All work to be in compliance with the current Building Standards Regulations (Scotland).
Use written dimensions only, do not scale from drawings.

Date printed 15/09/2020, by AndersonJG Scale printed 1:1 | Plot style ac_p
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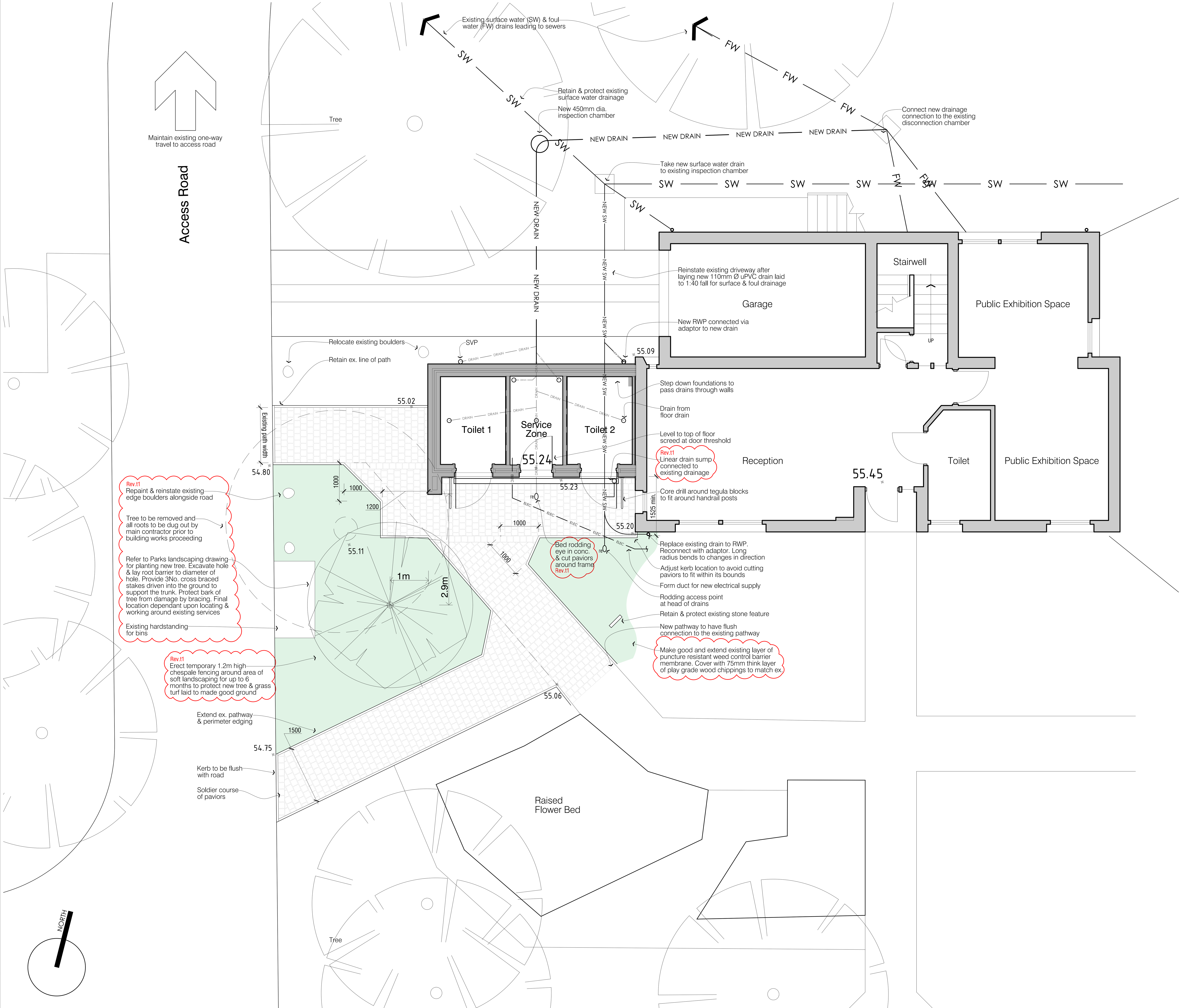
Existing surface water (SW) & foul water (FW) drains leading to sewers
SW
FW
Retain & protect existing surface water drainage
New 450mm dia. inspection chamber
NEW DRAIN
Connect new drainage connection to the existing disconnection chamber
Take new surface water drain to existing inspection chamber
NEW SW
Tree
Maintain existing one-way travel to access road
Access Road
Reinstate existing driveway after laying new 110mm Ø uPVC drain laid to 1:40 fall for surface & foul drainage
Garage
Stairwell
Public Exhibition Space
New RWP connected via adaptor to new drain
Relocate existing boulders
SVP
Retain ex. line of path
55.09
55.02
Existing path width
Toilet 1
Service Zone
Toilet 2
55.24
Step down foundations to pass drains through walls
Drain from floor drain
Level to top of floor screed at door threshold
Rev.t1 Linear drain sump connected to existing drainage
Reception
55.45
Toilet
Public Exhibition Space
54.80
Rev.t1 Repaint & reinstate existing edge boulders alongside road
1000
1200
55.23
Core drill around tegula blocks to fit around handrail posts
1525 min.
55.20
Tree to be removed and all roots to be dug out by main contractor prior to building works proceeding
55.11
1m
2.9m
Bed rodding eye in conc. & cut paviors around frame Rev.t1
Replace existing drain to RWP. Reconnect with adaptor. Long radius bends to changes in direction
Adjust kerb location to avoid cutting paviors to fit within its bounds
Form duct for new electrical supply
Refer to Parks landscaping drawing for planting new tree. Excavate hole & lay root barrier to diameter of hole. Provide 3No. cross braced stakes driven into the ground to support the trunk. Protect bark of tree from damage by bracing. Final location dependant upon locating & working around existing services
Rodding access point at head of drains
Retain & protect existing stone feature
Existing hardstanding for bins
New pathway to have flush connection to the existing pathway
Make good and extend existing layer of puncture resistant weed control barrier membrane. Cover with 75mm think layer of play grade wood chippings to match ex.
Rev.t1 Erect temporary 1.2m high chespale fencing around area of soft landscaping for up to 6 months to protect new tree & grass turf laid to made good ground
55.06
Extend ex. pathway & perimeter edging
1500
54.75
Kerb to be flush with road
Soldier course of paviors
Raised Flower Bed
Tree
NORTH

