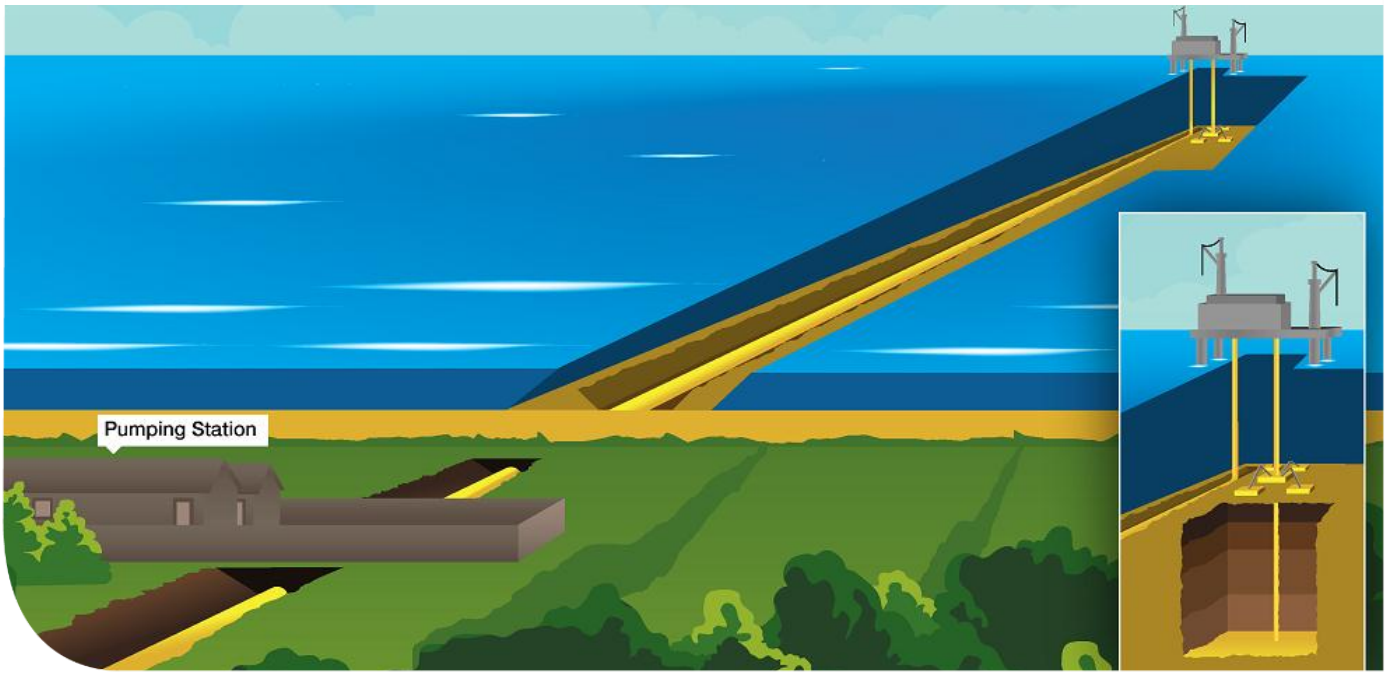
November 2015

WHITE ROSE

K36: Offshore Installation Plot Plan

Transport and Storage



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Contents

Key Words

Key Work	Meaning or Explanation
Carbon	An element, but used as shorthand for its gaseous oxide, CO_2.
Capture	Collection of CO_2 from power station combustion process or other facilities and its process ready for transportation.
Dense Phase	Fluid state that has a viscosity close to a gas while having a density closer to a liquid. Achieved by maintaining the temperature of a gas within a particular range and compressing it above a critical pressure.
Key knowledge	Information that may be useful if not vital to understanding how some enterprise may be successfully undertaken
Storage	Containment in suitable pervious rock formations located under impervious rock formations usually under the sea bed.
Transport	Moving processed CO_2 by pipeline from the capture and process unit to storage.
Offshore platform	An offshore structure that is permanently fixed to the seabed
Topsides	The upper half of the platform, located on the Jacket structure above the sea level, outside the splash zone, on which equipment is installed.
Jacket	The steel frame, located on the seabed, supporting the deck and the topsides in a fixed offshore platform.

Executive Summary

This report is one of a series of reports; these “key knowledge” reports are issued here as public information. These reports were generated as part of the Front End Engineering Design Contract agreed with the Department for the Environment and Climate Change (DECC) as part of the White Rose Project.

White Rose seeks to deliver a clean coal-fired power station using oxy-fuel technology fitted with Carbon Capture Storage (CCS), which would generate up to 448MWe (gross) while capturing at least 90% of the carbon dioxide (CO_2) emissions. CCS technology allows the carbon dioxide produced during combustion to be captured, processed and compressed before being transported to storage in dense phase. The dense phase carbon dioxide would be kept under pressure while it is pumped through an underground pipeline to the seashore and then through an offshore pipeline to be stored in a specially chosen rock formation under the seabed of the southern North Sea.

Delivery of the full-chain project is being provided by National Grid Carbon Limited (NGCL), which is responsible for the T&S network, and Capture Power Limited (CPL), which is responsible for the Oxy Power Plant (OPP) and the Gas Processing Unit (GPU).

This “key knowledge deliverable” (KKD) provides the offshore plot plan in such detail as would meet the regulatory requirements should such a requirement arise.

1 Introduction

National Grid Carbon Limited (NGCL) is a wholly owned subsidiary of the National Grid group of companies. Capture Power Limited (CPL) is a special purpose vehicle company, which has been formed by a consortium consisting of General Electric (GE), Drax and BOC, to pursue the White Rose CCS Project (the WR Project).

CPL have entered into an agreement (the FEED Contract) with the UK Government's Department of Energy and Climate Change (DECC) pursuant to which it will carry out, among other things, the engineering, cost estimation and risk assessment required to specify the budget required to develop and operate the WR Assets. The WR Assets comprise an end-to-end electricity generation and carbon capture and storage system comprising, broadly: a coal fired power station utilising oxy-fuel technology, carbon dioxide capture, processing, compression and metering facilities; transportation pipeline and pressure boosting facilities; offshore carbon dioxide reception and processing facilities, and injection wells into an offshore storage reservoir.

CPL and NGCL have entered into an agreement (the KSC) pursuant to which NGCL will perform a project (the WR T&S FEED Project) which will meet that part of CPL's obligations under the FEED Contract which are associated with the T&S Assets. The T&S Assets include, broadly: the transportation pipeline and pressure boosting facilities; offshore carbon dioxide reception and processing facilities, and injection wells into an offshore storage reservoir.

A key component of the WR T&S FEED Project is the Key Knowledge Transfer process. A major portion of this is the compilation and distribution of a set of documents termed Key Knowledge Deliverables, of which this document is one.

2 Purpose

The purpose of this document is to provide the offshore plot plan in such detail as would meet the regulatory requirements of the Offshore Installations (Safety Case) Regulations 2005, should such a requirement arise.

Included in this plot plan are:

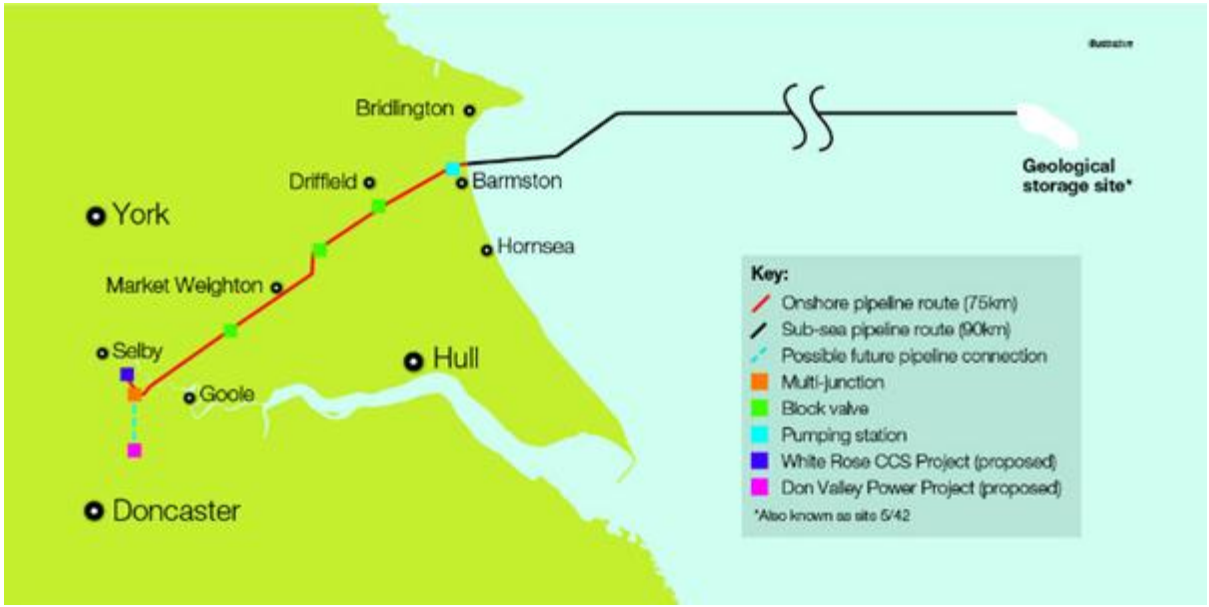
- main items of equipment;
- Topside Plan, including the vent stacks;
- separate jacket plans at different levels down to seabed; and
- Jacket elevations.

3 Overview

In December 2013 UK Government Department of Energy and Climate Change (DECC) awarded a Front-End Engineering Design (FEED) contract to the White Rose project as part of their CCS Commercialisation Programme.

The project comprises a state-of-the-art coal-fired power plant that is equipped with full CCS technology. The plant would also have the potential to co-fire biomass. The project is intended to prove CCS technology at a commercial scale and demonstrate it as a competitive form of low-carbon power generation and as an important technology in tackling climate change. It would also play an important role in establishing a CO_2 transportation and storage network in the Yorkshire and Humber area. Figure 3.1 below gives a geographical overview of the proposed CO_2 transportation system.

Figure 3.1: Geographical Overview of the Transportation Facility



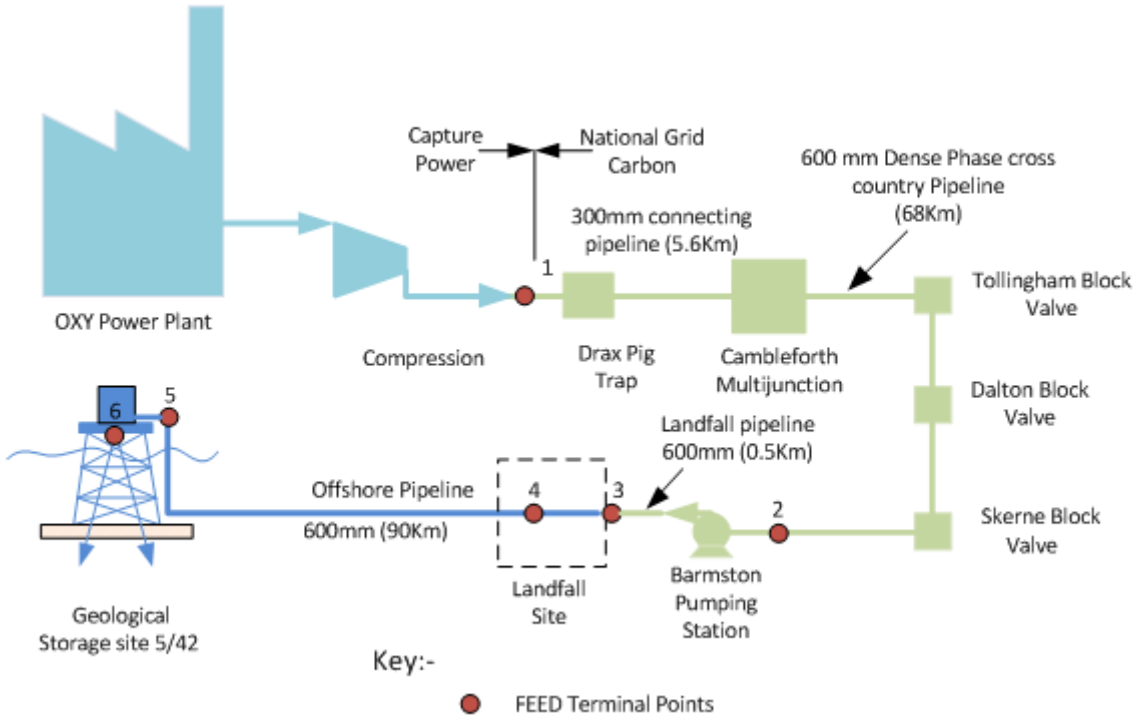
The standalone power plant would be located at the existing Drax Power Station site near Selby, North Yorkshire, generating electricity for export to the Electricity Transmission Network (the "Grid") as well as capturing approximately 2 million tonnes of CO_2 per year, some 90% of all CO_2 emissions produced by the Oxy Power Plant (OPP). The by-product CO_2 from the OPP would be compressed and transported via an export pipeline for injection into an offshore saline formation (the reservoir) for permanent storage.

The power plant technology, which is known as Oxyfuel combustion, burns fuel in a modified combustion environment with the resulting combustion gases being high in CO_2 concentration. This allows the CO_2 produced to be captured without the need for additional chemical separation, before being compressed into dense phase and transported for storage.

The overall integrated control of the End-to-End CCS chain would have similarities to that of the National Grid natural gas pipeline network. Operation of the Transport and Storage System would be undertaken by NGCL. However, transportation of carbon dioxide presents differing concerns to those of natural gas; suitable specific operating procedures would be developed to cover all operational aspects including start-up, normal and abnormal operation, controlled and emergency shutdowns. These procedures would

include a hierarchy of operation, responsibility, communication procedures and protocols. Figure 3.2 below provides a schematic diagram of the overall end-to-end chain for the White Rose CCS Project.

Figure 3.2: End To End Chain Overall Schematic Diagram



The proposed location of the platform is as follows:

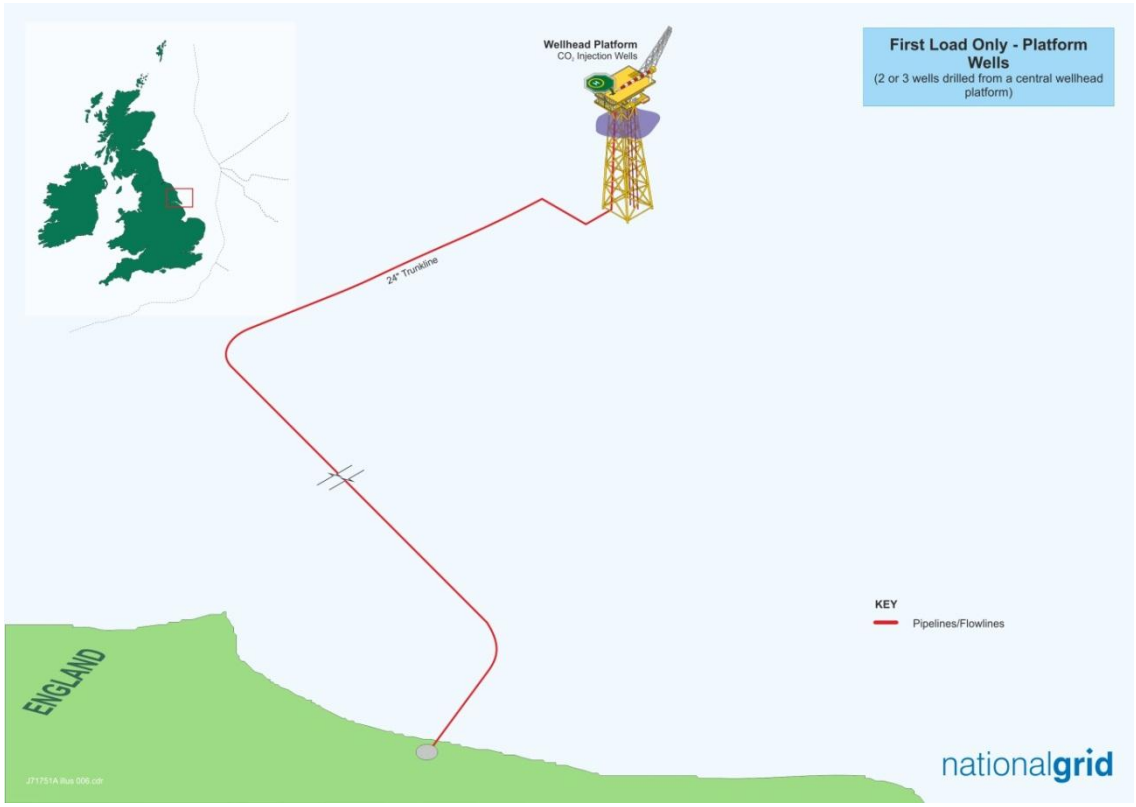
Table 3.1: Platform Location

	Coordinate/depth
Northing	**6 012 790.00 m**
Easting	366 882.00 m
Water Depth	59.3 m LAT

The co-ordinate system is UTM Grid Zone 31N, CM 3°E – ED 50.

The drill rig approach is from the South with the conductor field located at Row 1 of the substructure. This face of the substructure is vertical while the other faces are inclined. Platform North points toward geographical North East. A platform schematic is shown below.

Figure 3-1 Platform Schematic



4 Offshore Platform description

The selected concept is a fixed four leg jacket offshore wellhead platform, sitting in 59.3m of water which will be a Normally Unmanned Installation (NUI) designed to last 40 years. The installation would initially have three platform wells for CO_2 injection (3 x 5.5-inch tubing). A total of six conductor slots would be installed to allow future expansion of the number of platform wells and, in future, to install further wells to tie-back to the main platform. The conductor size is confirmed as 30-inch.

The jacket would be lift installed, typical for Southern North Sea operations. The jacket foundation consists of six 72-inch diameter piles with an embedment length of 56m. Early site surveys anticipate hard ground and if driven piles are not feasible then drilled and grouted piles are likely to be more appropriate.

The jacket would house the following appurtenances:

- 1 x 24-inch CO_2 Import riser;
- 1 x 24-inch CO_2 Export riser (spare);
- 2 x 16-inch CO_2 Injection riser (spare);
- 2 x 16-inch Produced Water risers (spare);
- 5 x 12-inch J-tubes for control and 2 x 12-inch J-tubes for power supply;
- 1 x 1500mm Caisson for produced water disposal; and
- 2 x 500mm Seawater lift caisson.

The riser and J-tube routing is designed to suit the positions in the topsides and subsea layouts. The positions of the caissons match the topsides layout. Pump and produced water caissons are vertical.

The Module Support Frame (MSF) will be installed after the jacket installation and made ready to support the main topsides and future module.

The topside structure initially comprises a single lifted unit complete with helideck and platform crane. The structure has four levels and stabs into the MSF on a 20m by 26m footprint. The topsides would have the following facilities:

- Wellheads and manifold;
- Temporary safe refuge and Local equipment rooms;
- Temporary water wash package;
- MEG injection system;
- Helideck with firefighting facilities;
- Platform crane;
- Power generation;
- Fuel and fresh water bunkering;
- Chemical injection;
- Seawater lift pumps;
- PIG trap;

- Control system;
- CO_2 and fire detection;
- Life-rafts and a TEMPSC; and
- Wireline equipment (temporary equipment).

In addition, future facilities such as CO_2 booster pumps and future PIG traps would be contained in a future module which would impose additional loads on the MSF structure, jacket and piles. The structure of the offshore platform would be configured to fit with the equipment plot plans and meet all the functional requirements of the structural recommended practice.

Within this report, the jacket gross weight (exclusive of the MSF) is assessed as 2930t with 1400t of piles and the MSF installation weight is assessed as 326t. The main topsides module installation weight is assessed as 2990t while the future module installation weight is assessed as 1595t. The not-to-exceed (NTE) topsides weight was set as 5250t for the jacket analyses.

5 Platform Configuration

5.1 Structural Description

The White Rose Platform would comprise a Normally Unattended Installation (NUI) consisting of a 6 slot Jacket, MSF, main topside and future module supporting a minimum amount of permanent equipment and systems.

The platform would only be manned during wirelining operations and maintenance. Normal access for routine operations is proposed to be by helicopter.

The topsides is a conventional deck supporting the equipment, bulks and a Local Equipment Room (LER) with Emergency Overnight Accommodation (EOA). The platform is orientated with the platform North direction towards the North-East.

The deck is on four levels, which are supported by braced trusses in two orthogonal directions. The weather deck is plated and the mezzanine and cellar decks are generally grated.

The drilling conductors are arranged in a grid on the south side. The platform crane is located over the east side of the main topside. The risers are adjacent to the South-West jacket leg.

The substructure is required to provide support to the risers, J-tubes, caisson and topsides as well as lateral restraint to the conductors. The configuration is a conventional four-leg Jacket with battered faces on the North, East and West sides and vertical face on the South side. Piles would be driven through the sleeves attached to the Jacket legs. The deck would be supported directly on the legs.

The MSF is required to support the main topsides and future module and would be installed after the jacket installation.

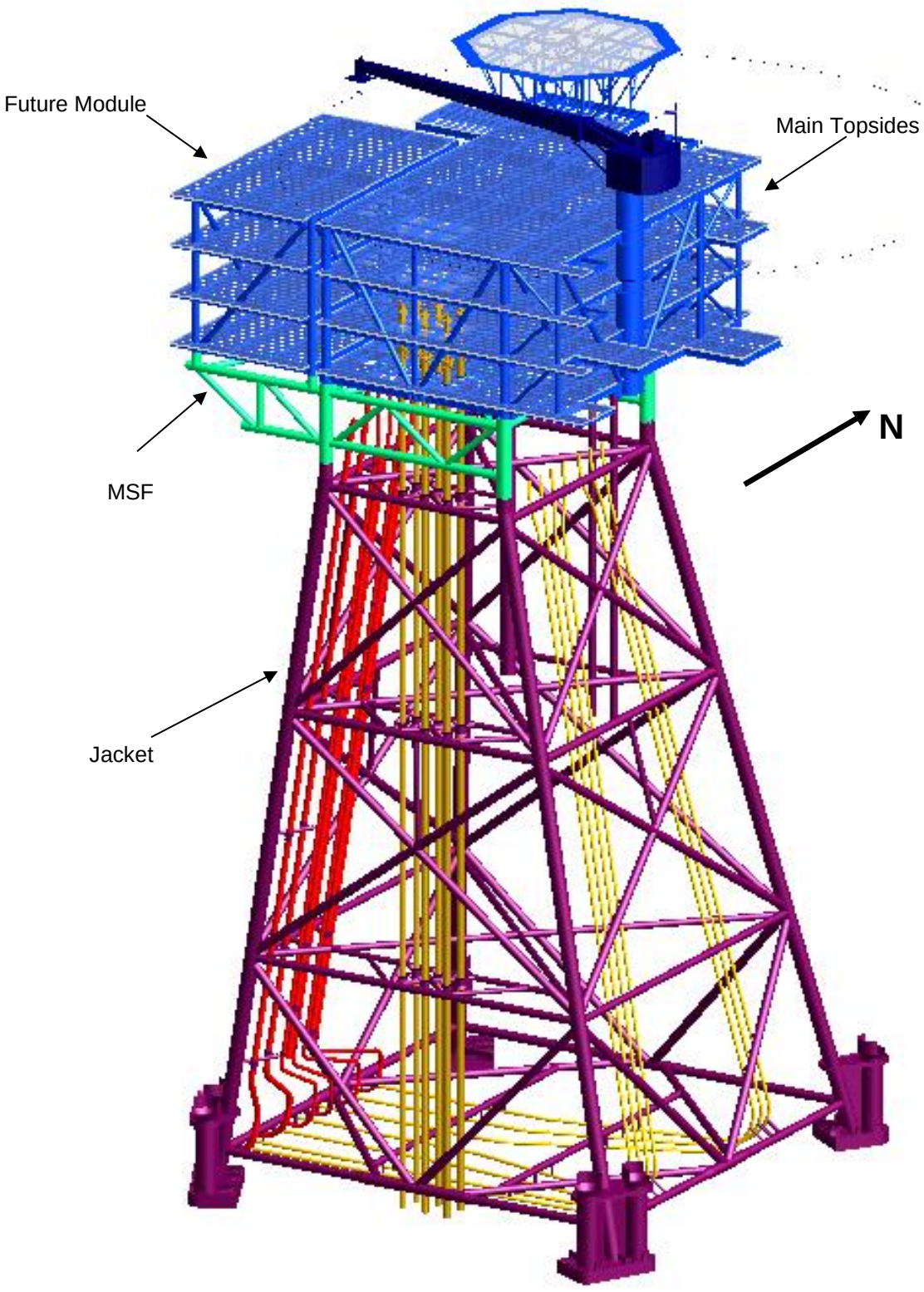
Since the area designated to receive the future module would stand empty for a significant duration, further consideration during detail design may be given to temporarily decking this area out for a limited period for use as additional storage/laydown space.

Corrosion protection would be in the form of sacrificial anodes together with an increased wall thickness and protective paint system for members in the splash zone.

The water depth at the platform location has been set at 59.3m LAT.

The primary elements of the Deck, MSF and Jacket structure are shown in Figure 5.1.

Figure 5.1: White Rose Platform



5.2 White Rose Topsides Configuration

5.2.1 General

The topsides comprise main topsides and a future module. It would be a four-level structure comprising weather deck, upper and lower mezzanine decks and cellar deck. A Helideck would be located above the weather deck. The majority of equipment would be situated on the Cellar Deck with major units of piping on the Mezzanine Decks. There would be sufficient space on the Weather Deck for wirelining equipment and associated mast.

Both main topsides and future module would be lift-installed with padeyes on each of the four corner legs.

5.2.2 Primary Framing

The topsides layout would be suitable for a Jack-up rig to approach the platform from the south and access the 6 well slots through hatches in the Weather Deck.

Trusses span along all gridlines which comprise tubular and open sections, utilising the depth across all decks for steelwork efficiency. Orientation of internal truss members has been selected to suit access walkways and equipment requirements.

5.2.3 Equipment

The Weather Deck would be plated and designed to provide dropped object protection to the equipment below. Hatches in the deck structure allow vertical access to the wells, risers, and J-tubes below. Space has been allocated for the Wirelining spread.

The helideck would be cantilevered out over the North-West corner and supported by framework from the north side of the Weather Deck. It is envisaged that the helideck would be a separately fabricated or procured entity which would be mounted over a set of supports on the Weather Deck steelwork.

5.2.4 Substructure Interface

The interface with the substructure would be by means of four stab-in legs on the main topsides and future module. These are welded out to the top of the MSF at (+)23.5m above LAT.

5.3 White Rose Substructure Configuration

5.3.1 Primary Framing

The jacket substructure consists of a four legged structure with skirt piles. The MSF to jacket stab-in cones are located at the top four corners of the jacket at El. +15.5m. The jacket would be inclined on the north, west and east faces and vertical on the south face to allow for jack-up drilling. The top of jacket dimension is set at 20m (E-W) x 26m (N-S) and at the sea bed, the jacket dimension is 44.5m (E-W) x 43.8m (N-S).

The jacket legs are generally cross braced in plan with the exception of El. -56.0m where a diamond brace arrangement is provided. In elevation, “X” bracing is provided at the upper two bays and a “V” bracing arrangement is provided at the lower bay of the jacket to simplify the pile cluster. Additional vertical members are provided for boat impact protection and to reduce the spans of some members. “X” bracing provides superior redundancy to either pure “K” or “V” bracing.

Conductor support framing would be provided at all levels except El. -56.0m and additional framing would be provided to support the appurtenances.

Lift points are provided at El +13.0m and El. -56.0m.

The primary framing of the jacket was generally developed to cater for interfaces with the topsides, appurtenances, risers, caisson and J-tube layout and for transportation and installation restrictions.

5.3.2 Foundations

The jacket foundation consists of six 72-inch diameter piles with an embedment length of 56m.

The jacket would be connected to the foundation via shear plates and pile sleeves with a grouted connection at each pile. The pile sleeves are located to ensure that there would be adequate clearance between the pile hammer and the jacket during installation.

5.3.3 MSF

The MSF would be located between the jacket and the topsides and extends to the west to support the future module. The MSF consists of four main legs with a similar size to the jacket legs and would be cross braced in plan and K-braced in elevation. The deck stab-in would be located at the top of the MSF legs at El. +23.5m.

5.3.4 Appurtenances and Miscellaneous Steel

The dead weight supports of the appurtenances such as risers and caissons are generally provided at El. +13.0m on the jacket with the exception of the produced water caisson where an additional support would be at El. +22.5m on the MSF. All other supports below this level would be guided.

6 Plot Plans, GAs and other Drawings

Copies of the drawings listed below are provided at the Appendix to this report.

Table 6.1: Offshore Facilities Plot Plans and General Arrangement Drawings

Document Number	Document Title
Topsides – Plot Plans and Isometrics	
C001-05-35-99-GD200-0001	Offshore Storage Plot Plan Cellar Deck (TOS EL. 25000)
C001-05-35-99-GD200-0002	Offshore Storage Plot Plan Lower Mezz (TOS EL. 30000)
C001-05-35-99-GD200-0003	Offshore Storage Plot Plan Upper Mezz Deck (TOS EL.35000)
C001-05-35-99-GD200-0004	Offshore Storage Plot Plan Weather Deck (TOS EL.40000)
C001-10-26-99-GD200-0001	Offshore Control and Equipment Room Layout
C001-05-35-99-GD200-0005	Plot Plan Isometric View (from NE)
C001-05-35-99-GD200-0006	Plot Plan Isometric View (from SE)
C001-05-35-99-GD200-0007	Plot Plan Isometric View (from SW)
C001-05-35-99-GD200-0008	Plot Plan Isometric View (from NW)
C001-05-35-99-GD200-0009	Plot Plan Elevation Looking North
C001-05-35-99-GD200-0010	Plot Plan Elevation Looking South
C001-05-35-99-GD200-0011	Plot Plan Elevation Looking East
C001-05-35-99-GD200-0012	Plot Plan Elevation Looking West
C001-05-35-99-GD200-0013	Offshore Storage Proposed Wirelining Equipment Plot Plan Weather Deck (TOS EL.40000)
C001-05-35-99-GD200-0014	Offshore Storage Proposed Umbilical Winch Plot Plan Weather Deck (TOS EL.40000)
Topsides - Piping General Arrangements	
C001-05-25-99-GD200-0001	Offshore Storage Piping GA North Cellar Deck (TOS EL.25000)
C001-05-25-99-GD200-0002	Offshore Storage Piping GA South Cellar Deck (TOS EL.25000)
C001-05-25-99-GD200-0003	Offshore Storage Piping GA Future Booster Pump Module Cellar Deck (TOS EL.25000)
C001-05-25-99-GD200-0004	Offshore Storage Piping GA North Lower Mezz (TOS EL.30000)
C001-05-25-99-GD200-0005	Offshore Storage Piping GA South Lower Mezz (TOS EL.30000)
C001-05-25-99-GD200-0006	Offshore Storage Piping GA Future Booster Pump Module Lower Mezz (TOS EL.30000)
C001-05-25-99-GD200-0007	Offshore Storage Piping GA North Upper Mezz Deck (TOS EL.35000)
C001-05-25-99-GD200-0008	Offshore Storage Piping GA South Upper Mezz Deck (TOS EL.35000)
C001-05-25-99-GD200-0009	Offshore Storage Piping GA Future Booster Pump Module Upper Mezz Deck (TOS EL.35000)
C001-05-25-99-GD200-0010	Offshore Storage Piping GA North Weather Deck (TOS EL.40000)
C001-05-25-99-GD200-0011	Offshore Storage Piping GA South Weather Deck (TOS EL.40000)
C001-05-25-99-GD200-0012	Offshore Storage Piping GA Future Booster Pump Module Weather Deck (TOS EL.40000)
C001-05-25-99-GD200-0013	Piping GA Elevation Looking North
C001-05-25-99-GD200-0014	Piping GA Elevation Looking South
C001-05-25-99-GD200-0015	Piping GA Elevation Looking East
C001-05-25-99-GD200-0016	Piping GA Elevation Looking West
Topsides - ATEX classification and HSE Layouts	
C001-14-25-99-GD200-0001	Hazardous Area Classification (Sheet 1 of 4) Offshore Storage Weather Deck (TOS EL.40000)
C001-14-25-99-GD200-0001	Hazardous Area Classification (Sheet 2 of 4) Offshore Storage Upper Mezz Deck (TOS EL.35000)

Document Number	Document Title
C001-14-25-99-GD200-0001	Hazardous Area Classification (Sheet 3 of 4) Offshore Storage Lower Mezz Deck (TOS EL.30000)
C001-14-25-99-GD200-0001	Hazardous Area Classification (Sheet 4 of 4) Offshore Storage Cellar Deck (TOS EL.25000)
C001-14-26-99-GD200-0001	Escape Routes and Safety Equipment Layouts (Sheet 1 of 4) Offshore Storage Weather Deck (TOS EL.40000)
C001-14-26-99-GD200-0001	Escape Routes and Safety Equipment Layouts (Sheet 2 of 4) Offshore Storage Upper Mezz Deck (TOS EL.35000)
C001-14-26-99-GD200-0001	Escape Routes and Safety Equipment Layouts (Sheet 3 of 4) Offshore Storage Lower Mezz Deck (TOS EL.30000)
C001-14-26-99-GD200-0001	Escape Routes and Safety Equipment Layouts (Sheet 4 of 4) Offshore Storage Cellar Deck (TOS EL.25000)
C001-14-26-99-GD200-0002	CO2 & Fire Detector Layouts (Sheet 1 of 4) Offshore Storage Weather Deck (TOS EL.40000)
C001-14-26-99-GD200-0002	CO2 & Fire Detector Layouts (Sheet 2 of 4) Offshore Storage Upper Mezz Deck (TOS EL.35000)
C001-14-26-99-GD200-0002	CO2 & Fire Detector Layouts (Sheet 3 of 4) Offshore Storage Lower Mezz Deck (TOS EL.30000)
C001-14-26-99-GD200-0002	CO2 & Fire Detector Layouts (Sheet 4 of 4) Offshore Storage Cellar Deck (TOS EL.25000)
C001-99-26-TR-GD200-0001	Offshore EOA / TR Roof Plan
C001-99-26-TR-GD200-0002	Offshore TR & Emergency Overnight Accommodation Plan
C001-99-26-TR-GD200-0003	Offshore EOA / TR LER Plan
C001-99-26-TR-GD200-0004	Offshore EOA / TR HVAC & Battery Plan
C001-99-26-TR-GD200-0005	Offshore TR & Emergency Overnight Accommodation Sections
C001-99-26-TR-GD200-0006	Offshore TR & Emergency Overnight North and East Elevation
C001-99-26-TR-GD200-0007	Offshore TR & Emergency Overnight South and West Elevation
C001-99-26-TR-GD200-0008	Offshore EOA/TR Heating and Ventilation Layout
Jacket – Structural General Arrangement Drawings	
C001-12-25-99-GD000-0001	General Notes
C001-12-25-99-GD200-0001	Topsides & Future Module Primary Joint - Standard Details
C001-12-25-99-GD200-0002	Secondary Standard Details - Topsides & Future Module
C001-12-25-99-GD200-0003	Primary Steel GA - Topside Longitude Elevations Grids C,D & E
C001-12-25-99-GD200-0004	Primary Steel GA - Topside Transverse Elevations Grids 1, 2 & 3
C001-12-25-99-GD200-0005	Primary Steel GA - Topside Cellar Deck Plan
C001-12-25-99-GD200-0006	Primary Steel GA - Topside Lower Mezzanine Deck Plan
C001-12-25-99-GD200-0049	Primary Steel GA - Topside Upper Mezzanine Deck Plan
C001-12-25-99-GD200-0007	Primary Steel GA - Topside Weather Deck Plan
C001-12-25-99-GD200-0008	Primary Steel GA - Future Module Longitudinal Elevations Grids A&B
C001-12-25-99-GD200-0009	Primary Steel GA - Future Module Transverse Elevations Grids 1&3
C001-12-25-99-GD200-0010	Primary Steel GA - Future Module Cellar Deck Plan
C001-12-25-99-GD200-0011	Primary Steel GA - Future Module Lower Mezzanine Deck Plan
C001-12-25-99-GD200-0050	Primary Steel GA - Future Module Upper Mezzanine Deck Plan
C001-12-25-99-GD200-0012	Primary Steel GA - Future Module Weather Deck Plan
C001-12-25-99-GD200-0013	Secondary Steel GA - Topside Weather Deck Plan

Document Number	Document Title
C001-12-25-99-GD200-0014	Secondary Steel GA - Topside Cellar Deck
C001-12-25-99-GD200-0015	Secondary Steel GA - Topside Lower Mezzanine Deck Plan
C001-12-25-99-GD200-0051	Secondary Steel GA - Topside - Upper Mezzanine Deck Plan
C001-12-25-99-GD200-0016	Secondary Steel GA - Topside Cellar Deck Plating & Grating
C001-12-25-99-GD200-0017	Secondary Steel GA - Topside Lower Mezzanine Deck Plating & Grating
C001-12-25-99-GD200-0053	Secondary Steel GA - Topside Upper Mezzanine Deck Plating & Grating
C001-12-25-99-GD200-0018	Secondary Steel GA - Topside Weather Deck Plating & Grating
C001-12-25-99-GD200-0019	Secondary Steel GA - Future Module Cellar Deck Plan
C001-12-25-99-GD200-0020	Secondary Steel GA - Future Module Lower Mezzanine Deck Plan
C001-12-25-99-GD200-0052	Secondary Steel GA - Future Module - Upper Mezzanine Deck Plan
C001-12-25-99-GD200-0021	Secondary Steel GA - Future Module Weather Deck Plan
C001-12-25-99-GD200-0022	Secondary Steel GA - Future Module Cellar Deck Plating & Grating
C001-12-25-99-GD200-0023	Secondary Steel GA - Future Module Lower Mezzanine Deck Plating & Grating
C001-12-25-99-GD200-0054	Secondary Steel GA - Future Module Upper Mezzanine Deck Plating & Grating
C001-12-25-99-GD200-0024	Secondary Steel GA - Future Module Weather Deck Plating & Grating
Jacket – Structural Details	
C001-12-25-99-GD210-0001	Standard Details - Jacket
C001-12-25-99-GD210-0002	Jacket - Primary Steel G.A. - Elevations C & D
C001-12-25-99-GD210-0003	Jacket - Primary Steel G.A. - Elevations Grid Line 1 & 3
C001-12-25-99-GD210-0004	Jacket - Primary Steel G.A. - Plans
C001-12-25-99-GD210-0005	Jacket - Primary Steel G.A. - Plans
C001-12-26-99-GD210-0001	Jacket - Anodes Layout & Details
C001-12-25-99-GD210-0007	Primary Steel GA. - Jacket Pile Sleeve Cluster
C001-12-25-99-GD210-0008	Secondary Steel - Jacket Mudmat Plan
C001-12-25-99-GD210-0009	Jacket - Pile General Arrangement & Details
C001-12-25-99-GD210-0010	Secondary Steel - Jacket Conductor Guides
C001-12-25-99-GD210-0011	Secondary Steel - Jacket Supports for J-tubes Caissons and Risers
C001-12-25-99-GD210-0012	Jacket - Secondary Steel G.A. Elevation Caissons & Risers
C001-12-25-99-GD210-0013	Jacket - Secondary Steel G.A. Elevation J-tubes
C001-12-25-99-GD200-0045	Module Support Frame Elevations
C001-12-25-99-GD200-0046	Module Support Frame Plan
C001-12-25-99-GD200-0047	Module Support Frame Details
Offshore Facilities Construction	
C001-12-25-99-GD200-0026	Construction Sequence Drawing - Topside Cellar Deck
C001-12-25-99-GD200-0027	Construction Sequence Drawing - Topside Lower Mezz Deck
C001-12-25-99-GD200-0028	Construction Sequence Drawing - Topside Upper Mezz Deck
C001-12-25-99-GD200-0029	Construction Sequence Drawing - Topside Weather Deck
C001-12-25-99-GD200-0032	Construction Sequence Drawing - Future Module Cellar Deck
C001-12-25-99-GD200-0033	Construction Sequence Drawing - Future Module Lower Mezz Deck
C001-12-25-99-GD200-0034	Construction Sequence Drawing - Future Module Upper Mezz Deck
C001-12-25-99-GD200-0035	Construction Sequence Drawing - Future Module Weather Deck
C001-12-25-99-GD200-0055	Construction Sequence Drawing - MSF

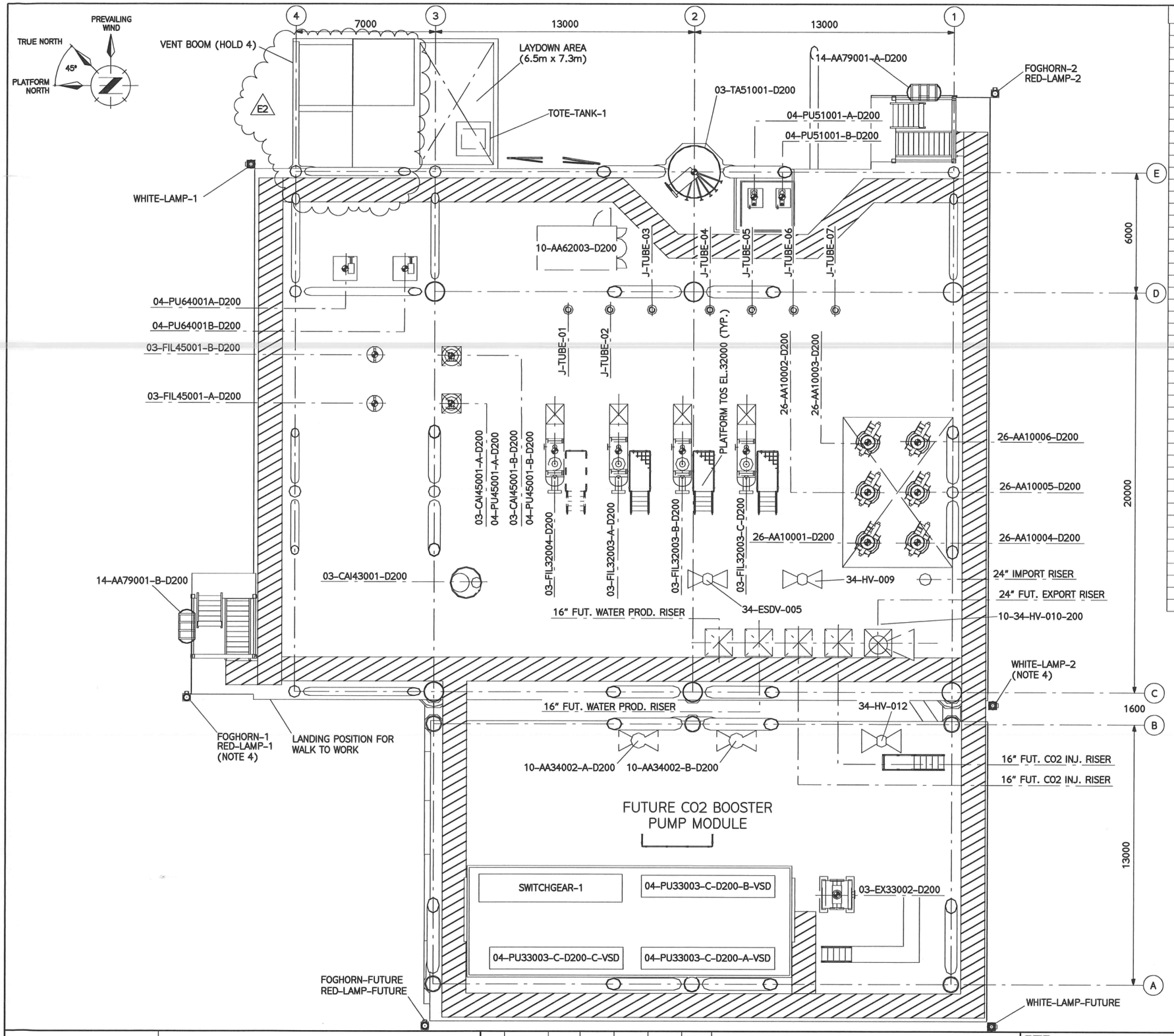
Document Number	Document Title
C001-12-25-99-GD210-0014	Construction Sequence Drawing - Sheet 1 - Jacket
C001-12-25-99-GD210-0015	Construction Sequence Drawing - Sheet 2 - Jacket
C001-12-25-99-GD210-0016	Construction Sequence Drawing - Sheet 3 - Jacket
Offshore Facilities Transport and Installation	
C001-12-25-99-GD200-0039	General Arrangement - Barge Layout Grillage and Seafastening - Topsides
C001-12-25-99-GD200-0040	General Arrangement - Barge Layout, Grillage and Seafastening - Future Module
C001-12-25-99-GD210-0020	General Arrangement - Barge Layout Grillage and Seafastening - Jacket and Pile
C001-12-25-99-GD200-0041	Schematic of Installation Sequence - Topsides
C001-12-25-99-GD200-0042	Schematic of Installation Sequence - Future Module
C001-12-25-99-GD200-0043	Schematic of Installation Sequence - Module Support Frame
C001-12-25-99-GD210-0021	Schematic of Installation Sequence - Jacket and Piles -Sheet 1
C001-12-25-99-GD210-0022	Schematic of Installation Sequence - Jacket and Piles -Sheet 2

7 Glossary

Capitalised Term	Meaning
CCS	Carbon Capture and Storage
CO_2	carbon dioxide
CPL	Capture Power Limited
DECC	The UK Government's Department of Energy and Climate Change
FEED	Front End Engineering Design
FEED Contract	Contract made between DECC and CPL pursuant to which WR Project FEED (as defined) will be performed
GA	General Arrangement drawing
GPU	Gas Processing Unit
KKD	Key Knowledge Deliverable
KSC	Key Services Contract
LAT	Lowest Astronomical Tide
LER	Local equipment room
MEG	monoethylene glycol
MSF	module support frame
MWe	Mega-Watts (electric)
NE	North East
NW	North West
NGC KSC	Contract made between CPL and NGC pursuant to which that part of the WR Project FEED (as defined) which appertains to the WR T&S assets will be performed.
NGC KSC Deliverables	A number of documents and services, the delivery of which is a contractual obligation under the KSC
NGC EPC Sub-contractors	Contractors providing an offer to develop a part of the WR T&S Assets in pursuance of the WR Development Project
NGC FEED Sub-contractors	Contractors entering into a contract with NGC to carry out a part of the obligations under the KSC
NGCL	National Grid Carbon Limited
NGC WR Team	The NGC team established to meet the obligations in the KSC
NUI	Normally Unmanned Installation
OPP	Oxy Power Plant
PIG	Pipeline Inspection Gauge
SE	South East
SW	South West
T&S	Transport and Storage
TEMPSC	Totally enclosed motor propelled survival craft
TR	Temporary Refuge
UK	United Kingdom
WR	White Rose
WR Assets	All those assets that would be developed pursuant to the WR Project
WR Development Project	A project to develop, operate and decommission the WR Assets which may transpire following the completion of the WR FEED Project
WR FEED Project	Project to carry out a FEED (as defined in the FEED Contract) with regard to the WR Assets
WR Project	White Rose CCS Project

Capitalised Term	Meaning
WR T&S Assets	That part of the WR Assets which would carry out the carbon dioxide transportation and storage functions of the WR Project and to which the KSC Contract relates
WR T&S FEED Project	The project to be pursued by NGC in order to meet its obligations under the NGC KSC

Appendix Facility Plot Plans and GAs



EQUIPMENT LIST		DRY WEIGHT	OPER. WEIGHT	POWER LOAD (kW)
03-CAI43001-D200	PRODUCED WATER CAISSON	52.3	52.3	HOLD
03-CAI45001-A-D200	SEAWATER-LIFT-PUMP-CAISSON	17	17	HOLD
03-CAI45001-B-D200	SEAWATER-LIFT-PUMP-CAISSON	17	17	HOLD
03-EX33002-D200	CO2 BOOSTER PUMPS RECYCLE COOLER (FUTURE)	14.7	15.4	3820
03-FIL32003-A-D200	CO2 FINE FILTER	11.8	13	HOLD
03-FIL32003-B-D200	CO2 FINE FILTER	11.8	13	HOLD
03-FIL32003-C-D200	CO2 FINE FILTER	11.8	13	HOLD
03-FIL32004-D200	CO2 FINE FILTER (FUTURE)	11.8	13	HOLD
03-FIL45001-A-D200	SEAWATER LIFT PUMP FILTER	0.1	0.15	HOLD
03-FIL45001-B-D200	SEAWATER LIFT PUMP FILTER	0.1	0.15	HOLD
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK	11	66.9	HOLD
04-PU33003-C-D200-A-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)	14.6	14.6	HOLD
04-PU33003-C-D200-B-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)	14.6	14.6	HOLD
04-PU33003-C-D200-C-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)	14.6	14.6	HOLD
04-PU45001-A-D200	SEAWATER LIFT PUMP	0.2	0.25	20
04-PU45001-B-D200	SEAWATER LIFT PUMP	0.2	0.25	20
04-PU51001-A-D200	DIESEL TRANSFER PUMP	0.3	0.73	0.06
04-PU51001-B-D200	DIESEL TRANSFER PUMP	0.3	0.73	0.06
04-PU64001A-D200	MEG INJECTION PUMP	1.1	1.3	11
04-PU64001B-D200	MEG INJECTION PUMP	1.1	1.3	11
10-AA34002-A-D200	HIPPS PACKAGE (FUTURE)	9.6	10.6	HOLD
10-AA34002-B-D200	HIPPS PACKAGE (FUTURE)	9.6	10.6	HOLD
26-AA10001-D200	WELLHEAD XMAS TREE	HOLD	HOLD	HOLD
26-AA10002-D200	WELLHEAD XMAS TREE	HOLD	HOLD	HOLD
26-AA10003-D200	WELLHEAD XMAS TREE	HOLD	HOLD	HOLD
26-AA10004-D200	WELLHEAD XMAS TREE (FUTURE)	HOLD	HOLD	HOLD
26-AA10005-D200	WELLHEAD XMAS TREE (FUTURE)	HOLD	HOLD	HOLD
26-AA10006-D200	WELLHEAD XMAS TREE (FUTURE)	HOLD	HOLD	HOLD
SWITCHGEAR-1	6.6kV SWITCHGEAR 1200A (FUTURE)	7000	7000	HOLD
TOTE-TANK-1	DRAINS TOTE TANK (5m3)	HOLD	HOLD	HOLD
FOGHORN-1	NAVIGATION AID	HOLD	HOLD	HOLD
FOGHORN-2	NAVIGATION AID	HOLD	HOLD	HOLD
10-AA62003-D200	HPU (FUTURE)	5.9	6.0	5
J-TUBE-01	12" J TUBE	HOLD	HOLD	HOLD
J-TUBE-02	12" J TUBE	HOLD	HOLD	HOLD
J-TUBE-03	12" J TUBE	HOLD	HOLD	HOLD
J-TUBE-04	12" J TUBE	HOLD	HOLD	HOLD
J-TUBE-05	12" J TUBE	HOLD	HOLD	HOLD
J-TUBE-06	12" J TUBE	HOLD	HOLD	HOLD
J-TUBE-07	12" J TUBE	HOLD	HOLD	HOLD
14-AA79001-A-D200	LIFE RAFT	0.07	0.07	HOLD
14-AA79001-B-D200	LIFE RAFT	0.07	0.07	HOLD
WHITE-LAMP-1	NAVIGATION AID	HOLD	HOLD	HOLD
WHITE-LAMP-2	NAVIGATION AID	HOLD	HOLD	HOLD
RED-LAMP-1	NAVIGATION AID	HOLD	HOLD	HOLD
RED-LAMP-2	NAVIGATION AID	HOLD	HOLD	HOLD
RED-LAMP-FUTURE	NAVIGATION AID (FUTURE)	HOLD	HOLD	HOLD
WHITE-LAMP-FUTURE	NAVIGATION AID (FUTURE)	HOLD	HOLD	HOLD
FOGHORN-FUTURE	NAVIGATION AID (FUTURE)	HOLD	HOLD	HOLD

NOTES

1. ALL DIMENSIONS IN MILLIMETRES.
2. ⊕ DENOTES EQUIPMENT C.O.G.
3. HATCHED ESCAPE ROUTES & LAYDOWN AREAS ARE PLATED .
4. TO BE REMOVED WHEN FUTURE MODULE IS INSTALLED.
4. ALL INSTRUMENT VALVES SHOWN ARE PREFIXED 10 & SUFFIXED D200.

HOLDS

1. DELETED
2. DELETED
3. DELETED
4. VENT BOOM LENGTH / DESIGN
5. DELETED
6. DELETED
7. EQUIPMENT WEIGHTS AND C.O.G FOR VENDOR INFO /DRAWINGS

0 1m 2m 4m 6m 8m 10m 12m
SCALE 1:100

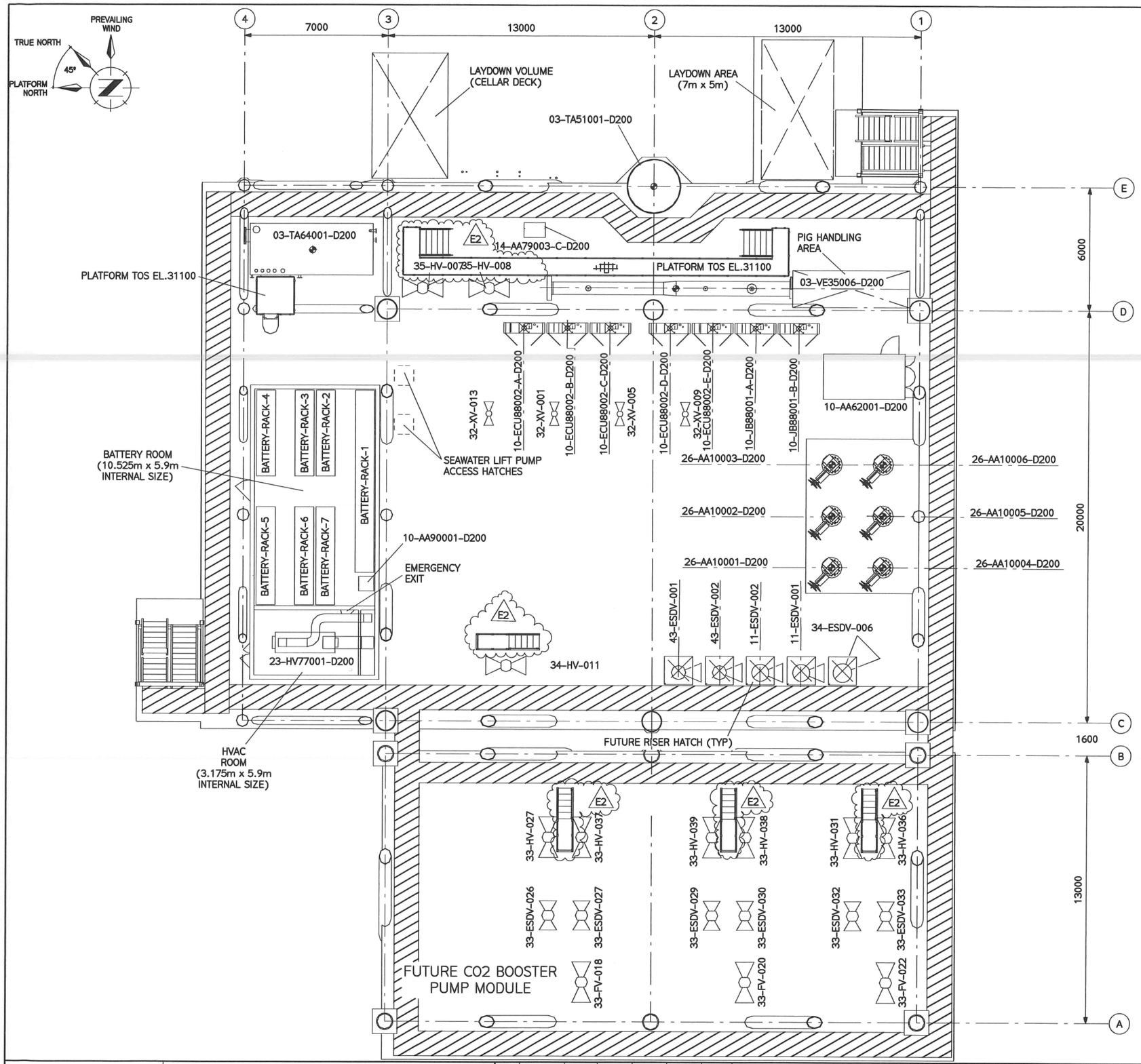
REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)	E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – DECK 3 (TOS EL.35000)	E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)	B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	24/10/2014	KP	PS	JN			ISSUED FOR IDC

CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE PLOT PLAN
CELLAR DECK (TOS EL.25000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0001	1:100	1 OF 1	E2

A1 SIZE SHEET



EQUIPMENT LIST		DRY WEIGHT	OPER. WEIGHT	POWER LOAD (kW)
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK	11	66.9	HOLD
03-TA64001-D200	MEG STORAGE TANK	5.5	54.2	HOLD
10-AA62001-D200	WELLHEAD CONTROL PANEL & HPU	5.9	6.00	5
03-VE35006-D200	OFFSHORE STORAGE FACILITY PIG RECEIVER	15.6	19	HOLD
26-AA10001-D200	WELLHEAD XMAS TREE	HOLD	HOLD	HOLD
26-AA10002-D200	WELLHEAD XMAS TREE	HOLD	HOLD	HOLD
26-AA10003-D200	WELLHEAD XMAS TREE	HOLD	HOLD	HOLD
26-AA10004-D200	WELLHEAD XMAS TREE (FUTURE)	HOLD	HOLD	HOLD
26-AA10005-D200	WELLHEAD XMAS TREE (FUTURE)	HOLD	HOLD	HOLD
26-AA10006-D200	WELLHEAD XMAS TREE (FUTURE)	HOLD	HOLD	HOLD
10-JB88001-A-D200	TOPSIDE TERMINATION JUNCTION BOX (FUTURE)	0.3	0.3	HOLD
10-JB88001-B-D200	TOPSIDE TERMINATION JUNCTION BOX (FUTURE)	0.3	0.3	HOLD
10-ECU88002-A-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)	0.3	0.3	HOLD
10-ECU88002-B-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)	0.3	0.3	HOLD
10-ECU88002-C-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)	0.3	0.3	HOLD
10-ECU88002-D-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)	0.3	0.3	HOLD
10-ECU88002-E-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)	0.3	0.3	HOLD
14-AA79003-C-D200	SAFETY SHOWER	HOLD	HOLD	HOLD
23-HV77001-D200	AIR HANDLING UNIT	0.7	0.7	12.1
BATTERY-RACK-1	BATTERY RACK	HOLD	HOLD	HOLD
BATTERY-RACK-2	BATTERY RACK	HOLD	HOLD	HOLD
BATTERY-RACK-3	BATTERY RACK	HOLD	HOLD	HOLD
BATTERY-RACK-4	BATTERY RACK	HOLD	HOLD	HOLD
BATTERY-RACK-5	BATTERY RACK	HOLD	HOLD	HOLD
BATTERY-RACK-6	BATTERY RACK	HOLD	HOLD	HOLD
BATTERY-RACK-7	BATTERY RACK	HOLD	HOLD	HOLD
10-AA90001-D200	NAVIGATION AID BATTERY	0.5	0.5	HOLD

NOTES

1. ALL DIMENSIONS IN MILLIMETRES.
2. ⊕ DENOTES EQUIPMENT C.O.G.
3. HATCHED ESCAPE ROUTES & LAYDOWN AREAS ARE PLATED .
4. ALL INSTRUMENT VALVES SHOWN ARE PREFIXED 10 & SUFFIXED D200.

HOLDS

1. DELETED
2. DELETED
3. DELETED
4. EQUIPMENT WEIGHTS AND C.O.G FOR VENDOR INFO /DRAWINGS
5. DELETED
6. HVAC

SCALE 0 1m 2m 4m 6m 8m 10m 12m — 1:100

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)	E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – UPPER MEZZ (TOS EL.35000)	E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK	B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	24/10/2014	KP	PS	JN	–		ISSUED FOR IDC

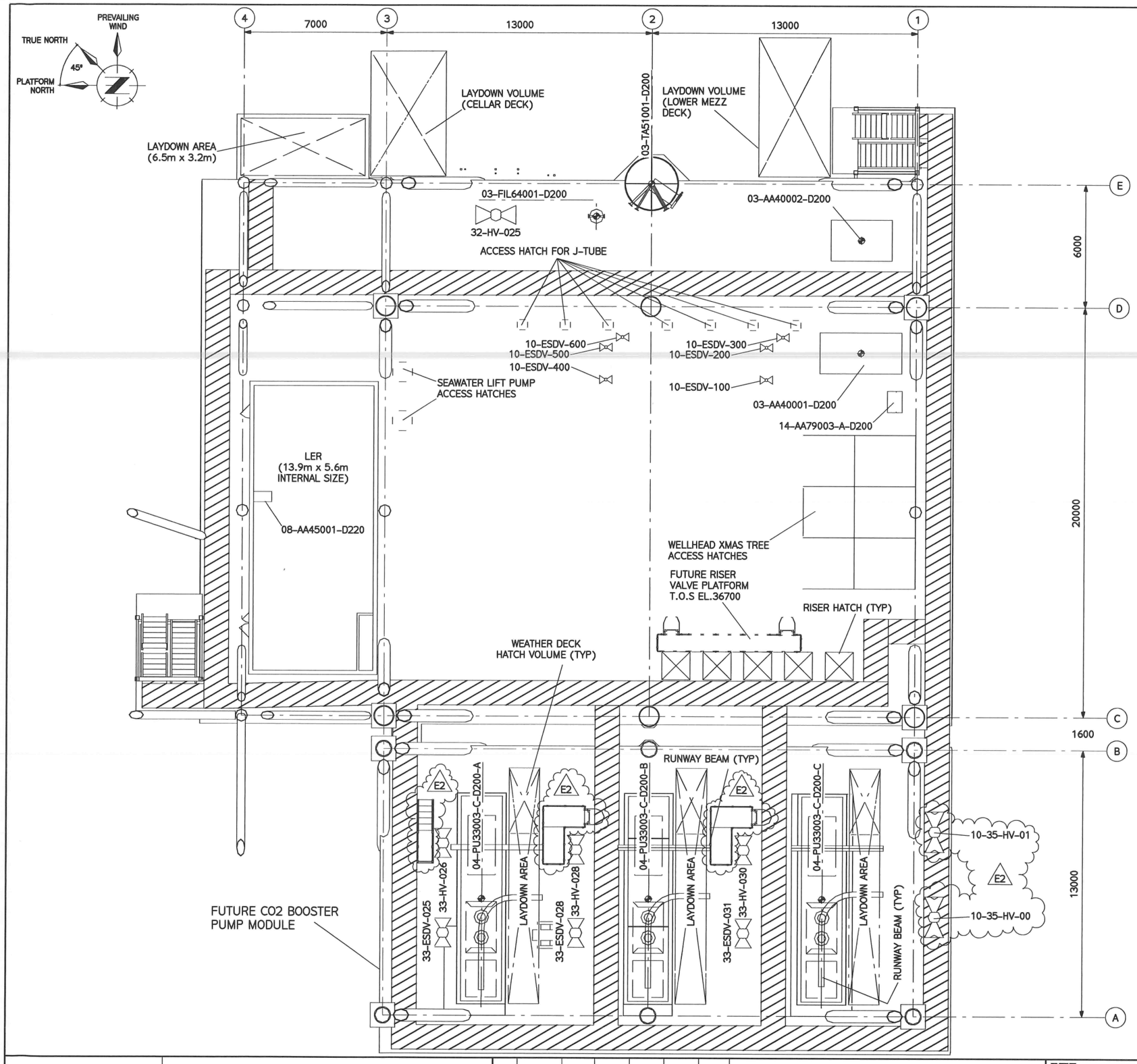
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE PLOT PLAN
LOWER MEZZ. (TOS EL.30000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0002	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 29/04/2015 15:29:57 by stokesp



EQUIPMENT LIST		DRY WEIGHT	OPER. WEIGHT	POWER LOAD (kW)
03-AA40001-D200	CHEMICAL INJECTION PACKAGE	4	4.3	HOLD
03-AA40002-D200	CHEMICAL INJECTION PACKAGE (FUTURE)	2	2.2	HOLD
03-FIL64001-D200	MEG FILTER	0.05	0.07	HOLD
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK	11	66.9	HOLD
04-PU33003-C-D200-A	CO2 BOOSTER PUMP (FUTURE)	27.0	29.0	4000
04-PU33003-C-D200-B	CO2 BOOSTER PUMP (FUTURE)	27.0	29.0	4000
04-PU33003-C-D200-C	CO2 BOOSTER PUMP (FUTURE)	27.0	29.0	4000
08-AA45001-D220	BIOFOULING CONTROL PANEL	0.1	0.1	HOLD
14-AA79003-A-D200	SAFETY SHOWER	HOLD	HOLD	HOLD

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ⊕ DENOTES EQUIPMENT C.O.G
3. HATCHED ESCAPE ROUTES & LAYDOWN AREAS ARE PLATED.
4. ALL INSTRUMENT VALVES SHOWN ARE PREFIXED 10 & SUFFIXED D200.

HOLDS

1. DELETED
2. DELETED
3. EQUIPMENT WEIGHTS AND C.O.G FOR VENDOR INFO /DRAWINGS

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

REFERENCE DRAWINGS	DRAWING TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR CLIENT COMMENT
A1	24/10/2014	KP	PS	JN			ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

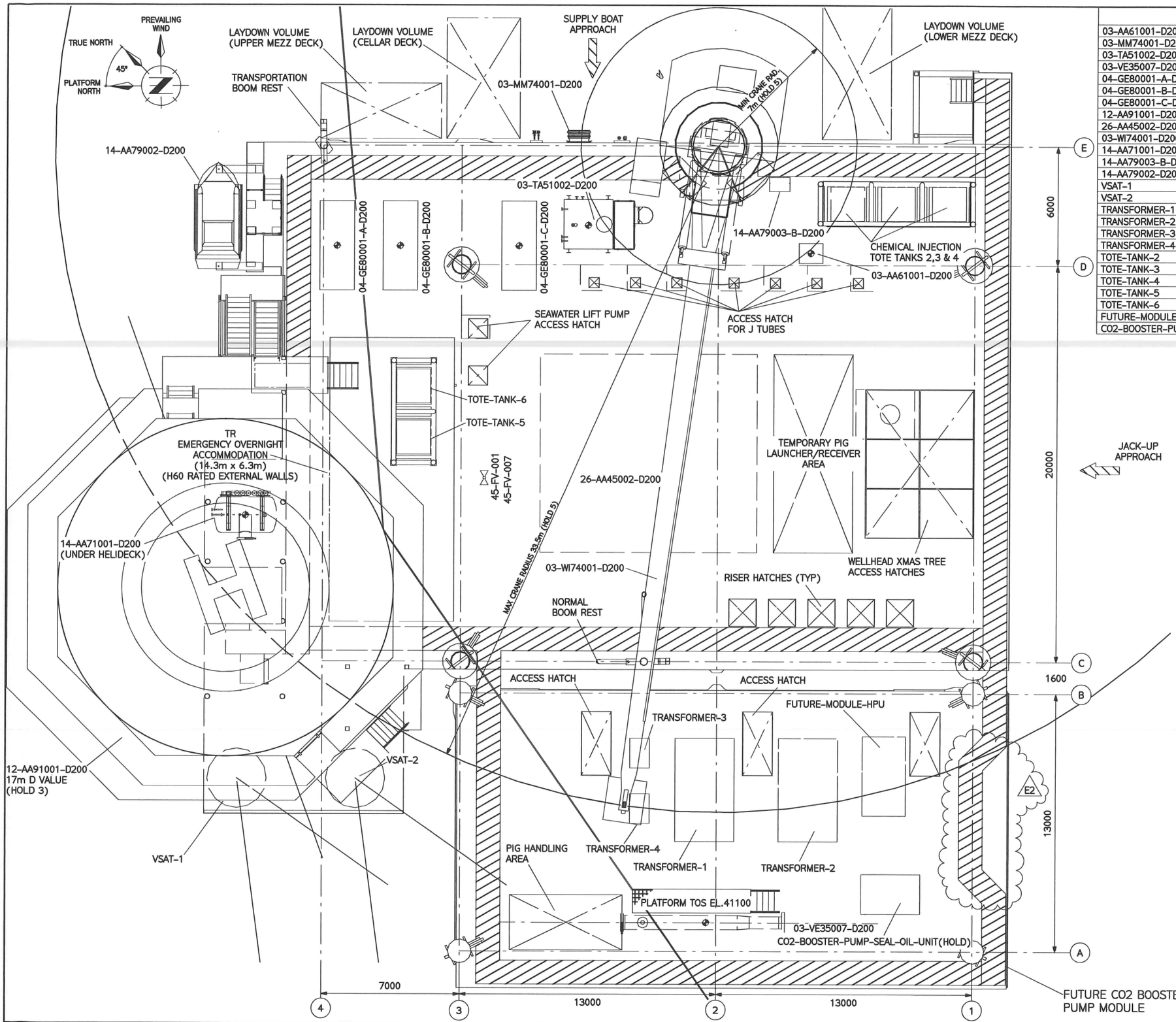
TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE PLOT PLAN
UPPER MEZZ DECK (TOS EL.35000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0003	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 29/04/2015 15:32:00 by stokesp



EQUIPMENT LIST		DRY WEIGHT	OPER. WEIGHT	POWER LOAD
03-AA61001-D200	NITROGEN PACKAGE	1.7	2.3	HOLD
03-MM74001-D200	HOSE LOADING STATION	HOLD	HOLD	HOLD
03-TA51002-D200	DIESEL SERVICE TANK	2.5	14.4	HOLD
03-VE35007-D200	CO2 INJECTION WELL PIG LAUNCHER (FUTURE)	HOLD	HOLD	HOLD
04-GE80001-A-D200	DIESEL GENERATOR PACKAGE	6.5	6.9	HOLD
04-GE80001-B-D200	DIESEL GENERATOR PACKAGE	6.5	6.9	HOLD
04-GE80001-C-D200	DIESEL GENERATOR PACKAGE	6.5	6.9	HOLD
12-AA91001-D200	HELIDECK	35	35	0.5
26-AA45002-D200	WATER WASH PACKAGE (TEMPORARY)	59	64.9	HOLD
03-WI74001-D200	PLATFORM CRANE	80	80	503.5
14-AA71001-D200	DIFFS HELIDECK FOAM PACKAGE	6.3	14.5	HOLD
14-AA79003-B-D200	SAFETY SHOWER	HOLD	HOLD	HOLD
14-AA79002-D200	19 MAN TEMPSC	8.2	10	12
VSAT-1	SATELLITE DISH	HOLD	HOLD	HOLD
VSAT-2	SATELLITE DISH	HOLD	HOLD	HOLD
TRANSFORMER-1	POWER TRANSFORMER 10MVA (FUTURE)	22	22	HOLD
TRANSFORMER-2	POWER TRANSFORMER 10MVA (FUTURE)	22	22	HOLD
TRANSFORMER-3	DIST TRANSFORMER 0.63MVA (FUTURE)	2.0	2.0	HOLD
TRANSFORMER-4	DIST TRANSFORMER 0.63MVA (FUTURE)	2.0	2.0	HOLD
TOTE-TANK-2	CHEMICAL INJECTION TOTE TANK	HOLD	HOLD	HOLD
TOTE-TANK-3	CHEMICAL INJECTION TOTE TANK (SPARE)	HOLD	HOLD	HOLD
TOTE-TANK-4	CHEMICAL INJECTION TOTE TANK (FUTURE)	HOLD	HOLD	HOLD
TOTE-TANK-5	FRESHWATER TOTE TANK	HOLD	HOLD	HOLD
TOTE-TANK-6	FRESHWATER TOTE TANK (SPARE)	HOLD	HOLD	HOLD
FUTURE-MODULE-HPU	FUTURE HPU	HOLD	HOLD	5
CO2-BOOSTER-PUMP-SEAL-OIL-UNIT(HOLD)	PUMP SEAL OIL UNIT (FUTURE)	HOLD	HOLD	HOLD

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ⊕ DENOTES EQUIPMENT C.O.G
3. HATCHED ESCAPE ROUTES & LAYDOWN AREAS ARE PLATED.
4. ALL INSTRUMENT VALVES SHOWN ARE PREFIXED 10 & SUFFIXED D200.

HOLDS

1. DELETED
2. EQUIPMENT TAG NUMBER
3. HELIDECK SIZE (D17 SHOWN)
4. DELETED
5. CRANE RADIUS – MIN & MAX.
6. EQUIPMENT WEIGHTS AND C.O.G FOR VENDOR INFO /DRAWINGS

0 1m 2m 4m 6m 8m 10m 12m
SCALE 1:100

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)	E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)	E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)	B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	24/10/2014	KP	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

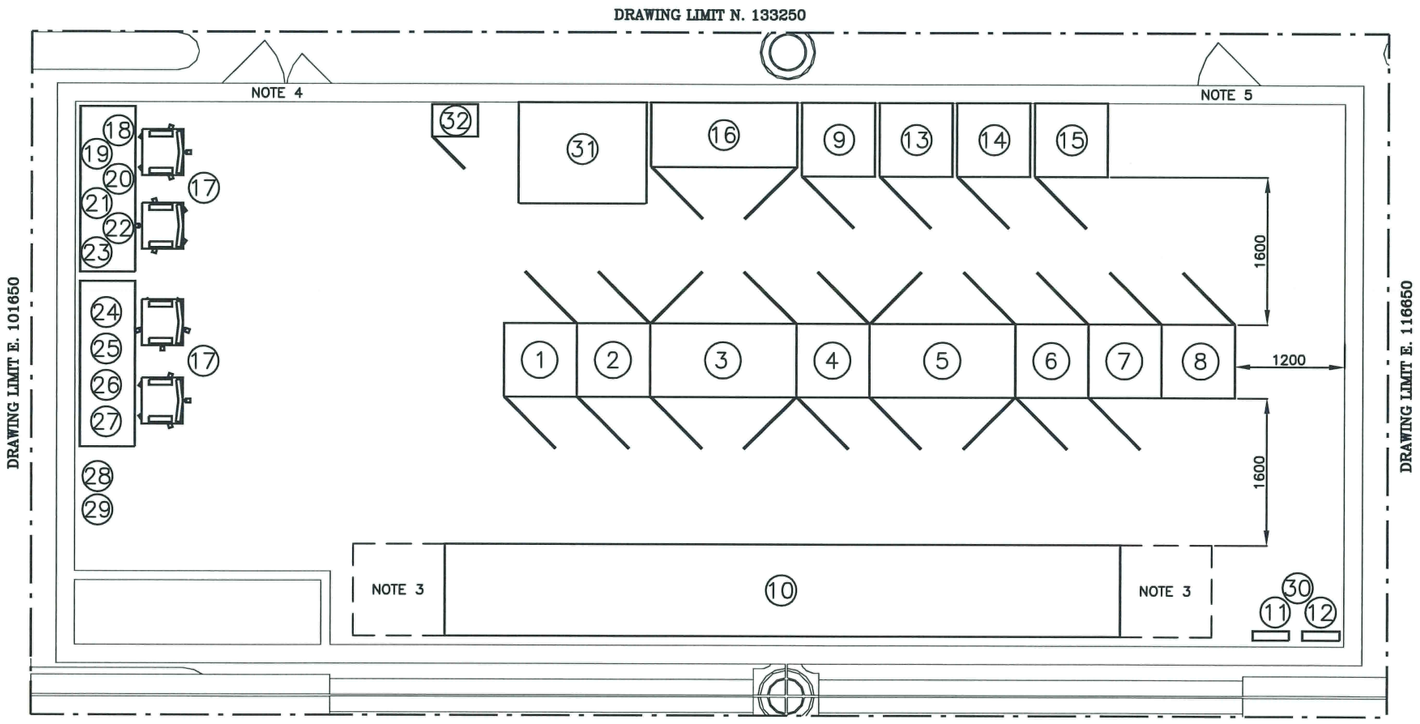
TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE PLOT PLAN
WEATHER DECK (TOS EL.40000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0004	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 29/04/2015 15:49:06 by stokesp

ITEM	DESCRIPTION	SIZE (WxDxH)	ITEM	DESCRIPTION	SIZE (WxDxH)
1	RITTAL CABINET OR SIMILAR MODEL No. TS8808.500	800x800x2000	15	UPS SYSTEM B	800x800x1700
	VERY SMALL APERTURE TERMINAL (VSAT) MODEM	–	16	NAVIGATION AIDS CONTROL PANEL	1600x700x2100
	PUBLIC SWITCH TELEPHONE NETWORK (PSTN) MODEM	–	17	DESK AND CHAIRS	1800x600x725
	MULTIPLEXER	–	18	ADMIN PC	–
	ROUTER ETHERNET SWITCH	–	19	TELEPHONE	–
2	TELECOMS CABINET	800x800x2000	20	PRINTER	553x433x310
	PA/GA MODULE	–	21	UHF BASE STATION	–
3	PCS CABINET	1600x800x2000	22	VHF MARINE BAND BASE STATION	–
4	PCS CABINET	800x800x2000	23	VHF AERONAUTICAL BASE STATION	–
5	ESD CABINET	1600x800x2000	24	ICS HMI	–
6	ESD CABINET	800x800x2000	25	LASER COLOUR PRINTER	553x433x310
7	FGS CABINET	800x800x2000	26	ESD MATRIX PANEL	–
8	DOWNHOLE GAUGING	800x800x2000	27	PA/GA MICROPHONE	–
9	BIOFOULING CONTROL PANEL	800x800x1800	28	LDA PANEL	–
10	400V SWITCHGEAR	7400x1000x2400	29	INSTRUMENT EARTH BAR	400x10x50
11	125A, 4-WAY EOA/ TR LIGHTING/ POWER DISTRIBUTION BOARD	400x100x600	30	ELECTRICAL EARTH BAR	400x10x50
12	125A, 6-WAY LER LIGHTING/ POWER DISTRIBUTION BOARD	400x100x700	31	NAV AIDS BATTERY	1400x1100x1000
13	UPS SYSTEM A	800x800x1700	32	400V/ 110V TRANSFORMER DISTRIBUTION CUBICLE	500x350x800
14	UPS STATIC SWITCH/ DISTRIBUTION	800x800x1700			

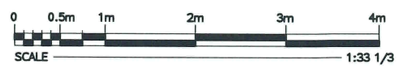


NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES, UNLESS STATED OTHERWISE.
2. ALL CABINETS TO BE TOP ENTRY.
3. AREAS SHOWN ARE FOR FUTURE EXTENSIONS TO THE SWITCHBOARD.
4. BUILDING EQUIPMENT ACCESS DOORS TO BE DOUBLE DOOR ARRANGEMENT. INSTALLATION AND SIZES OF PANELS TO BE CONSIDERED WHEN SIZING EQUIPMENT ACCESS DOORS.
5. PERSONNEL DOOR TO BE SINGLE DOOR ARRANGEMENT. THIS DOOR IS TO BE USED FOR NORMAL OPERATIONS ACCESS.

ABBREVIATIONS

EOA	– EMERGENCY OVERNIGHT ACCOMMODATION
ESD	– EMERGENCY SHUTDOWN SYSTEM
FGS	– FIRE AND GAS SYSTEM
LDA	– LOCAL DETECTION & ALARM
PA/GA	– PUBLIC ADDRESS & GENERAL ALARM SYSTEM
PCS	– PROCESS CONTROL SYSTEM
PSTN	– PUBLIC SWITCH TELEPHONE NETWORK
TR	– TEMPORARY REFUGE
UPS	– UNINTERRUPTIBLE POWER SUPPLY
UHF	– ULTRA HIGH FREQUENCY
VHF	– VERY HIGH FREQUENCY
VSAT	– VERY SMALL APERTURE TERMINAL



DRAWING No.	DRAWING TITLE
C001/10/10/99/GD200/0001	OFFSHORE ICSS SPECIFICATION
C001/10/10/99/GD200/0002	OFFSHORE TELECOMMUNICATION SPECIFICATION
C001/10/05/99/GD200/0001	OFFSHORE ICSS ARCHITECTURE DIAGRAM
C001/10/05/99/GD200/0002	OFFSHORE TELECOMMUNICATION SYSTEM ARCHITECTURE DIAGRAM

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	12/03/2014	PH	KT	ICF	JJ		ISSUED FOR FEED
B1	21/01/2014	PH	KT	ICF	JJ		ISSUED FOR CLIENT COMMENT
A1	09/01/2014	PH	KT	ICF	–		ISSUED FOR IDC

CLIENT

nationalgrid

GENESIS

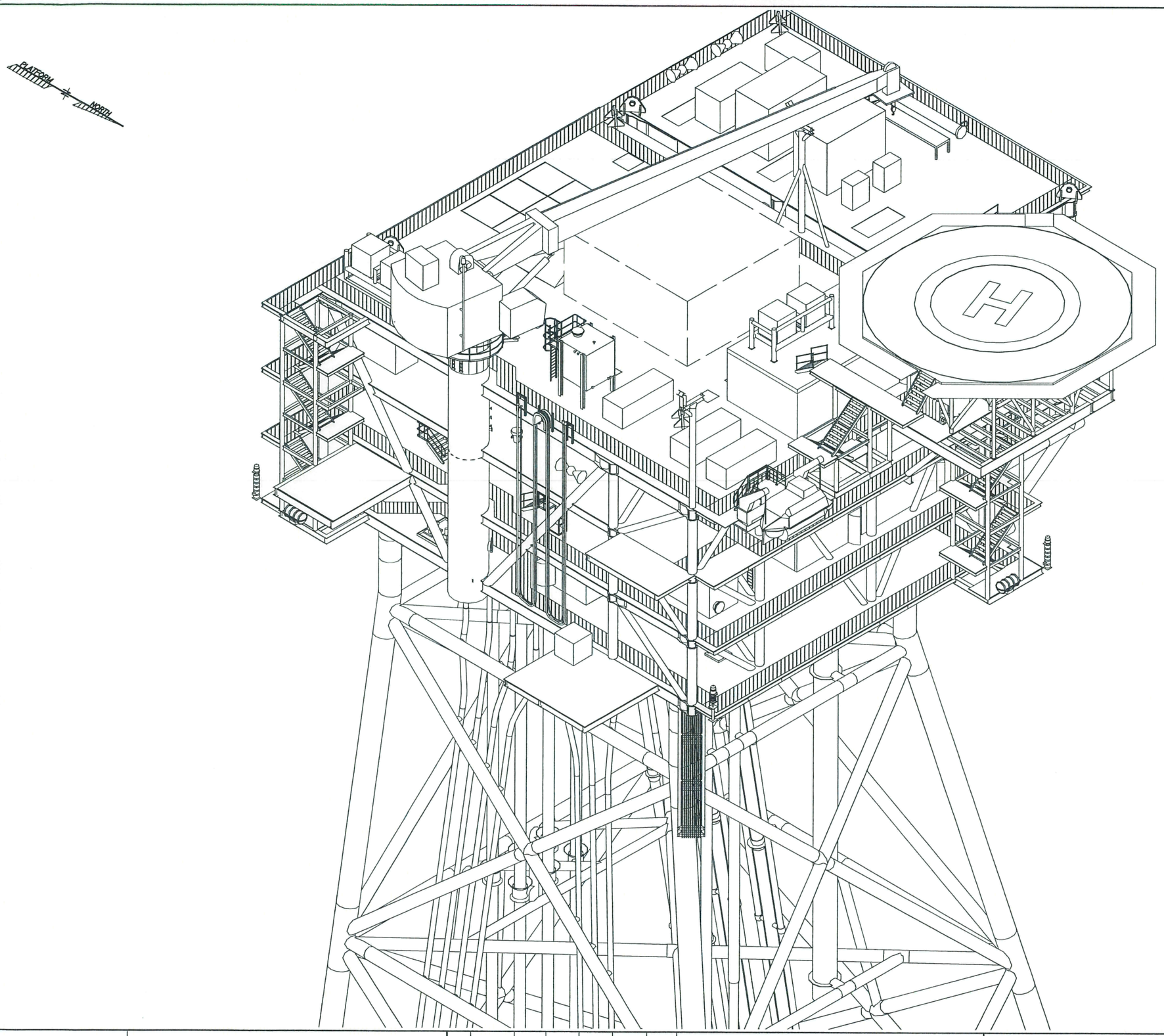
TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE
WHITE ROSE PLATFORM
CONTROL & EQUIPMENT ROOM LAYOUT

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001/10/26/99/GD200/0001	1:33 1/3		E1

A1 SIZE SHEET

Drawing updated 21/01/2015 11:18:31 by harrisp



NOTES

1. PREVAILING WIND FROM SOUTH WEST.

DRAWING No.	DRAWING TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – DECK 3 (TOS EL.35000)
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		KP	PS	JN	JNJ		
E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR CLIENT COMMENT
A1	24/10/2014	KP	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

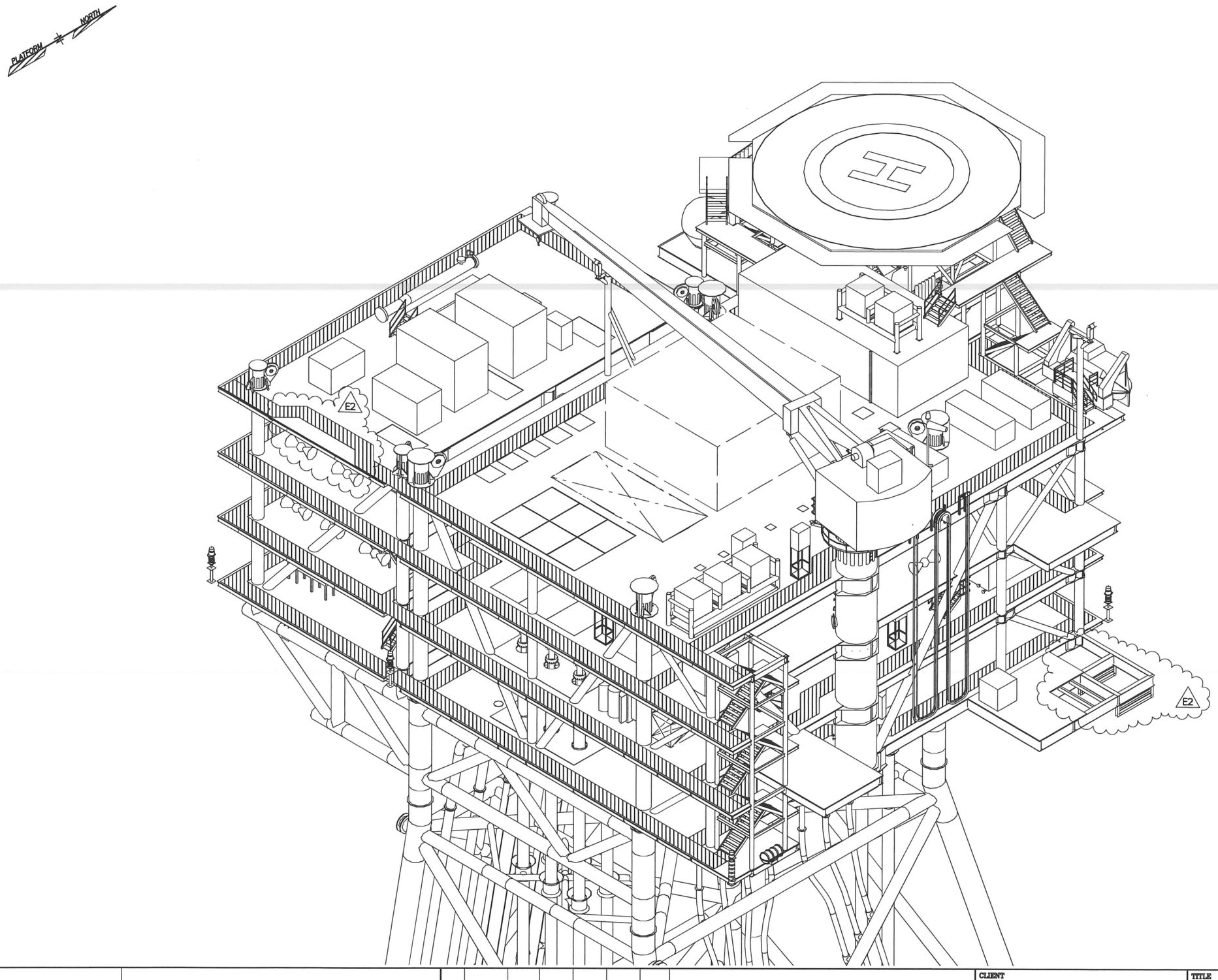
GENESIS

TITLE

WHITE ROSE CCS PROJECT FEED
PLOT PLAN
ISOMETRIC VIEW
(FROM NE)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0005	–	1 OF 1	E1

A1 SIZE SHEET



NOTES

1. PREVAILING WIND FROM SOUTH WEST.

DRAWING No.	DRAWING TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – DECK 3 (TOS EL.35000)
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR CLIENT COMMENT
A1	24/10/2014	KP	PS	JN	-		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

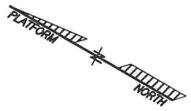
TITLE

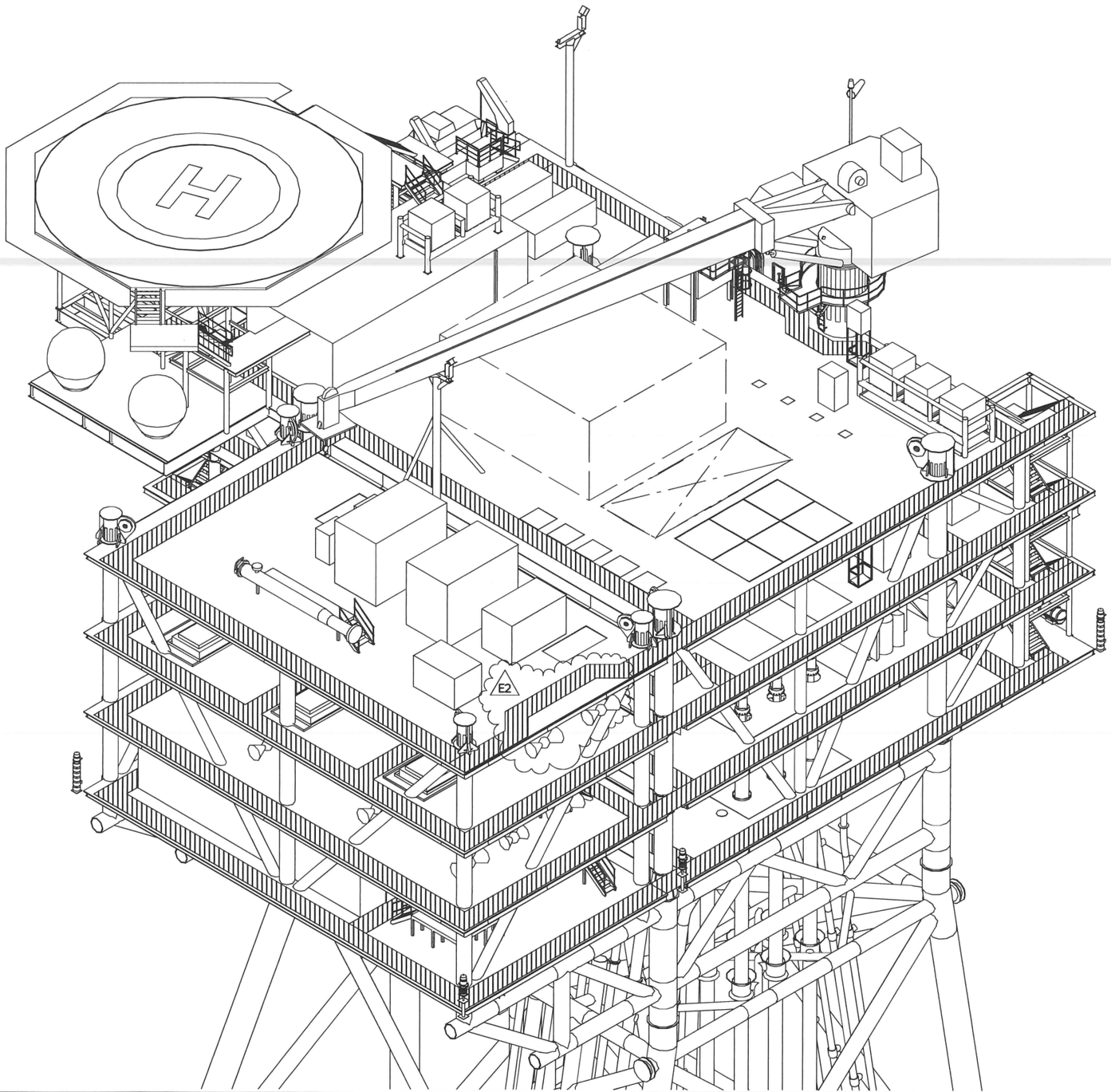
WHITE ROSE CCS PROJECT FEED
PLOT PLAN
ISOMETRIC VIEW
(FROM SE)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0006	-	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 29/04/2015 16:08:20 by stokesp





NOTES

1. PREVAILING WIND FROM SOUTH WEST.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)								
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – DECK 3 (TOS EL.35000)	E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)	E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)	B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	24/10/2014	KP	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

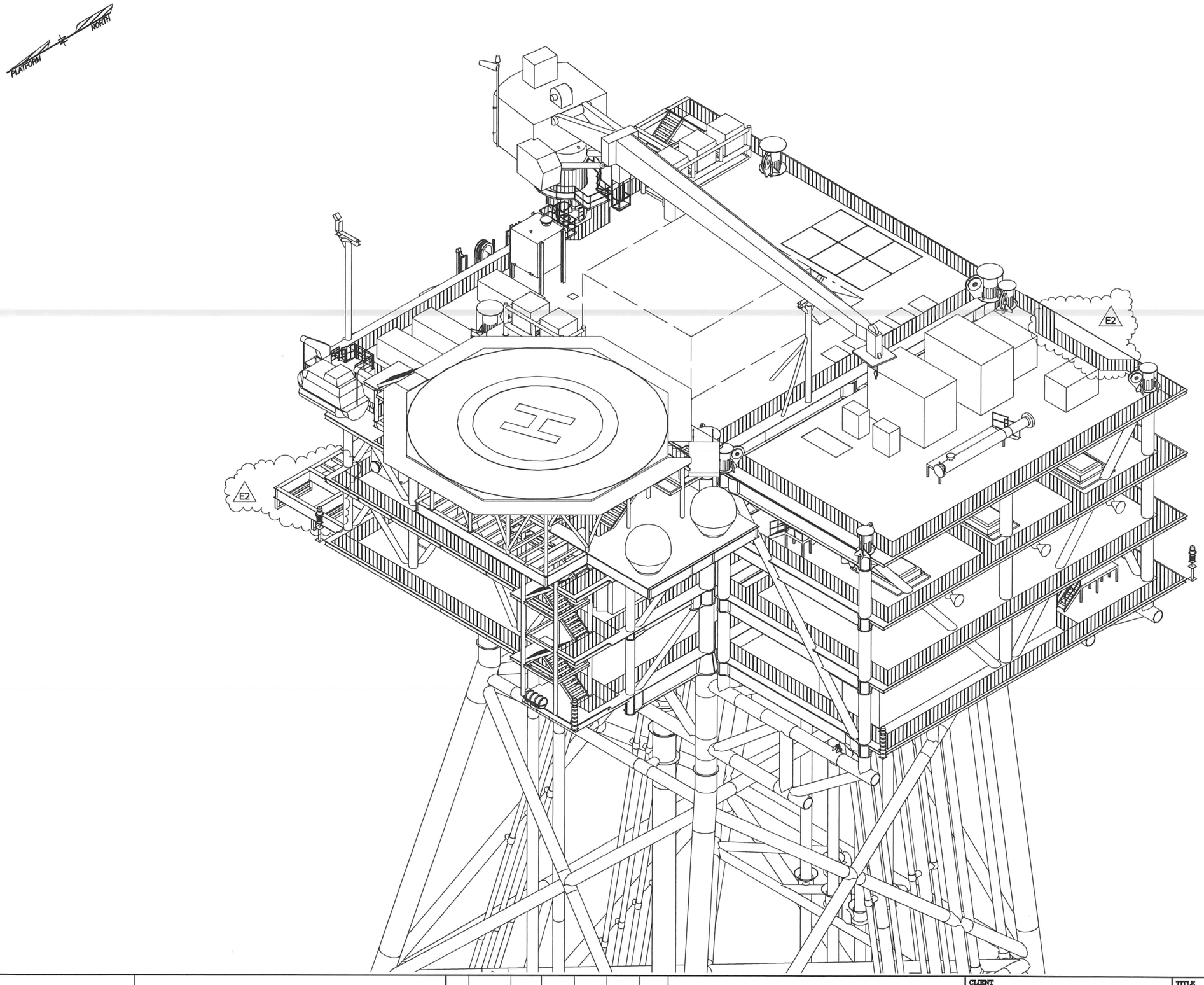
TITLE

WHITE ROSE CCS PROJECT FEED
PLOT PLAN
ISOMETRIC VIEW
(FROM SW)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0007	–	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 29/04/2015 16:22:55 by stokesp



NOTES

1. PREVAILING WIND FROM SOUTH WEST.

DRAWING No.	DRAWING TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – DECK 3 (TOS EL.35000)
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR CLIENT COMMENT
A1	24/10/2014	KP	PS	JN	-		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

