

E. SCHEDULE OF WORK

1.0	GENERAL	
1.1	General: the works comprise roof repairs and maintenance including repairs to tile listings to nave roof, parapet copings to both north and south aisles; repairs to the copper roof of the north aisle	
1.2	Include for all preliminaries under Part C GENERAL PRELIMINARIES.	
1.3	Include for all SPECIFICATION CLAUSES, and APPENDIX items.	
1.4	Site: a compound within the churchyard in acceptable location to be agreed. Include for all heras fencing ensuring site safety and security. Provide notices as necessary.	
1.5	Protection: provide all protection to the Works. Assume that all fabric is precious and the contractor is to provide protection as necessary. The church is listed Grade I .	
1.6	Access and Security: the church shall remain open to public access during the course of the works.	
1.6.1	The PCC shall remain responsible for the opening and closing of the church each day.	
1.7	Roof Alarm: there is no roof alarm.	
1.8	Utilities: electricity and water may be obtained free issue from within the church.	

1.9	<p>CDM 2015 Regulations - Health and Safety, and Welfare Provision: comply with all health and safety legislation and provisions and duties as necessary as Principal Contractor under CDM 2015 Regulations. See Preliminaries for Pre-Construction Information concerning significant hazards.</p> <p>Include for all Covid-19 provisions to include a thorough clean down with sanitiser of all surfaces touched at the end of each day.</p> <p>There is no toilet within the church, so do include for a chemical toilet.</p>	
1.10	<p>Faculty: do not proceed with the works until a Faculty, or List B consent, has been obtained and a copy provided.</p>	
1.11	<p>Read all Architect's Dwgs Nos. 20-27/01, 02, 03, 04, 05, 06, 07, 08, 09, and 10 and Schedule of Works, Specification Clauses and Appendix enclosures together.</p> <p>It is the Contractor's duty to point out the discrepancy/doubt and to ask for detailed instructions before proceeding with the work.</p>	
1.12	<p>Materials Goods and Workmanship: materials, goods, and workmanship, are to be of the best quality of their respective kinds and are to comply with the latest standards.</p>	
1.13	<p>All proprietary products and materials are to be employed in accordance with the manufacturer's recommendations, all codes of practice, and be fit for purpose.</p>	
1.14	<p><u>The contractor is to carry out everything necessary for the proper execution of the works whether or not shown on the drawings or described in the specification provided the same may reasonably be inferred therefrom.</u></p>	
1.15	<p>Waste Disposal: include for clearing away all waste and debris from site as it arises.</p>	
1.16	<p>Fixings - general note: as a rule there are to be no fixings into any stonework internally or externally without the express consent of the Architect. Any screw fixings whether visible or not are to be stainless steel slotted screws, hand tightened, unless otherwise specified.</p>	

1.17	<u>The Works:</u> all items are provisional and must not to be proceeded with without the express confirmation by written instruction by the Architect following inspections on site with the Contractor once the scaffold has been installed.	
1.18	Hot Works: any Hot Works on site shall require a Hot Works Permit.	
1.19	Archaeology: include for an archaeological watching brief with regard to the drainage works, by direct specialist archaeologist. Inform archaeologist two weeks before works commence. Include the provisional sum of £500 for direct specialist.	
1.20	Protect all parts of the existing fabric of the church and churchyard from the works as necessary. Assume that all fabric is precious and protect it from damage as necessary. The church is listed Grade I.	
	THE WORKS	
2.0	ROOF WORKS - NAVE	
2.1	General: provide all protection to roof coverings as necessary, including the aisles noting that the north aisle has a copper covering. Include all access provision including roof ladders to safely access all areas of the roof slopes.	
2.2	Both Slopes - Moss: with a bassine natural bristle brush brush down and remove all moss to both slopes of the nave roof and clear away. Include to remove all moss from the parapet copings and tile listings to the crossing wall, and to the west end nave parapet on the north side; and in addition remove moss from the tower string above the north slope of the nave.	
2.3	Both Slopes - Tiling Maintenance: carry out general tiling maintenance to this slope to replace broken tiles in matching tiles as above. Allow a pro-rata rate and provisionally allow to replace 20Nos. defective tiles with new aluminium peg nails.	

