

PLAN AT GROUND FLOOR LEVEL AS PROPOSED (1:50)

General repair of timber framing required including: Repair or replacement of ALL timber members (Studs/soleplates/headplates/diagonal braces etc) affected by rot and associated defects.

Main timber cross beams to be reconnected to main timber posts and be generally strengthened as described on the first floor plan in order to support additional loading from new mezzanine floor.

Perimeter plinth wall to be repaired and re-pointed where necessary. Note! Perimeter plinth wall may require underpinning subject to form of construction of existing footing. Ref to F477-S-03.

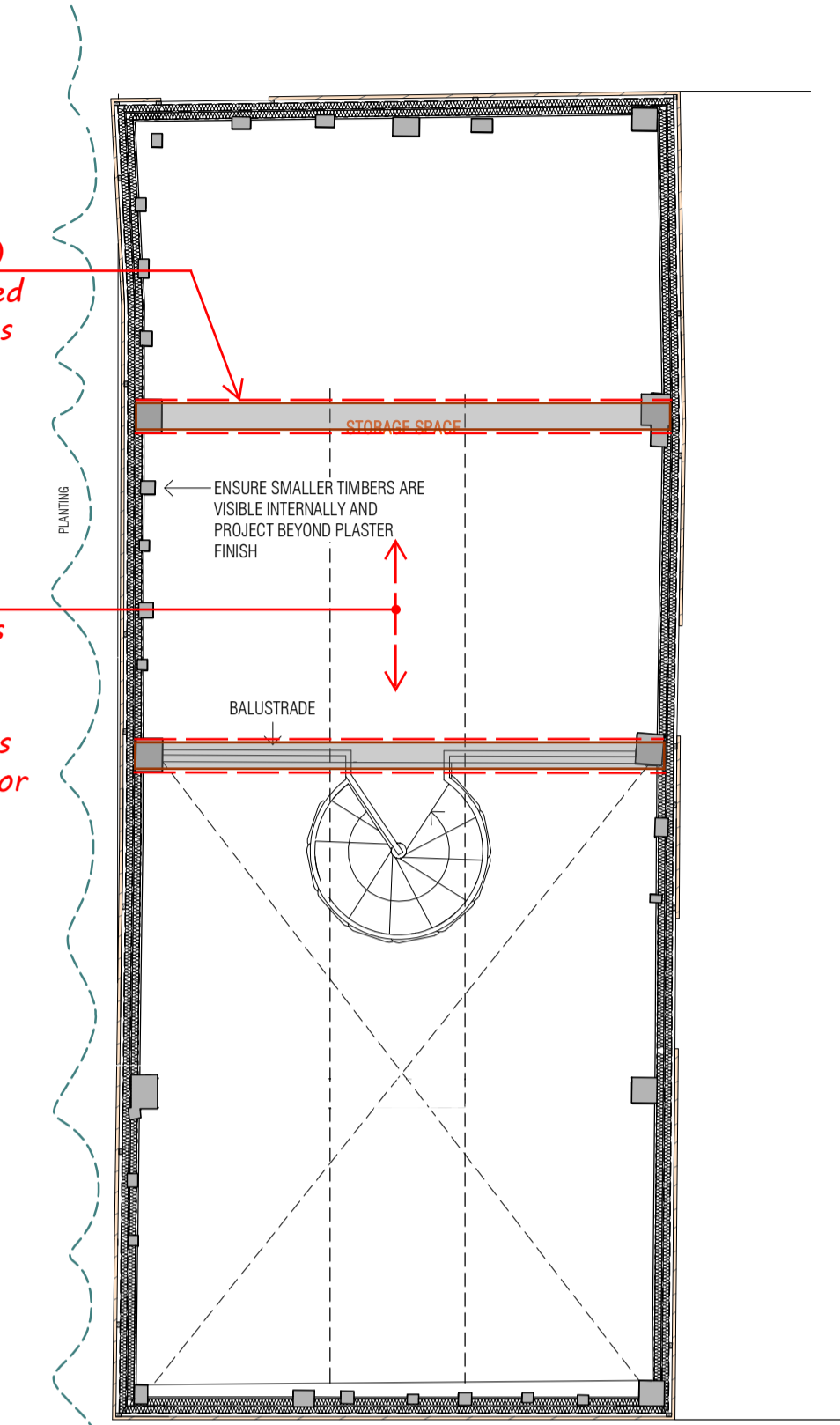
2 No 120x10thk (S275) steel flitch plates, bolted to sides of existing cross beams using M12 bolts with 36x3thk steel washers at 400x80 staggered centres, see F477-S-03 for details