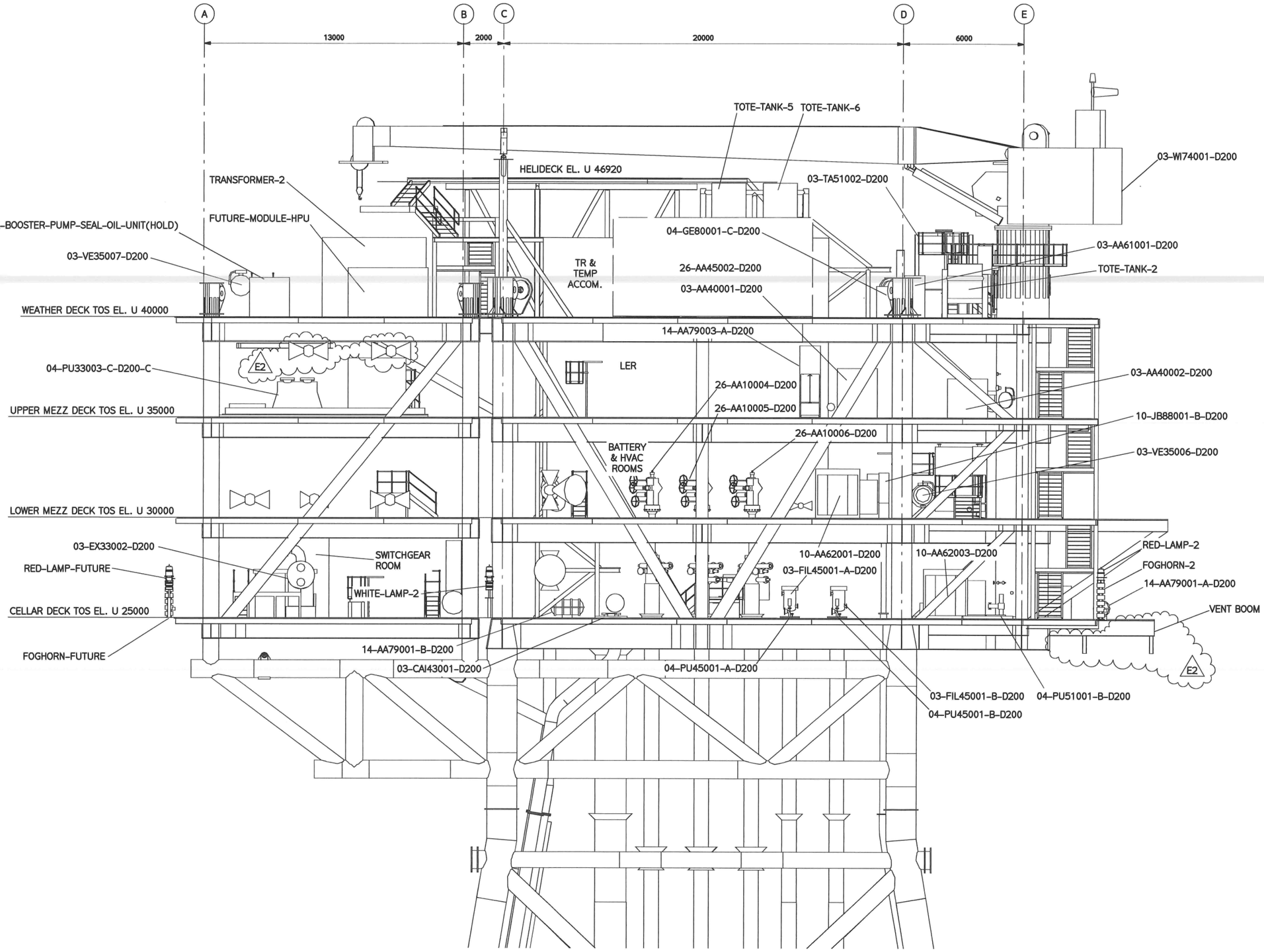
TITLE

WHITE ROSE CCS PROJECT FEED
PLOT PLAN
ISOMETRIC VIEW
(FROM NW)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0008	-	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 30/04/2015 07:54:55 by stokesp



NOTES

1. PREVAILING WIND FROM SOUTH WEST.

DRAWING No.	DRAWING TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR IDC / CLIENT COMMENT

CLIENT: nationalgrid

GENESIS

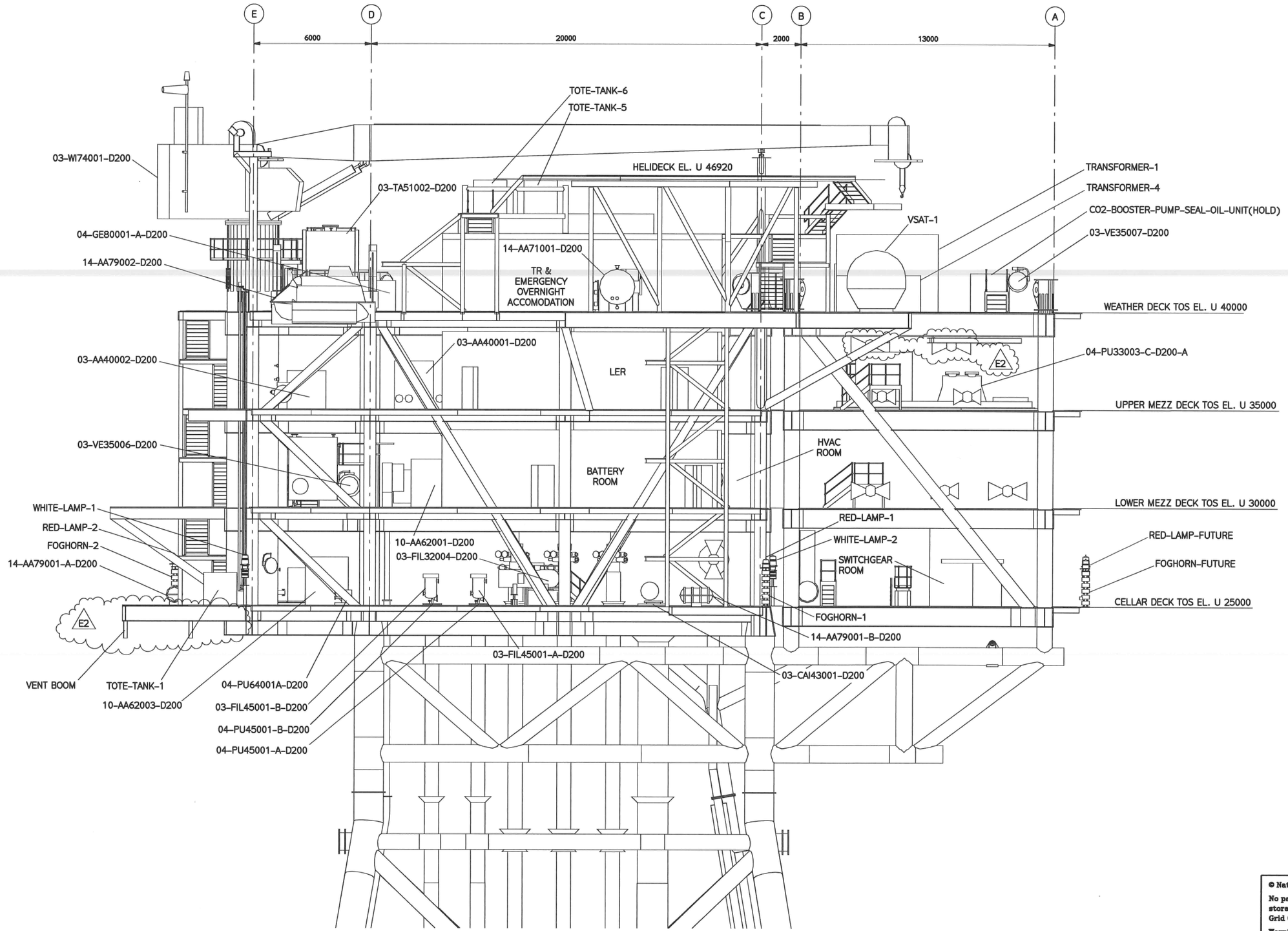
TITLE

WHITE ROSE CCS PROJECT FEED
PLOT PLAN
ELEVATION LOOKING NORTH

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0009	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 30/04/2015 08:02:56 by stokesp



NOTES

1. PREVAILING WIND FROM SOUTH WEST.

DRAWING No.	DRAWING TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR IDC / CLIENT COMMENT

CLIENT: nationalgrid

GENESIS

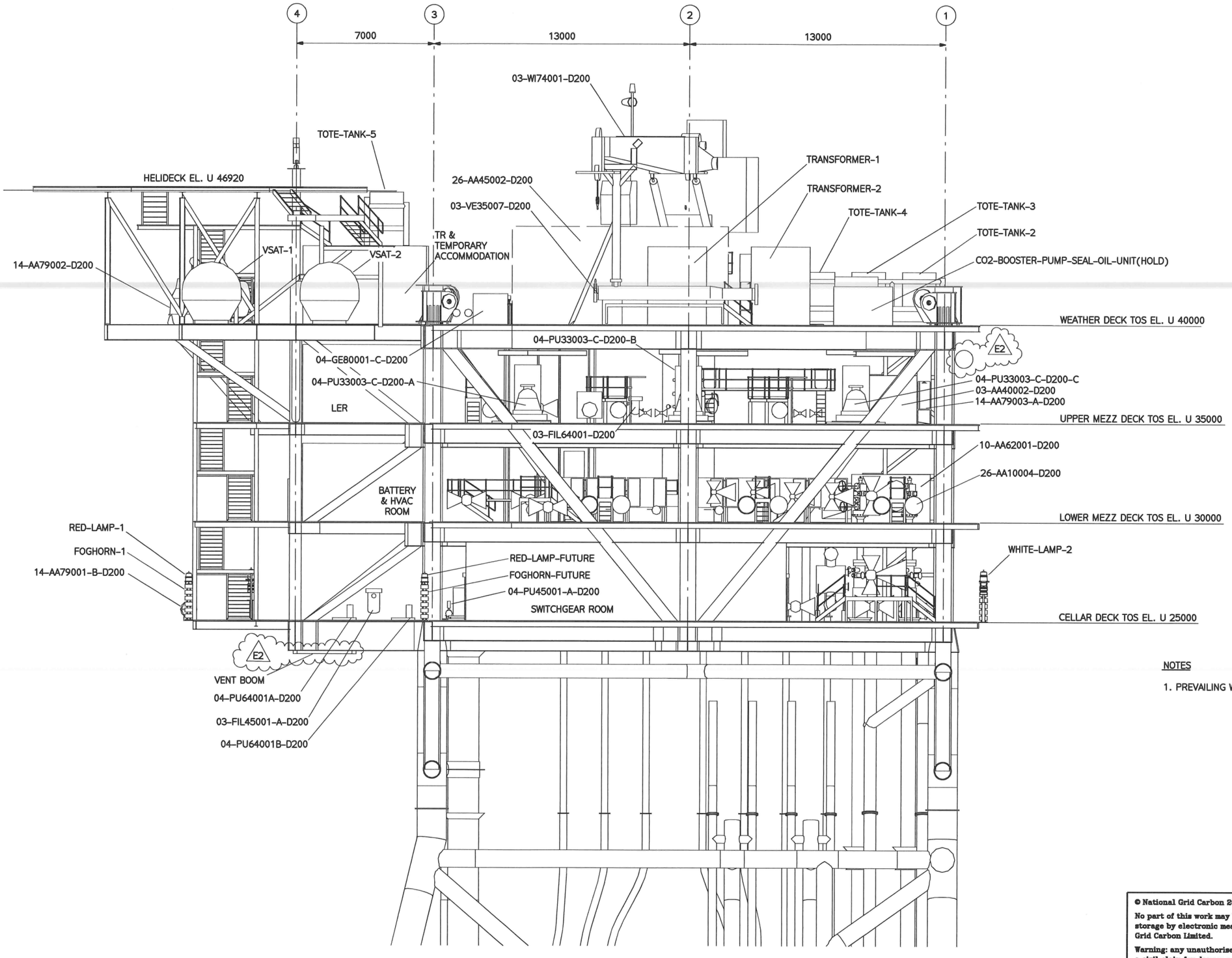
TITLE

WHITE ROSE CCS PROJECT FEED
PLOT PLAN
ELEVATION LOOKING SOUTH

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0010	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 30/04/2015 08:07:46 by stokesp



NOTES

1. PREVAILING WIND FROM SOUTH WEST.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)								
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)								
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)	E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)	E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
DRAWING No.	DRAWING TITLE	B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR IDC / CLIENT COMMENT

CLIENT: nationalgrid

GENESIS

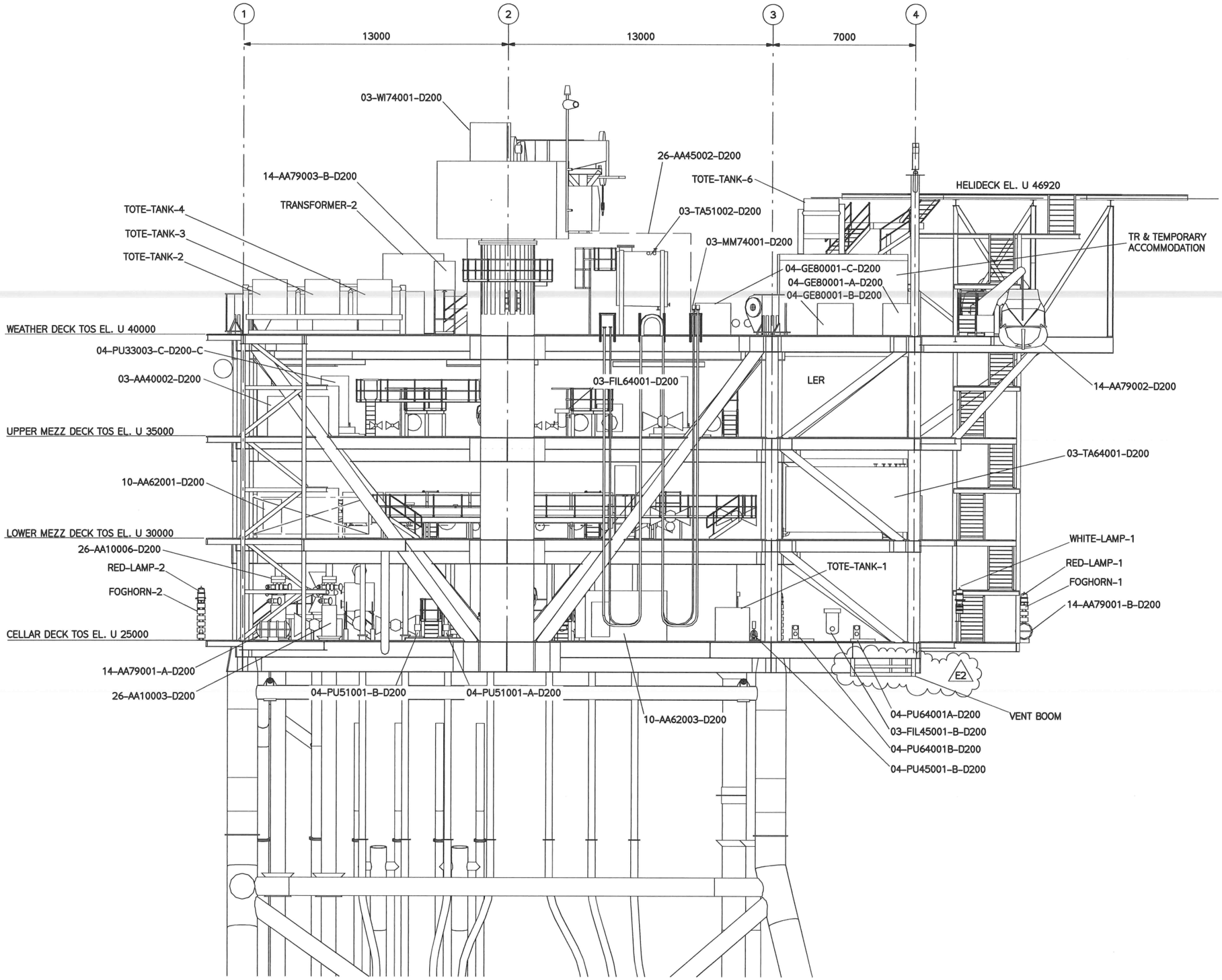
TITLE

WHITE ROSE CCS PROJECT FEED
PLOT PLAN
ELEVATION LOOKING EAST

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0011	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 30/04/2015 08:20:02 by stokesp



NOTES

1. PREVAILING WIND FROM SOUTH WEST.

DRAWING No.	DRAWING TITLE
C001-05-35-99-GD200-0004	PLOT PLAN – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-35-99-GD200-0003	PLOT PLAN – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-35-99-GD200-0002	PLOT PLAN – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-35-99-GD200-0001	PLOT PLAN – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/05/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	30/01/2015	KP	PS	JN	JNJ		FEED ISSUE
B1	21/11/2014	KP	PS	JN	JNJ		ISSUED FOR IDC / CLIENT COMMENT

CLIENT: nationalgrid

GENESIS

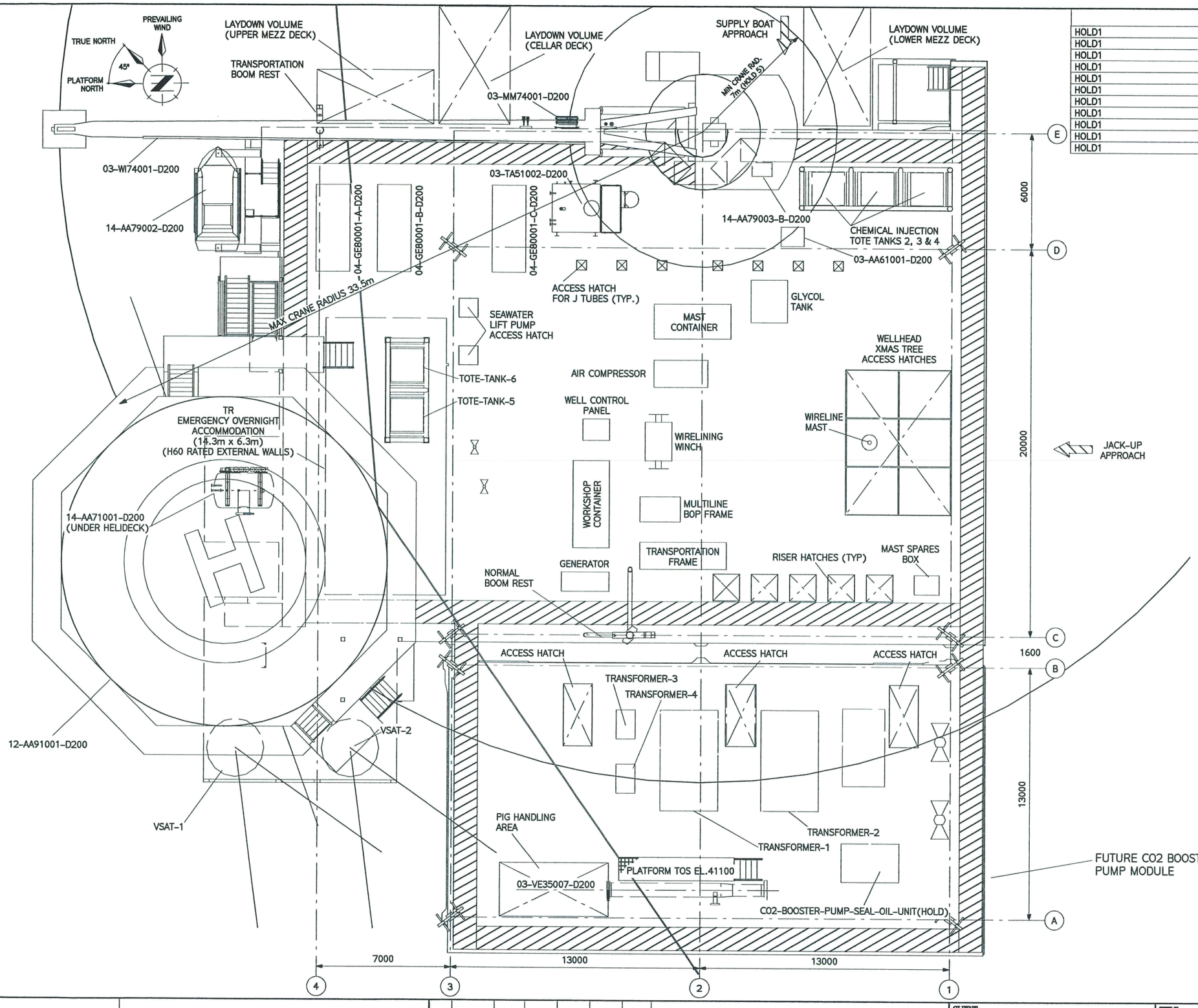
TITLE

WHITE ROSE CCS PROJECT FEED
PLOT PLAN
ELEVATION LOOKING WEST

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0012	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 30/04/2015 08:33:55 by stokeso



WIRELINING EQUIPMENT LIST		DRY WEIGHT	OPER. WEIGHT	POWER LOAD
HOLD1	MAST CONTAINER	5.0	5.0	HOLD4
HOLD1	GLYCOL TANK	4.0	4.0	HOLD4
HOLD1	AIR COMPRESSOR	2.9	2.9	HOLD4
HOLD1	WIRELINING WINCH	7.0	7.0	HOLD4
HOLD1	WELL CONTROL PANEL	1.5	1.5	HOLD4
HOLD1	WIRELINE MAST	9.0	9.0	HOLD4
HOLD1	WORKSHOP CONTAINER	7.7	7.7	HOLD4
HOLD1	MULTILINE BOP FRAME	4.0	4.0	HOLD4
HOLD1	TRANSPORTATION FRAME	6.0	6.0	HOLD4
HOLD1	GENERATOR	3.6	3.6	HOLD4
HOLD1	MAST SPARES BOX	3.5	3.5	HOLD4

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. HATCHED ESCAPE ROUTES & LAYDOWN AREAS ARE PLATED.
3. SEE DRAWING C001-05-35-99-GD200-0004 FOR MAIN EQUIPMENT LIST.

HOLDS

1. WIRELINING EQUIPMENT TAG NUMBERS
2. DRY WEIGHT
3. OPERATING WEIGHT
4. POWER LOAD
5. CRANE RADIUS - MIN. & MAX.

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

REFERENCE DRAWINGS	DRAWING TITLE	REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-35-99-GD200-0004	PLOT PLAN - OFFSHORE STORAGE - WEATHER DECK (TOS EL.40000)	E1	30/01/2015	PG	PS	JN	JNJ		FEED ISSUE
DRAWING No.	DRAWING TITLE	B1	21/11/2014	BD	PS	JN	JJ		ISSUED FOR IDC / FOR CLIENT COMMENT

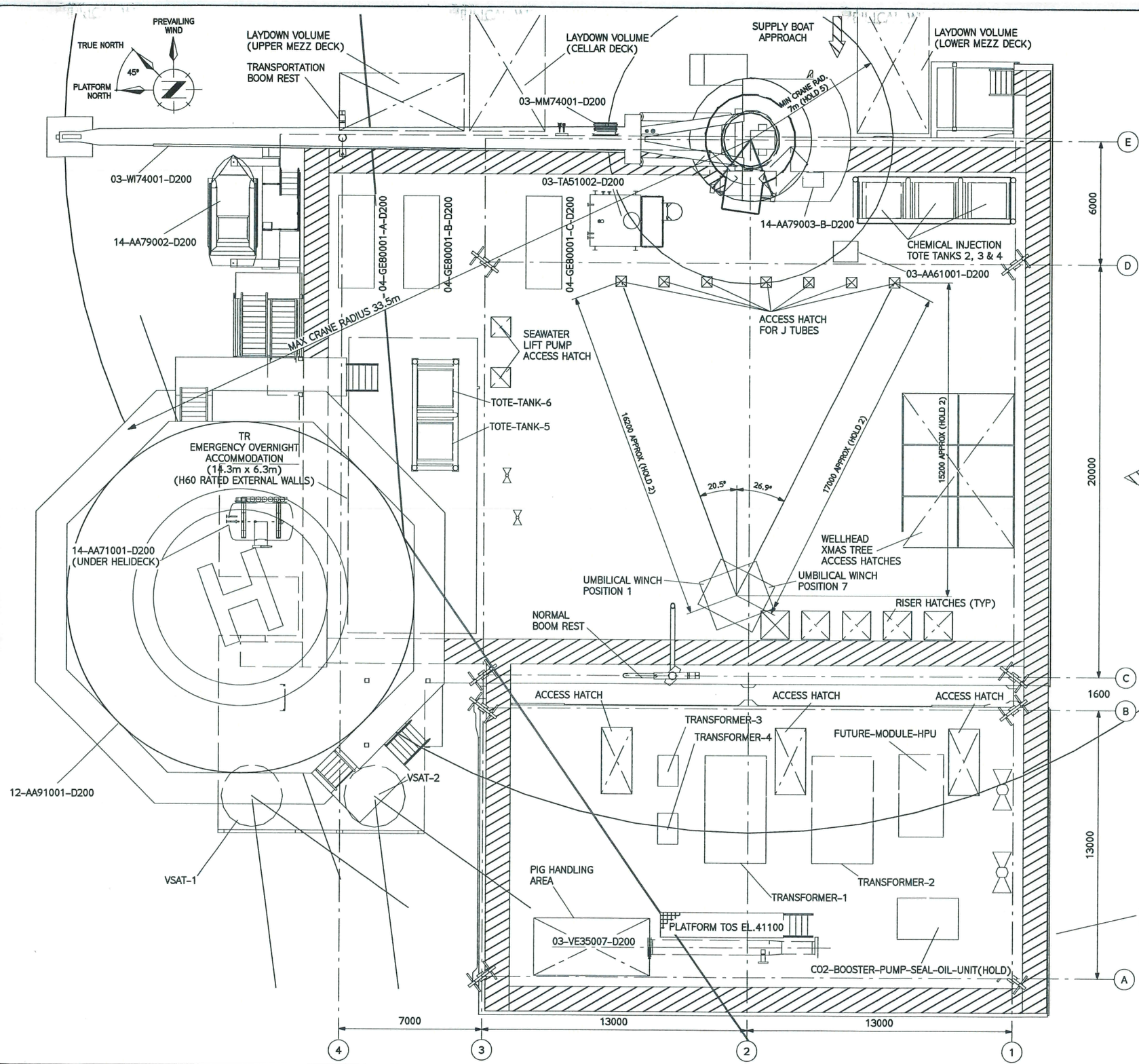
CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE PROPOSED
WIRELINING EQUIPMENT PLOT PLAN
WEATHER DECK (TOS EL.40000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-35-99-GD200-0013	1:100	1 OF 1	E1

A1 SIZE SHEET



UMBILICAL WINCH EQUIPMENT LIST

HOLD	UMBILICAL WINCH	DRY WEIGHT HOLD	OPER. WEIGHT HOLD	POWER LOAD HOLD

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2 HATCHED ESCAPE ROUTES & LAYDOWN AREAS ARE PLATED.
3. SEE DRAWING C001-05-35-99-GD200-0004 FOR MAIN EQUIPMENT LIST.

HOLDS

1. WINCH SIZE
2. DISTANCE FROM WINCH TO J-TUBE HATCH

0 1m 2m 4m 6m 8m 10m 12m
SCALE 1:100

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	30/01/2015	PG	PS	JN	JNJ		FEED ISSUE
B1	21/11/2014	BD	PS	JN	JJ		ISSUED FOR IDC / FOR CLIENT COMMENT

REFERENCE DRAWINGS

DRAWING No. C001-05-35-99-GD200-0004

DRAWING TITLE PLOT PLAN - OFFSHORE STORAGE - WEATHER DECK (TOS EL.40000)

CLIENT nationalgrid

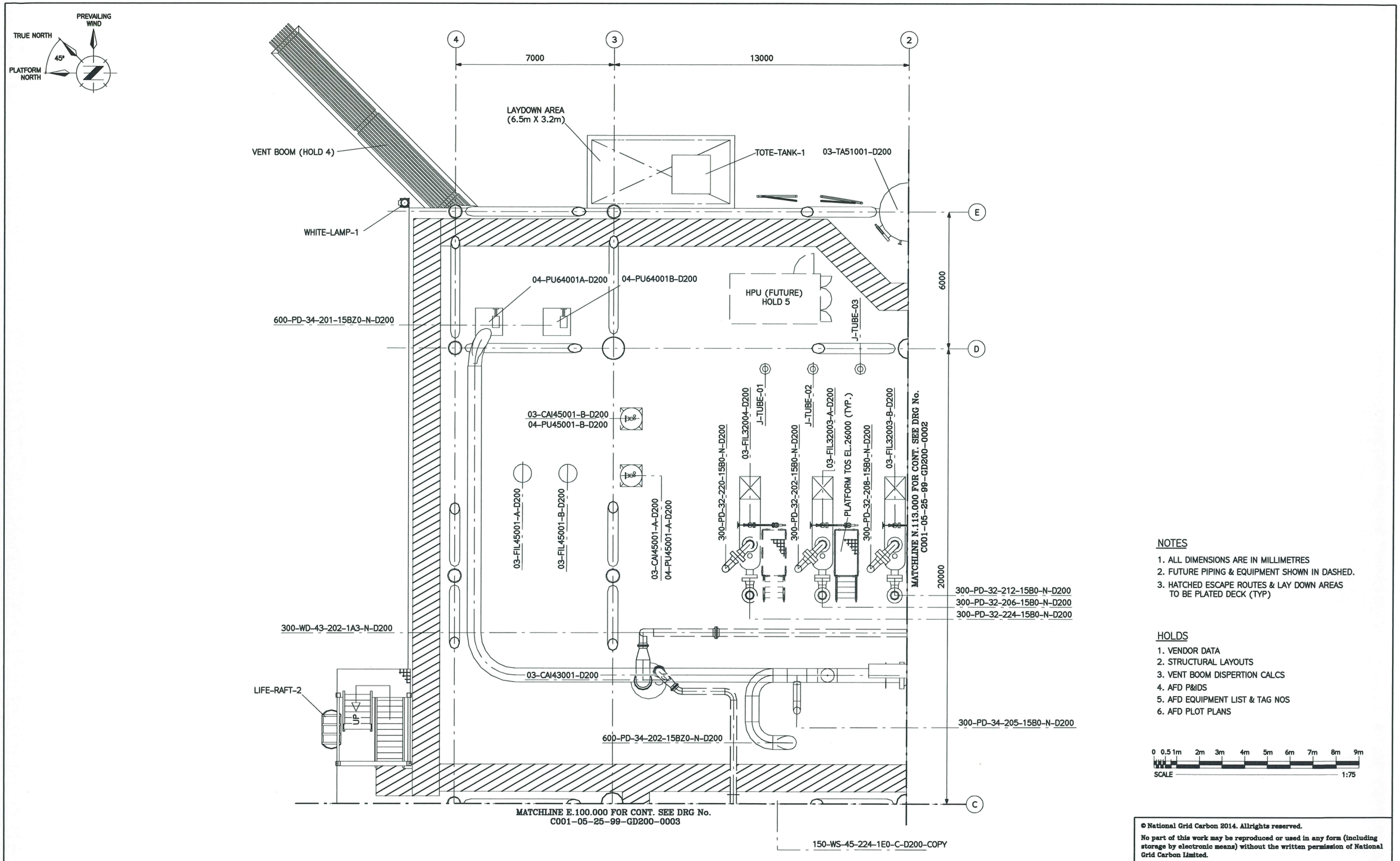
GENESIS

TITLE
WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE PROPOSED
UMBILICAL WINCH PLOT PLAN
WEATHER DECK (TOS EL.40000)

PROJECT No. / DRAWING No. C001-05-35-99-GD200-0014 | SCALE 1:100 | SHT. 1 OF 1 | REV. E1

A1 SIZE SHEET

Drawing updated 30/01/2015 11:27:26 by GATESP



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED.
3. HATCHED ESCAPE ROUTES & LAY DOWN AREAS TO BE PLATED DECK (TYP)

HOLDS

1. VENDOR DATA
2. STRUCTURAL LAYOUTS
3. VENT BOOM DISPERTION CALCS
4. AFD P&IDS
5. AFD EQUIPMENT LIST & TAG NOS
6. AFD PLOT PLANS

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-00013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0010/11/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0002/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	BD	PS	JN			ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

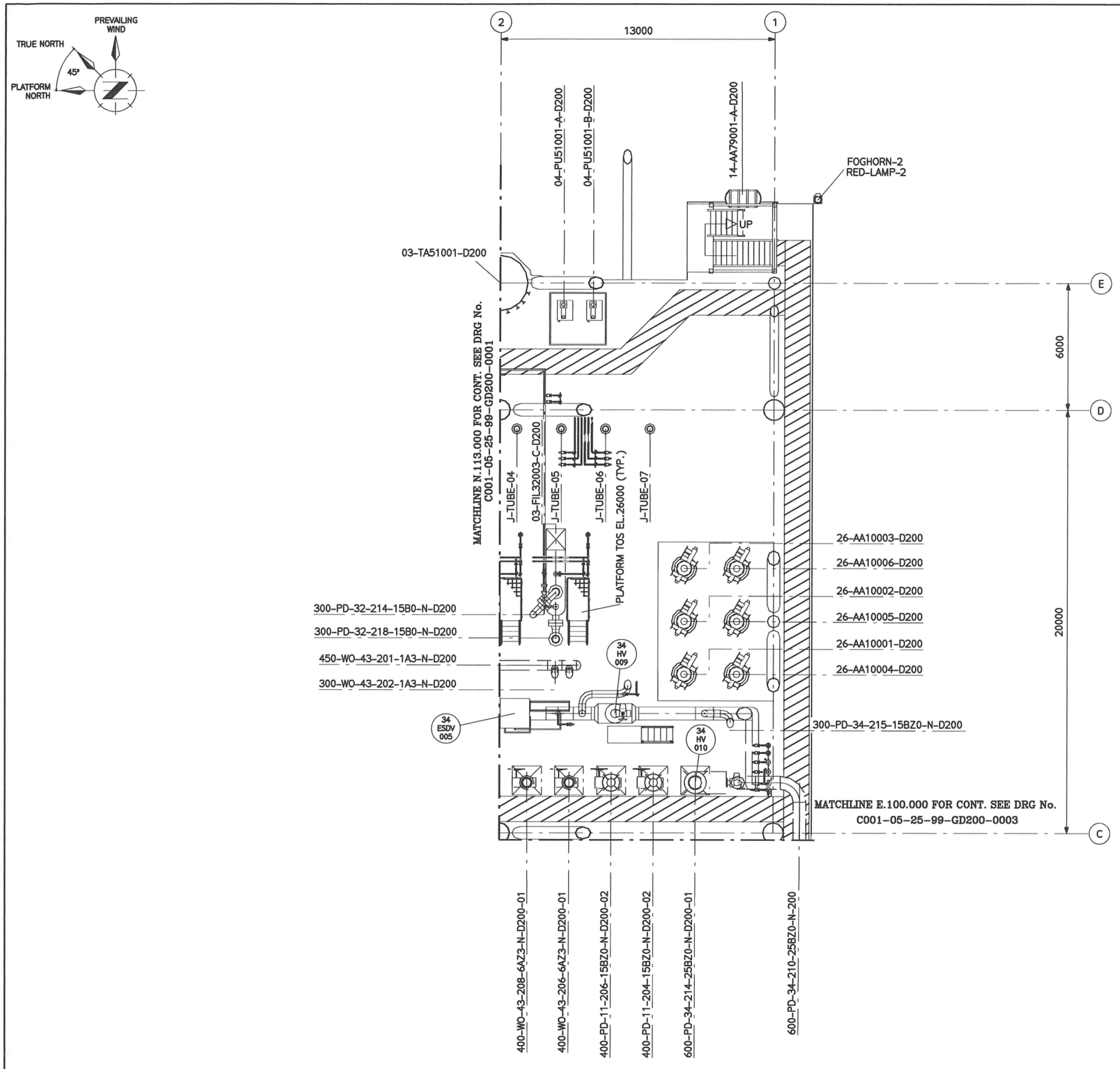
TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. NORTH
CELLAR DECK (TOS EL.25000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0001	1:75	1 OF 1	B1

A1 SIZE SHEET

Drawing updated 23/12/2014 11:25:53 by hllc



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED.
3. HATCHED ESCAPE ROUTES & LAY DOWN AREAS TO BE PLATED DECK (TYP)

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0011/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	BD	PS	JN			ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

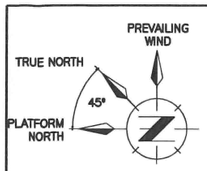
TITLE

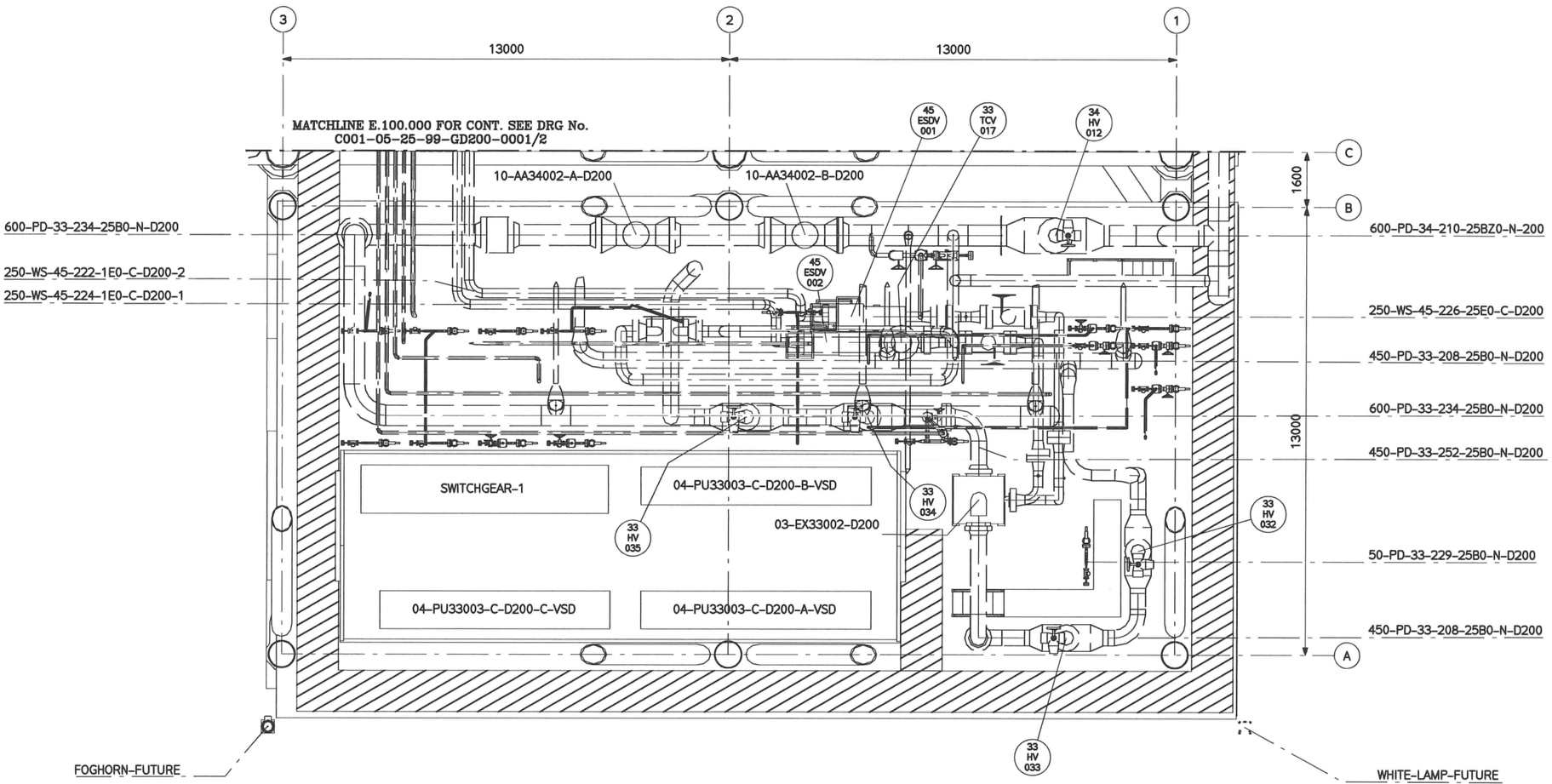
WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. SOUTH
CELLAR DECK (TOS EL.25000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0002	1:75	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 04/03/2015 08:57:55 by normanl



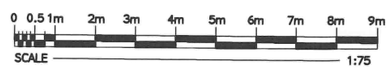


NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED.
3. HATCHED ESCAPE ROUTES & LAYDOWN AREAS TO BE PLATED DECK.

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED
6. DELETED



REFERENCE DRAWINGS	
DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0011/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/2	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	BD	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

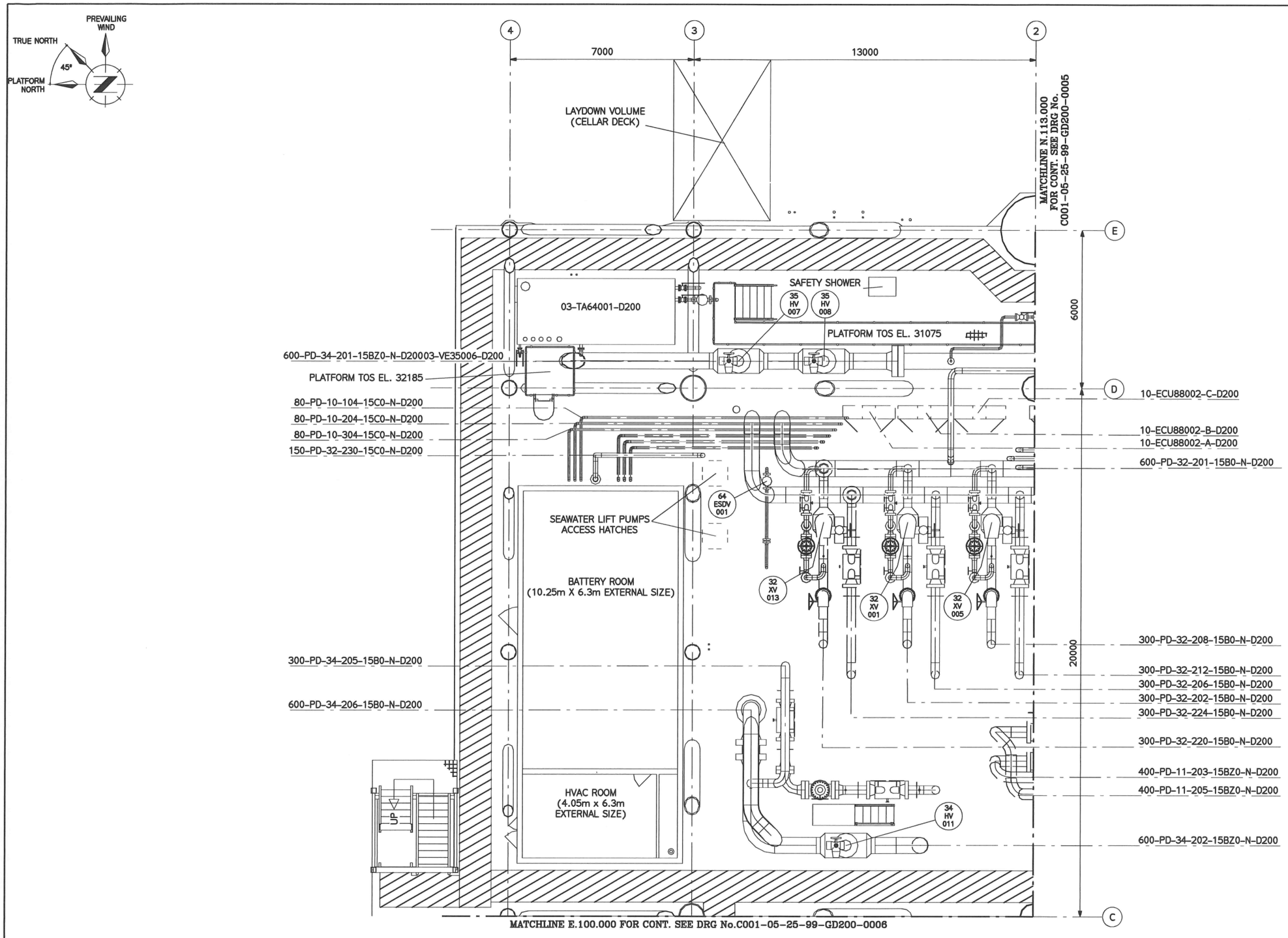
TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. FUTURE BOOSTER PUMP MODULE
CELLAR DECK (TOS EL.25000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0003	1:75	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 04/03/2015 08:58:19 by pernasl



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED.
3. HATCHED ESCAPE ROUTES & LAY DOWN AREAS TO BE PLATED DECK (TYP)

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m
SCALE 1:75

DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0010/11/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ (TOS EL.35000)
C001-05-25-99-GD200-0005/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	PG	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

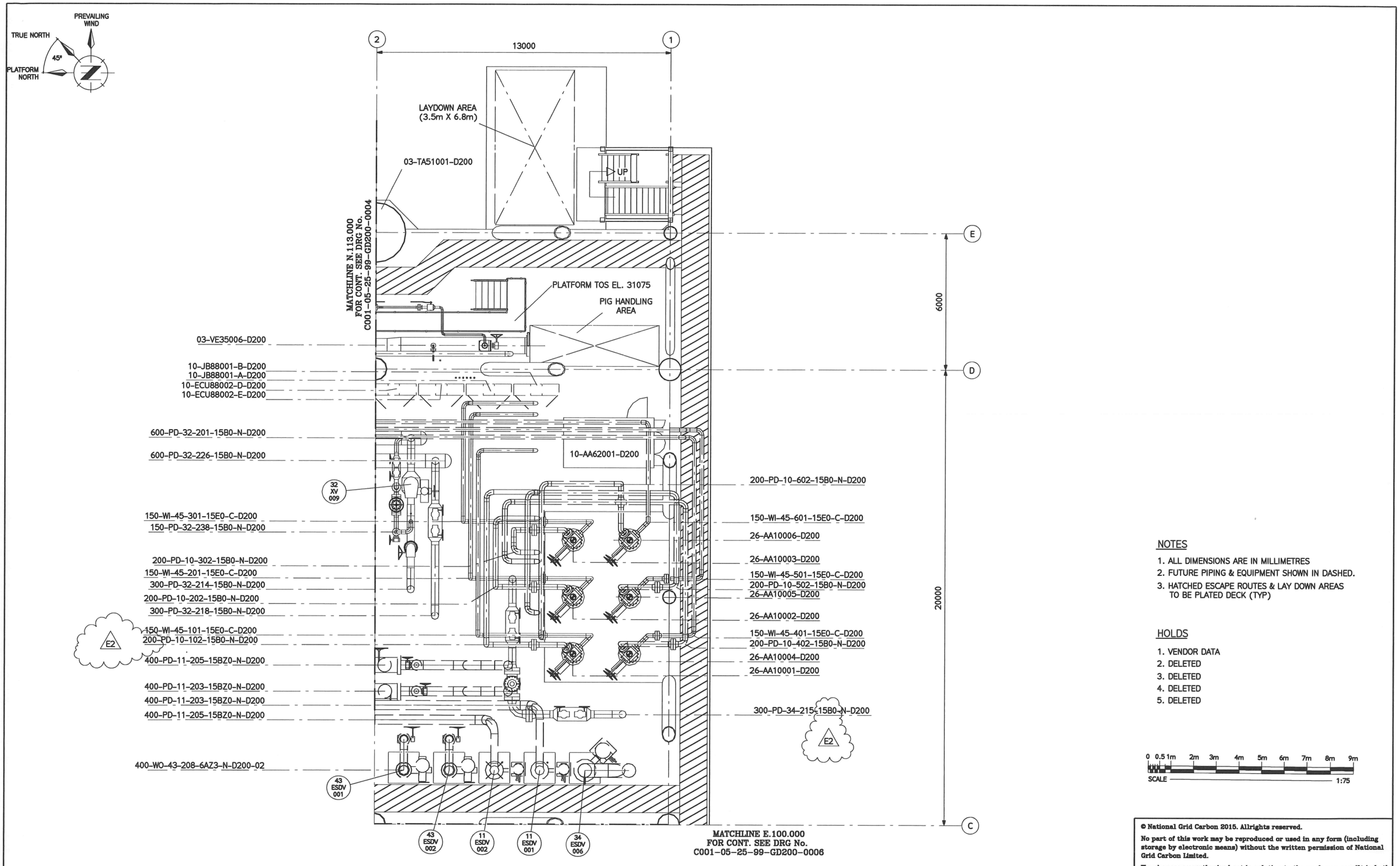
GENESIS

TITLE
WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. NORTH
LOWER MEZZ. (TOS EL.30000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0004	1:75	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 04/03/2015 08:56:27 by norman1



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED.
3. HATCHED ESCAPE ROUTES & LAY DOWN AREAS TO BE PLATED DECK (TYP)

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

REFERENCE DRAWINGS	
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0010/11/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ (TOS EL.35000)
C001-05-25-99-GD200-0004/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)
DRAWING No.	DRAWING TITLE

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	PG	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

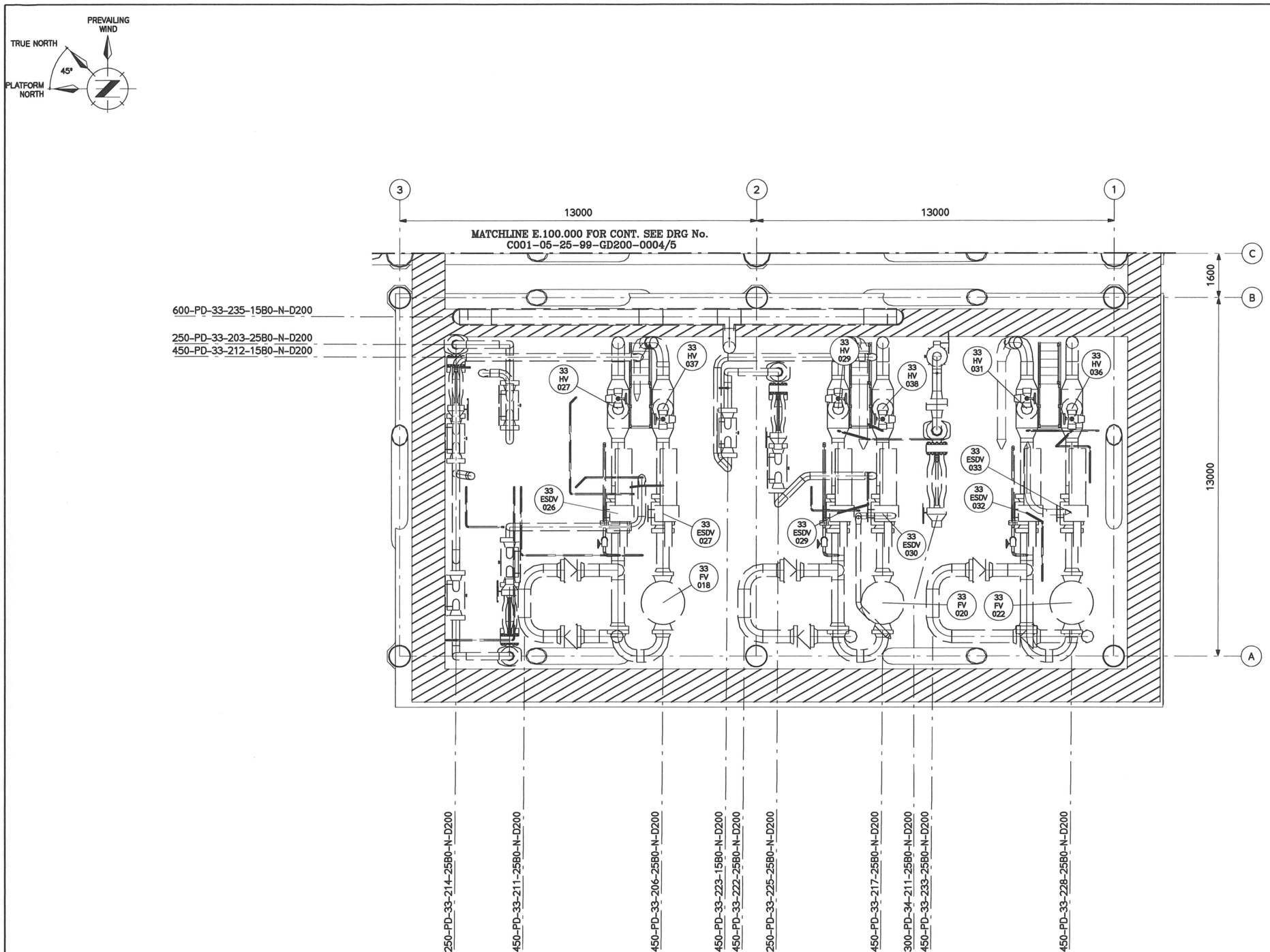
TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. SOUTH
LOWER MEZZ. (TOS EL.30000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0005	1:75	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 28/04/2015 09:16:03 by stokesa



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED
3. HATCHED ESCAPE ROUTES & LAYDOWN AREAS TO BE PLATED DECK.

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m
SCALE 1:75

DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. - OFFSHORE STORAGE - ELEVATIONS
C001-05-25-99-GD200-0010/11/12	PIPING G.A. - OFFSHORE STORAGE - WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. - OFFSHORE STORAGE - UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5	PIPING G.A. - OFFSHORE STORAGE - LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. - OFFSHORE STORAGE - CELLAR DECK (TOS EL.25000)
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	PG	PS	JN	-		ISSUED FOR IDC

CLIENT: nationalgrid

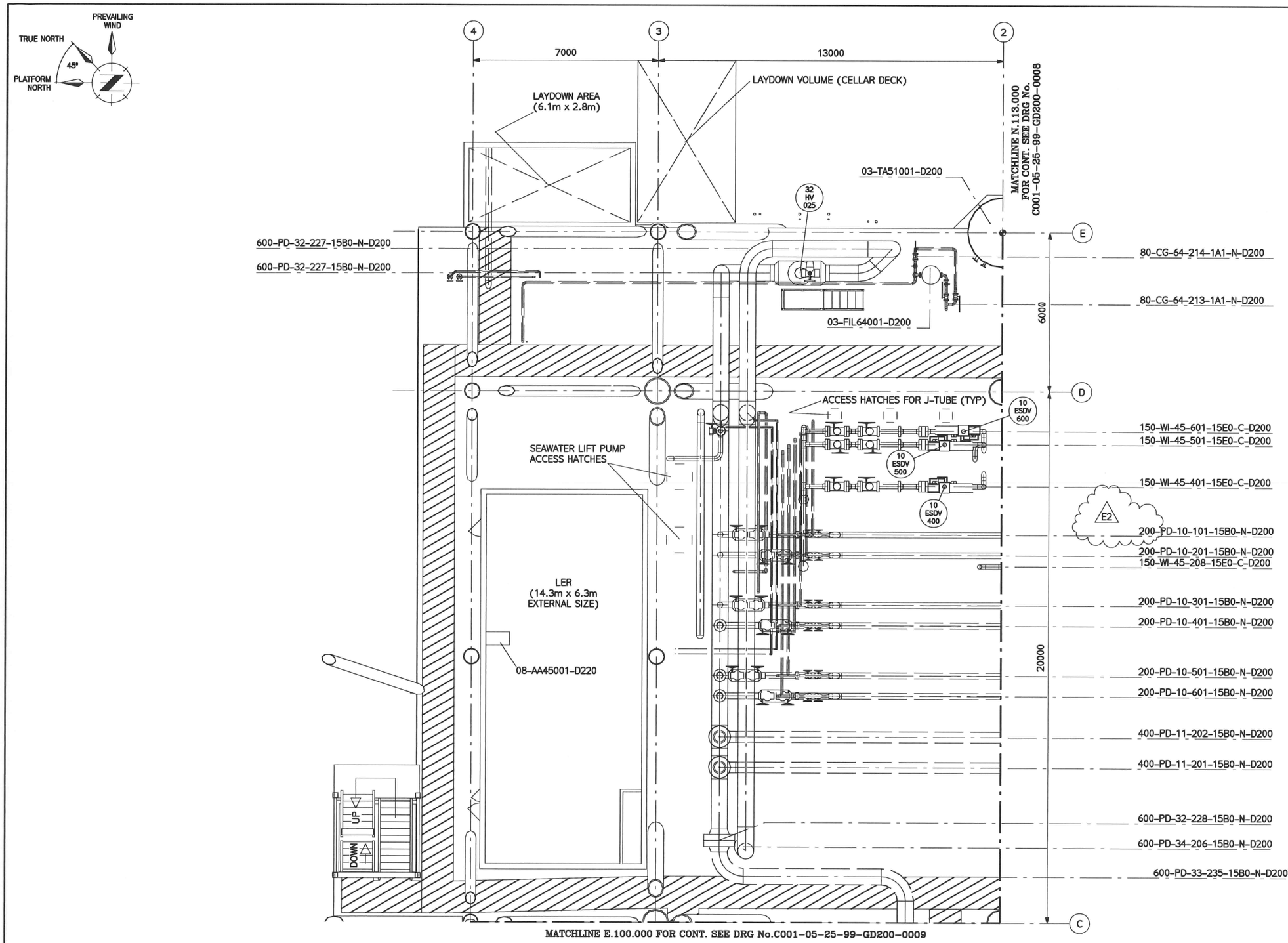
GENESIS

TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. FUTURE BOOSTER PUMP MODULE
LOWER MEZZ. (TOS EL.30000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0006	1:75	1 OF 1	E1

A1 SIZE SHEET



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED
3. HATCHED ESCAPE ROUTES & LAY DOWN AREAS TO BE PLATED DECK (TYP)

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS								
C001-05-25-99-GD200-0010/11/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)								
C001-05-25-99-GD200-0008/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)	E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
C001-05-25-99-GD200-0004/5/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)	E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)	B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
DRAWING No.	DRAWING TITLE	A1	25/11/2014	PG	PS	JN			ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

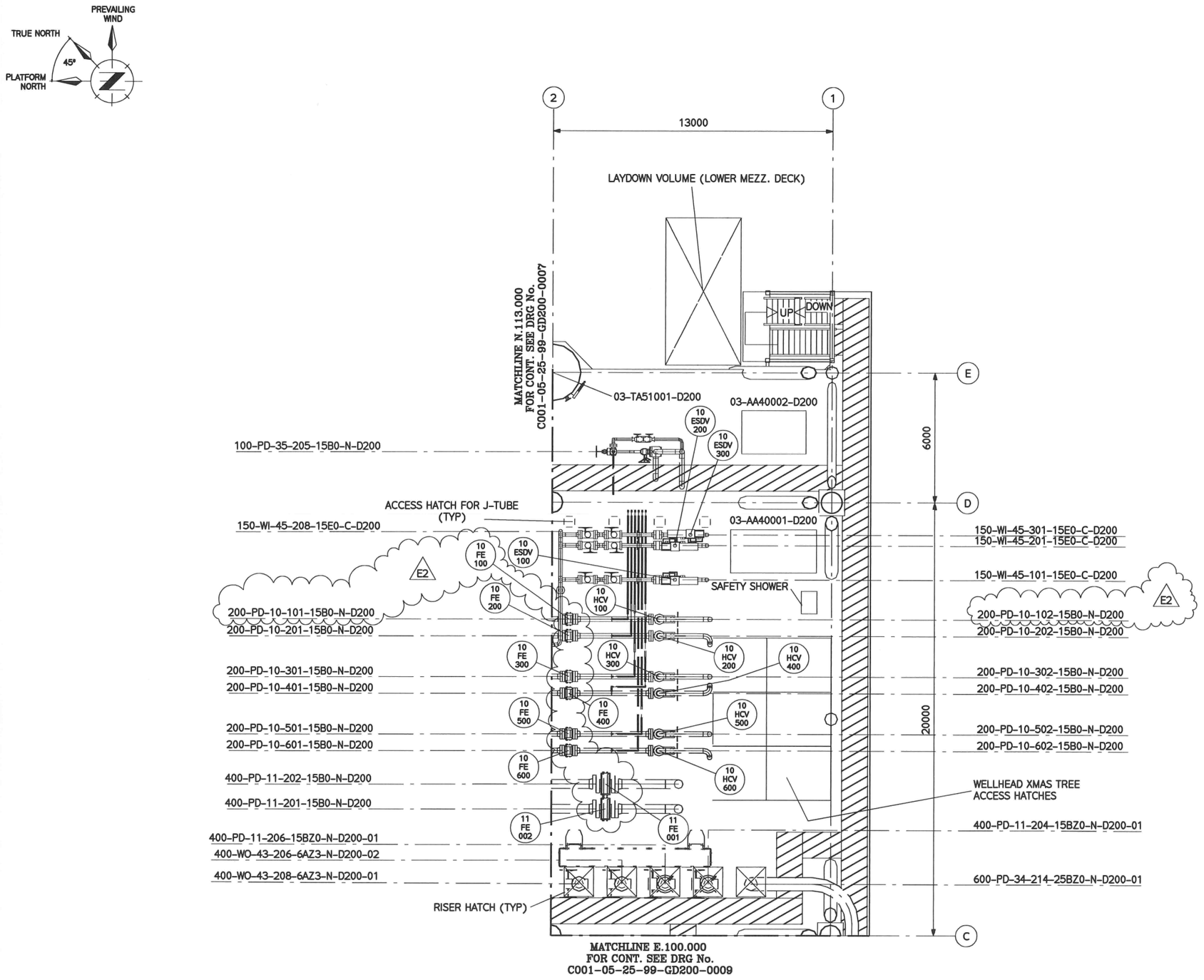
TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. NORTH
UPPER MEZZ DECK (TOS EL.35000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0007	1:75	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 28/04/2015 09:37:13 by stainsp



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED
3. HATCHED ESCAPE ROUTES & LAY DOWN AREAS TO BE PLATED DECK (TYP)

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0010/11/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	PG	PS	JN			ISSUED FOR IDC

CLIENT: nationalgrid

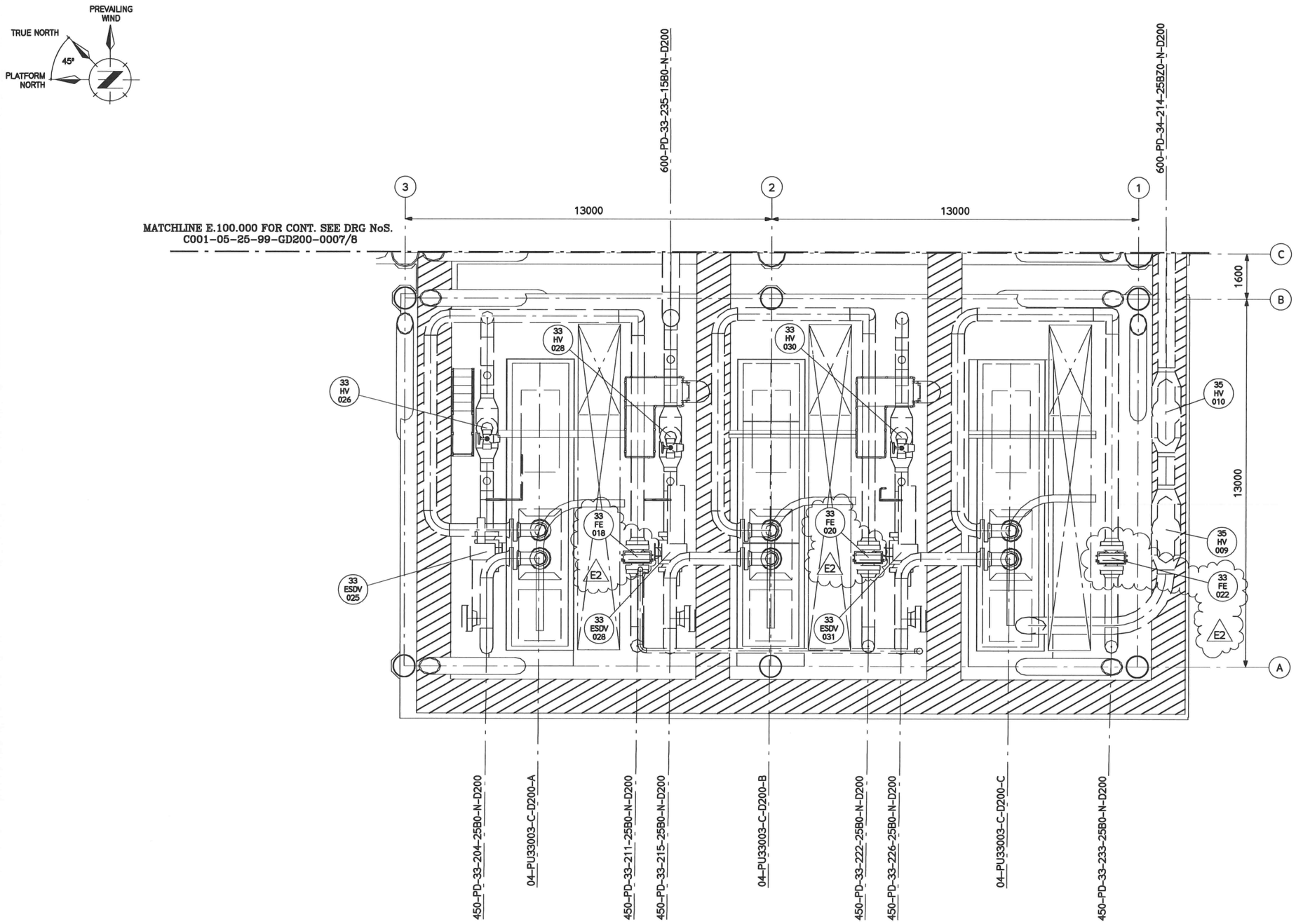
GENESIS

TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. SOUTH
UPPER MEZZ DECK (TOS EL.35000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0008	1:75	1 OF 1	E2

A1 SIZE SHEET



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED
3. HATCHED ESCAPE ROUTES & LAYDOWN AREAS TO BE PLATED DECK.

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

REFERENCE DRAWINGS	
DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0010/11/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0008/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0005/6/7	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	PG	PS	JN			ISSUED FOR IDC

CLIENT

nationalgrid

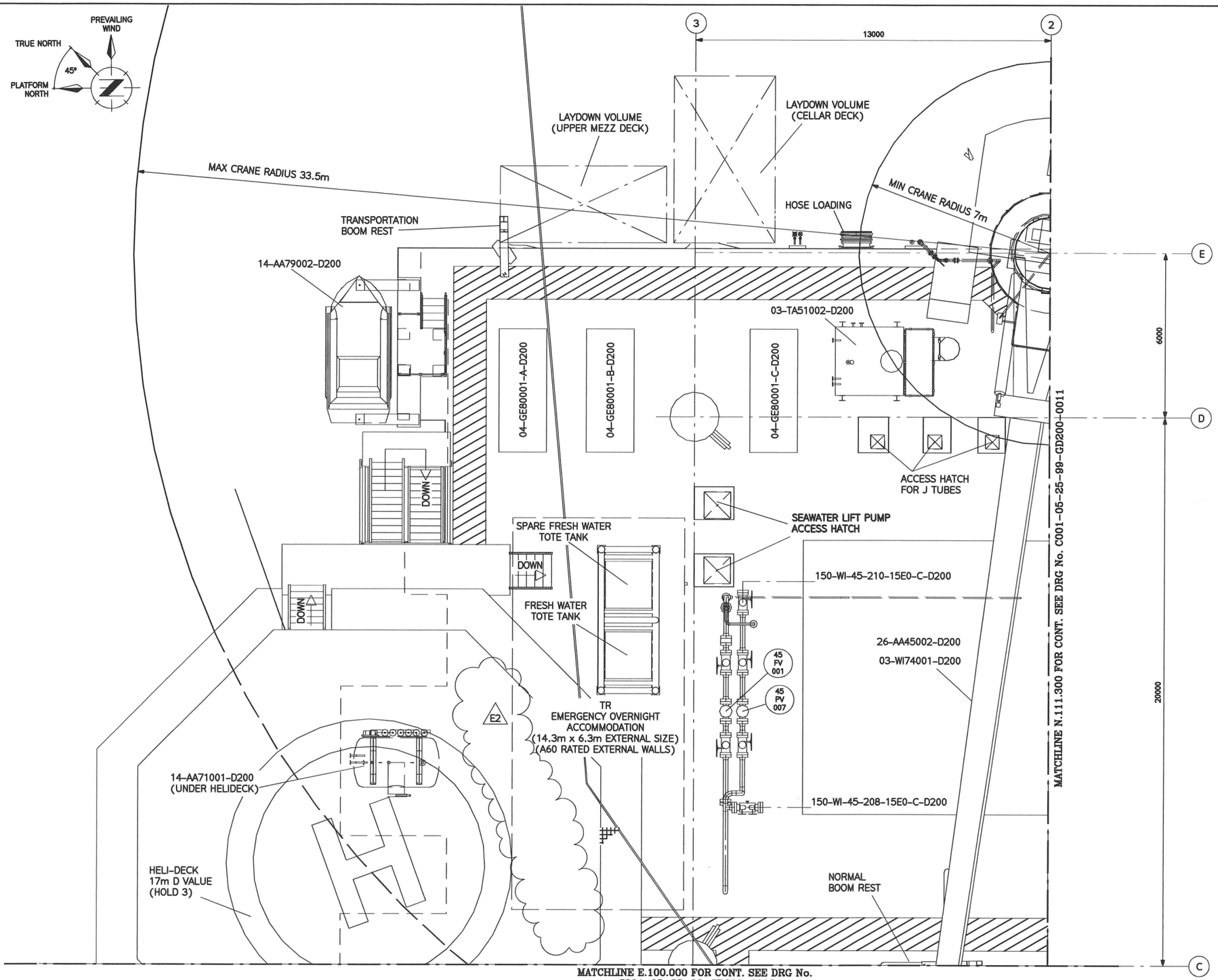
GENESIS

TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. FUTURE BOOSTER PUMP MODULE
UPPER MEZZ DECK (TOS EL.35000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0009	1:75	1 OF 1	E2

A1 SIZE SHEET



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED
3. HATCHED ESCAPE ROUTES & LAY DOWN AREAS TO BE PLATED DECK (TYP)

HOLDS

1. VENDOR DATA
2. HELIDECK SIZE (D17 SHOWN)
3. DELETED
4. DELETED
5. DELETED
6. DELETED
7. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

REFERENCE DRAWINGS	DRAWING TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0011/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	BD	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

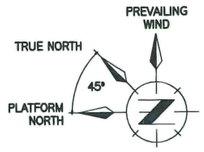
TITLE

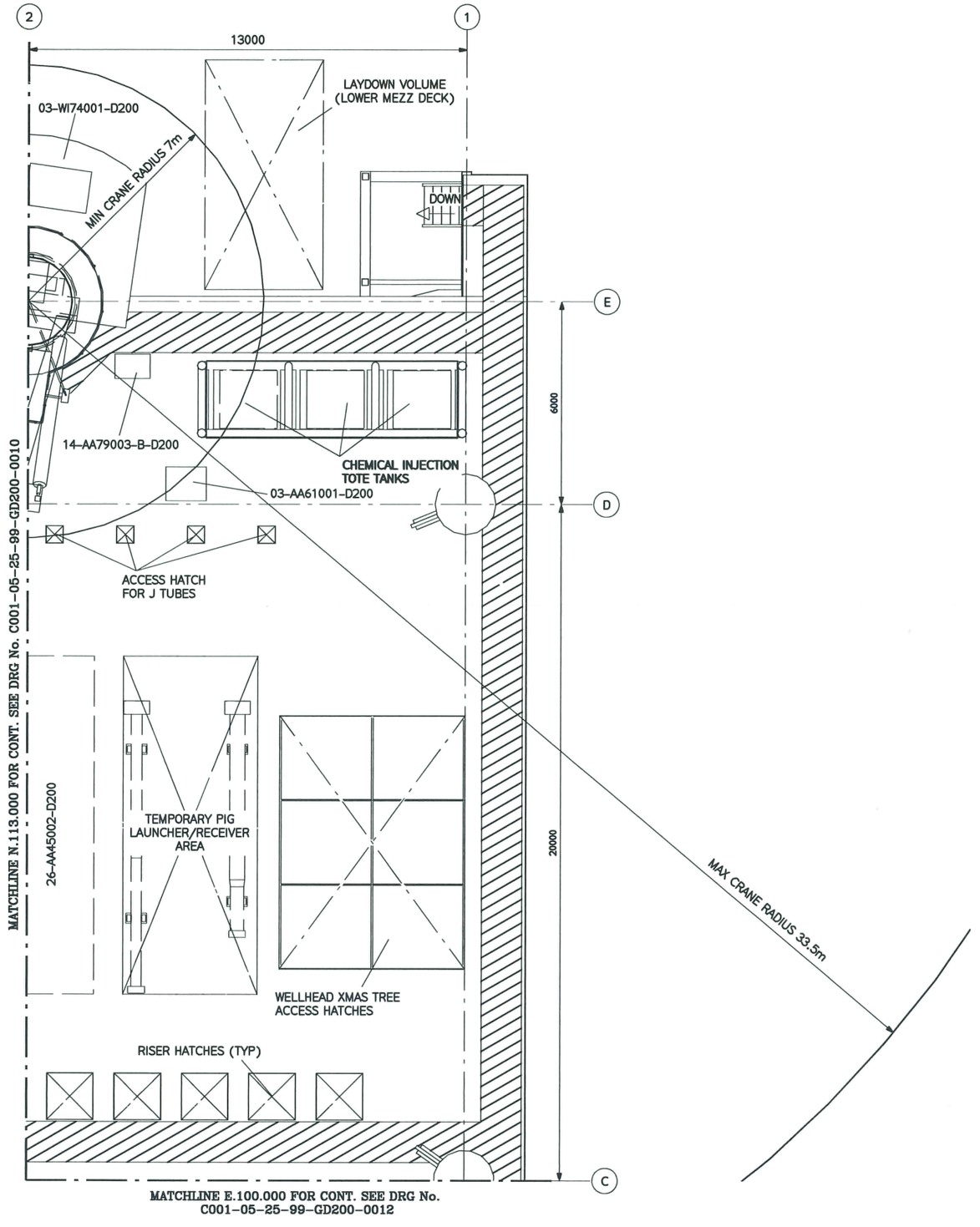
WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. NORTH
WEATHER DECK (TOS EL.40000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0010	1:75	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 28/04/2015 13:40:16 by stokesp





NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED
3. HATCHED ESCAPE ROUTES & LAY DOWN AREAS TO BE PLATED DECK (TYP)

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED
6. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS
C001-05-25-99-GD200-0010/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	BD	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

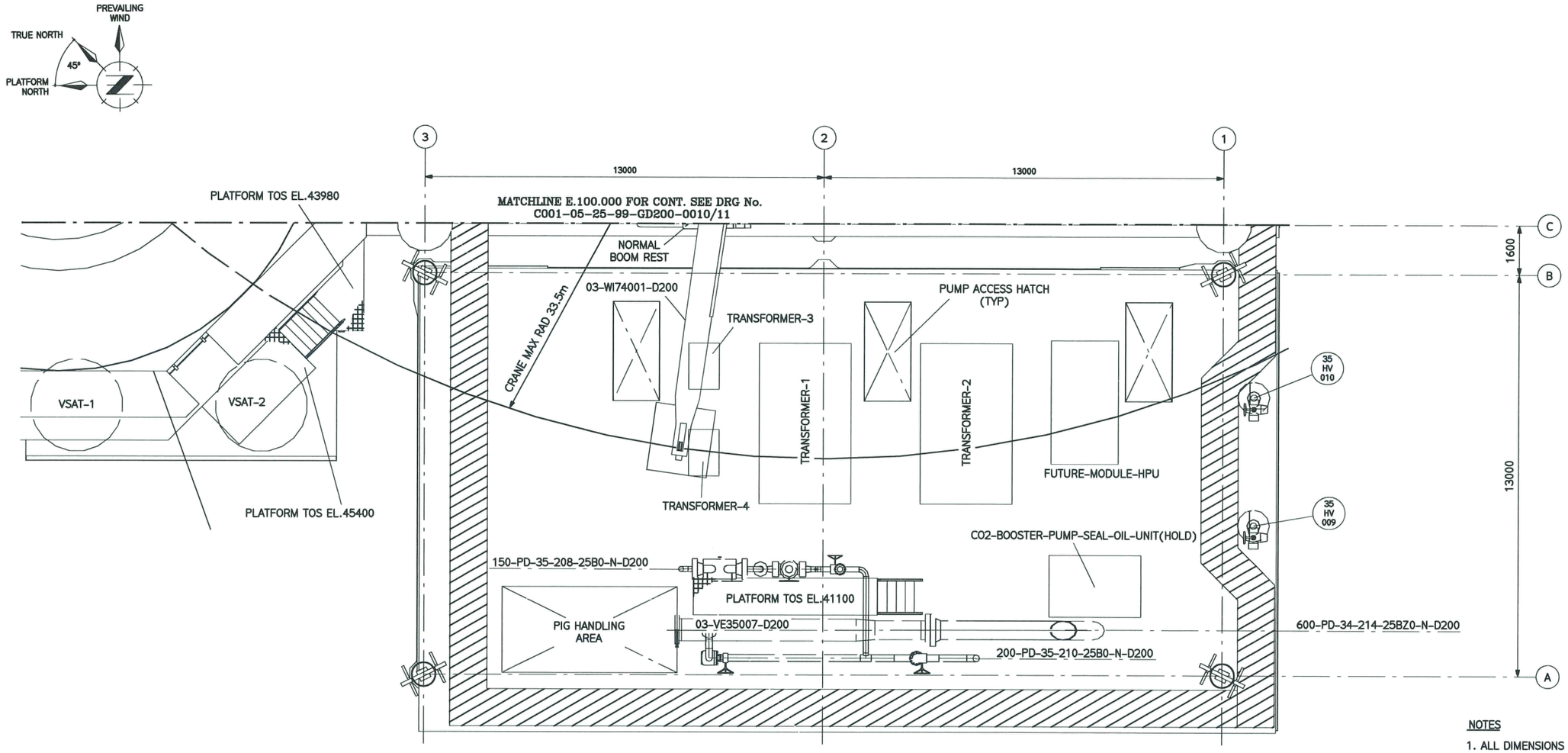
TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. SOUTH
WEATHER DECK (TOS EL.40000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0011	1:75	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 05/03/2015 10:34:40 by stokesp



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED
3. HATCHED ESCAPE ROUTES & LAYDOWN AREAS TO BE PLATED DECK.

HOLDS

1. VENDOR DATA
2. DELETED
3. DELETED
4. DELETED
5. DELETED
6. DELETED

0 0.5 1m 2m 3m 4m 5m 6m 7m 8m 9m

SCALE 1:75

C001-05-25-99-GD200-0013/14/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS								
C001-05-25-99-GD200-0010/11	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)								
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)			BD					
C001-05-25-99-GD200-0004/5/6	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)	E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)	B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
DRAWING No.	DRAWING TITLE	A1	25/11/2014	BD	PS	JN	–		ISSUED FOR IDC
REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE

CLIENT: nationalgrid

GENESIS

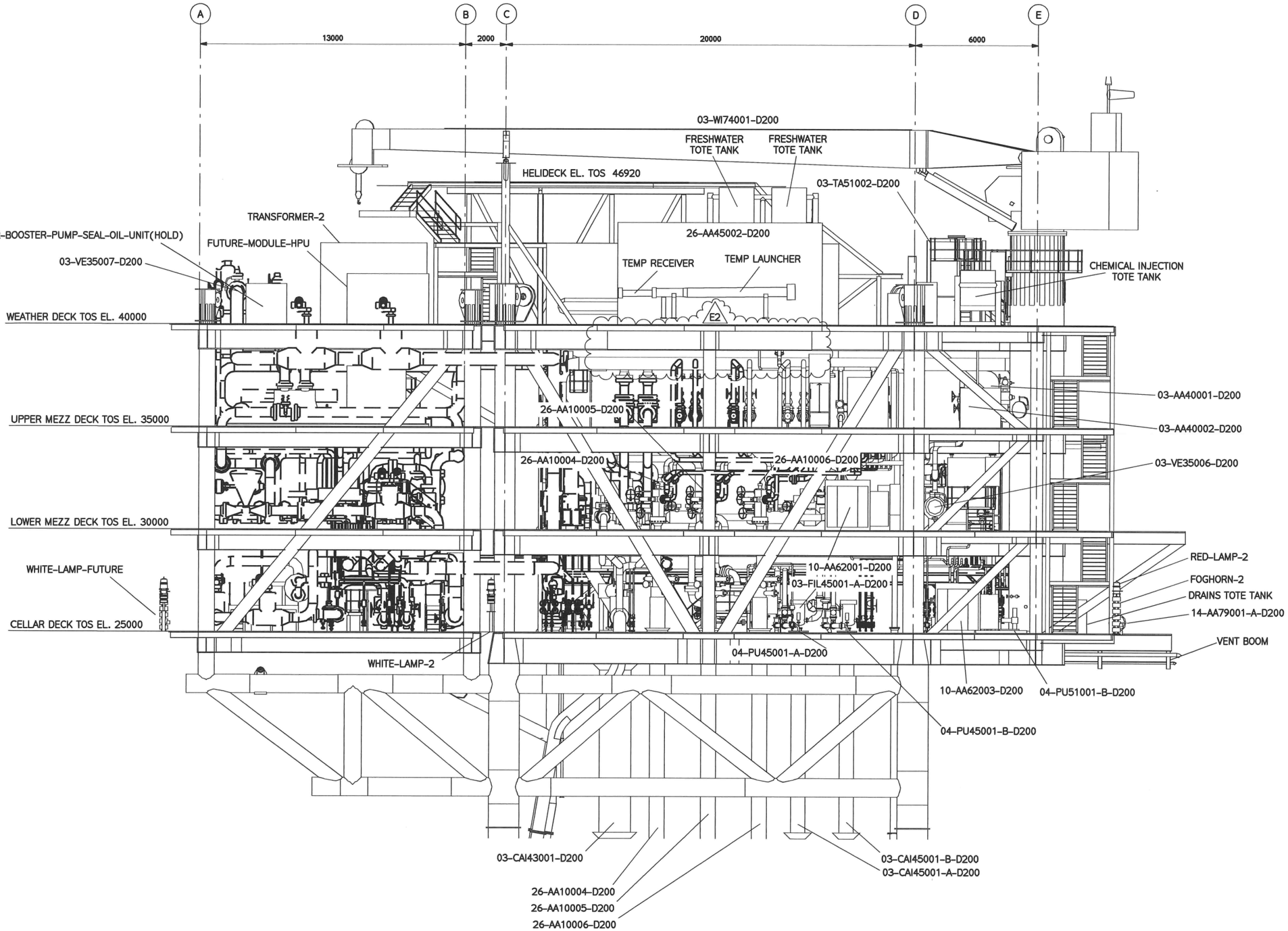
TITLE

WHITE ROSE CCS PROJECT FEED
OFFSHORE STORAGE
PIPING G.A. FUTURE BOOSTER PUMP MODULE WEATHER DECK (TOS EL.40000)

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0012	1:75	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 05/03/2015 13:37:02 by stokesp



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED

HOLDS

1. DELETED
2. DELETED
3. DELETED
4. VENDOR DATA
5. DELETED
6. VENT BOOM DISPERSION CALCS
7. HELIDECK SIZE
8. DELETED

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-25-99-GD200-0014/15/16	PIPING G.A. – OFFSHORE STORAGE – ELEVATIONS								
C001-05-25-99-GD200-0010/11/12	PIPING G.A. – OFFSHORE STORAGE – WEATHER DECK (TOS EL.40000)								
C001-05-25-99-GD200-0007/8/9	PIPING G.A. – OFFSHORE STORAGE – UPPER MEZZ DECK (TOS EL.35000)	E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
C001-05-25-99-GD200-0004/5	PIPING G.A. – OFFSHORE STORAGE – LOWER MEZZ DECK (TOS EL.30000)	E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
C001-05-25-99-GD200-0001/2/3	PIPING G.A. – OFFSHORE STORAGE – CELLAR DECK (TOS EL.25000)	B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
DRAWING No.	DRAWING TITLE	A1	25/11/2014	KP	PS	JN	–		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

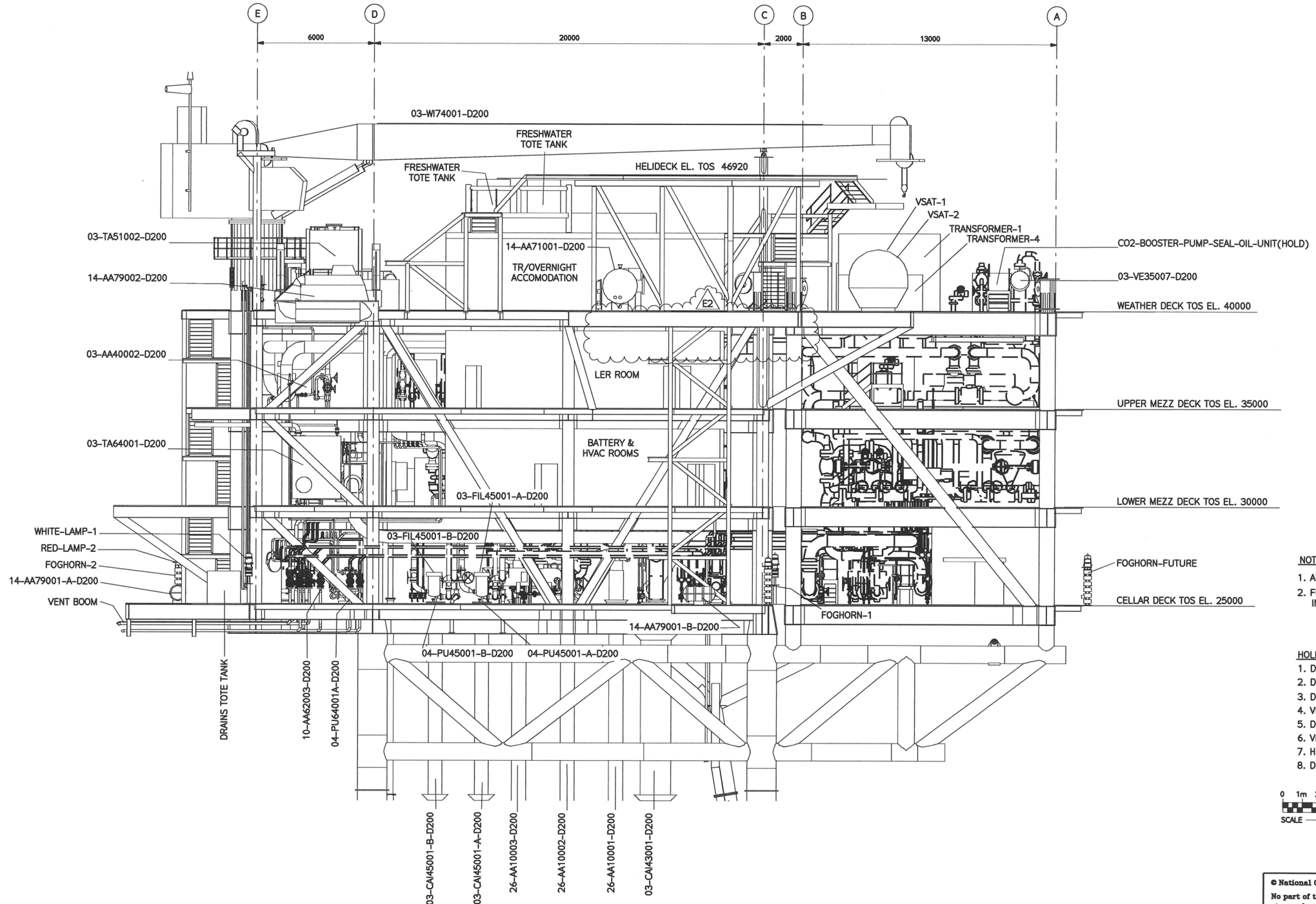
TITLE

WHITE ROSE CCS PROJECT FEED
PIPING G.A.
ELEVATION LOOKING NORTH

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0013	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 28/04/2015 13:41:33 by stokesp



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED

HOLDS

1. DELETED
2. DELETED
3. DELETED
4. VENDOR DATA
5. DELETED
6. VENT BOOM DISPERSION CALCS
7. HELIDECK SIZE
8. DELETED

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/15/16	PIPING G.A. - OFFSHORE STORAGE - ELEVATIONS
C001-05-25-99-GD200-0010/11/12	PIPING G.A. - OFFSHORE STORAGE - WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. - OFFSHORE STORAGE - UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5	PIPING G.A. - OFFSHORE STORAGE - LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. - OFFSHORE STORAGE - CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	PG	PS	JN	-		ISSUED FOR CLIENT COMMENT

CLIENT: nationalgrid

GENESIS

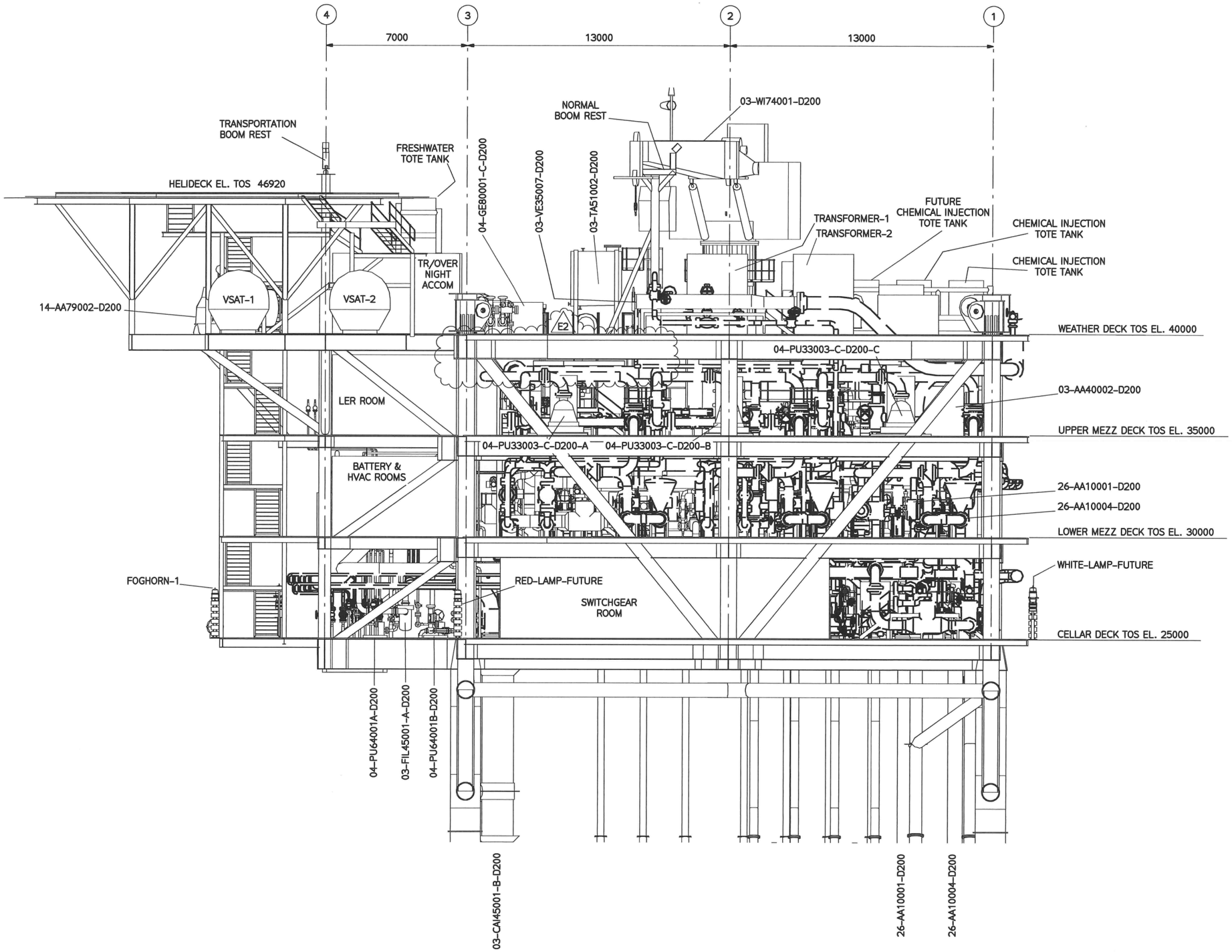
TITLE

WHITE ROSE CCS PROJECT FEED
PIPING G.A.
ELEVATION LOOKING SOUTH

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0014	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 28/04/2015 14:16:25 by stokesp



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED

HOLDS

1. DELETED
2. DELETED
3. DELETED
4. VENDOR DATA
5. DELETED
6. VENT BOOM DISPERSION CALCS
7. HELIDECK SIZE
8. DELETED

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

DRAWING No.	DRAWING TITLE
C001-05-25-99-GD200-0013/14/16	PIPING G.A. - OFFSHORE STORAGE - ELEVATIONS
C001-05-25-99-GD200-0010/11/12	PIPING G.A. - OFFSHORE STORAGE - WEATHER DECK (TOS EL.40000)
C001-05-25-99-GD200-0007/8/9	PIPING G.A. - OFFSHORE STORAGE - UPPER MEZZ DECK (TOS EL.35000)
C001-05-25-99-GD200-0004/5	PIPING G.A. - OFFSHORE STORAGE - LOWER MEZZ DECK (TOS EL.30000)
C001-05-25-99-GD200-0001/2/3	PIPING G.A. - OFFSHORE STORAGE - CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
A1	25/11/2014	KP	PS	JN	-		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

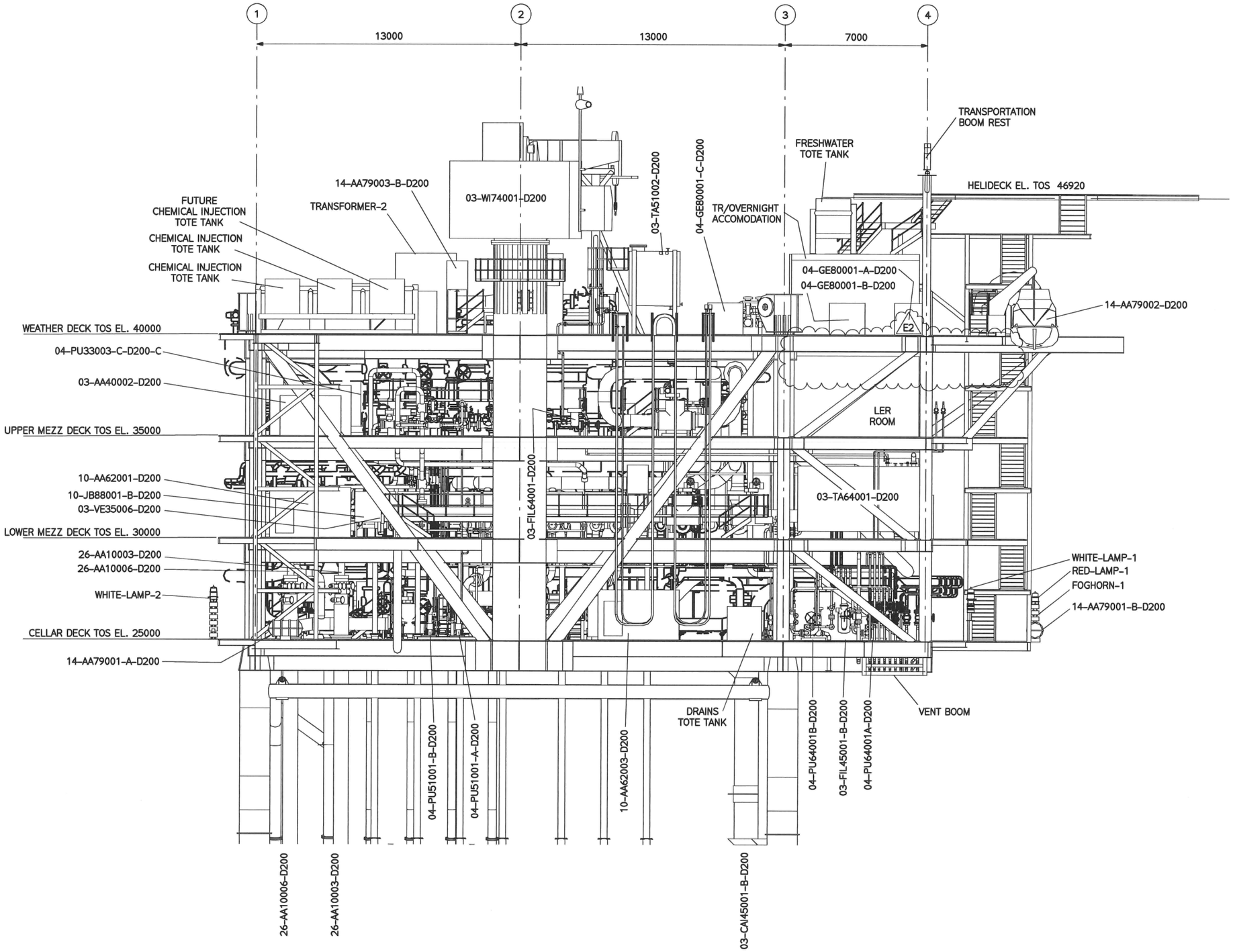
TITLE

WHITE ROSE CCS PROJECT FEED
PIPING G.A.
ELEVATION LOOKING EAST

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0015	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 28/04/2015 14:18:54 by stokesp



NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. FUTURE PIPING & EQUIPMENT SHOWN IN DASHED

HOLDS

1. DELETED
2. DELETED
3. DELETED
4. VENDOR DATA
5. DELETED
6. VENT BOOM DISPERSION CALCS
7. HELIDECK SIZE
8. DELETED

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-05-25-99-GD200-0013/14/15	PIPING G.A. - OFFSHORE STORAGE - ELEVATIONS								
C001-05-25-99-GD200-0010/11/12	PIPING G.A. - OFFSHORE STORAGE - WEATHER DECK (TOS EL.40000)								
C001-05-25-99-GD200-0007/8/9	PIPING G.A. - OFFSHORE STORAGE - UPPER MEZZ DECK (TOS EL.35000)	E2	01/04/2015	PS	PS	JN	JNJ		RE-ISSUED FEED ISSUE
C001-05-25-99-GD200-0004/5	PIPING G.A. - OFFSHORE STORAGE - LOWER MEZZ DECK (TOS EL.30000)	E1	06/03/2015	BD	PS	JN	JNJ		FEED ISSUE
C001-05-25-99-GD200-0001/2/3	PIPING G.A. - OFFSHORE STORAGE - CELLAR DECK (TOS EL.25000)	B1	23/12/2014	CH	PS	JN	JNJ		ISSUED FOR CLIENT COMMENTS
DRAWING No.	DRAWING TITLE	A1	25/11/2014	KP	PS	JN	-		ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

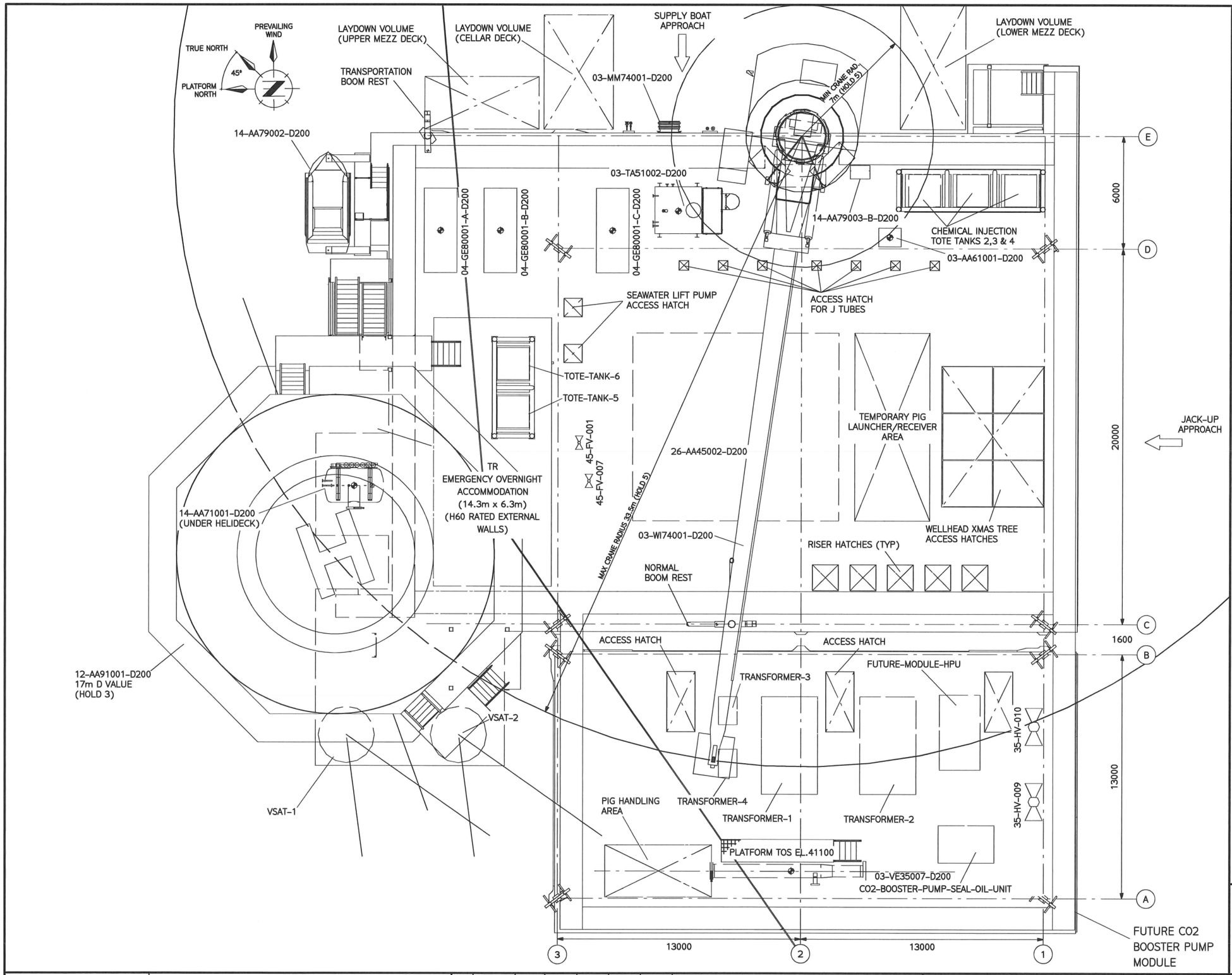
TITLE

WHITE ROSE CCS PROJECT FEED
PIPING G.A.
ELEVATION LOOKING WEST

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-05-25-99-GD200-0016	1:100	1 OF 1	E2

A1 SIZE SHEET

Drawing updated 28/04/2015 14:22:47 by stokesp



EQUIPMENT LIST

03-MM74001-D200	HOSE LOADING STATION
03-TA51002-D200	DIESEL SERVICE TANK
03-VE35007-D200	CO2 INJECTION WELL PIG LAUNCHER (FUTURE)
04-GE80001-A-D200	DIESEL GENERATOR PACKAGE
04-GE80001-B-D200	DIESEL GENERATOR PACKAGE
04-GE80001-C-D200	DIESEL GENERATOR PACKAGE
12-AA91001-D200	HELIDECK
26-AA45002-D200	WATER WASH PACKAGE (TEMPORARY)
03-WI74001-D200	PLATFORM CRANE
14-AA71001-D200	DIFFS HELIDECK FOAM PACKAGE
14-AA79003-B-D200	SAFETY SHOWER
14-AA79002-D200	19 MAN TEMPSC
VSAT-1	SATELLITE DISH
VSAT-2	SATELLITE DISH
TRANSFORMER-1	POWER TRANSFORMER 10MVA (FUTURE)
TRANSFORMER-2	POWER TRANSFORMER 10MVA (FUTURE)
TRANSFORMER-3	DIST TRANSFORMER 0.63MVA (FUTURE)
TRANSFORMER-4	DIST TRANSFORMER 0.63MVA (FUTURE)
TOTE-TANK-2	CHEMICAL INJECTION TOTE TANK
TOTE-TANK-3	CHEMICAL INJECTION TOTE TANK (SPARE)
TOTE-TANK-4	CHEMICAL INJECTION TOTE TANK (FUTURE)
TOTE-TANK-5	FRESHWATER TOTE TANK
TOTE-TANK-6	FRESHWATER TOTE TANK (SPARE)
FUTURE-MODULE-HPU	FUTURE HPU

NOTES

1. NO HAZARDOUS AREAS IDENTIFIED BASED ON EI15: AREA CLASSIFICATION CODE FOR INSTALLATIONS HANDLING FLAMMABLE FLUIDS.
2. DIESEL DELIVERY WILL BE AT LOW PRESSURE (<4.5barg).
3. TRANSFORMER FLUID IS MIDEL 7131. ANY FLUID EJECTED FROM THE TANK DURING AN ARCING FAULT WILL BE DEFLECTED BY THE VENT PIPE INTO THE TRANSFORMER BUND.
4. MEG INJECTION IS NNF AND IS HANDLED BELOW FLASH POINT.
5. THE OPEN LAYOUT AND LOWER GRATED DECKS WILL FACILITATE NATURAL VENTILATION.