Site Plan as Proposed

Scale 1:50

scale 1:50 metres

General Notes

1. Existing Site & Surrounding Area : The site is part of a public park, close to a narrow one way access road & car parks, all which must be kept open at all times.
   The Rangers Centre is used as an office for staff and a resource partially open to the public.
   Public & staff access to be maintained from Car Park 4 to the front door.
   Staff use the Garage for storing materials. Access to the driveway & garage to be maintained, unless previously agreed with Head Ranger.
   Contractor will not be able to use existing facilities & services, other than to extend services to the extension.
   Demolition works to the Lochside Leisure Centre may be ongoing while the toilet works are ongoing. Main Contractors are expected to liaise with one another on both projects to allow works to proceed.
   The area is a known target for vandalism. Main Contractor to ensure that the site is protected & maintained during the project period.
2. Working Area : 2.0m high heras fencing to site boundaries with gate access for deliveries & staff entry. Allow for triangulating panels or other alternative means to ensure that the fencing is sound & secure at all times.
3. Site Compound & Facilities : Secure compound to be formed in Car Park 4 (south of building). Car Park to be shared with staff & public, to allow continued access to the building. 2.0m high heras fencing with gate to boundary.
   Main Contractor to supply & maintain secure office, storage, toilet & skip units within the compound.
4. Tree : Existing tree to be cut back by registered tree surgeon in agreement with Local Authority Parks dept. to reduce the overhanging tree canopy & root system.
5. External works to building
   5.1. Landscaping :
   Lift existing grass & retain for relaying upon completion. Water throughout the contract period. Prepare soil prior to relaying turf.
   Remove existing planting & stone features and lay aside for the Rangers staff to reinstate.
   Lay fresh tree bark to front garden area.
   5.2. Existing Centre Gable :
   Remove existing signage. Allow for refurbishing. Store on site for potential reinstatement.
   Bat Box : Take possession of bat box, mount on wall at high level at a position to be agreed with the Head Ranger.
   Remove existing trellis frame & planting to gable.
   5.3. Protect existing glazing adjacent to the works. Clean all windows after works are complete. Prepare gable for building works, as per drawings.
6. Pathway
   6.1. Uplift existing paviors & kerbing affected by landscaping works. Retain existing Tegula paving & reuse, mixing in with new stock to new pathway layout.
   6.2. New Tegula concrete paviors to match colour, size & form as existing. Machine cut to boundaries. All paving to be laid to 1:60 cross fall unless otherwise indicated. Concrete kerbing to bound all paving. Core drill for fitting around handrails.
   6.3. Pathway to be flush with existing linear drain, 15mm below finished floor level.
7. Drains : Form new 110mm Ø uPVC drains laid at 1:40 min. fall. Laid in 150mm pea gravel bed. Connect to existing drain. Changes in direction to be formed with long radius bends, with rodding access or inspection chamber.
8. Services Ducts : Provide new ducting for electrical & water supplies. Lay warning tape 150mm above service run.

Revision History

Version	Date	Description
d0	May 2020	Original Issue
t0	10/07/2020	Tender Issue
t1	Aug 2020	Connect linear drain outlet to existing surface water drainage. Drainage to match civil engineers drawings. Existing tree to be replaced

Project Title
Proposed Toilet Block Extension, Forfar Loch Rangers Centre, Craig O'Loch Road, Forfar DD8 1BT

Angus Council
Comhairle Aonghais
Property
Angus House
Orchardbank
Forfar
DD8 1AN
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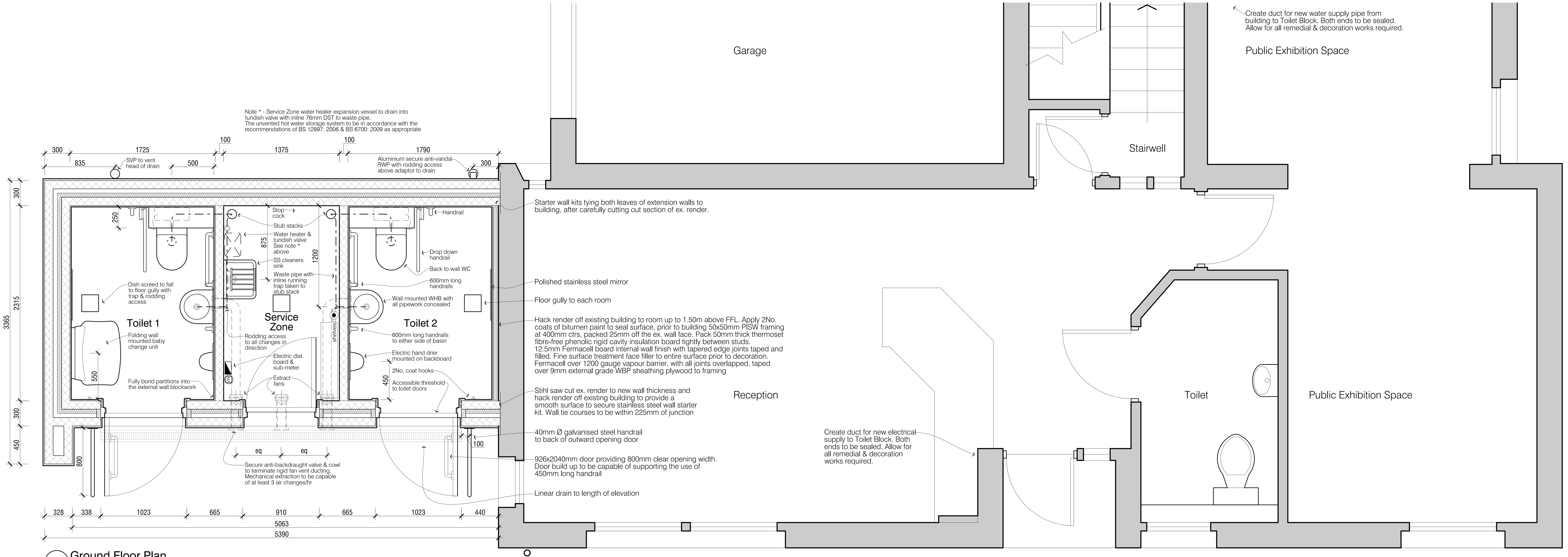
Drawing Title
Proposed Site Plan