Introduce 147x47 C24 grade timber floor joists at 400 max centres, spanning onto existing main timber cross beams to create mezzanine floor space

Foundations to spiral stair set to be confirmed

Door posts to be 2 No 195x72 C24's fully screwed together throughout height using M6x120mm long screws at 150x100 staggered centres refer to F477-S-03 for details

Flitch beam over Bi-Fold door set comprising: 2 No 195x72 C24 grade timber beams, sandwiching a central 150x8thk (S275) steel flitch plate, refer to F477-S-03 for details



PLAN AT MEZZANINE FLOOR LEVEL AS PROPOSED (1:50)

General repair of timber framing required including: Repair or replacement of ALL timber members (Studs/soleplates/headplates/diagonal braces etc) affected by rot and associated defects.

Main timber cross beams to be reconnected to main timber posts and be generally strengthened as described on the first floor plan in order to support additional loading from new mezzanine floor.

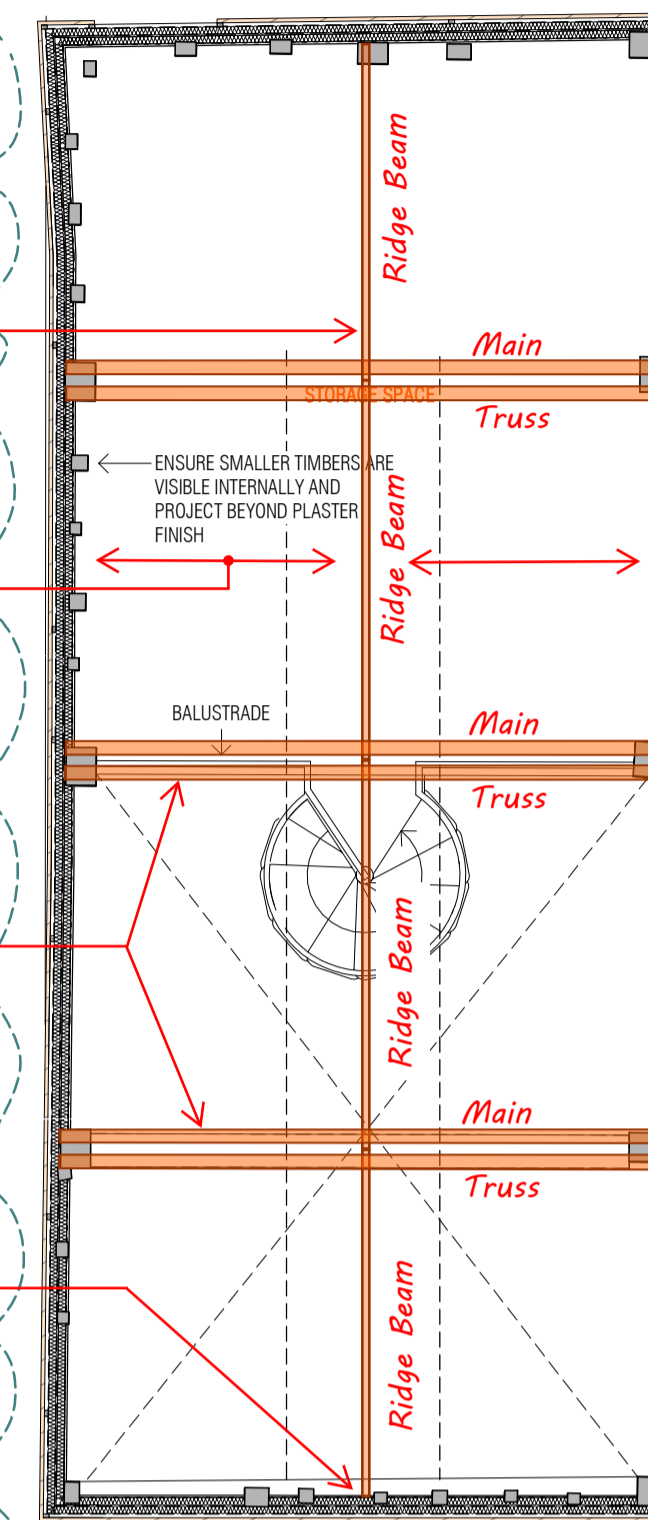
Renovation of perimeter timber frame walls to incorporate OSB sheathing to enhance structural integrity and overall stability of building.

