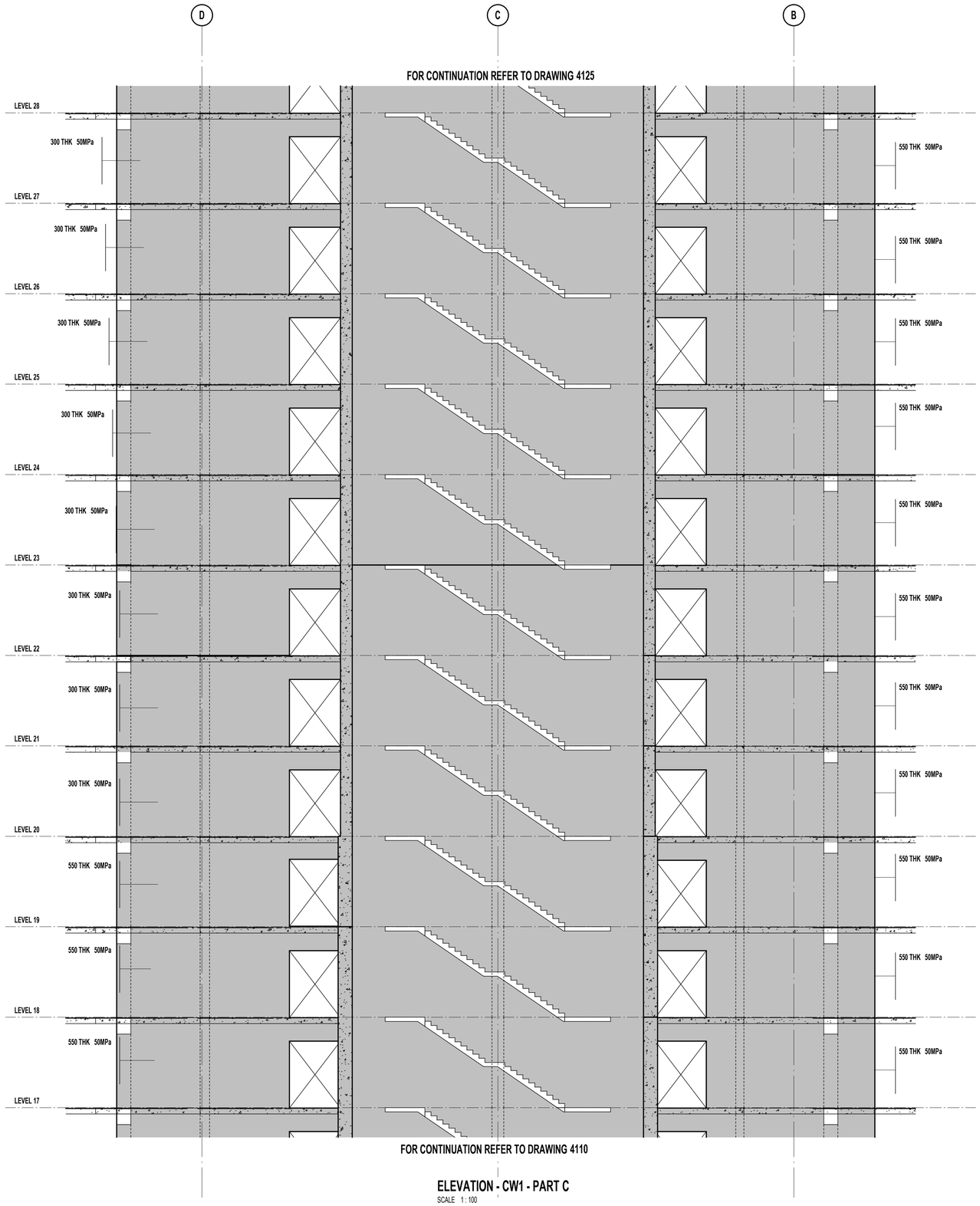
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-4118	A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW1 - PART C

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
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13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- 15 — NO. OF BARS (IF REQUIRED)
- A — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- (C) — DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- 5000 — BAR LENGTH (IF REQUIRED)
- LG

17. TIE TAG NOTATION:

12-D20-T2
- 12 — TOTAL NO. OF TIES (IF REQUIRED)
- D — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- T — TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- 2

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 19

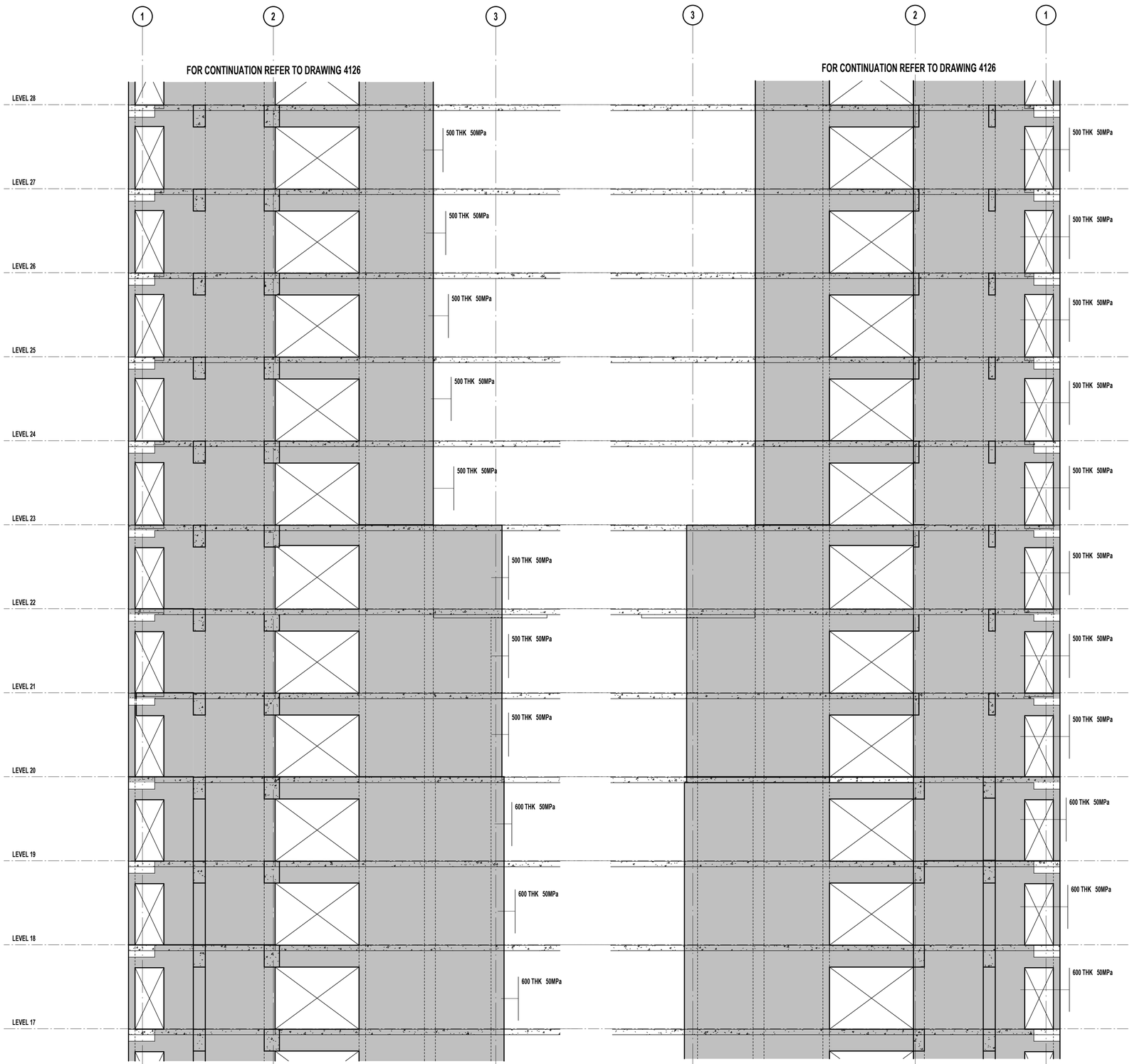
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4119 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW2 - PART C
SCALE 1 : 100

ELEVATION - CW4 - PART C
SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa — DENOTES WALL THICKNESS, DENOTES CONCRETE STRENGTH
S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: — DENOTES **HORIZONTAL** REINFORCEMENT
T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
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11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
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14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

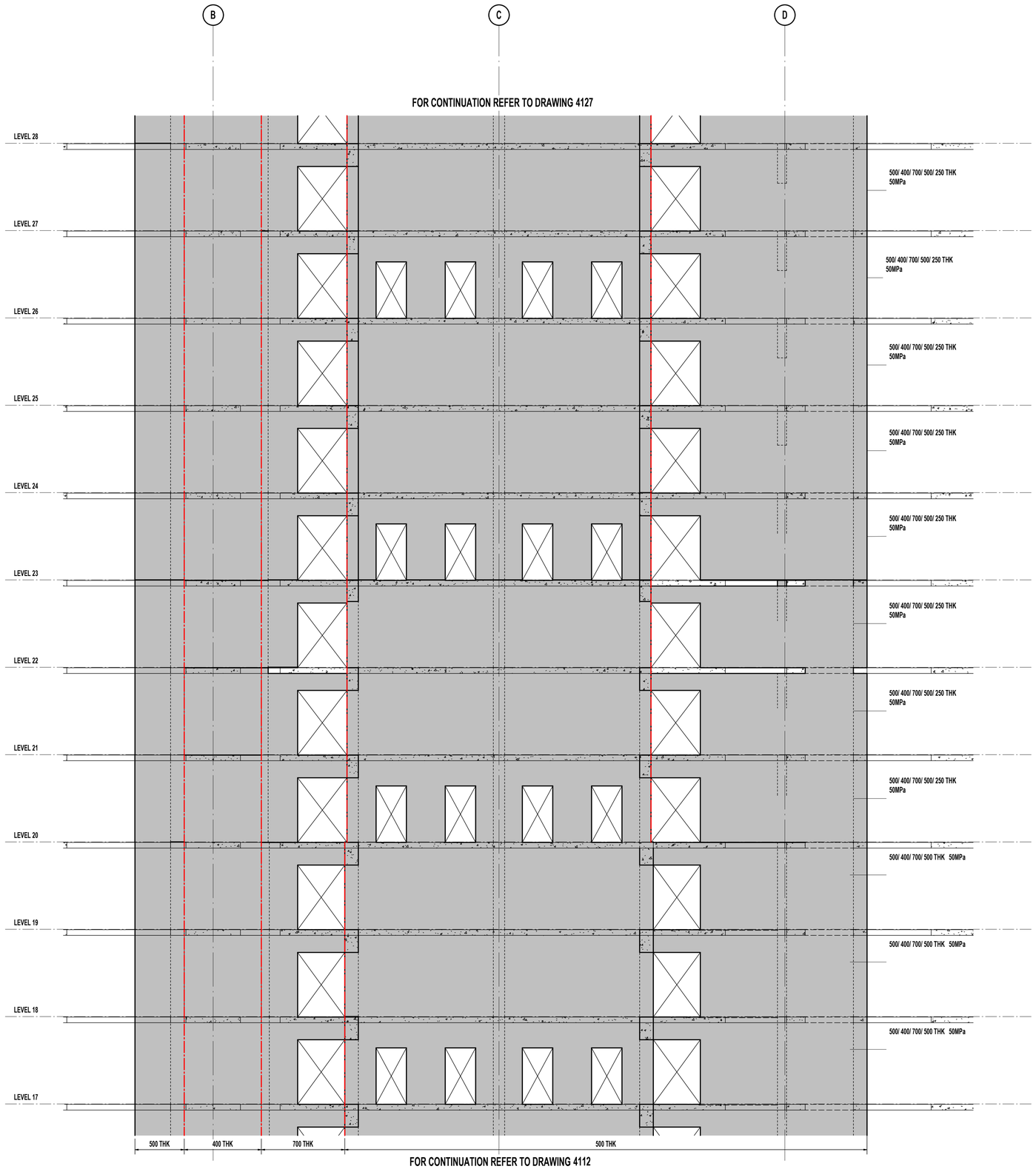
DRAWING TITLE
CORE WALL ELEVATION - SHEET 20

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4120
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200



FOR CONTINUATION REFER TO DRAWING 4112

ELEVATION - CW3 - PART C

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

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DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
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4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
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7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
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11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104- FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

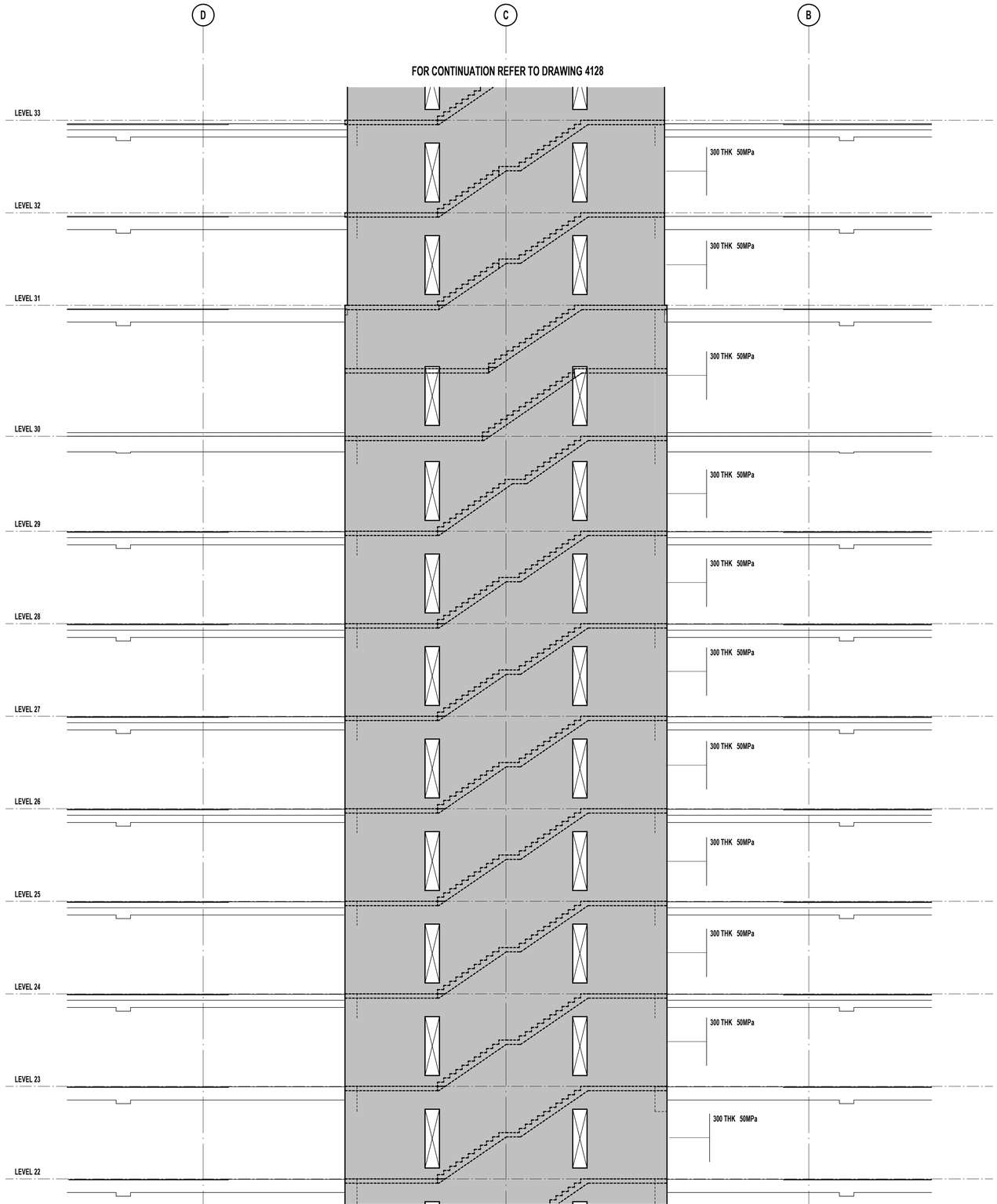
DRAWING TITLE
CORE WALL ELEVATION - SHEET 21

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4121
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW5 - PART C

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000x400 — DENOTES WALL THICKNESS
- 50MPa — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

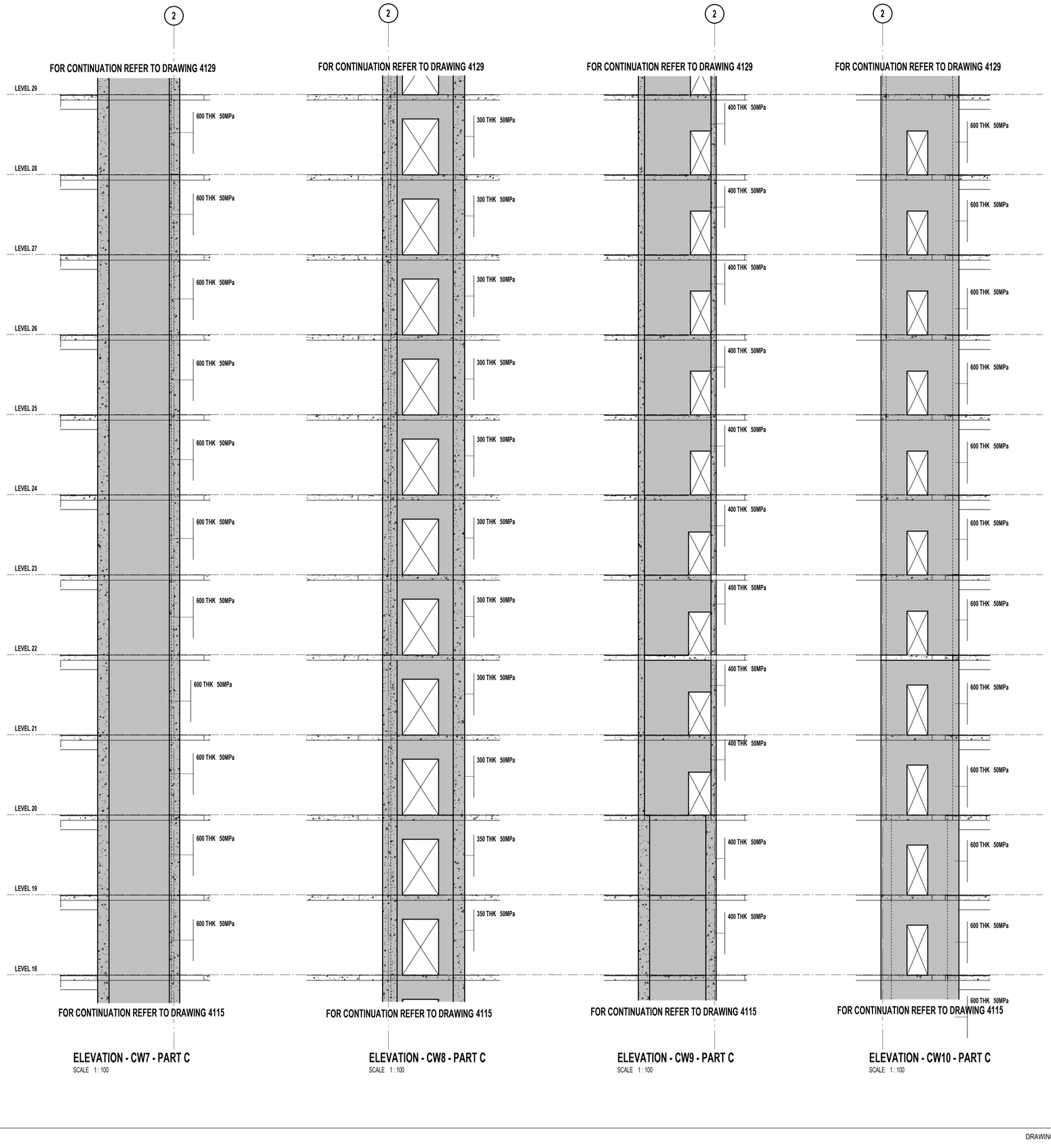
DRAWING TITLE
CORE WALL ELEVATION - SHEET 22

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4122
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW7 - PART C
SCALE 1 : 100

ELEVATION - CW8 - PART C
SCALE 1 : 100

ELEVATION - CW9 - PART C
SCALE 1 : 100

ELEVATION - CW10 - PART C
SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa — DENOTES WALL THICKNESS; DENOTES CONCRETE STRENGTH
S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
H: — DENOTES **HORIZONTAL** REINFORCEMENT
T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
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14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG

- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2

- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

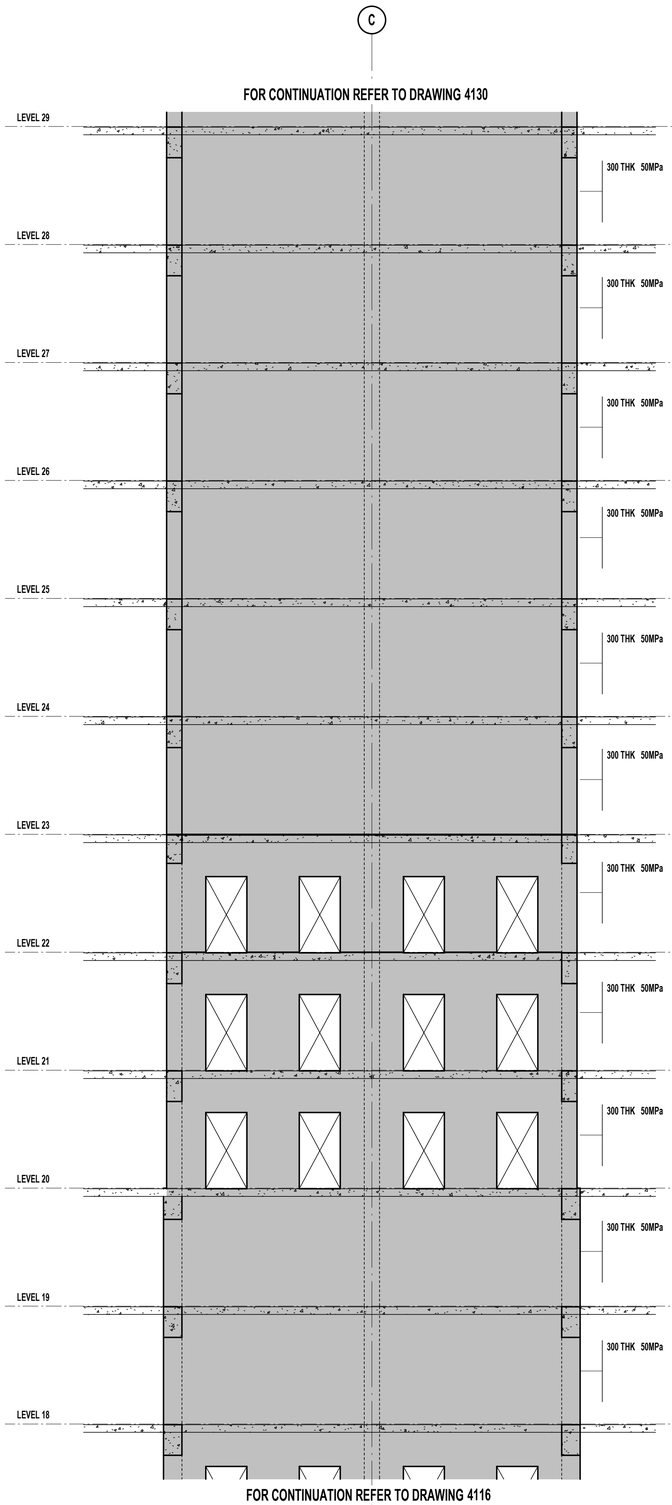
DRAWING TITLE
CORE WALL ELEVATION - SHEET 23

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

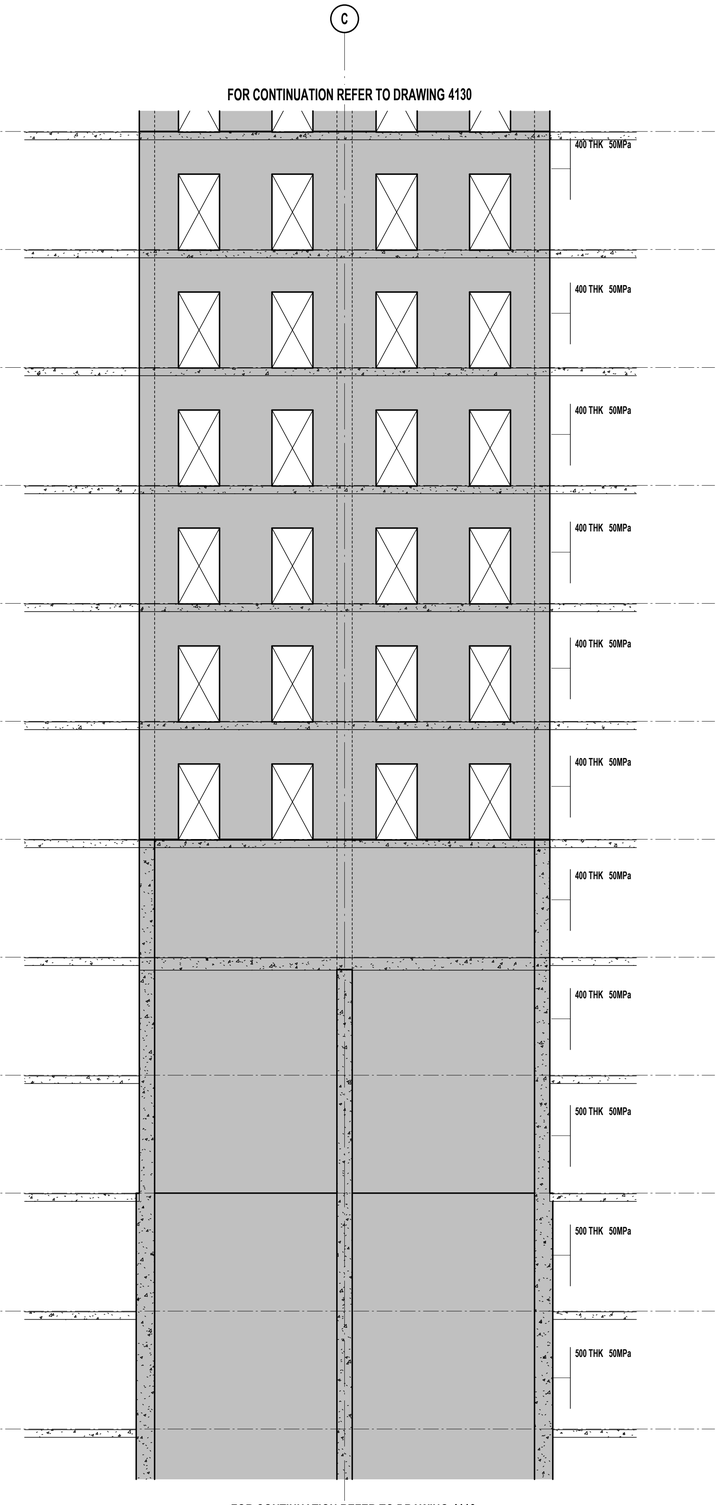
PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4123
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW11 - PART C

SCALE 1 : 100



ELEVATION - CW12 - PART C

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

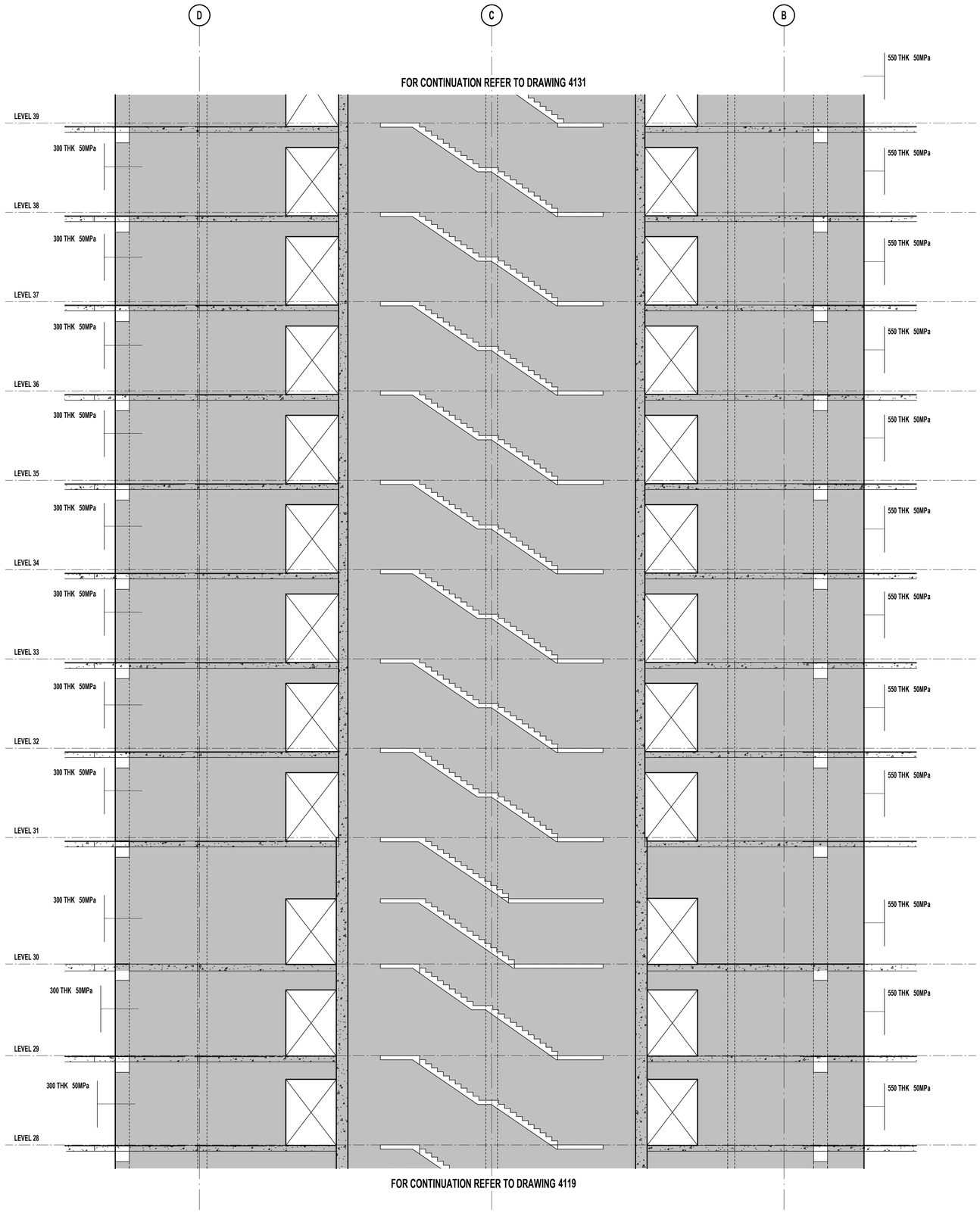
DRAWING TITLE
CORE WALL ELEVATION - SHEET 24

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4124
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200



ELEVATION - CW1 - PART D

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
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4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
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13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 25

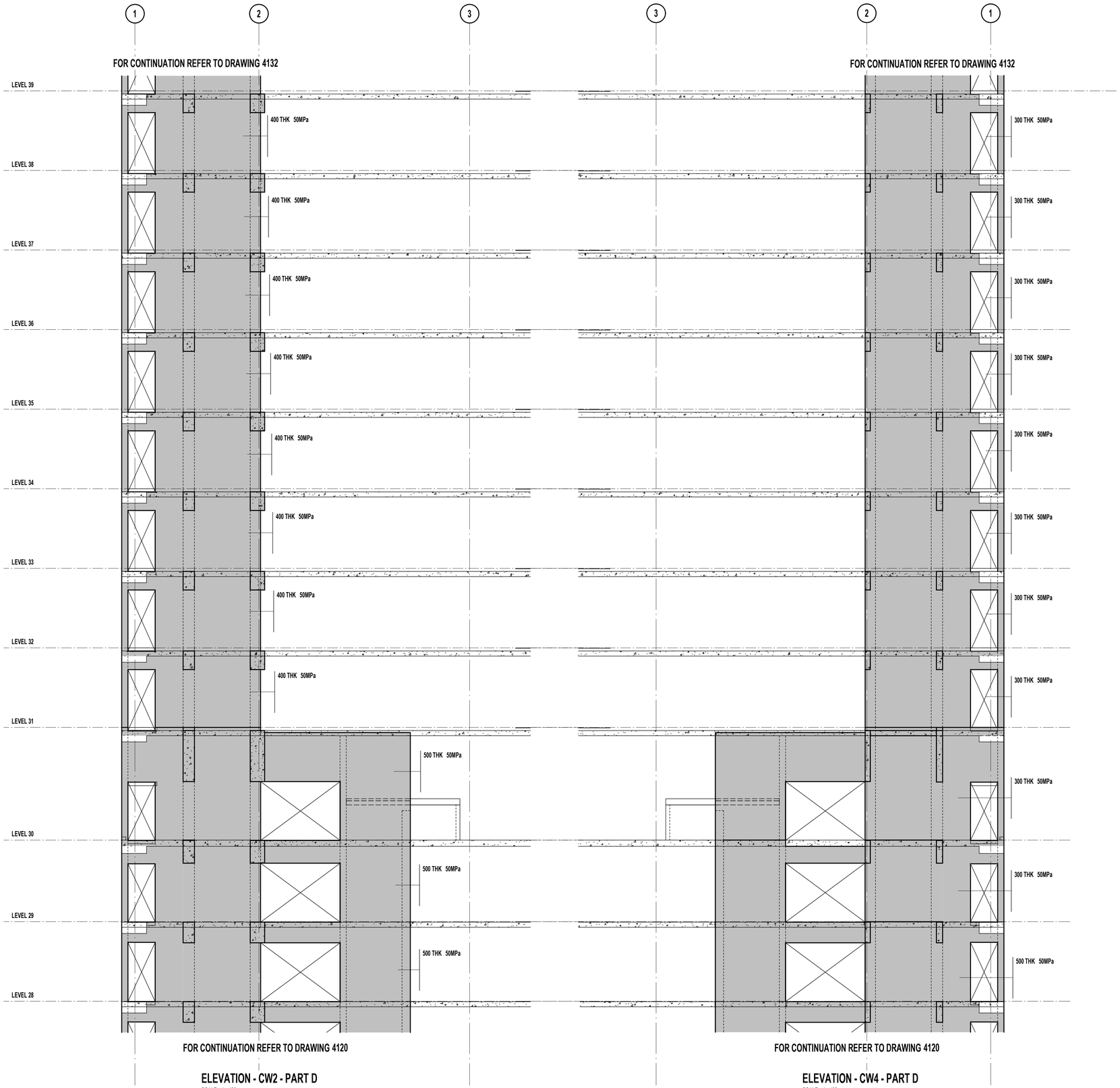
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4125
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



ELEVATION - CW2 - PART D
SCALE 1 : 100

ELEVATION - CW4 - PART D
SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

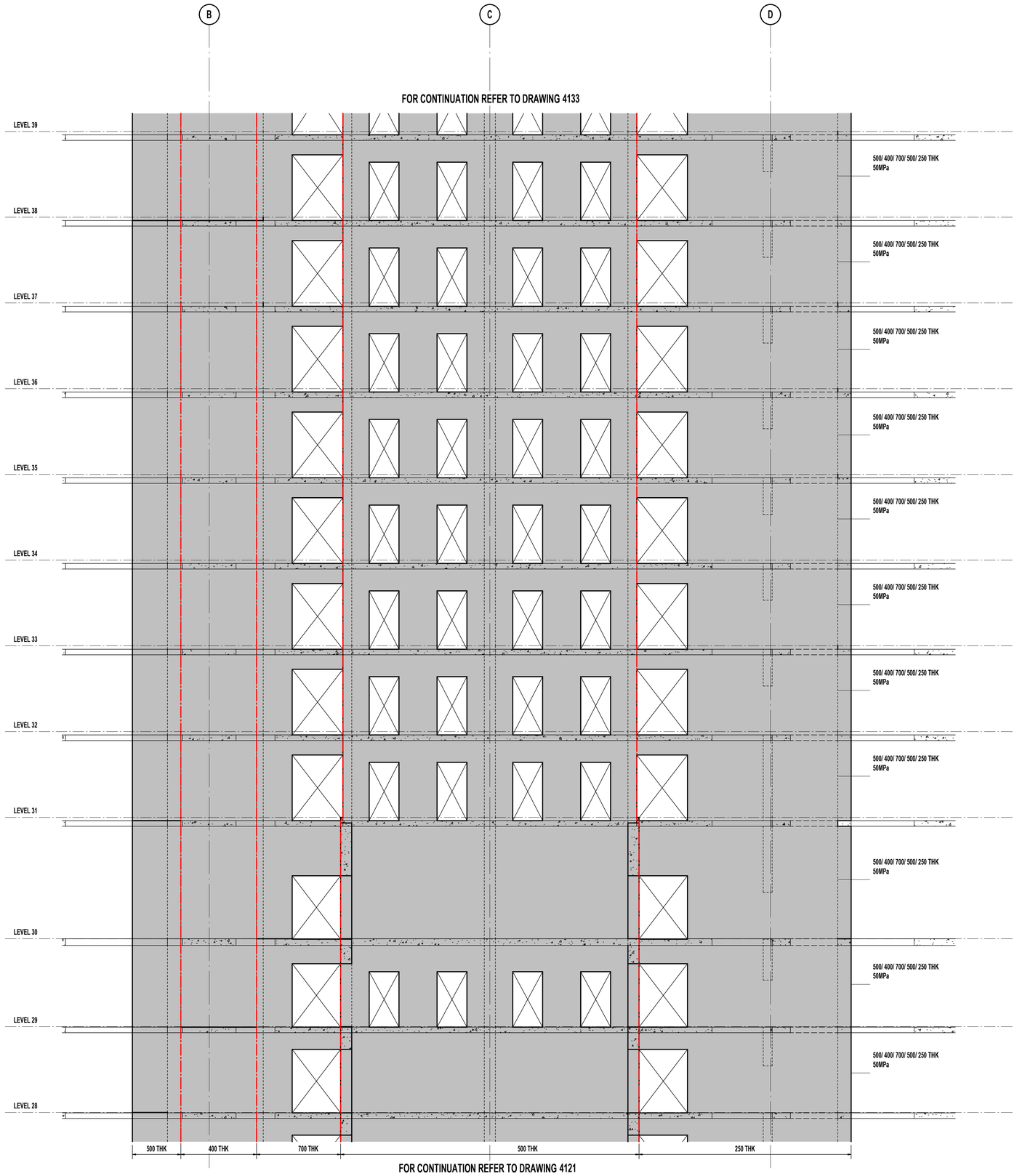
DRAWING TITLE
CORE WALL ELEVATION - SHEET 26

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4126
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - CW3 - PART D

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000x400 — DENOTES WALL THICKNESS
- 50MPa — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
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11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104- FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 27

PROJECT STATUS
FOR DESIGN DEVELOPMENT

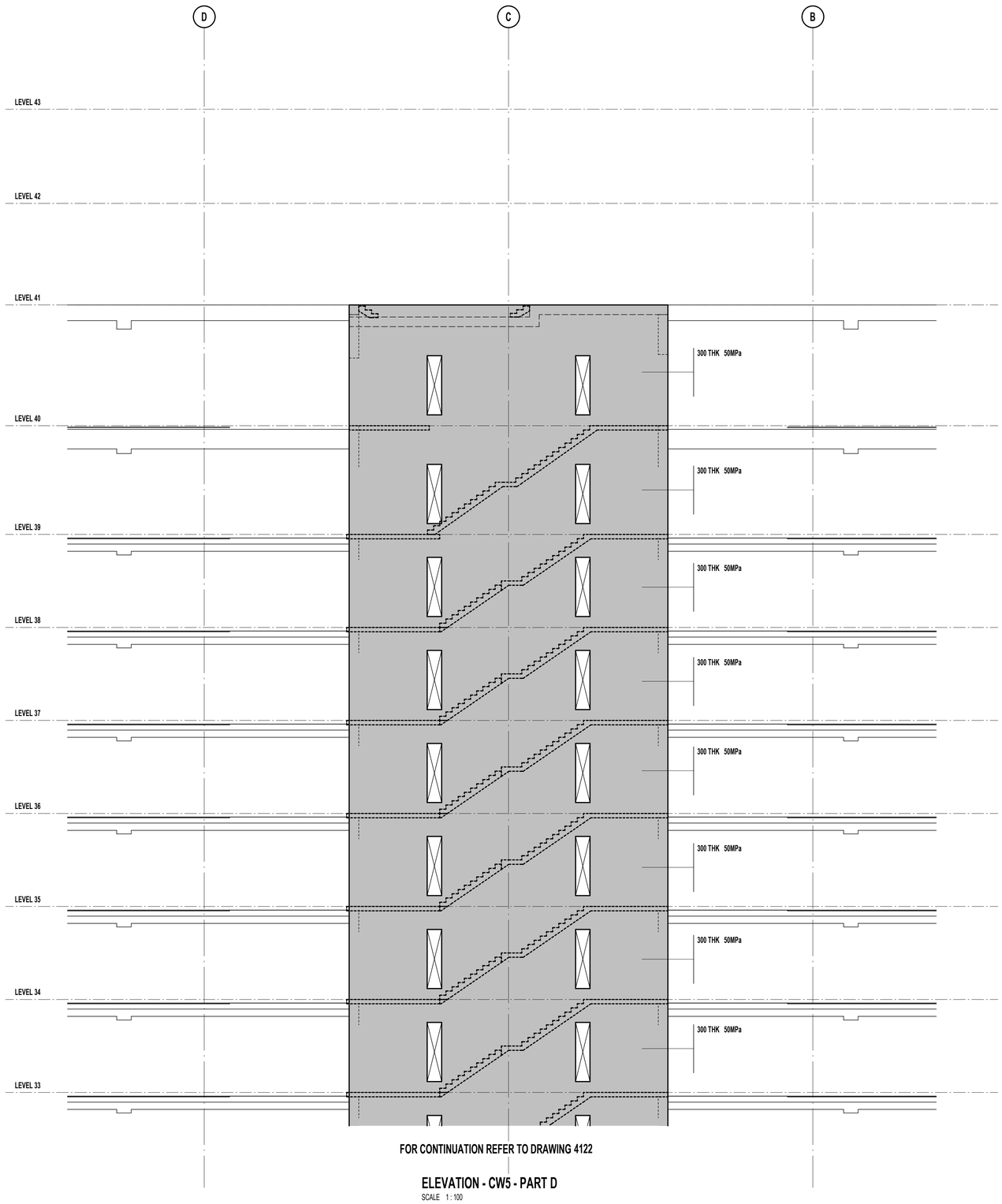
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4127 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



FOR CONTINUATION REFER TO DRAWING 4122

ELEVATION - CW5 - PART D

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- 15 — NO. OF BARS (IF REQUIRED)
- A — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- (C) — DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- 5000 — BAR LENGTH (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- 12 — TOTAL NO. OF TIES (IF REQUIRED)
- D — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- T2 — TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 28

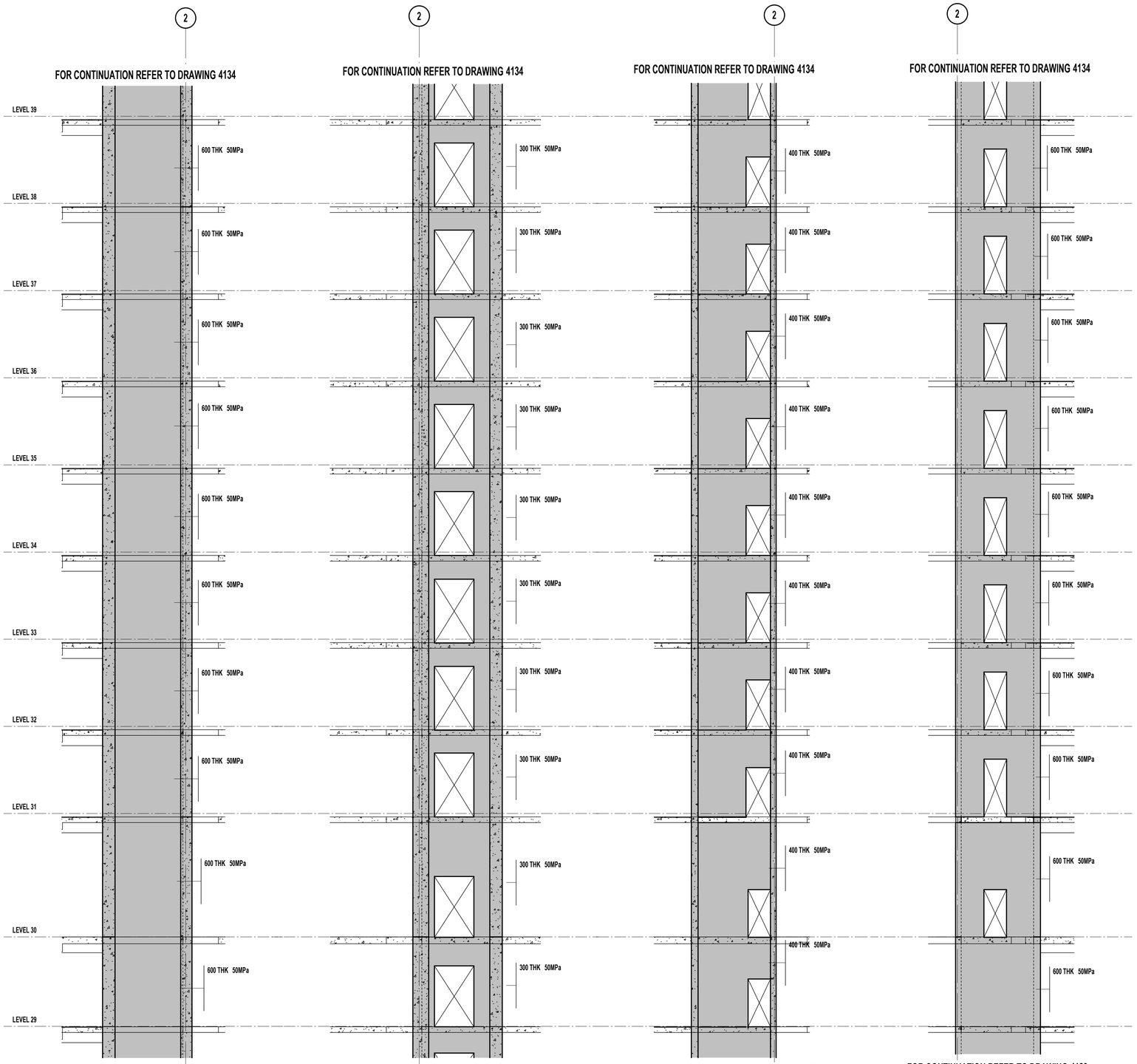
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4128 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR



ELEVATION - CW7 - PART D
SCALE 1 : 100

ELEVATION - CW8 - PART D
SCALE 1 : 100

ELEVATION - CW9 - PART D
SCALE 1 : 100

ELEVATION - CW10 - PART D
SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

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15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 29

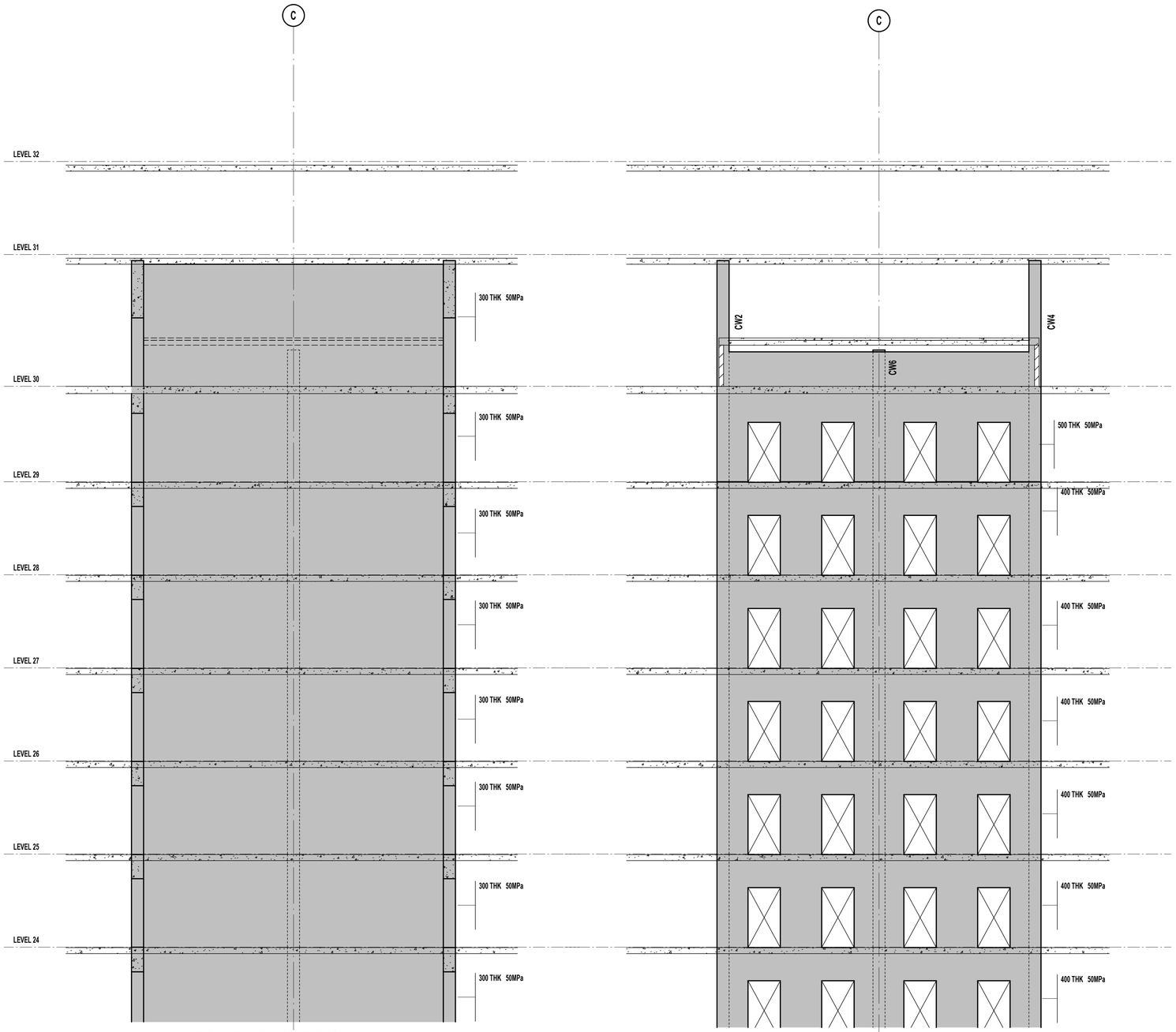
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4129 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200



FOR CONTINUATION REFER TO DRAWING 4124

ELEVATION - CW11 - PART D

SCALE 1 : 100

FOR CONTINUATION REFER TO DRAWING 4124

ELEVATION - CW12 - PART D

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- 15 — NO. OF BARS (IF REQUIRED)
- A — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- (C) — DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- 5000 — BAR LENGTH (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- 12 — TOTAL NO. OF TIES (IF REQUIRED)
- D — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- T2 — TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 30

PROJECT STATUS
FOR DESIGN DEVELOPMENT

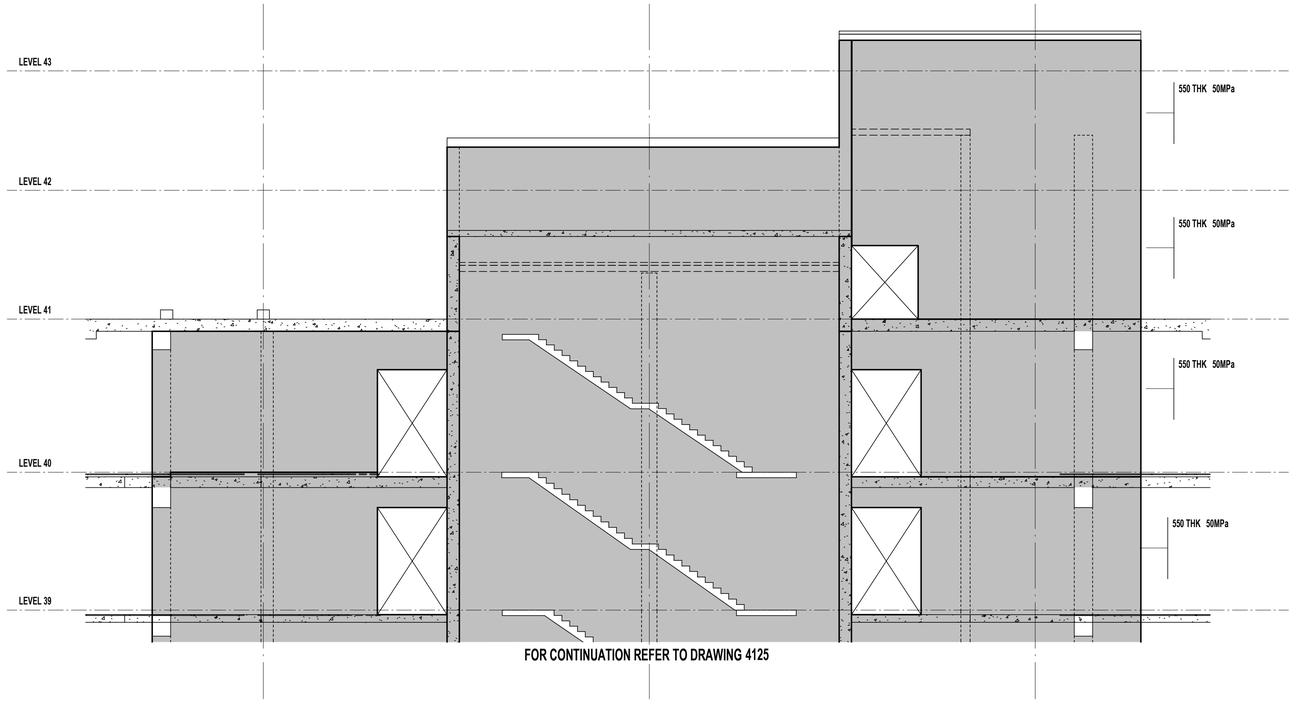
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-4130	A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



FOR CONTINUATION REFER TO DRAWING 4125

ELEVATION - CW1 - PART E

SCALE 1 : 100

LEGEND

DENOTES INSITU

DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 31

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4131
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- 1000 — DENOTES WALL THICKNESS
- 400 — DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

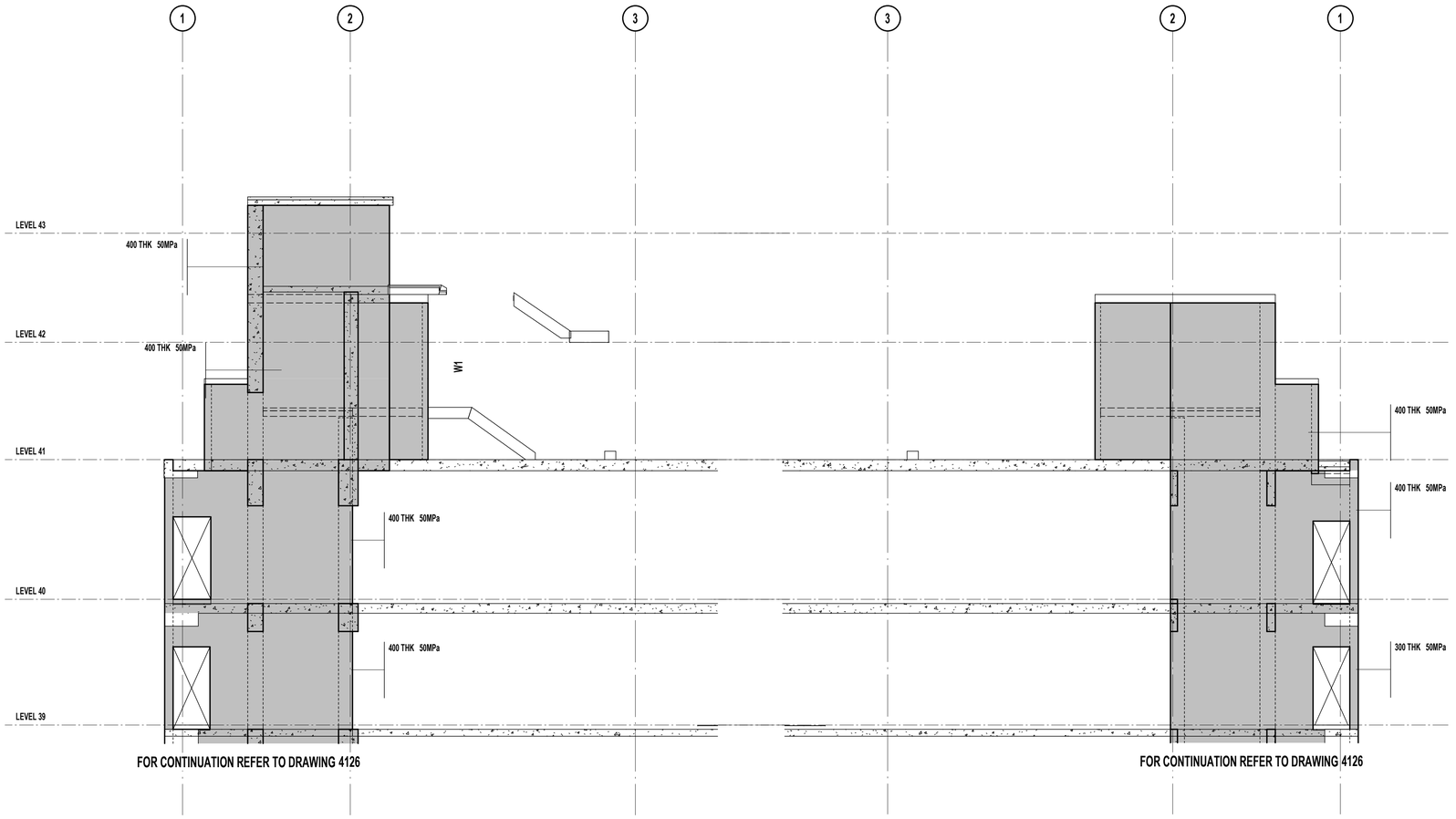
CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
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4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
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15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- 15 — NO. OF BARS (IF REQUIRED)
- A — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- (C) — DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- 5000 — BAR LENGTH (IF REQUIRED)
- LG

17. TIE TAG NOTATION:

12-D20-T2
- 12 — TOTAL NO. OF TIES (IF REQUIRED)
- D — BAR SIZE (REFER SCHEDULE)
- 20 — SPACING (IN cm)
- T — TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- 2