Scale 1:50 @a1
Date May 2020
Drawn by JGA

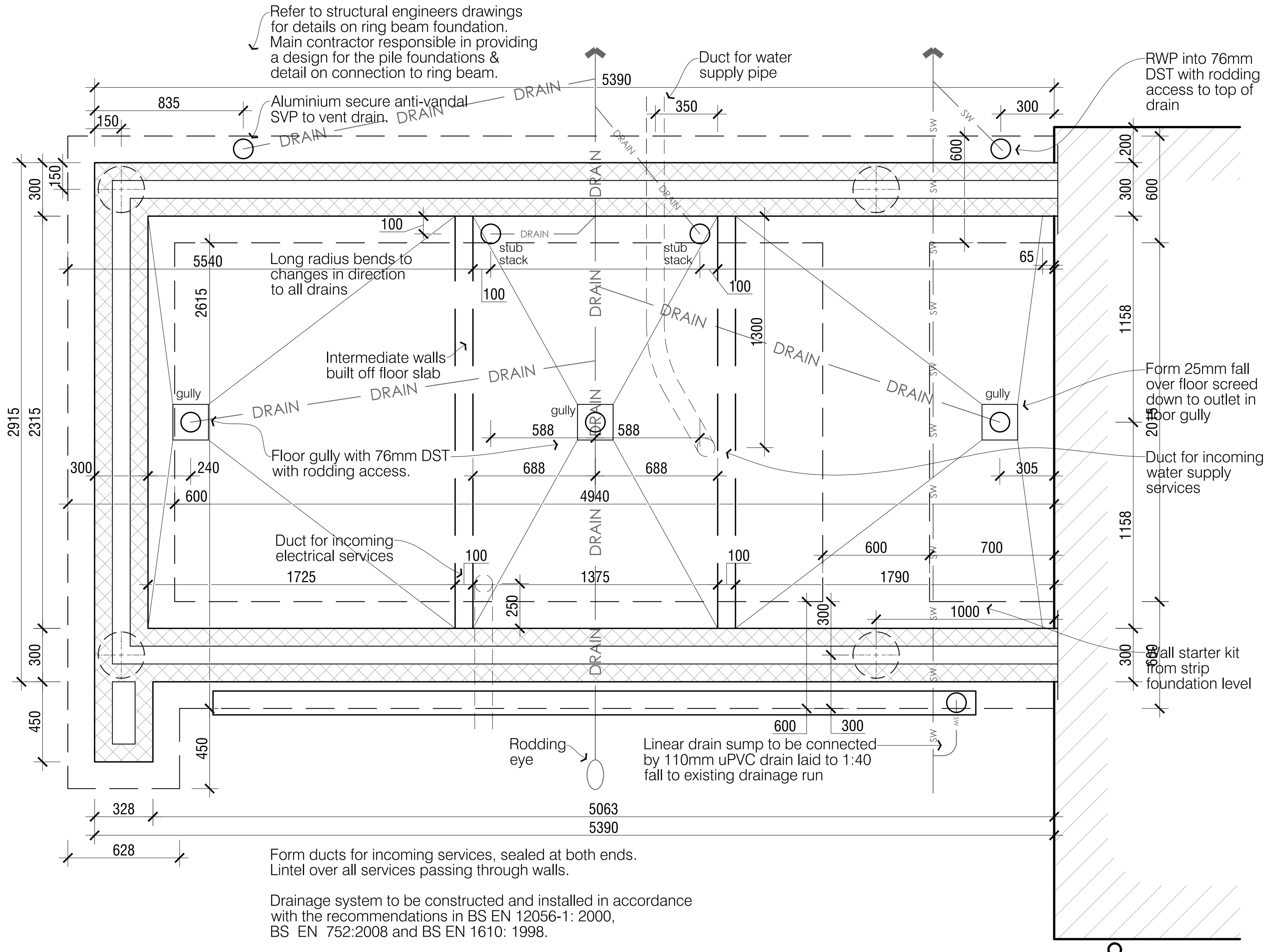
Project No.
09611028

Drawing No.
051

Revision
t1



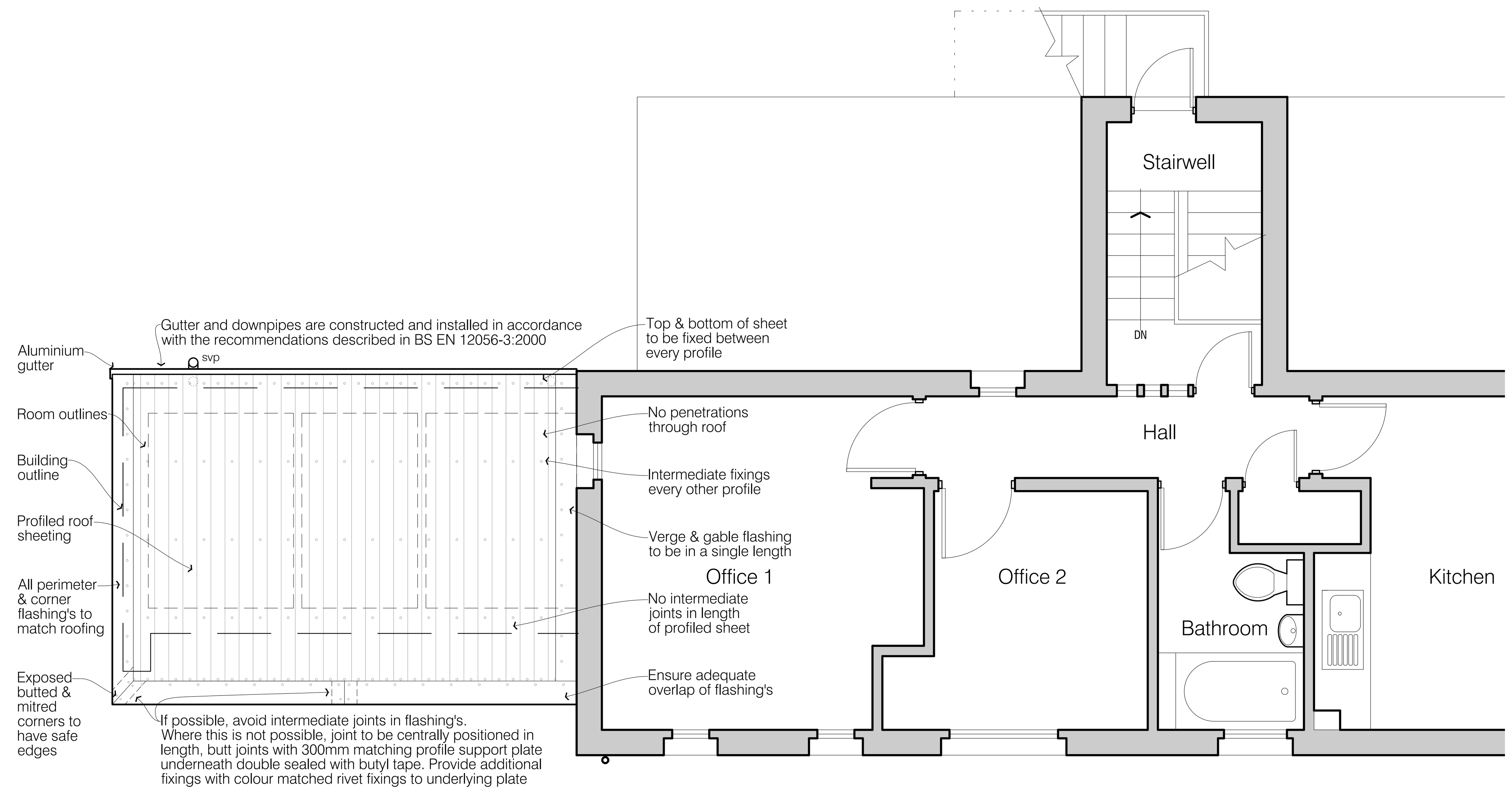
02 Ground Floor Plan
Scale 1:25



Form ducts for incoming services, sealed at both ends.
Lintel over all services passing through walls.

Drainage system to be constructed and installed in accordance with the recommendations in BS EN 12056-1: 2000, BS EN 752:2008 and BS EN 1610: 1998.

01 Foundation Plan
Scale 1:25



03 Roof / First Floor Plan
Scale 1:50

Project Title **Proposed Toilet Block Extension, Forfar Loch Rangers Centre, Craig O'Loch Road, Forfar DD8 1BT**	Angus Council Comhairle Aonghais **Property** Angus House Orchardbank Forfar DD8 1AN 03452 777 778 | assets@angus.gov.uk
Drawing Title **Proposed Toilet Block Foundation, Floor & Roof Plans**	Scale 1:25 @a1 1:50 Date May 2020 Drawn by JGA
Project No. **09611028**	Drawing No. **101** Revision **t1**