219x72 C24 Grade ridge beam

147x47 C24 Grade timber rafters at 600 max centres supported by ridge beam

New exposed 2 No 219x97 C24 grade timber twin truss rafters spaced either side of truss collar, refer to F477-S-02 for details

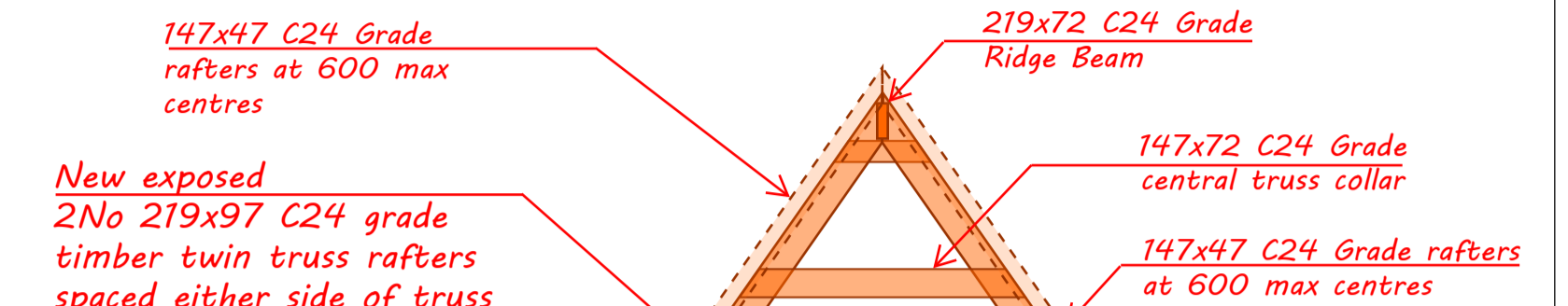
Timber posts/cripple studs introduce into the existing timber framing to support ends of ridge beam



PLAN AT ROOF LEVEL AS PROPOSED (1:50)

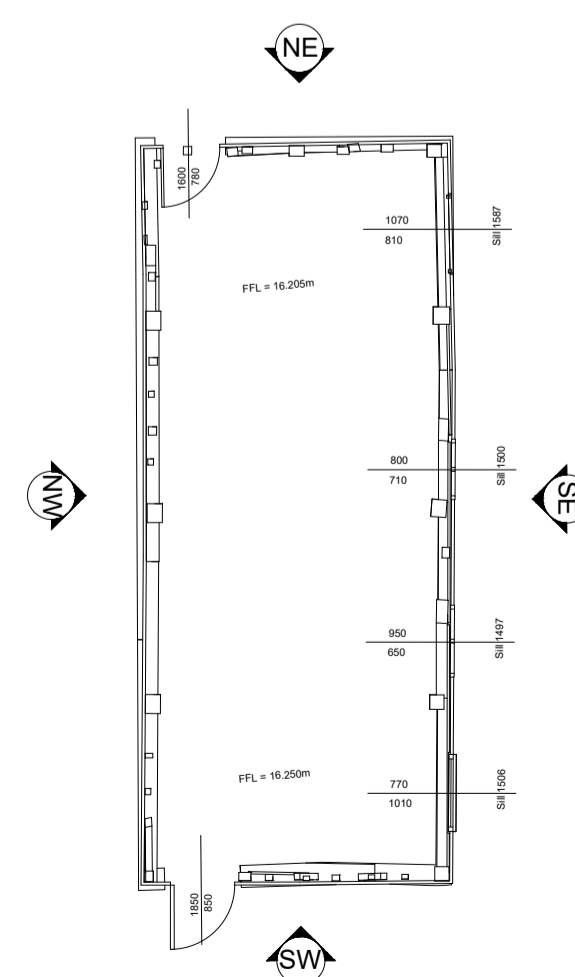
The existing roof is to be removed, retaining existing rafters for re-use where possible. New exposed timber trusses with raised collar on lines of existing main timber frames are to be introduced to support new timber ridge beam.

Roof construction to incorporate OSB sheathing to enhance structural integrity and overall stability of building.