ELEVATION - CW2 - PART E
SCALE 1 : 100

ELEVATION - CW4 - PART E
SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

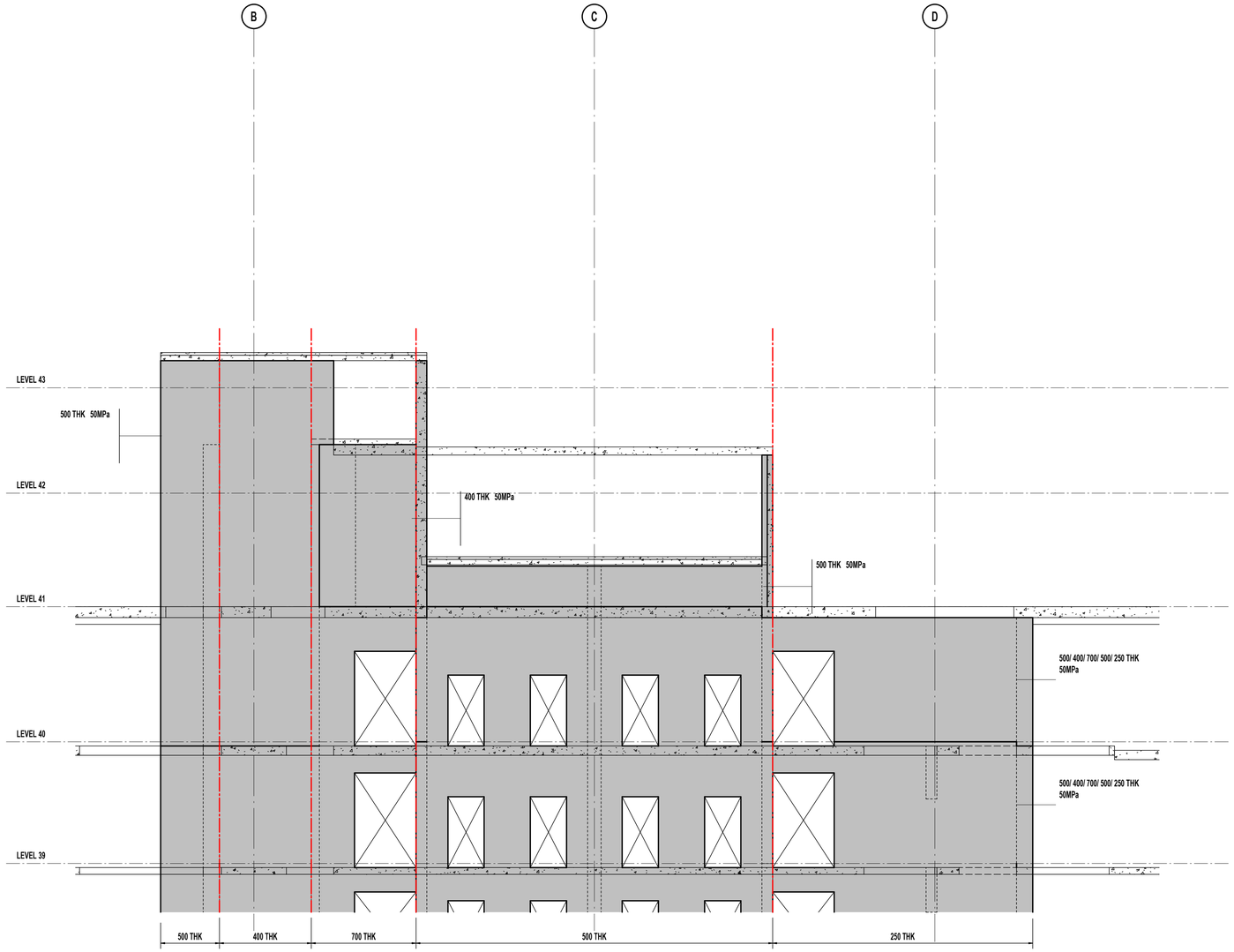
DRAWING TITLE
CORE WALL ELEVATION - SHEET 32

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4132
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



FOR CONTINUATION REFER TO DRAWING 4127

ELEVATION - CW3 - PART E

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa
- DENOTES WALL THICKNESS
- DENOTES CONCRETE STRENGTH
- S: DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: DENOTES **HORIZONTAL** REINFORCEMENT
- T: DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
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3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
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12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:

15-A20 (C) 5000 LG
- BAR LENGTH (IF REQUIRED)
- DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- NO. OF BARS (IF REQUIRED)

17. TIE TAG NOTATION:

12-D20-T2
- TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
- SPACING (IN cm)
- BAR SIZE (REFER SCHEDULE)
- TOTAL NO. OF TIES (IF REQUIRED)

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
CORE WALL ELEVATION - SHEET 33

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4133
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR

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LEGEND

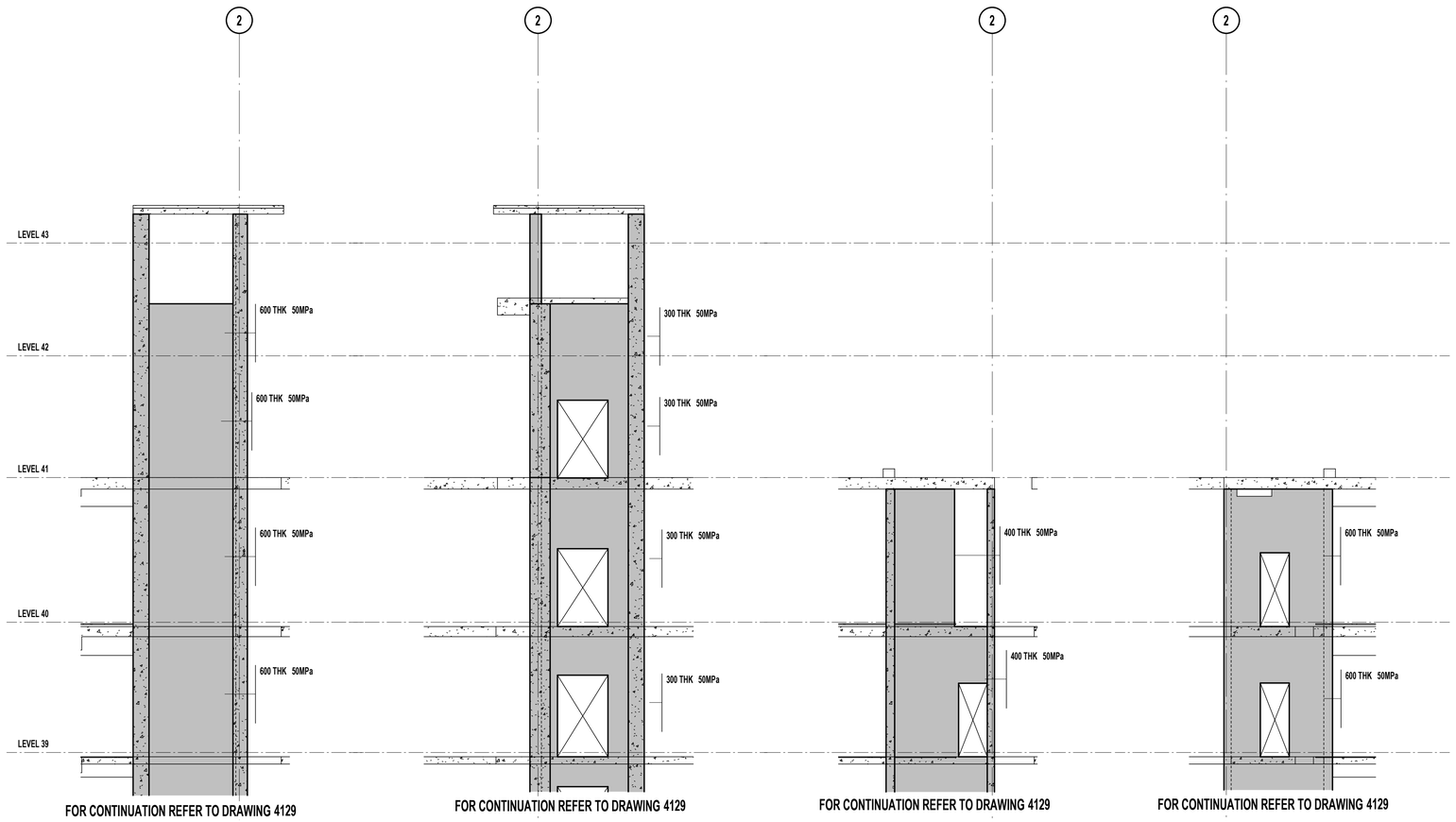
- DENOTES INSITU
- DENOTES PRECAST
- 1000x400 50MPa — DENOTES WALL THICKNESS / DENOTES CONCRETE STRENGTH
- S: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
- V: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
- H: — DENOTES **HORIZONTAL** REINFORCEMENT
- T: — DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

- L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG
- G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG
- **DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG**
- **DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG**

CORE WALL NOTES:

1. **WALL REINFORCEMENT IS TO BE EACH FACE UNO.**
2. HEADER BEAM SIDE FACE REINFORCEMENT TO MATCH HORIZONTAL REINFORCEMENT SHOWN ON ELEVATION UNO.
3. ELEVATIONS TO BE READ IN CONJUNCTION WITH DETAILS SHEETS.
4. REFER TO GENERAL ARRANGEMENT FOR CONCRETE PROFILE.
5. REFER TO GENERAL NOTES FOR COVER REQUIREMENTS.
6. CRANKED REINFORCEMENT AS REQUIRED (1:6 MAX).
7. BARS TO BE LAPPED AS SHOWN, UNLESS SPECIFICALLY APPROVED OTHERWISE BY ENGINEER. REFER LAP TABLE FOR MINIMUM LAP LENGTHS.
8. WHERE ALPHABETICAL BAR TAG NOTATION ARE USED REFER TO REINFORCEMENT SCHEDULE FOR SIZE AND SPACING.
9. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT WALL INTERSECTIONS, PENETRATIONS, EDGES AND CONSTRUCTION JOINTS.
10. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
11. DENOTES CONCRETE COLUMN, REFER TO GA FOR SIZE WALL REINFORCEMENT TO BE LAPPED INTO COLUMNS UNO.
12. BUILDER TO COORDINATE SERVICE PENETRATIONS TO NOT AFFECT WALL REINFORCEMENT, AND WILL ADVISE HERA ENGINEERING WHERE THIS IS NOT ACHIEVABLE.
13. **HBn.n** DENOTES HEADER BEAM REFER TO SHEET SERIES S104-___ FOR HEADER BEAM LAYOUT AND REINFORCEMENT.
14. DENOTES COUPLERS TO MATCH REINFORCEMENT.
15. REFER TO TENDER NOTES AND DETAILS SHEETS FOR TYPICAL ELEVATION DETAIL AND HOW TO READ THE REINFORCEMENT TAGS.
16. BAR TAG NOTATION:
    15-A20 (C) 5000 LG
    - BAR LENGTH (IF REQUIRED)
    - DENOTES BAR PLACEMENT / LAYER (IF REQUIRED)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - NO. OF BARS (IF REQUIRED)
17. TIE TAG NOTATION:
    12-D20-T2
    - TIE SHAPE (REFER REINF. TIE TYPE SCHEDULE)
    - SPACING (IN cm)
    - BAR SIZE (REFER SCHEDULE)
    - TOTAL NO. OF TIES (IF REQUIRED)



ELEVATION - CW7 - PART E
SCALE 1 : 100

ELEVATION - CW8 - PART E
SCALE 1 : 100

ELEVATION - CW9 - PART E
SCALE 1 : 100

ELEVATION - CW10 - PART E
SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

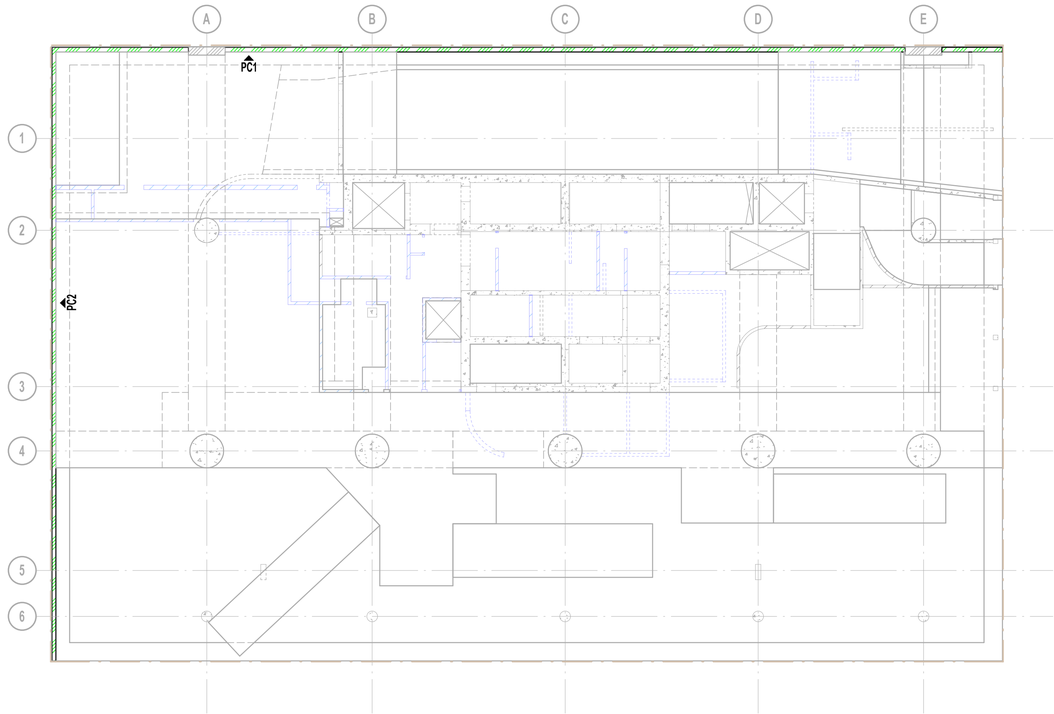
DRAWING TITLE
CORE WALL ELEVATION - SHEET 34

PROJECT STATUS
FOR DESIGN DEVELOPMENT

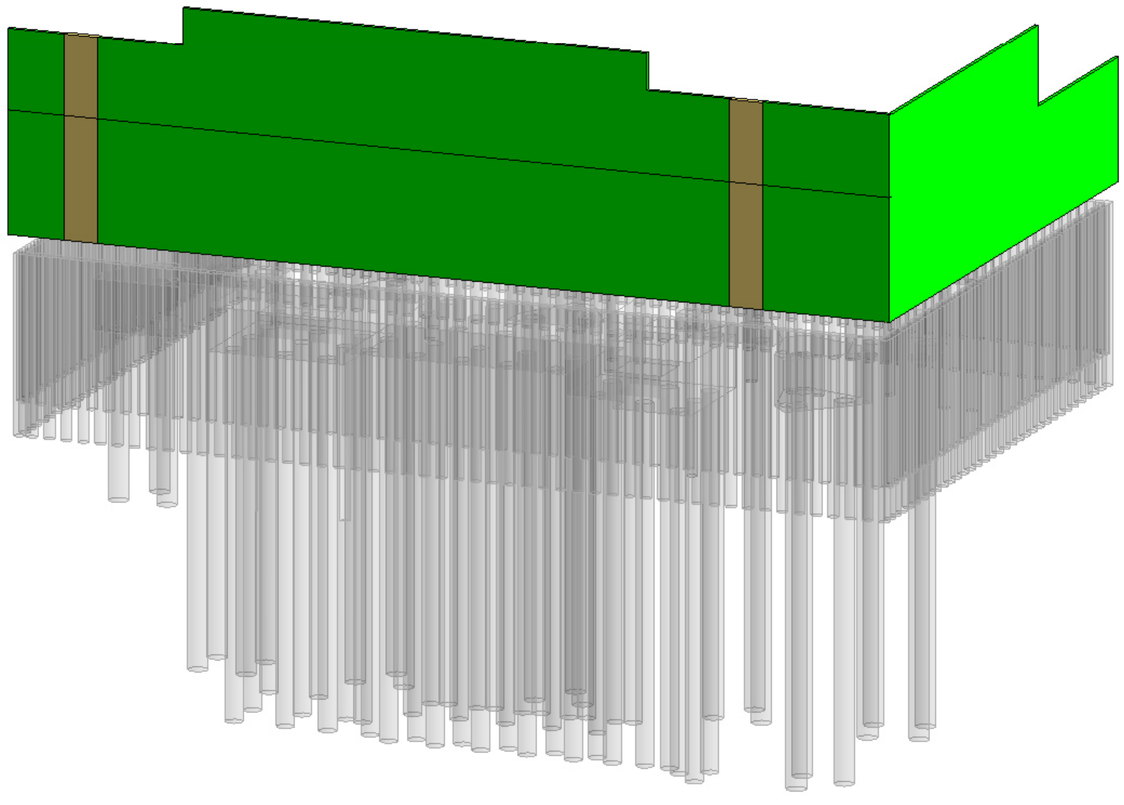
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4134
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



KEY PLAN - GROUND LEVEL SHOWN



ISOMETRIC VIEW

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

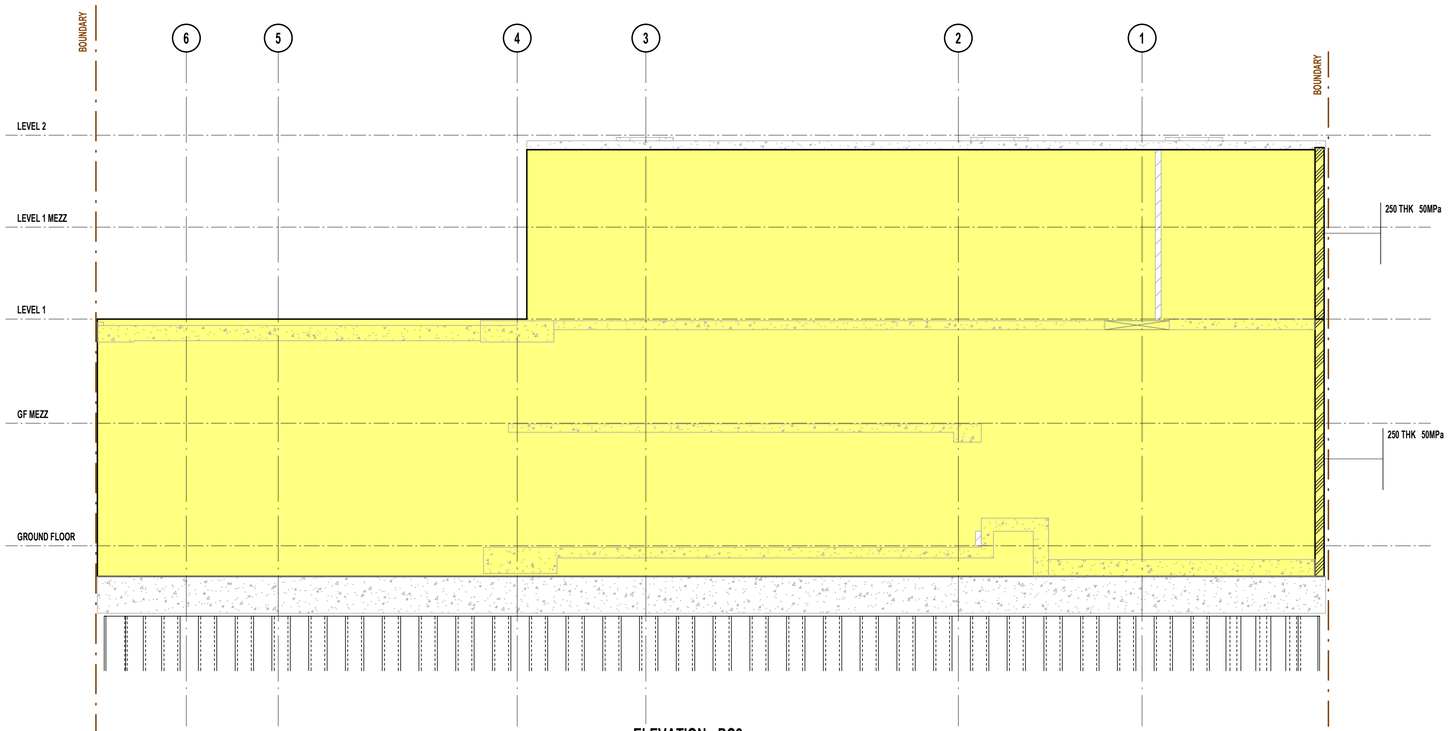
DRAWING TITLE
PRECAST WALL ELEVATION - KEY PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 200	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

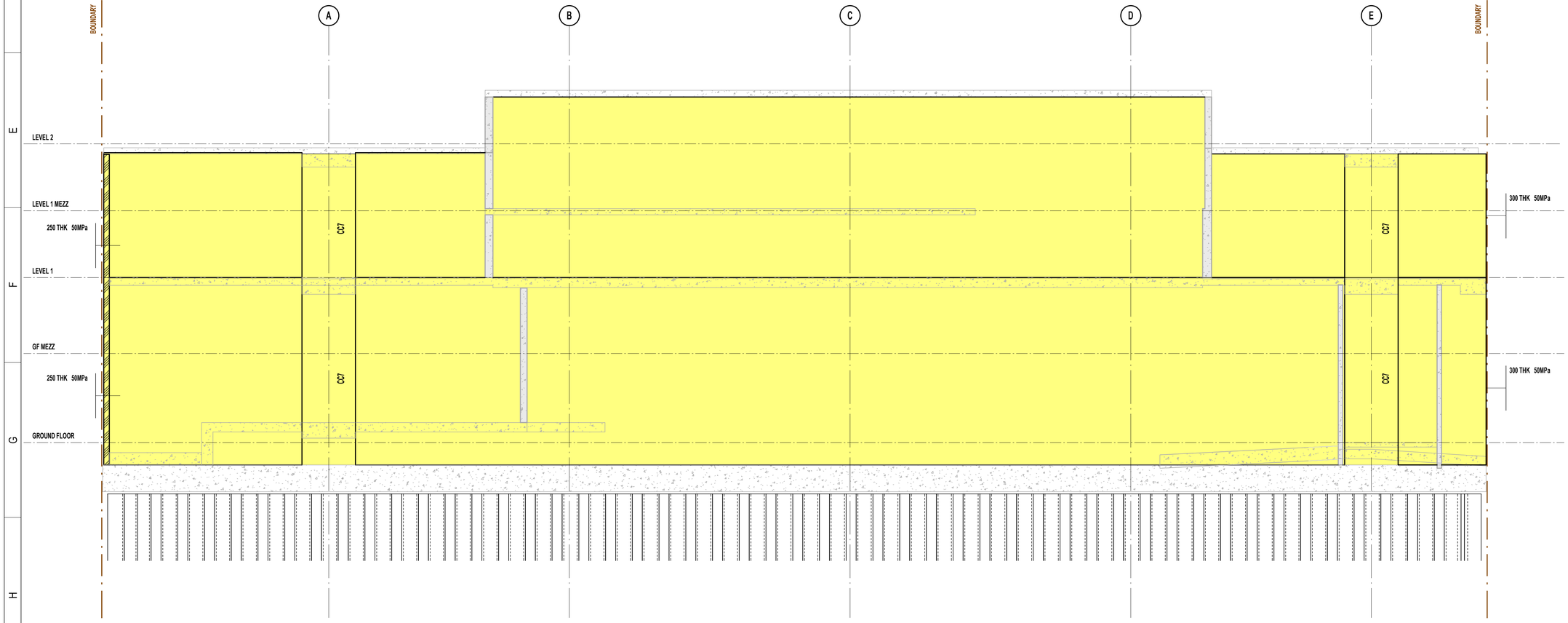
PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4300
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



ELEVATION - PC2

SCALE 1 : 100



ELEVATION - PC1

SCALE 1 : 100

LEGEND

- DENOTES INSITU
- DENOTES PRECAST

1000x400 50MPa — DENOTES WALL THICKNESS
S: — DENOTES CONCRETE STRENGTH
V: — DENOTES BOTTOM **STARTER** / DOWEL BARS (IF DIFFERENT TO VERTICAL REINF.)
H: — DENOTES TOTAL **VERTICAL** REINFORCEMENT
T: — DENOTES **HORIZONTAL** REINFORCEMENT
DENOTES CONFINEMENT **TIE** REINFORCEMENT

NOTE: ALL REINFORCEMENT TO BE EACH FACE UNLESS NOTED OTHERWISE.

L15 — DENOTES SUBSTITUTE REINFORCEMENT TO SUPERCEDE TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

G20 EXTRA — DENOTES EXTRA REINFORCEMENT ADDITIONAL TO THE CONVENTIONAL REINFORCEMENT SHOWN IN ADJACENT ELEVATION TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN MAIN WALL TAG

DENOTES ADDITIONAL WALL TIES EXTENT. SIZE AND SPACING AS DENOTED IN SEPARATE TAG

PRECAST PANEL NOTES:

1. TYPICAL ALL REINFORCEMENT SHOWN ON ELEVATIONS IS EXTRA TO PANEL REINFORCEMENT. REFER PANEL SCHEDULE FOR REINFORCEMENT.
2. REFER TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT AT PANEL INTERSECTIONS, PENETRATIONS AND EDGES.
3. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE STAIR DRAWINGS.
4. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECT SERVICE DRAWINGS FOR ALL SERVICES PENETRATION LOCATIONS AND SIZES. THE CONTRACTOR TO CONTACT THE STRUCTURAL ENGINEER SHOULD ANY DISCREPANCIES OCCUR.
5. FLOOR LEVELS (RL) SHOWN IN THIS DRAWING ARE FOR THE STRUCTURAL ENGINEERS USE ONLY. REFER TO ARCHITECTS DRAWINGS FOR LEVELS AND OTHER GEOMETRY RELATED DIMENSIONS.
6. CONTRACTOR TO ALLOW ADDITIONAL REINFORCEMENT AROUND THE WALL PENETRATION.
7. HORIZONTAL PANEL JOINTS ARE AT EACH FLOOR LEVEL OR AS SHOWN ON ELEVATION.
8. VERTICAL PANEL JOINTS ARE AS SHOWN ON ELEVATION.
9. PC WALL THICKNESS NOTED IS MINIMUM STRUCTURAL THICKNESS. ARTWORK RECESSES AND REBATE DEPTHS ARE IN ADDITION TO THE PC WALL MINIMUM THICKNESS.
10. REFER TO ARCHITECTS DRAWINGS FOR FINISHES AND DUMMY JOINTS (D.J) LOCATIONS.
11. **SP1** DENOTES PRECAST STITCH PLATE. REFER TO DRAWING SERIES S104-5_ FOR STITCH PLATE DETAILS.
    TYPE A DENOTES PRECAST PANEL FIXING IF SHOWN.
12. REFER TO DRAWING SERIES S104-5_ FOR FIXING DETAILS.
    PWn DENOTES PRECAST PANEL TYPE IF SHOWN. REFER TO TYPE SCHEDULE FOR MORE INFORMATION
    PHB DENOTES PRECAST HEADER BEAM. REFER TO
14. TYPICAL DETAILS AND SCHEDULE FOR REINFORCEMENT AND ARRANGEMENT.

PRECAST NOTE:
1. PANELISATIONS AND PANEL CONNECTIONS TO BE CONFIRMED BASED ON LIFTING CAPACITIES.
2. CONTRACTOR TO ALLOW FOR ADDITIONAL COSTING REQUIRED FOR WATERPROOFING DETAILS INCLUDING SHIPLAP DETAILS AT EACH LEVEL IF REQUIRED.

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
PRECAST WALL ELEVATION - SHEET 01

PROJECT STATUS
FOR DESIGN DEVELOPMENT

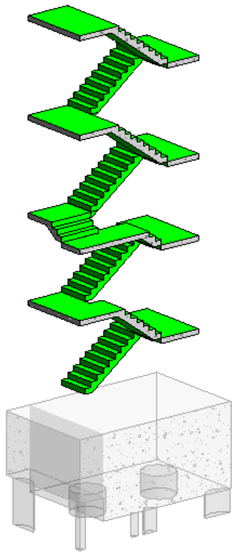
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

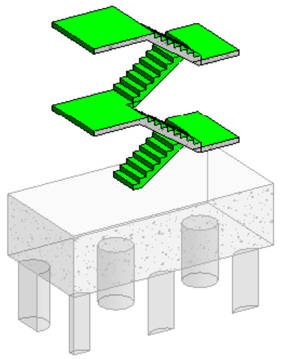
DRAWING NUMBER HER-DRG-STR-4301 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR

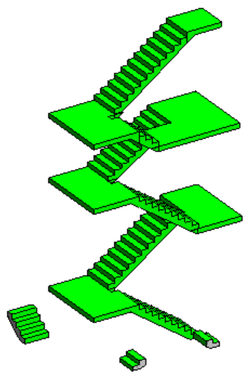
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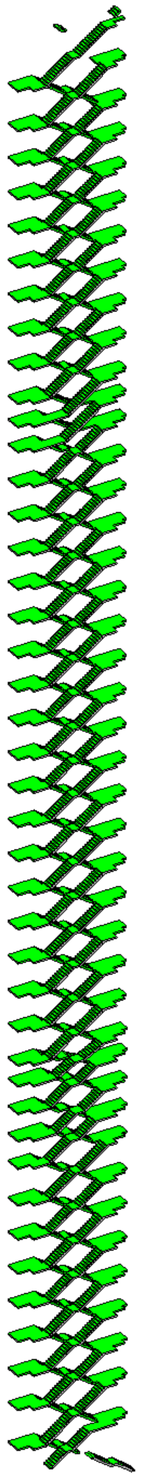
S1 - ISOMETRIC VIEW



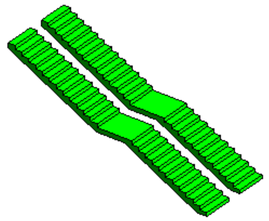
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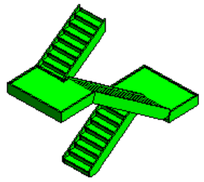
S3 - ISOMETRIC VIEW



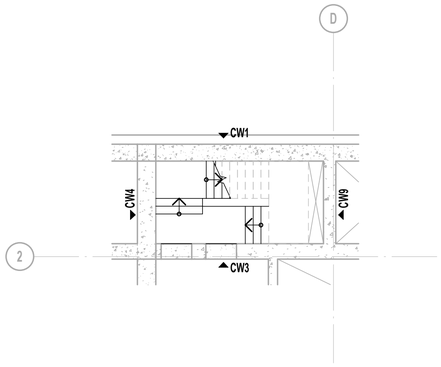
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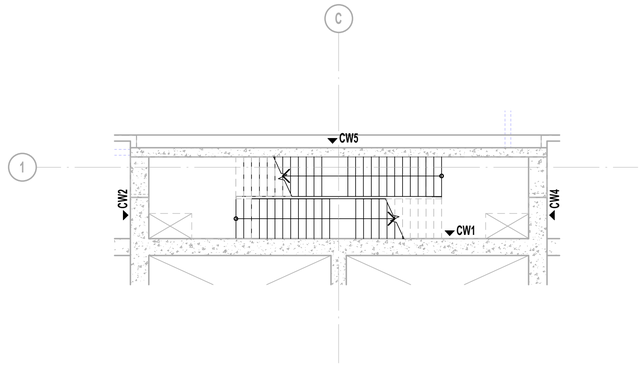
S5 - ISOMETRIC VIEW
SCALE



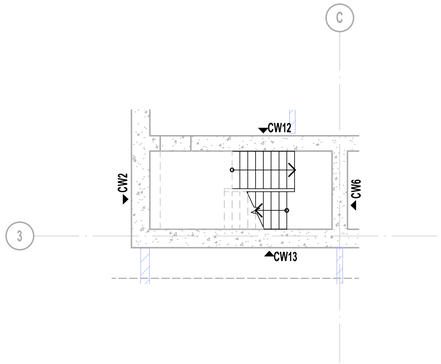
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SCALE



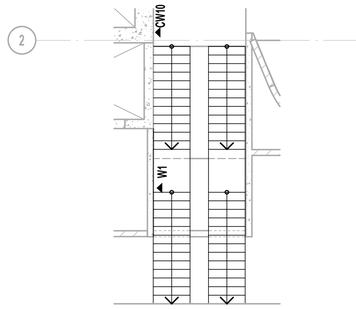
S1 - KEY PLAN - LEVEL GROUND SHOWN



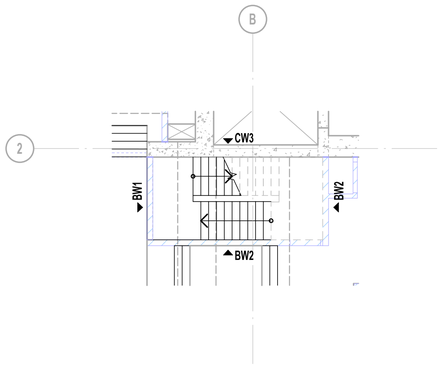
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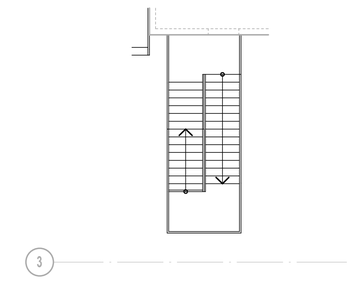
S2 - KEY PLAN - LEVEL B1 SHOWN



S5 - KEY PLAN - LEVEL GROUND SHOWN



S3 - KEY PLAN - LEVEL GROUND SHOWN



S6 - KEY PLAN - LEVEL 42 SHOWN
SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

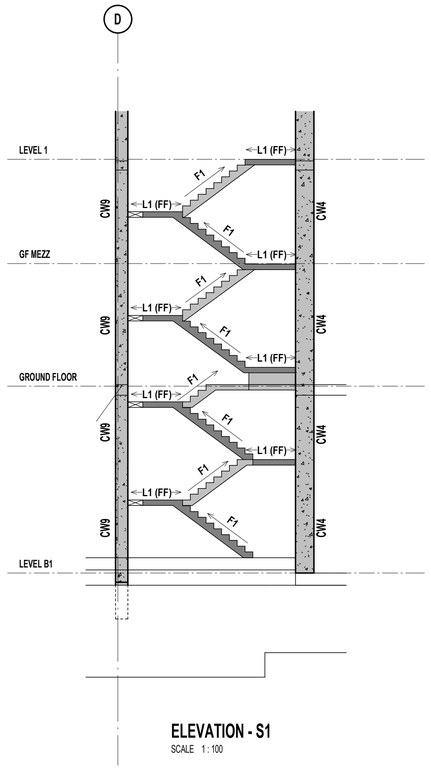
DRAWING TITLE
STAIR ELEVATION - KEY PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

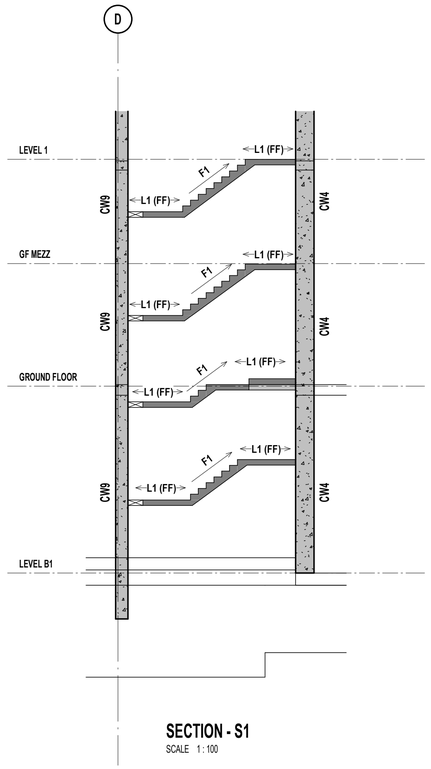
SCALE		
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	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4500
REV. No.: A

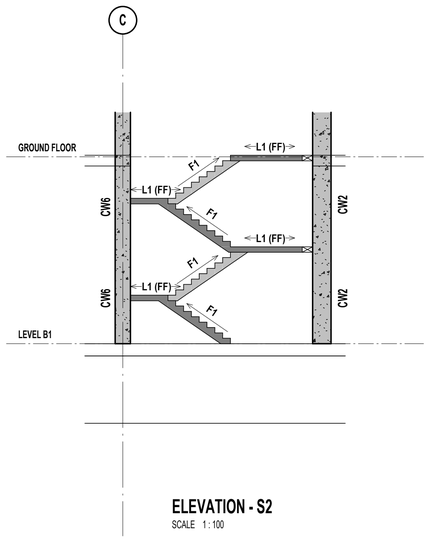
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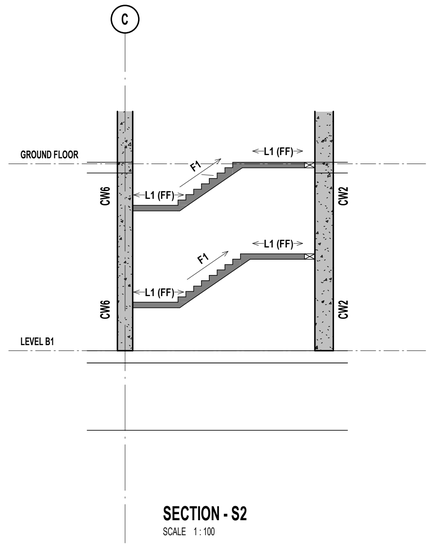
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SCALE 1 : 100



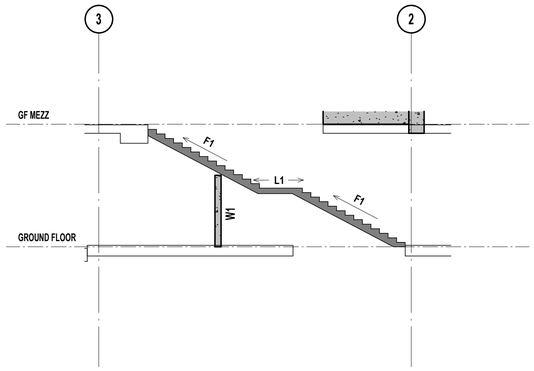
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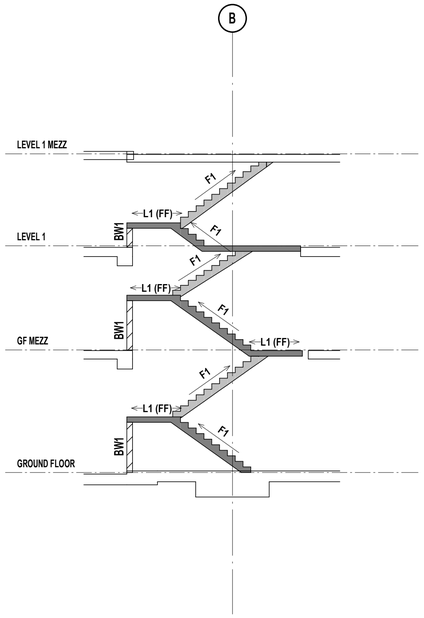
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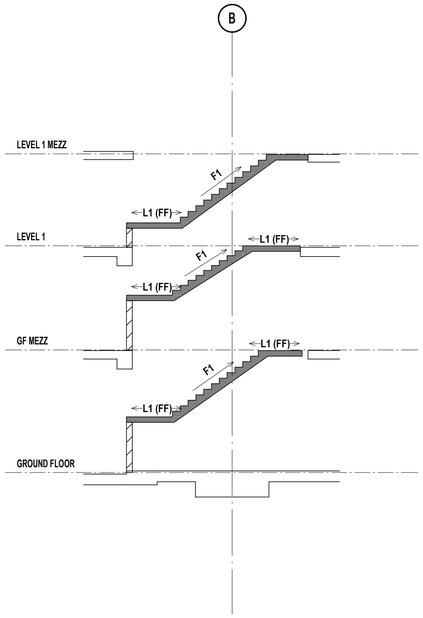
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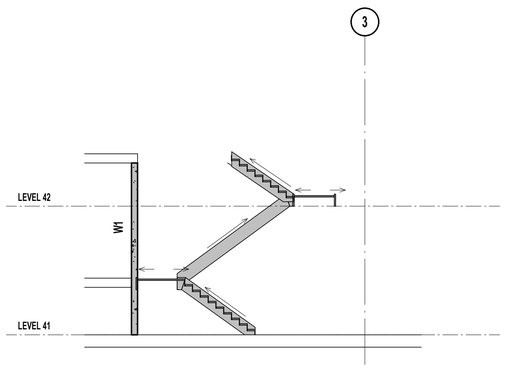
ELEVATION - S5
SCALE 1 : 100



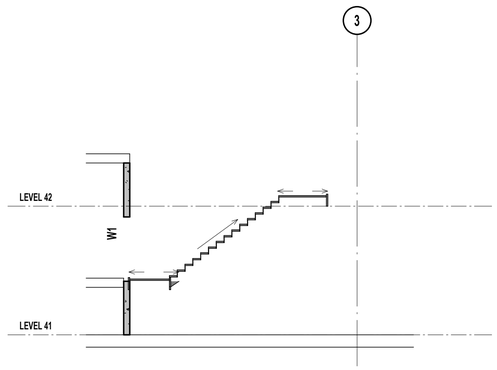
ELEVATION - S3
SCALE 1 : 100



SECTION - S3
SCALE 1 : 100



ELEVATION - S6
SCALE 1 : 100



SECTION - S6
SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
STAIR ELEVATION - SHEET 01

PROJECT STATUS
FOR DESIGN DEVELOPMENT

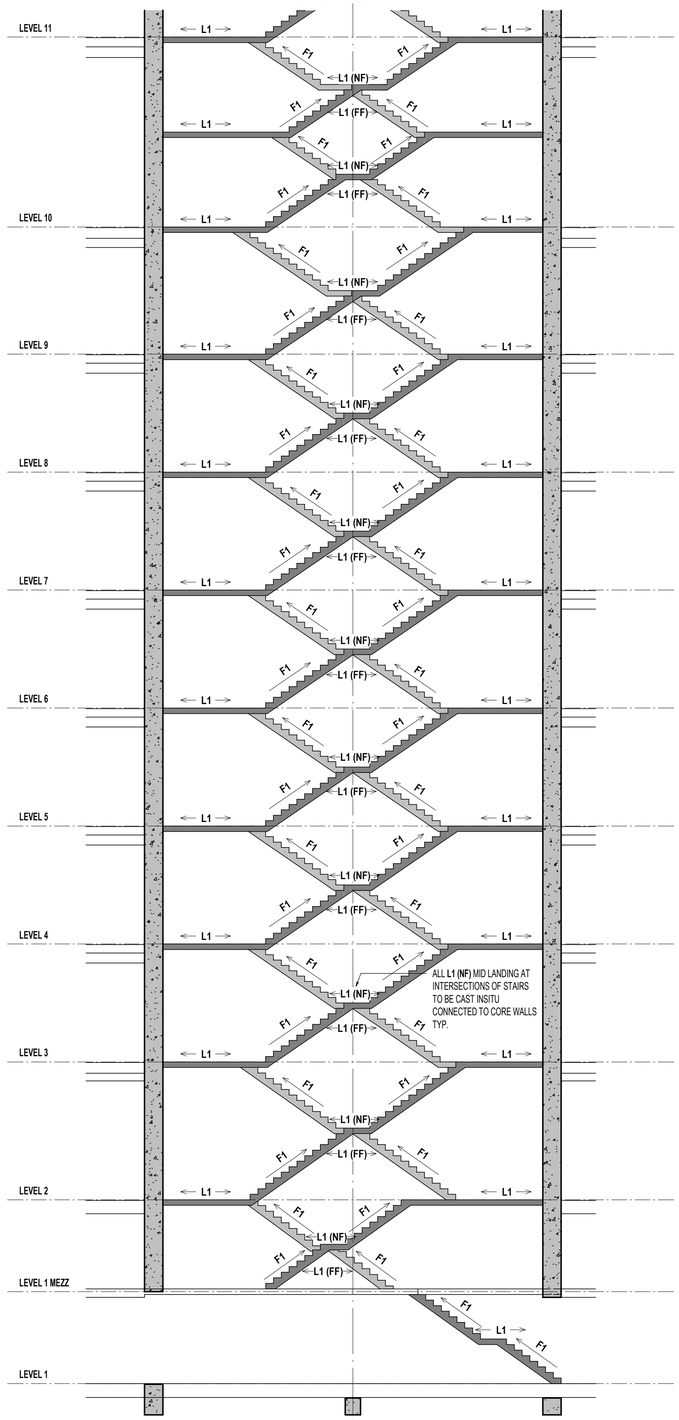
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-4501	A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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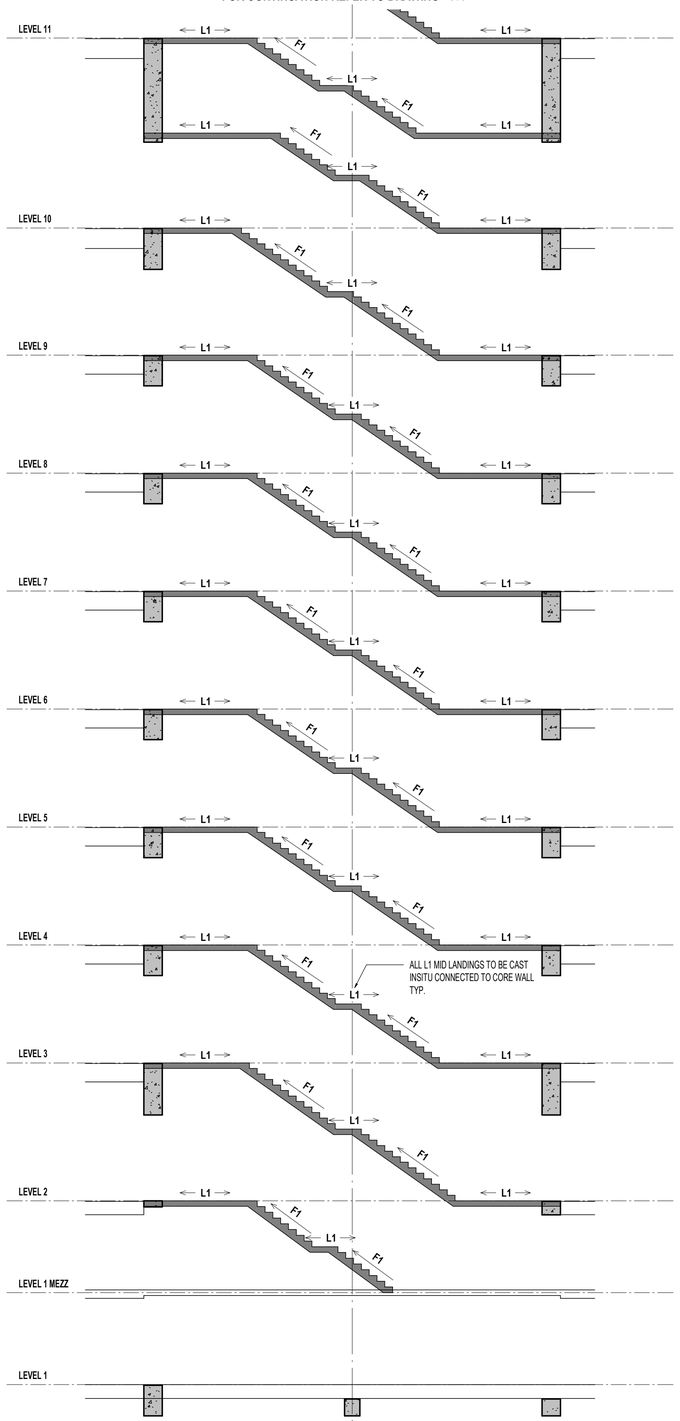
FOR CONTINUATION REFER TO DRAWING 4503



ELEVATION - FS4 - PART A

SCALE 1 : 100

FOR CONTINUATION REFER TO DRAWING 4503



SECTION - FS4 - PART A

SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

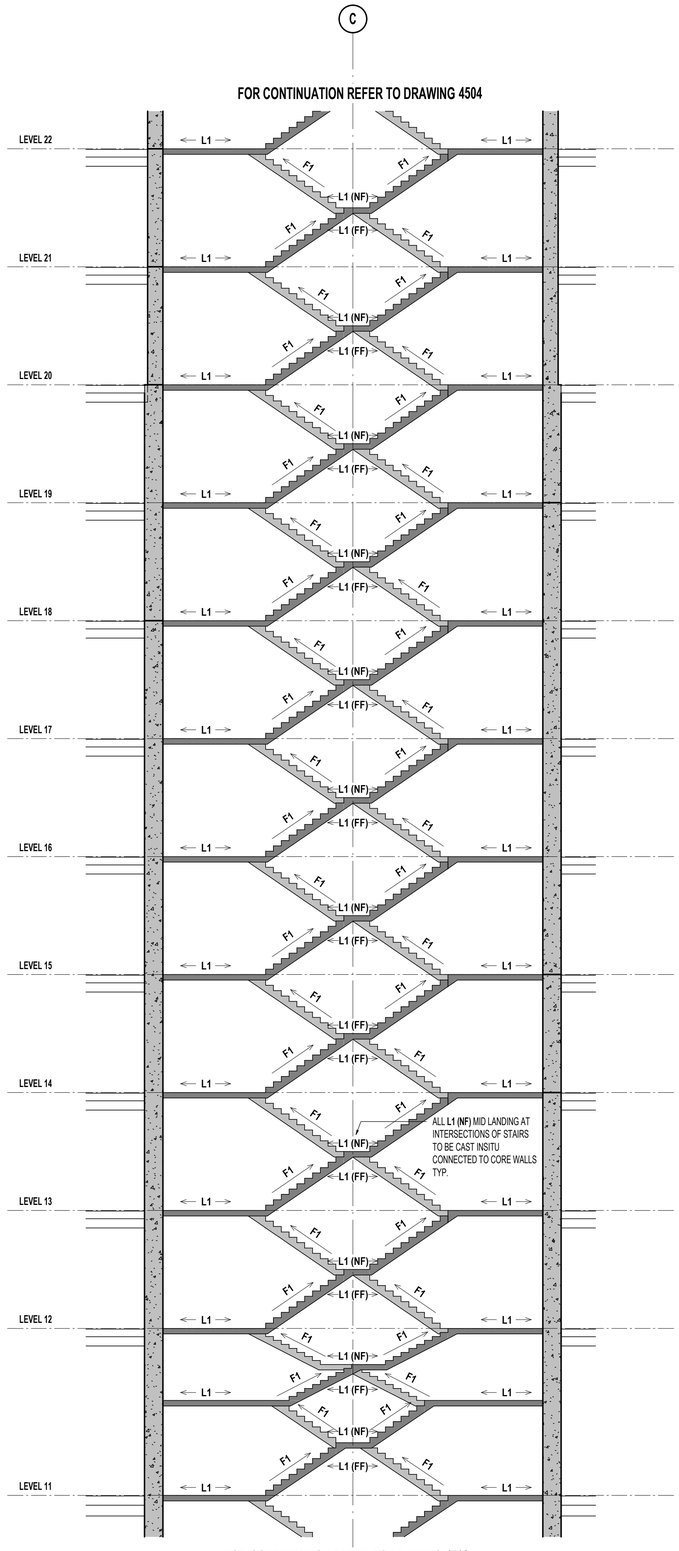
DRAWING TITLE
STAIR ELEVATION - SHEET 02

PROJECT STATUS
FOR DESIGN DEVELOPMENT

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	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

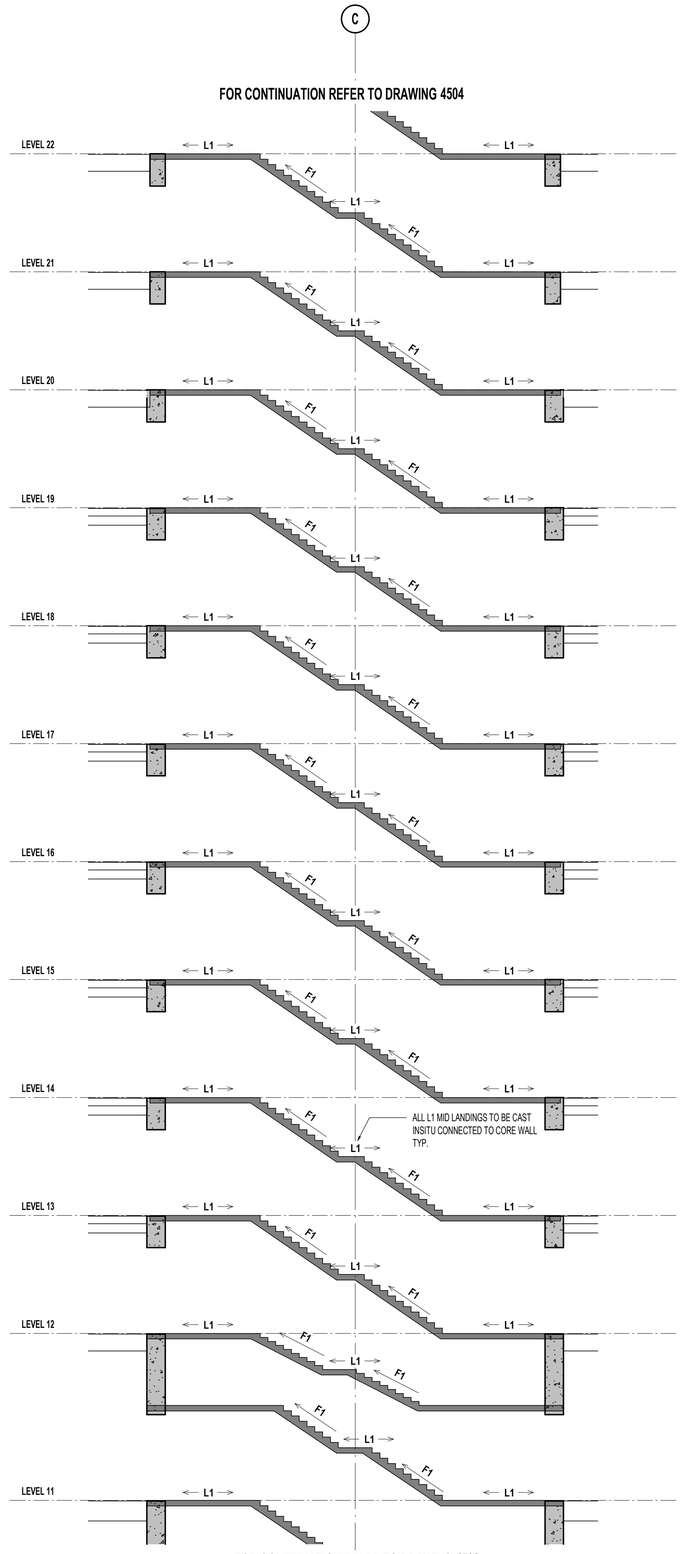
PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-4502
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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ELEVATION - FS4 - PART B

SCALE 1 : 100



SECTION - FS4 - PART B

SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

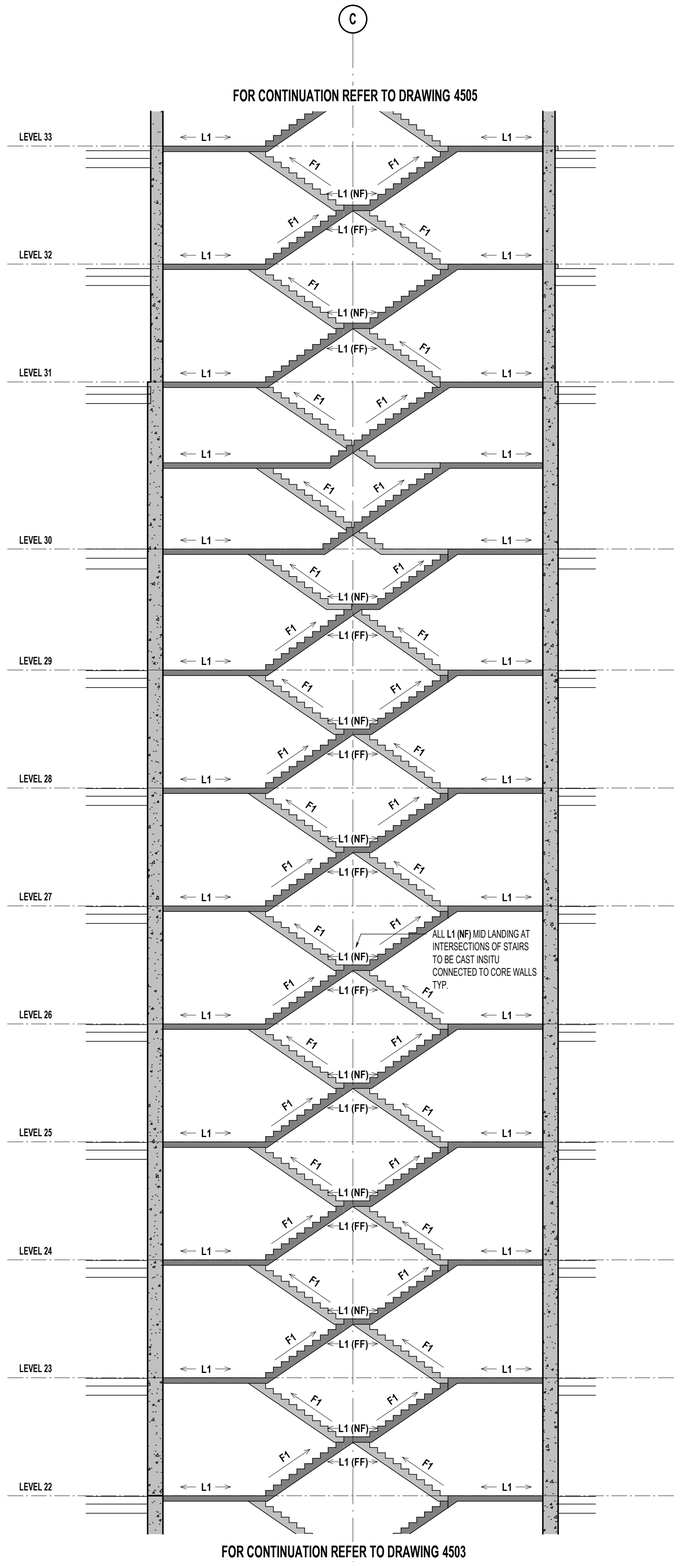
DRAWING TITLE
STAIR ELEVATION - SHEET 03

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
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	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

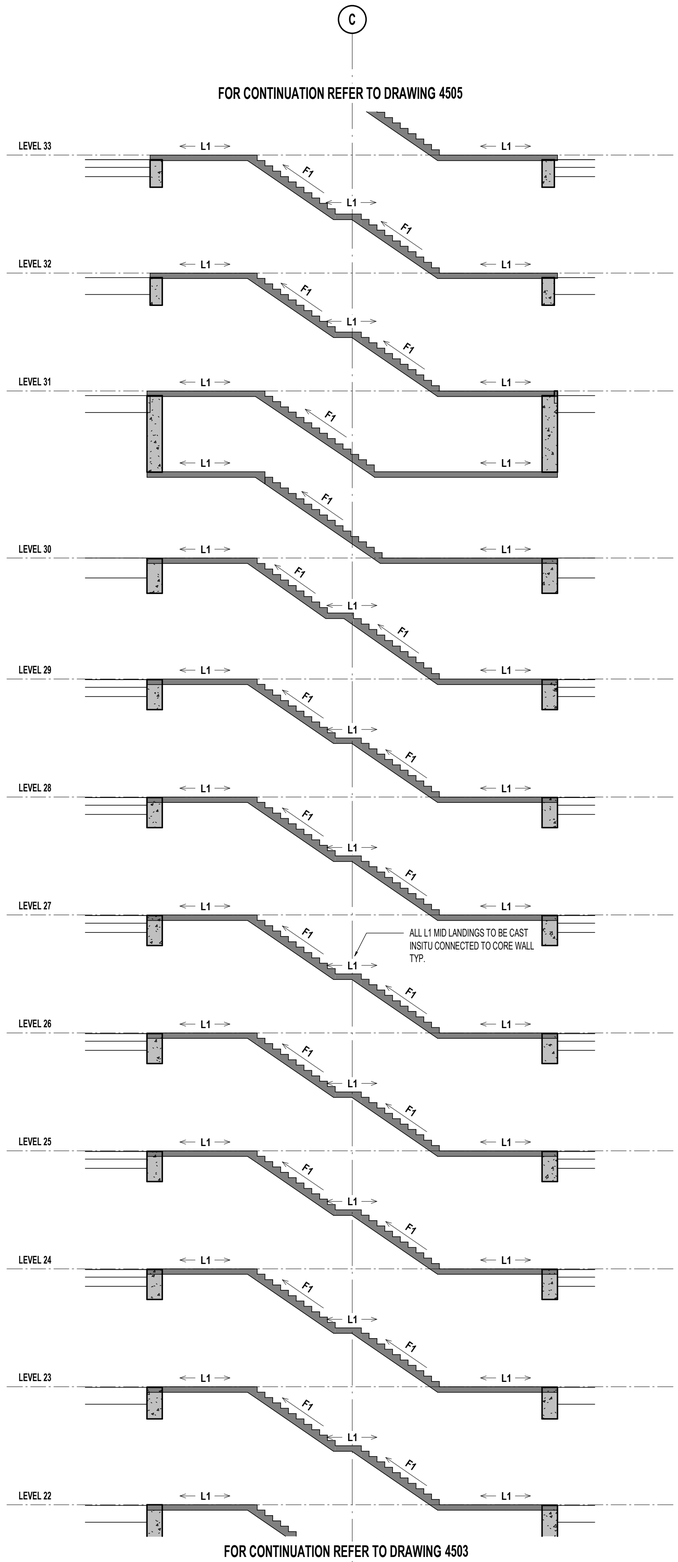
PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-4503
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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ELEVATION - FS4 - PART C

