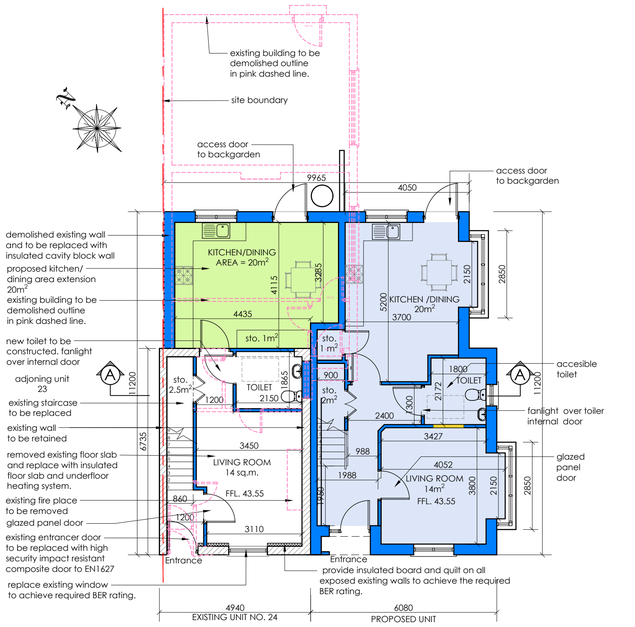
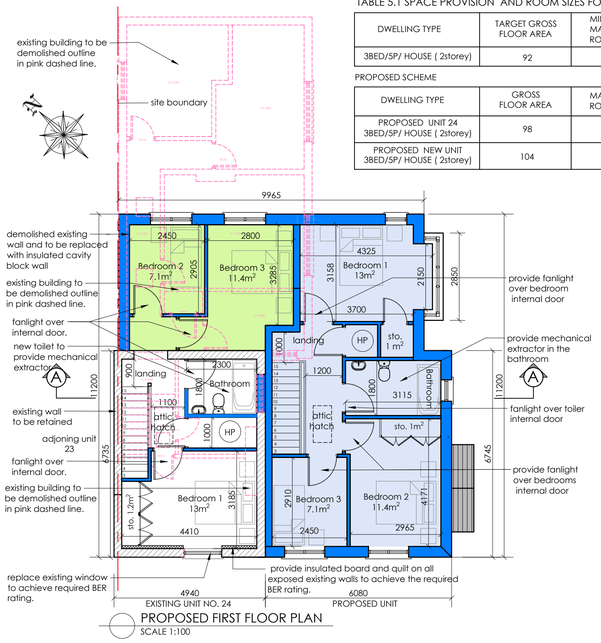
DRAWING NO.
21481-PLA -000

Proposed Residential Development at Congress Terrace, Co. Longford



PROPOSED GROUND FLOOR PLAN
SCALE 1:100



PROPOSED FIRST FLOOR PLAN
SCALE 1:100

QUALITY HOUSING FOR SUTAINABLE COMMUNITIES
BY DEPARTMENT OF GOVERNMENT , HERITAGE & LOCAL GOVERNMENT
TABLE 5.1 SPACE PROVISION AND ROOM SIZES FOR TYPICAL DWELLINGS.

DWELLING TYPE	TARGET GROSS FLOOR AREA	MINIMUM - MAIN LIVING ROOM	AGGREGATE LIVING AREA	AGGREGATE BEDROOM AREA	STORAGE
3BED/5P/ HOUSE (2storey)	92	13	34	32	5

