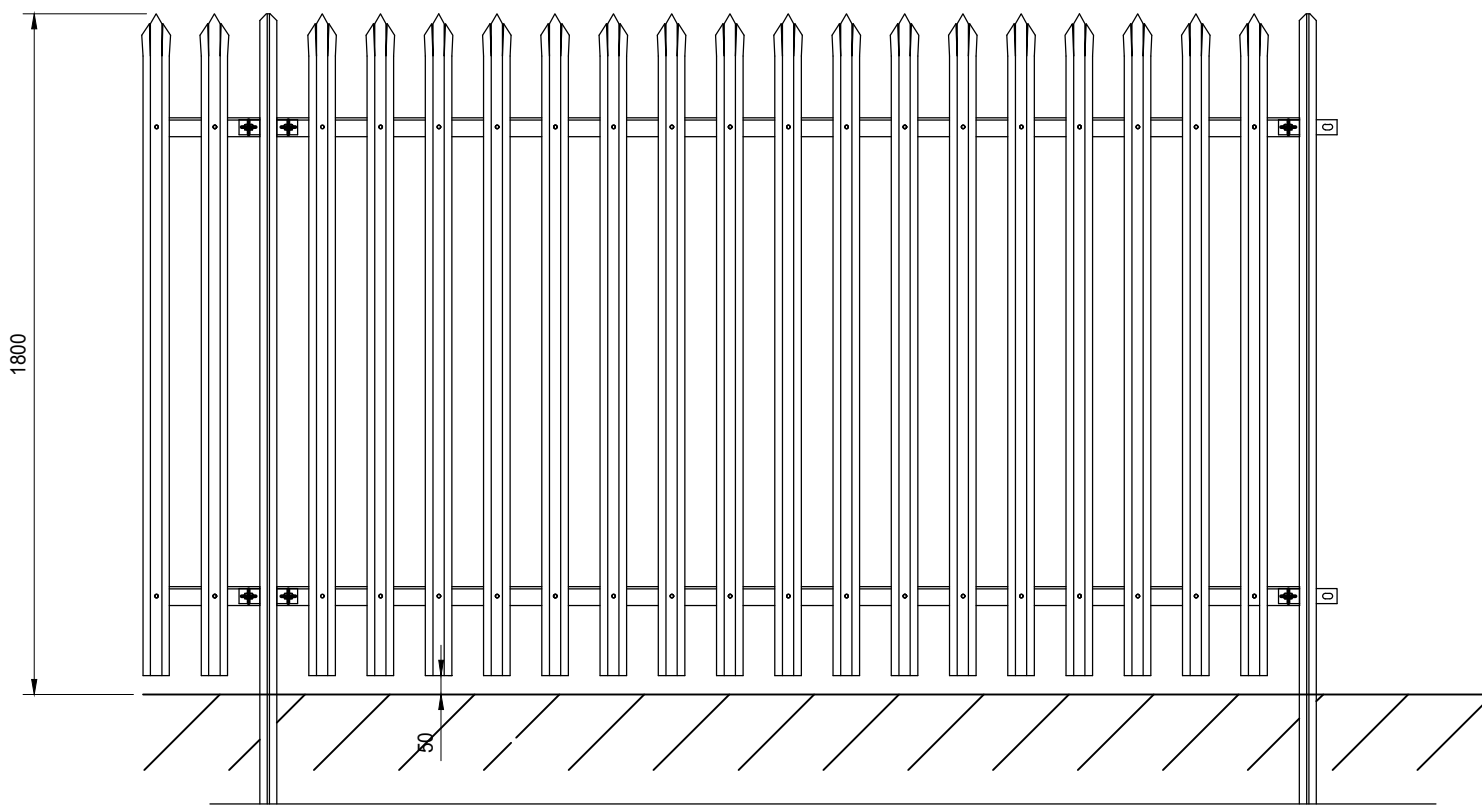
