



WAYFINDING & SIGNAGE MANUAL

November 2022

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MANUAL STATUS

This is a draft issue of the SEGRO Wayfinding & Signage Manual.

This manual is issued for the purpose of review and comment of the wayfinding suite across the SEGRO estates.

Sign types that have been fully documented and detailed will require further engineering review and validation.

REVISION	DESCRIPTION	ISSUE
A	Draft for Review	14.11.22

FOREWORD

The SEGRO Wayfinding & Signage Manual provides information on how to identify and specify the complete range of sign types required for effective wayfinding on the SEGRO estates.

The Manual describes the principles of the wayfinding strategy and details construction and visual standards of the various sign types required.

The Manual is provided to ensure signage across all of the estates meet the quality standards of aesthetic appeal, uniformity and simplicity. The wayfinding scheme has been developed to be highly functional and deliver effective wayfinding communication that is clear, consistent and meaningful.

It is important that the Manual be strictly followed to maintain consistency across the estates in both application and brand.

Manuals are living documents and will inevitably continue to evolve alongside the business and therefore will be reviewed periodically to maintain accuracy and to capture changing signage needs.

We create the
space that enables
extraordinary things
to happen

PART A

1 USING THIS MANUAL

- 1.1 Who will use this Manual
- 1.2 How to use this Manual
- 1.3 Sign Type Code Definitions
- 1.4 Sign Type Summary – Site Identification signs
- 1.5 Sign Type Summary – Directional signs
- 1.6 Sign Type Summary – Tenant Identification signs
- 1.7 Project Delivery & Responsibility

1 USING THIS MANUAL

1.1 WHO WILL USE THIS MANUAL

It is anticipated that a variety of contractors and consultants will utilise this document to deliver signage at the various SEGRO estates.

This will include new large-scale sign implementation programs as well as replacing an individual or a small number of existing signs.

Typically the following list of people would access this Manual.

SEGRO Project and Estate Management

Signage manufacturers

Maintenance contractors

Design Consultants such as Architectural and Landscape

There may be times when the answer isn't always clear or assistance is required.

It is the responsibility of the signage manufacturers and consultants to contact SEGRO before applying solutions that are outside of this Manual.

1 USING THIS MANUAL

1.2 HOW TO USE THIS MANUAL

The Manual aims to provide information on how to design and specify all estate wayfinding signs. It is important to maintain this strategy throughout all projects and across all estates.

This Manual has been prepared in two sections;

Part A

Documents the various aspects of strategy, concept, design, documentation and implementation.

Part B

Provides the detailed sign drawings for each of the sign types and their variations.

Before specifying any signs, it is important to read and understand the vision and framework outlined in Part A.

1 Using this Manual

Provides an overview of how to use the Manual along with an introduction to selecting the correct sign type for each application.

2 Design Principles

Describes the fundamental design principles including wayfinding methodology and design philosophy.

3 Typical Wayfinding Applications

Provides an overview of evidence based assessments and analysis of the various estates and the intended applications for each sign type.

4 Graphic Standards

Documents the visual graphic standards including type, colour, pictograms, arrows and estate naming.

5 Material Standards

Details the approach to material use and various types of reclaimed material and biodiversity elements.

1 USING THIS MANUAL

1.3 SIGN TYPE CODE DEFINITIONS

This page illustrates the typical process in selecting the correct type of sign for the required message.

Sign Type Code

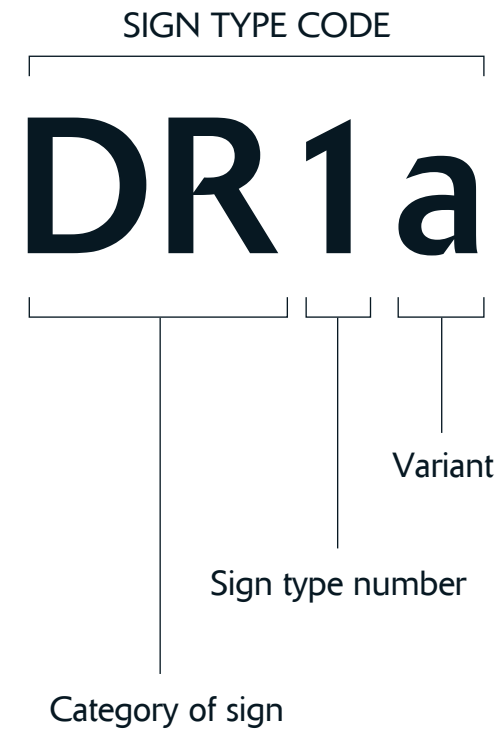
Signs have been categorised based on the type of message they convey. This is indicated by the first two letters of the sign code.

- ID** Site Identification signs
- DR** Directional signs
- TN** Tenant Identification signs

Detailed drawings of sign types are provided in PART B Sign Type Drawings.

In some instances minor differences exist within a sign type and they are identified by an alphabetical suffix (e.g. DR1a, DR1b etc).

Variants of sign types are based on the option of adding insect habitats and/or planting to signage structures. These are detailed in PART B Sign Type Drawings.



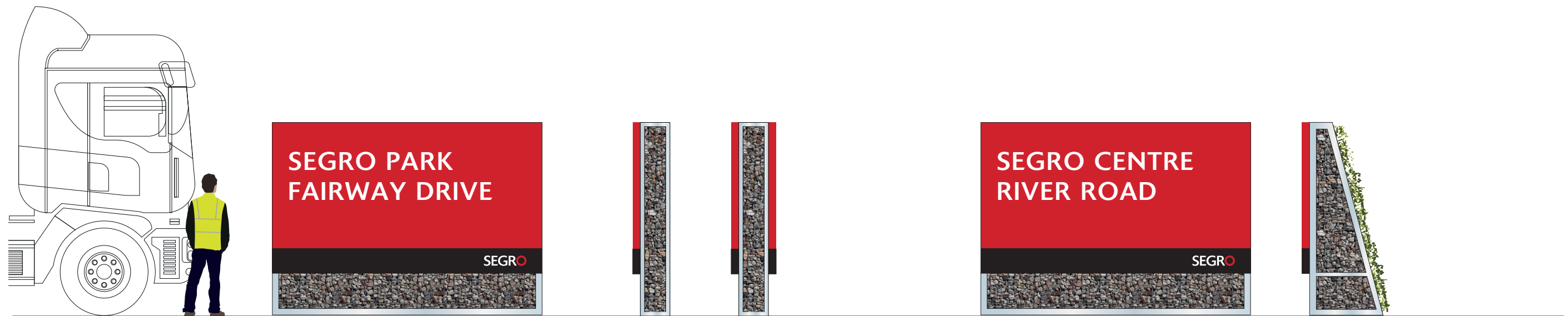
1 USING THIS MANUAL

1.4 SIGN TYPE SUMMARY – Site Identification Signs



ID1 Site Identification – Totem
Double Sided

ID2 Site Identification – Large Landscape (Tapered)
Single Sided

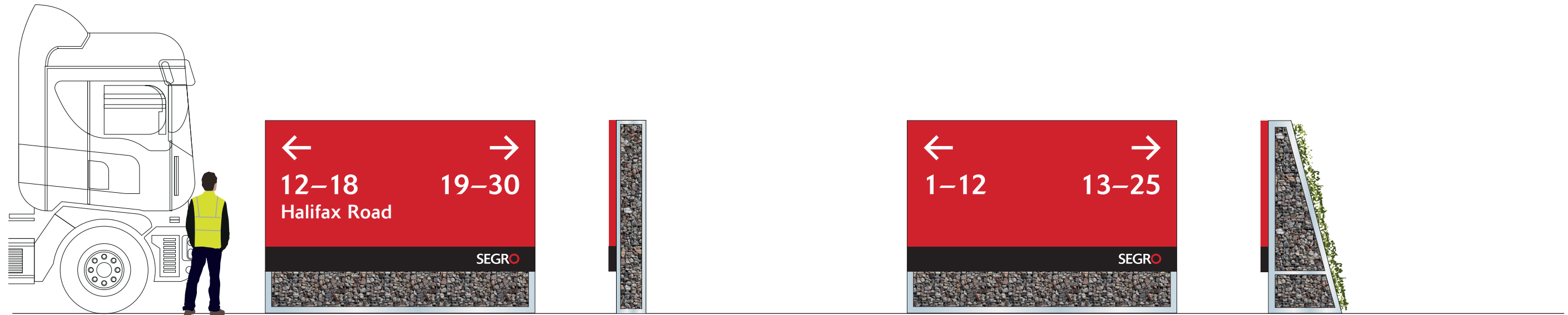


ID3a Site Identification – Small Landscape (Plinth)
Single or Double Sided

ID3b Site Identification – Small Landscape (Tapered)
Single Sided

1 USING THIS MANUAL

1.5 SIGN TYPE SUMMARY – Directional Signs



DR1a Directional – Landscape (Plinth)
Single Sided

DR1b Directional – Landscape (Tapered)
Single Sided



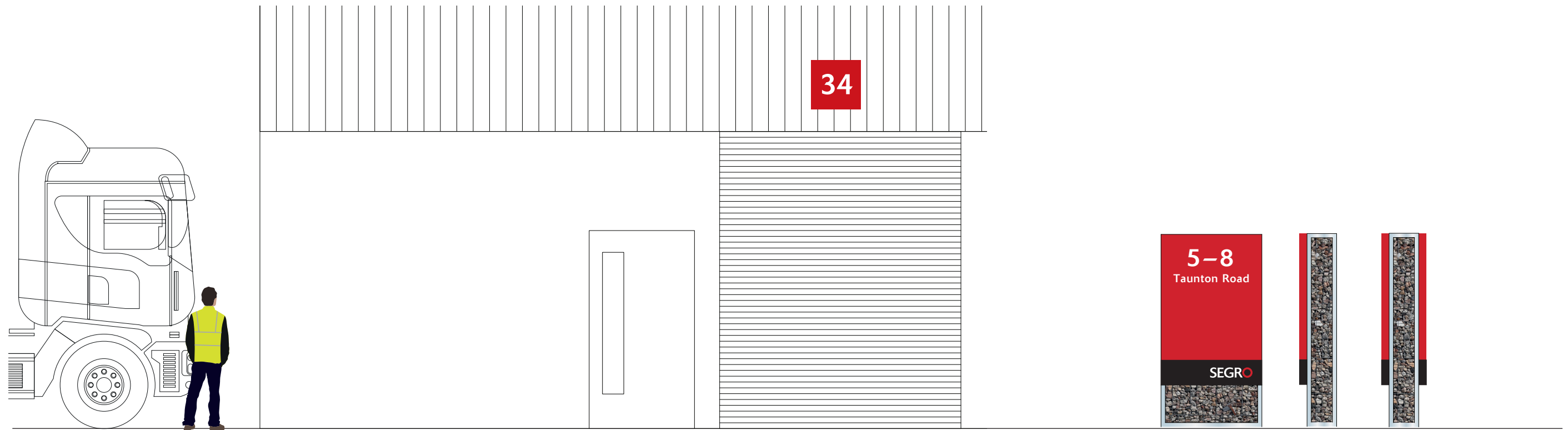
DR2a Directional – Totem (Plinth)
Single or Double Sided

DR2b Directional – Totem (Tapered)
Single Sided

DR3 Street Name – Finger Board
Double Sided Board

1 USING THIS MANUAL

1.6 SIGN TYPE SUMMARY – Tenant Identification Signs



TN1 Single Unit Number
Single Sided

TN2a Multi Unit Number – Totem (Plinth)
Single or Double Sided



TN2b Multi Unit Number – Totem (Tapered)
Single Sided

TN3a Tenant Name – Totem (Plinth)
Single or Double Sided

TN3a Tenant Name – Totem (Tapered)
Single Sided

1 USING THIS MANUAL

1.7 PROJECT DELIVERY & RESPONSIBILITY

It is vitally important the contractor follows the Step Chart and workflow process to ensure wayfinding and signage adheres to the design and wayfinding principles as set out in this Manual.

The contractor is responsible for: **Being fully informed and diligent in their approach to each project to meet expectations and enable successful outcomes.**

Ensuring a consistent and coherent wayfinding strategy is applied to each SEGRO estate.

Biodiversity, planting and reuse of existing materials are adequately explored and introduced into the signage scheme.

STEP 1 Wayfinding Review

Contractor

- Review site based on wayfinding strategy principles.
- Issue draft sign location plan supported by user circulation and sightline studies.

SEGRO

- Review wayfinding proposal and provide feedback / approve as required.

Contractor

- Confirm scope and quantity of signs required to fulfill wayfinding requirements.

STEP 2 Biodiversity & Materiality Review

Contractor / SEGRO

- Investigate options for materiality that can be reclaimed from the estate or sourced locally.
- Provide short summary of local biodiversity environment.

Contractor

- Identify and select reclaimed material to be used within signage structures.

Contractor

- Identify local pollinator and planting species to be supported within signage.

STEP 3 Shop Drawings

Contractor

- Coordinate with other consultants as required.
- Issue full set of shop drawings for approval

SEGRO

- Review drawing proposal and provide feedback / approve as required.

Contractor

- Update and make changes to drawings as required.
- Ensure all landscape and biodiversity elements have been coordinated.

SEGRO

- Provide final approvals and sign-offs.

STEP 4 Manufacture and installation

Contractor / SEGRO

- Conduct on-site visit to confirm all sign locations prior to install of foundations.

Contractor

- Manage and coordinate the manufacture process.
- Provide final installation programme.

Contractor

- Manufacture all sign types.
- Coordinate in factory inspections for SEGRO to review prior to installation.

Contractor

- Coordinate all footings and foundations.
- Installation of all signs.

STEP 5 Inspections

Contractor / SEGRO

- Conduct on-site inspections.
- Inspect installed signs and prepare Defects Report as required.

Contractor

- Manage and coordinate the rectification process for each defective sign.
- Rectify any defects in accordance with contract.

SEGRO

- Review and approve signs as required

PART A

2 DESIGN PRINCIPLES

- 2.1 Design Philosophy
- 2.2 Design Objectives
- 2.3 Wayfinding Methodology

2 DESIGN PRINCIPLES

2.1 DESIGN PHILOSOPHY

We aim to create the space that enables extraordinary things to happen. This company philosophy applies not only to our buildings, but also to the areas on which we develop them.

Wayfinding signage is considered a key element in providing greater visibility of SEGRO's progress through championing a commitment to sustainability and biodiversity.

The design approach is based on a simple system of elements and standardised components that provide an intelligent, legible and interchangeable kit of parts that can function at various scales and environments.

Signage structures are designed to be flexible in their material and function using a range of sustainable and circular building materials combined with biodiversity elements such as planting and insect hotels; supporting the UK government strategy to curb pollinator loss by introducing more spaces and 'urban hotspots' to support pollinating insects.



2 DESIGN PRINCIPLES

2.2 DESIGN OBJECTIVES

Unified Image

Create a coherent unifying system of elements that visitors can understand across each estate and all environments. Enhance the overall visitor experience of the SEGRO estates.

Keeping it Simple

Simplify journeys for all visitors, both pedestrian and vehicular. The simpler the information, the easier it will be to understand.

One Voice

Provide a wayfinding system that is consistent across all platforms. Consistent approach to the naming of sites and tenant information will allow familiarity for users and build credibility in the information presented.

Inclusive

Reduce stress for first time visitors. Information is appropriate for all types of users and vehicles so that it does not exclude any group or individual from being able to engage and access the information provided.

Appropriate to Scale

Information to be presented to suit the respective environment. Signage is presented and to be positioned to be legible from expected viewing distances.

We do things in a sustainable way as part of our Responsible SEGRO framework. Our future success depends on our ability to make a positive contribution to local customers, employees, suppliers, investors and our communities. Being responsible and acting with integrity has always been at the heart of what we do.

2 DESIGN PRINCIPLES

2.3 WAYFINDING METHODOLOGY

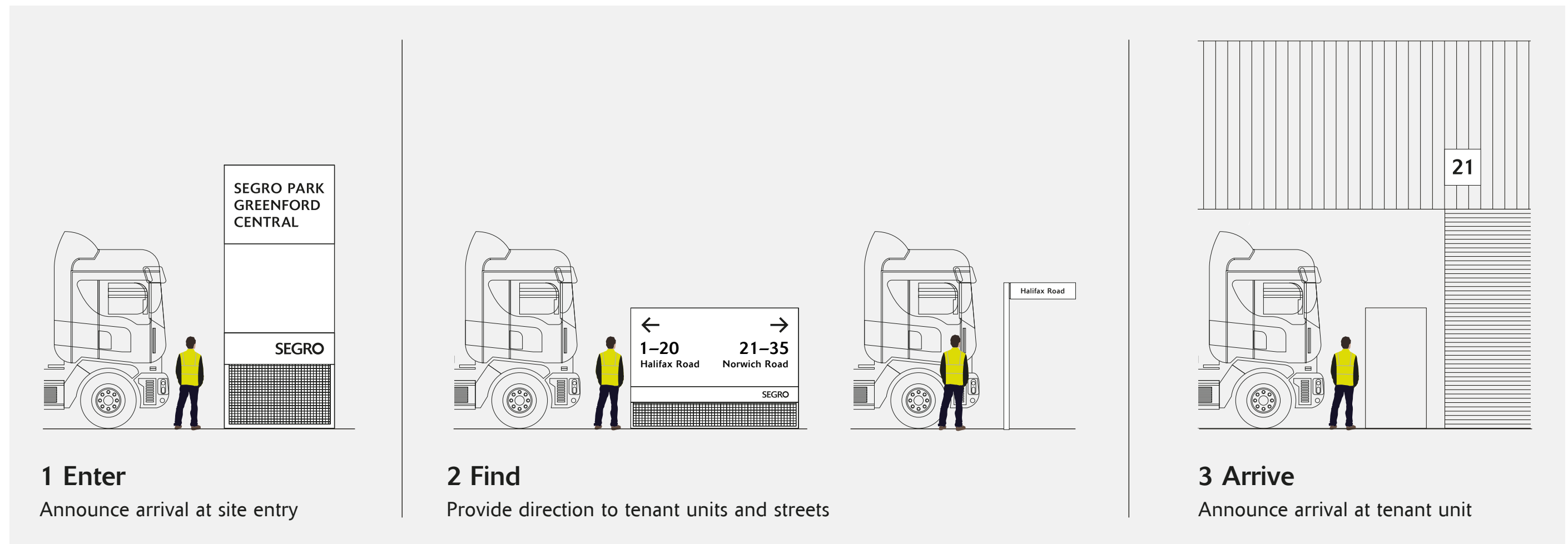
The wayfinding strategy incorporates a consistent family of sign types that starts when first approaching a SEGRO estate and will form continuous threads of information that addresses the vehicular journeys throughout the site.

A clear logic has been developed that shows the timely provision of appropriate information during visitor journeys including approaching, arriving, travelling through and departing from the site.

SEGRO estates are relatively simple in their structure and road layout. Wayfinding methodology follows a simple approach of progressive disclosure:

- Step 1 Announce arrival at main entry points
- Step 2 Direct to streets and tenant units
- Step 3 Announce arrival at tenant unit

Users of site will typically be driving HGV's, large vans, and couriers. They will be looking for clear and simple information.



Methodology Diagram

PART A

3 TYPICAL WAYFINDING APPLICATIONS

- 3.1 ID1 Site Identification
- 3.2 ID2 Site Identification
- 3.3 ID3a ID3b Site Identification
- 3.4 DR1a & DR1b Direction
- 3.5 DR2a & DR2b Direction
- 3.6 DR3 Street Name
- 3.7 TN1 Tenant Identification
- 3.8 TN2a & TN2b Tenant Identification
- 3.9 TN3a & TN3b Tenant Identification

3 TYPICAL WAYFINDING APPLICATIONS

3.1 ID1 SITE IDENTIFICATION

STEP 1

Announce arrival at site entry

ID1 Totem sign

The sign is typically the most used identification sign due to its scale, visibility and small footprint.

The sign is typically double sided and commonly used at urban and inner city estates where traffic approaches from both directions.

The estate name must be clearly visible from distance and legible on approach.

General notes

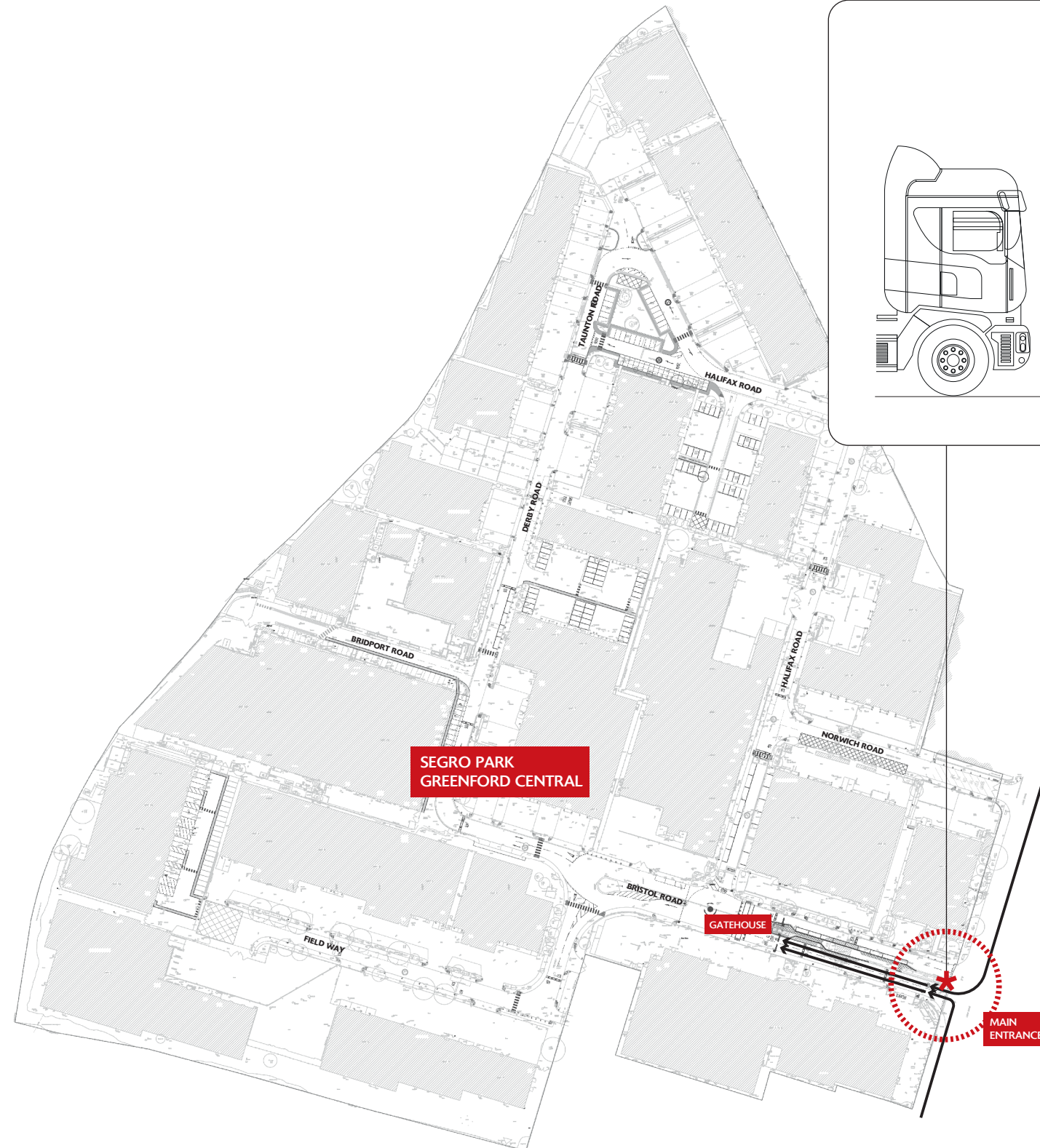
Scale, sightlines, urban and environmental context, legibility, day and night use must be considered when selecting the appropriate sign.

Design options

Reclaim materials – YES

Planting – NO

Insect habitats – NO



Typical Application

3 TYPICAL WAYFINDING APPLICATIONS

3.2 ID2 SITE IDENTIFICATION

STEP 1

Announce arrival at site entry

ID2 Large Landscape sign

The sign is typically used at large estates such as Logistic Parks where scale and impact is priority.

The sign is typically single sided and orientated to face towards approaching traffic.

The estate name must be clearly visible from distance and legible on approach.

General notes

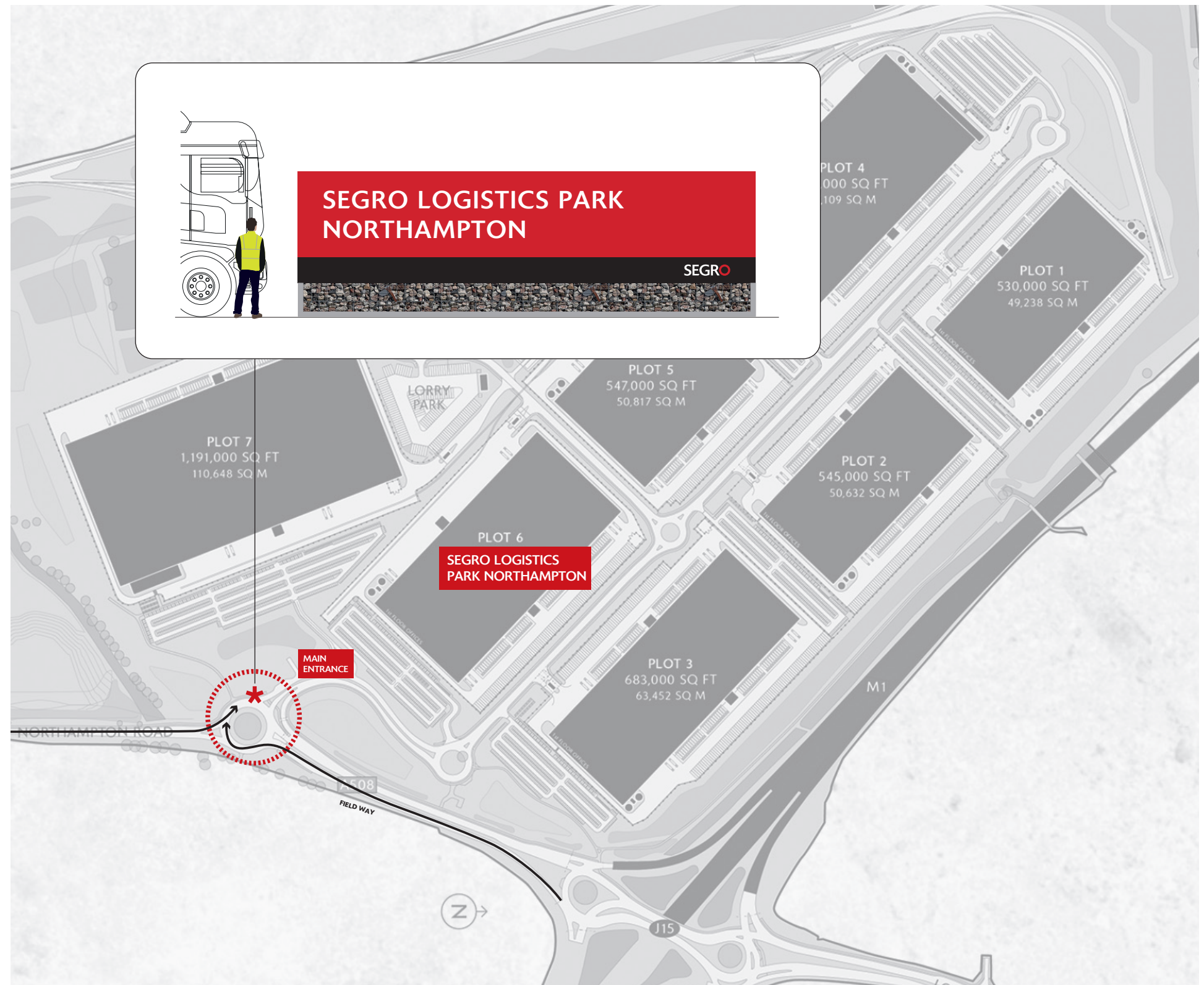
Scale, sightlines, urban and environmental context, legibility, day and night use must be considered when selecting the appropriate sign.