2.3.1	Tiling Maintenance: additionally, include to make good the damaged area of tiling on the south slope, near the tower, as shown, utilising 4Nos. tiles kept on site. Include for new aluminium peg nails.	
2.4	North Slope - Nave Tile Listing Abutment, west end: carefully remove and dispose of the whole of the extg defective tile listing to this abutment to the tower, all the way down to eaves, including tile listing to nave west wall parapet. Also remove the cement rendered margin between the tile listing and the tower string. Clear away from site.	
2.4.1	Include to replace and make good any damaged roof tiles in best quality reclaimed matching hand made peg tiles, red in colour. And include to dress back extg soakers so that they properly meet the wall abutment.	
2.4.2	Ensure all exposed faces are cleaned of all micro-biological growth before placing any new mortars.	
2.4.3	Rake out area of walling between nave slope (including behind tile listing) and tower string and re-render in hot lime mortar to Clause D.2.3.1 allowing a tight two coats finishing tight and flush to quoin dressings. The first coat is to be thrown on, so far as possible, coats to be well scoured, and to be given a wood float finish. Sample to be approved. Provide access and protection.	
2.4.4	Supply best quality reclaimed matching hand made peg tiles, red in colour, and fit new tile listing to this abutment, bedding and pointing in hot lime mortar to Clause D.2.3.1. noting that the mortar on view is to be kept to a minimum and is to copy the example shown.	
2.4.5	Provisionally allow to supply and fit all new Code 4 milled lead soakers to this entire length of this abutment (should there be none), allowing a width of 225mm; dress up the abutment wall such that there is no gap to the walling. Dispose of extg zinc soakers.	
2.4.6	Include the extra over to chase the abutment wall and turn the new soakers 1¼" into the wall, and point up in hot lime mortar to D.2.3.1, as one would do for a traditional secret soaker detail, noting that the soakers will need dressing over irregular flints and field stones.	

2.5	North Slope - Nave west wall parapet/buttress: provisionally allow to rake out, and repoint defective weathering joints, to this buttress, in hot lime mortar to D.2.3.2. Allow for 7Nos. joints.	
2.6	North Slope – Nave Tile Listing Abutment, east end: carefully remove and dispose of the whole of the extg defective tile listing to this abutment to the crossing parapet. Clear away from site.	
2.6.1	Include to replace and make good any damaged roof tiles in best quality reclaimed matching hand made peg tiles, red in colour. And include to dress back extg soakers so that they properly meet the wall abutment.	
2.6.2	Ensure all exposed faces are cleaned of all micro-biological growth before placing any new mortars.	
2.6.3	Supply best quality reclaimed matching hand made peg tiles, red in colour, and fit new tile listing to this abutment, bedding and pointing in hot lime mortar to Clause D.2.3.1 and D.2.9.1 noting that the mortar on view is to be kept to a minimum and is to copy the example shown. In particular, the tiles need to be individually measured and cut down, to neatly diminish to a taper, so that they do not stick up above the copings as they do at present as they reach the apex. Agree exactly how this is to finish this as it reaches the apex with Architect.	
2.6.4	Provisionally allow to supply and fit all new Code 4 milled lead soakers to this entire length of this abutment (should there be none), allowing a width of 225mm; dress up the abutment wall such that there is no gap to the walling. Dispose of extg zinc soakers.	
2.6.5	Include the extra over to chase the abutment wall and turn the new soakers 1¼" into the wall, and point up in hot lime mortar to D.2.3.1, as one would do for a traditional secret soaker detail, noting that the soakers will need dressing over irregular flints and field stones.	
2.7	North Slope – Nave Crossing Parapet: provisionally allow to rake out full depth, deeply pack and and repoint defective coping joints in gauged hot lime mortar to D.2.3.5 to match stone colour. Allow for 2Nos. joints.	

2.7.1	Provisionally allow to take off and rebed 1No. displaced coping stone to Item 12.1.2 and rebed and point in gauged hot lime mortar to D.2.3.5 to match stone colour.	
2.8	South Slope - Ridge Tiles: rake out and repoint open joints to ridge tiles, towards the west end, as shown, in gauged hot lime mortar to D.2.3.4. Allow an aggregate length of 3m.	
2.9	South Slope – Nave Tile Listing Abutment, west end: carefully remove and dispose of the whole of the extg defective tile listing to this abutment to the tower, down to the corner of the tower only, as shown. Also remove the cement rendered margin between the tile listing and the tower string. Clear away from site.	
2.9.1	Include to replace and make good any damaged roof tiles in best quality reclaimed matching hand made peg tiles, red in colour. And include to dress back extg soakers so that they properly meet the wall abutment.	
2.9.2	Ensure all exposed faces are cleaned of all micro-biological growth before placing any new mortars.	
2.9.3	Rake out area of walling between nave slope (including behind tile listing) and tower string and re-render in hot lime mortar to Clause D.2.3.1 allowing a tight two coats finishing tight and flush to quoin dressings. The first coat is to be thrown on, so far as possible, coats to be well scoured, and to be given a wood float finish. Sample to be approved. Provide access and protection.	
2.9.4	Supply best quality reclaimed matching hand made peg tiles, red in colour, and fit new tile listing to this abutment, bedding and pointing in hot lime mortar to Clause D.2.3.1 and D.2.9.1 noting that the mortar on view is to be kept to a minimum and is to copy the example shown.	
2.9.5	Provisionally allow to supply and fit all new Code 4 milled lead soakers to this entire length of this abutment (should there be none), allowing a width of 225mm; dress up the abutment wall such that there is no gap to the walling. Dispose of extg zinc soakers.	

