SOUTH AFRICAN POLICE SERVICE

PROJECT FIVE STAR 2006

SPECIFICATIONS
FOR

POLICE CELLS

TABLE OF CONTENTS

* = Rev. A

1. MINIMUM ACCOMMODATION REQUIREMENTS

The following rooms are essential for the effective functioning of any cell block. All of the rooms, have to be provided under the project (see Annexure "A"). The norms as applied by the Department of Public Works, are also provided. These norms are an indication of the ideal, but can be changed, due to limited space available on site. Any deviations from these norms are to be indicated on plan and motivated to SAPS : Sypply Chain Management : Expert Services, for approval.

*	1.1.	Cells (with ablution)	:	**37.81 m²** (male) and **20.20 m²** (female)
*	1.2.	Exercise Yards	:	**18.70 m²** (male) and **12 m²**(female)
	1.3.	Security Passage to Cells	:	**1,5 m** wide
*	1.4.	Cell Kitchen	:	**18.00 m²** for 4 cells plus **2 m²** for every additional 3 cells
*	1.5.	Pantry	:	**6 m²** for 4 cells plus **2 m²** for every additional 3 cells
	1.6.	Kitchen Yard	:	**16 m²**
	1.7.	Visitor's Room	:	**12 m²** for (2 cubicles) plus 1 for every additional 3 cells
	1.8.	Prisoner's Property Store	:	**6 m²** for 4 cells plus **2 m²** for every additional 3 cells
*	1.9.	Blanket Store	:	**12 m²** for 4 cells plus **2 m²** for every additional 3 cells
	1.10.	Geyser Room	:	**6 m²** for 4 cells plus **2 m²** for every additional 3 cells
	1.11.	Admittance Area	:	**20 m²** for 4 cells plus **2 m²** for every additional 3 cells. (Toilet for cell guard to be provided in large cell blocks +6)
	1.12.	Holding Cell	:	**6 m²** for 4 cells plus **2 m²** for every additional 3 cells
	1.13.	Security Service Duct	:	**1,2 m** wide behind cell block

The cell block should consist of at least four (4) cells with yards.
SAPS: Expert Services (Capt. Dirk Els)

ALL SKETCH PLANS AND WORKING DRAWINGS HAVE TO BE SUBMITTED TO SYPPLY CHAIN MANAGEMENT : EXPERT SERVICES FOR APPROVAL PRIOR TO CALLING OF TENDERS. THE SKETCH PLANS SHOULD CONSIST OF AT LEAST A FLOOR PLAN, SITE PLAN AND TYPICAL SECTION.

Plans can be **posted** to:
S.A.P.S.
Supply Chain Management:
Expert Services
Private Bag X254
Pretoria
0001

Plans can be **couriered** to:
S.A.P.S.
Supply Chain Management:
Expert Services
18 De Havilland Crescent
Mopane Building
Persequor Technopark
Pretoria

2. CELLS

2.1 GENERAL REQUIREMENTS

* 2.1.1 All cells must have ablution facilities, namely, a toilet, shower and drinking fountain inside the cell. See Annexure A, B & C

2.2 GENERAL CONSTRUCTION

2.2.1 All brickwork to be **230 mm** brick walls. A high tensile steel mesh of **100 mm x 200 mm x 5 mm thick**, is to be built in cells,
* cell yards, kitchen, pantry or visitors area into the wall, between skins, in the perimeter walls of the cells (See Annexure "A"). The wall behind the toilet to be **330 mm** (built up to sill height), with steel mesh between skins. (POL2006/S1)

2.2.2 Walls have to be painted to specification in heavy-duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E" Underside of concrete slab to be painted white

2.2.3 A concrete bench must be built against the wall dividing the cell and the cell yard.

2.2.4 All cells, kitchens, pantry and visitors areas must have concrete ceilings with a minimum height of **3000 mm** and finished with a conventional roof over.

2.2.5 All screen walls to the toilets and showers are to be **230 mm** walls, built up to concrete slab/ceiling. Screen walls are to be added beside and in front of the toilet in accordance with the relevant Annexure. Free space between the front of the drinking fountain and screen wall to be **700 mm** to **900 mm**.

2.2.6 * All floors have to be finished in a steel/wooden trowel grano finish as specified with a **250 mm high monolithic** upwards sloping concave skirting. See POL2006/B1

2.2.7 * Insides of shower walls and floors to be waterproofed with Duraflex, "ABE" product or similar approved. Apply to manufactures specification and allow product to dry.

2.2.8 * The floor to be finished with a **250 mm high monolithic** upwards sloping concave grano skirting and sealed same as 2.2.7. The shower must be provided with a **170 mm** threshold. See Annexure "A".