Design options

Reclaim materials – YES

Planting – YES

Insect habitats – YES



Typical Application

3 TYPICAL WAYFINDING APPLICATIONS

3.3 ID3 SITE IDENTIFICATION

STEP 1

Announce arrival at site entry

ID3a & ID3b Small Landscape signs

The sign is flexible in its use. The sign can be single or double sided depending on site layout and vehicular approach.

The sign is typically used in areas of surrounding residential, or at smaller estates where a large sign is not warranted.

The estate name must be clearly visible from distance and legible on approach.

General notes

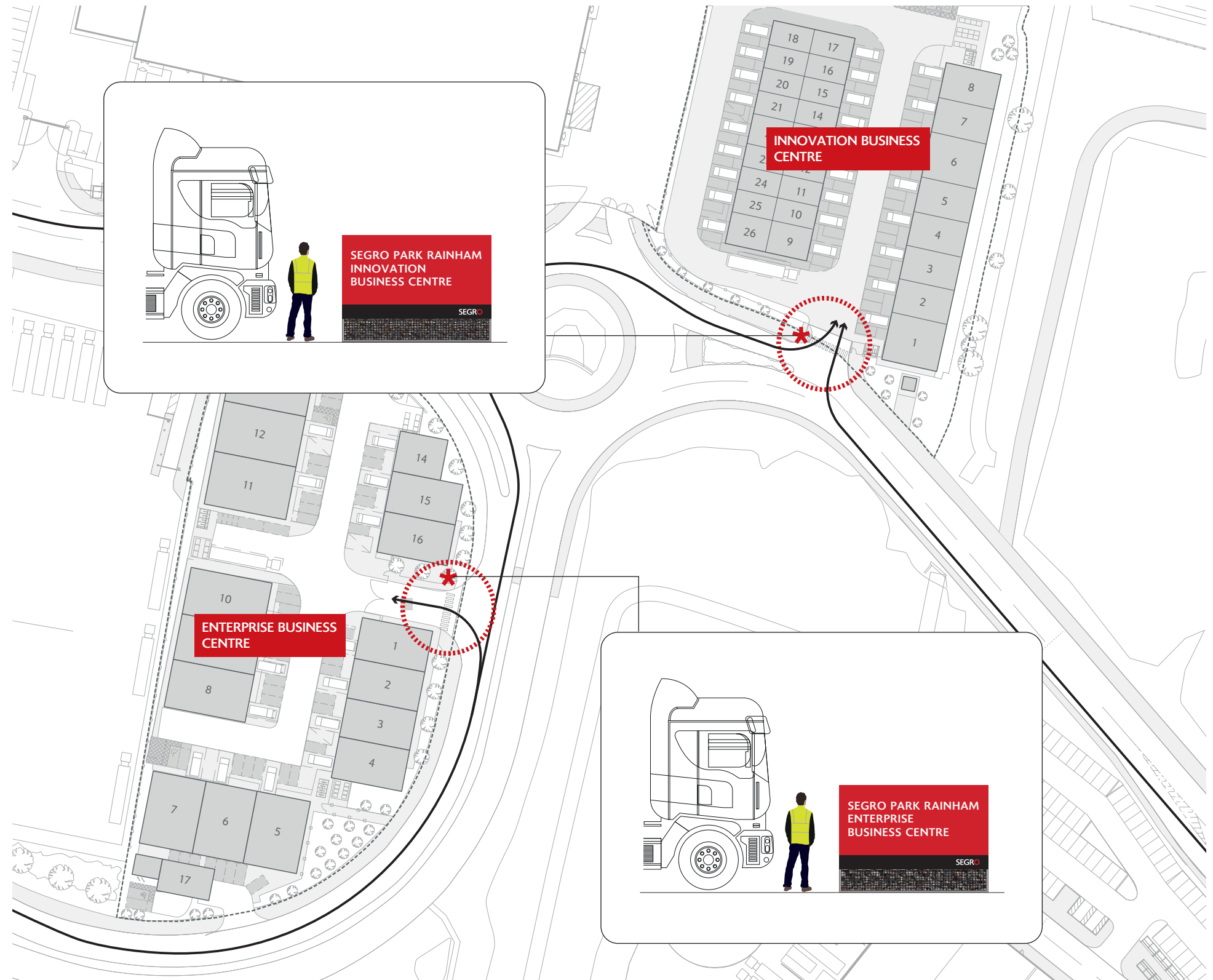
Scale, sightlines, urban and environmental context, legibility, day and night use must be considered when selecting the appropriate sign.

Design options

Reclaim materials – YES

Planting – YES

Insect habitats – YES



Typical Application

3 TYPICAL WAYFINDING APPLICATIONS

3.4 DR1 DIRECTION

STEP 2

Provide direction to tenant units and streets

DR1a & DR1b Landscape signs

The sign is typically single sided and orientated to face towards approaching traffic.

The sign is typically used at 'T-style' junctions to provide guidance to both directions.

Typically visitors will be guided by using tenant unit numbering and street names. This is the primary information a visitor will need in order to find their way around an estate.

Where this strategy will differ is on a large Logistics Park where only a small amount of tenants are located; in this instance tenant names may be considered to be used on a directional sign.

General notes

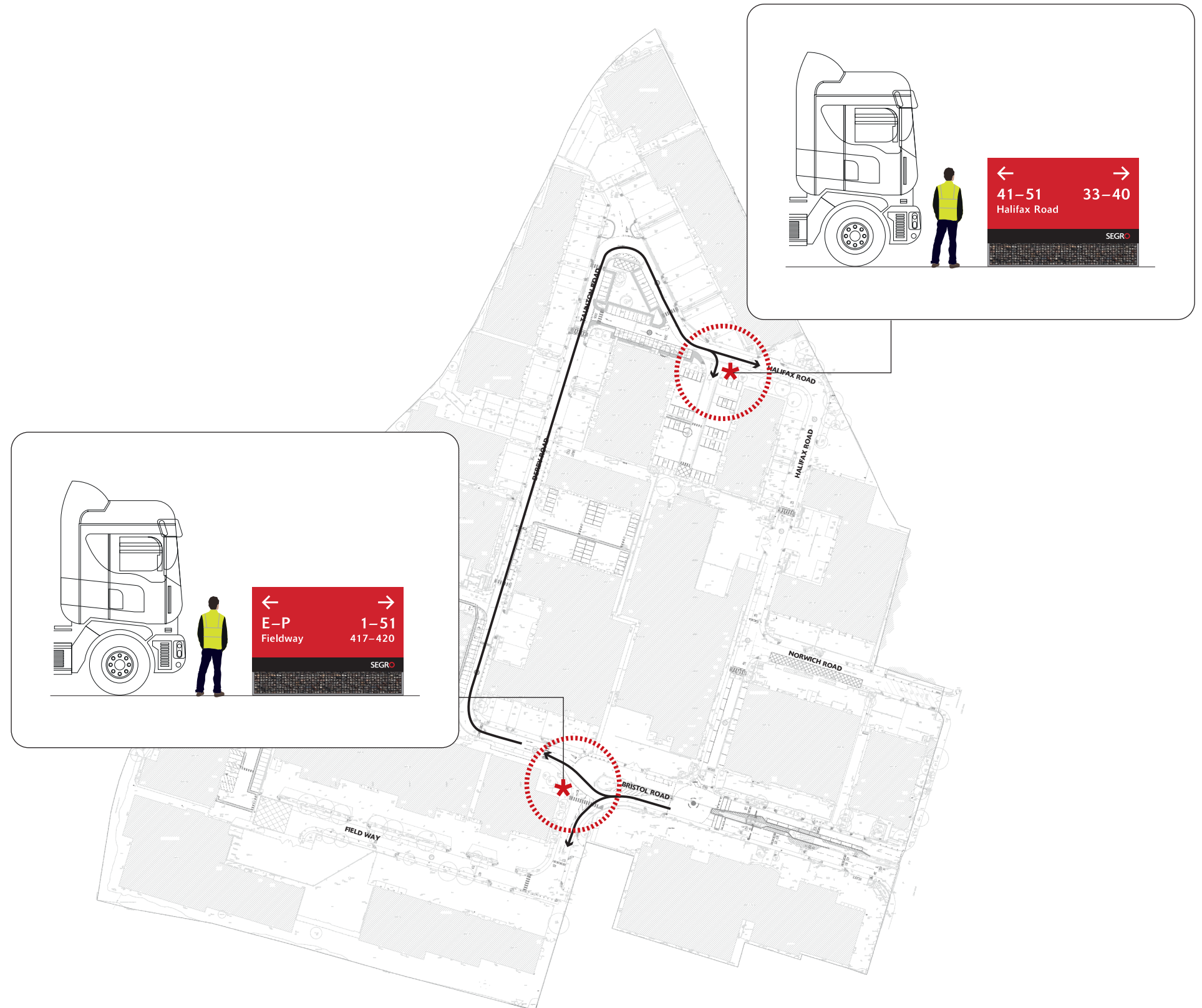
Scale, sightlines, urban and environmental context, legibility, day and night use must be considered when selecting the appropriate sign and positioning.

Design options

Reclaim materials – YES

Planting – YES

Insect habitats – YES



Typical Application

3 TYPICAL WAYFINDING APPLICATIONS

3.5 DR2 DIRECTION

STEP 2

Provide direction to tenant units and streets

DR2a & DR2b Totem signs

The sign is flexible in its use. The sign can be single or double sided depending on site layout and vehicular approach. The sign is to be orientated to face towards approaching traffic.

Typically visitors will be guided by using tenant unit numbering and street names. This is the primary information a visitor will need in order to find their way around an estate.

Where this strategy will differ is on a large Logistics Park where only a small amount of tenants are located; in this instance tenant names maybe considered to be used on a directional sign.

General notes

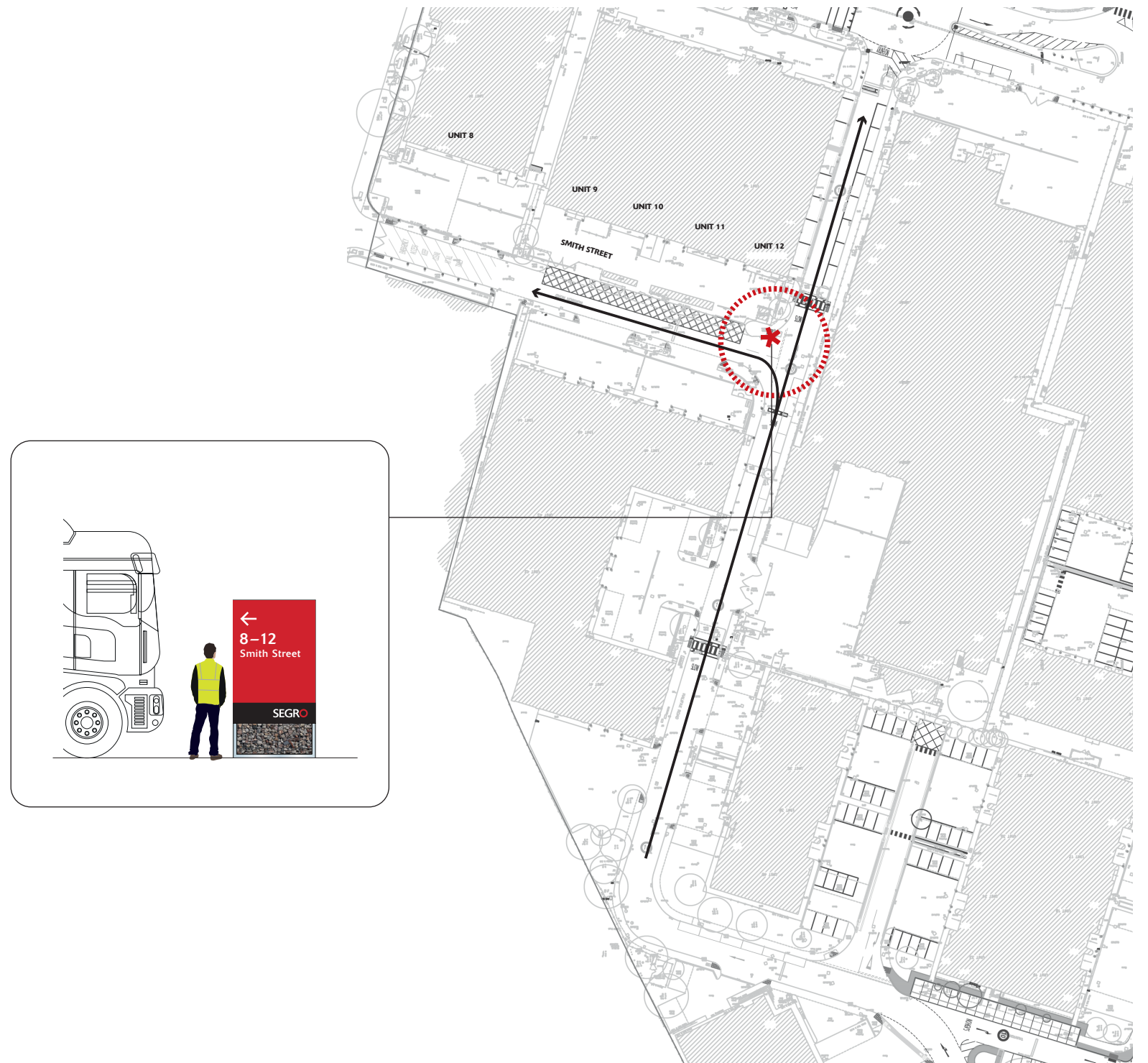
Scale, sightlines, urban and environmental context, legibility, day and night use must be considered when selecting the appropriate sign and positioning.

Design options

Reclaim materials – YES

Planting – YES

Insect habitats – YES



Typical Application

3 TYPICAL WAYFINDING APPLICATIONS

3.6 DR3 STREET NAME

STEP 2

Provide direction to tenant units and streets

DR3 Street Name Finger Board signs

The sign is to identify street and road names across all estates. Street names combined with unit numbers provide each tenant a unique address at each estate.

Signs will always be shown double sided. The sign is to be positioned on street and road corners and be easily seen by approaching traffic from all directions.

General notes

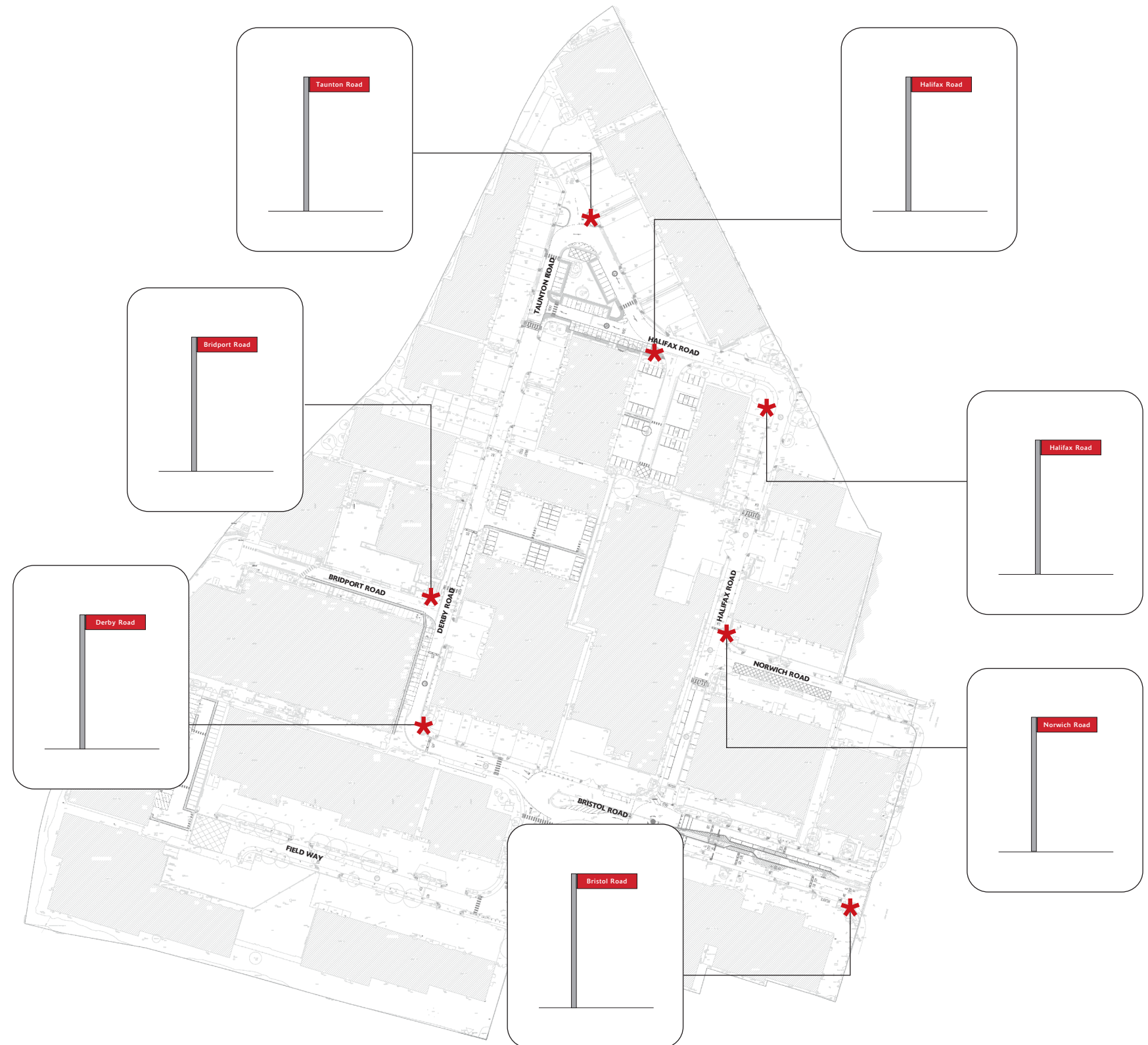
Scale, sightlines, urban and environmental context, legibility, day and night use must be considered when selecting the appropriate sign and positioning.

Design options

Reclaim materials – NO

Planting – NO

Insect habitats – NO



Typical Application

3 TYPICAL WAYFINDING APPLICATIONS

3.7 TN1 TENANT IDENTIFICATION

STEP 3

Announce arrival at tenant units

TN1 Single Unit Number signs

The sign is to provide a unique unit number and subsequent address for each tenant.

For example:
34 Halifax Road

Signs will always be shown single sided. The sign is to be positioned at high level to ensure clear and uninterrupted views. A consistent datum line across all buildings should be identified at each estate.

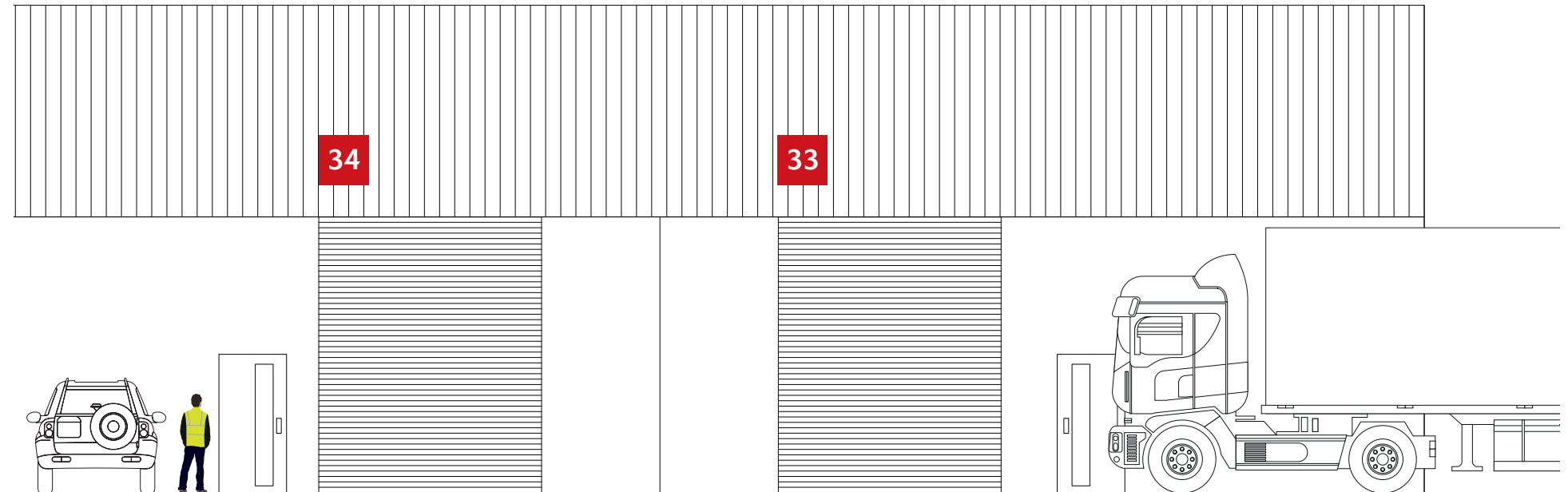
Tenant units should be numbered in a sequential order along streets and roads. Every unit must be identified using a number.

General notes

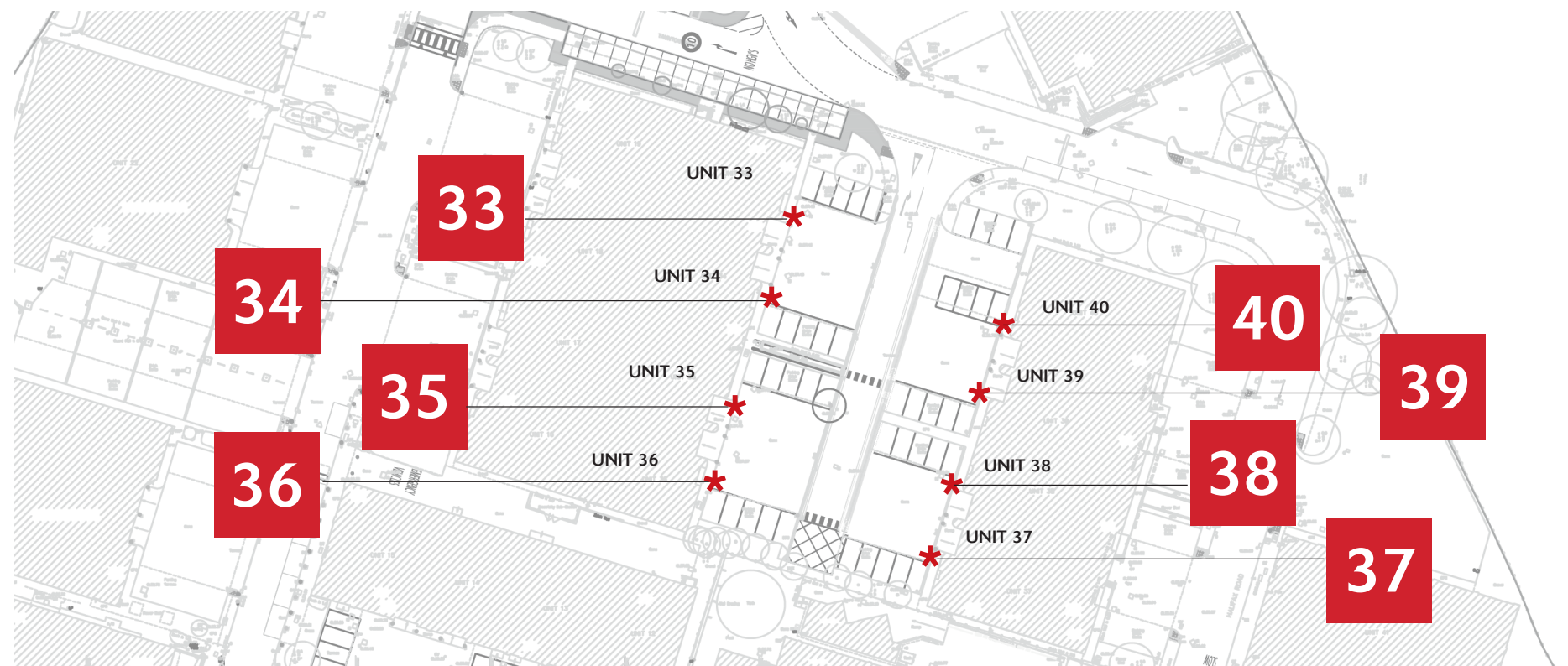
Architectural context, scale, sightlines, legibility, day and night use must be considered when selecting the appropriate sign, colour and positioning.

Design options

- Reclaim materials – NO
- Planting – NO
- Insect habitats – NO



Typical Elevation



Typical Application

3 TYPICAL WAYFINDING APPLICATIONS

3.8 TN2 TENANT IDENTIFICATION

STEP 3

Announce arrival at tenant units

TN2a & TN2b Multi Unit Number signs

The sign is to be used when a group of tenants are located within a cul-de-sac or driveway courtyard arrangement.

Typically these tenants and unit their numbers are hidden from approach and street view.

This sign provides identification and visually marks the entry into the cul-de-sac or driveway courtyard.

The sign is flexible in its use. The sign can be single or double sided depending on site layout and vehicular approach.

General notes

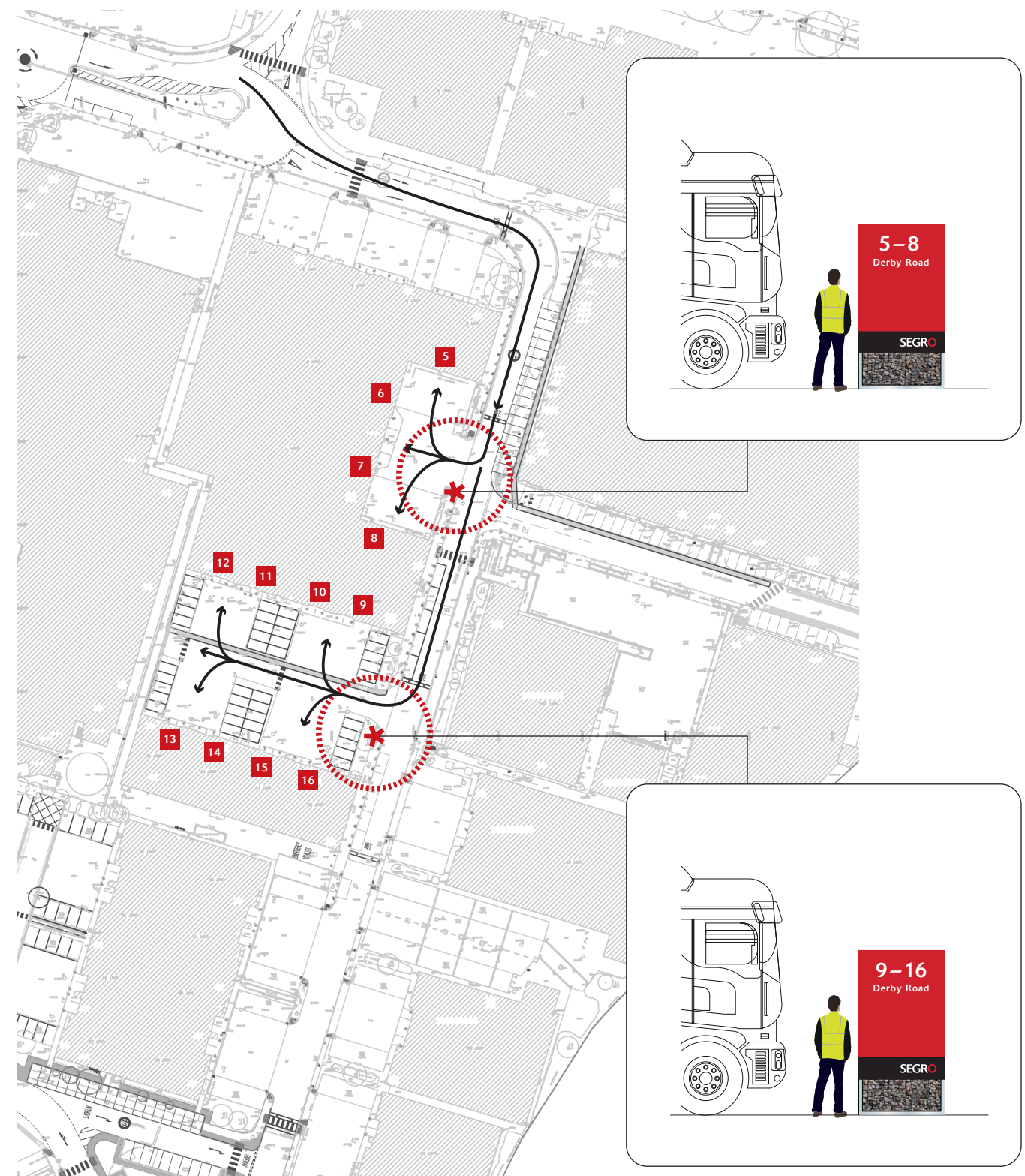
Scale, sightlines, urban and environmental context, legibility, day and night use must be considered when selecting the appropriate sign and positioning.

