



Grenfell Scope of works: - 10 x Shed Breeder farms 1, 2, 3 & 4 March 2022

ID	Description	Quantity
1	Site location	
2	Property known as "Summerfield" - 598 hectares located at 1130 Gooloogong Road, Grenfell. Local government area Weddin, Parish of Melyra and County of Forbes	
3	Project description	
4	Purpose built Breeder rearing Complex consisting of 10 x breeder sheds, 1 x Bio security entry building, egg packing building and all weather access ring road.	
5	Preliminaries by Baiada	
6	Development application (DA) plans dated..... - Pages.....	
7	Development application (DA) submission	
8	Digital Elevation Model of Grenfell site	
9	Fire Engineering Services report	
10	Civil Engineering - stage one	
11	Capital Investment valuation estimate	
12	Detailed site survey across the proposed farm building site	
13	Heritage assessment	
14	Ecological assessment	
15	Odour and Dust assessment	
16	Traffic impact assessment	
17	Noise impact assessment	
18	Community Consultation	
19	SEPP 33 Assessment report	
20	Desktop review, fieldwork and preparation of ACHAR, ACHCRs, AFGM and RAP participation in fieldwork	
21	Bushfire planning - Hazard assessment report and Management plan	
22	DIPE lodgement fees	
23	Provide coordinated responses from consultants to DoPI	
24	Site surveying and as built survey (not including earth works)	
25	Geotechnical investigation (not including compaction testing or reports)	
26	Construction long service levy = 0.35% of construction costs	
27	94A Contributions	
28	Building certification (not including inspections)	
29	BCA Consultant	
30	Fire solution engineering	
31	Bio security entry floor slab design and inspections	
32	Lunch room and portable toilets	
33	Waste skip bins	
34	Baiada contractor management documents	
35	Contractor Induction V2 2020.02.03	
36	WHS-F-401.1-NAT - Contractor Checklist (Prior Check)	
37	WHS-F-401.2-NAT - Contractor Risk Assessment	
38	WHS-F-401.4-NAT - Contractor Assessment	
39	WHS-F-401.8-NAT - CoR Contractor Checklist	
40	WHS-F-401.9-NAT - CoR Document Review Checklist	
41	WHS-F-401.10-NAT - WHS Document Review Checklist	
42	WHS-F-401.11-NAT - Contractor Documentation Checklist	
43	WHS-STD-401-NAT - Contractor Management	
44	Project schedule provided by Baiada	
45	Stating the following (not limited to):	
46	Development application approval date	
47	Construction certificate issued	
48	Contractor starting and completion dates	
49	Key milestones	
50	Project completion date	
51	Bird placement	
52	Contract provided by Baiada	
53	Contract for works over \$..... AS4000	
54	Contract for works under \$	
55	Purchase order (PO) only issued for works under \$.....	
56	Earthworks	
57	Tree removal as required - to be placed in a position agreed with Baiada	

- 58 Strip topsoil (assumed average depth 100mm) under shed pads, ring roads, water tank pads and egg packing room and stock pile for respreading in swale drains (After roofs on)
- 59 Re-spread topsoil in swale drains (after roofs on). Topsoil depth 100mm.
- 60 Cut and fill shed pads (98% standard compaction under sheds). Fill in layers 150mm compacted thickness, test every 300mm lift. Prior to placing fill under sheds scarify the sub-soil to a depth of 200mm, moisture condition and compact to 98% standard compaction and proof roll with 10 passes of 12 tonne dead weight.
- 61 Fill under water tanks (98% standard compaction). Fill in layers 150mm compacted thickness. Tease every 300mm layer.

62 **Roadworks**

- 63 Transport and place 200mm thick DGS40 base course for house roads, centre road and ring roads around sheds

64 **Stormwater and Drainage**

- 65 Excavate trenches in all classes of material for stormwater pipes
- 66 Sand bedding and lay stormwater pipes;
- 67 a. Supply and install 300mm diameter concrete headwalls
- 68 b. Supply and install 300mm SN8 corrugated stormpro pipes
- 69 Backfilling and compaction of trenches subject to subgrade condition. Option are as below.
- 70 a. Backfill and compact stormwater trenches with stabilised sand to underside of road base (optional)
- 71 b. Backfill stormwater trenches with clay borrowed on-site to underside of road base. (optional)
- 72 Provide rock mattress with 300mm diameter rock under aid with geofabric where stormwater pipes discharge into swale drain.