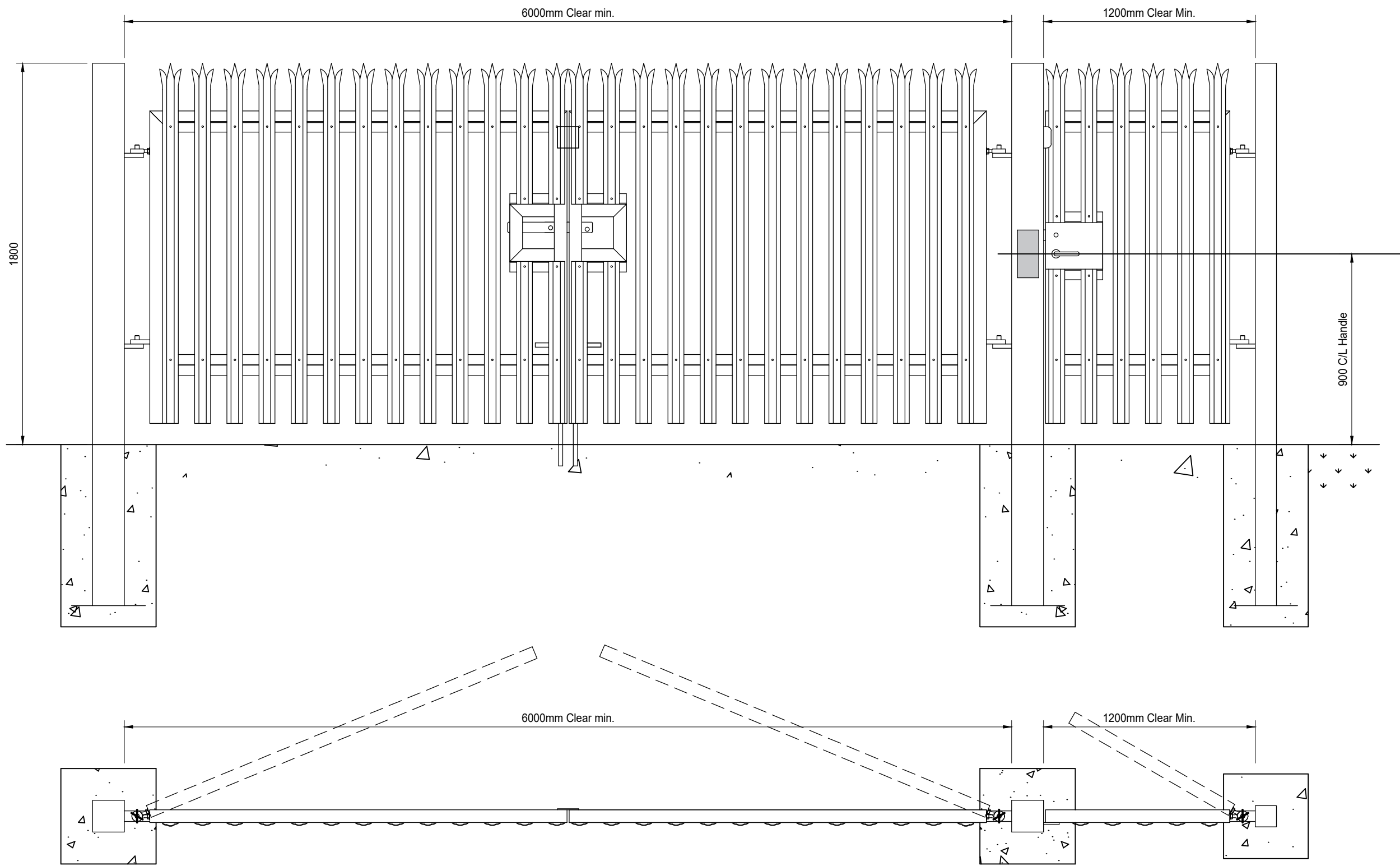


