A1

FIRE DOORS
All fire doors are to be provided with signage in accordance with BS5499: Part 5:2002 indicating that they are to be kept shut, in accordance with section 1.4.13 of Building Regulations 2006, TGD B.

Door fastenings to be in accordance with TGD Part B: 1.4.3.2 Door fastenings - in general - doors on escape routes whether or not the doors are fire doors, should either be fitted with lock, latch or bolt fastenings, or they should only be fitted with simple fastenings that can be readily operated in the direction of escape without the use of a key save for the exception of the main B & B access B doors, which shall open in-wards for security purposes).

FIRE SAFETY STRATEGY:
Consideration should be given to accommodating and providing for the safe evacuation of people with disabilities, provide indication for methods and management of evacuation. to ensure that any person with dissabilitys is evacuated by other occupants of the building.

MECHANICAL VENTILATION:
Any machanical ventilation system are installed in accordance with current Building Regulations.

EXIT ROUTES:
All exit routes to have ranped access to surrounding hard landscaping.

FIRE DETECTION ALARM SYSTEM:
The premises is to be provided with type L1 system as per TGD B Building regulations. and shall be certified by installer

EMERGENCY LIGHTING AND ELECTRICAL WORKS:
Emergency lighting will be incorporated with overall lighting scheme and in accordance with table 1.8 of Building Regulations 2006, TGD B & with I.S. 3217: 2008.
Emergency exit signs (directional) are to be located above all exit doors on escape routes and along any changes in direction in the exit routes. All electrical installations and protected circuits will be installed in accordance with the national rules for electrical installations (ET 101) published by Electro-Technical Council of Ireland.

GENERAL NOTE'S:
All internal clear openings (single doors) to be minimum 800 mm clear width unless otherwise indicated.
Level / Ramped access will be provided outside all final exits in accordance with TGD Part M 2010. (see Dissability Access Drawings).
Travel distance is taken from a point 600 mm from wall structure to allow for fitted furniture etc.

SPECIFICATION:

GENERAL:
Building Classification: Purpose Group 5 of Technical guidance Document B 2006. All works to be carried out in accordance with the Building Regulations Technical Guidance Documents. All materials, fittings, components and other manufactured products or parts thereof are to comply with and to be fitted in accordance with all relevant Standards. All structural work to be in accordance with relevant standards. All works to comply with fire certificate and disability access certificate drawings, technical reports and conditions.

SITE CLEARANCE:
The site at present is a cleared green field site. The existing ground level is generally flat over the entire site area. All existing and nearby services both over ground and underground are to be protected at all times. All existing roads are to be kept clean at all times.

FOUNDATIONS: STRIP FOUNDATIONS EXTERNAL WALLS:
Strip foundations 960mm wide x 350mm deep generally, positioned centrally below walls. Foundation details to be agreed with the Engineer at the excavation stage, however they shall generally be constructed of 30N with A393 mesh reinforcement including 12mm L-bars at 90 degree turns. Nominal maximum size of aggregate: 20mm. Foundations to be formed at minimum depth of 750mm below existing ground level. See site layout plan for existing ground levels and proposed finished floor levels.

STRIP FOUNDATIONS INTERNAL WALLS:
Strip foundations 350mm wide x 350mm deep generally, positioned centrally below walls. Foundation details to be agreed with the Engineer at the excavation stage, however they shall generally to be constructed of 30N with A393 mesh reinforcement. Nominal maximum size of aggregate: 20mm. Foundations to be formed at minimum depth of 750 mm below existing ground level. See site layout plan for existing ground levels and proposed finished floor levels.

UNDERBUILDING: Allow a minimum of 3 no courses of rising walls typically 675 mm. T he cavity wall construction is 100mm blockwork outer leaf with 120mm cavity and 100mm blockwork inner leaf generally. Stainless steel wall ties to be positioned at maximum 600mm horizontal spacing and maximum 450mm vertical spacing. The cavity is to be filled with concrete up to 225 mm below ground level damp proof course and raked outwards. Polyethylene damp proof course / radon membrane to be fitted, at minimum 150mm above finished ground level. Damp proof membrane / radon membrane and damp proof course to be overlapped.

GROUND FLOOR CONSTRUCTION: Maximum U-value = 0.21W/m²k.
150mm reinforced concrete ground floor slab on 150mm Xtratherm XT/UF Thin-R under floor insulation or similar. Vapour control layer. Monarflex Radon barrier fitted and certified by specialists and detail to be agreed with the engineer. 25mm sand blinding on 250mm Clause 804 or similar on suitable imported material on good ground. Radon membrane shall be certified by the NSAI Irish Agrement Board. Location of 2 no. standby Radon sumps to be agreed with the engineer along with the associated pipe work.