73 **Construction - 10 x Sheds 14.5m a 139.280m and 1 x Bio security entry building & Egg packing building**

74 **Supply and install the following:**

- 75 Construction drawings
- 76 Engineers certification
- 77 Allow all inspections and reports for the certifier
- 78 Provide all available materials supplier warranties
- 79 Daily clean up and place your waste into the skip bin provided
- 80 Pier holes - Dig, place reinforcement, inspection and pour to engineers detail
- 81 Floor slabs (Non structural) - Plastic membrane, F72 mesh and 25mpa concrete
- 82 Posts & rafters to be 150mm x 100mm x 4mm 450 grade RHS @ 3.660m centres
- 83 Concrete rat wall
- 84 1 x row of C150 Purlins & 1 x row C100 - supply and fix under the eave line for equipment electrical cabling. Supply cover cap for equipment electrician to fit
- 85 C150 Purlins
- 86 Colourbond underside ceiling
- 87 Roof to be corrugated zincalume sheeting
- 88 Roof to be insulated with 55mm fibreglass blanket
- 89 Side walls to be constructed of 50mm PIR sandwich panel - colourbond surfmist.
- 90 End walls to be constructed of 50mm PIR sandwich panel - colourbond surfmist
- 91 Two double door vehicle access points each end of the sheds
- 92 Ten (10) personal access doors in total + cool cell doors - Door width and handles to meet BCA requirements
- 93 Cool pad area prepared for cells (pads not included) with insulated roof.
- 94 Telescopic posts and PIR panel above black outs
- 95 Area for tunnel air inlet to have hinged shutter (Rack and pinion or motor by others)
- 96 Tunnel fans mounted into walls (fans supplied by others)
- 97 Feed weigh room 2.4m x 2.4m constructed of 50mm PIR
- 98 External concrete aprons each end of every shed as per plan
- 99 Silo slabs 300mm thick with 2 x layers of F82 mesh
- 100 Bio security entry building & egg packing shell as per plan - floor, walls and fitout by others

101 **High voltage (HV) power**

102 **Supply and install the following:**

- 103 Provide all available materials and equipment supplier warranties
- 104 Provide copies of service agreements
- 105 Daily clean up and place your waste into the skip bin provided

106 **Low voltage (LV) power to buildings (not including equipment)**

107 **Supply and install the following:**

- 108 Provide all available materials and equipment supplier warranties
- 109 Daily clean up and place your waste into the skip bin provided
- 110 Supply and installation of a new IP42 powder coated mild steel main switchboard (MSB)
- 111 Supply and installation of underground conduits. The conduits shall consist of one 100mm electrical conduit per new MCC submain cable, one 50mm communications conduit from the main switch room to each MCC location.
- 112 Civil trenching for above noted conduits.

- 113 Supply and installation of thirteen submain cables from the new main switchboard to sheds 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, two Covered Conveyor hallway L&P DB's and Egg Packing room MCC's.
- 114 Supply and install cable support trays where required.
- 115 Supply and install power outlets & lights within the Quarantine Entry Complex, Covered Conveyor hallway and the Egg Packing room.
- 116 Supply and installation of a smoke detector system (similar to Farm 44) within the Quarantine Entry Complex, Covered Conveyor hallway and the Egg Packing room.
- 117 Supply and installation of a 550kVa temporary standby generator & separate fuel pod.
- 118 Supply and installation of new mains cabling from the transformer to the new main switchboard, inclusive of underground conduits.
- 119 Supply and installation of underground conduits from the main switch room to one external cable pit to service farm managers residences. We have made **no** allowance to continue underground conduits from this pit, as the location of manager's residences is unknown. We consider these works should be part of the residence builder's scope of work.
- 120 Supply and installation of the following air exhaust systems.
- 121 Quarantine Entry Complex external biosecurity zone toilet (vented into roof space).
- 122 Quarantine Entry Complex laundry (vented into roof space).
- 123 Quarantine Entry Complex male & female shower facilities. These shall consist of two separate common ducted ventilation systems, actuated in conjunction with the local light fittings (conceptually vented through the gable fascia, but to be confirmed during design period)
- 124 Covered Conveyor hallway toilets (vented via external wall).
- 125 Supply and installation of air conditioners for;
- 126 Main switch room
- 127 As built drawings/O&M manuals.
- 128 Site operator training.