ALL DIMENSIONS TO BE CHECKED BY CONTRACTOR



Typical Palasade Fence - Typical Fence Elevation

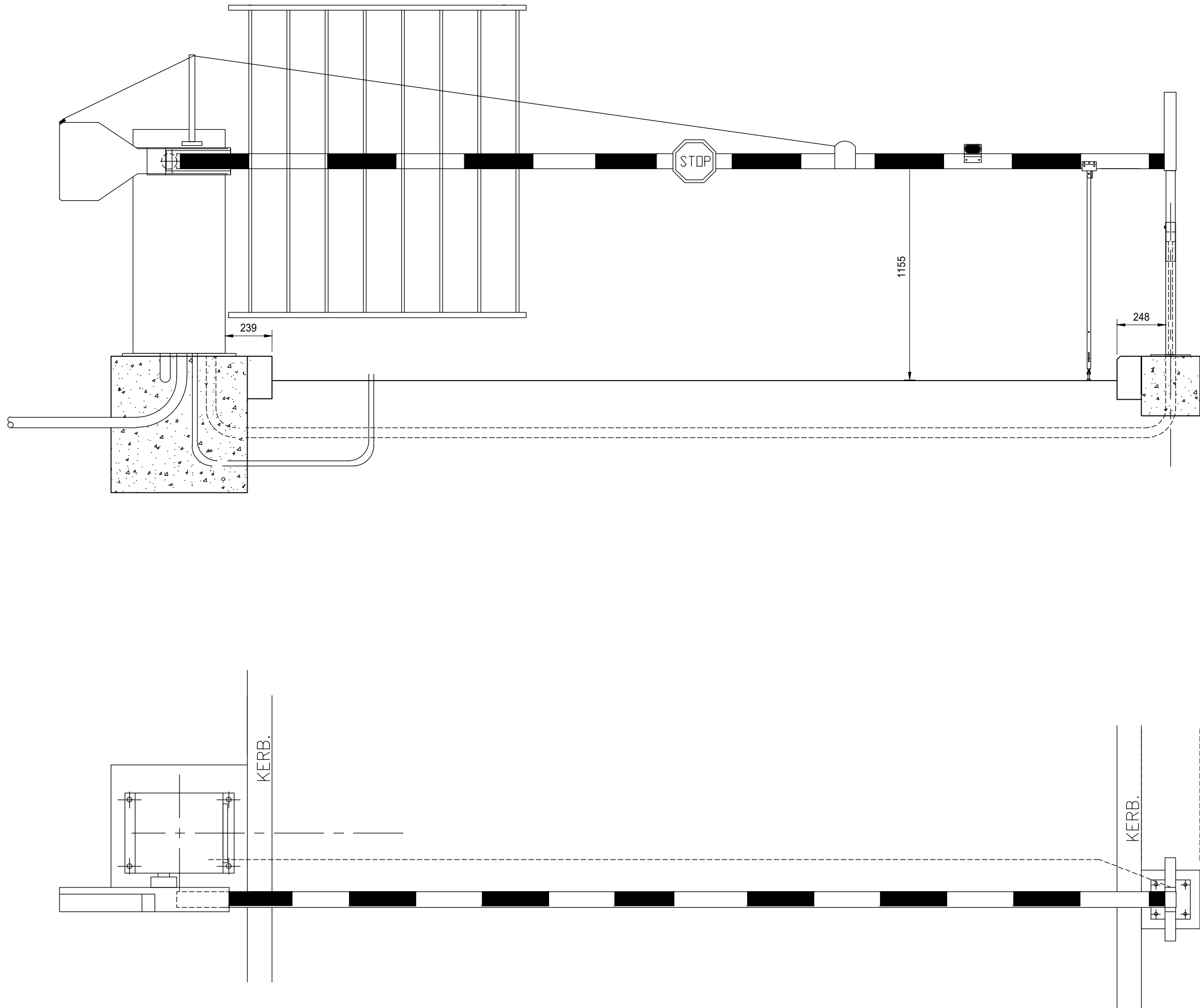
Scale 1:20 @ A1

Typical Palasade Fence Gate Type 1

Scale 1:20 @ A1

Typical Palasade Fence Gate Type 2

Scale 1:20 @ A1



Typical Vehicle Barrier Plan and Elevation Gate Type 3

Scale 1:20 @ A1

Palisade Fencing Specification

To extent as shown on CCE drawings, and to the approximate dimensions indicated above, allow for the supply and installation of 1.8m high PPC steel palisade fencing to meet the following specification:

Heights:
1.8m high from external ground level. Posts and panel position to be adjusted to suit surface level to ensure consistent height is achieved throughout.