Design options

Reclaim materials – YES

Planting – YES

Insect habitats – YES



Typical Application

3 TYPICAL WAYFINDING APPLICATIONS

3.9 TN3 TENANT IDENTIFICATION

STEP 3

Announce arrival at tenant units

TN3a & TN3b Tenant Name signs

The sign is to be used where only a small amount of tenants occupy a large estate.

Typically these estates include between 2–6 tenants and where tenant naming is the most obvious form of wayfinding communication.

This sign provides tenant identification at street level and visually marks the entry into each tenant site. The sign typically includes supporting information such as visitor parking, drop off, deliveries etc.

The sign is flexible in its use. The sign can be single or double sided depending on site layout and vehicular approach.

General notes

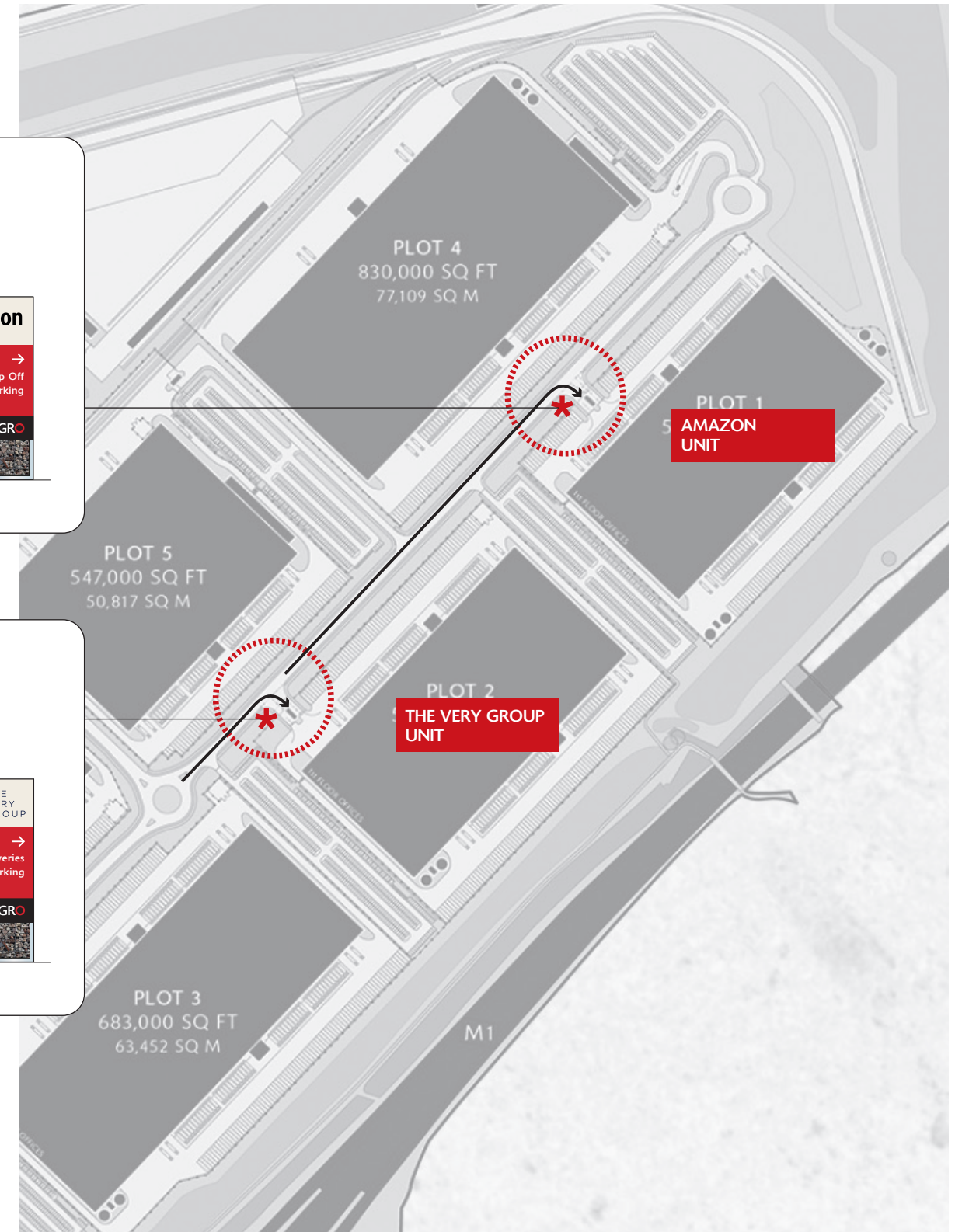
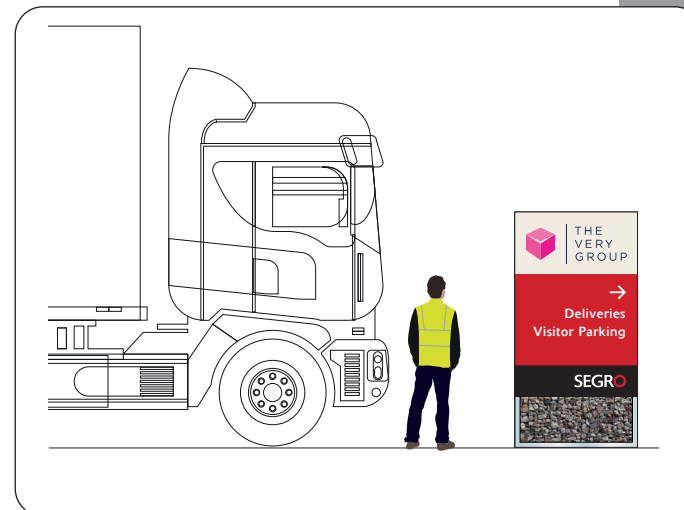
Scale, sightlines, urban and environmental context, legibility, day and night use must be considered when selecting the appropriate sign and positioning.

Design options

Reclaim materials – YES

Planting – YES

Insect habitats – YES



Typical Application

PART A

4 GRAPHIC STANDARDS

- 4.1 Typography
- 4.2 Type Detailing
- 4.3 Arrows
- 4.4 Colour & Logo
- 4.5 Estate Naming Conventions

4 GRAPHIC STANDARDS

4.1 TYPOGRAPHY

The selected typeface for wayfinding is from the SEGRO branded Delta BQ font family.

No other versions of the font or alternative weights are to be used.

General notes

Text on signs needs to be deciphered quickly and effortlessly. Letterform legibility is critical to the success of a wayfinding graphic system.

Signage is required to be read at a distance by users while driving lorries, heavy goods vehicles, vans, couriers etc.

Factors taken into consideration while designing signage and wayfinding include legibility, distance, site lines and various-angle views.

Delta Jaeger Book
abcdefghijklmnopqrstuvwxy
ABCDEFGHIJKLMNOPQRSTUVWXY
0123456789

SEGRO LOGISITICS PARK
NORTHAMPTON

SEGRO PARK
GREENFORD CENTRAL

42-43 Halifax Road

4 GRAPHIC STANDARDS

4.2 TYPE DETAILING

Type Size

Text size on all signs has been determined based on ideal viewing distances and should be adhered to wherever possible. Refer to sign type drawings for further detail.

Cap X–height

For accuracy in layout of text on signs, the height of the capital letter 'X' should be used instead of the point size of the font. This measurement is always shown in millimetres unless otherwise stated.

Letterspacing

Letterspacing adds space between letterforms to open up text. The addition of minimal letterspacing can increase the legibility and readability. Increased whitespace around a character will allow individual characters to emerge and be recognised more quickly and easily.

Title Case

Title case is to be used when identifying the name of an estate.

Sentence Case

Sentence case is to be used when identifying a street name or tenant address.

Cap X–height

The distance between the baseline and the top of a capital letter 'X'.



Letter spacing (+50)



Title Case

SEGRO LOGISTICS PARK
NORTHAMPTON

SEGRO PARK
WELHAM GREEN

Sentence Case

Taunton Road
Derby Road
Smith Street

4 GRAPHIC STANDARDS

4.3 ARROWS

Standard Arrows

Arrows play a major role in wayfinding. To fulfil their purpose in the most effective manner, arrows must be used consistently.

Arrow Directions

Up pointing arrow is used to direct forward.

Right and Left pointing arrows are used to direct to destinations that require vehicles and pedestrians to turn right or left.

Diagonal arrows direct diagonally up or ahead.

Down and Diagonal arrows may never be used to direct backwards.

Arrow Size

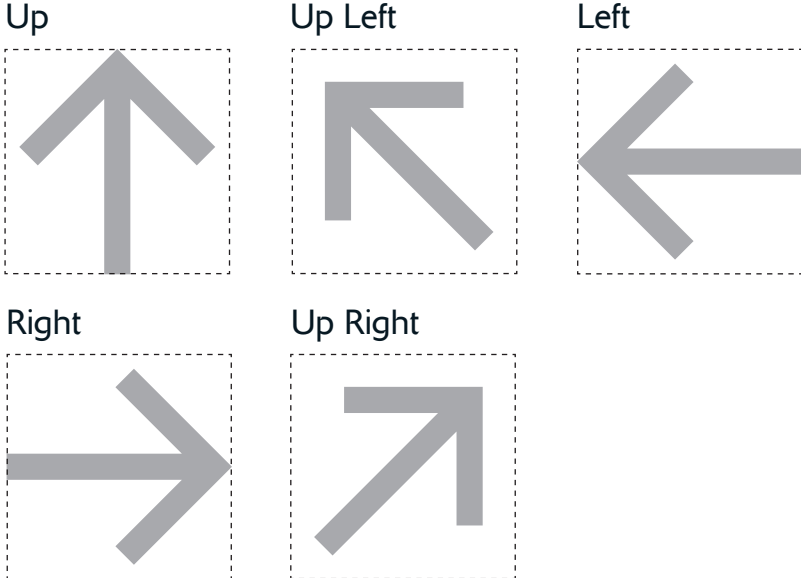
As shown on the sign type drawings the ratio between the size of the arrow and the text it is associated with must always be maintained.

Arrow Usage

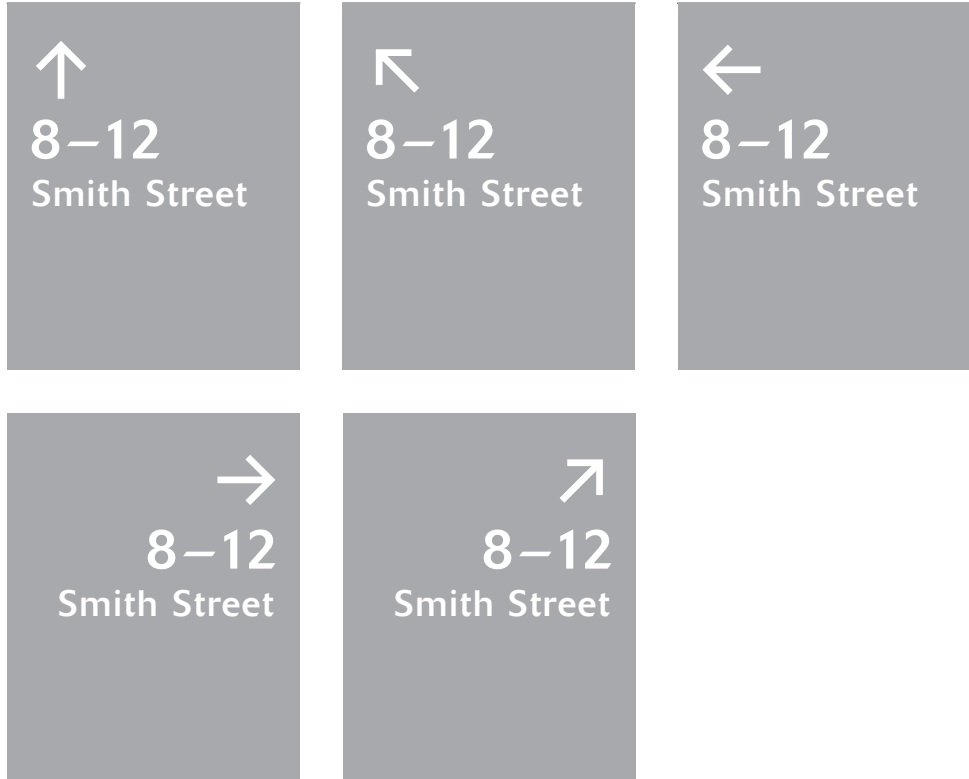
A single arrow is required for each direction; not for each destination.

Standard Arrows

This specific arrow type has been chosen to compliment the font Delta BQ. This arrow type should be used on all directional signs.



Arrow Usage & Direction



4 GRAPHIC STANDARDS

4.4 COLOUR

Colour

The SEGRO branded colours should only be used with the colour values set out on this page.

The primary colour palette underpins the SEGRO corporate style. These colours are to be used on all wayfinding signage.

Wherever possible, these colours should be painted or powdercoated using RAL and Pantone® colours.

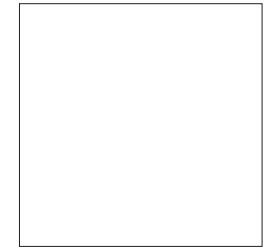
Primary Colour Palette



SEGRO Red
Pantone 186C
RAL 3020



SEGRO Black
Pantone Black C
RAL 9005



SEGRO White

Secondary Colour Palette



SEGRO Grey
Pantone Cool Grey 6C
RAL 7040



SEGRO Stone
Pantone 9143C
RAL 1015

4 GRAPHIC STANDARDS

4.5 ESTATE NAMING CONVENTIONS

How a site is identified is determined by the following naming conventions;

SEGRO Logistics Park

An estate (i.e. two or more separate buildings on the same designated area) that is occupied or likely to be occupied only for logistics purposes.

SEGRO Park

An estate (i.e. two or more separate buildings on the same designated area) that is occupied or likely to be occupied not purely for logistics purposes.

SEGRO V-Park

An asset that is a single building; multi-storey, either above or below ground or both and accessed in any way (ramps/good lifts etc); and has multiple customers or potential for multiple customers.

SEGRO Logistics Centre

A single building that is not on a designated SEGRO estate and is a single storey design that is occupied or likely to be occupied only for logistics purposes.

SEGRO Centre

A single building that is not on a designated SEGRO estate and is a single storey design that is occupied or likely to be occupied only for not purely logistics purposes

Prefix **SEGRO LOGISTICS PARK**
Estate name **NORTHAMPTON**

Prefix **SEGRO PARK**
Estate name **GREENFORD NORTH**

Prefix **SEGRO V-PARK**
Estate name **GRAND UNION**

Prefix **SEGRO LOGISTICS CENTRE**
Estate name **PURFLEET**

Prefix **SEGRO CENTRE**
Estate name **RIVER ROAD**

PART A

5 MATERIAL STANDARDS

- 5.1 Core Materials
- 5.2 Reclaimed Material – Aggregates
- 5.3 Reclaimed Material – Rubber & Timber
- 5.4 Insect Habitats
- 5.5 Planting

5 MATERIAL STANDARDS

5.1 CORE MATERIALS

Sustainable material considerations

All elements to be recyclable, at the end of the signage product life nothing should go to landfill.

Aluminium

Highly efficient recycling process creating high quality secondary aluminium using just 5% of the primary aluminium consumption. Aluminium used in building and construction industries is recycled at a rate of roughly 92-98%.

Steel

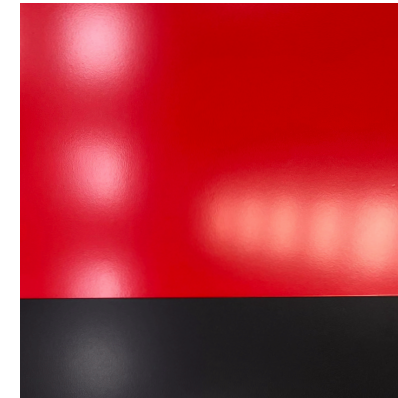
Used for the internal framework and structural component of signs, steel is the world's most recycled construction material and approximately 40% of all steel production is based on recycled scrap.

The galvanised finish prolongs the use and service life. Galvanised steel can be recycled easily with other steel scrap in an electric arc furnace (EAF) steel production process.

Acrylic

Opal acrylic to be both UV and weather resistance. Sheets can be recycled all the way back to the original raw material, the monomer. Use 100% recycled acrylic sheets where possible.

Cladding & Graphics

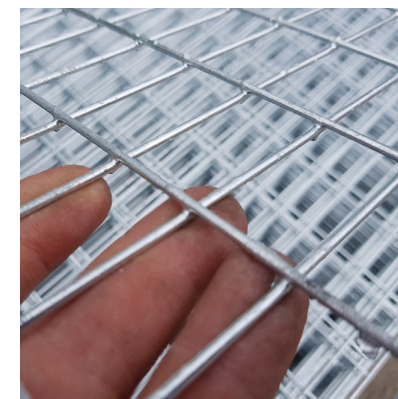


Aluminium sheet
– painted / powdercoated

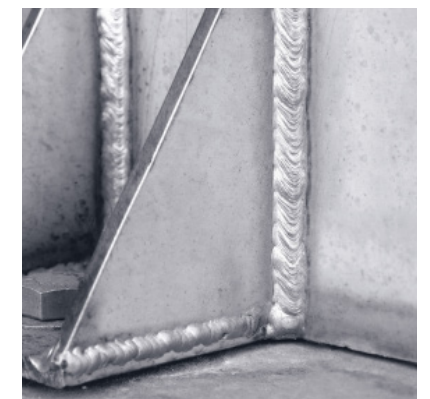


Illuminated letters
– opal acrylic

Structural material



Steel mesh
– galvanised finish



Steel frame
– galvanised finish

5 MATERIAL STANDARDS

5.2 RECLAIMED MATERIAL – Aggregates

Signage designs include gabion-like bases and structures that are to be in-filled with reclaimed materials and recycled aggregates such bricks, stone, pipework and concrete.

The gabion-like structures are not designed to be load bearing. Structural steel columns are embedded within the signage elements allowing the walls to be used as decoration to include various reclaimed materials.

These materials should firstly be sourced from existing demolition works on a SEGRO estate, or secondly sourced from a local construction recycling centre.

For demolition waste, which makes up the bulk of our total waste, it is important to reuse as much as possible on-site to avoid the carbon emissions related to transportation of waste off-site. Although not all debris can be recycled, much of it should be.

Note

It is not the intention to have the same reclaimed material used across all SEGRO estates. Material is intended to vary from site to site.

It is the responsibility of the contractor to engage with SEGRO to identify material at the start of any project.

Additional opportunities

There are further opportunities to explore and use other materials as a replacement for reclaimed aggregates. Refer section 5.3

Typical reclaimed aggregates



Choose materials that can have multiple effective cycles in their lives.

5 MATERIAL STANDARDS

5.3 RECLAIMED MATERIAL – Rubber & Timber

Additional opportunities

Every project defines its own line of research to achieve the most appropriate material.

Opportunities exist to explore and use other materials as a replacement for reclaimed aggregates.

Gabion filling can be various and as such there is the opportunity to use material such as recycled rubber and reclaimed salvaged timber.

Environmental and urban context can be a factor in deciding on reclaimed material. For example; small or urban estates have opportunities to explore rubber – while rural and low-level landscaped estates can explore using salvaged timbers.

Note

It is the responsibility of the contractor to engage with SEGRO to identify material at the start of any project.

Rubber

Recycled shredded tyres



Timbers

Salvaged hardwood scrap



5 MATERIAL STANDARDS

5.4 INSECT HABITATS

Biodiversity in an urban setting

Wayfinding signage includes opportunities to incorporate insect habitats and nesting facilities to support local biodiversity – sustaining a variety of pollinators and invertebrates to provide habitats and nesting places for various insect and bird species.

Refer to sign type drawings for opportunities to include insect habitats into signage structures.

Note

It is the responsibility of the contractor to identify material and nesting apertures required for each identified insect species that is to be supported on site.

Insect ecosystems

Divided structures with nesting facilities using recycled bricks, timber and natural materials.



Biodiversity forms a key part of SEGRO's sustainability strategy.

5 MATERIAL STANDARDS

5.5 PLANTING

Maintain balance and support life

Biodiversity is all the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and even micro-organisms like bacteria that make up our natural world. Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life.

Wayfinding signage includes opportunities to incorporate vegetation into or surrounding the signage structures to support insect habitats.

Planting a variety of climbers, flowering herbs and wild flowers that provide nectar and pollen to attract pollinators. Native plants and wild flowers rich in pollen and nectar are the best for enticing bees.

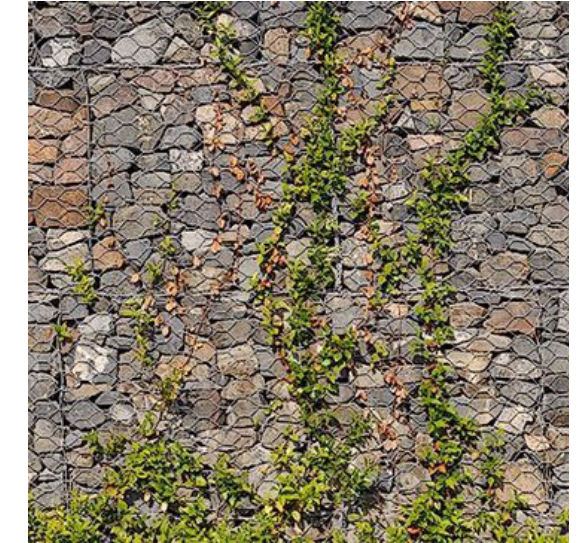
Refer to sign type drawings for opportunities to include planting into signage structures.

Note

It is the responsibility of the contractor to identify appropriate plants in consultation with a landscape consultant for each site. Ensure planting faces the right direction and has the right amount of sunshine for each particular species.

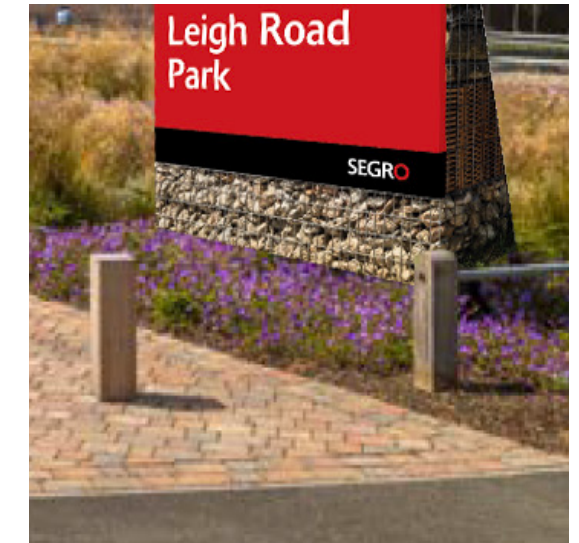
Climbers

Flowering climbers planted into ground at rear base of sign to allow vertical climb up and along gabion mesh



Planting surrounds

Wild flowers and grasses planted to surround signage structure.



PART B

SIGN TYPE DRAWINGS

- ID1 Site Identification Signs
- DR Directional Signs
- TN Tenant Identification Signs

PART B

ID SITE IDENTIFICATION SIGNS

ID1	Site Identification – Totem
ID2	Site Identification – Large Landscape (Tapered)
ID3a	Site Identification – Small Landscape (Plinth)
ID3b	Site Identification – Small Landscape (Tapered)

ID1 SITE IDENTIFICATION SIGN – Totem

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised

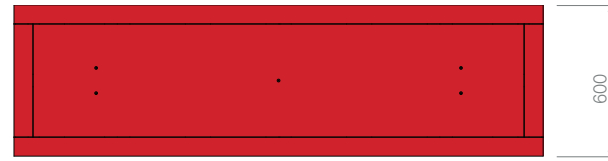


SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION



PLAN

2100



600

GRAPHICS
190mm cap X-height

**SEGRO PARK
GREENFORD
CENTRAL**



1500

PAINTED SIGN PANELS

SEGRO



1700



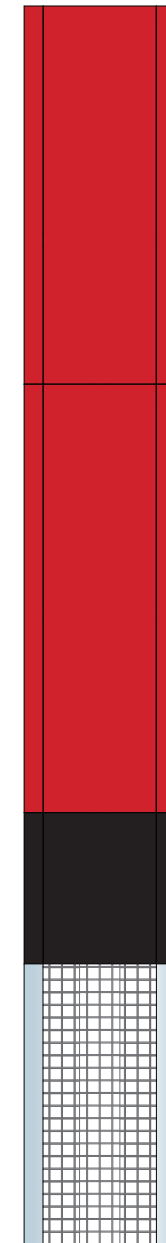
600



1200

FRONT

75 448 75



SIDE

DETAIL

STRUCTURE

Fabricated monolith with internal structural steel frame with painted external aluminium cladding and individual lettering and logo.

PANELS

Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Illuminated

Double sided with WHITE illuminated Park name and illuminated Logo. Push through opal acrylic site name and logo. Face illuminated.

GRAPHICS – Non-illuminated

Double sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE

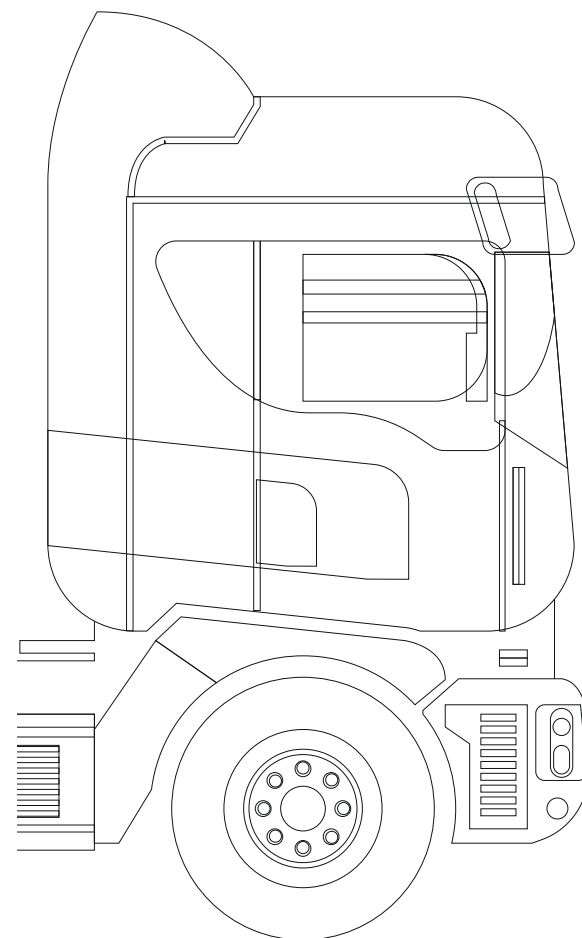
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

RECLAIMED MATERIAL

Size to suit internal space and mesh aperture.