2.9.6	Include the extra over to chase the abutment wall and turn the new soakers 1¼" into the wall, and point up in hot lime mortar to D.2.3.1, as one would do for a traditional secret soaker detail, noting that the soakers will need dressing over irregular flints and field stones.	
2.10	South Slope – Nave Tile Listing Abutment, east end: carefully remove and dispose of the whole of the extg defective tile listing to this abutment to the crossing parapet. Clear away from site.	
2.10.1	Include to replace and make good any damaged roof tiles in best quality reclaimed matching hand made peg tiles, red in colour. And include to dress back extg soakers so that they properly meet the wall abutment.	
2.10.2	Ensure all exposed faces are cleaned of all micro-biological growth before placing any new mortars.	
2.10.3	Supply best quality reclaimed matching hand made peg tiles, red in colour, and fit new tile listing to this abutment, bedding and pointing in hot lime mortar to Clause D.2.3.1 and D.2.9.1 noting that the mortar on view is to be kept to a minimum and is to copy the example shown. In particular, the tiles need to be individually measured and cut down, to neatly diminish to a taper, so that they do not stick up above the copings as they do at present as they reach the apex. Agree exactly how this is to finish this as it reaches the apex with Architect.	
2.10.4	Provisionally allow to supply and fit all new Code 4 milled lead soakers to this entire length of this abutment (should there be none), allowing a width of 225mm; dress up the abutment wall such that there is no gap to the walling. Dispose of extg zinc soakers.	
2.10.5	Include the extra over to chase the abutment wall and turn the new soakers 1¼" into the wall, and point up in hot lime mortar to D.2.3.1, as one would do for a traditional secret soaker detail, noting that the soakers will need dressing over irregular flints and field stones.	
2.11	South Slope - Nave Crossing Parapet: provisionally allow to rake out full depth, deeply pack and and repoint all of the extg coping joints in gauged hot lime mortar to D.2.3.5 to match stone colour. Approx. 20Nos.	

2.12	South Slope – Nave Crossing Parapet: provisionally allow to replace 1No. defective coping, as shown, to Item 12.1.2, to match size and profile and drip; rebed in gauged hot lime mortar to D.2.3.4, and deeply pack and repoint in gauged hot lime mortar to D.2.3.5 to match stone colour.	
3.0	ROOF WORKS - SOUTH AISLE	
3.1	Maintenance: clean down roof with soft brushes, dust pan and buckets, of all moss and debris and clear away from site.	
3.1.1	Maintenance: clear out gutter of all moss and debris, with rubber gloves, and clear away from site. Ensure downpipes are running clear and clear out as necessary.	
3.2	East Parapet: remove all moss from the coping stones and clear away.	
3.2.1	Rake out full depth 3Nos. defective coping joints, as shown, and deeply pack/grout and point in gauged hot lime mortar to D.2.3.5 to match stone colour.	
3.2.2	Rake out defective cement pointing to the abutment flashing and repoint in haired hot lime mortar to D.2.3.3.	
3.5	West Parapet: see Masonry for works to the west wall of the south aisle before carrying out the following: lift off loose coping stones (the bottom 3 out of the 5Nos.), clean off, consolidate wall top, and rebed in gauged hot lime mortar to D2.3.4. and deeply pack and point in hot lime mortar to D.2.3.5 to match stone colour. However, leave a chase for redressing the flashings - see below.	
3.5.1	Rake out the defective cement “flaunching” that is behind the abutment flashing and redo in gauged hot lime mortar to D.2.3.4.	
3.5.2	Leadworker to redress and wedge extg flashing back into place.	

3.5.3	Rake out defective cement pointing to the abutment flashing and repoint in haired gauged hot lime mortar to D.2.3.3.	
3.5.4	Provide safe access as necessary for the above.	
4.0	ROOF WORKS - NORTH AISLE	
4.1	Maintenance: clean down roof with soft brushes, dust pan and buckets, of all moss and debris and clear away from site.	
4.1.1	Maintenance: clear out gutter of all moss and debris, with rubber gloves, and clear away from site. Ensure downpipes are running clear and clear out as necessary. See below for alterations to outlets.	
4.2	West Parapet: remove all moss from the coping stones and clear away.	
4.2.1	Provisionally allow to replace 1No. defective coping, as shown, in best quality Lincolnshire Ancaster Weatherbed stone to match size and profile; rebed in gauged hot lime mortar to D.2.3.4. and deeply pack and repoint in hot lime mortar to D.2.3.5 to match stone colour.	
4.3	East Parapet: remove all moss and debris from the coping stones and clear away.	
4.3.1	Provisionally allow to replace 1No. defective coping, as shown, in best quality Lincolnshire Ancaster Weatherbed stone to match profile including throated drip to inside edge, but being longer - allow for o/a size 500lx450wx100d; rebed in gauged hot lime mortar to D.2.3.4. and deeply pack and repoint in hot lime mortar to D.2.3.5 to match stone colour.	
4.3.2	Provisionally allow to rake out full depth 4Nos. defective coping joints, as shown, and deeply pack/grout and point in hot lime mortar to D.2.3.5 to match stone colour.	
4.4	Extg Copper Roof Covering: Specialist Copper Subcontractor to carry out the following repairs and alterations:	