ZONE 0

ZONE 0: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS CONTINUOUSLY PRESENT OR PRESENT FOR LONG PERIODS.

ZONE 1

ZONE 1: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS LIKELY TO OCCUR IN NORMAL OPERATION.

ZONE 2

ZONE 2: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS NOT LIKELY TO OCCUR IN NORMAL OPERATION AND, IF IT OCCURS, WILL EXIST ONLY FOR A SHORT PERIOD.

1m 2m 4m 6m 8m 10m 12m
SCALE 1:100

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		E1	04.02.15	RL	MCH	AMM	JNJ		FEED ISSUE
C001-05-35-99-GD200-0004	OFFSHORE STORAGE PLOT PLAN – WEATHER DECK (TOS EL.40000)	B1	18.12.14	AG	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

CLIENT: nationalgrid

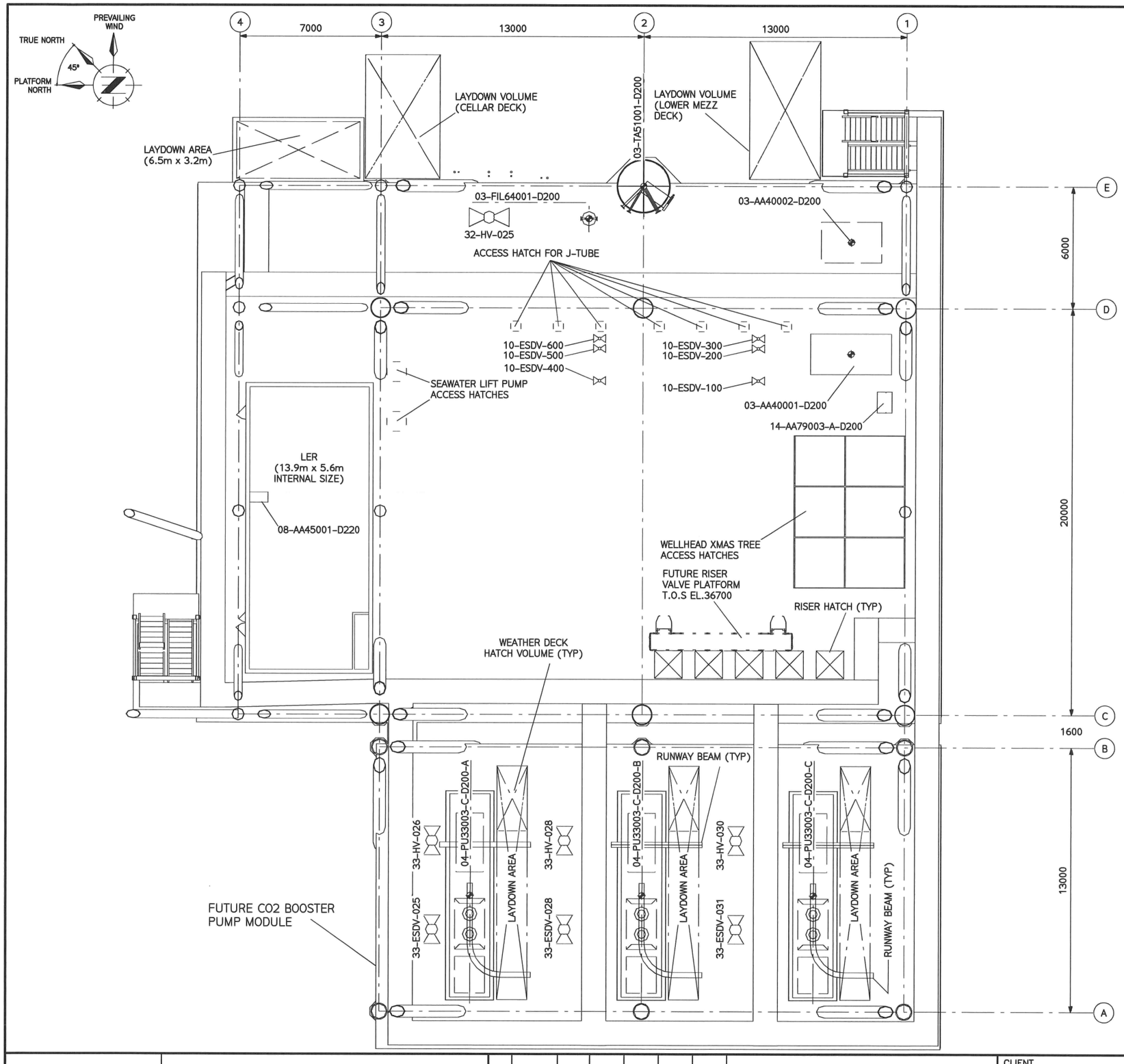
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
HAZARDOUS AREA CLASSIFICATION
OFFSHORE STORAGE
WEATHER DECK (TOS EL.40000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/25/99/GD200/0001/0001	1:100	1 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\HAZARDOUS AREA\C001-14-25-99-GD200-0001-0001 REV-E1.DWG



EQUIPMENT LIST	
03-AA40001-D200	CHEMICAL INJECTION PACKAGE
03-AA40002-D200	CHEMICAL INJECTION PACKAGE (FUTURE)
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
03-FIL64001-D200	MEG FILTER
04-PU33003-C-D200-A	CO2 BOOSTER PUMP (FUTURE)
04-PU33003-C-D200-B	CO2 BOOSTER PUMP (FUTURE)
04-PU33003-C-D200-C	CO2 BOOSTER PUMP (FUTURE)
08-AA45001-D220	BIOFOULING CONTROL PANEL
14-AA79003-A-D200	SAFETY SHOWER

NOTES

1. NO HAZARDOUS AREAS IDENTIFIED BASED ON EI15: AREA CLASSIFICATION CODE FOR INSTALLATIONS HANDLING FLAMMABLE FLUIDS.
2. MEG INJECTION IS NNF AND IS HANDLED BELOW FLASH POINT.
3. THE OPEN LAYOUT AND LOWER GRATED DECKS WILL FACILITATE NATURAL VENTILATION.
4. THE POSSIBILITY FOR THE PRESENCE OF A HAZARDOUS ATMOSPHERE DUE TO OIL MIST ACCUMULATION FROM THE PUMPS IS DEEMED UNLIKELY AS THE PLATFORM BENEFITS FROM GRATED DECKS AND AN OPEN LAYOUT.

ZONE 0

ZONE 0: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS CONTINUOUSLY PRESENT OR PRESENT FOR LONG PERIODS.

ZONE 1

ZONE 1: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS LIKELY TO OCCUR IN NORMAL OPERATION.

ZONE 2

ZONE 2: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS NOT LIKELY TO OCCUR IN NORMAL OPERATION AND, IF IT OCCURS, WILL EXIST ONLY FOR A SHORT PERIOD.

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
					MCH	AMM	JNJ		
		E1	04.02.15	RL	MCH	AMM	JNJ		FEED ISSUE
C001-05-35-99-GD200-0003	OFFSHORE STORAGE PLOT PLAN – UPPER MEZZ DECK (TOS EL.35000)	B1	18.12.14	AG	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	20.11.14	AG	RW	MCH			ISSUED FOR IDC

CLIENT: nationalgrid

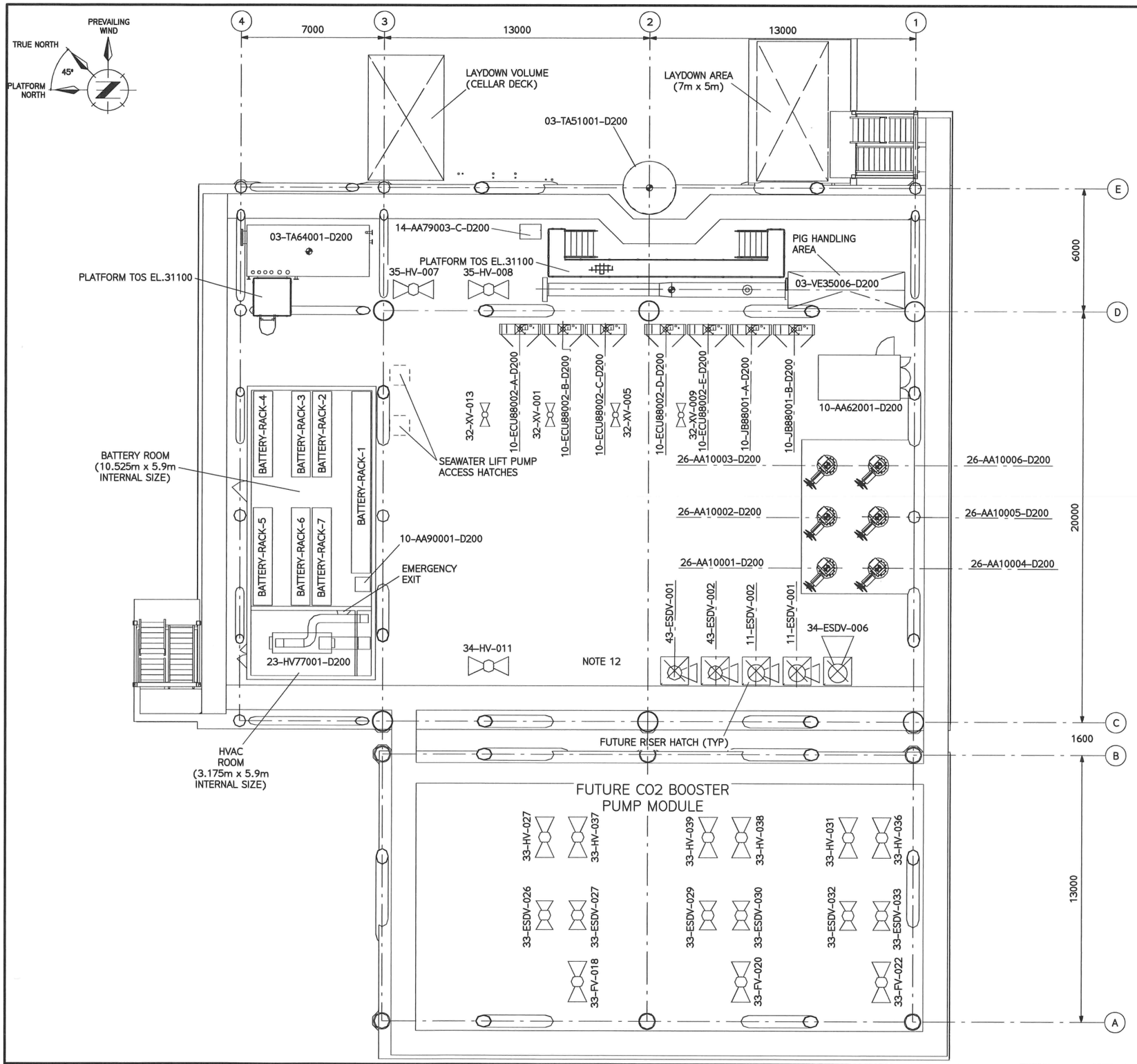
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
HAZARDOUS AREA CLASSIFICATION
OFFSHORE STORAGE
UPPER MEZZ DECK (TOS EL.35000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/25/99/GD200/0001/0002	1:100	2 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\HAZARDOUS AREA\C001-14-25-99-GD200-0001-0002 REV-E1.DWG



EQUIPMENT LIST	
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
03-TA64001-D200	MEG STORAGE TANK
10-AA62001-D200	WELLHEAD CONTROL PANEL & HPU
03-VE35006-D200	OFFSHORE STORAGE FACILITY PIG RECEIVER
26-AA10001-D200	WELLHEAD XMAS TREE
26-AA10002-D200	WELLHEAD XMAS TREE
26-AA10003-D200	WELLHEAD XMAS TREE
26-AA10004-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10005-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10006-D200	WELLHEAD XMAS TREE (FUTURE)
10-JB88001-A-D200	TOPSIDE TERMINATION JUNCTION BOX (FUTURE)
10-JB88001-B-D200	TOPSIDE TERMINATION JUNCTION BOX (FUTURE)
10-ECU88002-A-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-B-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-C-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-D-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-E-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
14-AA79003-C-D200	SAFETY SHOWER
23-HV77001-D200	AIR HANDLING UNIT
BATTERY-RACK-1-7	BATTERY RACK
10-AA90001-D200	NAVIGATION AID BATTERY

NOTES

1. NO HAZARDOUS AREAS IDENTIFIED BASED ON EI15: AREA CLASSIFICATION CODE FOR INSTALLATIONS HANDLING FLAMMABLE FLUIDS.
2. MEG INJECTION IS NNF AND IS HANDLED BELOW FLASH POINT.
3. THE OPEN LAYOUT AND LOWER GRATED DECKS WILL FACILITATE NATURAL VENTILATION.
4. BATTERY ROOM IS DESIGNATED NON-HAZARDOUS AND VENTILATION DILUTION REQUIREMENTS WILL MEET BS EN-50272-2 TO ENSURE CONCENTRATION REMAINS BELOW 4% (C001/04/10/HV/GD200/0001). CIRCUIT BREAKERS ARE LOCATED EXTERNAL TO THE BATTERY ROOM.

ZONE 0

ZONE 0: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS CONTINUOUSLY PRESENT OR PRESENT FOR LONG PERIODS.

ZONE 1

ZONE 1: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS LIKELY TO OCCUR IN NORMAL OPERATION.

ZONE 2

ZONE 2: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS NOT LIKELY TO OCCUR IN NORMAL OPERATION AND, IF IT OCCURS, WILL EXIST ONLY FOR A SHORT PERIOD.

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

					MCH	AMM	JNJ		
		E1	04.02.15	RL	MCH	ANM	JNJ		FEED ISSUE
C001-05-35-99-GD200-0002	OFFSHORE STORAGE PLOT PLAN – LOWER DECK MEZZ (TOS EL.30000)	B1	18.12.14	AG	MCH	ANM	JNJ		ISSUED FOR CLIENT COMMMENT
DRAWING No.	DRAWING TITLE	A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC
REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE

CLIENT: nationalgrid

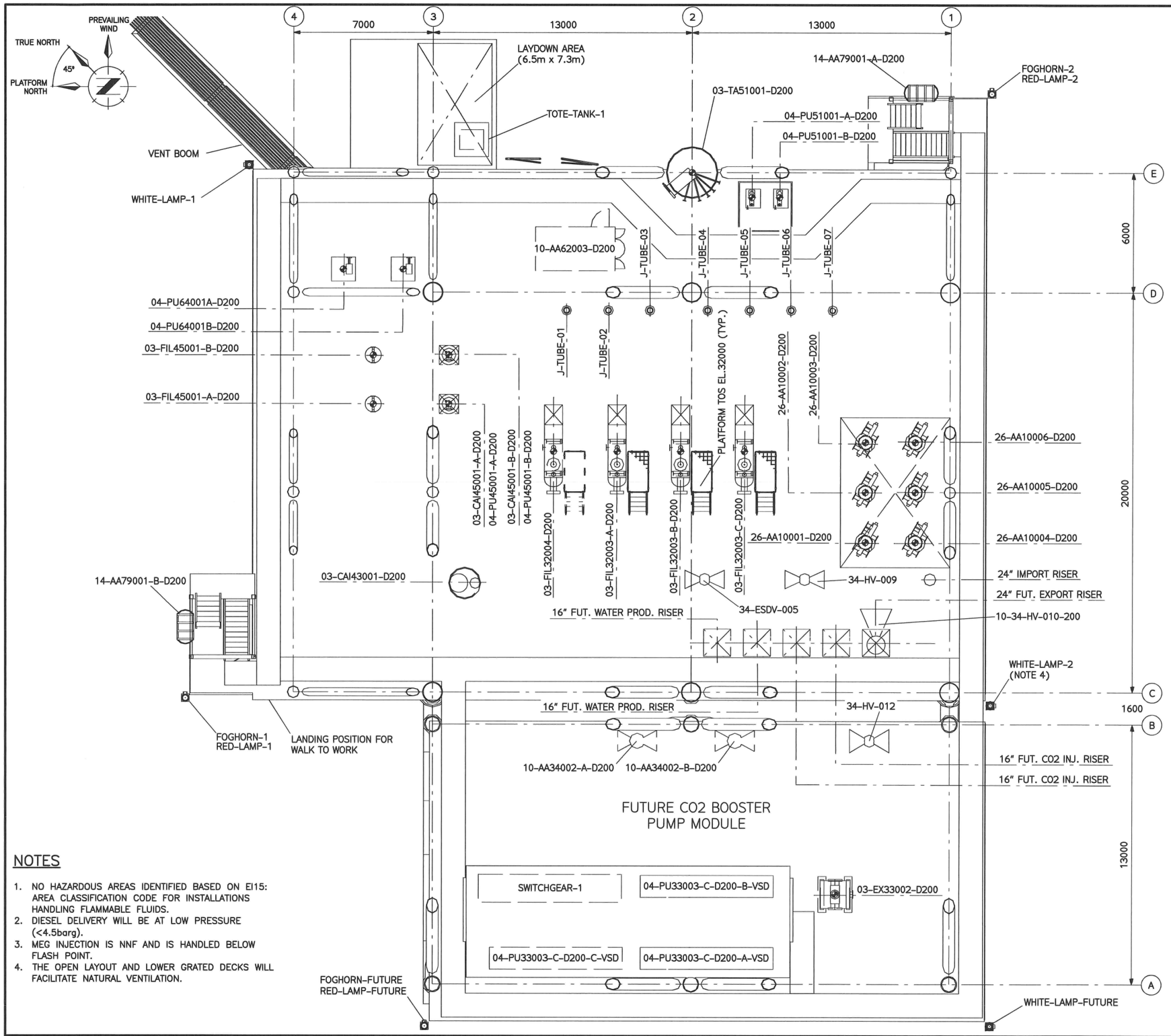
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
HAZARDOUS AREA CLASSIFICATION
OFFSHORE STORAGE
LOWER MEZZ DECK (TOS EL.30000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/25/99/GD200/0001/0003	1:100	30F 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\HAZARDOUS AREA\C001-14-25-99-GD200-0001-0003 REV-E1.DWG



NOTES

1. NO HAZARDOUS AREAS IDENTIFIED BASED ON EI15: AREA CLASSIFICATION CODE FOR INSTALLATIONS HANDLING FLAMMABLE FLUIDS.
2. DIESEL DELIVERY WILL BE AT LOW PRESSURE (<4.5barg).
3. MEG INJECTION IS NNF AND IS HANDLED BELOW FLASH POINT.
4. THE OPEN LAYOUT AND LOWER GRATED DECKS WILL FACILITATE NATURAL VENTILATION.

EQUIPMENT LIST

03-CAI43001-D200	PRODUCED WATER CAISSON
03-CAI45001-A-D200	SEAWATER-LIFT-PUMP-CAISSON
03-CAI45001-B-D200	SEAWATER-LIFT-PUMP-CAISSON
03-EX33002-D200	CO2 BOOSTER PUMPS RECYCLE COOLER (FUTURE)
03-FIL32003-A-D200	CO2 FINE FILTER
03-FIL32003-B-D200	CO2 FINE FILTER
03-FIL32003-C-D200	CO2 FINE FILTER
03-FIL32004-D200	CO2 FINE FILTER (FUTURE)
03-FIL45001-A-D200	SEAWATER LIFT PUMP FILTER
03-FIL45001-B-D200	SEAWATER LIFT PUMP FILTER
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
04-PU33003-C-D200-A-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU33003-C-D200-B-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU33003-C-D200-C-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU45001-A-D200	SEAWATER LIFT PUMP
04-PU45001-B-D200	SEAWATER LIFT PUMP
04-PU51001-A-D200	DIESEL TRANSFER PUMP
04-PU51001-B-D200	DIESEL TRANSFER PUMP
04-PU64001A-D200	MEG INJECTION PUMP
04-PU64001B-D200	MEG INJECTION PUMP
10-AA34002-A-D200	HIPPS PACKAGE (FUTURE)
10-AA34002-B-D200	HIPPS PACKAGE (FUTURE)
26-AA10001-D200	WELLHEAD XMAS TREE
26-AA10002-D200	WELLHEAD XMAS TREE
26-AA10003-D200	WELLHEAD XMAS TREE
26-AA10004-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10005-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10006-D200	WELLHEAD XMAS TREE (FUTURE)
SWITCHGEAR-1	6.6kV SWITCHGEAR 1200A (FUTURE)
TOTE-TANK-1	DRAINS TOTE TANK (5m3)
FOGHORN-1	NAVIGATION AID
FOGHORN-2	NAVIGATION AID
10-AA62003-D200	HPU (FUTURE)
J-TUBE-01	12" J TUBE
J-TUBE-02	12" J TUBE
J-TUBE-03	12" J TUBE
J-TUBE-04	12" J TUBE
J-TUBE-05	12" J TUBE
J-TUBE-06	12" J TUBE
J-TUBE-07	12" J TUBE
14-AA79001-A-D200	LIFE RAFT
14-AA79001-B-D200	LIFE RAFT
WHITE-LAMP-1	NAVIGATION AID
WHITE-LAMP-2	NAVIGATION AID
RED-LAMP-1	NAVIGATION AID
RED-LAMP-2	NAVIGATION AID
RED-LAMP-FUTURE	NAVIGATION AID (FUTURE)
WHITE-LAMP-FUTURE	NAVIGATION AID (FUTURE)
FOGHORN-FUTURE	NAVIGATION AID (FUTURE)

ZONE 0

ZONE 0: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS CONTINUOUSLY PRESENT OR PRESENT FOR LONG PERIODS.

ZONE 1

ZONE 1: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS LIKELY TO OCCUR IN NORMAL OPERATION.

ZONE 2

ZONE 2: THAT PART OF A HAZARDOUS AREA IN WHICH A FLAMMABLE ATMOSPHERE IS NOT LIKELY TO OCCUR IN NORMAL OPERATION AND, IF IT OCCURS, WILL EXIST ONLY FOR A SHORT PERIOD.

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	04.02.15	RL	MCH	ANM	JNJ		FEED ISSUE
B1	18.12.14	AG	MCH	ANM	JNJ		ISSUED FOR CLIENT COMMENT
A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

DRAWING No.: C001-05-35-99-GD200-0001 | DRAWING TITLE: OFFSHORE STORAGE PLOT PLAN – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

CLIENT: nationalgrid

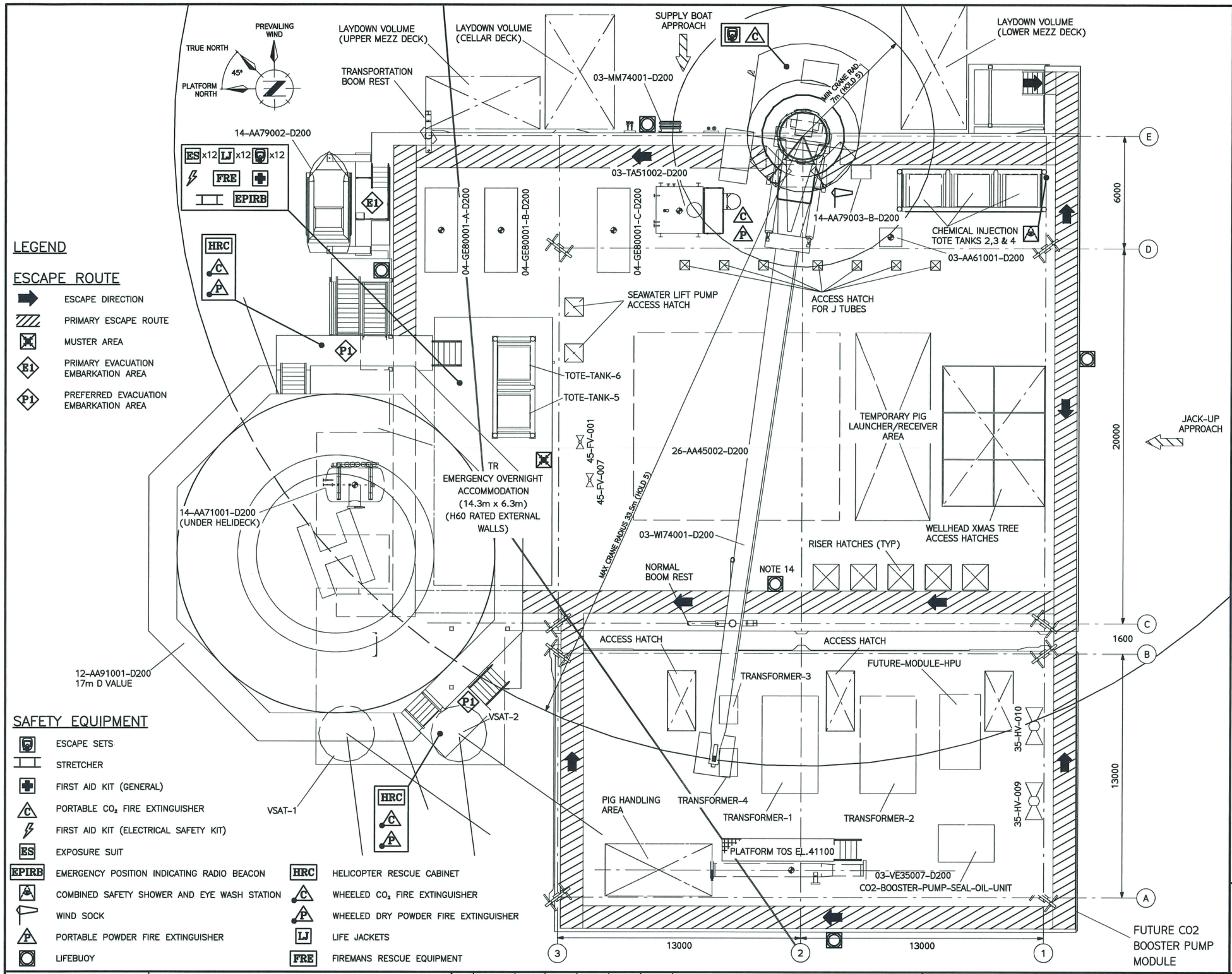
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
HAZARDOUS AREA CLASSIFICATION
OFFSHORE STORAGE
CELLAR DECK (TOS EL.25000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/25/99/GD200/0001/0004	1:100	4 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\HAZARDOUS AREA\C001-14-25-99-GD200-0001-0004 REV-E1.DWG



LEGEND

ESCAPE ROUTE

- ESCAPE DIRECTION
- PRIMARY ESCAPE ROUTE
- MUSTER AREA
- PRIMARY EVACUATION EMBARKATION AREA
- PREFERRED EVACUATION EMBARKATION AREA

SAFETY EQUIPMENT

- ESCAPE SETS
- STRETCHER
- FIRST AID KIT (GENERAL)
- PORTABLE CO_2 FIRE EXTINGUISHER
- FIRST AID KIT (ELECTRICAL SAFETY KIT)
- EXPOSURE SUIT
- EMERGENCY POSITION INDICATING RADIO BEACON
- COMBINED SAFETY SHOWER AND EYE WASH STATION
- WIND SOCK
- PORTABLE POWDER FIRE EXTINGUISHER
- LIFEBUOY
- HELICOPTER RESCUE CABINET
- WHEELED CO_2 FIRE EXTINGUISHER
- WHEELED DRY POWDER FIRE EXTINGUISHER
- LIFE JACKETS
- FIREMANS RESCUE EQUIPMENT

EQUIPMENT LIST

03-MM74001-D200	HOSE LOADING STATION
03-TA51002-D200	DIESEL SERVICE TANK
03-VE35007-D200	CO2 INJECTION WELL PIG LAUNCHER (FUTURE)
04-GE80001-A-D200	DIESEL GENERATOR PACKAGE
04-GE80001-B-D200	DIESEL GENERATOR PACKAGE
04-GE80001-C-D200	DIESEL GENERATOR PACKAGE
12-AA91001-D200	HELIDECK
26-AA45002-D200	WATER WASH PACKAGE (TEMPORARY)
03-WI74001-D200	PLATFORM CRANE
14-AA71001-D200	DIFFS HELIDECK FOAM PACKAGE
14-AA79003-B-D200	SAFETY SHOWER
14-AA79002-D200	19 MAN TEMPSC
VSAT-1	SATELLITE DISH
VSAT-2	SATELLITE DISH
TRANSFORMER-1	POWER TRANSFORMER 10MVA (FUTURE)
TRANSFORMER-2	POWER TRANSFORMER 10MVA (FUTURE)
TRANSFORMER-3	DIST TRANSFORMER 0.63MVA (FUTURE)
TRANSFORMER-4	DIST TRANSFORMER 0.63MVA (FUTURE)
TOTE-TANK-2	CHEMICAL INJECTION TOTE TANK
TOTE-TANK-3	CHEMICAL INJECTION TOTE TANK (SPARE)
TOTE-TANK-4	CHEMICAL INJECTION TOTE TANK (FUTURE)
TOTE-TANK-5	FRESHWATER TOTE TANK
TOTE-TANK-6	FRESHWATER TOTE TANK (SPARE)
FUTURE-MODULE-HPU	FUTURE HPU

NOTES

1. PERSONNEL ATTENDING THE PLATFORM MAY BE REQUIRED TO CARRY ESCAPE SETS ON THEIR PERSON. THE ESCAPE SETS SHALL BE OF SUFFICIENT CAPACITY TO ENABLE PERSONNEL TO REACH THE EOA.
2. THERE SHALL BE AT LEAST TWO DIVERSE ESCAPE ROUTES PROVIDED FROM EACH PRIMARY DECK LEADING TO THE EOA / EVACUATION EMBARKATION AREAS.
3. AS FAR AS PRACTICABLE, PRIMARY ESCAPE ROUTES SHOULD RUN ALONG THE PERIMETER OF THE DECK.
4. PRIMARY ESCAPE ROUTES SHOULD HAVE A MINIMUM CLEAR WIDTH OF 1000MM.
5. PRIMARY ESCAPE ROUTES RUNNING BETWEEN ANY DECKS SHALL BE PROVIDED WITH FIXED STAIRS (OR RAMPS IF PRACTICABLE) OF SUFFICIENT WIDTH TO ACCOMMODATE STRETCHERS – INCLUDING MANEUVERING OF STRETCHERS ON THE STAIR LANDING.
6. ESCAPE ROUTES SHALL BE CLEARLY SIGN POSTED AND PROVIDED WITH DIRECTION ARROWS.
7. ESCAPE ROUTES SHALL BE PROVIDED WITH EMERGENCY LIGHTING.
8. ESCAPE ROUTES SHALL REMAIN CLEAR AT ALL TIMES.
9. ANY HINGED DOORS OPENING ONTO ESCAPE ROUTES SHALL NOT BLOCK THE ESCAPE ROUTE. IF THERE IS POTENTIAL FOR DOORS TO BLOCK THE ESCAPE ROUTE, SLIDING DOORS SHOULD BE CONSIDERED. ANY DOORS OPENING ONTO ESCAPE ROUTES SHOULD BE SELF-CLOSING.
10. A WIND SOCK SHALL BE PROVIDED AT THE PLATFORM PRIMARILY FOR THE PURPOSES OF HELICOPTER INDICATION WHEN APPROACHING OR LEAVING THE HELIDECK.
11. ESCAPE SETS, INCLUDING SPARE UNITS TO BE LOCATED IN THE EOA AND THE TEMPSC.
12. ESCAPE DIRECTIONS BASED ON MOVING TO HIGHER ELEVATION AS QUICKLY AS POSSIBLE.
13. THE PREFERRED MEANS OF EVACUATION FROM THE PLATFORM WILL BE VIA HELICOPTER. HOWEVER, AS THE HELICOPTER MAY NOT ALWAYS BE AVAILABLE WHEN REQUIRED, THE PRIMARY MEANS OF EVACUATION SHALL BE VIA TEMPSC AND THE SECONDARY SHALL BE VIA LIFERAFT.
14. ADDITIONAL LIFEBUOY LOCATED ON THE WEST FACE OF THE PLATFORM PRIOR TO THE INSTALLATION OF THE FUTURE MODULE.

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	04.02.15	PH	MCH	AMM	JNJ		FEED ISSUE
B1	18.12.14	AG	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

REFERENCE DRAWINGS

C001-05-35-99-GD200-0004 — OFFSHORE STORAGE PLOT PLAN – WEATHER DECK (TOS EL.40000)

DRAWING No. — DRAWING TITLE

CLIENT: nationalgrid

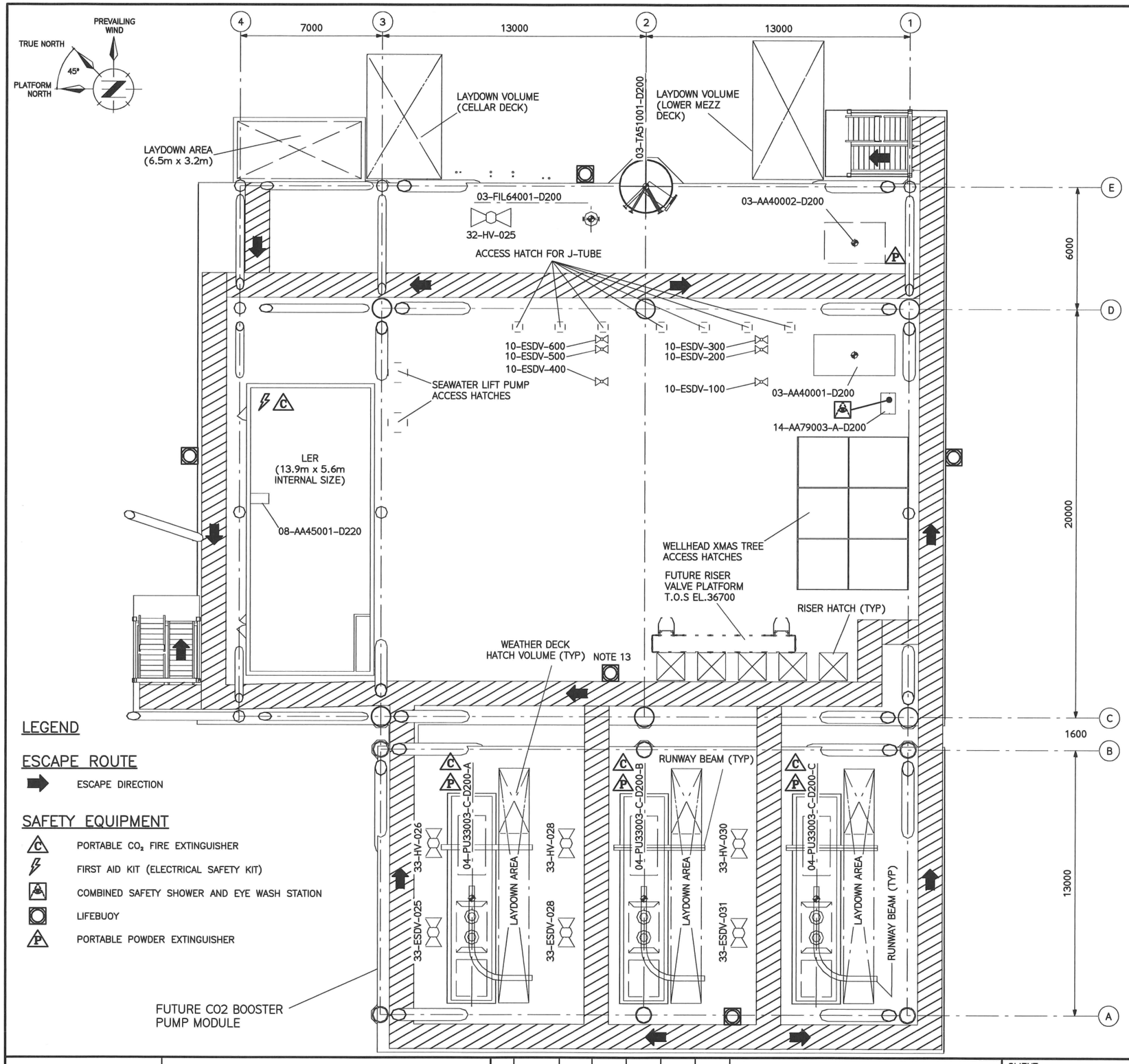
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
ESCAPE ROUTES AND SAFETY EQUIPMENT LAYOUTS
OFFSHORE STORAGE
WEATHER DECK (TOS EL.40000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/26/99/GD200/0001/0001	1:100	1 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\ESCAPE ROUTES AND SAFETY EQUIPMENT LAYOUTS\C001-14-26-99-GD200-0001-0001 REV-E1.DWG



LEGEND

ESCAPE ROUTE

ESCAPE DIRECTION

SAFETY EQUIPMENT

- PORTABLE CO_2 FIRE EXTINGUISHER
- FIRST AID KIT (ELECTRICAL SAFETY KIT)
- COMBINED SAFETY SHOWER AND EYE WASH STATION
- LIFEBUOY
- PORTABLE POWDER EXTINGUISHER

EQUIPMENT LIST

03-AA40001-D200	CHEMICAL INJECTION PACKAGE
03-AA40002-D200	CHEMICAL INJECTION PACKAGE (FUTURE)
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
03-FIL64001-D200	MEG FILTER
04-PU33003-C-D200-A	CO2 BOOSTER PUMP (FUTURE)
04-PU33003-C-D200-B	CO2 BOOSTER PUMP (FUTURE)
04-PU33003-C-D200-C	CO2 BOOSTER PUMP (FUTURE)
08-AA45001-D220	BIOFOULING CONTROL PANEL
14-AA79003-A-D200	SAFETY SHOWER

NOTES

1. PERSONNEL ATTENDING THE PLATFORM MAY BE REQUIRED TO CARRY ESCAPE SETS ON THEIR PERSON. THE ESCAPE SETS SHALL BE OF SUFFICIENT CAPACITY TO ENABLE PERSONNEL TO REACH THE EOA.
2. THERE SHALL BE AT LEAST TWO DIVERSE ESCAPE ROUTES PROVIDED FROM EACH PRIMARY DECK LEADING TO THE EOA / EVACUATION EMBARKATION AREAS.
3. AS FAR AS PRACTICABLE, PRIMARY ESCAPE ROUTES SHOULD RUN ALONG THE PERIMETER OF THE DECK.
4. PRIMARY ESCAPE ROUTES SHOULD HAVE A MINIMUM CLEAR WIDTH OF 1000MM.
5. PRIMARY ESCAPE ROUTES RUNNING BETWEEN DECKS SHOULD BE PROVIDED WITH FIXED STAIRS (OR RAMPS IF PRACTICABLE) OF SUFFICIENT WIDTH TO ACCOMMODATE STRETCHERS – INCLUDING MANOEUVRING OF STRETCHERS ON THE STAIR LANDING.
6. ESCAPE ROUTES SHALL BE CLEARLY SIGN POSTED AND PROVIDED WITH DIRECTION ARROWS.
7. ESCAPE ROUTES SHALL BE PROVIDED WITH EMERGENCY LIGHTING.
8. ESCAPE ROUTES SHALL REMAIN CLEAR AT ALL TIMES.
9. ANY HINGED DOORS OPENING ONTO ESCAPE ROUTES SHALL NOT BLOCK THE ESCAPE ROUTE. IF THERE IS POTENTIAL FOR DOORS TO BLOCK THE ESCAPE ROUTE, SLIDING DOORS SHOULD BE CONSIDERED. ANY DOORS OPENING ONTO ESCAPE ROUTES SHOULD BE SELF-CLOSING.
10. A WIND SOCK SHALL BE PROVIDED AT THE PLATFORM PRIMARILY FOR THE PURPOSES OF HELICOPTER INDICATION WHEN APPROACHING OR LEAVING THE HELIDECK.
11. ESCAPE SETS, INCLUDING SPARE UNITS TO BE LOCATED IN THE EOA AND THE TEMPSC.
12. ESCAPE DIRECTIONS BASED ON MOVING TO HIGHER ELEVATION AS QUICKLY AS POSSIBLE.
13. ADDITIONAL LIFEBUOY LOCATED ON THE WEST FACE OF THE PLATFORM PRIOR TO THE INSTALLATION OF THE FUTURE MODULE.

HOLDS

1. HANG OFF MODULE INTERFACE ARRANGEMENT.

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	04.02.15	PH	MCH	AMM	JNJ		FEED ISSUE
B1	18.12.14	AG	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

REFERENCE DRAWINGS

C001-05-35-99-GD200-0003 | OFFSHORE STORAGE PLOT PLAN – UPPER MEZZ DECK (TOS EL.35000)

DRAWING No. | DRAWING TITLE

CLIENT: nationalgrid

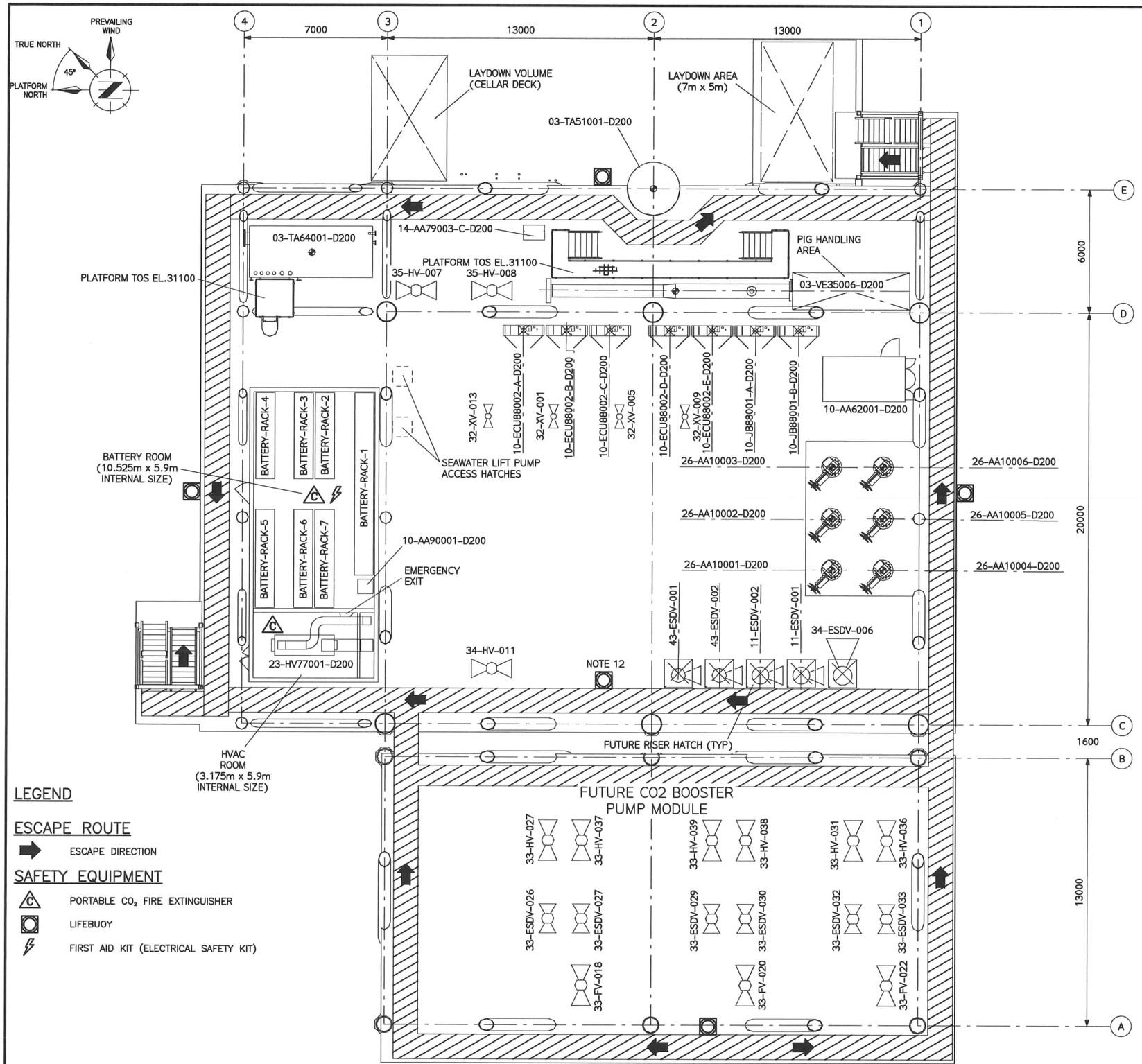
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
ESCAPE ROUTES AND SAFETY EQUIPMENT LAYOUTS
OFFSHORE STORAGE
UPPER MEZZ DECK (TOS EL.35000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/26/99/GD200/0001/0002	1:100	2 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\ESCAPE ROUTES AND SAFETY EQUIPMENT LAYOUTS\C001-14-26-99-GD200-0001-0002 REV-E1.DWG



LEGEND

ESCAPE ROUTE

ESCAPE DIRECTION

SAFETY EQUIPMENT

PORTABLE CO_2 FIRE EXTINGUISHER

LIFEBUOY

FIRST AID KIT (ELECTRICAL SAFETY KIT)

EQUIPMENT LIST

03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
03-TA64001-D200	MEG STORAGE TANK
10-AA62001-D200	WELLHEAD CONTROL PANEL & HPU
03-VE35006-D200	OFFSHORE STORAGE FACILITY PIG RECEIVER
26-AA10001-D200	WELLHEAD XMAS TREE
26-AA10002-D200	WELLHEAD XMAS TREE
26-AA10003-D200	WELLHEAD XMAS TREE
26-AA10004-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10005-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10006-D200	WELLHEAD XMAS TREE (FUTURE)
10-JB88001-A-D200	TOPSIDE TERMINATION JUNCTION BOX (FUTURE)
10-JB88001-B-D200	TOPSIDE TERMINATION JUNCTION BOX (FUTURE)
10-ECU88002-A-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-B-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-C-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-D-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-E-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
14-AA79003-C-D200	SAFETY SHOWER
23-HV77001-D200	AIR HANDLING UNIT
BATTERY-RACK-1-7	BATTERY RACK
10-AA90001-D200	NAVIGATION AID BATTERY

NOTES

1. PERSONNEL ATTENDING THE PLATFORM MAY BE REQUIRED TO CARRY ESCAPE SETS ON THEIR PERSON. THE ESCAPE SETS SHALL BE OF SUFFICIENT CAPACITY TO ENABLE PERSONNEL TO REACH THE EOA.
2. THERE SHALL BE AT LEAST TWO DIVERSE ESCAPE ROUTES PROVIDED FROM EACH PRIMARY DECK LEADING TO THE EOA / EVACUATION EMBARKATION AREAS.
3. AS FAR AS PRACTICABLE, PRIMARY ESCAPE ROUTES SHOULD RUN ALONG THE PERIMETER OF THE DECK.
4. PRIMARY ESCAPE ROUTES SHOULD HAVE A MINIMUM CLEAR WIDTH OF 1000MM.
5. PRIMARY ESCAPE ROUTES RUNNING BETWEEN DECKS SHOULD BE PROVIDED WITH FIXED STAIRS (OR RAMPS IF PRACTICABLE) OF SUFFICIENT WIDTH TO ACCOMMODATE STRETCHERS – INCLUDING MANOEUVRING OF STRETCHERS ON THE STAIR LANDING.
6. ESCAPE ROUTES SHALL BE CLEARLY SIGN POSTED AND PROVIDED WITH DIRECTION ARROWS.
7. ESCAPE ROUTES SHALL BE PROVIDED WITH EMERGENCY LIGHTING.
8. ESCAPE ROUTES SHALL REMAIN CLEAR AT ALL TIMES.
9. ANY HINGED DOORS OPENING ONTO ESCAPE ROUTES SHALL NOT BLOCK THE ESCAPE ROUTE. IF THERE IS POTENTIAL FOR DOORS TO BLOCK THE ESCAPE ROUTE, SLIDING DOORS SHOULD BE CONSIDERED. ANY DOORS OPENING ONTO ESCAPE ROUTES SHOULD BE SELF-CLOSING.
10. A WIND SOCK SHALL BE PROVIDED AT THE PLATFORM PRIMARILY FOR THE PURPOSES OF HELICOPTER INDICATION WHEN APPROACHING OR LEAVING THE HELIDECK.
11. ESCAPE SETS, INCLUDING SPARE UNITS TO BE LOCATED IN THE EOA AND THE TEMPSC.
12. ADDITIONAL LIFEBUOY LOCATED ON THE WEST FACE OF THE PLATFORM PRIOR TO THE INSTALLATION OF THE FUTURE MODULE.

HOLDS

1. HANG OFF MODULE INTERFACE ARRANGEMENT.

0 1m 2m 4m 6m 8m 10m 12m

SCALE 1:100

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
					MH	AMM	JNJ		
		E1	04.02.15	PH	MCH	AMM	JNJ		FEED ISSUE
C001-05-35-99-GD200-0002	OFFSHORE STORAGE PLOT PLAN – LOWER MEZZ DECK (TOS EL.30000)	B1	18.12.14	AG	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

CLIENT: nationalgrid

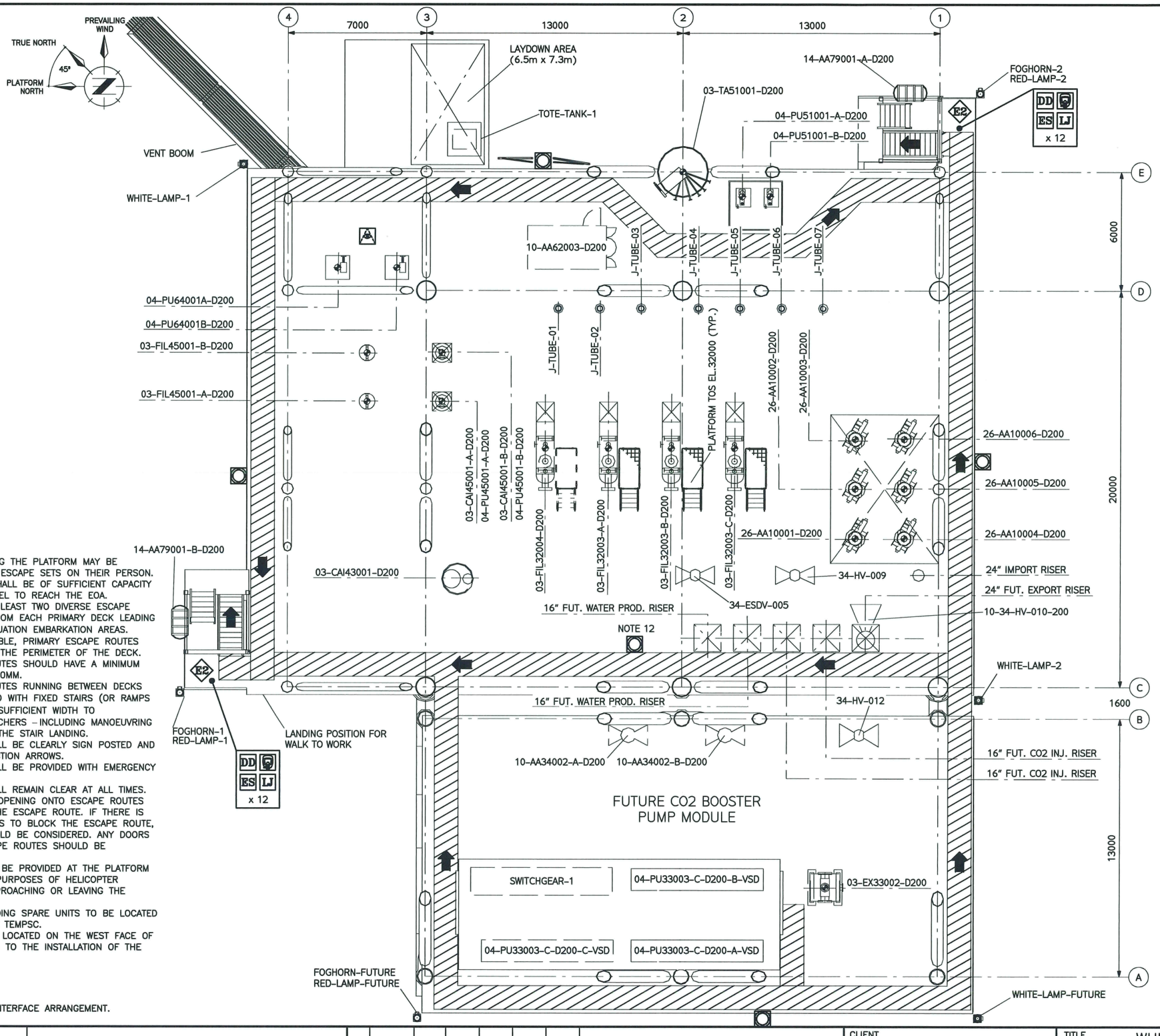
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
ESCAPE ROUTES AND SAFETY EQUIPMENT LAYOUTS
OFFSHORE STORAGE
LOWER MEZZ DECK (TOS EL.30000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/26/99/GD200/0001/0003	1:100	3 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\ESCAPE ROUTES AND SAFETY EQUIPMENT LAYOUTS\C001-14-26-99-GD200-0001-0003 REV-E1.DWG



NOTES

1. PERSONNEL ATTENDING THE PLATFORM MAY BE REQUIRED TO CARRY ESCAPE SETS ON THEIR PERSON. THE ESCAPE SETS SHALL BE OF SUFFICIENT CAPACITY TO ENABLE PERSONNEL TO REACH THE EOA.
2. THERE SHALL BE AT LEAST TWO DIVERSE ESCAPE ROUTES PROVIDED FROM EACH PRIMARY DECK LEADING TO THE EOA / EVACUATION EMBARKATION AREAS.
3. AS FAR AS PRACTICABLE, PRIMARY ESCAPE ROUTES SHOULD RUN ALONG THE PERIMETER OF THE DECK.
4. PRIMARY ESCAPE ROUTES SHOULD HAVE A MINIMUM CLEAR WIDTH OF 1000MM.
5. PRIMARY ESCAPE ROUTES RUNNING BETWEEN DECKS SHOULD BE PROVIDED WITH FIXED STAIRS (OR RAMPS IF PRACTICABLE) OF SUFFICIENT WIDTH TO ACCOMMODATE STRETCHERS – INCLUDING MANOEUVRING OF STRETCHERS ON THE STAIR LANDING.
6. ESCAPE ROUTES SHALL BE CLEARLY SIGN POSTED AND PROVIDED WITH DIRECTION ARROWS.
7. ESCAPE ROUTES SHALL BE PROVIDED WITH EMERGENCY LIGHTING.
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9. ANY HINGED DOORS OPENING ONTO ESCAPE ROUTES SHALL NOT BLOCK THE ESCAPE ROUTE. IF THERE IS POTENTIAL FOR DOORS TO BLOCK THE ESCAPE ROUTE, SLIDING DOORS SHOULD BE CONSIDERED. ANY DOORS OPENING ONTO ESCAPE ROUTES SHOULD BE SELF-CLOSING.
10. A WIND SOCK SHALL BE PROVIDED AT THE PLATFORM PRIMARILY FOR THE PURPOSES OF HELICOPTER INDICATION WHEN APPROACHING OR LEAVING THE HELIDECK.
11. ESCAPE SETS, INCLUDING SPARE UNITS TO BE LOCATED IN THE EOA AND THE TEMPSC.
12. ADDITIONAL LIFEBUOY LOCATED ON THE WEST FACE OF THE PLATFORM PRIOR TO THE INSTALLATION OF THE FUTURE MODULE.

HOLDS

1. HANG OFF MODULE INTERFACE ARRANGEMENT.

EQUIPMENT LIST

03-CAI43001-D200	PRODUCED WATER CAISSON
03-CAI45001-A-D200	SEAWATER-LIFT-PUMP-CAISSON
03-CAI45001-B-D200	SEAWATER-LIFT-PUMP-CAISSON
03-EX33002-D200	CO2 BOOSTER PUMPS RECYCLE COOLER (FUTURE)
03-FIL32003-A-D200	CO2 FINE FILTER
03-FIL32003-B-D200	CO2 FINE FILTER
03-FIL32003-C-D200	CO2 FINE FILTER
03-FIL32004-D200	CO2 FINE FILTER (FUTURE)
03-FIL45001-A-D200	SEAWATER LIFT PUMP FILTER
03-FIL45001-B-D200	SEAWATER LIFT PUMP FILTER
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
04-PU33003-C-D200-A-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU33003-C-D200-B-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU33003-C-D200-C-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU45001-A-D200	SEAWATER LIFT PUMP
04-PU45001-B-D200	SEAWATER LIFT PUMP
04-PU51001-A-D200	DIESEL TRANSFER PUMP
04-PU51001-B-D200	DIESEL TRANSFER PUMP
04-PU64001A-D200	MEG INJECTION PUMP
04-PU64001B-D200	MEG INJECTION PUMP
10-AA34002-A-D200	HIPPS PACKAGE (FUTURE)
10-AA34002-B-D200	HIPPS PACKAGE (FUTURE)
26-AA10001-D200	WELLHEAD XMAS TREE
26-AA10002-D200	WELLHEAD XMAS TREE
26-AA10003-D200	WELLHEAD XMAS TREE
26-AA10004-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10005-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10006-D200	WELLHEAD XMAS TREE (FUTURE)
SWITCHGEAR-1	6.6kV SWITCHGEAR 1200A (FUTURE)
TOTE-TANK-1	DRAINS TOTE TANK (5m3)

LEGEND

ESCAPE ROUTE

- ESCAPE DIRECTION
- E2 — SECONDARY EVACUATION EMBARKATION AREA

SAFETY EQUIPMENT

- LIFEBUOY
- DD — DESCENT DEVICE
- LJ — LIFE JACKET
- ES — EXPOSURE SUIT
- ESCAPE SET
- COMBINED SAFETY SHOWER AND EYE WASH STATION

SCALE 0 1m 2m 4m 6m 8m 10m 12m — 1:100

DRAWING No.	DRAWING TITLE
C001-05-35-99-GD200-0001	OFFSHORE STORAGE PLOT PLAN – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	04.02.15	PH	MCH	AMM	JNJ		FEED ISSUE
B1	18.12.14	AG	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

CLIENT: nationalgrid

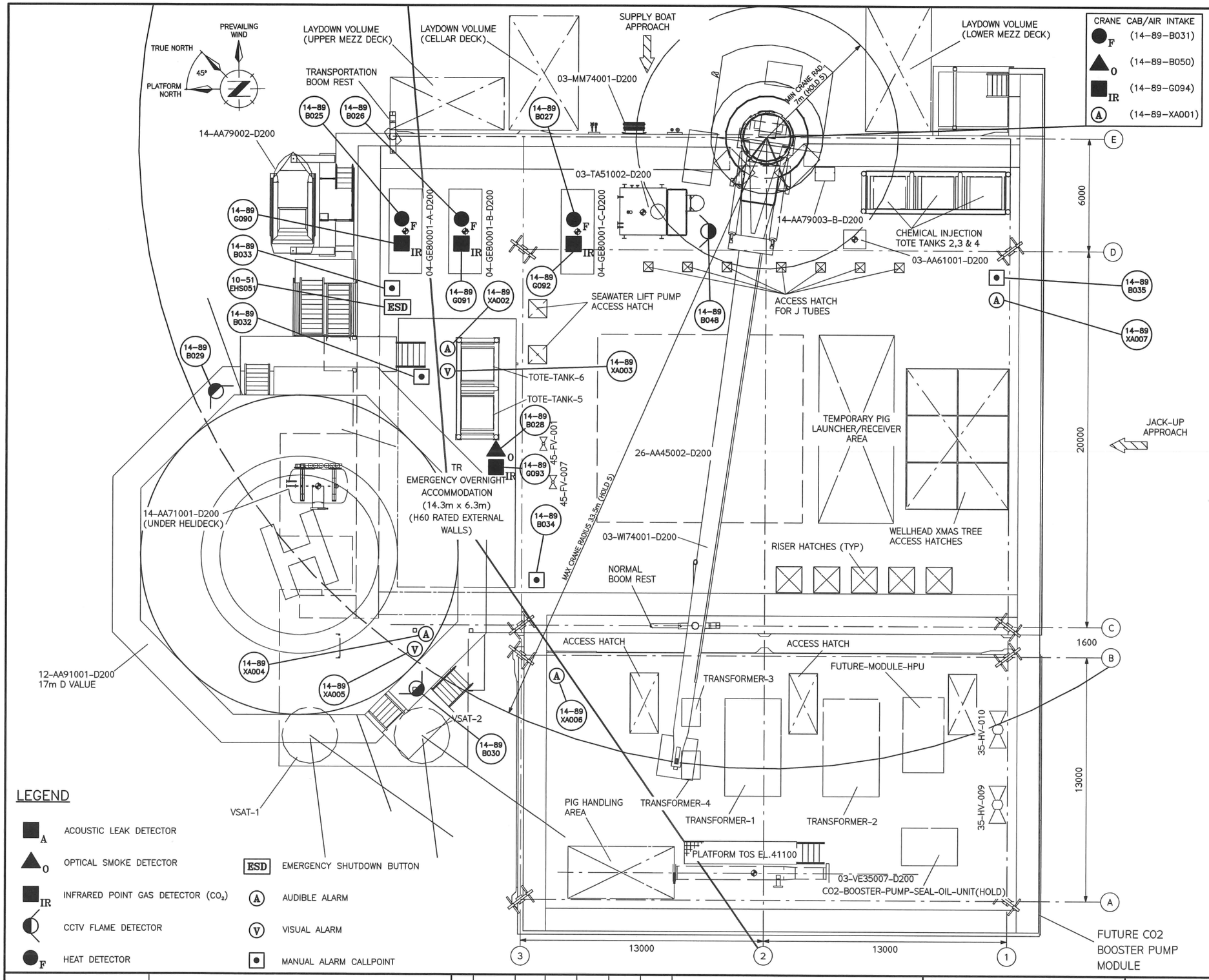
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
ESCAPE ROUTES AND SAFETY EQUIPMENT LAYOUTS
OFFSHORE STORAGE
CELLAR DECK (TOS EL.25000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/26/99/GD200/0001/0004	1:100	4 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\ESCAPE ROUTES AND SAFETY EQUIPMENT LAYOUTS\C001-14-26-99-GD200-0001-0004 REV-E1.DWG



LEGEND

- A — ACOUSTIC LEAK DETECTOR
- O — OPTICAL SMOKE DETECTOR
- IR — INFRARED POINT GAS DETECTOR (CO_2)
- CCTV FLAME DETECTOR
- F — HEAT DETECTOR
- ESD — EMERGENCY SHUTDOWN BUTTON
- (A) — AUDIBLE ALARM
- (V) — VISUAL ALARM
- MANUAL ALARM CALLPOINT

EQUIPMENT LIST

03-MM74001-D200	HOSE LOADING STATION
03-TA51002-D200	DIESEL SERVICE TANK
03-VE35007-D200	CO2 INJECTION WELL PIG LAUNCHER (FUTURE)
04-GE80001-A-D200	DIESEL GENERATOR PACKAGE
04-GE80001-B-D200	DIESEL GENERATOR PACKAGE
04-GE80001-C-D200	DIESEL GENERATOR PACKAGE
12-AA91001-D200	HELIDECK
26-AA45002-D200	WATER WASH PACKAGE (TEMPORARY)
03-WI74001-D200	PLATFORM CRANE
14-AA71001-D200	DIFFS HELIDECK FOAM PACKAGE
14-AA79003-B-D200	SAFETY SHOWER
14-AA79002-D200	19 MAN TEMPSC
VSAT-1	SATELLITE DISH
VSAT-2	SATELLITE DISH
TRANSFORMER-1	POWER TRANSFORMER 10MVA (FUTURE)
TRANSFORMER-2	POWER TRANSFORMER 10MVA (FUTURE)
TRANSFORMER-3	DIST TRANSFORMER 0.63MVA (FUTURE)
TRANSFORMER-4	DIST TRANSFORMER 0.63MVA (FUTURE)
TOTE-TANK-2	CHEMICAL INJECTION TOTE TANK
TOTE-TANK-3	CHEMICAL INJECTION TOTE TANK (SPARE)
TOTE-TANK-4	CHEMICAL INJECTION TOTE TANK (FUTURE)
TOTE-TANK-5	FRESHWATER TOTE TANK
TOTE-TANK-6	FRESHWATER TOTE TANK (SPARE)
FUTURE-MODULE-HPU	FUTURE HPU

NOTES

1. THE EOA SHALL BE PROVIDED WITH AN HVAC SYSTEM WITH POSITIVE PRESSURISATION TO PREVENT CO_2 GAS INGRESS. THE SYSTEM SHALL BE PROVIDED WITH CO_2 IR POINT DETECTORS AT THE INLET TO ENABLE CLOSURE OF THE DAMPERS ON CONFIRMED CO2 DETECTION.
2. PERSONNEL SHALL BE EQUIPPED WITH PERSONAL CO_2 MONITORS AND HAVE ACCESS TO ESCAPE SETS.
3. GENERAL ALARM SYSTEM AND VISIBLE WARNING DEVICES (BEACONS) TO WARN PERSONNEL OF INCIDENTS AND ALLOW THEM TO TAKE APPROPRIATE ACTIONS.
4. ALARM TONE NOTIFICATION FOR THE FIRE AND CO_2 DETECTION AND ALARM SYSTEM WILL INCLUDE DIFFERENT TONES FOR FIRE DETECTION, CO_2 DETECTION AND SIGNAL TO ABANDON FACILITY.
5. THE REQUIREMENTS FOR MACS SHALL BE AS OUTLINED IN THE PROJECT GAS LEAK DETECTION AND CONTROL PHILOSOPHY (C001.14.09.99.GD000.0001).
6. WARNING LIGHTS SHALL BE PROVIDED AT THE HELIDECK FOR VISUAL INDICATION OF THE HEIGHT OF THE PLATFORM. WAVE OFF LIGHTS SHALL ALSO BE PROVIDED.
8. THE FOLLOWING ALARM SET POINTS AS DEFINED IN THE GAS LEAK DETECTION AND CONTROL PHILOSOPHY (C001.14.09.99.GD000.0001).

DETECTOR TYPE	HIGH (ALERT)[1]	HIGH-HIGH (ACTION)[2]
INFRARED POINT DETECTOR	0.5%	1.5%
OPEN PATH DETECTOR	50,000 ppm.m[3]	150,000 ppm.m[3]

1. LONG TERM EXPOSURE LIMIT (LTEL) AVERAGED OVER 8 HOURS.
2. SHORT TERM EXPOSURE LIMIT (STEL) AVERAGED OVER 15 MINUTES.
3. BASED ON A 10M PATH LENGTH – TO BE VERIFIED AS PART OF PROJECT.

HOLDS

1. NUMBERS AND LOCATIONS OF DETECTORS PENDING ROOM CONFIGURATIONS.

0 1m 2m 4m 6m 8m 10m 12m
SCALE 1:100

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E2	17.02.15	PH	MCH	AMM	JNJ		REISSUED FOR FEED
E1	05.02.15	AG	MCH	AMM	JNJ		FEED ISSUE
B1	18.12.14	AMP	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

REFERENCE DRAWINGS

C001-05-35-99-GD200-0004 — OFFSHORE STORAGE PLOT PLAN – WEATHER DECK (TOS EL.40000)

DRAWING No. / DRAWING TITLE

CLIENT: nationalgrid

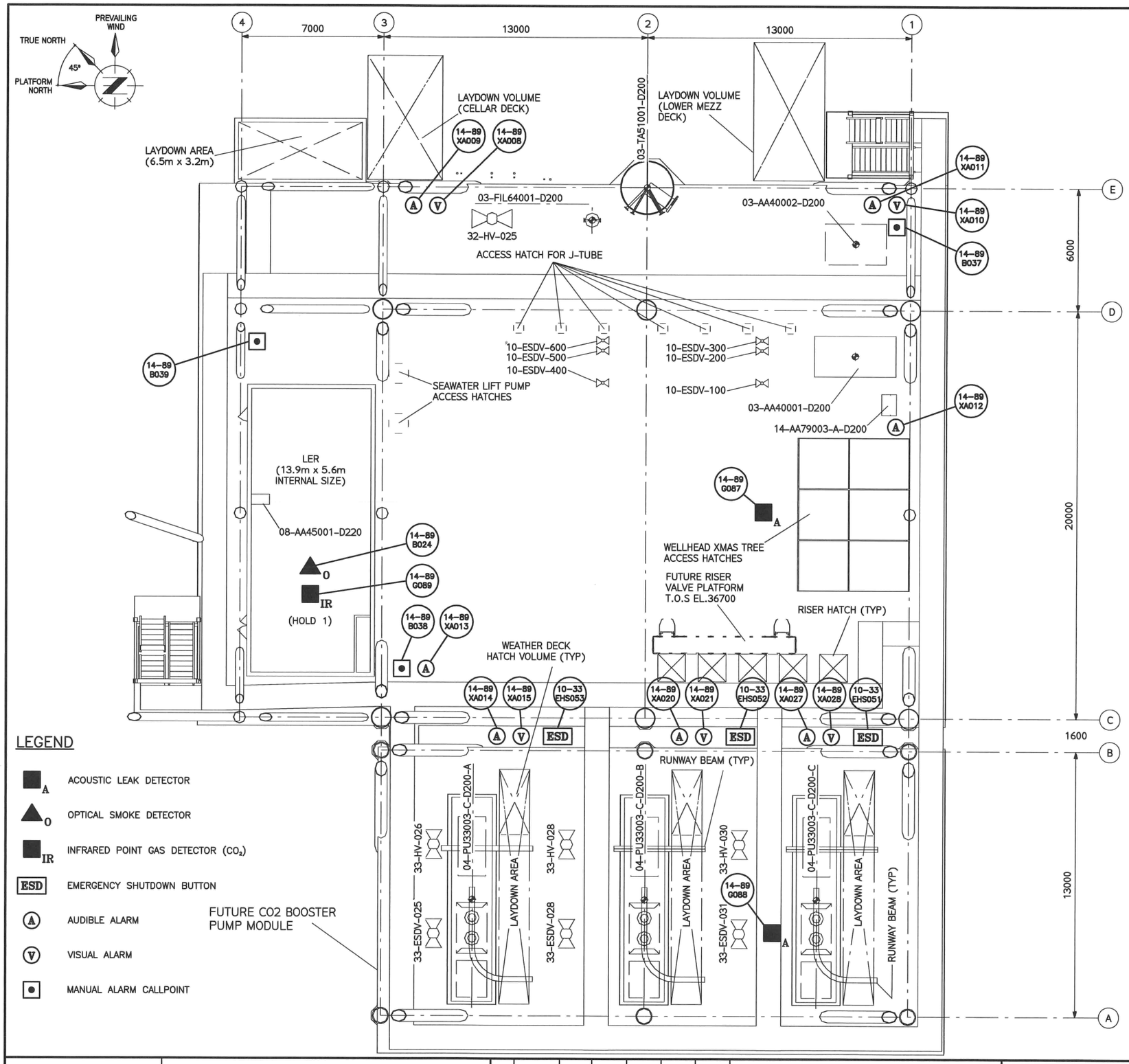
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CO_2 AND FIRE DETECTOR LAYOUTS
OFFSHORE STORAGE
WEATHER DECK (TOS EL.40000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/26/99/GD200/0002/0001	1:100	10F 4	E2

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\C02 & FIRE DETECTION\C001-14-26-99-GD200-0002-0001 REV-E2.DWG



LEGEND

- ACOUSTIC LEAK DETECTOR
- OPTICAL SMOKE DETECTOR
- INFRARED POINT GAS DETECTOR (CO_2)
- EMERGENCY SHUTDOWN BUTTON
- AUDIBLE ALARM
- VISUAL ALARM
- MANUAL ALARM CALLPOINT

EQUIPMENT LIST

03-AA40001-D200	CHEMICAL INJECTION PACKAGE
03-AA40002-D200	CHEMICAL INJECTION PACKAGE (FUTURE)
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
03-FIL64001-D200	MEG FILTER
04-PU33003-C-D200-A	CO2 BOOSTER PUMP (FUTURE)
04-PU33003-C-D200-B	CO2 BOOSTER PUMP (FUTURE)
04-PU33003-C-D200-C	CO2 BOOSTER PUMP (FUTURE)
08-AA45001-D220	BIOFOULING CONTROL PANEL
14-AA79003-A-D200	SAFETY SHOWER

NOTES

1. THE EOA SHALL BE PROVIDED WITH AN HVAC SYSTEM WITH POSITIVE PRESSURISATION TO PREVENT CO_2 GAS INGRESS. THE SYSTEM SHALL BE PROVIDED WITH CO_2 IR POINT DETECTORS AT THE INLET TO ENABLE CLOSURE OF THE DAMPERS ON CONFIRMED CO2 DETECTION.
2. PERSONNEL SHALL BE EQUIPPED WITH PERSONAL CO_2 MONITORS AND HAVE ACCESS TO ESCAPE SETS.
3. GENERAL ALARM SYSTEM AND VISIBLE WARNING DEVICES (BEACONS) TO WARN PERSONNEL OF INCIDENTS AND ALLOW THEM TO TAKE APPROPRIATE ACTIONS.
4. ALARM TONE NOTIFICATION FOR THE FIRE AND CO_2 DETECTION AND ALARM SYSTEM WILL INCLUDE DIFFERENT TONES FOR FIRE DETECTION, CO_2 DETECTION AND SIGNAL TO ABANDON FACILITY.
5. THE REQUIREMENTS FOR MACS SHALL BE AS OUTLINED IN THE PROJECT GAS LEAK DETECTION AND CONTROL PHILOSOPHY (C001.14.09.99.GD000.0001).
6. WARNING LIGHTS SHALL BE PROVIDED AT THE HELIDECK FOR VISUAL INDICATION OF THE HEIGHT OF THE PLATFORM. WAVE OFF LIGHTS SHALL ALSO BE PROVIDED.
7. THE FOLLOWING ALARM SET POINTS AS DEFINED IN THE GAS LEAK DETECTION AND CONTROL PHILOSOPHY (C001.14.09.99.GD000.0001).

Detector Type	High (Alert) [1]	High-High (Action) [2]
Infrared Point Detector	0.5%	1.5%
Open Path Detectors	50,000 ppm.m [3]	150,000 ppm.m [3]

1. LONG TERM EXPOSURE LIMIT (LTEL) AVERAGED OVER 8 HOURS.
2. SHORT TERM EXPOSURE LIMIT (STEL) AVERAGED OVER 15 MINUTES.
3. BASED ON A 10M PATH LENGTH – TO BE VERIFIED AS PART OF PROJECT.

HOLDS

1. NUMBERS AND LOCATIONS OF DETECTORS PENDING ROOM CONFIGURATIONS.

0 1m 2m 4m 6m 8m 10m 12m
SCALE 1:100

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	05.02.15	AG	MCH	AMM	JNJ		FEED ISSUE
B1	18.12.14	AMP	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

DRAWING No.: C001-05-35-99-GD200-0003
DRAWING TITLE: OFFSHORE STORAGE PLOT PLAN – UPPER MEZZ DECK (TOS EL.35000)
REFERENCE DRAWINGS

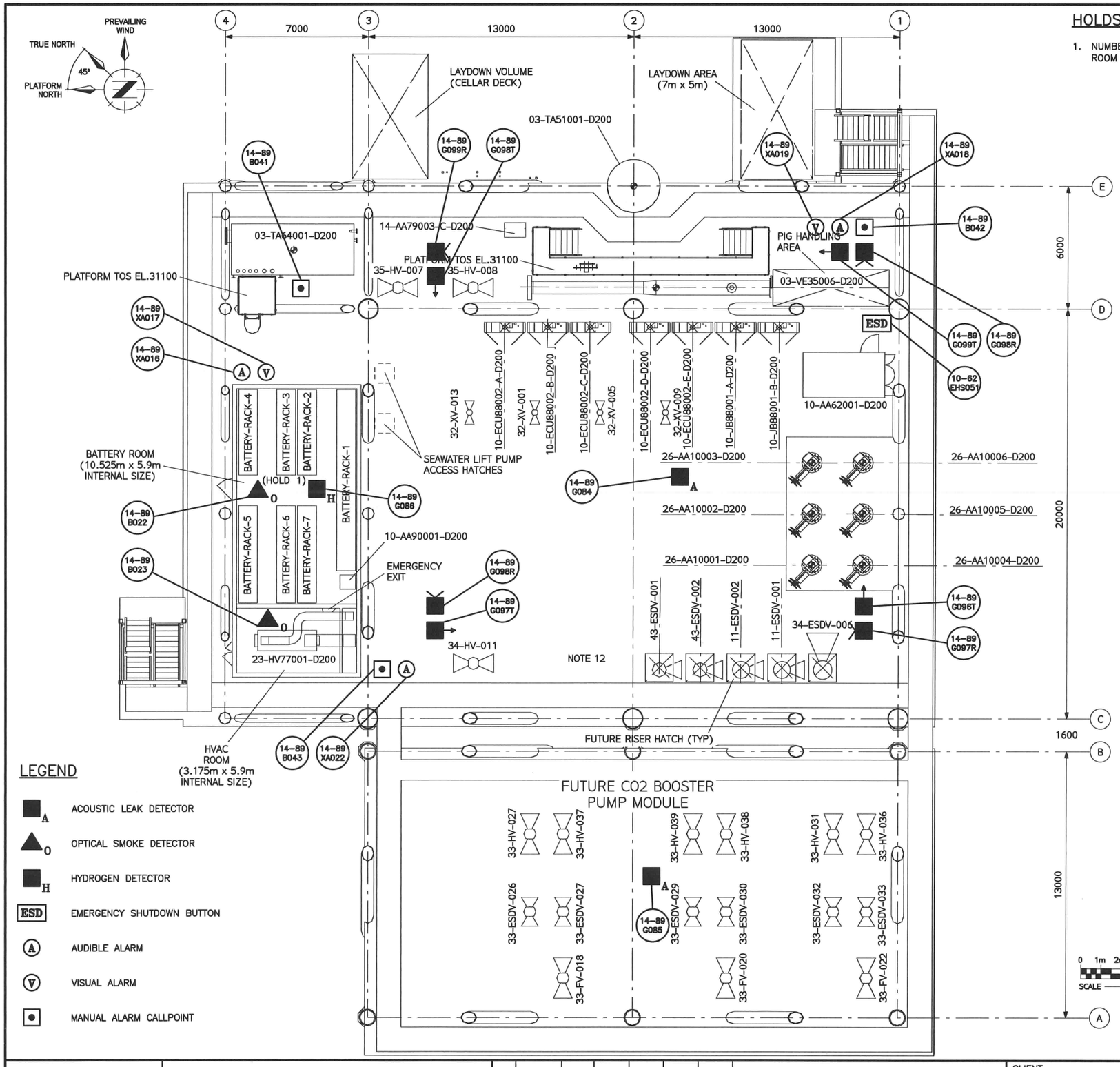
CLIENT: nationalgrid
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CO_2 AND FIRE DETECTOR LAYOUTS
OFFSHORE STORAGE
UPPER MEZZ DECK (TOS EL.35000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/26/99/GD200/0002/0002	1:100	2 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\C02 & FIRE DETECTION\C001-14-26-99-GD200-0002-0002 REV-E1.DWG



HOLDS

1. NUMBERS AND LOCATIONS OF DETECTORS PENDING ROOM CONFIGURATIONS.

LEGEND

- A — ACOUSTIC LEAK DETECTOR
- 0 — OPTICAL SMOKE DETECTOR
- H — HYDROGEN DETECTOR
- ESD — EMERGENCY SHUTDOWN BUTTON
- (A) — AUDIBLE ALARM
- (V) — VISUAL ALARM
- ● — MANUAL ALARM CALLPOINT

EQUIPMENT LIST

03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
03-TA64001-D200	MEG STORAGE TANK
10-AA62001-D200	WELLHEAD CONTROL PANEL & HPU
03-VE35006-D200	OFFSHORE STORAGE FACILITY PIG RECEIVER
26-AA10001-D200	WELLHEAD XMAS TREE
26-AA10002-D200	WELLHEAD XMAS TREE
26-AA10003-D200	WELLHEAD XMAS TREE
26-AA10004-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10005-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10006-D200	WELLHEAD XMAS TREE (FUTURE)
10-JB88001-A-D200	TOPSIDE TERMINATION JUNCTION BOX (FUTURE)
10-JB88001-B-D200	TOPSIDE TERMINATION JUNCTION BOX (FUTURE)
10-ECU88002-A-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-B-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-C-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-D-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
10-ECU88002-E-D200	TOPSIDE UMBILICAL TERMINATION UNIT (FUTURE)
14-AA79003-C-D200	SAFETY SHOWER
23-HV77001-D200	AIR HANDLING UNIT
BATTERY-RACK-1-7	BATTERY RACK
10-AA90001-D200	NAVIGATION AID BATTERY

NOTES

1. THE EOA SHALL BE PROVIDED WITH AN HVAC SYSTEM WITH POSITIVE PRESSURISATION TO PREVENT CO_2 GAS INGRESS. THE SYSTEM SHALL BE PROVIDED WITH CO_2 IR POINT DETECTORS AT THE INLET TO ENABLE CLOSURE OF THE DAMPERS ON CONFIRMED CO2 DETECTION.
2. PERSONNEL SHALL BE EQUIPPED WITH PERSONAL CO_2 MONITORS AND HAVE ACCESS TO ESCAPE SETS.
3. GENERAL ALARM SYSTEM AND VISIBLE WARNING DEVICES (BEACONS) TO WARN PERSONNEL OF INCIDENTS AND ALLOW THEM TO TAKE APPROPRIATE ACTIONS.
4. ALARM TONE NOTIFICATION FOR THE FIRE AND CO_2 DETECTION AND ALARM SYSTEM WILL INCLUDE DIFFERENT TONES FOR FIRE DETECTION, CO_2 DETECTION AND SIGNAL TO ABANDON FACILITY.
5. THE REQUIREMENTS FOR MACS SHALL BE AS OUTLINED IN THE PROJECT GAS LEAK DETECTION AND CONTROL PHILOSOPHY (C001.14.09.99.GD000.0001).
6. WARNING LIGHTS SHALL BE PROVIDED AT THE HELIDECK FOR VISUAL INDICATION OF THE HEIGHT OF THE PLATFORM. WAVE OFF LIGHTS SHALL ALSO BE PROVIDED.
8. THE FOLLOWING ALARM SET POINTS AS DEFINED IN THE GAS LEAK DETECTION AND CONTROL PHILOSOPHY (C001.14.09.99.GD000.0001).

Detector Type	High (Alert) [1]	High-High (Action) [2]
Infrared Point Detector	0.5%	1.5%
Open Path Detectors	50,000 ppm.m [3]	150,000 ppm.m [3]

1. LONG TERM EXPOSURE LIMIT (LTEL) AVERAGED OVER 8 HOURS.
2. SHORT TERM EXPOSURE LIMIT (STEL) AVERAGED OVER 15 MINUTES.
3. BASED ON A 10M PATH LENGTH – TO BE VERIFIED AS PART OF PROJECT.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		E1	05.02.15	AG	MCH	AMM	JNJ		FEED ISSUE
C001-05-35-99-GD200-0002	OFFSHORE STORAGE PLOT PLAN – LOWER MEZZ DECK (TOS EL.30000)	B1	18.12.14	AMP	MCH	AMM	JNJ		ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

CLIENT: nationalgrid

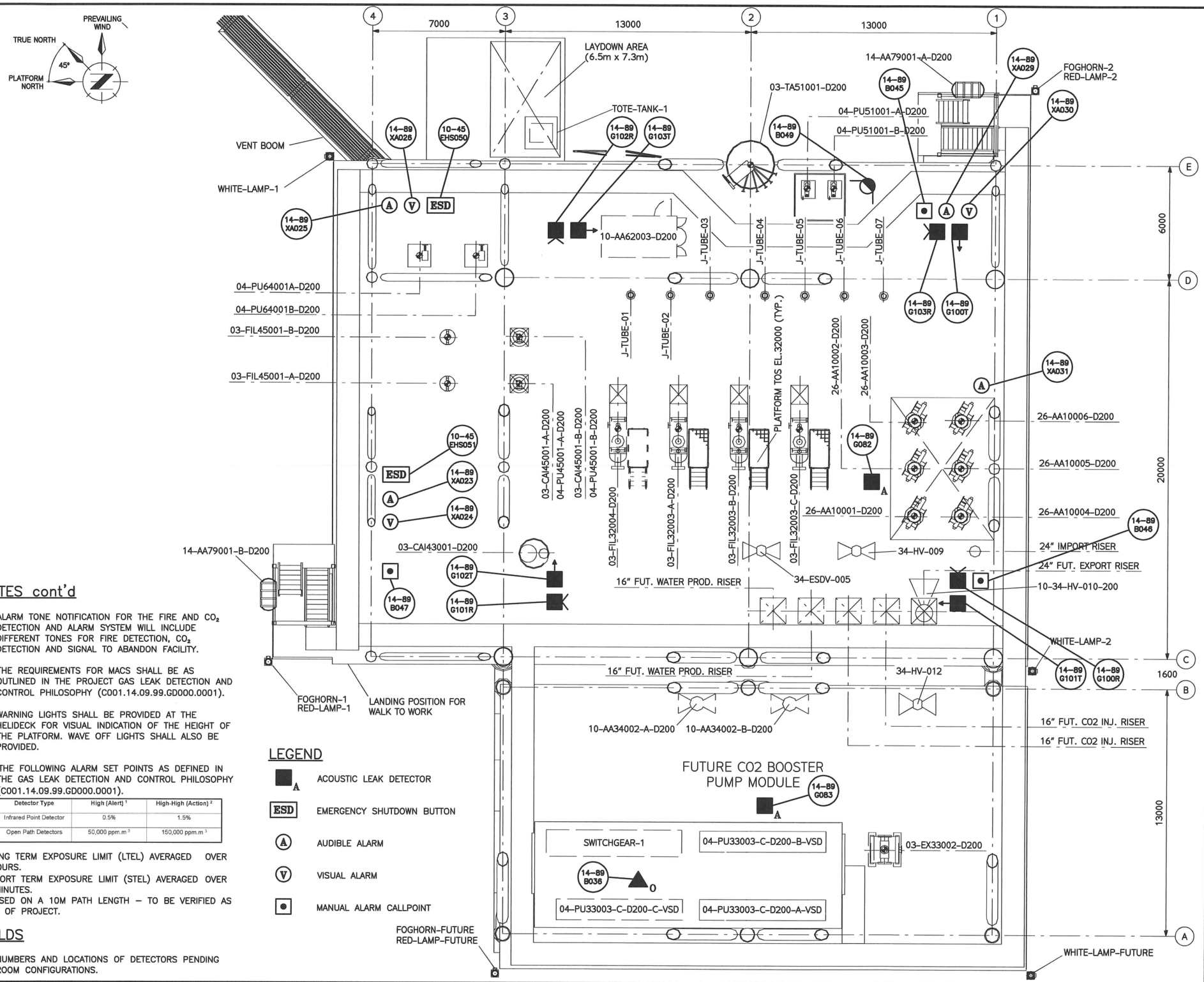
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CO_2 AND FIRE DETECTOR LAYOUTS
OFFSHORE STORAGE
LOWER MEZZ DECK (TOS EL.30000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/26/99/GD200/0002/0003	1:100	3 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\C02 & FIRE DETECTION\C001-14-26-99-GD200-0002-0003 REV-E1.DWG



NOTES cont'd

4. ALARM TONE NOTIFICATION FOR THE FIRE AND CO_2 DETECTION AND ALARM SYSTEM WILL INCLUDE DIFFERENT TONES FOR FIRE DETECTION, CO_2 DETECTION AND SIGNAL TO ABANDON FACILITY.
5. THE REQUIREMENTS FOR MACS SHALL BE AS OUTLINED IN THE PROJECT GAS LEAK DETECTION AND CONTROL PHILOSOPHY (C001.14.09.99.GD000.0001).
6. WARNING LIGHTS SHALL BE PROVIDED AT THE HELIDECK FOR VISUAL INDICATION OF THE HEIGHT OF THE PLATFORM. WAVE OFF LIGHTS SHALL ALSO BE PROVIDED.
7. THE FOLLOWING ALARM SET POINTS AS DEFINED IN THE GAS LEAK DETECTION AND CONTROL PHILOSOPHY (C001.14.09.99.GD000.0001).

Detector Type	High (Alert) [1]	High-High (Action) [2]
Infrared Point Detector	0.5%	1.5%
Open Path Detectors	50,000 ppm.m [3]	150,000 ppm.m [3]

1. LONG TERM EXPOSURE LIMIT (LTEL) AVERAGED OVER 8 HOURS.
2. SHORT TERM EXPOSURE LIMIT (STEL) AVERAGED OVER 15 MINUTES.
3. BASED ON A 10M PATH LENGTH – TO BE VERIFIED AS PART OF PROJECT.

HOLDS

1. NUMBERS AND LOCATIONS OF DETECTORS PENDING ROOM CONFIGURATIONS.

LEGEND

- ACOUSTIC LEAK DETECTOR
- ESD — EMERGENCY SHUTDOWN BUTTON
- (A) — AUDIBLE ALARM
- (V) — VISUAL ALARM
- MANUAL ALARM CALLPOINT

EQUIPMENT LIST

03-CAI43001-D200	PRODUCED WATER CAISSON
03-CAI45001-A-D200	SEAWATER-LIFT-PUMP-CAISSON
03-CAI45001-B-D200	SEAWATER-LIFT-PUMP-CAISSON
03-EX33002-D200	CO2 BOOSTER PUMPS RECYCLE COOLER (FUTURE)
03-FIL32003-A-D200	CO2 FINE FILTER
03-FIL32003-B-D200	CO2 FINE FILTER
03-FIL32003-C-D200	CO2 FINE FILTER
03-FIL32004-D200	CO2 FINE FILTER (FUTURE)
03-FIL45001-A-D200	SEAWATER LIFT PUMP FILTER
03-FIL45001-B-D200	SEAWATER LIFT PUMP FILTER
03-TA51001-D200	CRANE PEDESTAL DIESEL STORAGE TANK
04-PU33003-C-D200-A-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU33003-C-D200-B-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU33003-C-D200-C-VSD	CO2 BOOSTER PUMP VSD CABINET (FUTURE)
04-PU45001-A-D200	SEAWATER LIFT PUMP
04-PU45001-B-D200	SEAWATER LIFT PUMP
04-PU51001-A-D200	DIESEL TRANSFER PUMP
04-PU51001-B-D200	DIESEL TRANSFER PUMP
04-PU64001A-D200	MEG INJECTION PUMP
04-PU64001B-D200	MEG INJECTION PUMP
10-AA34002-A-D200	HIPPS PACKAGE (FUTURE)
10-AA34002-B-D200	HIPPS PACKAGE (FUTURE)
26-AA10001-D200	WELLHEAD XMAS TREE
26-AA10002-D200	WELLHEAD XMAS TREE
26-AA10003-D200	WELLHEAD XMAS TREE
26-AA10004-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10005-D200	WELLHEAD XMAS TREE (FUTURE)
26-AA10006-D200	WELLHEAD XMAS TREE (FUTURE)
SWITCHGEAR-1	6.6kV SWITCHGEAR 1200A (FUTURE)
TOTE-TANK-1	DRAINS TOTE TANK (5m3)
FOGHORN-1	NAVIGATION AID
FOGHORN-2	NAVIGATION AID
10-AA62003-D200	HPU (FUTURE)
J-TUBE-01	12" J TUBE
J-TUBE-02	12" J TUBE
J-TUBE-03	12" J TUBE
J-TUBE-04	12" J TUBE
J-TUBE-05	12" J TUBE
J-TUBE-06	12" J TUBE
J-TUBE-07	12" J TUBE
14-AA79001-A-D200	LIFE RAFT
14-AA79001-B-D200	LIFE RAFT
WHITE-LAMP-1	NAVIGATION AID
WHITE-LAMP-2	NAVIGATION AID
RED-LAMP-1	NAVIGATION AID
RED-LAMP-2	NAVIGATION AID
RED-LAMP-FUTURE	NAVIGATION AID (FUTURE)
WHITE-LAMP-FUTURE	NAVIGATION AID (FUTURE)
FOGHORN-FUTURE	NAVIGATION AID (FUTURE)

NOTES

1. THE EOA SHALL BE PROVIDED WITH AN HVAC SYSTEM WITH POSITIVE PRESSURISATION TO PREVENT CO_2 GAS INGRESS. THE SYSTEM SHALL BE PROVIDED WITH CO_2 IR POINT DETECTORS AT THE INLET TO ENABLE CLOSURE OF THE DAMPERS ON CONFIRMED CO2 DETECTION.
2. PERSONNEL SHALL BE EQUIPPED WITH PERSONAL CO_2 MONITORS AND HAVE ACCESS TO ESCAPE SETS.
3. GENERAL ALARM SYSTEM AND VISIBLE WARNING DEVICES (BEACONS) TO WARN PERSONNEL OF INCIDENTS AND ALLOW THEM TO TAKE APPROPRIATE ACTIONS.

