

**Health and Safety Notice**  
**Client and contractor to be aware:**

1. The design has elements of working at height
2. The design has drainage elements
3. The design includes demolition tasks
4. The design has trenching works at various depths
5. The design has manual handling tasks
6. The design requires vehicle movements and crane lifts

**H4 BUILDING OVER OR NEAR PUBLIC SEWERS**

The developer is to consult the Local Sewers Undertaker when constructing, extending or underpinning over a sewer or within 3m of the centreline of sewer shown on the sewerage undertakers sewer records and when the following applies:

- The building or extension is to be constructed over a manhole or inspection chamber or other access fitting on a sewer.
- The length of the drain or sewer under the proposed building or extension will exceed 6m.
- The Building or extension is to be constructed over or within 3m of any drain or sewer more than 3m deep or greater than 225mm in diameter.

**PUBLIC SEWER REQUIREMENTS**

Special measures may be required for the following:

- Soils easily eroded by ground water leaking into the drain or sewer, e.g., silty sands, saturated silts and peat.
- A rising main (except those used for the building only).
- Any sewer or drain constructed from brick or masonry.
- Drains or sewers in poor condition.
- Sites prone to subsidence.

(Advice to be sought from the Sewerage undertaker).

**Other provisions that apply to Sewers:**

- Any repairs or replacements of a sewer public or drain is to be carried out by the sewerage undertaker.
- Access points to sewers to be in places where they are accessible and apparent for use in an emergency.
- All drains or sewers running under a building to be provided with a minimum of 100mm of granular fill around the pipe.
- The crown of a pipe is within 300mm of the underside of a floor slab special protection to be provided.
- Where a pipe runs less than 2m below a building the foundation is to be extended so that the pipe passes through the wall
- Where the pipe is more than 2m deep to the invert and passes beneath the foundation, the foundation is to be designed as a lintel, spanning over the drain, the lintel should span 1.5m either side of the pipe.
- A drain trench is not to be excavated lower than the foundations of any building nearby.

**PIPES PASSING THROUGH TRENCH FOUNDATIONS**

The load-bearing capability of foundations must not be affected where services pass through. The pipe work should be sleeved and be provided with 'rocker pipes' of a distance of 150mm either side of the foundation concrete. The 'rocker pipes' should have flexible joints and be a maximum length of 600mm.

Alternatively  
Pipework should pass through a suitably strengthened opening in the foundation, i.e. foundation shuttered and a provided with suitable lintel over the pipe allowing for sufficient space for movement to ensure that the drain is capable of maintaining line and gradient. Opening should be masked with granular backfill (pea shingle) around pipe.  
DPC to be provided as required by BCO.  
Advice from Building Control to be sought on suitability of pipe running through foundation before construction.

**PIPES PASSING THROUGH WALLS**

Walls above ground drainage and plumbing to comply with BS EN 12054-2 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

Where new pipework passes through external walls the pipe work is to be provided with 'rocker pipes' at a distance of 150mm either side of the wall face. The 'rocker pipes' must have flexible joints and be a maximum length of 600mm.

**UNDERGROUND FOUL DRAINAGE**

Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1.

**INSPECTION CHAMBERS**

Underground quality proprietary UPVC 450mm diameter inspection chambers to be provided at all changes of level, direction, connections and every 45m in straight runs. Inspection chambers to have built down double sealed covers in buildings and be adequate for vehicle loads in driveways.