4.4.1	Repairs: carry out 3Nos. repairs to splits to the ends of the seams.	
4.4.2	<p>Alterations to the copper gutter outlet to extg RWP No.8: alter outlet and form new section of gutter with new outlet and chute with weir, such that the new copper outlet falls outside of the stone gutter straight into NEW RWP No.12 being a 4 inch dia. pipe. The design of this outlet is to be based on those to the south aisle and are to be finished off neatly to a high degree of craftsmanship and skill.</p> <p>NB if it is easier to fabricate and weld a lead chute, onto the copper, then this would be acceptable, noting that it would have to be in sand cast lead, and probably Code 7.</p>	
4.4.3	Stone mason to carve out of the extg stone gutter the new outlet position to agreed position with Architect to be centred over new RWP No.12 position. Extg stone outlet to remain as is.	
4.4.4	M.c to include all b.w.i.c. and profit and attendance. And M/c to have both downpipe and bobbins on site so that the correct positioning of the new outlet can be determined on site with coppersmith.	
5.0	ROOF WORKS – SOUTH PORCH	
5.1	Both Slopes – Moss: with a bassine natural bristle brush brush down and remove all moss to both slopes of the porch roof, including parapet copings, and clear away.	
5.1.1	Maintenance: clear out both gutters of all moss and debris, with rubber gloves, and clear away from site. Ensure downpipes are running clear and clear out as necessary.	
5.2	East and West Parapet Copings: rake out full depth and deeply pack and repoint, all defective joints, as shown, in gauged hot lime mortar to D.2.3.5 to match stone colour. Provide generous flaunching to the apex stone for sufficient weathering.	
6.0	ROOF WORKS – NORTH PORCH	

7.0	SPIRE AND TOWER PARAPET	
7.1	<p>General: works are at parapet level, with awkward access up the turret stair and through the belfry. Great care is required. It is not intended to provide scaffolding, but provide for any harnesses as necessary.</p> <p>For descriptive purposes, the spire has 4Nos. "broaches" to the NE, NW, SE, and SW corners. The door onto the parapet is on the west face.</p> <p>Carry out the following if it can be done safely – if not advise at tender stage:</p>	
7.2	<p>South Parapet: to the loose piece of stone taken off the crenelation, as shown, this is to be refixed. Clean off extg cement mortar bed, and provide new gauged hot lime mortar bed to Clause D.2.3.5 to match stone colour. Supply and fit a 8mm stainless steel threaded bar, say 75mm long and pin the piece onto the extg stone, carefully drilling holes into both stones and grout together (and point) in gauged hot lime mortar together with a gauged hot mortar bed to give a tight joint between the two of 3/4mm. Sieve aggregates as necessary.</p>	
7.3	<p>South Parapet: repoint missing pointing to flashing as shown in haired gauged hot lime mortar to Clause 2.3.3. Include to lift adjacent flashing to complete pointing.</p>	
7.3.1	<p>Provisionally allow to rewedged flashing, with lead wedges, if found to be loose before repointing.</p>	
7.4	<p>Door: rake out defective joint and adjacent failed mortar repair, as shown, and repoint, and reform a mortar repair in gauged hot lime to Clause D.2.3.5 to match stone colour.</p>	
7.5	<p>Parapet Gutter: clean out gutters of all vegetation and sediment and clear away. Allow to carefully lift leadwork as necessary to remove all roots of brambles in the NW corner. Ensure all outlets run clear.</p>	

7.6	Vegetation: cut down and clear away all other vegetation from the spire and broaches; remove so far as possible without damage, unless further opening up is described below. Supply and apply New Formula Super Concentrate Roundup Tree Stump and Root Killer to all remaining roots, all in accordance with instructions.	
7.7	Moss: with a bassine natural bristle brush brush down, remove and clear away all moss and lichen to the crenelations.	
7.8	SW Broach: rake out defective pointing, generally around the 2Nos. stones as shown. Include to remove the stone (on the rhs as shown) and remove as much of the elder as possible. Consolidate substrate, fully rebed stone and repoint in gauged hot lime mortar to Clause D.2.3.5 to match stone colour, and repoint along the flashing in haired gauged hot lime mortar to Clause D.2.3.3.	
7.9	SE Broach: carefully take down the stone casing to this broach disposing of all cement mortars; remove and dispose of elder roots. Consolidate substrate, fully rebed stones and repoint in gauged hot lime mortar to Clause D.2.3.5 to match stone colour, and repoint along the flashing in haired hot lime mortar to Clause D.2.3.3.	
7.9.1	Provisionally allow to supply and fit tile listing detail to replace extensive mortar in tiles as elsewhere. Noting that it is probably too tricky and expensive to get a new piece of stone up here without installing a Jenny wheel.	
7.10	NE Broach: rake out defective pointing to the flashing a shown, all the way back to the door, and repoint in gauged haired hot lime mortar to Clause D.2.3.5.	
7.11	NW Broach: carefully take down the stone casing to this broach disposing of all cement mortars; remove and dispose of bramble roots. Consolidate substrate, fully rebed stones and repoint in gauged hot lime mortar to Clause D.2.3.5 to match stone colour, and repoint along the flashing in haired hot lime mortar to Clause D.2.3.3.	
7.11.1	Rewedge and point loose lead cap.	