SCALE 1 : 100



SECTION - FS4 - PART C

SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
STAIR ELEVATION - SHEET 04

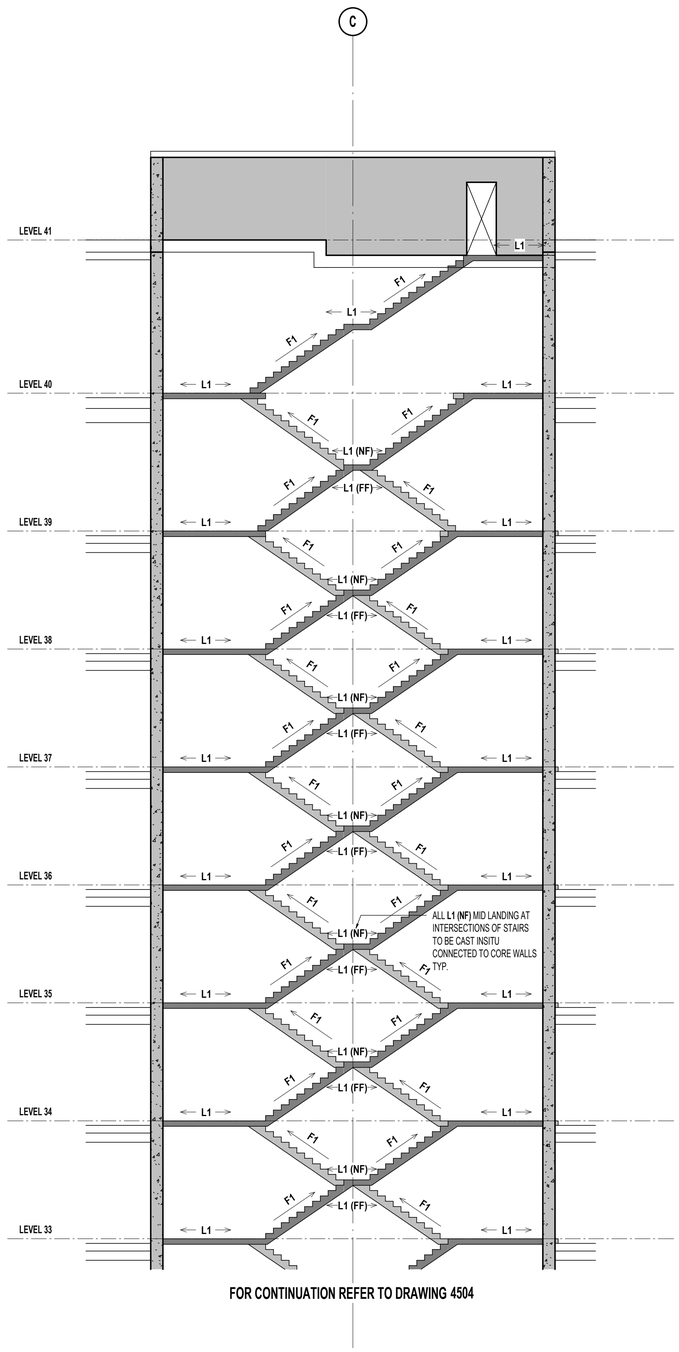
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-4504 — REV. No. A

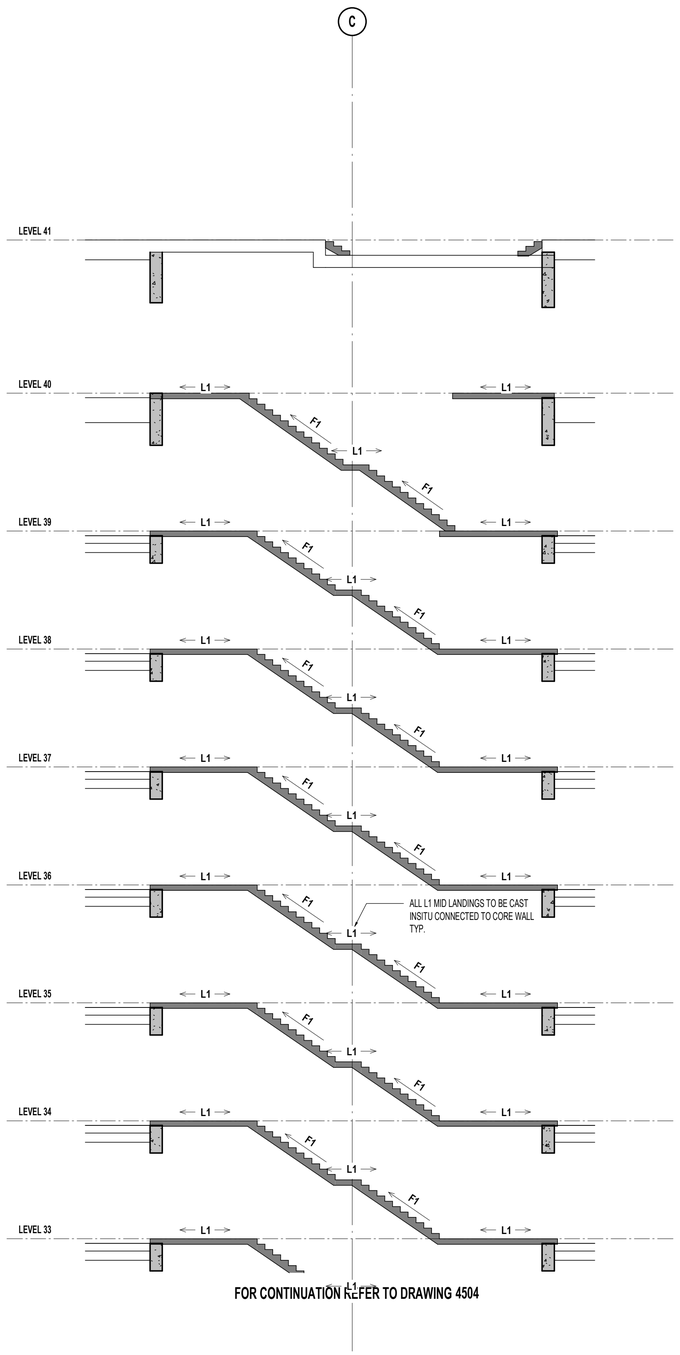
DRAWINGS ARE TO BE PRINTED IN COLOUR
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FOR CONTINUATION REFER TO DRAWING 4504

ELEVATION - FS4 - PART D

SCALE 1 : 100



FOR CONTINUATION REFER TO DRAWING 4504

SECTION - FS4 - PART D

SCALE 1 : 100

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
STAIR ELEVATION - SHEET 05

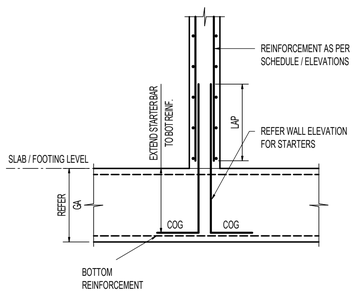
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

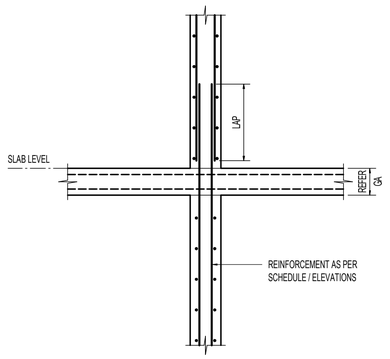
DRAWING NUMBER	REV. No.
HER-DRG-STR-4505	A

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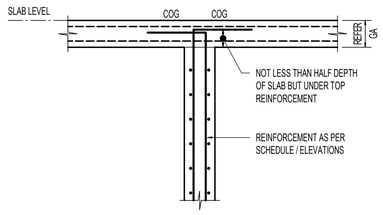
TYPICAL WALL SECTION - WALL STARTER DETAIL

DETAIL SCALE: 1 : 20 — CW01.1



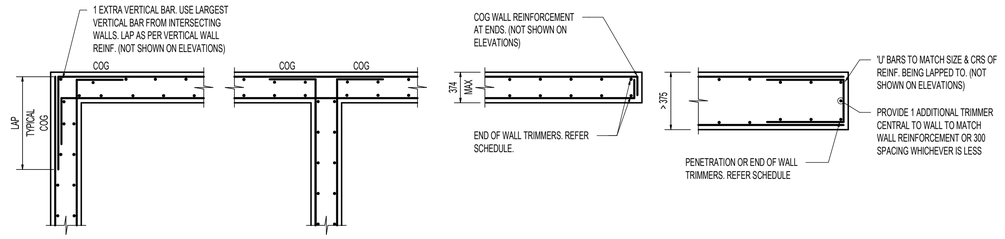
TYPICAL WALL SECTION - SLAB INTERSECTION DETAIL

DETAIL SCALE: 1 : 20 — CW02.1



TYPICAL WALL SECTION - TOP CONNECTION DETAIL

DETAIL SCALE: 1 : 20 — CW03.1

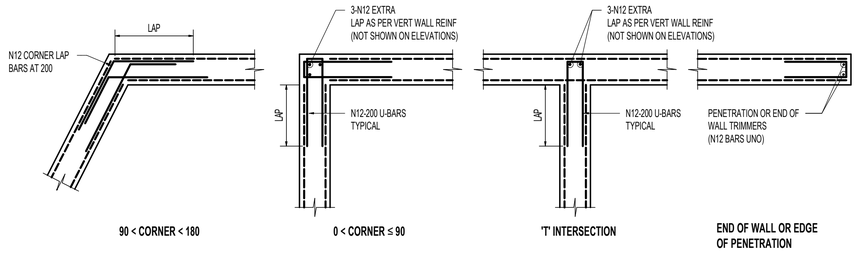


CORNER | 'T' INTERSECTION | END OF WALL OR TOP OF WALL (< 375 THICK) | END OF WALL OR TOP OF WALL (> 375 THICK)

NOTE: PROVIDE EXTRA STARTER BARS TO MATCH EXTRA VERTICAL BARS SHOWN ABOVE

TYPICAL WALL INTERSECTION DETAIL WITH BAR REINFORCEMENT

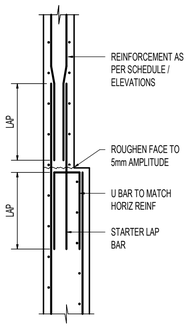
DETAIL SCALE: 1 : 20 — CW04.1



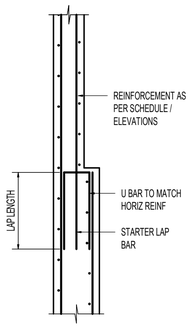
90 < CORNER < 180 | 0 < CORNER ≤ 90 | 'T' INTERSECTION | END OF WALL OR EDGE OF PENETRATION

TYPICAL WALL INTERSECTION DETAILS WITH MESH REINFORCEMENT

DETAIL SCALE: 1 : 20 — CW05.1



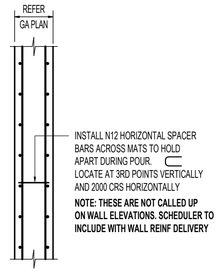
WITH CONSTRUCTION JOINT PLAN VIEW



WITHOUT CONSTRUCTION JOINT PLAN VIEW

TYPICAL WALL THICKNESS CHANGE DETAIL

DETAIL SCALE: 1 : 20 — CW06.1



PLAN VIEW

TYPICAL WALL SPACER DETAIL

DETAIL SCALE: 1 : 20 — CW07.1

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
INSITU WALL DETAILS - SHEET 1

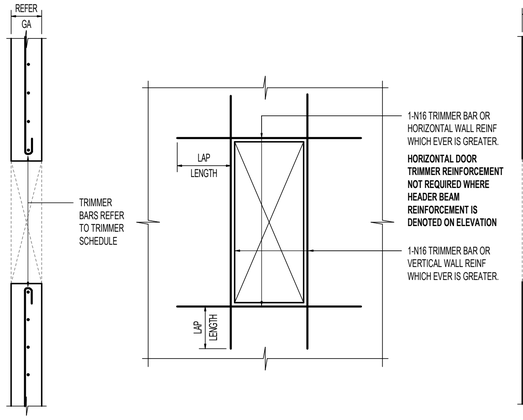
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

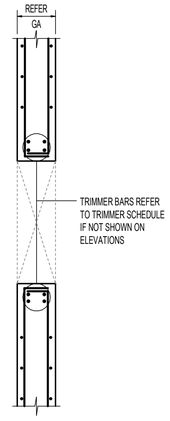
DRAWING NUMBER HER-DRG-STR-8000 — REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



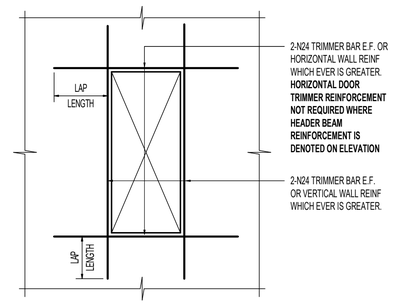
WALL TRIMMER DETAIL (1 LAYER REINFORCEMENT)

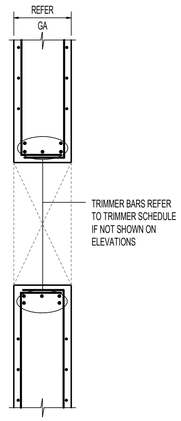
DETAIL CW09
SCALE: 1 : 20

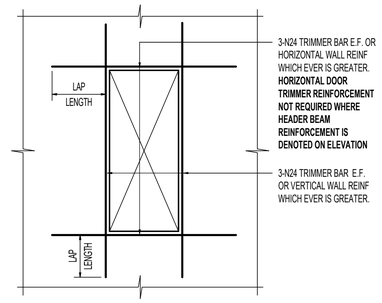


WALL TRIMMER DETAIL (2 LAYERS REINFORCEMENT)

DETAIL CW10
SCALE: 1 : 20

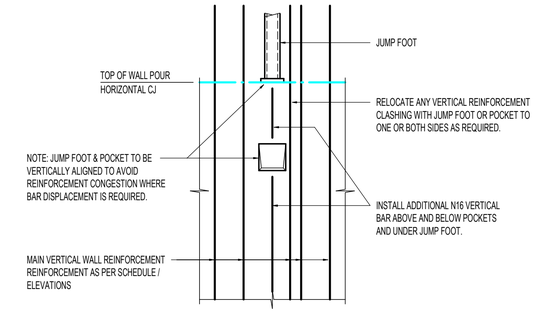






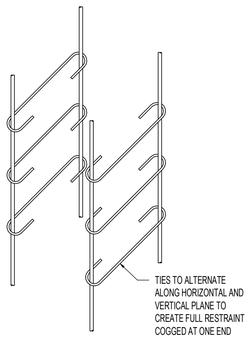
WALL TRIMMER DETAIL (>375 THICK)

DETAIL CW11
SCALE: 1 : 20

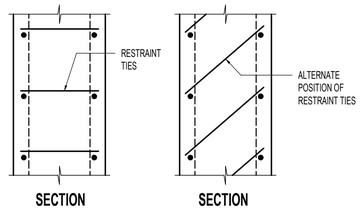


JUMP FORM WALLS REINFORCEMENT DISPLACEMENT DETAIL

DETAIL CW14
SCALE: 1 : 20

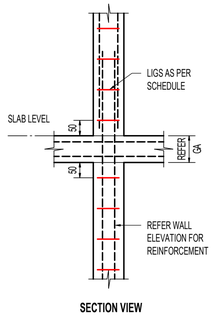


ISOMETRIC FIXING ARRANGEMENT FOR HOOK-COG TIES

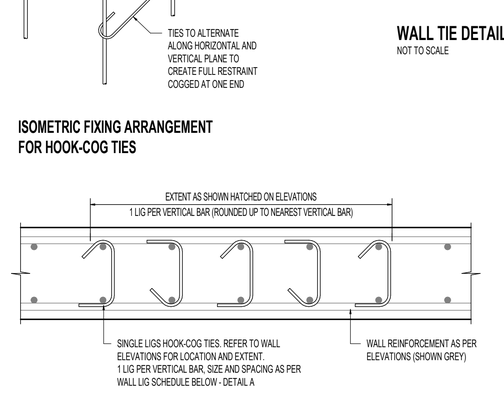


WALL TIE DETAIL

NOT TO SCALE



SECTION VIEW

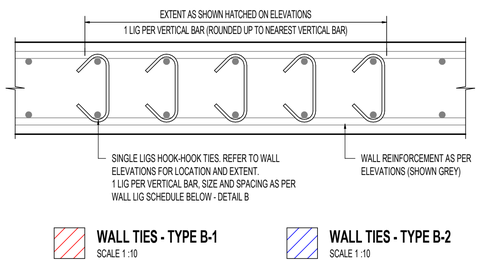


WALL TIES - TYPE A-1

SCALE 1 :10

WALL TIES - TYPE A-2

SCALE 1 :10



WALL TIES - TYPE B-1

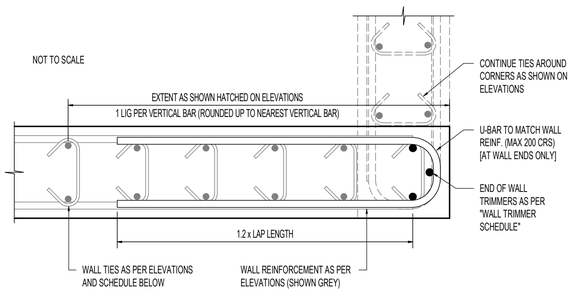
SCALE 1 :10

WALL TIES - TYPE B-2

SCALE 1 :10

COMPRESSION WALL TIE DETAILS AND SCHEDULE

DETAIL CW15
SCALE: 1 : 10

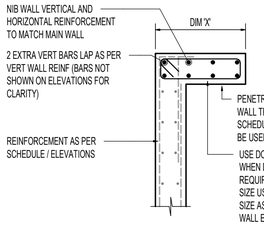


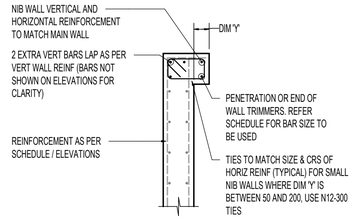
WALL TIES - WALL END DETAIL

WALL TIE SCHEDULE

		A-1 B-1	A-2 B-2
WALL VERT BAR SIZE	LIG BAR SIZE	LIG CRS - DETAIL TYPE 1 (THE LESSER OF)	LIG CRS - DETAIL TYPE 2 (THE LESSER OF)
N12	N10	180 OR WALL THICKNESS	90 OR HALF WALL THICKNESS
N12 BUNDLED	N12	90 OR HALF WALL THICKNESS	
N16	N10	240 OR WALL THICKNESS	120 OR HALF WALL THICKNESS
N16 BUNDLED	N12	120 OR HALF WALL THICKNESS	
N20	N10	300 OR WALL THICKNESS	150 OR HALF WALL THICKNESS
N20 BUNDLED	N12	150 OR HALF WALL THICKNESS	
N24	N10	300 OR WALL THICKNESS	180 OR HALF WALL THICKNESS
N24 BUNDLED	N12	180 OR HALF WALL THICKNESS	
N28	N12	300 OR WALL THICKNESS	200 OR HALF WALL THICKNESS
N28 BUNDLED	N12	200 OR HALF WALL THICKNESS	
N32	N12	300 OR WALL THICKNESS	250 OR HALF WALL THICKNESS
N32 BUNDLED	N12	250 OR HALF WALL THICKNESS	
N36	N12	300 OR WALL THICKNESS	270 OR HALF WALL THICKNESS
N36 BUNDLED	N12	270 OR HALF WALL THICKNESS	

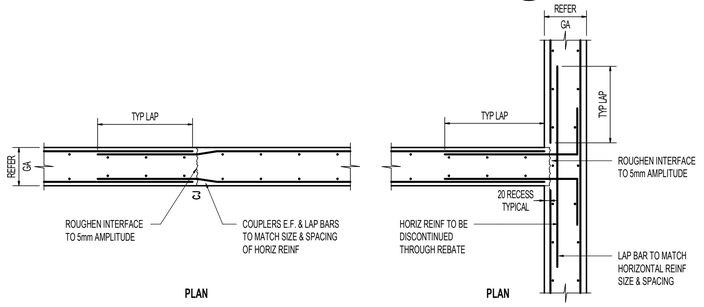
NOTE: FIRST LIG TO SIT 50mm ABOVE SLAB TOP AND
LAST LIG TO SIT 50mm BELOW SLAB SOFFIT

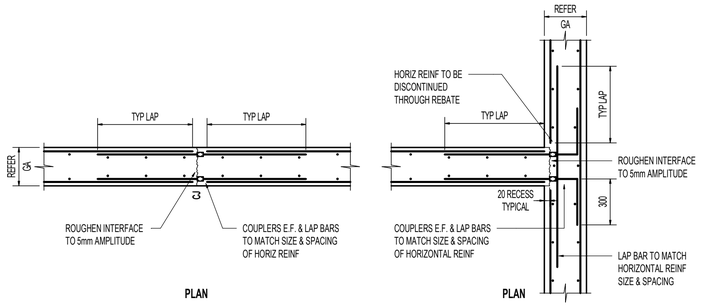




WALL CORNER DETAIL AT OPENING

DETAIL CW13
SCALE: 1 : 20





TYPICAL WALL CONSTRUCTION JOINT (CJ) DETAILS

DETAIL CW12
SCALE: 1 : 20

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
INSITU WALL DETAILS - SHEET 2

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
As indicated	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-8001
REV. No. A

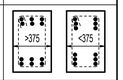
DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200

HEADER BEAM LEGEND:

NOTE:
**HBx DENOTES HEADER BEAM HORIZONTAL REINFORCEMENT TO HAVE COUPLER AT CONSTRUCTION JOINT. COUPLER SIZE AND NUMBER TO MATCH HEADER BEAM.

H1-L1
(###)

- H1-L1: SHEAR REINFORCEMENT MARK / TOP AND BOTTOM REINFORCEMENT MARK
- (###): MINIMUM HEADER DEPTH REFER ELEVATION

HEADER BEAM REINF. ARRANGEMENT	
REINF. MARK	REINF. ARRANGEMENT
A B C D	
E F G	
H J K	
L M N P	
Q	
LIGS SHOWN INDICATIVELY REFER ELEVATIONS AND SCHEDULE	

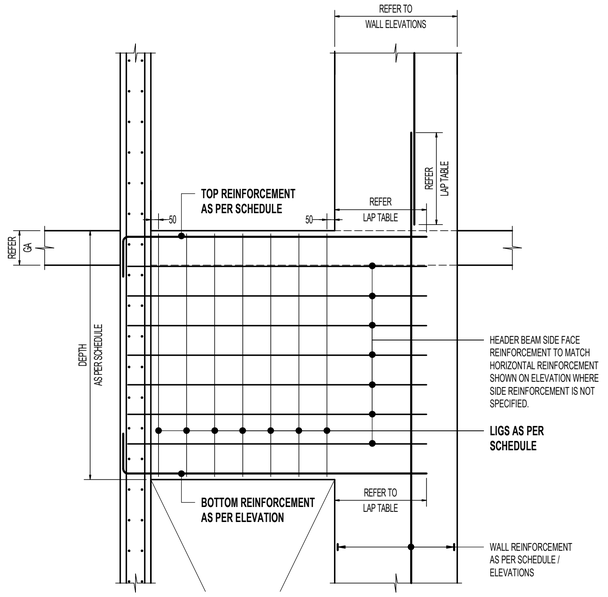
HEADER BEAM TOP AND BOTTOM REINFORCEMENT	
MARK	BAR No. & SIZE
H1	-
H2	
H3	
H4	
H5	
H6	
H7	
H8	
H9	

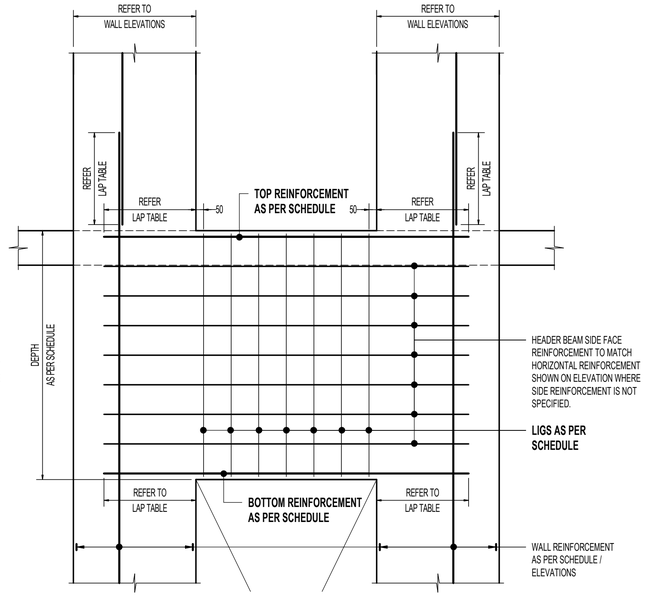
SHEAR REINFORCEMENT	
MARK	No. OF LIGS, SIZE & CRS
L1	-
L2	
L3	
L4	
L5	
L6	
L7	
L8	
L9	

(2L) DENOTES REINFORCEMENT PLACED IN 2 LAYERS

REINFORCEMENT MARK SCHEDULE			
MARK	SIZE	MARK	SIZE
A	N10	F	N28
B	N12	G	N32
C	N16	H	N36
D	N20	J	N40
E	N24		

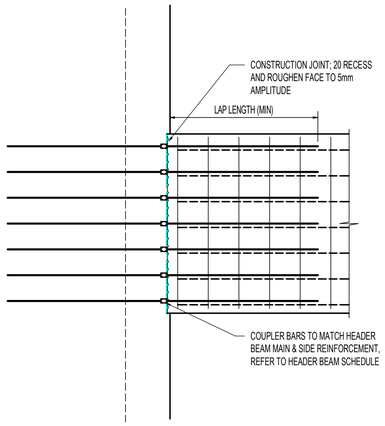
ALL WALL REINFORCEMENT IS TO BE EACH FACE UNO, (C) DENOTES CENTRAL REINFORCEMENT.
ALL REINF. TAGS SPACING IS SHOWN IN cm
EG. D20 DENOTES N20-200; B15 DENOTES N12-150





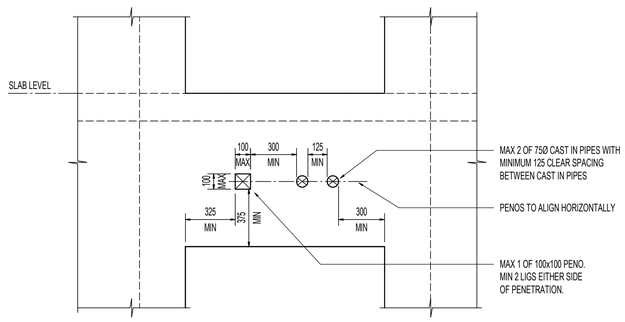
HEADER BEAM SCHEDULE

DETAIL CW16
SCALE: 1 : 10



TYPICAL HEADER BEAM COUPLER DETAIL AT CONSTRUCTION JOINT

DETAIL CW18
SCALE: 1 : 20



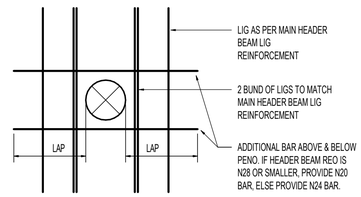
NOTE: PENETRATIONS TO HEADER BEAMS ACCEPTABLE ONLY WHERE HEADER BEAM DEPTH EXCEEDS 900. ANY ADDITIONAL PENETRATIONS AND/OR IF DIMENSIONS LARGER THAN SHOWN, CONTACT HERA ENGINEERING FOR ASSESSMENT.

TYPICAL PENETRATIONS TO HEADER BEAM DETAIL

DETAIL CW19
SCALE: 1 : 20

TYPICAL HEADER BEAM DETAIL

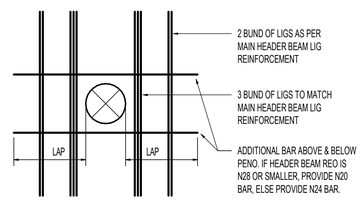
DETAIL CW17
SCALE: 1 : 20



WHERE HEADER BEAM LIGS ARE NOT BUNDLED

TYPICAL HEADER BEAM LIG REINFORCEMENT AROUND PENETRATIONS (MAX 100mm)

SCALE 1:10

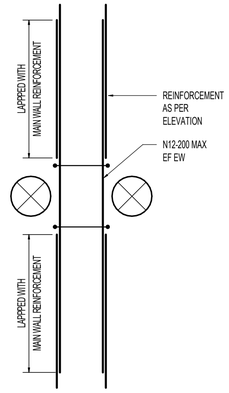


WHERE HEADER BEAM LIGS ARE BUNDLED

FOR PENOS > 100mm CONTACT HERA ENGINEERING

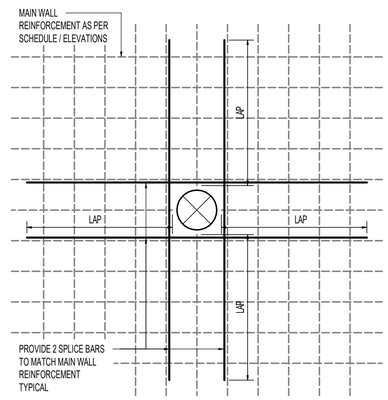
TYPICAL HEADER BEAM LIG REINFORCEMENT AROUND PENETRATIONS (MAX 100mm)

DETAIL CW20
SCALE: 1 : 10



TYPICAL WALL REINFORCEMENT BETWEEN PENETRATIONS

DETAIL CW21
SCALE: 1 : 10



TYPICAL WALL REINFORCEMENT DETAIL AROUND PENETRATIONS

DETAIL CW22
SCALE: 1 : 10

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

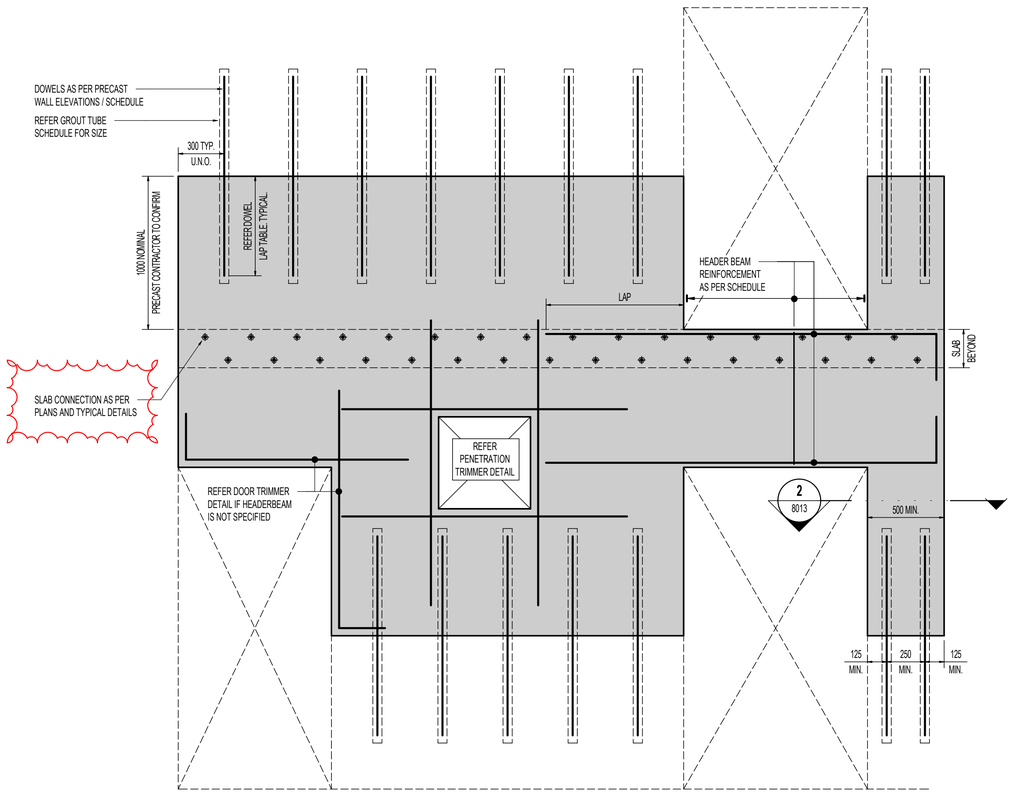
DRAWING TITLE
INSITU WALL DETAILS - SHEET 3

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
As indicated	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

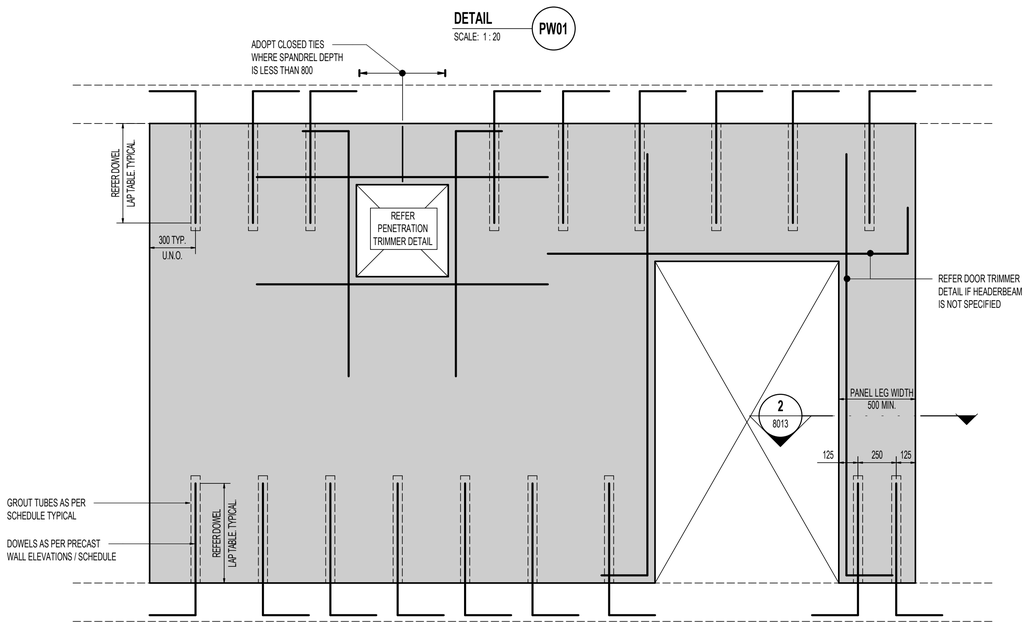
PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-8002	A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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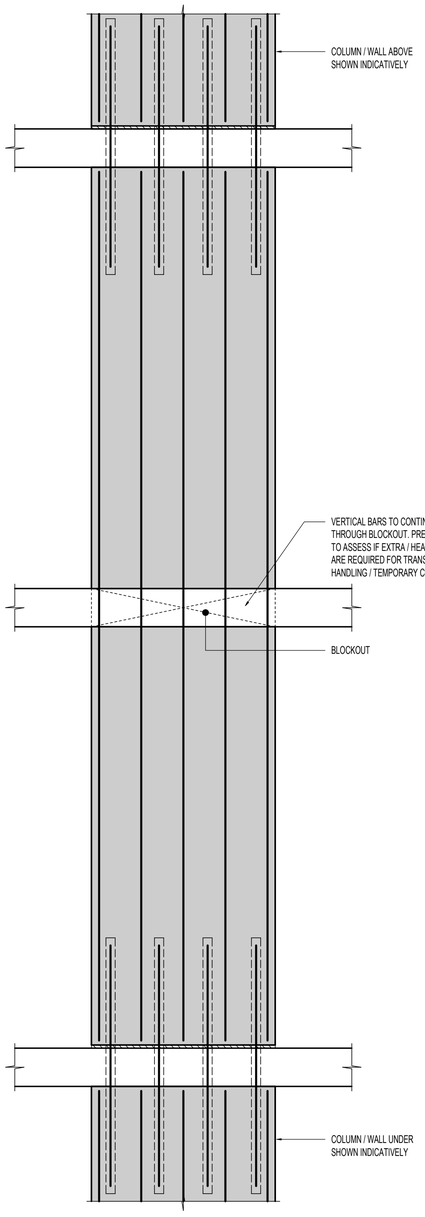
TYPICAL CONTINUOUS PRECAST PANEL ELEVATION ARRANGEMENT

DETAIL PW01
SCALE: 1 : 20

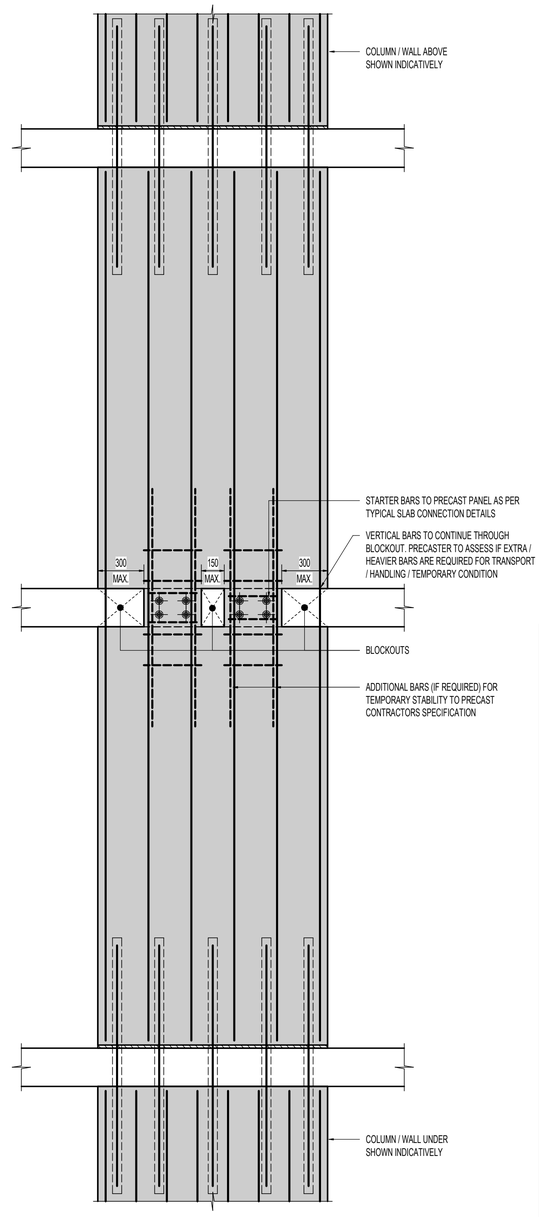


TYPICAL DISCONTINUOUS PRECAST PANEL ELEVATION ARRANGEMENT

DETAIL PW02
SCALE: 1 : 20



PANEL WIDTH ≤ 1200 WIDE



PANEL WIDTH > 1200 WIDE

TYPICAL DOUBLE-HEIGHT INTERNAL PRECAST PANEL CONNECTION DETAILS

DETAIL PW03
SCALE: 1 : 20

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

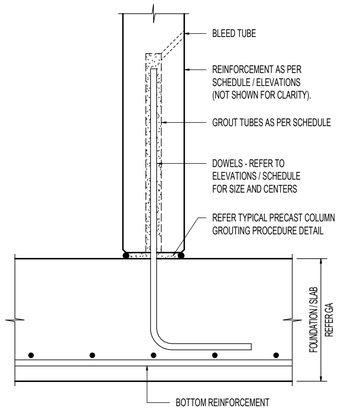
DRAWING TITLE
PRECAST WALL DETAILS - SHEET 1

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

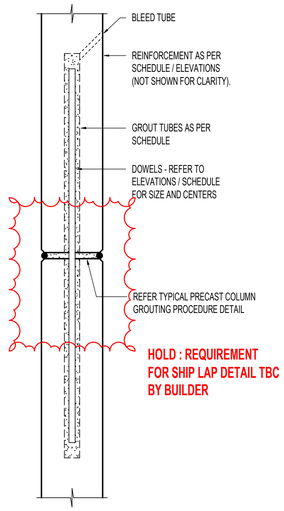
PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-8010
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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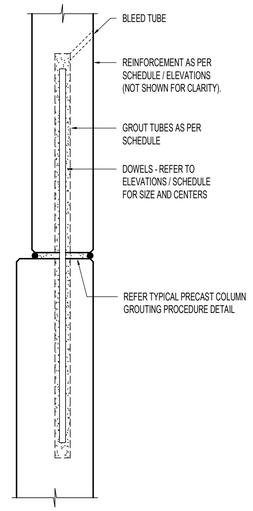
TYPICAL PRECAST PANEL STARTER BAR DETAIL

DETAIL PW04
SCALE: 1 : 10



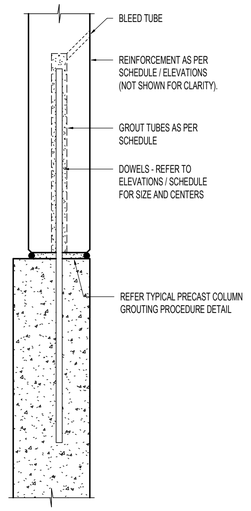
TYPICAL LOAD BEARING PANEL TO PANEL DETAIL

DETAIL PW05
SCALE: 1 : 10



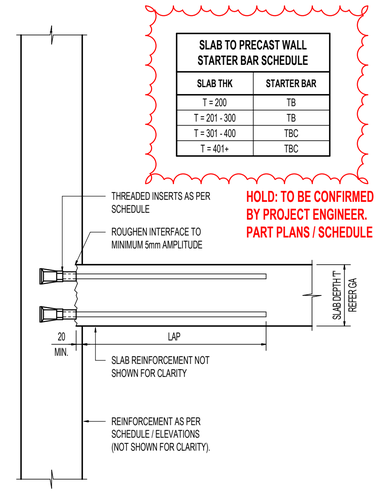
TYPICAL PANEL TO PANEL THICKNESS CHANGE DETAIL

DETAIL PW06
SCALE: 1 : 10



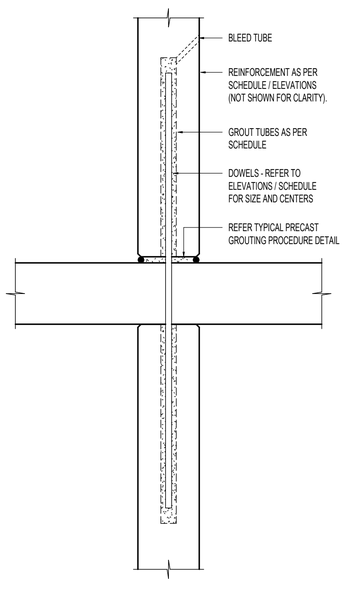
TYPICAL PANEL TO CAST IN-SITU WALL DETAIL

DETAIL PW07
SCALE: 1 : 10



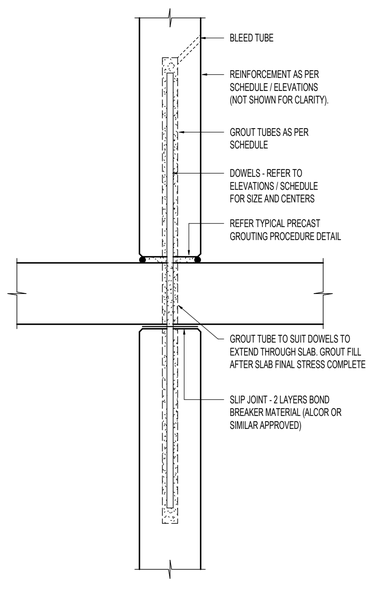
TYPICAL SLAB TO PRECAST WALL CONNECTION DETAIL

DETAIL 1
SCALE: 1 : 10



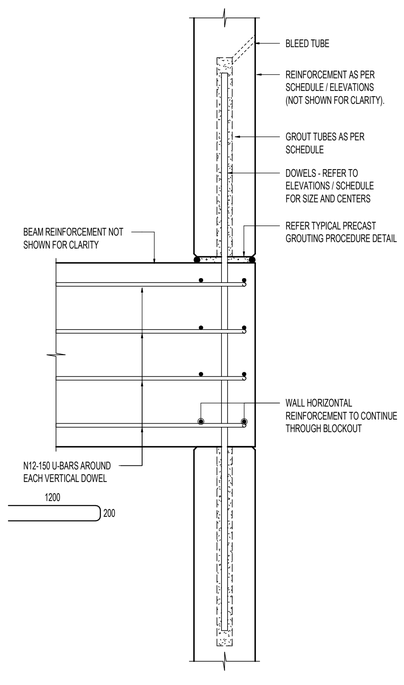
TYPICAL PANEL TO PANEL LOAD BEARING WALL TO RC SLAB

DETAIL PW08
SCALE: 1 : 10



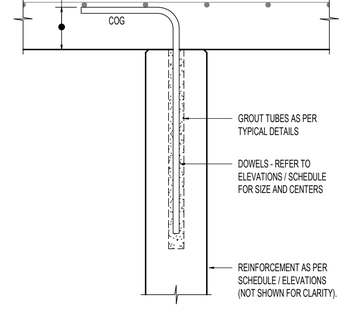
TYPICAL DETAIL PANEL TO PANEL LOAD BEARING WALL TO PT SLAB BEAM

DETAIL PW09
SCALE: 1 : 10



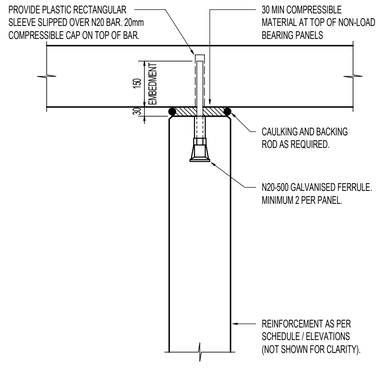
TYPICAL DETAIL PANEL TO PANEL LOAD BEARING WALL TO TRANSFER SLAB/BEAM

DETAIL PW10
SCALE: 1 : 10



TYPICAL LOAD-BEARING PANEL TO UNDERSIDE OF SLAB CONNECTION DETAIL

DETAIL PW11
SCALE: 1 : 10



TYPICAL NON-LOAD BEARING PANEL TO UNDERSIDE OF SLAB CONNECTION DETAIL

DETAIL PW12
SCALE: 1 : 10

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

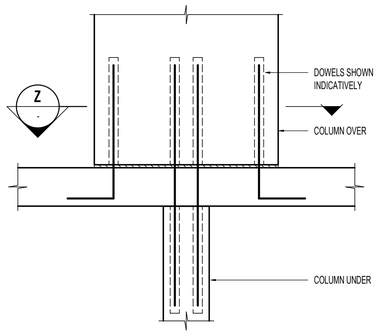
DRAWING TITLE
PRECAST WALL DETAILS - SHEET 2

PROJECT STATUS
FOR DESIGN DEVELOPMENT

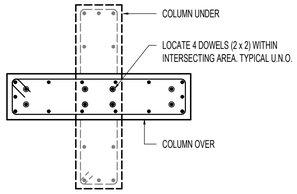
SCALE		
1 : 10	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-8011
REV. No. A

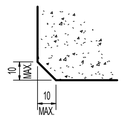
DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



COLUMN TRANSITION 90° ROTATION
SCALE: 1:20

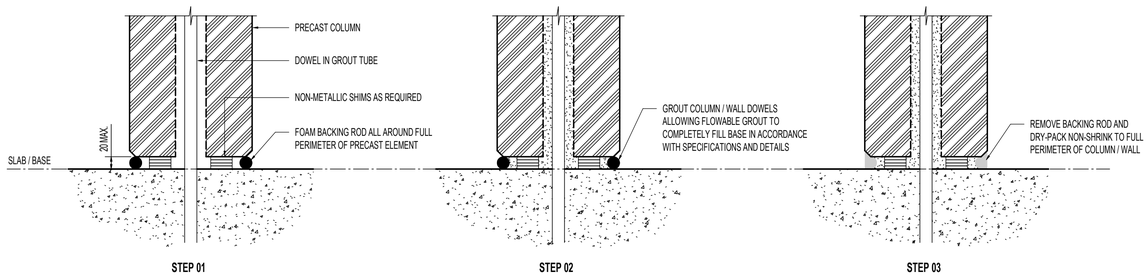


SECTION Z
SCALE: 1:20



TYPICAL PRECAST CORNER CHAMFER DETAIL

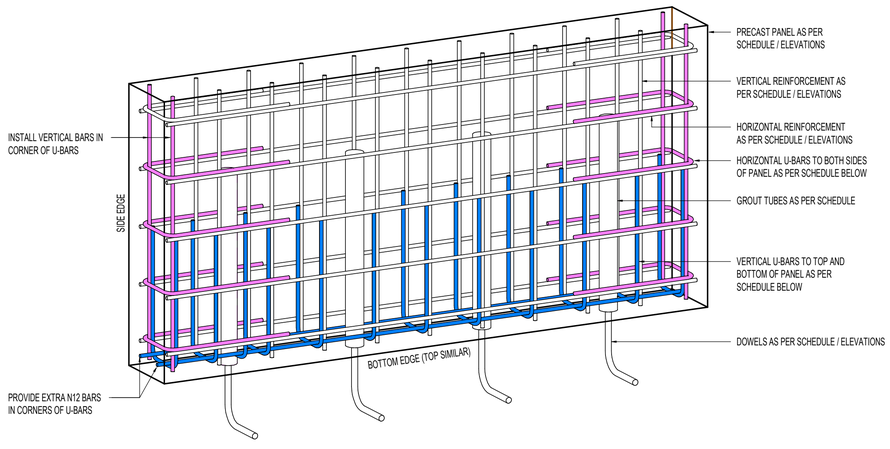
DETAIL PW17
SCALE: 1 : 5



STEP 01 **STEP 02** **STEP 03**

TYPICAL PRECAST GROUTING PROCEDURE

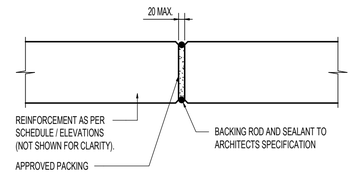
DETAIL PW15
SCALE: 1 : 5



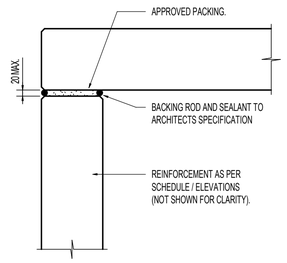
PRECAST WALL EDGE U-BAR SCHEDULE					
EDGE	MARK	WALL THK 'T'	BAR SIZE	BAR LENGTH	BAR SPACING
TOP + BOTTOM		150mm < T ≤ 250mm	N10	LESSER OF: 800 OR GROUT TUBE LENGTH	LESSER OF: VERTICAL BAR SPACING OR HALF GROUT TUBE SPACING
		250mm < T ≤ 300mm	N12		
SIDES		150mm < T ≤ 250mm	N10	LESSER OF: 800 OR GROUT TUBE LENGTH	MATCH HORIZONTAL BAR SPACING
		250mm < T ≤ 300mm	N12		
NOTE: FOR WALLS GREATER THAN 300THK CONTACT HERA ENGINEERING.					

TYPICAL DOWEL CONFINEMENT DETAIL

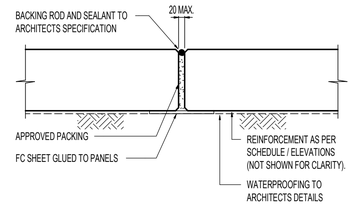
DETAIL PW18
SCALE: 1 : 10



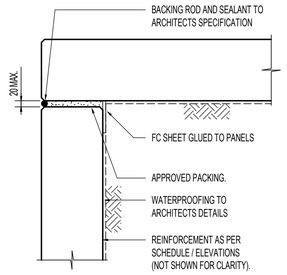
INTERMEDIATE JOINT



CORNER JOINT



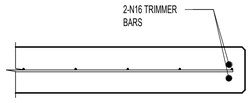
INTERMEDIATE JOINT AT RETAINING WALLS



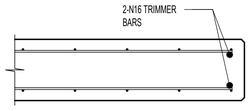
CORNER JOINT AT RETAINING WALLS

TYPICAL INTERMEDIATE AND CORNER JOINT DETAILS

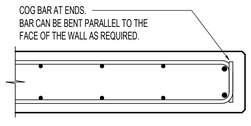
DETAIL PW16
SCALE: 1 : 10



PLAN
SINGLE MESH LAYER REINFORCEMENT



PLAN
DUAL MESH LAYER REINFORCEMENT



PLAN
DUAL LAYER REINFORCEMENT
(DUCTILITY 1)

TYPICAL PRECAST PANEL WALL END DETAILS

DETAIL 1
SCALE: 1 : 10

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
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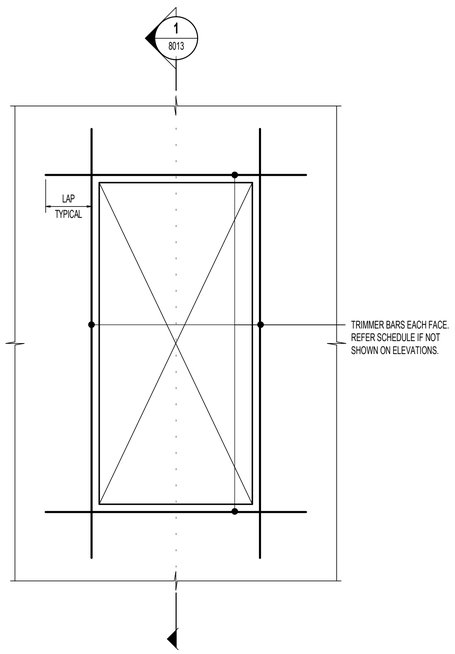
DRAWING TITLE
PRECAST WALL DETAILS - SHEET 3

PROJECT STATUS
FOR DESIGN DEVELOPMENT

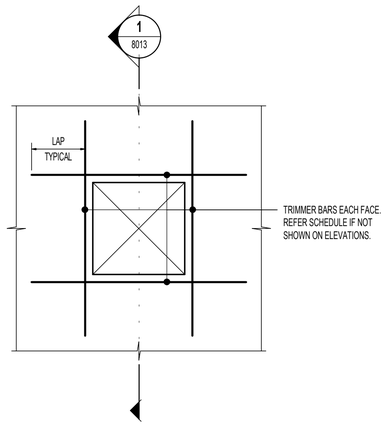
SCALE		
As indicated	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-8012
REV. No. A

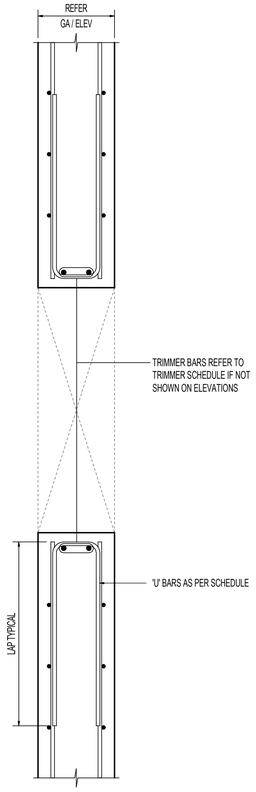
DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



DOOR OPENING



PENETRATION (GREATER THAN 150)



PENETRATION TRIMMER SCHEDULE		
MAIN BARS	TRIMMER BARS	U-BARS
N12	1-N16 (E.F.)	N12
N16	1-N16 (E.F.)	N16
N20	1-N20 (E.F.)	N20
N24	2-N16 (E.F.)	N20
N28	2-N20 (E.F.)	N20
N32	2-N24 (E.F.)	2-N16
N36	2-N24 (E.F.)	2-N16

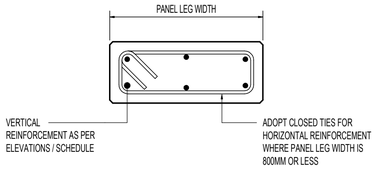
PENETRATION TRIMMER NOTES:

1. WHERE TRIMMER BARS, U-BARS OR HEADER BEAM BARS ARE SHOWN ON ELEVATION AT PENETRATION THE ELEVATION SHALL TAKE PRECEDENCE.
2. TRIMMER BARS AND U-BARS TO BE SELECTED BASED ON MAIN BAR SIZE IN CORRESPONDING DIRECTION (VERTICAL / HORIZONTAL).
3. U-BAR SPACING TO MATCH CORRESPONDING MAIN BAR SPACING.
4. TRIMMERS TO BE BUNDLED AS SPECIFIED.
5. IF A PENETRATION IS NOT SHOWN ON ELEVATION, CONTACT ENGINEER FOR REINFORCEMENT REQUIREMENTS.