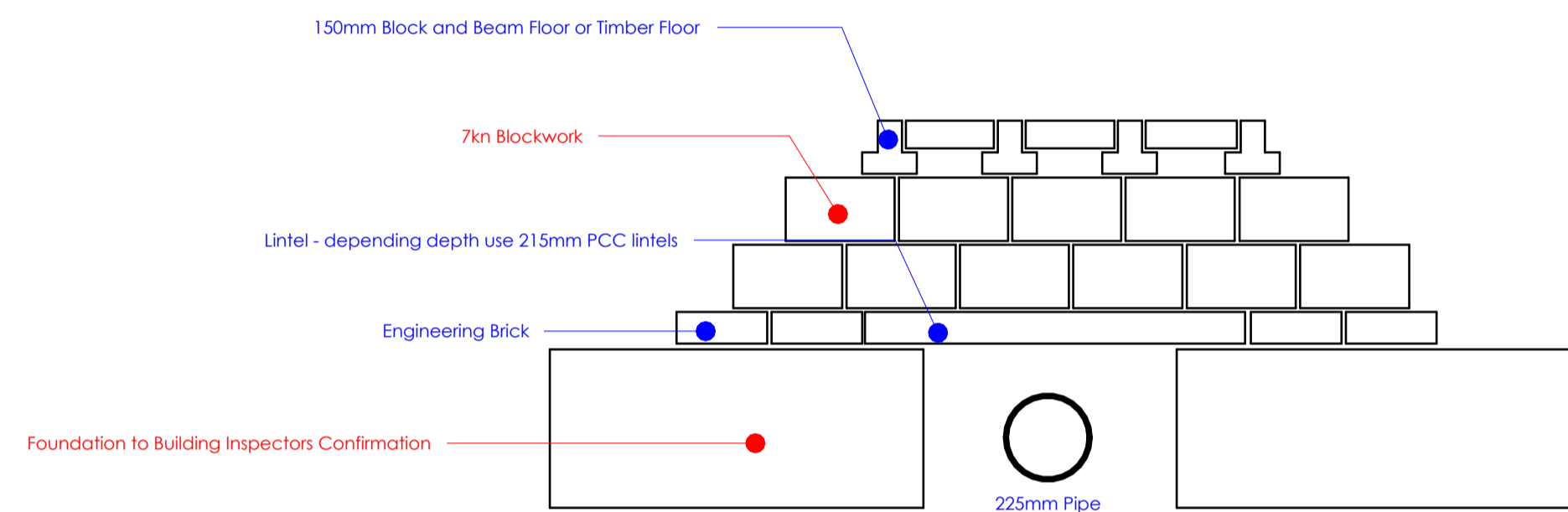
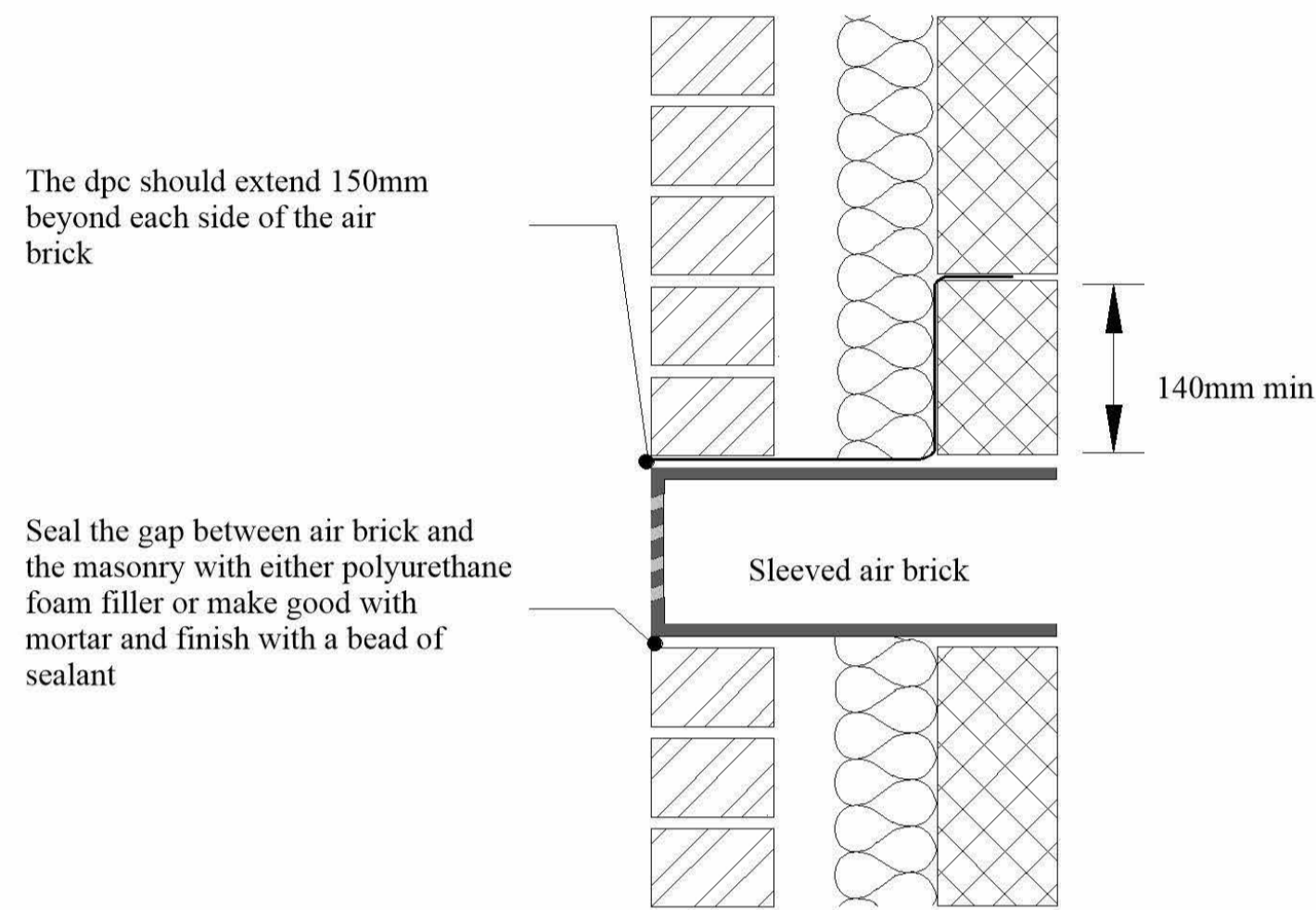
**ABOVE GROUND DRAINAGE**

