Floors to comply with SANS 10400 - Part J
Wall to comply with SANS 10400 - Part K
Roof to comply with SANS 10400 - Part L
Stairs to comply with SANS 10400 - Part M
Balustrading to comply with SANS 10400 - Part M4.3
Glazing to comply with SANS 10400 - Part N
Drainage to comply with SANS 10400 - Part P
Stormwater to comply with SANS 10400 - Part R
Nat. Lighting to comply with SANS 10400 - Part 0
min. 10% floor area - (5% openable)
Ref. Walls to comply with SANS 10400 - Part K4.2.4

NB. Should the contractor/builder be unsure of any of the regulations as noted above or wish to ammend any of the above, written notification to the author must be made in order to obtain approval from the relevant authority.

GENERAL NOTES:

ROOF

1. 11 Degree Roof Pitch
   Rafters : 152 x 38mm @ 1.2m centres
   Purlins 75x50mm @ 650mm centres
   Roof sheeting to chicken coops GEO Plastic UV Resistant 710mm sheets, 1.25mm. Colour: Bronze
   Roof sheeting to all other buildings: Chromadeck IBR, 710mm sheets. Colour: Dark Dolphin 13030.
   100x100 powder coated alum. seamless gutters & downpipes.
   75x50 SA pine ceiling battens @approx 650mmc/c's to support skimmed gypsum ceiling board
   Sisalation FR405 fixed to manufacturers specification

CONCRETE

1. All concrete to be class 25/19
2. 600mm wide drain to be reinforced with mesh ref 193
3. Cover to steel 30mm
4. Form 10mm soft board joints in drain every 1.5m. Top 25mm out & sealed with polysulphide sealant. The same applies to joints between drain & Chicken Coup
5. Surface bed to be 100mm thick with mesh Ref 193 on 250 Micron DMP. Surface bed slope at 2%
6. Mesh Ref 193 in surface beds & walkways
7. All concrete to be cast on 250 Micron DMP
8. All surface bed & walkway interfaces with blockwork to be separated with 10mm softboard joint.
9. All spacer blocks to be plastic (uPVC pipe 50mm cut to suit)

BLOCKWORK

1. M140 & M90 Concrete hollow blocks with minimum of 4.5MPa strength @ 28 days,
2. Brickforce every course below ground & above lintels, every second course elsewhere. Hoop Irons every second course on intersecting walls
3. Perps 10-15mm with class 2 mortar.

FINISHES

1. All block walls to be bagwashed with cement or similar approved. Colour: Light Grey

BULK EARTHWORKS & LANDSCAPING

1. All clear & grub material to be stockpiled on site as directed for use as compost.
2. Strip 150mm topsoil & stockpile for use on cut & fill banks. Excess to be distributed to community as directed on site .
3. All cut banks to 1:2 slope, all fill banks to be 1:3
4. Cut to fill and borrow to fill to be compacted to 95% Mod AASHTO Density.
5. Platform to be constructed to degree accuracy ±
6. All cut & fill banks to be top soiled 75mm thick & planted either with grass sods or Kahikos as directed on site.
7. Indigenous trees to be planted at spacing & final positions as directed on site

WATER RETICULATION

1. All water lines to be laid at 600mm below final ground level. Trenches to be 400mm wide. Compacted to 93% Mod AASHTO Density.
2. All water lines to be either 40mm diameter HDPE class 10 or 28mm diameter Polycop class 10. (Rising mains 50mm Diameter NDPE class 16)
3. All HDPE fittings to be Plasson Type or similar approved.
4. All Polycop fittings and valves to be brass
5. All rising mains valves to be class 16.

SEWER RETICULATION

1. All sewer mains to be 110 diameter uPVC class 34
2. All sewer lines to be laid at a min fall of 1:40
3. All changes in horizontal & vertical direction to be fitted with a rodding eye brought to ground level & cast in 300x300x150mm concrete class 20/9.5.
4. Kitchens to be fitted with commercial type grease traps

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STORM WATER & DRAINAGE NOTES

Min fall to drain 1:40 - Min cover to drain 450mm
Provide anchor blocks to ends of drains exceeding 1:5
All drainpipes and fittings to be SANS approved
All waste pipes 110dia unless specified & certified by registered plumber. Provide re's to ends of pipe runs & bends as noted on drawings. I.E.'s to be provided at all accessible junctions & bends.
All drainage pipes under hardened surfaces to be 'twin walled' uPVC piping SABS
Access for cleaning of discharge pipes within 2m above entry of the pipes into the ground are to have removable access points (covers) SANS 10400-P4.19
The design of the drainage system is to comply with part P of SANS 10400 & any requirements of the relevant local authority & is the responsibility of the Main Contractor/Plumbing Contractor.
The sewer sections shown indicate the design intent only. This is to be verified by the registered plumber/plumbing Contractor - any discrepancies or proposed alterations are To be reported to the author prior to commencement of any work.
Agricultural drains to be provided where necessary as per structural Engineer's design & requirements.
All storm water to be piped to soakpits unless otherwise indicated.
No Soakpit to be positioned within 3M OF ANY BOUNDARY LINE. Any drain passing under or adjacent to a building shall not impair the structural stability of the building.

