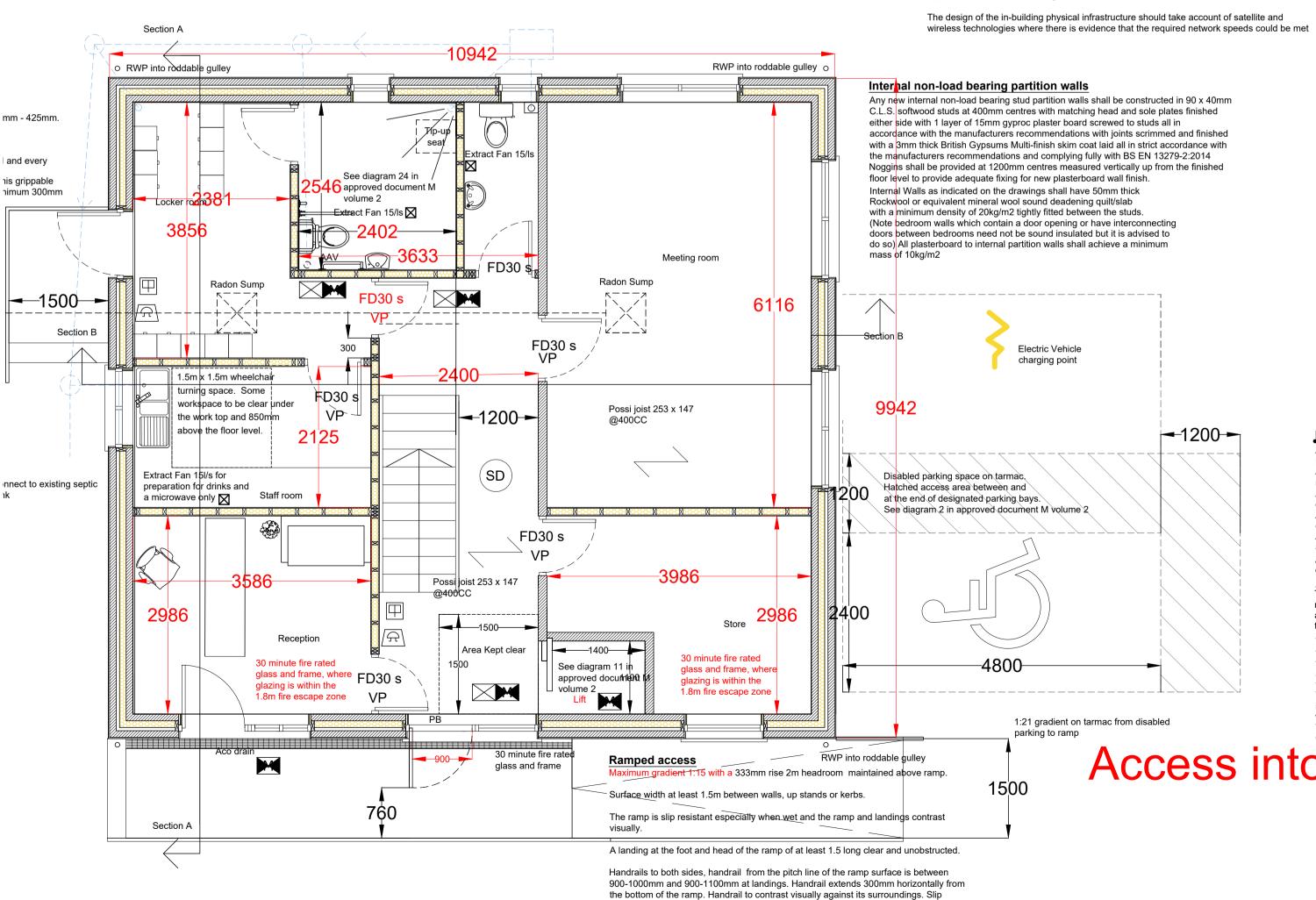


Section A

PROPOSED FIRST FLOOR PLAN 1:50

The guarding shall be 1100mm high and be designed to withstand a horizontal force consistant with BS 6399: Part 1 1996 finished on top with a suitable handrail For Barriers and infill panels refer to BS 6180



PROPOSED GROUND FLOOR PLAN 1:50

Guarding to be non-climbable.

clothing.

resistant and not hot or cold to touch. Handrail to terminate in a way that does not catch

Rigid ducts should be used wherever possible. Where necessary, flexible ducts may be used for final connections, but their lengths should be kept to a minimum. All flexible ductwork should meet the

standards of BSRIA's BG 43/2013. Ductwork installations should be designed and installed to minimise the overall pressure losses

within the system by taking all of the following steps. -Minimising the overall length of duct. -Minimising the number of bends required. -Installing appropriately sized ducts for the air flow rate.