0 1m 2m 4m 6m 8m 10m 12m
SCALE 1:100

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	05.02.15	AG	MCH	AMM	JNJ		FEED ISSUE
B1	18.12.14	AMP	MCM	AMM	JNJ		ISSUED FOR CLIENT COMMENT
A1	20.11.14	AG	MCH	AMM			ISSUED FOR IDC

DRAWING No.: C001-05-35-99-GD200-0001 — DRAWING TITLE: OFFSHORE STORAGE PLOT PLAN – CELLAR DECK (TOS EL.25000)

REFERENCE DRAWINGS

CLIENT: nationalgrid

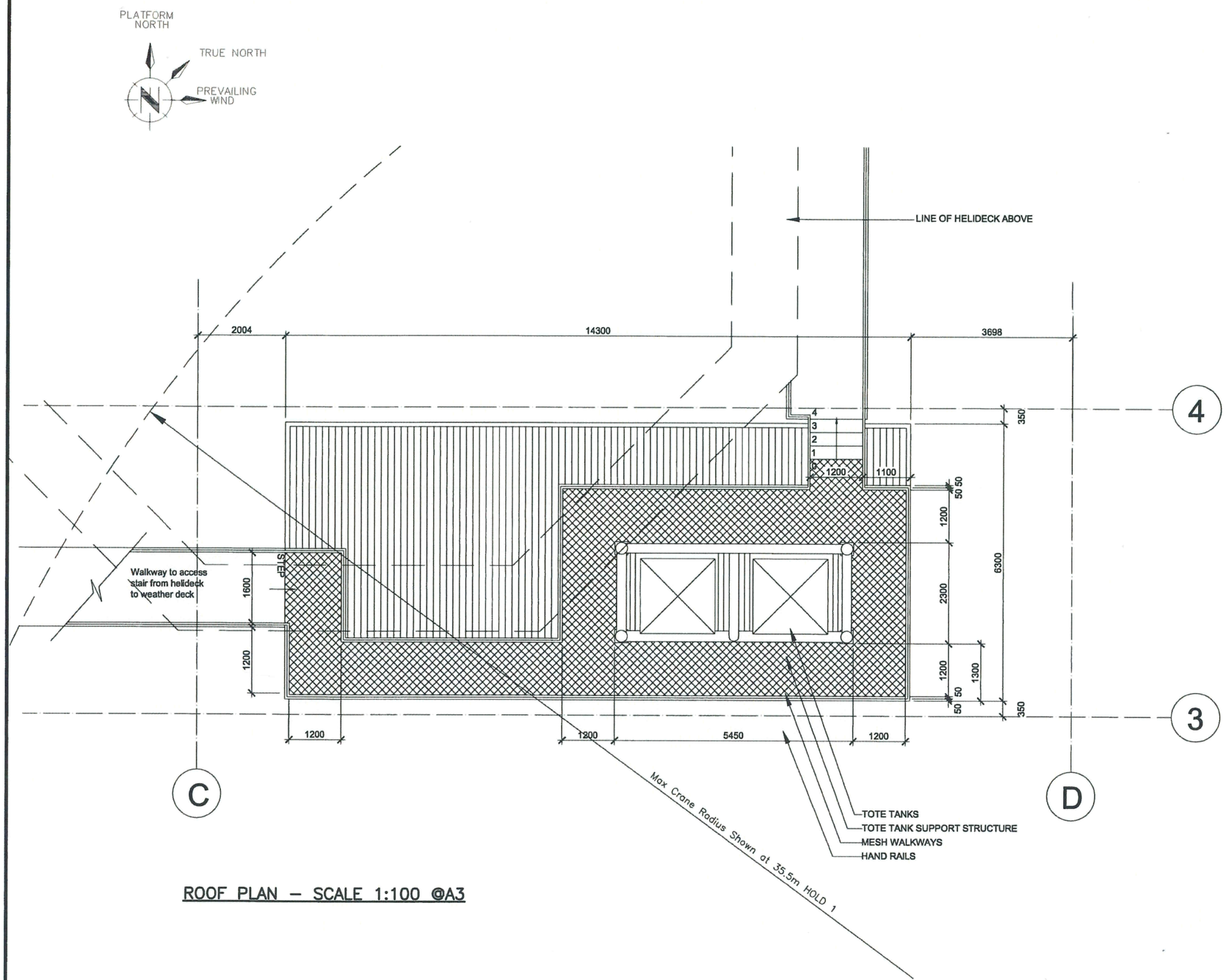
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CO_2 AND FIRE DETECTOR LAYOUTS
OFFSHORE STORAGE
CELLAR DECK (TOS EL.25000)

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/14/26/99/GD200/0002/0004	1:100	4 OF 4	E1

A1 SIZE SHEET

J:\GWMSDATA\DATA\J08712\B\9.0 CAD WORKING AREA\9.F SAFETY\CO2 & FIRE DETECTION\C001-14-26-99-GD200-0002-0004 REV-E1.DWG



ROOF PLAN – SCALE 1:100 @A3

NOTES

1. All dimensions are in millimeters.
2. All dimensions are for pricing purposes only.
3. Drawing to be read in conjunction with reference drawings and C001.04.10.TR.GD200.0001 Specification for Offshore Temporary Refuge
4. The TR building shall have a H60 fire rating.
5. There is no blast rating requirement for the TR.

HOLDS

1. Crane radius

0 1 2 4 6

Scale 1:100

DRAWING No.	DRAWING TITLE
C001/99/26/TR/GD200/0007	OFFSHORE NORTH AND EAST ELEVATIONS
C001/99/26/TR/GD200/0006	OFFSHORE SOUTH AND WEST ELEVATIONS
C001/99/26/TR/GD200/0005	OFFSHORE TR / EOA SECTIONS
C001/99/26/TR/GD200/0003	OFFSHORE TR / EOA LER PLAN
C001/99/26/TR/GD200/0002	OFFSHORE TR / EMERGENCY OVERNIGHT ACCOMMODATION PLAN
C001/99/26/TR/GD200/0004	OFFSHORE TR / HVAC & BATTERY PLAN

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	23.03.15	RD	RD	RS	JJ		FEED ISSUE
B1	29.01.15	RD	RD	RS	JJ		FCC ISSUE
A1	12.01.15	RD	RD	RS			IDC ISSUE

CLIENT: nationalgrid

GENESIS

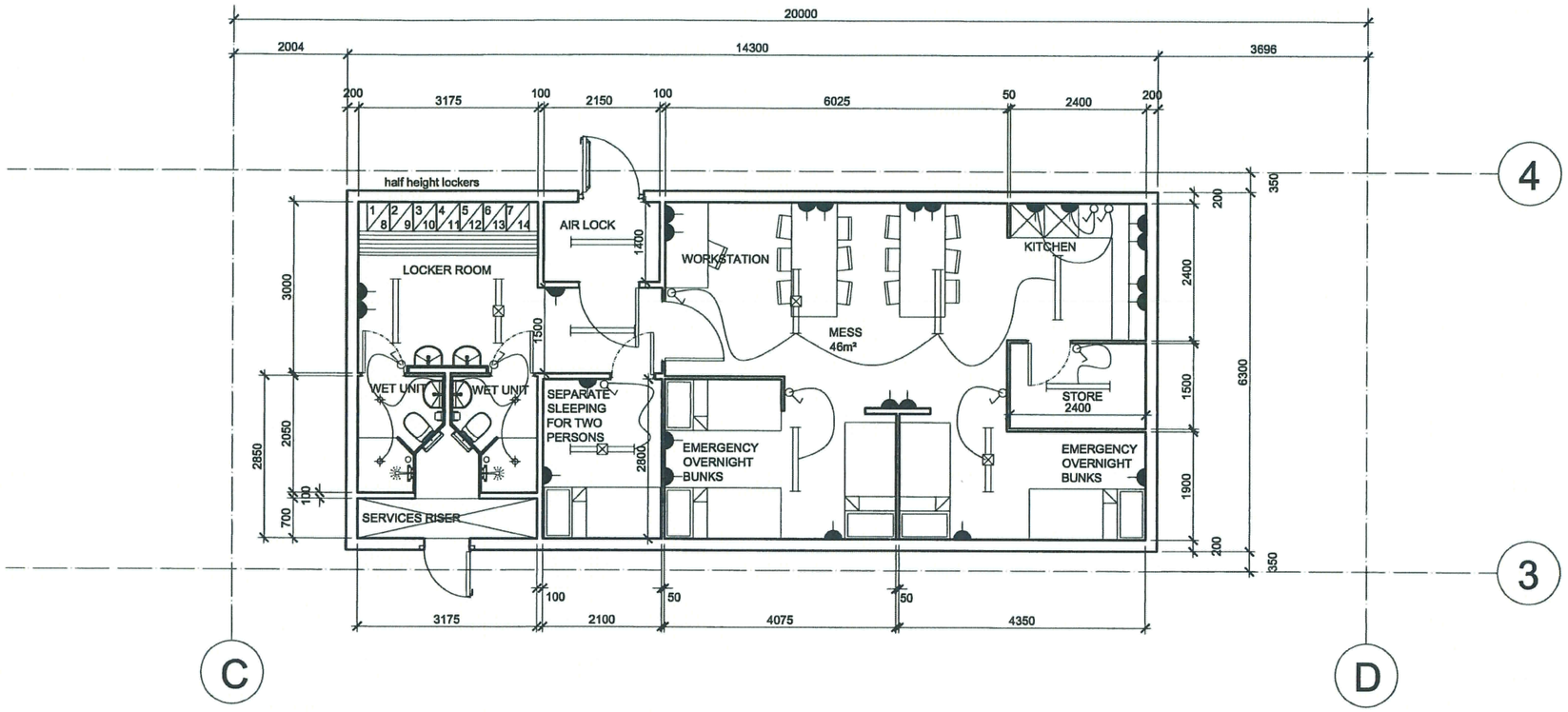
TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE EOA / TR
ROOF PLAN

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/99/26/TR/GD200/0001	-	1 OF 1	E1

PLATFORM NORTH

TRUE NORTH

PREVAILING WIND



TR & EMERGENCY OVERNIGHT ACCOMMODATION – PLAN – SCALE 1:100 @A3

NOTES

1. Drawing to be read in conjunction with Specification for Offshore EOA & Temporary Refuge C001/04/10/TR/GD200/0001
2. In accordance with HSE ON82 here must be separate provision of bunks for male and female personnel.
3. The separate room for two persons should be sized based on the room having a minimum of 11m³ per person.
4. Provision of two separate bunks is shown. Male / Female shift ratio or split must be confirmed HOLD 1
5. The room which will double as the Overnight accommodation should provide a minimum of 11m³ per person.
6. HSE ON82 Scenario 2 states 6.9m³ per person is the minimum provision of space per person on board. Any less is considered as overcrowding. HSE consider this area to be the minimum which is tolerable where no more can be provided. HSE ON82 also states a cabin / sleeping quarters should be a minimum of 11m³ per person. The EOA should be designed with 11m³ as it's minimum provision per person on board.
7. The TR shall provide H60 separation from the out side. The construction including the cladding, openings and penetrations shall achieve this rating.
8. Internal partitions shall be defined as B15, A60 and A0 where applicable.
9. Drawing to be read in conjunction with Offshore Storage Lighting and Small Power Layout C001/08/26/99/GD200/0006

HOLDS

1. Male / Female shift split ratio to be confirmed.

LEGEND

- Over mirror light with shaver socket IP65 rated - water jet proof
- Recessed LED spotlight IP65 rated - water jet proof
- 2 x 36W Fluorescent fitting
- 2 x 36W Fluorescent fitting with emergency battery
- Single 13amp socket
- Double 13 amp socket
- Light switch. One way
- Switched socket

0 1 2 4 6

Scale 1:100

DRAWING No.	DRAWING TITLE
C001/99/26/TR/GD200/0007	OFFSHORE NORTH AND EAST ELEVATIONS
C001/99/26/TR/GD200/0006	OFFSHORE SOUTH AND WEST ELEVATIONS
C001/99/26/TR/GD200/0005	OFFSHORE TR / EOA SECTIONS
C001/99/26/TR/GD200/0003	OFFSHORE TR / EOA LER PLAN
C001/99/26/TR/GD200/0004	OFFSHORE TR /HVAC & BATTERY PLAN
C001/99/26/TR/GD200/0001	OFFSHORE EOA / TR HVAC & BATTERY ROOM
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	12.03.15	RD	RD	RS	JJ		FEED ISSUE
B1	29.01.15	RD	RD	RS	JJ		FCC ISSUE
A1	09.01.15	RD	RD	RS			IDC ISSUE

CLIENT: nationalgrid

GENESIS

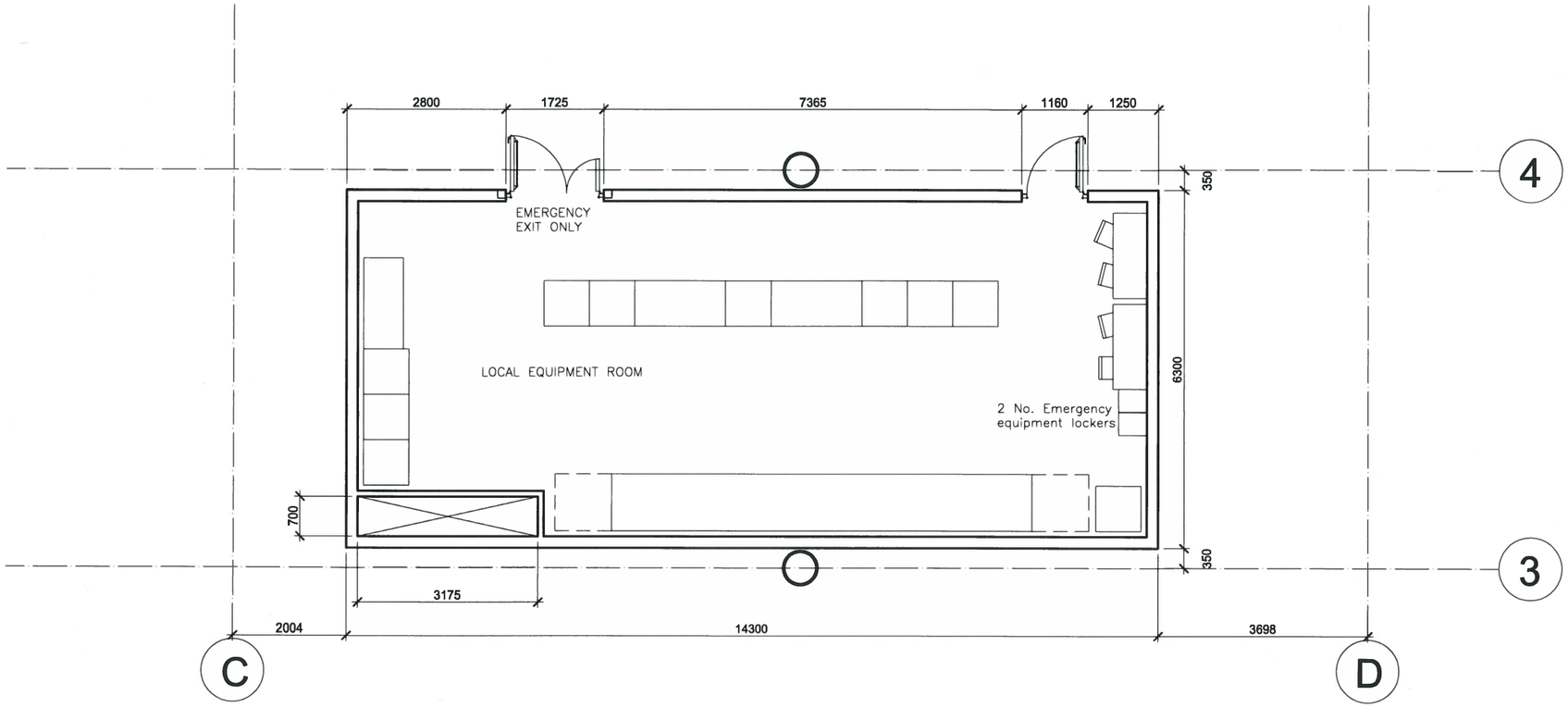
TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE
TR & EMERGENCY OVERNIGHT ACCOMMODATION PLAN

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/99/26/TR/GD200/0002	-	1 OF 1	E1

PLATFORM NORTH

TRUE NORTH

PREVAILING WIND



LER – FLOOR PLAN – SCALE 1:100 @A3

NOTES

1. All dimensions are in millimeters.
2. All dimensions are for pricing purposes only.
3. Drawing to be read in conjunction with reference drawings and C001.04.10.TR.GD200.0001 Specification for Offshore Temporary Refuge
4. Drawing to be read in conjunction with C001.10.26.99.GD200.0001 Equipment room layout

0 1 2 4 6

Scale 1:100

DRAWING No.	DRAWING TITLE
C001/99/26/TR/GD200/0007	OFFSHORE NORTH AND EAST ELEVATIONS
C001/99/26/TR/GD200/0006	OFFSHORE SOUTH AND WEST ELEVATIONS
C001/99/26/TR/GD200/0005	OFFSHORE TR / EOA SECTIONS
C001/99/26/TR/GD200/0004	OFFSHORE TR / HVAC & BATTERY PLAN
C001/99/26/TR/GD200/0002	OFFSHORE TR / EMERGENCY OVERNIGHT ACCOMMODATION PLAN
C001/99/26/TR/GD200/0001	OFFSHORE EOA / TR HVAC & BATTERY ROOM
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	18.03.15	RD	RD	RS	JJ		FEED ISSUE
B1	29.01.15	RD	RD	RS	JJ		FCC ISSUE
A1	12.01.15	RD	RD	RS			IDC ISSUE

CLIENT: nationalgrid

GENESIS

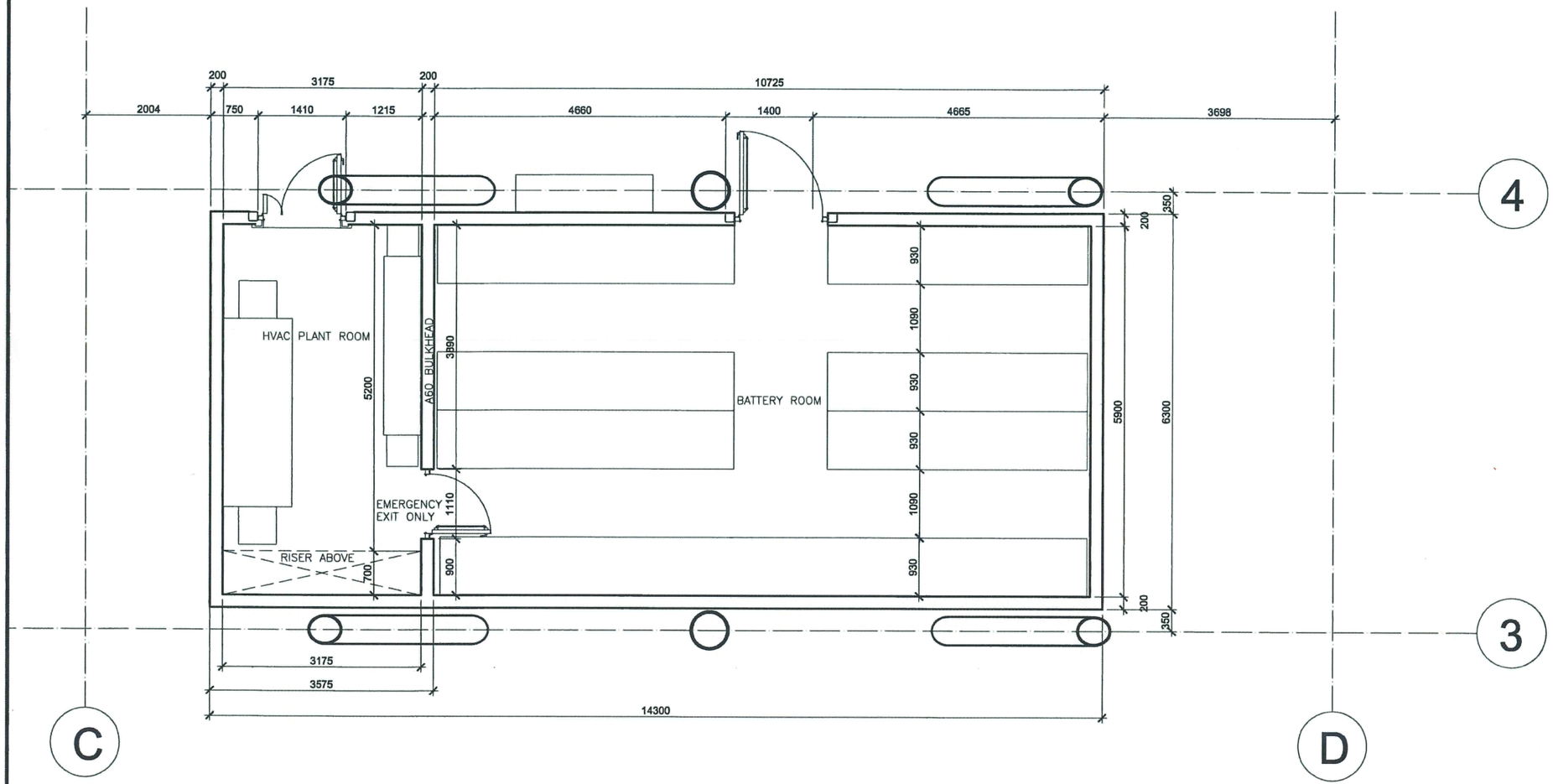
TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE EOA / TR
LER PLAN

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/99/26/TR/GD200/0003	-	1 OF 1	E1

PLATFORM NORTH

TRUE NORTH

PREVAILING WIND



BATTERY ROOM AND HVAC – FLOOR PLAN – SCALE 1:100 @A3

NOTES

1. All dimensions are in millimeters.
2. All dimensions are for pricing purposes only.
3. Drawing to be read in conjunction with reference drawings and C001.04.10.TR.GD200.0001 Specification for Offshore Temporary Refuge
4. The TR building shall have a H60 fire rating.
5. There is no blast rating requirement for the TR.

Scale 1:100

DRAWING No.	DRAWING TITLE
C001/99/26/TR/GD200/0007	OFFSHORE NORTH AND EAST ELEVATIONS
C001/99/26/TR/GD200/0006	OFFSHORE SOUTH AND WEST ELEVATIONS
C001/99/26/TR/GD200/0005	OFFSHORE TR / EOA SECTIONS
C001/99/26/TR/GD200/0003	OFFSHORE TR / EOA LER PLAN
C001/99/26/TR/GD200/0002	OFFSHORE TR / EMERGENCY OVERNIGHT ACCOMMODATION PLAN
C001/99/26/TR/GD200/0001	OFFSHORE EOA / TR HVAC & BATTERY PLAN

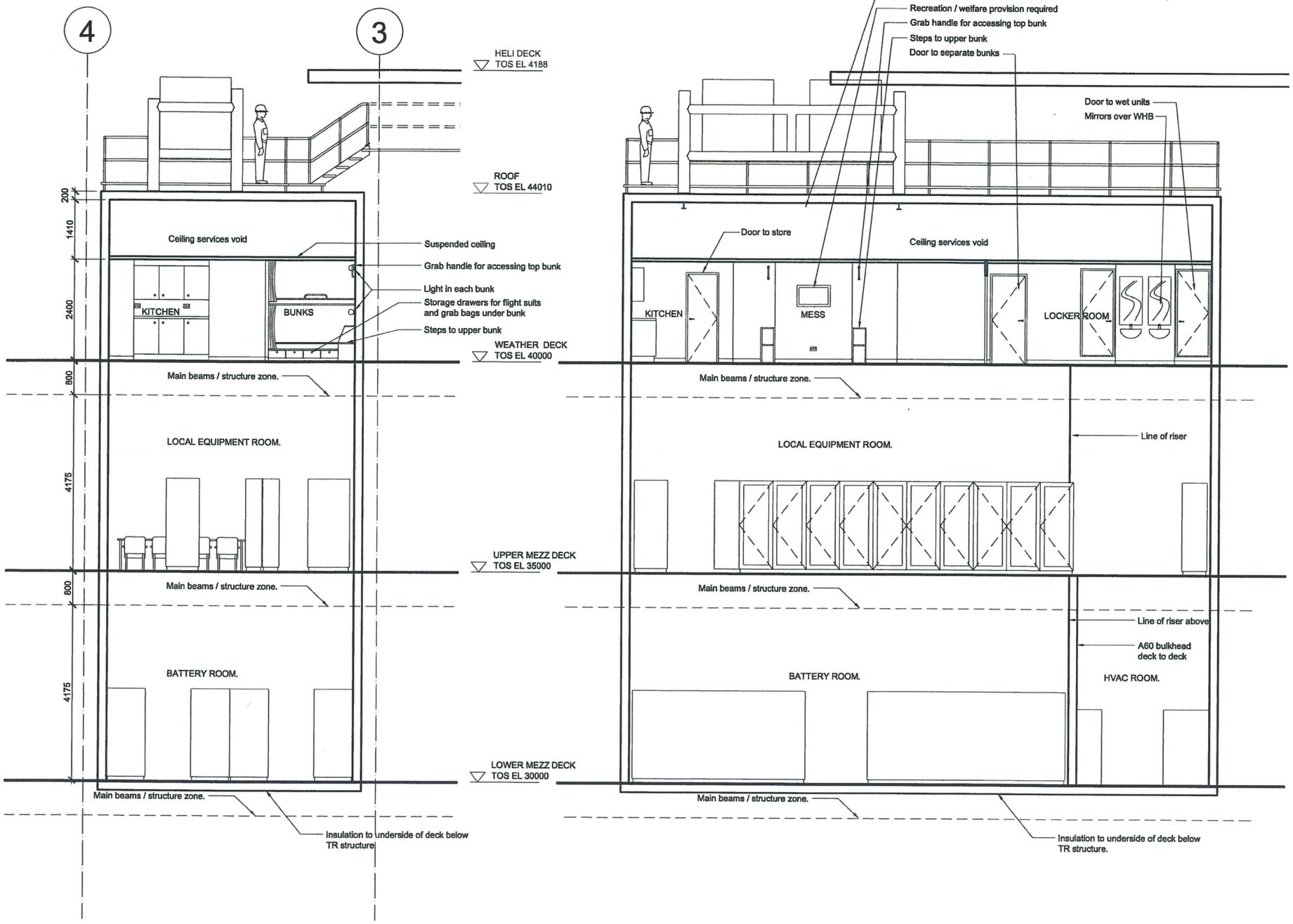
REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	18.03.15	RD	RD	RS	JJ		FEED ISSUE
B1	29.01.15	RD	RD	RS	JJ		FCC ISSUE
A1	12.01.15	RD	RD	RS			IDC ISSUE

CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE EOA / TR
HVAC & BATTERY PLAN

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/99/26/TR/GD200/0004	-	1 OF 1	E1



CROSS SECTION – SCALE 1:200 @A3

LONGDITUDINAL SECTION – SCALE 1:200 @A3

NOTES

1. All dimensions are in millimeters.
2. All dimensions are for pricing purposes only.
3. Drawing to be read in conjunction with reference drawings and C001.04.10.TR.GD200.0001 Specification for Offshore Temporary Refuge
4. The TR building shall have a H60 fire rating.
5. There is no blast rating requirement for the TR.

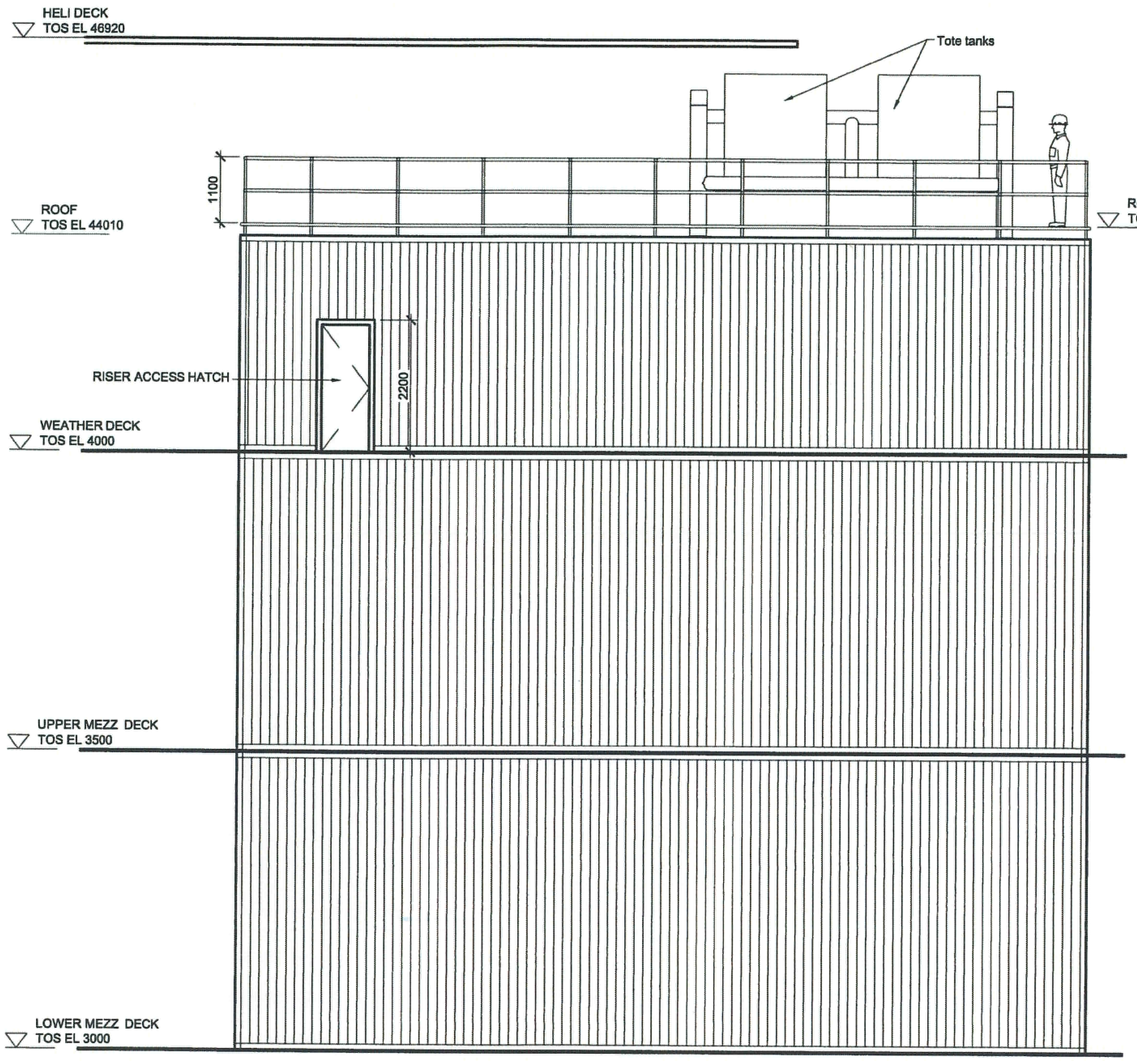
DRAWING No.	DRAWING TITLE
C001/99/26/TR/GD200/0007	OFFSHORE NORTH AND EAST ELEVATIONS
C001/99/26/TR/GD200/0006	OFFSHORE SOUTH AND WEST ELEVATIONS
C001/99/26/TR/GD200/0004	OFFSHORE TR / EOA HVAC & BATTERY PLAN
C001/99/26/TR/GD200/0003	OFFSHORE TR / EOA LER PLAN
C001/99/26/TR/GD200/0002	OFFSHORE TR / EMERGENCY OVERNIGHT ACCOMMODATION PLAN
C001/99/26/TR/GD200/0001	OFFSHORE EOA / TR HVAC & BATTERY PLAN
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	23.03.15	RD	RD	RS	JJ		FEED ISSUE
B1	15.01.15	RD	RD	RS	JJ		IDC AND FCC ISSUE

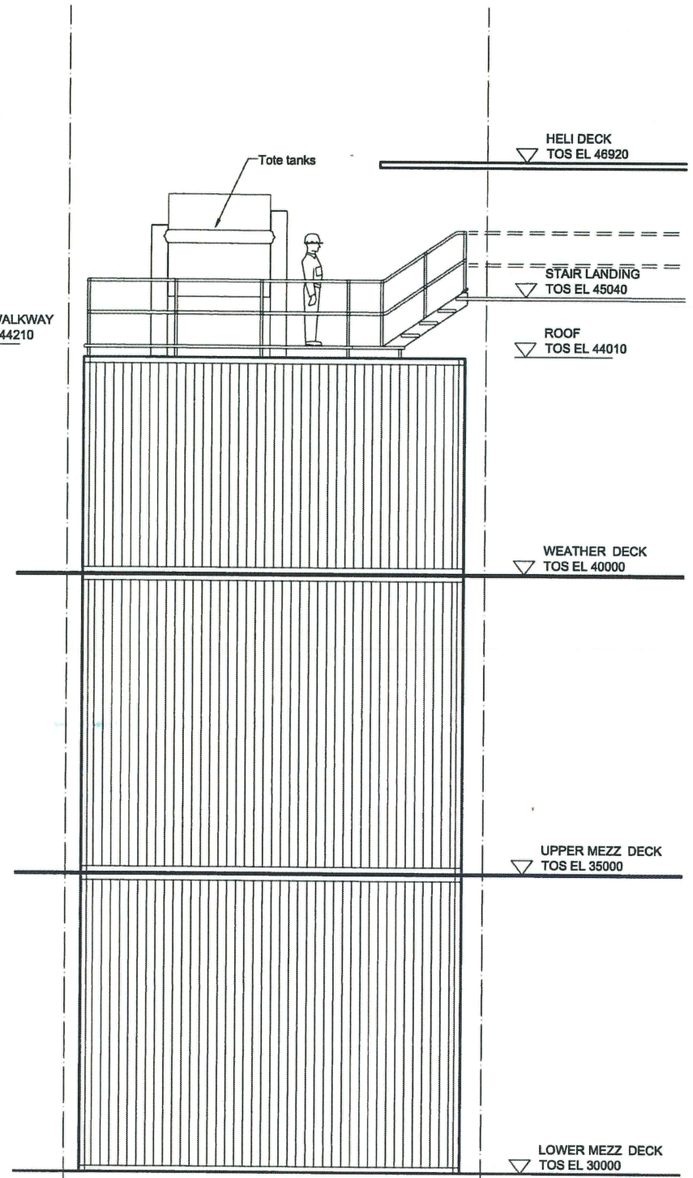
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE
TR & EMERGENCY OVERNIGHT ACCOMMODATION SECTIONS

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/99/26/TR/GD200/0005	-	1 OF 1	E1



NORTH ELEVATION – SCALE 1:100 @A3



EAST ELEVATION – SCALE 1:100 @A3

NOTES

1. All dimensions are in millimeters.
2. All dimensions are for pricing purposes only.
3. Drawing to be read in conjunction with reference drawings and C001.04.10.TR.GD200.0001 Specification for Offshore Temporary Refuge
4. The TR building shall have a H60 fire rating.
5. There is no blast rating requirement for the TR.

0 1 2 4 6
Scale 1:100

DRAWING No.	DRAWING TITLE
C001/99/26/TR/GD200/0007	OFFSHORE NORTH AND EAST ELEVATIONS
C001/99/26/TR/GD200/0004	OFFSHORE TR / HVAC & BATTERY PLAN
C001/99/26/TR/GD200/0005	OFFSHORE TR / EOA SECTIONS
C001/99/26/TR/GD200/0003	OFFSHORE TR / EOA LER PLAN
C001/99/26/TR/GD200/0002	OFFSHORE TR / EMERGENCY OVERNIGHT ACCOMMODATION PLAN
C001/99/26/TR/GD200/0001	OFFSHORE EOA / TR HVAC & BATTERY PLAN
REFERENCE DRAWINGS	

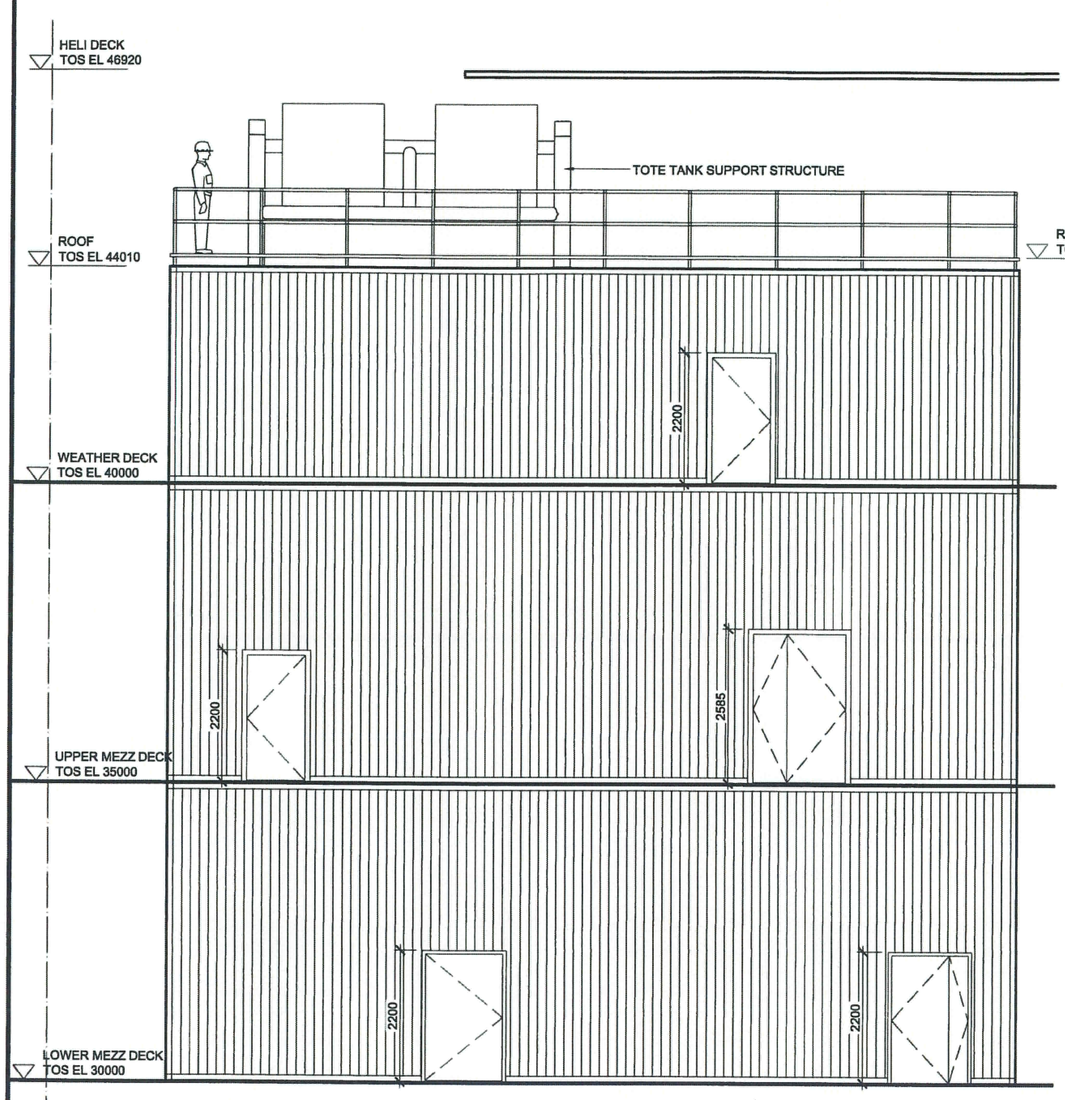
REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	23.03.15	RD	RD	RS	JJ		FEED ISSUE
B1	29.01.15	RD	RD	RS	JJ		FCC ISSUE
A1	12.01.15	RD	RD	RS			IDC ISSUE

CLIENT: nationalgrid

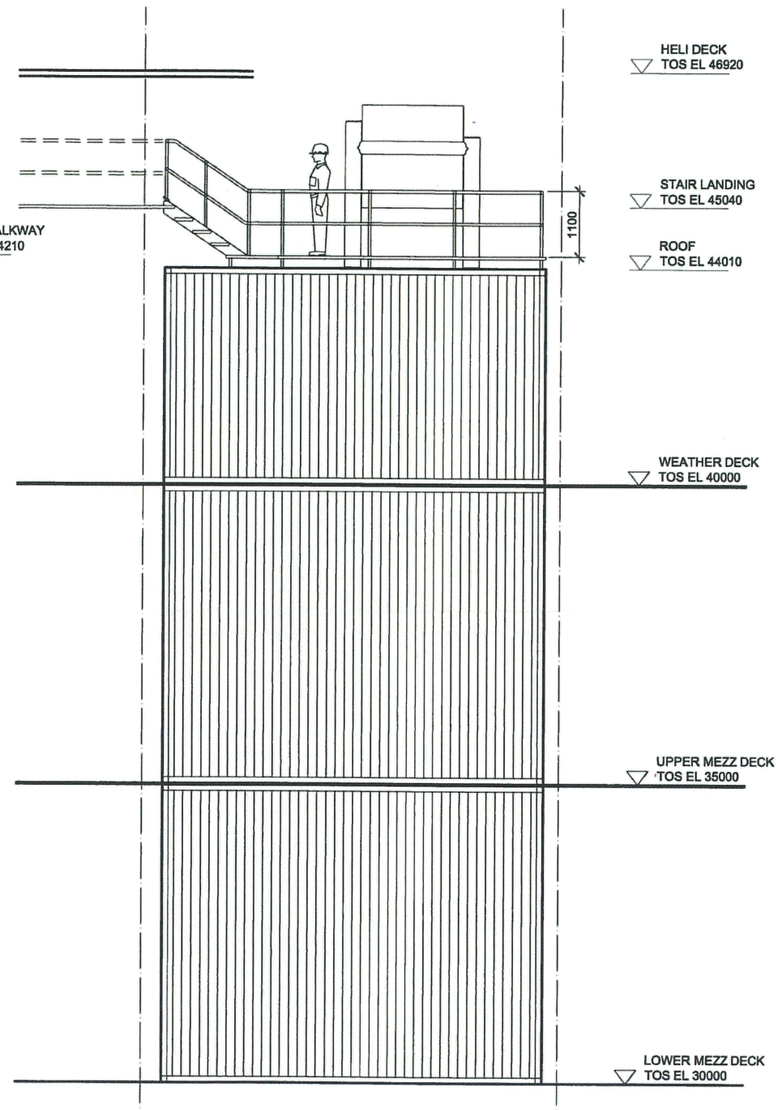
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE
TR & EMERGENCY OVERNIGHT
NORTH AND EAST ELEVATION

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/99/26/TR/GD200/0006	-	1 OF 1	E1



SOUTH ELEVATION – SCALE 1:100 @A3



WEST ELEVATION – SCALE 1:100 @A3

NOTES

1. All dimensions are in millimeters.
2. All dimensions are for pricing purposes only.
3. Drawing to be read in conjunction with reference drawings and C001.04.10.TR.GD200.0001 Specification for Offshore Temporary Refuge
4. The TR building shall have a H60 fire rating.
5. There is no blast rating requirement for the TR.

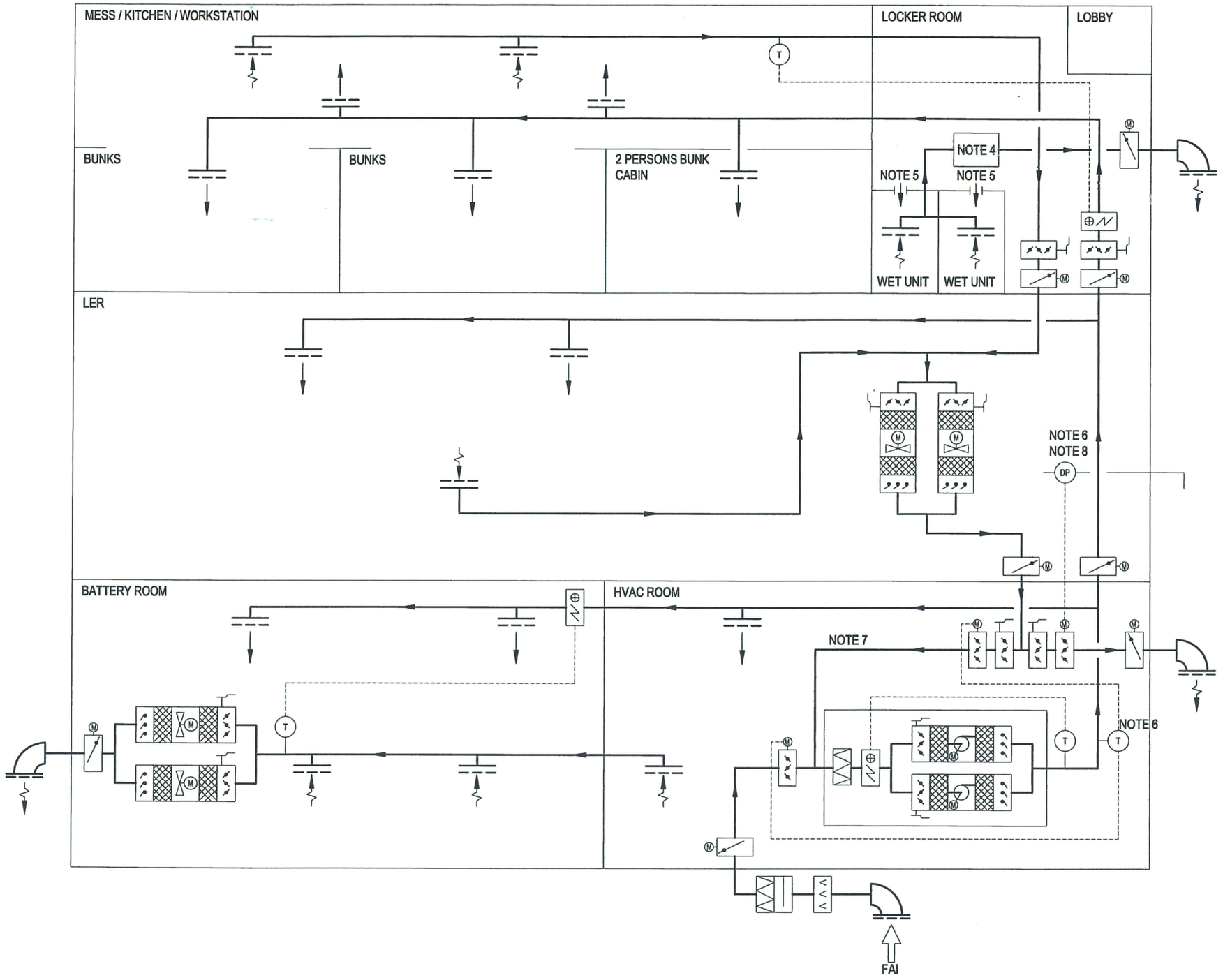
REFERENCE DRAWINGS	DRAWING TITLE
C001/99/26/TR/GD200/0006	OFFSHORE NORTH AND EAST ELEVATIONS
C001/99/26/TR/GD200/0005	OFFSHORE TR / EOA SECTIONS
C001/99/26/TR/GD200/0004	OFFSHORE TR / EOA HVAC & BATTERY
C001/99/26/TR/GD200/0003	OFFSHORE TR / EOA LER PLAN
C001/99/26/TR/GD200/0002	OFFSHORE TR / EOA PLAN
C001/99/26/TR/GD200/0001	OFFSHORE TR / EOA ROOF PLAN
DRAWING No.	DRAWING TITLE

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	23.03.15	RD	RD	RS	JJ		FEED ISSUE
B1	29.01.15	RD	RD	RS	JJ		FCC ISSUE
A1	13.01.15	RD	RD	RS			IDC ISSUE

CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE
TR & EMERGENCY OVERNIGHT
SOUTH AND WEST ELEVATION

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/99/26/TR/GD200/0007	-	1 OF 1	E1



NOTES

1. REFER ALSO TO SPECIFICATION DOCUMENT C001/04/10/HV/GD150/0001.
2. INTERNAL DUCTWORK TO BE GALVANISED MILD STEEL.
3. MAINTAINABLE HVAC EQUIPMENT TO BE PERMANENTLY ACCESSIBLE, FROM DECK LEVEL WITHOUT THE NEED FOR ACCESS PLATFORMS OR LADDERS IF FEASIBLE.
4. TOILET EXTRACT UNIT, TWIN FANS
5. AIR TRANSFERS TO WET UNITS VIA UNDER-CUT DOORS
6. HVAC CONTROL FUNCTIONS UNDERTAKEN BY HVAC CONTROL PANEL
7. RE-CIRCULATION FUNCTIONS IN WINTER TO REDUCE HEATING POWER REQUIRED.
8. THE DIFFERENTIAL PRESSURE (DP) TRANSMITTER CONTROLS THE OUTLET DAMPER VIA THE HVAC CONTROL PANEL.

		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		E1	23.03.15	RS	PB	RS	JJ		FEED ISSUE
C001/11/26/99/GD150/0032	STANDARD HVAC SYMBOLS	B1	26.02.15	RS	PB	RS	JJ		FCC ISSUE
DRAWING No.	DRAWING TITLE	A1	18.02.15	RS	RS	PB		–	IDC ISSUE
REFERENCE DRAWINGS									

CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
OFFSHORE EOA / TR
HEATING & VENTILATION LAYOUT

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001/99/26/TR/GD200/0008	-	1 OF1	E1

GENERAL NOTES

THE FOLLOWING GENERAL NOTES SHALL APPLY UNLESS NOTED OTHERWISE ON DESIGN DRAWINGS

1. DRAUGHTING CONVENTIONS
- ALL DIMENSIONS AND ANGLES ARE TRUE IN THE PLANE IN WHICH THE VIEW LIES

2. GEOMETRY
- IT IS THE RESPONSIBILITY OF THE FABRICATION CONTRACTOR TO VERIFY ALL DIMENSIONS AND ANGLES (OTHER THAN MAIN LAYOUT DIMENSIONS) PRIOR TO FABRICATION.
- GEOMETRY TOLERANCES ARE IN ACCORDANCE WITH BS EN ISO 1660:1996

3. DATUM AND ELEVATIONS
- ALL ELEVATIONS ARE BASED ON ELEVATION 0.000 AS LOWEST ASTRONOMICAL TIDE LEVEL (LAT)
- ALL ELEVATIONS ARE IN MILLIMETRES

4. DIMENSIONS
- ALL DIMENSIONS ARE IN MILLIMETRES

5. STEEL TYPES
- ALL STRUCTURAL MATERIALS SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN IN THE BASIS OF DESIGN C001-12-02-99-GD000-0001

TYPE 1 : EN10225 STEEL GRADE S355 G10+N, G10+M PLATE WITH THROUGH THICKNESS PROPERTIES WITH OPTIONS 12, 13, 18 & 22

TYPE 1-X : EN10225 STEEL GRADE S460 G2+M PLATE WITH THROUGH THICKNESS PROPERTIES WITH OPTIONS 12, 13, 18 & 22

TYPE 2 : EN10225 STEEL GRADE S355 G9+N, G9+M PLATE WITH OPTIONS 12 & 8

TYPE 2-X : EN10225 STEEL GRADE S460 G1+Q, G1+M PLATE WITH OPTIONS 12 & 8

TYPE 3 : EN10225 STEEL GRADE S355 G14+N, G14+Q HOT FINISHED HOLLOW SECTIONS, TUBULAR AND SQUARE, D<610 OD.

TYPE 4 : EN10225 STEEL GRADE S355 G11+N, G11+M ROLLED SECTIONS
EN10025-3 STEEL GRADE S355 J2 AR OR N ROLLED SECTIONS WITH DEPTHS <575

TYPE 4-X : EN10225 STEEL GRADE S460 G3+N ROLLED SECTIONS

TYPE 5 : MINOR STRUCTURAL ELEMENTS ONLY
EN10210-1 STEEL GRADE S275 J2H HOT FINISHED HOLLOW SECTIONS
EN10025-2 STEEL GRADE S275 J2+N PLATE AND ROLLED SECTIONS

- STEEL GRADE SUBSTITUTION SHALL ONLY BE MADE WHERE THE SUBSTITUTED MATERIAL IS EQUIVALENT OR OF A HIGHER GRADE, UNLESS PRIOR APPROVAL IS OBTAINED FROM COMPANY
- ALL INSERT FLANGE PLATES AND PADEYE PLATES SHALL BE TYPE 1 OR TYPE 1X MATERIAL UNLESS NOTED OTHERWISE ON DESIGN DRAWINGS

6. FABRICATION / WELDING
- DESIGN DRAWINGS MUST NOT BE USED FOR CONSTRUCTION UNTIL SPECIFICALLY CERTIFIED FOR THAT PURPOSE UNDER A.F.C ISSUE
- STEELWORK FABRICATION SHALL BE CARRIED OUT IN ACCORDANCE WITH EEMUA158 EDITION 3 2014
- ALL WELD SYMBOLS ARE IN ACCORDANCE WITH A.W.S. D1.1:2010 STANDARD WELD SYMBOLS
- ALL WELDS TO BE FULL PENETRATION WELDS AND CONTINUOUS (UNO)
- FOR PARTIAL PENETRATION WELDS THE SIZE SHOWN IS THE EFFECTIVE THROAT THICKNESS
- FILLET WELD SIZE IS DEFINED AS LEG LENGTH
- ALL JOINTS AND CONNECTIONS TO BE FULLY SEAL WELDED (4mm) (UNO)

7. PLATING
- ALL DECK PLATING TO BE FULLY WELDED TO BEAMS, STRINGERS OR PLATE GIRDERS
- ALL CUTOUTS AND PENETRATIONS TO BE BANDED (UNO)

8. GRATING
- ALL GRATING TO BE TYPE 5 MATERIAL
- GRATING SIZE AND MAXIMUM SPACING TO BE AS TABLE
- ALL GRATING TO BE FIXED BY STANDARD PROPRIETARY GRATING MAIN BEARING BARS TO BE FLAT BAR SERRATED GRATING CLIPS OR SIMILAR APPROVED
- GRATING SPAN SHOWN THUS ⟵⟶
- ALL CUTOUTS AND PENETRATIONS TO BE BANDED
- ALL GRATING AND FIXINGS TO BE HOT DIP GALVANISED

9. TUBULARS
- ALL TUBE NOTATIONS ARE OUTSIDE DIAMETER (O.D.) OR ø x WALL THICKNESS U.N.O
- ALL TUBULARS GREATER THAN 609.6 O.D. SHALL BE FORMED FROM PLATE
- TUBULARS 609.6 O.D. AND LESS TO BE IN ACCORDANCE WITH BS EN 10225

10. BOLTS
- ALL NUTS, BOLTS AND WASHERS TO BE GALVANISED TO ISO 1461 CLASS E, OR APPROVED SIMILAR.
- U.N.O. ALL BOLTS TO BE IN ACCORDANCE WITH BS EN ISO 898-1 CLASS 8.8
- U.N.O. ALL NUTS TO BE IN ACCORDANCE WITH BS EN ISO 898-2 CLASS 8
- U.N.O. ALL WASHERS TO BE IN ACCORDANCE WITH EN ISO 887 FORM A

11. RATHOLES
- RATHOLES SHALL BE MINIMISED WHEREVER POSSIBLE
- RATHOLES SHALL HAVE A MINIMUM RADIUS OF 25mm OR TWICE THE PLATE THICKNESS, WHICHEVER IS GREATER
- RATHOLES OR CUTOUTS IN ANY TUBULAR MEMBER ARE STRICTLY PROHIBITED UNLESS SPECIFICALLY DETAILED ON CONSTRUCTION DRAWINGS

12. PAINTING AND COATING
- ALL PROTECTIVE COATINGS AND PAINTING SHALL BE IN ACCORDANCE WITH C001-16-10-99-GD000-0008 SPECIFICATION FOR ABOVE GROUND COATING PAINTING

13. CORROSION
- ALL VOIDS TO BE SEALED TO AVOID CORROSION TRAPS
- AREAS WHERE IT IS NOT POSSIBLE TO SEAL WELD OR PAINT ADEQUATELY, FABRICATOR SHALL PROVIDE ADDITIONAL 6mm THICK SEAL PLATES TO SUIT & MATCH THE PARENT MATERIAL TO WHICH IT IS ATTACHED.

14. SURFACES
- ALL BURRS AND SHARP EDGES TO BE REMOVED
- ALL WELD CAP TO TOP OF BEAM TO BE GROUND FLUSH
- ALL PENETRATION HOLE EDGES TO BE GROUND SMOOTH
- ALL REPAIRS TO BE COMPLETED PRIOR TO PAINTING/COATING.

15. FIXING DETAILS OF EQUIPMENT
- ALL BOLTS, WASHERS AND NUTS TO BE NYLON COATED
- BOLT HOLES IN PADS TO BE DRILLED AND TAPPED TO SUIT BOLT DIAMETER
- SHIMS TO BE PROVIDED WITH OVERSIZE HOLES TO SUIT INSTALLATION OF BOLTS - ALL BOLTS TO BE PROVIDED WITH LOCK NUTS WHERE APPROPRIATE
- NEOPRENE ISOLATOR (5mm THK) TO BE INSTALLED BETWEEN STAINLESS AND CARBON STEEL SURFACES.

16. PASSIVE AND COLD SPLASH FIRE PROTECTION
- PASSIVE FIRE AND COLD SPLASH PROTECTION SHALL BE IN ACCORDANCE WITH SPECIFICATION

HOLD 1

17. FIELD CUT LINES
- FIELD CUT LINES SHALL BE MADE AS FOR AN EDGE PREPARATION WITH THE MATERIAL GROUND BACK 5mm TO THE PARENT METAL TO GIVE A SMOOTH SURFACE
- MPI SHALL BE USED TO CHECK FOR DEFECTS AND IF FOUND SHALL BE PREPARED AS FOR A WELD REPAIR
- SURFACE PROTECTIVE COATINGS SHALL BE REINSTATED IN ACCORDANCE WITH THE SPECIFICATION GIVEN IN NOTE 12

18. SACRIFICIAL ANODES
- SACRIFICIAL ANODES SHALL BE IN ACCORDANCE WITH REPORT C001-12-06-99-GD000-0001 CATHODIC PROTECTION DESIGN CALCULATIONS & C001-12-26-99-GD210-0003 GA JACKET ANODE LAYOUT

ABBREVIATIONS

ADJ	–	ADJACENT	EL.	–	ELEVATION	MKD.	–	MARKED	SHT.	–	SHEET
A.F.C.	–	APPROVED FOR CONSTRUCTION	EQUIP.	–	EQUIPMENT	M.T.O.	–	MATERIAL TAKE OFF	SHS	–	SQUARE HOLLOW SECTION
A.F.D.	–	APPROVED FOR DESIGN	EQUIV.	–	EQUIVALENT	MPI	–	MAGNETIC PARTICLE INSPECTION	SIM.	–	SIMILAR
APPROX.	–	APPROXIMATE	E.R.S.	–	EXTERNAL RING STIFFENERS	MISC.	–	MISCELLANEOUS	S.O.P.	–	SETTING OUT POINT
A.P.I.	–	AMERICAN PETROLEUM INSTITUTE	E.W.	–	EACH WAY	N	–	NORTHING	SPEC.	–	SPECIFICATION
ARRGT.	–	ARRANGEMENT	F.B.	–	FLAT BAR	N.F.	–	NEAR FACE	SQ.	–	SQUARE
A.S.T.M.	–	AMERICAN SOCIETY FOR TESTING MATERIALS	FCC	–	FOR CLIENT COMMENT	N.S.	–	NEAR SIDE	S.S.	–	STAINLESS STEEL
			F.F.	–	FAR FACE	NOM.	–	NOMINAL	STD.	–	STANDARD
A.W.S.	–	AMERICAN WELDING SOCIETY	F.S.	–	FAR SIDE	N.T.S.	–	NOT TO SCALE	STIFF.	–	STIFFENER
B.S.	–	BRITISH STANDARD	G.A.	–	GENERAL ARRANGEMENT	OPP.	–	OPPOSITE	STRUCT.	–	STRUCTURAL
B.O.S.	–	BOTTOM OF STEEL	GALV.	–	GALVANISED	O.D.	–	OUTSIDE DIAMETER	STWK.	–	STEELWORK
CHS	–	CIRCULAR HOLLOW SECTION	GR.	–	GRADE	O/A	–	OVERALL	S.W.G.	–	STANDARD WIRE GAUGE
COL.	–	COLUMN	GRT'G	–	GRATING	O/O	–	OUT OF	S.W.L.	–	SAFE WORKING LOAD
CONN.	–	CONNECTION	H/R.	–	HANDRAIL	P.C.D.	–	PITCH CIRCLE DIAMETER	SYM.	–	SYMMETRICAL
CONT.	–	CONTINUED / CONTINUOUS	HORIZ.	–	HORIZONTAL	PLT.	–	PLATE	T & B	–	TOP AND BOTTOM
C.L.	–	CENTERLINE	I.D.	–	INSIDE DIAMETER	PG	–	PLATE GIRDER	THK.	–	THICK
CTR.	–	CENTRE	I.D.C	–	INTER DISCIPLINE CHECK	PLATF.	–	PLATFORM	T.O.G.	–	TOP OF GRATING
C/C	–	CENTRE TO CENTRE	INT.	–	INTERNAL	QTY.	–	QUANTITY	T.O.P.	–	TOP OF PLATING
CFW	–	CONTINUOUS FILLET WELD	LAT	–	LOWEST ASTRONOMICAL TIDE	RAD.	–	RADIUS	T.O.S.	–	TOP OF STEEL
C/W.	–	COMPLETE WITH	LG.	–	LONG	REF.	–	REFERENCE	TYP.	–	TYPICAL
DET.	–	DETAIL	L.H.	–	LEFT HAND	REQ'D	–	REQUIRED	UB	–	UNIVERSAL BEAM
DIA OR ø	–	DIAMETER	LOC'N.	–	LOCATION	REV.	–	REVISION	UC	–	UNIVERSAL COLUMN
DIAG.	–	DIAGONAL	m	–	METRES	R.H.	–	RIGHT HAND	U.N.O.	–	UNLESS NOTED OTHERWISE
DIM.	–	DIMENSION	mm	–	MILLIMETRES	RHS	–	RECTANGULAR HOLLOW SECTION	VERT.	–	VERTICAL
DRG.	–	DRAWING	MAT'L	–	MATERIAL	RSA OR L	–	ROLLED STEEL ANGLE	W.P.	–	WORKPOINT
E	–	EASTING	MAX.	–	MAXIMUM	PFC OR [	–	PARALLEL FLANGE CHANNEL	W.T.	–	WALL THICKNESS
EEMUA	–	ENGINEERING EQUIPMENT AND MATERIALS USERS ASSOCIATION	MIN.	–	MINIMUM	SCH.	–	SCHEDULE			
			MK.	–	MARK	SECT.	–	SECTION			

GRATING TABLE

LOCATION	GRATING SIZES	WEIGHT APPROX.	MAX CLEAR SPAN
CELLAR, LOWER & UPPER MEZZANINE DECKS	40x5 BARS AT 30 SPACING TRANSVERSE BARS AT 50 SPACING	60 Kg/m²	1840
ACCESS PLATFORMS	30x5 BARS AT 30 SPACING TRANSVERSE BARS AT 50 SPACING	50 Kg/m²	1220
STAIR TREADS	30x5 BARS AT 30 SPACING TRANSVERSE BARS AT 50 SPACING	50 Kg/m²	1220
GRATED HATCHES	60x5 BARS AT 30 SPACING TRANSVERSE BARS AT 50 SPACING	93 Kg/m²	–

HOLDS LIST

1. **PASSIVE FIRE & COLD SPLASH PROTECTION SPECIFICATION TO BE DEVELOPED DURING DETAIL DESIGN.**

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AB	RY	JC			
		E1	20.04.15	AB	RY	JC	JJ	--	ISSUED FOR FEED
		B1	03.03.15	CH	RY	JK	JJ	--	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	20.02.15	AB	RY	JK	--	--	ISSUED FOR IDC

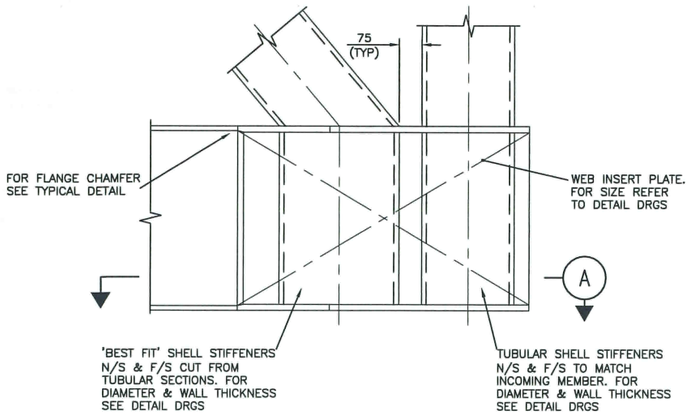
CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED

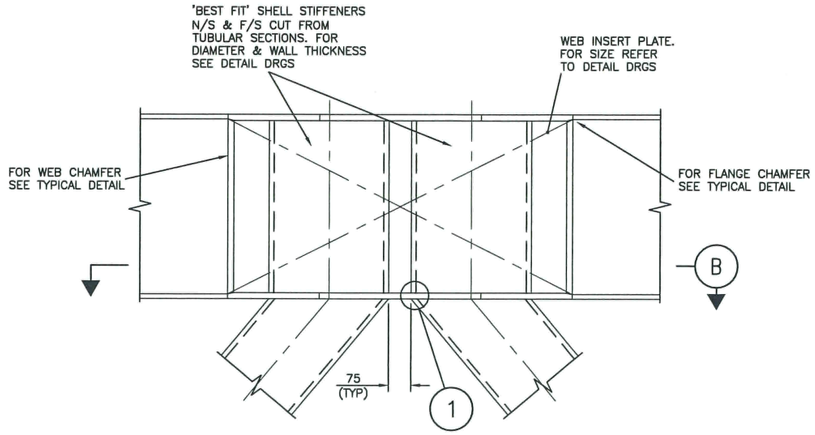
GENERAL NOTES

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD000-0001	–	1 OF 1	E1



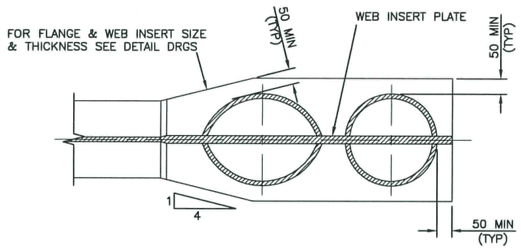
TYPICAL NODE DETAIL 1

SCALE 1:10



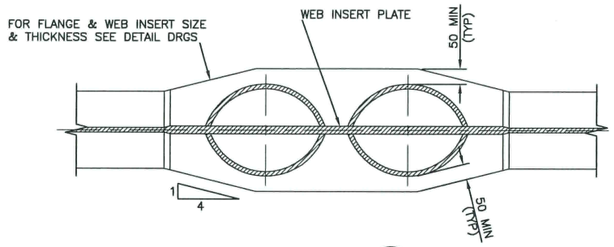
TYPICAL NODE DETAIL 2

SCALE 1:10



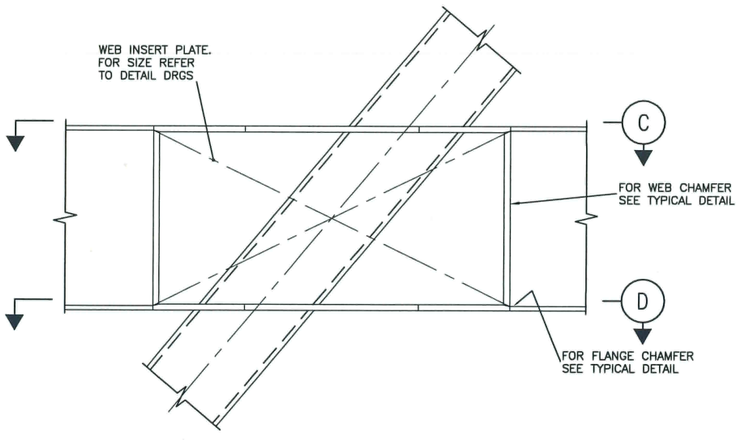
SECTION A

SCALE 1:10



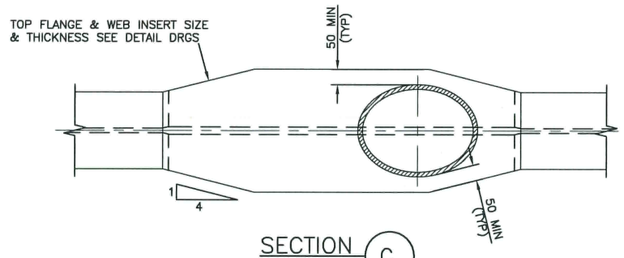
SECTION B

SCALE 1:10



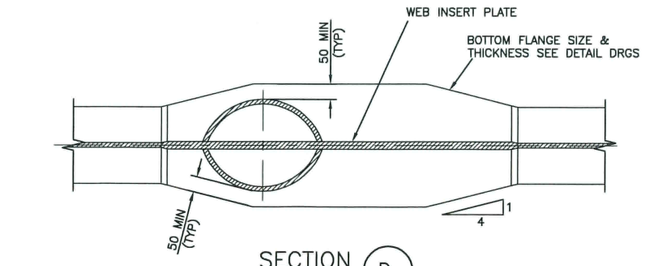
TYPICAL NODE DETAIL 3

SCALE 1:10



SECTION C

SCALE 1:10

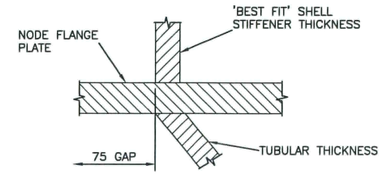


SECTION D

SCALE 1:10

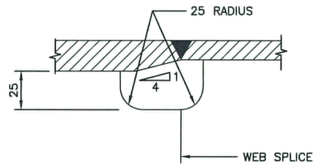
NOTES

1. FOR GENERAL NOTES SEE DRAWING No. C001-12-25-99-GD000-0001
2. ALL WELDS TO VIEWS SHOWN ON THIS DRAWING ARE FULL STRENGTH PENETRATION WELDS UNLESS SHOWN OTHERWISE ON DETAIL DRAWINGS
3. UNLESS NOTED OTHERWISE ON THE DESIGN DRAWINGS ALL FLANGE & WEB NODE PLATES ARE TO BE TYPE 1 OR TYPE 1X MATERIAL.



DETAIL 1

Scale 1:2

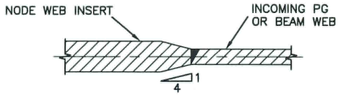


TYPICAL FLANGE CHAMFER @ NON-COINCIDENT FLANGE THICKNESS

SCALE 1:2

TYPICAL FLANGE TO FLANGE CONNECTION @ COINCIDENT FLANGE THICKNESS

SCALE 1:2



TYPICAL WEB CHAMFER

SCALE 1:2

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

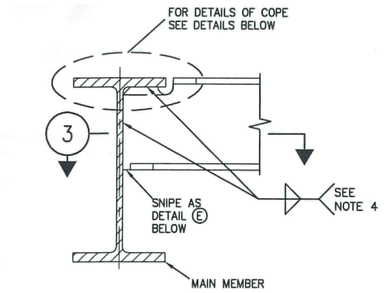
REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		AB	RY	JC	JJ		
E1	17.04.15	AB	RY	JC	JJ	--	ISSUED FOR FEED
B1	03.03.15	CH	RY	JK	JJ	--	ISSUED FOR CLIENT COMMENT
A1	27.02.15	CH	RY	JK	--	--	ISSUED FOR IDC

CLIENT: nationalgrid

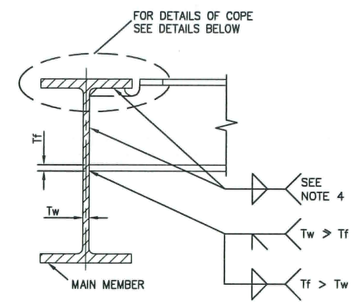
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
TOPSIDES & FUTURE MODULE PRIMARY JOINT STANDARD DETAILS

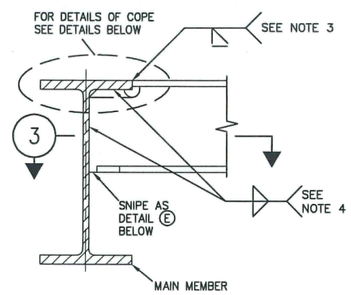
PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0001	-	10F1	E1



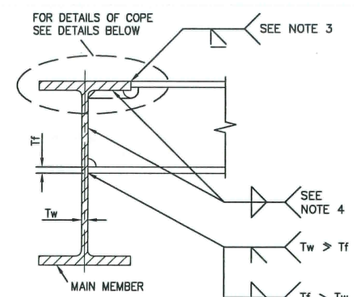
DETAIL SCALE 1:10 1A 1B



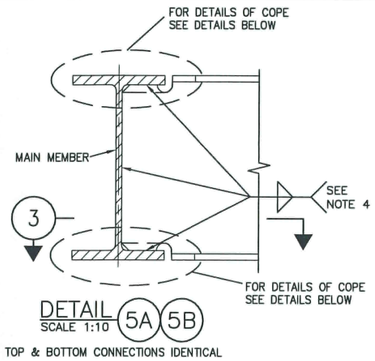
DETAIL SCALE 1:10 2A 2B



DETAIL SCALE 1:10 3C 3D

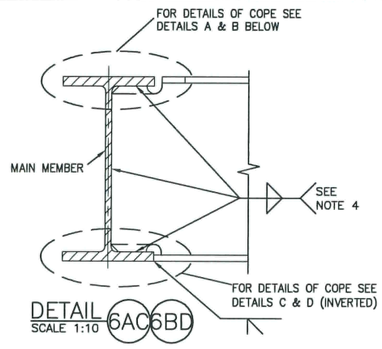


DETAIL SCALE 1:10 4C 4D

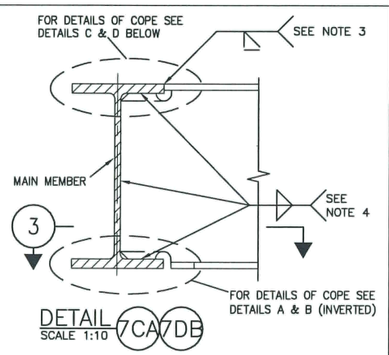


DETAIL SCALE 1:10 5A 5B

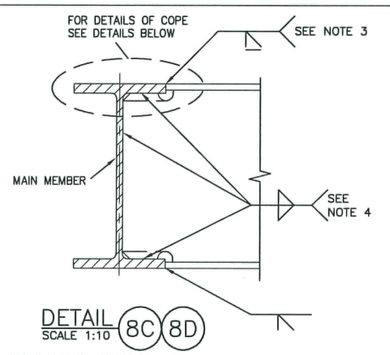
TOP & BOTTOM CONNECTIONS IDENTICAL



DETAIL SCALE 1:10 6AC 6BD

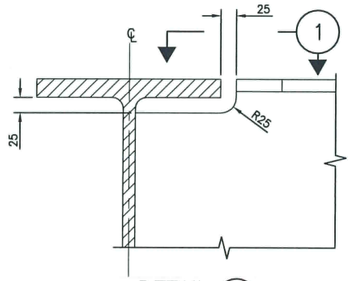


DETAIL SCALE 1:10 7CA 7DB

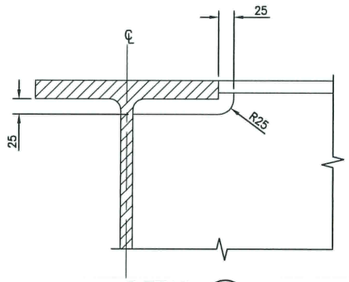


DETAIL SCALE 1:10 8C 8D

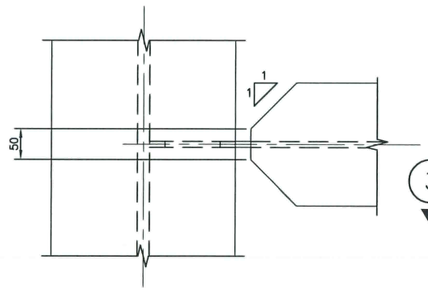
TOP & BOTTOM CONNECTIONS IDENTICAL



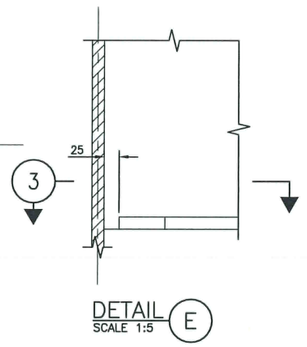
DETAIL SCALE 1:5 A



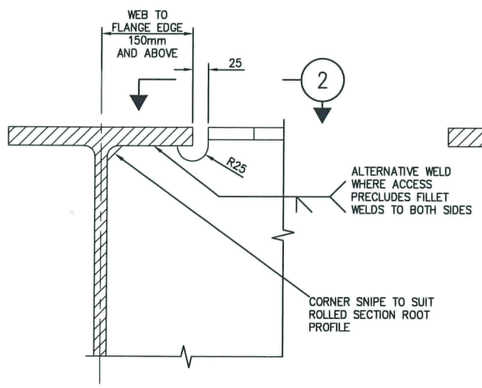
DETAIL SCALE 1:5 C



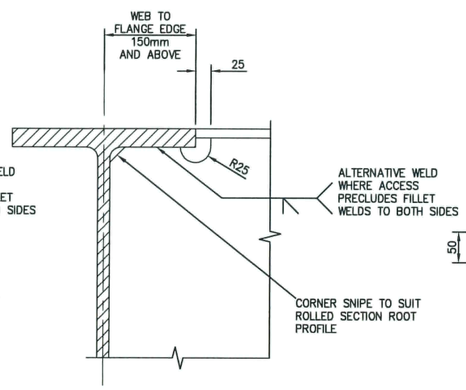
SECTION SCALE 1:5 1 WHERE CONTINUOUS MEMBER FLANGE THICKNESS < 35mm



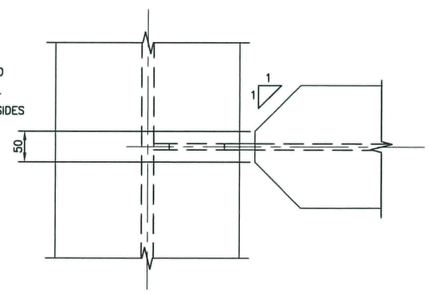
DETAIL SCALE 1:5 E



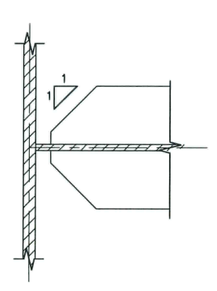
DETAIL SCALE 1:5 B



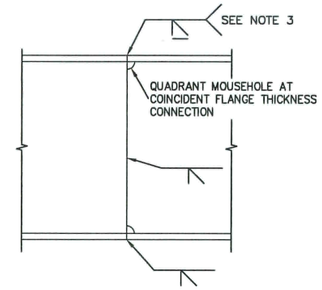
DETAIL SCALE 1:5 D



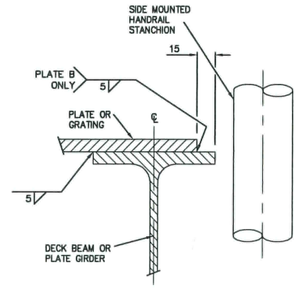
SECTION SCALE 1:5 2 WHERE CONTINUOUS MEMBER FLANGE THICKNESS > 35mm



SECTION SCALE 1:5 3



TYPICAL SECONDARY BEAM SPLICE
SCALE 1:10



TYPICAL DECK EDGE DETAIL

GRATING TO PLATETRANSITION DETAIL

GRATING TRANSITION DETAIL

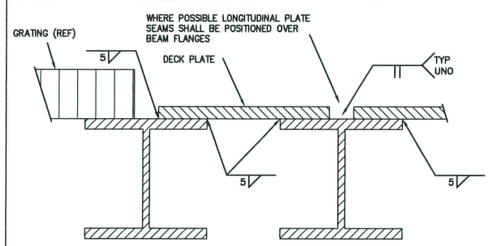
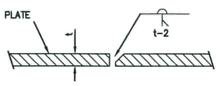


PLATE & GRATING AT PRIMARY & SECONDARY MEMBERS



UNSUPPORTED SEAM CONNECTION TYPICAL DECK PLATE SPLICE

NOTES

1. FOR GENERAL NOTES SEE DRAWING No. C001-12-25-99-GD000-0001
2. CONNECTION DETAILS AS SHOWN MAY BE INVERTED
3. WELDS TO BE GROUND FLUSH AS NECESSARY, TYPICALLY BEAM TOP FLANGE WELDS UNDER PLATE OR GRATING
4. FILLET WELD SIZES SHALL BE AS FOLLOWS U.N.O. ON DETAIL DRAWINGS.

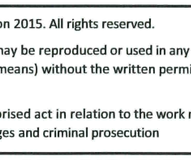
TABLE 1

THICKNESS OF INCOMING BEAM WEB.	FILLET WELD LEG LENGTH
UP TO AND INCLUDING 7.0mm	5mm
7.1mm TO 10.0mm	6mm
10.1mm TO 15.0mm	8mm
15.1mm TO 20.0mm	10mm
GREATER THAN 20.0mm	12mm

TABLE 2

FLANGE THICKNESS	STIFF THICKNESS	FILLET WELD LEG LENGTH
UP TO AND INCL. 16.0mm	10mm	6mm
16.1mm TO 25.0mm	15mm	8mm
25.1mm TO 30.0mm	20mm	10mm
GREATER THAN 20.0mm	25mm	12mm

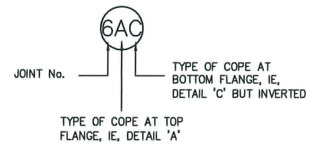
5. WHERE INCOMING BEAM FLANGE IS THE SAME WIDTH AS THE MAIN BEAM, THE EDGES OF THE INCOMING BEAM FLANGE SHALL BE LOCALLY CHAMFERED AS SHOWN BELOW



DIMENSION 'D' DEPTH AND WIDTH OF CHAMFER TO MATCH FILLET WELD SIZE AS SHOWN IN TABLE ABOVE, SEE NOTE 4

6. NOMENCLATURE OF JOINT CALL-UPS AS FOLLOWS:

EXAMPLE:



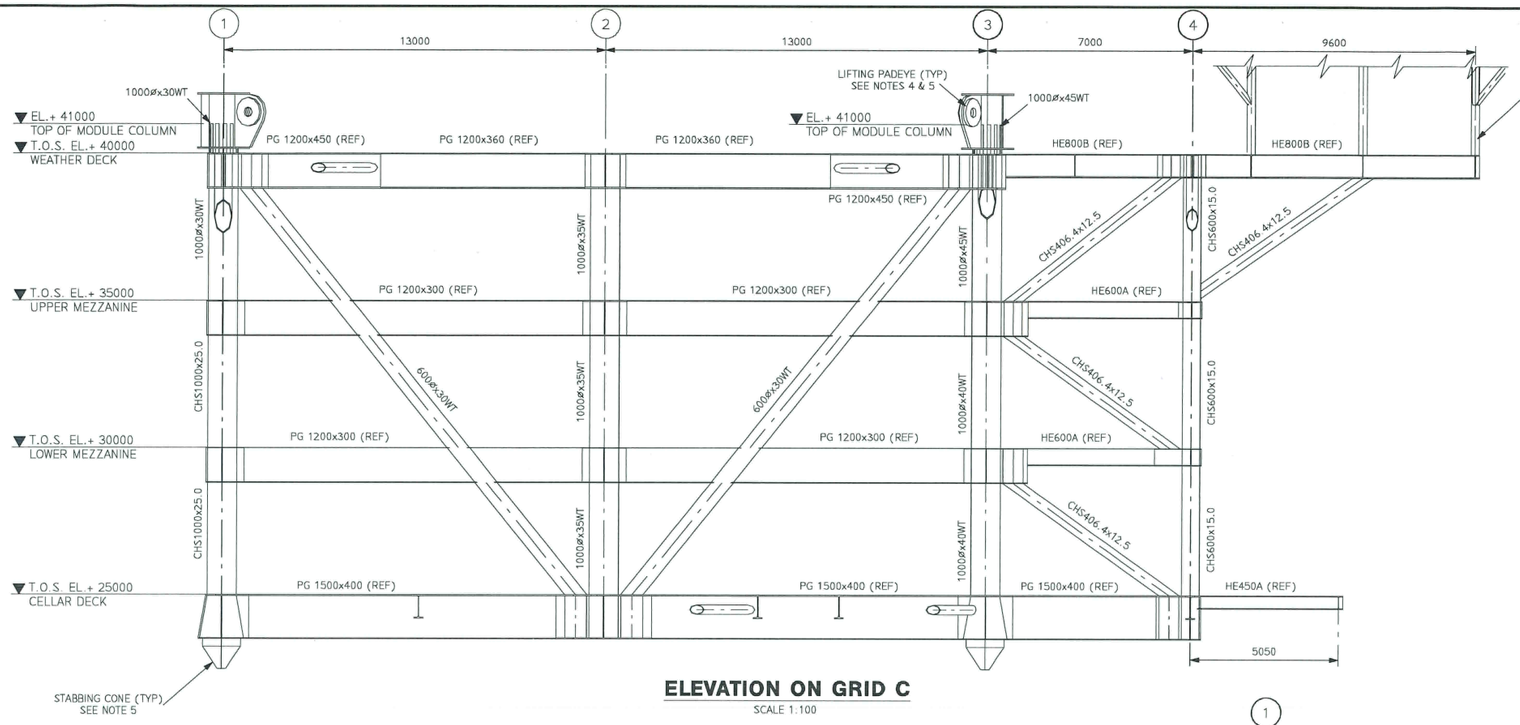
DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	17.04.15	AB	RY	JC	JJ	--	ISSUED FOR FEED
B1	03.03.15	CH	RY	JK	JJ	--	ISSUED FOR CLIENT COMMENT
A1	27.02.15	AB	RY	JK	--	--	ISSUED FOR IDC

CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STANDARD DETAILS
TOPSIDES & FUTURE MODULE

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0002	-	10F 1	E1



ELEVATION ON GRID C

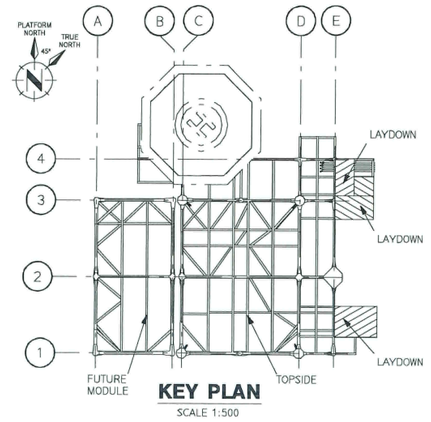
SCALE 1:100

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   ROLLED TUBULARS – TYPE 2
   CHS TUBULARS – TYPE 3
   PADEYES – TYPE 1 (UNO)
   STABBING CONES – TYPE 2 (UNO)
4. LIFTING PADEYES TO BE CUT-OFF AFTER OFFSHORE INSTALLATION
5. STABBING CONES & LIFT PADEYES TO BE DETERMINED DURING DETAIL DESIGN

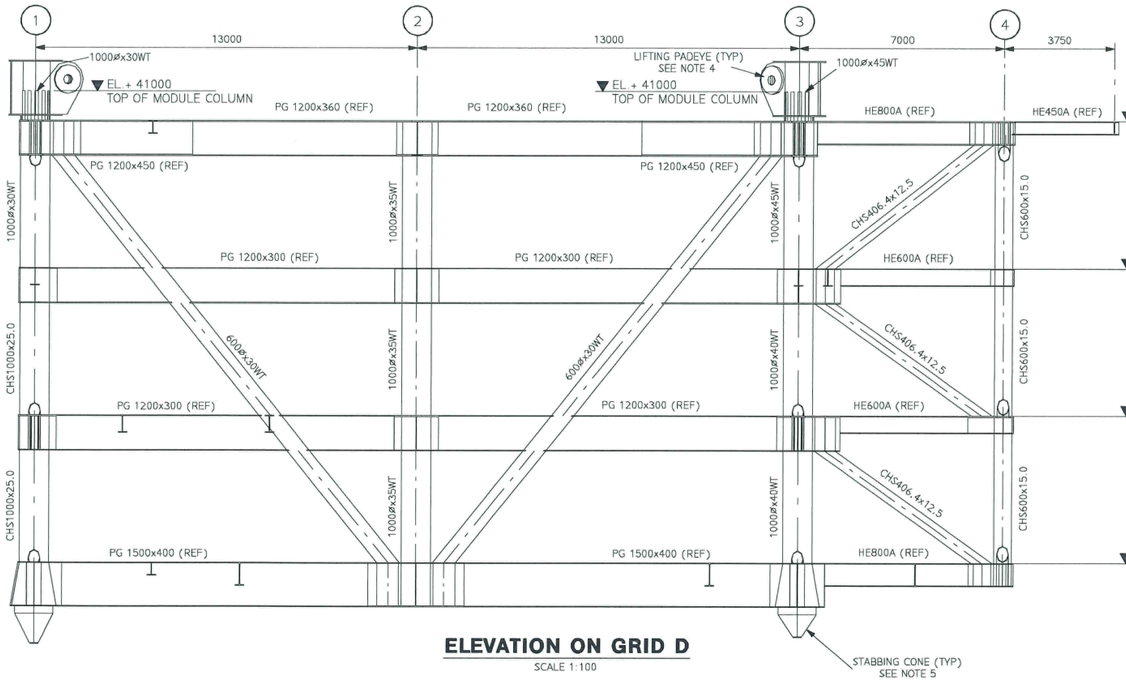
HOLDS

1. CONFIRMATION OF TOP OF CRANE PEDESTAL
2. SUPPORT STEELWORK TO VENT BOOM



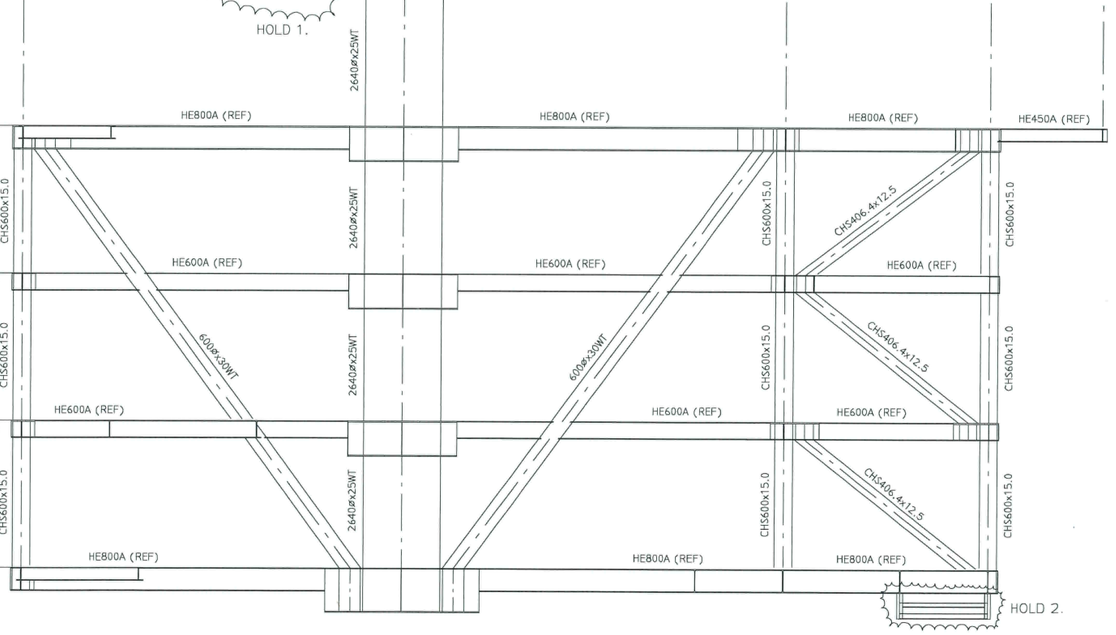
KEY PLAN

SCALE 1:500



ELEVATION ON GRID D

SCALE 1:100



ELEVATION ON GRID E

SCALE 1:100

REFERENCE DRAWINGS	DRAWING TITLE	REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		E1	13.03.15	CH	SJC	RY	JJ	–	ISSUED FOR FEED
		B1	13.02.15	AJB	SJC	RY	JJ	–	ISSUED FOR CLIENT COMMENT
DRAWING No.		A1	30.01.15	AJB	SJC	RY	–	–	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

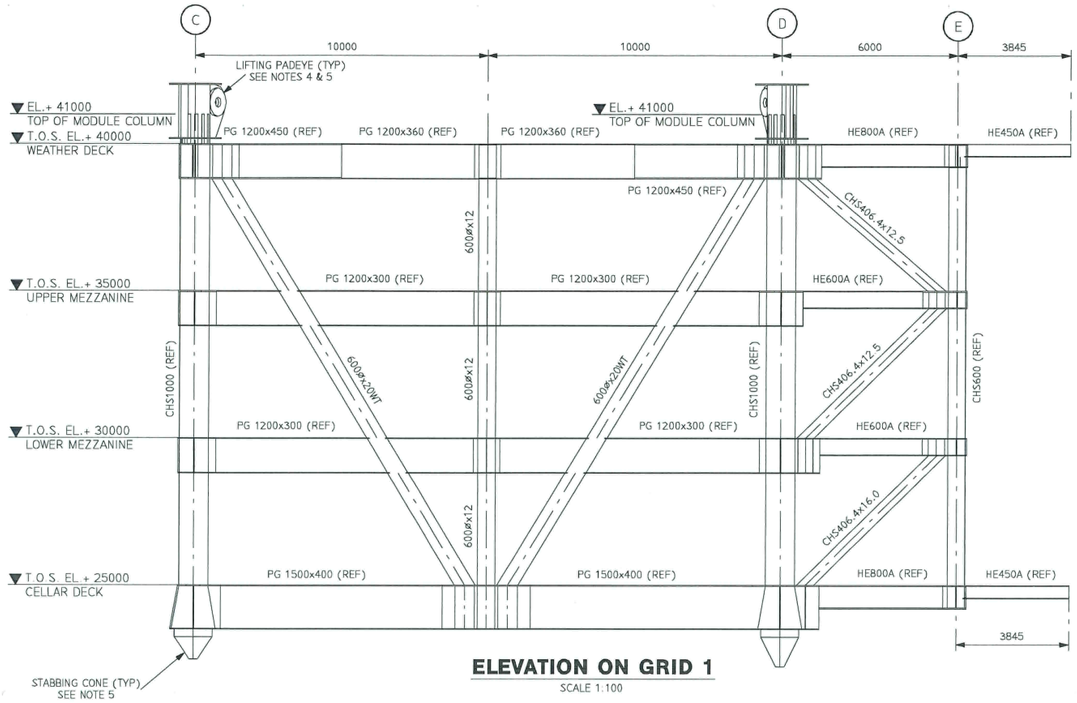
TITLE

WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
TOPSIDE
LONGITUDE ELEVATIONS GRIDS C, D & E

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0003	1:100	1 OF 1	E1

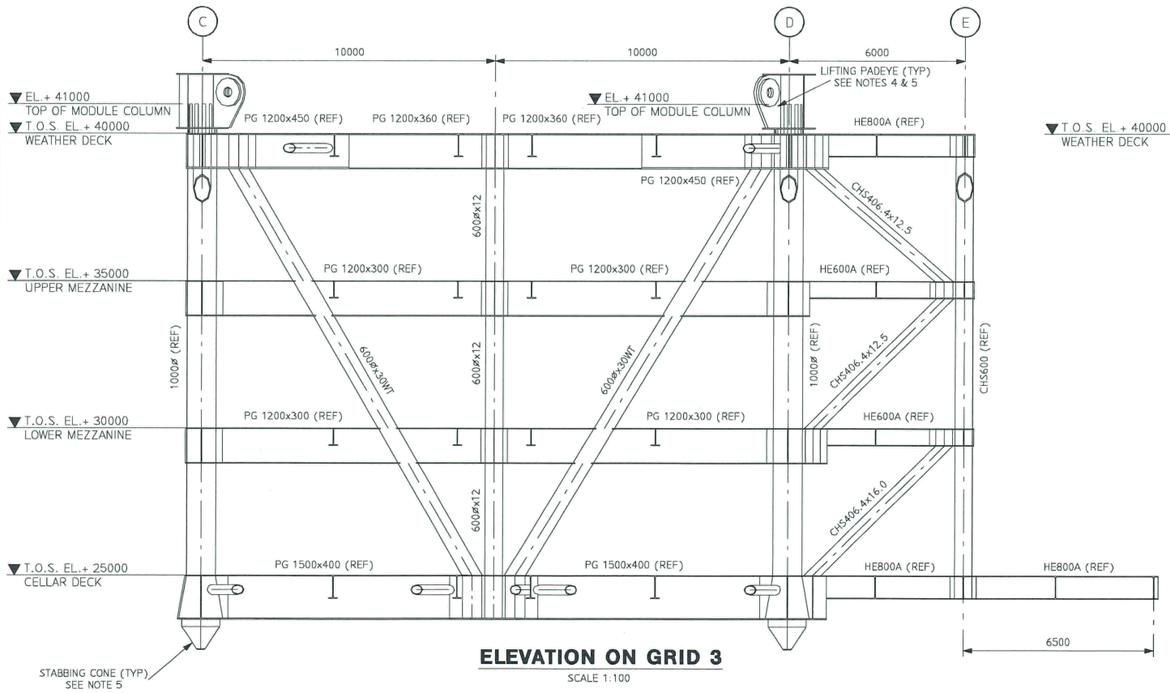
A1 SIZE SHEET

Drawing updated 11/03/2015 16:21:29 by hillc



ELEVATION ON GRID 1

SCALE 1:100



ELEVATION ON GRID 3

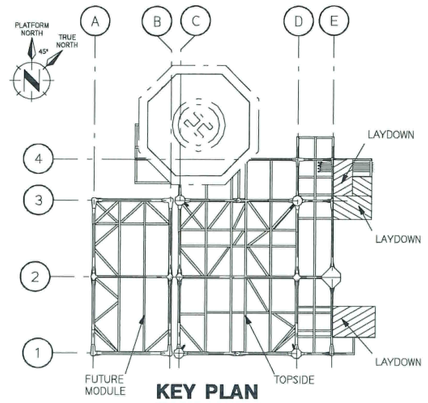
SCALE 1:100

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   ROLLED TUBULARS - TYPE 2
   CHS TUBULARS - TYPE 3
   PADEYES - TYPE 1 (UNO)
   STABBING CONES - TYPE 2 (UNO)
4. LIFTING PADEYES TO BE CUT-OFF AFTER OFFSHORE INSTALLATION
5. STABBING CONES & LIFT PADEYES TO BE DETERMINED DURING DETAIL DESIGN

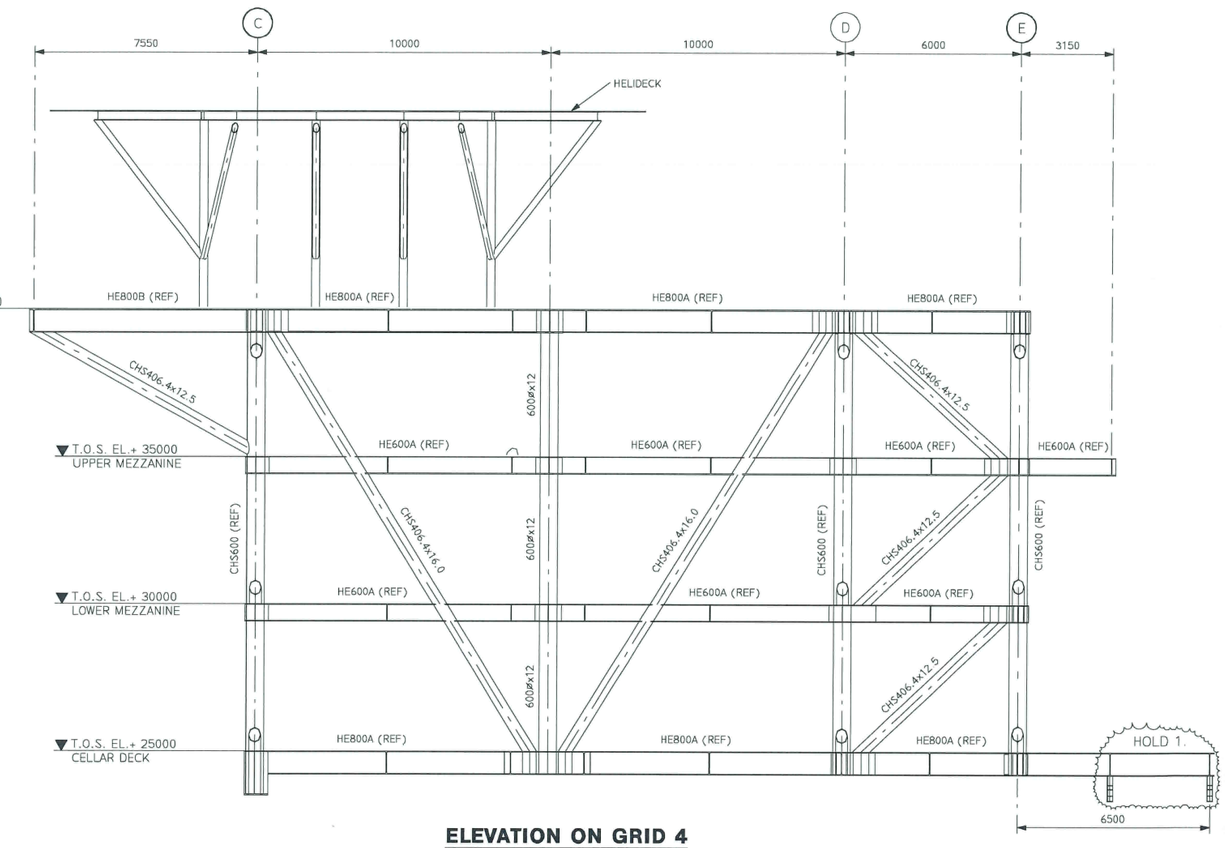
HOLDS

1. SUPPORT STEELWORK TO VENT BOOM
2. FINAL HELIDECK STEELWORK



KEY PLAN

SCALE 1:500



ELEVATION ON GRID 4

SCALE 1:100

REFERENCE DRAWINGS	DRAWING TITLE	REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
DRAWING No.		E1	13.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
		B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
		A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

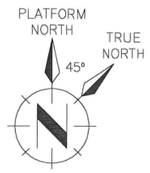
TITLE

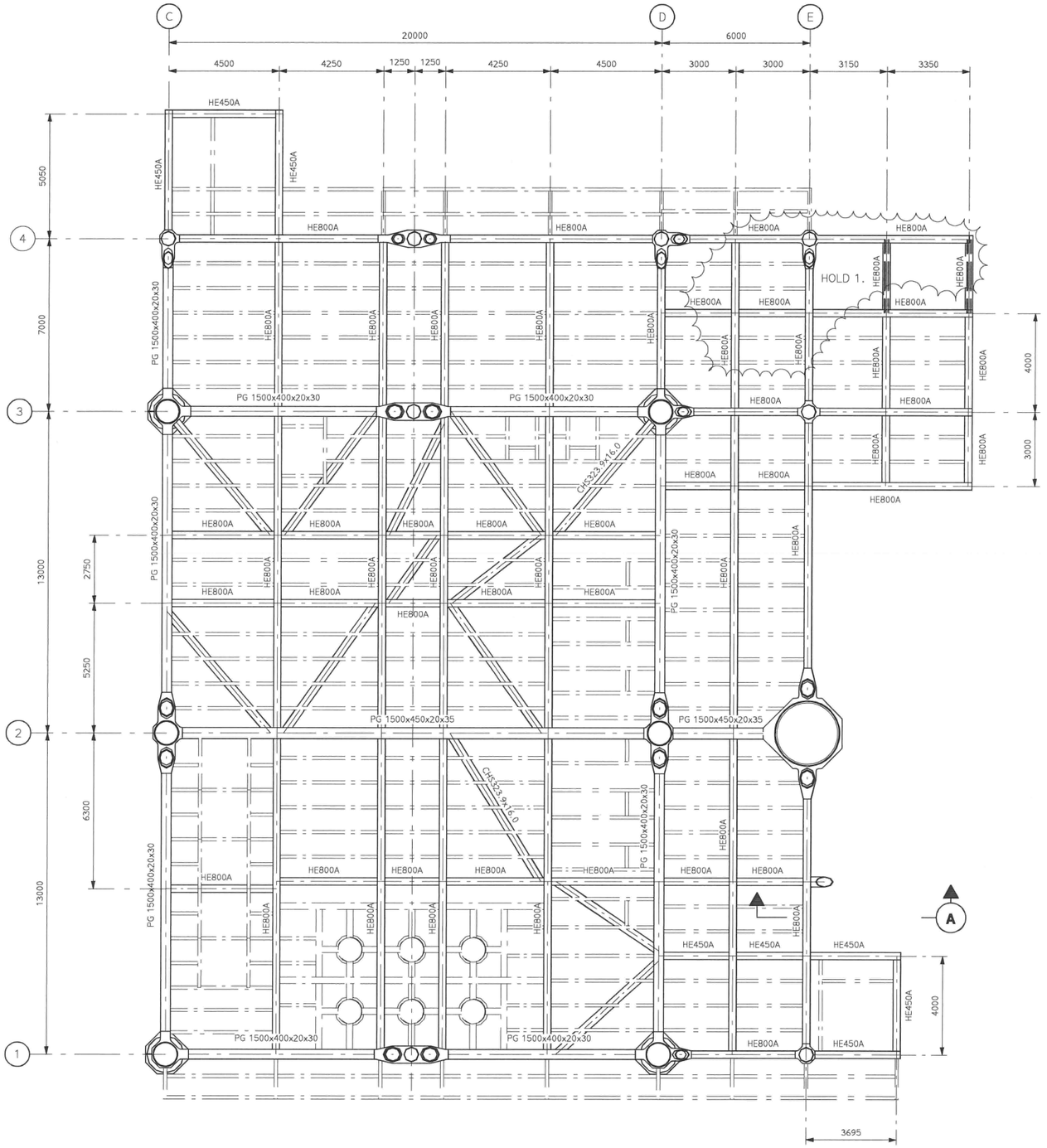
WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
TOPSIDE
TRANSVERSE ELEVATIONS GRIDS 1, 3 & 4

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0004	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 12/03/2015 14:27:58 by hillc





CELLAR DECK PLAN AT EL.+25000 T.O.S.