7.11.2	Allow to replace the extg length of lead shown, allowing for a piece 1m long and 300mm wide in Code 6 traditional English sand cast lead, s/s screw fixed and washered and dressed into place, providing 100mm min overlap and underlap to adjacent flashings. The turn in must be as much as possible to be agreed with Architect. Repoint along the flashing in haired hot lime mortar to Clause D.2.3.3.	
7.12	West Parapet: again, here there is a thin piece repair to a crenelation that is failing. Provisionally allow to remove and to refix all as Item 7.2, cleaning off and removing all modern silicone adhesives.	
8.0	DRAINAGE INVESTIGATIONS - CCTV SURVEY	
8.1	<p>CCTV Camera Survey - see dwgs No. 20-27/01: Specialist Subcontractor to carry out camera survey of all extg drain runs to RWPs Nos. 1-11. Lift known Catchpit No.1 cover beside RWP No.10 to facilitate this, and include to clear out a small chamber beside RWP No.6 (Catchpit No.2?).</p> <p>Record condition and provide 2Nos. digital copies on a CD for Employer and Architect, together with a hard copy report and drawing identifying routes, size, and significant defects.</p> <p>Carry out this work before all other drainage works. NB all gullies are trapped, see Item 8.1.2.</p>	
8.1.1	Include to rod and clear out the drains, including the clearing out of all gullies and catchpits. Clear away all debris from site.	
8.1.2	M/c to facilitate the camera survey by exposing a length of drain in front of the trapped gully and with a small angle grinder carefully cut out a rectangular section from the top of the clayware drainage (without affecting the flow of surfacewater) to allow entry of camera and rodding equipment. With a garden spade cut out the turf and soil and set aside on tarpaulin sheet. On completion of investigations reinstate clayware top with a small length of Visqueen dpc (as above) to prevent soil entry and back fill and reinstate turf. Allow a pro-rata rate to provisionally make 9Nos. such investigations.	
8.1.3	M.c to include all b.w.i.c. and profit and attendance.	

9.0	RAINWATER DRAINAGE	
9.1	<p>General: subject to investigations above provisionally allow to provide all new drainage to RWP Nos. 1 and 2 together with new soakaway.</p> <p>See APPENDIX for manufacture's enclosures and product literature. Installation to be installed all in accordance with manufacturer's recommendations.</p>	
9.1.1	<p>Setting Out: set out and agree new drainage runs and soakaway on site with Architect. The proposed routes shown are provisional.</p>	
9.1.2	<p>New Pipework: to be Hepworth clayware SuperSleve HouseDrain 100mm dia. x 1.6m pipework to BS EN 295-1:2013, laid all in accordance with with manufacturer's recommendations, with a minimum cover of 400mm, laid to 1:100 min fall, also to achieve 500mm min cover over Aquacells (this may be more due to local ground levels).</p>	
9.1.3	<p>New Accessories: include for all accessories as necessary to be Hepworth SuperSleve HouseDrain. To be Wavin SuperSleve clayware including new rest bends, square hoppers, bends, and oblique access junction with cover.</p>	
9.1.4	<p>Method of Jointing: as follows:</p> <ul style="list-style-type: none"> i. all plain ended joints to be coupled with HepSure Standard Couplings (the ones fastened with jubilee type clips). 	
9.1.5	<p>Excavating New Drainage Runs: the use of a mini-digger with rubber track and toothless bucket, may be employed with hand trimming as required and along the bottom of the trench to form correct falls.</p> <p>Include to provide 18mm plywood sheeting to protect grassed areas of the churchyard from the mini-digger's tracks through the churchyard and whilst digging during. The mini-digger is to have a toothless bucket.</p>	

<p>9.1.6</p>	<p>Excavating New Drainage Runs: where new routes go across grassed areas, include to cut out the grass turf by hand with a garden spade and set aside on plastic sheeting for reinstatement. Include to water salvaged turf during any dry spells, and water well on reinstatement.</p> <p>Include for all hand digging and trimming of trenches and soakaway to correct falls—a high standard of workmanship is required. Pipes to rest uniformly on their barrels, and on the soil where conditions permit.</p> <p>Cut out as Class D (Bedding factor 1.1)—Natural Trench: assume the sub-soil falls within types III to VI in Table E1 in Approved Document A1/2 of The Building Regulations 1985 (see below left), and hand trim the trench bottom with a spade to correct falls and to support the pipe along the length of its barrel, allowing for any socket recesses.</p> <p>Break out and dispose of extg gullies/brick sumps and redundant drainage that fouls new routes and clear away from site. Excavate new drainage runs, gullies, and soakaways, cutting out turf to runs and soakaways by hand and setting aside for reinstatement.</p> <p>Excavated soil to be set aside on a plastic sheet, and any surplus soil to be disposed of on site at the direction of the Employer (PCC), unless otherwise specified.</p> <p>Trench from bottom up to 300mm above crown of pipe with vertical sides. Width of trench to be as small as practical but not less than external diameter of pipe plus 300mm. Excavate to formation immediately before laying beds or pipes. Hand trim with a shovel around obstacles and for gullies.</p> <p>After initial testing, backfill to 150mm above crown of pipe with a protective cushion of selective fill, free from vegetable matter, rubbish, and frozen soil and material retained on a 40mm sieve. Thoroughly hand compact in 100mm layers all in excavated soil of suitable grade conforming to Class D Natural Bed: Bedding factor 1.1.</p> <p>On completion reinstate salvaged turf, and/or make good existing finishes.</p>	
<p>9.1.7</p>	<p>Pea Shingle: where ground conditions do not permit, and where specified, excavate in accordance with Class B: Bedding factor 1.9, excavating a further 50mm and providing 50mm granular fill 5-10mm max pea shingle bed (conforming to BS EN 1610 Annex B Table B.15) before laying pipes to true line and regular gradient on even bed for full length of barrel, followed by a further 50mm pea shingle surround to half depth of pipe, before continuing to backfill with selected as dug material as above.</p>	