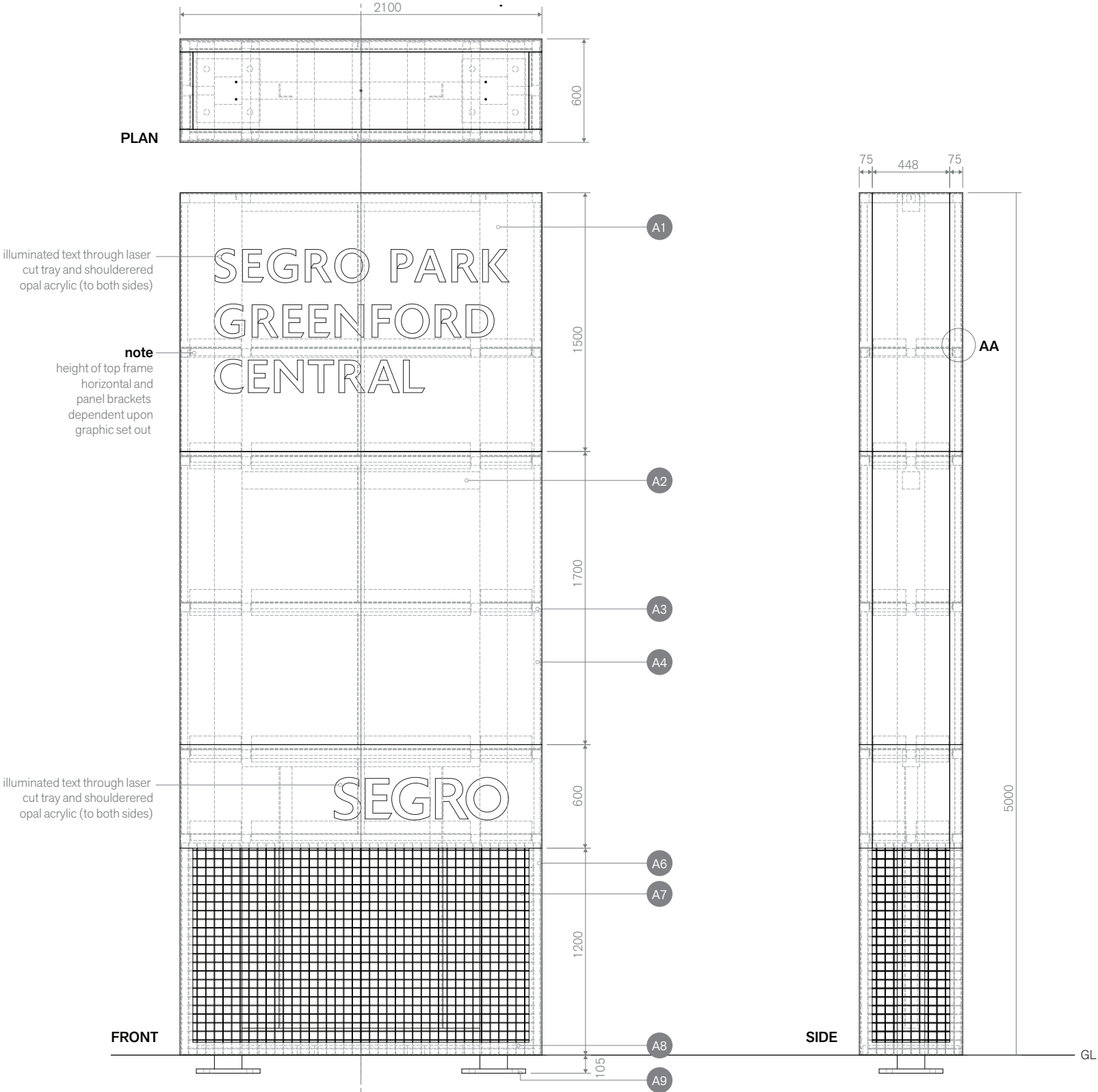
GALVANISED MESH & ANGLE FRAME

GL



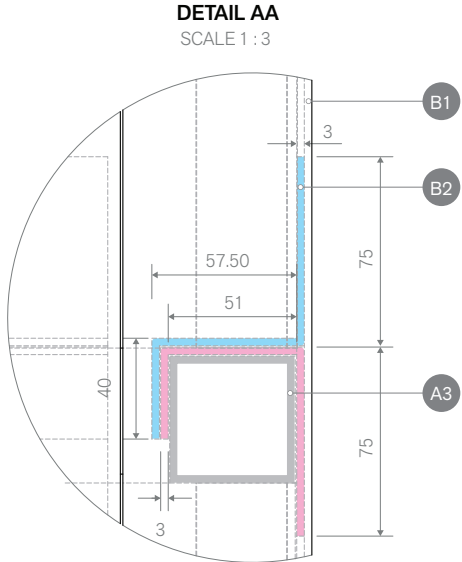
ID1 SITE IDENTIFICATION SIGN – Totem

Assembly 1



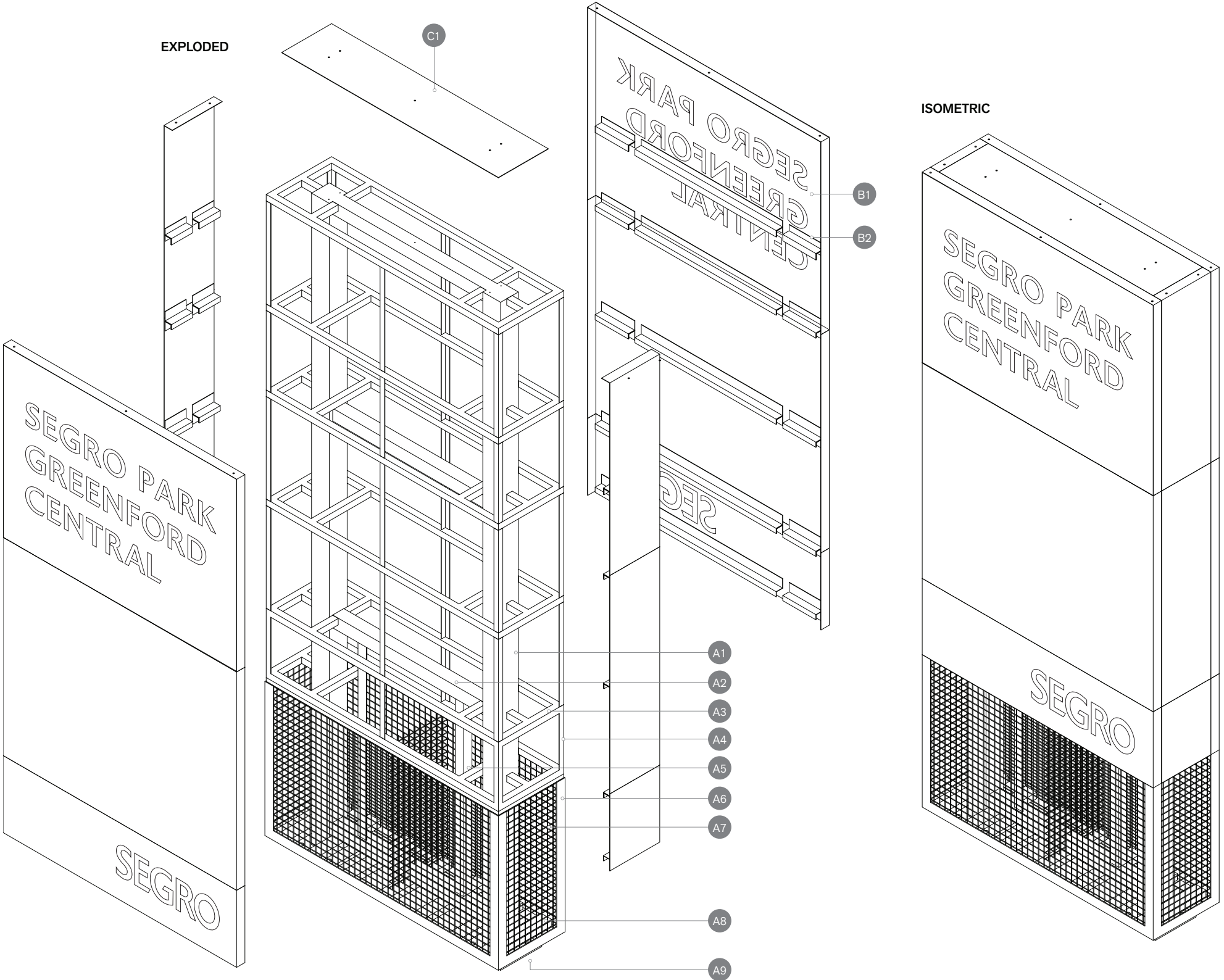
CONSTRUCTION

- A1 POSTS - 160x160x5mm SHS S355 steel fully welded, no holes.
- A2 MAIN CROSS MEMBERS - 100x100x5mm SHS S355 steel welded, no holes.
- A3 FRAME HORIZONTALS - 50x50x3mm SHS S355 steel, welded maz. 6mm holes.
- A4 FRAME VERTICALS - 40x40x4 RSA S355 steel angle, welded no holes.
- A5 VERTICAL ANGLE- 75x75x6mm RSA S355 steel welded, no holes.
- A6 MESH ANGLE - 75x75x6mm RSA S355 steel welded, no holes.
- A7 MESH - to all sides and base, plus front to back divider - 50x50mm, Ø4mm galvanised steel welded to inside of mesh angle.
- A8 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
- A9 FEET - 370x370x25mm S355 steel welded feet with x4 Ø34mm holes to accept M30 steel rootage.
- B1 FRONT & SIDE PANELS - 3mm thk 5052-O or 5005-H32 grade aluminium with 75mm folded, welded and dressed returns. Secure top panels using M5 CS colour matched fixings. Face panels to have routed detail with shouldered opal acrylic for internal illumination. Height of top bracket is dependent on graphic setting out.
- B2 PANEL JOINTS - 3mm thk 5052-O or 5005-H32 grade aluminium folded brackets - hook (lower panel) and joggle (upper panel).
- C1 TOP PANEL - 3mm thk 5052-O or 5005-H32 grade aluminium, secured using x5 M5 CS colour matched fixings.



ID1 SITE IDENTIFICATION SIGN – Totem

Assembly 2



CONSTRUCTION

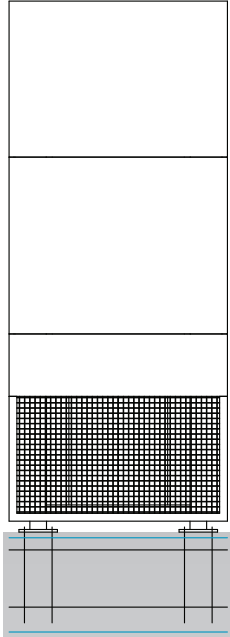
- A1 POSTS - 160x160x5mm SHS S355 steel fully welded, no holes.
- A2 MAIN CROSS MEMBERS - 100x100x5mm SHS S355 steel welded, no holes.
- A3 FRAME HORIZONTALS - 50x50x3mm SHS S355 steel, welded maz. 6mm holes.
- A4 FRAME VERTICALS - 40x40x4 RSA S355 steel angle, welded no holes.
- A5 VERTICAL ANGLE- 75x75x6mm RSA S355 steel welded, no holes.
- A6 MESH ANGLE - 75x75x6mm RSA S355 steel welded, no holes.
- A7 MESH - to all sides and base, plus front to back divider - 50x50mm, Ø4mm galvanised steel welded to inside of mesh angle.
- A8 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
- A9 FEET - 370x370x25mm S355 steel welded feet with x4 Ø34mm holes to accept M30 steel rootcage.
- B1 FRONT & SIDE PANELS - 3mm thk 5052-O or 5005-H32 grade aluminium with 75mm folded, welded and dressed returns. Secure top panels using M5 CS colour matched fixings. Face panels to have routed detail with shouldered opal acrylic for internal illumination. Height of top bracket is dependent on graphic setting out.
- B2 PANEL JOINTS - 3mm thk 5052-O or 5005-H32 grade aluminium folded brackets - hook (lower panel) and joggle (upper panel).
- C1 TOP PANEL - 3mm thk 5052-O or 5005-H32 grade aluminium, secured using x5 M5 CS colour matched fixings.

FOUNDATION

Single concrete foundation 2200 side to side x 1500 front to back x 1000mm deep with A393 steel mesh reinforcement top & bottom, 50mm cover.

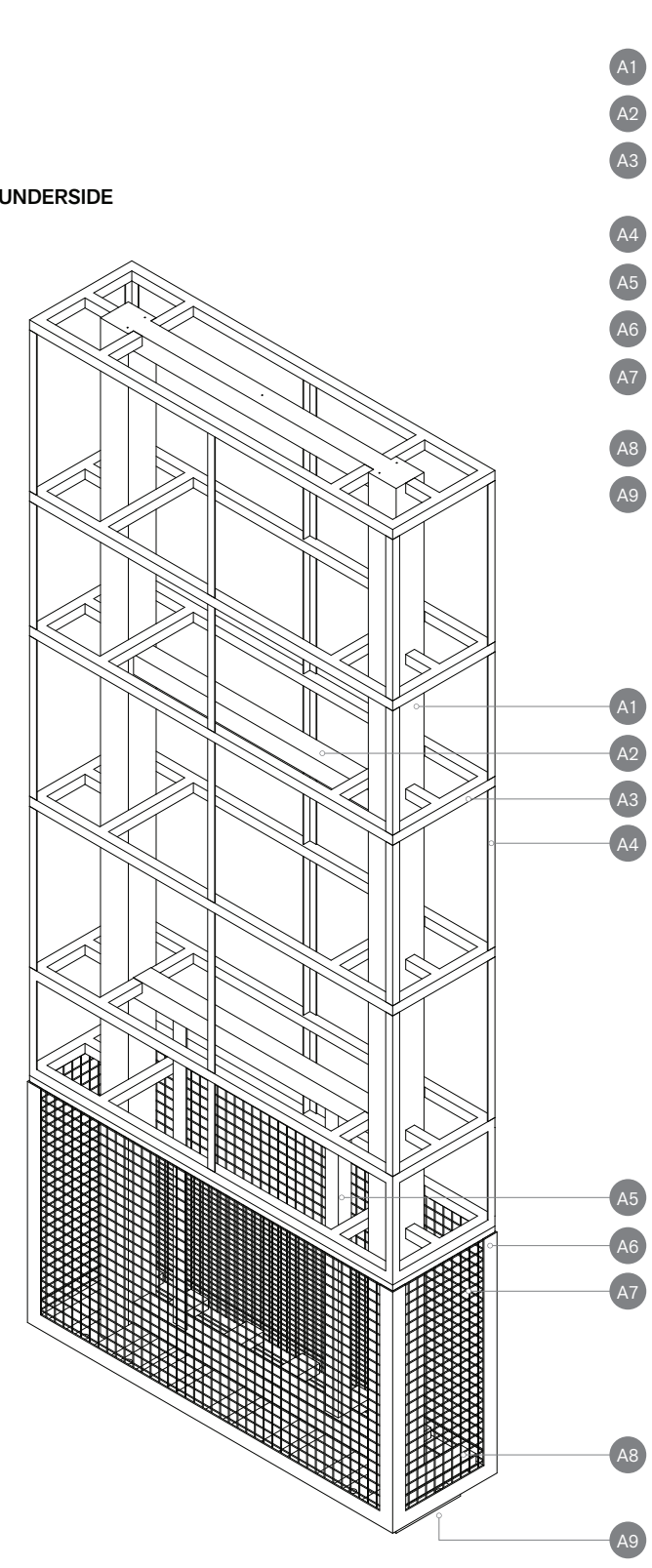
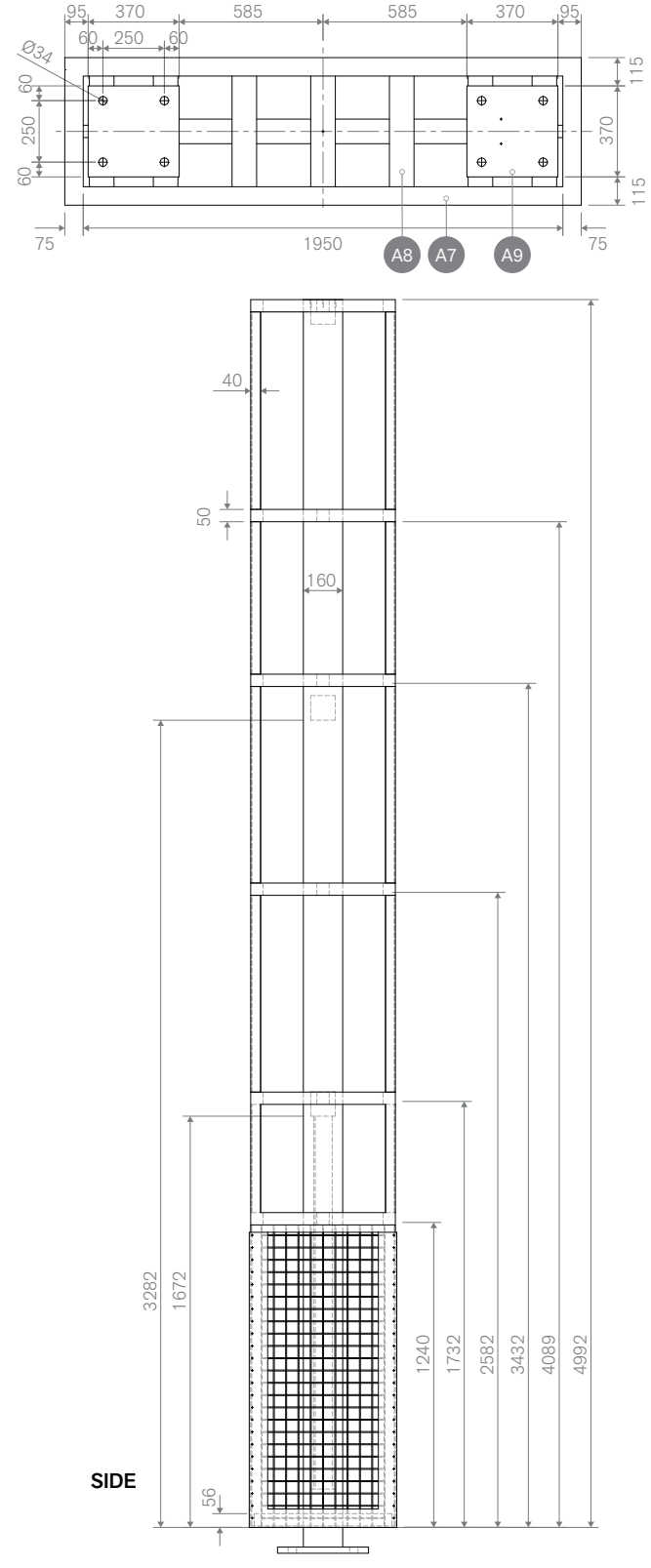
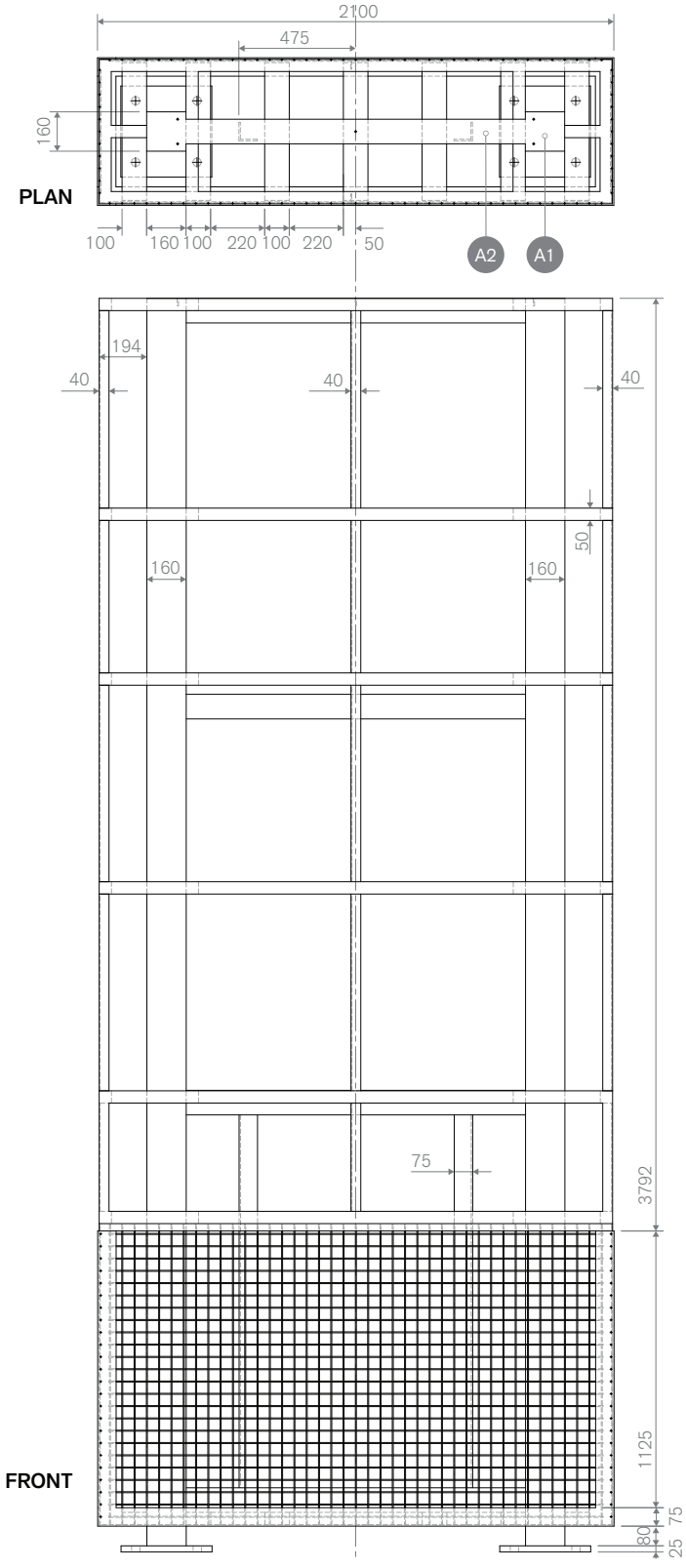
ROOT CAGE

M30 steel studding rootcage, 4 no. verticals per baseplate.



ID1 SITE IDENTIFICATION SIGN – Totem

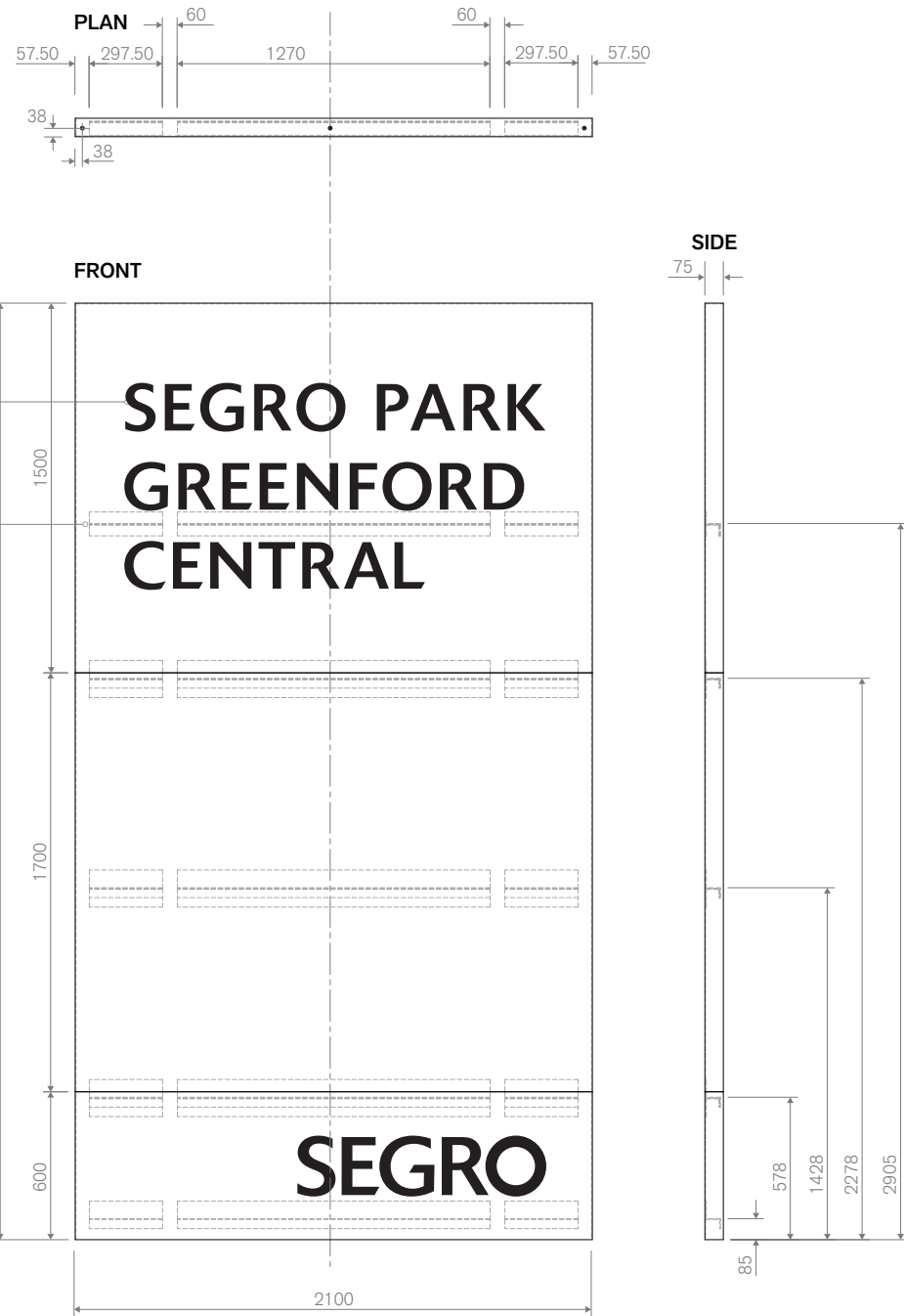
Frame



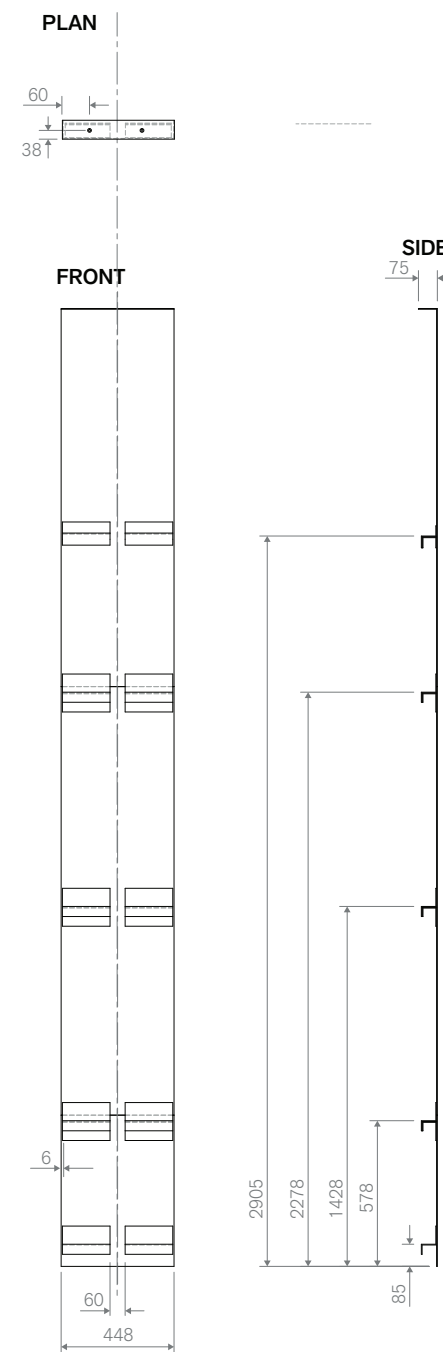
- CONSTRUCTION**
- A1 POSTS - 160x160x5mm SHS S355 steel fully welded, no holes.
 - A2 MAIN CROSS MEMBERS - 100x100x5mm SHS S355 steel welded, no holes.
 - A3 FRAME HORIZONTALS - 50x50x3mm SHS S355 steel, welded maz. 6mm holes.
 - A4 FRAME VERTICALS - 40x40x4 RSA S355 steel angle, welded no holes.
 - A5 VERTICAL ANGLE - 75x75x6mm RSA S355 steel welded, no holes.
 - A6 MESH ANGLE - 75x75x6mm RSA S355 steel welded, no holes.
 - A7 MESH - to all sides and base, plus front to back divider - 50x50mm, Ø4mm galvanised steel welded to inside of mesh angle.
 - A8 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
 - A9 FEET - 370x370x25mm S355 steel welded feet with x4 Ø34mm holes to accept M30 steel rootcage.