Panel width:
Panel widths shall to be determined by contractor to suit site conditions, with a maximum width of 2750mm or as advised by chosen fencing supplier.

Pales:
Pales to be W-section profile with splayed triple-spike at head. All pales to be formed from minimum 2.0mm thick hot-dip galvanised mild steel and finished with Polyester Powdercoating finish of colour to be chosen by client.

Pales shall be installed at maximum 150mm centres and shall be positioned to ensure no gaps between pales exceed 90mm.

Rails:
All rails to be constructed from min. 50 x 50 x 2.75 mm rolled steel angles (RSA) or as determined by manufacturer to suit site conditions. All rails shall be constructed from hot-dip galvanised mild steel and finished Polyester Powdercoating finish of colour to be chosen by client.

Posts:
All posts to be constructed from min. 102 x 44 mm steel RSJ sections of appropriate length to suit site conditions. All posts shall be constructed from hot-dip galvanised mild steel and finished Polyester Powdercoating finish of colour to be chosen by client.

All posts shall be fixed into minimum 750mm deep foundation footings or as determined by contractor to meet wind loading requirements.

Fixings:
Zinc-plated steel bolts with shear nuts

Compliance:
All fencing and associated elements shall be designed, manufactured and installed in full accordance with BS EN 1722-12, BS EN ISO 1461 and NG TS 2.22.

Palisade Gate Specification

To extent as shown on CCE drawings, and to the approximate dimensions indicated above, allow for the supply and installation of 1.8m high PPC steel palisade single and double gates to meet the following specification:

Heights:
All gates shall be designed to be 1.8m high and shall be aligned with adjacent palisade fences.

Widths:
Gate Type 2 (single pedestrian gates) shall be designed to provide a clear opening width of 1.2m wide.

Gate Type 1 (double vehicular gates) shall be designed to provide a clear opening width of 6m wide, split into 2 swing gates of equal width.

Pales:
Pales to be W-section profile with splayed triple-spike at head. All pales to be formed from minimum 2.0mm thick hot-dip galvanised mild steel and finished with Polyester Powdercoating finish of colour to be chosen by client.

Framework:
The main framework for gates shall be constructed from minimum 60 x 60 x 3mm SHS for main frame and minimum 50 x 50 x 5 mm for sub frame. All framework elements shall be constructed from hot-dip galvanised mild steel and finished with Polyester Powdercoating finish of colour to be chosen by client.

Posts:
All support posts shall be a minimum of 150 x 5 mm SHS or as deemed required by the contractor to suit the opening width. All posts shall be constructed from hot-dip galvanised mild steel and finished with Polyester Powdercoating finish of colour to be chosen by client.

Hinges:
Hinges to all gates shall be determined by the contractor to suit the opening operation of the gate. All hinges shall be adjustable to allow for local site adjustment at installation.

For Gate Type 2, the door shall be provided with a secure self-closing device to ensure the door swings to the closed position following use. The door closing device shall meet the opening force requirements as set out within Approved Document M.

Latch:
For Gate Type 1, this shall be a traditional sliding latch with provision for heavy-duty padlock.

For Gate Type 2, the gate shall be provided with a lever handle and deadlock. The lever handle shall allow for operation of the door during normal conditions, with the deadlock used for nighttime security. During day-to-day use, the door shall be locked shut via a magnetic locking device fitted to the secure side of the door. This shall be linked to the access control system as detailed below.

Fixings:
Zinc-plated steel bolts with shear nuts as standard

Compliance:
All gates and fencing and associated elements shall be designed, manufactured and installed in full accordance with BS EN 1722-12, BS EN ISO 1461, BS EN 13438, powered and automatic gates are CE Marked to the Machinery Directive.

Access Control
To Gate Type 2 (single gates) the contractor shall allow for the supply and installation of a combined key pad and video intercom access system to match and extend the existing Marshalls system elsewhere on site. The contractor is to include for all necessary equipment including, but not limited to, card readers, programmers, push to exit buttons on opposite side. The contractor shall allow of liaising with the clients chosen supplier to agree details for programming etc. Include for all wiring, connections and installation works in accordance with manufacturer's guidelines and MEP Specification.

