



- NOTES:**
- The drawing is the property Urban Engineering (Pty) Ltd and all designs are covered by copyright. The drawing and information hereon may not be used for any purpose other than that for what it was originally intended.
 - These drawings should be read together with the Architect's drawings, specifications and any discrepancies should be reported.
 - All dimensions and levels to be checked on site before fabrication. Any discrepancy or changes to the information on this drawing to be reported to the Engineer before fabrication.
 - The following standard specifications are applicable:
 - SANS 1200 C Site Clearance
 - SANS 1200 D Earthworks
 - SANS 1200 G Concrete
 - SANS 1200 H Structural Steelwork
 - All levels indicated on this plan are related to unfinished concrete.
 - All foundation excavations to be inspected and approved by the Engineer before casting of concrete.

- CONCRETE NOTES:**
- Concrete mixes:
 - All mass concrete - Class 20/19
 - Reinforced concrete strip footings - Class 25/19
 - Retaining wall and column footings - Class 25/19
 - Cavities of Retaining walls - Class 25/13
 - All other reinforced concrete - Class 30/19
 - All reinforcement to be supported on approved concrete spacers for cover:
 - Bases - 75mm bottom and 50mm sides
 - Retaining walls - Centred
 - Slabs - 40mm
 - Columns and beams - 40mm
 - No concrete may be cast without approval of the Engineer.
 - All concrete between expansion joints to be cast in one pour.
 - All reinforced concrete to be vibrated.
 - Place 250 Micron Polylin sheet between 2 layers of 3 ply method on nutec fibre cement sheet between concrete and brickwork as per detail shown.
 - No brick wall should be built on unsupported sections of the slab before removal of all formwork and props to slab and beams soffits.
 - Formwork and props to any reinforced concrete can only be removed on the Engineers instructions.
 - All concrete to be cured by an approved method for a minimum period of 7 days.

- BRICKWORK NOTES:**
- Use Class FBSE (14MPa) bricks and Class 2 mortar for all loadbearing brickwork indicated on this plan. Test on bricks and mortar to confirm the required strength should be submitted to the Engineer before building work commences.
 - All foundation walls exceeding 1m but less than 1.25m in height difference should be built as 350mm walls with brickforce every brick course.
 - Foundation walls exceeding 1.25m in height should be designed as retaining walls by the Engineer.
 - All brick loadbearing walls and walls supported by the reinforced concrete structure should be built as per building plans.

- STRUCTURAL STEEL NOTES:**
- All structural steel to EN10025-2-S355JR.
 - All structural steel to be hot dipped galvanized to ISO 1461-1999 only after fabrication. Clean galvanized surfaces with Placon galvanized iron cleaner, apply 1 coat of Placon Interseal 6710 HS Surface Tolerant Epoxy (125-150um dry thickness) and finishing coat of Placon Interthane 990 (20-75um dry thickness). Colours as per Architect's specifications.
 - All bolts are to be hot-dipped galvanized to ISO 1461.
 - Damaged galvanized areas should be treated with an 80 grit abrasive paper or stainless steel brush and all dust and debris should be removed. A zinc rich epoxy "Zinc fix" should then be applied over the damaged areas as per manufacturers instructions to a dry film thickness of minimum 100um.
 - All welding to be done by qualified welders. Minimum 6mm fillet welds with E70XX electrodes unless otherwise shown. No welding on site will be allowed, unless approved by Engineer. Weld surfaces to be continuous, clean and smoothly finished without pores or craters. No site welding allowed.

The reinforced concrete structure indicated on this drawing has been designed for the following additional loads apart from the own weight of the structure and walls as per Architect's building plans:

Floor finishes = 120kg/m²
 Live load = 150kg/m²

REFERENCE DRAWINGS		
NO	DATE	DESCRIPTION

NO	DATE	DESCRIPTION
0A	19/09/2025	FOR INFORMATION



Project
LANGENHOVEN STREET SUBSTATION

Drawing Title
SITE LAYOUT

ISSUED FOR: INFORMATION

Scale (Paper Size)	Date
AS SHOWN	19 SEPTEMBER 2025
Designed T de JAGER	Drawing Number 24-139-001
Drawn T de JAGER	Revision 0A
Checked -	