ID1 SITE IDENTIFICATION SIGN – Totem Panels

FACE PANELS



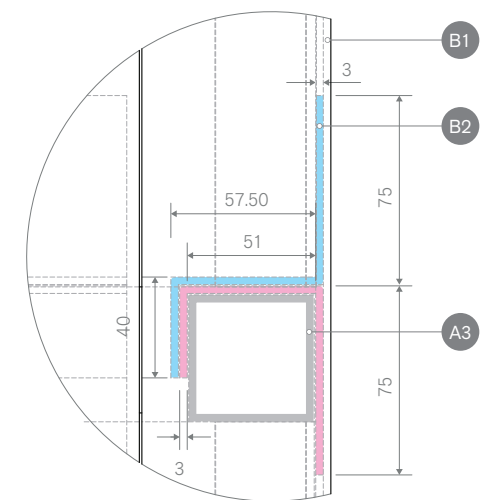
SIDE PANELS



CONSTRUCTION

- B1** FRONT & SIDE PANELS - 3mm thk 5052-O or 5005-H32 grade aluminium with 75mm folded, welded and dressed returns. Secure top panels using M5 CS colour matched fixings. Face panels to have routed detail with shouldered opal acrylic for internal illumination. Height of top bracket is dependent on graphic setting out.
- B2** PANEL JOINTS - 3mm thk 5052-O or 5005-H32 grade aluminium folded brackets - hook (lower panel) and joggle (upper panel).
- C1** TOP PANEL - 3mm thk 5052-O or 5005-H32 grade aluminium, secured using x5 M5 CS colour matched fixings.

DETAIL AA SCALE 1 : 3



ID2 SITE IDENTIFICATION SIGN – Large Landscape (Tapered)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised



SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

STRUCTURE
Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

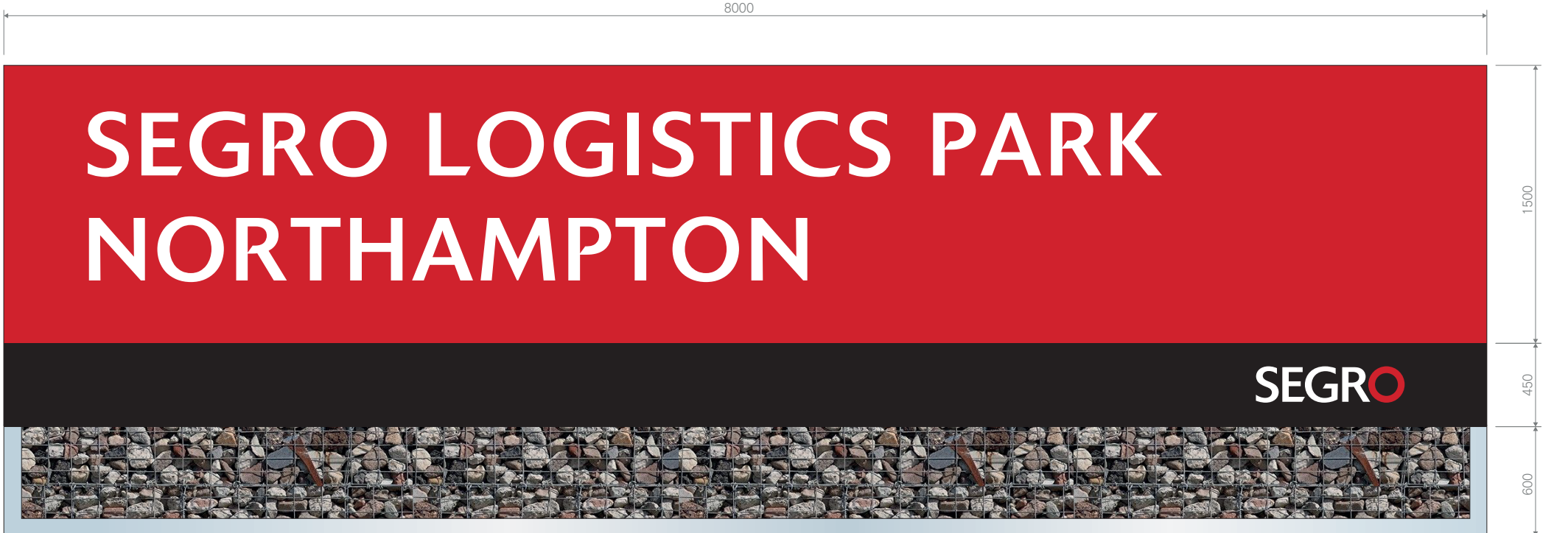
PANELS
Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Illuminated
Single sided with WHITE illuminated Park name and illuminated Logo.

GRAPHICS – Non-illuminated
Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



ID3a SITE IDENTIFICATION SIGN – Small Landscape (Plinth)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised



SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

STRUCTURE
Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

PANELS
Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Illuminated
Single sided with WHITE illuminated Park name and illuminated Logo.

GRAPHICS – Non-illuminated
Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



ID3b SITE IDENTIFICATION SIGN – Small Landscape (Tapered)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised



SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

STRUCTURE
Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

PANELS
Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Illuminated
Single sided with WHITE illuminated Park name and illuminated Logo.

GRAPHICS – Non-illuminated
Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



FRONT



SIDE – Single Side



PART B

DR DIRECTIONAL SIGNS

DR1a	Directional – Landscape (Plinth)
DR1b	Directional – Landscape (Tapered)
DR2a	Directional – Totem (Plinth)
DR2b	Directional – Totem (Tapered)
DR3	Street Name – Finger Board

DR1a DIRECTIONAL SIGN – Landscape (Plinth)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised



SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

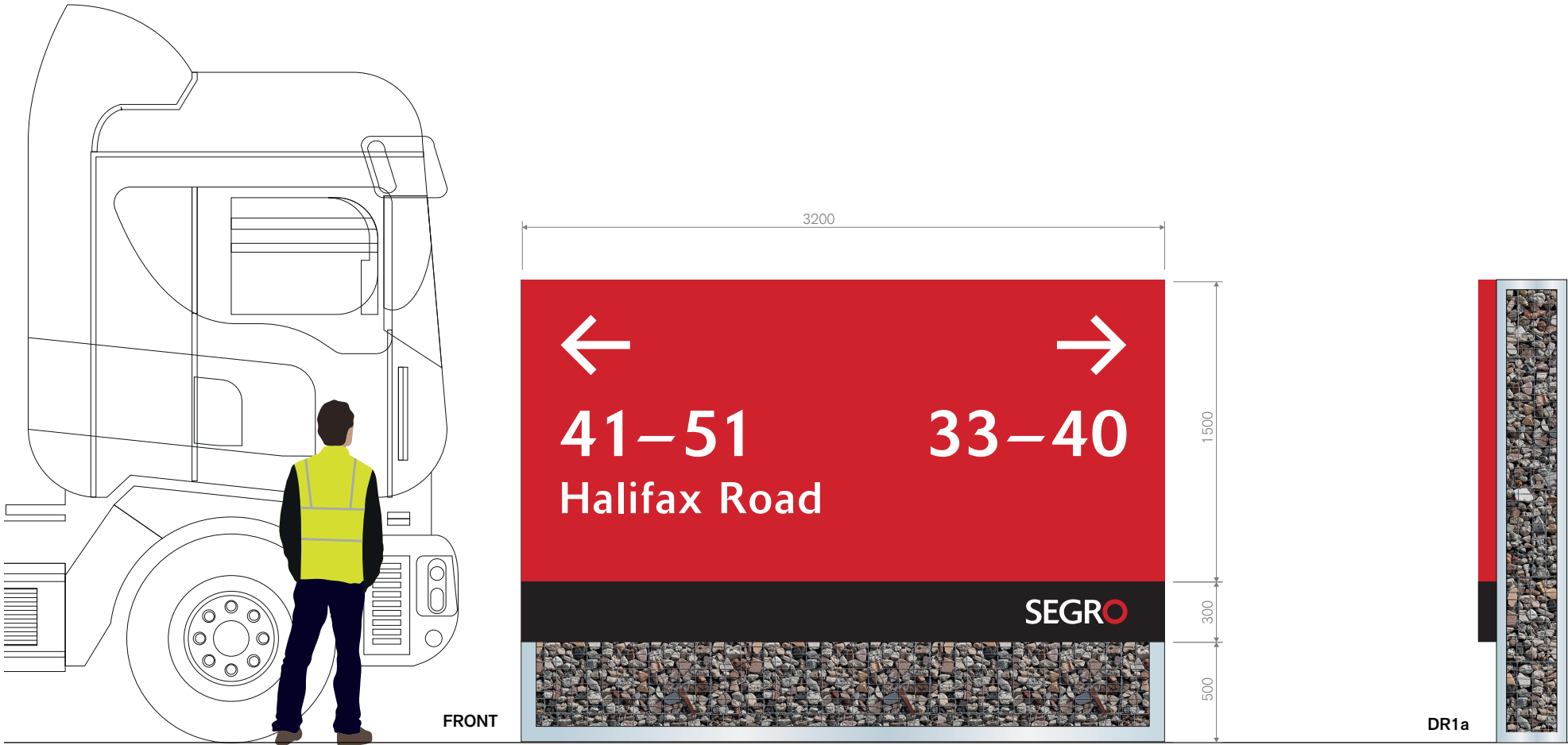
STRUCTURE
Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

PANELS
Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Non-illuminated
Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



DR1b DIRECTIONAL SIGN – Landscape (Tapered)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised



SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

STRUCTURE
Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

PANELS
Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Non-illuminated
Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



DR2a DIRECTIONAL SIGN – Totem (Plinth)

Elevations



DR2a DIRECTIONAL SIGN – Totem (Plinth)

Assembly 1

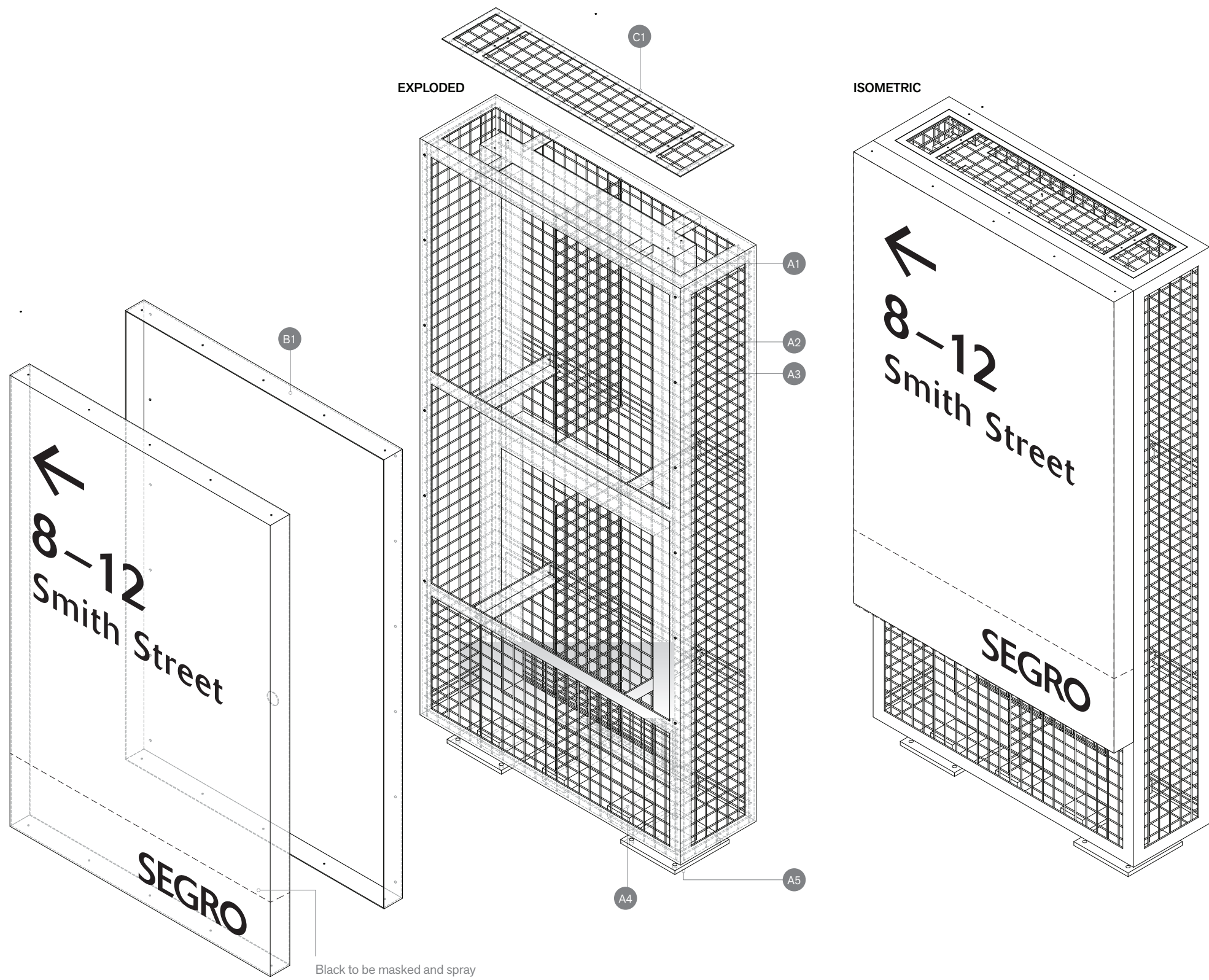


CONSTRUCTION

- A1 POSTS & CROSS MEMBERS- 100x100x3mm SHS S355 steel fully welded, no holes.
- A2 MESH ANGLE - 50x50x6mm RSA S355 steel welded, no holes. All round outside frame and front to back ties.
- A3 MESH - to all sides and base, plus front to back divider - 50x50mm, Ø4mm galvanised steel welded to inside of mesh angle.
- A4 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
- A5 FEET - 250x250x15mm S355 steel welded feet with x4 Ø14mm holes to accept M12 steel rootage.
- B1 FACE PANELS - 3mm thick 5052-O or 5005-H32 grade integral aluminium trays with 90 / 85mm folded, welded and dressed returns. Secure rear tray to vertical angle. Secure front tray along top and bottom returns using M5 colour matched CS security screws.
- C1 TOP PANEL - 3mm S355 steel with laser cut detail and welded mesh to inside face , secured using x4 M5 CS colour matched fixings.

DR2a DIRECTIONAL SIGN – Totem (Plinth)

Assembly 2



CONSTRUCTION

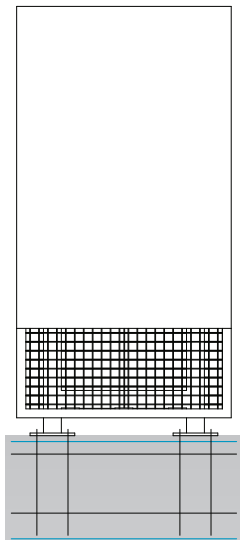
- A1 POSTS & CROSS MEMBERS- 100x100x3mm SHS S355 steel fully welded, no holes.
- A2 MESH ANGLE - 50x50x6mm RSA S355 steel welded, no holes. All round outside frame and front to back ties.
- A3 MESH - to all sides and base, plus front to back divider - 50x50mm, Ø4mm galvanised steel welded to inside of mesh angle.
- A4 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
- A5 FEET - 250x250x15mm S355 steel welded feet with x4 Ø14mm holes to accept M12 steel rootage.
- B1 FACE PANELS - 3mm thick 5052-O or 5005-H32 grade integral aluminium trays with 90 / 85mm folded, welded and dressed returns. Secure rear tray to vertical angle. Secure front tray along top and bottom returns using M5 colour matched CS security screws. Graphics to be self adhesive vinyl.
- C1 TOP PANEL - 3mm S355 steel with laser cut detail and welded mesh to inside face , secured using x4 M5 CS colour matched fixings.

FOUNDATION

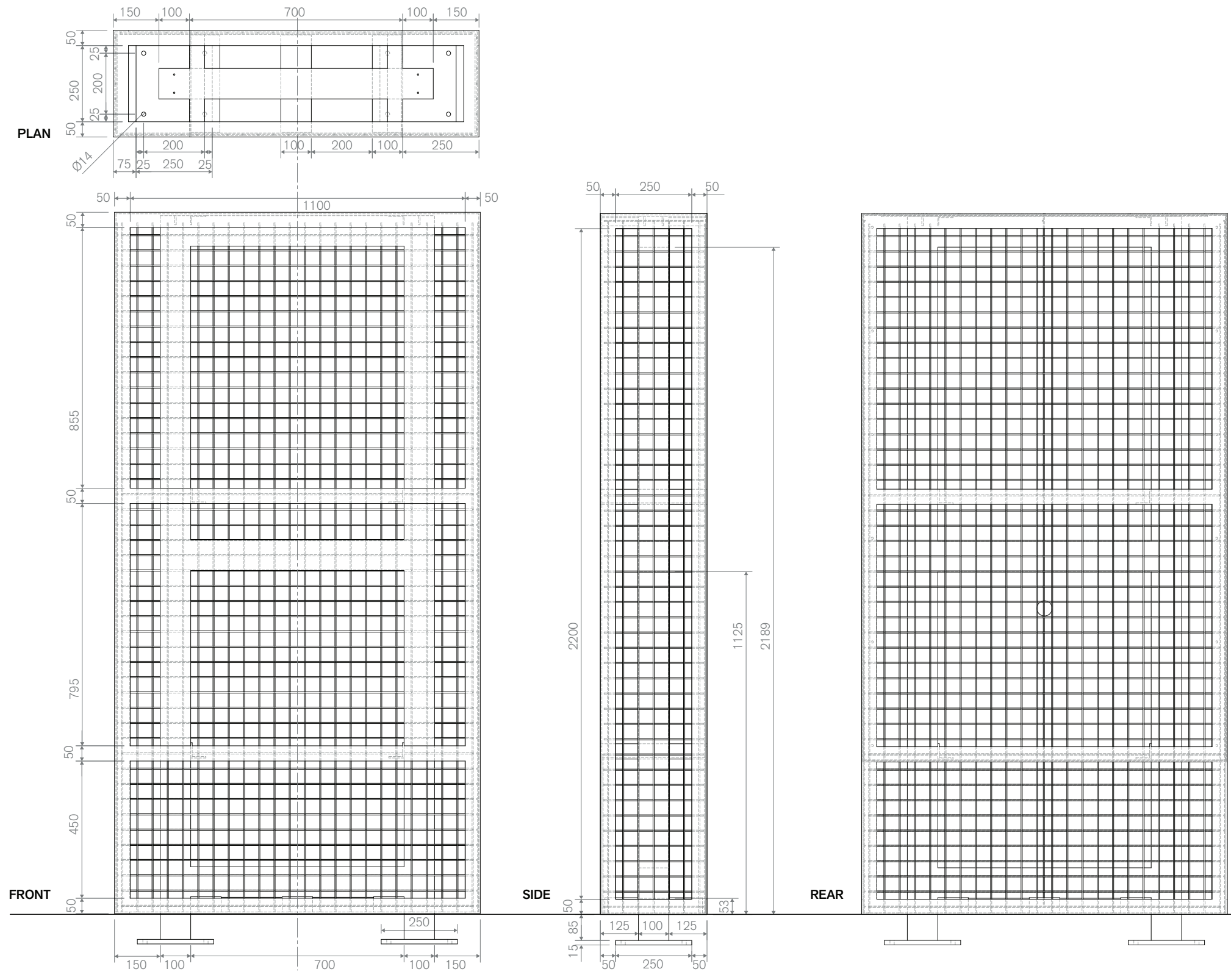
Single concrete foundation 1400 side to side x 800 front to back x 600mm deep with A393 steel mesh reinforcement top & bottom, 50mm cover.

ROOT CAGE

M12 steel studding rootage, 4 no. verticals per baseplate.

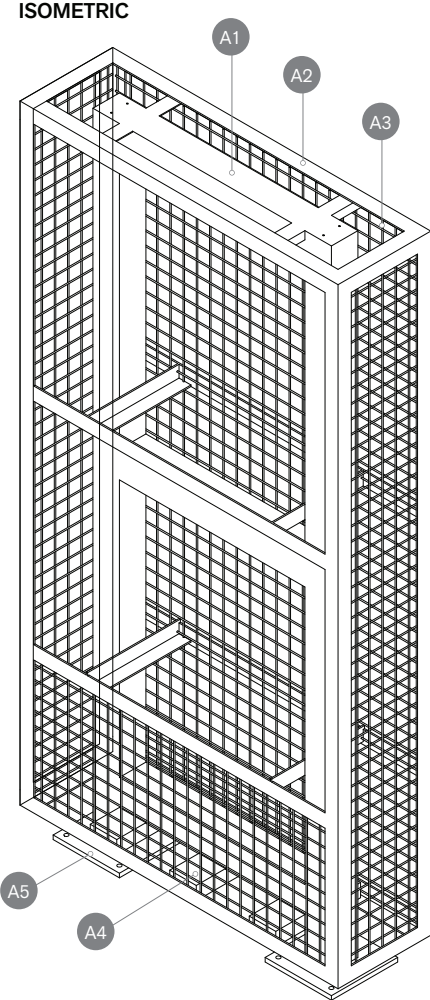


DR2a DIRECTIONAL SIGN – Totem (Plinth) Frame



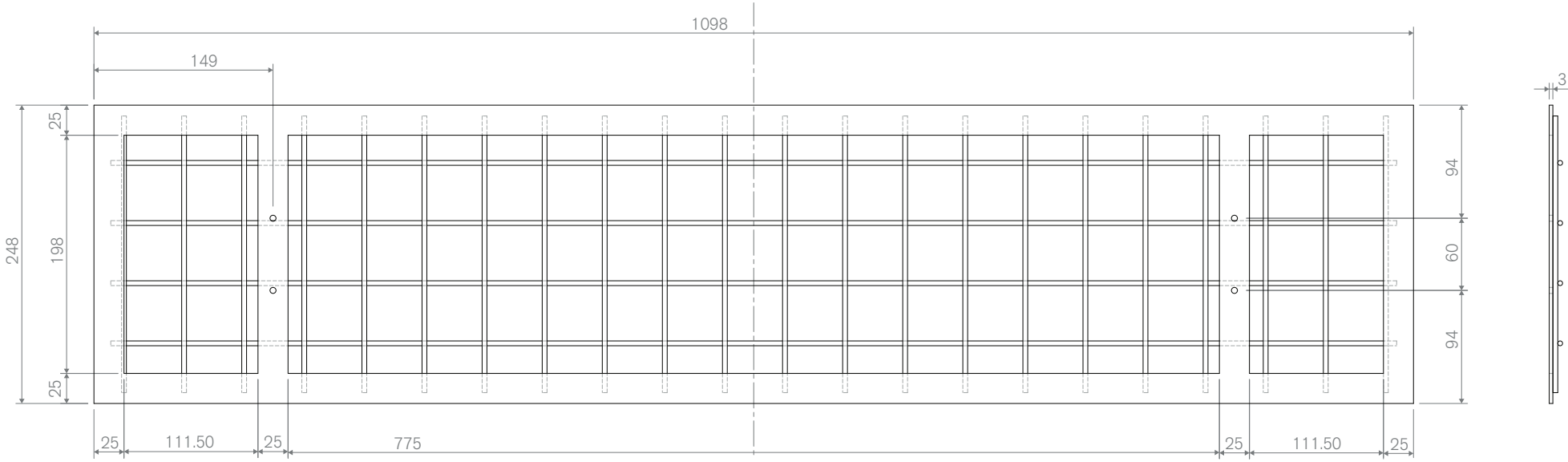
CONSTRUCTION

- A1 POSTS & CROSS MEMBERS- 100x100x3mm SHS S355 steel fully welded, no holes.
- A2 MESH ANGLE - 50x50x6mm RSA S355 steel welded, no holes. All round outside frame and front to back ties.
- A3 MESH - to all sides and base, plus front to back divider - 50x50mm, $\varnothing 4$ mm galvanised steel welded to inside of mesh angle.
- A4 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
- A5 FEET - 250x250x15mm S355 steel welded feet with x4 $\varnothing 14$ mm holes to accept M12 steel rootage.



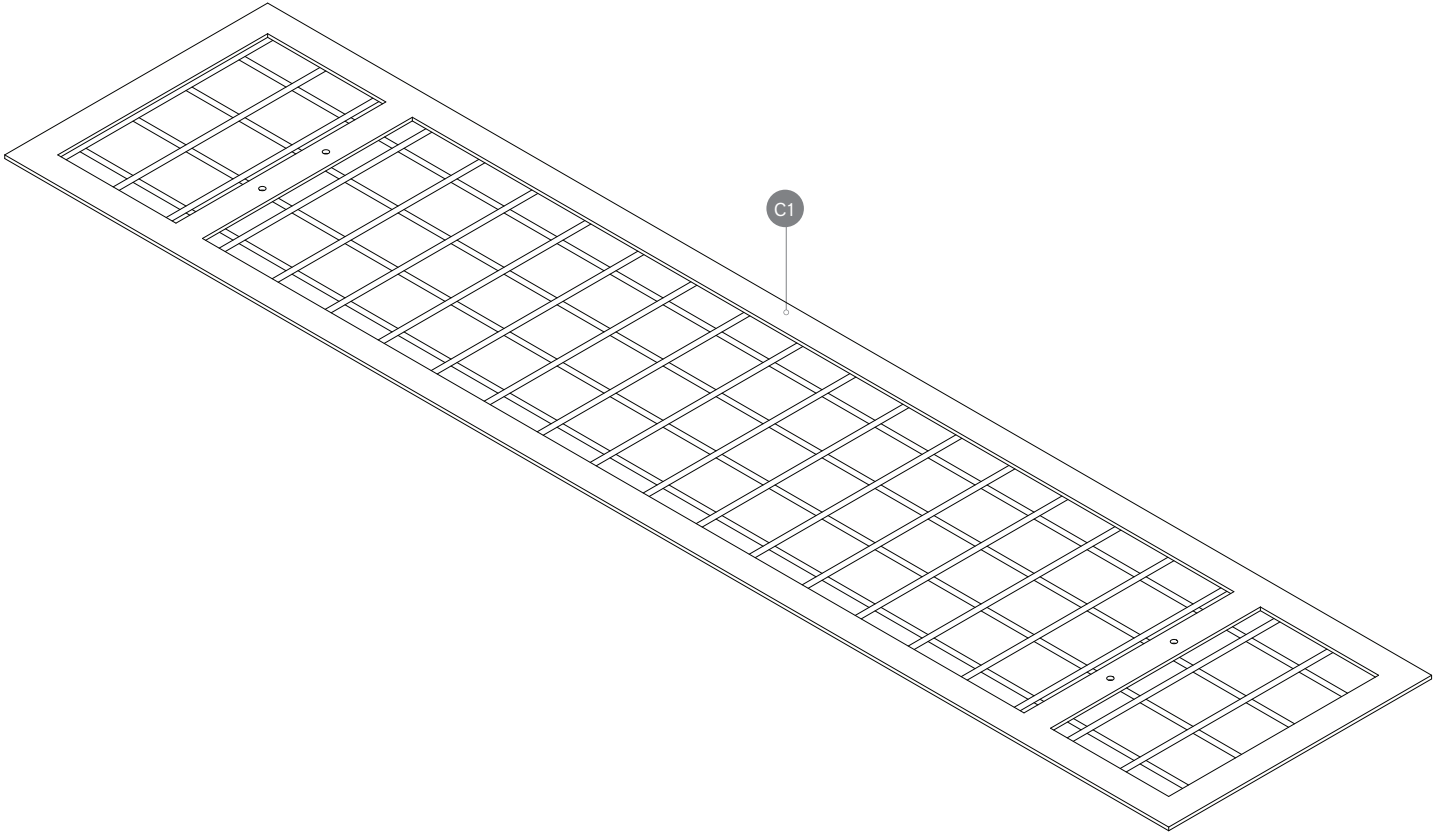
DR2a DIRECTIONAL SIGN – Totem (Plinth)

Top Panel



CONSTRUCTION

- C1 TOP PANEL - 3mm S355 steel with laser cut detail and welded mesh to inside face , secured using x4 M5 CS colour matched fixings.