MINIMUM REQUIREMENTS

All dimensions pertaining to the structral integratory of the structure are for information only. The appointed Engineer must specify all foundations, depths of founds, backfill, reinforced conc. slabs, lintols, brickforce and all matters relating to the structural stability of the proposed works. Should the engineer specify something different to what has been dimensioned then the eng's specifications must supercede the noted dims. The discrepancies must be reported to the author prior to construction.
regulations & specifications relating to the building practices. Any deviations from these regulations will become the sole responsibility of the contractor & any costs relating to the rectification of such items will be to the cost of the contractor.
All construction works are to further comply with the Standard building regulations as per SANS 10400 of 2010 as well as the local authorities bylaws.
All glazing to comply with SANS 10400 Part N.
NB see detailed window/glazing schedule.

CO-ORDINATES

POINT A:	X = -1080.116	Y = -3276745.559
POINT B:	X = -1076.765	Y = -3276747.742
POINT C:	X = -1075.759	Y = -3276748.397
POINT D:	X = -1107.954	Y = -3276788.292
POINT E:	X = -1104.602	Y = -3276790.475
POINT F:	X = -1098.569	Y = -3276794.405
POINT G:	X = -1096.260	Y = -3276794.525
POINT H:	X = -1092.238	Y = -3276797.144
POINT I:	X = -1069.391	Y = -3276752.545
POINT J:	X = -1068.386	Y = -3276753.200
POINT K:	X = -1065.034	Y = -3276755.384
POINT L:	X = -1057.493	Y = -3276760.296
POINT M:	X = -1053.304	Y = -3276763.025
POINT N:	X = -1081.141	Y = -3276805.758
POINT O:	X = -1085.331	Y = -3276803.029
POINT P:	X = -1112.426	Y = -3276768.614
POINT Q:	X = -1105.339	Y = -3276814.071
POINT R:	X = -1098.235	Y = -3276828.513
POINT S:	X = -1043.960	Y = -3276746.664

LEGEND

- **600mm WIDE CONCRETE V-DRAIN**
- **TYPE G101 CONCRETE GRASS BLOCKS LG GREEN OR SIMILAR APPROVED**
- **1.8M DIAMOND MESH SECURITY FENCE WITH BARBED WIRE TOP AND BOTTOM**
- **METRO TYPE CONCRETE BOLLARDS SPACED AT 1.5M CENTRES LG GREEN OR SIMILAR APPROVED GL116**
- **1200mm CONCRETE PEDESTRIAN WALKWAY**
- **200mm DIAMETER uPVC SW PIPE, GRD INLET, MANHOLE AND BRICK HEADWALL**
- **5000l JOJO TANKS ON 2X2X0.2m CLASS 25/19 CONCRETE BASES. WHERE SPECIFIED**
- **2500l JOJO TANKS ON 2X2X0.2m CLASS 25/19 CONCRETE BASES. WHERE SPECIFIED**
- **40mm CLASS 6 HDPE WATER PIPES WITH IRRIGATION STANDPIPE FROM RAINWATER HARVESTING TANKS**
- **50/40mm DIAMETER HDPE CLASS 16 & 10 WATER RISING & MAINS**
- **110mm DIAMETER uPVC CLASS 34 WITH RE/IE**
- **350mm DIAMETER ALUMINIUM WHIRLYBIRDS**

REV	DATE	DESCRIPTION	CHKD
1	18.04.17	ISSUED FOR CONSTRUCTION	AW

REVISION SCHEDULE

CONSULTING ENGINEERS
(CIVIL AND GEOTECHNICAL)
Asha Sunker (Pty)Ltd
1 Bellevue Road, Block 2, Kloof 3610 P.O. Box 689, Kloof, 3640

CONSULTANTS DRAWING NO.

APPROVED

CLIENT
ETHEKWINI MUNICIPALITY
ETHEKWINI MUNICIPALITY
ENGINEERING UNIT
DEVELOPMENT ENGINEERING

PROJECT
OAKFORD PRIORY HOUSING PROJECT

ADDRESS
OAKFORD, VERELUM

DRAWING TITLE
AGRI HUB GENERAL ARRANGEMENT LAYOUT & SERVICES

DATE CREATED	DRAWN BY	CHECKED BY	SCALE	SIGNATURE
04/11/17	TW	AW	1 : 100@ A1	

DRAWING/ DOCUMENT REFERENCE		STATUS	
OAKFORD	A306-301	1	CONSTRUCTION
PROJECT REFERENCE	DRAWING NUMBER	REVISION	SUITABILITY

1 GENERAL ARRANGEMENT
1 : 100