2.3 WINDOWS

2.3.1 * Wire mesh- and expanded metal screens inside and outside windows, according to specifications, expanded metal, with a thickness of **3 mm**, web width **10 mm** and openings of **10 mm** x **40 m**m, of the approved type Flatex/345 (Pigmesh). Openings in screens, for opening windows, to be finished so that **NO** sharp extrusions exists. Screen openings only on the inside screens of windows, **NO** openings on outside screens. (POL2006/W1 to W3)

2.3.2 Screen frames to be according to typical drawing POL2006/ W1, W2 and W3. The heavy-duty padlocks as specified on the drawings are to be included in the contract, on a master key system. The keys are to be handled in a similar fashion to the cell lock keys (see 2.4.7).

2.3.3 Glazing in cell windows to be **6,5 mm** laminated glass. There must be a sufficient number of windows to ensure good ventilation of the cell.

2.3.4 * Where windows and mesh are to be installed, all steel to be **hot dipped galvanised**. Galvanised steel work to be left unpainted and welding joints to be cold galvanised on site. The putty to galvanised windows to be painted with silver enamel paint.

2.3.5 The windows in the external wall to be built in as high as possible. Note that at least **2 brick** courses are to be left between underside of concrete ceiling and window soffit. The windows in the wall between the cell and the yard are to be built in at a standard soffit height of **2100 mm** from finished floor level.

2.3.6 At least one window per cell is not to be installed until after the cell door and -gate have been built in and allowed to set (see 2.4.8).

2.4 DOORS AND GATES

2.4.1 * All hinges in accordance with the specifications as per drawing no. POL 2006/D4, and to be **greased monthly after installation**.

2.4.2 All frames, doors, gates and trellis work have to be in accordance with **drawings** POL2006/D1, D2, D3, D4 and D5.
The cell door and gate lock box to have a keyhole only on the exercise yard side. Cell side to be blocked off.

2.4.3 * Doors and gates have to be **hot dipped galvanised**.
NOTE: **NO PAINT ON GALVANISED FINISHES**

2.4.4 ALL doors and gates have to open against the wall. See Annexure "A" and "B".

2.4.5 ALL cell type locks have to be ordered from Capt. Steve van Schalkwyk of SAPS: Building Services ((082) 779-8615 or (012) 841-7368) has to be contacted in this regard. The cost of the locks have to be budgeted for in the contract amount, as SAPS Building Services is only responsible for the ordering and co-ordinating. **ALL CELLS LOCKS ARE TO BE ACCOUNTED FOR BY THE CONTRACTOR AT THE END OF THE CONTRACT. THE CONTRACTOR MAY NOT TAKE POSSESSION OF ANY CELL LOCKS. EXTRA CELL LOCKS TO BE RETURNED TO SAPS : BUILDING SERVICES.**

2.4.6 A total of two suites for the cell door and trellis door locks, have to be used in the entire cell complex. The locks are to be 4 lever, see drawing POL2006/D5. One suite has to be used for trellis and solid doors, to all cells and exercise yards, as well as the trellis gate in the passage, between the kitchen yard and the first exercise yard. The other suite has to be used for the trellis gate to the kitchen yard, the main entrance to the security passage, as well as any other trellis gates or solid doors. The Project Manager of Department of Public Works must confirm the number of different locks with Capt. Steve van Schalkwyk in writing. A floor plan of cell block to be included.
THE LOCKS HAVE TO BE ORDERED WELL IN ADVANCE, AS THE DELIVERY TIME CAN BE AS LONG AS TWO TO THREE MONTHS.

2.4.7 **UNDER NO CIRCUMSTANCES** may the contractor or any other party, except the Station Commissioner of the station or his nominated representative, take possession of the keys of the locks. The keys have to be provided to the Station Commissioner or representative, in a sealed envelope (signed for) and kept in the safe of the station, for safekeeping.

2.4.8 The door, gate and frame are delivered to site as a unit, welded closed. Under no circumstances may the doors be cut open until after it has been built in completely. For this reason, the doors have to be built in before the windows, or one window per cell is not to be built in, until after the door has been built in, to allow * access to the cell. (See 2.3.6).

2.5 ELECTRICAL

2.5.1 Vandal proof wall and ceiling lights with metal bases for fixing to structure and polycarbonate screens to be used throughout. See Annexure "D".

2.5.2 Lights in cells to be fixed out of reach, against the ceiling and never near any element that can serve as a possible foothold. The lights to be used in the cells to be a vandal proof fluorescent light with a built in PL9 night-light (with a guaranteed working life of 4000 hours) See Annexure "D".

2.5.3 A shorter light fitting, but of the same type as for the cell, to be used in the wc cubicle. See Annexure "A" and "D".

2.5.4 All light fittings to be positioned similar to Annexure "A"

2.6 PLUMBING

2.6.1 Drinking fountains: To be installed in all cells in accordance with drawing POL2006/S2. Drinking fountains to be of the approved type, and equipped with push button faucets, serviceable from the front, built into drinking fountain. Fountains to be installed with the underside, at a min height of **1200 mm** from finished floor level.