WALL PENETRATION TRIMMER DETAIL

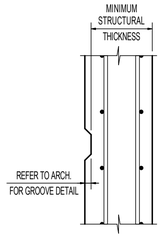
DETAIL PW19
SCALE: 1 : 20

SECTION 1 / 8013
SCALE: 1 : 10



TYPICAL NARROW PANEL LEG DETAIL

DETAIL 2
SCALE: 1 : 10



TYPICAL REBATE / DUMMY JOINT PANEL SECTION

DETAIL PW21
SCALE: 1 : 10

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

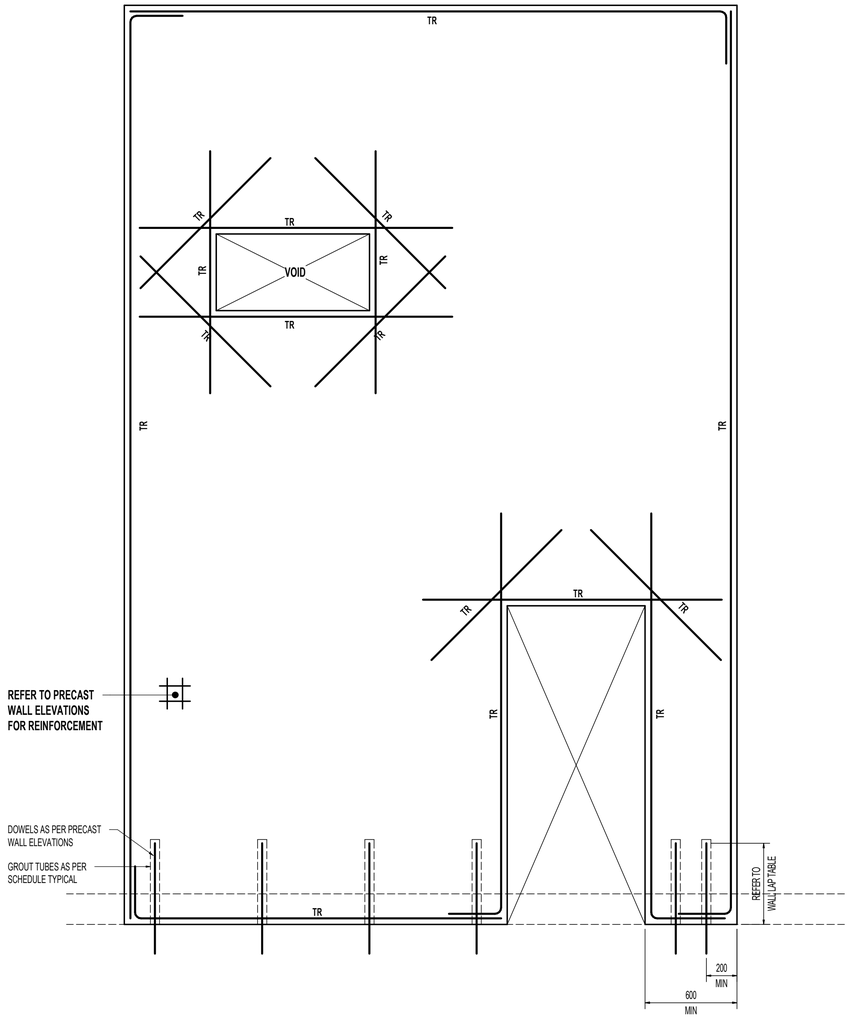
DRAWING TITLE
PRECAST WALL DETAILS - SHEET 4

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
As indicated	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-8013
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



TYPICAL PRECAST PANEL ELEVATION ARRANGEMENT

TR - 2-N16 TRIMMER BAR

REFER TO TYPICAL DETAILS AND WALL ELEVATIONS FOR MORE DETAIL

NOT TO SCALE

PW-DET-29

DETAIL — PW29

SCALE: 1 : 20

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

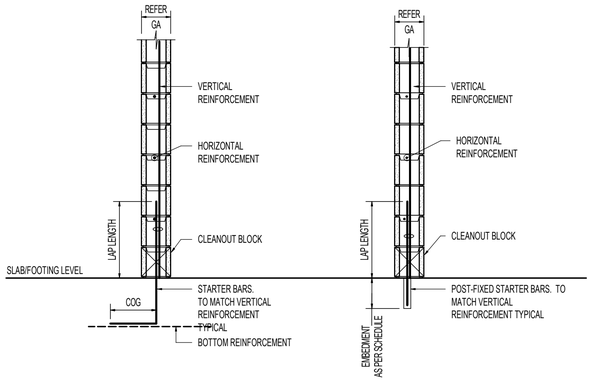
DRAWING TITLE
PRECAST WALL DETAILS - SHEET 5

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-8014
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



TYPICAL SECTION THROUGH BLOCKWORK WALL

SCALE 1:20

ALTERNATE SECTION THROUGH BLOCKWORK WALL

SCALE 1:20

NOTE:

1. STARTER BARS SHALL ONLY BE POST-FIXED WHERE SPECIFICALLY APPROVED BY ENGINEER. BUILDER TO SUBMIT PROPOSED EXTENT TO ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF WORKS.
2. REFER SCHEDULE FOR STARTER BAR EMBEDMENT DEPTHS.
3. STARTER BARS TO BE DRILLED AND ANCHORED USING HILTI HIT-RE 500 V4 ADHESIVE OR APPROVED EQUIVALENT.
4. SUPPLIER TO PROVIDE WALL DATA SHEET TO CONTRACTOR

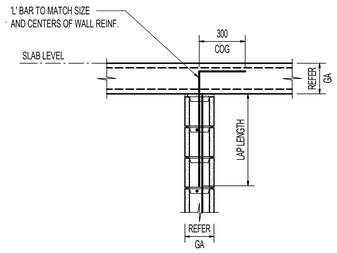
POST-FIXED STARTER BAR EMBEDMENT SCHEDULE

BAR SIZE	MINIMUM EMBEDMENT
N12	120
N16	160

REINFORCED BLOCKWORK CONSTRUCTION ORDER OF WORK

REFER ALSO TO THE SPECIFICATION

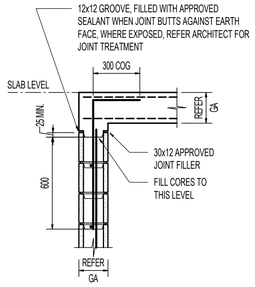
1. BUILD CONCRETE BASE STRUCTURE WITH A STARTER BAR PROJECTING UPWARDS FOR EACH VERTICAL BAR IN WALL.
2. BUILD BLOCKWORK UP TO LEVEL OF FIRST BOND BEAM, AND PLACE BOND BEAM BLOCKS. BLOCKWORK IS TO BE BUILT WITH FULL FACE SHELL BEDDING AND WITH PERPEND COMPLETELY FILLED.
3. PLACE BOND BEAM BARS ALONG BOND BEAM BLOCKS. IF THERE IS NO VERTICAL REINFORCEMENT, GROUT BEAM BEFORE PROCEEDING. IF THERE IS VERTICAL REINFORCEMENT, GROUT BEAM IN STEP 9 BELOW.
4. CONTINUE PLACING BLOCKWORK UP TO NEXT BOND BEAM OR LINTEL BEAM.
5. WHEN A LINTEL BEAM IS REACHED EG. OVER A DOOR
   - PLACE LINTEL BLOCKS 'H' ON TEMPORARY SUPPORT
   - PLACE REINFORCEMENT BARS AND LIGATURES.
   - PLACE FURTHER BLOCKS 'A' AS NECESSARY TO COMPLETE THE BEAM
   - FILL THE BEAM BLOCKS WITH CONCRETE OR GROUT TO COMPLETE THE BEAM
   - REMOVE TEMPORARY SUPPORT WHEN THE GROUT HAS ACHIEVED THE REQUIRED STRENGTH.
6. CONTINUE PLACING BLOCKWORK, AS DESCRIBED ABOVE, UP TO NEXT FLOOR LEVEL OR ROOF LEVEL.
7. PREPARE FOR GROUTING BY THOROUGHLY CLEANING OUT VERTICAL CELLS, WHICH ARE TO RECEIVE REINFORCEMENT WITH RODS AND REMOVING DROPPINGS FROM THE INSPECTION OPENINGS AT THE BOTTOM, THIS SHOULD BE DONE PROGRESSIVELY AS BLOCKWORK CONSTRUCTION PROCEEDS, SAY FOR EACH 1.2m LIFT OF BLOCKWORK, CLEAN OUT CELLS.
8. PLACE VERTICAL REINFORCEMENT. TIE TO STARTER BARS AT BASE OF WALL. RESTRAIN AT 2000mm CRS MAXIMUM.
9. PLACE GROUT IN 1500mm MAX. LIFTS ALLOWING 30 TO 60 MINUTES BETWEEN EACH LIFT. STOP EACH LIFT 50 BELOW A MORTAR JOINT OR 10mm BELOW TOP OF BOND BEAM, PUDDLE OR VIBRATE GROUT THOROUGHLY.



LOAD BEARING BLOCKWORK TO UNDERSIDE OF SLAB

SCALE 1:20

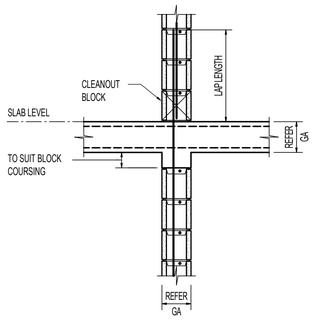
NOTE:
BLOCKWALL SHALL NOT INTRUDE INTO SOFFIT OF SLAB BY MORE THAN 10mm



LOAD BEARING RETAINING BLOCKWORK TO UNDERSIDE OF SLAB

SCALE 1:20

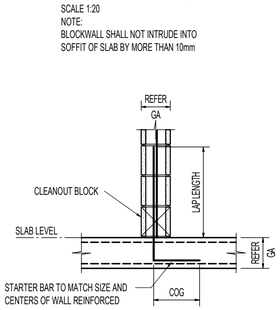
NOTE:
BLOCKWALL SHALL NOT INTRUDE INTO SOFFIT OF SLAB BY MORE THAN 10mm



LOAD BEARING BLOCKWORK AT INTERMEDIATE SLAB

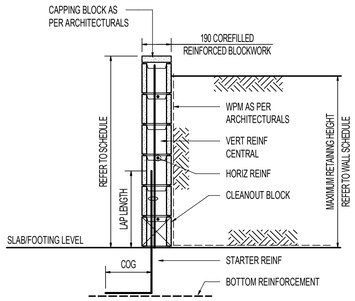
SCALE 1:20

NOTE:
BLOCKWALL SHALL NOT INTRUDE INTO SOFFIT OF SLAB BY MORE THAN 10mm



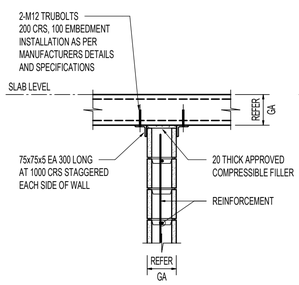
LOAD BEARING BLOCKWORK AT BASE

SCALE 1:20



TYPICAL PLANTER WALL REINFORCED BLOCKWORK

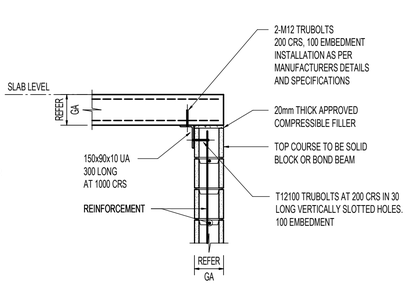
SCALE 1:20



NON-LOAD BEARING BLOCKWORK TO UNDERSIDE OF SLAB

(REINFORCED OR UNREINFORCED)

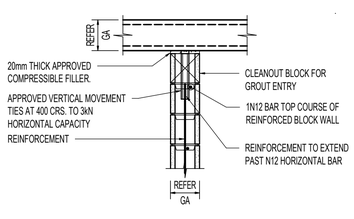
SCALE 1:20



NON-LOAD BEARING BLOCKWORK TO UNDERSIDE OF SLAB

(REINFORCED OR UNREINFORCED)

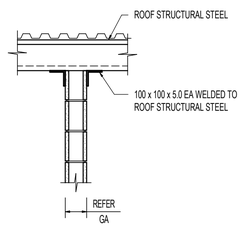
SCALE 1:20



NON-LOAD BEARING BLOCKWORK TO UNDERSIDE OF SLAB - ALTERNATE

(REINFORCED OR UNREINFORCED)

SCALE 1:20



TYPICAL BLOCK WALL TOP RESTRAINT TO STEELWORK DETAIL

SCALE 1:20

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

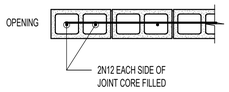
DRAWING TITLE
BLOCKWORK WALL DETAILS - SHEET 1

PROJECT STATUS
FOR DESIGN DEVELOPMENT

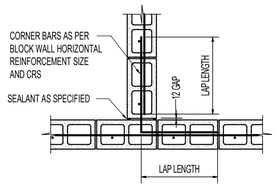
SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-8020
REV. No. A

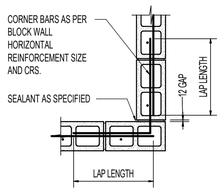
DRAWINGS ARE TO BE PRINTED IN COLOUR
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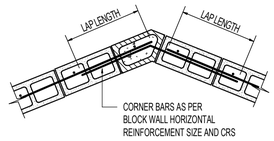
BLOCKWALL TO OPENING
(REINFORCED)
SCALE 1:20



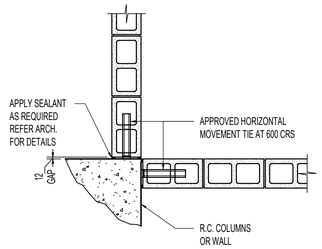
BLOCKWORK 'T' INTERSECTION
(REINFORCED)
SCALE 1:20



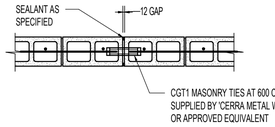
BLOCKWORK
AT 90 DEGREES CORNER
(REINFORCED)
SCALE 1:20



BLOCKWORK
AT 45 DEGREES CORNER
(REINFORCED)
SCALE 1:20

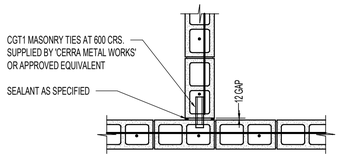


BLOCKWORK TO CONCRETE TIE DETAIL
(REINFORCED OR UNREINFORCED)
SCALE 1:20



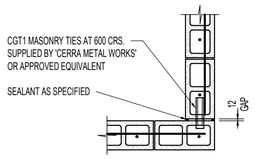
CONTROL JOINT TO BE VERTICAL FOR FULL HEIGHT
OF WALL. APPLY SEALANTS AS SPECIFIED TO EACH FACE
OF THE BLOCK WALL

BLOCKWORK CONTROL JOINT
(REINFORCED) (RECOMMENDED EVERY 7.5m UNO)
SCALE 1:20



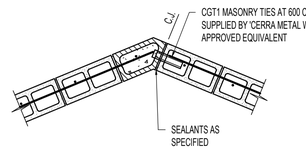
CONTROL JOINTS TO BE VERTICAL FOR FULL HEIGHT
OF WALL. APPLY SEALANTS AS SPECIFIED TO EACH
FACE OF BLOCK WALL

BLOCKWORK CONTROL JOINT
AT 'T' INTERSECTION
(REINFORCED)
SCALE 1:20



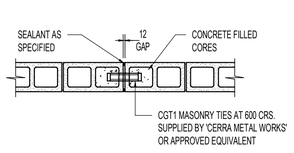
CONTROL JOINTS TO BE VERTICAL FOR FULL HEIGHT
OF WALL. APPLY SEALANTS AS SPECIFIED TO EACH
FACE OF BLOCK WALL.

BLOCKWORK CONTROL
JOINT AT 90 DEGREES CORNER
(REINFORCED)
SCALE 1:20



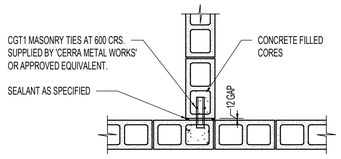
CONTROL JOINT TO BE VERTICAL FOR FULL HEIGHT OF WALL.
APPLY SEALANTS AS SPECIFIED TO EACH FACE OF BLOCK WALLS.

BLOCKWORK CONTROL JOINT
AT ANGLED CORNER
(REINFORCED)
SCALE 1:20



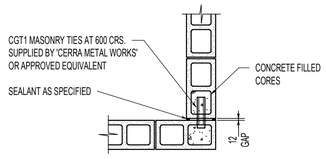
CONTROL JOINT TO BE VERTICAL FOR FULL HEIGHT OF WALL, APPLY
SEALANTS AS SPECIFIED TO EACH FACE OF THE BLOCK WALL

BLOCKWORK CONTROL JOINT - BCJ
(UNREINFORCED) (RECOMMENDED EVERY 5m AND
AT CONSTRUCTION JOINTS UNO)
SCALE 1:20



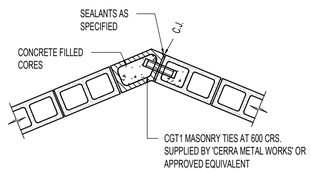
CONTROL JOINTS TO BE VERTICAL FOR FULL HEIGHT
OF WALL, APPLY SEALANTS AS SPECIFIED TO EACH
FACE OF BLOCK WALL

BLOCKWORK CONTROL JOINT - BCJ
AT 'T' INTERSECTION
(UNREINFORCED)
SCALE 1:20



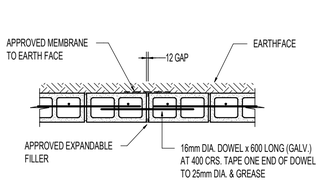
CONTROL JOINTS TO BE VERTICAL FOR FULL HEIGHT
OF WALL, APPLY SEALANTS AS SPECIFIED TO EACH
FACE OF BLOCK WALL

BLOCKWORK CONTROL JOINT - BCJ
AT 90 DEGREES CORNER
(UNREINFORCED)
SCALE 1:20



CONTROL JOINTS TO BE VERTICAL FOR FULL HEIGHT OF
WALL, APPLY SEALANTS AS SPECIFIED TO EACH FACE OF
BLOCK WALL

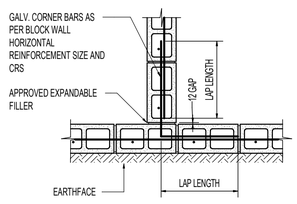
BLOCKWORK CONTROL JOINT -
BCJ AT 45 DEGREES CORNER
(UNREINFORCED)
SCALE 1:20



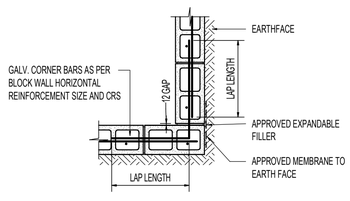
APPLY SEALANTS AS SPECIFIED TO EACH FACE OF BLOCK WALL
COVER EARTHFACE OF JOINT WITH FIBERGLASS MEMBRANE &
TWO COATS OF MULSEAL. AS APPLICABLE

RETAINING BLOCKWORK CONTROL JOINT

(RECOMMENDED EVERY 7.5m UNO)
SCALE 1:20

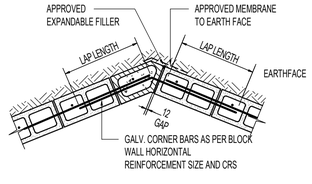


RETAINING BLOCKWORK
AT 'T' INTERSECTION
SCALE 1:20



APPLY SEALANTS AS SPECIFIED TO EACH FACE OF BLOCK WALL COVER
EARTHFACE OF JOINT WITH FIBERGLASS MEMBRANE & TWO
COATS OF MULSEAL. AS APPLICABLE

RETAINING BLOCKWORK CONTROL
JOINT AT 90 DEGREES CORNER
SCALE 1:20



APPLY SEALANTS AS SPECIFIED TO EACH FACE OF BLOCK WALL COVER
EARTHFACE OF JOINT WITH FIBERGLASS MEMBRANE & TWO COATS OF
MULSEAL. AS APPLICABLE

RETAINING BLOCKWORK CONTROL
JOINT AT 45 DEGREES CORNER
SCALE 1:20

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

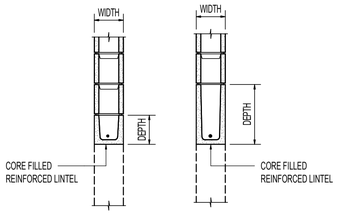
DRAWING TITLE
BLOCKWORK WALL DETAILS - SHEET 2

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

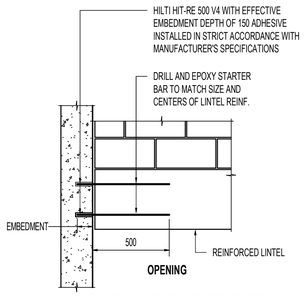
PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-8021
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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TYPICAL BLOCKWORK LINTEL DETAILS

NOTE: 200 END BEARING MIN.

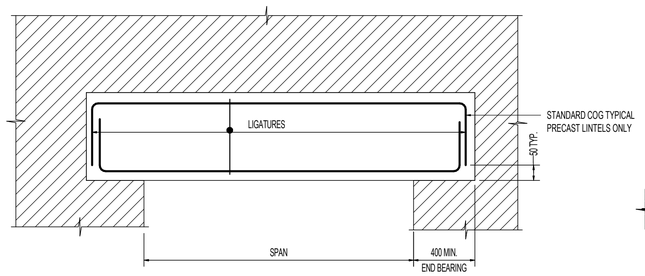


BOND BEAM CONNECTION TO CONCRETE WALL

SCALE 1:20

BOND BEAM LINTEL (f'c= 20 MPa) NON-LOAD BEARING)
GENERALLY REQUIRED BY ARCHITECT

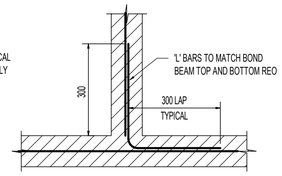
WALL THICKNESS	SPAN (MAX.)	LINTEL SIZE DEPTH x WIDTH	REINFORCEMENT	
			BARS	LIGS
140	UP TO 500	200 x 140	1N12 B	-
140	500-1800	400 x 140	1N20 B	-
140	1800	190 x 140	1N20 T & B	N10□AT 300
140	2400	190 x 140	1N20 T & B	N10□AT 150
190	UP TO 500	200 x 190	1N12 B	-
190	500-1800	300 x 190	1N16 B	-
190	1800	190 x 190	2N20 T & B	N10□AT 300
190	2400	190 x 190	2N20 T & B	N10□AT 150



TYPICAL PRECAST / BOND BEAM LINTEL

PRECAST LINTEL SCHEDULE (f'c= 32 MPa) NON-LOAD BEARING)
NOT GENERALLY REQUIRED BY ARCHITECT

WALL THICKNESS	SPAN (MAX.)	LINTEL SIZE DEPTH x WIDTH	REINFORCEMENT	
			BARS	LIGS
140	2400	190 x 140	1N20 T & B	N10□AT 200
140	4400	390 x 140	1N20 T & B	N10□AT 150
190	2400	190 x 190	2N20 T & B	N10□AT 200
190	4400	390 x 190	2N20 T & B	N10□AT 150



TYPICAL BOND BEAM INTERSECTION DETAIL

SCALE: 1:10

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
BLOCKWORK WALL DETAILS - SHEET 3

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
As indicated	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-8022
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR

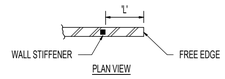
0 10 20 30 40 50 100 150 200

INTERNAL NON-LOAD BEARING BLOCK WALL STIFFENING SPAN TABLES - 0.50 kPa WORKING PRESSURE								
WALL HEIGHT	MAX. SPACING OF STIFFENERS WITH CONTINUOUS SUPPORT ALONG TOP OF WALL				MAX. SPACING OF STIFFENERS WITH NO SUPPORT ALONG TOP OF WALL			
	90 BLOCK	110 BLOCK	140 BLOCK	190 BLOCK	90 BLOCK	110 BLOCK	140 BLOCK	190 BLOCK
< 2.40m	6.0m	8.0m	NOT REQ'D	NOT REQ'D	2.4m	3.0m	3.6m	4.2m
< 3.0m	4.0m	6.0m	8.0m	10.0m	2.4m	3.0m	3.6m	4.2m
< 4.0m	4.0m	5.0m	6.0m	8.0m	2.4m	3.0m	3.6m	4.2m
< 5.0m	3.0m	4.0m	5.0m	5.0m	2.4m	3.0m	3.6m	4.2m
< 6.0m	3.0m	4.0m	4.0m	5.0m	2.4m	3.0m	3.6m	4.2m
< 7.0m	3.0m	4.0m	4.0m	5.0m	2.4m	3.0m	3.6m	4.2m

NOTES:
1. RETURNS GREATER THAN 600mm ARE EQUIVALENT TO STIFFENERS
2. STIFFENERS
 2.1 WALLS UP TO 3.0m HIGH USE 75 x 50 x 6.0 RHS
 2.2 WALLS UP TO 4.0m HIGH USE 65 x 6.0 SHS
 2.3 WALLS UP TO 5.0m HIGH USE 89 x 6.0 SHS OR 12 PLATE
 2.4 WALLS UP TO 6.0m HIGH USE 100 x 9.0 SHS
 2.5 WALLS UP TO 7.0m HIGH USE 125 x 6.0 SHS
3. FOR COMMON / PARTY WALLS ETC. STIFFENERS TO BE FIRE RATED TO APPROPRIATE FIRE RATING LEVEL.

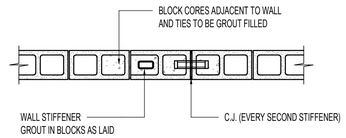
NOTES FOR OPENINGS IN WALLS:
- LOCATE WALL STIFFENERS ON BOTH SIDES OF DOOR OPENING OR OTHER OPENINGS LARGER THAN 1m SQ. OR HEIGHT GREATER THAN 1.5m

NOTES FOR BLOCKWORK FREE EDGES:
- 'L' <= 10 x WALL THICKNESS FOR NON-FIRE RATED WALLS
- 'L' <= 5 x WALL THICKNESS FOR FIRE RATED WALLS

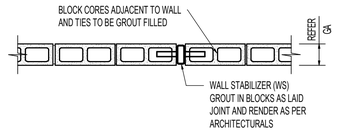


PLAN VIEW

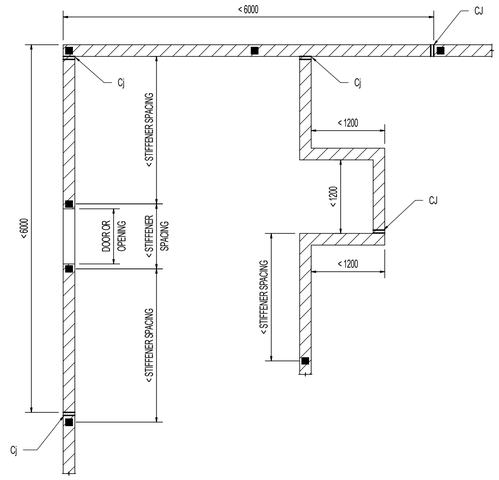
NOTES FOR WHEN THE BLOCKWORK CONSTRUCTION IS STOPPED SHORT OF THE SLAB SOFFIT OVER:
- RHS WALL STIFFENER BECOMES THE ONLY SUITABLE SOLUTION.
- SIZE OF THE RHS STIFFENER WILL DEPEND ON THE FLOOR TO FLOOR CONNECTION HEIGHT, USED IN CONJUNCTION WITH TABLE ABOVE.
- THE PORTION OF MULLION BETWEEN TOP OF BLOCKWORK AND SLAB SOFFIT WILL REQUIRE ADDITIONAL FIRE PROTECTION SHOULD THE WALL BE A DESIGNATED FIRE RATED WALL.



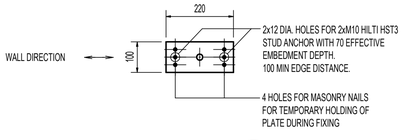
190 REDUCED CORE BLOCK STIFFENER
SCALE 1:20



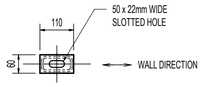
140 REDUCED CORE BLOCK STIFFENER
SCALE 1:20



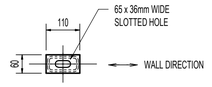
TYPICAL PLAN : WALL STIFFENER & CONTROL JOINT GUIDANCE FOR NON - LOAD BEARING WALLS
SCALE: 1:50



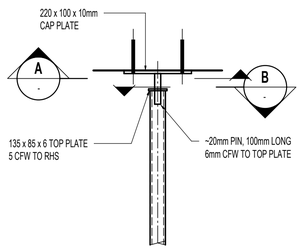
SECTION A
SCALE: 1:10

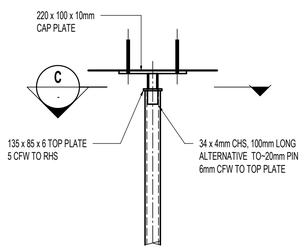


SECTION B
SCALE: 1:10

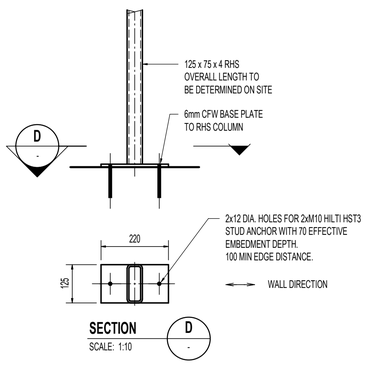


SECTION C
SCALE: 1:10



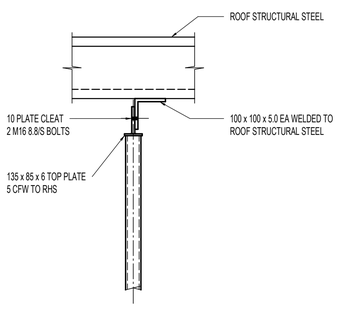


ALTERNATIVE TOP FIXING DETAIL
SCALE 1:10

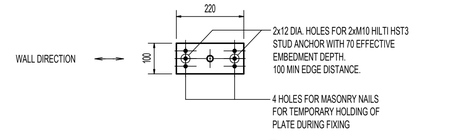


SECTION D
SCALE: 1:10

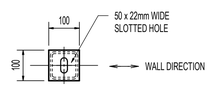
TYPICAL RHS WALL STIFFENER DETAIL
SCALE 1:10



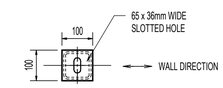
ALTERNATIVE TOP FIXING DETAIL
SCALE 1:10



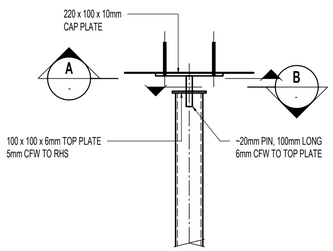
SECTION A
SCALE: 1:10

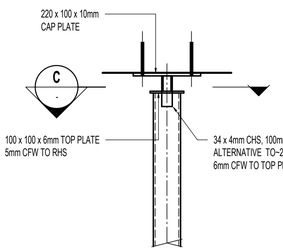


SECTION B
SCALE: 1:10

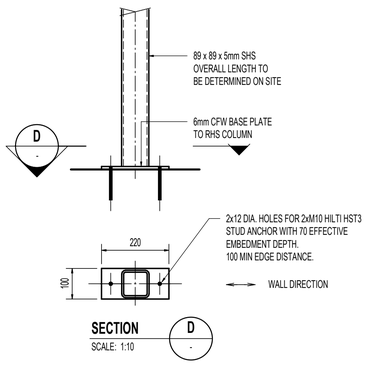


SECTION C
SCALE: 1:10





ALTERNATIVE TOP FIXING DETAIL



SECTION D
SCALE: 1:10

TYPICAL SHS WALL STIFFENER DETAIL
SCALE 1:10

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

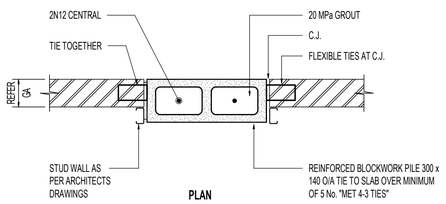
DRAWING TITLE
BLOCKWORK WALL DETAILS - SHEET 4

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
As indicated	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-8023
REV. No.: A

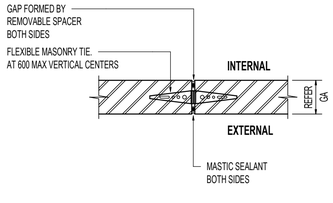
DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



LONG INTERNAL WALLS WITH REINFORCED BLOCKWORK STIFFENER

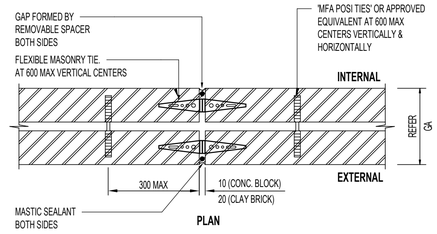
SCALE 1:10

PROVIDE N12 DOWEL x 400 LONG GROUTED 100mm INTO SLAB AS STARTER TO EACH N12 BAR IN BRICK CORE. (USE CEMENTITIOUS GROUT)



TYPICAL EXTERNAL MASONRY ARTICULATION JOINT

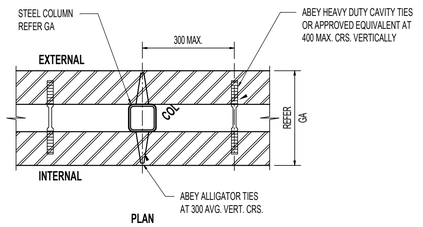
SCALE 1:10



TYPICAL VERTICAL CONTROL JOINT & CAVITY TIE DETAILS

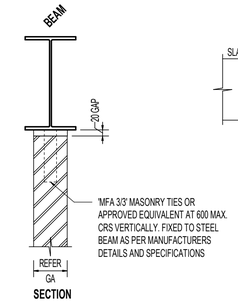
SCALE 1:10

NOTE: REFER ARCHITECTS DRAWINGS FOR JOINT LOCATIONS



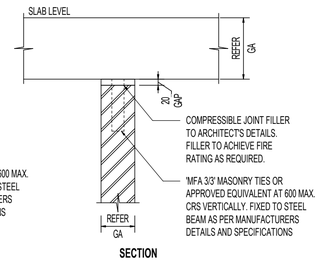
TYPICAL MASONRY WALLS TO RHS POST STIFFENER & CAVITY TIE DETAILS (DOUBLE LEAF)

SCALE 1:10



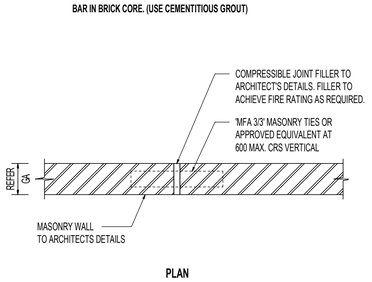
TYPICAL NON LOAD BEARING BLOCKWORK WALL TO ROOF BEAM

SCALE 1:10

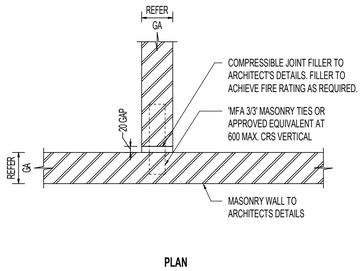


TYPICAL NON LOAD BEARING BLOCKWORK TO UNDERSIDE OF SLAB

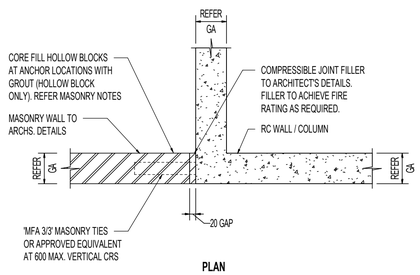
SCALE 1:10



VERTICAL CONTROL JOINT



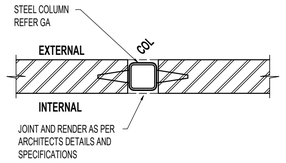
VERTICAL CONTROL JOINT AT WALL INTERSECTION



VERTICAL CONTROL JOINT AT ALL BLOCKWORK AND RC WALL / COLUMN INTERSECTIONS

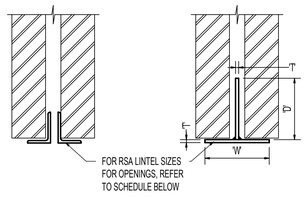
NOTES:

1. ALL BLOCKS TO BE SOLID OR GROUT FILLED IN THE EMBEDMENT AREA WHERE MASONRY TIES ARE TO BE EMBEDDED IN HOLLOW BLOCK WALL BED JOINTS.



TYPICAL MASONRY WALLS TO RHS POST STIFFENER & CAVITY TIE DETAILS (SINGLE LEAF)

SCALE 1:10



TYPICAL 'T' LINTEL

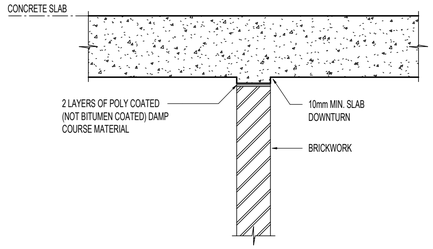
SCALE 1:10

LINTEL SCHEDULE

SPAN	LINTEL SIZE	END BEARING
<1200	100 x 100 x 8 EA.	150 MIN.
1200-1900	150 x 100 x 10 UA.	200 MIN.
2000-2900	200W x 150D x 8 "T" LINTEL	200 MIN.
2900-3900	200W x 200D x 8 "T" LINTEL	250 MIN.
3900-4900	200W x 200D x 10 "T" LINTEL	300 MIN.

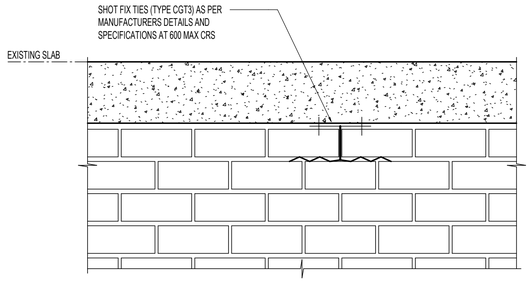
NOTE:

1. PROVIDE GALVANIZED STEEL SHELF ANGLES TO EACH BRICK LEAF OVER OPENINGS AS SCHEDULED ABOVE UNO
2. IN MASONRY CAVITY WALLS, EMBED S.S. MEDIUM DUTY CAVITY TIES AT 600 MAX VERT. & HORIZ. CRS. TYPICAL THROUGHOUT.
3. 'W' DENOTES WALL THICKNESS
4. LINTELS TO BE 250 MPa UNLESS NOTED OTHERWISE



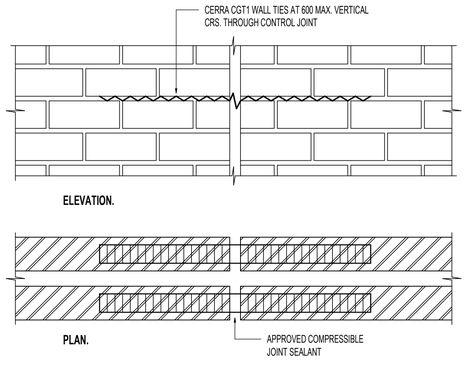
LOAD BEARING BRICKWORK TO UNDERSIDE OF SLAB

SCALE 1:10



NON-LOAD BEARING BRICKWORK TO UNDERSIDE OF EXISTING SLAB

SCALE 1:10



BRICKWORK CONTROL JOINT

SCALE 1:10

REFER SUPPLIERS REQUIREMENTS FOR QUICKBRICK

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

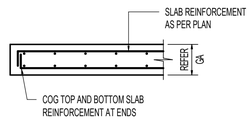
DRAWING TITLE
BLOCKWORK WALL DETAILS - SHEET 5

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 10	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

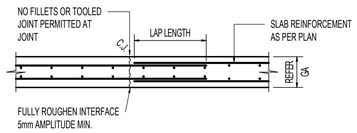
PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-8024
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



TYPICAL RC SLAB EDGE DETAIL (UNO)

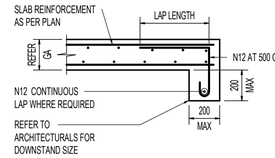
DETAIL SCALE: 1 : 20 — SL01

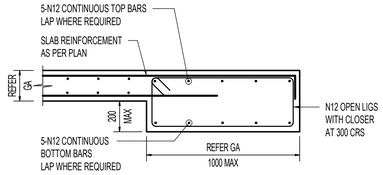


CONSTRUCTION JOINTS SHALL ONLY BE USED WHERE SHOWN ON PLAN OR SPECIFICALLY APPROVED BY 'HERA ENGINEERING'

TYPICAL RC SLAB CONSTRUCTION JOINT DETAIL - C.J.

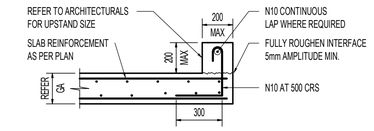
DETAIL SCALE: 1 : 20 — SL02





TYPICAL DOWNSTAND (CD) DETAIL

DETAIL SCALE: 1 : 20 — SL03



TYPICAL HOB DETAIL

DETAIL SCALE: 1 : 20 — SL04



TYPICAL RC SLAB SETDOWN (UNO)

DETAIL SCALE: 1 : 20 — SL05



STEPS FROM 0 - 50mm

TYPICAL RC SLAB FOLD SECTION (UNO)

DETAIL SCALE: 1 : 20 — SL06



STEPS FROM 50 - 300mm

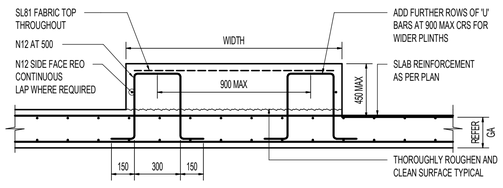
TYPICAL RC SLAB DEEP FOLD SECTION

DETAIL SCALE: 1 : 20 — SL07

TYPICAL RC SLAB DEEP FOLD SECTION

DETAIL SCALE: 1 : 20 — SL08

NOTE: DISTRIBUTION BARS NOT SHOWN ON PLAN

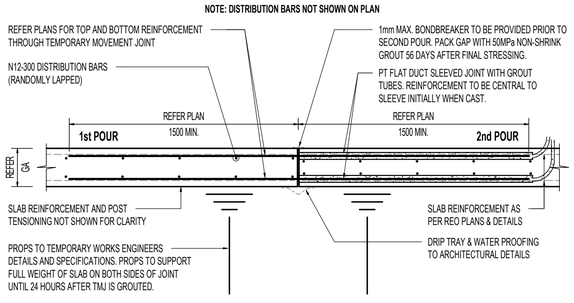


WHERE WIDTH IS GREATER THAN 400

REFER SPECIFIC DETAILS WHERE HEIGHT LIMITS ARE EXCEEDED

TYPICAL SLAB PLINTH/BUILDUP DETAIL

DETAIL SCALE: 1 : 20 — SL09



NOTE:

1. ALL SLABS ADJACENT TO POUR LINES NEED TO BE TEMPORARILY PROPPED UNTIL CONSTRUCTION AND CURING OF ADJACENT SLABS TO ENSURE SUPPORT AND CONTROL OVER DEFLECTION AND TO SUIT PROPOSED CONSTRUCTION SEQUENCE.

TYPICAL TEMPORARY MOVEMENT JOINT - T.M.J.

DETAIL SCALE: 1 : 20 — SL41

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
SUSPENDED SLAB DETAILS - SHEET 1

PROJECT STATUS
FOR DESIGN DEVELOPMENT

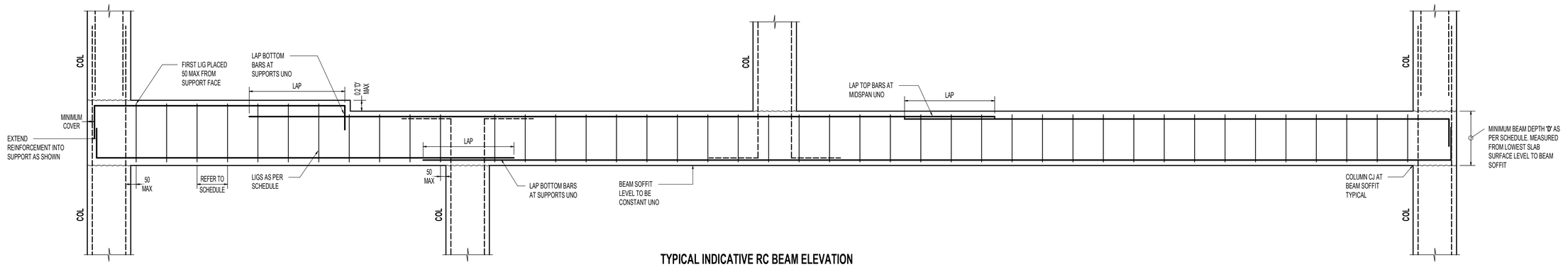
SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-8120 — REV. No. A

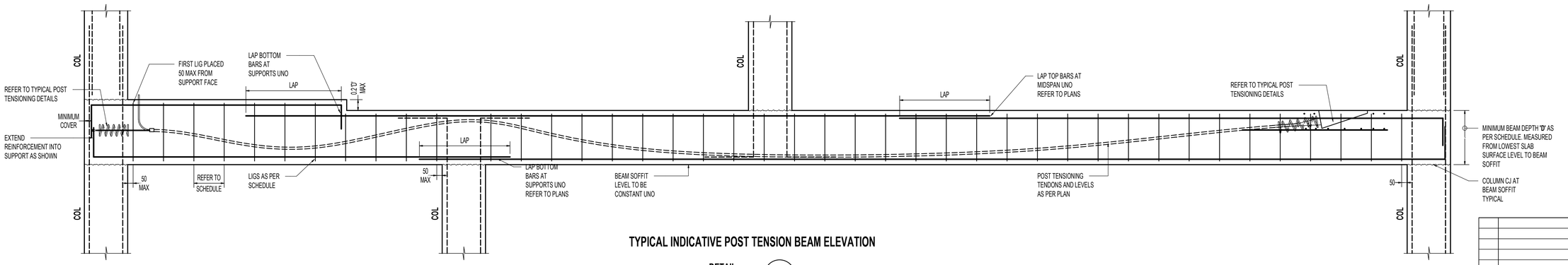
DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



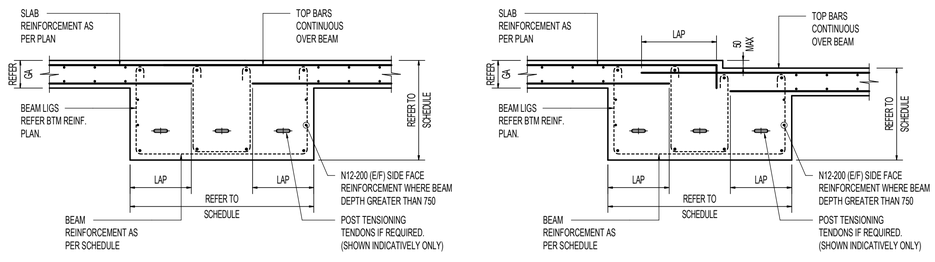
TYPICAL INDICATIVE RC BEAM ELEVATION

DETAIL SL10
SCALE: 1 : 20



TYPICAL INDICATIVE POST TENSION BEAM ELEVATION

DETAIL SL11
SCALE: 1 : 20



TYPICAL SLAB BEAM SECTION DETAILS

DETAIL SL12
SCALE: 1 : 20

REV	DESCRIPTION	BY	APP	DATE
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101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
SUSPENDED SLAB DETAILS - SHEET 2

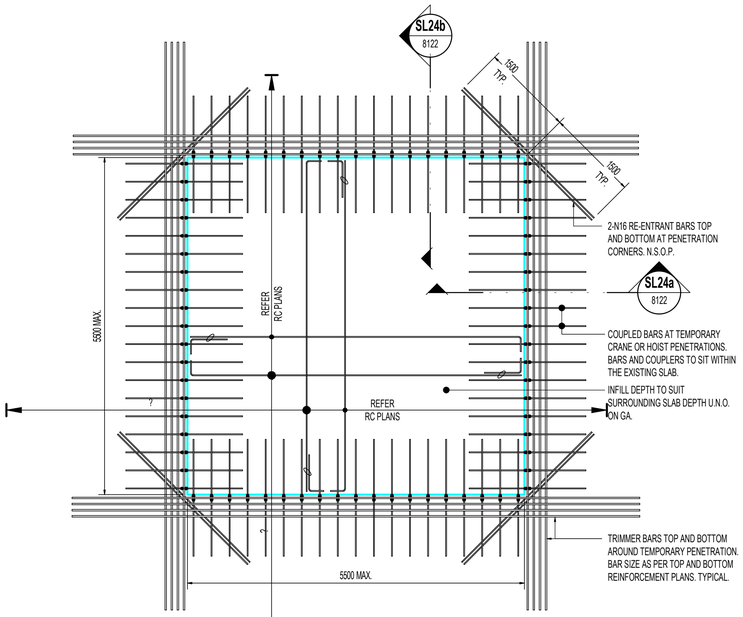
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-8121	A

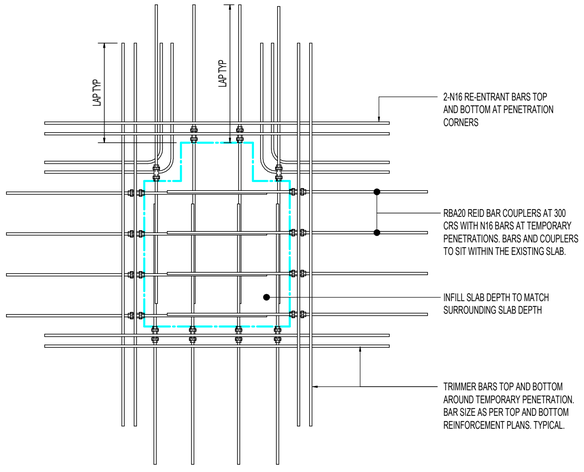
DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



NOTES:
1. APPLIES TO PENETRATIONS FOR CRANE, HOIST, PUMP ETC.
2. CONSULT ENGINEER IF INFILL DIMENSIONS ARE GREATER THAN THAT SHOWN
3. ALL REINFORCEMENT IS ADDITIONAL TO THAT SHOWN ON REINFORCEMENT PLANS

TYPICAL CRANE / HOIST / STAIR INFILL SLAB PLAN DETAIL

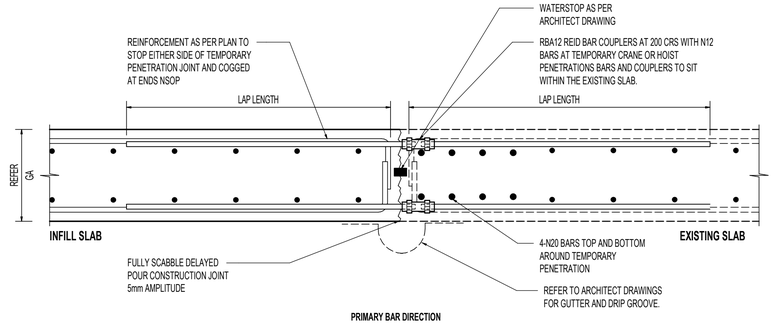
DETAIL SL23
SCALE: 1 : 50



NOTES:
1. APPLIES TO PENETRATIONS FOR PUMP
2. CONSULT ENGINEER IF INFILL DIMENSIONS ARE GREATER THAN THAT SHOWN
3. ALL REINFORCEMENT IS ADDITIONAL TO THAT SHOWN ON REINFORCEMENT PLANS

TYPICAL CONCRETE PUMP INFILL SLAB PLAN DETAIL

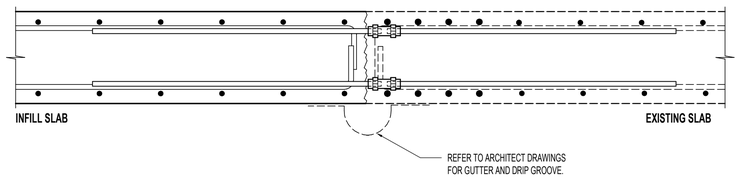
DETAIL SL25
SCALE: 1 : 20



PRIMARY BAR DIRECTION

TYPICAL CRANE AND HOIST DELAYED POUR CONSTRUCTION JOINT DETAIL

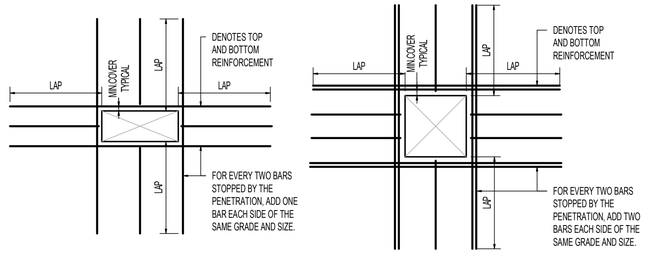
DETAIL SL24a
SCALE: 1 : 10



SECONDARY BAR DIRECTION

TYPICAL CRANE AND HOIST DELAYED POUR CONSTRUCTION JOINT DETAIL

DETAIL SL24b
SCALE: 1 : 10



TYPICAL SLAB PENETRATION DETAILS

SCALE 1:20

NOTES:
1. FOR PENETRATION LESS THAN 300 x 300, BARS TO BE PLACED ABOUT PENETRATION.
2. FOR PENETRATION GREATER THAN 300 x 300, BUT LESS THAN 1000 x 1000, THE DETAILS ABOVE ARE TO BE USED.
3. FOR PENETRATIONS GREATER THAN 1000 IN ANY DIRECTION, PLEASE CONTACT ENGINEER TO CONFIRM DETAILS.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. ADOPT THESE DETAILS FOR FLOOR BOX REBATES

HORIZONTAL ELEMENTS LAP TABLE (SLABS & BEAMS)

BAR SIZE	BOTTOM	TOP		COG/HOOK LENGTH
		CONC. < 300 THK	CONC. > 300 THK	
N12	450	450	550	170
N16	650	650	800	205
N20	900	900	1100	245
N24	1100	1100	1400	295
N28	1350	1350	1750	345
N32	1600	1600	2050	395
N36	1900	1900	2500	440
N40	2150	2150	2800	490
COG LENGTH BASED ON 5 x BAR DIAMETER PIN MAX				

TYPICAL SLAB TRIMMER DETAIL

DETAIL SL50
SCALE: 1 : 20

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

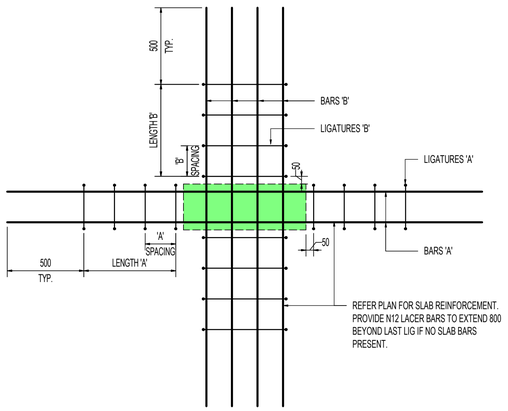
DRAWING TITLE
SUSPENDED SLAB DETAILS - SHEET 3

PROJECT STATUS
FOR DESIGN DEVELOPMENT

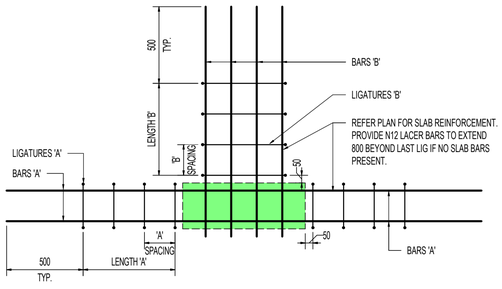
SCALE		
As indicated	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-8122
REV. No. A

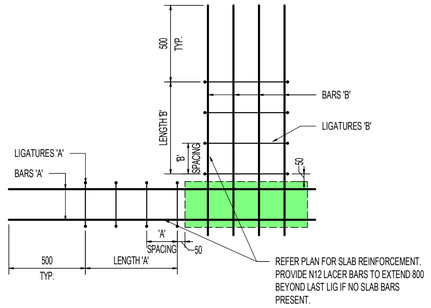
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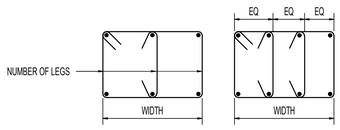
TYPICAL INTERNAL COLUMN PUNCHING SHEAR PLAN DETAIL
SCALE 1:20



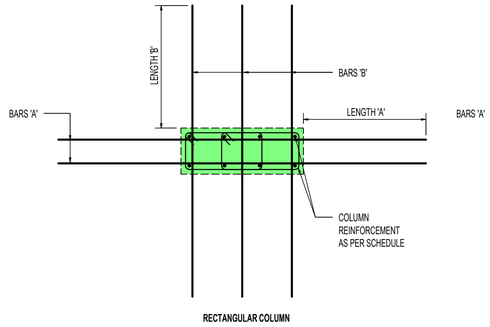
TYPICAL EDGE COLUMN PUNCHING SHEAR PLAN DETAIL
SCALE 1:20



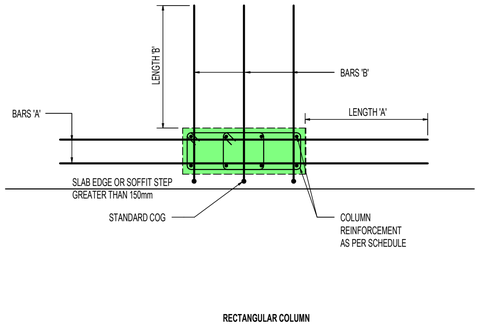
TYPICAL CORNER COLUMN PUNCHING SHEAR PLAN DETAIL
SCALE 1:20



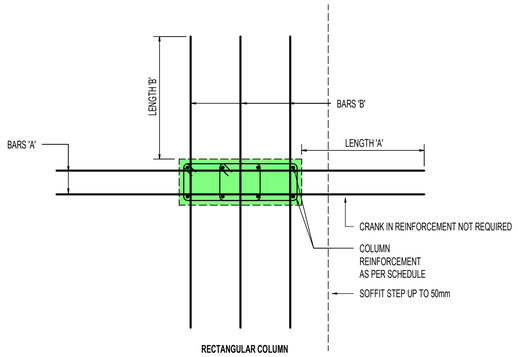
TYPICAL LIGATURES DETAIL
SCALE NTS



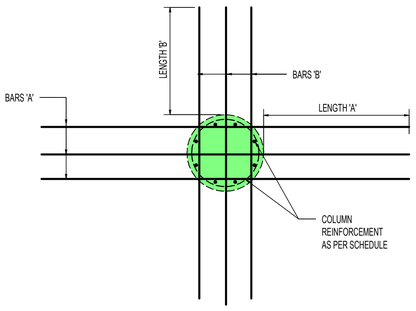
TYPICAL INTERNAL COLUMN SLAB INTEGRITY BOTTOM REINFORCEMENT DETAIL
SCALE 1:20



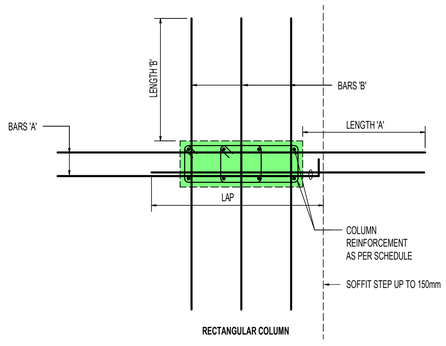
TYPICAL EDGE COLUMN SLAB INTEGRITY BOTTOM REINFORCEMENT DETAIL
SCALE 1:20



TYPICAL INTERNAL COLUMN SLAB INTEGRITY BOTTOM REINFORCEMENT DETAIL AT SOFFIT STEPS 50mm AND LESS
SCALE 1:20



TYPICAL INTERNAL COLUMN SLAB INTEGRITY BOTTOM REINFORCEMENT DETAIL
SCALE 1:20



TYPICAL INTERNAL COLUMN SLAB INTEGRITY BOTTOM REINFORCEMENT DETAIL AT SOFFIT STEPS 50mm TO 150mm
SCALE 1:20

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

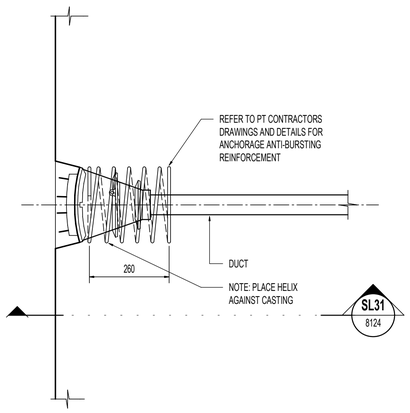
DRAWING TITLE
SUSPENDED SLAB DETAILS - SHEET4

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

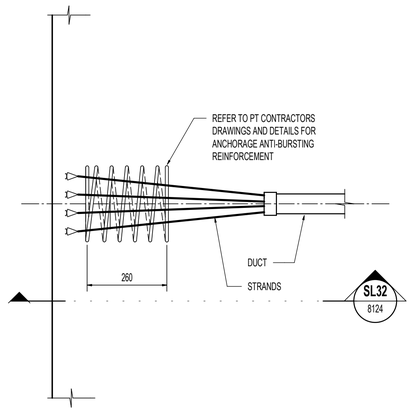
PROJECT NUMBER 24111
DWG SIZE A1
DRAWING NUMBER HER-DRG-STR-8123
REV. No. A

DRAWINGS ARE TO BE PRINTED IN COLOUR
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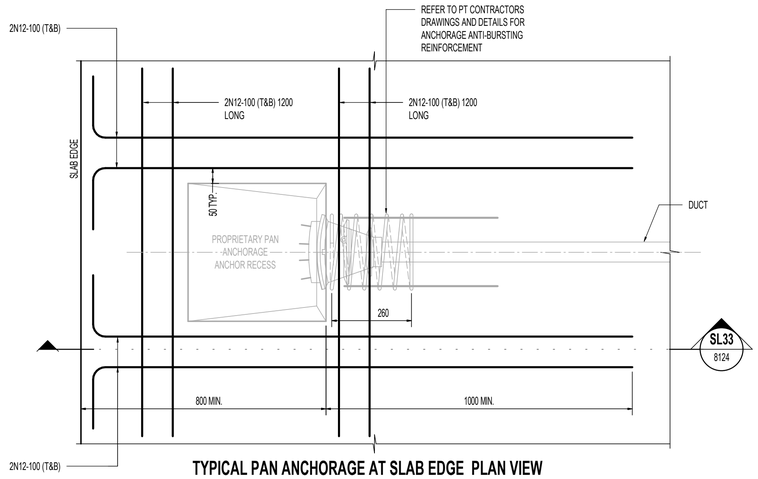
LIVE END ANCHORAGE REINFORCEMENT PLAN VIEW