Ventilation systems

floor area.

CIBSE's AM13.

current Building Regulations

corners than 350mm.

Light Fittings

in each space

per circuit-watt.

Establishment's Digest 498.

Duct connections should be both mechanically secured and adequately sealed to prevent leaks. Rigid connectors and jubilee clips should be used for flexible ducting to ensure a good seal. Mechanical ventilation systems must be commissioned in accordance with an approved procedure.

New buildings should have a means of monitoring the indoor air quality. This may be achieved using CO2 monitors or other means of measuring indoor air quality. Ventilation systems should be designed to minimise the intake of external air pollutants. If practicable, ventilation intakes should not be located in courtyards or enclosed urban spaces where air pollutants are discharged.

Outdoor air should be supplied for occupiable rooms in offices at whichever of the following will provide the higher total rate, 10 litres per second per person or 1 litre per second per m2

Each office should have the means to provide purge ventilation, to reduce pollutants before the office space is occupied or after activities such as painting. The purged air should both be taken directly to the outside not be recirculated to any other part of the building.

Mixed mode buildings (natural and mechanical ventilation) should follow additional guidance on ventilation in

he design, installation, inspection and testing of the new electrical system shall be carried out by a fully qualified Electrical Engineer(N.I.C.E.I.C. registered) all in accordance with the latest edition of the I.E.E. regulations, BS 7671 and the current Approved Document : P The new wiring shall be carried out in insulated and sheathed type cables and where necessary being protected from damage all in accordance with BS 7671 : 2001 as well as

Any fixed lighting should achieve levels of illumination appropriate to the activity in the space. Spaces should not be over-illuminated. Lighting should be designed based on CIBSE's SLL Lighting Handbook or an equivalent design guide.

The new installation shall include all new and adequate earthing and bonding systems to meet the requirements of the current I.E.E regulations as well as BS 7671 : 2001 New switches, sockets, outlets for lighting and all other such equipment Wall mounted sockets and outlets, telephone points adn tv sockets are located 400-1000mm

above the FFL. Siwtches for permanently wired appliances located between 400 -1200mm above the FFL. All swtitches and controls that require precise hand movement are located 750mm-1200mm above FFL. Push button controls that require lmited dexterity are not more than 1200mm above the floor. Pull cords are 800-100mm above the FFL. Controls that need close vision are located between 122-1400mm above the FFL. Socket outlets are no nearer to

All non-metallic light fittings, switches or the like must not be earthed unless a new circuit protected earthing conductor is installed All lighting circuits shall include a circuit protective conductor.

The Electrical Engineer shall fully test the new installation on completion and issue the owner/occupier with a Completion/Test Certificate which if required by the Local Authority shall be submitted to Building Control for approval. In addition the Electrical Engineer shall provide the owner/occupier with sufficient information so that persons operating, maintaining or altering the installation can do so with reasonable safety.

100 percent of all fixed light fittings are to be fittings which take lamps having a luminous efficancy greater than 95 lumens per circuit-Watt. If it is display lighting ii. the Lighting Energy Numeric Indicator (LENI) method, following Appendix B.

b. If it is display lighting, any of the following: i. have an average light source efficacy of 80 light source lumens per circuit-watt ii. have a rated power usage no greater than 0.3W/m2

iii. the LENI method, following Appendix B.

c. For high excitation purity light sources, an average light source efficacy of 65 light source lumens

Lighting controls in new and existing buildings should follow the guidance in the Building Research

Unoccupied spaces should have automatic controls to turn the general lighting off when the space is not in use (e.g. through presence detection). Occupied spaces should have automatic controls where suitable for the use of the space.