SCALE 1:100

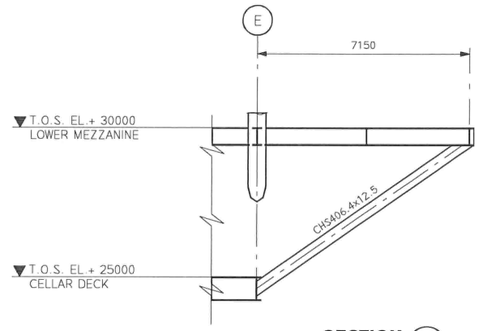
(PLAN BRACING TO BE CHS 323 x 12.5 ¢ EL. +24505 U.N.O.)

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   PLATE GIRDERS - TYPE 2
   ROLLED BEAM SECTIONS - TYPE 4
   CHS TUBULARS - TYPE 3
   NODES - TYPE 1

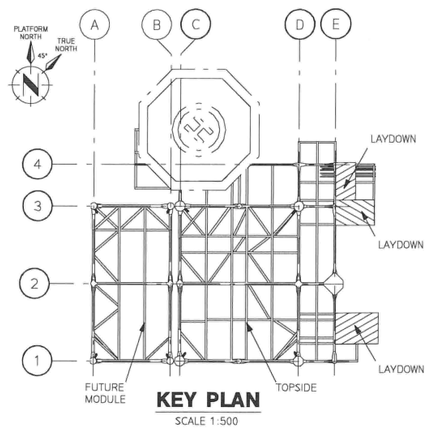
HOLDS

1. SUPPORT STWK TO VENT BOOM



SECTION A

SCALE 1:100



KEY PLAN

SCALE 1:500

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		BD	JC	RY	JJ		
E1	17.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

CLIENT

nationalgrid

GENESIS

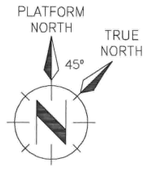
TITLE

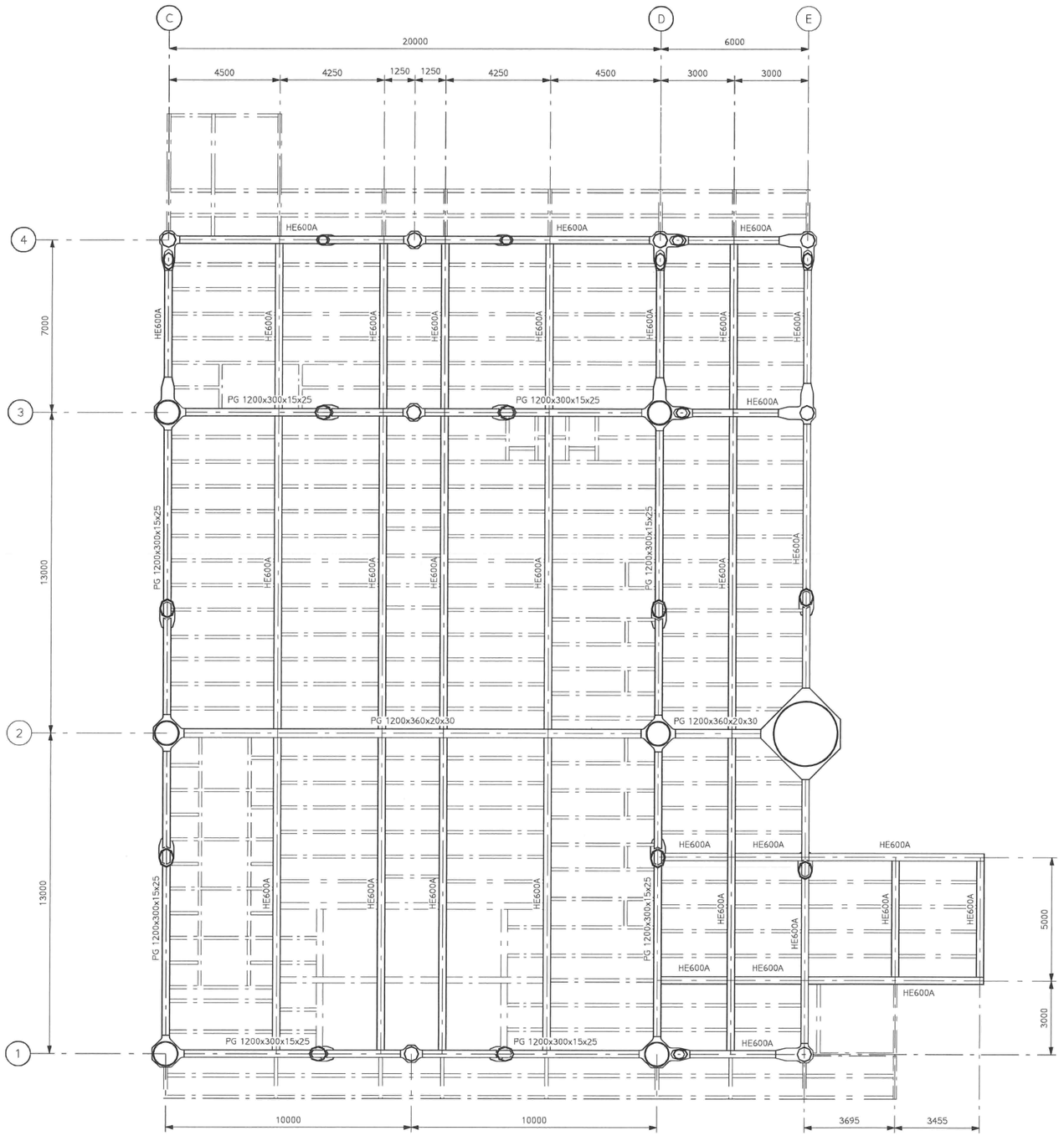
WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
TOPSIDE
CELLAR DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0005	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 17/03/2015 08:16:38 by Devonshireb



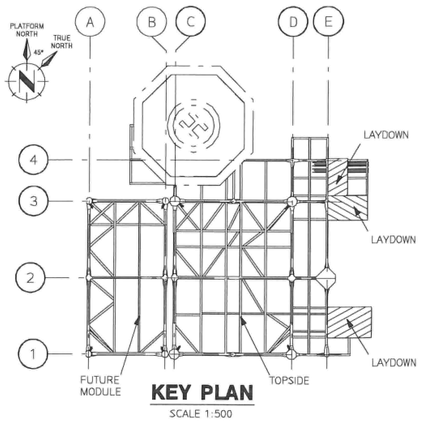


LOWER MEZZANINE DECK PLAN AT EL.+30000 T.O.S.

SCALE 1:100

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   PLATE GIRDERS - TYPE 2
   ROLLED BEAM SECTIONS - TYPE 4
   NODES - TYPE 1



KEY PLAN

SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				BD	R	RY	JJ		
		E1	16.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0049	PRIMARY STEEL GA, TOPSIDE, UPPER MEZZANINE DECK PLAN	B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENTS COMMENT
DRAWING No.	DRAWING TITLE	A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

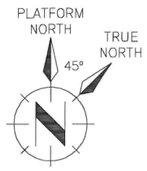
CLIENT: nationalgrid / GENESIS

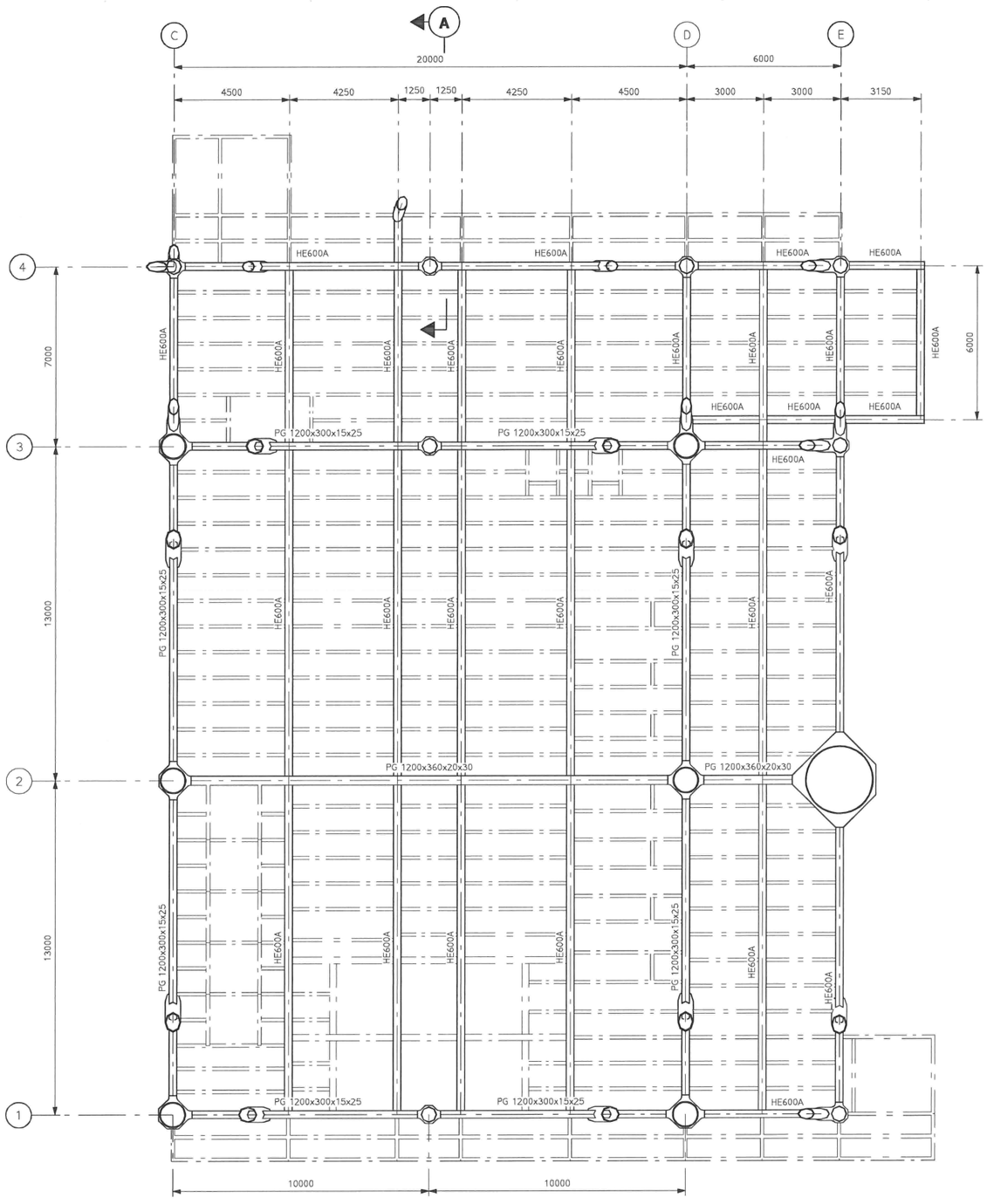
TITLE: WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
TOPSIDE
LOWER MEZZANINE DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0006	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 16/03/2015 09:40:16 by Devonshireb

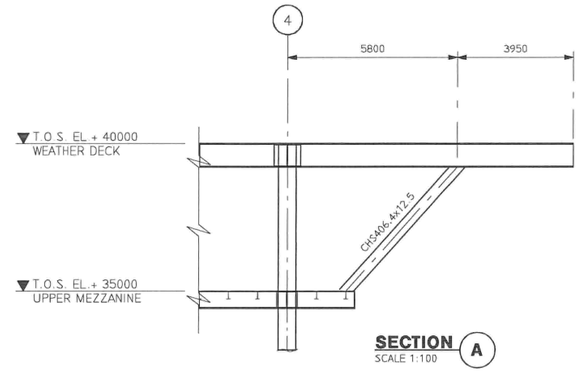




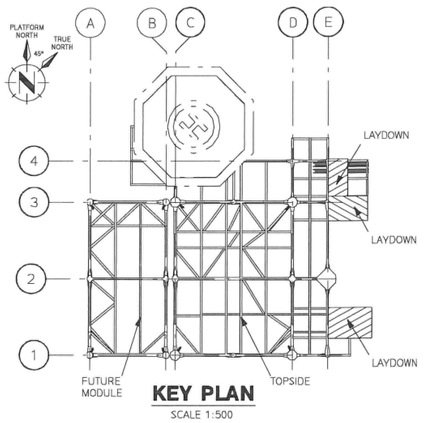
UPPER MEZZANINE DECK PLAN AT EL.+35000 T.O.S.
SCALE 1:100

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   PLATE GIRDERS - TYPE 2
   ROLLED BEAM SECTIONS - TYPE 4
   CHS TUBULARS - TYPE 3
   NODES - TYPE 1



SECTION A
SCALE 1:100



KEY PLAN
SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				BD	SJC	RY	JJ		
		E1	16.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0006	PRIMARY STEEL GA, TOPSIDE, LOWER MEZZANINE DECK PLAN	B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

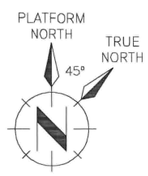
CLIENT
nationalgrid
GENESIS

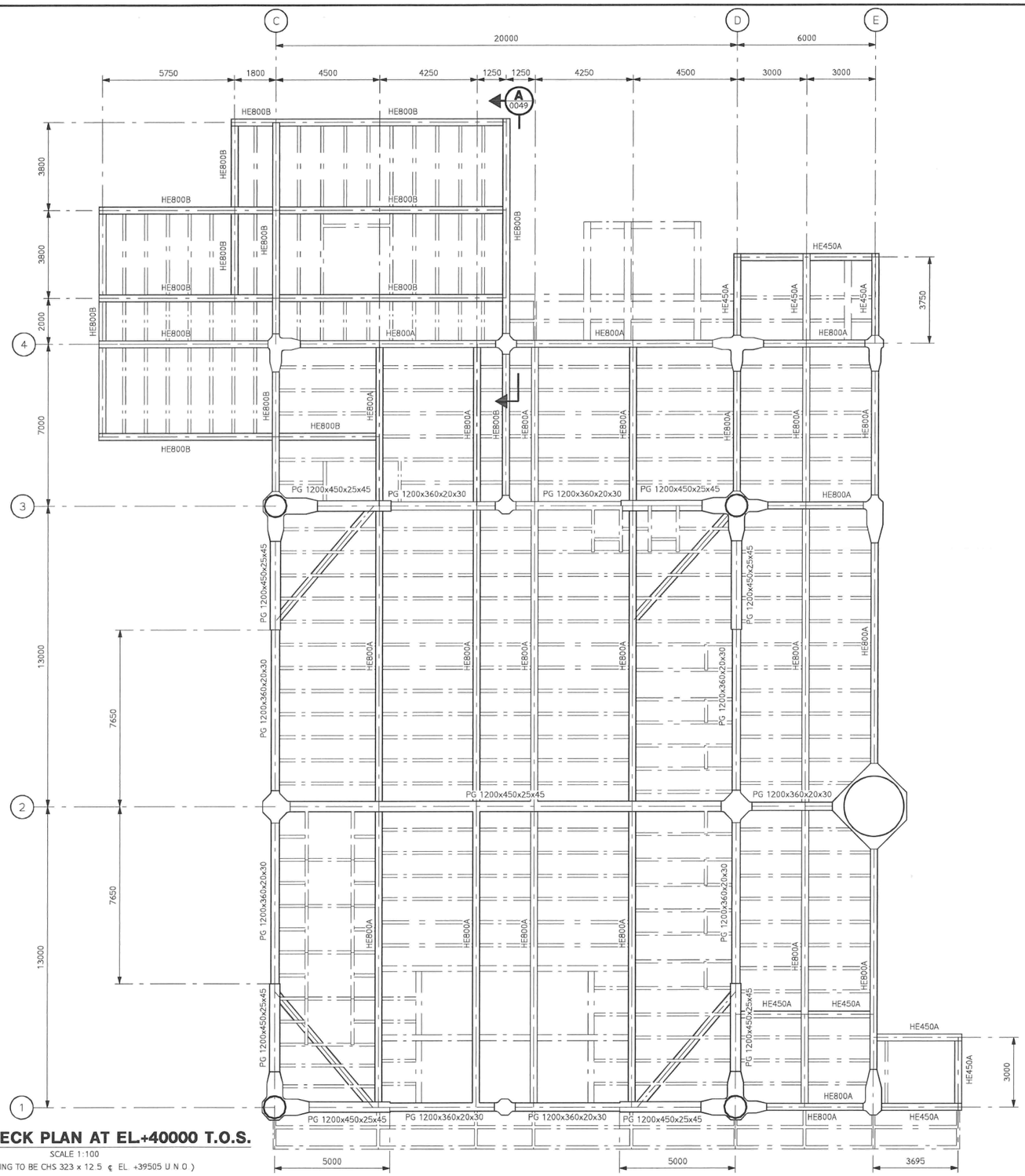
TITLE
WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
TOPSIDE
UPPER MEZZANINE DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0049	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 16/03/2015 10:22:37 by Devonshireb





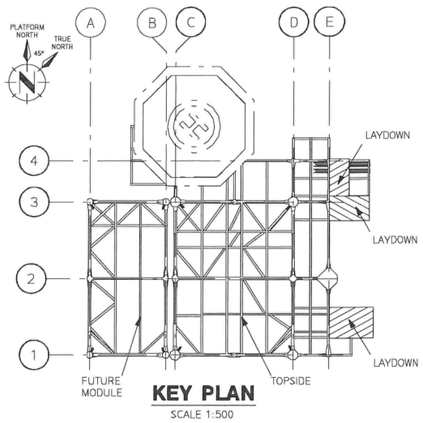
WEATHER DECK PLAN AT EL.+40000 T.O.S.

SCALE 1:100

(PLAN BRACING TO BE CHS 323 x 12.5 ℄ EL. +39505 U.N.O.)

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   PLATE GIRDERS - TYPE 2
   ROLLED BEAM SECTIONS - TYPE 4
   CHS TUBULARS - TYPE 3
   NODES - TYPE 1



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		PAD	ZE	RY	JJ		
E1	16.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

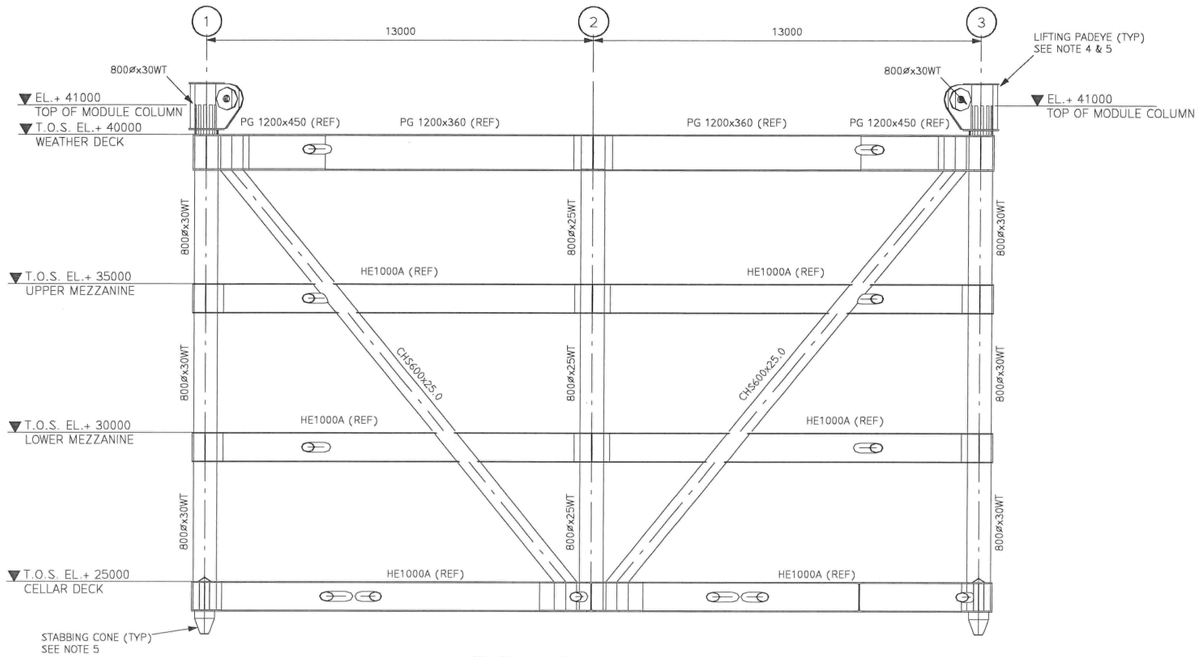
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
TOPSIDE
WEATHER DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0007	1:100	1 OF 1	E1

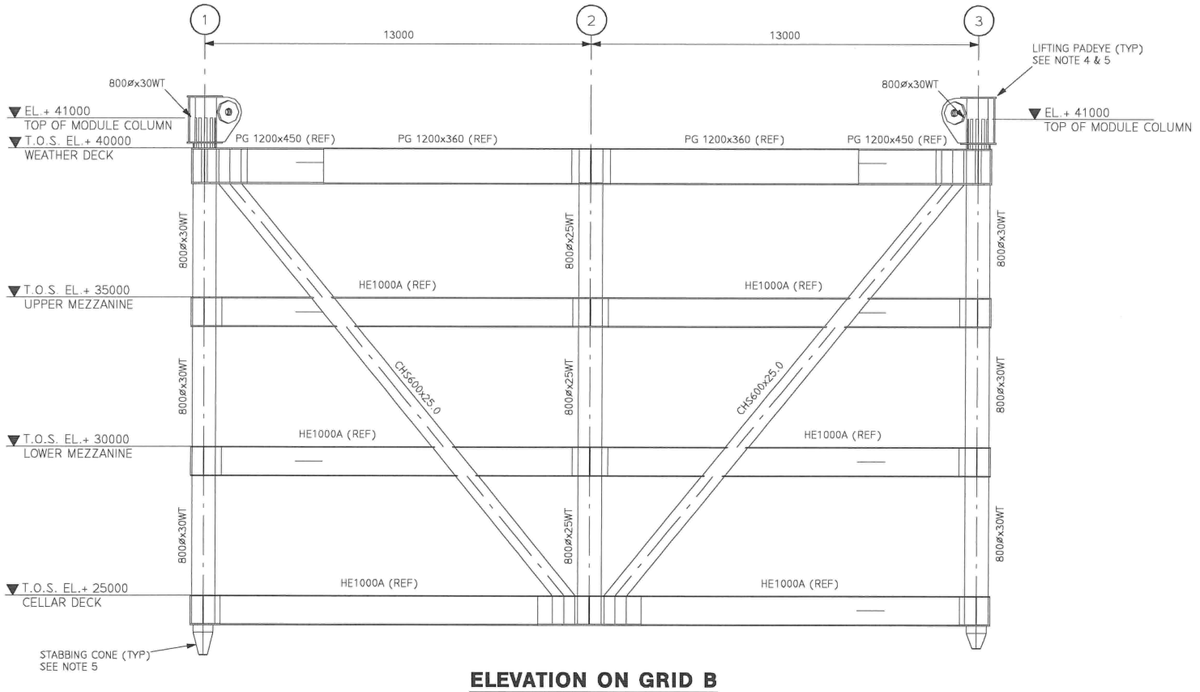
A1 SIZE SHEET

Drawing updated 16/03/2015 10:32:12 by Devonshireb



ELEVATION ON GRID A

SCALE 1:100

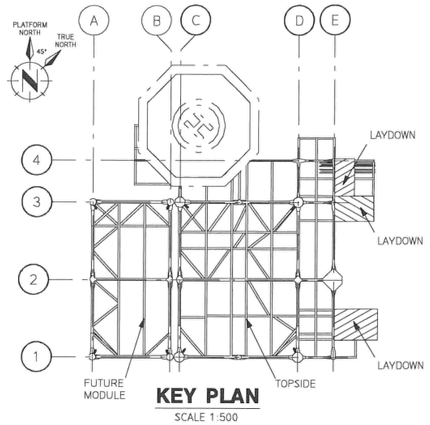


ELEVATION ON GRID B

SCALE 1:100

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   ROLLED TUBULARS - TYPE 2-X
   PADEYES - TYPE 1-X
   STABBING CONES - TYPE 2-X (UNO)
4. LIFTING PADEYES TO BE CUT-OFF AFTER OFFSHORE INSTALLATION
5. STABBING CONES & LIFTING PADEYES TO BE DETERMINED DURING DETAIL DESIGN



KEY PLAN

SCALE 1:500

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		BD	JC	RY	JJ		
E1	17.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

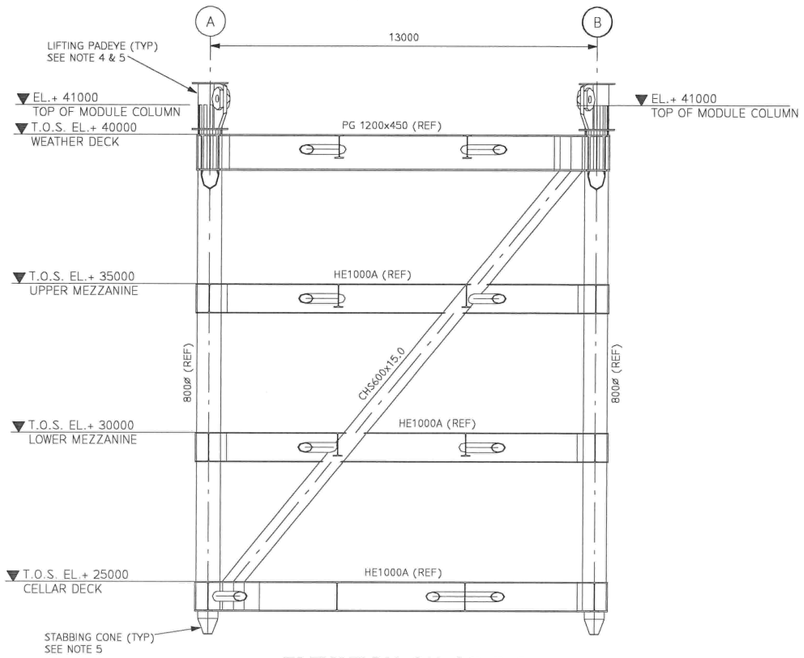
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
FUTURE MODULE
LONGITUDINAL ELEVATIONS GRIDS A & B

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0008	1:100	1 OF 1	E1

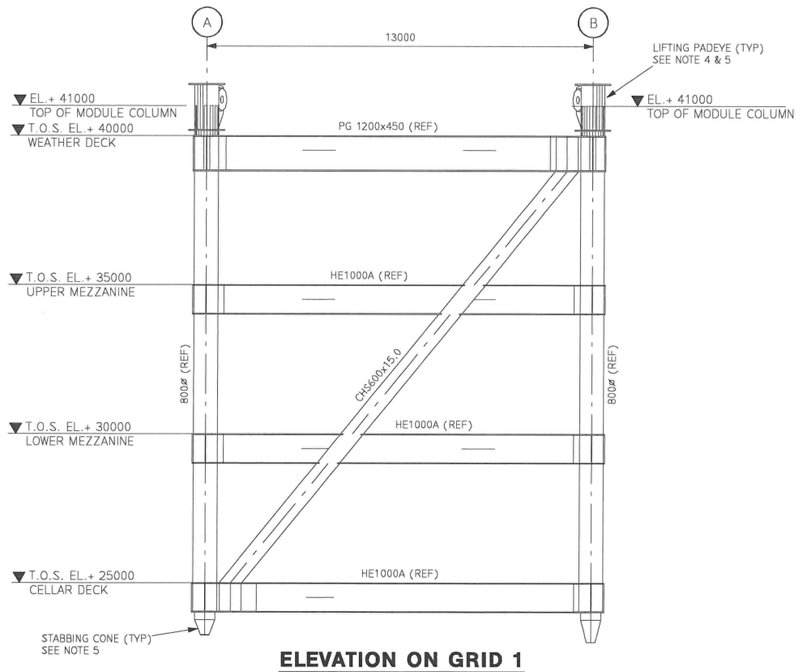
A1 SIZE SHEET

Drawing updated 16/03/2015 16:12:31 by Devonshireb



ELEVATION ON GRID 3

SCALE 1:100

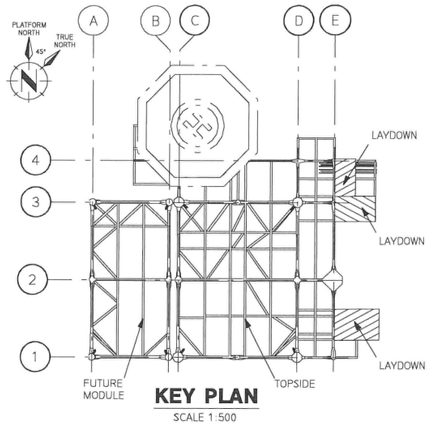


ELEVATION ON GRID 1

SCALE 1:100

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   ROLLED TUBULARS - TYPE 2-X
   PADEYES - TYPE 1-X
   STABBING CONES - TYPE 2-X (UNO)
4. LIFTING PADEYES TO BE CUT-OFF AFTER OFFSHORE INSTALLATION
5. STABBING CONES & LIFTING PADEYES TO BE DETERMINED DURING DETAIL DESIGN



KEY PLAN

SCALE 1:500

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		ED	JC	RY	JJ		
E1	17.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

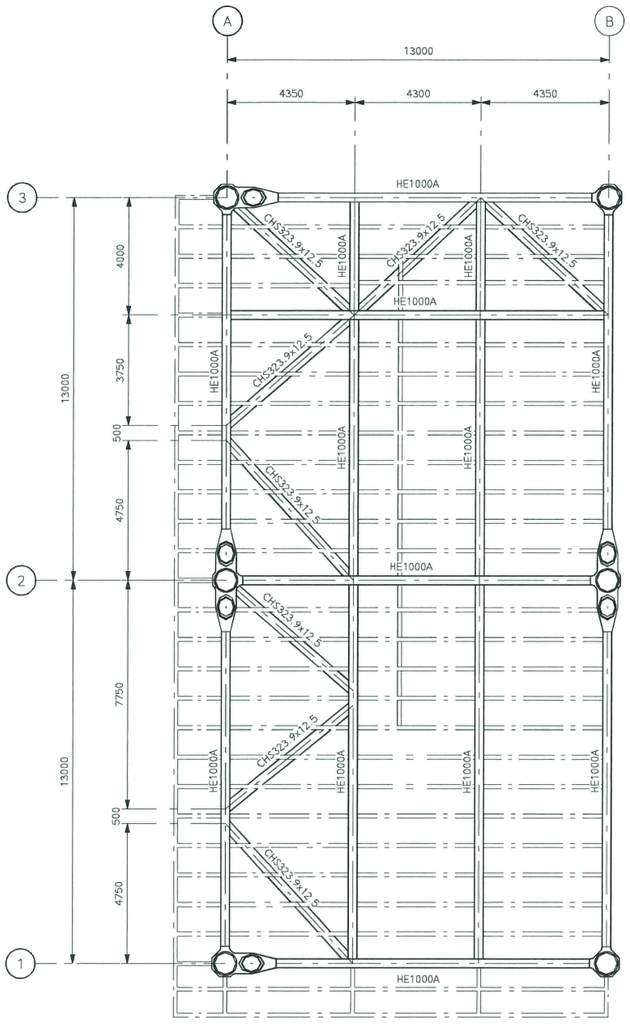
TITLE

WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
FUTURE MODULE
TRANSVERSE ELEVATIONS GRIDS 1 & 3

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0009	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 16/03/2015 15:27:55 by Devonshireb



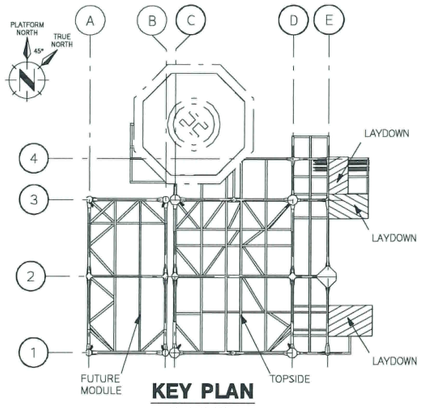
CELLAR DECK PLAN AT EL.+25000 T.O.S.

SCALE 1:100

(PLAN BRACING TO BE CHS 323 x 12.5 ℄ EL. +24505 U.N.O)

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   ROLLED BEAM SECTIONS - TYPE 4-X
   CHS TUBULARS - TYPE 3
   NODES - TYPE 1-X



KEY PLAN

SCALE 1:500

DRAWING No.	DRAWING TITLE	REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				CH	SJC	RY	JJ		
		E1	20.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
		B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
		A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC
REFERENCE DRAWINGS									

CLIENT: nationalgrid

GENESIS

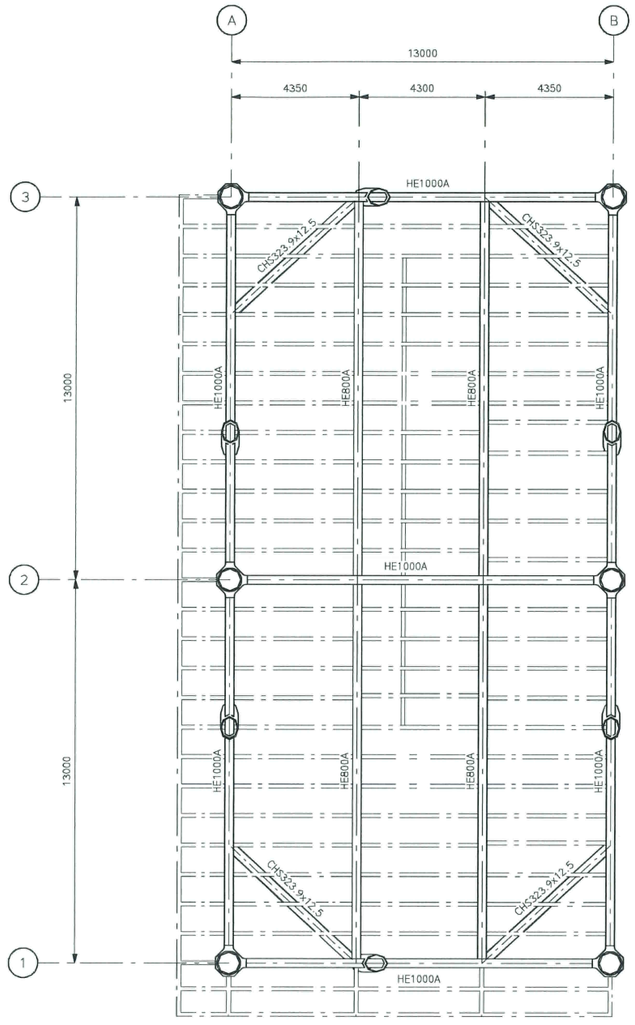
TITLE

WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
FUTURE MODULE
CELLAR DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0010	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 20/03/2015 14:50:55 by hillc



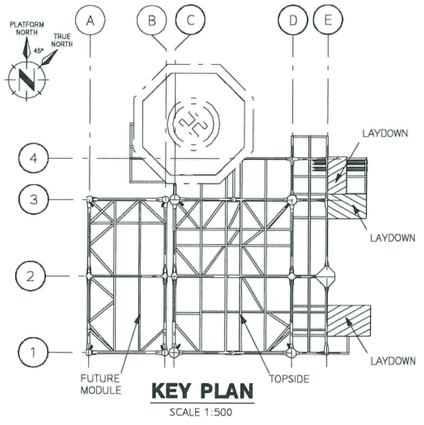
LOWER MEZZANINE DECK PLAN AT EL.+30000 T.O.S.

SCALE 1:100

(PLAN BRACING TO BE CHS 323.9 @ ℄ EL. +29505 U.N.O.)

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   ROLLED BEAM SECTIONS - TYPE 4-X
   CHS TUBULARS - TYPE 3
   NODES - TYPE 1-X



KEY PLAN

SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				CH	SJC	RY	JJ	–	
C001-12-25-99-GD200-0050	PRIMARY STEEL GA, FUTURE MODULE, UPPER MEZZANINE DECK PLAN	E1	20.03.15	CH	SJC	RY	JJ	–	ISSUED FOR FEED
DRAWING No.	DRAWING TITLE	B1	13.02.15	AJB	SJC	RY	JJ	–	ISSUED FOR CLIENT COMMENT
		A1	30.01.15	AJB	SJC	RY	–	–	ISSUED FOR IDC

CLIENT: nationalgrid

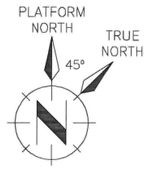
GENESIS

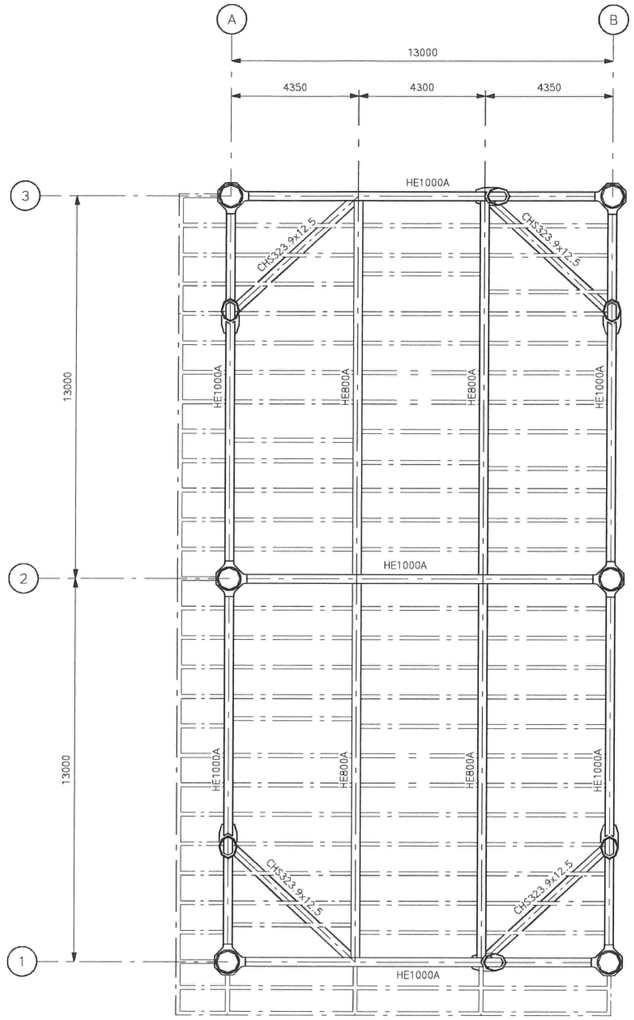
TITLE: WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
FUTURE MODULE
LOWER MEZZANINE DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0011	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 20/03/2015 14:51:18 by hillc





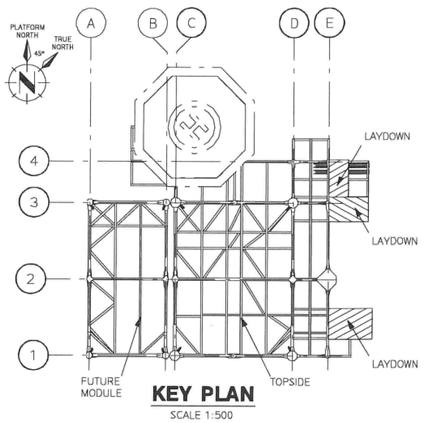
UPPER MEZZANINE DECK PLAN AT EL.+35000 T.O.S.

SCALE 1:100

(PLAN BRACING TO BE CHS 323.9 @ ℄ EL. +34505 U.N.O.)

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   PLATE GIRDERS - TYPE 2-X
   ROLLED BEAM SECTIONS - TYPE 4-X
   CHS TUBULARS - TYPE 3
   NODES - TYPE 1-X



KEY PLAN

SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				CH	SJC	RY	JJ	-	
		E1	20.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0011	PRIMARY STEEL GA, FUTURE MODULE, LOWER MEZZANINE DECK PLAN	B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

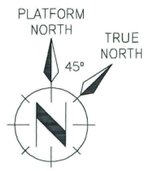
CLIENT: nationalgrid / GENESIS

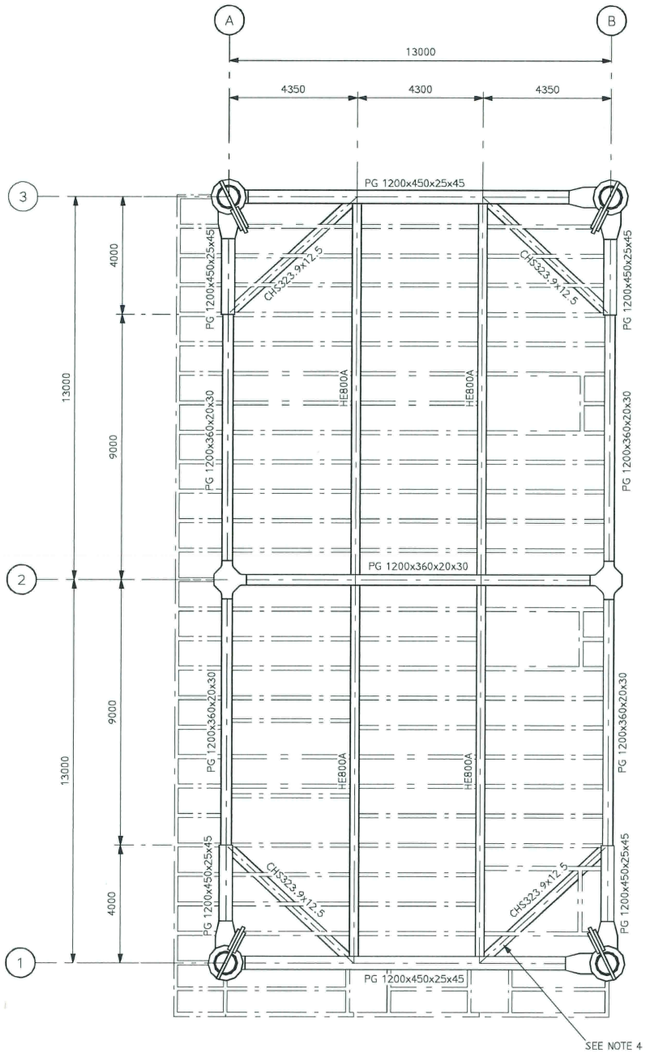
TITLE: WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
FUTURE MODULE
UPPER MEZZANINE DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0050	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 20/03/2015 14:52:52 by hillc





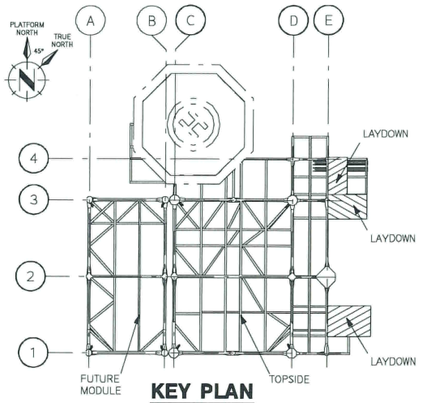
WEATHER DECK PLAN AT EL.+40000 T.O.S.

SCALE 1:100

(PLAN BRACING TO BE CHS 323 x 12.5 ℄ EL. +39505 U.N.O)

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL PRIMARY JOINT DETAILS SEE DRAWING No. C001-12-25-99-GD200-0001
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS:
   PLATE GIRDERS - TYPE 2-X
   ROLLED BEAM SECTIONS - TYPE 4-X
   CHS TUBULARS - TYPE 3
   NODES - TYPE 1-X
4. BRACE DENOTED THUS TO BE REMOVED AFTER OFFSHORE INSTALLATION (TO BE CONFIRMED DURING DETAIL DESIGN)



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	20.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
B1	13.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	30.01.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

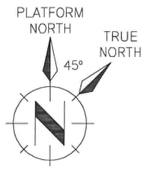
CLIENT: nationalgrid / GENESIS

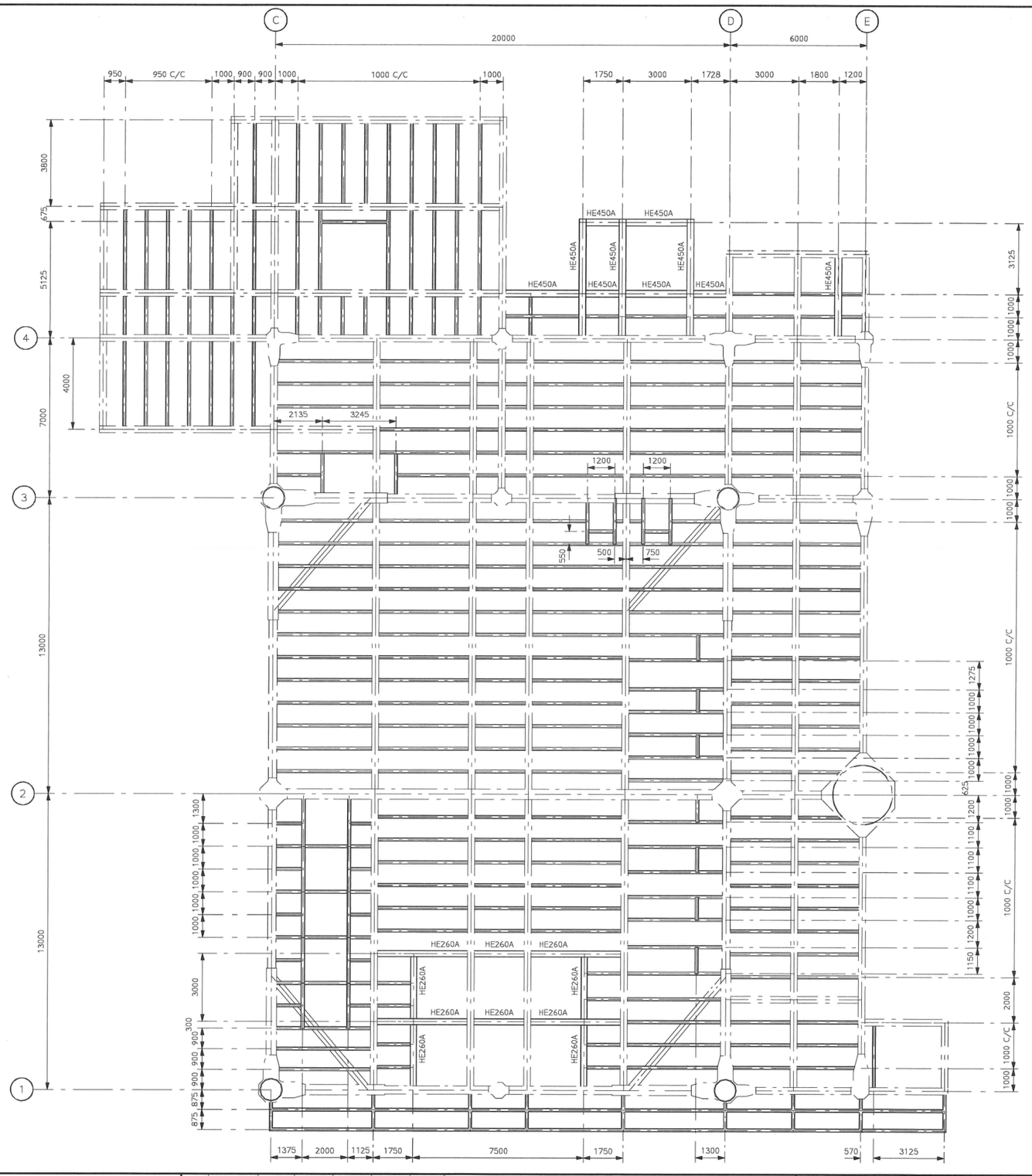
TITLE: WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA
FUTURE MODULE
WEATHER DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0012	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 20/03/2015 14:52:25 by hillc





NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL SECONDARY JOINT DETAILS SEE DRAWING No. C001-12-25-99-GD200-0002
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS: ROLLED BEAM SECTIONS - TYPE 4
4. ALL SECONDARY & TERTIARY STEEL TO BE DETERMINED DURING DETAIL DESIGN

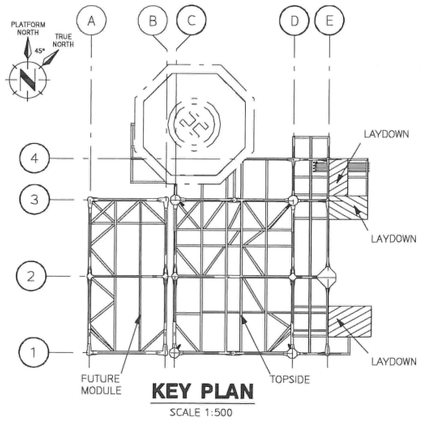
HOLDS

1. ALL SECONDARY & TERTIARY STEEL

WEATHER DECK PLAN AT EL.+40000 T.O.S.

SCALE 1:100

SECONDARY MEMBERS TO BE IPE270 U.N.O



KEY PLAN

SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				CH	SJC	RY	JJ		
		E1	13.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
		B1	19.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	06.02.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

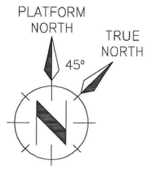
GENESIS

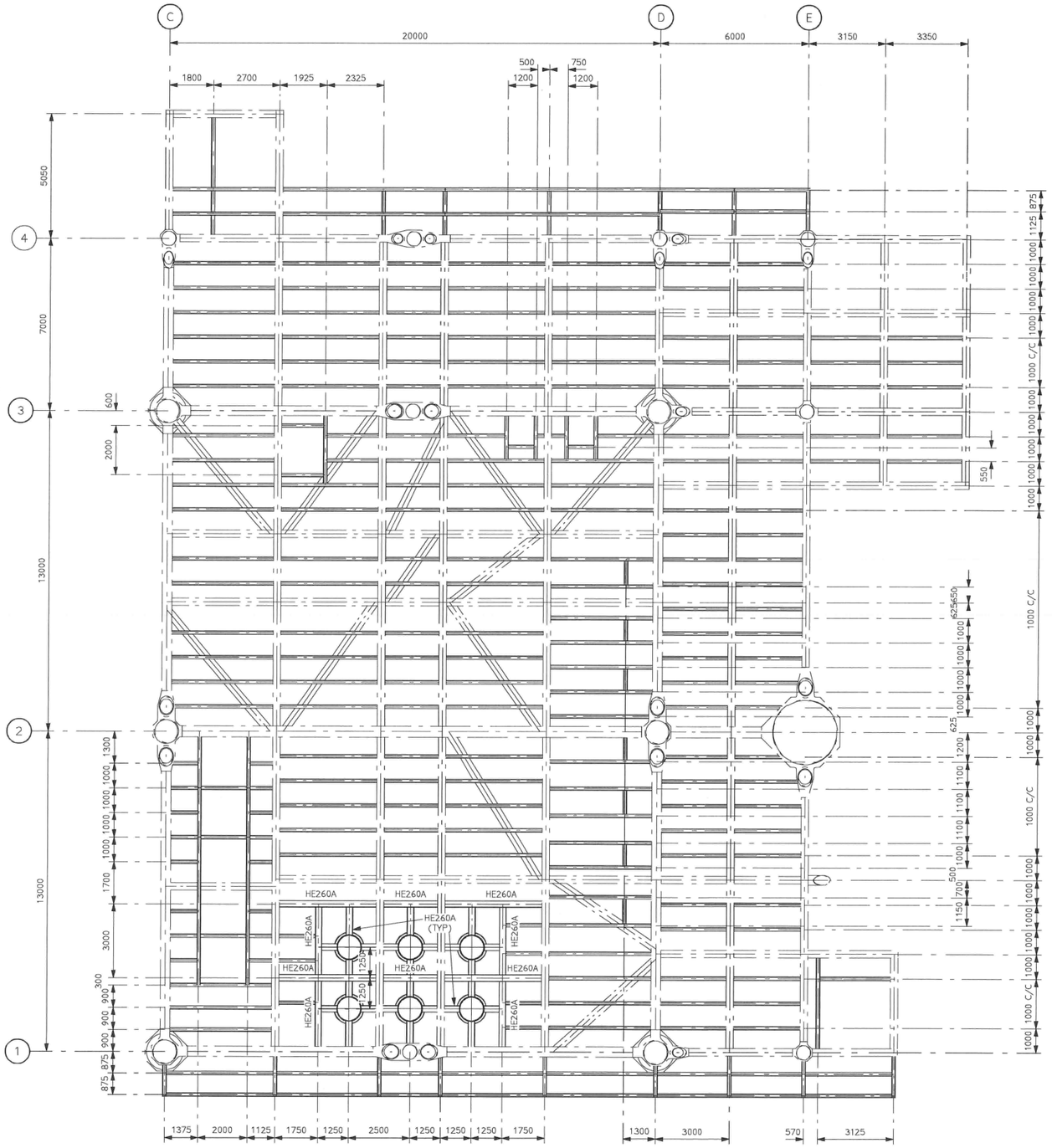
TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
TOPSIDE
WEATHER DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0013	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 13/03/2015 11:53:26 by hillc





CELLAR DECK PLAN AT EL.+25000 T.O.S.

SCALE 1:100

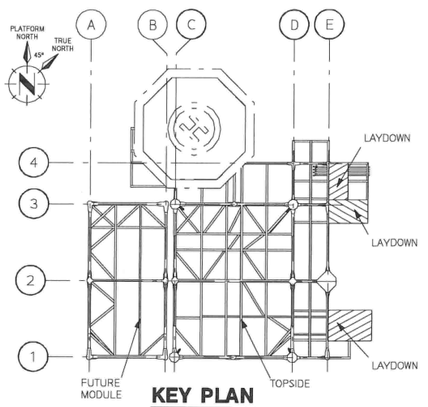
SECONDARY MEMBERS TO BE IPE270 U.N.O

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL SECONDARY JOINT DETAILS SEE DRAWING No. C001-12-25-99-GD200-0002
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS: ROLLED BEAM SECTIONS - TYPE 4
4. ALL SECONDARY & TERTIARY STEEL TO BE DETERMINED DURING DETAIL DESIGN

HOLDS

1. ALL SECONDARY & TERTIARY STEEL



KEY PLAN

SCALE 1:500

REFERENCE DRAWINGS	DRAWING TITLE	REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
DRAWING No.		E1	13.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
		B1	19.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
		A1	06.02.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

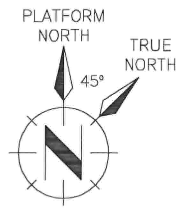
CLIENT: nationalgrid / GENESIS

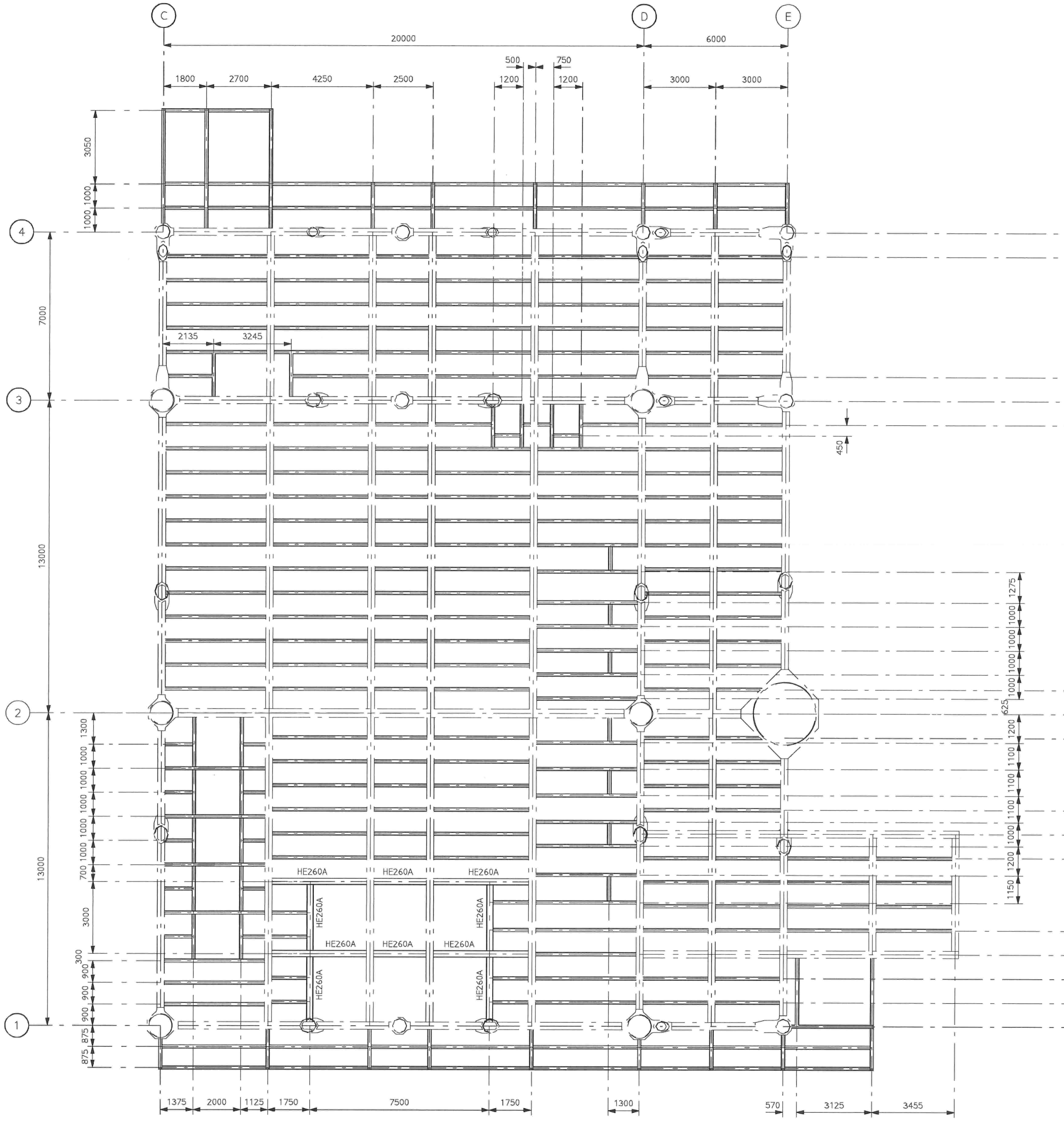
TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
TOPSIDE
CELLAR DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0014	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 13/03/2015 11:46:34 by hillc





LOWER MEZZANINE DECK PLAN AT EL.+30000 T.O.S.

SCALE 1:100

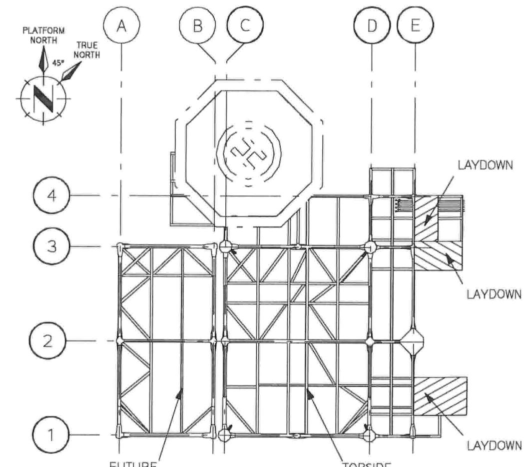
SECONDARY MEMBERS TO BE IPE270 U.N.O

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL SECONDARY JOINT DETAILS SEE DRAWING No. C001-12-25-99-GD200-0002
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS: ROLLED BEAM SECTIONS - TYPE 4
4. ALL SECONDARY & TERTIARY STEEL TO BE DETERMINED DURING DETAIL DESIGN

HOLDS

1. ALL SECONDARY & TERTIARY STEEL



KEY PLAN

SCALE 1:500

DRAWING No.	DRAWING TITLE
C001-12-25-99-GD200-0051	SECONDARY STEEL GA, TOPSIDE, UPPER MEZZANINE DECK PLAN

REFERENCE DRAWINGS

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	13.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
B1	19.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	06.02.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

CLIENT

nationalgrid

GENESIS

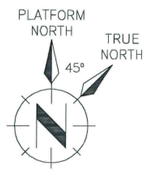
TITLE

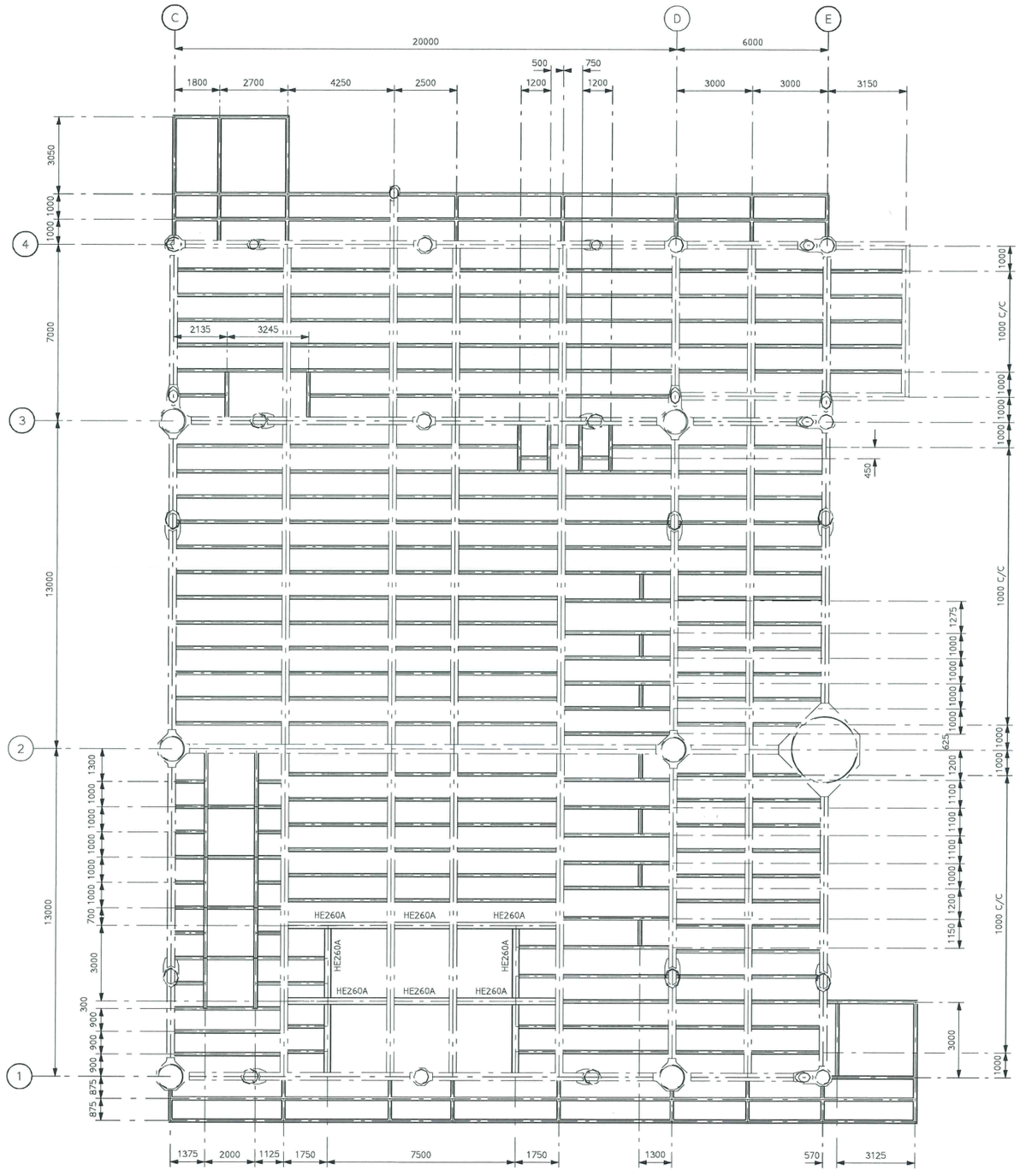
WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
TOPSIDE
LOWER MEZZANINE DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0015	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 13/03/2015 10:24:25 by hillc





UPPER MEZZANINE DECK PLAN AT EL.+35000 T.O.S.

SCALE 1:100

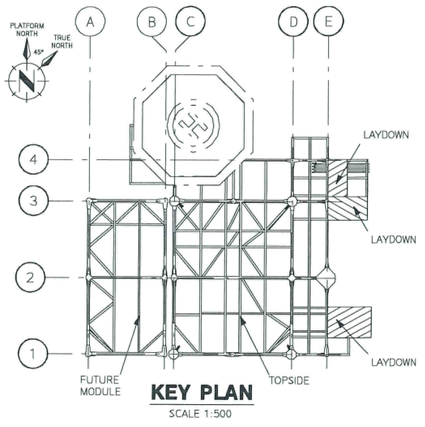
SECONDARY MEMBERS TO BE IPE270 U.N.O.

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL SECONDARY JOINT DETAILS SEE DRAWING No. C001-12-25-99-GD200-0002
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS: ROLLED BEAM SECTIONS – TYPE 4
4. ALL SECONDARY & TERTIARY STEEL TO BE DETERMINED DURING DETAIL DESIGN

HOLDS

1. ALL SECONDARY & TERTIARY STEEL



KEY PLAN

SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-12-25-99-GD200-0015	SECONDARY STEEL GA, TOPSIDE, LOWER MEZZANINE DECK PLAN	E1	13.03.15	CH	SJC	RY	JJ	–	ISSUED FOR FEED
		B1	19.02.15	AJB	SJC	RY	JJ	–	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	06.02.15	AJB	SJC	RY	–	–	ISSUED FOR IDC

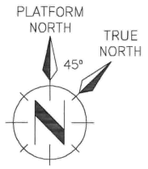
CLIENT: nationalgrid / GENESIS

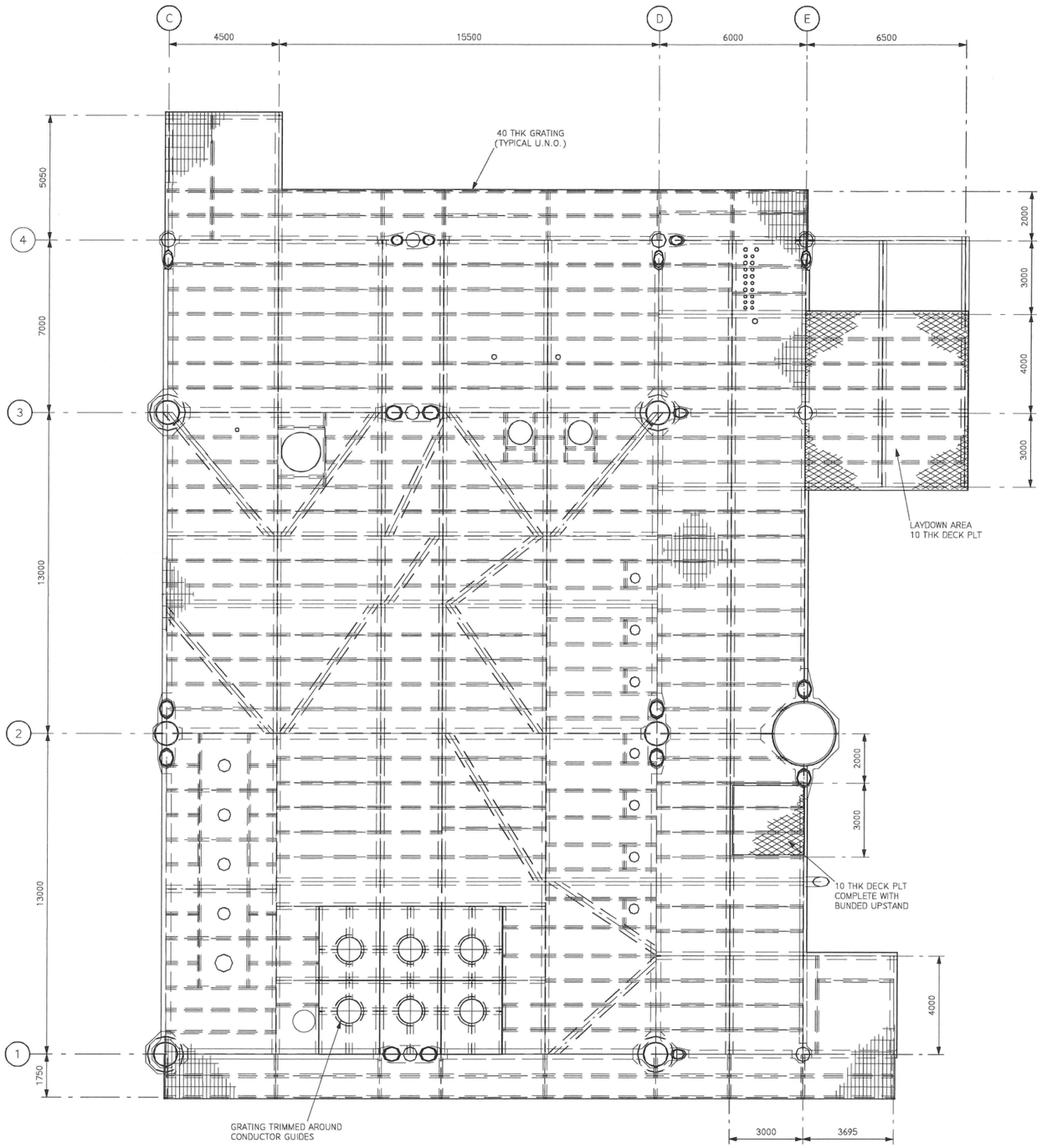
TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
TOPSIDE
UPPER MEZZANINE DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0051	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 13/03/2015 11:24:12 by hillc





CELLAR DECK PLAN AT EL.+25000 T.O.S.

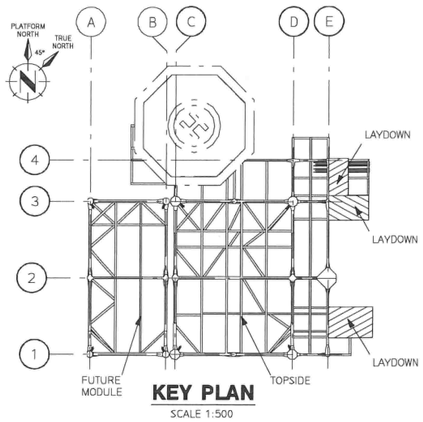
SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE TO CENTRELINE OF BEAMS
2. FOR GRATING AND PLATING SPECIFICATIONS REFER TO DRG No. C001-12-25-99-GD000-0001-GENERAL NOTES
3. FOR DETAILS OF GRATING AND PLATING, REFER TO DRG No. C001-12-25-99-GD200-0002-TOPSIDE AND FUTURE MODULE STANDARD DETAILS
4. PENETRATIONS INDICATED BUT FINAL ADJUSTMENT OF SECONDARY STEEL AND PENETRATIONS TO BE DETERMINED DURING DETAIL DESIGN
5. PLATE MATERIAL TO BE TYPE 2
6. ALL PLATING & GRATING TO BE DETERMINED DURING DETAIL DESIGN

HOLDS

1. ALL PLATING & GRATING



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	18.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
B1	20.02.15	CH	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	CH	SJC	RY	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

CLIENT: nationalgrid

GENESIS

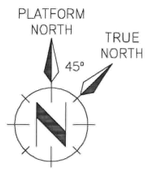
TITLE

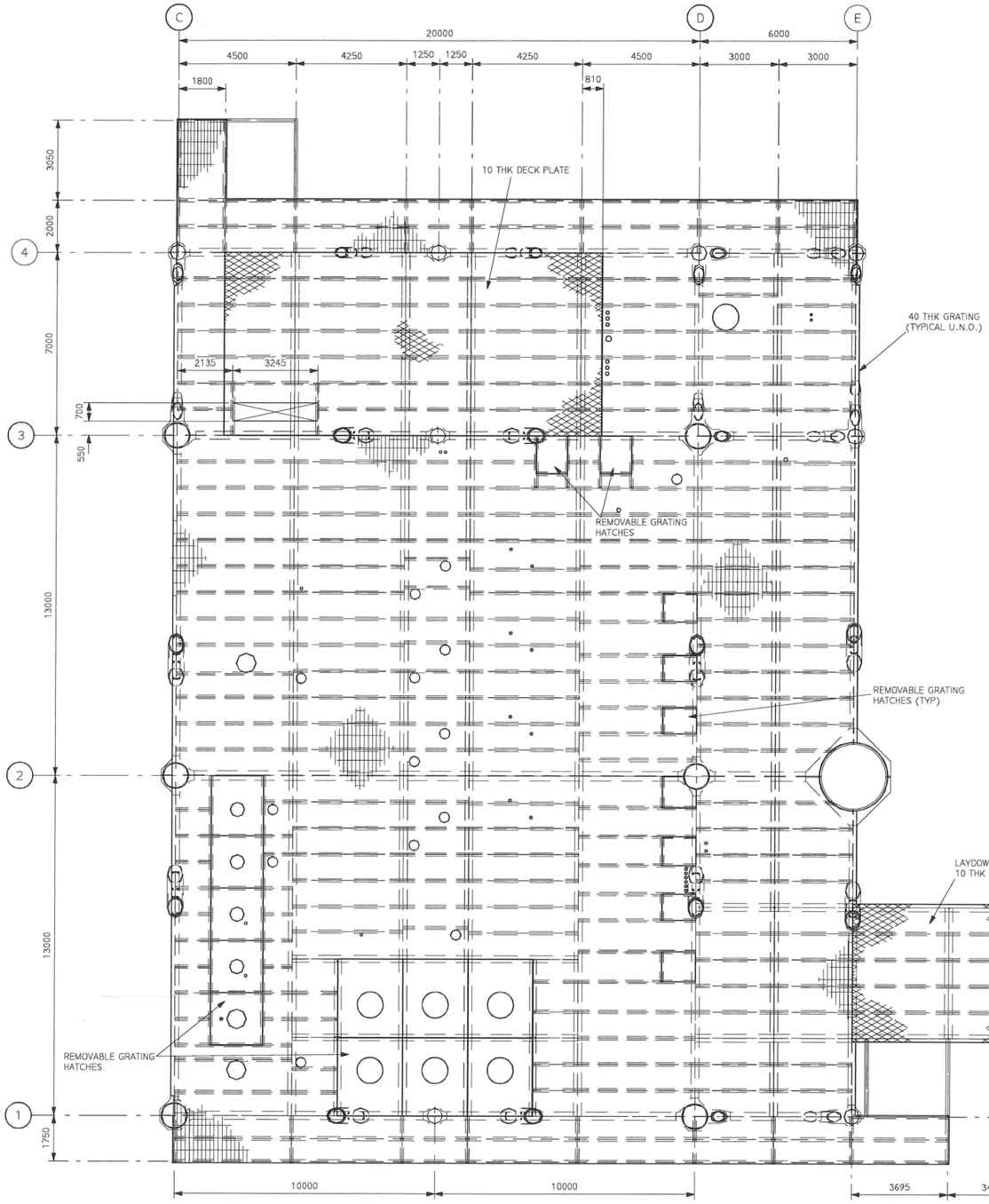
WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
TOPSIDE
CELLAR DECK PLATING & GRATING

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0016	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 18/03/2015 14:18:07 by Devonshireb





LOWER MEZZ DECK PLAN AT EL.+30000 T.O.S.

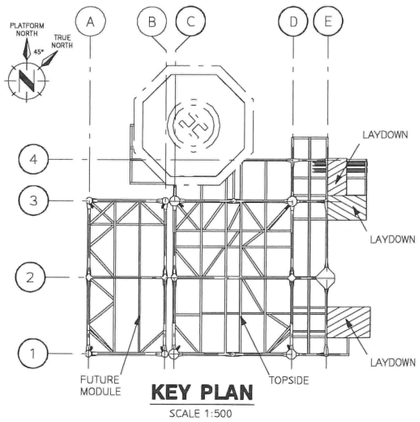
SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE TO CENTRELINE OF BEAMS
2. FOR GRATING AND PLATING SPECIFICATIONS REFER TO DRG No. C001-12-25-99-GD000-0001-GENERAL NOTES
3. FOR DETAILS OF GRATING AND PLATING, REFER TO DRG No. C001-12-25-99-GD200-0002-TOPSIDE AND FUTURE MODULE STANDARD DETAILS
4. PENETRATIONS INDICATED BUT FINAL ADJUSTMENT OF SECONDARY STEEL AND PENETRATIONS TO BE DETERMINED DURING DETAIL DESIGN
5. PLATE MATERIAL TO BE TYPE 2
6. ALL PLATING & GRATING TO BE DETERMINED DURING DETAIL DESIGN

HOLDS

1. ALL PLATING & GRATING



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		BD	SJC	RY	JJ		
E1	18.03.15	BD	SJC	RY	JJ	–	ISSUED FOR FEED
B1	20.02.15	CH	SJC	RY	JJ	–	ISSUED FOR CLIENT COMMENT
A1	13.02.15	CH	SJC	RY	–	–	ISSUED FOR IDC

REFERENCE DRAWINGS

DRAWING No. C001-12-25-99-GD200-0053

DRAWING TITLE SECONDARY STEEL GA, TOPSIDE, UPPER MEZZANINE DECK PLATING & GRATING

CLIENT nationalgrid

GENESIS

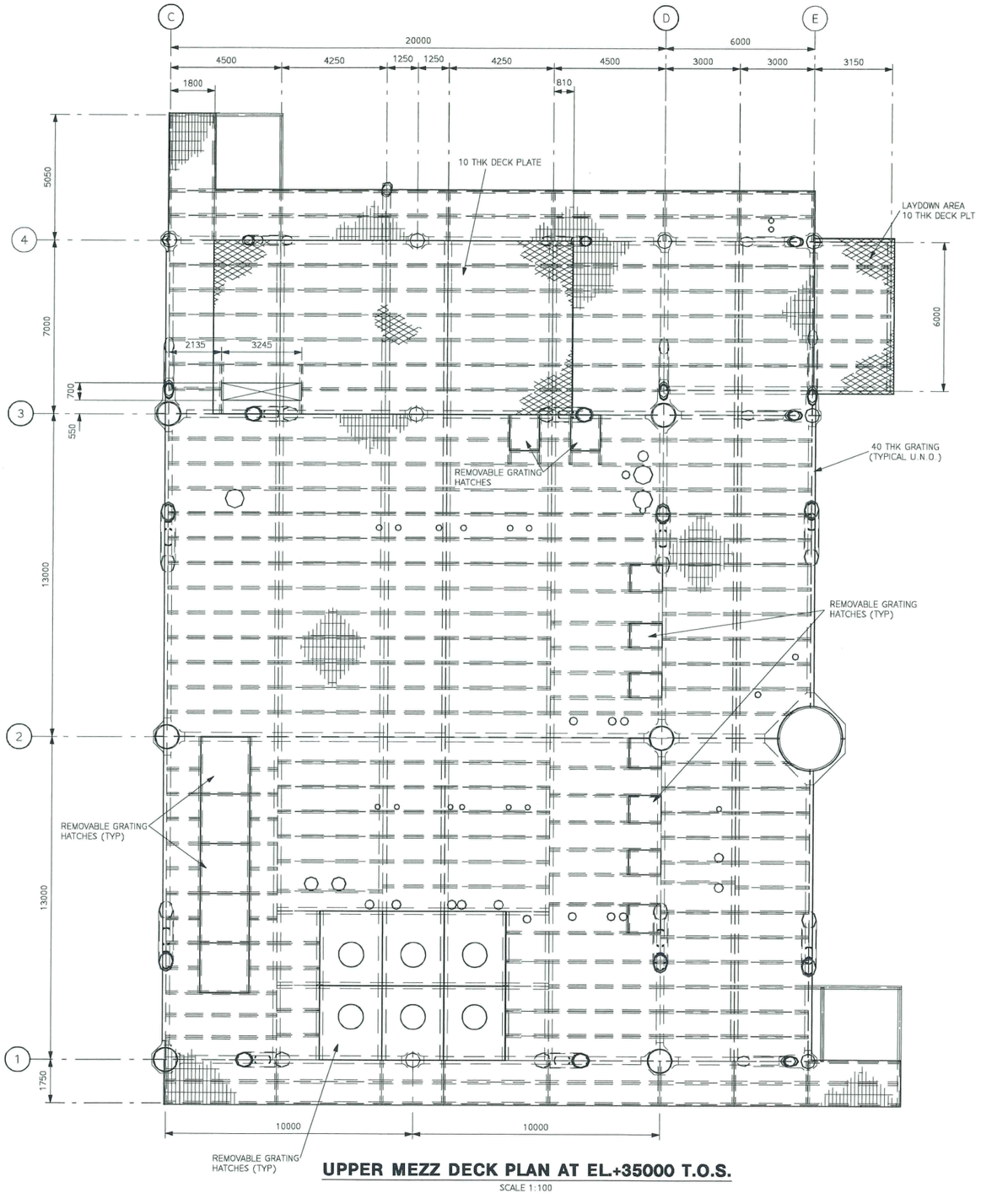
TITLE

WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
TOPSIDE
LOWER MEZZANINE DECK PLATING & GRATING

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0017	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 18/03/2015 14:21:10 by Devonshireb



UPPER MEZZ DECK PLAN AT EL.+35000 T.O.S.

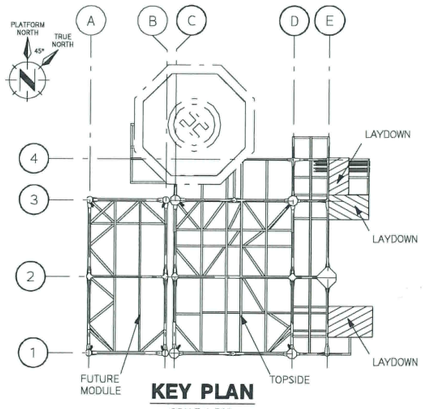
SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE TO CENTRELINE OF BEAMS
2. FOR GRATING AND PLATING SPECIFICATIONS REFER TO DRG No. C001-12-25-99-GD000-0001-GENERAL NOTES
3. FOR DETAILS OF GRATING AND PLATING, REFER TO DRG No. C001-12-25-99-GD200-0002-TOPSIDE AND FUTURE MODULE STANDARD DETAILS
4. PENETRATIONS INDICATED BUT FINAL ADJUSTMENT OF SECONDARY STEEL AND PENETRATIONS TO BE DETERMINED DURING DETAIL DESIGN
5. PLATE MATERIAL TO BE TYPE 2
6. ALL PLATING & GRATING TO BE DETERMINED DURING DETAIL DESIGN

HOLDS

1. ALL PLATING & GRATING



KEY PLAN

SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		E1	18.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0017	SECONDARY STEEL GA, TOPSIDE, LOWER MEZZANINE DECK PLATING & GRATING	B1	20.02.15	CH	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	13.02.15	CH	SJC	RY	-	-	ISSUED FOR IDC

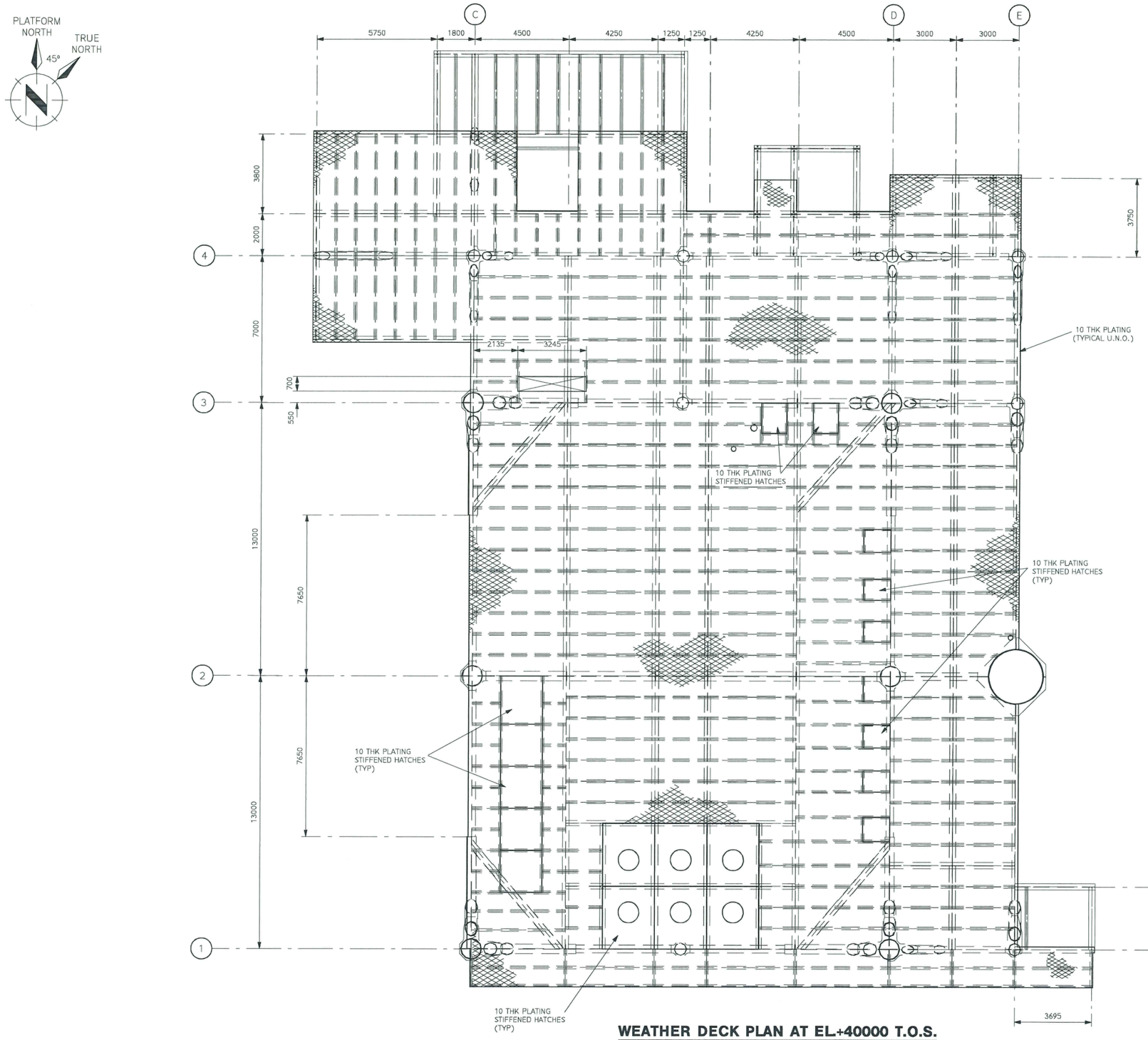
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
TOPSIDE
UPPER MEZZANINE DECK PLATING & GRATING

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0053	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 18/03/2015 14:30:51 by hillc



WEATHER DECK PLAN AT EL.+40000 T.O.S.

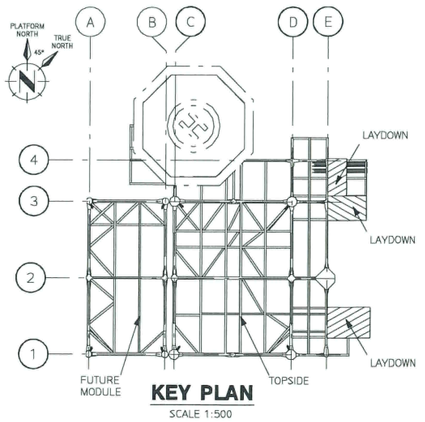
SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE TO CENTRELINE OF BEAMS
2. FOR GRATING AND PLATING SPECIFICATIONS REFER TO DRG No. C001-12-25-99-GD000-0001-GENERAL NOTES
3. FOR DETAILS OF GRATING AND PLATING, REFER TO DRG No. C001-12-25-99-GD200-0002-TOPSIDE AND FUTURE MODULE STANDARD DETAILS
4. PENETRATIONS INDICATED BUT FINAL ADJUSTMENT OF SECONDARY STEEL AND PENETRATIONS TO BE DETERMINED DURING DETAIL DESIGN
5. PLATE MATERIAL TO BE TYPE 2
6. ALL PLATING & GRATING TO BE DETERMINED DURING DETAIL DESIGN

HOLDS

1. ALL PLATING & GRATING



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	18.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
B1	20.02.15	CH	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	CH	SJC	RY	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

CLIENT: nationalgrid

GENESIS

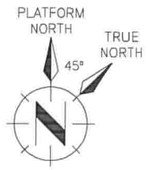
TITLE

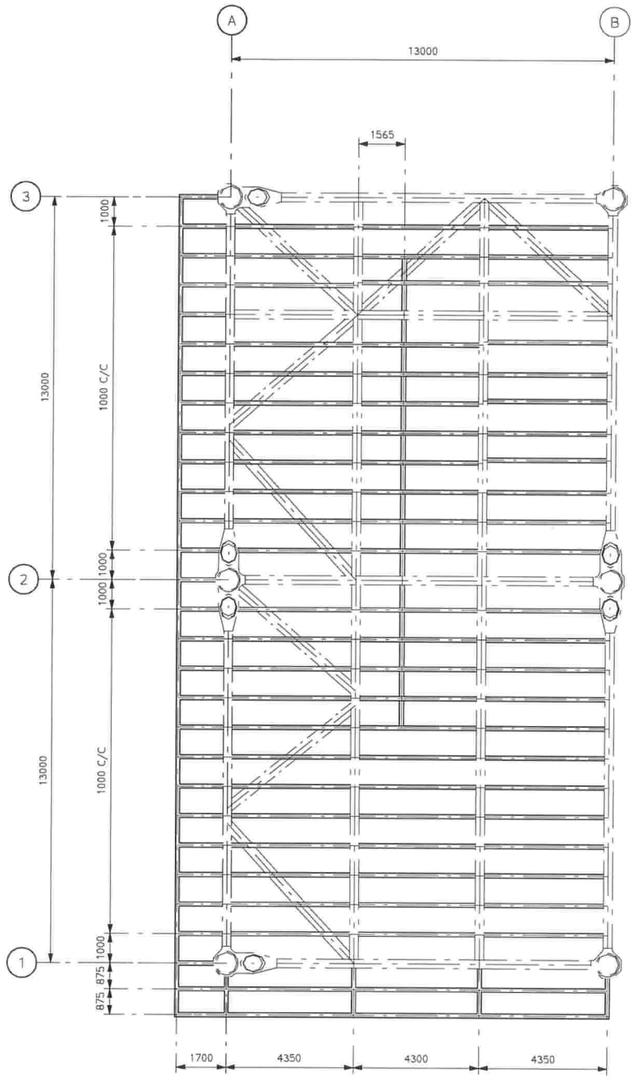
WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
TOPSIDE
WEATHER DECK PLATING & GRATING

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0018	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 18/03/2015 14:31:11 by hillc





CELLAR DECK PLAN AT EL.+25000 T.O.S.