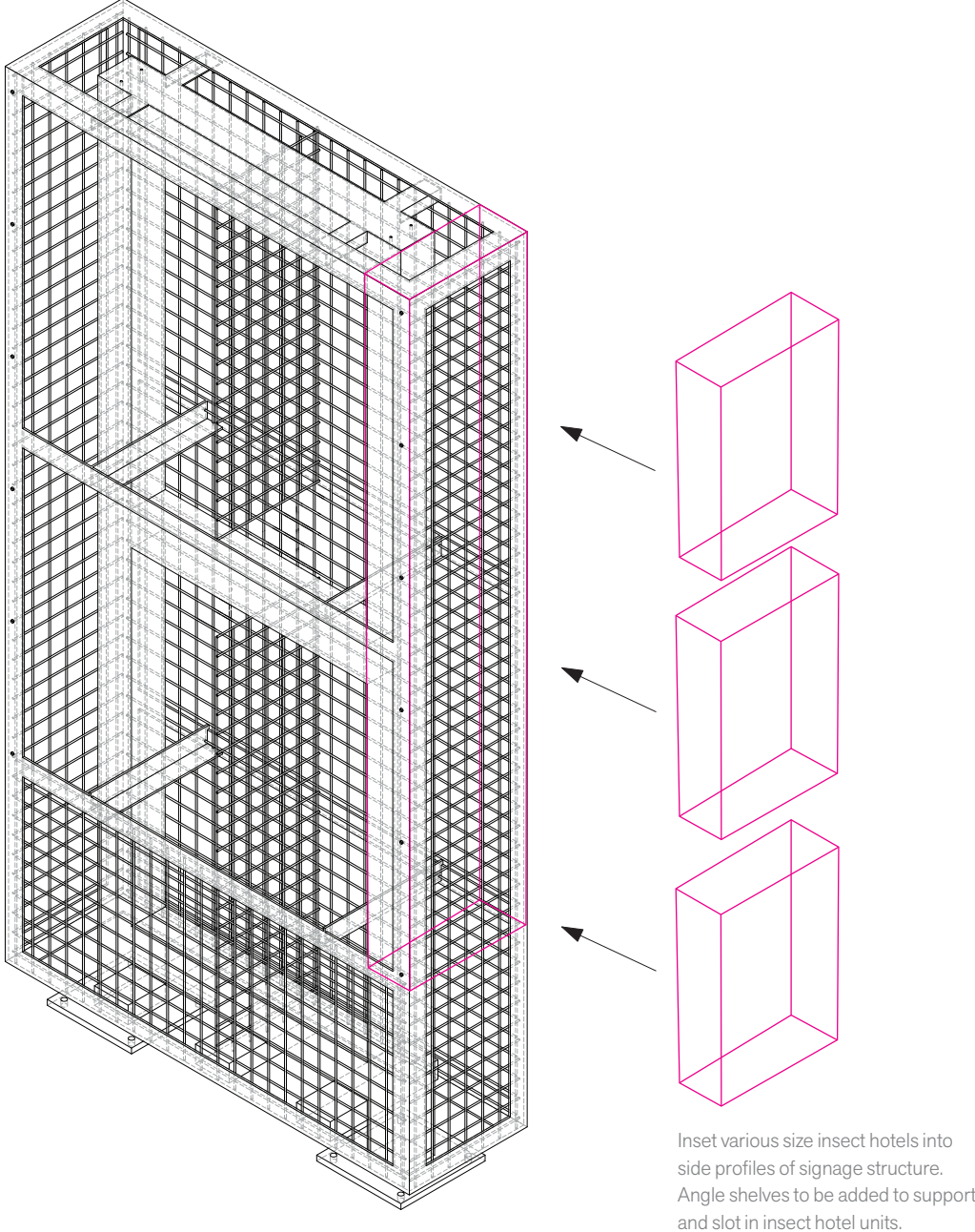
DR2a DIRECTIONAL SIGN – Totem (Plinth)

Variation 1 – Insect Habitats



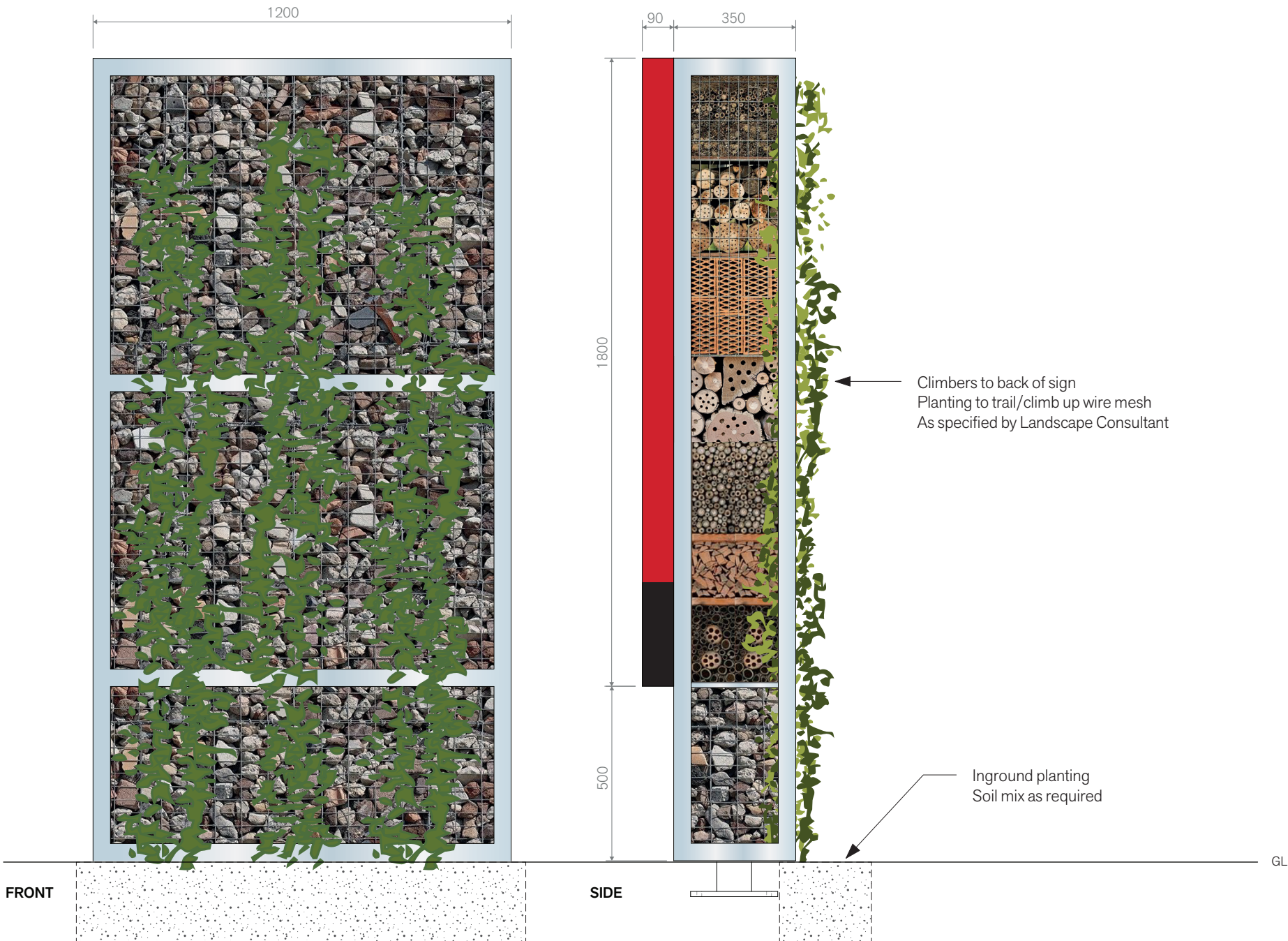
VARIATION 1 – with INSECT & SMALL ANIMAL HABITATS

INSECT HOTELS
Angle shelves to be welded between internal SHS posts and side vertical angle to provide support for insect hotels.
Units can be added to both sides of sign.



DR2a DIRECTIONAL SIGN – Totem (Plinth)

Variation 2 – Planting



VARIATION 2 – with PLANTING TO REAR

INSECT HOTELS
Angle shelves to be welded between internal SHS posts and side vertical angle to provide support for insect hotels.

PLANTING
Climbing plants such as Ivy or similar (as specified by Landscape Consultant) to be planted within ground directly to rear of sign. Plants to trail vertically on wire mesh at rear.



REFERENCE

DR2b DIRECTIONAL SIGN – Totem (Tapered)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised

SEGRO RED

SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

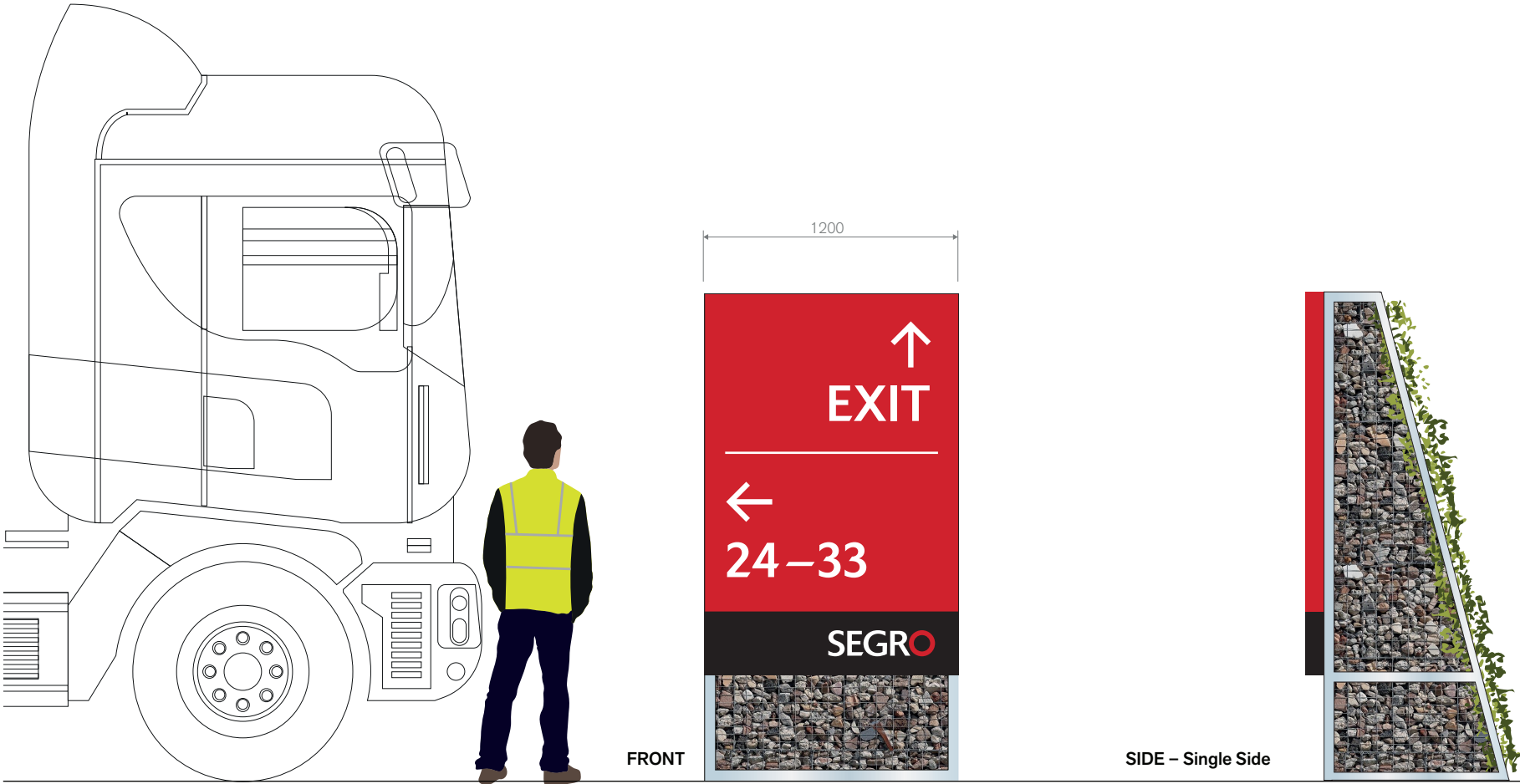
STRUCTURE
Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

PANELS
Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Non-illuminated
Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



DR3 STREET NAME SIGN – Finger Board

Elevations



PLAN



GALVANISED FINISH
Mesh & visible angle and
all steel work to be galvanised



SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION

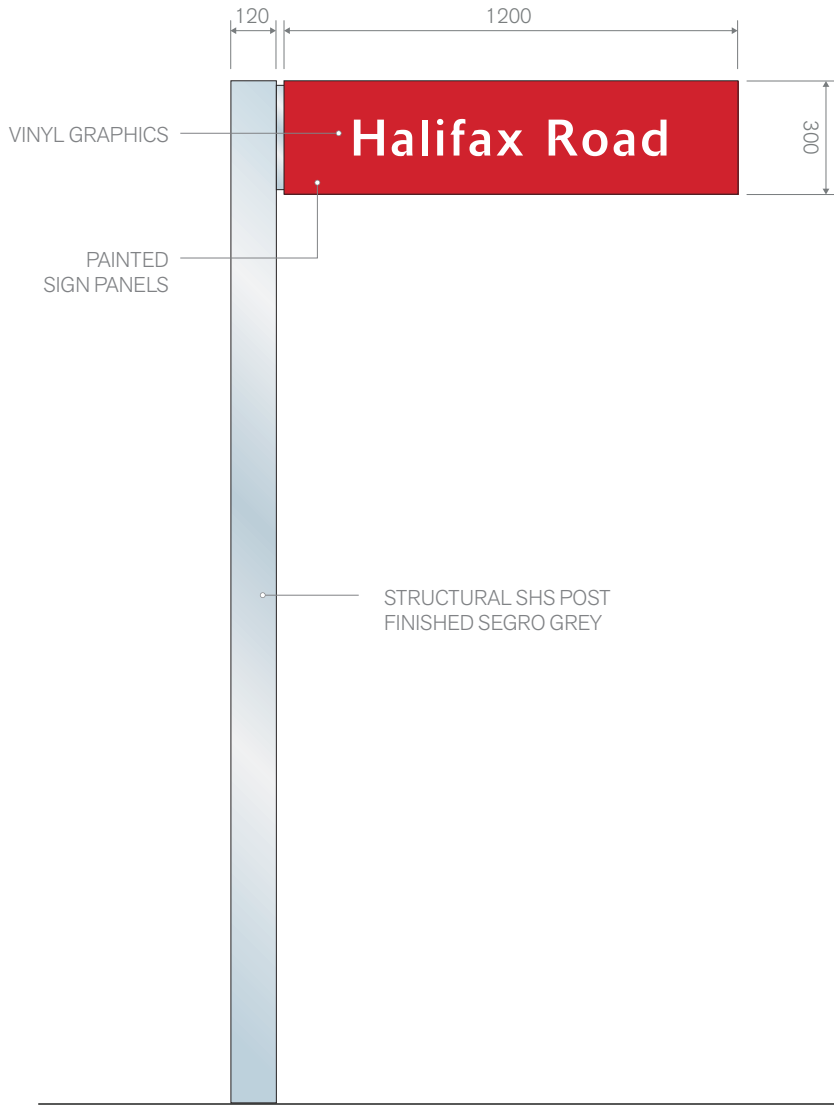
DETAIL

POST
SHS structural post painted all round. Footing below ground to engineers requirements.

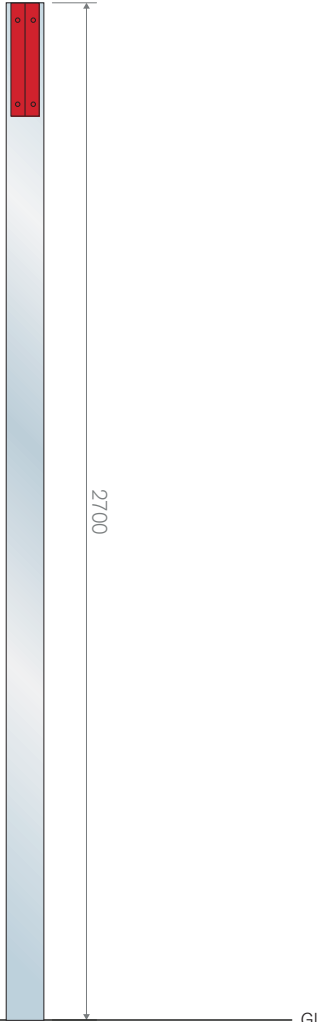
SIGN PANELS
Internally fabricated RHS subframe securely fixed to post. Sign panel to be folded and countersunk fixed to returns.

GRAPHICS
Panel colours to be painted Satin finish to match SEGRO branding specification.

Applied external grade vinyl graphics. Satin protective spray clearcoat over.



FRONT

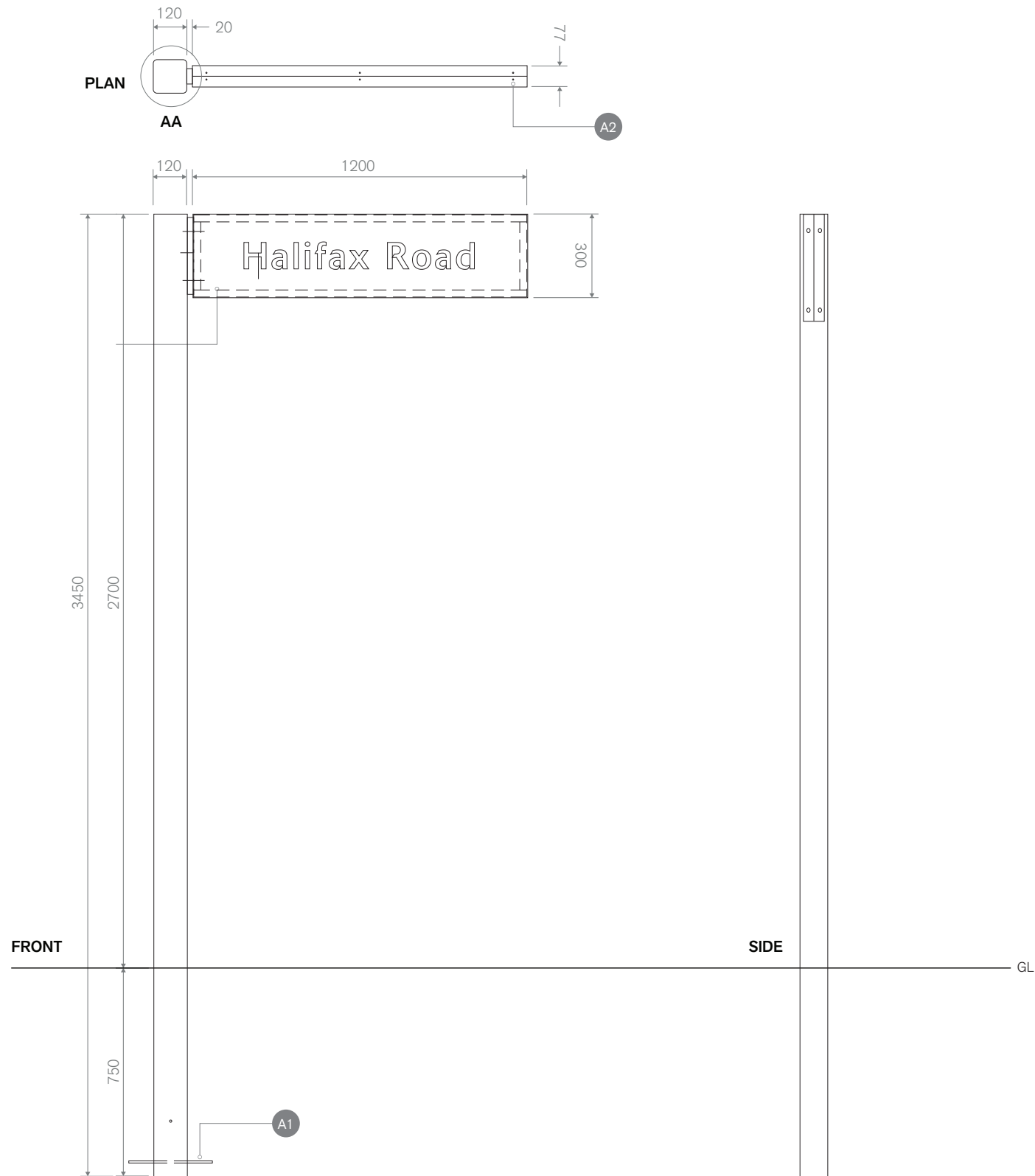


SIDE



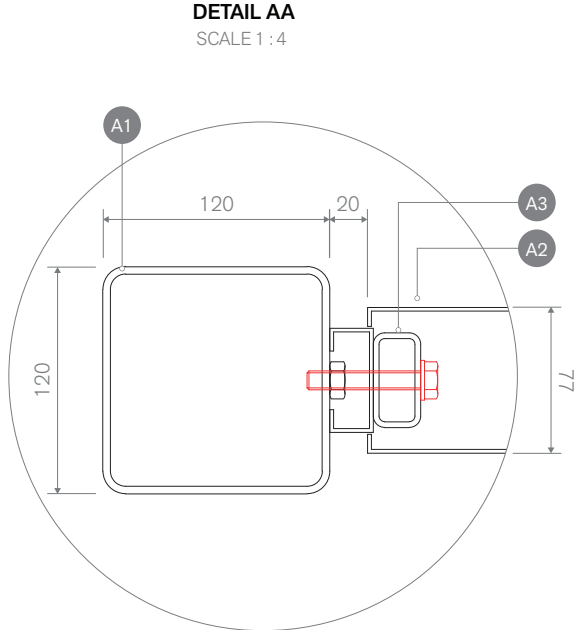
TYPICAL LAYOUTS
LETTERING – 95mm cap X-height

DR3 STREET NAME SIGN – Finger Board Assembly



CONSTRUCTION

- A1 POST - 120x120x4mm SHS, capped at top. Fitted with M8x300lg anti-pullout bars.
- A2 PANELS - 2mm thick 5052-O or 5005-H32 grade aluminium panels with 38.5mm folded, welded and dressed returns. Panels fixed to internal frame using M4 countersunk screws.
- A3 INTERNAL FRAME - 50x25x3mm RHS. Fixed to post through folded 2mm spacer using M10 fixings into nut welded on o/side of post.



PART B

TN TENANT IDENTIFICATION SIGNS

TN1	Single Unit Number
TN2a	Multi Unit Number – Totem (Plinth)
TN2b	Multi Unit Number – Totem (Tapered)
TN3a	Tenant Name – Totem (Plinth)
TN3b	Tenant Name – Totem (Tapered)

TN1 SINGLE UNIT NUMBER

Elevations

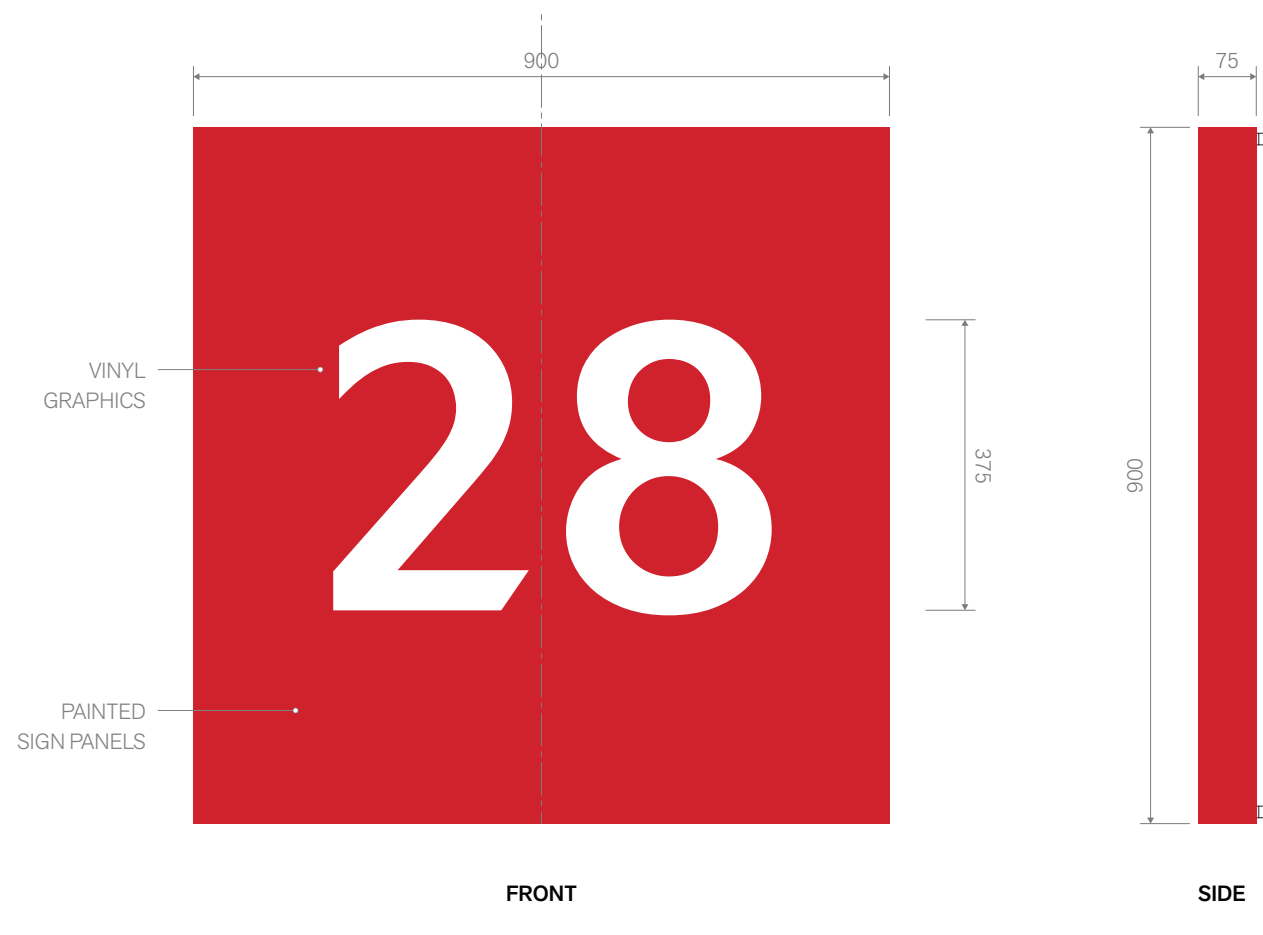


COLOUR & FINISH SPECIFICATION

DETAIL

MATERIAL
Aluminium panel with folded returns and painted to face and sides.

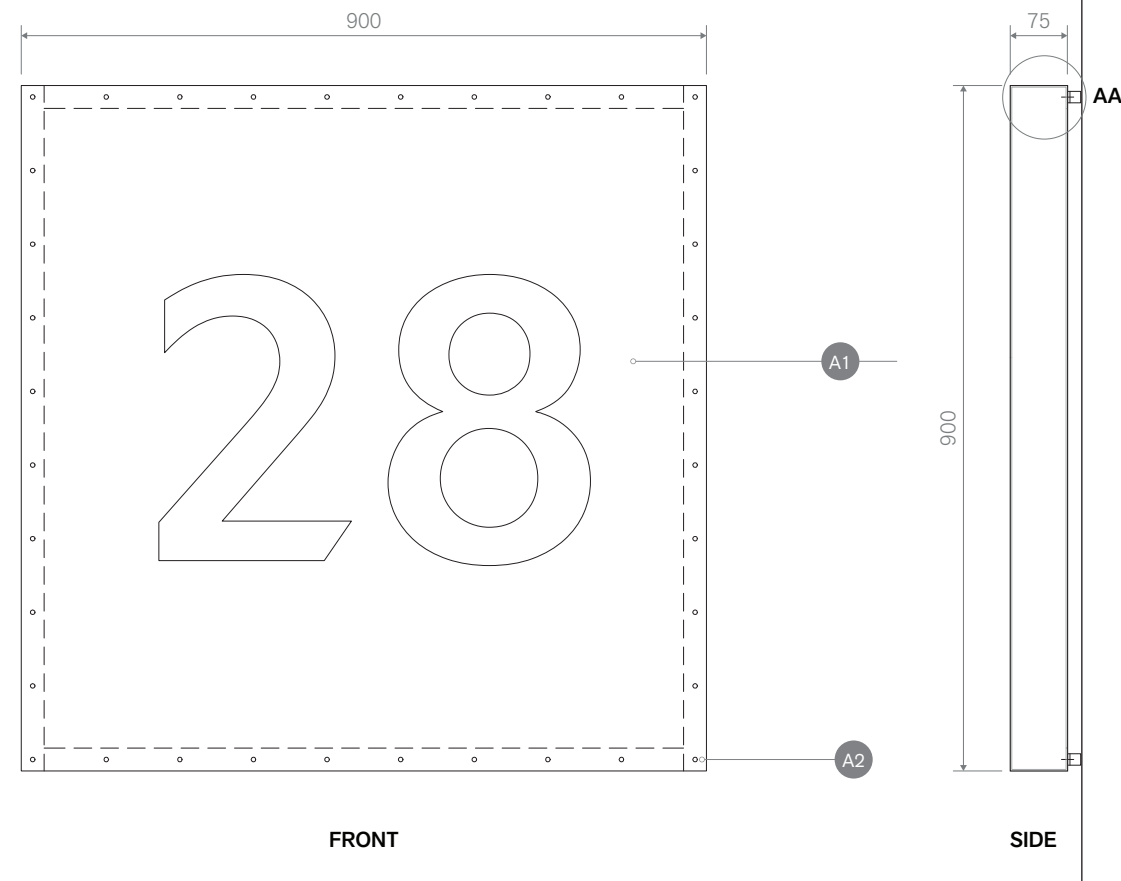
GRAPHICS
Background to be painted. Graphics to be applied external grade vinyl graphics.