129 **Plumber**

130 **Supply and install the following:**

- 131 2 x Heaters, 225,000 BTU, spaced evenly down the length of the shed
- 132 Septic tank - Biocycle 7000 AWTS
- 133 Storm water to AS 3500 - PVC
- 134 Drainage to AS3500 - PVC
- 135 HWS for amenities - Rinnai demand duo
- 136 HWS for egg room - 26 litre continuous flow
- 137 Speed queen gas commercial dryer LPG 9 kg
- 138 Speed queen washing machine commercial top load 9 kg
- 139 Floor wastes in egg room packing room 3 monkey bucket trap
- 140 600mm laundry tub for laundry
- 141 Shower mixers for shower overhead shower head
- 142 Stainless steel hand basins for amenities
- 143 Knee operated two person handwash station
- 144 Tempered water supplied to all showers and disabled toilets and hand wash stations/basins
- 145 PVC covers for firehose reels
- 146 Safety shower for pump shed/chemical dosing eye wash
- 147 Isolation valve for amenities and eggroom water and gas
- 148 M10 mushroom cap for all bolted installations eg handwash station
- 149 I.O to be installed to ground level at each exit from under slabs for drains
- 150 1 x firehose reel to be installed in workshop
- 151 1 x firehose reel to be installed in egg packing room
- 152 Storm water to be terminated in suitable position on plan
- 153 Septic water pump out to be terminated in suitable site
- 154 Boiling water unit to be installed in amenities Rheem lazer 3 L
- 155 1 x mirrors to be installed in shower rooms above hand basin
- 156 Supply and installation of toilet roll holders in each toilet
- 157 Standard strap plastic toilet suites to be supplied and installed
- 158 Australian standard disabled toilet, basin hand rails and mixer taps to be supplied
- 159 Basin mixers for stainless steel hand basins installed
- 160 Kitchen mixers for kitchen and laundry
- 161 Kitchen sink to be supplied and installed
- 162 Install compressed air system in egg room, connect onto supplied compressor by others
- 163 Connect compressed air to egg packer, supply 2 x air blow down points
- 164 Supply cold water washdown hoses in egg room x 4
- 165 Hired hand heaters - SS225 with outdoor kit & regulator for LPG or NG
- 166 Supply and install bollards for gas tanks, spec supplied on separate sheet
- 167 Gas pipe to AG 501 - underground SDR11 EF poly
- 168 Supply and install Elgas gas manifold and regulators
- 169 Heaters to be installed in between every second shed as shown on plan
- 170 Water pipe to AS3500 underground blue line poly
- 171 Treated water (twin oxide) stainless steel pipe 316 above ground in tunnel