SCALE 1:100

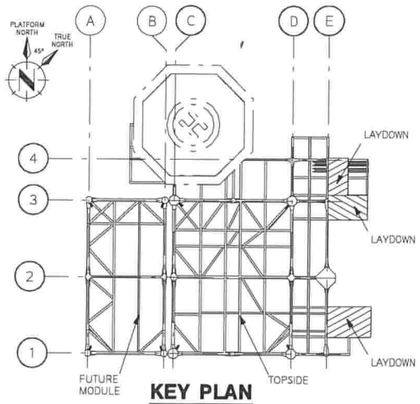
SECONDARY MEMBERS TO BE IPE270 U.N.O

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL SECONDARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0002
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS. ROLLED BEAM SECTIONS - TYPE 4
4. ALL SECONDARY & TERTIARY STEEL TO BE DETERMINED DURING DETAIL DESIGN

HOLD

1. ALL SECONDARY & TERTIARY STEEL



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		BD	JC	RY	JJ		
E1	19.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
B1	19.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	06.02.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

CLIENT: nationalgrid

GENESIS

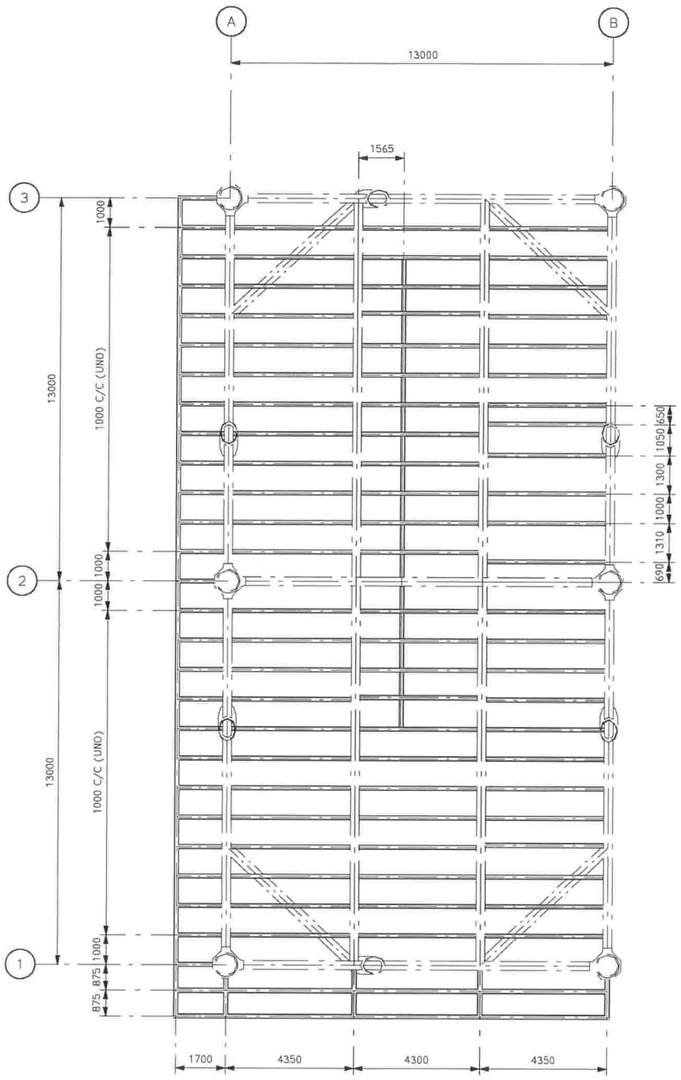
TITLE

WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
FUTURE MODULE
CELLAR DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0019	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 19/03/2015 10:31:00 by Devonshireb



LOWER MEZZANINE DECK PLAN AT EL.+30000 T.O.S.

SCALE 1:100

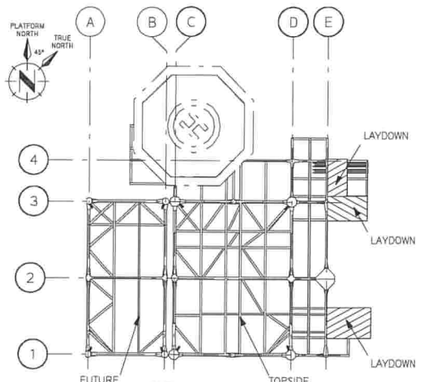
SECONDARY MEMBERS TO BE IPE270 U.N.O

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL SECONDARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0002
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS: ROLLED BEAM SECTIONS - TYPE 4
4. ALL SECONDARY & TERTIARY STEEL TO BE DETERMINED DURING DETAIL DESIGN

HOLD

1. ALL SECONDARY & TERTIARY STEEL



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		BD	JC	RY	JJ		
E1	19.03.15	BD	SJC	RY	JJ	-	ISSUE FOR FEED
B1	19.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	06.02.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

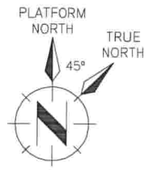
CLIENT: nationalgrid / GENESIS

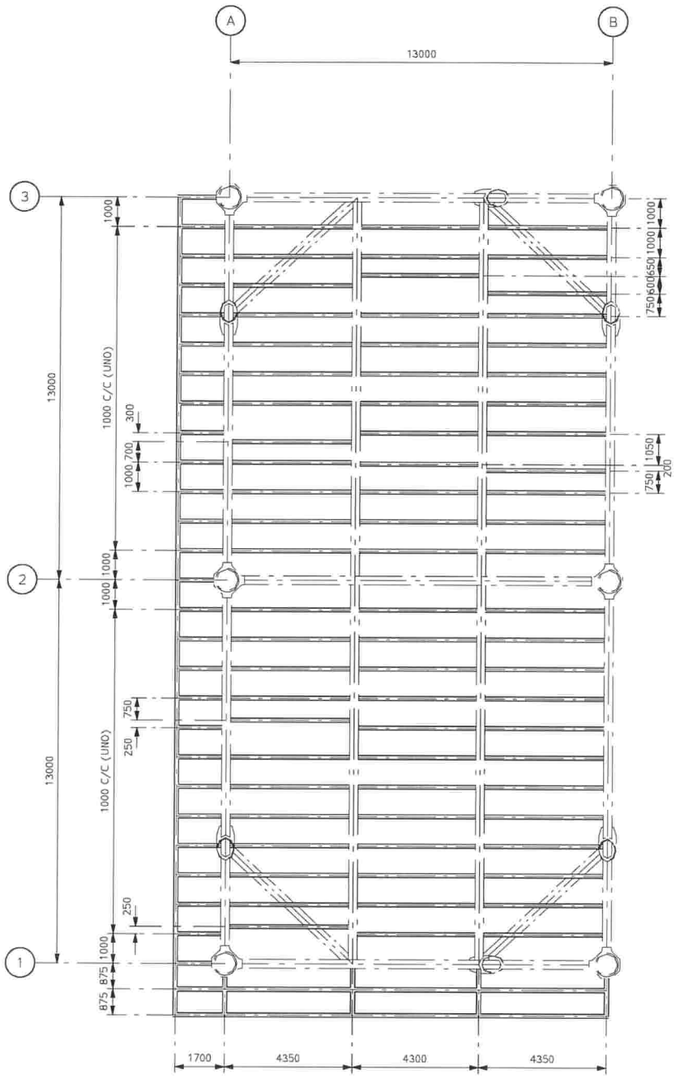
TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
FUTURE MODULE
LOWER MEZZANINE DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0020	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 19/03/2015 10:30:31 by Devonshireb





UPPER MEZZANINE DECK PLAN AT EL.+35000 T.O.S.

SCALE 1:100

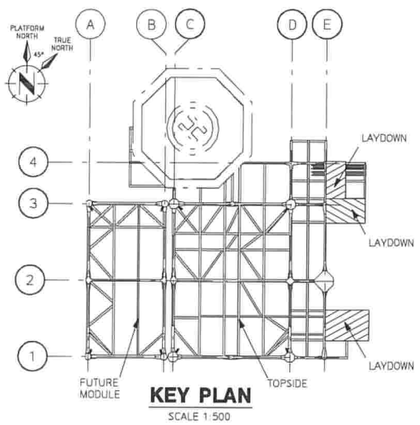
SECONDARY MEMBERS TO BE IPE270 U.N.O

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL SECONDARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0002
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS. ROLLED BEAM SECTIONS - TYPE 4
4. ALL SECONDARY & TERTIARY STEEL TO BE DETERMINED DURING DETAIL DESIGN

HOLD

1. ALL SECONDARY & TERTIARY STEEL



KEY PLAN

SCALE 1:500

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	19.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
B1	19.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	06.02.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

CLIENT

nationalgrid

GENESIS

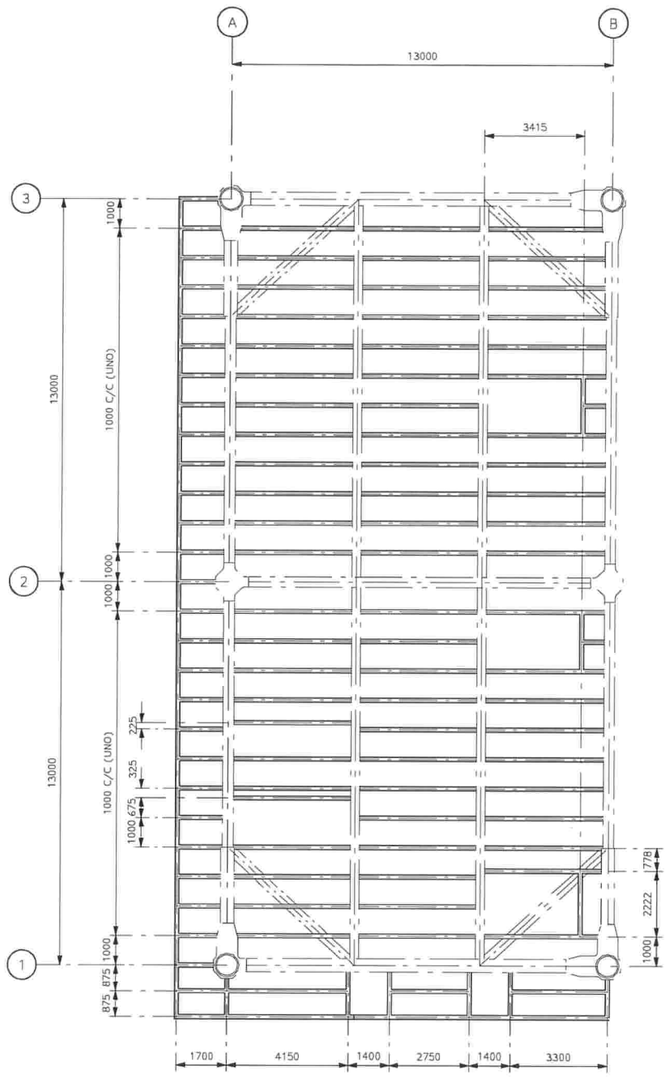
TITLE

WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
FUTURE MODULE
UPPER MEZZANINE DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0052	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 19/03/2015 10:21:01 by hillc



WEATHER DECK PLAN AT EL.+40000 T.O.S.

SCALE 1:100

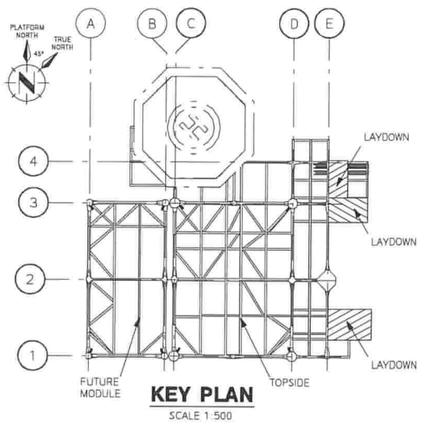
SECONDARY MEMBERS TO BE IPE270 U.N.O

NOTES

1. FOR GENERAL NOTES, SEE DRAWING No. C001-12-25-99-GD000-0001
2. FOR TYPICAL SECONDARY JOINT DETAILS, SEE DRAWING No. C001-12-25-99-GD200-0002
3. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS: ROLLED BEAM SECTIONS - TYPE 4
4. ALL SECONDARY & TERTIARY STEEL TO BE DETERMINED DURING DETAIL DESIGN

HOLD

1. ALL SECONDARY & TERTIARY STEEL



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	19.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
B1	19.02.15	AJB	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	06.02.15	AJB	SJC	RY	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE

REFERENCE DRAWINGS

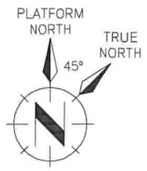
CLIENT: nationalgrid / GENESIS

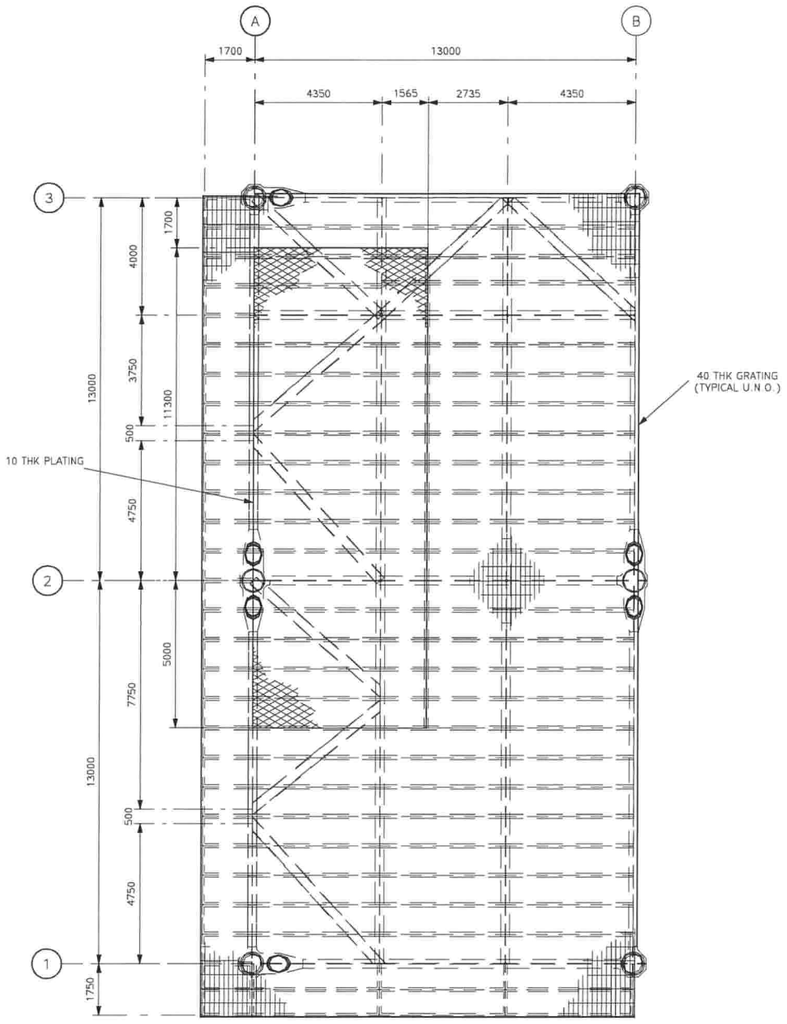
TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
FUTURE MODULE
WEATHER DECK PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0021	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 19/03/2015 10:21:11 by hillc





CELLAR DECK PLAN AT EL.+25000 T.O.S.

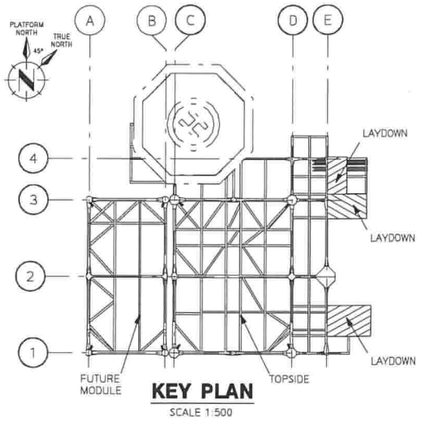
SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE TO CENTRELINE OF BEAMS
2. FOR GRATING AND PLATING SPECIFICATIONS REFER TO DRG No. C001/12/25/99/GD000/0001-GENERAL NOTES
3. FOR DETAILS OF GRATING AND PLATING, REFER TO DRG No. C001/12/25/99/GD200/0002-TOPSIDE AND FUTURE MODULE STANDARD DETAILS
4. PENETRATIONS INDICATED BUT FINAL ADJUSTMENT OF SECONDARY STEEL AND PENETRATIONS TO BE DETERMINED DURING DETAIL DESIGN
5. PLATE MATERIAL TO BE TYPE 2
6. ALL PLATING & GRATING TO BE DETERMINED DURING DETAIL DESIGN

NOTES

1. ALL PLATING & GRATING



KEY PLAN

SCALE 1:500

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		BD	JC	RY	JJ	-	
E1	20.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
B1	20.02.15	CH	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	CH	SJC	RY	-	-	ISSUED FOR IDC

CLIENT

nationalgrid

GENESIS

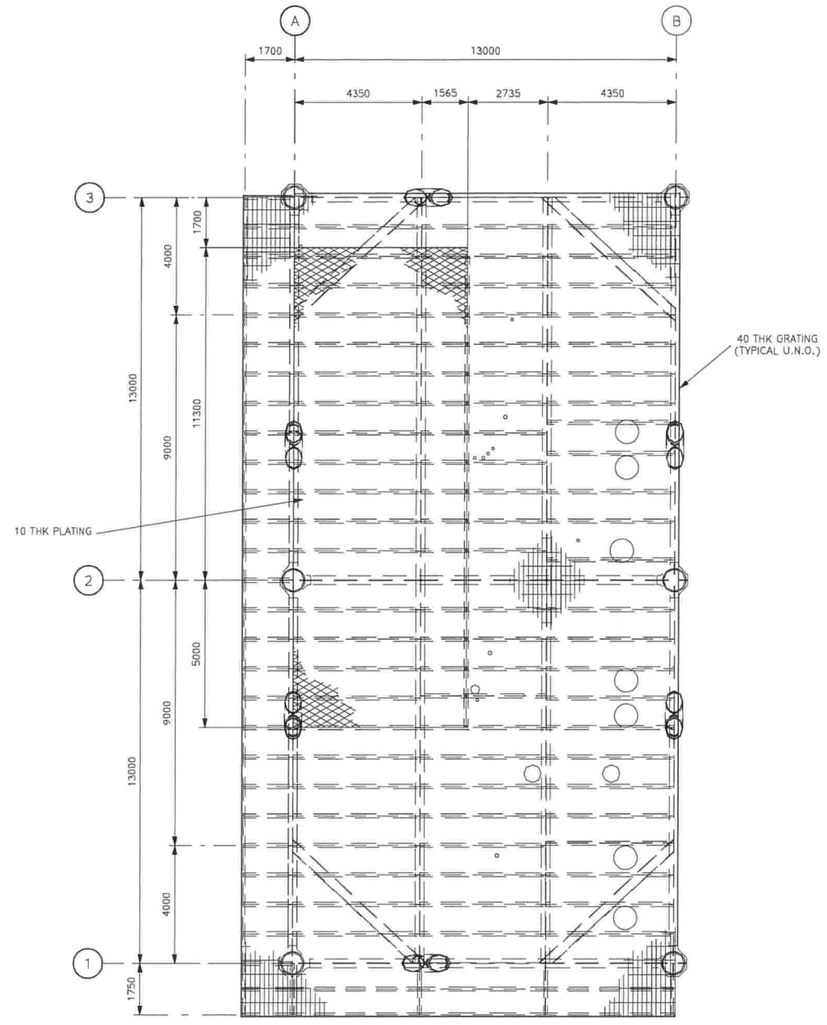
TITLE

WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
FUTURE MODULE
CELLAR DECK PLATING & GRATING

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0022	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 20/03/2015 10:45:17 by Devonshireb



LOWER MEZZANINE DECK PLAN AT EL.+30000 T.O.S.

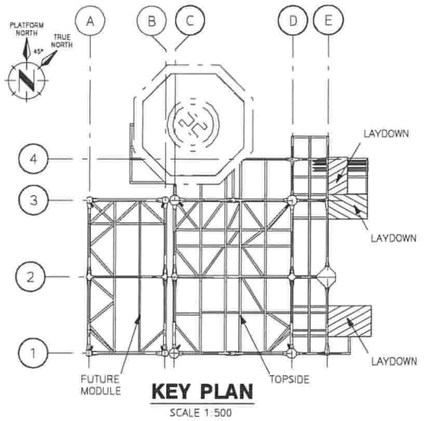
SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE TO CENTRELINE OF BEAMS
2. FOR GRATING AND PLATING SPECIFICATIONS REFER TO DRG No. C001/12/25/99/GD000/0001-GENERAL NOTES
3. FOR DETAILS OF GRATING AND PLATING, REFER TO DRG No. C001/12/25/99/GD200/0002-TOPSIDE AND FUTURE MODULE STANDARD DETAILS
4. PENETRATIONS INDICATED BUT FINAL ADJUSTMENT OF SECONDARY STEEL AND PENETRATIONS TO BE DETERMINED DURING DETAIL DESIGN
5. PLATE MATERIAL TO BE TYPE 2
6. ALL PLATING & GRATING TO BE DETERMINED DURING DETAIL DESIGN

NOTES

1. ALL PLATING & GRATING



KEY PLAN

SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				BD	SJC	RY	JJ	-	
		E1	20.03.15	BD	SJC	RY	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0054	SECONDARY STEEL GA, FUTURE MODULE, UPPER MEZZANINE DECK PLATING & GRATING	B1	20.02.15	CH	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	13.02.15	CH	SJC	RY	-	-	ISSUED FOR IDC

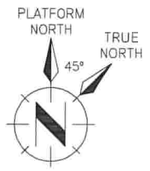
CLIENT: nationalgrid / GENESIS

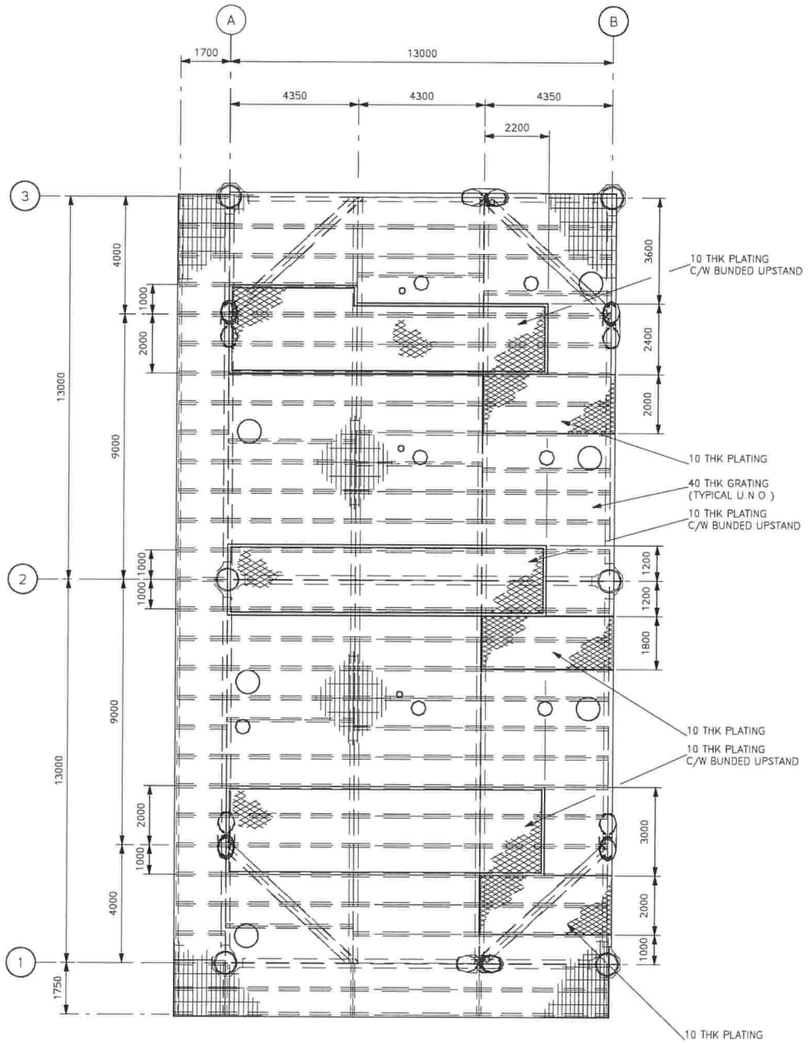
TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
FUTURE MODULE
LOWER MEZZANINE DECK PLATING & GRATING

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0023	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 20/03/2015 10:45:43 by Devonshireb





UPPER MEZZANINE DECK PLAN AT EL.+35000 T.O.S.

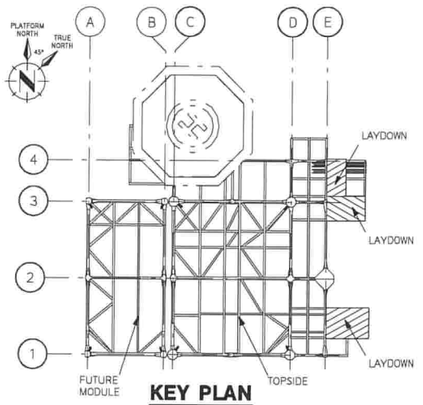
SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE TO CENTRELINE OF BEAMS
2. FOR GRATING AND PLATING SPECIFICATIONS REFER TO DRG No. C001/12/25/99/GD000/0001-GENERAL NOTES
3. FOR DETAILS OF GRATING AND PLATING, REFER TO DRG No. C001/12/25/99/GD200/0002-TOPSIDE AND FUTURE MODULE STANDARD DETAILS
4. PENETRATIONS INDICATED BUT FINAL ADJUSTMENT OF SECONDARY STEEL AND PENETRATIONS TO BE DETERMINED DURING DETAIL DESIGN
5. PLATE MATERIAL TO BE TYPE 2
6. ALL PLATING & GRATING TO BE DETERMINED DURING DETAIL DESIGN

NOTES

1. ALL PLATING & GRATING



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
			CH	RY	JJ		
E1	20.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
B1	20.02.15	CH	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	CH	SJC	RY	-	-	ISSUED FOR IDC

REFERENCE DRAWINGS

DRAWING No.: C001-12-25-99-GD200-0023

DRAWING TITLE: SECONDARY STEEL GA, FUTURE MODULE, LOWER MEZZANINE DECK PLATING & GRATING

CLIENT: nationalgrid

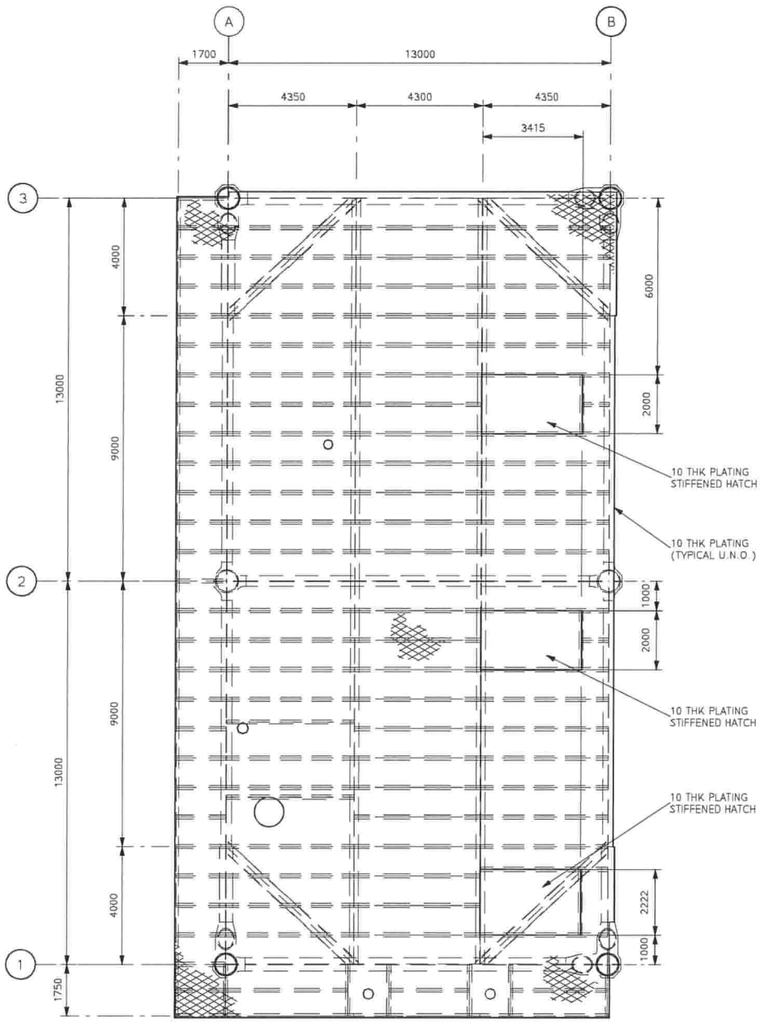
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
FUTURE MODULE
UPPER MEZZANINE DECK PLATING & GRATING

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0054	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 20/03/2015 11:21:29 by hillc



WEATHER DECK PLAN AT EL.+40000 T.O.S.

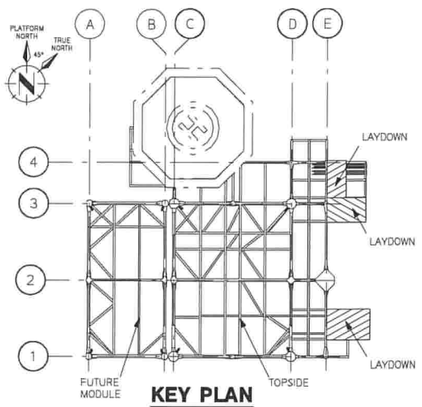
SCALE 1:100

NOTES

1. ALL DIMENSIONS ARE TO CENTRELINE OF BEAMS
2. FOR GRATING AND PLATING SPECIFICATIONS REFER TO DRG No. C001/12/25/99/GD000/0001-GENERAL NOTES
3. FOR DETAILS OF GRATING AND PLATING, REFER TO DRG No. C001/12/25/99/GD200/0002-TOPSIDE AND FUTURE MODULE STANDARD DETAILS
4. PENETRATIONS INDICATED BUT FINAL ADJUSTMENT OF SECONDARY STEEL AND PENETRATIONS TO BE DETERMINED DURING DETAIL DESIGN
5. PLATE MATERIAL TO BE TYPE 2
6. ALL PLATING & GRATING TO BE DETERMINED DURING DETAIL DESIGN

NOTES

1. ALL PLATING & GRATING



KEY PLAN

SCALE 1:500

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	20.03.15	CH	SJC	RY	JJ	-	ISSUED FOR FEED
B1	20.02.15	CH	SJC	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	CH	SJC	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

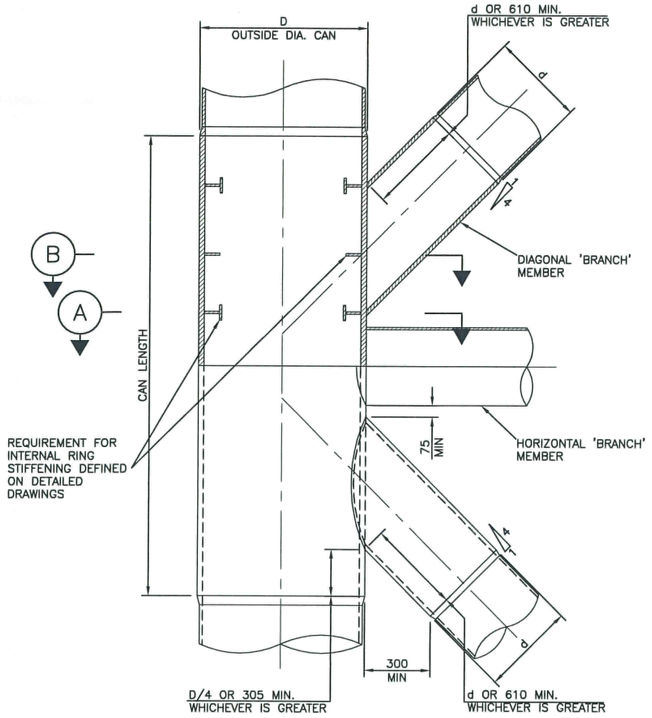
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL GA
FUTURE MODULE
WEATHER DECK PLATING & GRATING

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0024	1:100	1 OF 1	E1

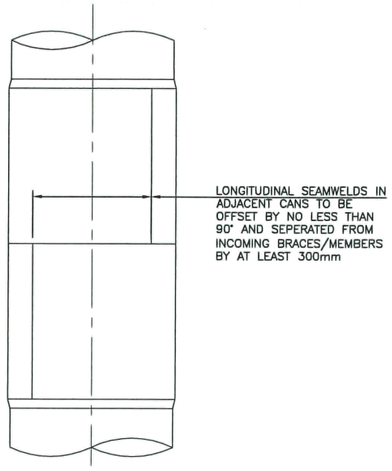
A1 SIZE SHEET

Drawing updated 20/03/2015 11:03:42 by hillc



TYPICAL ELEVATION

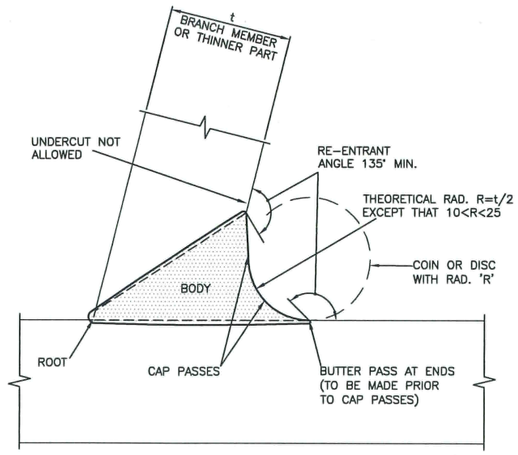
SCALE 1:20



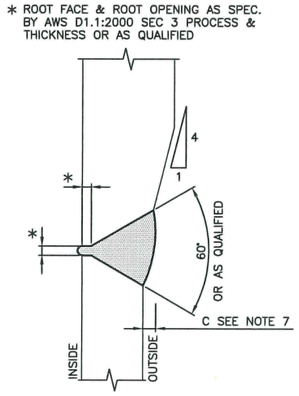
TYPICAL ROLLED JACKET MEMBER

MADE UP OF CANS

SCALE 1:20



WELD PROFILE REQUIREMENTS FOR OUTSIDE WELDS AT ALL TUBULAR CONNECTIONS & OTHER LOCATIONS AS NOTED

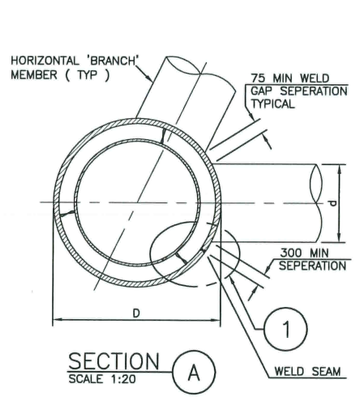


DETAIL 3

Scale 1:1

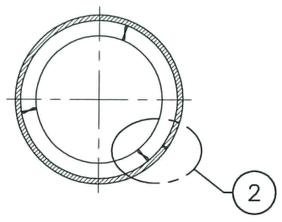
NOTES

1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DRAWING No. C001-12-25-99-GD000-0001
2. STANDARD DETAILS SHOWN SHOULD BE READ IN CONJUNCTION WITH INDIVIDUAL NODE DETAIL DRAWINGS WHERE APPLICABLE
3. RING SEGMENTATION SHOWN IS FOR GUIDANCE ONLY. RINGS MAY BE CUT TO SUIT FABRICATION METHODS PROVIDED MATERIAL IS AVAILABLE TO SUIT
4. UNLESS OTHERWISE NOTED ALL STEEL SHALL BE JOINED BY COMPLETE PENETRATION GROOVE WELDS.
5. DOUBLE PREPARATIONS ARE INTENDED TO PRODUCE BALANCED WELDS AND IT MAY BE NECESSARY TO USE PREPARATIONS OTHER THAN 1/3-2/3 FOR THICKER SECTIONS. THE CHOICE OF SINGLE OR DOUBLE PREPARATIONS SHALL SUIT FABRICATION METHODS AND MINIMIZE FINAL DISTORTION.
6. ROOT FACE, GAP AND BEVEL ANGLE MAY BE SUBJECT TO VARIATION DEPENDING ON APPROVED WELDING PROCEDURES, WELD PREPARATION AND FIT-UP TOLERANCES.
7. THE MAXIMUM BUTT WELD REINFORCEMENT "C" SHALL NOT EXCEED 3.2mm.
8. WELD PROFILE RADIUS INDICATES THE REQUIRED AVERAGE AS WELDED SHAPE ONLY AND DOES NOT CALL FOR SURFACE GRINDING UNLESS SPECIFIED OTHERWISE.
9. THE CHOICE OF SINGLE OR DOUBLE PREPARATIONS SHALL SUIT FABRICATION METHODS AND MINIMIZE FINAL DISTORTION. DESIGN REQUIREMENTS (FATIGUE) MAY REQUIRE DOUBLE SIDED WELDING.



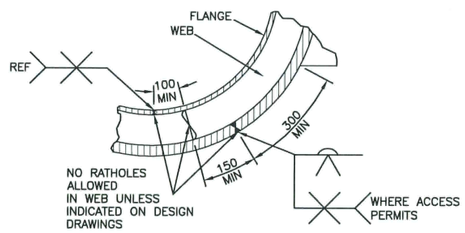
SECTION A

SCALE 1:20



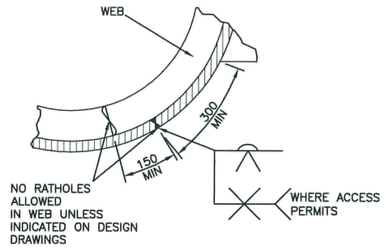
SECTION B

SCALE 1:20



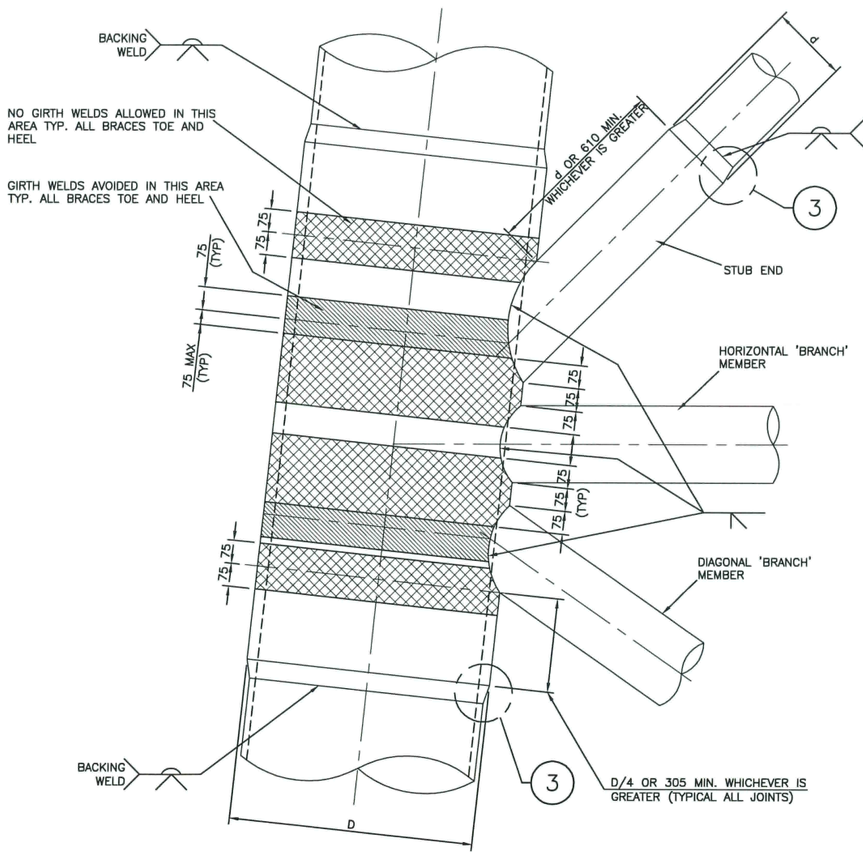
DETAIL 1

Scale 1:10



DETAIL 2

Scale 1:10



TYPICAL ELEVATION - SIMPLE JOINTS

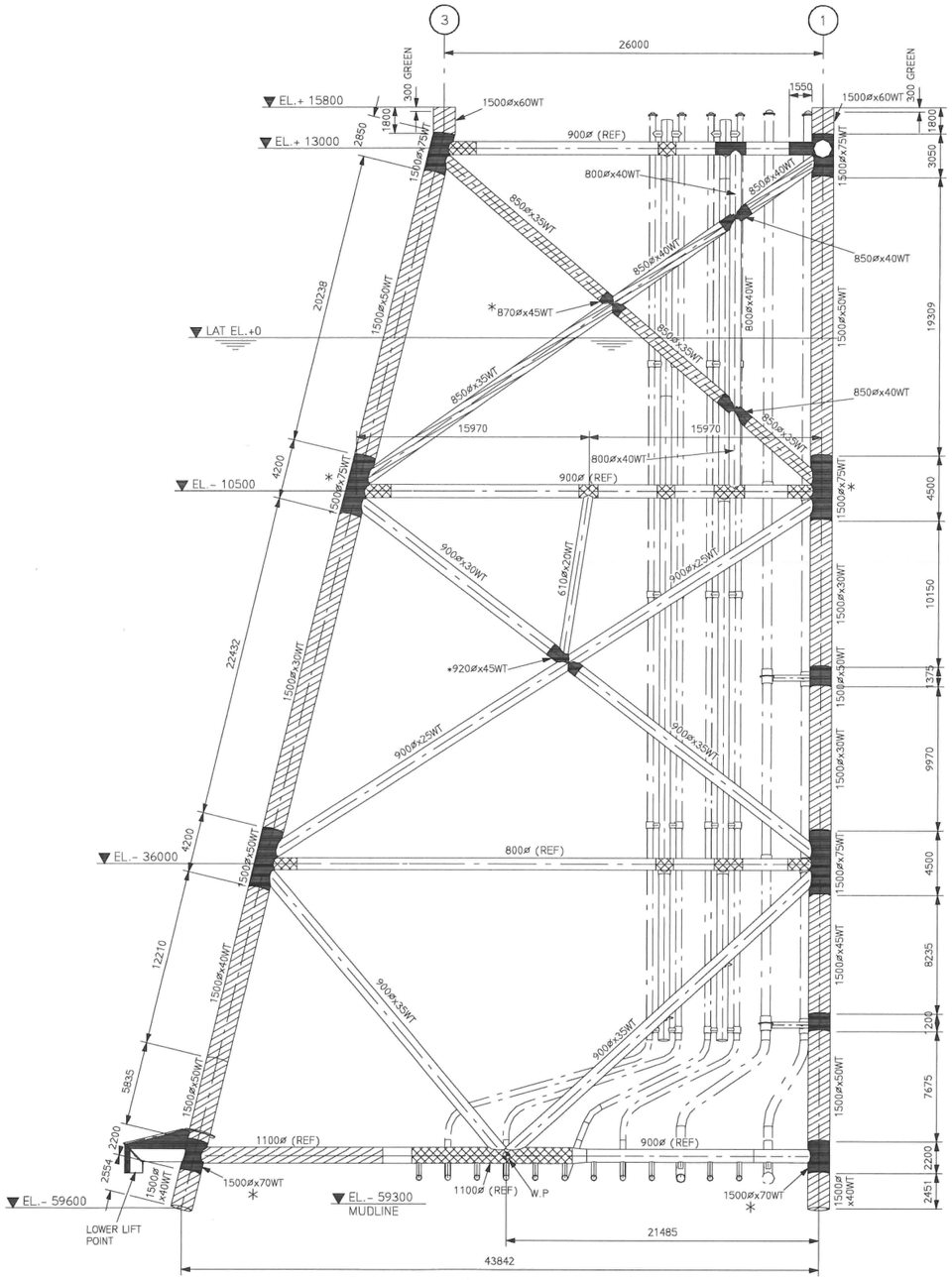
SCALE 1:10

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		E1	17.04.15	AB	RY	JC	JJ	--	ISSUED FOR FEED
		B1	03.03.15	CH	RY	JK	JJ	--	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	27.02.15	CH	RY	JK	--	--	ISSUED FOR IDC

CLIENT: nationalgrid / GENESIS

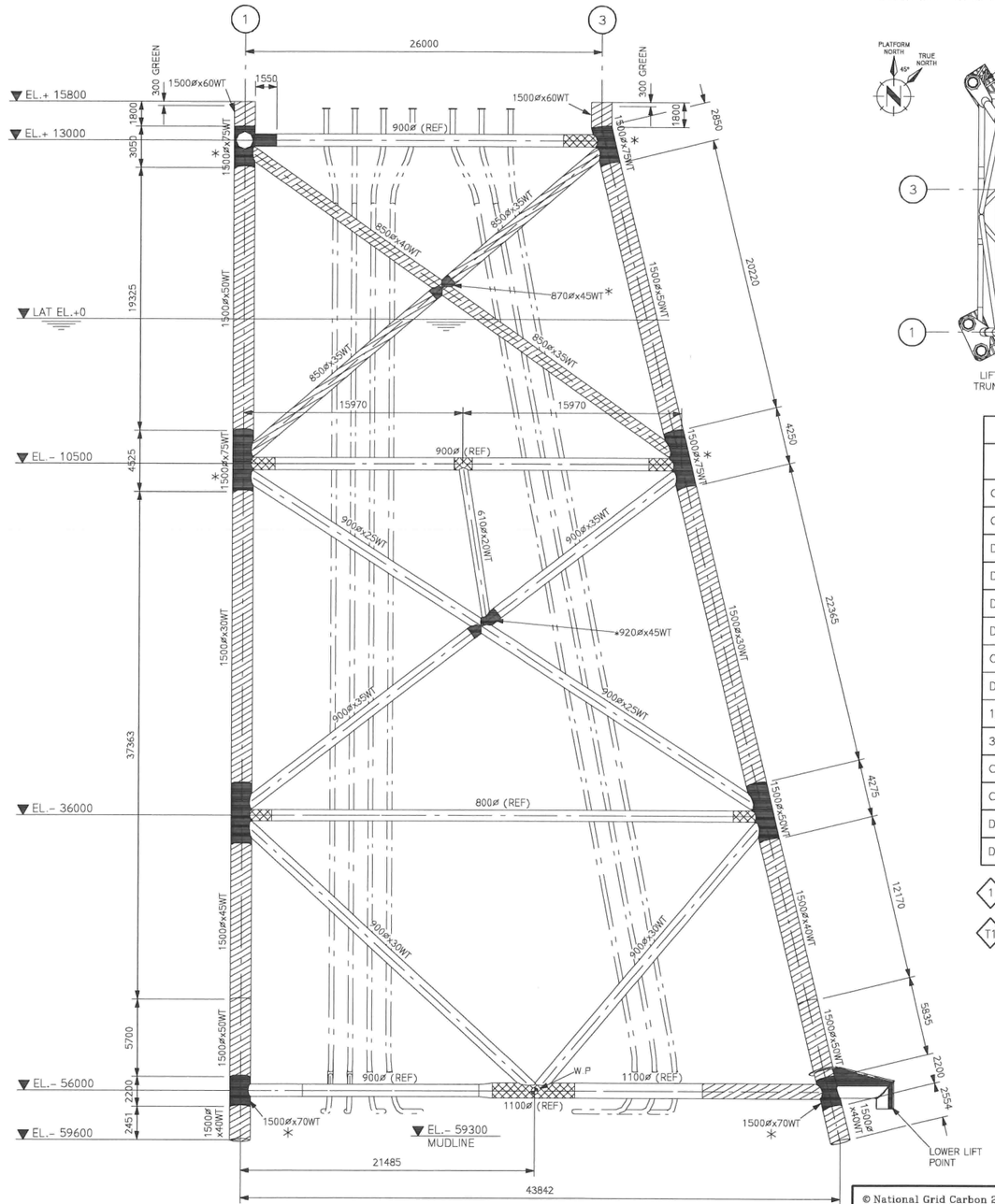
TITLE: WHITE ROSE CCS PROJECT FEED
STANDARD DETAILS
JACKET

PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0001	-	10F1	E1



ELEVATION ON GRID LINE C

SCALE 1:200

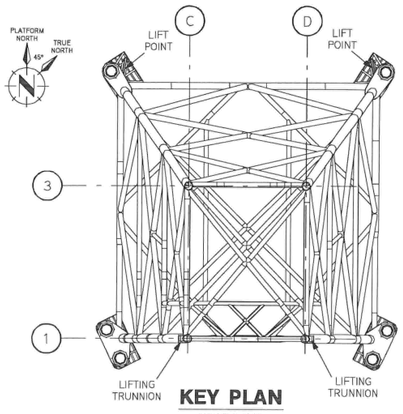


ELEVATION ON GRID LINE D

SCALE 1:200

NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD200-0001
2. JOINTS MARKED * ARE INTERNALLY RING STIFFENED SEE TABLE BELOW
3. JACKET TUBULAR CONNECTIONS TO BE IN ACCORDANCE WITH DETAILS SHOWN C001-12-25-99-GD210-0001



KEY PLAN

SCALE 1:500

RING STIFFENER SCHEDULE			
NODE	STIFF TYPE	No. OFF	SPACING
C3-10.5	T1	5	500
C1-10.5	T1	5	500
D3-10.5	T1	5	500
D1-10.5	T1	5	500
D3+13.0	T1	3	500
D1+13.0	T1	3	500
C/X NODE	1	2	700
D/X NODE	1	2	700
1/X NODE	1	1	700
3/X NODE	1	2	700
C1-56.0	T1	3	500
C3-56.0	T1	3	500
D1-56.0	T1	3	500
D3-56.0	T1	3	500

1 WEB 300 x 30

T1 FLANGE 150 x 30
WEB 300 x 30

MATERIALS

- TYPE 1-X
- TYPE 2-X
- TYPE 1
- TYPE 2

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	13.03.15	RE	AO	JK	JJ	-	ISSUED FOR FEED
B1	19.02.15	RE	AO	JK	JJ	-	ISSUED FOR CLIENT COMMENT
A1	07.01.15	ASR	AO	JK	-	-	ISSUED FOR IDC

REFERENCE DRAWINGS

DRAWING No. | DRAWING TITLE

CLIENT: nationalgrid

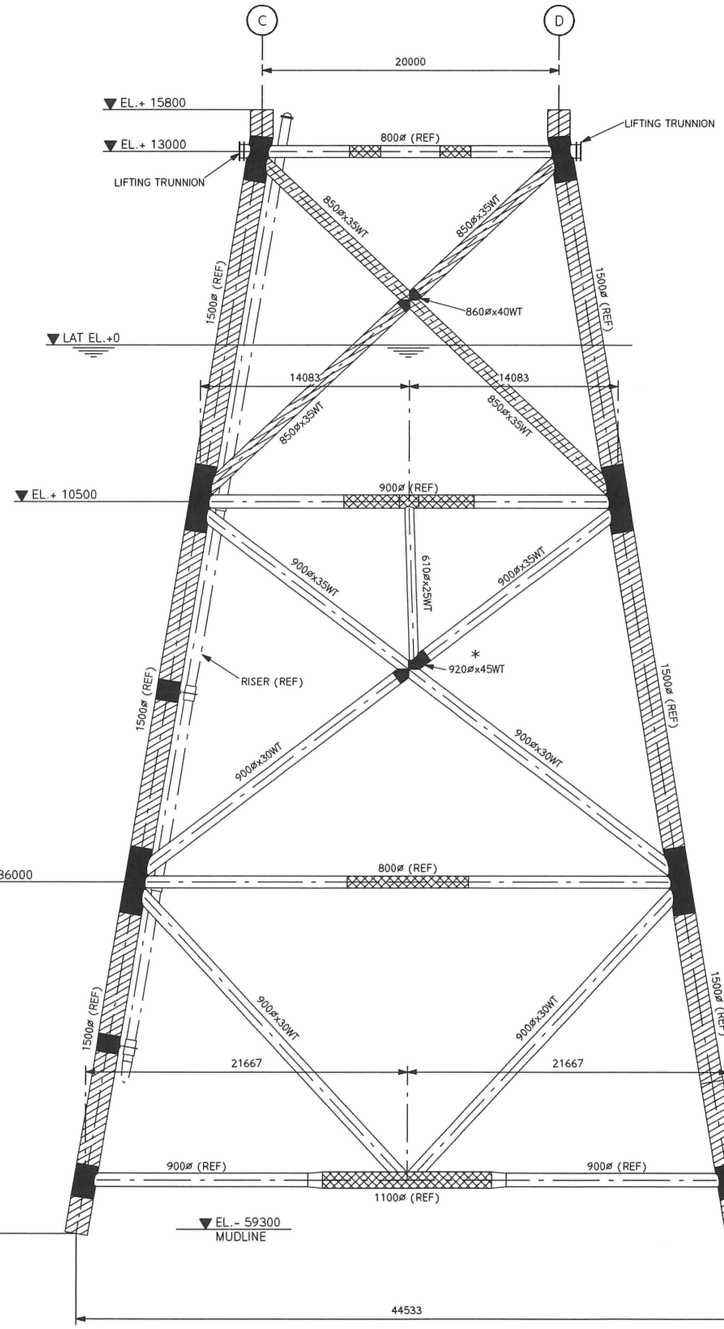
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
JACKET
PRIMARY STEEL G.A.
ELEVATIONS GRID LINE C & D

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0002	1:200	1 OF 1	E1

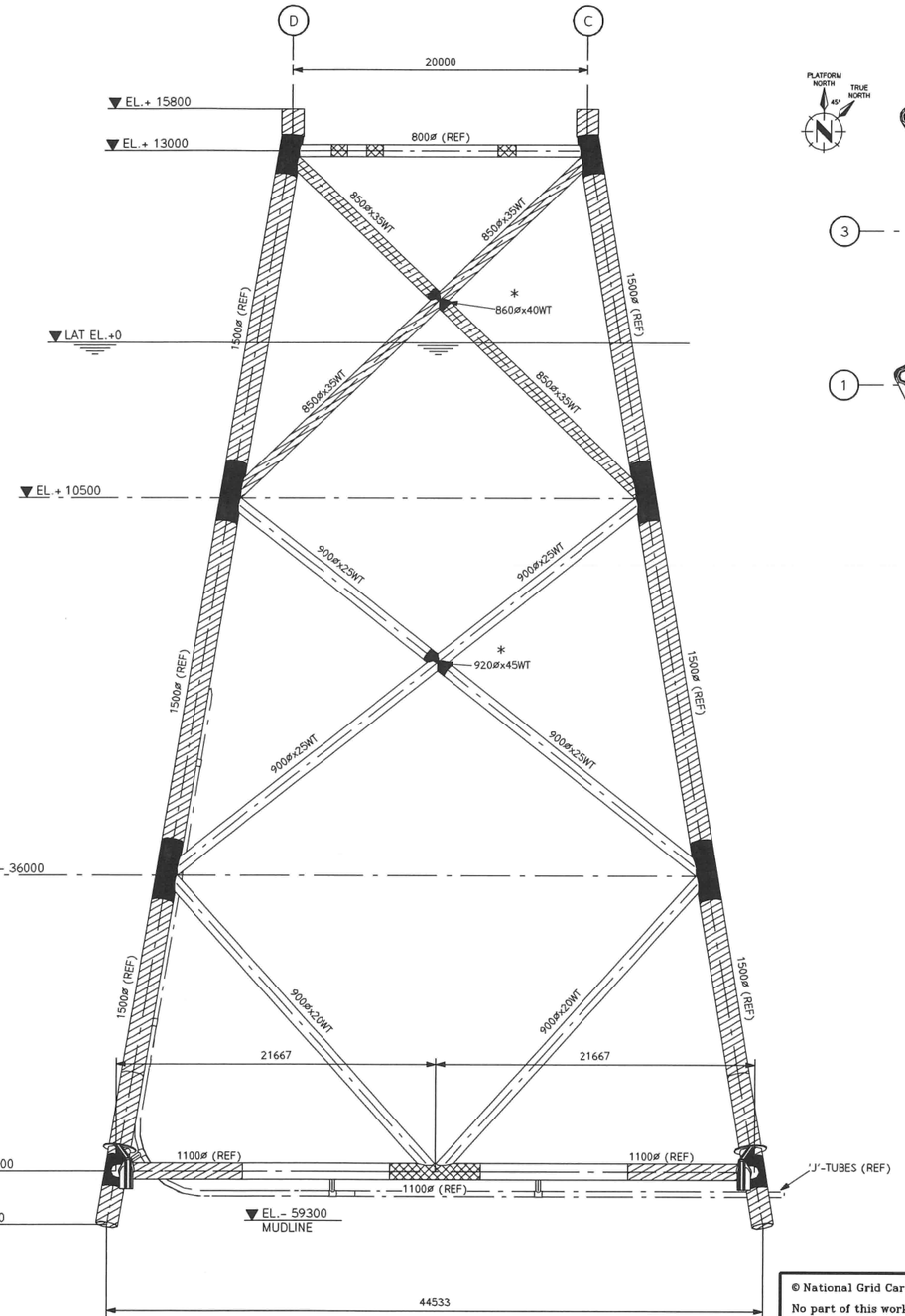
A1 SIZE SHEET

Drawing updated 13/03/2015 08:05:01 by patchingk



ELEVATION ON GRID LINE 1

SCALE 1:200

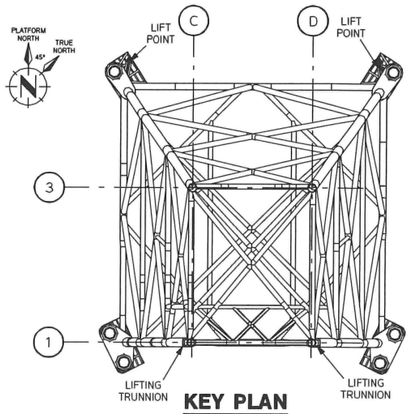


ELEVATION ON GRID LINE 3

SCALE 1:200

NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD200-0001
2. JOINTS MARKED * ARE INTERNALLY RING STIFFENED SEE TABLE BELOW
3. JACKET TUBULAR CONNECTIONS TO BE IN ACCORDANCE WITH DETAILS SHOWN C001-12-25-99-GD210-0001



KEY PLAN

SCALE 1:500

MATERIALS

- TYPE 1-X
- TYPE 2-X
- TYPE 1
- TYPE 2

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	13.03.25	AJB	AO	JK	JJ	-	ISSUED FOR FEED
B1	19.02.15	RE	AO	JK	JJ	-	ISSUED FOR CLIENT COMMENT
A1	07.01.15	ASR	AO	JK	-	-	ISSUED FOR IDC

REFERENCE DRAWINGS

DRAWING No. | DRAWING TITLE

CLIENT: nationalgrid

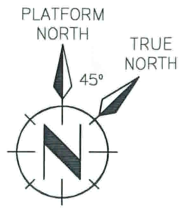
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
JACKET
PRIMARY STEEL G.A.
ELEVATIONS GRID LINE 1 & 3

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0003	1:200	1 OF 1	E1

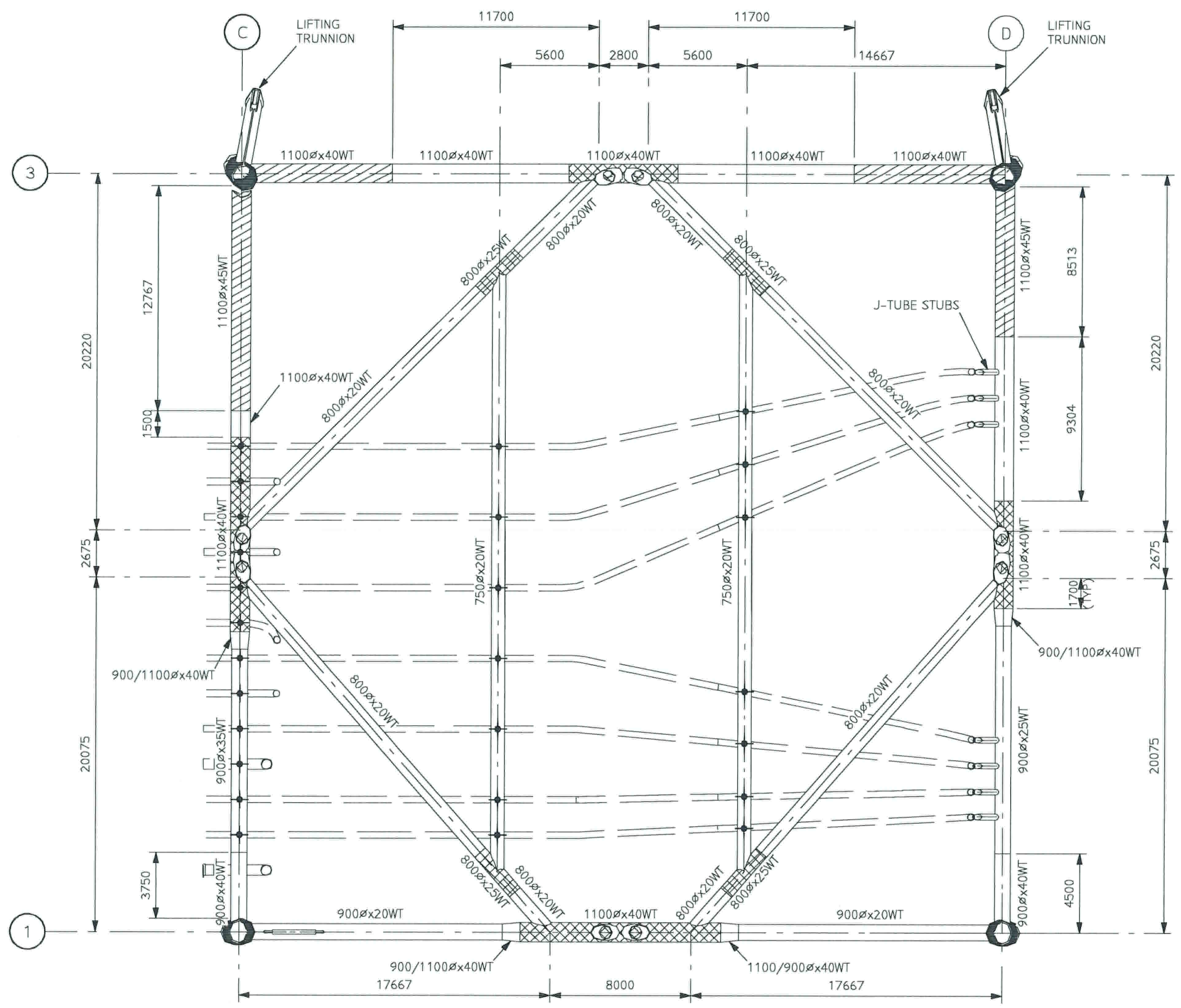
A1 SIZE SHEET

Drawing updated 13/03/2015 13:04:39 by baulcha



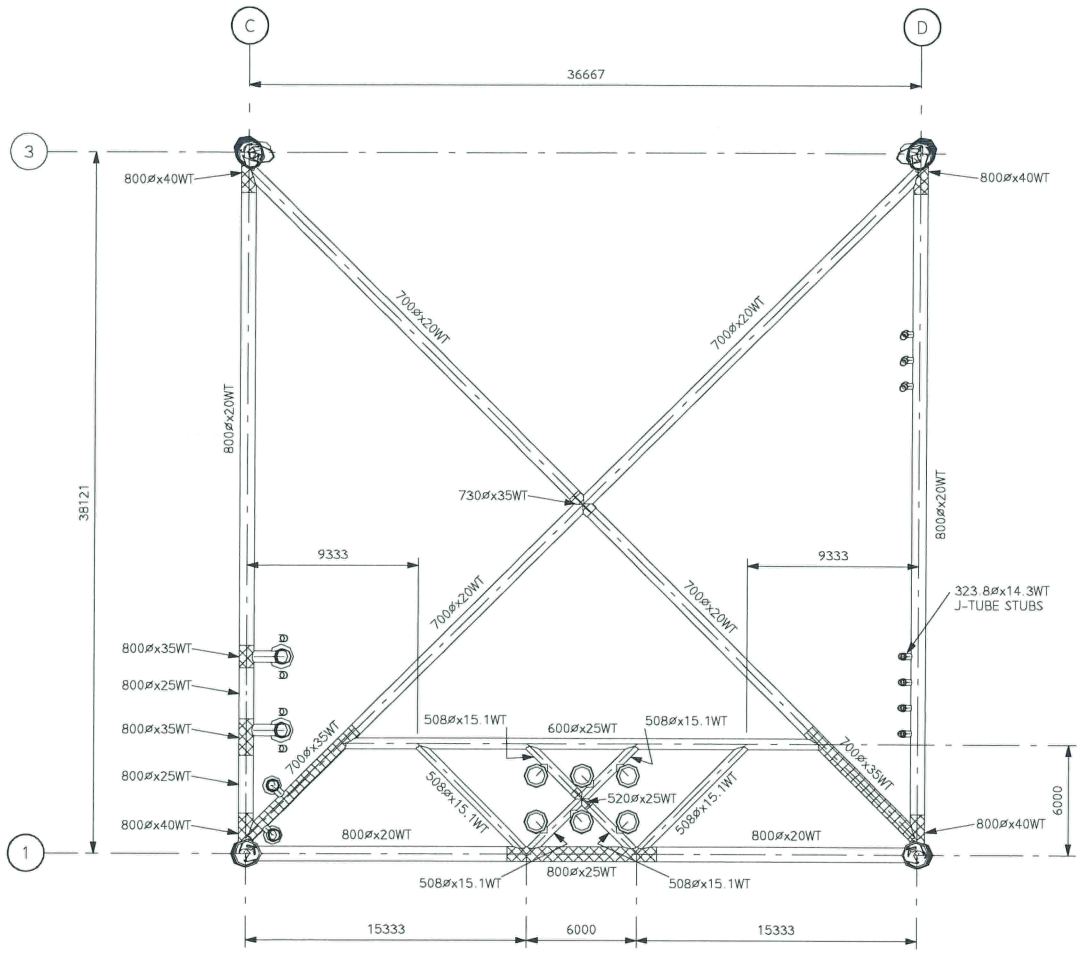
NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD200-0001
2. ✚ INDICATES J-TUBE STUB LOCATIONS
3. JACKET TUBULAR CONNECTIONS TO BE IN ACCORDANCE WITH DETAILS SHOWN C001-12-25-99-GD210-0001



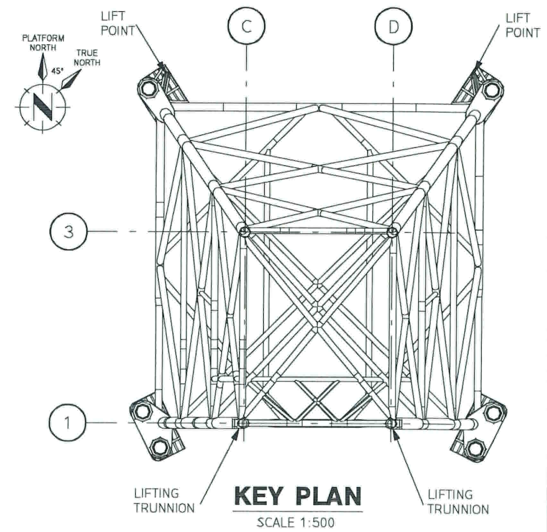
PLAN AT EL.-56000

SCALE 1:200
SEE NOTE 3



PLAN AT EL.-36000

SCALE 1:200



KEY PLAN

SCALE 1:500

MATERIALS

- ■ TYPE 1-X
- ▨ TYPE 2-X
- ▩ TYPE 1
- □ TYPE 2

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		[illegible]	[illegible]	JK	[illegible]		
E1	13.03.15	GCH	AO	JK	JJ	-	ISSUED FOR FEED
B1	19.02.15	RE	AO	JK	JJ	-	ISSUED FOR CLIENT COMMENT
A1	07.01.15	ASR	AO	JK	-	-	ISSUED FOR IDC

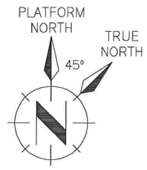
CLIENT
nationalgrid
GENESIS

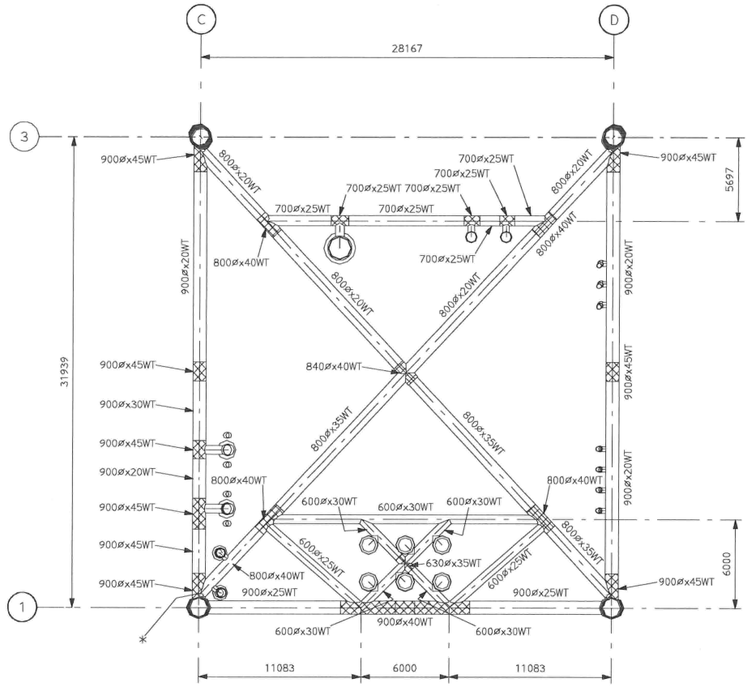
TITLE
WHITE ROSE CCS PROJECT FEED
JACKET
PRIMARY STEEL G.A.
PLANS

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0004	1:200	1 OF 1	E1

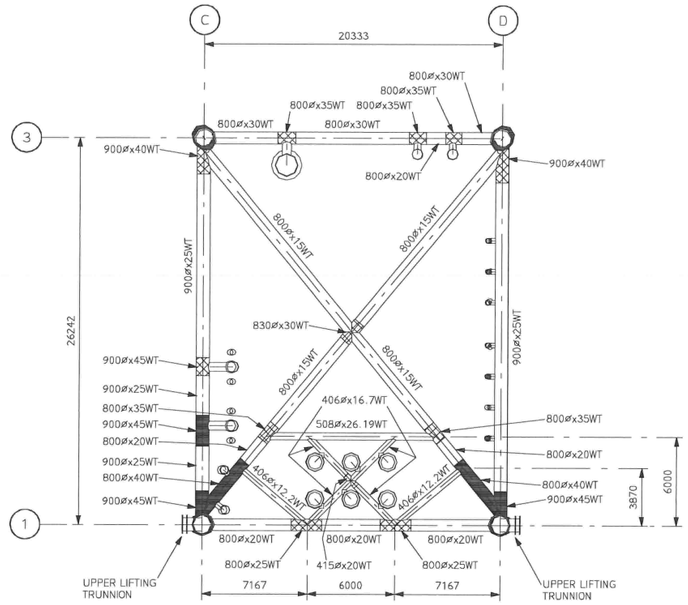
A1 SIZE SHEET

Drawing updated 13/03/2015 13:24:30 by harmang





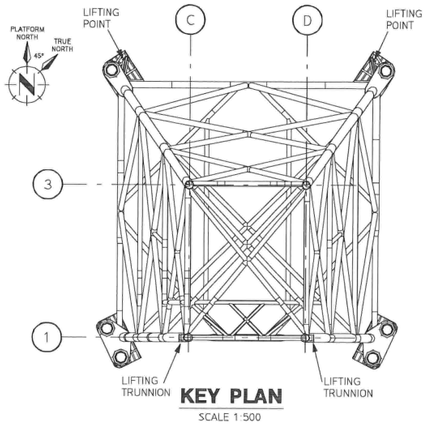
PLAN AT EL.-10500
SCALE 1:200



PLAN AT EL.+13000
SCALE 1:200

NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD200-0001
2. '*' DENOTES WELD TOE PROFILE GROUND IN ACCORDANCE WITH EEMUA158
3. JACKET TUBULAR CONNECTIONS TO BE IN ACCORDANCE WITH DETAILS SHOWN C001-12-25-99-GD210-0001



KEY PLAN
SCALE 1:500

MATERIALS

- TYPE 1-X
- TYPE 2-X
- TYPE 1
- TYPE 2

REFERENCE DRAWINGS	DRAWING TITLE	REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
DRAWING No.		E1	13.03.15	RE	AO	JK	JJ	-	ISSUED FOR FEED
		B1	19.02.15	RE	AO	JK	JJ	-	ISSUED FOR CLIENT COMMENT
		A1	07.01.15	ASR	AO	JK	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
JACKET
PRIMARY STEEL G.A.
PLANS

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0005	1:200	1 OF 1	E1

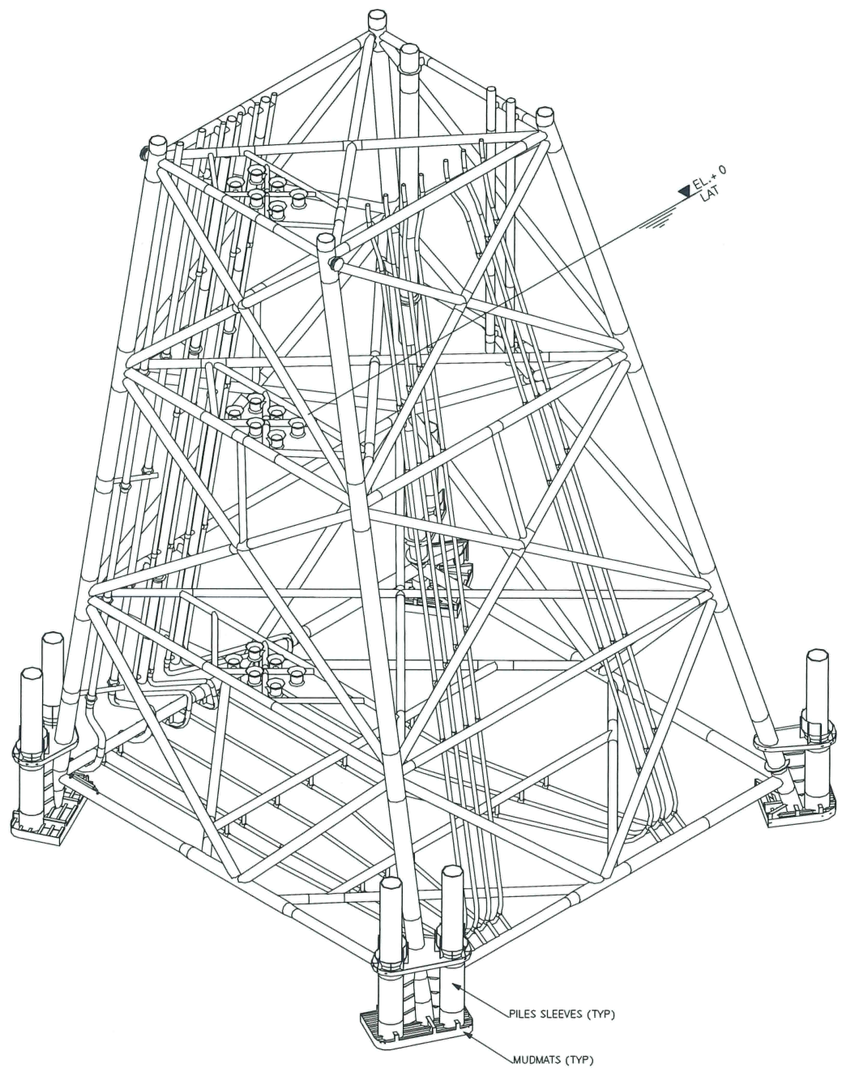
A1 SIZE SHEET

Drawing updated 13/03/2015 13:29:03 by eavesr

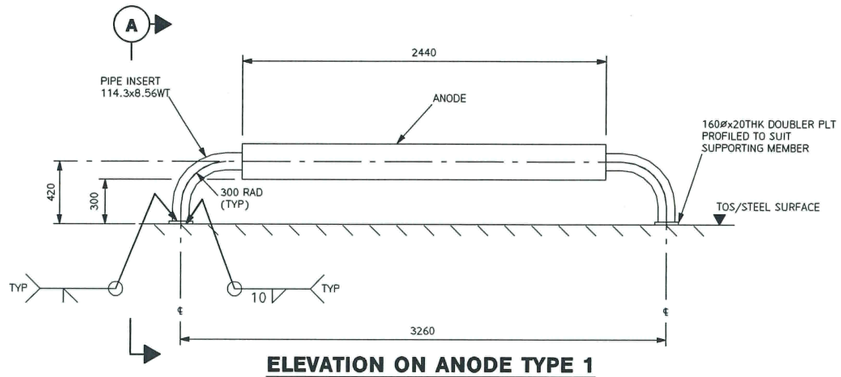
NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD000-0001
2. ANODE MATERIAL TO BE Al-Zn-In ALLOY IN ACCORDANCE WITH THE CATHODIC PROTECTION SPECIFICATION, DOCUMENT No. C001-16-10-99-GD000-0003

   FOR CATHODIC PROTECTION DESIGN REFER TO DOCUMENT No. C001-12-06-99-GD000-0001
3. ANODE TYPE 2 TO BE USED ON PILE SLEEVES, MUDMATS & LEGS ADJACENT TO PILE SLEEVES.
   ANODE TYPE 1 TO BE USED ELSEWHERE. BOTH TYPES SHALL BE LOCATED IN ACCORDANCE WITH NOTES 4 & 5
4. ANODE POSITIONING BY FABRICATOR SHALL SATISFY THE FOLLOWING GUIDELINES:
   - MINIMUM 300mm BETWEEN ANODE FACE & ANY STRUCTURAL PART
   - MINIMUM 500mm BETWEEN ANODES
   - NO ANODES SHALL BE LOCATED CLOSER THAN 600mm TO NODES
   - DOUBLER PLATES TO CLEAR WELD SEAMS BY A MINIMUM OF 150mm
5. NO ANODES ABOVE EL.-4000

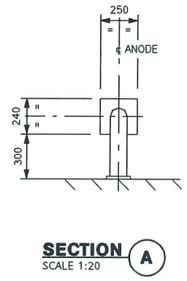


ISOMETRIC VIEW ON JACKET (SEE NOTES 4 & 5)
SCALE 1:250

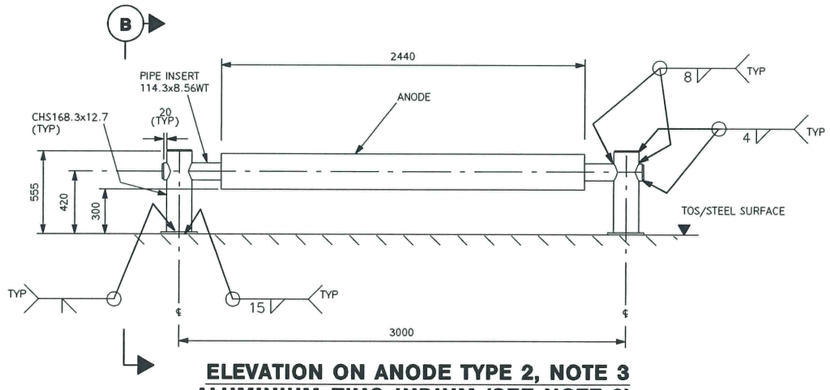


ELEVATION ON ANODE TYPE 1
ALUMINIUM-ZINC-INDIUM (SEE NOTE 2)
(500 No. TOTAL)
SCALE 1:20

NET WEIGHT = 331kg
GROSS WEIGHT (EXCLUDING DOUBLER PLATES) = 416kg

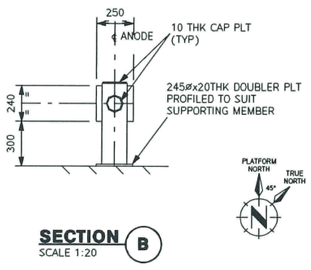


SECTION A
SCALE 1:20

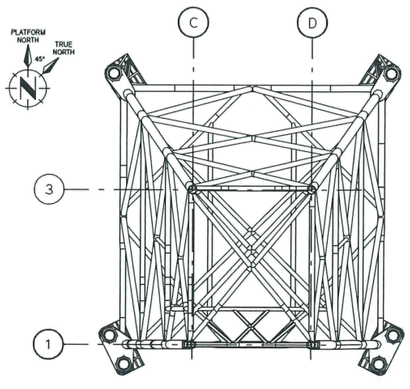


ELEVATION ON ANODE TYPE 2, NOTE 3
ALUMINIUM-ZINC-INDIUM (SEE NOTE 2)
(78 No. TOTAL)
SCALE 1:20

NET WEIGHT = 331kg
GROSS WEIGHT (EXCLUDING DOUBLER PLATES) = 455kg



SECTION B
SCALE 1:20



KEY PLAN
SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		E1	21.04.2015	AB	CV	RY	JJ	-	ISSUED FOR FEED
		B1	10.03.2015	CH	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	03.03.2015	CH	CV	RY	-	-	ISSUED FOR IDC

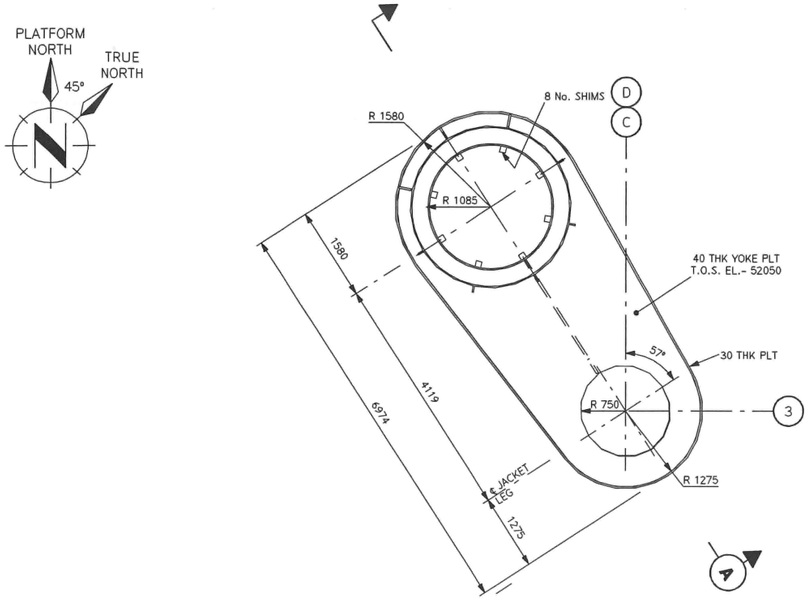
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
JACKET
ANODES LAYOUT & DETAILS

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-26-99-GD210-0001	1:250	1 OF 1	E1

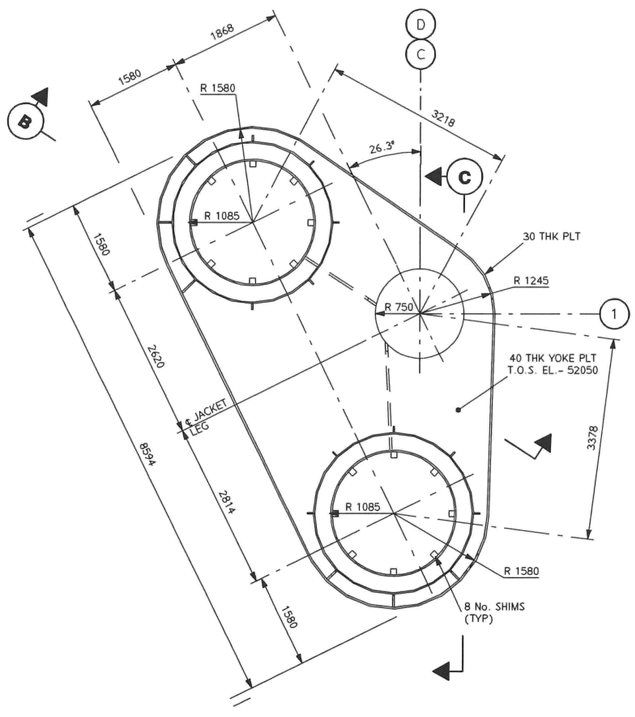
A1 SIZE SHEET

Drawing updated 27/03/2015 09:41:26 by Devonshireb



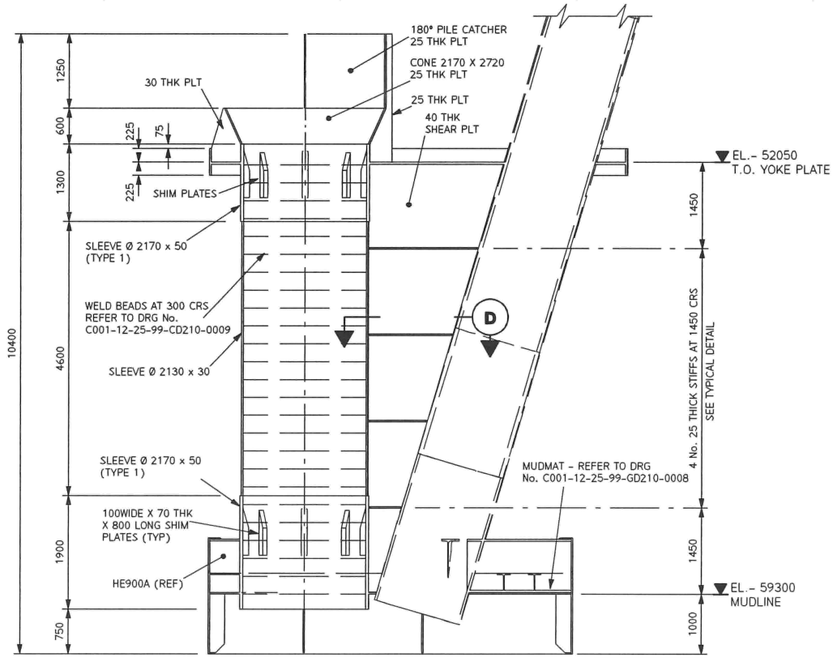
PLAN ON LEG C3 (LEG D3 SIMILAR BUT MIRRORED)

SCALE 1:50



PLAN ON LEG C1 (LEG D1 SIMILAR BUT MIRRORED)

SCALE 1:50



SECTION A

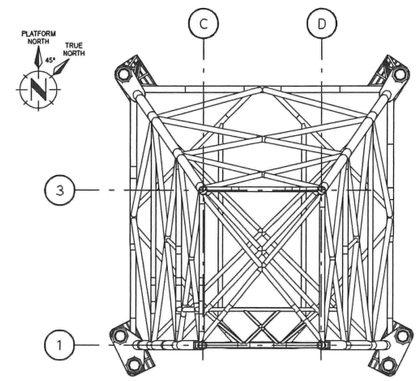
SCALE 1:50

SECTION B SECTION C

SCALE 1:50 SCALE 1:50

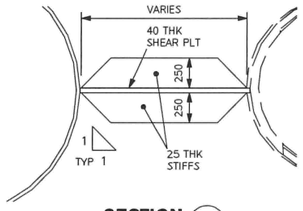
NOTES

1. FOR GENERAL NOTES & ABBREVIATIONS REFER TO DRAWING No. C001-12-25-99-GD000-0001
2. MATERIAL ON THIS DRAWING TO BE TYPE 2 UNO.



KEY PLAN

SCALE 1:500



SECTION D

SCALE 1:25

TYPICAL DETAIL OF SHEAR PLATE STIFFENER

(4 LOCATION'S PER SHEAR PLATE)

HOLDS

1. ALL PILE SLEEVE CLUSTER DETAILS PENDING CONFIRMATION DURING DETAIL DESIGN AFTER RECEIPT OF SITE SPECIFIC GEOTECHNICAL DATA

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AJB	CV	JC	JJ		
		E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
		B1	06.03.15	AJB	CV	JK	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	19.02.15	CH	CV	JK	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

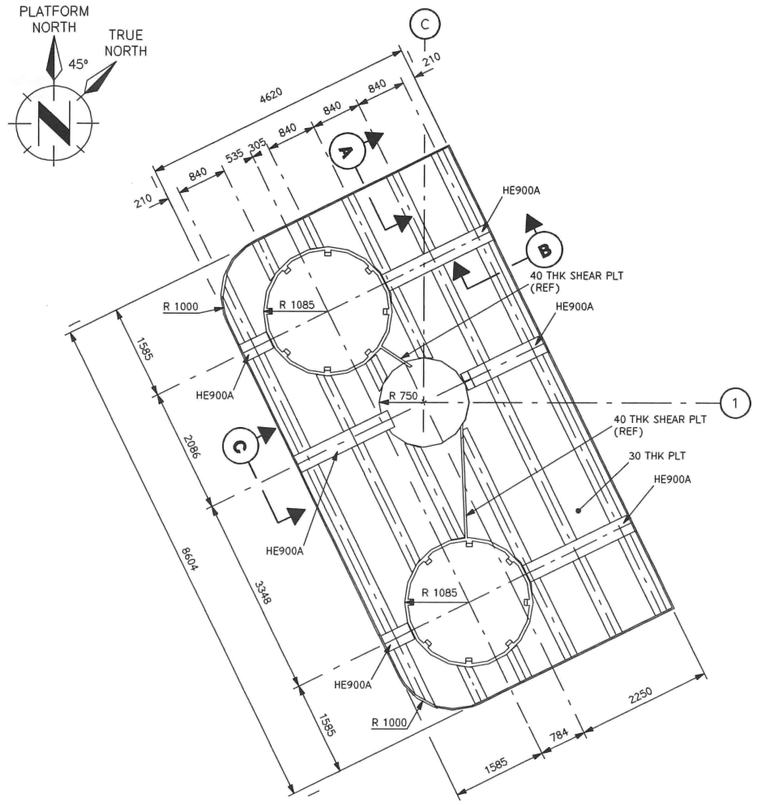
TITLE

WHITE ROSE CCS PROJECT FEED
PRIMARY STEEL GA.
JACKET PILE
SLEEVE CLUSTER

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0007	1:50	1 OF 1	E1

A1 SIZE SHEET

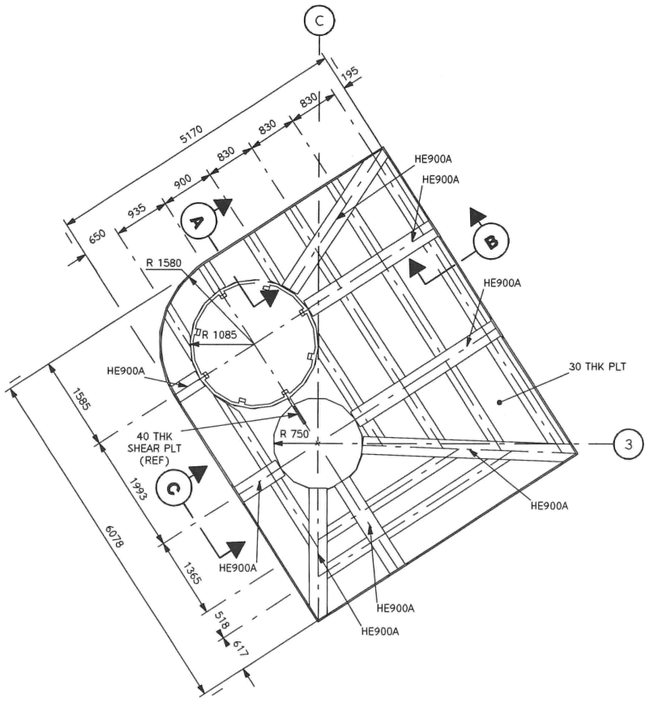
Drawing updated 27/03/2015 09:37:36 by Devonshireb



PLAN ON LEG C1 (LEG D1 SIMILAR BUT MIRRORED)

SCALE 1:50

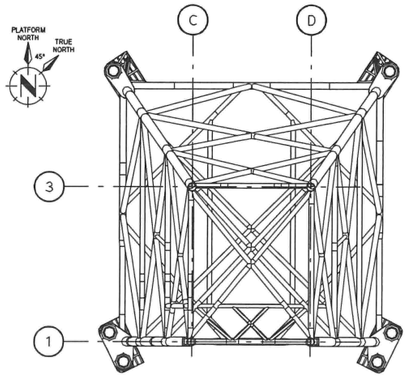
ALL BEAMS TO BE 'T' SECTIONS O/O IPE600 U.N.O.



PLAN ON LEG C3 (LEG D3 SIMILAR BUT MIRRORED)

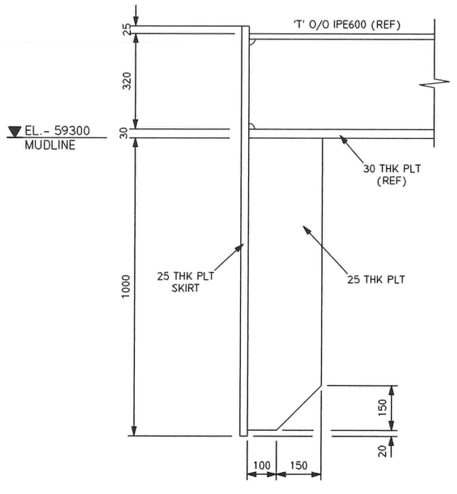
SCALE 1:50

ALL BEAMS TO BE 'T' SECTIONS O/O IPE600 U.N.O.



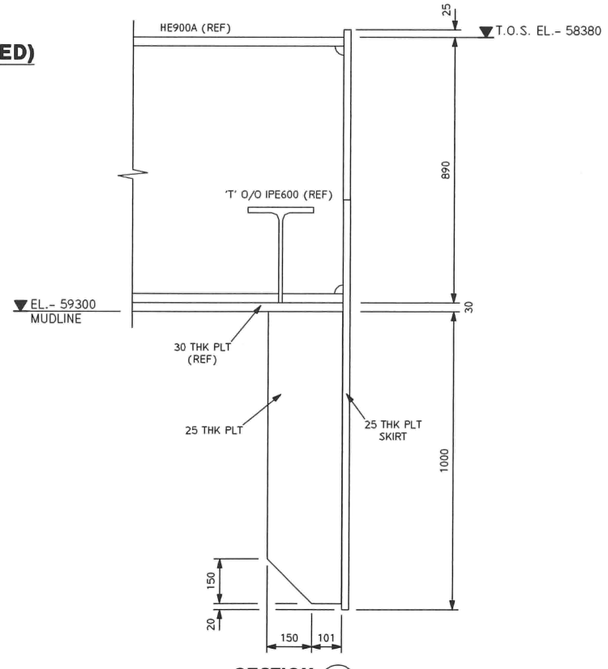
KEY PLAN

SCALE 1:500



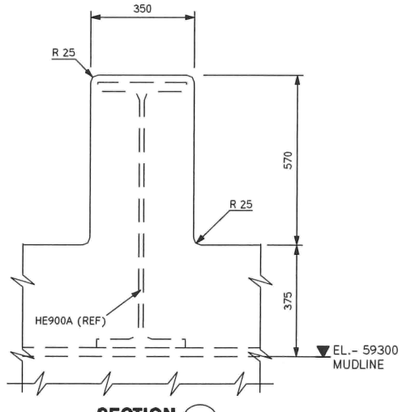
SECTION A

SCALE 1:10



SECTION B

SCALE 1:10



SECTION C

SCALE 1:10

(TYPICAL)

NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD200-0001
2. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS :
   - ALL PLATES TO BE TYPE 2 .
   - ROLLED SECTIONS TO BE TYPE 4 .