DETAIL SL27
SCALE: 1 : 10



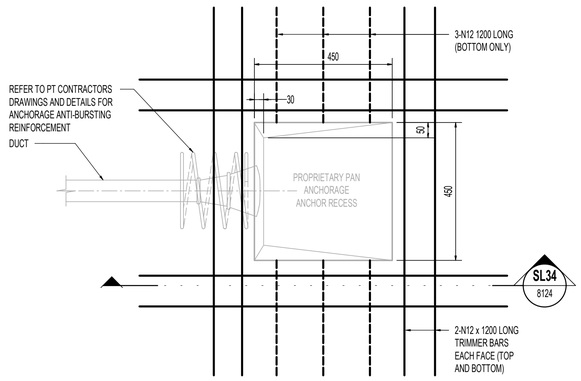
DEAD END ANCHORAGE REINFORCEMENT PLAN VIEW

DETAIL SL28
SCALE: 1 : 10



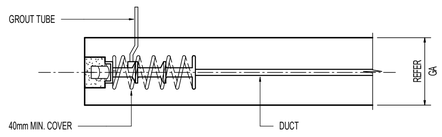
TYPICAL PAN ANCHORAGE AT SLAB EDGE PLAN VIEW

DETAIL SL29
SCALE: 1 : 10

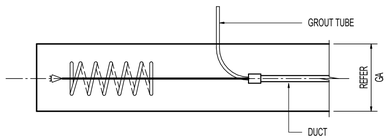


TYPICAL INTERNAL PAN ANCHORAGE PLAN VIEW

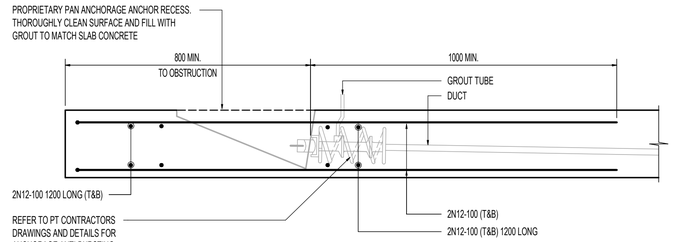
DETAIL SL30
SCALE: 1 : 10



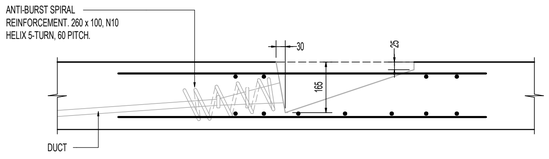
SECTION SL31
SCALE: 1 : 10



SECTION SL32
SCALE: 1 : 10



SECTION SL33
SCALE: 1 : 10



SECTION SL34
SCALE: 1 : 10

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
SUSPENDED SLAB DETAILS - SHEET 5

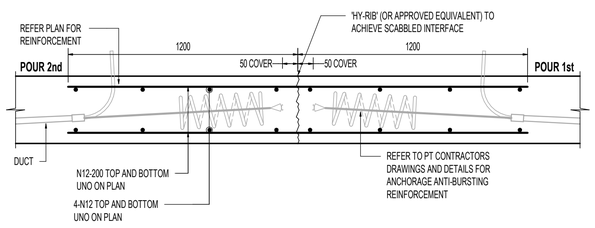
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 10	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-8124	A

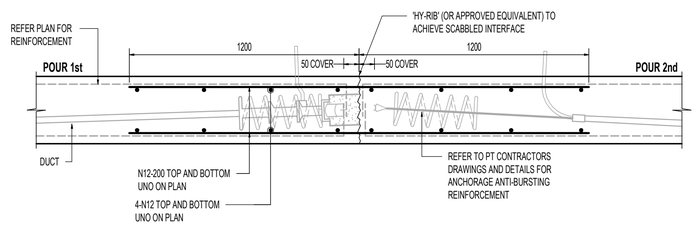
DRAWINGS ARE TO BE PRINTED IN COLOUR
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DEAD / DEAD ROUGHENED INTERFACE

TYPICAL CONSTRUCTION JOINT (C.J)

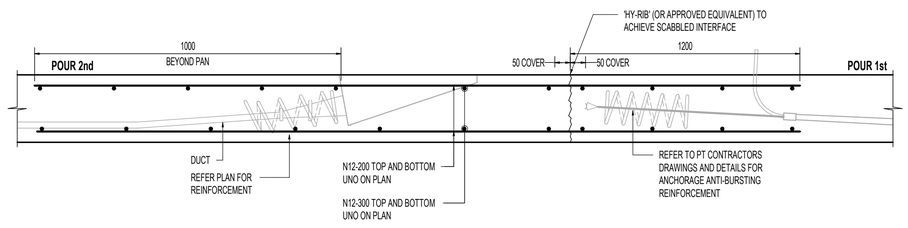
SCALE 1 : 10



LIVE / DEAD ROUGHENED INTERFACE

TYPICAL CONSTRUCTION JOINT (C.J)

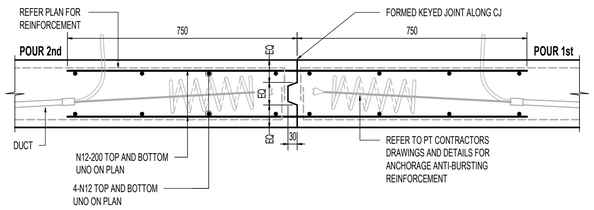
SCALE 1 : 10



PAN / DEAD ROUGHENED INTERFACE

TYPICAL CONSTRUCTION JOINT (C.J)

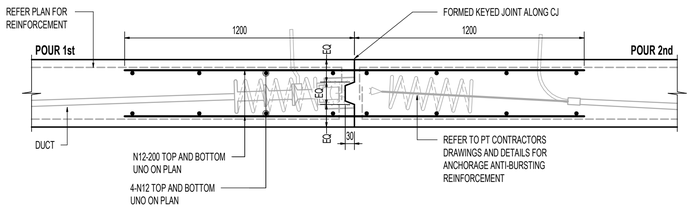
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DEAD / DEAD ENDS - KEYED JOINT

TYPICAL CONSTRUCTION JOINT (C.J)

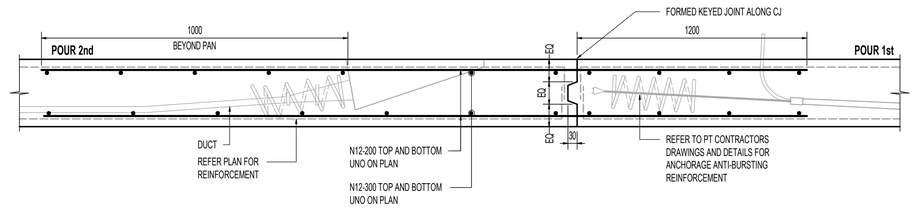
SCALE 1 : 10



LIVE / DEAD ENDS - KEYED JOINT

TYPICAL CONSTRUCTION JOINT (C.J)

SCALE 1 : 10



PAN / DEAD ENDS - KEYED JOINT

TYPICAL CONSTRUCTION JOINT (C.J)

SCALE 1 : 10

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
SUSPENDED SLAB DETAILS - SHEET 6

PROJECT STATUS
FOR DESIGN DEVELOPMENT

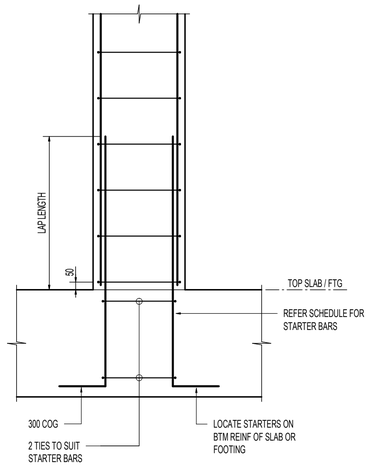
SCALE		
1 : 10	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-8125	A

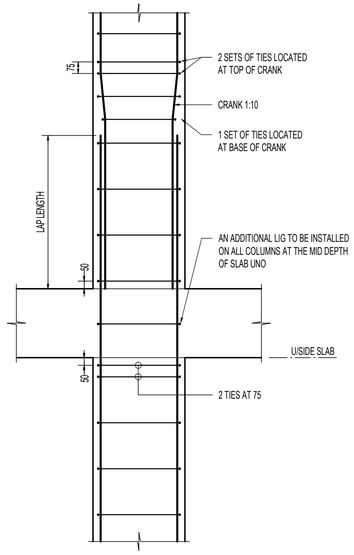
DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



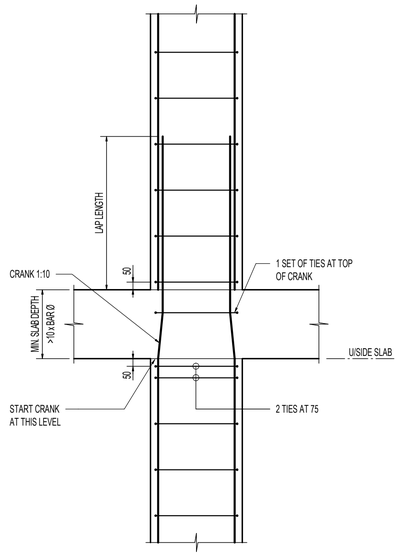
COLUMN STARTER

DETAIL SCALE: 1 : 20 — CC01



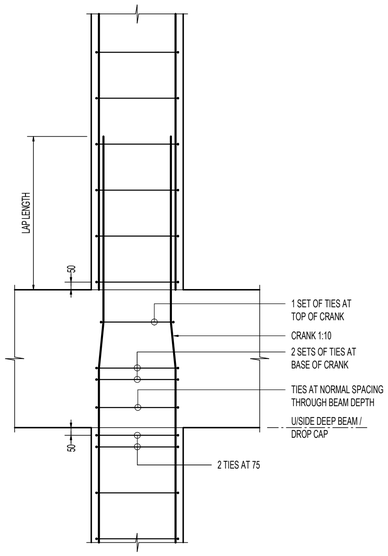
COLUMN SPLICE

DETAIL SCALE: 1 : 20 — CC02



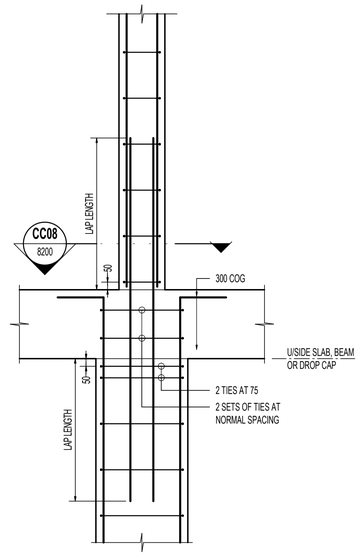
COLUMN SPLICE (ALTERNATIVE)

DETAIL SCALE: 1 : 20 — CC02a



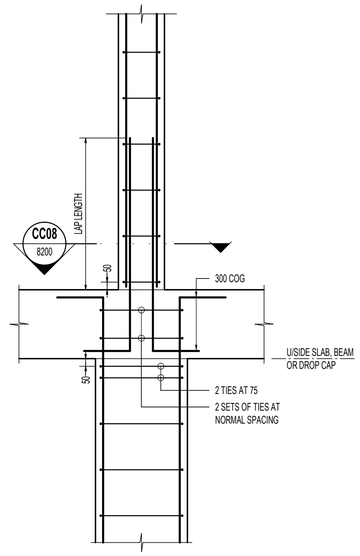
COLUMN SPLICE AT DEEP BEAM (750 MIN.)

DETAIL SCALE: 1 : 20 — CC03



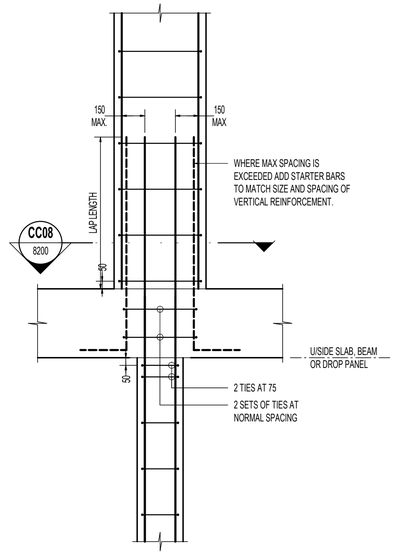
LARGE TO SMALL COLUMN TRANSITION

DETAIL SCALE: 1 : 20 — CC04



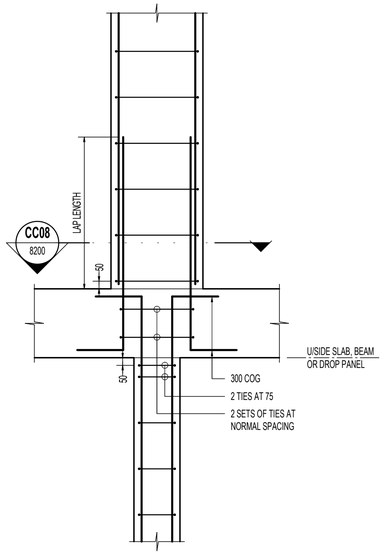
LARGE TO SMALL COLUMN TRANSITION (ALTERNATE)

DETAIL SCALE: 1 : 20 — CC04a



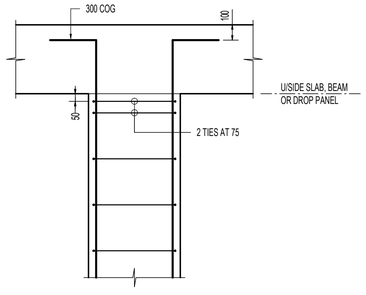
SMALL TO LARGE COLUMN TRANSITION (ALTERNATE)

DETAIL SCALE: 1 : 20 — CC05



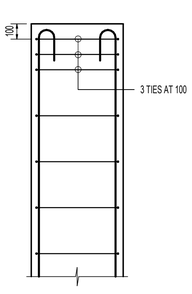
SMALL TO LARGE COLUMN TRANSITION

DETAIL SCALE: 1 : 20 — CC05a



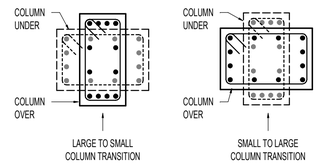
TERMINATING COLUMN (WITH SLAB OVER)

DETAIL SCALE: 1 : 20 — CC06



TERMINATING COLUMN (CANTILEVERING)

DETAIL SCALE: 1 : 20 — CC07



BI-AXIAL TRANSITION

DETAIL SCALE: 1 : 20 — CC08

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

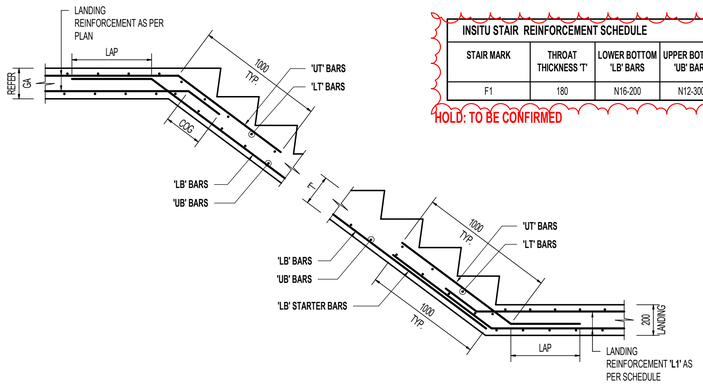
DRAWING TITLE
COLUMN DETAILS - SHEET 1

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-8200
REV. No.: A

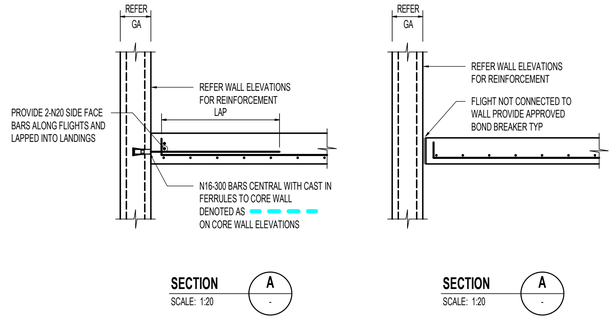
DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



INSITU STAIR REINFORCEMENT SCHEDULE

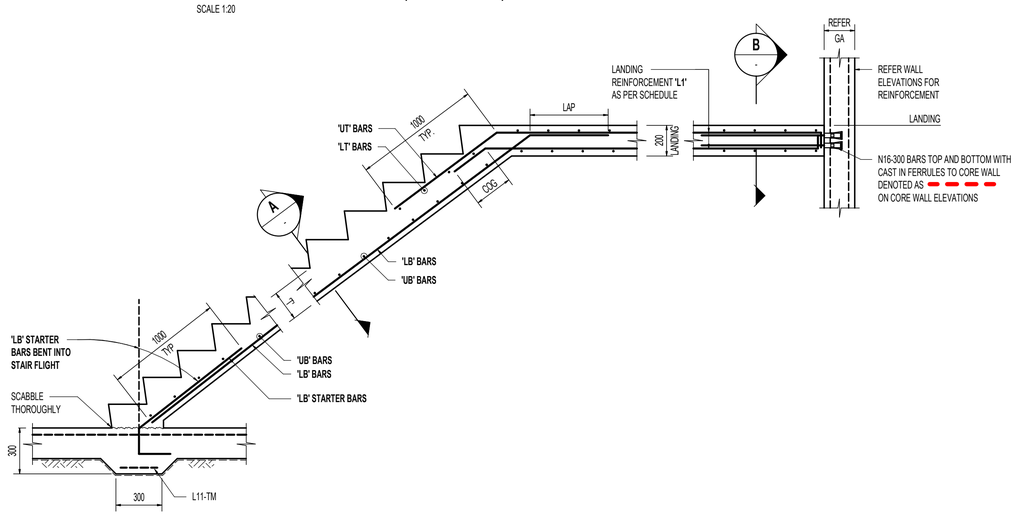
STAIR MARK	THROAT THICKNESS 'T'	LOWER BOTTOM 'LB' BARS	UPPER BOTTOM 'UB' BARS	LOWER TOP 'LT' BARS	UPPER TOP 'UT' BARS	LANDING 'L1' BARS (E/W)
F1	180	N16-200	N12-300	N12-300	N16-200	N12-175

HOLD: TO BE CONFIRMED



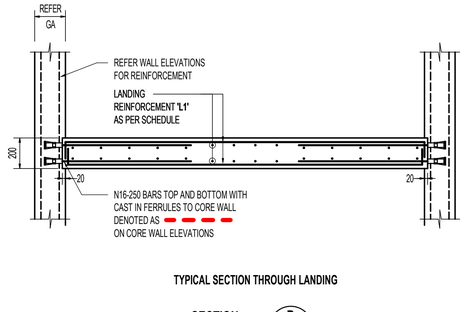
INSITU STAIR TYPICAL SECTION (UPPER FLIGHT)

SCALE 1:20



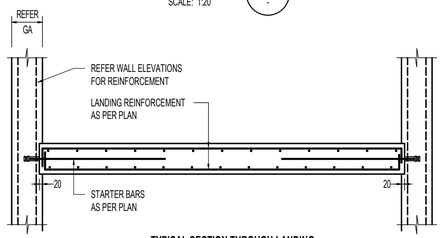
INSITU STAIR TYPICAL SECTION (LOWER FLIGHT)

SCALE 1:20



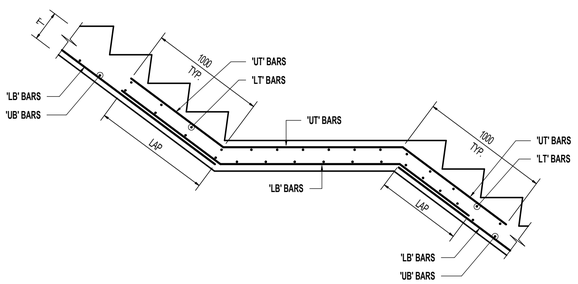
TYPICAL SECTION THROUGH LANDING

SECTION B — SCALE: 1:20



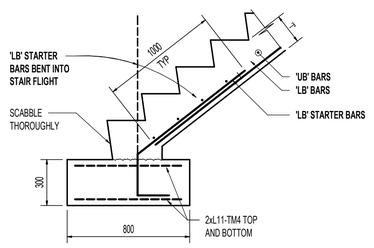
TYPICAL SECTION THROUGH LANDING

SECTION B — SCALE: 1:20



INSITU STAIR TYPICAL MID FLIGHT LANDING DETAIL

SCALE 1:20



INSITU STAIR TYPICAL STARTER DETAIL

SCALE 1:20

TYPICAL CONCRETE STAIR DETAILS

DETAIL SL22 — SCALE: 1 : 20

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
STAIR DETAILS - SHEET 1

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 20	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-8300
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200

NO LONGER IN USE

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
BASEMENT LEVEL 01 LOADING - PART PLANS

PROJECT STATUS
FOR DESIGN DEVELOPMENT

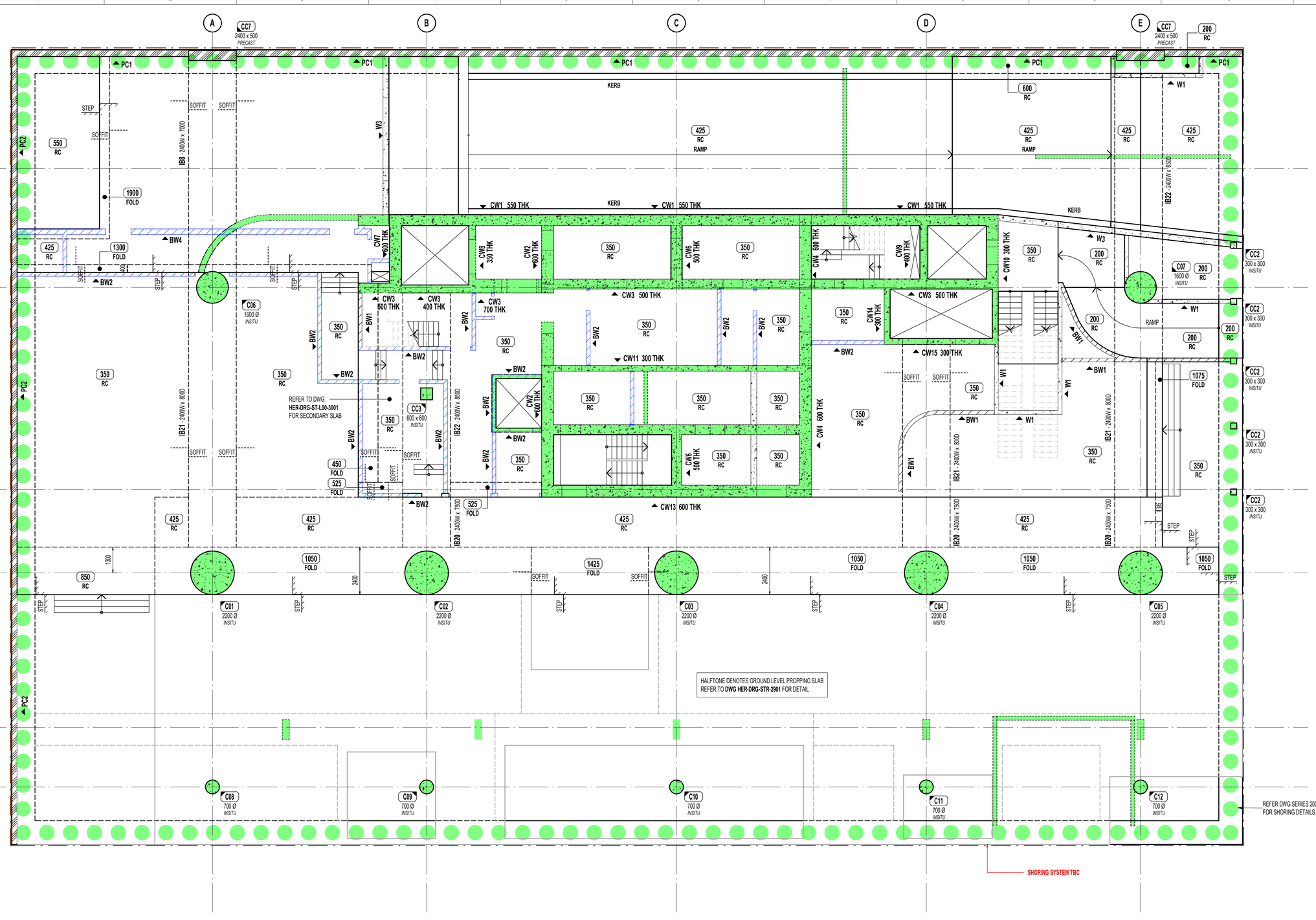
SCALE		
	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-B01-3001	C

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LATEST STRUCTURAL, ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES SHALL BE IDENTIFIED AND REPORTED TO HERA ENGINEERING AND THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORKS IN THAT AREA.
3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE, ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- SLAB STEP
- SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG L x W or Ø SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200

TRUE NORTH | PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR 50% DD	JH	SD	26.03.2026

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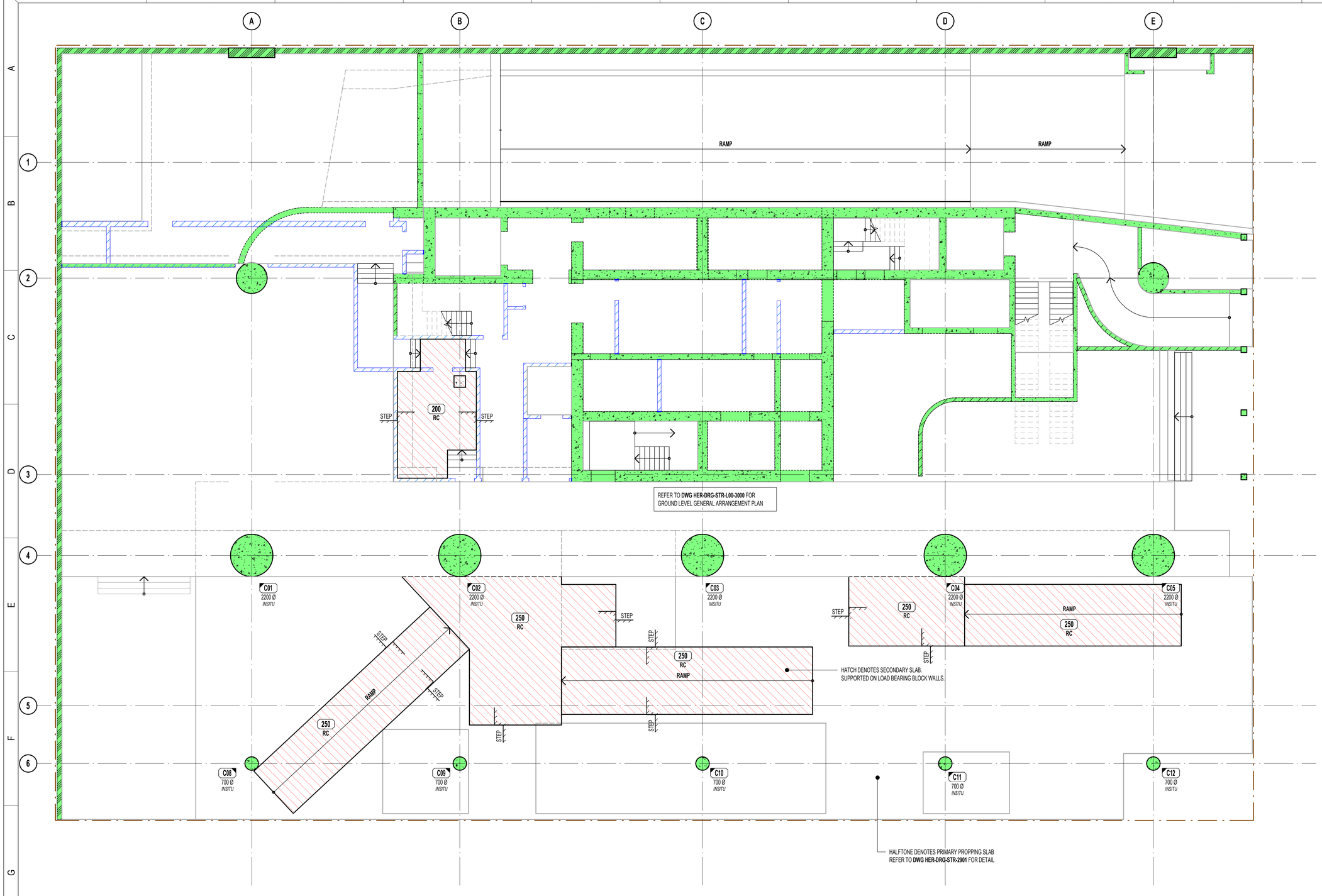
PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
GROUND LEVEL - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-L00-3000	C



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NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN TBC MAXIMUM

- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- Pn — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS / DESC. / MPa — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL

- SPAN DIRECTION
- TAG / L x W or Ø / SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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T (61 7) 3907 4000
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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

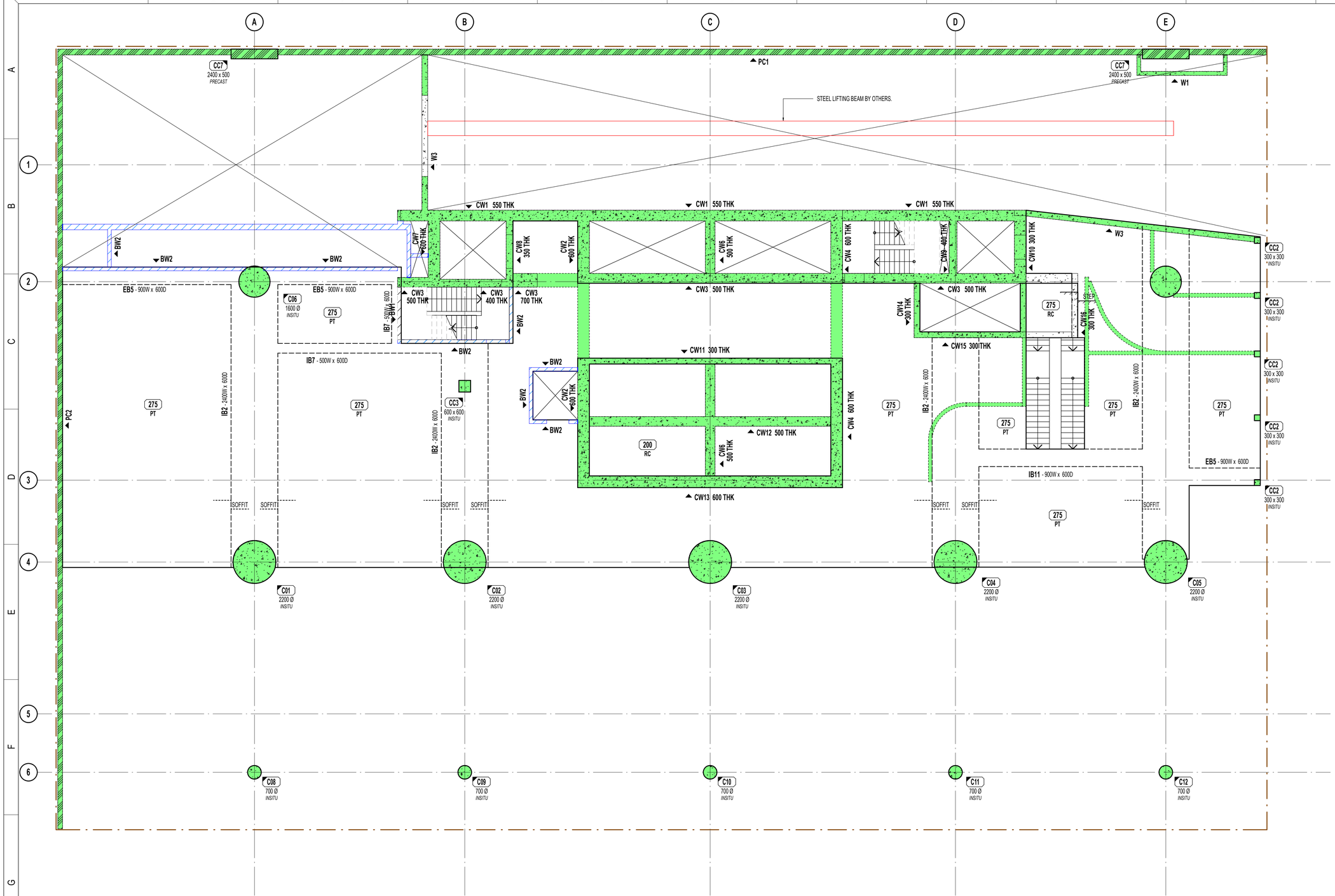
DRAWING TITLE
GROUND LEVEL - PART PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L00-3001	A



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE, ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM

- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- Pn — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL

- SPAN DIRECTION
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- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
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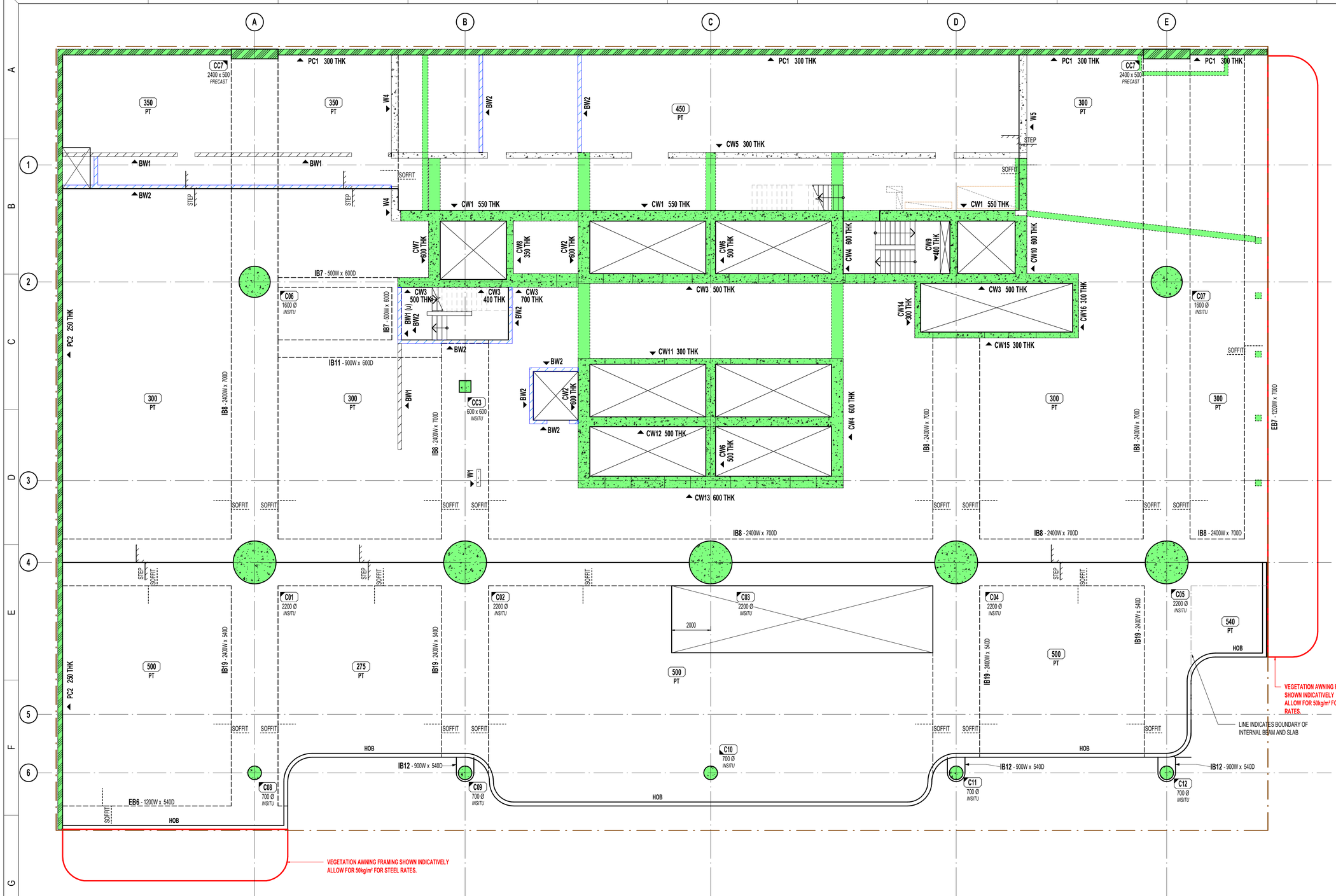
DRAWING TITLE
MEZZANINE - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-L0M-3000 — REV. No. D



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- BRICKWORK ELEMENT
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- BOUNDARY

TRUE NORTH — PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

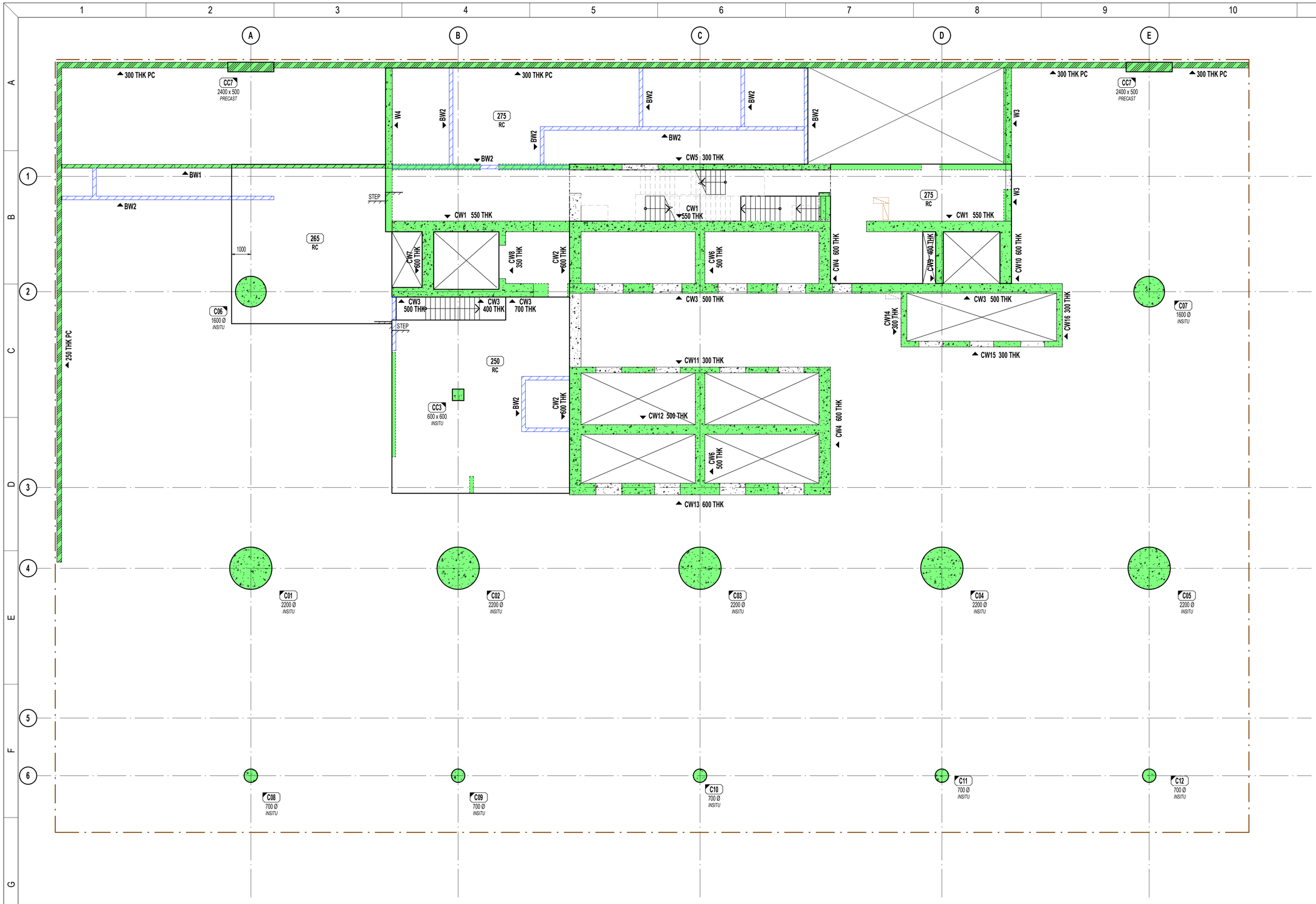
DRAWING TITLE
LEVEL 1 OFFICE LOBBY - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L01-3000
REV. No.: D

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



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- PN — CONCRETE PILE NUMBER
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- TAG / L x W or Ø / SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
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TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 1 MEZZANINE SERVICES - GENERAL ARRANGEMENT PLAN

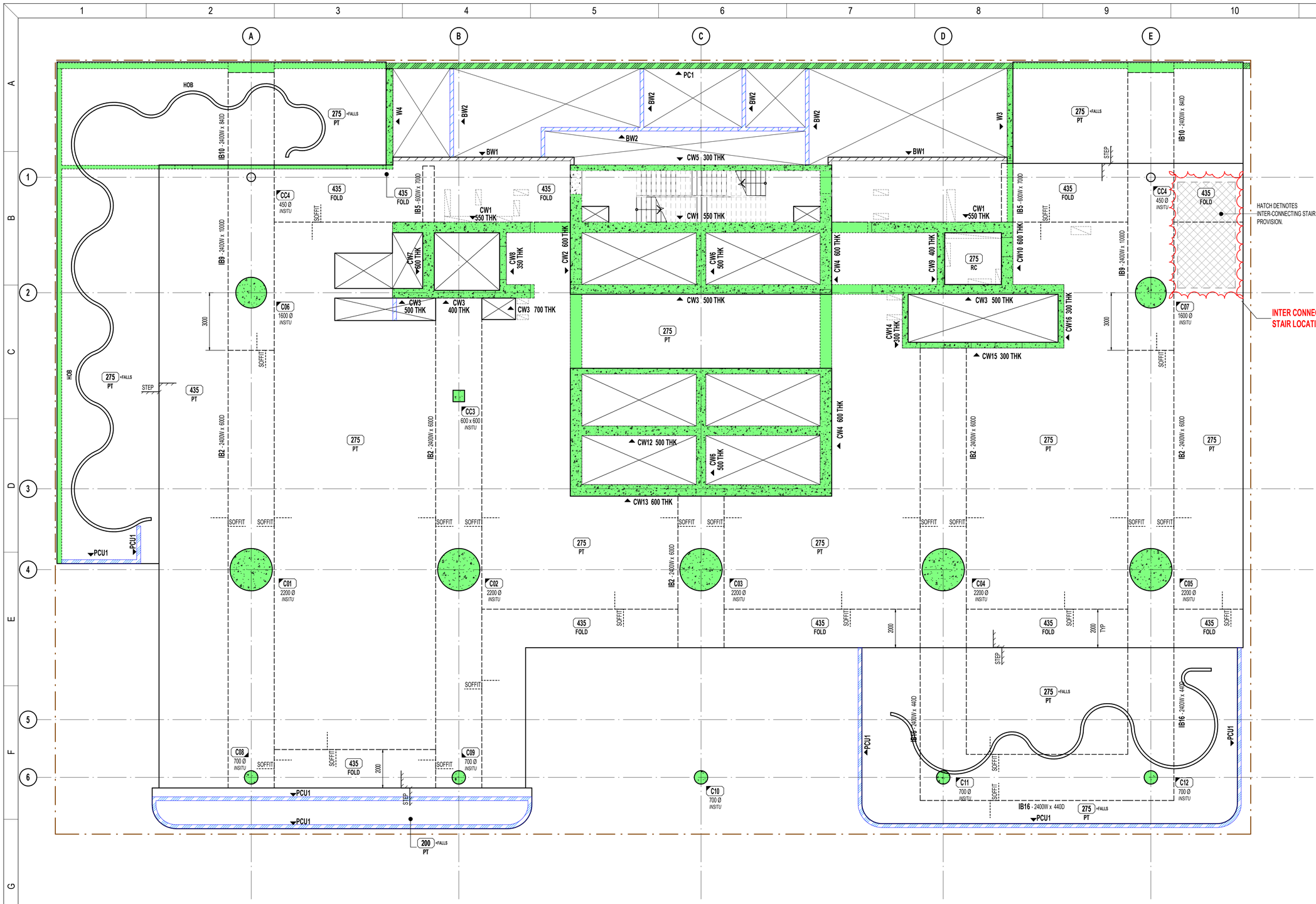
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L1M-3000
REV. No.: D

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



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REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

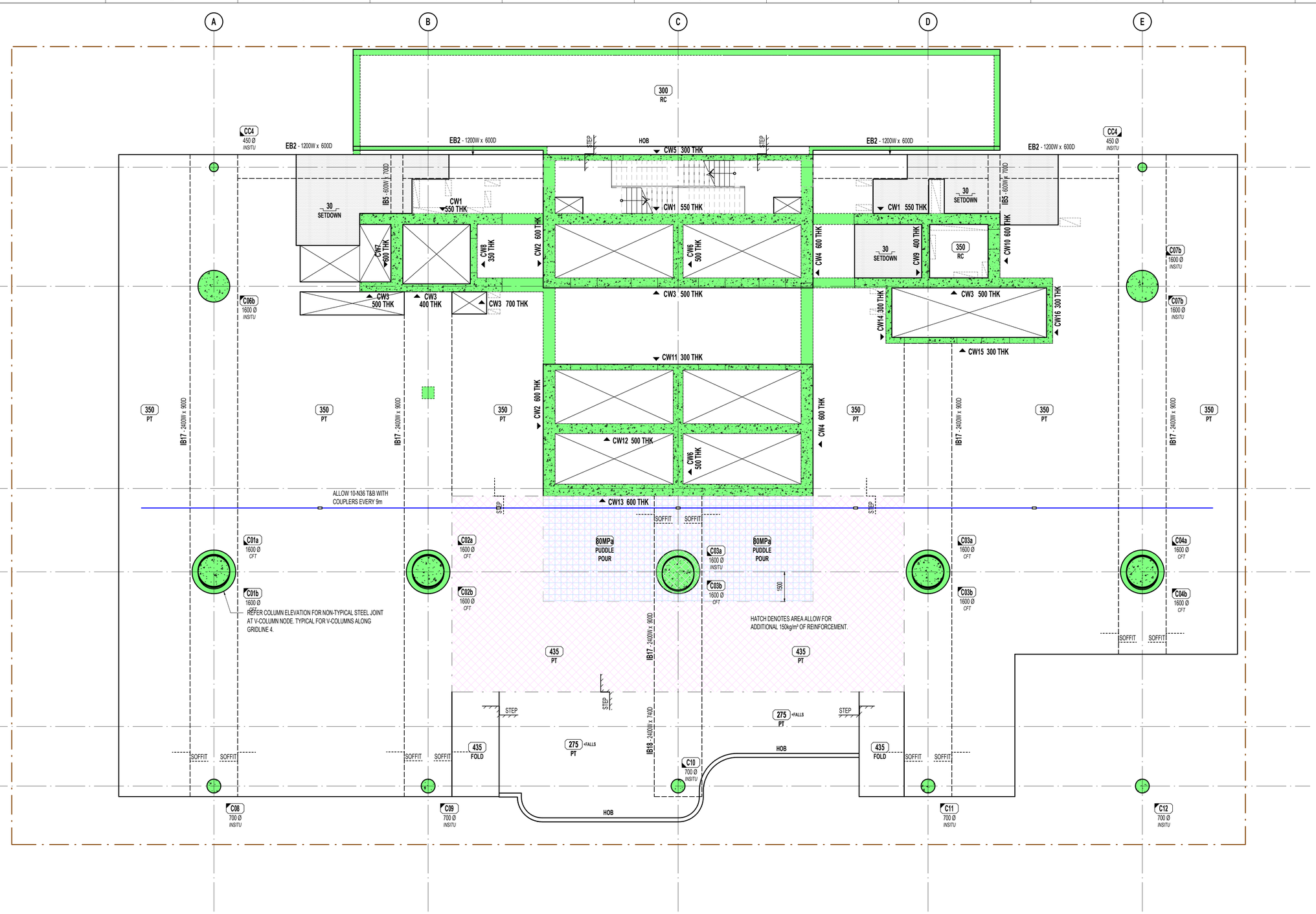
DRAWING TITLE
LEVEL 2 LOW RISE - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L02-3000
REV. No.: D

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LATEST STRUCTURAL, ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES SHALL BE IDENTIFIED AND REPORTED TO HERA ENGINEERING AND THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORKS IN THAT AREA.
3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN(TBC) MAXIMUM
- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS DESC. MPa — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG L x W or Ø SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

TRUE NORTH — PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

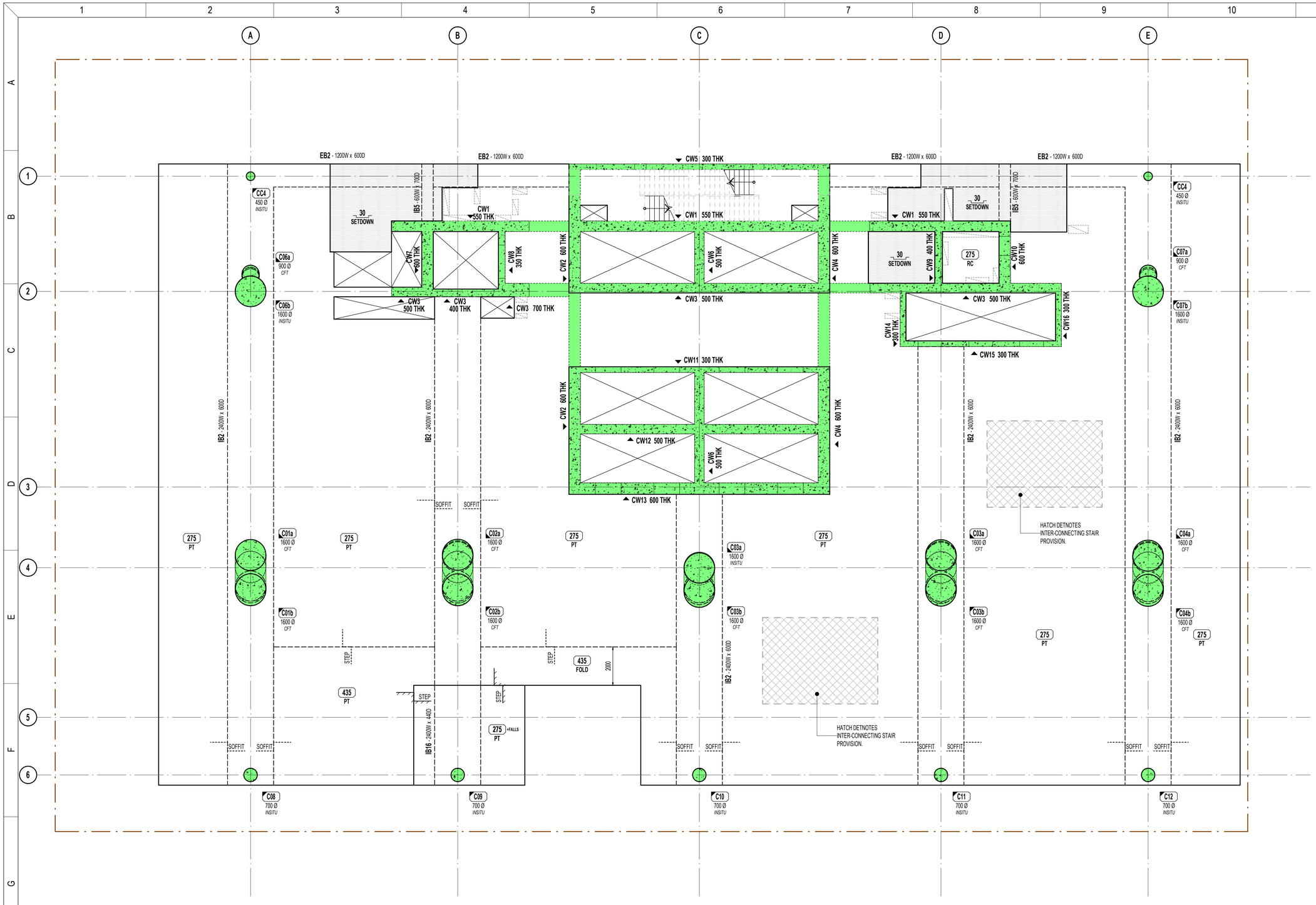
DRAWING TITLE
LEVEL 3 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-L03-3000	D

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM

- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL

- SPAN DIRECTION
- TAG L x W or Ø SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
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- BOUNDARY

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 4 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN

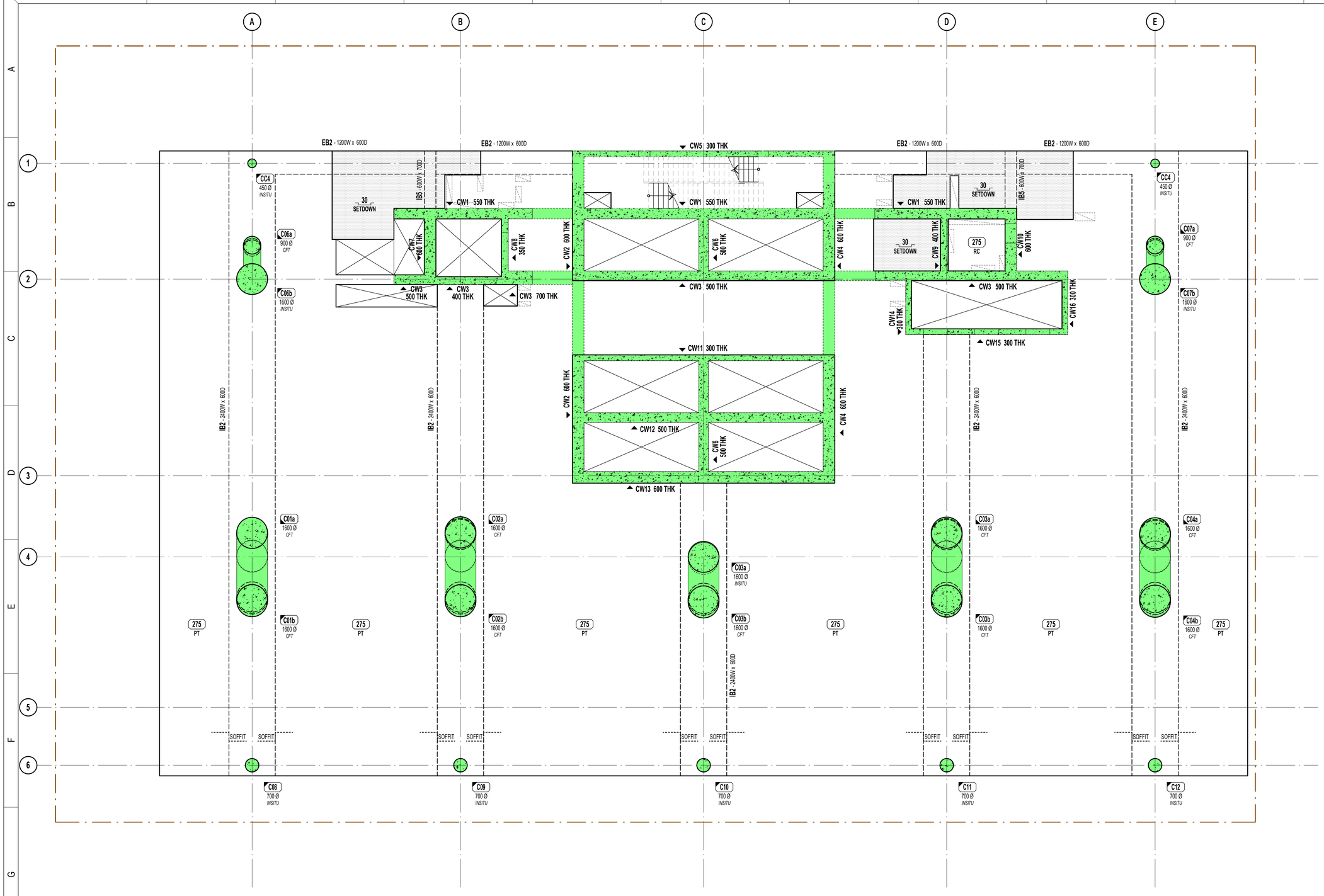
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-L04-3000 — REV. No. D

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LATEST STRUCTURAL, ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES SHALL BE IDENTIFIED AND REPORTED TO HERA ENGINEERING AND THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORKS IN THAT AREA.
3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
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5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP / SOFFIT — SLAB STEP / SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS / DESC. / MPa — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG / L x W or Ø / SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

TRUE NORTH | PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

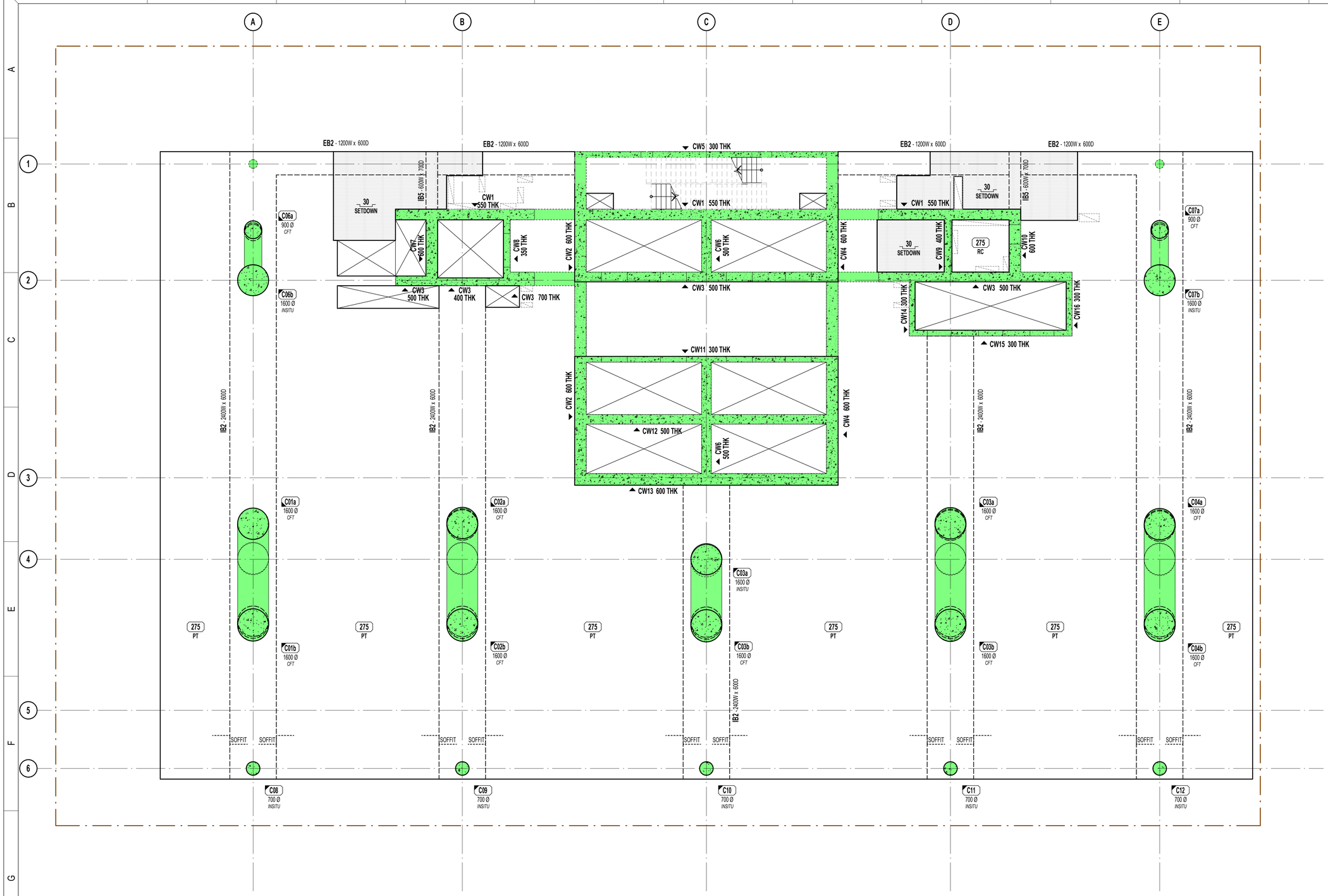
DRAWING TITLE
LEVEL 5 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L05-3000
REV. No.: D