172 Non treated water (bore) copper above ground in tunnel
 173 Pump for treated water - grundfos CRIE 45-2-1 11kw VSD solo e
 174 Integra dosing system - Autobatching system for clo2 PLC controlled
 175 Integra meter 80mm water meter 4/20 pulse
 176 Fire hose reel main - 50 mm copper above ground in tunnel
 177 Treated water main - 80mm stainless steel above ground in tunnel
 178 Capped off ball valve for each coolcell and manifold supply for others to connect
 179 **Equipment - Breeder**
 180 **Supply and install the following:**
 181 Provide all available materials and equipment supplier warranties
 182 Provide copies of service agreements
 183 Daily clean up and place your waste into the skip bin provided
 184 Commissioning and Baiada team training
 185 Fixed cost shipping and freight to site
 186 Any trenching if required
 187 Weigh rooms **(by the shed builder)**
 188 **(by the shed builder)** 1 x row of C150 Purlins & 1 x row C100 - supply and fix under the eave line for equipment electrical cabling. Supply cover cap for equipment **(Equipments installers electrician to fit the capping)**
 189 **Silos - 35 Tonne for pellets GE Silos or equivalent**
 190 Silos - (concrete slabs by others)
 191 **Jansen nests with 3.0m slats**
 192 Drive unit with collection table or transfer, 400mm belt = 150m, 500mm belt = 120m
 193 Double compensation roller for rows longer than 45m
 194 Expel motor and 1x slave unit for max 69 nests and 5 cross overs
 195 End extension frame for nest row
 196 Wire mesh enclosure for rear of house (1 per house)
 197 Jansen Premium+ double nest, L=1.22m, with 400mm belt and supports every 2.44m
 198 Cross over for Jansen nest row, 1220mm, suit 400 or 500mm egg belt
 199 Betonplex slat enclosure, 450mm high
 200 Jansen slats, manufactured from virgin plastic, per m2
 201 Hot dip galvanised support bars 3.0m (per m2)
 202 **Lubing drinkers**
 203 Feeder winch incl up/down limit, w/out motor
 204 0.75kW Motor, 415V, B5
 205 Mounting plate for feeder winch, galv
 206 Lubing Pressure regulator with 450mm breather for round pipe
 207 Flush breather unit for 26.7mm pipe
 208 Water connection kit, 4m
 209 Connection set for shock wire
 210 Lubing drinker section for breeders:
 211 Nipple element, with 4001 (180 deg) nipple and double wire hangers (030 700 21 00)
 212 Conduit hanger - 2 wires - for 26.7mm
 213 1.6mm wire for shocker- 7x7 Steel Core 6185IC
 214 Lifter, 3mm, galv #65823
 215 Pulley 40mm
 216 3mm 7x19 WSC G2070 wire rope
 217 Cable clamp 3mm, galvanised
 218 Tag for pulley suspension, 2.5mm, incl. 1 x 12Gx32mm Tekes
 219 Main water supply ¾" with Dosatron and bypass and 240V solenoid
 220 Computer connection for water meter
 221 **VDL Chain feeders with tube winching**
 222 Start set for chain feeding loop for breeders with 4 LARGE hoppers and TUBE WINCHING
 223 Corner 90 deg cpl
 224 Reinforcement plate for corner 90deg
 225 Wire suspension hanger for chain feeder corner
 226 Direct drive 1,5kW, 36m/min (since 2018)
 227 Suspension set for direct drive compact, tube winching with cord (New Type)
 228 Shear pin set, new type
 229 End cap for anti-perch grills (incl. mounting materials)
 230 260320355 V-Compact-MX 180L Detachable hopper - unassembled
 231 Clamp set for demountable extension of hopper
 232 Extension 280L for MX hopper, without lid
 233 Extension / cover 75L for V-Compact hopper
 234 Suspension set for hopper chain feeding, tube winching with cord
 235 270140086 - Additional suspension set for V-Compact detachable Hopper