General lighting in occupied spaces should have daylight controls (e.g. photo-switching and dimming) for parts of the space which are likely to receive high levels of natural light. Display lighting should be controlled on dedicated circuits that can be switched separately from those for lighting provided for general illuminance.

Physical infrastructure for high-speed electronic communications network Building work must be carried out so as to ensure that the building is equipped with a

high-speed- ready in- building physical infrastructure, up to a network termination point for high speed electronic communications network. Copper or fibre-optic cables or wireless devices capable of broadband speeds grater than 30Mbps to be installed.

Corridor and door widths

Doors to have a minimum clear width of 800mm when approached head on. Increased to 825mm when the access route is 1200mm wide and the door is at a right angle

300mm minimum return to door on the pull/push side unless the door is power operated. Door frames contrast visually with the surrounding wall.

Where fitted with a latch, the door opening furniture can be operated with one hand using a closed fist. e.g a lever handle

All door opening furniture contrasts visually with the surface of the door.

The Door frames contrast visually with the surrounding wall.

When of glass or fully glazed they are clearly differentiated from any adjacent glazed wall or partition by the provision of high contrast strip at the top and on both sides

Light fittings

100 percent of all fixed light fittings are to be fittings which take lamps having a luminous efficancy greater than 75 light source lumens per circuit-Watt. Areas over 60sqm to be provided with horizontal luminance of not less than 0.5Lx at

the floor level of the area excluding a boarder of 0.5 around the perimeter If electrical fire warning system is required. It should be installed to BS5839 Part 1 2017 commissioning certificate for fire detection and warning system to be obtained from competent electrical engineer and be available for inspection by the fire and rescue authority.

Smoke detection and carbon monoxide alarms

SD - indicates smoke detector HD - indicates heat detector

CMA - indicates carbon monoxide alarm

A carbon monoxide alarm (which complies with British Standard BS EN 50291 - 1- :2018) should be fitted when fixed combustion appliances are installed in new homes and in existing homes for new or replacement fixed combustion appliances.it is considered appropriate to require carbonmonoxide alarms only when fixed appliances that burn solid fuel, gas (excluding gas appliances used solely for cooking) and oil are installed, such alarms can still reduce the risk of poisoning from other types of appliance. A Carbon Monoxide alarm is to be fitted on the ceiling at least 300mm from any wall

or, if it is located on a wall, as high up as possible (above any doors and windows) but not within 150mm of the ceiling and between 1m and 3m horizontally from the appliance. Carbon monoxide alarms should comply with BS EN 50291-1:2018 and be powered by a

battery designed to operate for the working life of the alarm. The alarm should incorporate a warning device to alert users when the working life of the alarm is due to pass. Mains-powered BS EN 50291-1:2018 Type A carbon monoxide alarms with fixed wiring (not plug-in types) may be used as an alternative, provided they are fitted with a sensor failure warning device.

Fixed solid fuel appliances, fixed gas burning appliances (excluding gas cooking appliances) and a fixed oil burning appliances. All must be provided with a CMA following the guidance above. I.e if there is a wood burner in one room and a oil fired Aga in another room, both rooms require a CMA.

Internal doors to comply with M1 or M2

Where needing to be opened manually, the opening force at the leading edge of the door is not more than 30N from 0 degrees. (the door in a closed position) to 30 degrees open and not more than 22.5N from 30 degrees to 60degrees of the opening cycle

The effective clear width through a single leaf door, or one leaf of a double door is on accordance with Table 2 and diagram 9.

There is a unobstructed space of at least 300mm on the pull side of the door between the leading edge of the door and any return wall, unless the door has a power-controlled opening or it provides access to a standard hotel bedroom

Where fitted with a latch, the door opening furniture can be operated with one hand using a closed fist. e.g a lever handle

All door opening furniture contrasts visually with the surface of the

The Door frames contrast visually with the surrounding wall. The surface of the leading edge of nay door that is not self-closing, or is like to be held open. contrasts visually with the

other door surfaces and its surroundings. Where appropriate in door leaves or side panels wider than 450mm, vision panels towards the leading edge of teh door have

vertical dimensions which include a least the minimum zone or zones or visibility between 500mm and 1500mm from the floor, iof necessary interrupted between 800mm and 1150mm above the floor, e.g to accommodate an intermediate horizontal rail. See approved doc K section 10.