COLOUR VARIANTS
SCALE 1:20

TN1 SINGLE UNIT NUMBER

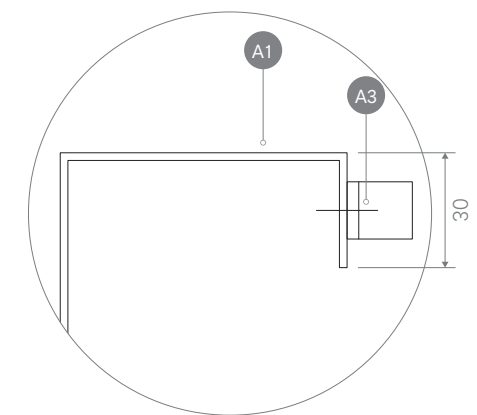
Assembly



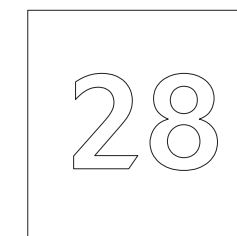
CONSTRUCTION

- A1 PANELS - 2mm thick 5052-O or 5005-H32 grade aluminium panels with 75x30mm folded, welded and dressed returns.
- A2 FIXING HOLES - to 30mm rear flange to allow locators positioning on site to suit cladding profile.
- A3 LOCATORS - Large brass locators fixed to panel using M5 x 10 lg hex head.

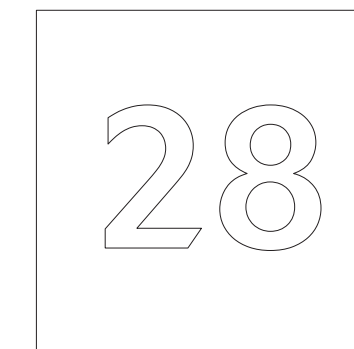
DETAIL AA
SCALE 1:2



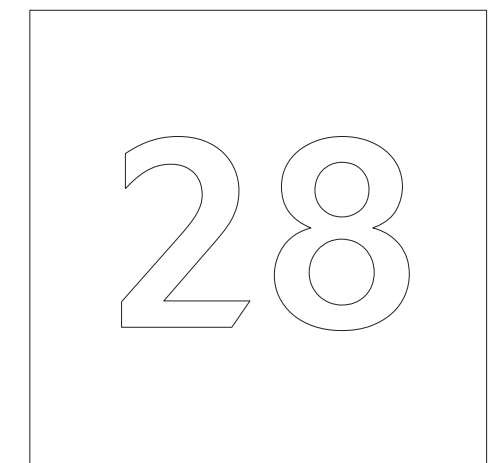
600 X 600mm



900 x 900mm



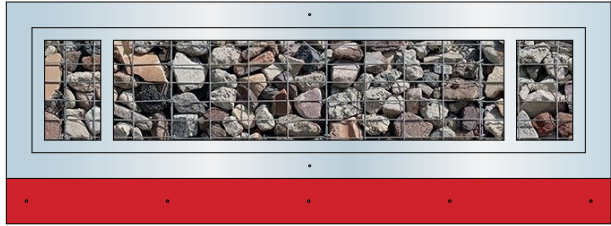
1200 x 1200mm



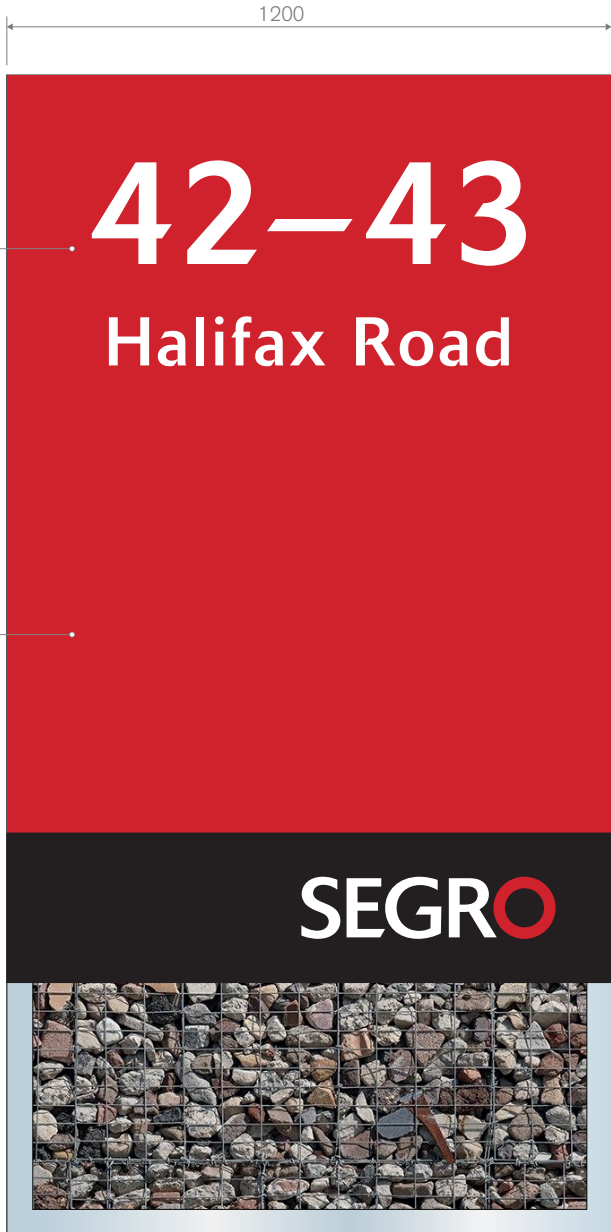
SIZE VARIANTS TO SUIT APPLICATION
SCALE 1:20

TN2a MULTI UNIT NUMBER – Totem (Plinth)

Elevations



PLAN



FRONT



GALVANISED FINISH
Mesh & visible angle and
all steel work to be galvanised

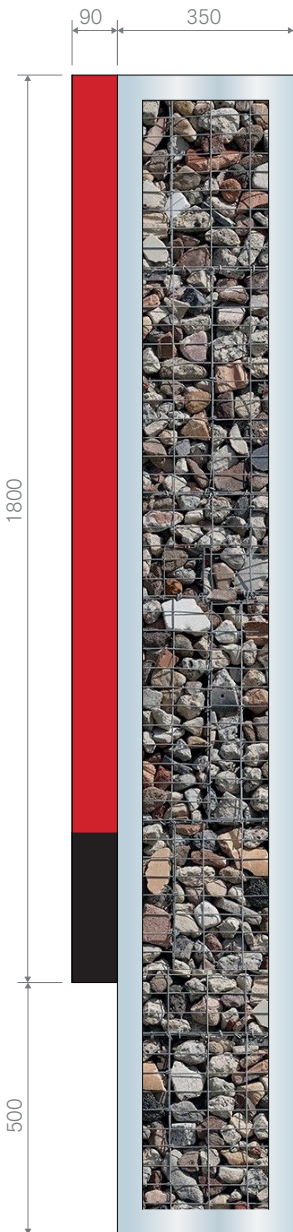


SEGRO RED

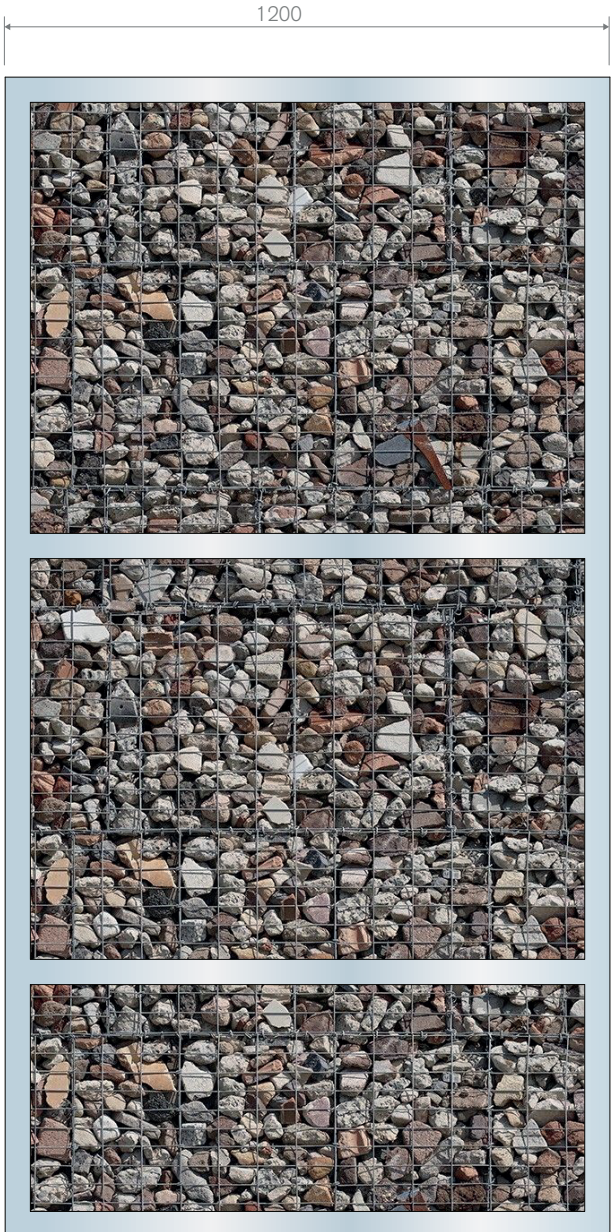


SEGRO BLACK

COLOUR & FINISH SPECIFICATION



SIDE



REAR

DETAIL

STRUCTURE
Fabricated plinth with internal structural steel frame with painted external aluminium cladding, and individual lettering and logo.

PANELS
Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Non-illuminated
Double sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

PLINTH
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

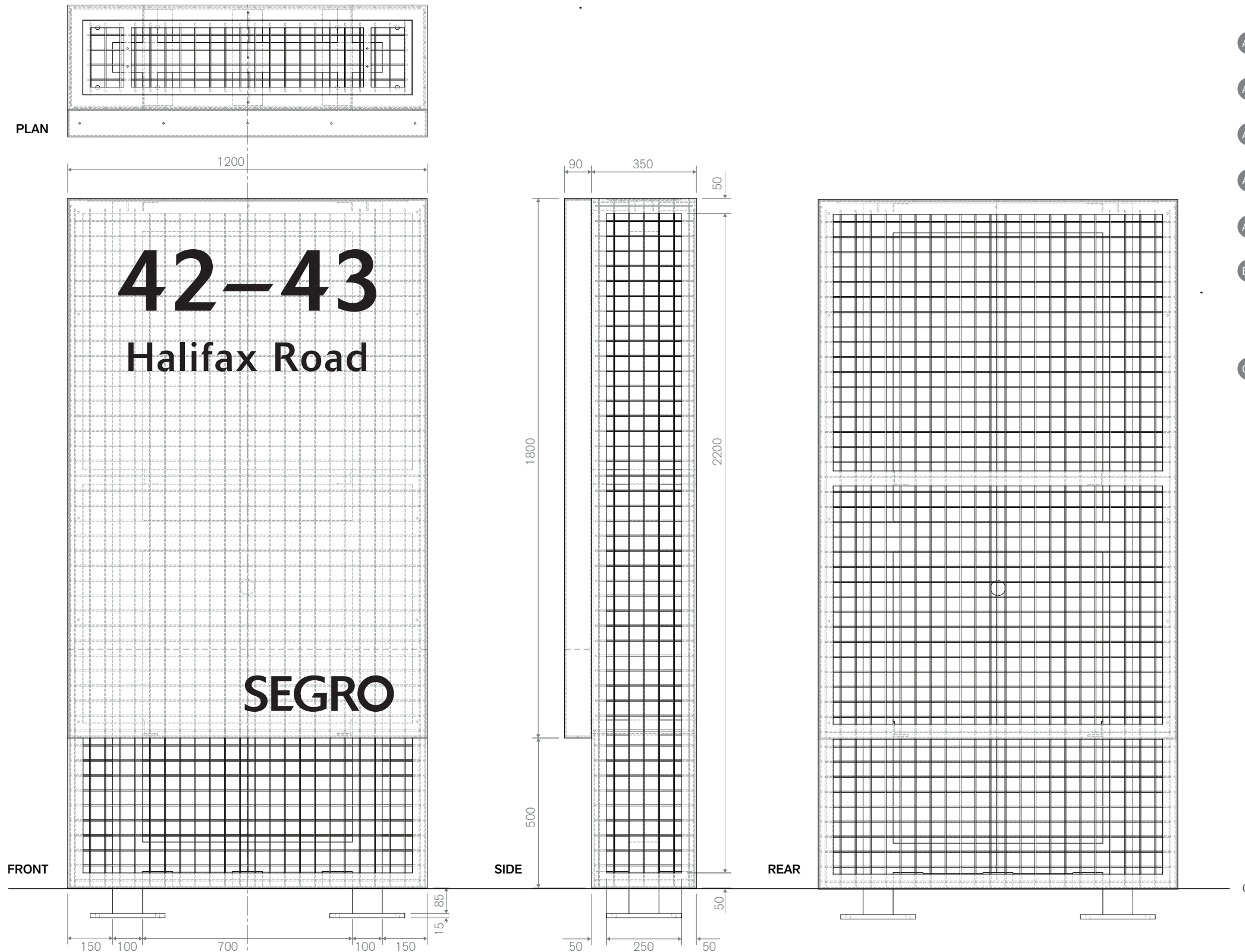
RECLAIMED MATERIAL
Size to suit internal space and mesh aperture.

GALVANISED MESH & ANGLE FRAME

GL

TN2a MULTI UNIT NUMBER – Totem (Plinth)

Assembly 1

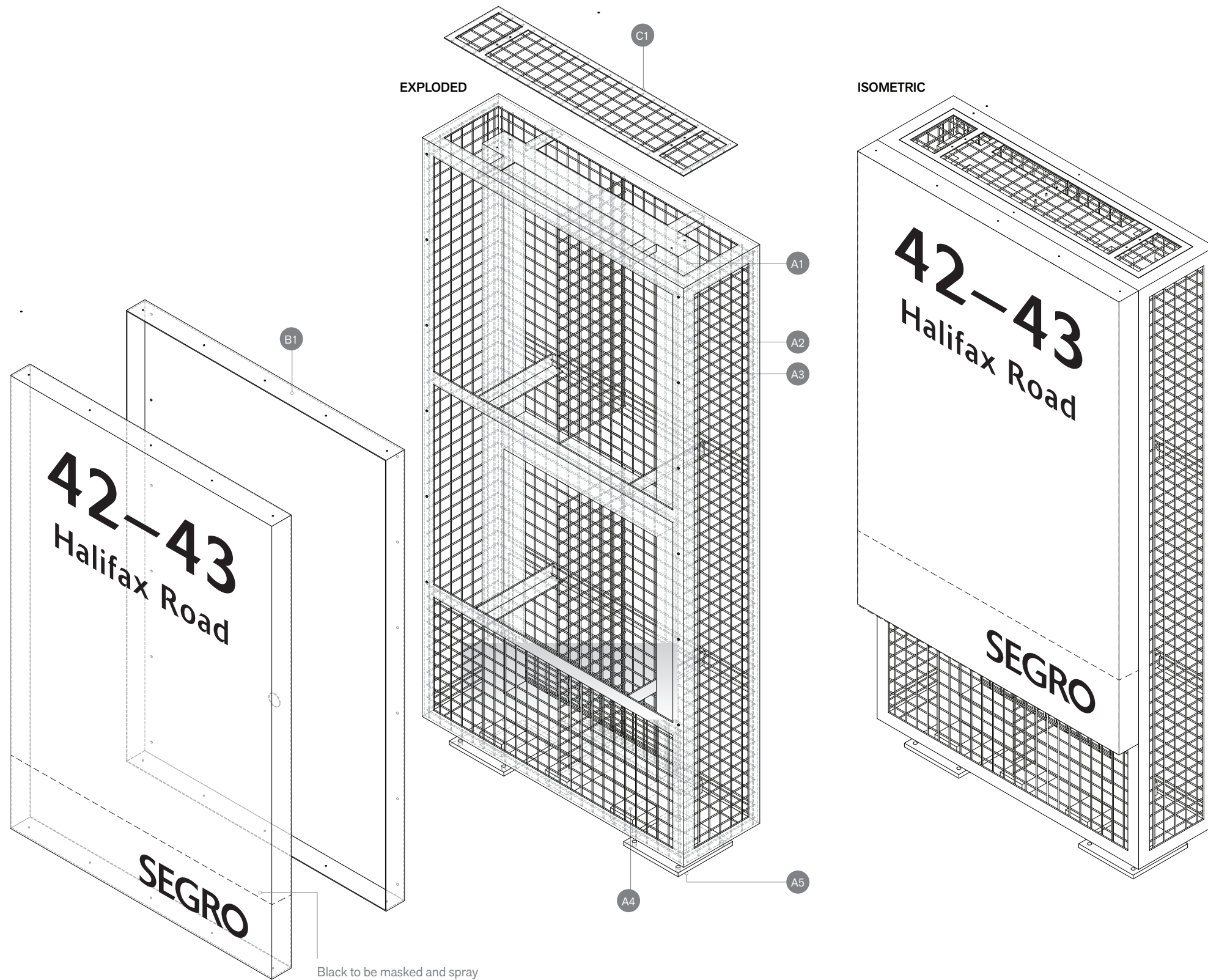


CONSTRUCTION

- A1 POSTS & CROSS MEMBERS- 100x100x3mm SHS S355 steel fully welded, no holes.
- A2 MESH ANGLE - 50x50x6mm RSA S355 steel welded, no holes. All round outside frame and front to back ties.
- A3 MESH - to all sides and base, plus front to back divider - 50x50mm, Ø4mm galvanised steel welded to inside of mesh angle.
- A4 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
- A5 FEET - 250x250x15mm S355 steel welded feet with x4 Ø14mm holes to accept M12 steel rootage.
- B1 FACE PANELS - 3mm thick 5052-O or 5005-H32 grade integral aluminium trays with 90 / 85mm folded, welded and dressed returns. Secure rear tray to vertical angle. Secure front tray along top and bottom returns using M5 colour matched CS security screws. Graphics to be self adhesive vinyl.
- C1 TOP PANEL - 3mm S355 steel with laser cut detail and welded mesh to inside face , secured using x4 M5 CS colour matched fixings.

TN2a MULTI UNIT NUMBER – Totem (Plinth)

Assembly 2



CONSTRUCTION

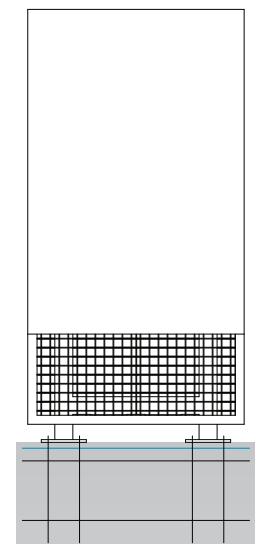
- A1 POSTS & CROSS MEMBERS- 100x100x3mm SHS S355 steel fully welded, no holes.
- A2 MESH ANGLE - 50x50x6mm RSA S355 steel welded, no holes. All round outside frame and front to back ties.
- A3 MESH - to all sides and base, plus front to back divider - 50x50mm, Ø4mm galvanised steel welded to inside of mesh angle.
- A4 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
- A5 FEET - 250x250x15mm S355 steel welded feet with x4 Ø14mm holes to accept M12 steel rootcage.
- B1 FACE PANELS - 3mm thick 5052-O or 5005-H32 grade integral aluminium trays with 90 / 85mm folded, welded and dressed returns. Secure rear tray to vertical angle. Secure front tray along top and bottom returns using M5 colour matched CS security screws. Graphics to be self adhesive vinyl.
- C1 TOP PANEL - 3mm S355 steel with laser cut detail and welded mesh to inside face , secured using x4 M5 CS colour matched fixings.

FOUNDATION

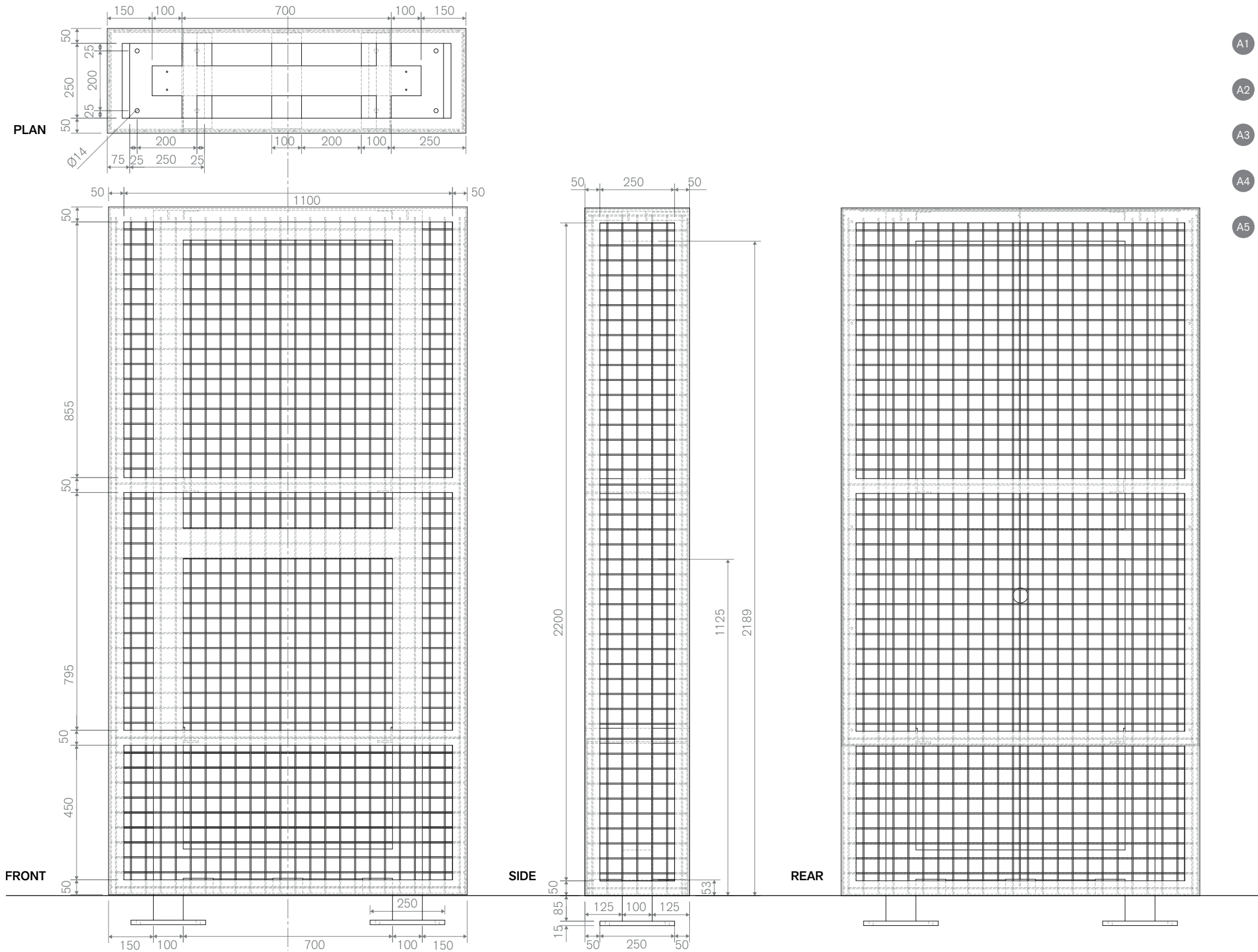
Single concrete foundation 1400 side to side x 800 front to back x 600mm deep with A393 steel mesh reinforcement top & bottom, 50mm cover.

ROOT CAGE

M12 steel studding rootcage, 4 no. verticals per baseplate.



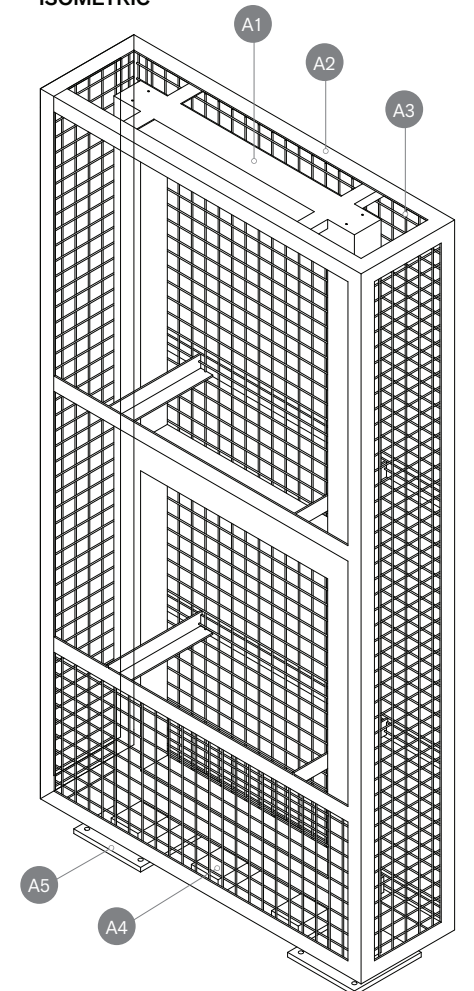
TN2a MULTI UNIT NUMBER – Totem (Plinth) Frame



CONSTRUCTION

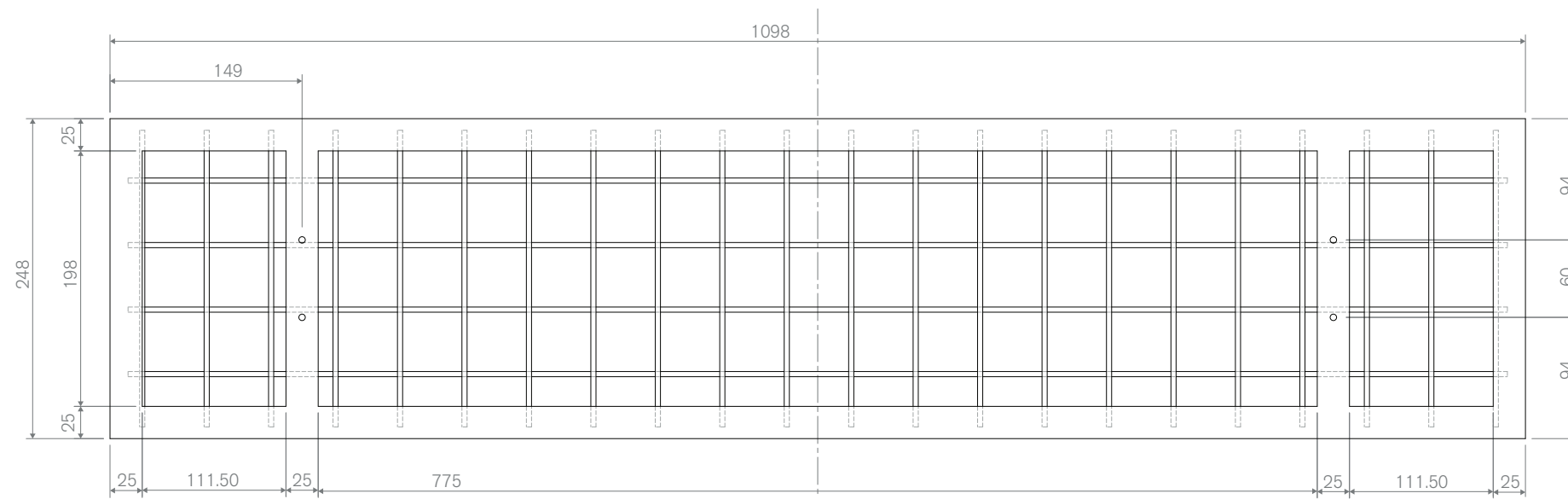
- A1 POSTS & CROSS MEMBERS- 100x100x3mm SHS S355 steel fully welded, no holes.
- A2 MESH ANGLE - 50x50x6mm RSA S355 steel welded, no holes. All round outside frame and front to back ties.
- A3 MESH - to all sides and base, plus front to back divider - 50x50mm, $\varnothing 4$ mm galvanised steel welded to inside of mesh angle.
- A4 STONE SUPPORTS - 100x50x3mm RHS S355 steel welded front to back.
- A5 FEET - 250x250x15mm S355 steel welded feet with x4 $\varnothing 14$ mm holes to accept M12 steel rootage.