Date printed 15/06/2020, by AndersonJG Scale printed 1:1 Plot HPB: 20.pltt
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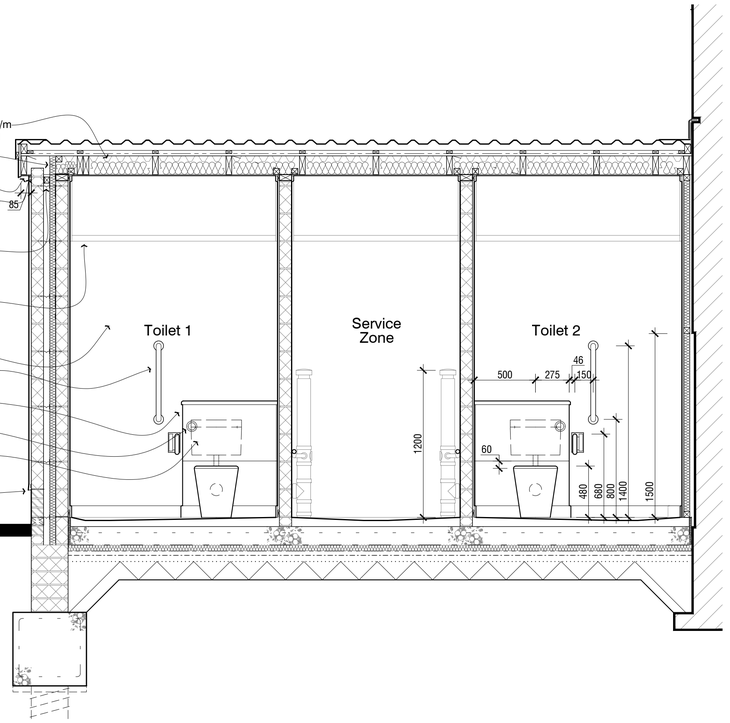
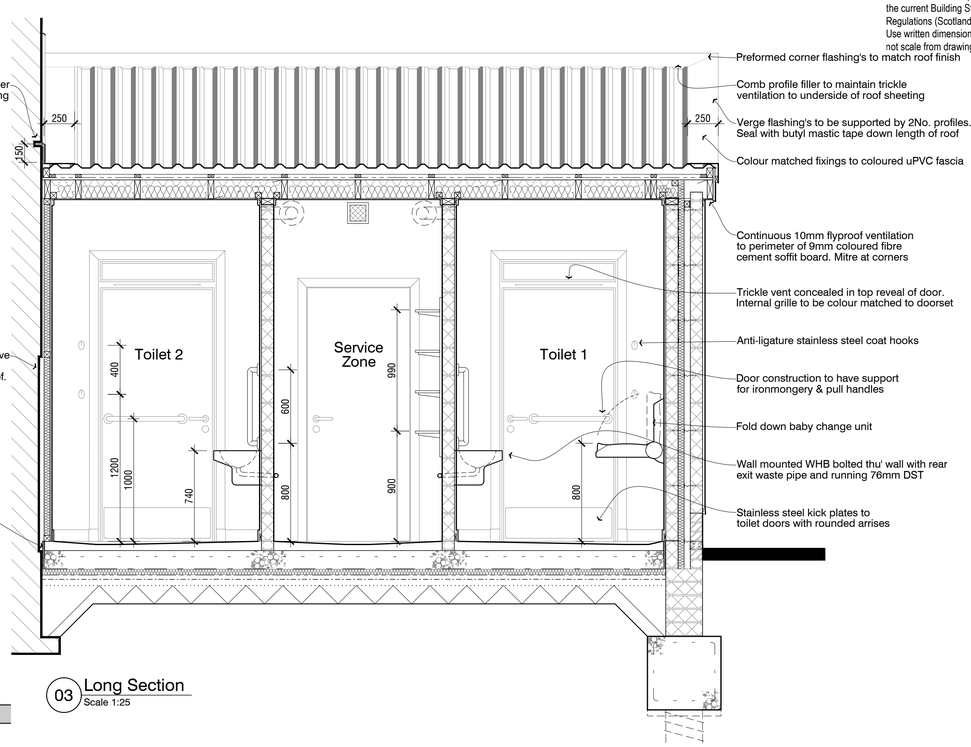
Provide roll panel vents to ensure 25,000mm²/m free air flow between ceiling board & decking
Provide additional support for insulation board extending between gable ladder
Support soffit board at perimeter & joints
Stop render stop bead 10mm from underside of soffit. Fill with a strip of expanding foam seal, finished with a polysulphide mastic to match colour of render
50x50mm PISW firestop wrapped in DPC at head of cavity.
Ensure that cavity ties extend up slope not more than 225mm from top of wallhead
14mm HW facing with one rounded corner on 35x15mm PISW ground to conceal wall plate & top of wallhead
Back (WC) walls of toilets to be in a contrasting colour
Plug & screw handrails through to blockwork. Colour caps to match handrail finish
Duct to be accessible for cistern with secure access fittings
Cistern flush controls to be towards the centre of the room in both toilets
Back to wall WC pan to be securely fixed to cistern framing. Neatly point around pan with a colour matched silicone sealant
Bellcast render stop bead at DPC level, with facing brickwork basecourse. Perpend weephole at ground level
3No. 100x100mm non-composite PCRC lintels with 150mm bearing over drainage
9mm fibre cement surround to drain passing under building to prevent entry of vermin.
600x600mm thick reinforced concrete ring beam set at level to allow passage of drain surrounded with 150mm pea gravel bed



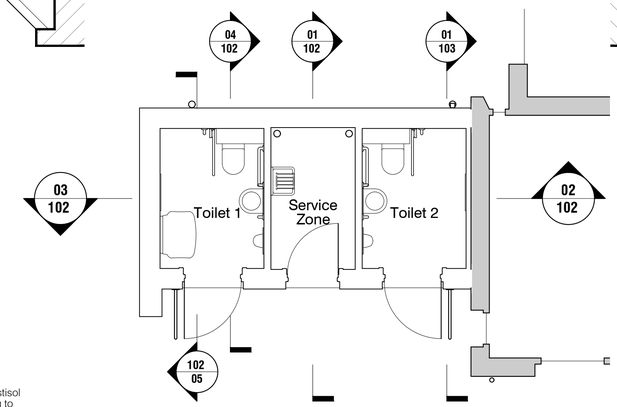
02 Long Section
Scale 1:25

Dress underlay up wall face & pin under 9mm thick external grade WBP levelling backing board for 2 piece flashing. Secure top flashing plate 45mm min. into raggle in existing wall. Pitch to match new roof.
Seal raggle with lead wedges & lead mastic sealant.
Colour caps to match roof finish to fixings to vertical face.
Apply bitumen paint up to 1.50m above FFL to seal existing wall.
Strap, line & insulate gable wall in roof.
Perimeter insulation & DPM to floor perimeter
Seal perimeter of slab & all services penetrations with gas barrier system

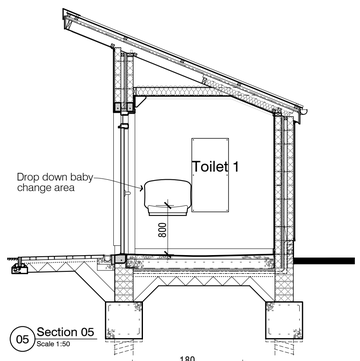
Preformed corner flashing's to match roof finish
Comb profile filler to maintain trickle ventilation to underside of roof sheeting
Verge flashing's to be supported by 2No. profiles. Seal with butyl mastic tape down length of roof
Colour matched fixings to coloured uPVC fascia
Continuous 10mm flyproof ventilation to perimeter of 9mm coloured fibre cement soffit board. Mitre at corners
Trickle vent concealed in top reveal of door. Internal grille to be colour matched to doorset
Anti-ligature stainless steel coat hooks
Door construction to have support for ironmongery & pull handles
Fold down baby change unit
Wall mounted WHB bolted thu' wall with rear exit waste pipe and running 76mm DST
Stainless steel kick plates to toilet doors with rounded arrises