All new above ground drainage and plumbing to comply with BS EN 12054-2 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)

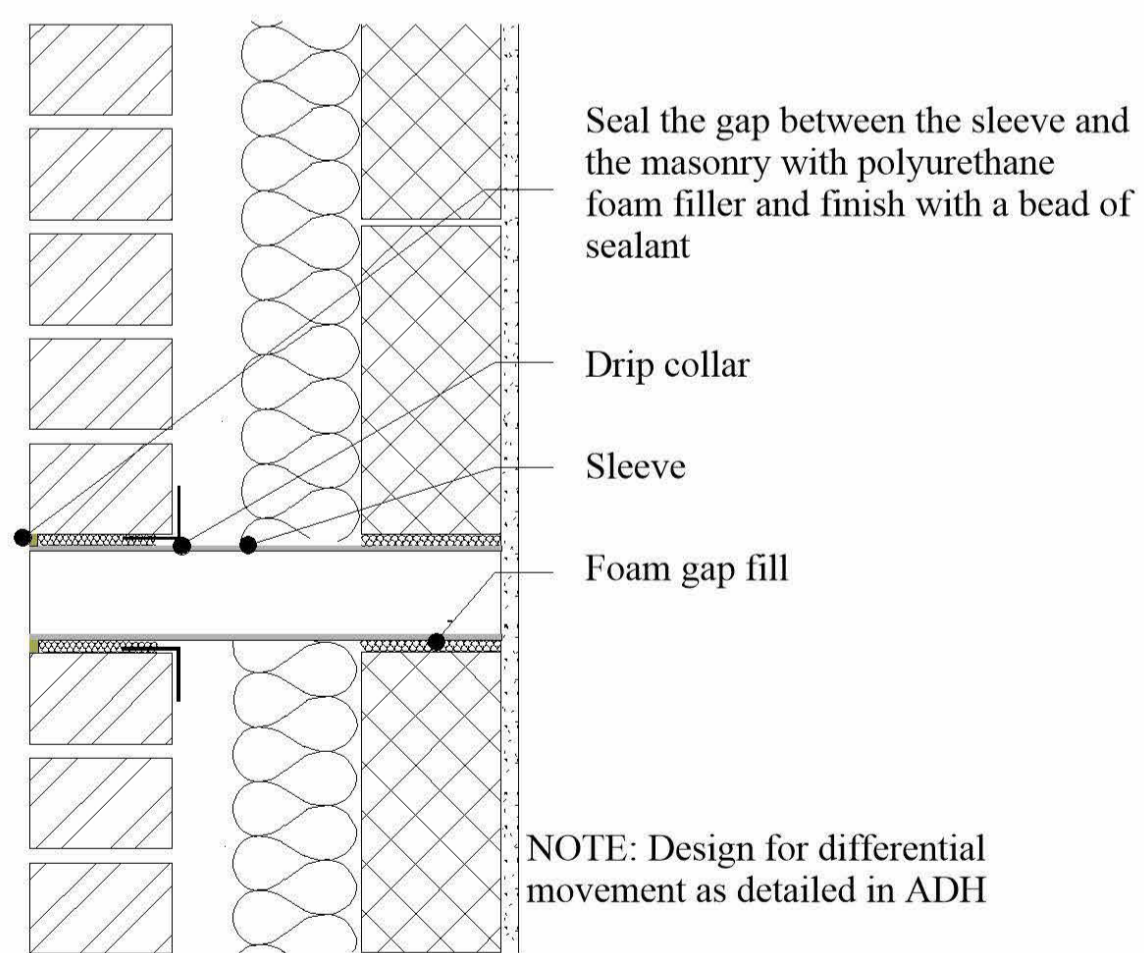
Wash basin - 1.7m for 32mm pipe 3m for 40mm pipe  
Bath/shower - 3m for 40mm pipe 4m for 50mm pipe  
W/C - 6m for 100mm pipe for single WC  
All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.  
Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.  
Waste pipes not to connect on to SVP within 200mm of the WC connection.  
Supply hot and cold water to all fittings as appropriate.