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
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- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS / DESC. / MPa — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG / L x W or Ø / SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT

101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE

LEVEL 6 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN

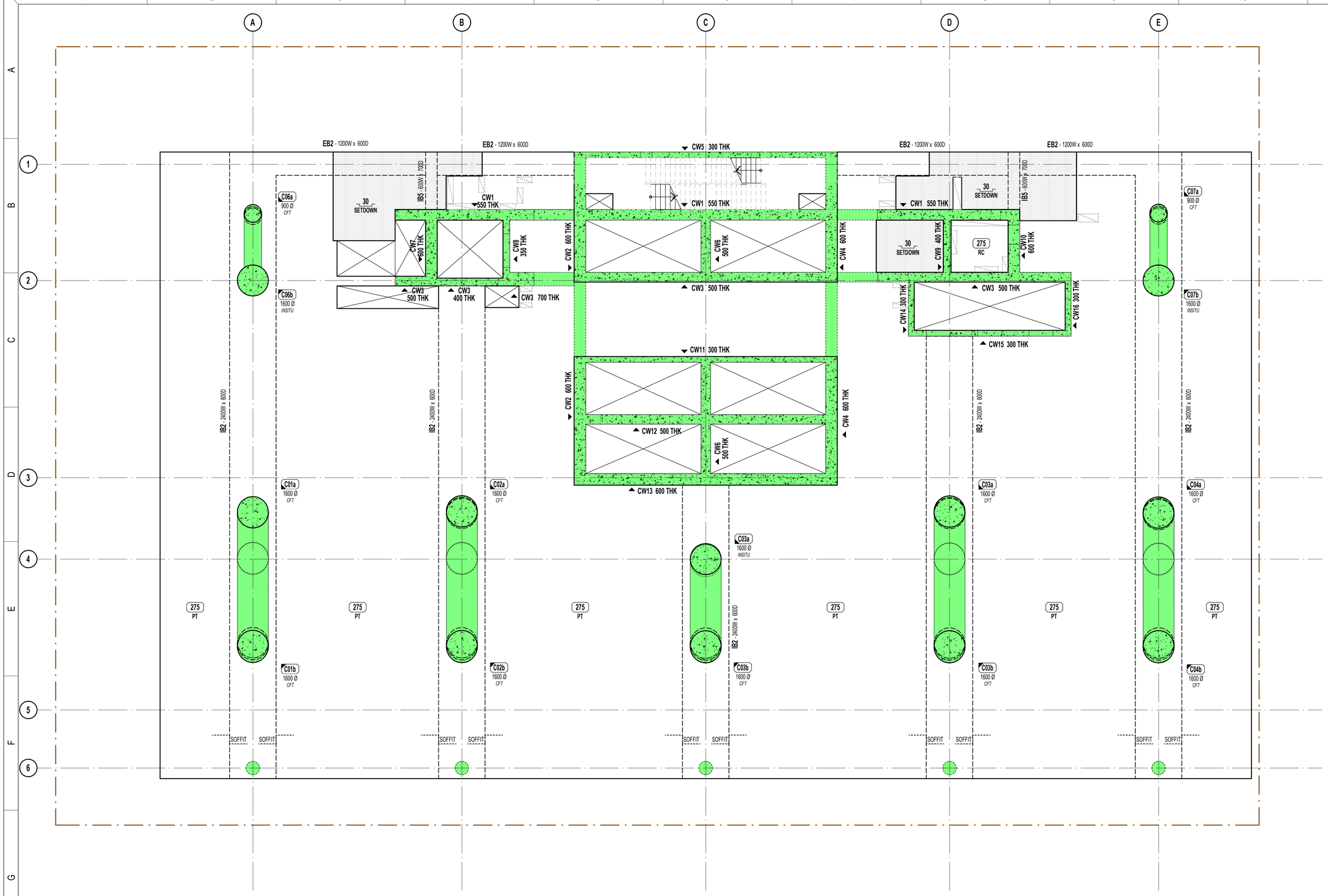
PROJECT STATUS

FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L06-3000	D



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LATEST STRUCTURAL, ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES SHALL BE IDENTIFIED AND REPORTED TO HERA ENGINEERING AND THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORKS IN THAT AREA.
3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP / SOFFIT — SLAB STEP / SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
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- THK +FALLS / DESC. / MPa — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
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- BOUNDARY

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 7 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

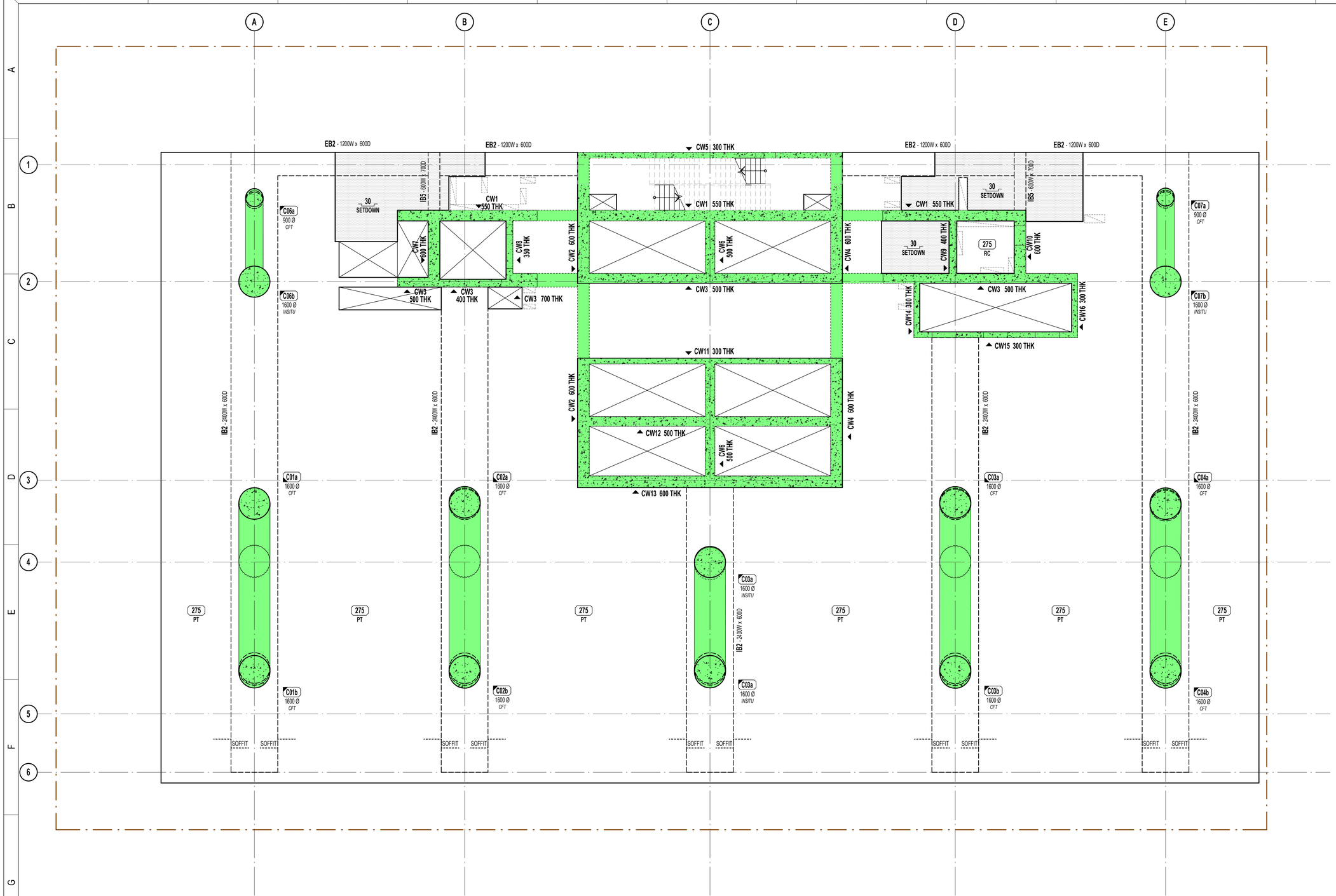
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L07-3000	D

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

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PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

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- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM

- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- Pn — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
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- BOUNDARY

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 8 LOW RISE RAKING - GENERAL ARRANGEMENT PLAN

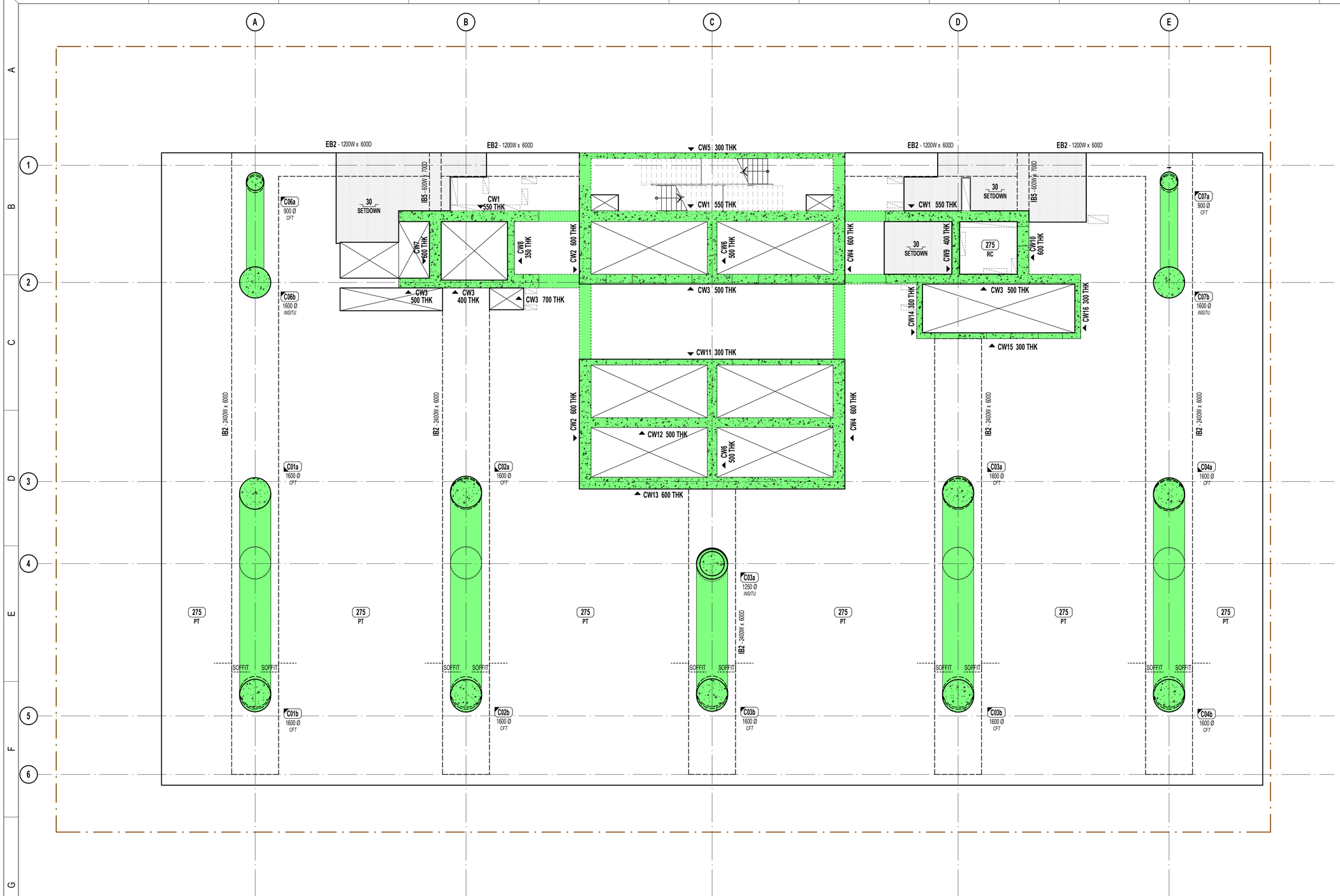
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-L08-3000	D

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



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PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

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- STEP / SOFFIT — SLAB STEP
- SLAB SOFFIT STEP
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TRUE NORTH — PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
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D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 9 LOW RISE - GENERAL ARRANGEMENT PLAN

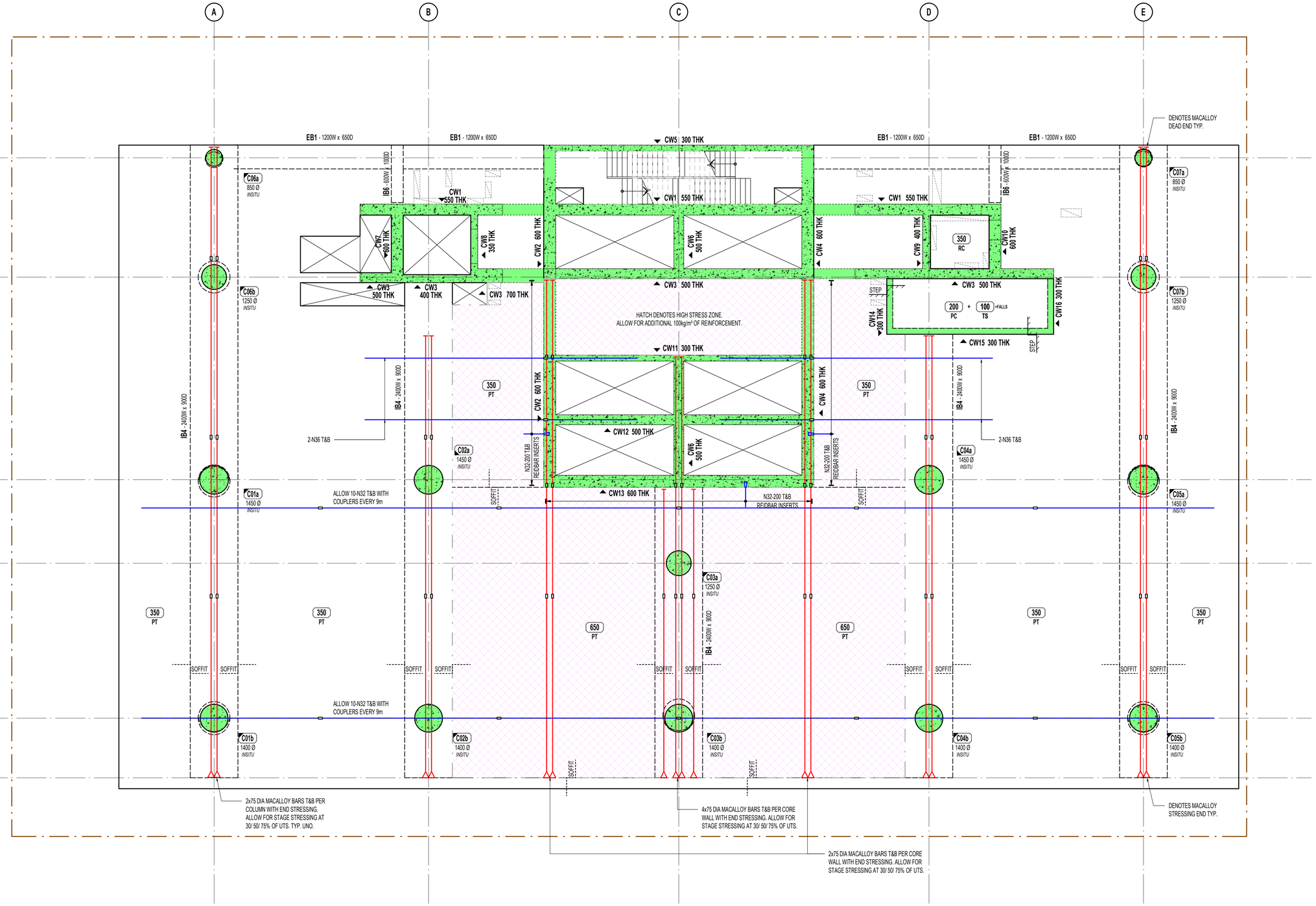
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 — DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-L09-3000 — REV. No. D

DRAWINGS ARE TO BE PRINTED IN COLOUR
0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

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PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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CLIENT

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www.multiplex.global/au/

PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 10 PLANT - GENERAL ARRANGEMENTPLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

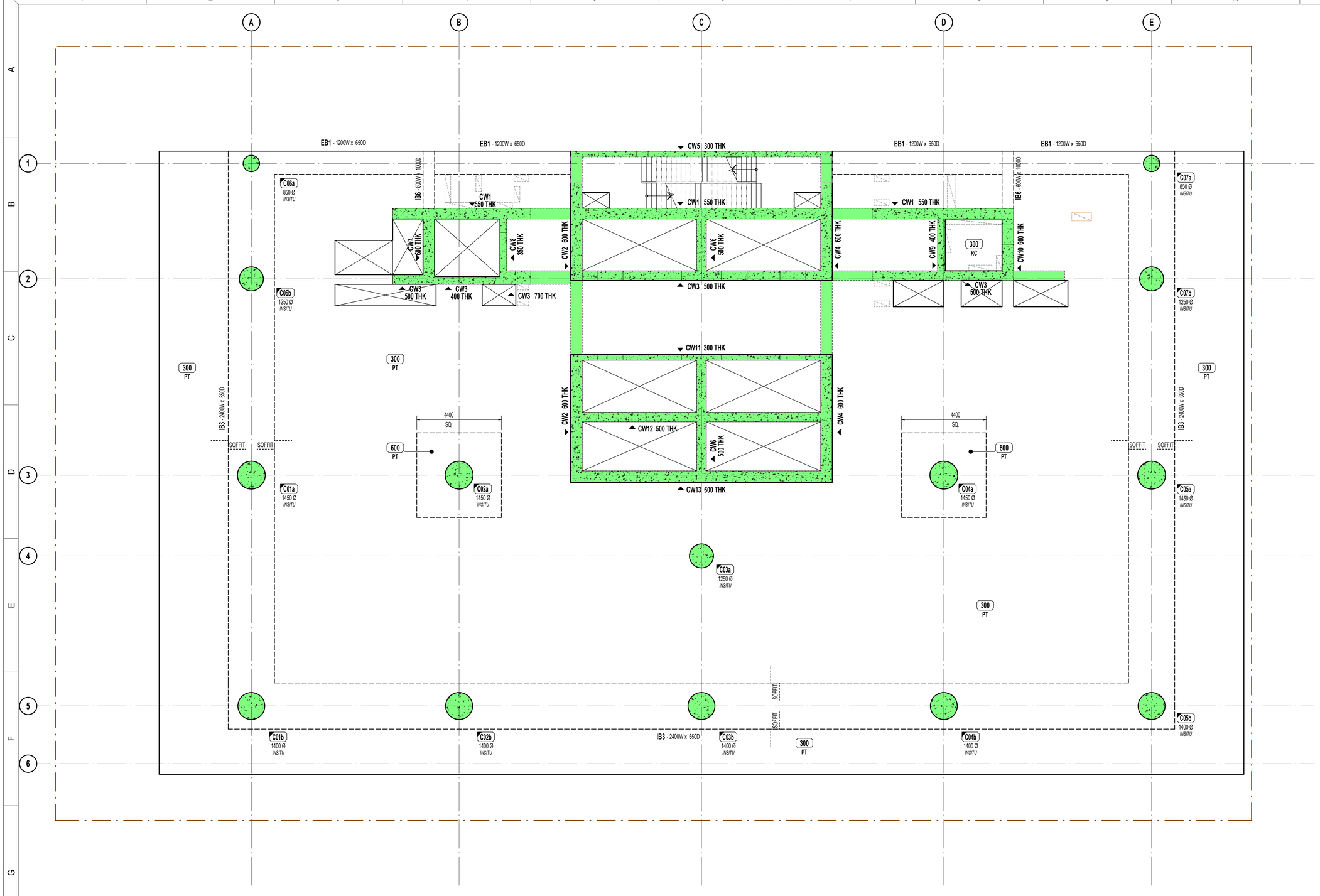
PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-L10-3000	D

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- pn — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG L x W or Ø SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LATEST STRUCTURAL, ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES SHALL BE IDENTIFIED AND REPORTED TO HERA ENGINEERING AND THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORKS IN THAT AREA.
3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

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- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP — SLAB STEP
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- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
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- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
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- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
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- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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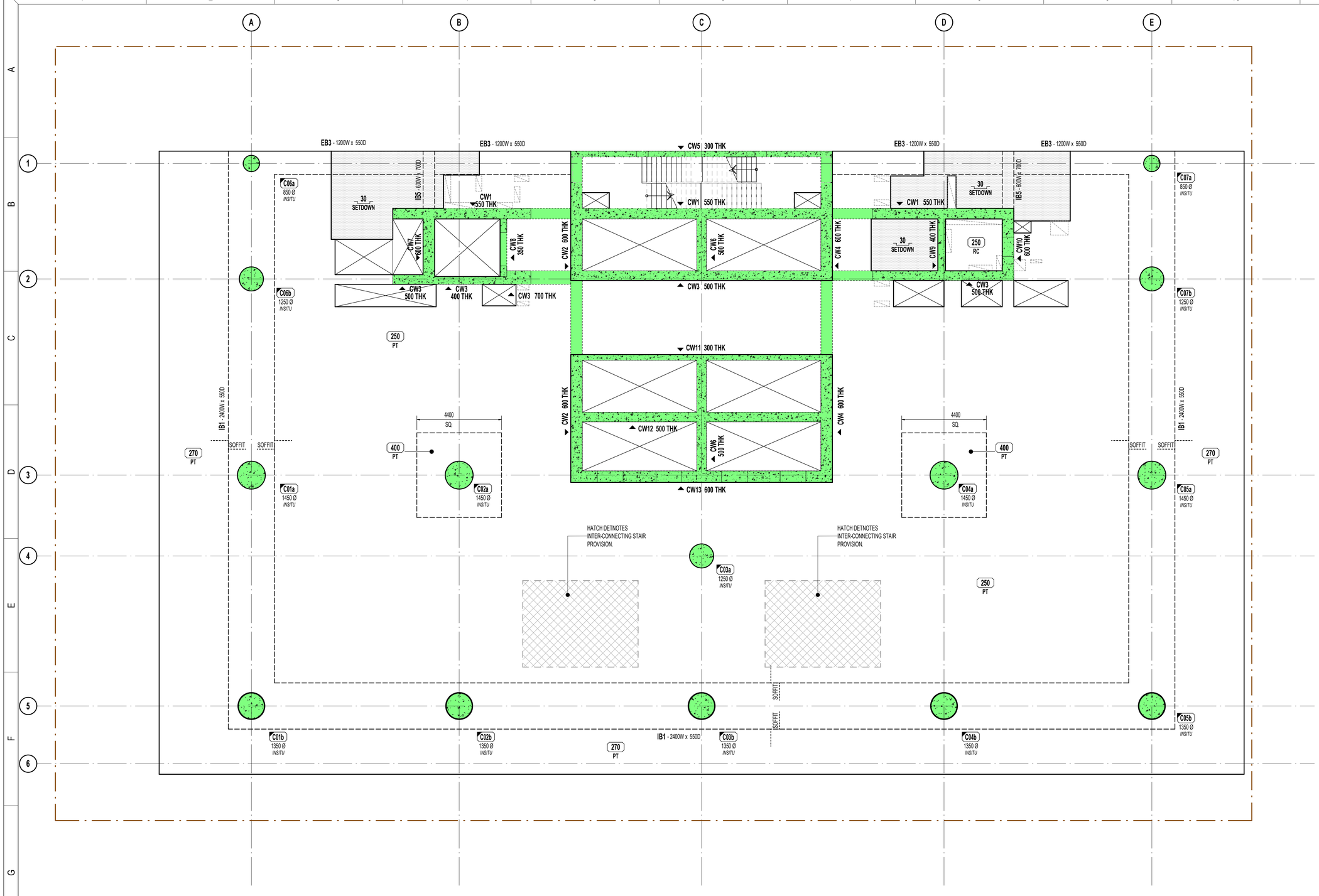
PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 11 PLANT - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1
DRAWING NUMBER	REV. No.
HER-DRG-STR-L11-3000	D



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LATEST STRUCTURAL, ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES SHALL BE IDENTIFIED AND REPORTED TO HERA ENGINEERING AND THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORKS IN THAT AREA.
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NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP — SLAB STEP
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- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
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- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
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- BOUNDARY

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

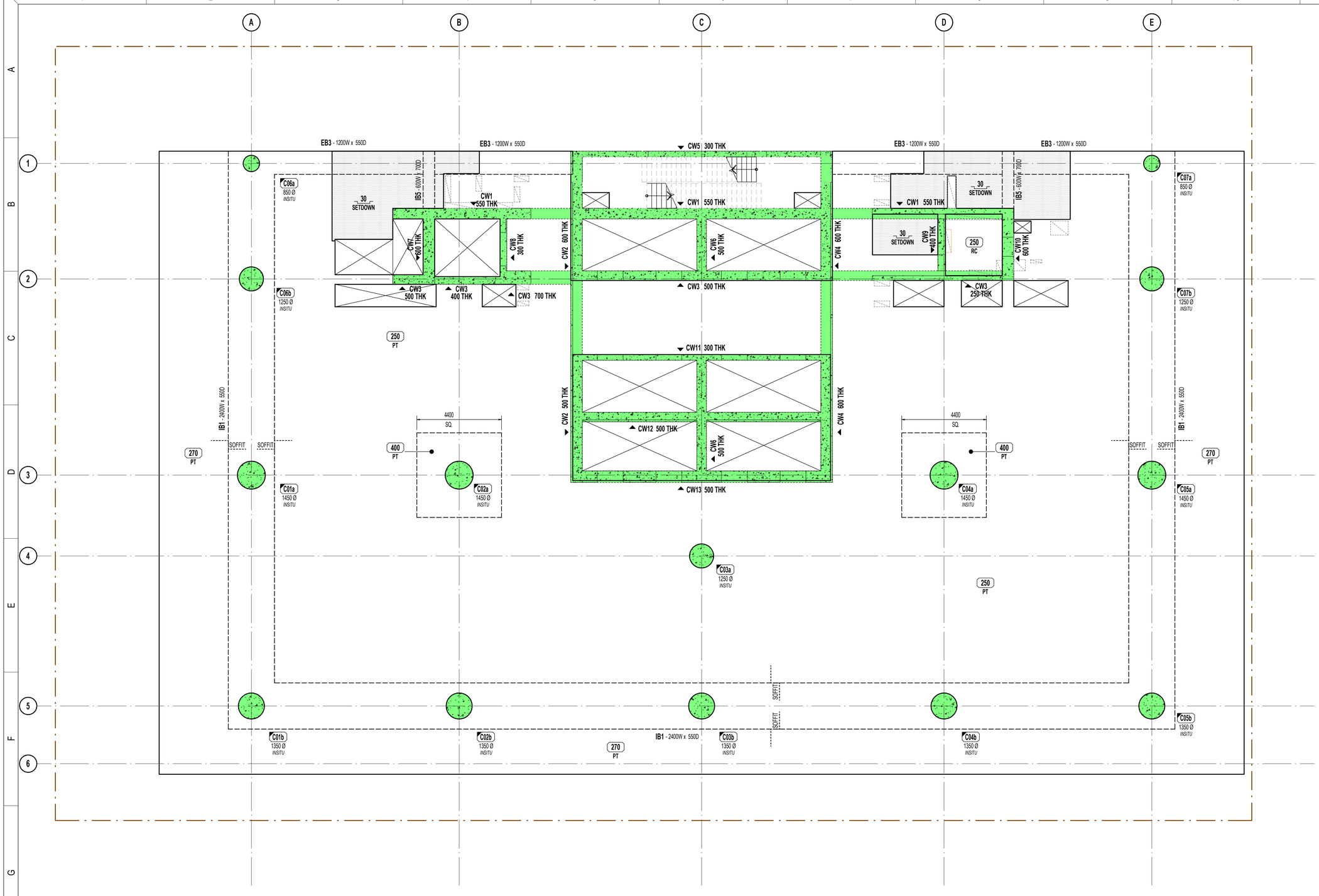
DRAWING TITLE
LEVEL 12-19 MID RISE TYPICAL - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L12-3000
REV. No.: D

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
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- BRICKWORK ELEMENT
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- ORANGE DENOTES NON-LOAD BEARING RETAINING
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- PN — CONCRETE PILE NUMBER
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- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
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- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR 0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
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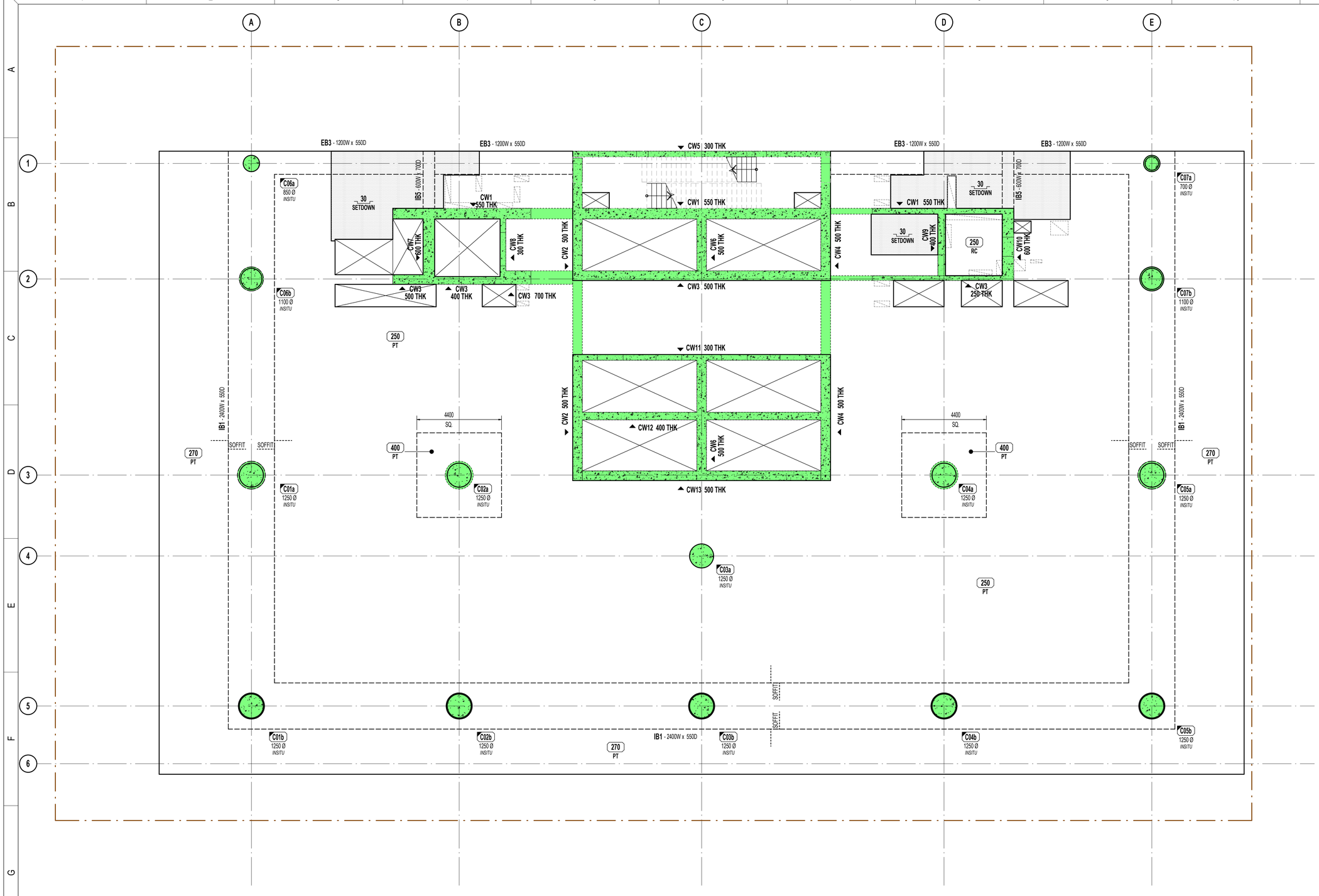
DRAWING TITLE
LEVEL 20 MID RISE TRANSFER - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111 | DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-L20-3000 | REV. No. D



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE, ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG L x W or Ø SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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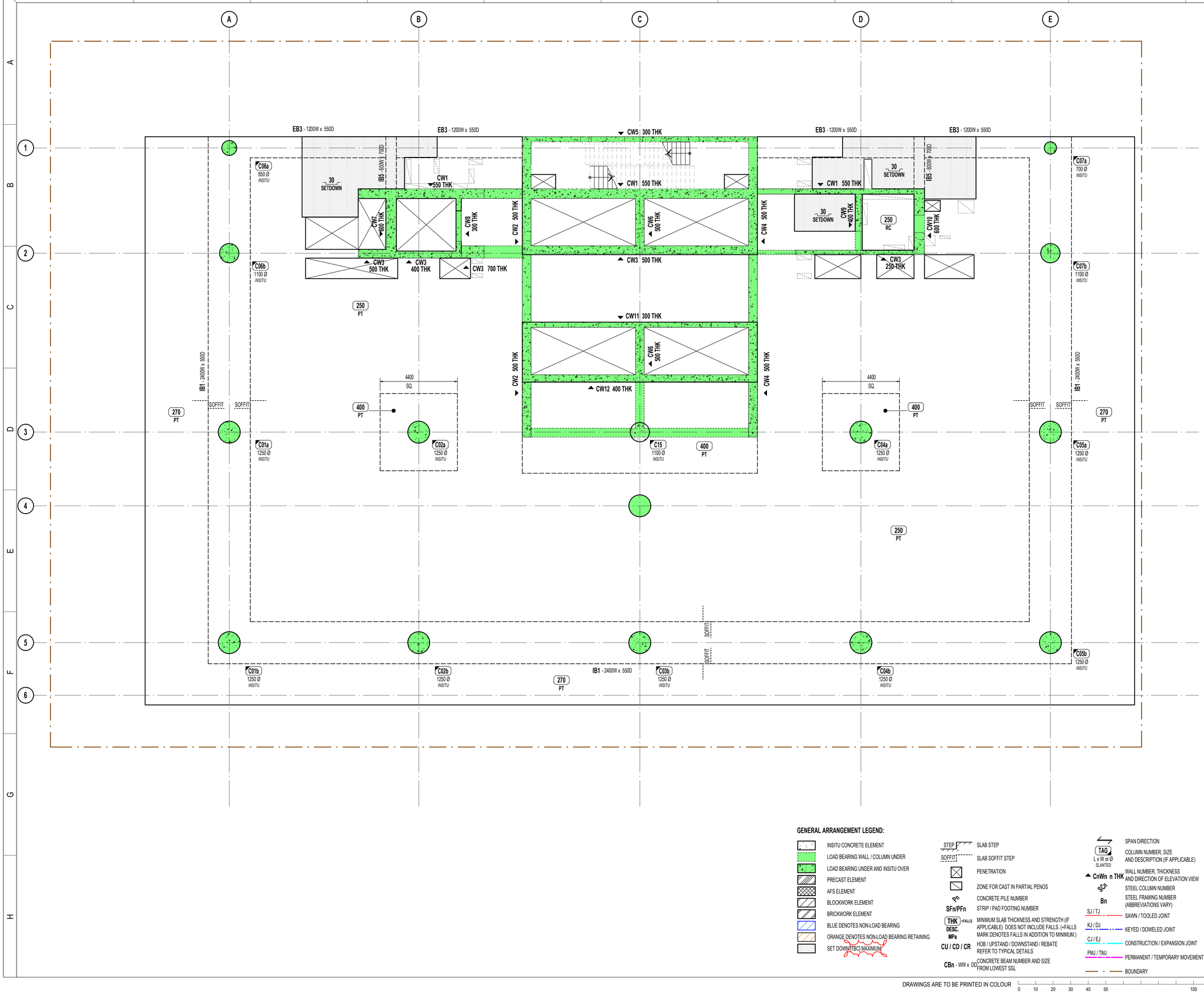
PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 21 HIGH RISE OVERRUN - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L21-3000
REV. No.: D



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LATEST STRUCTURAL, ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES SHALL BE IDENTIFIED AND REPORTED TO HERA ENGINEERING AND THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORKS IN THAT AREA.
3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CU / CD / CR
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG — L x W or Ø SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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www.multiplex.global/au/

PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 22 HIGH RISE LMR - GENERAL ARRANGEMENT PLAN

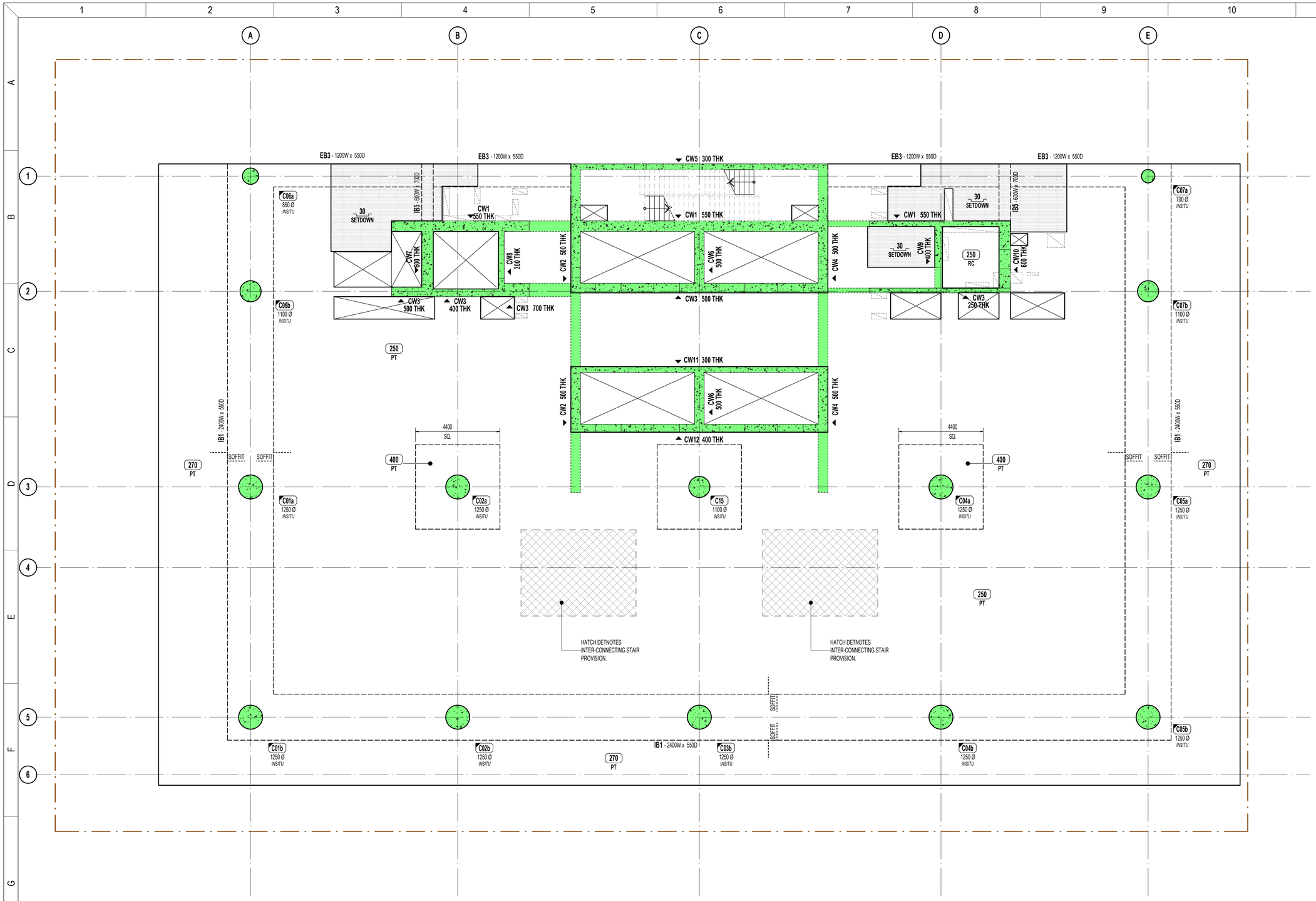
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L22-3000
REV. No.: D

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
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7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

PUDDLE POUR ALLOWANCE SCHEDULE:

COLUMN CONCRETE GRADE	PUDDLE POUR
100 MPa	80 MPa
80 MPa	65 MPa

NOTE: UNLESS NOTED OTHERWISE. ALLOW FOR PUDDLE POUR FOR ALL SLABS BENEATH COLUMNS 80 MPa AND OVER AS PER SCHEDULE.

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- DESC. MPa
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG L x W or Ø SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 23-29 HIGH RISE TYPICAL - GENERAL ARRANGEMENT PLAN

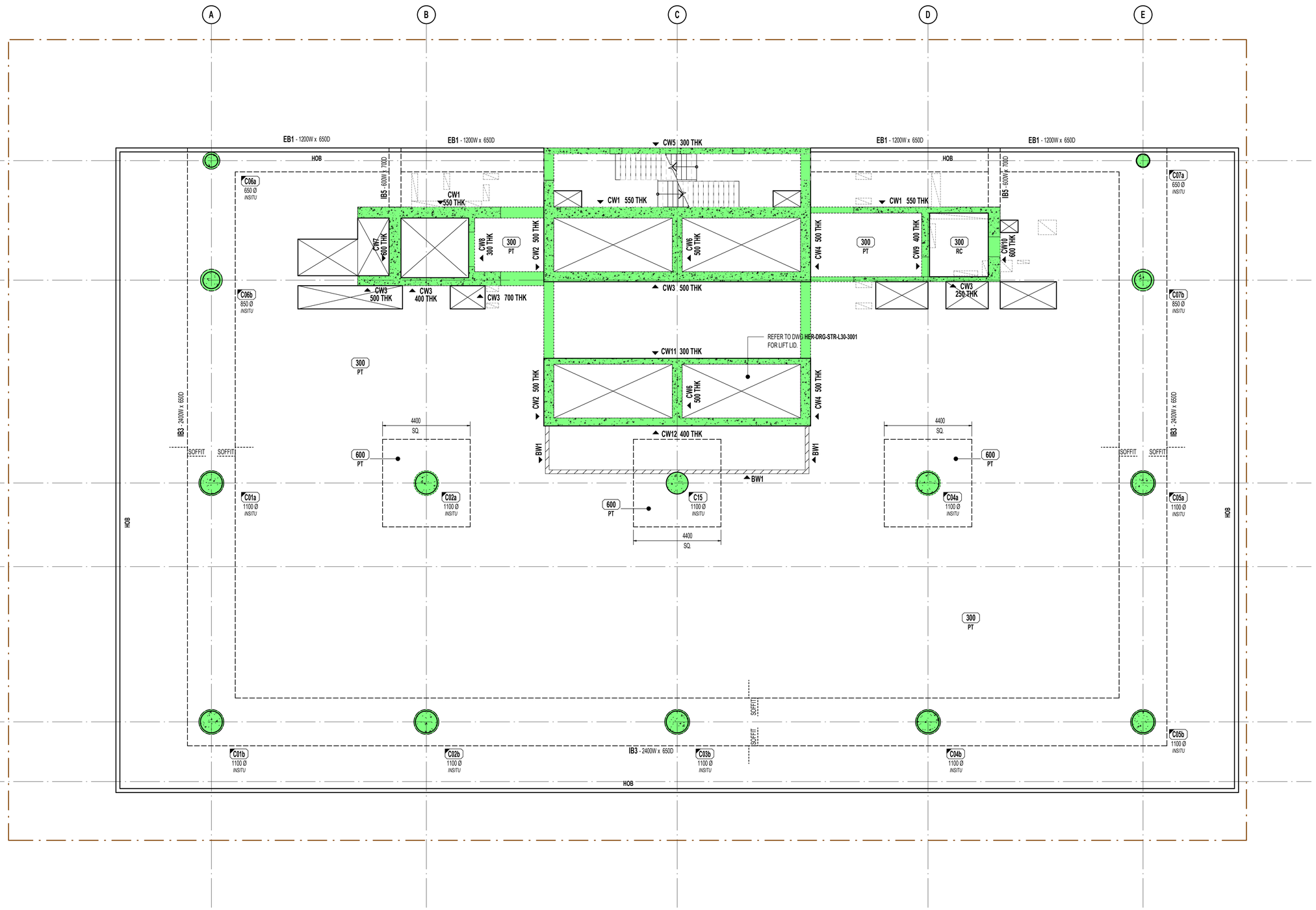
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L23-3000
REV. No.: D

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

GENERAL ARRANGEMENT LEGEND:

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- LOAD BEARING UNDER AND INSITU OVER
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- BLUE DENOTES NON-LOAD BEARING
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- STEP — SLAB STEP
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- ZONE FOR CAST IN PARTIAL PENOS
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- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG L x W or Ø SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
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- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

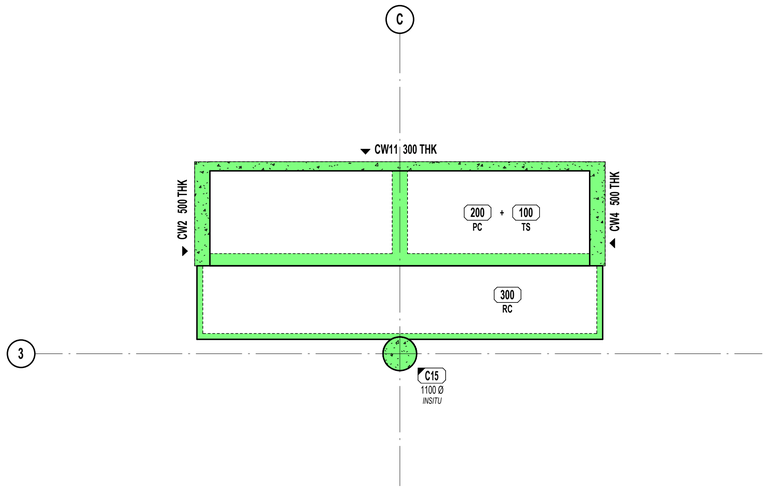
DRAWING TITLE
LEVEL 30 PLANT - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L30-3000	D



LEVEL 30 LIFT LID - GENERAL ARRANGEMENT PLAN

SCALE 1 : 100

GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
2. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LATEST STRUCTURAL, ARCHITECT'S AND OTHER CONSULTANT'S DRAWINGS. ANY DISCREPANCIES SHALL BE IDENTIFIED AND REPORTED TO HERA ENGINEERING AND THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING WITH WORKS IN THAT AREA.
3. DIMENSIONS SHOWN IN THE STRUCTURAL DRAWINGS ARE INDICATIVE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR SET OUT OF ELEMENTS ON PLAN.
4. PENETRATIONS SMALLER THAN 150 ARE GENERALLY NOT SHOWN ON PLAN. ANY PENETRATIONS LARGER THAN 150 NOT SHOWN ON THIS PLAN HAVE NOT BEEN DESIGNED FOR. BUILDER TO SUBMIT PROPOSED PENETRATIONS TO ENGINEER FOR APPROVAL PRIOR TO COMMENCING SLAB CONSTRUCTION. REFER TO REINFORCEMENT DRAWINGS FOR REINFORCEMENT REQUIREMENTS AROUND PENETRATIONS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB STEPS, FALLS, FINISH LEVELS, DRAINS ETC.
6. WET AREAS TO HAVE WATERPROOF TANKING IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS.
7. ALL AREAS OF EXPOSED SLAB TO HAVE FALLS, FLOOR WASTES, SCREED AND FLEXIBLE WATERPROOFING TANKING MEMBRANES AS SPECIFIED ON THE ARCHITECTURAL SPECIFICATIONS.

NOTE: REFER ARCHITECTS DRAWINGS FOR ALL STEPS AND FALLS IN SLABS

GENERAL ARRANGEMENT LEGEND:

- INSITU CONCRETE ELEMENT
- LOAD BEARING WALL / COLUMN UNDER
- LOAD BEARING UNDER AND INSITU OVER
- PRECAST ELEMENT
- AFS ELEMENT
- BLOCKWORK ELEMENT
- BRICKWORK ELEMENT
- BLUE DENOTES NON-LOAD BEARING
- ORANGE DENOTES NON-LOAD BEARING RETAINING
- SET DOWN (TBC) MAXIMUM
- STEP — SLAB STEP
- SOFFIT — SLAB SOFFIT STEP
- PENETRATION
- ZONE FOR CAST IN PARTIAL PENOS
- PN — CONCRETE PILE NUMBER
- SFn/PFn — STRIP / PAD FOOTING NUMBER
- THK +FALLS / DESC. / MPa — MINIMUM SLAB THICKNESS AND STRENGTH (IF APPLICABLE) DOES NOT INCLUDE FALLS. (+FALLS MARK DENOTES FALLS IN ADDITION TO MINIMUM.)
- CU / CD / CR — HOB / UPSTAND / DOWNSTAND / REBATE REFER TO TYPICAL DETAILS
- CBn - WW x DD — CONCRETE BEAM NUMBER AND SIZE FROM LOWEST SSL
- SPAN DIRECTION
- TAG / L x W or Ø / SLANTED — COLUMN NUMBER, SIZE AND DESCRIPTION (IF APPLICABLE)
- CnWn n THK — WALL NUMBER, THICKNESS AND DIRECTION OF ELEVATION VIEW
- SCn — STEEL COLUMN NUMBER
- Bn — STEEL FRAMING NUMBER (ABBREVIATIONS VARY)
- SJ / TJ — SAWN / TOOLED JOINT
- KJ / DJ — KEYED / DOWELED JOINT
- CJ / EJ — CONSTRUCTION / EXPANSION JOINT
- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 30 PLANT - PART PLAN

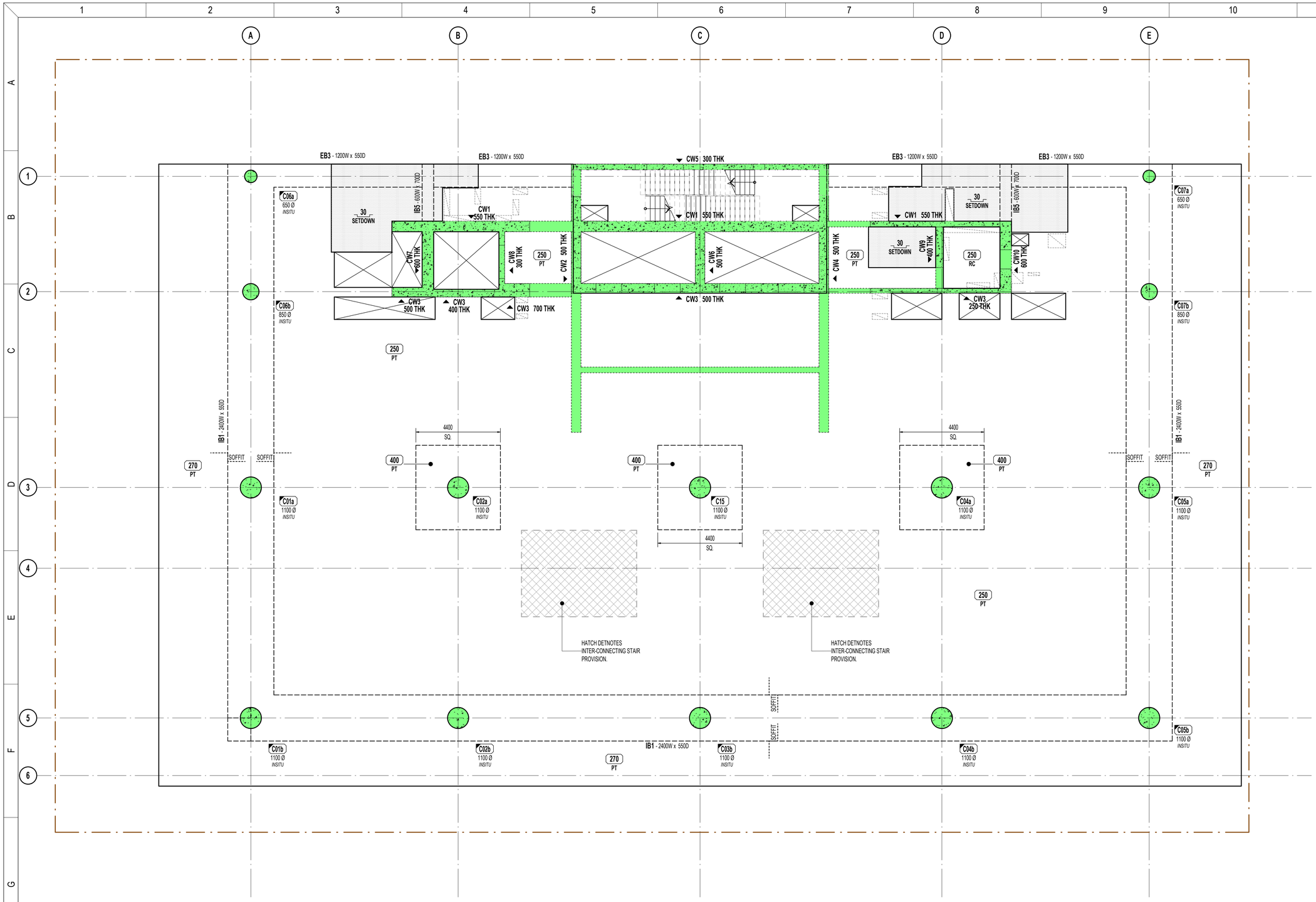
PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER: 24111
DWG SIZE: A1
DRAWING NUMBER: HER-DRG-STR-L30-3001
REV. No.: A

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



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1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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- BRICKWORK ELEMENT
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- DESC. MPa
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- PMJ / TMJ — PERMANENT / TEMPORARY MOVEMENT JOINT
- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 31 SKY RISE - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

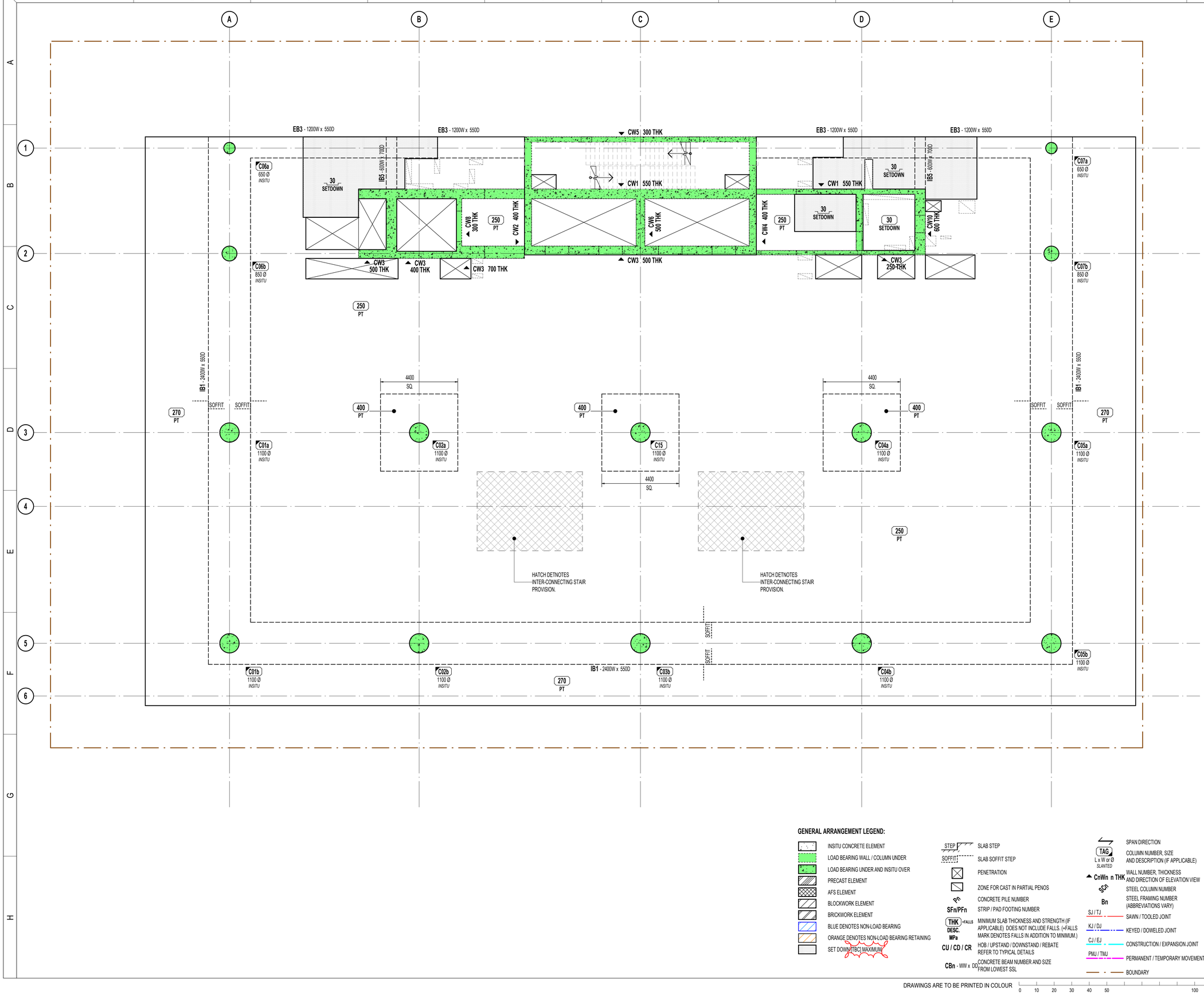
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER 24111

DWG SIZE A1

DRAWING NUMBER HER-DRG-STR-L31-3000

REV. No. D



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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- BOUNDARY