EXTERNAL WALL CONSTRUCTION: Maximum U-value = 0.21W/m²k.
19mm render, 100mm blockwork external leaf, 120mm cavity with 80mm Xratherm XT/CW Thin-R or similar partial fill cavity wall insulation, 100mm blockwork internal leaf, 42.5mm Xratherm XT/TL Thin-R thermal linerboard (or similar). Plaster skim finish.

LINTELS/ STEELS:
All lintels to be precast concrete and to have minimum 150mm bearing up to a maximum span of 2.7 m in width. All other lintels to be RSJ's or Catnic Aluminum lintels designed by specialist supplier / engineer. In these circumstances e.g. beam bearings, it may be necessary to provide padstones or longer bearings. All RSJ type lintels on cavity walls to be welded at 300 mm intervals longitudinally to prevent overturning.

CILLS: All cills to be precast concrete and shall be fully wrapped in a DPC.

GROUND FLOOR INTERNAL BLOCKWORK WALLS: 102.5mm blockwork with 13mm dense plaster scratch coat finished with gypsum skim coat to both sides. Walls to toilets and kitchen to be fully tiled.

GROUND FLOOR INTERNAL PARTITIONS: 100 x 50mm SW studs @ 600 c/c with noggings @ 750 c/c. 100mm mineral fibre insulation between studs. 12.5mm dense fire rated plasterboard to both side (min 60 min fire rating) with plaster skim finish.

WINDOWS & EXTERNAL DOORS:
All doors and windows shall have a different colour finish to be agreed with the Client / Engineer prior to ordering. The Fire Officer's requirement is that the clear opening section of a window is of a minimum of 850mm high x 500mm wide with a sill height of no greater than 1100mm. In all areas where glazing is used it shall comply with the requirement for safety glass either toughened or laminated. Laminated glass is preferred as the glass stays in place following impact which creates a continuous barrier. External Windows/doors to be double glazed UPVC and fully weather stripped with compression seal gaskets. Maximum U-value = 1.6 W/m²k. Any unguarded glazing, in critical locations in doors and door side panels, at low level in walls and partitions should be safety glazing. VELUX ROOF WINDOWS: U-value = 0.16W/m²k. Velux Type roof windows to be installed in accordance with manufacturers' guidlines.

CEILING CONSTRUCTION: Location of any RSJ's to carry roof system shall be specially designed by the engineer during construction and shall have a minimum bearing of 150 mm. Fire rated Plaster board slabs (60 mins min) Typically 2 no. 12.5mm fixed to underside of ceiling with skim finish. 300 mm quilt insulation or similar between and above ceiling joists throughout. All insulation to be installed in accordance with manufacturers' guidelines.

ROOF CONSTRUCTION: Maximum U-value = 0.16 W/m²k. -
Concrete roof tiles (blue / Black in colour), on 38 * 25 mm double treated battens, on Tyvek breathable roofing felt with 50 mm clear ventilation as per Building regulations on EITHER timber cut roof incorporating 44 * 225 mm C24 Rafters at 400 mm centres or Timber roof trusses deginged by specialist supplier. Roof Desingation: Permitted Designation (up to 6 m): AA, AB, AC, National Designation as per Table A5: Class AA

PLUMBING/HEATING & THERMAL INSULATION:
Heating: The Client shall engage the services of a BER Assessor to clarify the design of all elements regarding the requirements of renewables as per the current Building Regulations. The Heating System shall be either Geothermal or Air to Water Type renewable heating system suitably sized to cater for the proposed building. This system shall incorporate under floor heating within all rooms accessible by the attending children, radiators can be used in all other rooms. The indoor temperature shall be kept at 18-20oC (except sleep room, 16-18oC) for childcare facilities. Radiatosr shall be protected by a guard or be thermostatically controlled, with the surface temperature not exceeding 50oC. Portable heaters, open fires or heating systems which give off fumes or gases, are not suitable.
Hot Water Taps: All child accessible hot water taps must be fitted with a temperature control system of not more than 43oC. Plunge taps prevent water wastage and guard against flooding.
Additional Fixtures: There shall be sink units in each play room to include drinking water.

HEATING & THERMAL INSULATION: Thermal Insulation: Technical Guidance Documents Part L - Conservation of Fuel and Energy Dwellings and BER Classification A3:

RAINWATER PIPES & GUTTERS:
All rainwater pipes and gutters to be powder coated aluminum extruded type. The colour shall be agreed with the engineer prior to ordering.