ISOMETRIC



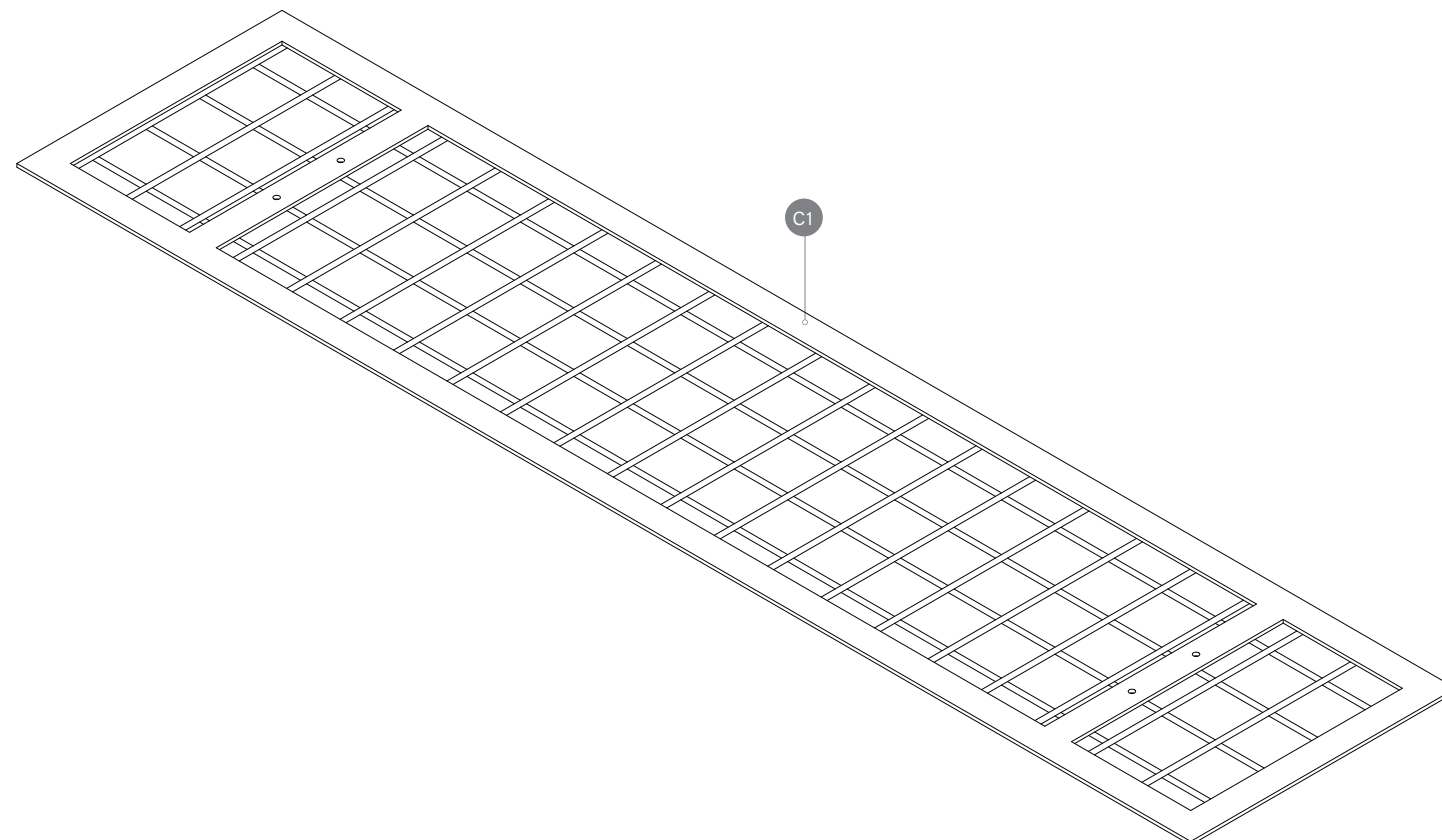
TN2a MULTI UNIT NUMBER – Totem (Plinth)

Top Panel



CONSTRUCTION

- C1 TOP PANEL - 3mm S355 steel with laser cut detail and welded mesh to inside face , secured using x4 M5 CS colour matched fixings.



TN2a MULTI UNIT NUMBER – Totem (Plinth)

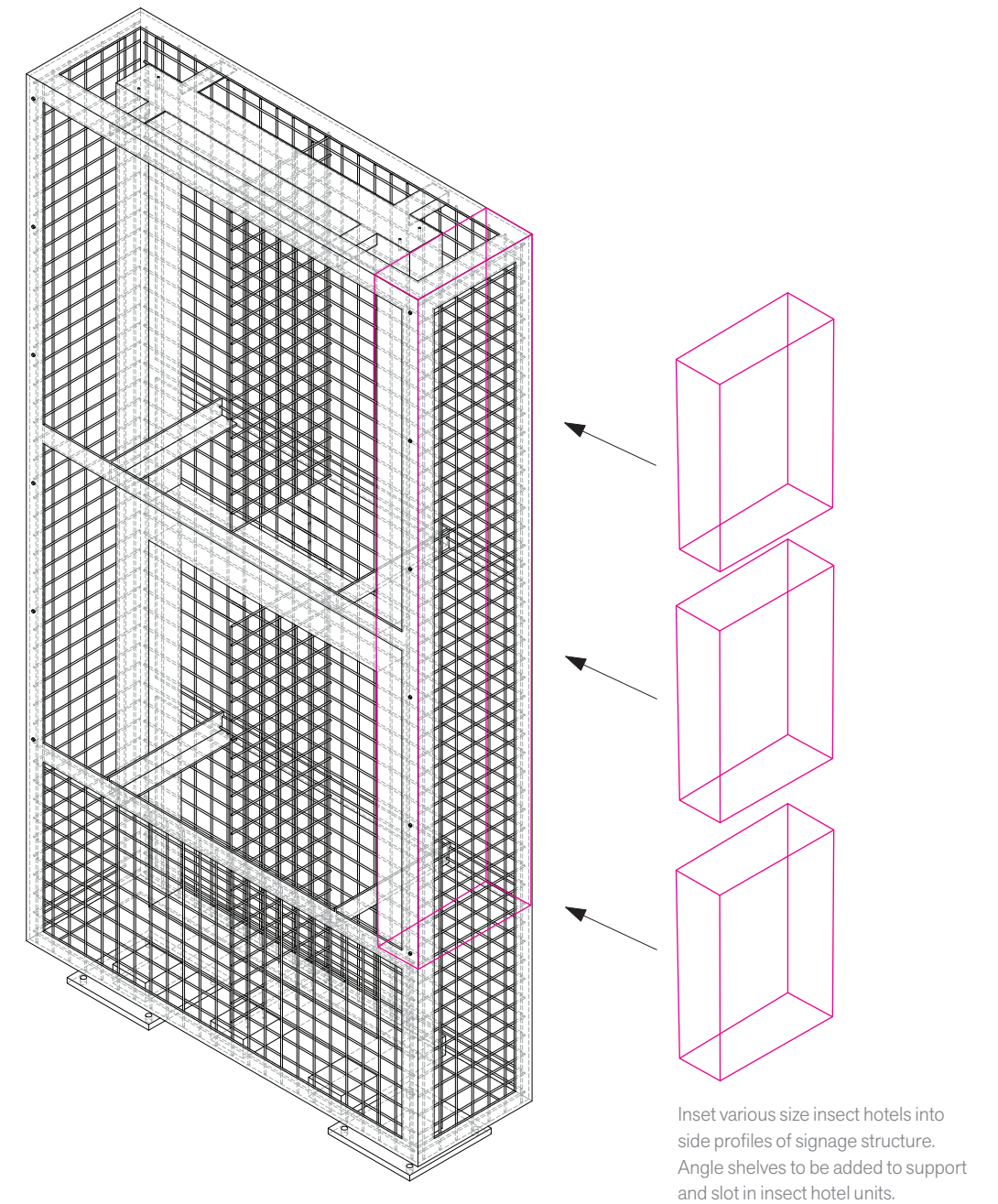
Variation 1 – Insect Habitats

VARIATION 1 – with INSECT & SMALL ANIMAL HOTELS

INSECT HOTELS

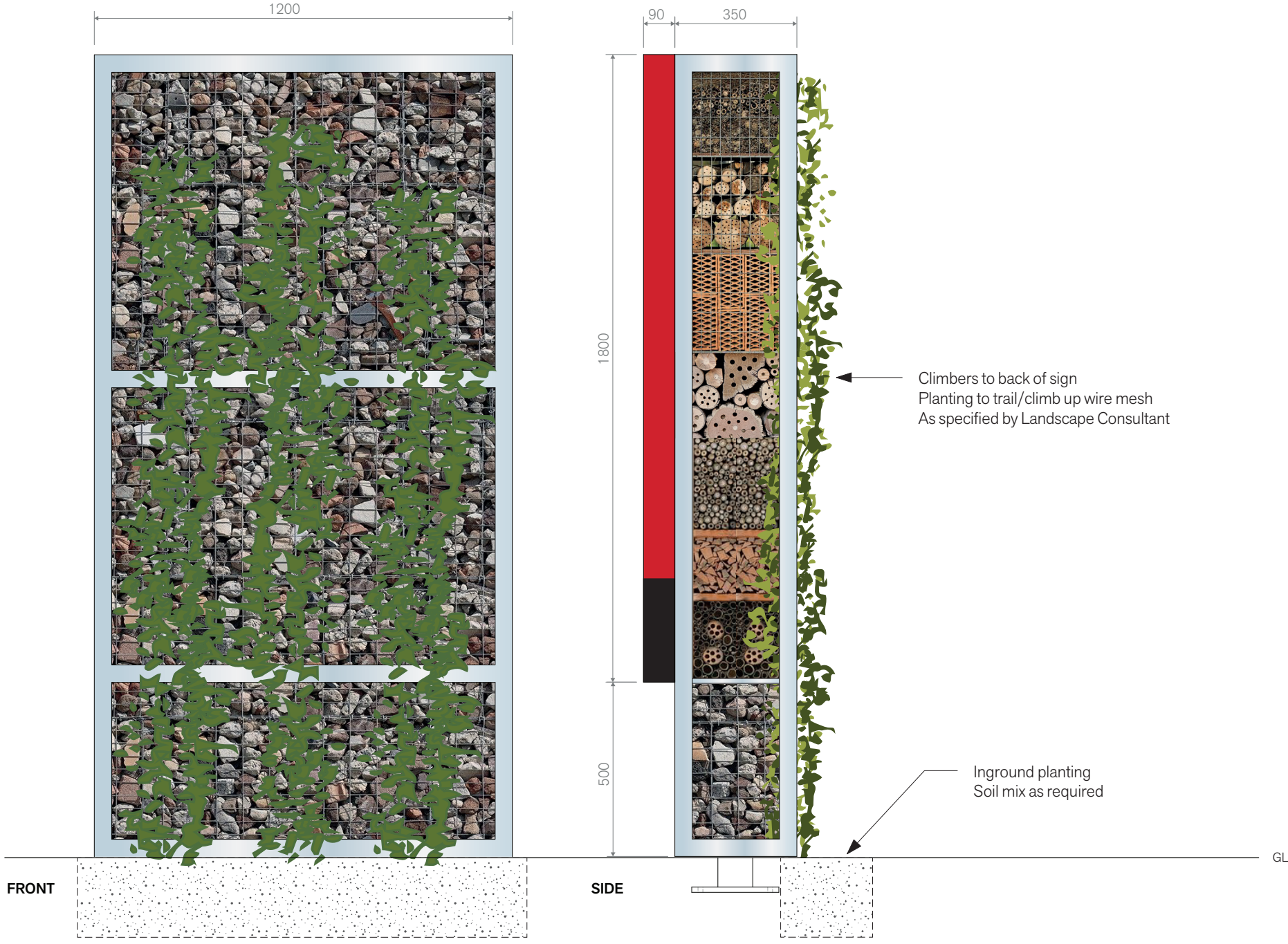
Angle shelves to be welded between internal SHS posts and side vertical angle to provide support for insect hotels.

Units can be added to both sides of sign.



TN2a MULTI UNIT NUMBER – Totem (Plinth)

Variation 2 – Planting



VARIATION 2 – with PLANTING TO REAR

INSECT HOTELS
Angle shelves to be welded between internal SHS posts and side vertical angle to provide support for insect hotels.

PLANTING
Climbing plants such as Ivy or similar (as specified by Landscape Consultant) to be planted within ground directly to rear of sign. Plants to trail vertically on wire mesh at rear.



REFERENCE

TN2b MULTI UNIT NUMBER – Totem (Tapered)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised

SEGRO RED

SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

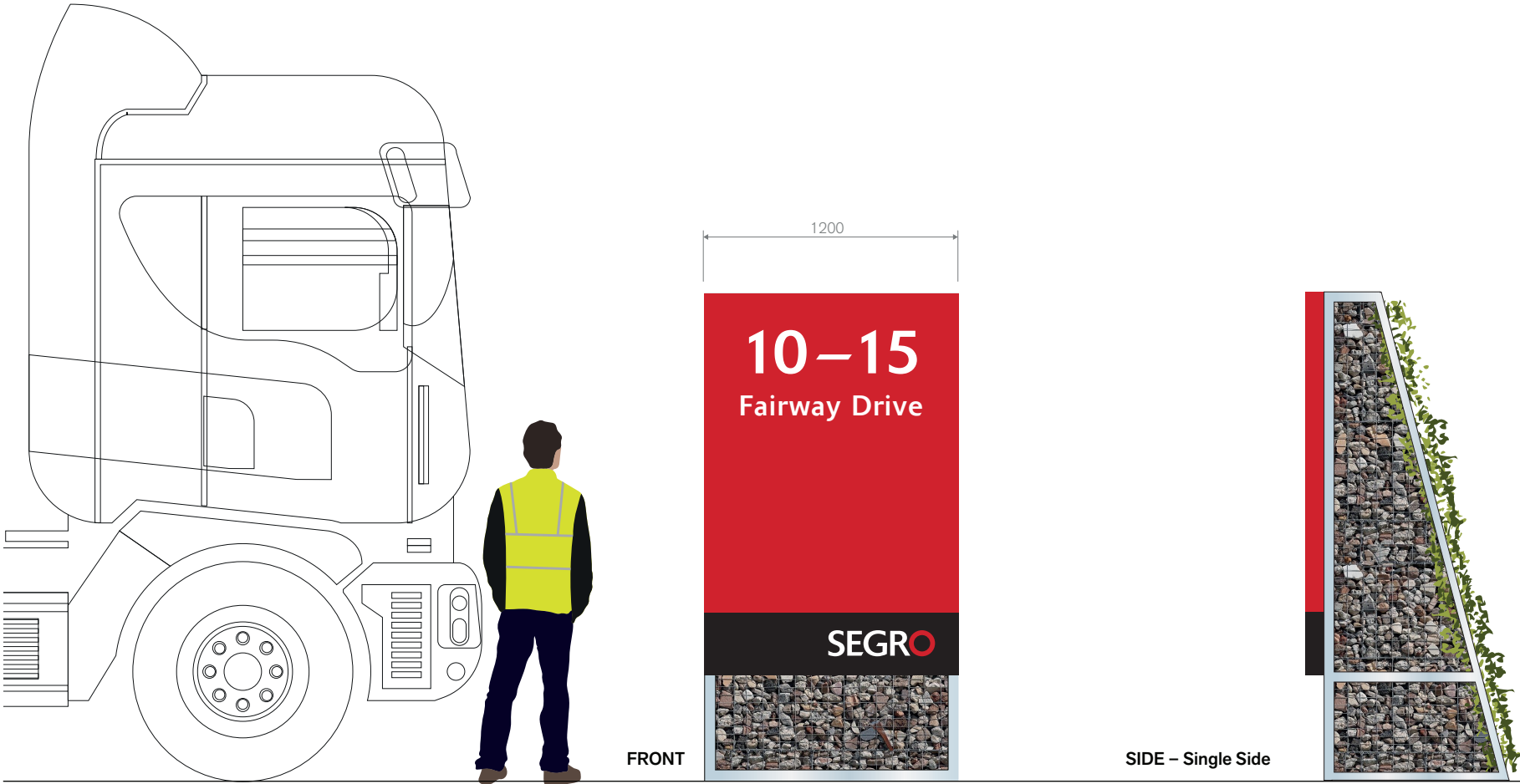
STRUCTURE
Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

PANELS
Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Non-illuminated
Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE
External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



TN3a TENANT NAME – Totem (Plinth)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised



SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

STRUCTURE

Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

PANELS

Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Non-illuminated

Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE

External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



TN3b TENANT NAME – Totem (Tapered)

Elevations



GALVANISED FINISH
Mesh & visible angle and all steel work to be galvanised



SEGRO RED



SEGRO BLACK

COLOUR & FINISH SPECIFICATION

DETAIL

STRUCTURE

Fabricated landscape plinth with internal structural steel frame with painted external aluminium cladding, intra-cut individual illuminated lettering and logo.

PANELS

Aluminium panel colours to be painted Satin finish to match SEGRO branding specification.

GRAPHICS – Non-illuminated

Single sided with WHITE fret-cut vinyl Park name and fret-cut vinyl Logo.

BASE

External angle frame with rear welded gabion wire mesh. Fill to be a mix of reclaimed material to suit.

FURTHER DETAILS FOR ASSEMBLY & STRUCTURAL FRAMING TO BE DEVELOPED. ENGINEERING VALIDATION REQUIRED



PART B

SIGN SPECIFICATIONS

SIGN SPECIFICATIONS

1.0 PRELIMINARIES

1.1 Scope of Work

The Contractor shall carry out all work necessary to supply and install all signs.

Without limiting the generality of the foregoing, the Contractor shall:

- Design supply, manufacture, store deliver, install, commission and test as appropriate all components of the Works as may be necessary to complete the Works on accordance with the Contract;
- Provide all materials, labour, supervision, plant (including hoisting), equipment (including scaffold and temporary lighting), fixings and all other incidental items which may be necessary to satisfactorily complete the Works in accordance with the Contract;
- Provide all specified and all other necessary support structures, frames, brackets or mouldings to support, build and install all signs included in the Works;
- Verify and be responsible for all dimensions and conditions on the job prior to manufacture, including structural, engineering and footing details and the strength and suitability of materials specified for each sign. The Contractor shall notify SEGRO/Managing Contractor of any variations from the dimensions and conditions shown by these and any subsequent drawings. If changes are requested they should be submitted as drawings for approval prior to production;
- Provide any alterations required to fix signs such as removal of pavers, concrete, tarmac, landscaping etc required to install adequate structural fixings for signage. This includes refurbishing existing ground surfaces and treatments where damaged by the Contractor during the construction or installation of a sign;
- Allow for protection of all signs during transport and installation and protection to all areas of adjacent work during installation, especially protection of tiled surfaces where access equipment is used (e.g., plywood or plastic covering for protection)
- Provide all samples, shop drawings and prototypes specified.

1.2 The Intent of the Sign Type Drawings and Specification

The intent of the drawings and specifications set out herein is to describe the design intent.

The Contractor may request SEGRO & Design Consultant to agree to proposed amendments to construction details not exposed to view, provided such proposed amendments are notified in ample time prior to the submission of shop drawings.

1.3 Quality of Work

The Contractor shall implement quality assurance procedures as set out in the Contract.

1.4 Format of Pricing

Prices are to be provided for supply & installation as a lump sum total and broken up per sign type to allow for additions and deletions if required.

1.5 Production Program

The Contractor must submit with their price a written production program including allowances shown below in the Review Period for:

- Site visits for inspection prior to shop drawings
- Shop drawings (drawings must include the following details and information):
- Large scale (full size if practical) lettering layouts/spacing templates.
- Sections and Details of proposed fabrication.
- Anchorages and Fixings, locations and types.
- Engineer's Certification on all structural and footings.
- Type faces, Colours and Finishes.
- Sampling (colours and material, prototypes and fittings)
- Manufacture / production inspections
- Installation

1.6 Special Requirements

Particular attention is drawn to the following.

- Graphics for all sign types shown in the Guidelines are available in scaled EPS vector format for the Subcontractor to apply to shop drawings and use as manufacture artwork.
- Samples and prototypes for all specified sign types and will be required and submitted for design review and approval prior to manufacture as required.

2.0 FABRICATION, FINISHES AND INSTALLATION

Materials shall be generally as follows:

In conformity with the current applicable UK Standards. All materials shall be the best of their respective kind and suitable for their purposes. Materials are to be free from corrosion, prime painted and compatible with the final finish, where applicable. Provide all screws, bolts, rivets, pop rivets, plain and countersunk fastenings and washers of a type and material suitable, sufficient and matching in finish and appearance to the components fastened.

Unless otherwise specified, comply with the following where applicable.

Properties: Allow for expansion/contraction of materials.

Electrolysis: Provide insulation between dissimilar metals to prevent electrolysis.

2.1 Aluminium

Aluminium sheet & extruded sections where specified to be used. Single full sheets are to be used for each sign face, there are to be no joints in sheet unless otherwise shown on drawings.

2.2 Mild Steel

All mild steel work to be hot dipped galvanised.

2.3 Pre-treatment

All materials subject to corrosion shall be suitably primed or otherwise treated with permanent protection. Undercoats shall be evenly applied to concealed frames and supports prior to assembly. Non corrosive materials are to be preferred in all cases.

The Contractor shall ensure that all surfaces are properly prepared and in suitable condition to receive coating applications prior to the first application as follows:

- Primed steelwork shall be brushed down and degreased using white spirit
- Galvanised steelwork scheduled to be paint finished shall be degreased using white spirit, and washed with water
- Concrete and masonry surfaces shall be cleaned of all oil, grease and loose foreign matter, including efflorescence and dirt, prior to the application of any paint finishes
- Aluminium should be lightly abraded using fine emery cloth and mineral turpentine as a lubricant. Surfaces should be cleaned with mineral turpentine, washed thoroughly and dried. As soon as surfaces are thoroughly dry, apply self-etching primer to all surfaces.

2.4 Paint

Paint to be applied in accordance with manufacturer's recommendations. Minimum 2 coats required on all paint surfaces. Use only branded premium quality lines, generic or unbranded products shall not be used.

All material required for the application of each finish must be manufactured by one approved manufacturer and used in conjunction with priming and undercoats produced by that manufacturer as a total coating system.

Surfaces to be satin finish (20 to 50 percent gloss level), with full and even cover unless otherwise specified. Where screws bolts or both are applied to pre finished material, retouch to match.

SIGN SPECIFICATIONS

2.5 Vinyl Graphics

Cut from self adhesive vinyl by computer operated flat bed machine.

TYPE

Premium Grade Cast vinyl

COLOURS & FINISH

As noted on the Graphic Standards Reference.

Gloss level to match painted surfaces.

Thickness: .08mm to .10mm thickness range

Manufacturer: 3M, Avery, Calon or equal standard.

2.6 Fixings

Materials subject to anodic reactions must be fixed with suitable hardware to eliminate anodic reactions between dissimilar metals. Fixings must suit design requirements.

• Tek-screw type fixings are not permitted where visible.

2.7 LED Illumination

The LED system shall be based on the following criteria:

• LEDs to be fully enclosed, with enclosure to have a minimum IP66 rating.

• LED efficacy to be a minimum of 66 lumens per watt

• LED temperature rating range to be -40 to 65 degrees C

• Lumen maintenance of the LEDs must be at least 70% after 50,000 hours of operation

• LED system must come with a minimum 5 year warranty on the LED system and a 5 year warranty on the power supplies.

3.0 CONSTRUCTION

Generally - Form graphics items accurately to the specified shapes and surfaces with clean, well defined edges or arises, free from blemishes. The Subcontractor shall be responsible for the quality of all materials and workmanship required to manufacture the signs including the materials and workmanship of any firms or individuals who act on behalf of the Contractor and/or suppliers.

3.1 Construction Standards

Construction is to be of the highest of industry standards. Where connection or suspensions are made, plates, bolts, angles and screws are to be concealed as much as possible from view unless otherwise detailed. Spaces, drilled holes and fixings shall be consistent from one sign to another. Screws, adhesives and silicones shall be concealed and or made flush with the surface. Fit components with care. Graphic standards are to be carefully adhered to.

3.2 Structural Support

For all signs, the Contractor is to be responsible for strength and suitability of the structural support and connection of all signs. Engineering certification must be provided by Contractor.

3.3 Cut out Shapes

Cut out shapes must be accurately laser cut from solid material and hand finished as necessary.

3.4 Warranty

The signs shall not show deterioration, fading, crazing, peeling or bond failure for a period not less than (5) years from the date of completion.

4.0 GRAPHICS

Sign messages are to be created from electronic artwork to faithfully reproduce the shapes and typefaces specified. The graphic layouts shall follow the guidelines outlined in this document.

It is the responsibility of the Contractor to ensure that all electronic files are accurately converted and match the guidelines in form, size & colour.

4.1 Graphic Standards

The following rules of graphic quality apply:

1. All lettering shall be true to its letter form in face weight and construction.

2. All graphics are to be electronically, photographically or mechanically reproduced.

3. All colours as specified in the Graphic Standards Reference.

4.2 Typeface

The font families shown on the sign type drawings are to be used for all messages, text and numerals except where specifically stated otherwise. No other versions of typefaces will be accepted. All sign artwork containing fonts will be supplied as artwork prior to production.

4.3 Pictograms and Arrows

Only the symbols as shown on the sign type drawings are to be used. No other versions will be accepted.

4.4 Colours

Colours for all parts and faces are as noted on the drawings. All colours to be approved via sampling process .

5.0 INSTALLATION STANDARDS

SITE CONDITIONS

Site inspections are to be carried out prior to installation to verify locations, confirm all details, footing conditions and dimensions.

GENERAL

All installations to be plumb and level, at the heights indicated, securely mounted with theft-resistant fixings. Locate all signs in the correct position and orientation as indicated on approved Sign Location Plans.

6.0 MAINTENANCE MANUAL

The Contractor is to provide a comprehensive operation and maintenance manual.

This manual is to be provided as an electronic version (PDF format) to be provided to SEGRO upon completion of works at each Estate / Site.

This manual is to contain all information for every aspect of the project and shall include, but not limited to:

- All working and as-built drawings for all aspects of the works, ie artwork, individual sign design, material and other details, thus enabling any component to be easily re-manufactured if and when required;
- Site plan detailing each sign location, type and artwork details;
- Subcontractors and suppliers contact list detailing all works performed and materials supplied, for example installation contractor, metal, bronze, paint, sealant, vinyl, printing and fixing suppliers;
- All associated certification documents;
- Sign Installation, removal details, cleaning and maintenance instructions;

SEGRO