HOLDS

1. ALL MUDMAT DETAILS PENDING CONFIRMATION DURING DETAIL DESIGN AFTER RECEIPT OF SITE SPECIFIC GEOTECHNICAL DATA

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
			CV	JC	JJ		
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	06.03.15	CH	CV	JK	JJ	-	ISSUED FOR CLIENT COMMENT
A1	19.02.15	CH	CV	JK	-	-	ISSUED FOR IDC

CLIENT

nationalgrid

GENESIS

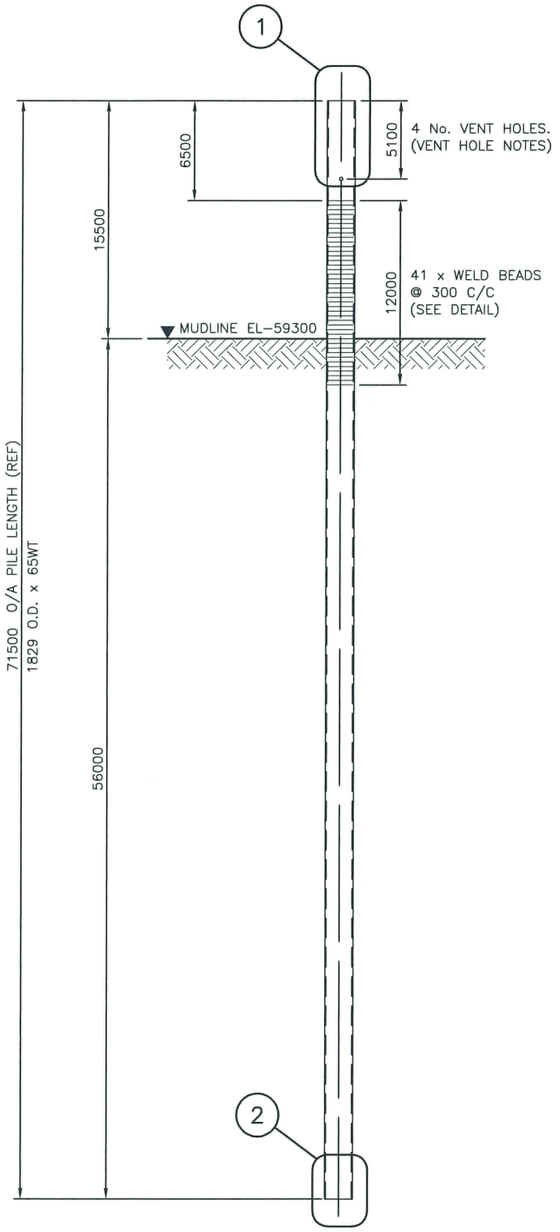
TITLE

WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL
JACKET
MUDMAT PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0008	1:50	1 OF 1	E1

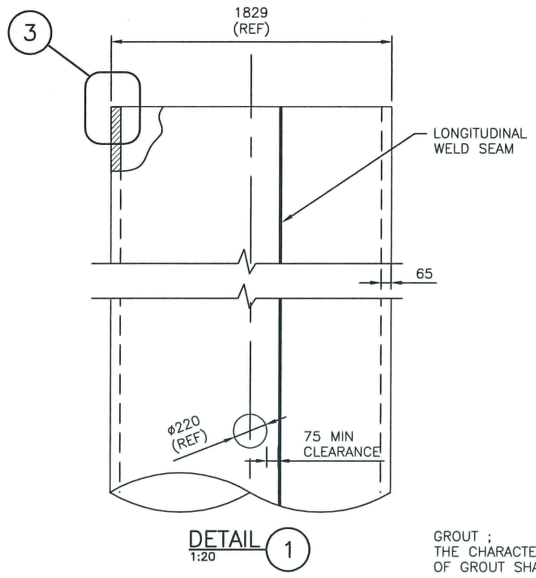
A1 SIZE SHEET

Drawing updated 27/03/2015 09:37:55 by Devonshireb

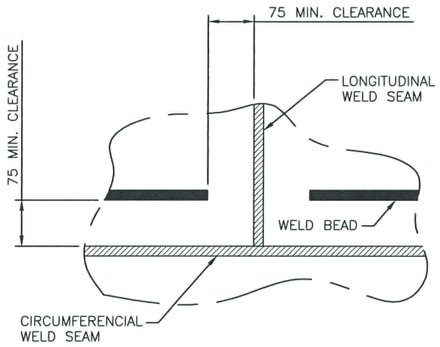


ELEVATION ON PILE

(6 No. REQ'D)



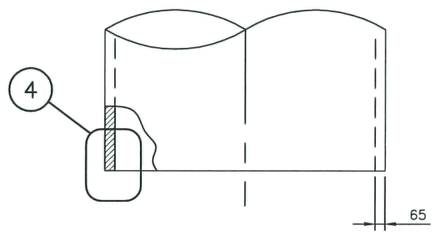
DETAIL 1 (1:20)



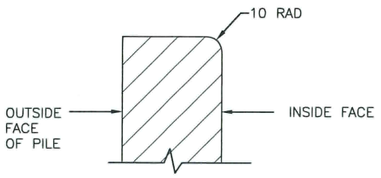
DETAIL OF WELD BEAD SEPARATION REQUIREMENTS

SCALE 1:5

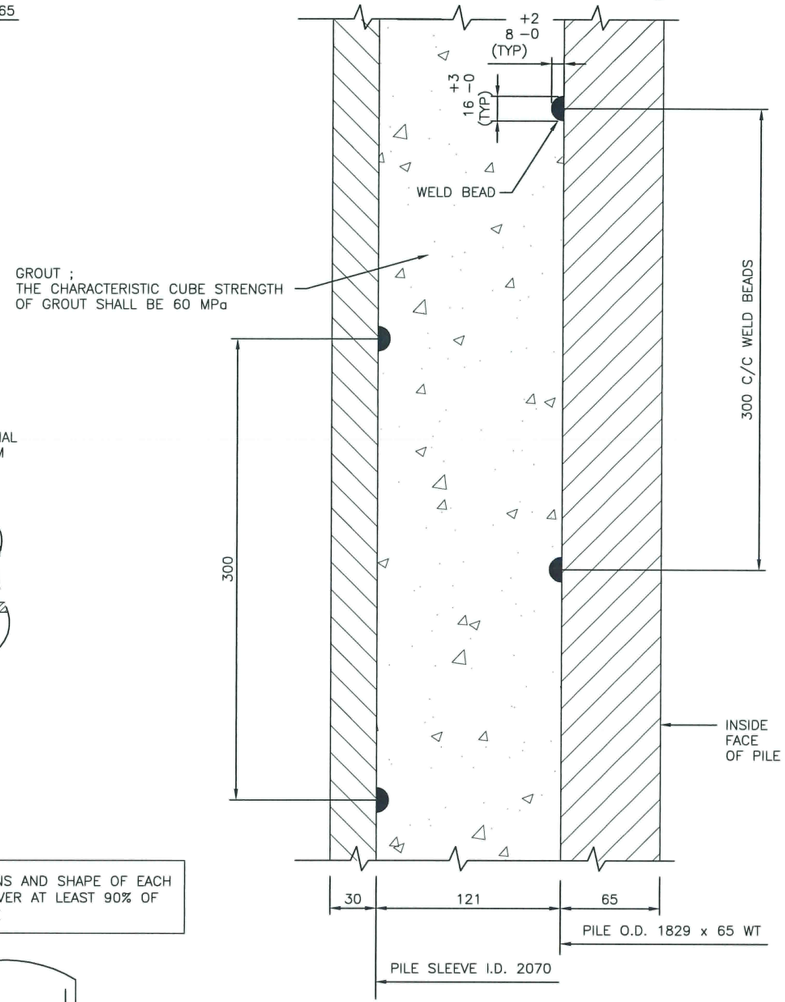
REQUIREMENT FOR DIMENSIONS AND SHAPE OF EACH WELD SHALL BE ACHIEVED OVER AT LEAST 90% OF PILE SLEEVE CIRCUMFERENCE



DETAIL 2 (1:20)

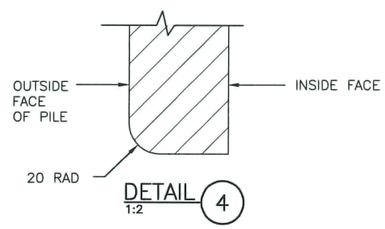


DETAIL 3 (1:2)



SECTION THRO' PILE & SLEEVE

SCALE 1:2



DETAIL 4 (1:2)

NOTES

1. FOR GENERAL NOTES AND ABBREVIATIONS SEE DRAWING No. C001-12-25-99-GD000-0001
2. ALL STEEL TO BE TYPE 2 U.N.O.
3. MINIMUM CIRCUMFERENTIAL SEPARATION OF LONGITUDINAL SEAMS IS 25°
4. TOP 2000mm INSIDE :
   : NO PAINTING / NO COATING
   : NO CIRCUMFERENTIAL WELD GROUND FLUSH
   : MAX CAP HEIGHT OF WELD IS 3mm
5. ALL CIRCUMFERENTIAL WELDS TO BE DOUBLE SIDED GROOVE WELDS.

VENT HOLES

4 No. 220ø VENT HOLES EQUALLY SPACED AROUND PILE ROTATED 45° RELATIVE TO LONGITUDINAL WELD

ALL SURFACES SHALL BE GROUND SMOOTH AND CUT EDGES CHAMFERED TO 3mm RADIUS MINIMUM

NO VENT HOLES IN THE CIRCUMFERENTIAL WELD (MIN 50mm END CLEARANCE)

REFERENCE DRAWINGS	DRAWING TITLE	REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
DRAWING No.		E1	20.03.15	BD	JK	RY	JJ	--	ISSUED FOR FEED
		B1	18.02.15	AB	JK	JK	JJ	--	ISSUED FOR CLIENT COMMENT
		A1	08.01.15	AB	JK	JK	--	--	ISSUED FOR IDC

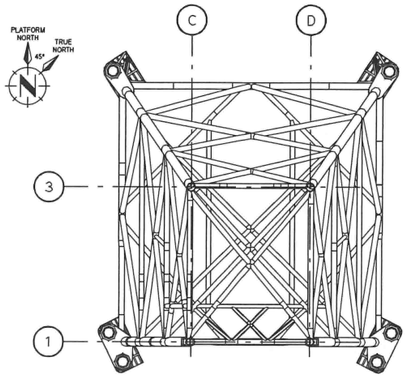
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
JACKET
PILE GENERAL ARRANGEMENT & DETAILS

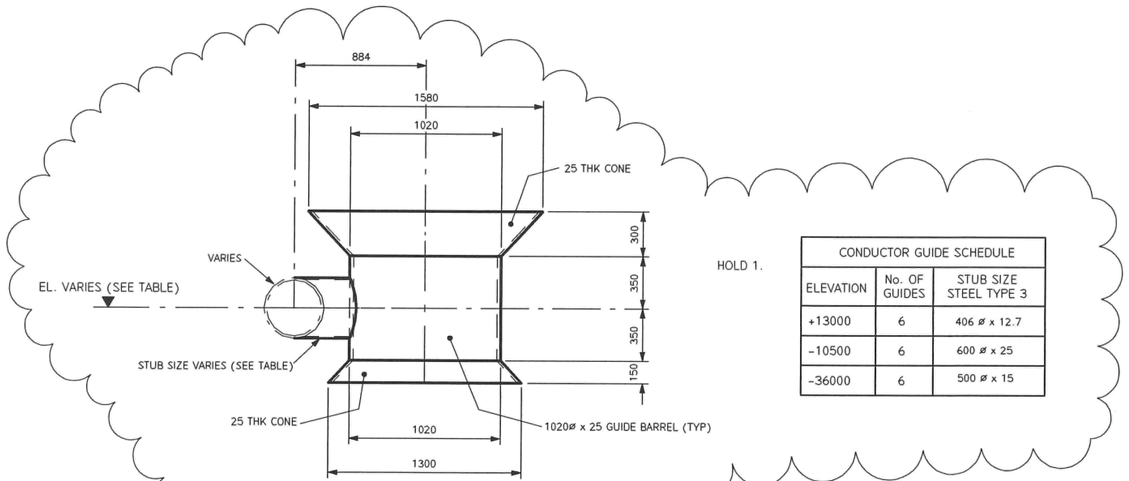
PROJECT No./DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0009	1:200	10F 1	E1

NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD000-0001
2. ALL STEEL TO BE TYPE 2 U.N.O.



KEY PLAN
SCALE 1:500



TYPICAL CONDUCTOR GUIDE
SCALE 1:20

HOLD 1.

CONDUCTOR GUIDE SCHEDULE		
ELEVATION	No. OF GUIDES	STUB SIZE STEEL TYPE 3
+13000	6	406 ø x 12.7
-10500	6	600 ø x 25
-36000	6	500 ø x 15

HOLDS

1. CONDUCTOR GUIDE DETAILS TO BE CONFIRMED DURING DETAIL DESIGN.

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	17.04.15	AJB	CV	JC	JJ	-	ISSUED FOR FEED
B1	06.03.15	AJB	CV	JK	JJ	-	ISSUED FOR CLIENT COMMENT
A1	25.02.15	AJB	CV	JK	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE
REFERENCE DRAWINGS

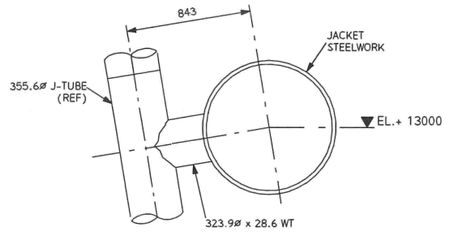
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL - JACKET
CONDUCTOR GUIDES

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0010	1:20	1 OF 1	E1

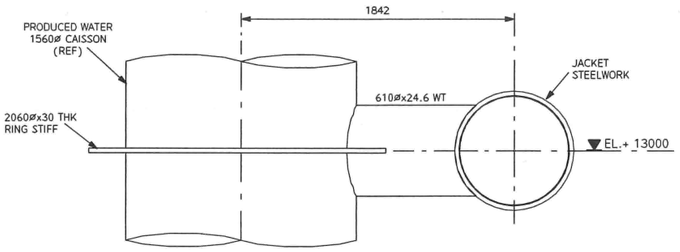
A1 SIZE SHEET

Drawing updated 15/04/2015 10:04:24 by baulcha



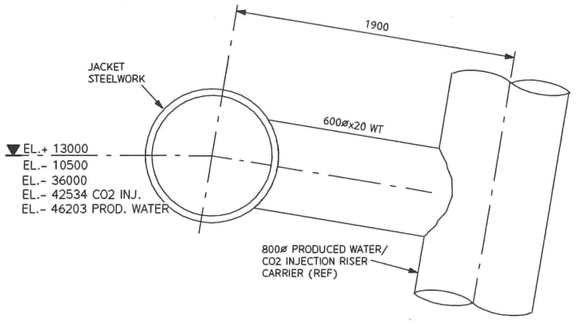
ELEVATION ON TYPICAL J-TUBE SUPPORT AT EL.+13000 (7 LOCATIONS)

SCALE 1:20



ELEVATION ON 1560 DIA CAISSON SUPPORT AT EL.+13000

SCALE 1:20

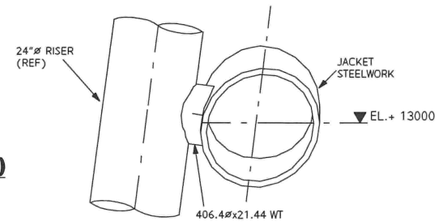


ELEVATION ON CO2 INJECTION RISER CARRIER SUPPORT (4 LOCATIONS)
PRODUCED WATER RISER CARRIER SUPPORT SIMILAR (4 LOCATIONS)

SCALE 1:20

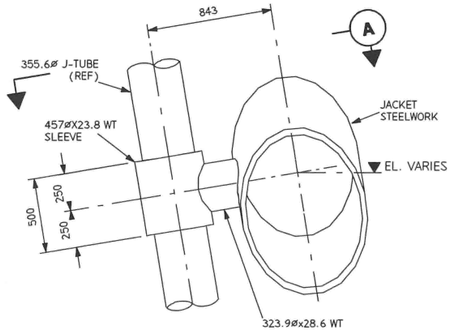
NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD000-0001
2. STEEL TYPES TO BE AS FOLLOWS U.N.O:
   PLATES - TYPE 2
   TUBULARS WITH DIA ≤ 610mm - TYPE 3
3. DEAD WEIGHT SUPPORT FOR THE 24" AND 16" RISERS TO BE DESIGNED DURING DETAIL ENGINEERING PHASE



ELEVATION ON EXPORT RISER FIXED SUPPORT AT EL.+13000
IMPORT RISER FIXED SUPPORT AT EL.+13000 SIMILAR (SEE NOTE 3)

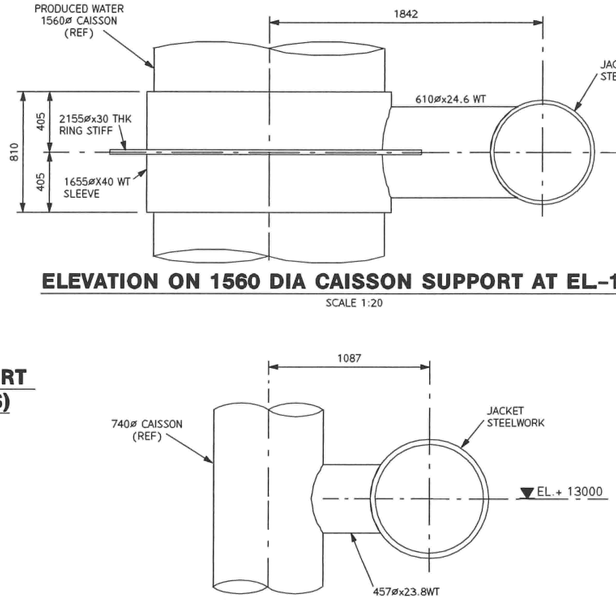
SCALE 1:20



ELEVATION & ORIENTATION OF J-TUBE SUPPORTS VARY
REFER TO DRG No.C001/12/25/99/GD210/0013

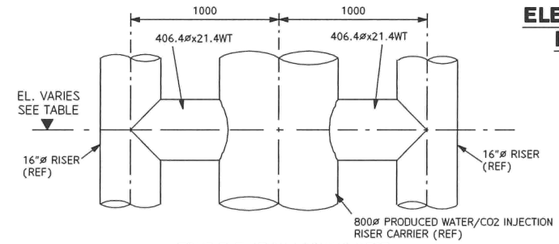
ELEVATION ON TYPICAL J-TUBE SUPPORT WITHIN SPLASH ZONE (14 LOCATIONS)

SCALE 1:20



ELEVATION ON 1560 DIA CAISSON SUPPORT AT EL.-10500

SCALE 1:20



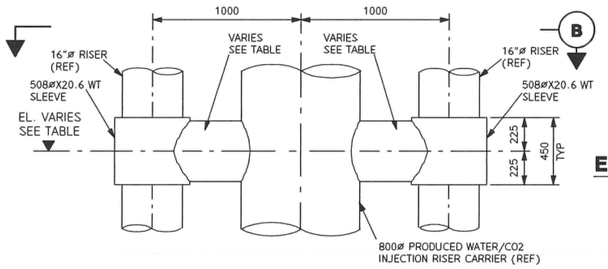
TRUE ELEVATION LOOKING WEST

ELEVATION ON TYPICAL PRODUCED WATER/CO2 INJECTION RISER FIXED SUPPORT AT EL.+14000 (SEE NOTE 3) (2 LOCATIONS)

SCALE 1:20

ELEVATION ON 740 DIA CAISSON SUPPORT AT EL.+13000 (2 LOCATIONS)

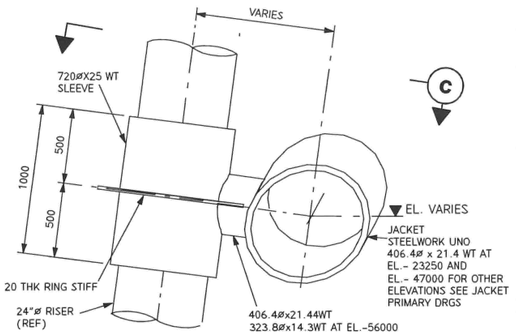
SCALE 1:20

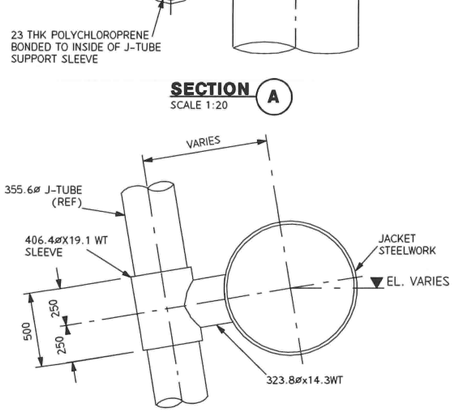


ELEVATION & ORIENTATION OF RISER SUPPORTS VARY
REFER TO DRG No. C001/12/25/99/GD210/0012

ELEVATION ON EXPORT RISER SUPPORT (5 LOCATIONS)
IMPORT RISER SUPPORT SIMILAR (5 LOCATIONS)

SCALE 1:20





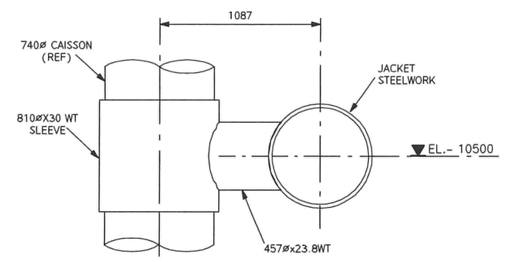
SECTION A
SCALE 1:20

ELEVATION & ORIENTATION OF J-TUBE SUPPORTS VARY
REFER TO DRG No.C001/12/25/99/GD210/0013

ELEVATION ON TYPICAL J-TUBE SUPPORT BELOW SPLASH ZONE

SCALE 1:20

56 No. REQUIRED WITH STRAIGHT SLEEVE
7 No. REQUIRED WITH BENT SLEEVE AT EL.-56000



ELEVATION ON 740 DIA CAISSON SUPPORT AT EL.-10500 (2 LOCATIONS)

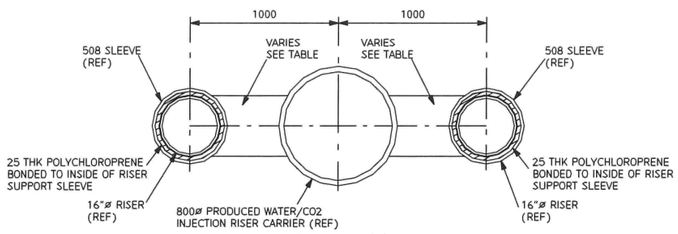
SCALE 1:20

TRUE ELEVATION LOOKING WEST

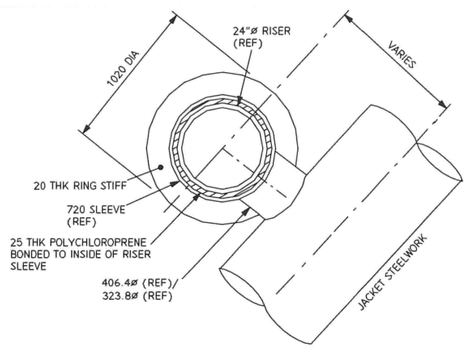
ELEVATION ON TYPICAL PRODUCED WATER/CO2 INJECTION RISER SUPPORT (8 LOCATIONS)

SCALE 1:20

ELEVATION	SUPPORT STUB SECTION SIZE
EL.- 1782	406.4ø x 21.4 WT
EL.- 17564	406.4ø x 21.4 WT
EL.- 33346	323.8ø x 14.3 WT
EL.- 47353	323.8ø x 14.3 WT



SECTION B
SCALE 1:20



SECTION C
SCALE 1:20

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	09.03.15	RE	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	03.03.15	RE	CV	RY	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE
REFERENCE DRAWINGS

CLIENT: nationalgrid

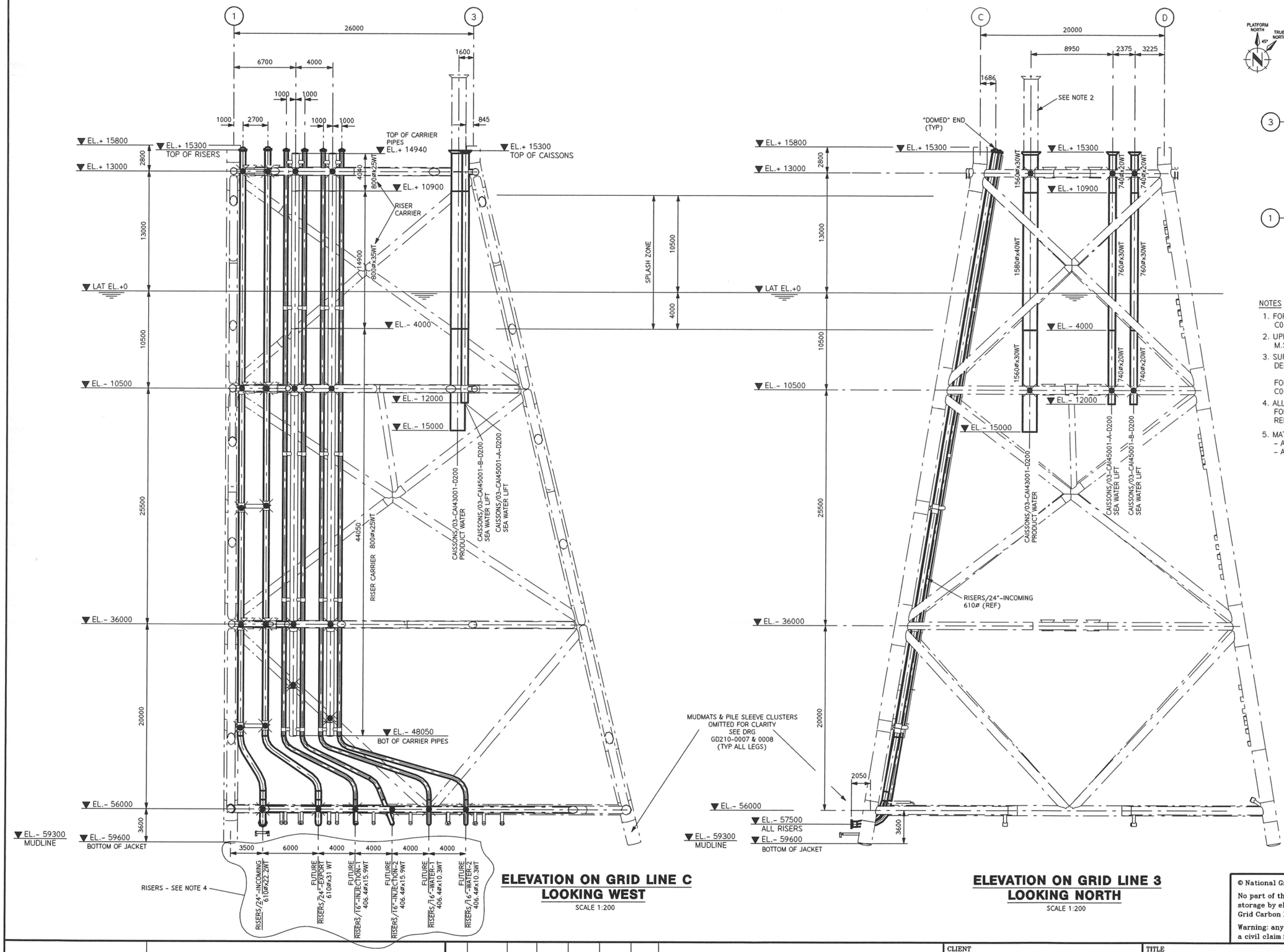
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SECONDARY STEEL - JACKET
SUPPORTS FOR J-TUBES, CAISSONS AND RISERS

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0011	1:20	1 OF 1	E1

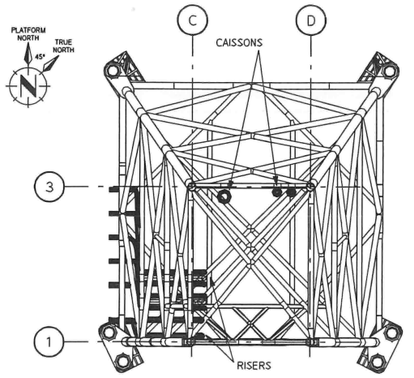
A1 SIZE SHEET

Drawing updated 27/03/2015 09:38:39 by Devonshireb



ELEVATION ON GRID LINE C
LOOKING WEST
SCALE 1:200

ELEVATION ON GRID LINE 3
LOOKING NORTH
SCALE 1:200



KEY PLAN
SCALE 1:500

NOTES

1. FOR GENERAL NOTES & ABBREVIATIONS REFER TO DRAWING No. C001-12-25-99-GD000-0001
2. UPPER SECTION OF PRODUCED WATER CAISSON ATTACHED TO M.S.F. REFER TO DRAWING No. C001-12-25-99-GD200-0045
3. SUPPORTS FOR RISERS, RISER CARRIERS & CAISSONS DENOTED THUS:
   FOR SUPPORT DETAILS REFER TO DRAWING No. C001-12-25-99-GD210-0011
4. ALL RISER SIZES TO BE CONFIRMED DURING DETAILED DESIGN FOR RISER MECHANICAL DESIGN AND MATERIAL TYPE REFER TO C001-06-11-99-GHU21-0004
5. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS UNO:
   - ALL TUBULARS 610Ø OR LESS TO BE TYPE 3
   - ALL TUBULARS GREATER THAN 610Ø TO BE TYPE 2

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		E1	17.04.15	AJB	CV	JC	JJ	-	ISSUED FOR FEED
		B1	10.03.15	AJB	JK	CV	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	27.02.15	AJB	JK	AJO	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

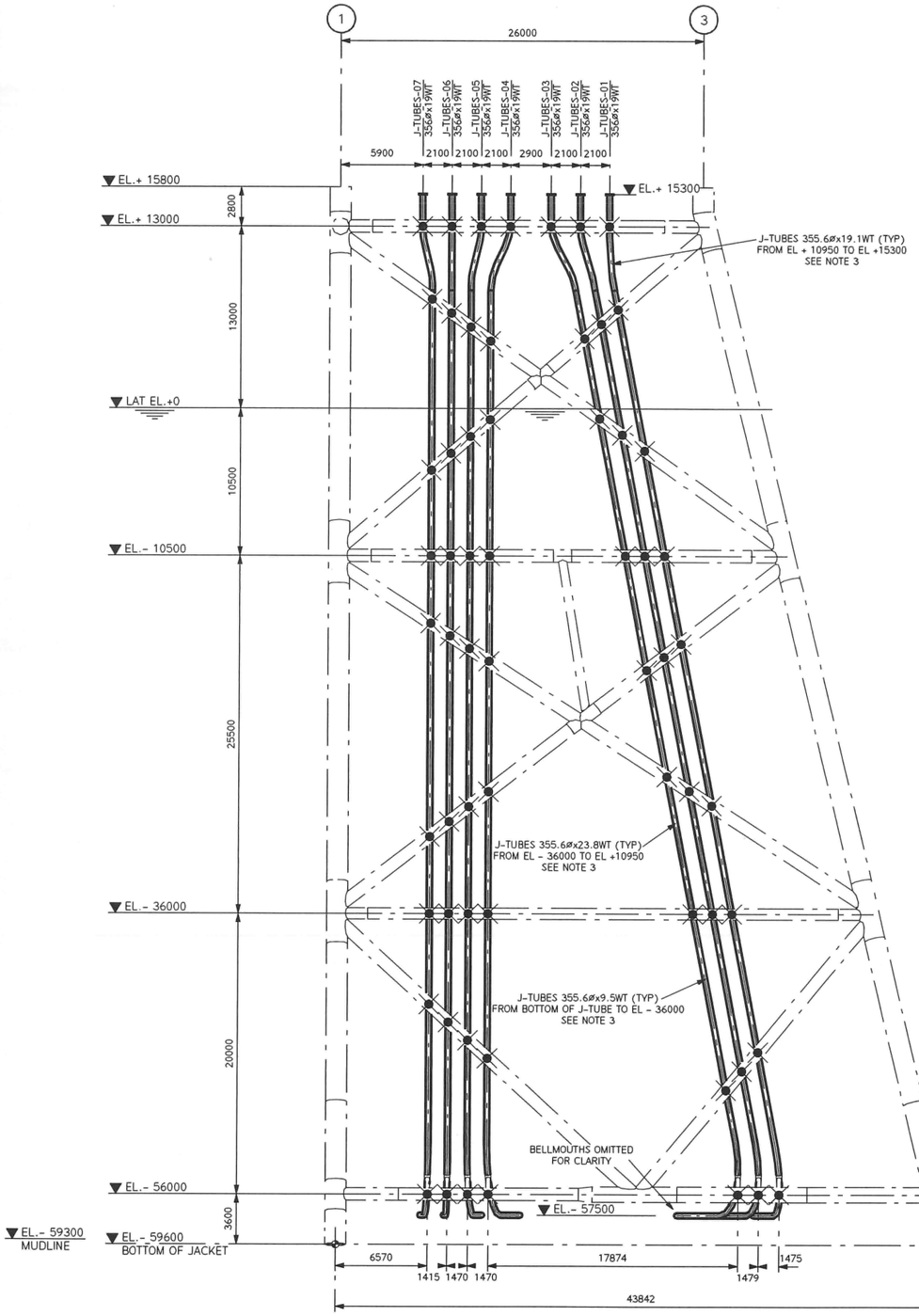
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
JACKET
SECONDARY STEEL G.A.
ELEVATIONS CAISSONS & RISERS

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0012	1:200	1 OF 1	E1

A1 SIZE SHEET

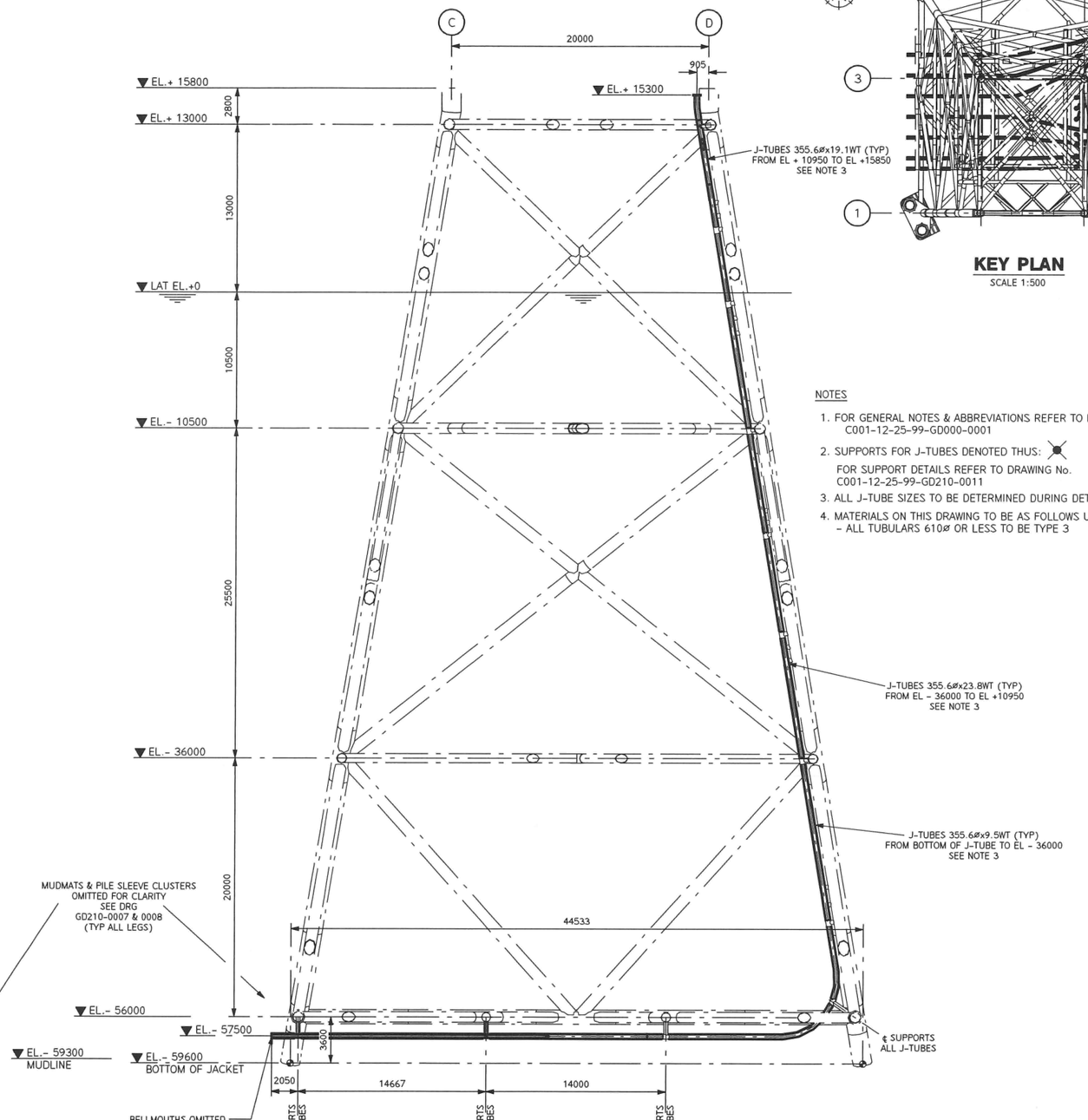
Drawing updated 27/03/2015 09:39:08 by Devonshireb



ELEVATION ON GRID D

SCALE 1:200

LOOKING WEST



ELEVATION ON GRID 1

SCALE 1:200

LOOKING NORTH

KEY PLAN

SCALE 1:500

NOTES

1. FOR GENERAL NOTES & ABBREVIATIONS REFER TO DRAWING No. C001-12-25-99-GD000-0001
2. SUPPORTS FOR J-TUBES DENOTED THUS: ⊗
   FOR SUPPORT DETAILS REFER TO DRAWING No. C001-12-25-99-GD210-0011
3. ALL J-TUBE SIZES TO BE DETERMINED DURING DETAILED DESIGN
4. MATERIALS ON THIS DRAWING TO BE AS FOLLOWS UNO:
   - ALL TUBULARS 610ø OR LESS TO BE TYPE 3

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		AJB	CV	JC	JJ		
E1	17.04.15	AJB	CV	JC	JJ	-	ISSUED FOR FEED
B1	10.03.15	AJB	JK	CV	JJ	-	ISSUED FOR CLIENT COMMENT
A1	26.02.15	AJB	JK	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE

WHITE ROSE CCS PROJECT FEED
JACKET
SECONDARY STEEL G.A.
ELEVATIONS J-TUBES

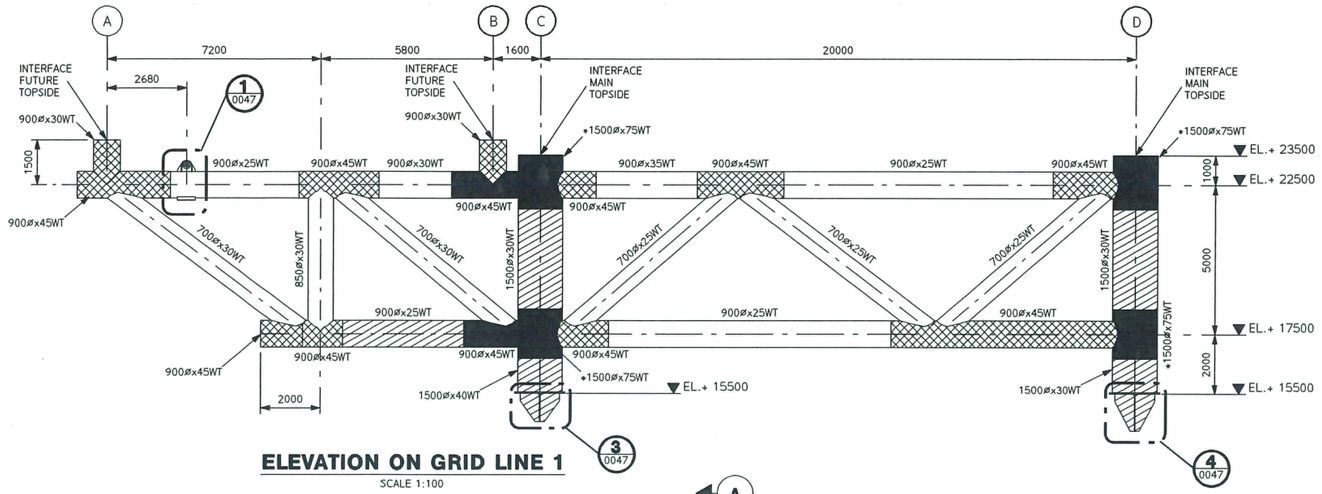
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0013	1:200	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 27/03/2015 09:39:37 by Devonshireb

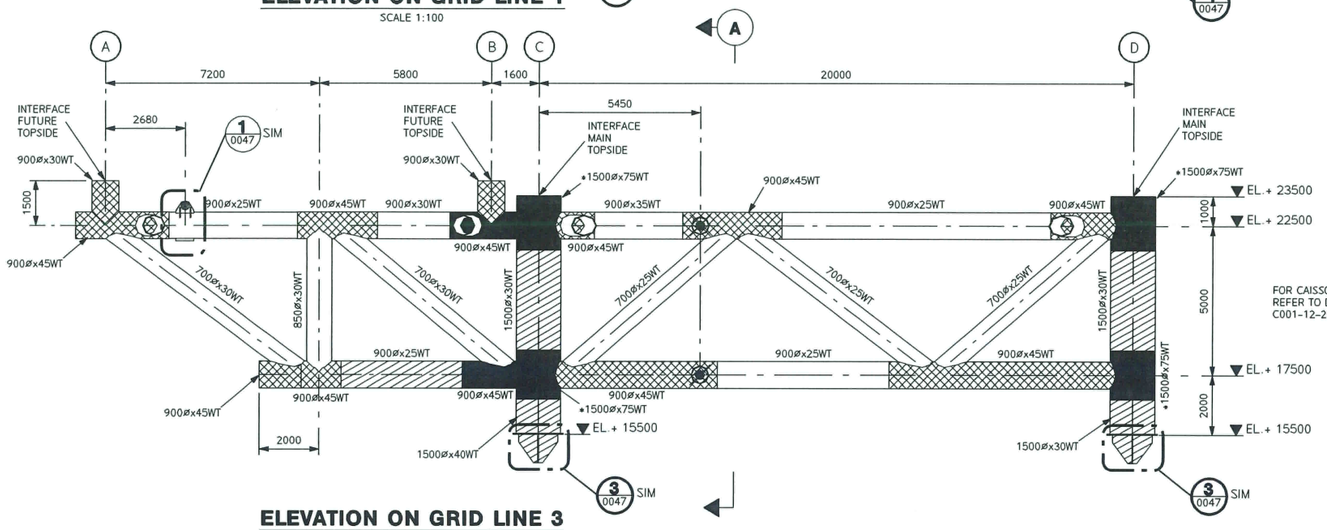
NOTES

1. FOR GENERAL NOTES & ABBREVIATIONS REFER TO DRAWING No. C001-12-25-99-GD000-0001
2. LEG JOINTS MARKED ▲ HAVE 2No. INTERNAL RING STIFFENERS WITH 300x20 WEB AND 150x40 FLANGE.
3. SUPPORTS FOR CAISSONS DENOTED THUS: ✱
4. MATERIALS TYPE LEGEND
   - TYPE 1-X
   - TYPE 2-X
   - TYPE 1
   - TYPE 2



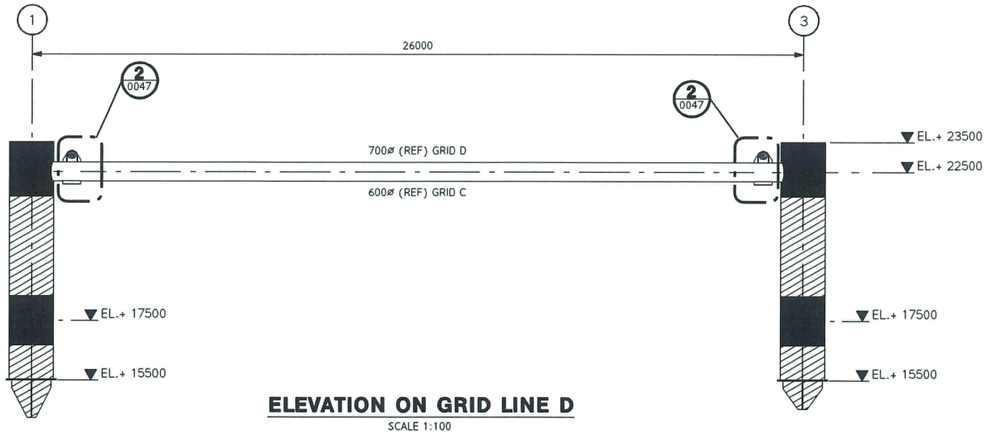
ELEVATION ON GRID LINE 1

SCALE 1:100



ELEVATION ON GRID LINE 3

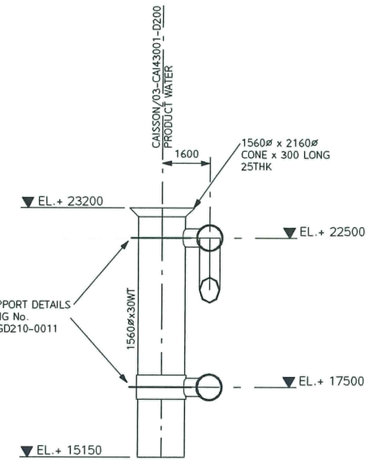
SCALE 1:100



ELEVATION ON GRID LINE D

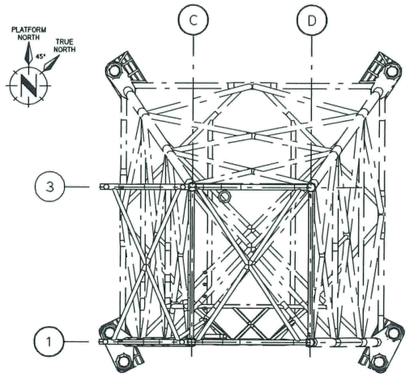
SCALE 1:100

(ELEVATION ON GRID LINE C SIMILAR BUT WITHOUT PADEYES)



SECTION A

SCALE 1:100



KEY PLAN

SCALE 1:500

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
B1	03.02.15	AJB	AO	JK	JJ	-	ISSUED FOR CLIENT COMMENT
A1	22.12.14	ASR	AO	JK	-	-	ISSUED FOR IDC

DRAWING No. | DRAWING TITLE | REFERENCE DRAWINGS

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
MODULE SUPPORT FRAME
ELEVATIONS

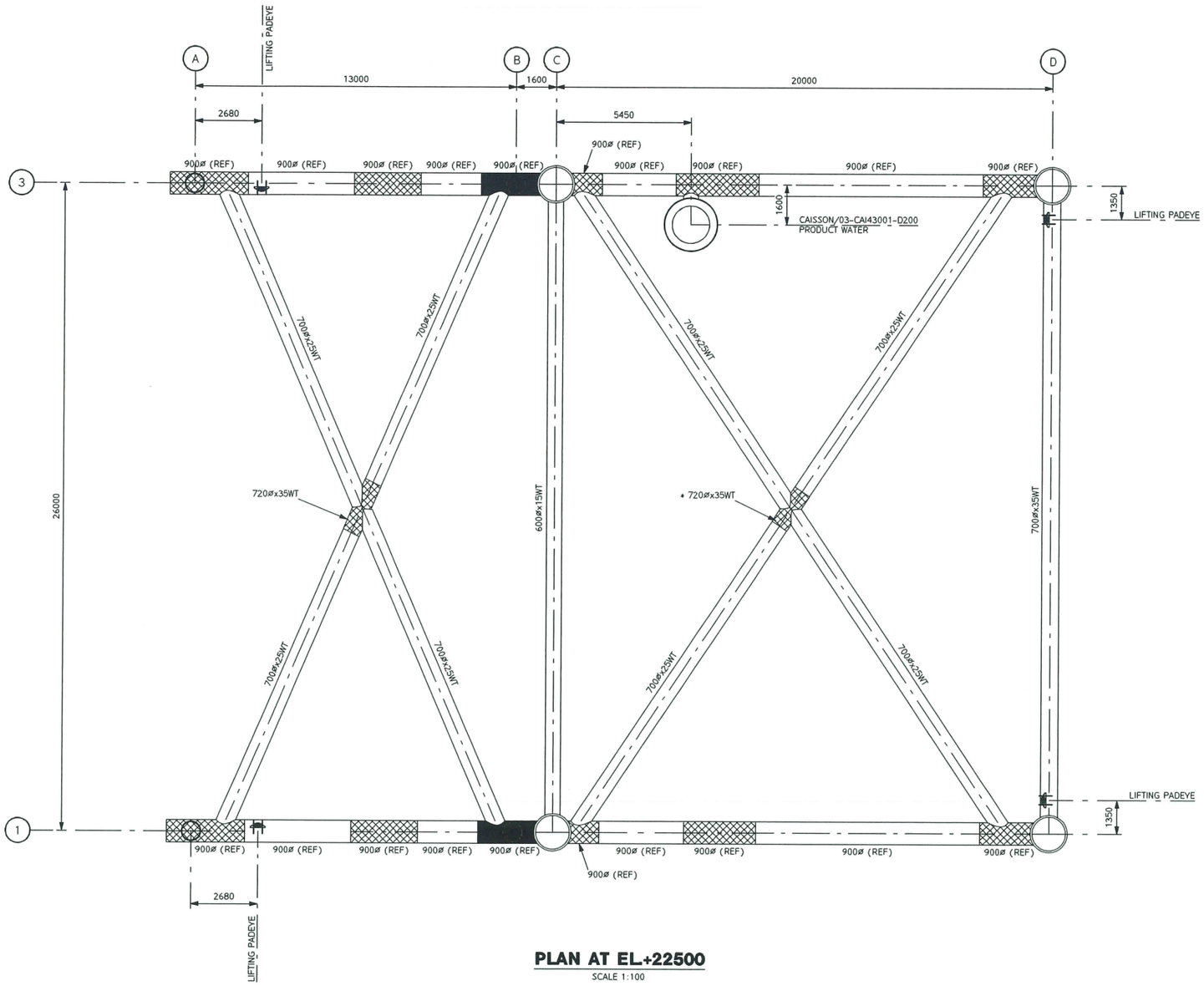
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0045	1:100	1 OF 1	B1

A1 SIZE SHEET

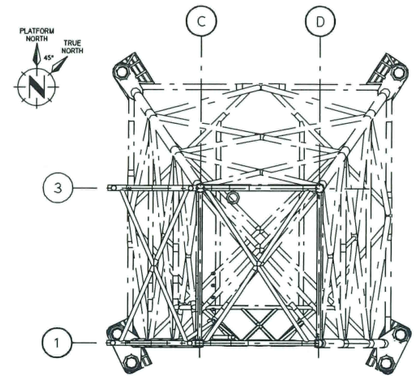
Drawing updated 03/03/2015 17:22:16 by baulcha

NOTES

1. FOR GENERAL NOTES & ABBREVIATIONS REFER TO DRAWING No. C001-12-25-99-GD000-0001
2. BRACE JOINTS MARKED ⋆ HAVE 2No. INTERNAL RING STIFFENERS WITH 300x20 WEB AND 150x40 FLANGE.
3. MATERIALS TYPE LEGEND
   - TYPE 1-X
   - TYPE 2-X
   - TYPE 1
   - TYPE 2



PLAN AT EL.+22500
SCALE 1:100



KEY PLAN
SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-12-25-99-GD200-0047	MODULE SUPPORT FRAME DETAILS	E1	17.04.15	AJB	JC	RY	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0045	MODULE SUPPORT FRAME ELEVATIONS	B1	03.03.15	AJB	AO	JK	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	15.12.14	ASR	AO	JK	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

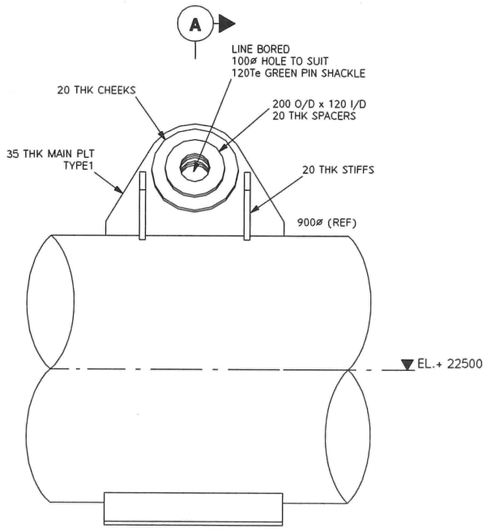
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
MODULE SUPPORT FRAME
PLAN

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0046	1:100	1 OF 1	E1

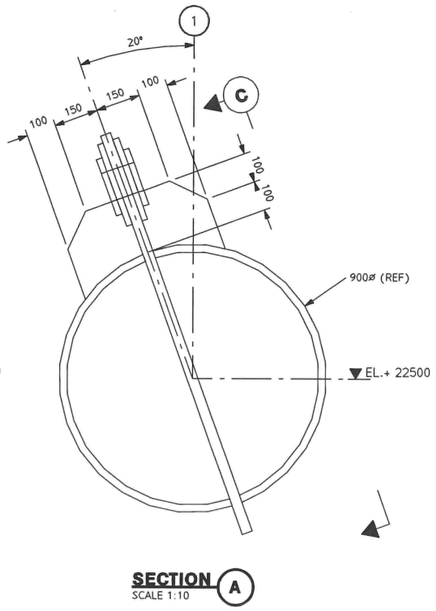
A1 SIZE SHEET

Drawing updated 27/03/2015 09:36:24 by Devonshireb

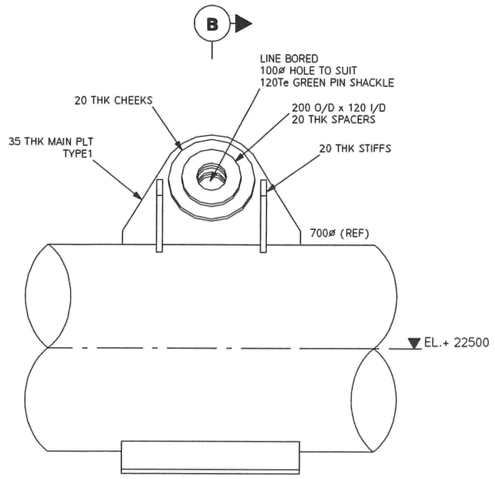


DETAIL 1 / 0045
SCALE 1:10

PADEYE ADJ TO GRID LINE A1 LOOKING NORTH
PADEYE ADJ TO GRID LINE A3 SIMILAR

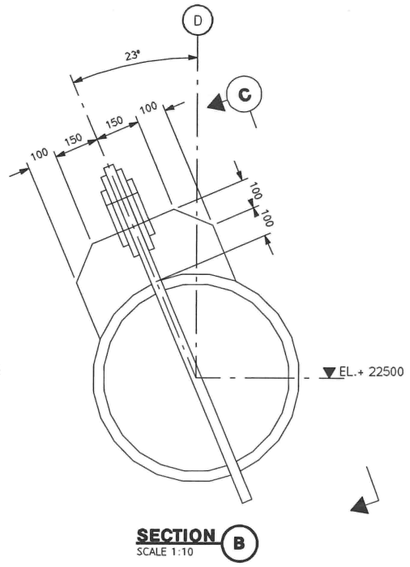


SECTION A
SCALE 1:10

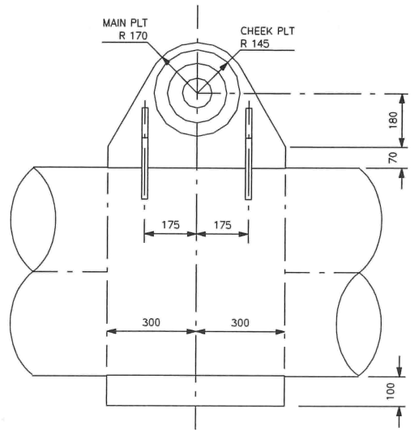


DETAIL 2 / 0045
SCALE 1:10

PADEYE ADJ TO GRID LINE D1 LOOKING WEST
PADEYE ADJ TO GRID LINE D3 SIMILAR



SECTION B
SCALE 1:10

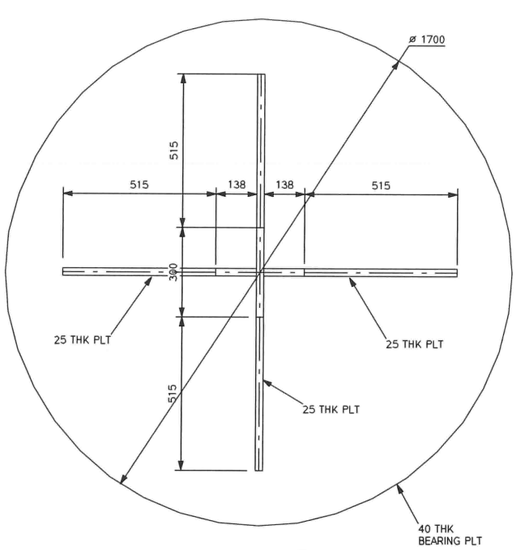


SECTION C
SCALE 1:10

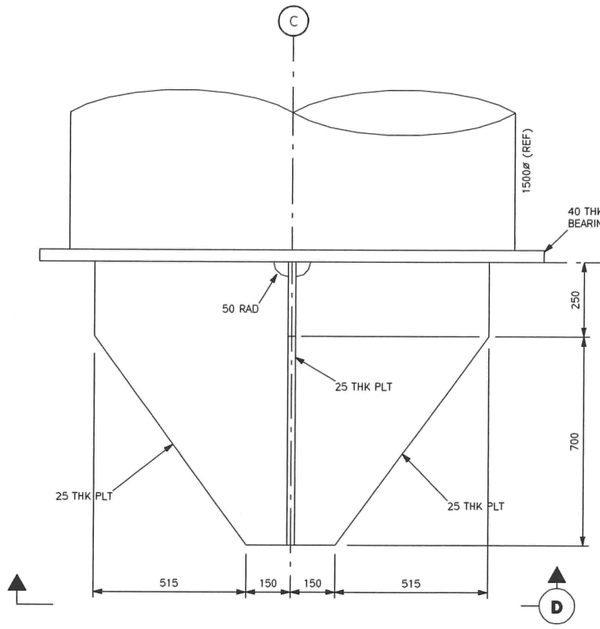
TYPICAL PADEYE

NOTES

1. FOR GENERAL NOTES REFER TO DRG. No. C001-12-25-99-GD000-0001
2. STEEL TYPES TO BE AS FOLLOWS U.N.O:
   PLATES - TYPE 2

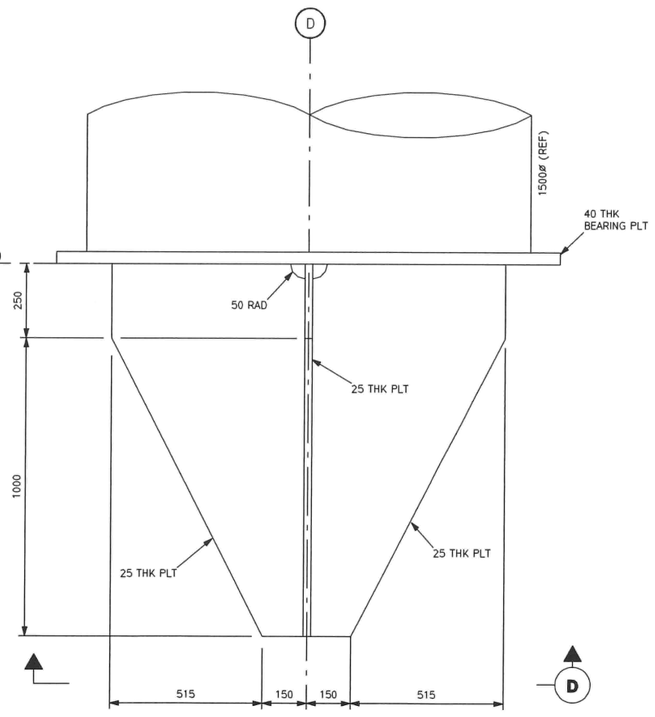


SECTION D
SCALE 1:10



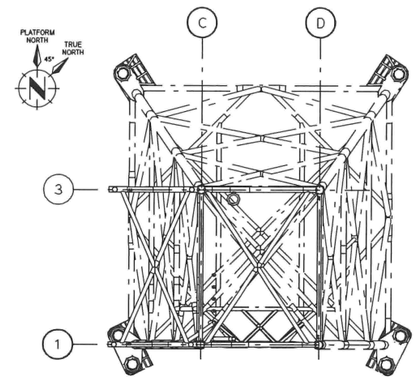
DETAIL 3 / 0045
SCALE 1:10

STABBING DETAIL AT LEG C1 LOOKING NORTH
STABBING DETAIL AT LEGS C3 & D3 SIMILAR



DETAIL 4 / 0045
SCALE 1:10

STABBING DETAIL AT LEG D1 LOOKING NORTH



KEY PLAN
SCALE 1:500

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-12-25-99-GD200-0045	MODULE SUPPORT FRAME ELEVATIONS	E1	17.04.15	AJB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0046	MODULE SUPPORT FRAME PLAN	B1	03.02.15	AJB	CV	JK	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	20.02.15	AJB	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
MODULE SUPPORT FRAME
DETAILS

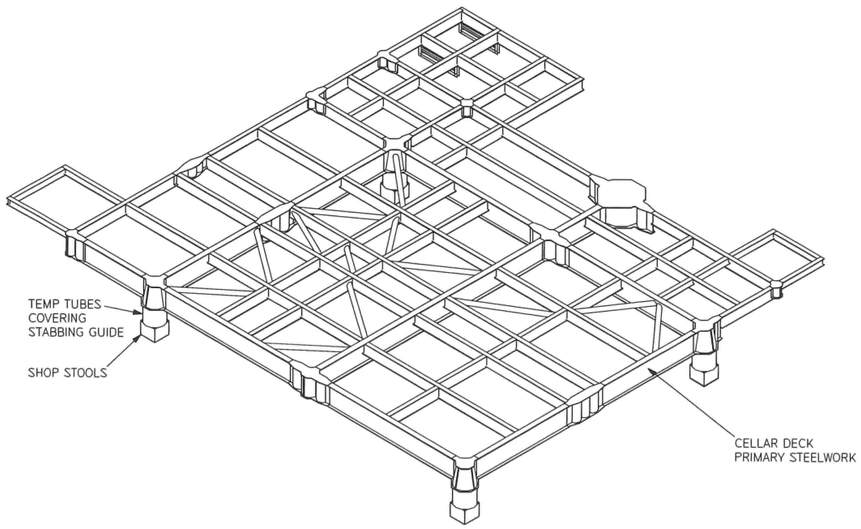
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0047	1:100	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 27/03/2015 09:37:03 by Devonshireb

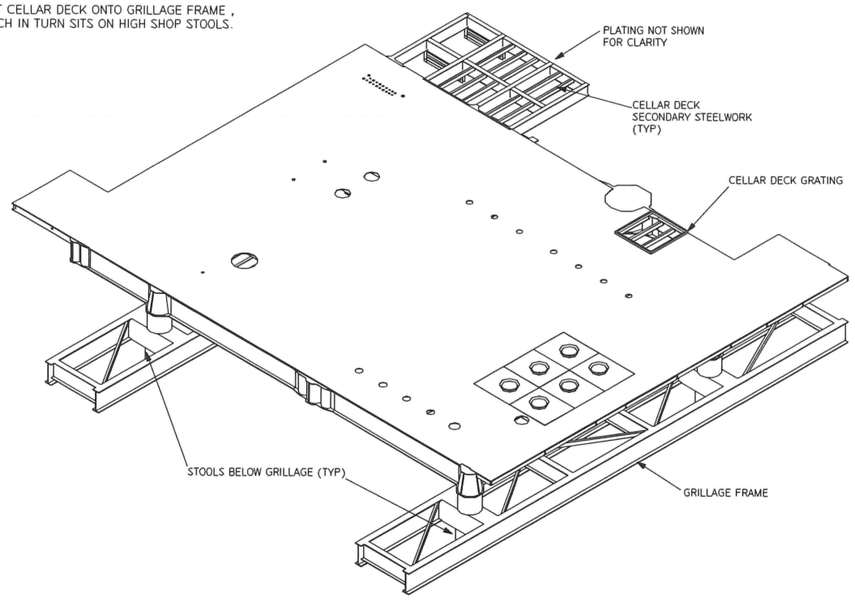
CONSTRUCTION SEQUENCE 1:

- SET OUT NODES , MAIN BEAMS & PRIMARY STEELWORK ONTO TEMPORARY SHOP SUPPORTS AND WELD OUT.



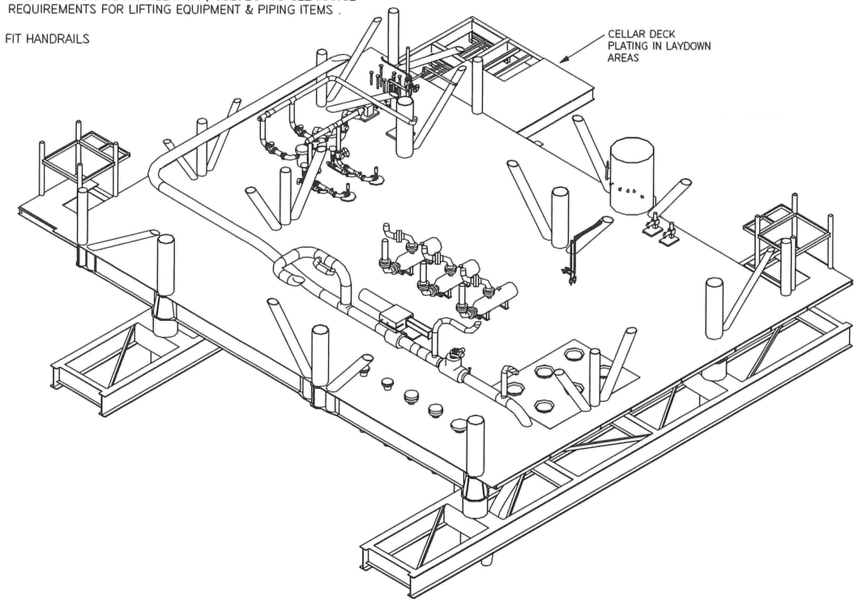
CONSTRUCTION SEQUENCE 2:

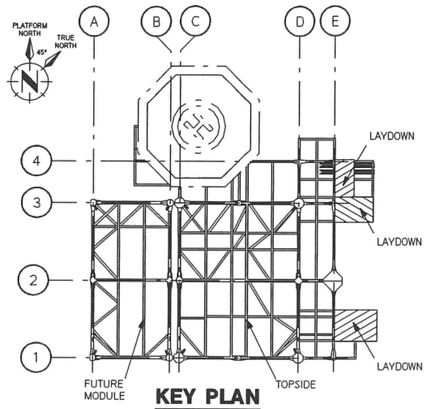
- PREPARE SECONDARY STEELWORK , INSTALL AND WELD OUT.
- INSTALL CELLAR DECK GRATING & PLATING.
- INSTALL EQUIPMENT & PIPE SUPPORTS .
- LIFT CELLAR DECK ONTO GRILLAGE FRAME , WHICH IN TURN SITS ON HIGH SHOP STOOLS.



CONSTRUCTION SEQUENCE 3:

- INSTALL COLUMNS , BRACES & TEMPORARY SUPPORTS REQUIRED FOR THE LOWER MEZZANINE DECK INSTALLATION.
- INSTALL CELLAR DECK MAJOR EQUIPMENT & LARGE BORE PIPING . THESE CAN ALSO BE INSTALLED PRIOR TO THE COLUMNS & BRACE INSTALLATION , SUBJECT TO CLEARANCE REQUIREMENTS FOR LIFTING EQUIPMENT & PIPING ITEMS .
- FIT HANDRAILS





KEY PLAN
SCALE 1:500

NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.
2. HANDRAILS OMITTED FOR CLARITY

DRAWING No.	DRAWING TITLE
C001-12-25-99-GD200-0029	CONSTRUCTION SEQUENCE DRAWING - WEATHER DECK
C001-12-25-99-GD200-0028	CONSTRUCTION SEQUENCE DRAWING - UPPER MEZZ DECK
C001-12-25-99-GD200-0027	CONSTRUCTION SEQUENCE DRAWING - LOWER MEZZ DECK
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		AB	CV	JC	JJ		
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE

WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
TOPSIDE CELLAR DECK

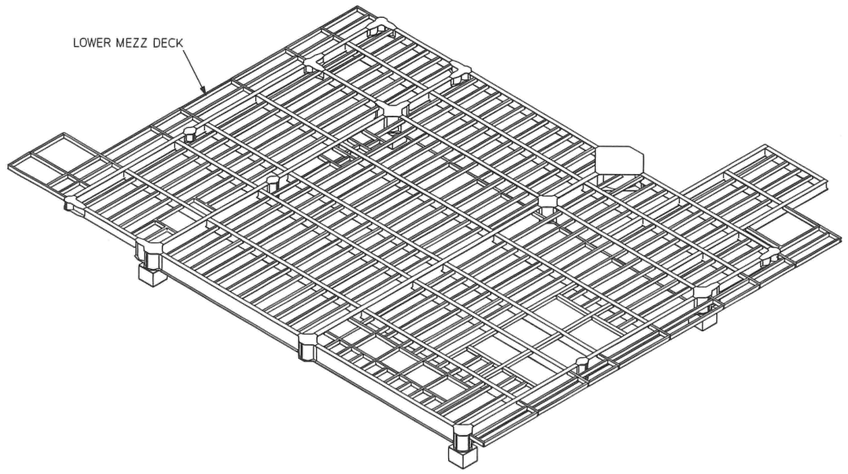
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0026	-	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 25/03/2015 10:06:35 by hillc

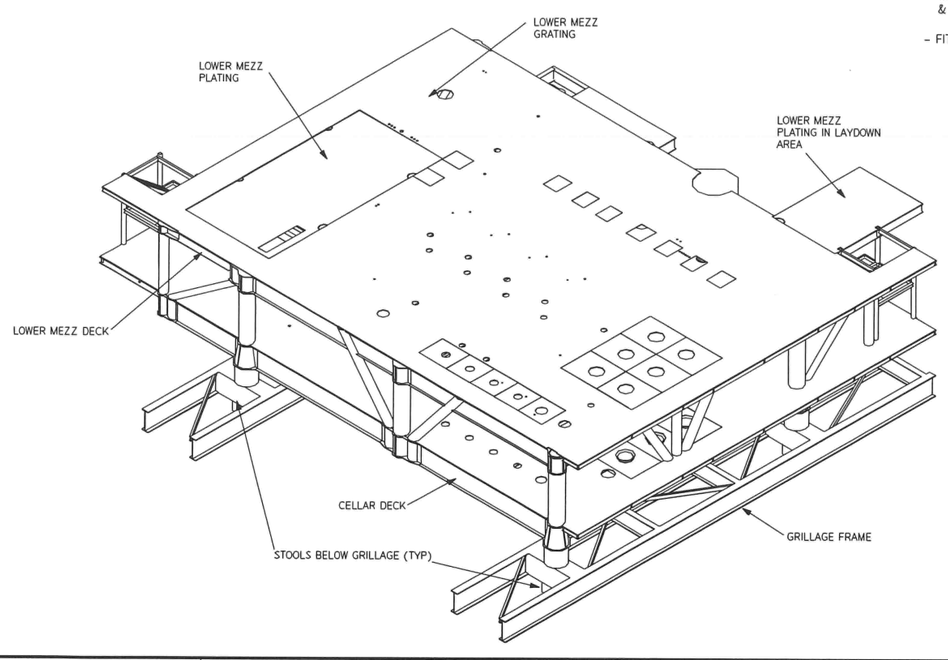
CONSTRUCTION SEQUENCE 4: (SEE NOTE 2)

- SET OUT TEMPORARY SHOP SUPPORTS.
- SET OUT PRIMARY STEELWORK ON SHOP SUPPORTS & WELD OUT.
- INSTALL SECONDARY STEELWORK & WELD OUT.
- INSTALL LOWER MEZZ DECK GRATING & PLATING.
- INSTALL EQUIPMENT & PIPE SUPPORTS .



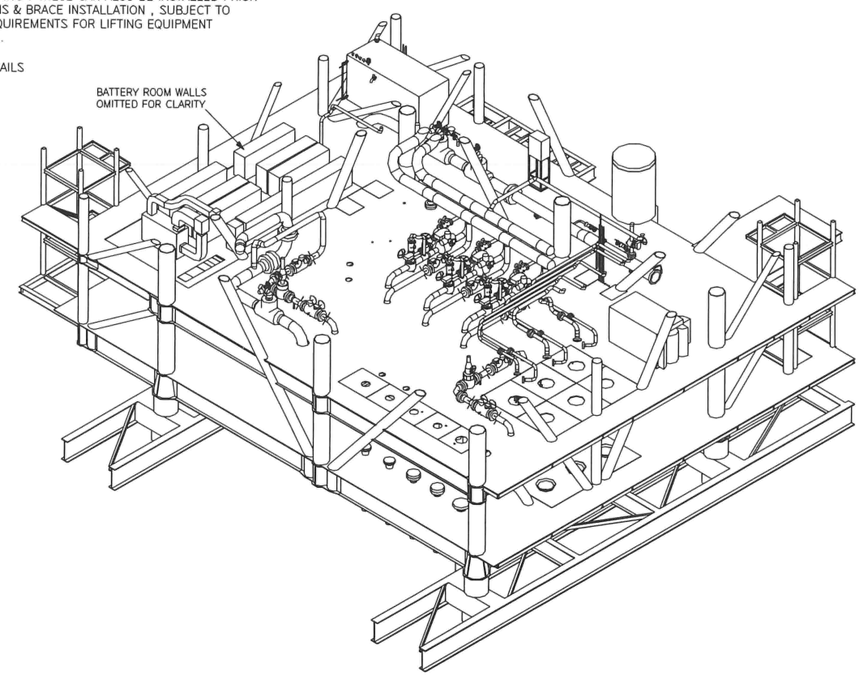
CONSTRUCTION SEQUENCE 5:

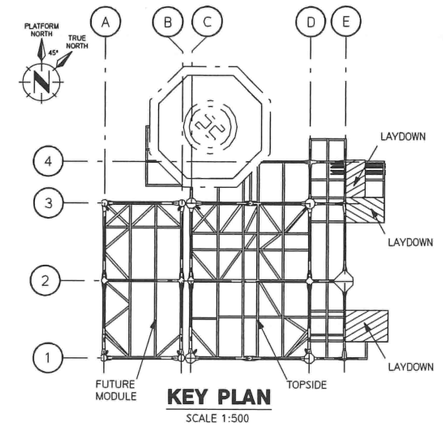
- LIFT LOWER MEZZ DECK ONTO CELLAR DECK TO LOWER MEZZ DECK COLUMNS & WELD OUT



CONSTRUCTION SEQUENCE 6:

- INSTALL COLUMNS , BRACES & TEMPORARY SUPPORTS REQUIRED FOR THE UPPER MEZZANINE DECK INSTALLATION.
- INSTALL LOWER MEZZ DECK MAJOR EQUIPMENT, BATTERY ROOM WALLS & LARGE BORE PIPING . THESE CAN ALSO BE INSTALLED PRIOR TO THE COLUMNS & BRACE INSTALLATION , SUBJECT TO CLEARANCE REQUIREMENTS FOR LIFTING EQUIPMENT & PIPING ITEMS .
- FIT EDGE HANDRAILS





KEY PLAN
SCALE 1:500

NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.
2. CONSTRUCTION OF THE LOWER MEZZ DECK CAN BE PERFORMED IN PARALLEL TO THE CONSTRUCTION OF THE CELLAR DECK , SUBJECT TO YARD SPACE AVAILABILITY .
3. HANDRAILS OMITTED FOR CLARITY

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AB	CV	JC	JJ		
C001-12-25-99-GD200-0029	CONSTRUCTION SEQUENCE DRAWING - WEATHER DECK								
C001-12-25-99-GD200-0028	CONSTRUCTION SEQUENCE DRAWING - UPPER MEZZ DECK	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0026	CONSTRUCTION SEQUENCE DRAWING - CELLAR DECK	B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
TOPSIDE LOWER MEZZ DECK

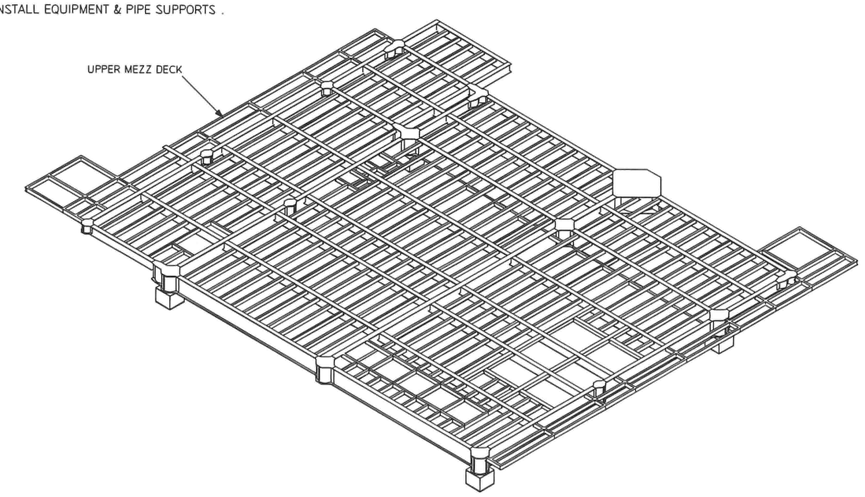
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0027	-	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 25/03/2015 10:15:37 by hillc

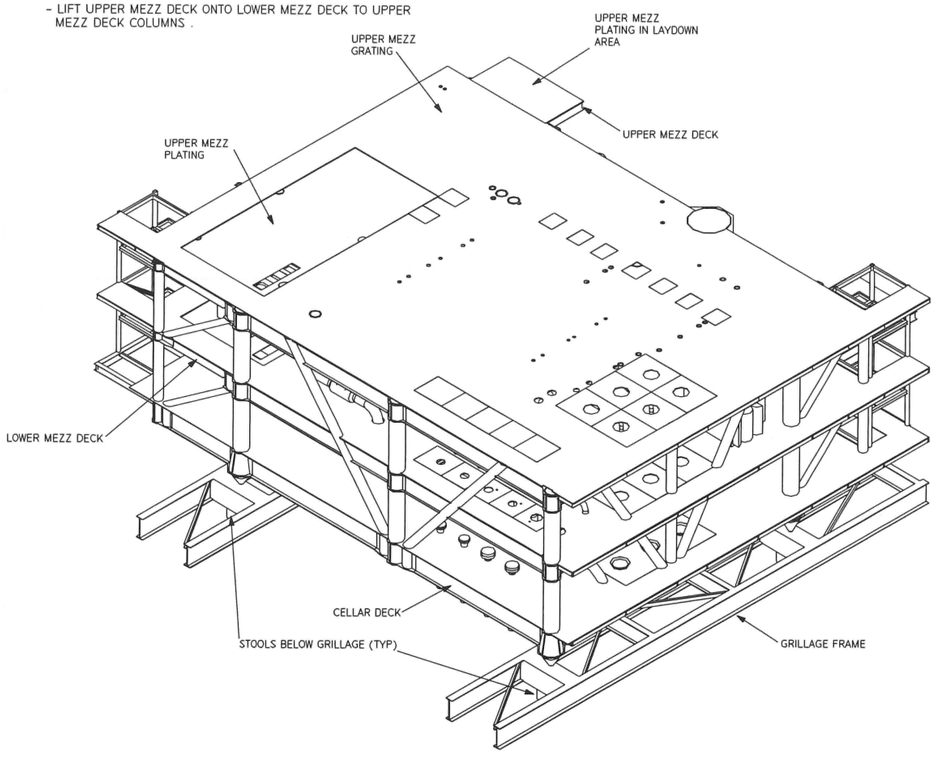
CONSTRUCTION SEQUENCE 7: (SEE NOTE 2)

- SET OUT TEMPORARY SHOP SUPPORTS.
- SET OUT PRIMARY STEELWORK ON SHOP SUPPORTS & WELD OUT.
- INSTALL SECONDARY STEELWORK & WELD OUT.
- INSTALL UPPER MEZZ DECK GRATING & PLATING.
- INSTALL EQUIPMENT & PIPE SUPPORTS .



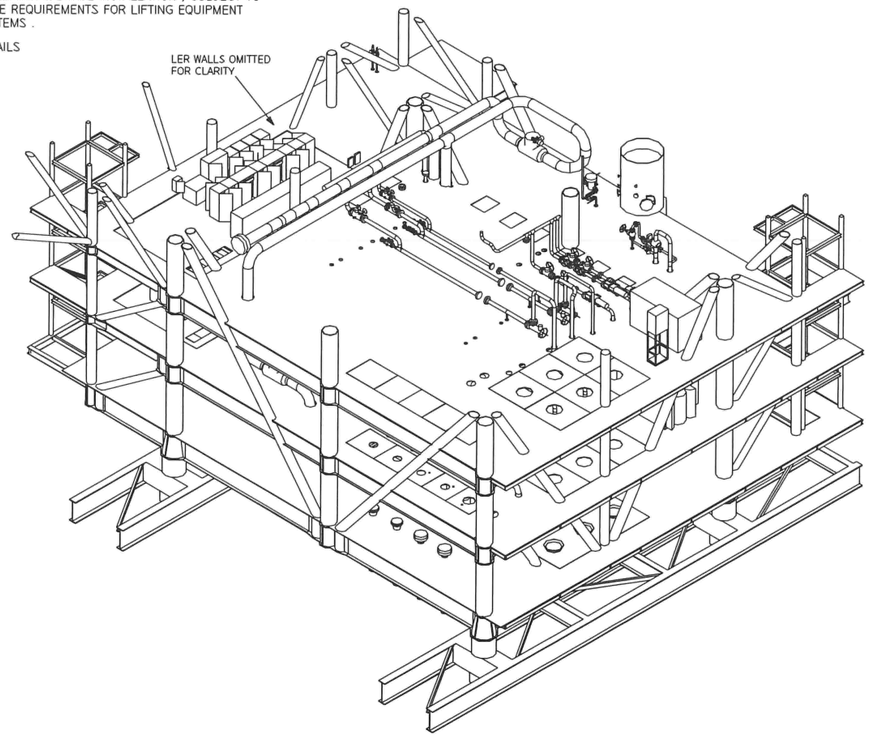
CONSTRUCTION SEQUENCE 8:

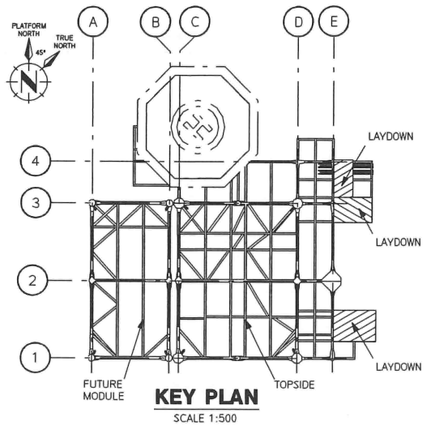
- LIFT UPPER MEZZ DECK ONTO LOWER MEZZ DECK TO UPPER MEZZ DECK COLUMNS .



CONSTRUCTION SEQUENCE 9:

- INSTALL COLUMNS , BRACES & TEMPORARY SUPPORTS REQUIRED FOR THE WEATHER DECK INSTALLATION .
- INSTALL UPPER MEZZ DECK MAJOR EQUIPMENT, LER WALLS & LARGE BORE PIPING . THESE CAN ALSO BE INSTALLED PRIOR TO THE COLUMNS & BRACE INSTALLATION , SUBJECT TO CLEARANCE REQUIREMENTS FOR LIFTING EQUIPMENT & PIPING ITEMS .
- FIT HANDRAILS





KEY PLAN
SCALE 1:500

NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.
2. CONSTRUCTION OF THE UPPER MEZZ DECK CAN BE PERFORMED IN PARALLEL TO THE CONSTRUCTION OF THE LOWER MEZZ DECK , SUBJECT TO YARD SPACE AVAILABILITY .
3. HANDRAILS OMITTED FOR CLARITY

REFERENCE DRAWINGS	DRAWING TITLE
C001-12-25-99-GD200-0029	CONSTRUCTION SEQUENCE DRAWING - WEATHER DECK
C001-12-25-99-GD200-0027	CONSTRUCTION SEQUENCE DRAWING - LOWER MEZZ DECK
C001-12-25-99-GD200-0026	CONSTRUCTION SEQUENCE DRAWING - CELLAR DECK

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
TOPSIDE UPPER MEZZ DECK

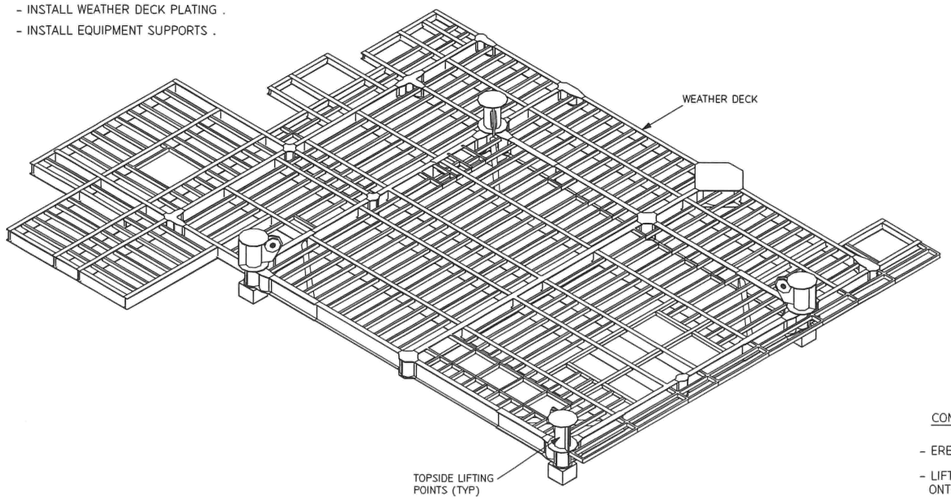
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0028	-	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 25/03/2015 10:23:44 by hillc

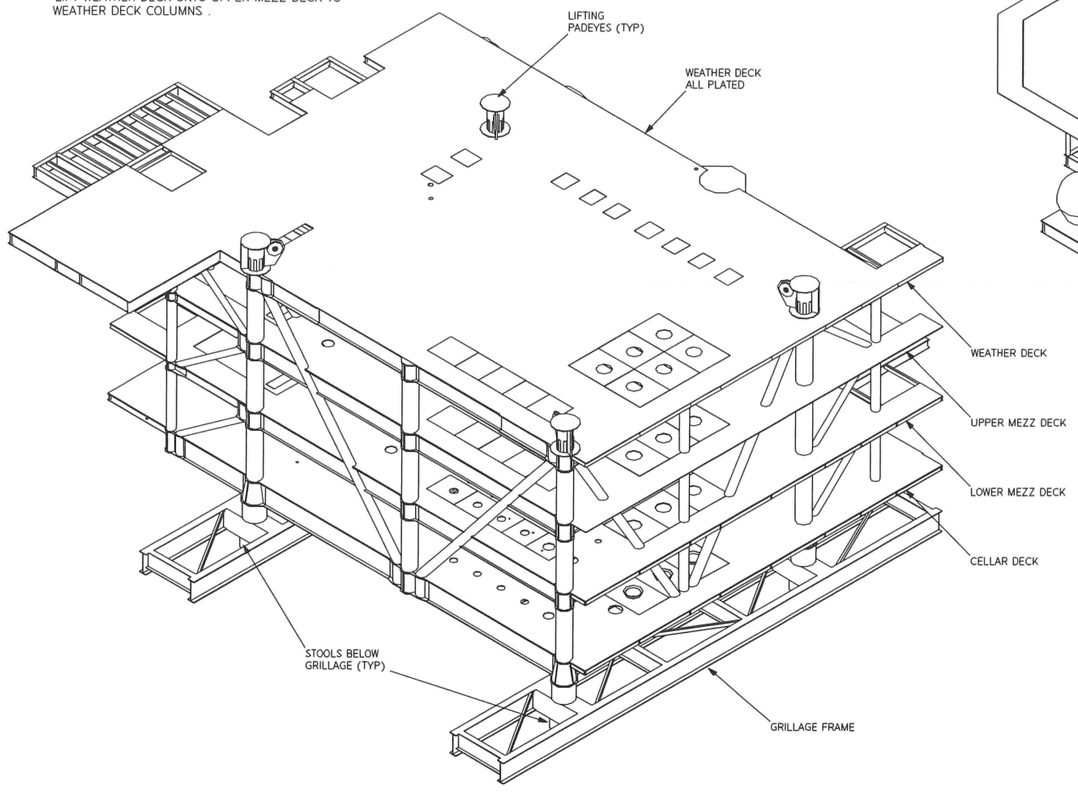
CONSTRUCTION SEQUENCE 10: (SEE NOTE 2)

- SET OUT TEMPORARY SHOP SUPPORTS.
- SET OUT PRIMARY STEELWORK ON SHOP SUPPORTS & WELD OUT.
- INSTALL SECONDARY STEELWORK & WELD OUT.
- INSTALL WEATHER DECK PLATING .
- INSTALL EQUIPMENT SUPPORTS .



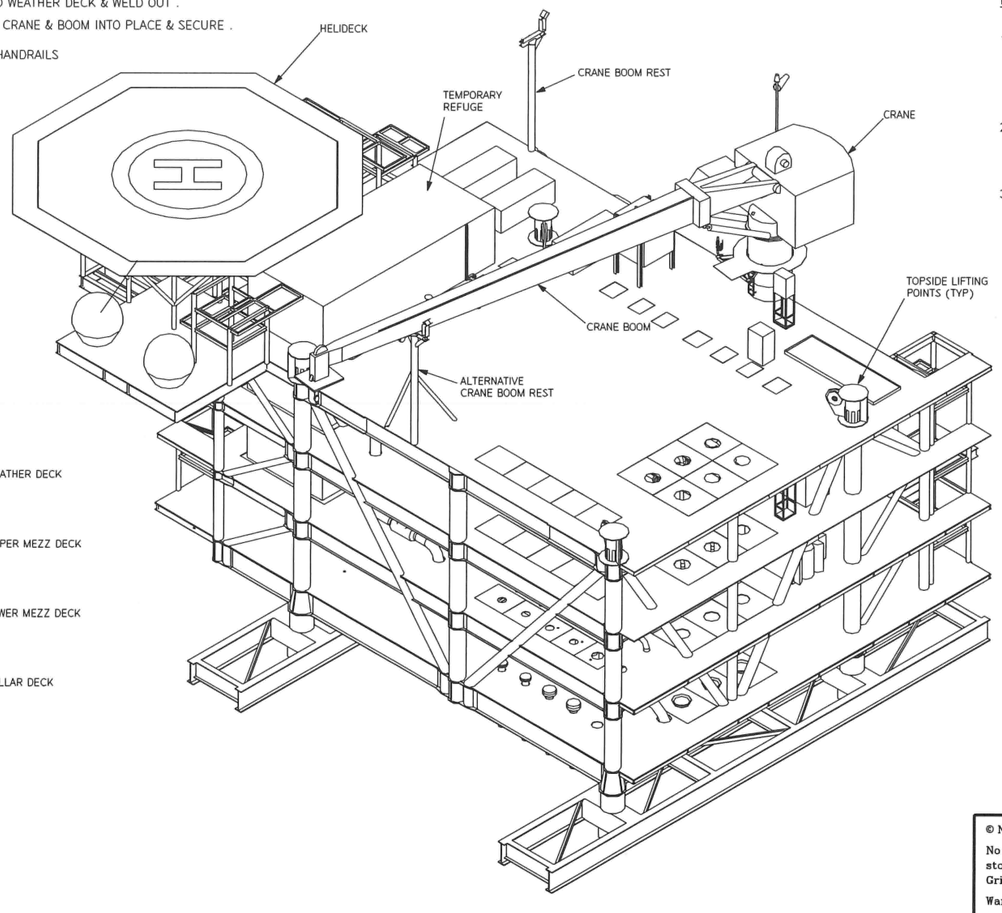
CONSTRUCTION SEQUENCE 11:

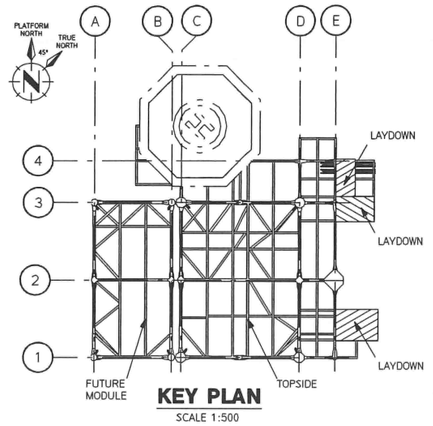
- LIFT WEATHER DECK ONTO UPPER MEZZ DECK TO WEATHER DECK COLUMNS .



CONSTRUCTION SEQUENCE 12:

- ERECT TEMPORARY REFUGE STRUCTURE
- LIFT PRE-ASSEMBLED HELIDECK (OR PROPRIETARY HELIDECK) ONTO WEATHER DECK & WELD OUT .
- LIFT CRANE & BOOM INTO PLACE & SECURE .
- FIT HANDRAILS





KEY PLAN
SCALE 1:500

NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.
2. CONSTRUCTION OF THE WEATHER DECK CAN BE PERFORMED IN PARALLEL TO THE CONSTRUCTION OF THE UPPER MEZZ DECK , SUBJECT TO YARD SPACE AVAILABILITY .
3. HANDRAILS OMITTED FOR CLARITY

DRAWING No.	DRAWING TITLE
C001-12-25-99-GD200-0028	CONSTRUCTION SEQUENCE DRAWING - UPPER MEZZ DECK
C001-12-25-99-GD200-0027	CONSTRUCTION SEQUENCE DRAWING - LOWER MEZZ DECK
C001-12-25-99-GD200-0026	CONSTRUCTION SEQUENCE DRAWING - CELLAR DECK
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
TOPSIDE WEATHER DECK

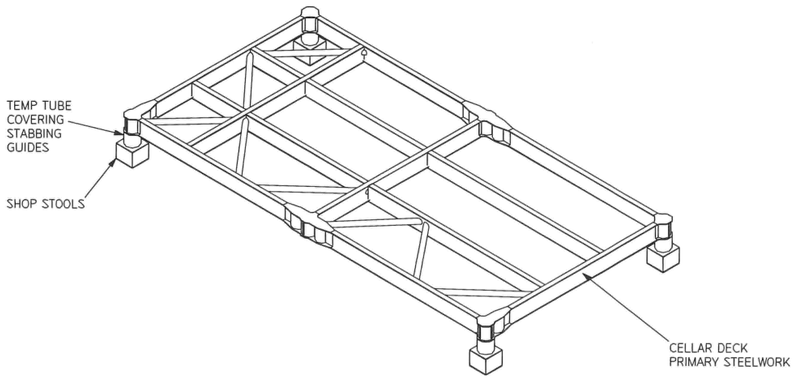
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0029	-	1 OF 1	E1

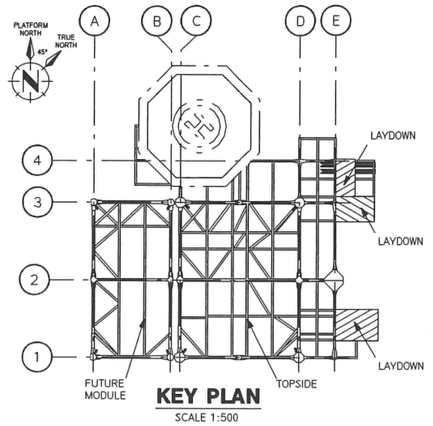
A1 SIZE SHEET

Drawing updated 25/03/2015 10:35:25 by hillc

CONSTRUCTION SEQUENCE 1:

- SET OUT NODES , MAIN BEAMS & PRIMARY STEELWORK ONTO TEMPORARY SHOP SUPPORTS AND WELD OUT.





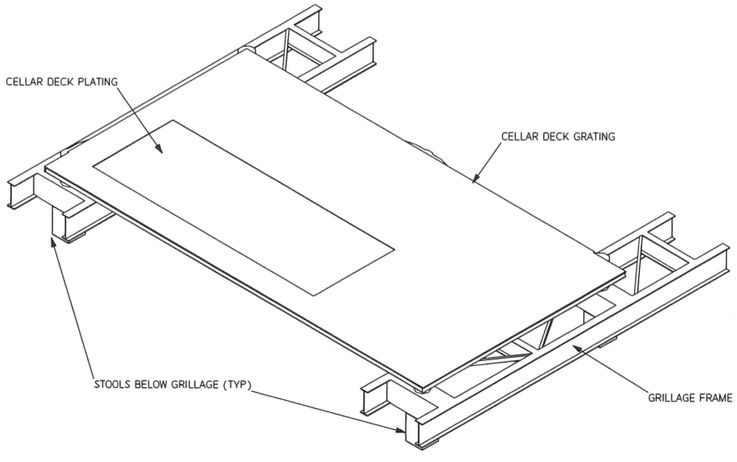
KEY PLAN
SCALE 1:500

NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.
2. HANDRAILS OMITTED FOR CLARITY

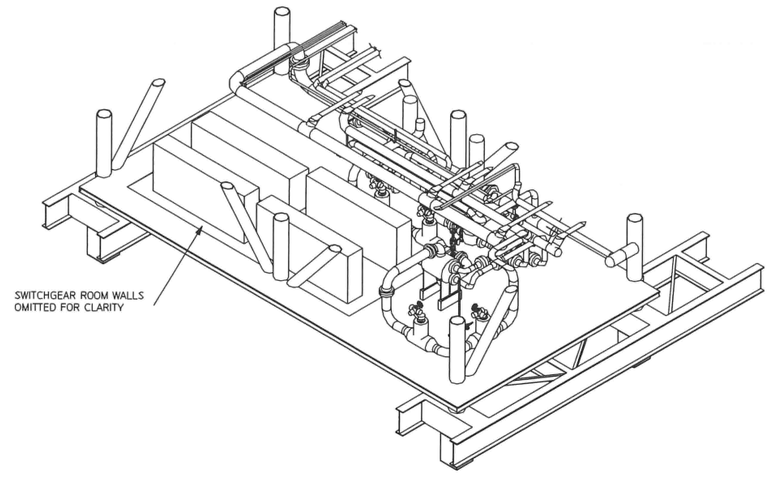
CONSTRUCTION SEQUENCE 2:

- PREPARE SECONDARY STEELWORK , INSTALL AND WELD OUT.
- INSTALL CELLAR DECK GRATING & PLATING.
- INSTALL EQUIPMENT & PIPE SUPPORTS .
- LIFT CELLAR DECK ONTO GRILLAGE FRAME , WHICH IN TURN SITS ON HIGH SHOP STOOLS.



CONSTRUCTION SEQUENCE 3:

- INSTALL COLUMNS , BRACES & TEMPORARY SUPPORTS REQUIRED FOR THE LOWER MEZZANINE DECK INSTALLATION.
- INSTALL CELLAR DECK MAJOR EQUIPMENT, SWITCHGEAR WALLS & LARGE BORE PIPING . THESE CAN ALSO BE INSTALLED PRIOR TO THE COLUMNS & BRACE INSTALLATION , SUBJECT TO CLEARANCE REQUIREMENTS FOR LIFTING EQUIPMENT & PIPING ITEMS .
- FIT HANDRAILS



C001-12-25-99-GD200-0035	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - WEATHER DECK			AB	CV	JC	JJ		
C001-12-25-99-GD200-0034	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - UPPER MEZZ DECK	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0033	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - LOWER MEZZ DECK	B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC
REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
FUTURE MODULE - CELLAR DECK

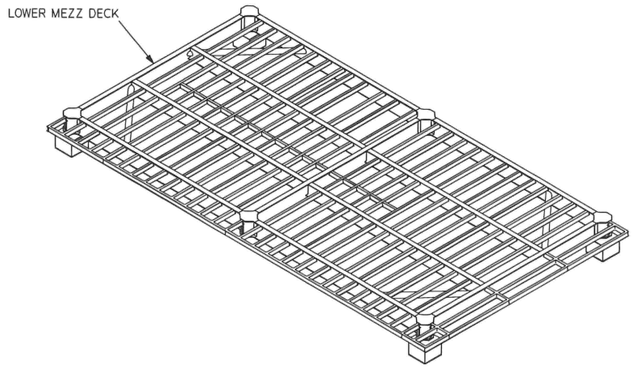
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0032	-	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 25/03/2015 10:44:14 by hillc

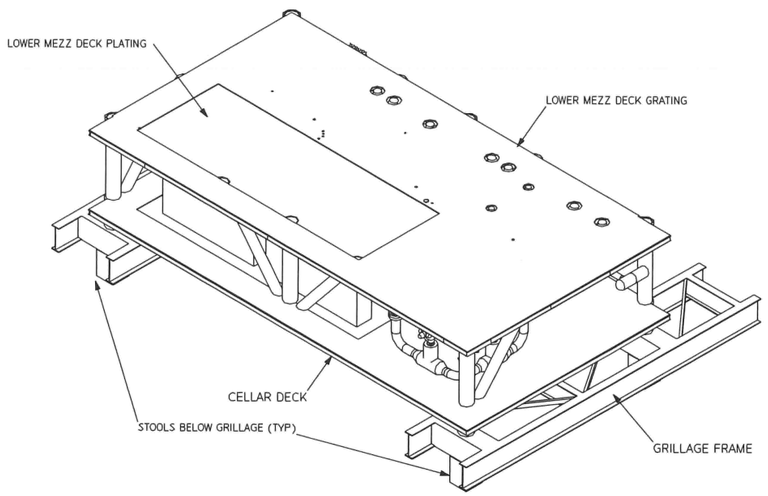
CONSTRUCTION SEQUENCE 4: (SEE NOTE 2)

- SET OUT TEMPORARY SHOP SUPPORTS.
- SET OUT PRIMARY STEELWORK ON SHOP SUPPORTS & WELD OUT.
- INSTALL SECONDARY STEELWORK & WELD OUT.
- INSTALL LOWER MEZZ DECK GRATING & PLATING
- INSTALL EQUIPMENT & PIPE SUPPORTS .