When of glass or fully glazed they are clearly differentiated from any adjacent glazed wall or partition by the provision of high contrast strip at the top and on both sides

Fire doors particularly those in corridors are held open with an electro magnetic device but self close whenever, The power supply fails. Activated by a hand-operated switch. Activated by smoke detectors linked to the door individually or to a main fire/ smoke alarm system.

Fire doors particularly to individual rooms are fitted with swing free devices that close when activated by smoke detector or the buildings fire alarm system, or when the power supply fails.

Any low energy powered swing door system is capable of being operated in manual mode, in powered mode or in power assisted mode

Corridor and door widths

Doors to have a minimum clear width of 800mm when approached head on. Increased to 825mm when the access route is 1200mm wide and the door is at a right angle.

300mm minimum return to door on the pull/push side unless the door is power operated. Door frames contrast visually with the surrounding wall.

Where fitted with a latch, the door opening furniture can be operated with one hand using a closed fist. e.g a lever handle

All door opening furniture contrasts visually with the surface of the door.

The Door frames contrast visually with the surrounding wall.

When of glass or fully glazed they are clearly differentiated from any adjacent glazed wall or partition by the provision of high contrast strip at the top and on both sides

Refuges should be a minimum of 900mm x 1400mm in size and accessible by someone in a

wheel chair. Where sited in a protected stairway, protected lobby or protected corridor, they should e the width of the escape route or other truct the flow of people escaping.

stairways there should be a blue mandatory sign worded 'Refuge - keep clear' in addition to fire

Structural calculations

safety signs.

This plan must be read in conjunction WITH ANY SEPARATE STRUCTURAL ENGINEERS/SPECIALIST CALCULATIONS AND THE DETAILS OF WHICH SHALL BE TAKEN IN PREFERENCE TO THOSE

INDICATED ON THESE PLANS. These plans have been provided for Building Regulation approval only, and are subject to structural calculations and details for any new Structure, Specialist details being submitted to Building Control for approval prior to the commencement of any works or the ordering of any Materials Notches and holes or the like shall not be formed in any structural floor, wall or roof timbers without the express permission of the engineer and/or the manufacturers.

Conservation of Fuel & Power Where ever possible and practical all new hot water and heating pipes shall be insulated with flexible foamed polyurethane pipe insulation of a suitable diameter and minimum wall thickness

of 13mm secured with waterproof adhesive tape all in accordance with current Approved Document : Part L1. 100% of all new light fittings and bulbs shall be of an energy efficient type all in accordance with Approved Document : Part L1 and details of which are to be submitted to Building Control for approval prior to their installation

The Main Contractor/supervisor shall be responsible for ensuring all insulation to floors, walls and roofs is continuous with all joints taped to ensure no cold bridging occurs. All relevant

areas shall be inspected during critical stages of construction and a report indicating that work has been completed satisfactorily and complies fully with Approved Document : Part E as well as DEFRA's latest edition of " Limiting Thermal Bridging and Air Leakage : Robust Construction Details for Dwellings and similar Buildings" A copy of such a report shall be made available during the Building Inspectors 'Final inspection' and failure to provide a report could jeopardize the issuing of a 'Completion Certificate'.

Structural Lintels

2 per opening) **Drainage and Heating** Air source heating to be installed and specified by others. Above ground drainage within the building shall comply fully with current Approved Document : Part H and BS 5572.

Structural Lintels to be provided as specified by Specialist, all lintels to have a minimum

end bearing of 150mm, have a cavity tray over with stop ends and weepholes (minimum

All new Wash Hand Basins shall be provided with 32mm diameter waste pipes laid to a minimum gradient of 1:40. All new waste pipes shall be fitted with 75mm deep sealed traps and shall discharge

directly into a soil/vent pipe, stub stack or Gully as indicated on the plans. Any new branch pipe should not discharge directy into the stacks in a way which could cause cross flow into the other branch pipes. All new waste pipes/traps shall be either removable and/or be provided with suitable rodding

access points at any change in direction to facilitate cleaning in case of blockages. All pipes, fittings and joints shall be capable of withstanding an air test of positive pressure of at least 30mm water gauge for at least 3 minutes. All to be designed and specified by others.