PROPOSED SCHEME

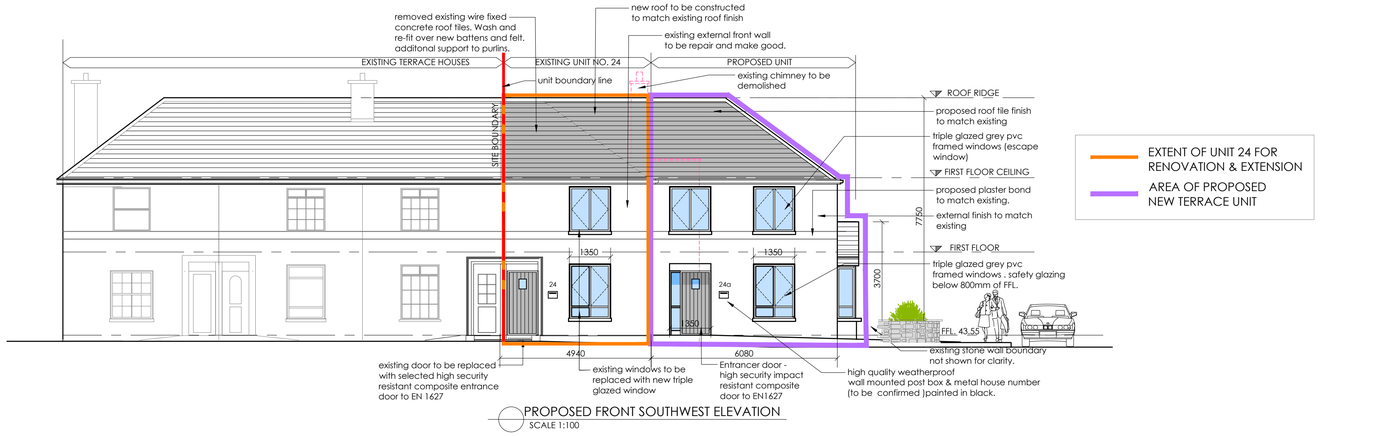
DWELLING TYPE	GROSS FLOOR AREA	MAIN LIVING ROOM	AGGREGATE LIVING AREA	AGGREGATE BEDROOM AREA	STORAGE
PROPOSED UNIT 24 3BED/5P/ HOUSE (2storey)	98	13	34	32	5
PROPOSED NEW UNIT 3BED/5P/ HOUSE (2storey)	104	13	34	32	5

AREA OF PROPOSED EXTENSION TO UNIT 24
AREA OF PROPOSED NEW TERRACE UNIT
PROPOSED NEW WALLS
EXISTING WALLS TO BE RETAINED
TO BE REMOVED/DEMOLISHED

NOTE:
REFER TO DWG. NO. 5240-E100 to E110 FOR ELECTRICAL SERVICES.

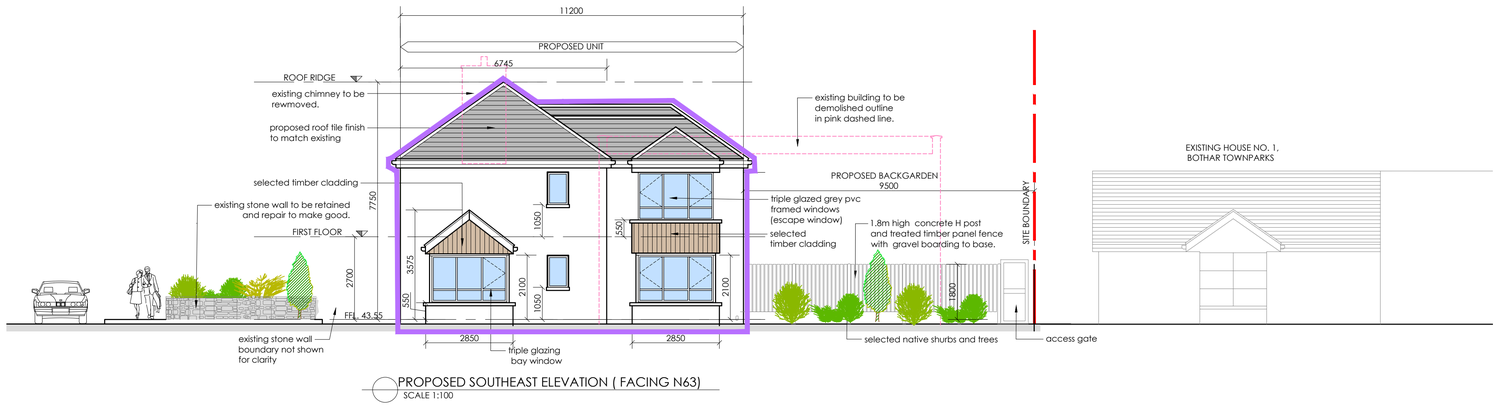
REFER TO DWG. NO. 5240-M100 to M111 FOR MECHANICAL SERVICES.

soft spot for future installation of door from bedroom to toilet



PROPOSED FRONT SOUTHWEST ELEVATION
SCALE 1:100

EXTENT OF UNIT 24 FOR RENOVATION & EXTENSION
AREA OF PROPOSED NEW TERRACE UNIT



PROPOSED SOUTHEAST ELEVATION (FACING N63)
SCALE 1:100

CONSTRUCTION SPECIFICATION
Selected roof tiles (to match existing) on treated timber battens. Approved breather membrane to be fitted to roof rafters/trusses. Gables to be finished with approved low profile slate trim system as appropriate. Air tightness membrane to be fitted to underside of ceiling joists as per manufacturers specification. Ceiling joists and Trusses/Rafters to engineers specification to be fixed to walls using proprietary galvanized steel joist hangers. Building joists into blockwork to be avoided. Wall plate to be 100 x 75mm treated timber bedded in mortar and strapped to internal leaf of external walls at maximum 2m centers using 30mm x 2.5mm galvanized steel straps to extend over minimum 2 courses of blockwork. Proprietary L-straps to be used on gable walls at minimum 2m centers and extending over 2 rafters.