9.1.8	Redundant Drainage: grub out and dispose of old drainage pipework and gully construction where this conflicts with new work and dispose of from site.	
9.1.9	Bedding and Jointing: lay pipes to true line and regular gradient on even bed for full length of barrel, with method of coupling/jointing as specified.	
9.1.10	New Gullies: Hepworth square hopper, ref: SH1 and rest bend ref: SBR1.	
9.1.11	New Gully Brick Surrounds and Welsh Slate Chute: supply and fit new best quality hand made Collier Clay brick on edge surround to gullies, with cuts and bats to corners, supplied by Bulmer Brick and Tile Company. Bedding, flaunching and pointing mortars to be hot lime mortar to Clause D.2.3.4. Supply and fit 500x250 best quality new Welsh slate chute bedded in same mortar and flanchued over as shown, cut and shaped to suit.	
9.1.12	New Single Oblique Access Junction: Hepworth ref: SJA1L or R to suit, with Alloy lid and Frame ref: ISO.	
9.1.13	New back inlet Yard Gully: Hepworth Yard Gully ref: RGP1B with back inlet and silt bucket ref: IBP3, 300mm raising pieces ref: SP030/5, cut down to suit new stone cover – level to be agreed on site with Architect. Yard gully and raising pieces to be installed level on 150mm gauged hot limecrete bed with 100m surround with floated top to fully support new stone cover to D.2.3.7.	
9.1.14	Stone top to new Yard Gully: new stone cover to be 400x400x90 fin best quality defect free, horizontally bedded, Ancaster Weatherbed.	
9.1.15	New Soakaways: new soakaways to be a minimum of 6m clear from any point of the church (unless expressly stated on the drawings or agreed on site with the Architect, and to comprise Wavin Aquacell PRIME units, being 1m long x 0.5m wide x 0.4m deep. <u>Supplied and installed all in accordance with manufacturer’s recommendations – See APPENDIX.</u> Provide 100mm new coarse sand bed and cover surround irrespective of as dug material excavating and hand trimming as necessary.	

9.1.16	Supply and fit Hepworth Bonar TF KNW8 non-woven geotextile membrane wrapping (see APPENDIX for further details), and all other adaptors connections, jubilee clips and accessories as required.	
9.1.16	Testing: test installation on completion and before backfilling to ensure watertight installation.	
	THE WORKS	
9.2	Supply and fit the following all in accordance with the above:	
9.3	EXTG RWP's Nos.1 and 2: dig out 2Nos. extg gullies and any drainage that fouls new routes and dispose of from site. Terminate any remaining drain runs with limecrete. Supply and install new drains, 2Nos. gullies, and 2Nos. brick surrounds with slate, back inlet yard gully with stone top, and oblique access junction. However, the access junction is not to be accessible but to be backfilled and covered over. Supply and install new soakaway No.1 to comprise 4Nos. Aquacell Prime units, in 2Nos. layers of two such that the overall size of soakaway (excluding the 100mm coarse sand surround) is 1m long x 1m wide x 0.8m deep, as shown. M/g finishes.	
9.3.1	Should the ground conditions of the trench not be suitable for natural trenching and backfilling with selected backfill, provisionally allow, should ground conditions be too rough, to excavate a further 100mm and to supply and install peashingle to Item 9.1.7.	
9.4	EXTG RWP No.3: extg gully to remain. Supply and install new brick surround with slate to suit to similar configuration as above, noting that some cutting and shaping of bricks will be required to accommodate the new channel serving RWP No.4, see below.	