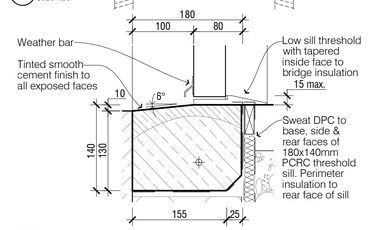
03 Long Section
Scale 1:25



07 Key Plan
Scale 1:50



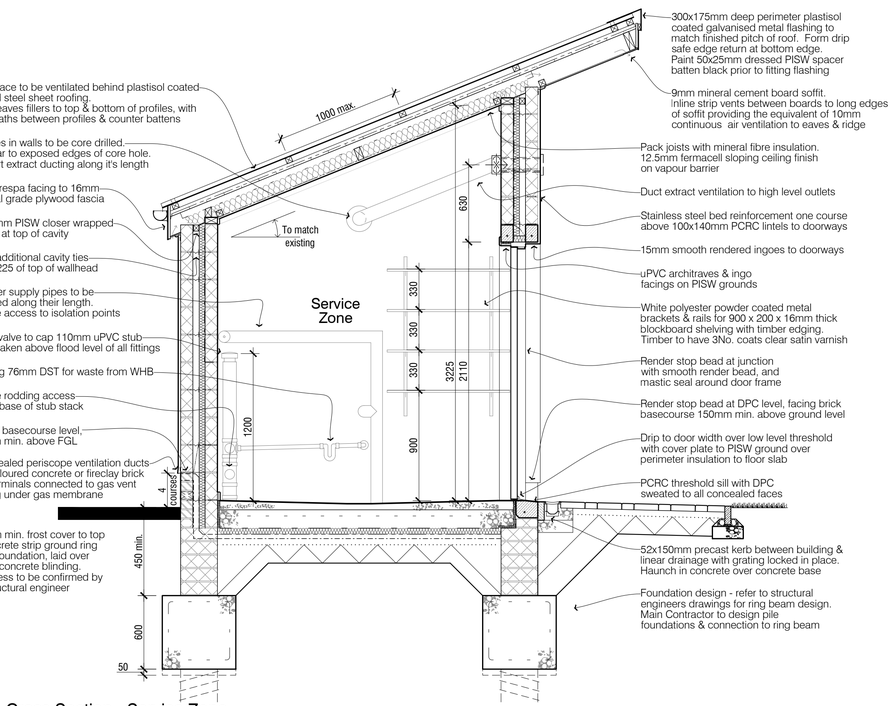
05 Section 05
Scale 1:50



06 Threshold Detail
Scale 1:5

Roofspace to be ventilated behind plastisol coated profiled steel sheet roofing.
comb eaves fillers to top & bottom of profiles, with clear paths between profiles & counter battens
All holes in walls to be core drilled. Fit collar to exposed edges of core hole. Support extract ducting along it's length
6mm Trespa facing to 16mm external grade plywood fascia
50x50mm PISW closer wrapped in DPC at top of cavity
Install additional cavity ties within 225 of top of wallhead
All water supply pipes to be insulated along their length. Provide access to isolation points
Durgo valve to cap 110mm uPVC stub stack, taken above flood level of all fittings
Running 76mm DST for waste from WHB
Provide rodding access cap to base of stub stack
DPC at basecourse level, 150mm min. above FGL
Rigid sealed periscope ventilation ducts with coloured concrete or fireclay brick vent terminals connected to gas vent matting under gas membrane
450mm min. frost cover to top of concrete strip ground ring beam foundation, laid over 50mm concrete blinding. Thickness to be confirmed by the structural engineer

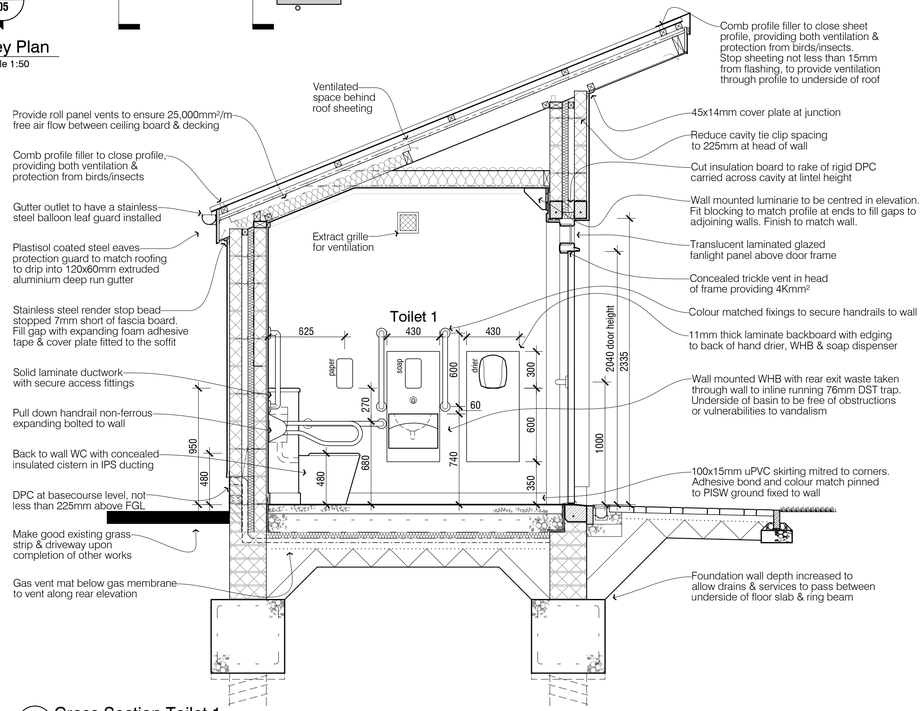
300x175mm deep perimeter plastisol coated galvanised metal flashing to match finished pitch of roof. Form drip safe edge return at bottom edge. Paint 50x25mm dressed PISW spacer batten black prior to fitting flashing
9mm mineral cement board soffit. Inline strip vents between boards to long edges of soffit providing the equivalent of 10mm continuous air ventilation to eaves & ridge
Pack joists with mineral fibre insulation. 12.5mm fermacell sloping ceiling finish on vapour barrier
Duct extract ventilation to high level outlets
Stainless steel bed reinforcement one course above 100x140mm PCRC lintels to doorways
15mm smooth rendered ingoes to doorways
uPVC architraves & ingo facings on PISW grounds
White polyester powder coated metal brackets & rails for 900 x 200 x 16mm thick blockboard shelving with timber edging. Timber to have 3No. coats clear satin varnish
Render stop bead at junction with smooth render bead, and mastic seal around door frame
Render stop bead at DPC level, facing brick basecourse 150mm min. above ground level
Drip to door width over low level threshold with cover plate to PISW ground over perimeter insulation to floor slab
PCRC threshold sill with DPC sweated to all concealed faces
52x150mm precast kerb between building & linear drainage with grating locked in place. Haunch in concrete over concrete base
Foundation design - refer to structural engineers drawings for ring beam design. Main Contractor to design pile foundations & connection to ring beam