**CAVITY TRAY OVER SLEEVED AIR BRICK**

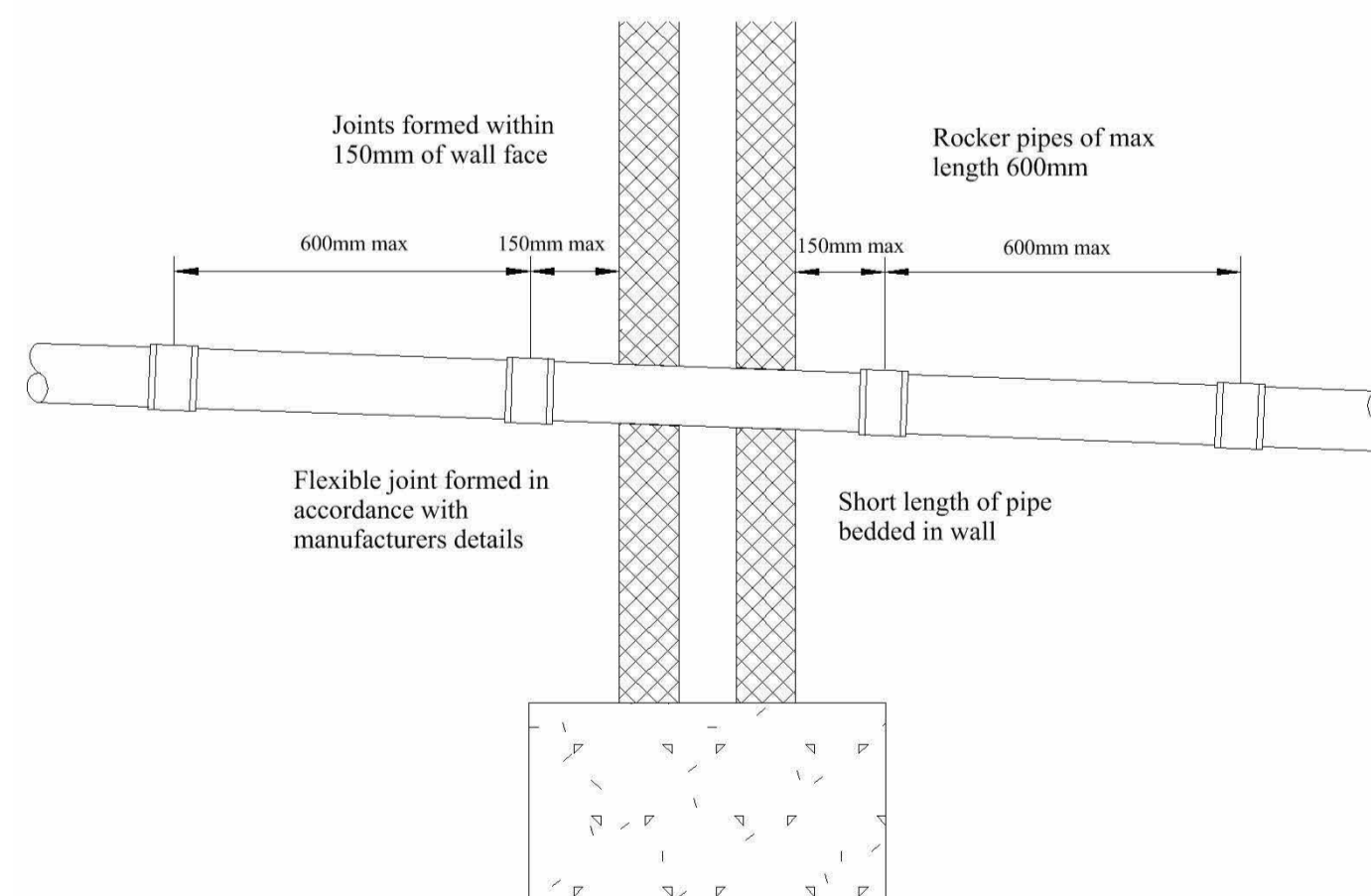


For Visualisation Purposes Only - Do Not Scale

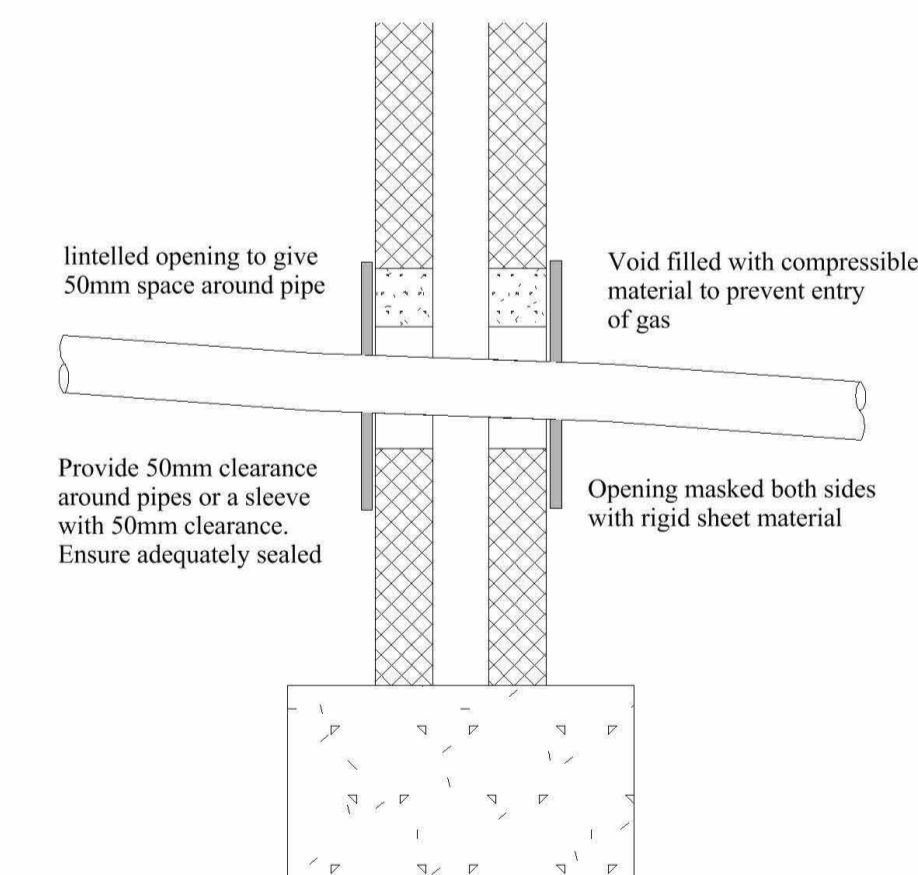
**DRIP COLLAR ON CIRCULAR PIPE**



**PIPES BEDDED IN WALLS**



**PIPES PASSING THROUGH WALL (LINTEL)**



**Wall Structure Key:**

- Cavity Wall: Render
- Cavity Wall: Face Brick
- Block Work: 100mm
- Studwork Wall: 75mm
- Metal Frame: 70mm
- Solid Brick Wall: 215mm
- Solid Block Wall: 215mm
- Structural Opening
- Walls Removed

Please note:  
All drawings are for the purposes of planning only unless marked for construction.

All builders to site measure to confirm measurements.

Report all discrepancies to the person named below, do not proceed without instruction.

BRO take no responsibility should any drawing/s unless specified are used for building purposes and measurements aren't checked on site.