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

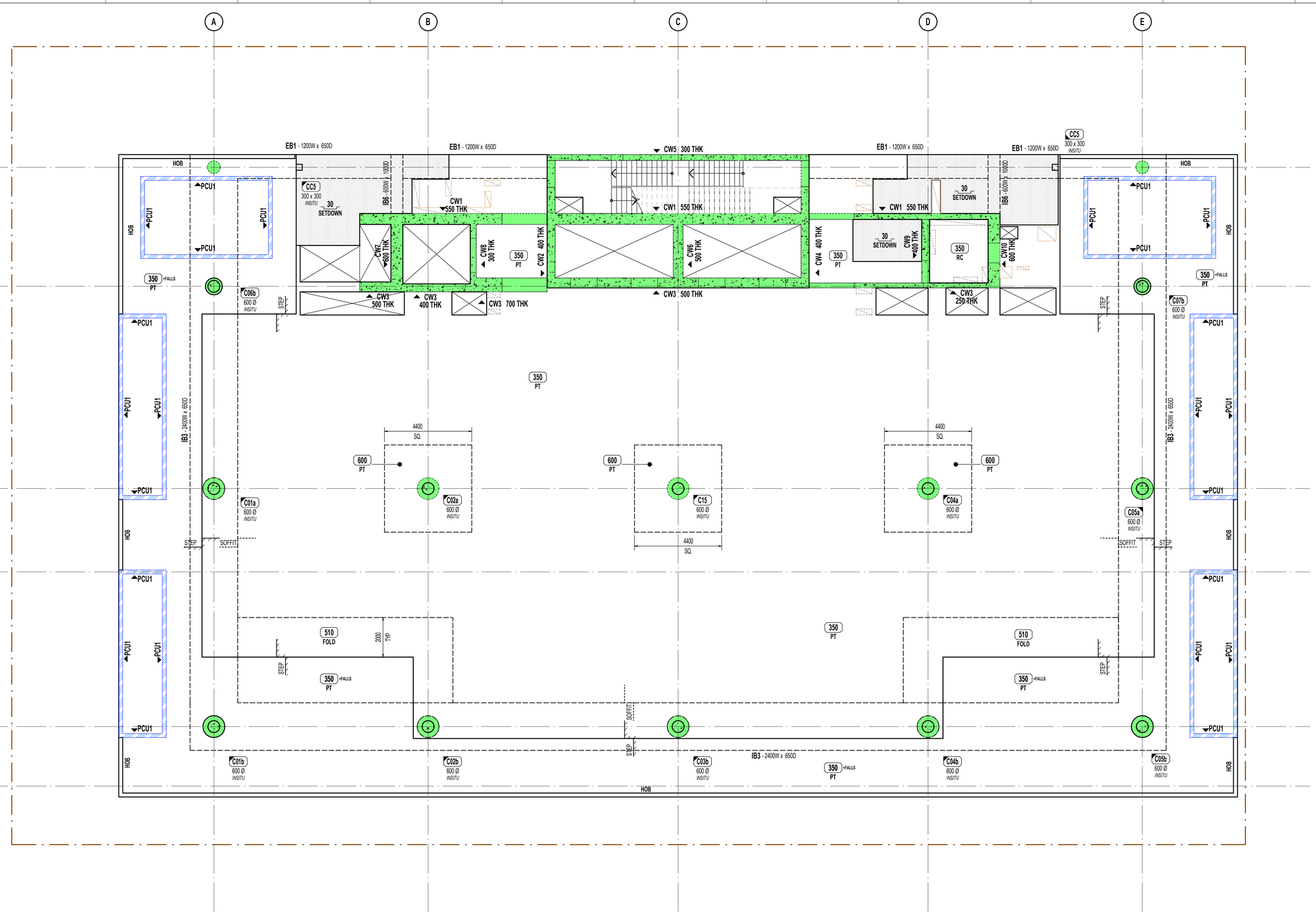
DRAWING TITLE
LEVEL 32-39 SKY RISE TYPICAL - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L32-3000	A



GENERAL ARRANGEMENT NOTES:

1. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES, LEGEND AND SCHEDULE SHEETS.
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- BOUNDARY

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

SCAN TO CHECK CURRENT REVISION

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CLIENT

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 40 ROOF - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

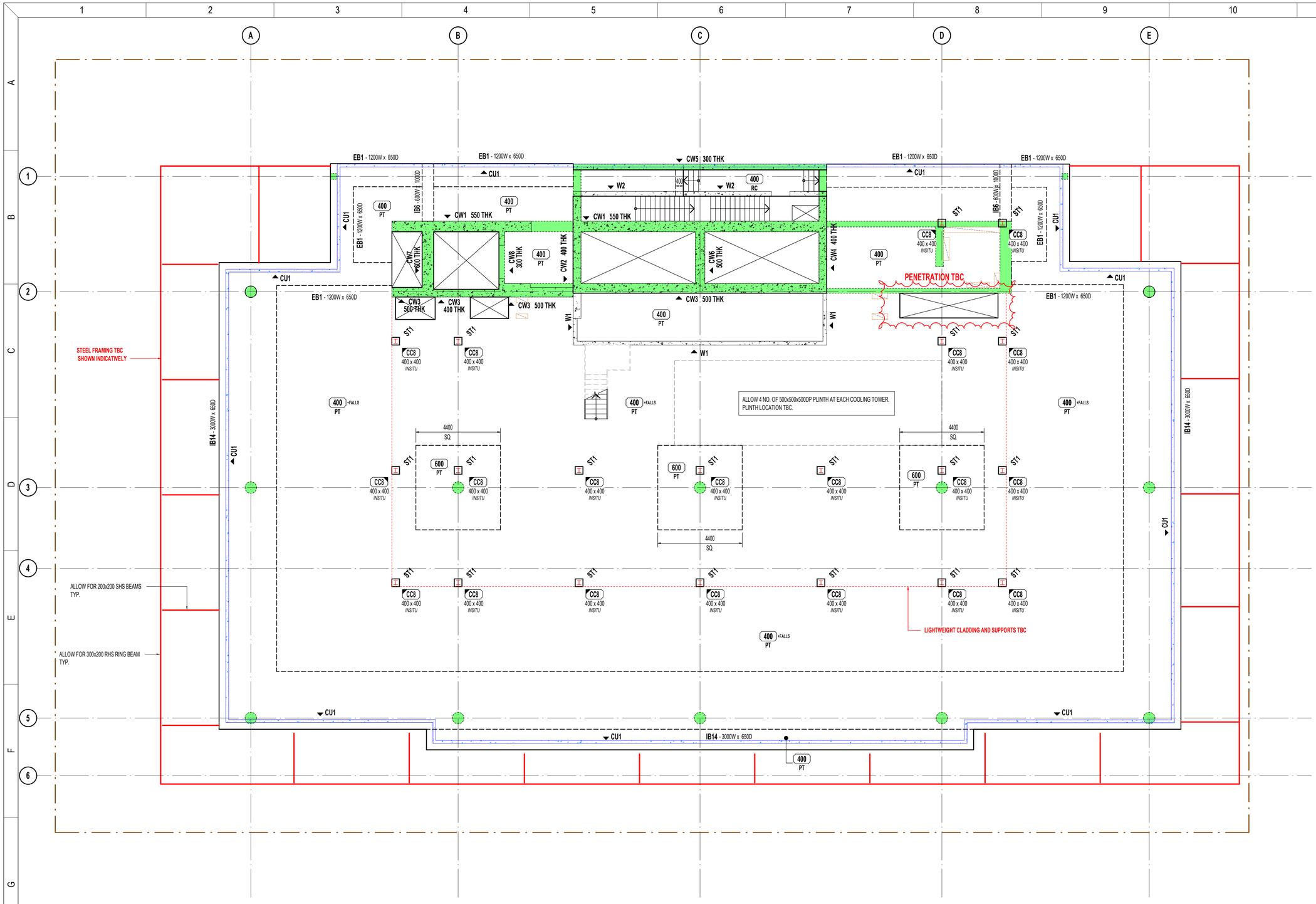
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L40-3000	D

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



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DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR COORDINATION	JH	SD	13.02.2026
B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
C	ISSUED FOR COORDINATION	JH	SD	20.03.2026
D	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT
101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

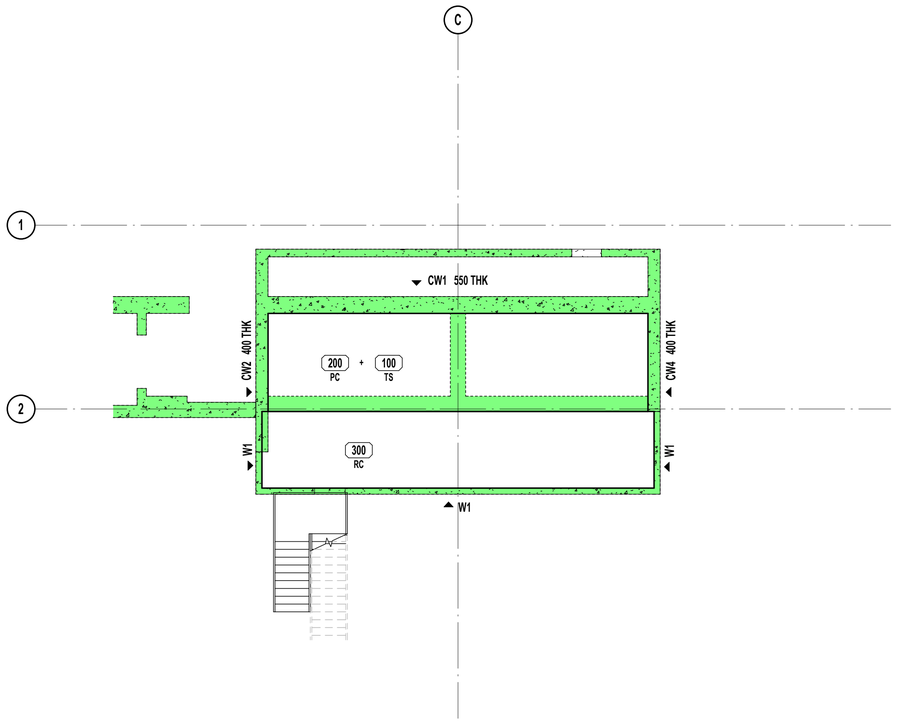
DRAWING TITLE
LEVEL 41 PLANT - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE	LEAD DRAFTER:	J.HEO
1 : 100	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L41-3000	D



LEVEL 41 - GENERAL ARRANGEMENT PART PLAN

SCALE 1 : 100

TRUE NORTH

PROJECT NORTH

REV	DESCRIPTION	BY	APP	DATE
A	ISSUED FOR 50% DD	JH	SD	26.03.2026

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PROJECT

101 ALBERT STREET
101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE

LEVEL 41 PLANT - PART PLAN

PROJECT STATUS

FOR DESIGN DEVELOPMENT

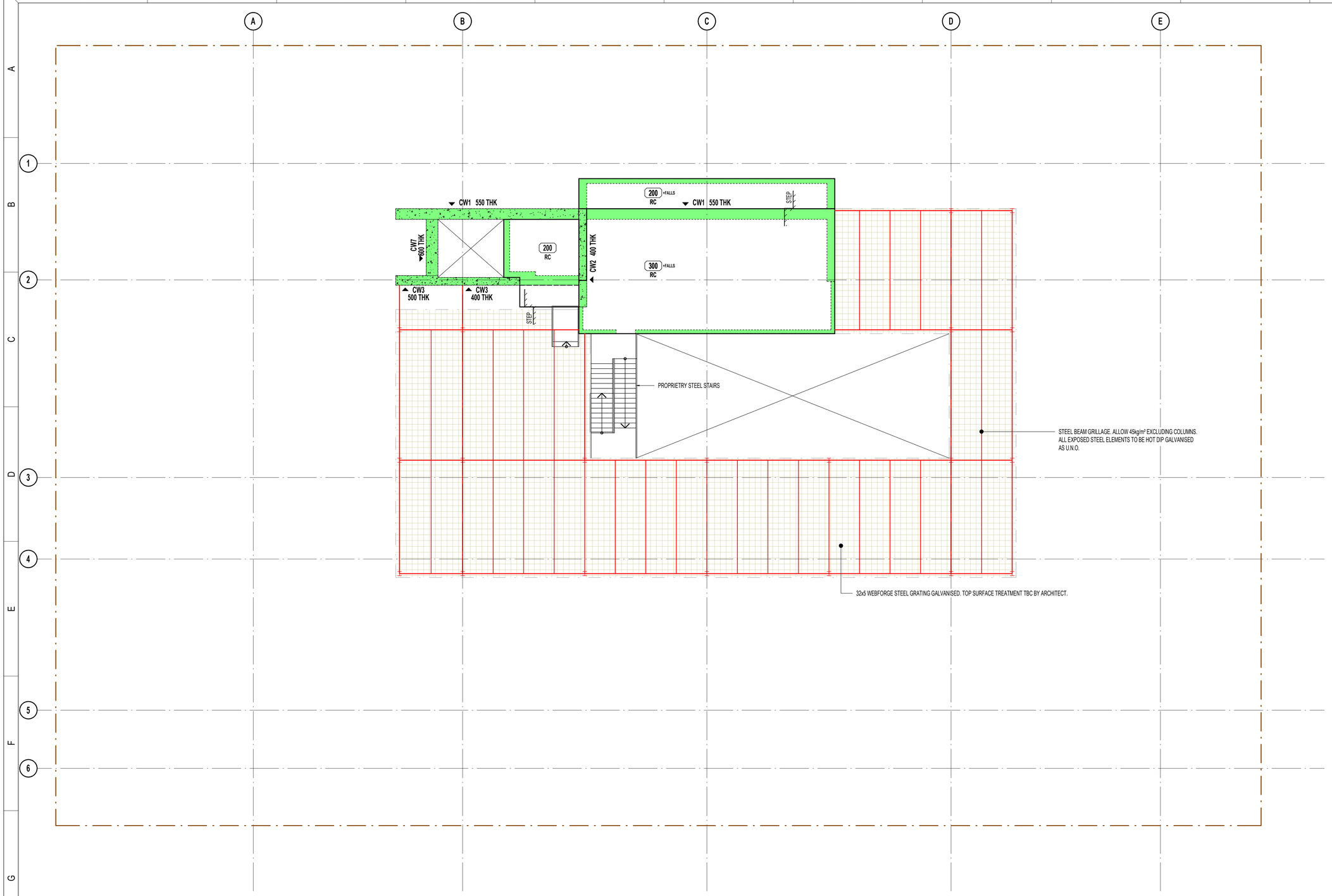
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L41-3001	A

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TRUE NORTH

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B	ISSUED FOR COORDINATION	JH	SD	06.03.2026
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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 42 PLANT - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

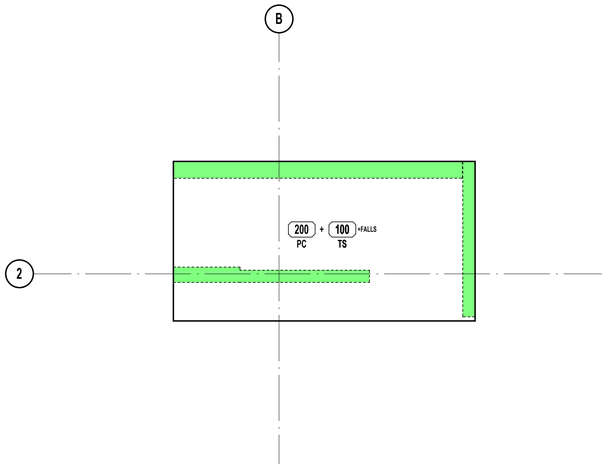
SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L42-3000	C

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200



LEVEL 43 CROWN - GENERAL ARRANGEMENT PLAN

SCALE 1 : 100

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TRUE NORTH

PROJECT NORTH

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PROJECT
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101 ALBERT STREET, BRISBANE CITY QLD 4000

DRAWING TITLE
LEVEL 43 CROWN - GENERAL ARRANGEMENT PLAN

PROJECT STATUS
FOR DESIGN DEVELOPMENT

SCALE		
1 : 100	LEAD DRAFTER:	J.HEO
	LEAD DESIGNER:	S.PILLAY
	PROJECT PRINCIPAL:	N.KIM

PROJECT NUMBER	DWG SIZE
24111	A1

DRAWING NUMBER	REV. No.
HER-DRG-STR-L43-3000	C

DRAWINGS ARE TO BE PRINTED IN COLOUR

0 10 20 30 40 50 100 150 200

Hera Engineering
101 Albert Street OSD

Design Note | Concrete Frame

Revision A

Multiplex Construction

May 12, 2026

Document control record

Document prepared by:

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DOCUMENT INFORMATION				
REPORT TITLE:	24111-RE-002_A_ Design Note | Concrete Frame	**PROJECT NUMBER:**	24111	
CLIENT:	Multiplex Construction	**CLIENT CONTACT:**		
REVISION	**DATE**	**COMMENT**	**PREPARED BY**	**APPROVED BY**
A	11 May 2026	Issued for Information	**SD**	**SD**
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REVISION HISTORY

REVISION	COMMENT
A	Issued for Information

Contents

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2.3 Inclined Column Locations 6
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4 Pile Loads 8

1 Introduction

The purpose of this report is to outline the changes made to the structural frame during the value engineering phase of the project, and the associated effects on the foundation loads and cavern analysis.

2 Structural Changes

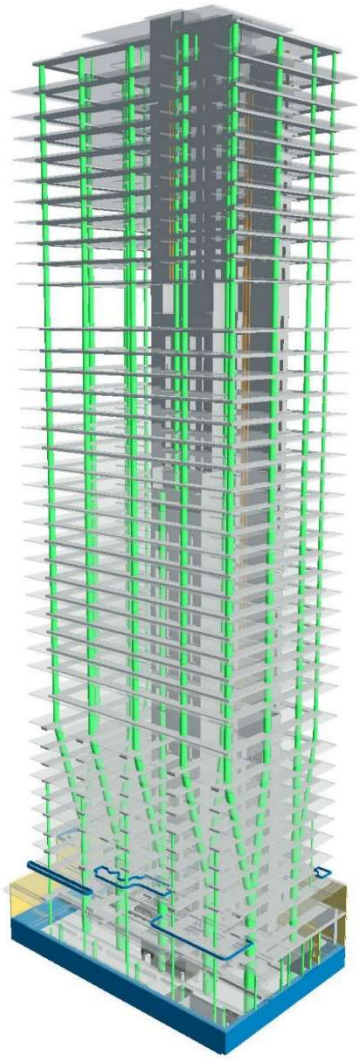
2.1 Concrete Frame

The structural frame of the tower was changed from steel beams supporting bondek slabs on steel columns, to post tensioned slabs supported by reinforced concrete columns. This change enabled the following benefits:

1) Simplified vertical and lateral load path
2) Simplified connections to the core by omitting steel cast-in plates.
3) ESD benefits
4) Improved supply chain options to allow for a competitive and open tender market.



Previous Steel Frame

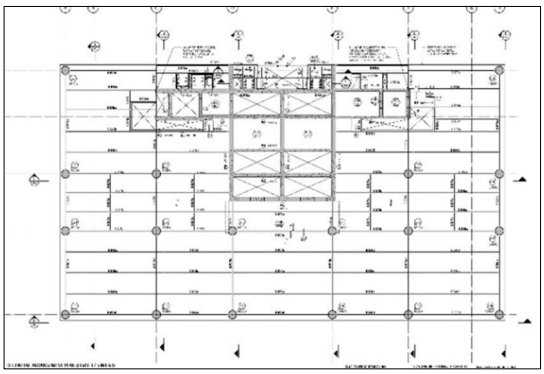


Current Concrete Frame

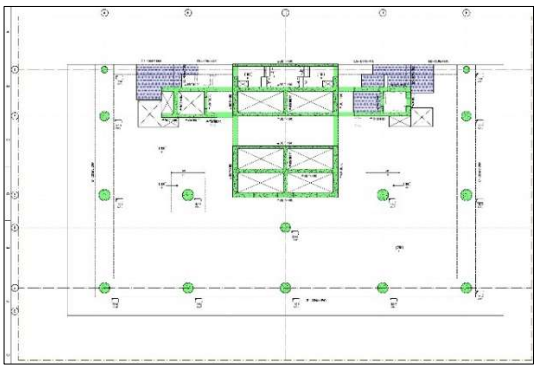
2.2 Structural Grid

To ensure an optimum design of the post tensioned slabs, the structural grid was altered as follows:

1) Amended column grid in the EW direction to maximize the spans of the slabs, and reduced overall number of columns.
2) Adjusted dimensions in the NS direction to balance the span length, and ensure end spans were not bigger than the internal spans.



Previous Structural Grid

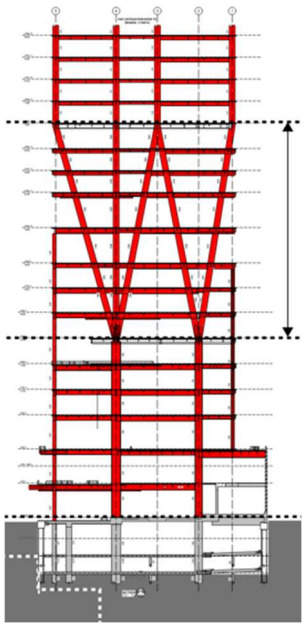


Current Structural Grid

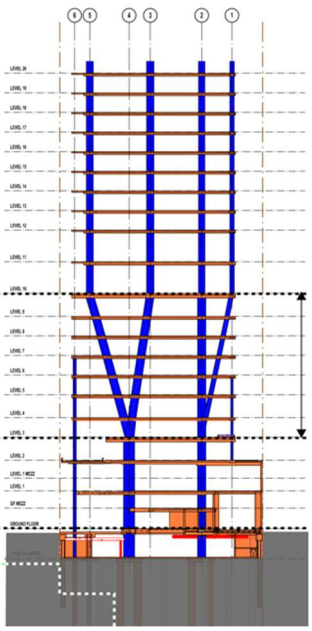
2.3 Inclined Column Locations

Two changes were made to the inclined columns which are used to direct loads away from the cavern structure, namely:

1) They were positioned further down the building, from level 6-14 to level 3-10. This was done to prevent extensive back-propping at height and provides early access to the typical floors to improve the programme.
2) The angle of the columns was also changed as part of the grid re-alignment. This helped balance the gravity loads and avoid any large net tension/diaphragm forces in the floor plates, and large overturning moments in the core by inclining more columns away from Albert Street than towards.



Previous Structural Grid



Current Structural Grid

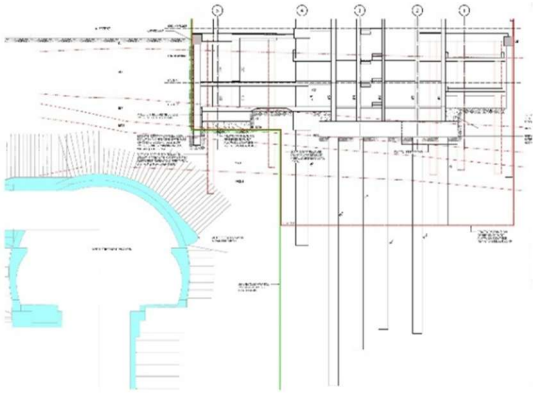
2.4 Post Tension Slabs

The use of post tension slabs is a very economical and common type of floor plate construction. It has several advantages that were introduced into the project:

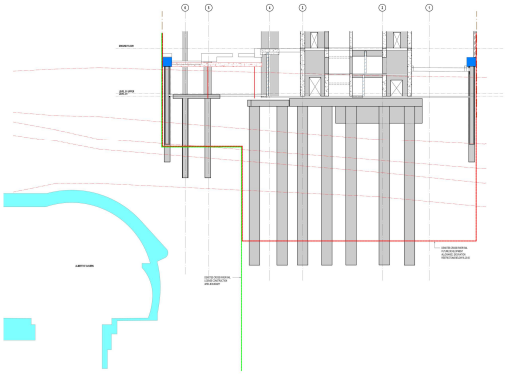
1) Ability to provide large internal spans and edge cantilevers to position columns to still allow for easy desk space planning.
2) Thinner structural zone within the floor plates to reduce floor to floor heights.
3) Omit the need for cast-in connections into the core walls to support steel beams. These are difficult to build accurately on site and induce large local stresses on the core.

2.5 Basement Changes

The number of levels in the basement was changed from 2 levels to 1 level. This was achieved by moving plant areas out of the basement, and a reduction of total car parking numbers. The main advantage of this is reduced surcharge load on the retention piles around the perimeter of the basement, and less soil excavation.



Previous Basement Levels

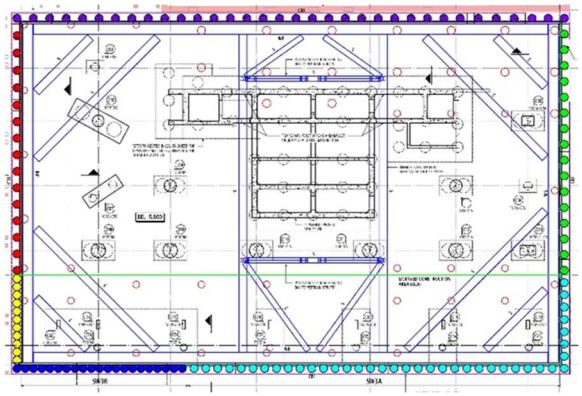


Current Basement Levels

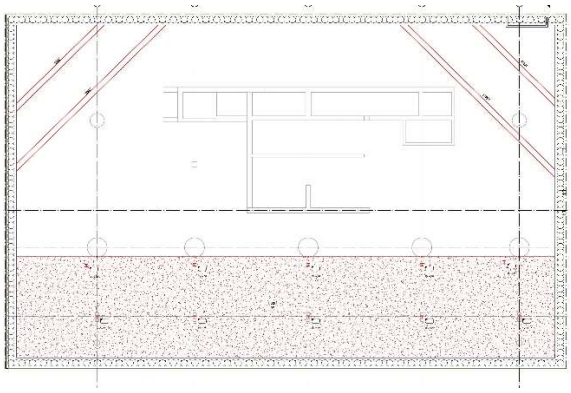
2.6 Retention Propping

The temporary propping of the retention wall was changed by using a *Strutting Slab* at ground floor on the SW boundary, and internal steel props only on the North and East corner to provide restraint to the capping beam.

The strutting slab provides a very stiff plate to help reduce lateral deflections and provides a suitable construction deck required in CBD construction.



Previous Retention Propping



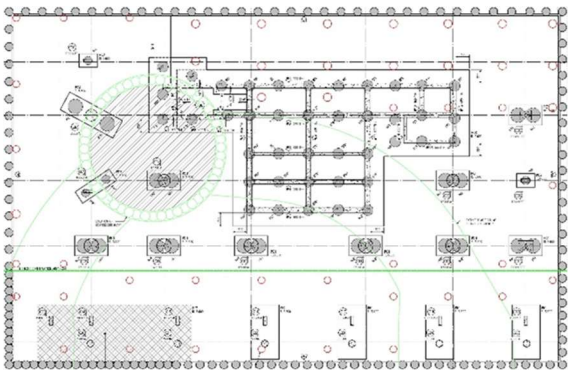
Current Retention Propping

3 Piled Foundations

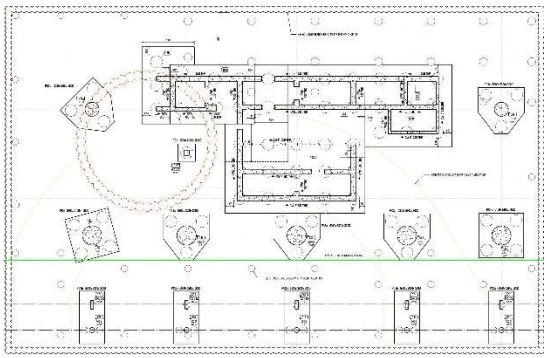
3.1 Column Piles

The piled foundations under the columns were redesigned for the following reasons:

1) To allow for the additional weight of the reinforced concrete frame building.
2) To provide an increased number of smaller diameter piles under the columns to provide greater flexibility to avoid/mitigate the underground obstructions.



Previous Pile Layout



Current Pile Layout

3.2 Core Piles

The core pile arrangement and diameter remained unchanged, mainly because the core layout was the same as the previous scheme.

3.3 Cavern Piles

Piles were introduced under the cavern shelf columns, but the depth still limited to the -12.00 RL level. The previous design had pad footings founded in the RSF material, however the single level basement is now founded in the weaker ALF material, making pad footings not applicable.

The loads, however were still reasonably matched to the previous scheme by limiting the height of the gridline 5 columns from level 8 to 6. The G+0.7Q loads case over the Cavern shelf = 120kPa. This is well below the PSTR load case of 375kPa.

4 Pile Loads

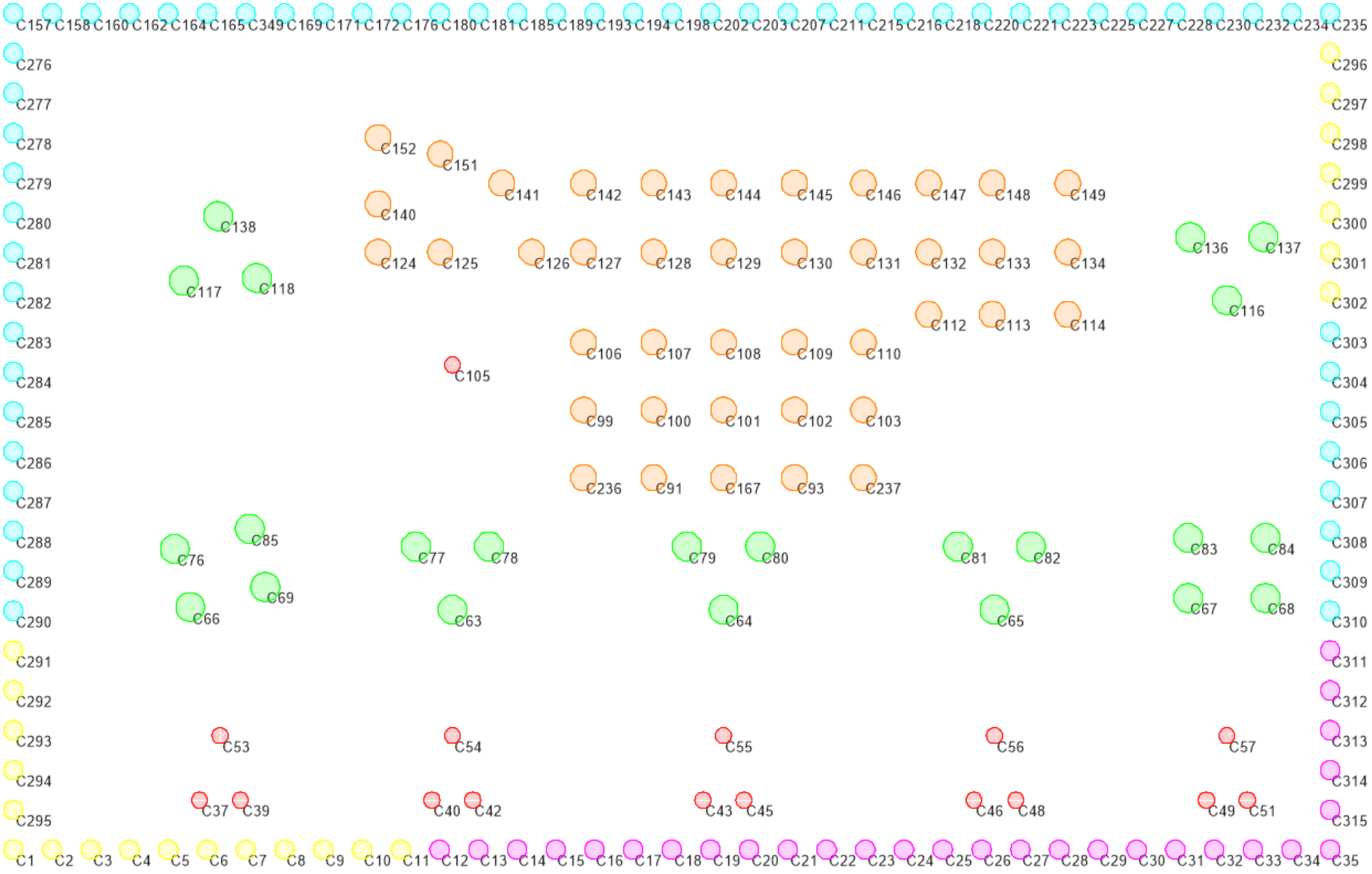
Hera provided updated building pile and retention pile loads as per schedule 24111-HERA-C—PILE LOADS, and 24111-SK019-A-PILE LOADS KEYPLAN.

All load combinations and spring stiffness, (axial and lateral), have been included in the above drawings.

Pile coordinates have also been issued on 24111-SK030-A-PILE COORDINATES KEY PLAN.

Refer to Appendix A for all pile loads.

5 Appendix A – Pile Loads



HERA ENGINEERING

24111-SK019-A-PILE LOADS KEYPLAN

27 Feb 26 GM

SECANT PILE WALL - 900DIA @ 1.8m C/C
STIFFNESS: AXIAL 200 MN/m/m LATERAL 50MN/m/m

SECANT PILE WALL - 900DIA @ 1.8m C/C
STIFFNESS: AXIAL 800 MN/m/m LATERAL 50MN/m/m

SECANT PILE WALL - 900DIA @ 1.8m C/C
STIFFNESS: AXIAL 1000 MN/m/m LATERAL 50MN/m/m

BORED PILE - 1350DIA
STIFFNESS: AXIAL 7500 MN/m LATERAL 135 MN/m

BORED PILE - 1200DIA
STIFFNESS: AXIAL 5300 MN/m LATERAL 120 MN/m

BORED PILE - 750DIA
STIFFNESS: AXIAL 1500 MN/m LATERAL 75 MN/m

NOTES

1) Shear (V) on piles can act in any direction, concurrently with axial loads.
2) Negative axial loads denote compression, in the direction of gravity. Positive axial loads denote tension.
3) Ultimate combinations to be used are:
    1.35Gmax
    1.2Gmax + 1.5Q
    0.9Gmin + Wt
    1.2Gmax + 0.4Q + Wc
    Gmin+ 0.3Q + EQt
    1) Gmax + 0.3Q + EQc
4) Suggested service combinations:
    Gmax + 0.7Q (short term)
    Gmax + 0.4Q (long term)
    Gmin + 0.4Q + 0.5Wt
    Gmax + 0.4Q + 0.5Wc
    Gmin+ 0.3Q + 0.5EQt
    Gmax + 0.3Q + 0.5EQc
5) All piles to be designed so that their shear capacity is larger than either the design combination ultimate shear action, or a shear equal to 2.5% of the axial load applied in any direction (whichever is larger). Any shear force due to tolerance on pile location or verticality must be added to the pile design shear.
6) All piles to be designed so that their moment capacity is larger than either the design combination ultimate moment action, or a moment equal to the design combination axial load applied with an eccentricity of 5% of the pile dimension in both principal axis simultaneously (whichever is larger). Any additional eccentricity due to tolerance on pile location or verticality must be added to the pile design
7) To be read in conjuction with 24111-SK019-A-PILE LOADS KEYPLAN
8) Pile stiffness (axial and lateral) assumed in our model is shown on the key plan - pile designer to advise if any of these should be changed. All loads are based on these values only, no sensitivity has been done at this stage. If sensitivity analysis is required, pile designer to advise upperbound and lowerbound stiffnesses (axial

Element	Action	Load Case	P (kN)	V (kN)
C1	Dead max	Gmax	-491	38
C1	Dead min	Gmin	-373	28
C1	Live	Q	-67	10
C1	Earthquake Tens	EQt	457	315
C1	Earthquake Comp	EQc	-457	315
C1	Wind Tens	Wt	486	261
C1	Wind Comp	Wc	-597	261
C2	Dead max	Gmax	-436	13
C2	Dead min	Gmin	-333	9
C2	Live	Q	-63	6
C2	Earthquake Tens	EQt	305	236
C2	Earthquake Comp	EQc	-305	236
C2	Wind Tens	Wt	330	110
C2	Wind Comp	Wc	-405	110
C3	Dead max	Gmax	-406	16
C3	Dead min	Gmin	-311	12
C3	Live	Q	-65	8
C3	Earthquake Tens	EQt	199	245
C3	Earthquake Comp	EQc	-199	245
C3	Wind Tens	Wt	220	106
C3	Wind Comp	Wc	-270	106
C4	Dead max	Gmax	-396	26
C4	Dead min	Gmin	-303	19
C4	Live	Q	-71	11
C4	Earthquake Tens	EQt	127	252
C4	Earthquake Comp	EQc	-127	252
C4	Wind Tens	Wt	147	106
C4	Wind Comp	Wc	-180	106
C5	Dead max	Gmax	-402	39
C5	Dead min	Gmin	-306	28
C5	Live	Q	-81	15
C5	Earthquake Tens	EQt	81	256
C5	Earthquake Comp	EQc	-81	256
C5	Wind Tens	Wt	102	112
C5	Wind Comp	Wc	-126	112
C6	Dead max	Gmax	-405	49
C6	Dead min	Gmin	-307	34
C6	Live	Q	-89	19
C6	Earthquake Tens	EQt	55	258
C6	Earthquake Comp	EQc	-55	258
C6	Wind Tens	Wt	77	115
C6	Wind Comp	Wc	-94	115
C7	Dead max	Gmax	-392	49
C7	Dead min	Gmin	-297	35
C7	Live	Q	-96	22
C7	Earthquake Tens	EQt	37	260
C7	Earthquake Comp	EQc	-37	260

C7	Wind Tens	Wt	56	117
C7	Wind Comp	Wc	-69	117
C8	Dead max	Gmax	-365	45
C8	Dead min	Gmin	-276	32
C8	Live	Q	-98	27
C8	Earthquake Tens	EQt	23	265
C8	Earthquake Comp	EQc	-23	265
C8	Wind Tens	Wt	38	119
C8	Wind Comp	Wc	-47	119
C9	Dead max	Gmax	-333	44
C9	Dead min	Gmin	-251	31
C9	Live	Q	-96	30
C9	Earthquake Tens	EQt	14	267
C9	Earthquake Comp	EQc	-14	267
C9	Wind Tens	Wt	26	120
C9	Wind Comp	Wc	-32	120
C10	Dead max	Gmax	-294	45
C10	Dead min	Gmin	-221	31
C10	Live	Q	-84	29
C10	Earthquake Tens	EQt	11	268
C10	Earthquake Comp	EQc	-11	268
C10	Wind Tens	Wt	21	121
C10	Wind Comp	Wc	-25	121
C11	Dead max	Gmax	-243	48
C11	Dead min	Gmin	-181	33
C11	Live	Q	-66	24
C11	Earthquake Tens	EQt	12	268
C11	Earthquake Comp	EQc	-12	268
C11	Wind Tens	Wt	20	121
C11	Wind Comp	Wc	-23	121
C12	Dead max	Gmax	-759	50
C12	Dead min	Gmin	-561	35
C12	Live	Q	-186	19
C12	Earthquake Tens	EQt	43	265
C12	Earthquake Comp	EQc	-43	265
C12	Wind Tens	Wt	76	120
C12	Wind Comp	Wc	-91	120
C13	Dead max	Gmax	-578	49
C13	Dead min	Gmin	-425	34
C13	Live	Q	-141	20
C13	Earthquake Tens	EQt	33	267
C13	Earthquake Comp	EQc	-33	267
C13	Wind Tens	Wt	61	120
C13	Wind Comp	Wc	-75	120
C14	Dead max	Gmax	-463	54
C14	Dead min	Gmin	-339	37
C14	Live	Q	-128	30
C14	Earthquake Tens	EQt	13	269

C14	Earthquake Comp	EQc	-13	269
C14	Wind Tens	Wt	27	120
C14	Wind Comp	Wc	-34	120
C15	Dead max	Gmax	-436	61
C15	Dead min	Gmin	-315	41
C15	Live	Q	-136	37
C15	Earthquake Tens	EQt	7	270
C15	Earthquake Comp	EQc	-7	270
C15	Wind Tens	Wt	9	119
C15	Wind Comp	Wc	-11	119
C16	Dead max	Gmax	-432	64
C16	Dead min	Gmin	-305	41
C16	Live	Q	-136	38
C16	Earthquake Tens	EQt	10	269
C16	Earthquake Comp	EQc	-10	269
C16	Wind Tens	Wt	4	118
C16	Wind Comp	Wc	-4	118
C17	Dead max	Gmax	-417	57
C17	Dead min	Gmin	-288	36
C17	Live	Q	-120	33
C17	Earthquake Tens	EQt	34	267
C17	Earthquake Comp	EQc	-34	267
C17	Wind Tens	Wt	16	116
C17	Wind Comp	Wc	-15	116
C18	Dead max	Gmax	-385	43
C18	Dead min	Gmin	-264	26
C18	Live	Q	-94	23
C18	Earthquake Tens	EQt	6	263
C18	Earthquake Comp	EQc	-6	263
C18	Wind Tens	Wt	7	114
C18	Wind Comp	Wc	-6	114
C19	Dead max	Gmax	-361	34
C19	Dead min	Gmin	-247	19
C19	Live	Q	-76	16
C19	Earthquake Tens	EQt	33	267
C19	Earthquake Comp	EQc	-33	267
C19	Wind Tens	Wt	15	114
C19	Wind Comp	Wc	-16	114
C20	Dead max	Gmax	-368	36
C20	Dead min	Gmin	-253	21
C20	Live	Q	-81	18
C20	Earthquake Tens	EQt	8	269
C20	Earthquake Comp	EQc	-8	269
C20	Wind Tens	Wt	6	114
C20	Wind Comp	Wc	-6	114
C21	Dead max	Gmax	-401	47
C21	Dead min	Gmin	-277	29
C21	Live	Q	-104	26

C21	Earthquake Tens	EQt	6	269
C21	Earthquake Comp	EQc	-6	269
C21	Wind Tens	Wt	7	113
C21	Wind Comp	Wc	-6	113
C22	Dead max	Gmax	-427	58
C22	Dead min	Gmin	-299	37
C22	Live	Q	-128	35
C22	Earthquake Tens	EQt	13	268
C22	Earthquake Comp	EQc	-13	268
C22	Wind Tens	Wt	7	114
C22	Wind Comp	Wc	-6	114
C23	Dead max	Gmax	-431	61
C23	Dead min	Gmin	-309	40
C23	Live	Q	-139	38
C23	Earthquake Tens	EQt	27	266
C23	Earthquake Comp	EQc	-27	266
C23	Wind Tens	Wt	12	114
C23	Wind Comp	Wc	-11	114
C24	Dead max	Gmax	-425	58
C24	Dead min	Gmin	-311	39
C24	Live	Q	-131	35
C24	Earthquake Tens	EQt	22	264
C24	Earthquake Comp	EQc	-22	264
C24	Wind Tens	Wt	14	115
C24	Wind Comp	Wc	-16	115
C25	Dead max	Gmax	-432	54
C25	Dead min	Gmin	-319	37
C25	Live	Q	-113	27
C25	Earthquake Tens	EQt	30	267
C25	Earthquake Comp	EQc	-30	267
C25	Wind Tens	Wt	33	118
C25	Wind Comp	Wc	-39	118
C26	Dead max	Gmax	-481	52
C26	Dead min	Gmin	-354	36
C26	Live	Q	-111	20
C26	Earthquake Tens	EQt	27	268
C26	Earthquake Comp	EQc	-27	268
C26	Wind Tens	Wt	53	121
C26	Wind Comp	Wc	-66	121
C27	Dead max	Gmax	-471	51
C27	Dead min	Gmin	-347	35
C27	Live	Q	-110	21
C27	Earthquake Tens	EQt	23	267
C27	Earthquake Comp	EQc	-23	267
C27	Wind Tens	Wt	46	122
C27	Wind Comp	Wc	-58	122
C28	Dead max	Gmax	-442	50
C28	Dead min	Gmin	-326	34

C28	Live	Q	-120	26
C28	Earthquake Tens	EQt	22	265
C28	Earthquake Comp	EQc	-22	265
C28	Wind Tens	Wt	32	121
C28	Wind Comp	Wc	-38	121
C29	Dead max	Gmax	-418	51
C29	Dead min	Gmin	-313	36
C29	Live	Q	-129	32
C29	Earthquake Tens	EQt	12	260
C29	Earthquake Comp	EQc	-12	260
C29	Wind Tens	Wt	18	119
C29	Wind Comp	Wc	-21	119
C30	Dead max	Gmax	-419	53
C30	Dead min	Gmin	-315	38
C30	Live	Q	-129	32
C30	Earthquake Tens	EQt	42	260
C30	Earthquake Comp	EQc	-42	260
C30	Wind Tens	Wt	20	119
C30	Wind Comp	Wc	-23	119
C31	Dead max	Gmax	-432	54
C31	Dead min	Gmin	-323	38
C31	Live	Q	-114	27
C31	Earthquake Tens	EQt	35	259
C31	Earthquake Comp	EQc	-35	259
C31	Wind Tens	Wt	44	119
C31	Wind Comp	Wc	-53	119
C32	Dead max	Gmax	-476	50
C32	Dead min	Gmin	-350	35
C32	Live	Q	-105	19
C32	Earthquake Tens	EQt	68	256
C32	Earthquake Comp	EQc	-68	256
C32	Wind Tens	Wt	92	117
C32	Wind Comp	Wc	-113	117
C33	Dead max	Gmax	-442	37
C33	Dead min	Gmin	-323	25
C33	Live	Q	-84	12
C33	Earthquake Tens	EQt	137	249
C33	Earthquake Comp	EQc	-137	249
C33	Wind Tens	Wt	160	113
C33	Wind Comp	Wc	-191	113
C34	Dead max	Gmax	-376	22
C34	Dead min	Gmin	-276	15
C34	Live	Q	-63	7
C34	Earthquake Tens	EQt	290	239
C34	Earthquake Comp	EQc	-290	239
C34	Wind Tens	Wt	296	111
C34	Wind Comp	Wc	-345	111
C35	Dead max	Gmax	-336	37

C35	Dead min	Gmin	-248	26
C35	Live	Q	-48	10
C35	Earthquake Tens	EQt	626	321
C35	Earthquake Comp	EQc	-626	321
C35	Wind Tens	Wt	613	312
C35	Wind Comp	Wc	-710	312
C157	Dead max	Gmax	-326	45
C157	Dead min	Gmin	-267	34
C157	Live	Q	-14	8
C157	Earthquake Tens	EQt	771	394
C157	Earthquake Comp	EQc	-771	394
C157	Wind Tens	Wt	1038	274
C157	Wind Comp	Wc	-920	274
C158	Dead max	Gmax	-536	43
C158	Dead min	Gmin	-419	33
C158	Live	Q	-67	9
C158	Earthquake Tens	EQt	397	324
C158	Earthquake Comp	EQc	-397	324
C158	Wind Tens	Wt	578	100
C158	Wind Comp	Wc	-511	100
C160	Dead max	Gmax	-730	47
C160	Dead min	Gmin	-560	36
C160	Live	Q	-124	11
C160	Earthquake Tens	EQt	195	334
C160	Earthquake Comp	EQc	-195	334
C160	Wind Tens	Wt	328	104
C160	Wind Comp	Wc	-289	104
C162	Dead max	Gmax	-875	49
C162	Dead min	Gmin	-666	38
C162	Live	Q	-165	12
C162	Earthquake Tens	EQt	102	341
C162	Earthquake Comp	EQc	-102	341
C162	Wind Tens	Wt	216	111
C162	Wind Comp	Wc	-185	111
C164	Dead max	Gmax	-1033	48
C164	Dead min	Gmin	-783	37
C164	Live	Q	-202	12
C164	Earthquake Tens	EQt	78	346
C164	Earthquake Comp	EQc	-78	346
C164	Wind Tens	Wt	199	117
C164	Wind Comp	Wc	-167	117
C165	Dead max	Gmax	-1170	44
C165	Dead min	Gmin	-884	34
C165	Live	Q	-228	12
C165	Earthquake Tens	EQt	67	347
C165	Earthquake Comp	EQc	-67	347
C165	Wind Tens	Wt	243	119
C165	Wind Comp	Wc	-205	119

C169	Dead max	Gmax	-961	35
C169	Dead min	Gmin	-732	27
C169	Live	Q	-185	11
C169	Earthquake Tens	EQt	67	356
C169	Earthquake Comp	EQc	-67	356
C169	Wind Tens	Wt	233	123
C169	Wind Comp	Wc	-195	123
C171	Dead max	Gmax	-868	30
C171	Dead min	Gmin	-665	23
C171	Live	Q	-163	11
C171	Earthquake Tens	EQt	71	361
C171	Earthquake Comp	EQc	-71	361
C171	Wind Tens	Wt	285	125
C171	Wind Comp	Wc	-242	125
C172	Dead max	Gmax	-791	26
C172	Dead min	Gmin	-612	19
C172	Live	Q	-149	11
C172	Earthquake Tens	EQt	101	362
C172	Earthquake Comp	EQc	-101	362
C172	Wind Tens	Wt	404	124
C172	Wind Comp	Wc	-346	124
C176	Dead max	Gmax	-731	22
C176	Dead min	Gmin	-571	17
C176	Live	Q	-148	13
C176	Earthquake Tens	EQt	114	361
C176	Earthquake Comp	EQc	-114	361
C176	Wind Tens	Wt	457	120
C176	Wind Comp	Wc	-387	120
C180	Dead max	Gmax	-718	21
C180	Dead min	Gmin	-564	16
C180	Live	Q	-163	16
C180	Earthquake Tens	EQt	122	360
C180	Earthquake Comp	EQc	-122	360
C180	Wind Tens	Wt	479	115
C180	Wind Comp	Wc	-403	115
C181	Dead max	Gmax	-690	19
C181	Dead min	Gmin	-543	15
C181	Live	Q	-173	18
C181	Earthquake Tens	EQt	102	364
C181	Earthquake Comp	EQc	-102	364
C181	Wind Tens	Wt	336	112
C181	Wind Comp	Wc	-288	112
C185	Dead max	Gmax	-655	21
C185	Dead min	Gmin	-516	16
C185	Live	Q	-175	20
C185	Earthquake Tens	EQt	76	368
C185	Earthquake Comp	EQc	-76	368
C185	Wind Tens	Wt	247	112

C185	Wind Comp	Wc	-211	112
C189	Dead max	Gmax	-643	21
C189	Dead min	Gmin	-507	16
C189	Live	Q	-178	21
C189	Earthquake Tens	EQt	36	371
C189	Earthquake Comp	EQc	-36	371
C189	Wind Tens	Wt	193	112
C189	Wind Comp	Wc	-157	112
C193	Dead max	Gmax	-648	21
C193	Dead min	Gmin	-512	16
C193	Live	Q	-182	21
C193	Earthquake Tens	EQt	30	373
C193	Earthquake Comp	EQc	-30	373
C193	Wind Tens	Wt	178	111
C193	Wind Comp	Wc	-145	111
C194	Dead max	Gmax	-638	21
C194	Dead min	Gmin	-504	16
C194	Live	Q	-185	21
C194	Earthquake Tens	EQt	35	370
C194	Earthquake Comp	EQc	-35	370
C194	Wind Tens	Wt	165	109
C194	Wind Comp	Wc	-135	109
C198	Dead max	Gmax	-618	20
C198	Dead min	Gmin	-489	15
C198	Live	Q	-191	20
C198	Earthquake Tens	EQt	27	365
C198	Earthquake Comp	EQc	-27	365
C198	Wind Tens	Wt	143	105
C198	Wind Comp	Wc	-116	105
C202	Dead max	Gmax	-629	20
C202	Dead min	Gmin	-498	15
C202	Live	Q	-208	20
C202	Earthquake Tens	EQt	31	372
C202	Earthquake Comp	EQc	-31	372
C202	Wind Tens	Wt	140	106
C202	Wind Comp	Wc	-113	106
C203	Dead max	Gmax	-634	20
C203	Dead min	Gmin	-503	15
C203	Live	Q	-226	20
C203	Earthquake Tens	EQt	32	375
C203	Earthquake Comp	EQc	-32	375
C203	Wind Tens	Wt	147	106
C203	Wind Comp	Wc	-119	106
C207	Dead max	Gmax	-618	21
C207	Dead min	Gmin	-490	15
C207	Live	Q	-230	20
C207	Earthquake Tens	EQt	37	375
C207	Earthquake Comp	EQc	-37	375

C207	Wind Tens	Wt	149	104
C207	Wind Comp	Wc	-120	104
C211	Dead max	Gmax	-609	20
C211	Dead min	Gmin	-483	15
C211	Live	Q	-232	20
C211	Earthquake Tens	EQt	54	373
C211	Earthquake Comp	EQc	-54	373
C211	Wind Tens	Wt	175	103
C211	Wind Comp	Wc	-143	103
C215	Dead max	Gmax	-612	20
C215	Dead min	Gmin	-486	15
C215	Live	Q	-236	19
C215	Earthquake Tens	EQt	81	370
C215	Earthquake Comp	EQc	-81	370
C215	Wind Tens	Wt	243	103
C215	Wind Comp	Wc	-197	103
C216	Dead max	Gmax	-583	20
C216	Dead min	Gmin	-468	15
C216	Live	Q	-225	19
C216	Earthquake Tens	EQt	102	366
C216	Earthquake Comp	EQc	-102	366
C216	Wind Tens	Wt	385	104
C216	Wind Comp	Wc	-313	104
C218	Dead max	Gmax	-537	21
C218	Dead min	Gmin	-438	15
C218	Live	Q	-205	20
C218	Earthquake Tens	EQt	171	368
C218	Earthquake Comp	EQc	-171	368
C218	Wind Tens	Wt	658	107
C218	Wind Comp	Wc	-536	107
C220	Dead max	Gmax	-499	21
C220	Dead min	Gmin	-418	15
C220	Live	Q	-187	20
C220	Earthquake Tens	EQt	308	369
C220	Earthquake Comp	EQc	-308	369
C220	Wind Tens	Wt	1166	110
C220	Wind Comp	Wc	-950	110
C221	Dead max	Gmax	-425	22
C221	Dead min	Gmin	-379	16
C221	Live	Q	-147	21
C221	Earthquake Tens	EQt	593	368
C221	Earthquake Comp	EQc	-593	368
C221	Wind Tens	Wt	2151	108
C221	Wind Comp	Wc	-1755	108
C223	Dead max	Gmax	-340	24
C223	Dead min	Gmin	-334	18
C223	Live	Q	-98	23
C223	Earthquake Tens	EQt	959	363

C223	Earthquake Comp	EQc	-959	363
C223	Wind Tens	Wt	3425	102
C223	Wind Comp	Wc	-2794	102
C225	Dead max	Gmax	-418	29
C225	Dead min	Gmin	-381	21
C225	Live	Q	-107	26
C225	Earthquake Tens	EQt	844	355
C225	Earthquake Comp	EQc	-844	355
C225	Wind Tens	Wt	3038	132
C225	Wind Comp	Wc	-2479	132
C227	Dead max	Gmax	-627	35
C227	Dead min	Gmin	-511	25
C227	Live	Q	-156	30
C227	Earthquake Tens	EQt	483	355
C227	Earthquake Comp	EQc	-483	355
C227	Wind Tens	Wt	1765	155
C227	Wind Comp	Wc	-1440	155
C228	Dead max	Gmax	-813	36
C228	Dead min	Gmin	-633	26
C228	Live	Q	-195	31
C228	Earthquake Tens	EQt	298	353
C228	Earthquake Comp	EQc	-298	353
C228	Wind Tens	Wt	1021	152
C228	Wind Comp	Wc	-834	152
C230	Dead max	Gmax	-940	32
C230	Dead min	Gmin	-717	24
C230	Live	Q	-211	28
C230	Earthquake Tens	EQt	211	345
C230	Earthquake Comp	EQc	-211	345
C230	Wind Tens	Wt	685	136
C230	Wind Comp	Wc	-559	136
C232	Dead max	Gmax	-983	24
C232	Dead min	Gmin	-744	19
C232	Live	Q	-208	21
C232	Earthquake Tens	EQt	220	335
C232	Earthquake Comp	EQc	-220	335
C232	Wind Tens	Wt	552	126
C232	Wind Comp	Wc	-451	126
C234	Dead max	Gmax	-875	18
C234	Dead min	Gmin	-664	14
C234	Live	Q	-171	11
C234	Earthquake Tens	EQt	356	322
C234	Earthquake Comp	EQc	-356	322
C234	Wind Tens	Wt	542	120
C234	Wind Comp	Wc	-444	120
C235	Dead max	Gmax	-680	19
C235	Dead min	Gmin	-525	14
C235	Live	Q	-128	5

C235	Earthquake Tens	EQt	686	385
C235	Earthquake Comp	EQc	-686	385
C235	Wind Tens	Wt	793	316
C235	Wind Comp	Wc	-652	316
C276	Dead max	Gmax	-529	32
C276	Dead min	Gmin	-412	23
C276	Live	Q	-65	6
C276	Earthquake Tens	EQt	338	288
C276	Earthquake Comp	EQc	-338	288
C276	Wind Tens	Wt	415	290
C276	Wind Comp	Wc	-372	290
C277	Dead max	Gmax	-643	45
C277	Dead min	Gmin	-493	33
C277	Live	Q	-106	11
C277	Earthquake Tens	EQt	211	299
C277	Earthquake Comp	EQc	-211	299
C277	Wind Tens	Wt	317	308
C277	Wind Comp	Wc	-280	308
C278	Dead max	Gmax	-762	58
C278	Dead min	Gmin	-577	43
C278	Live	Q	-133	16
C278	Earthquake Tens	EQt	71	307
C278	Earthquake Comp	EQc	-71	307
C278	Wind Tens	Wt	25	322
C278	Wind Comp	Wc	-29	322
C279	Dead max	Gmax	-792	63
C279	Dead min	Gmin	-598	47
C279	Live	Q	-130	17
C279	Earthquake Tens	EQt	21	314
C279	Earthquake Comp	EQc	-21	314
C279	Wind Tens	Wt	7	336
C279	Wind Comp	Wc	-8	336
C280	Dead max	Gmax	-747	61
C280	Dead min	Gmin	-563	45
C280	Live	Q	-110	17
C280	Earthquake Tens	EQt	36	314
C280	Earthquake Comp	EQc	-36	314
C280	Wind Tens	Wt	66	336
C280	Wind Comp	Wc	-57	336
C281	Dead max	Gmax	-842	56
C281	Dead min	Gmin	-628	41
C281	Live	Q	-123	16
C281	Earthquake Tens	EQt	143	313
C281	Earthquake Comp	EQc	-143	313
C281	Wind Tens	Wt	186	338
C281	Wind Comp	Wc	-217	338
C282	Dead max	Gmax	-800	53
C282	Dead min	Gmin	-593	39

C282	Live	Q	-101	16
C282	Earthquake Tens	EQt	59	309
C282	Earthquake Comp	EQc	-59	309
C282	Wind Tens	Wt	86	336
C282	Wind Comp	Wc	-73	336
C283	Dead max	Gmax	-814	54
C283	Dead min	Gmin	-605	39
C283	Live	Q	-107	17
C283	Earthquake Tens	EQt	33	315
C283	Earthquake Comp	EQc	-33	315
C283	Wind Tens	Wt	13	342
C283	Wind Comp	Wc	-11	342
C284	Dead max	Gmax	-886	58
C284	Dead min	Gmin	-660	42
C284	Live	Q	-118	18
C284	Earthquake Tens	EQt	28	321
C284	Earthquake Comp	EQc	-28	321
C284	Wind Tens	Wt	35	351
C284	Wind Comp	Wc	-38	351
C285	Dead max	Gmax	-839	60
C285	Dead min	Gmin	-629	43
C285	Live	Q	-108	19
C285	Earthquake Tens	EQt	88	321
C285	Earthquake Comp	EQc	-88	321
C285	Wind Tens	Wt	137	349
C285	Wind Comp	Wc	-116	349
C286	Dead max	Gmax	-902	59
C286	Dead min	Gmin	-676	43
C286	Live	Q	-123	18
C286	Earthquake Tens	EQt	74	320
C286	Earthquake Comp	EQc	-74	320
C286	Wind Tens	Wt	102	348
C286	Wind Comp	Wc	-118	348
C287	Dead max	Gmax	-864	58
C287	Dead min	Gmin	-651	42
C287	Live	Q	-113	17
C287	Earthquake Tens	EQt	14	320
C287	Earthquake Comp	EQc	-14	320
C287	Wind Tens	Wt	20	348
C287	Wind Comp	Wc	-18	348
C288	Dead max	Gmax	-806	53
C288	Dead min	Gmin	-611	38
C288	Live	Q	-110	15
C288	Earthquake Tens	EQt	25	311
C288	Earthquake Comp	EQc	-25	311
C288	Wind Tens	Wt	9	337
C288	Wind Comp	Wc	-10	337
C289	Dead max	Gmax	-876	46