Ceiling Construction
ceiling joists/trusses to structural Engineers design. Mineral/Glass wool insulation to be provided between first floor ceiling joists with a further layer laid perpendicular over. Depth of insulation will be generally 400mm overall but will vary depending on spacing of ceiling joists/trusses and thermal conductivity of insulation to be used. Roof construction to achieve a U-Value of 0.12 W/M²K. Approved Air tightness membrane to be fixed to underside of ceiling joist and bonded to wall/wallplate at junction with approved air tightness tapes. All penetrations of air tightness membrane to be sealed and sleeved. Service cavity to be provided for lighting cables using 35 x 44 battens, fixed perpendicular to underside of ceiling joists/trusses. Underside of battens to be clad in 12.5mm plasterboard, fixed as per manufacturers requirements with all joints taped and skimmed with skim plaster finish.

First Floor Construction
25mm t&g floor boards mechanically fixed to 225 x 44 C16 ceiling joists at 400 c/c (to be confirmed by structural Engineer) with staggered bridging at max. 1.38m c/c throughout. Air tightness tapes to be fitted to joist ends where penetrating air tightness layer at external walls. Notching of joists for services to be carefully considered so as not to affect the structural capacity of the timbers. Underside of ceiling to be clad in 12.5mm plasterboard, fixed as per manufacturers requirements with all joints taped and skimmed and skim plaster finish.

External Walls
Walls to be finished externally with selected coloured pre-pigmented render generally. External wall construction to be generally 100mm external leaf of blockwork with 150mm cavity with 140mm rigid insulation board (max. thermal conductivity of 0.022W/m²K.) Inner leaf to be 100mm concrete blockwork with lightweight thermal blockwork as required at junctions to comply with DOE approved thermal bridging details. U-Value of walls to be 0.21 W/M²K
Wall ties to be provided at maximum 750mm horizontal centers and 450mm vertical centers and in every course around window and door opes and at max 300mm to gable walls. Wall ties to be stainless steel twist type unless otherwise specified and comply with IS268. Cavity to be kept clear of mortar droppings throughout.
Building to achieve an air tightness value of 3 Ac/Hr.

Internal Walls
Internal walls to be 100 x 215 x 440mm 7.5n concrete blockwork with 10mm horizontal and vertical mortar joint finished both sides with skim coat plaster on bonding as required to level. Stud partitions to be 100 x 44mm C16 grade studs at max 400 c/c finished both sides with 12.5mm plasterboard slabs, fixed as per manufacturers requirements with all joints taped and skimmed and skim plaster finish. Approved sound insulation board to be incorporated into stud partitions around bathrooms and toilets to Irish Building Regulations TGD part E. Foil backed plasterboard slabs to ceilings above wet areas. Approved water resistant plasterboard to all walls and ceilings in wet areas. All plastered walls and ceilings to be finished internally with 3 no. coats satin emulsion paint, colour to clients specification. 150mm high Tiled splashbacks to be provided behind all wash hand basins, baths and above kitchen and utility worktops to clients approval. Walls behind showers to be tiled to a height of 2.1 m and tanked to shower tray/bath. Tiling shall include all colour matched pvc capping, corner, quadrant beading and trim pieces.

Party Wall Construction
Party walls between houses to be 100 x 215 x 440mm dense concrete blockwork, 215mm wide, with 10mm horizontal and vertical mortar joint. Walls either side to be finished in approved air tightness parge coat plaster or similar air tightness layer. Vertical timber battens to be mechanically fixed to party wall on sound absorbant quilt insulation and slabbed with 12.5mm plasterboard finished in skim coat plaster. All joints in plasterboard to be taped and skimmed. External wall cavity at junction with party wall to be closed completely using proprietary vertical fire stopping cavity barrier. Void between top of party wall and underside of roof slates/tiles to be filled with firestopping material(both above and below roofing membrane.) There shall be no penetrations for sockets or services in the party wall. All voids to be filled with proprietary fire stopping material. Contractor to provide photographs of installed firestopping in all inaccessible areas prior to closing up.