01 Cross Section - Service Zone
Scale 1:25

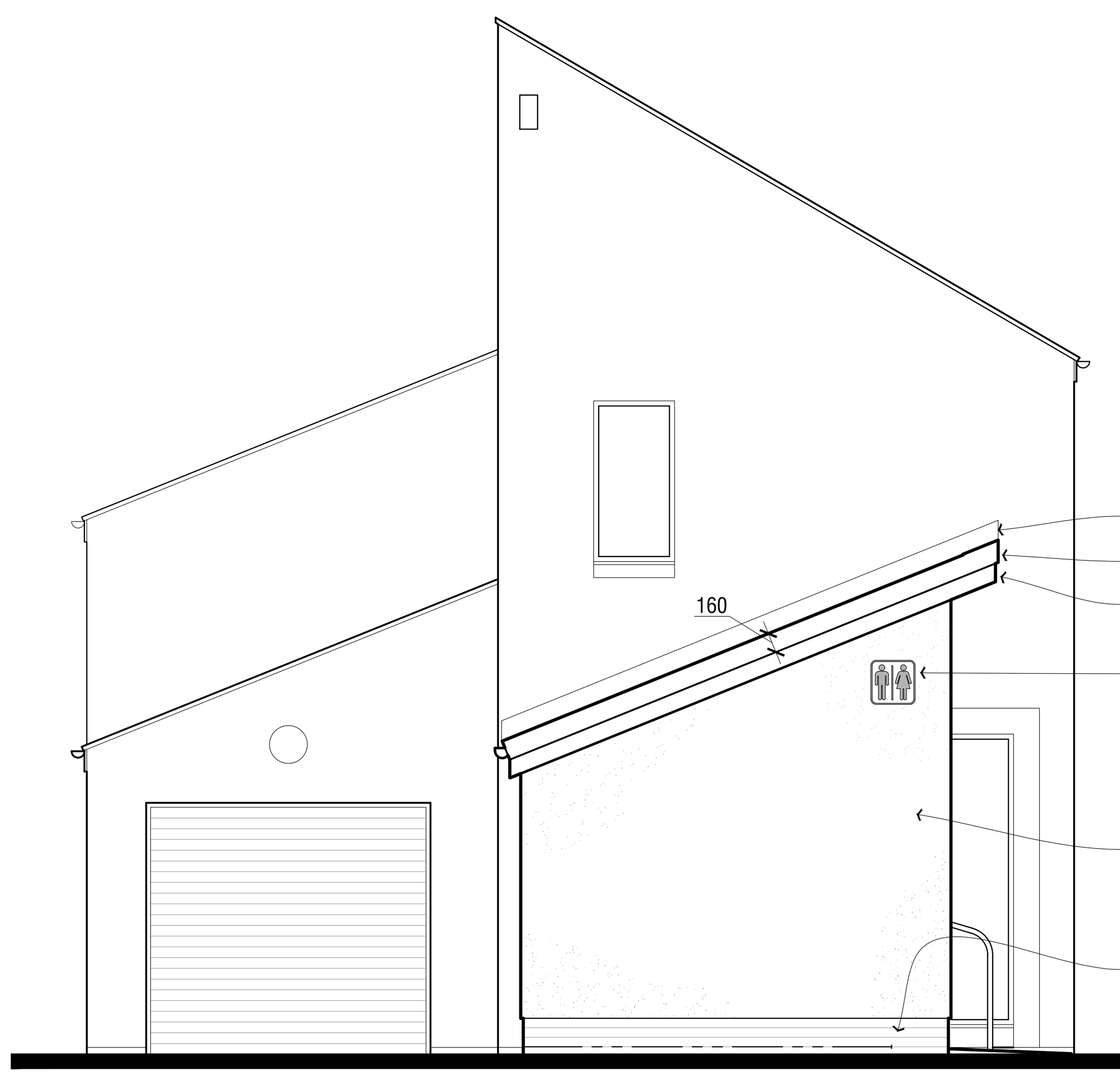
Ventilated space behind roof sheeting
Provide roll panel vents to ensure 25,000mm²/m free air flow between ceiling board & decking
Comb profile filler to close profile, providing both ventilation & protection from birds/insects
Gutter outlet to have a stainless steel balloon leaf guard installed
Plastisol coated steel eaves protection guard to match roofing to drip into 120x60mm extruded aluminium deep run gutter
Stainless steel render stop bead stopped 7mm short of fascia board. Fill gap with expanding foam adhesive tape & cover plate fitted to the soffit
Solid laminate ductwork with secure access fittings
Pull down handrail non-ferrous expanding bolted to wall
Back to wall WC with concealed insulated cistern in IPS ducting
DPC at basecourse level, not less than 225mm above FGL
Make good existing grass strip & driveway upon completion of other works
Gas vent mat below gas membrane to vent along rear elevation

Comb profile filler to close sheet profile, providing both ventilation & protection from birds/insects. Stop sheeting not less than 15mm from flashing, to provide ventilation through profile to underside of roof
45x14mm cover plate at junction
Reduce cavity tie clip spacing to 225mm at head of wall
Cut insulation board to rake of rigid DPC carried across cavity at lintel height
Wall mounted luminarie to be centred in elevation. Fit blocking to match profile at ends to fill gaps to adjoining walls. Finish to match wall.
Translucent laminated glazed fanlight panel above door frame
Concealed trickle vent in head of frame providing 4Kmm²
Colour matched fixings to secure handrails to wall
11mm thick laminate backboard with edging to back of hand drier, WHB & soap dispenser
Wall mounted WHB with rear exit waste taken through wall to inline running 76mm DST trap. Underside of basin to be free of obstructions or vulnerabilities to vandalism
100x15mm uPVC skirting mitred to corners. Adhesive bond and colour match pinned to PISW ground fixed to wall
Foundation wall depth increased to allow drains & services to pass between underside of floor slab & ring beam