All drawings remain the property of BRO Architecture

**Drainage Key**

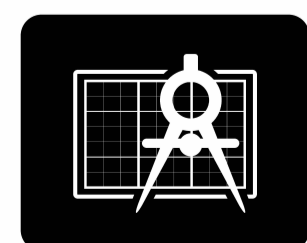
- S Storm Drainage
- MH Manhole
- FD Foul Drainage
- SVP Soil Vent Pipe
- GP Gulley Pot
- RWP Rainwater Pipe
- AD ACO Drain

**Ducting Colour & Use**

- Red Electric cable
- Yellow Gas Pipe
- Blue Water pipes
- Green Data/Comms
- Grey BT
- Purple Security - Cameras
- Orange Garden Lighting non Security

DRAWING NUMBER

**B1-5**



**BRO ARCHITECTURE**  
DESIGNING YOUR DREAMS

Mobile: 07508 856621  
Website: www.broarchitecture.co.uk  
E-mail: info@broarchitecture.co.uk

CLIENT

Mr Thorne

SITE ADDRESS

1 Tally Ho Lane Guiting  
Power GL54 5TY

PROJECT NAME

Proposed Rear Extension

DRAWING NAME

Proposed Build Over Specification

DATE  
08/14/22

DRAWN BY  
SH

CHECKED BY  
Checker

REV

SCALE (@ A1)

PROJECT NUMBER  
SH/BRO