Ground floor slab
Selected floor finish on 75mm concrete screed . 1000 gauge Vapour check layer on 150mm approved foil backed rigid PIR insulation board with a thermal conductivity of 0.022W/m²k. 2000 gauge reinforced radon barrier with all joints lapped and sealed on 150mm 25N concrete floor slab reinforced with A393 reinforcing mesh to have min. 50mm concrete cover in all areas. Reinforcing to be supported using non-hydroscopic materials. minimum of 250mm consolidated hardcore compacted in layers of 200mm using 10 ton vibrating roller. Radon sump to be provided to all houses, piped to outside footpath level and capped. Ground floor to achieve a U-Value of 0.11 W/m.K

Ventilation
Continuous mechanical ventilation to be provided as per TGD Part F and as per attached layout. Kitchen extract hood to be piped to external independent of CMEV. CMEV system to be NSAI certified and to be installed by competent installer to include comissioning certification and maintenance options as required

System Components:
- Air inlets to bring fresh air to habitable rooms
- Extract units to transfer moisture or odour intensive air to external via ducting and a central extract fan/fans.
- Central electric constant pressure fan to extract moisture and odour intensive air from the dwelling to external.
- Humidity sensors in the fresh air inlets and extract units automatically adjust air flow volume to ensure a comfortable room climate. The system automatically adjusts ventilation volume according to the humidity.

Performance Specification:
The ventilation system in a typical dwelling will consist of three main parts:
The air inlets that brings fresh air into the habitable rooms of the dwelling.
The extract units that facilitate the removal the moisture and odour from the dwelling. The central electric fan and ducting that extracts the used humid air from the kitchen, utility and bathroom in the dwelling.

Doors shall be undercut to allow the air to move from the habitable rooms to the 'wet' rooms by the negative pressure induced by the fan.

The three parts of the system (air inlets, extract units and fan) must be designed to provide good indoor air quality and to reduce the relative humidity in the dwelling.

The air inlets must achieve the following performance criteria:
- An air flow rate that ensures good indoor air quality, based on relative humidity, of min 5m³/hr and max 35-40m³/hr at 10 Pa. Air inlets should be incorporated within the window frame or shall be wall mounted.
- A wind damping device to control draughts in windy conditions by reducing the size of the air passage duct.
- Silent operation.
- Acoustic attenuation incorporated into the air inlet to reduce the impact of sound into the dwelling.
- An internal grille which disperses the air without draughts, which is difficult to seal.
- Be provided with an external grille or slot with an insect screen.

The extract units must achieve the following performance criteria:
- An air flow rate of min. 12m³/hr and max. of 70m³/hr @100Pa.
- Bathrooms shall be humidity sensitive and shall also incorporate a boost function that opens the extract unit to max. on activation of a PIR sensor, incorporated in the extract unit. Kitchen and utility rooms shall be humidity sensitive only.
- Silent operation.

The centralised extract fan must achieve the following performance criteria:
- Be constant pressure/variable volume central extract fan.
- Use no more than 0.50 W/l/sec of specific fan power.
- Have a proven long service life
- Be quiet in operation generating no more than 35 dB at full power.

Extract air is to be brought to the exterior through appropriate ducting in compliance with all relevant Codes, Regulations and manufacturer's recommendations.

INTERNAL FINISHES SPECIFICATION

Floor Finishes
All floors to be steel float finish throughout. Bathroom to be fitted with selected vinyl sheet flooring with welded joints(R11/12 with appropriate bare foot slip resistance). Flooring to be continued below bath and to be turned up wall 100mm to form bunded skirting and finished with PVC trim to skim coat plaster above. Utility rooms to be finished with selected 2mm vinyl tiles (R11/12) and to be finished at edges with softwood timber skirting(MDF or PVC skirtings, architraves or windowboards are not to be used.) Kitchens, utility rooms and entrance halls to be finished with selected 2mm vinyl tiles (R11/12) and to be finished at edges with timber skirting and at junction with dining area with flush aluminium nosing piece to receive tenants flooring to remainder of room. All other floors are to be steel float finish, cleared of debris, plaster and projections, to receive tenants floor finish.