9.5	EXTG RWP No.4: the extg rwp cannot be altered at present. However, the current defective situation is to be improved. As above, the extg concrete channel has been reduced in width, but is otherwise to remain so as to form a substrate on which to bed and flaunch new clayware channel with a fall into the extg gully to RWP No.3. The channel will need to be built into the new brick surround.	
9.6	EXTG RWP No.5: extg gully to remain. Supply and install new brick surround with slate to suit to similar configuration as above.	
9.7	EXTG RWP No.6: extg gully to remain. Supply and install new brick surround with slate to suit to similar configuration as above.	
9.8	EXTG RWP No.7: the relationship between gully and rwp is very poor. Excavate and expose extg gully and allow to alter such that it is centred under the shoe. Allow to cut adjacent pipes as necessary, for new limecrete footing and HepSure connector.	
9.8.1	Supply and install new brick surround with slate to suit to similar configuration as above.	
9.9	EXTG RWP No.8: extg gully to remain, but also needs to serve new RWP No.12. Supply and install new larger brick surround with slate to suit both EXTG RWP 8 and NEW RWP No.12, similar configuration as above.	
10.0	RAINWATER GOODS	
10.1	General - see dwgs Nos. 20-25/01, 02, 03, 04, 05, 06, and 07: include Specification Clause D.50, and where necessary detailed below. Carry out these works before the drainage works as the relationship of the new gullies is determined by the final position of the shoes.	

10.1.1	New Goods: all new cast iron rainwater goods to be supplied by J & J W Longbottom Ltd. J and JW Longbottom Ltd Bridge Foundry Holmfirth Nr Huddersfield HD9 7AW Tel: 01484 682141	
10.1.2	Ordering: M/c must check all quantities stated at tender stage are correct. And before placing of order check quantities and dimensions of components are correct, e.g. verify plinth and offset dimensions.	
10.1.3	Decorations: new decorations to be by M/c before installation. The goods will arrive with one coat primer. Decorations to be in Linseed Oil system supplied by Brouns and Co Ltd, see D.50. See also manufacturer's website, including training videos at www.linseedpaint.com . Colour to be agreed, but allow for Blackout.	
10.1.4	Temporary goods: include for the supply and fitting of temporary plastic goods to ensure that the walling does not get wet.	
	THE WORKS	
10.2	EXTG RWP No.8: carefully unjoint and take down extg rwp for decorations. Inspect for defects and report back to Architect. Dispose of the top section from hopper up serving the aisle roof as this is to be altered, see Items 4.4.2 and 4.4.3.	
10.2.1	Clean down sections serving the North Porch, de-grease, prepare, ready for redecorations. Where there is any rust, rub back to sound metal, apply 2Nos coats red oxide primer and apply 3Nos. matching linseed oil, in matching colour.	
10.2.2	Reinstate downpipe on completion, including repointing of wall. Touch in and m/g finishes on completion to D.50.9.	
10.3	NEW RWP No.12: agree the setting out of this new rwp with Architect on site, and supply and fix the following new all new Longbottom goods:	

10.3.1	<p>- 4" dia. downpipe (6' lengths) ref: A.585 with standard ears. Calculate quantity of pipes at time of tender. Cut down the <u>bottom</u> length to suit, filing off the edges, and provide full decoration as below to cut edge. Downpipes are not to be caulked but supply and fit lead wedges to prevent rattle.</p> <ul style="list-style-type: none"> - 1No. shoe ref: A.588 with standard ears - allow 6Nos. fixings as Item 50.5.4. - 6Nos. 38mm bobbins - NB there is to be no offset over plinth. 	
10.3.2	<p>Before fixing thoroughly prepare and decorate the new cast iron as D.50 with 2Nos. red oxide primer and 3Nos. full finish coats of Linseed Oil paint.</p>	
10.3.3	<p>Touch in and m/g finishes on completion to D.50.9.</p>	
11.0	JOINERY - CHOIR STALLS	
11.1	<p>General: the works comprise dismantling, carrying out remedial repairs, and reinstating the choir stall to the south side of the chancel, where they have collapsed due to suspected rot of timber in the substrate. Note that the stalls are on two levels, with the frontal being at a lower level. Specialist Joiner to carry out the following:</p>	
11.2	<p>Clear away loose masonry along the south wall under seat.</p>	
11.3	<p>Carefully examine before dismantling without damage the extg stall to the south wall and return to screen, as necessary in order to be able to take up the floor to the top tier.</p>	
11.4	<p>Carefully take up the floorboards, to this top tier, sufficiently to expose the defect beneath. Allow for inspection by Architect.</p>	
11.5	<p>It is assumed that the timber joists sit on a timber wall plate along the south wall that has rotted. Provisionally allow to take up these joists, and to reinstate, along with the floorboards on completion of any repairs. Use matching nail fixings.</p>	