The video intercom display shall link back to a receiver, screen and handset to be located within the main office of the new gatehouse building. The exact location shall be confirmed with the client team at the pre-start meeting.

Vehicle Barrier Specification

To extent as shown on CCE drawings, allow for the supply and installation of new Heavy Duty Automatic Rising Arm vehicle barrier by Newgate (T: 01636 700 172) or similar and equal approved, to meet the following specifications:

Width:
The width of the barrier shall be designed to extend across the full width of the new access road as indicated on the adjacent design elevation.

Height:
The height of the barrier shall be 1055mm from kerb level.

Curtain:
The barrier shall be provided with a full Aluminium curtain to prevent unauthorised pedestrian access beyond the barrier.

Additional Accessories
The barrier shall be provided with a central "stop" sign located upon the barrier.

The barrier shall be provided with associated tip support post to opposite side of barrier.

Supplies
The contractor shall include for all required power, data and associated supplies to ensure full operation of the barrier. It is noted that the barrier requires a 230v 1Ph 50hz supply.

Foundations
The contractor shall include for design, supply and installation of all required foundation footings as deemed required for the main motor and gear housing, plus associated tip support.

Compliance:
The barrier system shall be designed, supplied and installed in full accordance with BS 6571 pt 4 and shall be UKCA Approved.

Operation:
During normal operation, the barrier shall be operated via push button control located within the gate house main office, plus the provision of operation via an intercom/access control system. All "entry" vehicles shall be required to activate the intercom/access pad system to be located adjacent the barrier (see notes below).

For "exit" vehicles, a vehicle transponder located within the roadway surface shall be provided to allow the barrier to open upon detection of a vehicle approaching the exit direction barrier.

Access Control
To Gate Type 3 the contractor shall allow for the supply and installation of a combined key pad and video intercom access system to match and extend the existing Marshalls system elsewhere on site. The contractor is to include for all necessary equipment including, but not limited to, card readers, programmers, push to exit buttons on opposite side. The contractor shall allow of liaising with the clients chosen supplier to agree details for programming etc. Include for all wiring, connections and installation works in accordance with manufacturer's guidelines and MEP Specification.

For the vehicle barrier, it is noted that the contractor shall include for the installation of 2no. intercom devices upon a single post, with 1no. positioned at low level for access from car/van level, and a second unit positioned at high level for access from HGV cab level.

The video intercom display shall link back to a receiver, screen and handset to be located within the main office of the new gatehouse building. The exact location shall be confirmed with the client team at the pre-start meeting.

P1	A Safe barrier detail omitted	RA	20.12.2024
P0	First Issue	RA	20.12.2024
REV	AMENDMENT	BY	DATE

UK CA CE	PROJECT EXECUTION CLASS: N/A All materials supplied in relation to those specified on this drawing are to be marked UKCA in accordance with the UK Department for Business and Trade OR CE marked in accordance with the European Union Declaration of conformity
-----------------	--

PURPOSE OF ISSUE:

PRELIMINARY

COUCH Consulting Engineers Civil & Structural					
SUTTON COLDFIELD St George's House, Unit 2, Priory, London Road, Canwell, Sutton Coldfield, B75 5SH Tel: 0121 308 7557 info@cough.co.uk	☐ AYLESBURY Midshires House, Midshires Business Park, Smeaton Close, Aylesbury, HP16 8HL Tel: 01296 761 719 www.cough.co.uk	☒ STONE-ON-TRENT Genesis Centre, 18 Innovation Way, Stoke-on-Trent, ST6 4BF Tel: 01782 366 160 www.cough.co.uk			
CLIENT					
PROJECT		NEWPORT GATEHOUSE			
DRAWING TITLE					
PROPOSED FENCE TYPES AND SPECIFICATIONS					
SHEET SIZE	SCALE	DATE	DRAWN	CHECKED	STATUS
A1	1:20	DEC 2024	RA	DCC	
CCE PROJECT No.	DRAWING No.				REV
8686	002				P1