The hot and cold water and heating service shall be carried out by a fully qualified Gas Safe/ Oftec registered Plumber/NICEIC or ELECSA Electrician. All radiators shall be designed so as to provide an adequate heat output for the new areas. The design and installation is the responsibility of the relevant sub-contractors

The outlet from the hot water storage vessel should be fitted with an in-line hot water supply tempering valve in accordance with BS EN 15092:2008 to ensure the temperature supplied to the domestic system does not exceed 60 degrees centigrade. The hot water to the Bath and Wash Basins is to be fitted with an in-line blending valve limiting the maximum temperature to 48 degrees centigrade

The Plumbing Engineer/Electrical Engineer shall supply the owner/occupier with sufficient information so that persons operating, maintaining or altering the installation can do so with reasonable safety

The systems shall be fully tested on completion with copies of the Completion/Test

Access into building Still pending.

NC

Doors and Windows Style of doors and windows to be selected by Client to approved Planning permission Sizes to be measured on site prior to manufacture Any sizes indicated are in metric, should imperial sizes be used the Contractor must adjust the sizes accordingly Permanent manifestation for glazing at two levels for large uninterrupted areas of transparent glazing. Located between 850-1000mm from floor level and between 1400-1600mm from floor level, in a continuous band. Can be patterns, logos, solid or broken lines at a minimum size of 50mm.Must contrast visually when looking from the inside and outside in all lighting conditions

For an alternative to permanent manifestation see Diagram 7.1 approved document K. Buildings other than dwellings All glazing to be double glazed, with windows acheiving a U Value of at least 1.6W/m2K

and External Doors a U Value of 1.6W/m2K Any new window glazing in critical locations (I.e. within 800mm above floor level for windows and 1500mm above floor level for doors/sidelights.) shall be glazed with annealed/toughened glass and be of an appropriate thickness/ weight for the purpose it is being used all in accordance with Approved Document: Part K latest edition

BS 6206 and BS EN 12600 and in accordance with part Q Full height glazing must be able to resist the forces specified BS6180 Any opening window which is below 800mm above the floor level must be suitably guarded as specified in Approved Document Part K

Windows to be openable with an opening angle of at least 60 degrees. Cavity around all Door and Window openings to be closed using a proprietary cavity closer having a path through the closer of not less than 0.45m2K/W

Provide horizontal and vertical DPC to all openings Weepholes are to be provided above all openings at minimum 900mm centres with a minimum of 2 weepholes above each opening

Fire Safetv Horizontal means of escape with escape 2 directions is less than 45 metres travel distance

All structural elements to have 60 minutes fire resistance Provision of fire doors

Any doors marked FD30 to be in accordance with BS 476 Any ducts/pipes passing through the enclosure of a protected escape route should be adequately stopped using intumescent material and collars as required Emergency Escape lighting should be on a separate lighting circuit and the standard for the installation of the system must comply with BS 5266-Part 1:2016 Code of Practice for the emergency escape lighting systems of premises Fire Safety Signage must be distinctive and conspicuous and comply with Health and Safety (Safety Signs and Signals) BS 5499-Part 1:2013 Fire Extinguishers to cover the premises as detailed in BS 5306 Part 8:2012 selection and installation of portable fire extinguishers. Extinguishers must be maintained in accordance with BS 5306-Part 3:2017 All internal fire resisting partitions to be taken up full height to underside of roof structure and be suitably fire stopped

All final exit doors should be fitted with simple fastenings to enable them to be opened easily from the inside without the use of keys or code, ie thumb turn Any Electrical service boards must be enclosed with materials affording a 30 minute standard of fire resistance. The access panel or door must conform to an FD30S standard of fire resistance and be indicated FIRE DOOR KEEP LOCKED SHUT

Fire alarm system

The electrically operated fire alarm system should comply with BS 5839-1:2019 Fire detection and alarm systems for buildings. Code of practice for system design installation commissioning and maintenance, category L3 Call points for electrical alarm systems should comply with BS 5839-2, or

Type A of BS EN 54-11:2001 and be installed in accordance with BS 5839-1. The new system shall be installed by a suitably qualified electrician (NICEIC or ELECSA registered.) who shall fully test the new installation on completion and issue the owner with a Completion/Test Certificate which if required by the Local Authority shall be submitted to Building Control for their approval. In addition the electrical engineer shall provide the owner with sufficient information so that persons operating, maintaining or altering the installation can do so with reasonable safety.