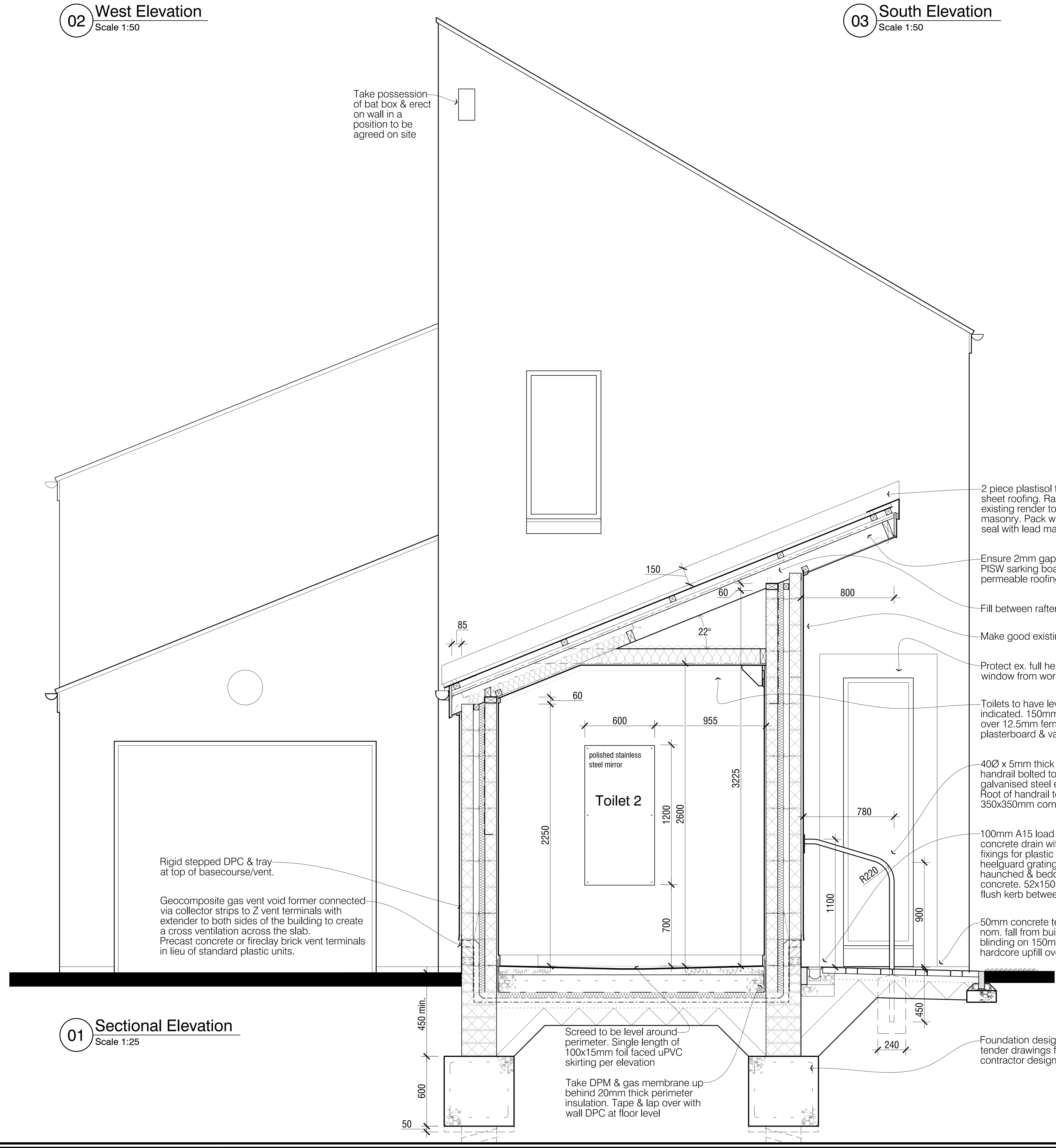
04 Cross Section Toilet 1
Scale 1:25

Project Title **Proposed Toilet Block Extension, Forfar Loch Rangers Centre, Craig O'Loch Road, Forfar DD8 1BT**	**Property** Angus House Orchardbank Forfar DD8 1AN
Drawing Title **Proposed Toilet Block Long & Cross Sections**	Angus Council Comhairle Aonghais 03452 777 778 | assets@angus.gov.uk
	Scale 1:25 @a1 1:50 Date May 2020 Drawn by JGA
Project No. **09611028**	Drawing No. **102** Revision **t1**

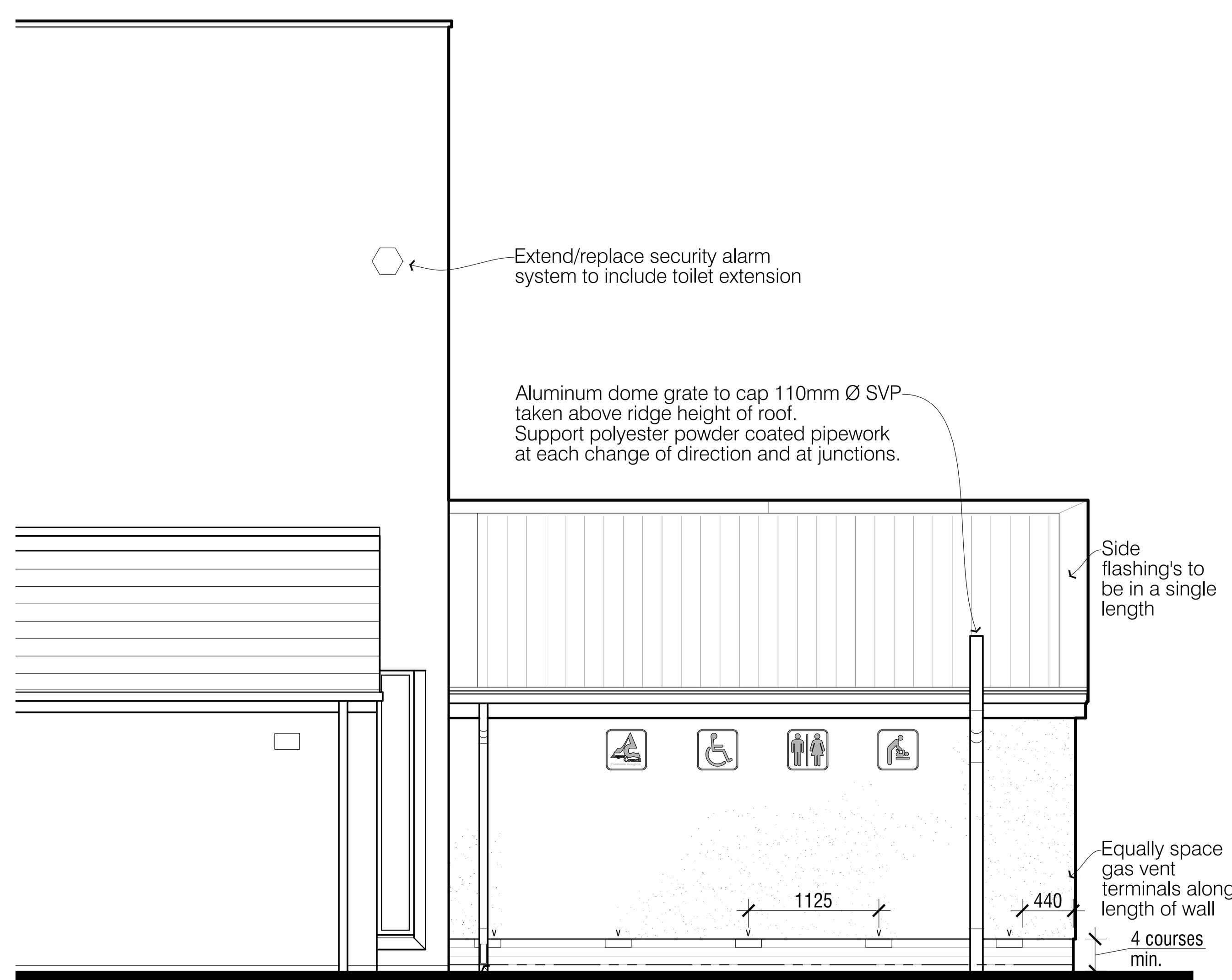


02 West Elevation
Scale 1:50

03 South Elevation
Scale 1:50



01 Sectional Elevation
Scale 1:25



04 North Elevation
Scale 1:50

Date printed 15/09/2020, by AndersonJG Scale printed 1:1 | Plot style ac_ps.stb
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General Notes