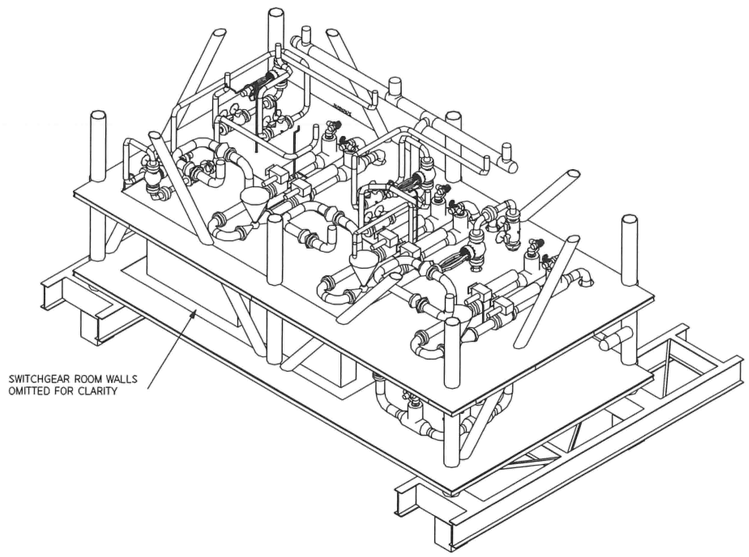
CONSTRUCTION SEQUENCE 5:

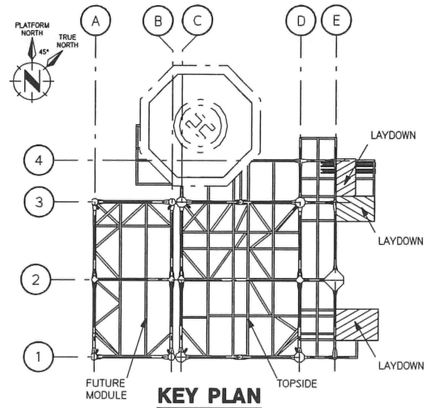
- LIFT LOWER MEZZ DECK ONTO CELLAR DECK TO LOWER MEZZ DECK COLUMNS .



CONSTRUCTION SEQUENCE 6:

- INSTALL COLUMNS , BRACES & TEMPORARY SUPPORTS REQUIRED FOR THE UPPER MEZZANINE DECK INSTALLATION.
- INSTALL LOWER MEZZ DECK MAJOR EQUIPMENT & LARGE BORE PIPING . THESE CAN ALSO BE INSTALLED PRIOR TO THE COLUMNS & BRACE INSTALLATION , SUBJECT TO CLEARANCE REQUIREMENTS FOR LIFTING EQUIPMENT & PIPING ITEMS .
- FIT HANDRAILS





KEY PLAN
SCALE 1:500

NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.
2. CONSTRUCTION OF THE LOWER MEZZ DECK CAN BE PERFORMED IN PARALLEL TO THE CONSTRUCTION OF THE CELLAR DECK , SUBJECT TO YARD SPACE AVAILABILITY .
3. HANDRAILS OMITTED FOR CLARITY

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0035	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - WEATHER DECK	B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
C001-12-25-99-GD200-0034	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - UPPER MEZZ DECK	A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC
C001-12-25-99-GD200-0032	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - CELLAR DECK								
DRAWING No.	DRAWING TITLE								

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
FUTURE MODULE - LOWER MEZZ DECK

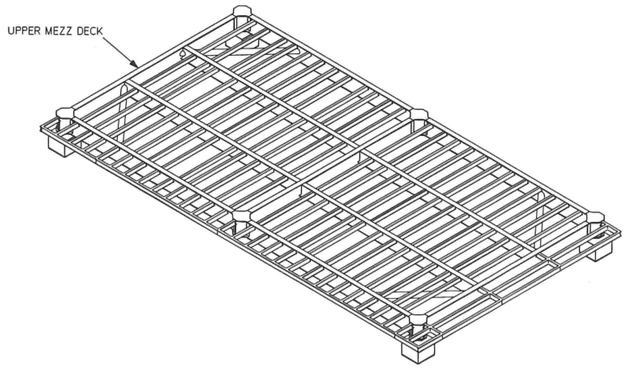
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0033	-	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 25/03/2015 10:51:20 by hillc

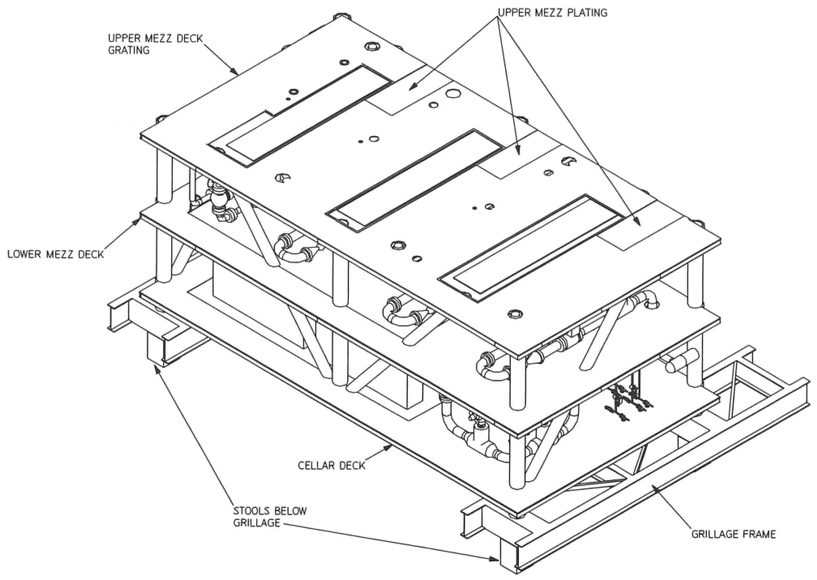
CONSTRUCTION SEQUENCE 7: (SEE NOTE 2)

- SET OUT TEMPORARY SHOP SUPPORTS.
- SET OUT PRIMARY STEELWORK ON SHOP SUPPORTS & WELD OUT.
- INSTALL SECONDARY STEELWORK & WELD OUT.
- INSTALL UPPER MEZZ DECK GRATING .
- INSTALL EQUIPMENT & PIPE SUPPORTS .



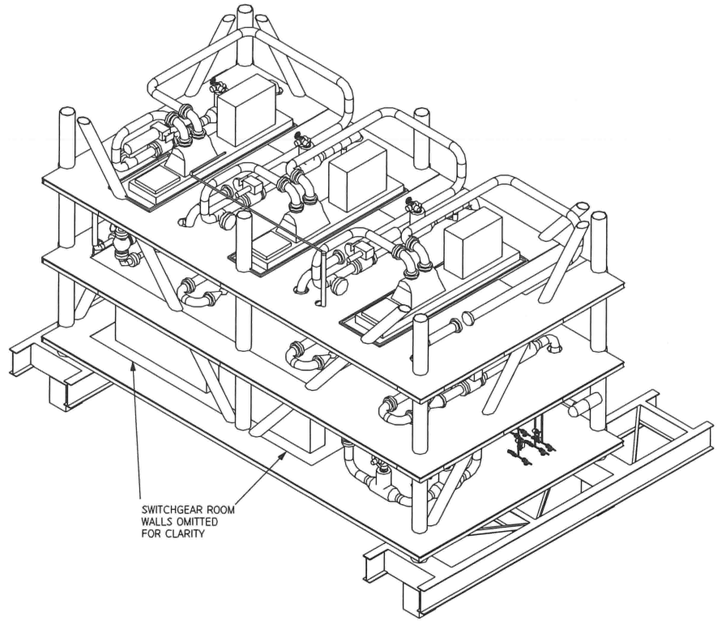
CONSTRUCTION SEQUENCE 8:

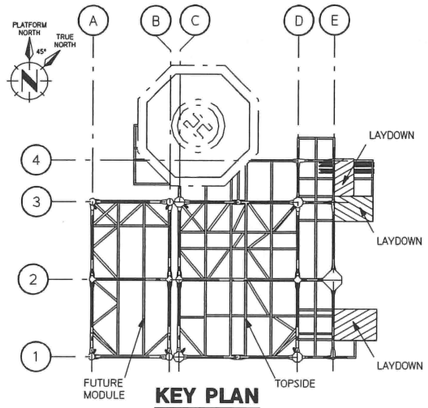
- LIFT UPPER MEZZ DECK ONTO LOWER MEZZ DECK TO UPPER MEZZ DECK COLUMNS .



CONSTRUCTION SEQUENCE 9:

- INSTALL COLUMNS , BRACES & TEMPORARY SUPPORTS REQUIRED FOR THE WEATHER DECK INSTALLATION .
- INSTALL UPPER MEZZ DECK MAJOR EQUIPMENT & LARGE BORE PIPING . THESE CAN ALSO BE INSTALLED PRIOR TO THE COLUMNS & BRACE INSTALLATION , SUBJECT TO CLEARANCE REQUIREMENTS FOR LIFTING EQUIPMENT & PIPING ITEMS .
- FIT HANDRAILS





KEY PLAN
SCALE 1:500

NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.
2. CONSTRUCTION OF THE UPPER MEZZ DECK CAN BE PERFORMED IN PARALLEL TO THE CONSTRUCTION OF THE LOWER MEZZ DECK , SUBJECT TO YARD SPACE AVAILABILITY .
3. HANDRAILS OMITTED FOR CLARITY

REFERENCE DRAWINGS	DRAWING TITLE
C001-12-25-99-GD200-0035	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - WEATHER DECK
C001-12-25-99-GD200-0033	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - LOWER MEZZ DECK
C001-12-25-99-GD200-0032	CONSTRUCTION SEQUENCE DRAWING - FUTURE MODULE - CELLAR DECK
DRAWING No.	DRAWING TITLE

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		AB	CV	JC	JJ	-	
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
FUTURE MODULE - UPPER MEZZ DECK

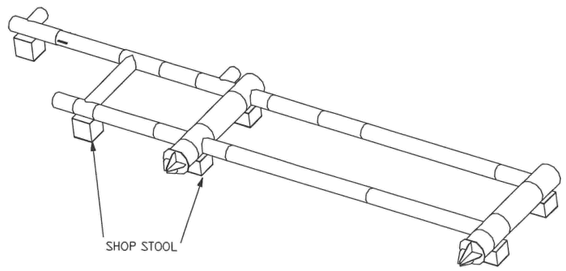
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0034	-	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 25/03/2015 11:15:41 by hillc

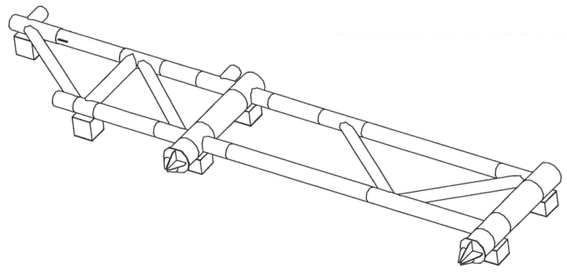
CONSTRUCTION SEQUENCE 1:

- SET OUT TEMPORARY SHOP SUPPORTS TO FACILITATE FABRICATION .
- ASSEMBLE GRID LINE 1 & GRID LINE 3 HORIZONTALLY & WELD OUT .



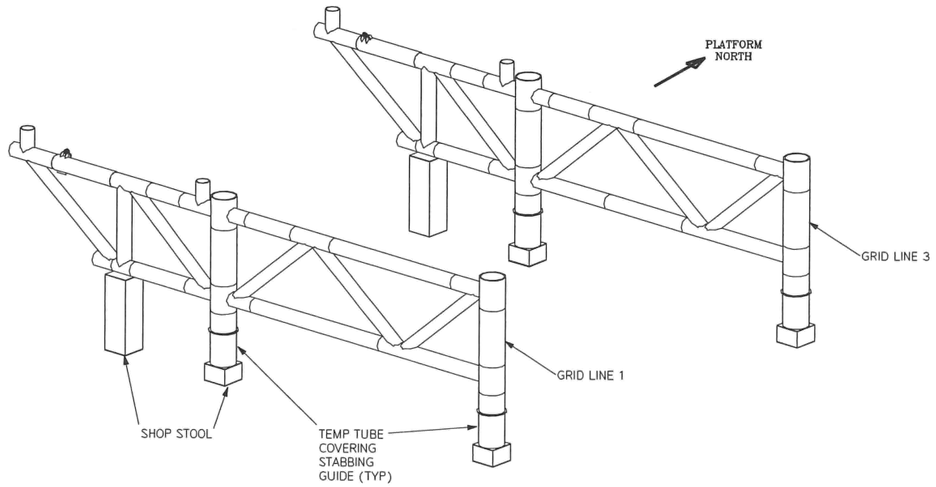
CONSTRUCTION SEQUENCE 2:

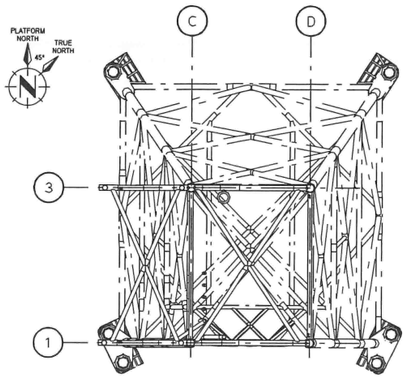
- PREPARE & INSTALL BRACING ON GRID LINE 1 & GRID LINE 3 .



CONSTRUCTION SEQUENCE 3:

- LIFT & ROTATE GRID LINE 1 & GRID LINE 3 INTO THE VERTICAL POSITION ONTO TEMPORARY SUPPORTS .
- SET DOWN ADDITIONAL TEMPORARY SUPPORTS REQUIRED FOR THE INSTALLATION OF THE HORIZONTAL BRACING .

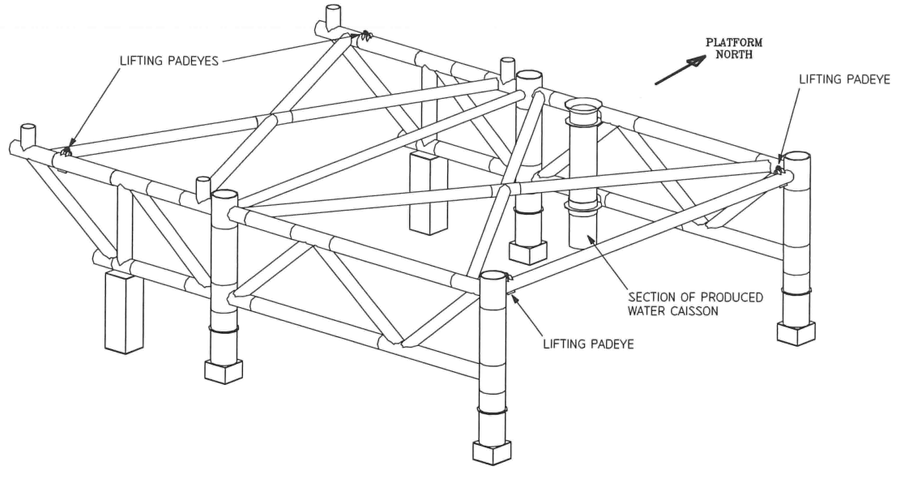




KEY PLAN
SCALE 1:500

CONSTRUCTION SEQUENCE 4:

- PREPARE PLAN HORIZONTAL MEMBERS & BRACING FOR INSTALLATION .
- INSTALL MEMBERS & WELD OUT .
- INSTALL SECTION OF PRODUCED WATER CAISSON .



NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.

DRAWING No.	DRAWING TITLE
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
		AB	CV	JC	JJ		
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	16.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
MSF

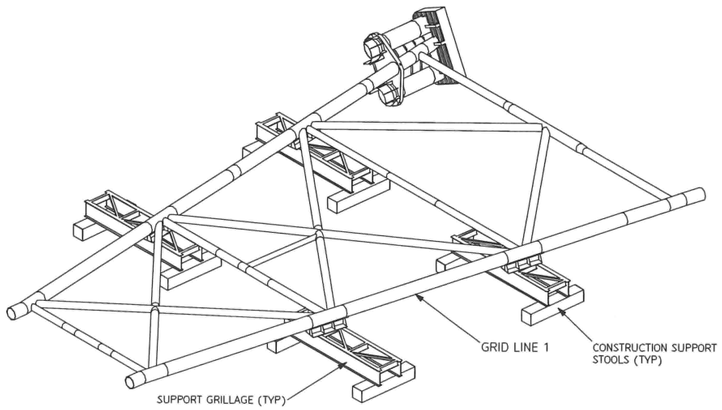
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0055	-	1 OF 1	E1

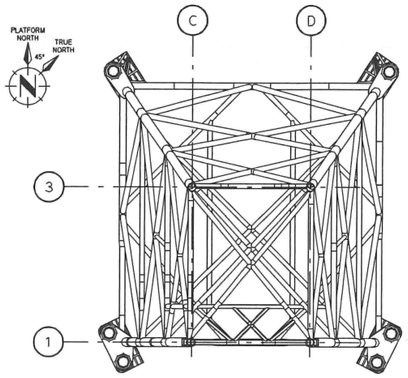
A1 SIZE SHEET

Drawing updated 27/03/2015 10:55:31 by Devonshireb

CONSTRUCTION SEQUENCE 1:

- SET OUT MAIN NODES & LEG TUBULARS ON SUPPORT GRILLAGES SAT ON TEMPORARY CONSTRUCTION SUPPORT STOOLS & WELD OUT .
- ASSEMBLE GRID LINE 1 COMPLETE WITH CROSS MEMBERS , DIAGONALS & MUDMATS .

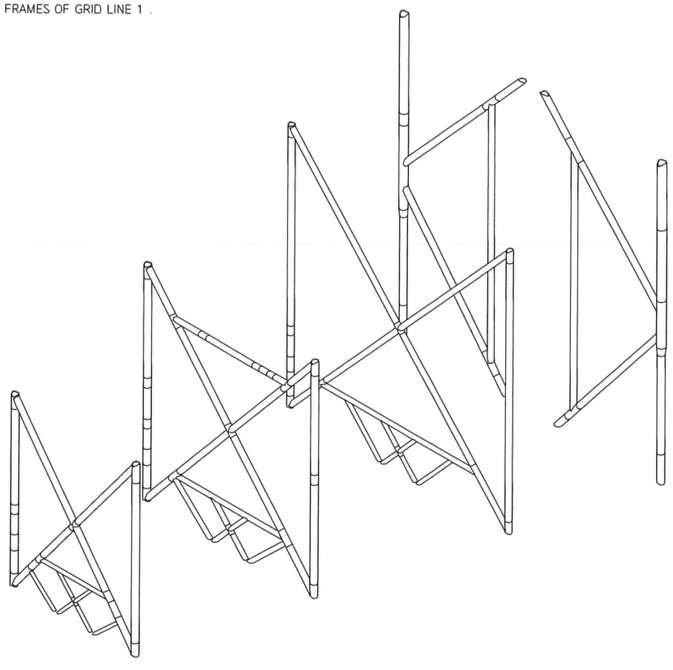




KEY PLAN
SCALE 1:500

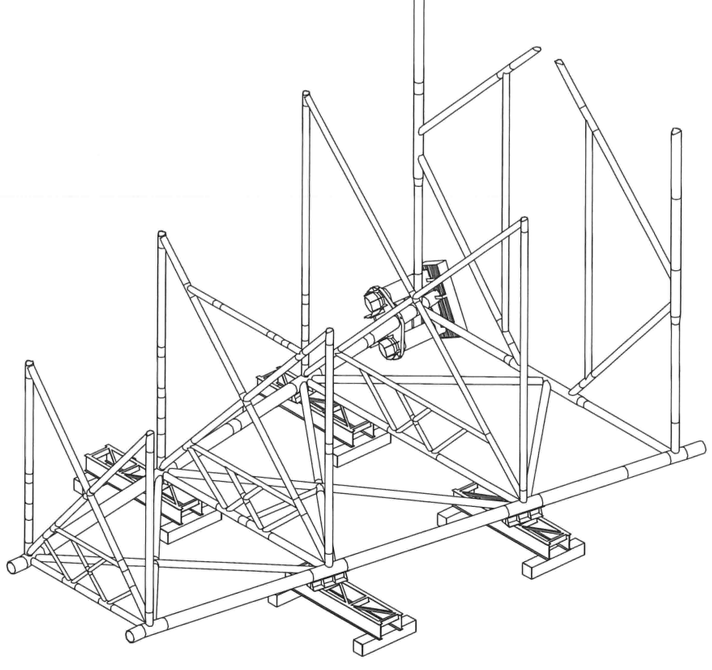
CONSTRUCTION SEQUENCE 2:

- PRE-ASSEMBLE ELEVATIONAL FRAMES OF GRID LINE 1 .



CONSTRUCTION SEQUENCE 3:

- INSTALL ELEVATIONAL FRAMES OF GRID LINE 1 & WELD OUT .



NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AB	CV	JC	JJ	-	
C001-12-25-99-GD210-0016	CONSTRUCTION SEQUENCE DRAWING - SHEET 3- JACKET	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD210-0015	CONSTRUCTION SEQUENCE DRAWING - SHEET 2- JACKET	B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
SHEET 1- JACKET

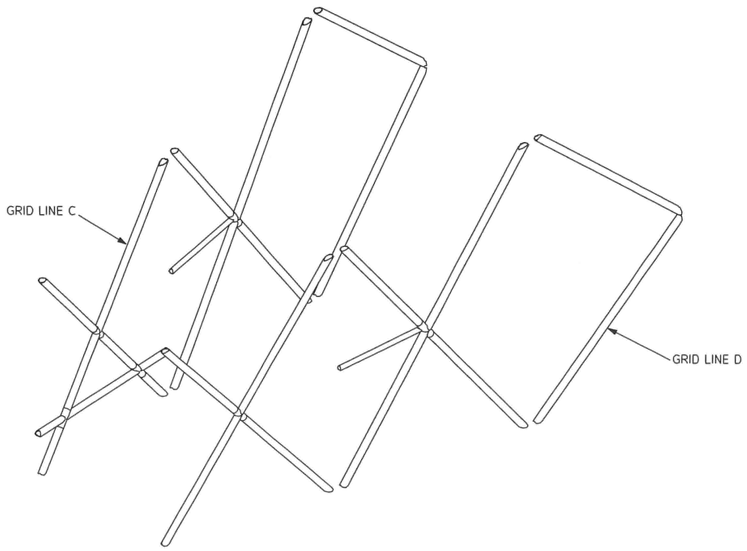
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0014	-	1 OF 1	E1

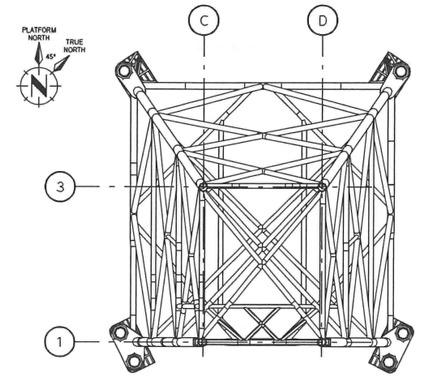
A1 SIZE SHEET

Drawing updated 26/03/2015 11:16:15 by Devonshireb

CONSTRUCTION SEQUENCE 4:

- PRE-ASSEMBLE DIAGONALS OF GRID LINE C & GRID LINE D .

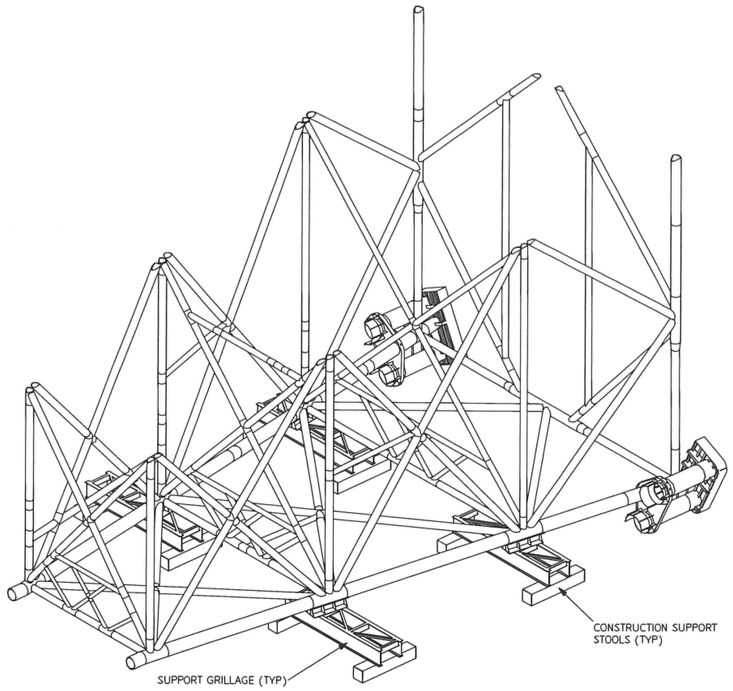




KEY PLAN
SCALE 1:500

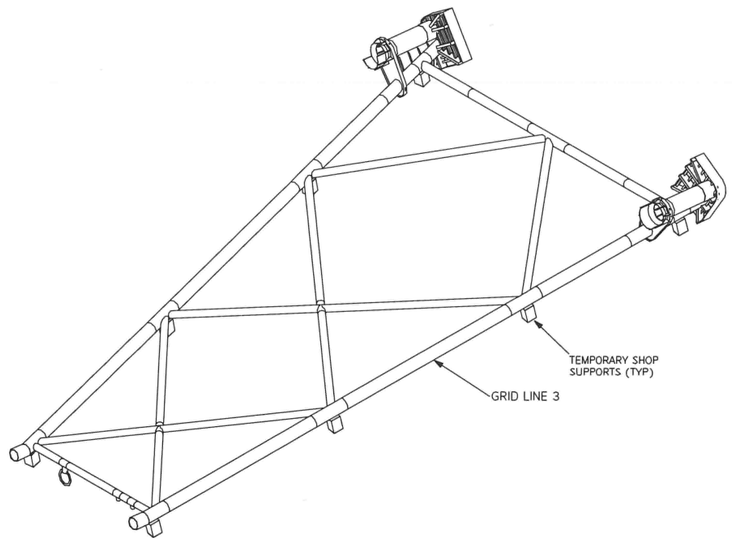
CONSTRUCTION SEQUENCE 5:

- INSTALL DIAGONALS OF GRID LINE C & GRID LINE D & WELD OUT .



CONSTRUCTION SEQUENCE 6:

- LAYOUT & ASSEMBLE ON TEMPORARY SHOP SUPPORTS GRID LINE 3 FRAME COMPLETE WITH IN-PLANE DIAGONALS , PILE SLEEVES & MUDMATS .



NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY . THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.

REFERENCE DRAWINGS	DRAWING TITLE
C001-12-25-99-GD210-0016	CONSTRUCTION SEQUENCE DRAWING - SHEET 3- JACKET
C001-12-25-99-GD210-0014	CONSTRUCTION SEQUENCE DRAWING - SHEET 1- JACKET
DRAWING No.	DRAWING TITLE

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
SHEET 2 - JACKET

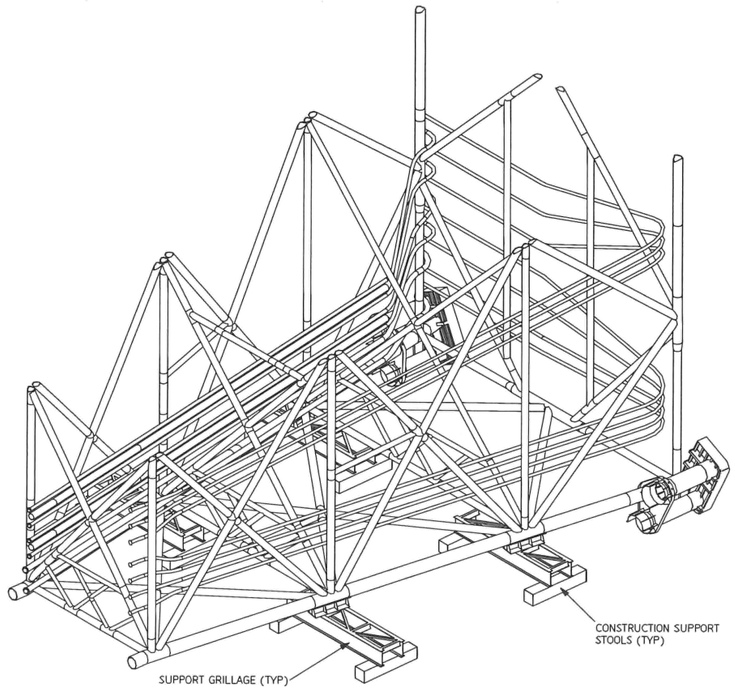
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0015	-	1 OF 1	E1

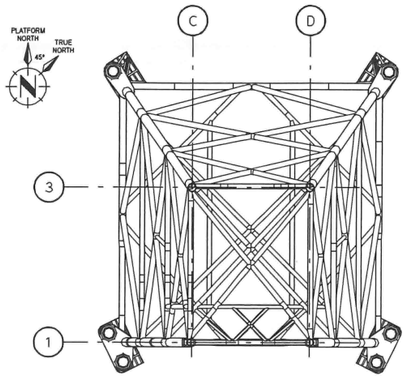
A1 SIZE SHEET

Drawing updated 26/03/2015 11:16:40 by Devonshireb

CONSTRUCTION SEQUENCE 7:

- INSTALL J-TUBES & RISERS .



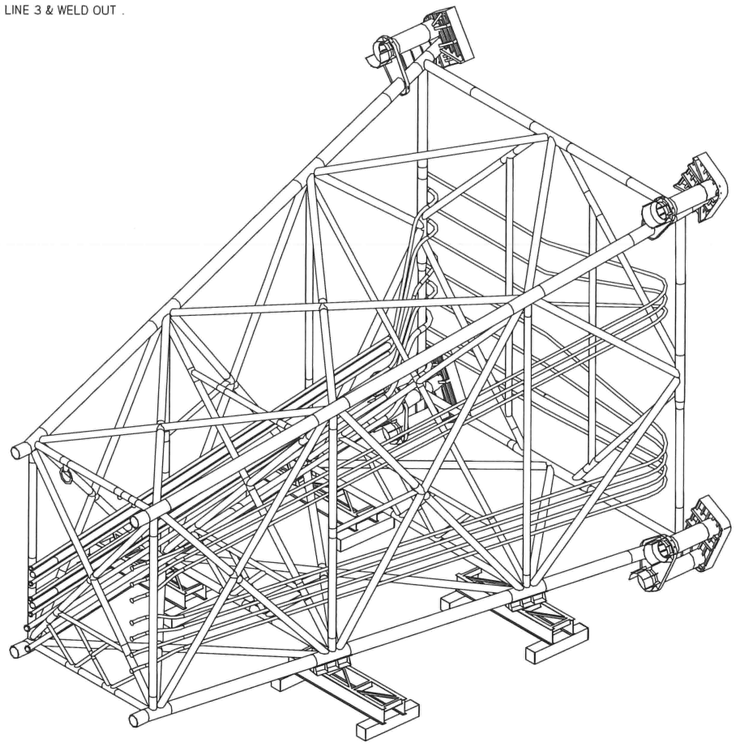


KEY PLAN

SCALE 1:500

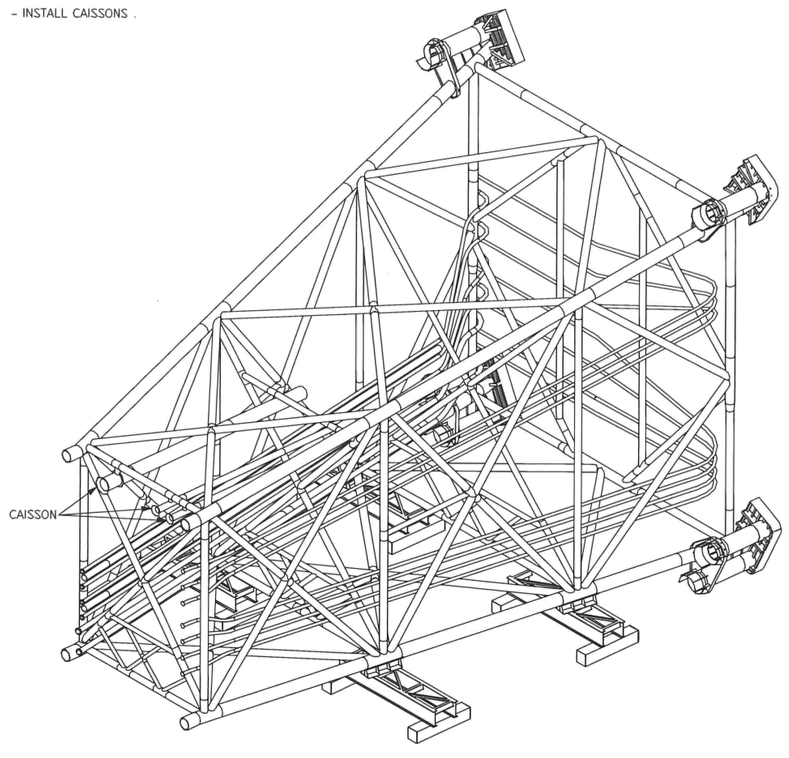
CONSTRUCTION SEQUENCE 8:

- LIFT & INSTALL GRID LINE 3 & WELD OUT .



CONSTRUCTION SEQUENCE 9:

- INSTALL CAISSONS .



NOTES

1. THE SEQUENCE OF FABRICATION ACTIVITIES INDICATED ON THIS DRAWING ARE REPRESENTATIVE ONLY .
   THE NOMINATED FABRICATOR SHALL DEVELOP CONSTRUCTION METHODOLOGY AGAINST THE SPECIFIC YARD LAYOUT & CAPABILITIES OF YARD/SHOP CRANES.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AB	CV	JC	JJ		
C001-12-25-99-GD210-0015	CONSTRUCTION SEQUENCE DRAWING - SHEET 2 - JACKET	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD210-0014	CONSTRUCTION SEQUENCE DRAWING - SHEET 1 - JACKET	B1	06.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	13.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

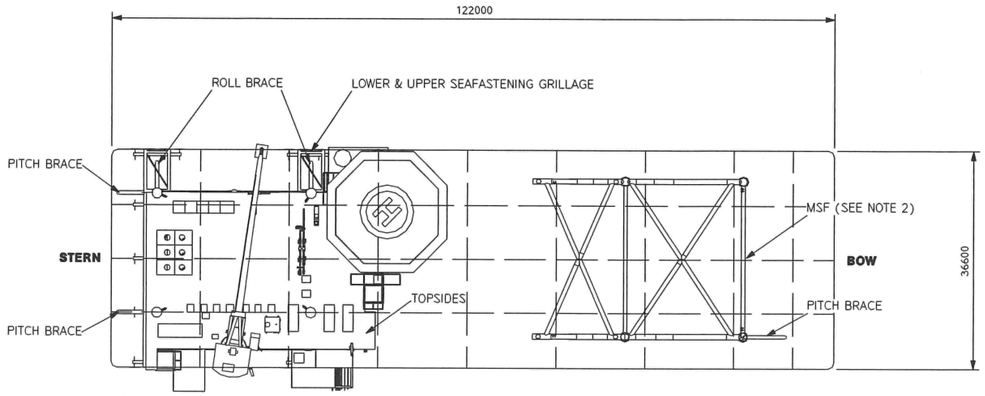
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
CONSTRUCTION SEQUENCE DRAWING
SHEET 3 - JACKET

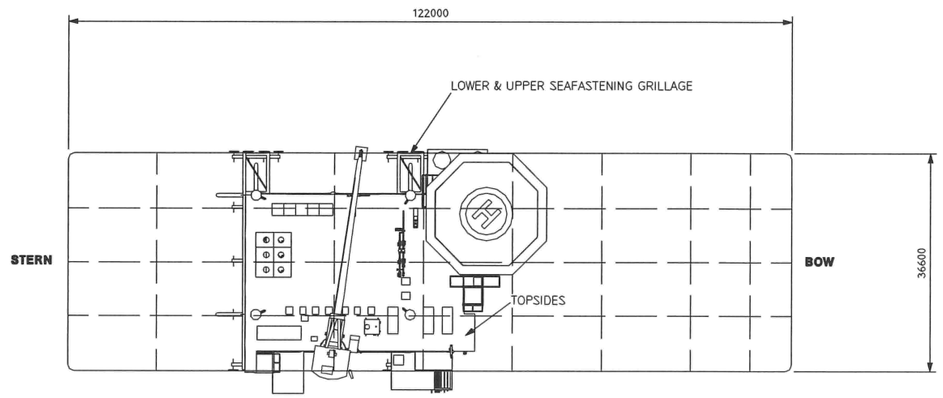
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0016	-	1 OF 1	E1

A1 SIZE SHEET

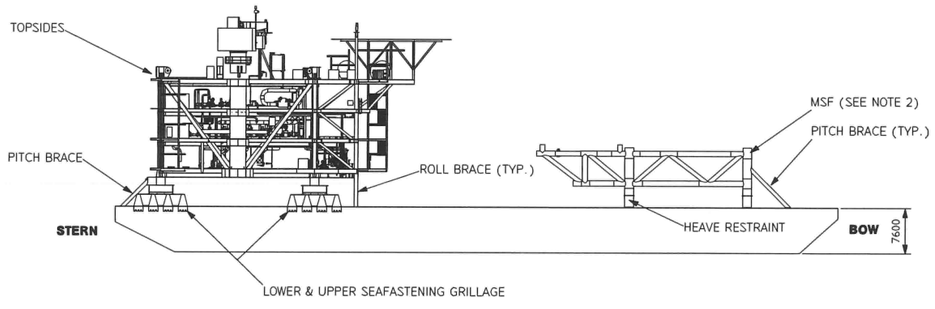
Drawing updated 26/03/2015 11:17:01 by Devonshireb



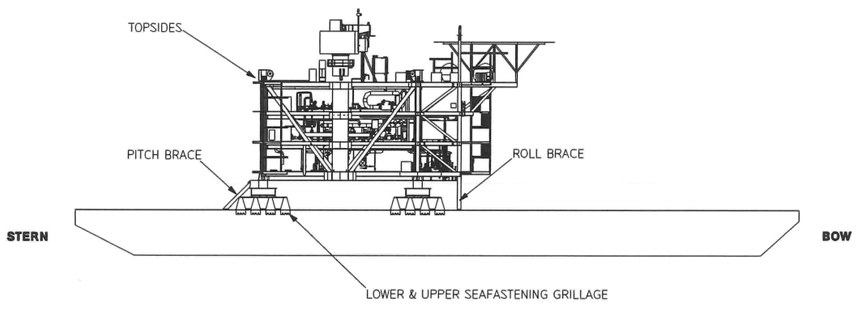
PLAN - TOPSIDE ON ASSUMED TRANSPORTATION BARGE WITH MSF (SEE NOTE 2)



PLAN - TOPSIDE ON ASSUMED TRANSPORTATION BARGE WITHOUT MSF



ELEVATION - TOPSIDE ON ASSUMED TRANSPORTATION BARGE WITH MSF (SEE NOTE 2)



ELEVATION - TOPSIDE ON ASSUMED TRANSPORTATION BARGE WITHOUT MSF

NOTES

1. THE GENERAL ARRANGEMENT OF THE STRUCTURES ON THE TRANSPORTATION BARGE SHOWN ON THIS DRAWING IS REPRESENTATIVE ONLY . THE INSTALLATION CONTRACTOR SHALL DEVELOP SPECIFIC SEA TRANSPORTATION ARRANGEMENT AGAINST THE NOMINATED TRANSPORTATION VESSEL .
2. THE MSF CAN BE TRANSPORTED ON EITHER THE SAME BARGE AS THE TOPSIDES (AS SHOWN ABOVE) OR , ON THE JACKET BARGE , (AS SHOWN ON DRG C001-12-25-99-GD210-0020) DEPENDING ON THE PREFERENCE OF THE INSTALLATION CONTRACTOR .

DRAWING No.	DRAWING TITLE
C001-12-25-99-GD200-0003	PRIMARY STEEL GA -TOPSIDE LONGITUDE ELEVATIONS GRIDS C, D & E
C001-12-25-99-GD200-0004	PRIMARY STEEL GA -TOPSIDE TRANSVERSE ELEVATIONS GRIDS 1, 3 & 4
C001-12-25-99-GD200-0041	SCHEMATIC OF INSTALLATION SEQUENCE - TOPSIDES
C001-12-25-99-GD200-0043	SCHEMATIC OF INSTALLATION SEQUENCE - MODULE SUPPORT FRAME
C001-12-25-99-GD200-0045	MODULE SUPPORT FRAME ELEVATIONS
C001-12-25-99-GD200-0046	MODULE SUPPORT FRAME PLAN
REFERENCE DRAWINGS	

REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
			CV		JJ		
E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
B1	09.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
A1	03.03.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

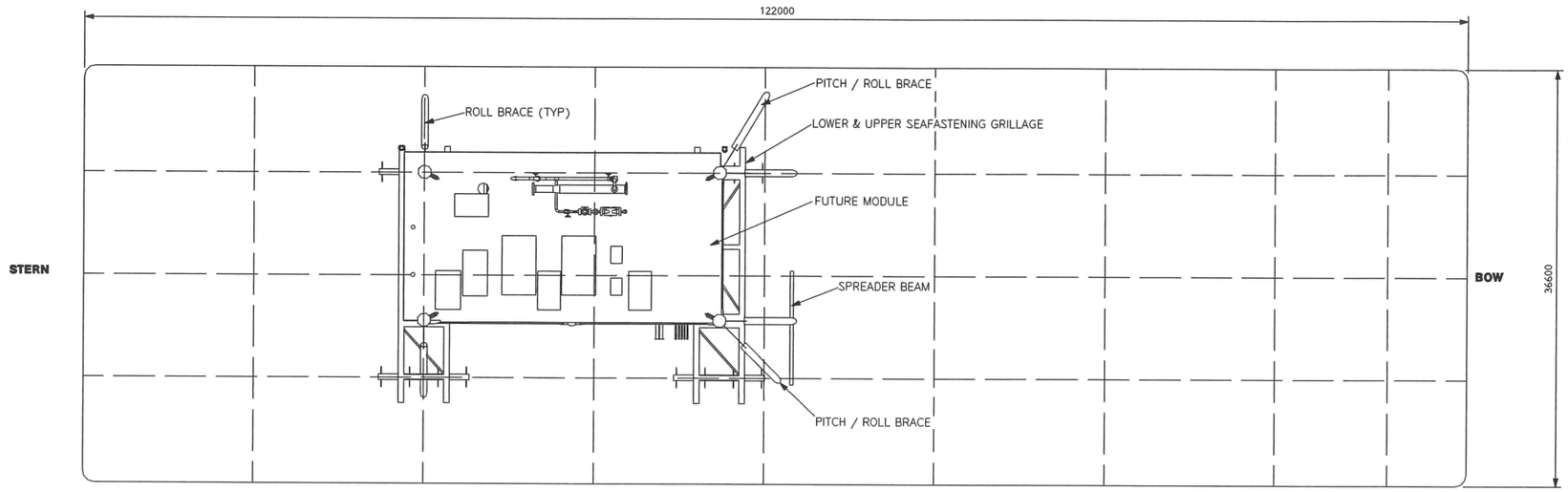
TITLE

WHITE ROSE CCS PROJECT FEED
GENERAL ARRANGEMENT
BARGE LAYOUT
GRILLAGE & SEAFASTENING - TOPSIDES

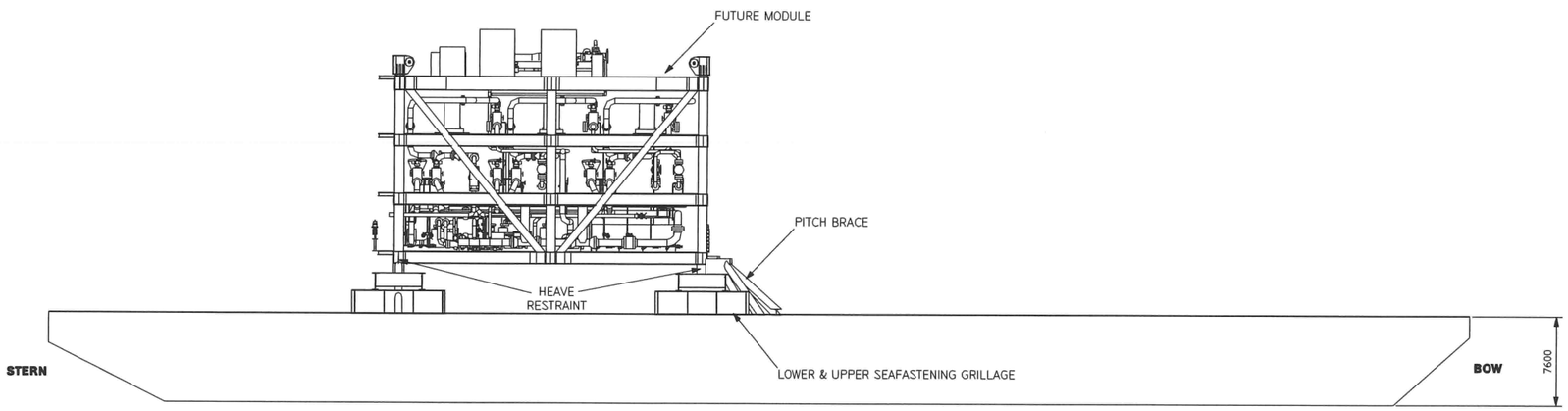
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0039	1:500	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 26/03/2015 11:17:29 by Devonshireb



PLAN - FUTURE MODULE ON ASSUMED TRANSPORTATION BARGE



ELEVATION - FUTURE MODULE ON ASSUMED TRANSPORTATION BARGE

NOTES

1. THE GENERAL ARRANGEMENT OF THE STRUCTURE ON THE TRANSPORTATION BARGE SHOWN ON THIS DRAWING IS REPRESENTATIVE ONLY . THE INSTALLATION CONTRACTOR SHALL DEVELOP SPECIFIC SEA TRANSPORTATION ARRANGEMENT AGAINST THE NOMINATED TRANSPORTATION VESSEL .

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-12-25-99-GD200-0008	PRIMARY STEEL GA - FUTURE MODULE LONGITUDE ELEVATIONS GRIDS A & B			AB	CV	JC	JJ		
C001-12-25-99-GD200-0009	PRIMARY STEEL GA - FUTURE MODULE TRANSVERSE ELEVATIONS GRIDS 1 & 3	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0042	SCHEMATIC OF INSTALLATION SEQUENCE - FUTURE MODULE	B1	09.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	04.03.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

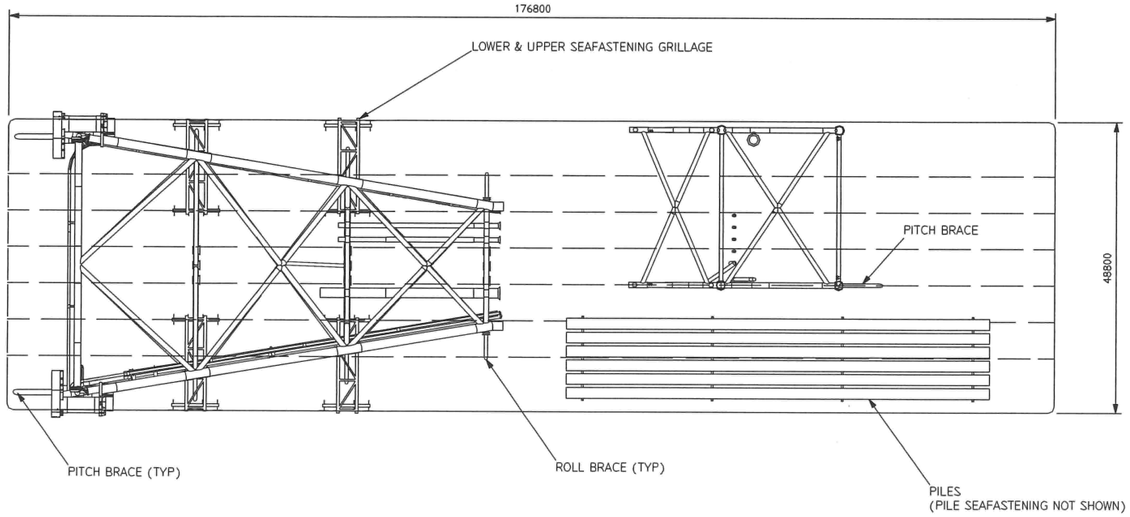
TITLE

WHITE ROSE CCS PROJECT FEED
GENERAL ARRANGEMENT
BARGE LAYOUT
GRILLAGE & SEAFASTENING - FUTURE MODULE

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0040	1:250	1 OF 1	E1

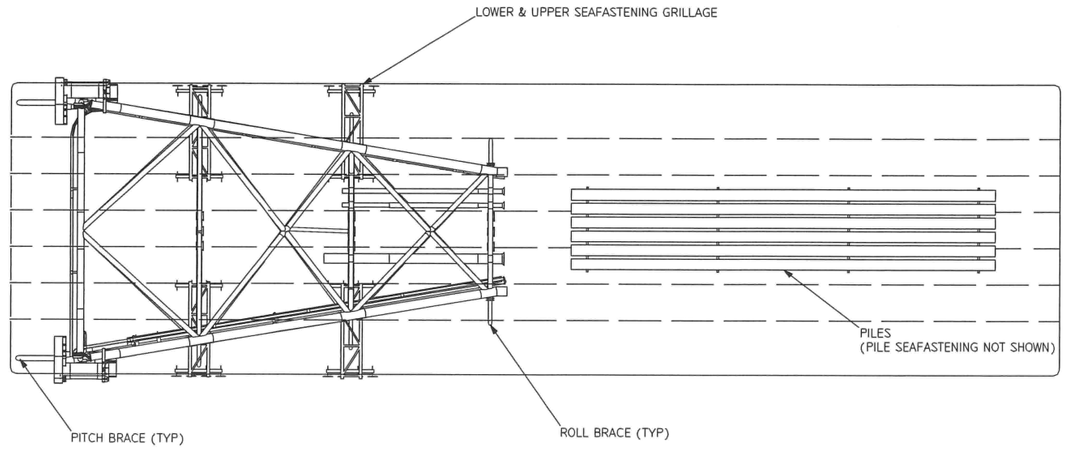
A1 SIZE SHEET

Drawing updated 26/03/2015 11:18:33 by Devonshireb



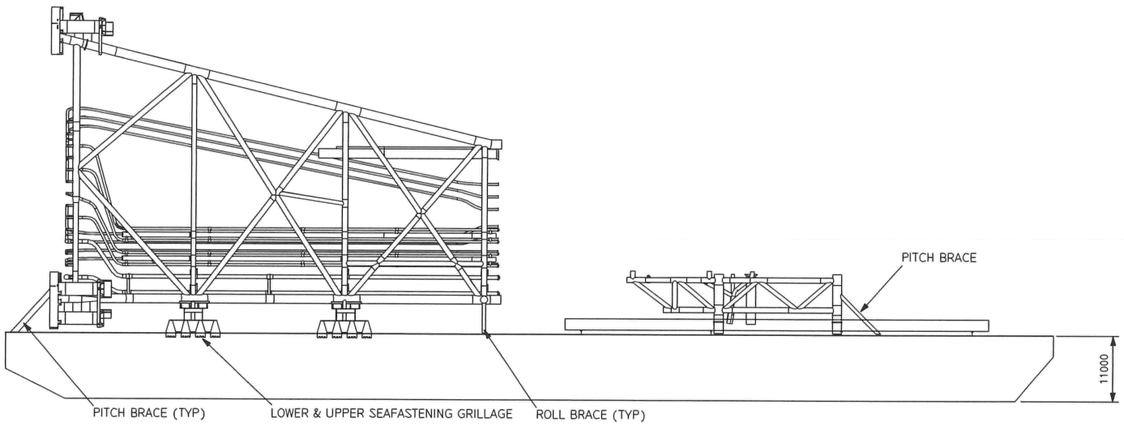
PLAN – JACKET ON ASSUMED TRANSPORTATION BARGE WITH PILES & MSF

SCALE 1:500



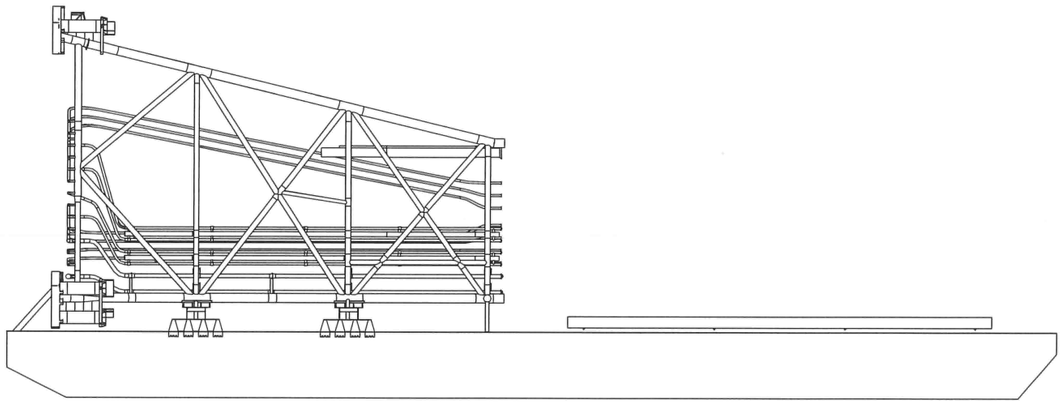
PLAN – JACKET ON ASSUMED TRANSPORTATION BARGE WITH PILES ONLY

SCALE 1:500



ELEVATION – JACKET ON ASSUMED TRANSPORTATION BARGE WITH PILES & MSF

SCALE 1:500



ELEVATION – JACKET ON ASSUMED TRANSPORTATION BARGE WITH PILES ONLY

SCALE 1:500

NOTES

1. THE GENERAL ARRANGEMENT OF THE STRUCTURES ON THE TRANSPORTATION BARGE SHOWN ON THIS DRAWING IS REPRESENTATIVE ONLY . THE INSTALLATION CONTRACTOR SHALL DEVELOP SPECIFIC SEA TRANSPORTATION ARRANGEMENT AGAINST THE NOMINATED TRANSPORTATION VESSEL .
2. THE MSF CAN BE TRANSPORTED ON EITHER THE SAME BARGE AS THE JACKET (AS SHOWN ABOVE) OR , ON THE TOPSIDES BARGE , (AS SHOWN ON DRG C001-12-25-99-GD200-0039) DEPENDING ON THE PREFERENCE OF THE INSTALLATION CONTRACTOR .

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AB	CV	JC	JJ		
C001-12-25-99-GD210-0022	SCHEMATIC OF INSTALLATION SEQUENCE - JACKET & PILES - SHEET 2	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD210-0021	SCHEMATIC OF INSTALLATION SEQUENCE - JACKET & PILES - SHEET 1	B1	04.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	20.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

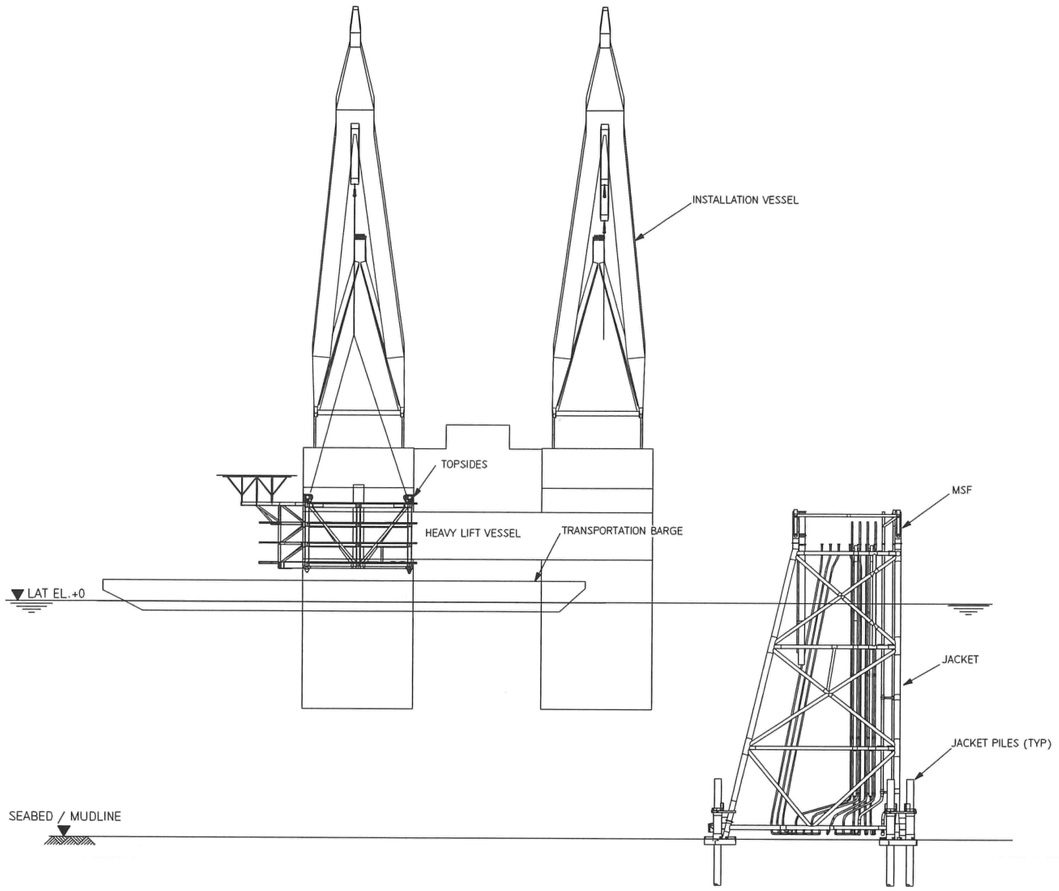
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
GENERAL ARRANGEMENT
BARGE LAYOUT
GRILLAGE & SEAFASTENING – JACKET & PILE

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0020	1:500	1 OF 1	E1

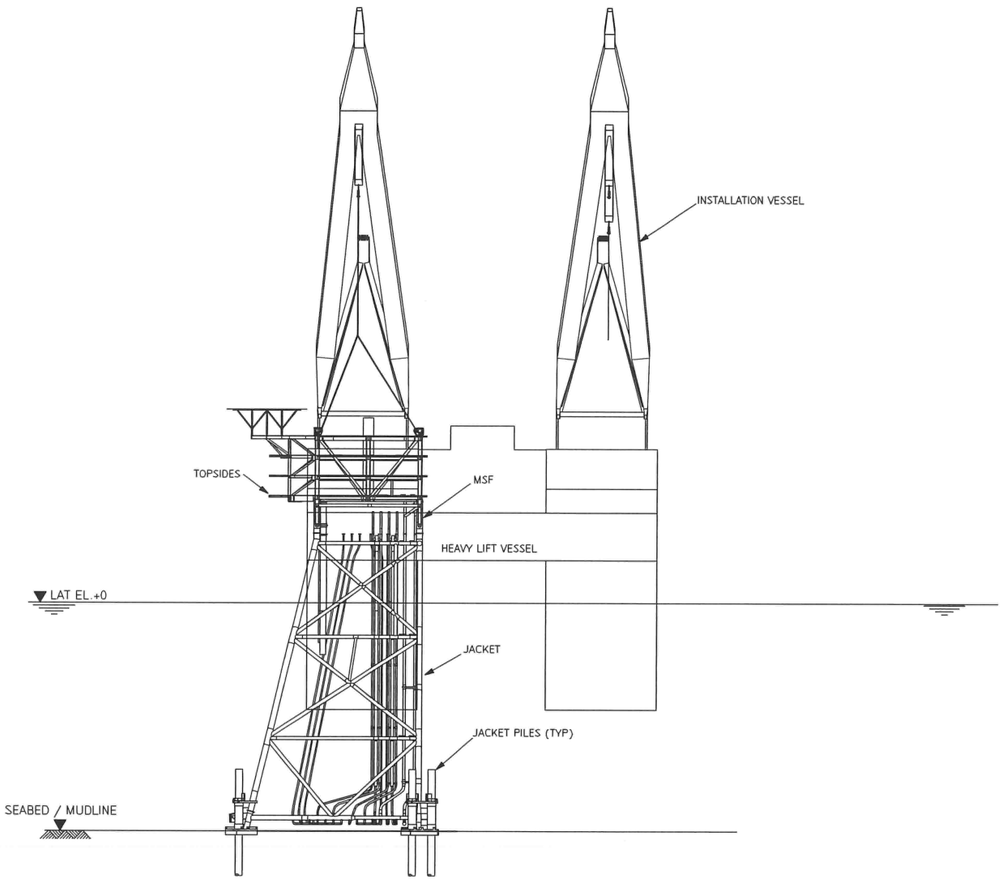
A1 SIZE SHEET

Drawing updated 26/03/2015 08:54:43 by Devonshireb



TOPSIDE INSTALLATION - STAGE 1

- CUT SEAFASTENINGS
- LIFT TOPSIDE OFF TRANSPORTATION BARGE USING SINGLE CRANE LIFT
- SAILAWAY TRANSPORTATION BARGE
- MOVE HEAVY LIFT VESSEL TOWARD WHITE ROSE PLATFORM WEST SIDE



TOPSIDE INSTALLATION - STAGE 2

- LOWER TOPSIDE
- STAB TOPSIDE INTO MSF
- WELD-OUT TOPSIDE TO MSF CONNECTION

NOTES

1. THE SCHEMATIC OF INSTALLATION SEQUENCE SHOWN ON THIS DRAWING IS REPRESENTATIVE ONLY. THE INSTALLATION CONTRACTOR SHALL DEVELOP INSTALLATION METHODOLOGY AGAINST THE NOMINATED INSTALLATION VESSEL.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
					CV	JC	JJ		
C001-12-25-99-GD200-0004	PRIMARY STEEL GA TOPSIDE TRANSVERSE ELEVATIONS GRIDS 1, 3 & 4								
C001-12-25-99-GD200-0003	PRIMARY STEEL GA TOPSIDE LONGITUDE ELEVATIONS GRIDS C, D & E	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0039	GENERAL ARRANGEMENT BARGE LAYOUT- GRILLAGE & SEAFASTENING - TOPSIDES	B1	10.03.15	GCH	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	06.03.15	GCH	CV	RY	-	-	ISSUED FOR IDC

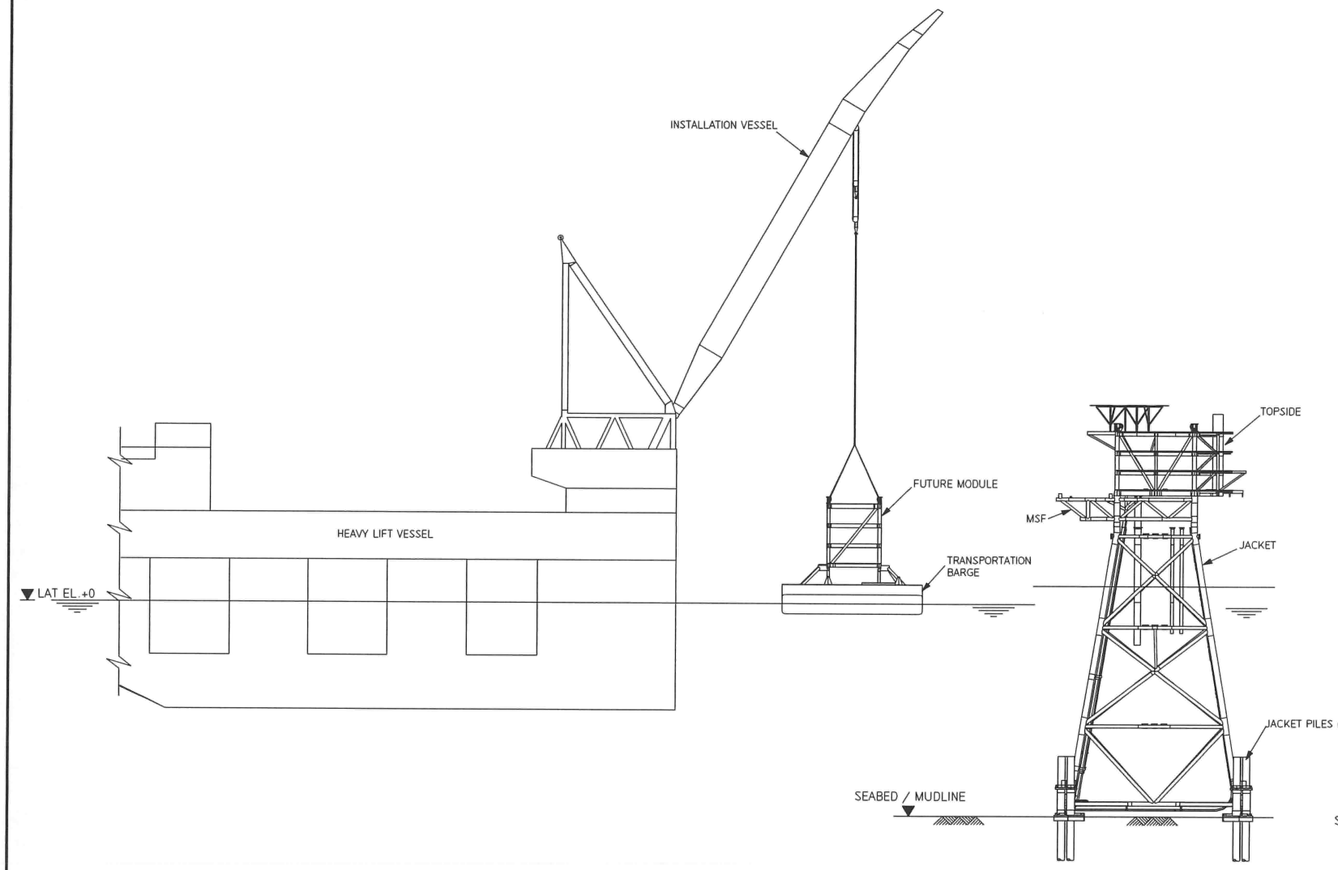
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SCHEMATIC OF INSTALLATION SEQUENCE
TOPSIDES

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0041	1:750	1 OF 1	E1

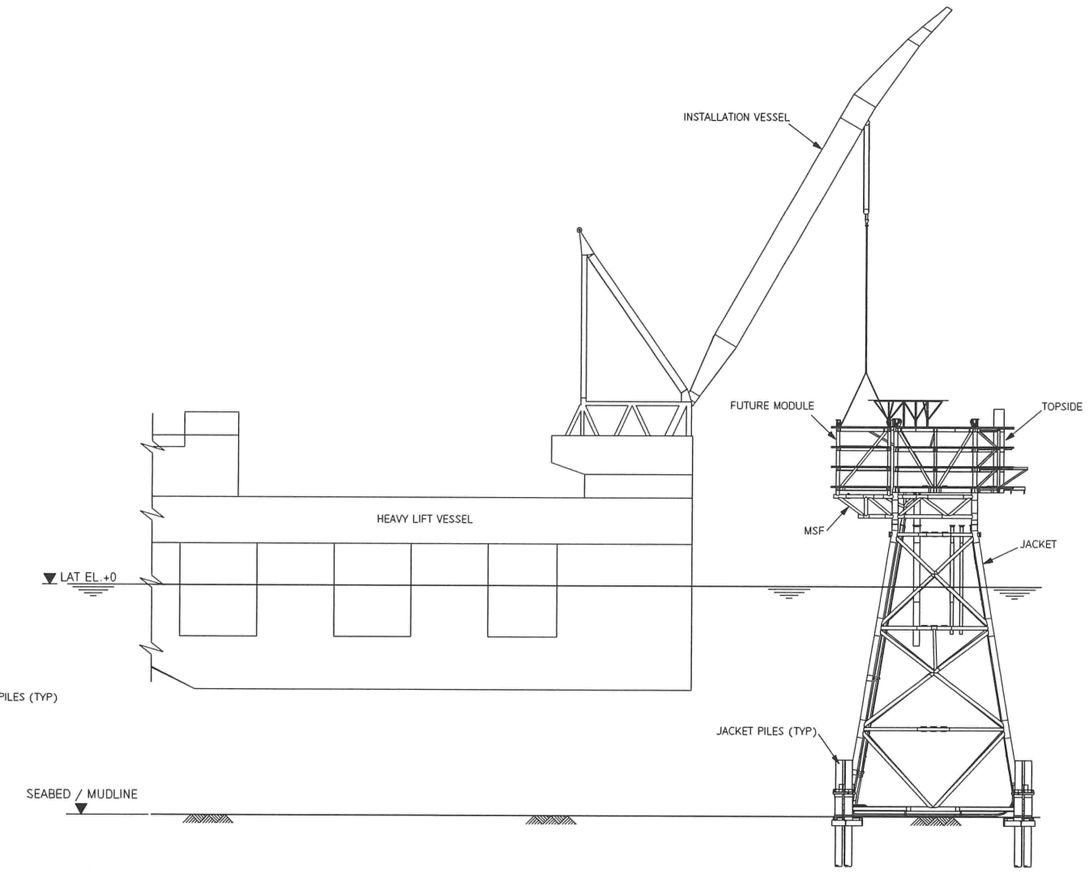
A1 SIZE SHEET

Drawing updated 26/03/2015 11:19:03 by Devonshireb



FUTURE MODULE INSTALLATION - STAGE 1

- CUT SEAFASTENINGS
- LIFT FUTURE MODULE OFF TRANSPORTATION BARGE USING SINGLE CRANE LIFT.
- SAILAWAY TRANSPORTATION BARGE.
- MOVE HEAVY LIFT VESSEL TOWARD WHITE ROSE PLATFORM WEST SIDE.



FUTURE MODULE INSTALLATION - STAGE 2

- LOWER FUTURE MODULE
- STAB FUTURE MODULE INTO MSF
- WELD-OUT FUTURE MODULE TO MSF CONNECTION

NOTES

1. THE SCHEMATIC OF INSTALLATION SEQUENCE SHOWN ON THIS DRAWING IS REPRESENTATIVE ONLY. THE INSTALLATION CONTRACTOR SHALL DEVELOP INSTALLATION METHODOLOGY AGAINST THE NOMINATED INSTALLATION VESSEL.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-12-25-99-GD200-0008	PRIMARY STEEL GA - FUTURE MODULE LONGITUDINAL ELEVATIONS GRIDS A & B				CV	JC	JJ		
C001-12-25-99-GD200-0009	PRIMARY STEEL GA - FUTURE MODULE TRANSVERSE ELEVATIONS GRIDS 1 & 3	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD200-0040	GENERAL ARRANGEMENT BARGE LAYOUT- GRILLAGE & SEAFASTENING - FUTURE MODULE	B1	10.03.2015	RE	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	06.03.15	RE	CV	RY	-	-	ISSUED FOR IDC

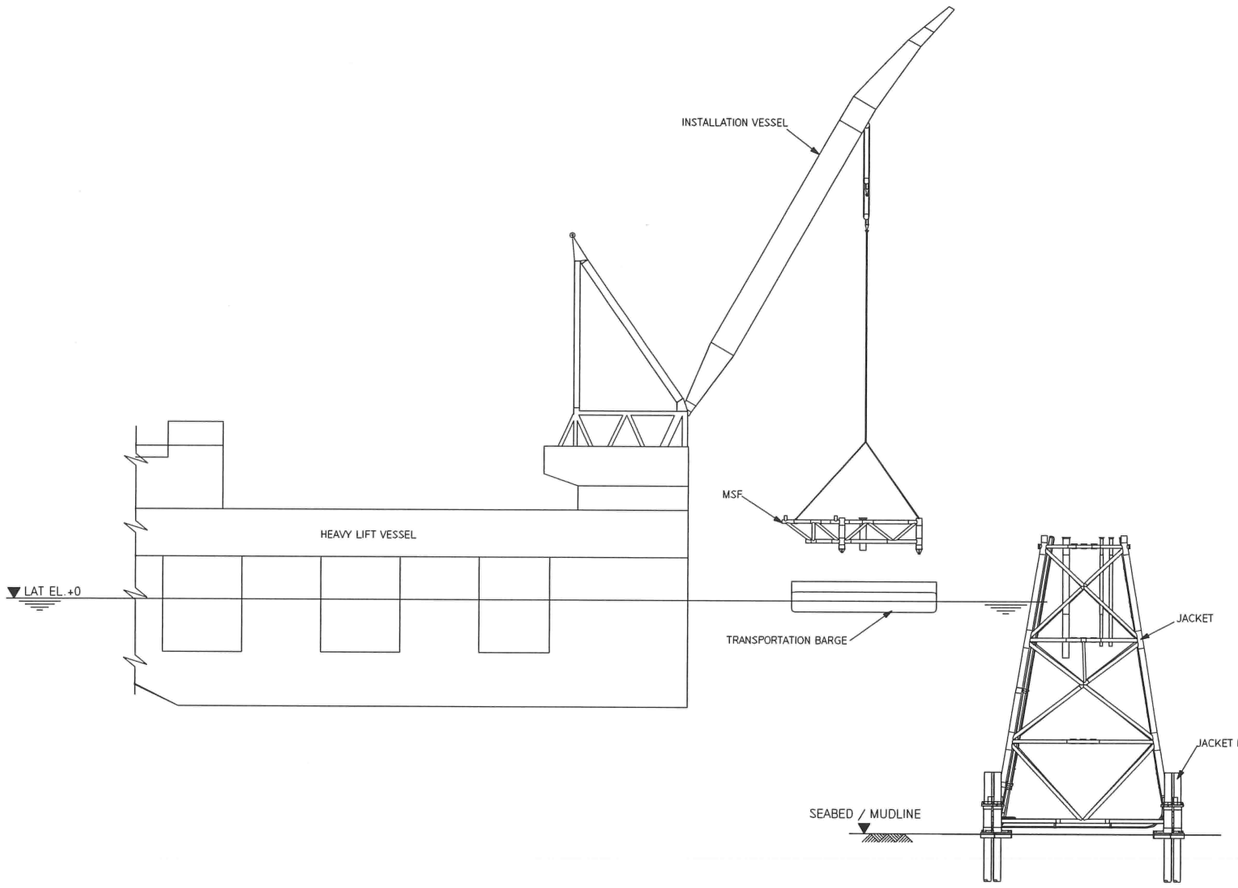
CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SCHEMATIC OF INSTALLATION SEQUENCE
FUTURE MODULE

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0042	1:750	1 OF 1	E1

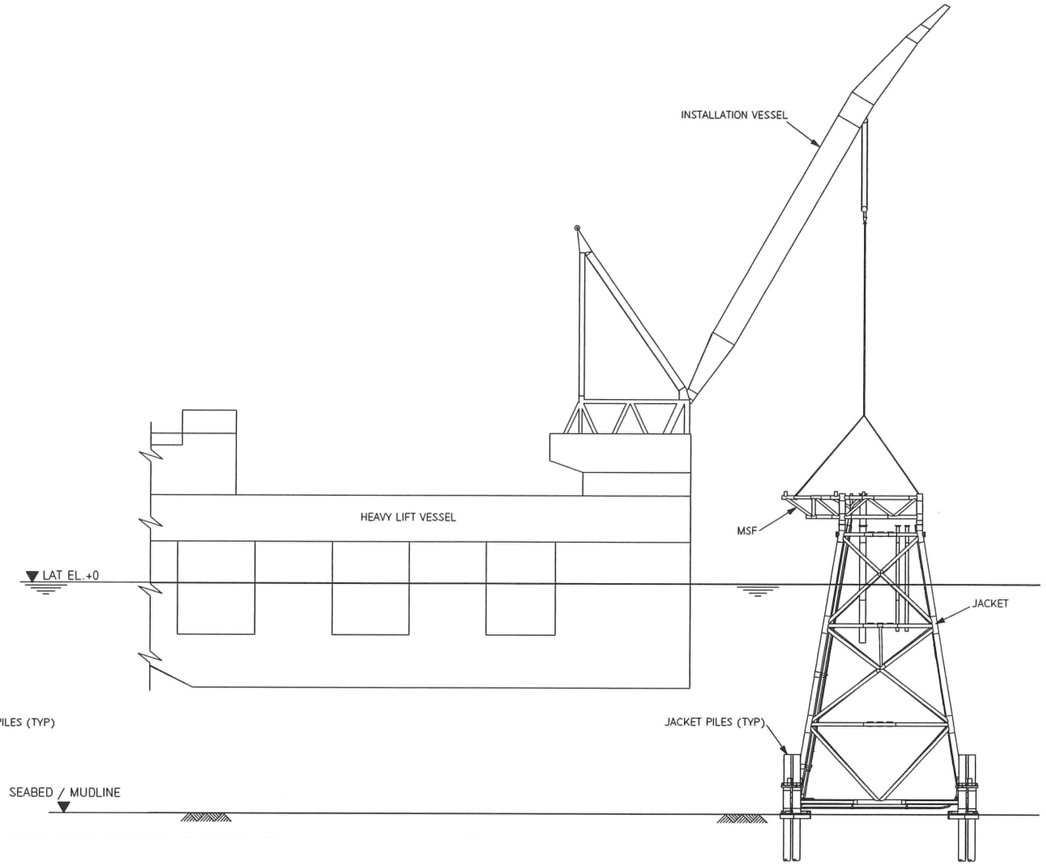
A1 SIZE SHEET

Drawing updated 26/03/2015 11:19:40 by Devonshireb



MSF INSTALLATION - STAGE 1

- CUT SEAFASTENINGS.
- LIFT MSF OFF TRANSPORTATION BARGE USING SINGLE CRANE LIFT.
- SAILAWAY TRANSPORTATION BARGE.
- MOVE HEAVY LIFT VESSEL TOWARD WHITE ROSE PLATFORM WEST SIDE.



MSF INSTALLATION - STAGE 2

- LOWER MSF
- STAB MSF INTO JACKET
- WELD-OUT MSF TO JACKET CONNECTION

NOTES

1. THE SCHEMATIC OF INSTALLATION SEQUENCE SHOWN ON THIS DRAWING IS REPRESENTATIVE ONLY. THE INSTALLATION CONTRACTOR SHALL DEVELOP INSTALLATION METHODOLOGY AGAINST THE NOMINATED INSTALLATION VESSEL.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
C001-12-25-99-GD200-0045	MODULE SUPPORT FRAME ELEVATIONS								
C001-12-25-99-GD200-0046	MODULE SUPPORT FRAME PLAN			AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD210-0020	GENERAL ARRANGEMENT BARGE LAYOUT- GRILLAGE & SEAFASTENING - JACKET & PILE	E1	17.04.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
C001-12-25-99-GD200-0039	GENERAL ARRANGEMENT BARGE LAYOUT- GRILLAGE & SEAFASTENING - TOPSIDES	B1	10.03.15	KP	CV	RY	-	-	ISSUED FOR IDC
DRAWING No.	DRAWING TITLE	A1	06.03.15						

CLIENT: nationalgrid

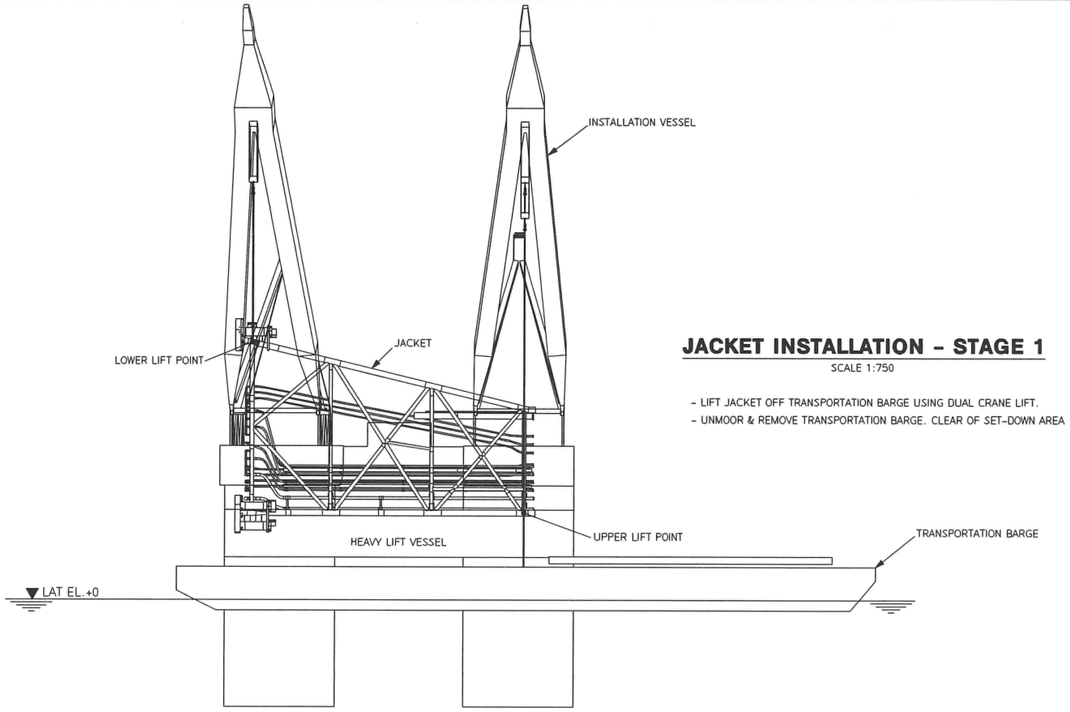
GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SCHEMATIC OF INSTALLATION SEQUENCE
MODULE SUPPORT FRAME

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD200-0043	1:750	1 OF 1	E1

A1 SIZE SHEET

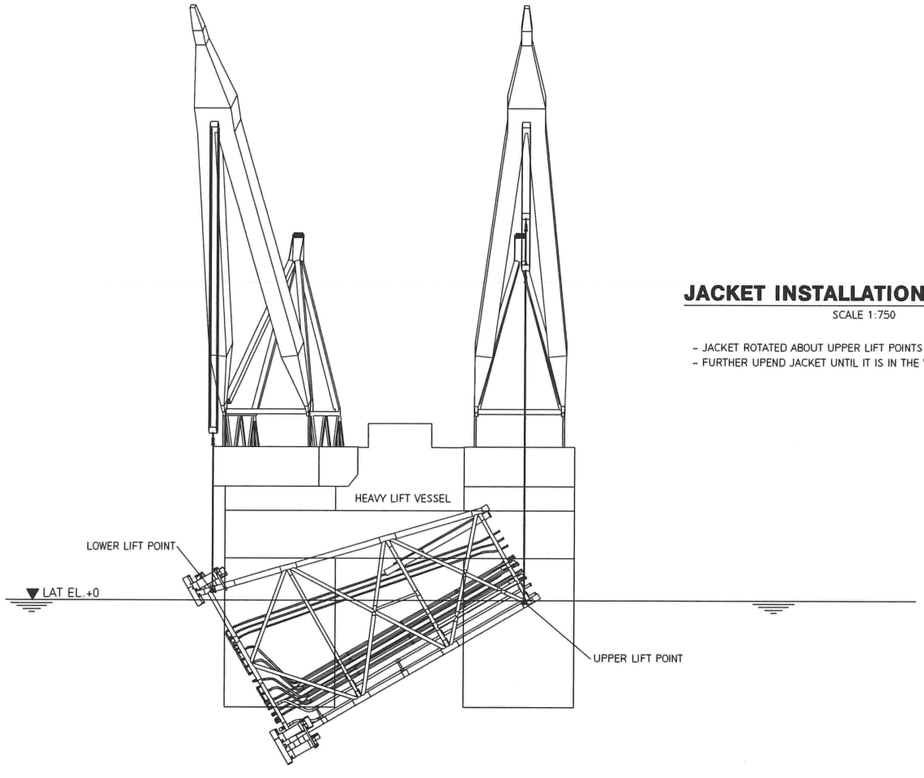
Drawing updated 26/03/2015 11:20:16 by Devonshireb



JACKET INSTALLATION - STAGE 1

SCALE 1:750

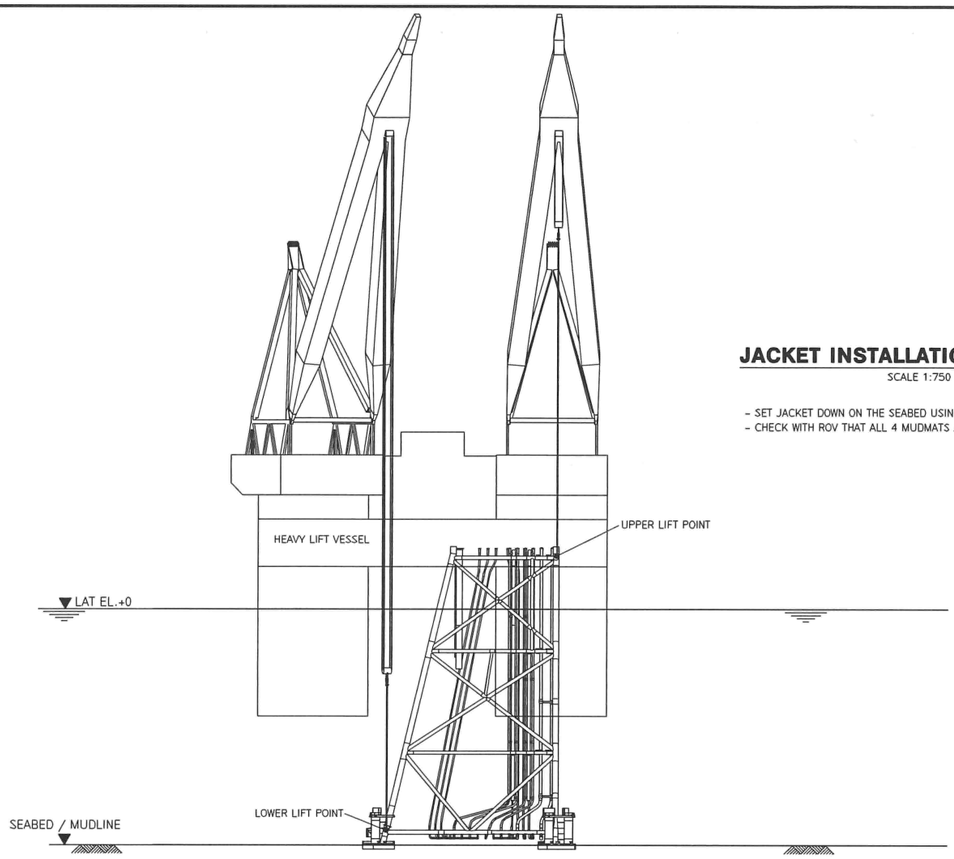
- LIFT JACKET OFF TRANSPORTATION BARGE USING DUAL CRANE LIFT.
- UNMOOR & REMOVE TRANSPORTATION BARGE. CLEAR OF SET-DOWN AREA



JACKET INSTALLATION - STAGE 2

SCALE 1:750

- JACKET ROTATED ABOUT UPPER LIFT POINTS USING DUAL CRANE UPEND.
- FURTHER UPEND JACKET UNTIL IT IS IN THE VERTICAL POSITION.



JACKET INSTALLATION - STAGE 3

SCALE 1:750

- SET JACKET DOWN ON THE SEABED USING DUAL CRANE: LOWERING
- CHECK WITH ROV THAT ALL 4 MUDMATS ARE ON THE SEABED.

NOTES

1. THE SCHEMATIC OF INSTALLATION SEQUENCE SHOWN ON THIS DRAWING IS REPRESENTATIVE ONLY. THE INSTALLATION CONTRACTOR SHALL DEVELOP INSTALLATION METHODOLOGY AGAINST THE NOMINATED INSTALLATION VESSEL.

REFERENCE DRAWINGS		REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AB	CV	JC	JJ		
C001-12-25-99-GD210-0022	SCHEMATIC OF INSTALLATION SEQUENCE - JACKET & PILES - SHEET 2	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD210-0020	GENERAL ARRANGEMENT BARGE LAYOUT- GRILLAGE & SEAFASTENING - JACKET & PILE	B1	04.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	25.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid / GENESIS

TITLE: WHITE ROSE CCS PROJECT FEED
SCHEMATIC OF INSTALLATION SEQUENCE
JACKET & PILES - SHEET 1

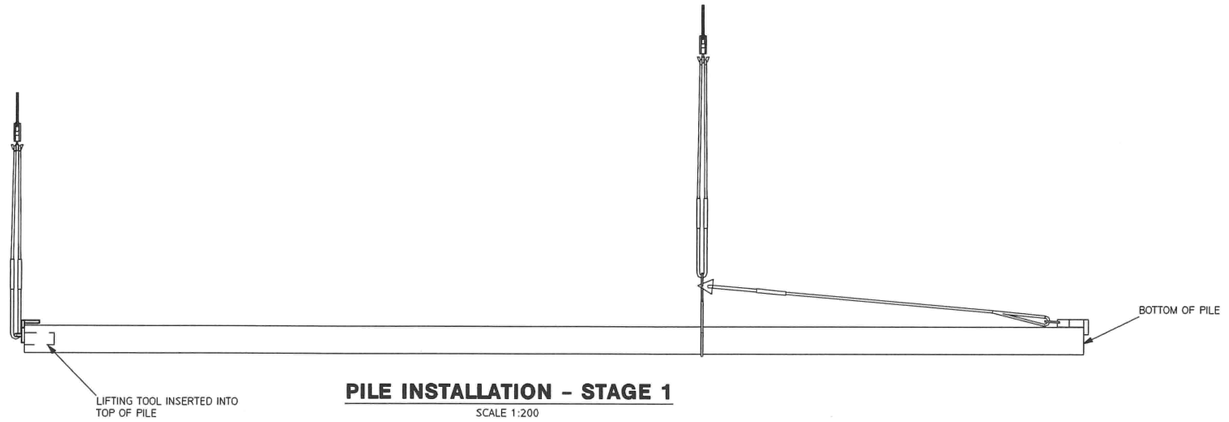
PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0021	1:750	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 26/03/2015 09:20:13 by Devonshireb

NOTES

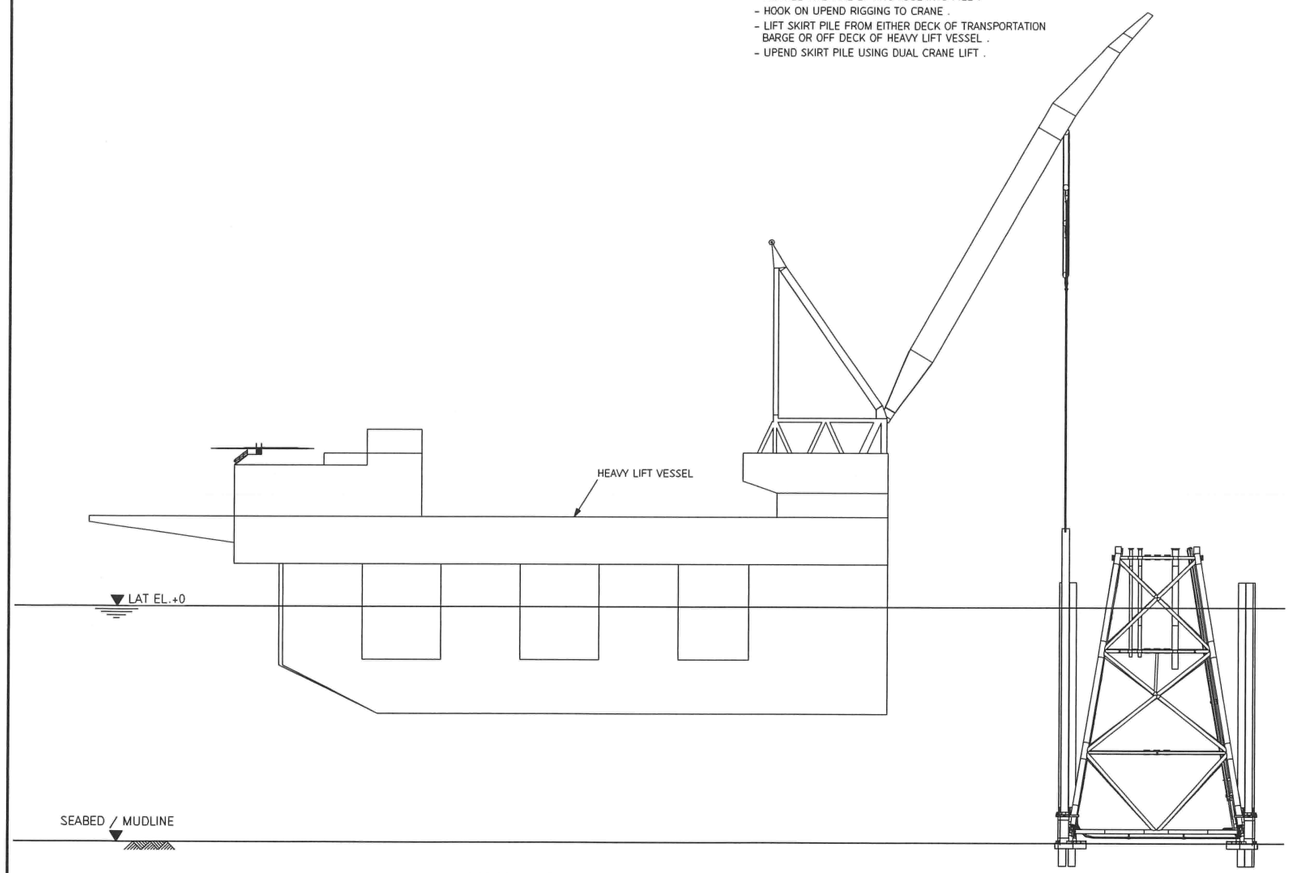
1. THE SCHEMATIC OF INSTALLATION SEQUENCE SHOWN ON THIS DRAWING IS REPRESENTATIVE ONLY.
   THE INSTALLATION CONTRACTOR SHALL DEVELOP INSTALLATION METHODOLOGY AGAINST THE NOMINATED INSTALLATION VESSEL.



PILE INSTALLATION - STAGE 1

SCALE 1:200

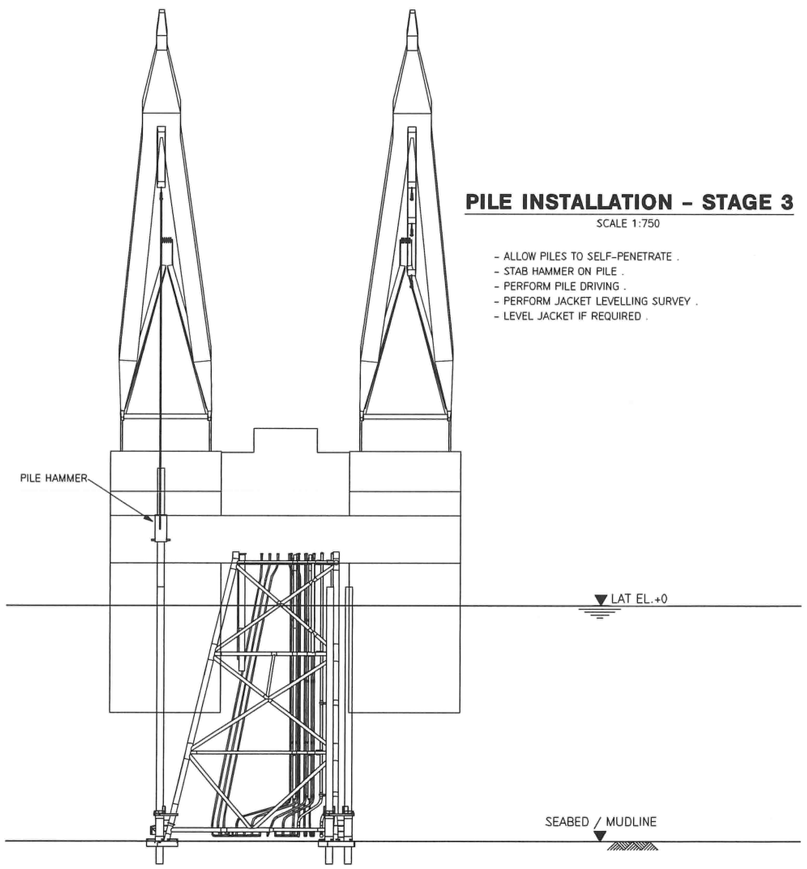
- HOOK ON INTERNAL LIFTING TOOL ONTO CRANE .
- INSTALL UPEND RIGGING TO BOTTOM OF SKIRT PILE .
- INSTALL INTERNAL LIFTING TOOL INTO PILE .
- HOOK ON UPEND RIGGING TO CRANE .
- LIFT SKIRT PILE FROM EITHER DECK OF TRANSPORTATION BARGE OR OFF DECK OF HEAVY LIFT VESSEL .
- UPEND SKIRT PILE USING DUAL CRANE LIFT .



PILE INSTALLATION - STAGE 2

SCALE 1:750

- REPEAT STAGE 1 FOR THE REMAINING 5 PILES .
- INSTALL VERTICAL SKIRT PILE .



PILE INSTALLATION - STAGE 3

SCALE 1:750

- ALLOW PILES TO SELF-PENETRATE .
- STAB HAMMER ON PILE .
- PERFORM PILE DRIVING .
- PERFORM JACKET LEVELLING SURVEY .
- LEVEL JACKET IF REQUIRED .

REFERENCE DRAWINGS	DRAWING TITLE	REV	DATE	DRN	ORIG	CHK	APP	CLT	REVISION TITLE
				AB	CV	JC	JJ		
C001-12-25-99-GD210-0021	SCHEMATIC OF INSTALLATION SEQUENCE - JACKET & PILES - SHEET 1	E1	17.04.15	AB	CV	JC	JJ	-	ISSUED FOR FEED
C001-12-25-99-GD210-0020	GENERAL ARRANGEMENT BARGE LAYOUT- GRILLAGE & SEAFASTENING - JACKET & PILE	B1	04.03.15	KP	CV	RY	JJ	-	ISSUED FOR CLIENT COMMENT
DRAWING No.	DRAWING TITLE	A1	26.02.15	KP	CV	RY	-	-	ISSUED FOR IDC

CLIENT: nationalgrid

GENESIS

TITLE

WHITE ROSE CCS PROJECT FEED
SCHEMATIC OF INSTALLATION SEQUENCE
JACKET & PILES - SHEET 2

PROJECT No. / DRAWING No.	SCALE	SHT.	REV.
C001-12-25-99-GD210-0022	1:750	1 OF 1	E1

A1 SIZE SHEET

Drawing updated 26/03/2015 10:04:45 by Devonshireb