Electrical System maintenance Must be subject to regular maintenance by a competent electrician in accordance with the requirements of the Institution of Electrical Engineers Regulations 18th Edition. Records of all maintenance to the electrical systems should be kept

Emergency Proceedures

A suitable management system must be in place to ensure all fire safety arrangements are maintained. Suitable arrangements to manage activations of the fire alarm must be in place. These must deal with false alarms being locally managed as well as actions in the event of a confirmed fire.

All staff should receive regular training to ensure that they are adequately trained and know what action to take in the event of a fire. If the organisation employs five or more persons a licence is in force, or an alterations notice requiring such a record is in force in relation to the premises then you must keep a record of staff training

Fire Action Notices

Should be provided throughout the premises to advise persons of the procedure to adopt in the event of fire

The testing and maintenance of any emergency lighting system, fire alarm system, firefighting equipment, fire exit and fire resisting doors shall be undertaken in accordance with the relevant British Standards

Key to Symbols

| PB | Doors so indicated are fitted with Panic Bolts or similar latches and are permanently marked "PUSH BAR TO OPEN" Immediately above the push bar. |
|-----------|--|
| SC | Doors so indicated are fitted with self closing devices. |
| | Emergency Lighting Points (Maintained). Designed, installed, inspected, commissioned and certified in accordance with BS5266:1:2016 |
| \times | Emergency Lighting Point with Exit Sign and directional arrows where necessary (Maintained). Specified and provided in accordance with BS5499:4:2013 |
| | "FIRE EXIT" Sign, with directional arrows. Specified and provided in accordance with BS5499:4:2013 |
| \square | Fire Alarm Call Point. |
| F | Audible Warning Device. |
| VP | Clear glazed Vision Panel. |
| SD | Smoke Detector |
| HD | Heat Detector |
| | Minimising the ingress of external pollutants- Ventilation systems should be designed to minimise intake of external air pollutants. Ventilation intake should be as high as possible and located on the |

se the intake of external air pollutants. Ventilation intake should be as high as possible and located on the less polluted side of the building. Exhaust outlets should no discharge to courtyards, enclosures or architectural screens

All internal doors to have 10mm undercuts to provide ventilation

| DTES. | THIS DRAWING IS COPYRIGHT |
|--|---|
| | IN CONJUNCTION WITH DRAWINGS, DETAILS AND CONSTRUCTION PURPOSES BY OTHERS. |
| | PARED TO OBTAIN PLANNING AND BUILDING REGULATION CTORS MUST VISIT THE SITE FOR THEIR OWN ASSESSMENT |
| OUT OF THE WORK ON SITE. OF | SIBLE FOR ALL DIMENSIONS AND FOR THE CORRECT SETTING NLY FIGURED DIMENSIONS ARE TO BE USED. ANY PORTED BEFORE PROCEEDING. DO NOT SCALE FOR F IN DOUBT ASKI |
| ALL MATERIALS AND WORKMAN CODES OF PRACTICE | NSHIP TO COMPLY WITH CURRENT BRITISH STANDARDS AND |

| rev C | Plan check | 06-03-24 | | | | | | | |
|--|------------|----------|----------|------------|--|--|--|--|--|
| rev B | Plan check | amend | 27-02-24 | | | | | | |
| rev A | Plan check | 16-01-24 | | | | | | | |
| ISSUE BUILDING REGULATION 2 of 4 NOT CONSTRUCTION DETAIL DRAWINGS | | | | | | | | | |
| CLIENT / SITE Pellows WDS Ltd Old Carnon Hill Carnon Downs TR3 6LG | | | | | | | | | |
| PROJECT Replacement Office | | | | | | | | | |
| DETAILS Proposed plans | | | | | | | | | |
| | 942 | 11 | SCALES | 1:50 @ A1 | | | | | |
| | | | DATE | March 2023 | | | | | |
| | | С | DRAWN | NB | | | | | |
| NHB ARCHITECTURAL | | | | | | | | | |

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