ELECTRICAL INSTALLATION:
Lighting: Fluorescent lighting should be avoided. Light switches must be positioned at a minimum height of 1.5m. External lighting for the winter months is also required. The use of timer switches for playgrounds and entrance doors is required. Dimmer switches should be provided in sleep rooms and rest areas. Equipment adjacent to the entry intended to assist in gaining entry, e.g. doorbells, entry phones, intercoms, should be located at a height between 900 mm and 1200 mm above floor level.

Electrical Power point: All electrical power points must be rendered safe for use in childcare centers. Ideally, they should be at a high level, out of reach of the child. When not in use, sockets must be fitted with blank covers.

Additional Fixtures: At the wiring stage it is important to consider services including telephone wiring, computer cabling and electrical to take into consideration CCTV, webcam, computer technology and internal security. Services to be in readily accessible circulation areas for maintenance and upgrade purposes.

Security: The entrance door shall be fitted with either key pads, an intercom system or CCTV.

Toilets: Each children's room has its own toilet facility within easy access of the activity room. The children's toilet cubicles shall be sufficient in size to allow a staff member to assist a child if necessary. The cubicle height shall be sufficient to permit child privacy while allowing staff supervision. The wash hand basins shall be at child level and the hot water thermostatically controlled with push-down taps or lever handles. Child sized toilets will be provided. A vision panel is provided between the toddler room and associated toilet / baby changing area to ensure child safety and supervision. Vented lobbies are provided. For hygiene purposes a sluice sink shall be provided in the toddler toilets and appropriate flooring for spillage.

The nappy changing area: Is located in the toddlers toilet and has clear vision for the staff and children. Hand washing facilities shall be provided next to the nappy changing area on the same worktop. The area shall have adequate ventilation a minimum of 6-8 air changes per hour via natural ventilation such as windows. Toilets shall be adequately heated to prevent the children from getting cold.

Staff Toilets: As per Drawing

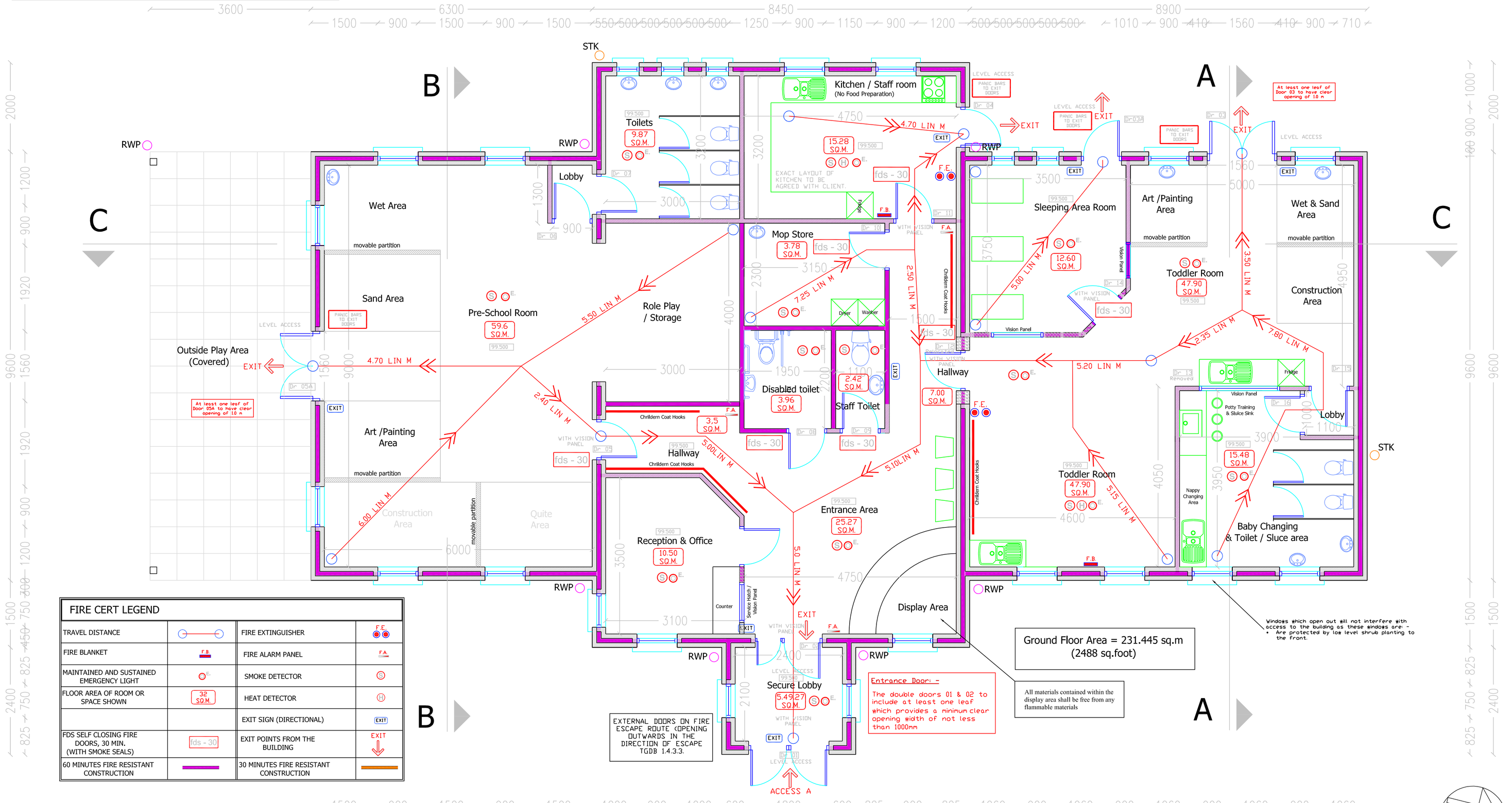
Mop Store / Laundry / Utility Area: The mop store shall have a washing machine and dryer for emergencies and storage space for cleaning equipment such as mops and vacuum cleaners.