Wall Finishes
All walls and ceilings to be finished internally with 3 no. coats selected satin emulsion paint, colour to clients specification, on smooth skimmed plaster finish. Selected vinyl paint to wet areas to include Kitchen, Bathroom, WC and utility room. Walls to 3 sides of bath to be tiled to a height of 2m above FFL with selected 150 x 150 x 5.5mm ceramic wall tiles. 300 x 600mm tiled splashback to be provided above all wash hand basins. Tiling above kitchen worktop to be 5 vertical rows of 100 x 100 x 6mm selected ceramic tiles for full lenght of kitchen fittings and to underside of mechanical extract fan above hob.
Tiling shall include all chrome quadrant beading to corners and trims and for all levelling compound, adhesive and anti-fungal grout as may be required.

Ceilings
Air tightness membrane to be fixed to underside of rafters and taped to wallplate/blockwork at perimeter. All protrusions through air tightness membrane to be sleeved and taped. Ceilings below attic space to be min 12.5mm plasterboard screw fixed to ceiling joists as per manufacturers specifications with all joints taped and filled and bonded (if required) to achieve true surface with skim coat finish. All internal and external corners to be smooth finished and provided with expanded metal plaster angle bead. Selected, approved insulated attic hatch with incorporated weather seal and folding access ladder to be provided as per ceiling plan. Hatch to be spring mounted with exposed ring pull to ceiling. Architrave to be provided around hatch to ceiling. Flooring to be provided to attic space from hatch to tanks (Allow 3 SqM) in selected T&G attic flooring above level of insulation. Lighting to be provided to attic space, switched from ground floor level.

EXTERNAL FINISHES SPECIFICATION

Windows and doors as per attached schedule or to clients specification. All window units(glazing and frames combined) to meet requirements of BER assessment and to have a U-Value of max. 0.72 W/M²K. Doors to have a max. U-Value of 1.2W/M²K. Walls and roofs to be finished as per elevations. Generally walls to be finished in selected dash render, colour to cleints approval , with selected slimline stone cladding panels and approved red brick to selected areas. Roof to be Approved black concrete tile with selected dry verge system to gables and lead flashings. Window cills to be 100mm deep pre-cast concrete (or reconstituted sandstone to selected areas), suitably weathered and with drip moulding and painted as required unless otherwise specified. Where not painted, exposed upward surfaces of cills to be treated with a proprietary clear UV proof and long life algae and moss inhibitor which shall not discolour or otherwise adversely affect the performance or appearance of the treated material. Flashings shall be lead or profiled metal as specified. Fascia & soffitt to be black aluminium/PVC to attached detail and corrseponding to roof. Seamless gutters and downpipes to be black upvc/aluminium. Soil & vent pipes and accessories to be 100mm dia. black upvc unless otherwise specified.

Footpaths around houses to be min.900mm wide, 35N concrete graded away from house at 2% slope and brush finished. Lawns to be cleared of builders debris, top soiled, levelled and seeded. Boundaries between properties to be as per site layout to include timber gate to secure rear garden.

Where changes in level occur, ground is to be graded at maximum gradient of 1:50 or ramped. Blockwork retaining walls, where required, to be max. 1m high to later design. External steps to be min 300mm going and 150mm max rise, single steps to be avoided. Selected slot drain system, to architects approval, to be provided to all areas where internal floor level is less than 150mm above external ground level. All slot drains to be fitted with appropriate cover piece, laid to a fall and connected to storm water sewer. Large areas of paving to be drained to central gully connected to storm water system. Downpipes to discharge to back inlet gully traps to be connected to Ø100mm PVC storm water sewer laid at 1:60 fall with AIs and MHs fitted as per drawings to discharge to main sewer. Foul sewer to be Ø100mm PVC pipework laid at a fall of 1:60 to discharge to main sewer. Soil & vent pipe, as per BS 4514:2001, to be provided at end of foul sewer, located and terminating as per TGD H diagram 5.
All underground service pipes and cables to be laid Min. 600mm below ground level at all times and as per relevant utility providers specifications

SPACE HEATING SPECIFICATION
Heating system to comprise of underfloor heating to ground floor with radiators to first floor. Contractor to provide SR50 calculations for all houses to Architect & BER Assessor to demonstrate compliance with TGD Part L prior top first fix mechanical installations.