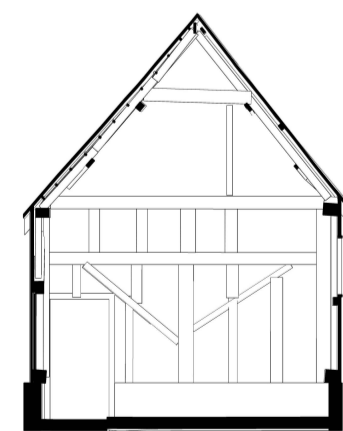


TYPICAL SECTION AS PROPOSED (1:50)

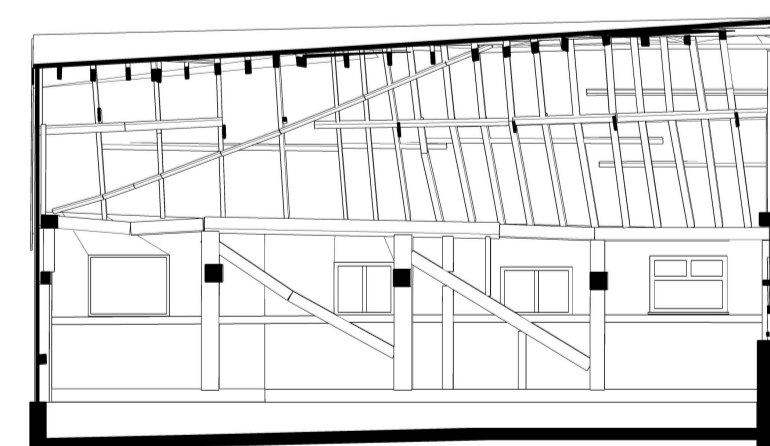
Whilst it is acknowledged that the existing timber framing to the barn will need to undergo a regime of general repair and renovation, which will inevitably require the introduction of new replacement members, every effort will be made to repair and retain as much of the existing timber framing as is practically possible.



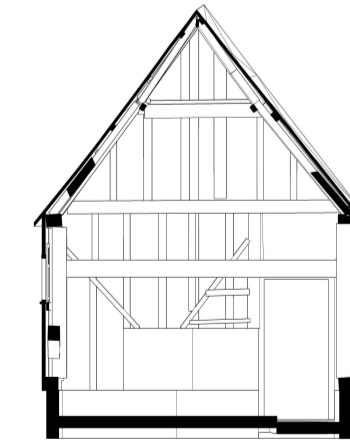
GROUND FLOOR PLAN (1:100)



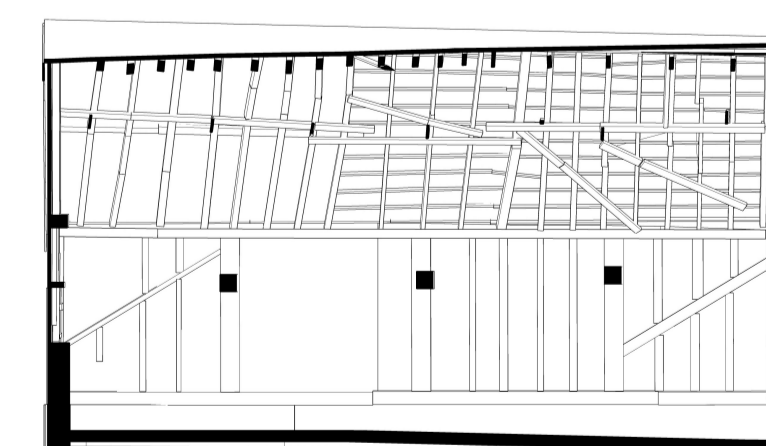
INTERNAL ELEVATION ON NE GABLE END (1:100)



INTERNAL ELEVATION ON SE SIDE WALL (1:100)



INTERNAL ELEVATION ON SW GABLE END (1:100)



INTERNAL ELEVATION ON NW SIDE WALL (1:100)

PLAN & ELEVATIONS AS EXISTING (1:50)

Whilst it is acknowledged that the existing timber framing to the barn will need to undergo a regime of general repair and renovation, which will inevitably require the introduction of new replacement members, every effort will be made to repair and retain as much of the existing timber framing as is practically possible.

Rev	Date	Description	By
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Project			
RENOVATION & CONVERSION OF EXISTING BARN, GRANGE FARM, POTASH LANE, WYVERSTON			
Title			
GENERAL ARRANGEMENT SHOWING STRUCTURAL PROPOSALS			
Drawn	J Parker/RH	Checked	NFP/JP
Scale	1:50 at A1 size	Date	AUG 2021
Drawing No	F477 - S - 01		Rev