C289	Dead min	Gmin	-667	32
C289	Live	Q	-134	12
C289	Earthquake Tens	EQt	100	303
C289	Earthquake Comp	EQc	-100	303
C289	Wind Tens	Wt	128	328
C289	Wind Comp	Wc	-149	328
C290	Dead max	Gmax	-876	38
C290	Dead min	Gmin	-675	26
C290	Live	Q	-144	10
C290	Earthquake Tens	EQt	68	304
C290	Earthquake Comp	EQc	-68	304
C290	Wind Tens	Wt	100	327
C290	Wind Comp	Wc	-88	327
C291	Dead max	Gmax	-322	32
C291	Dead min	Gmin	-247	23
C291	Live	Q	-56	9
C291	Earthquake Tens	EQt	43	300
C291	Earthquake Comp	EQc	-43	300
C291	Wind Tens	Wt	54	321
C291	Wind Comp	Wc	-65	321
C292	Dead max	Gmax	-380	34
C292	Dead min	Gmin	-292	24
C292	Live	Q	-65	10
C292	Earthquake Tens	EQt	70	296
C292	Earthquake Comp	EQc	-70	296
C292	Wind Tens	Wt	80	316
C292	Wind Comp	Wc	-99	316
C293	Dead max	Gmax	-413	36
C293	Dead min	Gmin	-317	26
C293	Live	Q	-66	10
C293	Earthquake Tens	EQt	105	284
C293	Earthquake Comp	EQc	-105	284
C293	Wind Tens	Wt	110	299
C293	Wind Comp	Wc	-134	299
C294	Dead max	Gmax	-463	37
C294	Dead min	Gmin	-353	27
C294	Live	Q	-71	10
C294	Earthquake Tens	EQt	210	271
C294	Earthquake Comp	EQc	-210	271
C294	Wind Tens	Wt	238	283
C294	Wind Comp	Wc	-292	283
C295	Dead max	Gmax	-475	40
C295	Dead min	Gmin	-361	29
C295	Live	Q	-65	10
C295	Earthquake Tens	EQt	299	258
C295	Earthquake Comp	EQc	-299	258
C295	Wind Tens	Wt	319	267
C295	Wind Comp	Wc	-391	267

C296	Dead max	Gmax	-245	19
C296	Dead min	Gmin	-190	13
C296	Live	Q	-60	13
C296	Earthquake Tens	EQt	118	271
C296	Earthquake Comp	EQc	-118	271
C296	Wind Tens	Wt	137	323
C296	Wind Comp	Wc	-112	323
C297	Dead max	Gmax	-296	33
C297	Dead min	Gmin	-228	24
C297	Live	Q	-80	25
C297	Earthquake Tens	EQt	73	279
C297	Earthquake Comp	EQc	-73	279
C297	Wind Tens	Wt	79	338
C297	Wind Comp	Wc	-65	338
C298	Dead max	Gmax	-337	44
C298	Dead min	Gmin	-258	32
C298	Live	Q	-93	31
C298	Earthquake Tens	EQt	43	285
C298	Earthquake Comp	EQc	-43	285
C298	Wind Tens	Wt	44	348
C298	Wind Comp	Wc	-36	348
C299	Dead max	Gmax	-366	45
C299	Dead min	Gmin	-278	33
C299	Live	Q	-95	26
C299	Earthquake Tens	EQt	24	288
C299	Earthquake Comp	EQc	-24	288
C299	Wind Tens	Wt	25	355
C299	Wind Comp	Wc	-21	355
C300	Dead max	Gmax	-378	46
C300	Dead min	Gmin	-285	33
C300	Live	Q	-88	18
C300	Earthquake Tens	EQt	16	288
C300	Earthquake Comp	EQc	-16	288
C300	Wind Tens	Wt	8	357
C300	Wind Comp	Wc	-8	357
C301	Dead max	Gmax	-350	53
C301	Dead min	Gmin	-264	38
C301	Live	Q	-74	16
C301	Earthquake Tens	EQt	22	287
C301	Earthquake Comp	EQc	-22	287
C301	Wind Tens	Wt	13	357
C301	Wind Comp	Wc	-15	357
C302	Dead max	Gmax	-298	59
C302	Dead min	Gmin	-225	43
C302	Live	Q	-58	16
C302	Earthquake Tens	EQt	9	283
C302	Earthquake Comp	EQc	-9	283
C302	Wind Tens	Wt	3	353

C302	Wind Comp	Wc	-3	353
C303	Dead max	Gmax	-816	64
C303	Dead min	Gmin	-616	46
C303	Live	Q	-159	17
C303	Earthquake Tens	EQt	36	290
C303	Earthquake Comp	EQc	-36	290
C303	Wind Tens	Wt	48	362
C303	Wind Comp	Wc	-39	362
C304	Dead max	Gmax	-647	66
C304	Dead min	Gmin	-493	47
C304	Live	Q	-126	19
C304	Earthquake Tens	EQt	20	293
C304	Earthquake Comp	EQc	-20	293
C304	Wind Tens	Wt	19	367
C304	Wind Comp	Wc	-16	367
C305	Dead max	Gmax	-597	63
C305	Dead min	Gmin	-456	46
C305	Live	Q	-119	19
C305	Earthquake Tens	EQt	14	295
C305	Earthquake Comp	EQc	-14	295
C305	Wind Tens	Wt	12	369
C305	Wind Comp	Wc	-10	369
C306	Dead max	Gmax	-561	65
C306	Dead min	Gmin	-429	47
C306	Live	Q	-107	19
C306	Earthquake Tens	EQt	13	294
C306	Earthquake Comp	EQc	-13	294
C306	Wind Tens	Wt	7	368
C306	Wind Comp	Wc	-8	368
C307	Dead max	Gmax	-503	72
C307	Dead min	Gmin	-384	52
C307	Live	Q	-82	20
C307	Earthquake Tens	EQt	26	293
C307	Earthquake Comp	EQc	-26	293
C307	Wind Tens	Wt	33	366
C307	Wind Comp	Wc	-40	366
C308	Dead max	Gmax	-438	77
C308	Dead min	Gmin	-337	56
C308	Live	Q	-61	19
C308	Earthquake Tens	EQt	52	289
C308	Earthquake Comp	EQc	-52	289
C308	Wind Tens	Wt	59	361
C308	Wind Comp	Wc	-72	361
C309	Dead max	Gmax	-400	75
C309	Dead min	Gmin	-310	55
C309	Live	Q	-55	18
C309	Earthquake Tens	EQt	9	283
C309	Earthquake Comp	EQc	-9	283

C309	Wind Tens	Wt	10	353
C309	Wind Comp	Wc	-11	353
C310	Dead max	Gmax	-353	69
C310	Dead min	Gmin	-275	50
C310	Live	Q	-61	20
C310	Earthquake Tens	EQt	48	287
C310	Earthquake Comp	EQc	-48	287
C310	Wind Tens	Wt	52	358
C310	Wind Comp	Wc	-42	358
C311	Dead max	Gmax	-362	59
C311	Dead min	Gmin	-281	42
C311	Live	Q	-77	20
C311	Earthquake Tens	EQt	29	288
C311	Earthquake Comp	EQc	-29	288
C311	Wind Tens	Wt	28	359
C311	Wind Comp	Wc	-23	359
C312	Dead max	Gmax	-317	49
C312	Dead min	Gmin	-245	35
C312	Live	Q	-68	17
C312	Earthquake Tens	EQt	17	287
C312	Earthquake Comp	EQc	-17	287
C312	Wind Tens	Wt	9	357
C312	Wind Comp	Wc	-7	357
C313	Dead max	Gmax	-307	45
C313	Dead min	Gmin	-232	31
C313	Live	Q	-58	14
C313	Earthquake Tens	EQt	36	282
C313	Earthquake Comp	EQc	-36	282
C313	Wind Tens	Wt	23	350
C313	Wind Comp	Wc	-25	350
C314	Dead max	Gmax	-319	43
C314	Dead min	Gmin	-236	30
C314	Live	Q	-55	12
C314	Earthquake Tens	EQt	109	274
C314	Earthquake Comp	EQc	-109	274
C314	Wind Tens	Wt	101	340
C314	Wind Comp	Wc	-115	340
C315	Dead max	Gmax	-324	40
C315	Dead min	Gmin	-238	28
C315	Live	Q	-51	11
C315	Earthquake Tens	EQt	274	262
C315	Earthquake Comp	EQc	-274	262
C315	Wind Tens	Wt	272	324
C315	Wind Comp	Wc	-315	324
C349	Dead max	Gmax	-1063	40
C349	Dead min	Gmin	-806	30
C349	Live	Q	-205	12
C349	Earthquake Tens	EQt	61	347

C349	Earthquake Comp	EQc	-61	347
C349	Wind Tens	Wt	231	119
C349	Wind Comp	Wc	-197	119

Element	Action	Load Case	P (kN)	V (kN)
C37	Dead max	Gmax	-3424	20
C37	Dead min	Gmin	-2425	15
C37	Live	Q	-1049	24
C37	Earthquake Tens	EQt	199	42
C37	Earthquake Comp	EQc	-199	42
C37	Wind Tens	Wt	524	44
C37	Wind Comp	Wc	-647	44
C39	Dead max	Gmax	-3410	15
C39	Dead min	Gmin	-2414	12
C39	Live	Q	-1020	20
C39	Earthquake Tens	EQt	210	43
C39	Earthquake Comp	EQc	-210	43
C39	Wind Tens	Wt	541	44
C39	Wind Comp	Wc	-648	44
C40	Dead max	Gmax	-2797	47
C40	Dead min	Gmin	-1950	35
C40	Live	Q	-909	39
C40	Earthquake Tens	EQt	145	44
C40	Earthquake Comp	EQc	-145	44
C40	Wind Tens	Wt	436	58
C40	Wind Comp	Wc	-541	58
C42	Dead max	Gmax	-2788	45
C42	Dead min	Gmin	-1944	34
C42	Live	Q	-902	38
C42	Earthquake Tens	EQt	165	44
C42	Earthquake Comp	EQc	-165	44
C42	Wind Tens	Wt	456	57
C42	Wind Comp	Wc	-544	57
C43	Dead max	Gmax	-3643	51
C43	Dead min	Gmin	-2522	40
C43	Live	Q	-1049	37
C43	Earthquake Tens	EQt	149	34
C43	Earthquake Comp	EQc	-149	34
C43	Wind Tens	Wt	560	54
C43	Wind Comp	Wc	-698	54
C45	Dead max	Gmax	-3508	58
C45	Dead min	Gmin	-2432	45
C45	Live	Q	-1018	39
C45	Earthquake Tens	EQt	148	34
C45	Earthquake Comp	EQc	-148	34
C45	Wind Tens	Wt	556	53
C45	Wind Comp	Wc	-689	53
C46	Dead max	Gmax	-3067	40
C46	Dead min	Gmin	-2150	30
C46	Live	Q	-993	34
C46	Earthquake Tens	EQt	164	42
C46	Earthquake Comp	EQc	-164	42
C46	Wind Tens	Wt	462	57
C46	Wind Comp	Wc	-567	57

C48	Dead max	Gmax	-2909	41
C48	Dead min	Gmin	-2038	31
C48	Live	Q	-946	35
C48	Earthquake Tens	EQt	138	41
C48	Earthquake Comp	EQc	-138	41
C48	Wind Tens	Wt	426	57
C48	Wind Comp	Wc	-529	57
C49	Dead max	Gmax	-2507	18
C49	Dead min	Gmin	-1733	15
C49	Live	Q	-692	19
C49	Earthquake Tens	EQt	166	41
C49	Earthquake Comp	EQc	-166	41
C49	Wind Tens	Wt	410	47
C49	Wind Comp	Wc	-501	47
C51	Dead max	Gmax	-2599	30
C51	Dead min	Gmin	-1802	23
C51	Live	Q	-747	26
C51	Earthquake Tens	EQt	149	41
C51	Earthquake Comp	EQc	-149	41
C51	Wind Tens	Wt	401	47
C51	Wind Comp	Wc	-495	47
C53	Dead max	Gmax	-1638	19
C53	Dead min	Gmin	-1184	14
C53	Live	Q	-863	24
C53	Earthquake Tens	EQt	171	45
C53	Earthquake Comp	EQc	-171	45
C53	Wind Tens	Wt	112	44
C53	Wind Comp	Wc	-91	44
C54	Dead max	Gmax	-1859	46
C54	Dead min	Gmin	-1297	35
C54	Live	Q	-1034	38
C54	Earthquake Tens	EQt	169	46
C54	Earthquake Comp	EQc	-169	46
C54	Wind Tens	Wt	140	57
C54	Wind Comp	Wc	-113	57
C55	Dead max	Gmax	-1787	53
C55	Dead min	Gmin	-1175	42
C55	Live	Q	-1003	38
C55	Earthquake Tens	EQt	151	37
C55	Earthquake Comp	EQc	-151	37
C55	Wind Tens	Wt	182	52
C55	Wind Comp	Wc	-146	52
C56	Dead max	Gmax	-1960	41
C56	Dead min	Gmin	-1376	30
C56	Live	Q	-1061	34
C56	Earthquake Tens	EQt	152	44
C56	Earthquake Comp	EQc	-152	44
C56	Wind Tens	Wt	114	56
C56	Wind Comp	Wc	-92	56
C57	Dead max	Gmax	-1525	34

C57	Dead min	Gmin	-1073	26
C57	Live	Q	-763	28
C57	Earthquake Tens	EQt	148	44
C57	Earthquake Comp	EQc	-148	44
C57	Wind Tens	Wt	106	47
C57	Wind Comp	Wc	-89	47
C63	Dead max	Gmax	-35911	13
C63	Dead min	Gmin	-26497	12
C63	Live	Q	-9106	11
C63	Earthquake Tens	EQt	1264	299
C63	Earthquake Comp	EQc	-1264	299
C63	Wind Tens	Wt	3401	142
C63	Wind Comp	Wc	-4218	142
C64	Dead max	Gmax	-26186	24
C64	Dead min	Gmin	-19362	15
C64	Live	Q	-5996	27
C64	Earthquake Tens	EQt	1506	317
C64	Earthquake Comp	EQc	-1506	317
C64	Wind Tens	Wt	7074	189
C64	Wind Comp	Wc	-8838	189
C65	Dead max	Gmax	-35704	23
C65	Dead min	Gmin	-26355	19
C65	Live	Q	-9204	10
C65	Earthquake Tens	EQt	1279	284
C65	Earthquake Comp	EQc	-1279	284
C65	Wind Tens	Wt	3534	135
C65	Wind Comp	Wc	-4356	135
C66	Dead max	Gmax	-29630	64
C66	Dead min	Gmin	-21700	48
C66	Live	Q	-6368	16
C66	Earthquake Tens	EQt	934	269
C66	Earthquake Comp	EQc	-934	269
C66	Wind Tens	Wt	2323	87
C66	Wind Comp	Wc	-2865	87
C67	Dead max	Gmax	-29382	17
C67	Dead min	Gmin	-21484	14
C67	Live	Q	-6360	6
C67	Earthquake Tens	EQt	958	235
C67	Earthquake Comp	EQc	-958	235
C67	Wind Tens	Wt	2187	58
C67	Wind Comp	Wc	-2707	58
C68	Dead max	Gmax	-29322	79
C68	Dead min	Gmin	-21440	58
C68	Live	Q	-6351	21
C68	Earthquake Tens	EQt	899	230
C68	Earthquake Comp	EQc	-899	230
C68	Wind Tens	Wt	2390	58
C68	Wind Comp	Wc	-2809	58
C69	Dead max	Gmax	-29414	24
C69	Dead min	Gmin	-21541	17

C69	Live	Q	-6326	9
C69	Earthquake Tens	EQt	901	262
C69	Earthquake Comp	EQc	-901	262
C69	Wind Tens	Wt	1841	88
C69	Wind Comp	Wc	-2267	88
C76	Dead max	Gmax	-29419	78
C76	Dead min	Gmin	-21552	57
C76	Live	Q	-6325	21
C76	Earthquake Tens	EQt	900	279
C76	Earthquake Comp	EQc	-900	279
C76	Wind Tens	Wt	974	85
C76	Wind Comp	Wc	-1152	85
C77	Dead max	Gmax	-34403	54
C77	Dead min	Gmin	-25398	38
C77	Live	Q	-8719	26
C77	Earthquake Tens	EQt	1173	303
C77	Earthquake Comp	EQc	-1173	303
C77	Wind Tens	Wt	1310	133
C77	Wind Comp	Wc	-1573	133
C78	Dead max	Gmax	-34352	52
C78	Dead min	Gmin	-25356	37
C78	Live	Q	-8715	26
C78	Earthquake Tens	EQt	1122	297
C78	Earthquake Comp	EQc	-1122	297
C78	Wind Tens	Wt	1159	140
C78	Wind Comp	Wc	-1355	140
C79	Dead max	Gmax	-24913	68
C79	Dead min	Gmin	-18437	48
C79	Live	Q	-5672	36
C79	Earthquake Tens	EQt	1300	310
C79	Earthquake Comp	EQc	-1300	310
C79	Wind Tens	Wt	4738	175
C79	Wind Comp	Wc	-5872	175
C80	Dead max	Gmax	-24887	66
C80	Dead min	Gmin	-18415	47
C80	Live	Q	-5675	36
C80	Earthquake Tens	EQt	1301	311
C80	Earthquake Comp	EQc	-1301	311
C80	Wind Tens	Wt	4819	178
C80	Wind Comp	Wc	-5863	178
C81	Dead max	Gmax	-34177	48
C81	Dead min	Gmin	-25243	34
C81	Live	Q	-8787	26
C81	Earthquake Tens	EQt	1134	289
C81	Earthquake Comp	EQc	-1134	289
C81	Wind Tens	Wt	1125	133
C81	Wind Comp	Wc	-1374	133
C82	Dead max	Gmax	-34241	44
C82	Dead min	Gmin	-25289	31
C82	Live	Q	-8815	25

C82	Earthquake Tens	EQt	1164	290
C82	Earthquake Comp	EQc	-1164	290
C82	Wind Tens	Wt	1443	126
C82	Wind Comp	Wc	-1560	126
C83	Dead max	Gmax	-28978	24
C83	Dead min	Gmin	-21198	16
C83	Live	Q	-6258	14
C83	Earthquake Tens	EQt	930	243
C83	Earthquake Comp	EQc	-930	243
C83	Wind Tens	Wt	621	57
C83	Wind Comp	Wc	-725	57
C84	Dead max	Gmax	-29075	80
C84	Dead min	Gmin	-21268	59
C84	Live	Q	-6283	24
C84	Earthquake Tens	EQt	924	238
C84	Earthquake Comp	EQc	-924	238
C84	Wind Tens	Wt	924	56
C84	Wind Comp	Wc	-918	56
C85	Dead max	Gmax	-29192	49
C85	Dead min	Gmin	-21384	35
C85	Live	Q	-6281	16
C85	Earthquake Tens	EQt	1010	274
C85	Earthquake Comp	EQc	-1010	274
C85	Wind Tens	Wt	426	86
C85	Wind Comp	Wc	-502	86
C91	Dead max	Gmax	-20170	66
C91	Dead min	Gmin	-15189	46
C91	Live	Q	-4506	19
C91	Earthquake Tens	EQt	4447	604
C91	Earthquake Comp	EQc	-4447	604
C91	Wind Tens	Wt	19565	218
C91	Wind Comp	Wc	-24223	218
C93	Dead max	Gmax	-19499	60
C93	Dead min	Gmin	-14639	42
C93	Live	Q	-4509	17
C93	Earthquake Tens	EQt	4380	611
C93	Earthquake Comp	EQc	-4380	611
C93	Wind Tens	Wt	19829	226
C93	Wind Comp	Wc	-24019	226
C99	Dead max	Gmax	-16664	71
C99	Dead min	Gmin	-12729	50
C99	Live	Q	-3553	20
C99	Earthquake Tens	EQt	4772	617
C99	Earthquake Comp	EQc	-4772	617
C99	Wind Tens	Wt	10994	208
C99	Wind Comp	Wc	-13256	208
C100	Dead max	Gmax	-15316	66
C100	Dead min	Gmin	-11677	46
C100	Live	Q	-3338	19
C100	Earthquake Tens	EQt	2585	605

C100	Earthquake Comp	EQc	-2585	605
C100	Wind Tens	Wt	9760	215
C100	Wind Comp	Wc	-11953	215
C101	Dead max	Gmax	-14853	65
C101	Dead min	Gmin	-11299	45
C101	Live	Q	-3307	18
C101	Earthquake Tens	EQt	1080	601
C101	Earthquake Comp	EQc	-1080	601
C101	Wind Tens	Wt	9001	218
C101	Wind Comp	Wc	-11232	218
C102	Dead max	Gmax	-14168	60
C102	Dead min	Gmin	-10766	42
C102	Live	Q	-3219	17
C102	Earthquake Tens	EQt	2361	611
C102	Earthquake Comp	EQc	-2361	611
C102	Wind Tens	Wt	9766	225
C102	Wind Comp	Wc	-11436	225
C103	Dead max	Gmax	-15927	61
C103	Dead min	Gmin	-12090	42
C103	Live	Q	-3678	17
C103	Earthquake Tens	EQt	4443	626
C103	Earthquake Comp	EQc	-4443	626
C103	Wind Tens	Wt	12120	228
C103	Wind Comp	Wc	-13519	228
C105	Dead max	Gmax	-2014	8
C105	Dead min	Gmin	-1511	6
C105	Live	Q	-408	6
C105	Earthquake Tens	EQt	318	23
C105	Earthquake Comp	EQc	-318	23
C105	Wind Tens	Wt	489	3
C105	Wind Comp	Wc	-592	3
C106	Dead max	Gmax	-12813	71
C106	Dead min	Gmin	-9928	50
C106	Live	Q	-2572	20
C106	Earthquake Tens	EQt	4084	623
C106	Earthquake Comp	EQc	-4084	623
C106	Wind Tens	Wt	4503	212
C106	Wind Comp	Wc	-4734	212
C107	Dead max	Gmax	-10766	64
C107	Dead min	Gmin	-8351	45
C107	Live	Q	-2195	18
C107	Earthquake Tens	EQt	2197	610
C107	Earthquake Comp	EQc	-2197	610
C107	Wind Tens	Wt	2307	215
C107	Wind Comp	Wc	-2421	215
C108	Dead max	Gmax	-9687	60
C108	Dead min	Gmin	-7498	42
C108	Live	Q	-2010	17
C108	Earthquake Tens	EQt	781	605
C108	Earthquake Comp	EQc	-781	605

C108	Wind Tens	Wt	1114	220
C108	Wind Comp	Wc	-1376	220
C109	Dead max	Gmax	-10477	57
C109	Dead min	Gmin	-8100	39
C109	Live	Q	-2243	17
C109	Earthquake Tens	EQt	2096	616
C109	Earthquake Comp	EQc	-2096	616
C109	Wind Tens	Wt	2257	227
C109	Wind Comp	Wc	-2030	227
C110	Dead max	Gmax	-11856	58
C110	Dead min	Gmin	-9135	40
C110	Live	Q	-2612	17
C110	Earthquake Tens	EQt	3557	631
C110	Earthquake Comp	EQc	-3557	631
C110	Wind Tens	Wt	4271	232
C110	Wind Comp	Wc	-3869	232
C112	Dead max	Gmax	-10526	40
C112	Dead min	Gmin	-8065	26
C112	Live	Q	-2235	13
C112	Earthquake Tens	EQt	2056	647
C112	Earthquake Comp	EQc	-2056	647
C112	Wind Tens	Wt	3586	222
C112	Wind Comp	Wc	-3539	222
C113	Dead max	Gmax	-11627	29
C113	Dead min	Gmin	-8848	17
C113	Live	Q	-2491	11
C113	Earthquake Tens	EQt	3609	653
C113	Earthquake Comp	EQc	-3609	653
C113	Wind Tens	Wt	5855	208
C113	Wind Comp	Wc	-6165	208
C114	Dead max	Gmax	-11811	12
C114	Dead min	Gmin	-8958	5
C114	Live	Q	-2592	7
C114	Earthquake Tens	EQt	4482	664
C114	Earthquake Comp	EQc	-4482	664
C114	Wind Tens	Wt	7061	193
C114	Wind Comp	Wc	-7265	193
C116	Dead max	Gmax	-19821	17
C116	Dead min	Gmin	-14567	13
C116	Live	Q	-4112	5
C116	Earthquake Tens	EQt	754	191
C116	Earthquake Comp	EQc	-754	191
C116	Wind Tens	Wt	1623	63
C116	Wind Comp	Wc	-1353	63
C117	Dead max	Gmax	-21711	22
C117	Dead min	Gmin	-15918	17
C117	Live	Q	-4559	6
C117	Earthquake Tens	EQt	857	219
C117	Earthquake Comp	EQc	-857	219
C117	Wind Tens	Wt	2218	92

C117	Wind Comp	Wc	-1996	92
C118	Dead max	Gmax	-22327	19
C118	Dead min	Gmin	-16366	14
C118	Live	Q	-4696	8
C118	Earthquake Tens	EQt	841	210
C118	Earthquake Comp	EQc	-841	210
C118	Wind Tens	Wt	2219	95
C118	Wind Comp	Wc	-1882	95
C124	Dead max	Gmax	-13348	123
C124	Dead min	Gmin	-10426	89
C124	Live	Q	-2166	29
C124	Earthquake Tens	EQt	4622	663
C124	Earthquake Comp	EQc	-4622	663
C124	Wind Tens	Wt	5721	163
C124	Wind Comp	Wc	-6248	163
C125	Dead max	Gmax	-18056	104
C125	Dead min	Gmin	-14116	75
C125	Live	Q	-2960	26
C125	Earthquake Tens	EQt	5287	662
C125	Earthquake Comp	EQc	-5287	662
C125	Wind Tens	Wt	7097	176
C125	Wind Comp	Wc	-7874	176
C126	Dead max	Gmax	-15756	76
C126	Dead min	Gmin	-12331	54
C126	Live	Q	-2651	21
C126	Earthquake Tens	EQt	3398	661
C126	Earthquake Comp	EQc	-3398	661
C126	Wind Tens	Wt	5649	203
C126	Wind Comp	Wc	-6034	203
C127	Dead max	Gmax	-14216	65
C127	Dead min	Gmin	-11163	45
C127	Live	Q	-2418	19
C127	Earthquake Tens	EQt	2519	660
C127	Earthquake Comp	EQc	-2519	660
C127	Wind Tens	Wt	6535	215
C127	Wind Comp	Wc	-6246	215
C128	Dead max	Gmax	-11937	62
C128	Dead min	Gmin	-9381	43
C128	Live	Q	-2071	18
C128	Earthquake Tens	EQt	1401	649
C128	Earthquake Comp	EQc	-1401	649
C128	Wind Tens	Wt	5902	220
C128	Wind Comp	Wc	-5240	220
C129	Dead max	Gmax	-13092	56
C129	Dead min	Gmin	-10272	39
C129	Live	Q	-2331	16
C129	Earthquake Tens	EQt	756	645
C129	Earthquake Comp	EQc	-756	645
C129	Wind Tens	Wt	5940	223
C129	Wind Comp	Wc	-4867	223

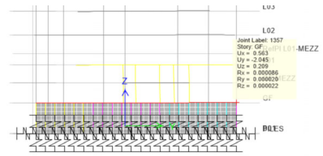
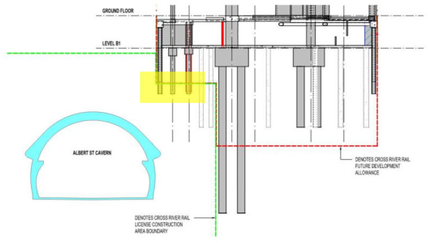
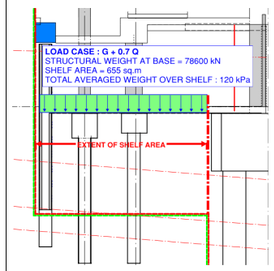
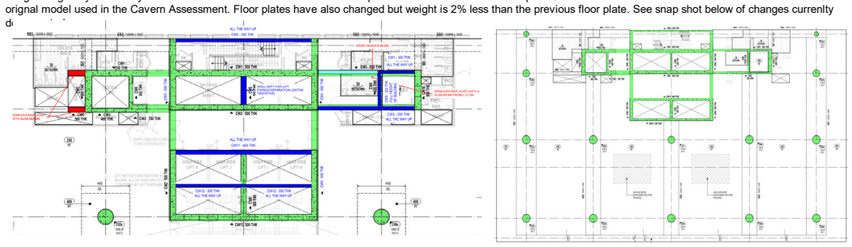
C130	Dead max	Gmax	-12853	54
C130	Dead min	Gmin	-10068	38
C130	Live	Q	-2370	16
C130	Earthquake Tens	EQt	1024	655
C130	Earthquake Comp	EQc	-1024	655
C130	Wind Tens	Wt	6124	231
C130	Wind Comp	Wc	-4970	231
C131	Dead max	Gmax	-13117	48
C131	Dead min	Gmin	-10250	32
C131	Live	Q	-2506	14
C131	Earthquake Tens	EQt	1821	666
C131	Earthquake Comp	EQc	-1821	666
C131	Wind Tens	Wt	6320	233
C131	Wind Comp	Wc	-5201	233
C132	Dead max	Gmax	-13125	42
C132	Dead min	Gmin	-10199	28
C132	Live	Q	-2597	13
C132	Earthquake Tens	EQt	2536	672
C132	Earthquake Comp	EQc	-2536	672
C132	Wind Tens	Wt	5252	225
C132	Wind Comp	Wc	-4426	225
C133	Dead max	Gmax	-14123	32
C133	Dead min	Gmin	-10941	21
C133	Live	Q	-2870	10
C133	Earthquake Tens	EQt	3742	679
C133	Earthquake Comp	EQc	-3742	679
C133	Wind Tens	Wt	5885	214
C133	Wind Comp	Wc	-5573	214
C134	Dead max	Gmax	-13642	26
C134	Dead min	Gmin	-10537	17
C134	Live	Q	-2851	8
C134	Earthquake Tens	EQt	4822	690
C134	Earthquake Comp	EQc	-4822	690
C134	Wind Tens	Wt	6857	201
C134	Wind Comp	Wc	-6485	201
C136	Dead max	Gmax	-19109	33
C136	Dead min	Gmin	-14048	24
C136	Live	Q	-3957	9
C136	Earthquake Tens	EQt	938	197
C136	Earthquake Comp	EQc	-938	197
C136	Wind Tens	Wt	2698	64
C136	Wind Comp	Wc	-2221	64
C137	Dead max	Gmax	-19205	48
C137	Dead min	Gmin	-14120	35
C137	Live	Q	-3980	11
C137	Earthquake Tens	EQt	964	201
C137	Earthquake Comp	EQc	-964	201
C137	Wind Tens	Wt	2881	66
C137	Wind Comp	Wc	-2388	66
C138	Dead max	Gmax	-21567	39

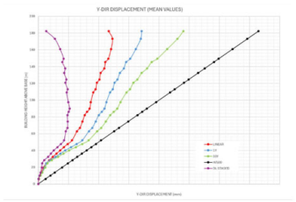
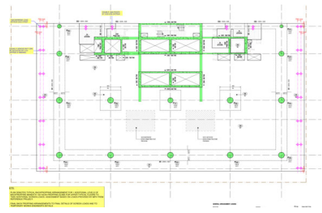
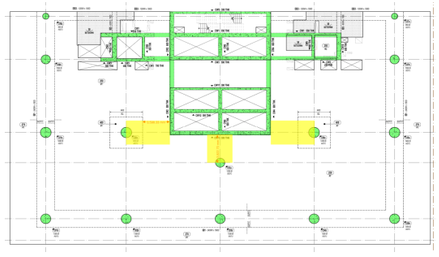
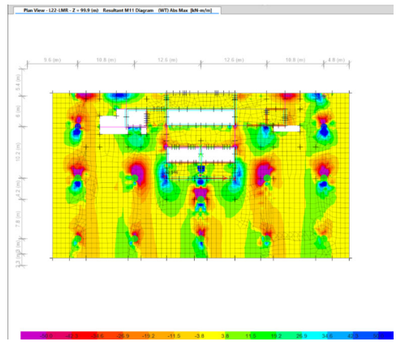
C138	Dead min	Gmin	-15814	29
C138	Live	Q	-4536	12
C138	Earthquake Tens	EQt	887	222
C138	Earthquake Comp	EQc	-887	222
C138	Wind Tens	Wt	3427	97
C138	Wind Comp	Wc	-2934	97
C140	Dead max	Gmax	-10520	119
C140	Dead min	Gmin	-8342	86
C140	Live	Q	-1570	28
C140	Earthquake Tens	EQt	3964	675
C140	Earthquake Comp	EQc	-3964	675
C140	Wind Tens	Wt	8871	174
C140	Wind Comp	Wc	-8699	174
C141	Dead max	Gmax	-14039	86
C141	Dead min	Gmin	-11235	61
C141	Live	Q	-2076	22
C141	Earthquake Tens	EQt	4228	684
C141	Earthquake Comp	EQc	-4228	684
C141	Wind Tens	Wt	16844	206
C141	Wind Comp	Wc	-15123	206
C142	Dead max	Gmax	-13717	71
C142	Dead min	Gmin	-11005	50
C142	Live	Q	-2062	20
C142	Earthquake Tens	EQt	3682	684
C142	Earthquake Comp	EQc	-3682	684
C142	Wind Tens	Wt	18007	220
C142	Wind Comp	Wc	-15588	220
C143	Dead max	Gmax	-11432	63
C143	Dead min	Gmin	-9173	44
C143	Live	Q	-1766	18
C143	Earthquake Tens	EQt	2458	677
C143	Earthquake Comp	EQc	-2458	677
C143	Wind Tens	Wt	15181	222
C143	Wind Comp	Wc	-12711	222
C144	Dead max	Gmax	-12667	60
C144	Dead min	Gmin	-10159	42
C144	Live	Q	-2024	17
C144	Earthquake Tens	EQt	2425	675
C144	Earthquake Comp	EQc	-2425	675
C144	Wind Tens	Wt	16842	223
C144	Wind Comp	Wc	-13613	223
C145	Dead max	Gmax	-12118	56
C145	Dead min	Gmin	-9708	39
C145	Live	Q	-2013	16
C145	Earthquake Tens	EQt	2574	685
C145	Earthquake Comp	EQc	-2574	685
C145	Wind Tens	Wt	16695	230
C145	Wind Comp	Wc	-13434	230
C146	Dead max	Gmax	-12246	54
C146	Dead min	Gmin	-9794	38

C146	Live	Q	-2119	15
C146	Earthquake Tens	EQt	3331	695
C146	Earthquake Comp	EQc	-3331	695
C146	Wind Tens	Wt	17582	236
C146	Wind Comp	Wc	-14248	236
C147	Dead max	Gmax	-11646	47
C147	Dead min	Gmin	-9290	32
C147	Live	Q	-2108	13
C147	Earthquake Tens	EQt	3761	702
C147	Earthquake Comp	EQc	-3761	702
C147	Wind Tens	Wt	16899	229
C147	Wind Comp	Wc	-13770	229
C148	Dead max	Gmax	-12027	42
C148	Dead min	Gmin	-9560	29
C148	Live	Q	-2273	12
C148	Earthquake Tens	EQt	4613	708
C148	Earthquake Comp	EQc	-4613	708
C148	Wind Tens	Wt	17218	222
C148	Wind Comp	Wc	-14113	222
C149	Dead max	Gmax	-10302	37
C149	Dead min	Gmin	-8169	27
C149	Live	Q	-2020	9
C149	Earthquake Tens	EQt	4843	718
C149	Earthquake Comp	EQc	-4843	718
C149	Wind Tens	Wt	14813	213
C149	Wind Comp	Wc	-12212	213
C151	Dead max	Gmax	-9007	104
C151	Dead min	Gmin	-7266	75
C151	Live	Q	-1243	25
C151	Earthquake Tens	EQt	3742	688
C151	Earthquake Comp	EQc	-3742	688
C151	Wind Tens	Wt	13698	202
C151	Wind Comp	Wc	-12337	202
C152	Dead max	Gmax	-3195	122
C152	Dead min	Gmin	-2631	88
C152	Live	Q	-365	29
C152	Earthquake Tens	EQt	2270	691
C152	Earthquake Comp	EQc	-2270	691
C152	Wind Tens	Wt	7479	190
C152	Wind Comp	Wc	-6741	190
C167	Dead max	Gmax	-20569	62
C167	Dead min	Gmin	-15463	43
C167	Live	Q	-4671	18
C167	Earthquake Tens	EQt	3715	599
C167	Earthquake Comp	EQc	-3715	599
C167	Wind Tens	Wt	19483	221
C167	Wind Comp	Wc	-24329	221
C236	Dead max	Gmax	-19838	66
C236	Dead min	Gmin	-14974	46
C236	Live	Q	-4350	20

C236	Earthquake Tens	EQt	5801	616
C236	Earthquake Comp	EQc	-5801	616
C236	Wind Tens	Wt	19493	219
C236	Wind Comp	Wc	-23920	219
C237	Dead max	Gmax	-18812	55
C237	Dead min	Gmin	-14115	38
C237	Live	Q	-4422	16
C237	Earthquake Tens	EQt	5563	625
C237	Earthquake Comp	EQc	-5563	625
C237	Wind Tens	Wt	20371	235
C237	Wind Comp	Wc	-23921	235

Addendum 1: Response to ARUP comments

DOCUMENT REFERENCE	ITEM NUMBER	REVIEWER	ARUP COMMENT	ARUP CLASSIFICATION	ARUP STATUS	QIC RESPONSE
ATTACHMENT G - SCHEMATIC DESIGN REPORT						
1.5 Proximity to Cross River Rail Assets (p13)	G1	ND	15-Jul-26 - The report states 'The final depth of the bored piers is subject to the founding rock strength and achieving the CRR Cavern stress criteria…'. Assuming the piles are a D&C element, the tender documentation (i.e., piling plan and piling specification once it exists) needs to make it clear that the toe levels nominated are minimum levels, based in part on the cavern assessment, and cannot be reduced without approval by Hera and EDG. 21-Aug-26 - Closed.	2	CLOSED	Piles are not D&C, and will be designed geotechnically by EDG and structurally by Hera, with all final socket and embedment depths to consider the current Cavern loading criteria.
2.4.4 Proposed Future Investigations (p16)	G2	ND	15-Jul-26 - Please clarify what future geotechnical investigations are proposed. We presume any unexpected findings that impact the assumptions underpinning the cavern assessment will trigger an updated modelling exercise and that this will be shared with EDQ's team for review. 21-Aug-26 - Closed.	2	CLOSED	Geotechnical, contamination and groundwater investigations are currenetly being undertaken. The results of which will be integrated into the design and communicated to EDQ via the Compliance Assessment process (e.g. Excavation and Basement report, geotech report etc)
4.1 Shoring and Retention System (p19)	G3	ND	15-Jul-26 - Please clarify the range of stiffness values that have been considered when estimating the distribution of load between the core box and the retention system. For example, if $I_{eff,cores} = 0.5I_{gross}$, does $I_{eff,ret} = +/-1.2 \times 0.5I_{gross}$? What is the basis of the +/-20% and how different is the distribution for the two extremes considered? 21-Aug-26 - Closed.	1	CLOSED	To clarify the spring stiffness upper and lower bound of the retention piles was used to design the strutting slab and capping beam in the temporary case, to ensure a 15mm deflection limit was achieved. The relationship between the core and the retention in the final case is minimal due to the high stiffness of the core and close prozimity of the piled raft foundation. The antipicated movement is 2mm using a 0.2 property modifier. 
4.1 Shoring and Retention System (p20)	G4	ND	15-Jul-26 - Please add commentary to clarify the intent with the piles that will encorach into the volumetric easement around the cavern (highlighted below). We understand this solution is currently being coordinated with QR/TMR.  *Figure 18 – Basement Section with Licence Construction Area* 21-Aug-26 - Closed.	1	CLOSED	CRRDA is the authority responsible for the reconfiguration of lots surrounding the CRR infrastructure and the registration of titles with the Queensland Titles Office. QIC confirm they have reached an in-principle agreement with CRRDA to establish an access easement in favour of QIC within the future DTMR volumetric title to accommodate these column encroachments. Subject to approval of the DA Change by EDQ, CRRDA will register the required easements with the Queensland Titles Office. The overall weight on this shelf is 120kPa compared to the allowance of 375kPa, so believe this will fall within accpetable limits according the EDG assessments. QIC are currrently dealing with the property line. 
4.2 Foundation System (p23)	G5	ND	15-Jul-26 - Please clarify the logic for the 0.5 factor applied to earthquake loads in Combination 4. Please also confirm that elastic earthquake loads based on a ductility factor of 1 have been considered for the cavern assessment? We note the original RBG Design Criteria Report references a higher level of ductility than the current General Notes drawing (HER-DRG-STR-1002_A). 21-Aug-26 - Closed.	1	CLOSED	Hera is using ductility 1 because the scheme changed to concrete. 0.5 factor was expanded on from the original RBG loading as per the table below. 0.5 equates to a service return period using AS1170.4 2007 of circa 1:175 which is considered sufficiently conservative, and assumed to be the code used for the original cavern design. **Included in the RBG Design Note 03 Dated 11 March 2025, the service load case presented is as follows:** 1.1*[G+Q+0.64*W+0.5*EQ]. This has been expanded into separate load case combinations using factors from the Australia Standard AS1170.0. Using these components, we arrive at the following services load combinations to be used in the analysis in conjunction with the 10% contingency listed in DS-03. These will be compared to the CRR services load cases. Combination 1 = 1.1 * [G + 0.7Q] (short term) Combination 2 = 1.1 * [G + 0.4Q] (long term) Combination 3 = 1.1 * [G + 0.4Q + 0.64W] Combination 4 = 1.1 * [G + 0.3Q + 0.5EQ] **Annual probability of exceedance P** / **Probability factor k_p** 1/2500 — 1.8 1/2000 — 1.7 1/1500 — 1.5 1/1000 — 1.3 1/800 — 1.25 1/500 — 1.0 1/250 — 0.75 1/200 — 0.7 1/100 — 0.5 1/50 — 0.35 1/25 — 0.25 1/20 — 0.20 NOTE: The annual probability of exceedance in Table 3.1 is taken from the NCC and AS/NZS 1170.0.
4.3 Tower Lateral Load Resisting Sytem (p25)	G6	ND	15-Jul-26 - Please provide a mark-up of the current changes being considered for the core box. We would recommend that the study on long-term gravity drift referenced in Section 4.5.1 is finalised before committing to changes in the core box. 21-Aug-26 - Closed.	1	CLOSED	Long term gravity lean analysis has been carried out on the new core and updated in the next issue of the report. Core stiffness and associated modal dats remain within 5% of the orignal model used in the Cavern Assessment. Floor plates have also changed but weight is 2% less than the previous floor plate. See snap shot below of changes currenlty d 

4.3.1 Dynamic Performance and Lateral Movement (p27)	G7	ND	15-Jul-26 - We presume the 145mm displacement referenced is due to SLS wind load only. The long-term gravity lean needs to be considered in conjunction with this. From the previous scheme which had a very similar stability system we expect that inter-storey drift will be more critical than total displacement. Please review. 21-Aug-26 - Closed.	1	CLOSED	145mm is SLS wind, based on analysis at the time. SLS movements have sinced changed due to the core and other structural changes and will be updated in the final report. See snap shot of preliminary mean sensitivity values for the long-term gravity lean, which will be included in an updated report.  The pile loads currently used in the Cavern Assessment have been checked with the long-term gravity lean case. See prelim table below with final loads to be incorporated in the final report **Cavern Assessment Loads** / **50% Spring Stiffness** / **100% Spring Stiffness** / **200% Spring Stiffness** Core Piles Max Comp: **46,800** / 37,100 / 40,200 / 44,300 Core Piles Max Tension: **6,200** / 4,000 / 4,400 / 5,500 Tower Col Max Comp: **55,500** / 51,600 / 52,500 / 52,900 Tower Col Max Tension: NA / NA / NA / NA Podium Col Max Comp: 5,600 / **6,000** / 5,900 / 5,900 Podium Col Max Tension: NA / NA / NA / NA
4.5.1 Gravity Lean (p29)	G8	ND	15-Jul-26 - We understand the study on long-term gravity drift is ongoing. Please confirm that the long-term staged distribution of foundation loads has been considered in the cavern assessment. 21-Aug-26 - Closed.	1	CLOSED	
4.7.3 Typical Tower Floors (p31)	G9	ND	15-Jul-26 - Please confirm that temporary loading due to screens, hoists, stairs and the like has been considered in developing the design for the typical floors. If so, we would suggest adding commentary to the report and allowances to the loading plans. 21-Aug-26 - Closed.	1	CLOSED	Screen loads have been assessed and no increase in slab thickness is required. A minor increase in PT and some propping as indicated in the sketch below is envisioned. 
4.7.3 Typical Tower Floors (p32)	G10	ND	15-Jul-26 - We would recommend checking design actions in the lateral stability model for the short stiff spans highlighted below. Despite being relatively thin, these zones will attract large forces due to lateral loading as well as long-term gravity effects. This may require changes to the concrete profile on the typical levels, or changes to detailing that needs to be re-tested for the current scheme. Please review.  21-Aug-26 - Closed.	1	CLOSED	Agreed - this is the critical area for axial shortening. The rotation due to axial shortening in combination with slab deflection will be limited to span/250. Bending moments due to lateral affects, and leaning in the N-S direction have been assessed at level 22, and reported as circa 10kN/m which will not cause any over stress of the structure. 
ATTACHMENT I - CRR CAVERN ASSESSMENT TECHNICAL MEMORANDUM						
3.2 Proposed Building Load Case (p3)	I3	OF	Only one load combination is listed. We would suggest updating this to be consistent with Attachment L please. 21-Aug-26 - Closed.	2	CLOSED	This attachment will not form part of the final submission as it is superceeded by the Cavern Assessment report (Attachment L)
ATTACHMENT L - ALBERT STREET CAVERN ASSESSMENT REPORT						
3.2 Analytical Model (p2)	L1	OF	The first paragraph makes reference to interpreted ground conditions. Please clarify. We were of the understanding that the ground conditions adopted in the EDG model were the same as those adopted by the original cavern designer. 21-Aug-26 - Closed.	2	CLOSED	The ground conditions considered in the original cavern design were based on the 2D geological long section (from the project GIR) and were supplemented by a limited number of 2D cross-sections at selected locations. In our assessment, we have adopted 3D analysis methods to apparopriately assess the 3D distribution of the proposed building loads, which is based on a three-dimensional ground model interpreted from the available geotechnical investigation data (developed independently of the original 2D sections). At the locations of the original long section and cross-sections, our interpreted ground conditions are consistent with those adopted in the original design. Elsewhere along the cavern alignment, the 3D model reflects our independent interpretation of the available investigation data and inferred spatial variability. Accordingly, the 3D finite element analysis provides a continuous representation of the interpreted ground conditions along the full cavern alignment, while maintaining consistency with the ground conditions adopted in the original design at the corresponding locations.

3.2.1 Rock Mass Stiffness (p3)	L2	OF	We note that adopting block scale parameters in a continuum model is not strictly appropriate. We understand from our previous discussions that this exercise is intended as a sensitivity analysis on increased stiffness of the continuum. We would suggest making the limitations of this assessment clear in the report. 21-Aug-26 - Comment can be closed on basis that the use of block scale parameters in a continuum analysis is clearly caveated in the report.	2	CLOSED	We agree that use of the discontinuum parameters is to provide additional sensitivity analyses and will clarify that the use of discontiuum parameters should be considered as a sensitivity assessment in the subsequent compliance assessment stage.
3.3 Structural Loads and Elements (p3)	L3	OF	Table 1, Cavern Invert Slab: The restraint (if any) provided by the invert slab will be lateral compression only. This is what has been considered by the original cavern designer. The approach outlined in Table indicates that rotational restraint has also been modelled. How sensitive are the results to this restraint? Has a sensitivity analysis without restraint from the invert slab been carried out? 21-Aug-26 - Closed.	2	CLOSED	A hinged support between the cavern liner and the cavern invert slab has been modelled allowing free rotation of the interface between the cavern liner and invert slab.
3.4 Construction Stages (p5)	L4	OF	Table 2, Relaxation range: It is noted that the derivation of the relaxation range considered is outlined in Section 3.5. How do the relaxation values used compare with that adopted in the original cavern design? 21-Aug-26 - Closed.	2	CLOSED	The exact relaxtion parameter that was adopted in the original design is not shown in the available documentation. As part of our assessment, we have derived the relaxation/MStage parameter from a parametric assessment of the unsupported excavation length, support installation sequence, and extent of the yielded/plastic zone around the cavern. The corresponding tunnel relaxation factor range of 0.5 to 0.7 is considered to appropriately encompass the credible range of stress relaxation associated with the proposed cavern construction methodology.
3.4 Construction Stages (p5)	L5	OF	Table 2, Piles: Please provide further explanation about the pile modelling and what this means for how the building load is delivered to the ground. 21-Aug-26 - Noted. Comment can be closed on basis that additional commentary will be included in the report.	2	CLOSED	We note that all piles have been modelled as embedded beam elements, and no sleeved piles are included in the latest model revisions. The same values of ultimate skin friction and end bearing previously documented in B01493-1BC have been adopted. Loads from the proposed building core will be transferred to the underlying piles and distributed into the surrounding rock mass through skin friction along the pile shafts and end bearing at the pile bases. The structural properties of the piles have been nominated by the Structural engineer and have been incorparated in our analysis.
3.6 PSTR Load Cases (p9)	L6	OF	1st paragraph on page 9: Suggests that PSTR load cases only consider deep excavation cases. This is not the case. Please note the PSTR OSD31 requires consideration of a range of basement excavation depth from none (+4m) down to RL -8, to give most unfavourable conditions. 21-Aug-26 - Closed.	2	CLOSED	Agreed. Please refer to bullet points 2 and 3 (on Page 9) that confirm that the assessment has considered the 375kPa load applied at RL +4m (OSD-31) and the 375 kPa load applied at RL -8m (OSD-31).
3.8 Analysis Cases (p10)	L7	GWB	It is not clear whether a 20kPa uniform load is applied at ground level directly above the tunnel in combination with the actual building loads for Load Cases 4 and 5. Please review and clarify if this is the case, and if an update is required please advise whether this changes the results significantly. 21-Aug-26 - Closed.	1	CLOSED	We have undertaken one additional analysis for MStage = 0.6, adopting the continuum rock mass stiffness parameters, where a 20kPa uniform load at ground surface has been applied in combination with the actual building loads (Load Case 4 per Table 5). The results demonstrate that the inclusion of the additional 20 kPa surface load has a negligible effect on the resulting normal stress on the cavern liner when compared with the analysis considering the building loads only. Furthermore, the resulting normal stress on the cavern liner, both with and without the inclusion of the 20kPa surface load, is less than the cavern normal stress associated with the PSTR reference load cases. The results are presented in Figure 1 of the attachment.
3.8 Analysis Cases (p10)	L8	GWB	Please provide the PSM ground loads for Load Case 1, 2 and 3 (OSD-48 and OSD-31 at +4m and -8m) for Pv and Ph. We would suggest this information is included for context and to provide clarity of the actual ground loads the tunnel lining has been designed for. 21-Aug-26 - Closed.	1	CLOSED	We will include the values of Pv and Ph considered by PSM in the subsequent issue of the report in the compliance assessment stage. However, for ease of reference the relevant values of Pv and Ph adopted in the cavern design are shown in the cell below and are reporduced on Figure 2 and 3 attached. **PSTR Clause No.** / **Ground Load (kPa)** OSD-46 / OSD-31 / OSD-48 — 76 OSD-47 / OSD-31 / OSD-48 — 62 OSD-48 — 89 **Ground Load Adopted in Design** — **90**
3.9.3 Horizontal Ground Load (p11)	L9	OF	2nd bullet point: The way in which the horizontal ground load has been calculated is unclear. Please provide further discussion. 21-Aug-26 - Similar to `L10, this can be closed on the basis that commentary is provided in the report to address: 1) Reasons for the difference in horizontal ground loading between PSM ground loads and EDG ground load results (Method 3) for Load Cases 1, 2 and 3. 2) Justification for the EDG results in consideration of the differences to PSM ground loads.	2	CLOSED	The available PSM documentation does not explicitly describe the basis for deriving the nominated 20 kPa horizontal ground load allowance. Some commentary in the documentation suggests that the allowance is associated with the horizontal component of loading from an asymmetrical rock wedge. However, this allowance does not appear to explicitly account for the potential increase in horizontal ground loading associated with future overstation development in the same manner as the assessment of vertical ground loads. Accordingly, EDG has undertaken a separate assessment of the potential increase in horizontal ground loading on the cavern liner resulting from the proposed future development. The increase in horizontal loading associated with the proposed development has been compared with the corresponding increase in horizontal loading calculated for the PSTR load cases. This comparison has been undertaken using three assessment methods, as described below, to provide an appropriate assessment of the potential effects of the proposed development on horizontal loads acting on the cavern liner. **Method 1:** This is the method previously described in B01493-1BS, whereby the horizontal ground load is calculated based on the difference between the average horizontal component of the liner normal stress on each side of the cavern. **Method 2:** The total normal stress acting on the cavern liner under the PSTR load cases is compared with that resulting from the proposed building loads. This comparison is presented in Figure 1 of the attachment and shows that the cavern normal stresses from the proposed building load cases are smaller than the corresponding PSTR load cases. **Method 3:** The increase in the horizontal component of cavern normal stress resulting from the PSTR load cases is compared directly with the corresponding increase resulting from the proposed building loads on the side of the cavern closest to the proposed development. These comparisons are presented in Figures 4 and 5 of the attachment. - Figure 4 presents Cross-Section 1, which is taken through the middle of the site. Table 1 presents the increase in horizontal ground load based on the adopted continuum rock mass stiffness parameters, while Table 2 presents the corresponding results based on the discontinuum rock mass stiffness parameters. - Figure 5 presents Cross-Section 2, which is taken along the northern boundary of the site. Table 3 presents the increase in horizontal ground load based on the adopted continuum rock mass stiffness parameters, while Table 4 presents the corresponding results based on the discontinuum rock mass stiffness parameters. The assessment demonstrates that, for all scenarios considered, the increase in normal stress on the cavern liner and the corresponding increase in horizontal ground load resulting from the proposed building loads are less than those associated with the PSTR load cases.
4 Discussion (p14)	L10	GWB	In the previous workshops the PSM results and comparions to EDG modelling and modelling results was discussed. Please provide commentary in the report to address; 1) reasons for differences in output between PSM ground loads and EDG ground load results for Load Cases 1, 2 and 3 2) justification for the EDG results in consideration of the differences to PSM ground load results. 21-Aug-26 - Closed.	1	CLOSED	We will present the following commentary in the subsequent issue of the report in the compliance assessment stage: The differences between the PSM and EDG calculated ground loads for Load Cases 1, 2 and 3 mainly relate to the different methods used to represent the rock mass in the finite element analyses. The original PSM analysis adopted a discontinuum representation of the rock mass, whereby the rock is represented as discrete intact rock blocks separated by discontinuities. In contrast, the EDG analysis adopts a continuum representation in which the effects of the rock mass discontinuities are incorporated implicitly within the adopted rock mass stiffness parameters (Young's modulus). Rock mass stiffness has a significant influence on the calculated ground loads transferred to the cavern lining. The lower rock mass stiffness adopted in the EDG continuum model results in greater deformation of the surrounding rock and correspondingly higher ground loads on the lining. The intact rock and continuum rock mass stiffness parameters used in the respective assessments were established by PSM as part of the project's GIR. It is recognised that the relationship between the intact rock stiffness and the equivalent continuum rock mass stiffness is dependent on the characteristics, persistence and orientation of the discontinuity system. Consequently, the actual equivalent rock mass stiffness may reasonably lie between the intact rock stiffness represented in the PSM discontinuum model and the continuum stiffness adopted in the EDG model. On this basis, the range of EDG analyses undertaken is considered to appropriately encompass the credible range of rock mass stiffness parameters for the assessment. The primary analyses adopt the continuum-based rock mass parameters, with additional sensitivity analyses undertaken using the higher stiffness parameters representative of the discontinuum approach. The resulting range of analyses therefore provides an appropriate assessment of the sensitivity of the calculated ground loads to the assumed rock mass stiffness. Importantly, irrespective of whether the continuum or discontinuum stiffness parameters are adopted, the analyses consistently demonstrate that the ground loads associated with the PSTR load cases are greater than those associated with the proposed building load cases. The conclusions of the assessment are therefore not sensitive to the adopted representation of rock mass stiffness, and the EDG results provide an appropriate basis for assessing the ground loads acting on the cavern lining and demonstrating that ground loads associated with the proposed building loads do not exceed those associated with the PSTR load cases considered in the cavern lining design.
4 Discussion (p14)	L11	OF	3rd bullet point: The wording is unclear. Is it possible that the wording contains a typographical error? Please review. 21-Aug-26 - Closed.	2	CLOSED	This is a typo.

Addendum 2: Response to TMR comments

Observation and comments -TMR -Geotech	Response	Discussion
The 101 Albert Street development is described as being approximately 180 m high and comprising 42 levels in the Cavern Assessment Report (Attachment L), whereas the Cavern Assessment Technical Memorandum (Attachment I) describes the development as being approximately 200 m high and comprising 45 levels. Please confirm the proposed development height and number of floors, and ensure that the information is presented consistently throughout the submission. In addition, please confirm that the assessment conclusions remain valid for the final development configuration	Please note that Attachment I has been superceeded by Attachment L and can therefore be disregarded.	Closed
Please state in the Cavern Assessment Report (Attachment L) the minimum instrumentation and monitoring requirements necessary to verify the assumptions made and the assessment methodology adopted in the cavern assessment. This report should identify, at a minimum: -The types of instrumentation required for the cavern and the tunnels; -The locations of the instrumentation; -The applicable trigger levels and response actions; and The required monitoring frequencies during the relevant phases of construction and operation. The instrumentation and monitoring requirements should be consistent with the assumptions adopted in the cavern assessment and comply with the requirements of DTMR's Design Criteria for Bridges and Other Structures (DCBoS). In particular, the monitoring regime should be sufficient to verify predicted movements and confirm the ongoing performance of the tunnels, cavern, and associated infrastructure during the proposed development works. Note: This comment relates specifically to the instrumentation and monitoring required to validate the assumptions and methodology adopted in the cavern assessment. It does not relate to other monitoring requirements that may be imposed under the approval conditions, including but not limited to vibration, track, ground movement, or groundwater monitoring.	Cavern modelling is covered under the Compliance Assessments: MCU#11 - Track and Structures Monitoring Plan and MCU#12 - Instrumentation and Monitoring Plan.	TMR: Noted; Please refer to our comment sheet on MCU#12: "TMR comment HPP report_101 Alber Street_2.xls". These are the comments made by TMR and provided to EDQ on 24/08/2026 about the Instrumentation Monitoring Plan (IMP) - July 2026 + Tilt & Laser Distance Monitoring in Lieu of Automated Total Station. EDQ: Further detals to be resolved through compliance assessment - item considered closed for the purpose of the amendment application (DEV-2026-ALB-4986).
Observation and Comments - TMR Structures		
Section 3.6 - Figure 4 corresponding to Table B2-B for case 2 is missing.	This is the distortion case associated with Load Case7, see response below.	Closed

In the analysis case presented in Table 5, the previously nominated Load Case 7(PSTR load Case 48 incorporating B2-B case 2 - the distortion case), has been omitted. Could you please confirm whether this omission is intentional? Similarly, Appendix D (Analysis Results) does not include results for previous Load Case 7. If this load case has been excluded because it is not governing or critical, it would be helpful to include a brief statement to that effect for completeness and clarity.	We have discussed the basis of Load Case 7 with the original cavern lining designer, PSM. Based on these discussions, it was confirmed that Load Case 7 adopted a substantially reduced stiffness for the cavern liner to represent an extreme condition associated with levels of deformation that are not considered likely to occur under the anticipated loading conditions. Accordingly, comparison of the cavern liner response under the proposed building loading with the response obtained for Load Case 7 would not provide a meaningful comparison, as the latter represents a substantially different liner stiffness condition rather than a representative loading case. Load Case 7 has therefore been disregarded for the purposes of the current assessment. It is noted that excluding Load Case 7 as a comparison case represents a conservative position, as it removes an extreme-condition load case from the assessment against which the effects of the proposed building loading could otherwise be compared.	Closed
EDG should include a longitudinal section of the tunnel showing the expected displacements along the cavern at positions X, Y and Z. This would facilitate the design of appropriate instrumentation to monitor and validate the predicted movements.	A longitudinal section showing the predicted cavern displacements will be extracted from the results and used to define trigger levels and the cavern monitoring plan.	Closed