- 236 Bearing plate 4mm with 6 bearings for tube 1" (slope 12°)
- 237 Electric winch 605D, for chain coupler, 2100kg 3ph 5.0rpm 50Hz - For tube winching
- 238 Gear box W400 for electric winch RW605D for Tube winching
- 239 Chain coupler for RW605D connection to W400, and for W400 to 1" pipe (590008)
- 240 Chain coupler for RW605D, RW400 and RW240 (590016) KBK-5/8-B1
- 241 Mounting plate for W400, RW241 and RW400 - 0 or 12 degree offset
- 242 Mounting plate for RW605 - 0 or 12 degree offset
- 243 Gear tray, galvanised, for RW240-600
- 244 Mounting plate, 8mm, for BM11163 Gear tray to suit RW240
- 245 Switch rail set with 2 switches
- 246 Profile angle, 50x50x2.5, 6m long perforated with 10mm holes
- 247 Galvanised RHS, 50x50x2.5
- 248 Chain breaker
- 249 Tool for chain tensioning
- 250 Chain feeding section, 3.65m, for breeders with TUBE winching
- 251 Grill, 45mm, anti-perch, 1817mm
- 252 Trough coupler, 200mm, for suspended systems
- 253 Feed transport chain, HT
- 254 Feedtrough L=3.65mtr. type Medium
- 255 Wire suspension hanger for feed trough, open
- 256 Suspension point tubewinching with cord 5 mm incl. exhaust clamp and cable clamps
- 257 Bearing plate 4mm with 2 bearings for tube 1" (slope 12°)
- 258 Tube, 1", for tube winching, 6.4m, with 2x coupler bolts
- 259 **Matrix male feeders**
- 260 Start set for Matrix 1.5 - 2 lines at side walls - single hopper
- 261 Hopper single Matrix 2.0, funnel 175L with hose/pipe ø100mm
- 262 Bend set Matrix2.0 2x45°PVC ø55mm bends with adapters ø45mm and clamps
- 263 DOL sensor, 44R ++24V++
- 264 Drive unit, Matrix, 415V, 0.37kW
- 265 Start trough, Matrix 1.5, incl. extra tube
- 266 Endtrough Matrix 1.5, excl. sensor
- 267 Trough couplerset and level control 8-positions with switch Matrix 1.5
- 268 Geared motor with twin output, 5RPM, 415V
- 269 Chain coupler for RW605D, RW400 and RW240 (590016) KBK-5/8-B1
- 270 Mounting plate for W400, RW241 and RW400 - 0 or 12 degree offset
- 271 Gear tray, galvanised, for RW240-600
- 272 Mounting plate, 8mm, for BM11163 Gear tray to suit RW240
- 273 Switch rail set with 2 switches
- 274 Feeding section Matrix, w/out auger, with tube ø44.5mm without holes p=50.8
- 275 Matrix 1.5 feeding section, 3.65m, tube winching
- 276 Feedtrough, Matrix, 3.65m
- 277 Feed section, Matrix 1.5, 3.65m, with 18 holes
- 278 170400087 Line auger for pan feeding / FV40, per m
- 279 Trough couplerset and level control 8-positions Matrix 1.5
- 280 Suspension point with PA 4mm cable Matrix 2.0 tube-tube-winch
- 281 Suspension point with PA 4mm cable Matrix 2.0 trough with drum for 1" pipe
- 282 Tube, 1", for tube winching, 6.4m, with 2x coupler bolts
- 283 Bearing plate 4mm with 2 bearings for tube 1" (slope 12°), for Matrix 2.0
- 284 **Variable speed drives for chain feeders**
- 285 Variable speed drive, 1.5kW, 3X400V , IP20 (132F0020)
- 286 VLT® Control Panel LCP 11 with potmeter
- 287 **Destination feeding**
- 288 Electronic feed weigher, 45kg batch
- 289 Hopper for under weigher, 130L, incline for green plastic boot adaptor
- 290 Support set for weighers
- 291 Support set for hopper
- 292 Stainless steel silo boot, M75, triple, with PVC funnel
- 293 Single boot with silo funnel, M75
- 294 Tension shaft, M75, extended
- 295 Conveying pipe, 75x3.6x3000 PVC Flex 75
- 296 Pipe bend, 75mm, 45deg
- 297 Auger open core 75/227 - Flex 75
- 298 Internal auger pipe support, M75
- 299 Welded nut clip for internal support of 75mm pipe (CN65) EP200-76
- 300 Abey welded 10mm nut stand off bracket, for 51908 and 51946 auger supports + 2x 14Gx35 Teks (ABY5160)