Underfloor Heating
Underfloor heating to be provided to all ground floor areas with full time and temperature controls. Separate zoning for domestic hot water and individual space heating zones: Pipework to be Ø15mm selected underfloor heating pipe on castellated system plates, interconnected and fixed at corners to insulation below using system anchor clips. Underfloor heating pipes to be laid in linear configuration at max.150mm c/c generally and 100mm c/c in bathroom. Layout to omit pipes below kitchen units and wardrobes, bath, whb & Wc to avoid potential punctures of pipework. Pipework to be pressure tested (to manufacturers requirements) prior to pouring of screed to ensure no leaks and to remain charged during pour to ensure no deflection of pipes. Manifold to be fitted to storage room with all runs permanently labeled. All primary pipework above floor level to be insulated. 25mm perimeter insulation to be fitted to all walls, internal and external from top of system plate to full height of proposed floor screed. Separating layer of polythene to be laid between insulation and proposed floor screed. Floor screed to be proprietary self-compacting liquid screed to comply with DIN EN 13454, laid as per manufacturers specification with expansion joints as required to ensure cracking at doors and junctions does not occur. All floors to be steel float finished, prepared for floor finish by tenant.

GENERAL NOTES
Insulation values , air proof rating and thermal bridging factor to be as per BER report. Target BER rating of A3 to be achieved throughout. Contractor to allow for air tight internal plaster finish to all external walls and selected air proof membranes to ceilings. Air tightness tapes to be applied to all windows, doors and service opes in building envelope and to all junctions as per manufacturers requirements to achieve a target air tightness rating of 3 air changes per hour. Contractor to allow for air blower test to be carried out on all individual buildings prior to final BER assessment. Design thermal bridging factor value of 0.08w/sqmk requires compliance with DOE approved construction details as supplied. Renewable technologies, heating and ventilation system to be specified and fitted to dwelling as per provisional BER assessment and to manufacturers guidelines.

Sound test to be carried out as per TGD part E.

Wheelchair accessible doors to have a minimum clear opening width of 775mm with a wheelchair accessible threshold of maximum height 15mm. 1.2m x 1.2m level access platform to be provided at wheelchair accessible entrance. Ramped access to platform to be minimum of 900mm wide and to have a maximum gradient of 1:12 for up to 6m long ramp. Ramps in excess of 6m in length to have a maximum gradient of 1:20. To maintain 150mm minimum level difference between finished floor level and outside ground level proprietary drainage channels are to be fitted as required and connected to surface water drainage system. All ground floor doors to have a clear opening width of minimum 750mm. Wheelchair accessible WC and minimum 1 habitable room to be provided as per drawings.

All bedrooms to have escape windows as per TGD part B. Escape windows to have a minimum unobstructed clear opening area of 0.33sqm with a minimum clear opening width and height of 450mm. Bottom of opening section of escape windows are to be between 800mm and 1100mm above finished floor level. Safety retractors to be fitted to opening section of escape windows that limit the initial opening section of the window to 100mm but are readily openable in the event of a fire. Lockable handles or retractors that require the use of a removable key or tool are not to be fitted to escape windows. The ground beneath an escape window should be clear of any obstruction such as railing or horizontally hung windows and should be suitable for supporting a ladder safely.

All glazing below 800mm above finished floor level on windows and 1500mm on doors and sidelights to be toughened glass as per BS6262 part 4 and marked as per BS6206. All glass to comply with TGD part D 2013.

ADDTIONAL NOTES:

a. provide attic light switch ,pendant light, & smoke detector in attic space.
b. provide vent tiles as per indicated in the drawing.
c. provide isolated concrete base with galvanized steel cage for Heat Pump Conderser unit.
d. provide high quality weathproof wall mounted post box.
e. provide metal house number - painted in gloss black.

Part 8 - planning permission

NOTES :

Use only figured dimensions. Do not scale this drawing.
The contractor is responsible for checking all dimensions on site prior to construction.
The Architects are to be notified of any discrepancies prior to work commencing.
Levels and contours, shown on drawings, are relative to local datum unless specified

REVISION:	DATE:	DESCRIPTION:	INITIAL:

REVISION:	DATE:	DESCRIPTION:	INITIAL:

CLIENT :- LONGFORD COUNTY COUNCIL
PROJECT :- PROPOSED EXTENSION TO UNIT 24 & CONSTRUCTION OF 1 NO.
ADDRESS :- SEMI DETACHED UNIT CONGRESS TERRACE, LONGFORD.
DRAWING :- **Proposed Floor Plans, Front and Side Elevations**

JOB REF.	SCALE	DWG. NO.
21481	1:100	**21481-PLA -000**
DRAWN BY	DATE	REV.
RN	18.01.2022	

SWEENEY architects
Ph:- 043 334 2480
Em:- info@sweeneyarchitects.ie
www.sweeneyarchitects.ie
SWEENEY Architects
Block 4, Green Park,
Athlone Rd
Longford

RIAI Practice Member 2021 — Practice Registration Committee — 03