11.6	Subject to inspection, provisionally allow to replace defective and rotten wallplate along the south wall. Allow for supplying and fitting a length the full length of the stall and 4"x4" in section. Timber to be Grade One air-dried Oak beams, must be selected to avoid defects and must be straight. Must be entirely sap free and worm free. Allow to re-saw to bring back to square section. Preferred supplier to be Whipple tree Hardwoods. Include for all necessary s/s fixings to be the responsibility of the M/c.	
11.7	Provisionally allow to supply and fit new 150 wide Visqueen Polyethylene dpc under the new plate.	
11.8	On completion of the floorboards, reinstate the choir stall joinery, using matching fixings to extg fixing positions, unless expressly permitted otherwise by the Architect.	
11.9	Should it be necessary, provisionally allow to carefully remove the frontal, floorboards under, and joists under to expose in order to facilitate the necessary repair to the substrate before reinstating on completion.	
11.10	Provisionally allow to replace 3Nos. defective joists, front to back, as a pro-rata rate, and supply and fit in air-dried Oak beams as above, again 4"x4" in section and re-saw to match extg sections as necessary.	
12.0	MASONRY	
12.1	GENERAL - dwgs No. 20-27/01, 02, 03, 04, 05, 06, 07, 08, 09 and 10: include Specification Clauses D.2, D.3, D.4, and D.5 concerning MASONRY, unless specifically deviated from in the schedule above or below. Also include for all safety precautions as stated, and include for operatives to carry diphoterine on their belts. Ensure public safety when mixing mortars on site. All mortars to be made from the hot lime method made on site. Include for batching of mortars on site as specified. The Contractor is to use a forced action mixer with suitable transformer, and is to include for procuring this item or hiring one if necessary.	

12.1.2	New Stone: new stone to be best quality, selected, seasoned, defect free and correctly bedded, Ancaster Weatherbed Lincolnshire Limestone. To be hand tool dressed to all sides, finish to be agreed. The underside of coping stones to be scutched to provide a key.	
12.1.3	Sample for Approval: include samples of all pointing and render mixes for approval by the Architect before generally proceeding.	
12.1.4	Include a rate for the extra over to consolidate and rebuild 1m ² of rubble flint walling before repointing.	
	THE WORKS	
12.2	Concrete Channel to North Aisle: break out extg concrete channel, as shown, and clear away from site including all hardcore. However, do not damage or disturb the extg gullies.	
12.2.1	M/g concrete channel by back filling with clean clay compacted to an even level and fall away from the church to meet extg ground levels. NB the intention is that the grass will self sow these margins. All a depth of clay of 150mm. Suggested source of suitable clay to be Bulmer Brick and Tile Company (speak to Tony Minter) or equivalent and approved.	
12.3	Concrete Channel to South Aisle and Chancel: break out extg concrete channel, as shown, and clear away from site including all hardcore. However, do not damage or disturb the extg gullies. NB the concrete channel between the old boiler room and the gully to RWP No.3 is to remain but is to be altered such that a 150mm margin is to be cut out along its back edge to the wall (this will enable the wall to breath better, and facilitate the removal of ivy. It will also facilitate temporary improvements to RWP No.4).	
12.3.1	M/g concrete channel by back filling with clean clay compacted to an even level and fall away from the church to meet extg ground levels. NB the intention is that the grass will self sow these margins. All a depth of clay of 150mm. Suggested source of suitable clay to be Bulmer Brick and Tile Company (speak to Tony Minter) or equivalent and approved.	

12.4	Spandrel to Nave Roof, south slope: rake out all defective mortar to area of walling, as shown, and repoint, followed by a tight hot lime render coat with finer aggregate to suit.	
12.5	Walling to RWP No.8: rake out and repoint area of walling to both north aisle and north porch, above plinths, as shown, before installation of goods, in hot lime mortar to Clause D.2.3.1. Finish to be full and flush with ashlar stones.	
12.5.1	Walling to RWP No.8: rake out and repoint area of walling to both north aisle and north porch, below plinths, as shown, including 100mm below perimeter level (noting that this is to be removed) before installation of goods, in gauged hot lime mortar to Clause D.2.3.4. Finish to be full and flush with ashlar stones.	
12.6	South Aisle, west elevation: rake out and repoint the defective area of cement pointing as shown in hot lime mortar to Clause 2.3.1. Finish to be full and flush with ashlar stones.	
12.6.1	Include to carefully take off the displaced kneeler stone and rebed and repoint back in its proper position in gauged hot lime mortar to Clause D.2.3.4 and hot lime mortar to Clause D.2.3.2. Provide all access as necessary.	
12.7	EXTG RWP No.1: rake out and deeply pack and repoint defective stone joints beside gully as shown in gauged hot lime mortar to Clause D.2.3.5.	
12.8	EXTG RWP No.2: rake out and deeply pack and repoint defective stone joints beside gully as shown in gauged hot lime mortar to Clause D.2.3.5.	
12.9	EXTG RWP No.7: rake out and repoint a margin of the plinth walling, 1m in each direction from internal corner, and 100mm below perimeter level (noting that this is to be removed), in gauged hot lime mortar to Clause D.2.3.4.	
12.10	SE Corner of Chancel: carefully cut out with traditional masonry hand tools the defective stone to the external corner as shown and dispose of. Supply and fit new ashlar block, as Item 12.1.2, in gauged hot lime mortar to Clause D.2.3.5. Allow for a stone block size to be 12" x 16" x 6".	

13.0	CLEAN DOWN	
13.1	Clean Down: on completion clean down the works to the complete satisfaction of the Employer and Architect.	