Building Regulations 2010 Technical Guidance Document M - Access and Use - See separate Disability Access Certificate, Drawings and Technical report.

Building Regulations 2013 Technical Guidance Document D - Materials andWorkmanship.

Building Regulations 2008 Technical Guidance Document G - Hygiene.

Building Regulations 2011 Technical Guidance Document L - Conservation of Fuel and Energy.



FIRE CERT LEGEND			
TRAVEL DISTANCE		FIRE EXTINGUISHER	F.E
FIRE BLANKET	F.B	FIRE ALARM PANEL	F.A
MAINTAINED AND SUSTAINED EMERGENCY LIGHT		SMOKE DETECTOR	S
FLOOR AREA OF ROOM OR SPACE SHOWN	32 SQ.M	HEAT DETECTOR	H
		EXIT SIGN (DIRECTIONAL)	EXIT
FDS SELF CLOSING FIRE DOORS, 30 MIN. (WITH SMOKE SEALS)	fds - 30	EXIT POINTS FROM THE BUILDING	EXIT
60 MINUTES FIRE RESISTANT CONSTRUCTION		30 MINUTES FIRE RESISTANT CONSTRUCTION	

Proposed Ground Floor Plan
Scale 1:50

Do not scale this drawing. Use figured dimensions only. All dimensions in millimetres unless stated otherwise. All levels in metres relative to ordnance datum. All given dimensions, datums and levels to be verified by the contractor prior to the commencement of work. The contractor shall inform the engineer of any discrepancies found in the drawings or doccuments.
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NOTES:

1. These drawings are for Fire Certification purposes only and do not purpose to contain all or any relevant technical or design information to comply with building regulations. Detailed construction drawings are required prior to tendering and construction work.
2. All works shall comply with current Building Regulations, Technical Guidance Documents
3. The contractor shall be responsible for checking the location of all existing services.
4. All structural elements i.e. roofs, walls, foundations, etc. to be designed & checked by clients engineer prior to commencement of development and provisions to be made for requirements of steel beams etc. at that stage.
5. Drawing & Issue notes to be read in conjunction with issue sheet.
6. All new residential/commercial builds reqiure a BER(Building Energy Rating) certificate to ensure that the energy performance of the building satisfies current standards. Consult architect/engineer at construction stage for current standards.

STATUS:
FIRE CERTIFICATE

REVISIONS:

A	15.07.15	ENTRANCE DOORS 01 & 02 OPEN OUT AS PER FI ON FIRE CERT
		DISPLAY AREA SHALL BE FREE OF ALL FLAMMABLE MATERILAS
B	21.07.15	EXIT DOOR ADDED TO TODDLER SLEEP ROOM
D	30.08.18	STAFF CANTEEN REMOVED, TODDLER ROOM ENLARGED ACCESS TO SLEEP ROOM ALTERED AND VISION PANEL ADDED
E	13.09.18	STUD WALL AND CUSTOMER SERVICE HATCH ADDED TO OFFICE

LC
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PROJECT
Cromane Community Pre-School Group Ltd, Cromane Upper, Killorglin, Co. Kerry

TITLE
Proposed Ground Floor Layout Plan.

DATE	SCALE	DRAWING No.	REVISION
13.09.18	1:50	14-024-FC01	E
DRAWN by C.L.			
CAD FILE LC- 14-024			

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