301 Threaded rod, M10, Zinc, 1000mm (10X1MZPTR)
302 Cross auger drive, M75, w/out motor
303 0.75kW Motor, 415V, B5
304 Tension ring 150 gal
305 Reducing bush 150x75
306 Transfer Plate - Cross auger drive to SST boot
307 Sensor VDL-12RTM 24-230V delay 0-10min
308 Automatic outlet, 24VDC for 75mm Flex Auger system
309 Outlet set for automatic outlet incl. 33cm flex hose FV90 and 2 hose clamps
310 Drop pipe telescopic P.V.C. Ø90 - Ø100mm. L=2x1m
311 **Fans**
312 EM50, 1.5HP, 3-phase, with safety mesh
313 **Light traps for fans**
314 Pericoli light trap for Euroemme EM50 fan
315 **Cool pads**
316 Supply unit 6 without pump
317 Ends kit for pad cooling frame
318 Pump for Lubing pad system, 240V (incl 2pc x sockets, 2pc x 90'bends)
319 Pad frame section, 3m
320 CELDek DARK -7060-45/15 (1800+30)x600x150, black coating, wdp glued
321 Cement (glue) clear 1L
322 Priming Fluid (Cleaner) Clear 500ML
323 **Tunnel inlets**
324 Geared motor with twin output shaft, 415V, 3RPM, 240Nm
325 Mounting plate for W400, RW241 and RW400 - 0 or 12 degree offset
326 Chain coupler for RW605D, RW400 and RW240 (590016) KBK-5/8-B1
327 Pinion housing for 30mm
328 Curved rack PH30-3\L1445\RI1000
329 Window connector set for Ridder rack (500021)
330 Slide bearing plate, 1", H=120
331 Tube, 1", for tube winching, 6.4m, with 2x coupler bolts
332 **Heaters**
333 Super Saver heater - outside mount LPG - **supplied and installed by the plumber**
334 **Mini-vents**
335 Inlet DA-1211 with 3-stage opening (w/ 6pc class 3 wafer head wood screw)
336 Light trap DA-1211
337 Tension rod M8x5500 galv with socket
338 Actuator 240VAC
339 **LED Lighting**
340 PULSA XL 15.4W WW, 2900K
341 PULSA connector cable 3mtr 2x2.5 + 2 male connectors
342 Waterproof cap for extension cable
343 Power supply 48V for max 38x 9W or 22x 15.4W Pula lights, 350W
344 3mm 7x7 Galv wire rope for lighting suspension
345 Cable clamp 3mm, galvanised
346 Cable ties GR76L/100St package = 100 cable ties, per package
347 Tag for pulley suspension, 2.5mm, incl. 1 x 12Gx32mm Tekes
348 Adding amplifier, 0-10VDC, panel mount
349 **Controls**
350 Orion-PP controller for breeders - feeders, lights, nests and destination feeding
351 IO Module for Orion- 6In x 14Out
352 Reversing motor group in control panel
353 Motor group in control panel
354 Floor standing control panel, 2000x1800x400, including mains
355 **2 Egg conveyors**
356 Front drive for 500mm conveyor - left
357 Front drive for 500mm conveyor - right
358 End unit, type 500
359 Intermediate drive type 500, for flange motor ++ UP/DOWN CHAIN ++
360 0.37KW Drive for Lubing conveyor
361 Pivoting unit, type 500
362 Bend, 10 deg, type 500
363 Connecting part-closed, type 500, 3m
364 Egg input unit, type 500
365 Floor support 0,6 -> 1,3m for 500mm conveyor
366 Support, 2.5m

367 Cross struts for support, set
368 Conveyor chain, type 500, rods up/down
369 Closing rod, type 500, incl. 4x security element
370 Wall mount control panel, 1200x800x300, including mains
371 Motor group in control panel
372 20ft container from Europe to farm
373 SUM 2 Egg conveyors
374 **Egg counting and belt speed optimisation**
375 Egg counter, 40cm with display incl mounting brackets
376 Computer for egg counting in up to 5 sheds
377 IO Module for (12x IN /6x OUT) egg counting
378 SUM Egg counters and egg optimisation
379 **Accumulation table**
380 SST Accumulator table, 1510mm wide x 1100mm long
381 0.37KW Drive for Lubing conveyor
382 SUM Accumulator table for 2 conveyors into 1 packer
383 **Hatchery packers**
384 Hatchery packer, suitable for 88, 150 and pulp trays
385 20ft container from Europe to farm
386 SUM Egg packer
387 **Low voltage (LV) power to equipment**
388 **Supply and install the following:**
389 Provide all available materials and equipment supplier warranties
390 Daily clean up and place your waste into the skip bin provided
391 **Bio security production area fencing and gates**
392 **Supply and install the following:**
393 Provide all available materials and equipment supplier warranties
394 Daily clean up and place your waste into the skip bin provided
395 Fencing
396 Double and single gates
397 **Site signage to Baiada design criteria**
398 **Supply and install the following all reflective material:**
399 Site entry
400 Bio security
401 Shed numbers each end of every shed
402 Silo numbers
403 Safety signs