1. Generally : Protect work site from unauthorised access & vandalism. All blockwork/brickwork to be protected after each working day.
2. For structural drawings refer to structural engineers drawings.
3. Groundworks : Existing ground to be confirmed once the Covid-19 lockdown has lifted. Excavate to reduced levels and build up in 150mm layers of consolidated hardcore upfill.
4. Founds : Foundation ring beam to structural engineers requirements. Allow for excavating in trenches to provide 450mm min. frost cover to top of found. Protect adjacent ground and roadway from subsidence &/or collapse. Foundation levels to be low enough to ensure new & existing drain passes above strip foundation. Lintel over drains passing through wall.
Main Contractor to provide a design & build solution for the pile foundations. Ensure capping to piles are designed in liason with ring beam structural engineers designs.
5. Insulation to the fabric of building is to provide nominal frost protection to building.
6. Floor : 75mm thick sand/cement screed, laid to 25mm fall to floor gully outlet with 76mm DST & rodding access. Scabble surface of 150mm thick concrete floor slab to provide a key. 1200 gauge DPM polythene separating membrane over 50mm thick floor grade PIR insulation board with 0.022 W/mK thermal conductivity, laid over Visqueen Gas Barrier or equal & approved multi-layer reinforced polyethylene gas barrier with a 20 micron aluminium foil suitable for use as a DPM, as well as a methane/carbon dioxide & radon barrier. Foil face to be protected from works. To have BBA accreditation & conform to the specification requirements of BS 8485:2015 + A1:2019, BR 211:2015 & all Characteristic Gas Situation (CS) ground gas regimes. To be supplied & installed in accordance with the manufacturers written instructions & details by a contractor experienced in gas barrier installations. To include all accessories, included double sided jointing tape, foil tape lap, preformed top hat units for providing an air tight seal around all services pop ups, corner preformed units and detailing strips for continuation of barrier at perimeters & junctions. Fit proprietary clamping collars to seal around floor gullies.
Gas vent matting to comprise a goocomposite void former comprising a cuspated high density polyethylene (HDPE) core bonded to a nonwoven polypropylene geotextile filter membrane to the length & width of the building slab. Vent matting to be connected to adjustable Z cavity vent ducting with extension pieces as required with proprietary mat connectors. To be vented to both sides of building to provide cross ventilation.. 50mm sand blinding over 150mm min. thick consolidated hardcore upfill. All perforations through the gas membrane to be sealed with fitted proprietary sealed designed each circumstance. To be carried out to achieve 3.5 under BS 8485 and installed in accordance with CIRIA 735.
7. Walls : 21mm thick dry dash render finish to 7.3 N/mm² concrete cavity blockwork. 100mm cavity partially filled with 50mm thick thermoset fibre-free phenolic rigid cavity insulation board with 0.018 W/mK thermal conductivity, secured with clips attached to stainless steel cavity wall ties at staggered 900 (h) by 450mm (v) centres, reduced at openings, corners & perimeters to 225mm.
Internal finish to be 15mm smooth cement plaster finish.
Basecourse to be F2/S2 grade facing brickwork, with bucket handle struck coloured mortar joints.
Stainless steel bed mesh reinforcement laid to course 215mm above openings.
8. Roof : 34/1000 box profile 0.7mm thick Plastisol coated galvanised steel sheet secured with tek screws with colour matched caps to 50x50mm PISW battens at 1.0m max. ctrs. 50x25mm PISW counterbattens over permeable roofing underlay on 150x16mm PISW sarking boards with 2mm air gap between boards, over 147x47mm C16 PISW roof joists at 600mm centres. 150mm thick mineral fibre insulation board (0.044 W/mK) between rafters fitted tight to underside of roll panel vents to ensure 25,000mm²/m free air flow to roof space supported by 1200 gauge vapour barrier, with additional PISW timber support as necessary. All VCB joints to be overlapped and taped in line with the rafters.
Each end of each joist to be secured with galvanised steel joist clips secured to 100x50mm PISW wallplate. Secure wallplate to blockwork by once bent 1200x5x3 galvanised steel tie down strap, secured to outside of inner leaf at 950mm max. ctrs, and to either side of each opening. 50mm solid PISW blocking where indicated. 12.5mm Fermacell board internal ceiling finish with tapered edge joints taped and filled. Fine surface treatment face filler to entire surface prior to decoration.
9mm self finished calcium silicate fibre cement to soffit.
9. Doors : 54mm thick polyester coated galvanised steel insulated doors, suitable for securely mounting a pull handle. All ironmongery to be in grade 316 (A4) stainless steel. D lever bolt through handle with toilet mortice lock and separate dead lock mortice lock. Door & ironmongery, including self closer to comply with requirements of BS:8300.
Level 5 obscurity acid etch finish to mid face of laminated glass skylight over room door.
Rain defectors over low sill weather threshold bar & above door.
10. Sanitaryware : WC & WHB to be a vandal resistant, anti-bacterial units suitable for an accessible toilet from the following material options to be priced for :-
    10.1. Grade 316 EN 1.4401 stainless steel
    10.2. Gloss white solid polymer grade, suitable for prison use
    10.3. Only one material to be chosen for all sanitaryware.
11. All pipework to be insulated and fitted with trace heating tape for extent of length of run. All to have brass isolation valve fittings.
12. WC : Back to wall or wall hung raised and extended pan with 76mm DST, complete with coloured seat 480mm above FFL. Concealed 4.5l insulated cistern in duct, protected by locked duct. Flush control by stainless steel push or PIR sensor.
13. WHB : Wall mounted handwash basin with rear waste exit to 32mm Ø waste pipe fitted with inline 76mm DST into connection to drain. Basin to provide sufficient clear room for knee room for accessible use.
Sanitaryware locations to be reviewed upon Main Contractor providing technical information on choice of units.
14. Handrails : 35mm dia. coloured resin coated metal fixed & drop down handrails to be bolted to masonry with colour capped fixings.
600mm long wall handrails, 450mm handrail to inside of external door.
800mm nom. long drop down handrail.
15. Drainage : system to be constructed and installed in accordance with the recommendations in BS EN 12056-1: 2000, BS EN 752:2008 and BS EN 1610: 1998.
The rainwatergoods will be constructed and installed in accordance with the recommendations described in BS EN 12056-3: 2000
16. Power : New lighting and small power installations including all associated accessories and equipment, in compliance with BS 7671:2018.
17. Extract Fans : Mechanical extraction to be capable of at least 3 air changes/hr.
18. Service Zone Water Heating : The unvented hot water storage system to be in accordance with the recommendations of BS 12897: 2006 & BS 6700: 2009 as appropriate.
Heatrae Multipoint 15 or equal water heating unit with expansion vessel and tundish valve discharging to the cleaners sink waste outlet.
Unit to be Kiwa approved, CE marked and IPX4 rated.
19. Pipework : All hot and cold water, heating pipework shall be trace heated & insulated to BS 5422 and fire performance to Class 1 & tested to BS 476-7 throughout its whole length.
All pipes and fittings should be supplied and installed in accordance with the relevant British Standards and Scottish Water Regulations. In addition, all fittings and materials used shall require to be WRAS approved

Project Title **Proposed Toilet Block Extension, Forfar Loch Rangers Centre, Craig O'Loch Road, Forfar DD8 1BT**	Angus Council Comhairle Aonghais **Property** Angus House Orchardbank Forfar DD8 1AN 03452 777 778 | assets@angus.gov.uk
Drawing Title **Proposed Toilet Block Section, Elevations General Notes**	Scale 1:50 @a1 1:25 Date May 2020 Drawn by JGA
Project No. **09611028**	Drawing No. **103** Revision **t1**