2.6.2 All toilets to be vandal proof stainless steel toilets, as specified in drawing POL2006/S1.

2.6.3 Toilets to be activated with push button type flush valves, only letting through measured amounts of water under high pressure and stopping automatically, concealed toilet flush valve with integral non-hold open, vacuum breaker and shut front-entry hidden and closed flow control valve or similar approved valves, for pressures between **30 kPa** and **250 kPa** at a height of **1500 mm** above floor level in the cell. See drawing POL2006/S1.

2.6.3.1 * Alternately in areas with a high lime content use low level cistern with 1.75" High Flow Flush Valve only to SABS 1509-1990 or 1.75" Kingfisher Syphonic Valve. To be mounted in secure service duct.

2.6.4 Where any sanitary fittings, e.g. wc's are to be fitted against an external wall, Provide steel mesh between brick skins, in accordance with drawing POL2006/S1.

2.6.5 * Warm water has to be laid and a proper water mixer provided. One **200 Litre** warm water cylinder has to be provided for every 2 cells, a **200 Litre** warm water cylinder to be added for every 2 cells thereafter. The warm water cylinders and water mixer are to be installed in the geyser room.

2.6.6 Showers to be activated with push button metre valve that allows only measured and pre-mixed amounts of water and automatically cuts off, e.g. a push button metering non hold open valve and with extension ring, fixed at a height of **1500 mm** above shower floor level. See drawing POL2006/S3.

2.6.7 A **30 mm** diameter sleeve has to be poured into the concrete, to house a stainless steel showerhead, as on drawing no. POL2006/S3.

2.6.8 * Installations where push button flush and metre valves are used and the water pressure is less than **30 kPa**, see 2.6.3 and 15.1.

2.6.9 Where the provision of a pressure tank and -pump is not possible, externally mounted high level cisterns can be used, after consultation with SAPS: Expert Services

2.6.10 Where the water pressure exceeds **250 kPa**, a pressure reducing valve is to be installed on the water supply line.

2.6.11 A water filter/in line strainer, easily serviceable and cleanable, to be provided in ALL water supply networks to cells and exercise yards to intercept any impurities and ensuring the effective use of push button flush- and metre valves.

2.6.12 Where push button flush- and water valves are used, the total water supply network has to be **PROPERLY** rinsed before use, to remove any dirt and impurities, under the supervision of the responsible consultant.

2.6.13 The service of the water filter, pressure pump (if installed), all pipes, valves and faucets; must be possible from outside the cell and exercise yard except where practically impossible.

2.6.14 All water pipes to be chased into walls and serviceable from outside the exercise yards. Normal screw type taps to be replaced with push button faucets.

2.6.15 The consultant responsible must investigate the frequency of water shortages, and supply a buffer tank, with a **36 hour** reservoir capacity, under the contract if the need exists.

2.6.16 The quality of the water has to be tested, and if it is of poor quality, or **ANY** lime is present, SAPS: Expert Services, has to be contacted with the proposed solutions, for discussion and approval.

3. EXERCISE YARDS

3.1 GENERAL REQUIREMENTS

3.1.1 Each cell must have a separate exercise yard, the full width of the cell, and built out to a length of **3,5 m** in front of the cell. See Annexure "A" and "B".

3.2 GENERAL CONSTRUCTION

3.2.1 The height of the walls of the cell yards to be min **4500 mm** high.

* Where the finish of the walls is face brick, the joints have to be filled in flush with the surface.

3.2.2 Finish of the walls is plaster and paint, the walls are to be prepared and painted with a heavy-duty oil base paint. (Annexure E).

3.2.3 The approved type of high tensile metal mesh screen to be

* installed at a min height of **4000 mm** from finished floor level (see drawing POL 2006/G1). A **3 mm** solid steel plate of at least **1,2 m** x **1,2 m**, is to be welded to the mesh, over all door openings into the cell yard, according to POL 2006/G1. **All steel to be hot dipped galvanised and welding spots to be finished with cold galvanising on site.**

3.2.4 **Approved Type Mesh:**

a) Galvanised Carbon Hardened Woven Steel Mesh (Screenex see "Annexure G")
b) Mesh Aperture: 12.00 mm x 12.00 mm
c) Wire Diameter: 4.80 mm
d) Coating : High Carbon (Spring Steel)
Hot Dipped Galvanised SABS 763
(Before weaving) ISO 1461
e) Weave Type: SW
f) Company : Screenex wire Weaving Manufacturers
g) Assist. Sales Manager:
Basil Shelver
Tel number : (011) 864 2773
Fax number: (011) 864 6800

3.2.5 **358 Benzinal Coated Double Skin High Security Fencing** (see "Annexure H")

a) Mesh Aperture: 12.70 mm x 12.70 mm
b) Wire Diameter: 4.00 mm
c) Coating : Hot dipped galvanised to SABS 763
d) Company: Bekaert Fencing
e) Senr. Sales Consultant :
Gwen Henwood
Cell number: 083 680 3797
Tel number : (011) 706 5833
Fax number: (011) 463 9388

3.2.6 Floors of yards (only plastered walls) are to be finished in a wooden trowel grano finish with a **250 mm high monolithic** upwards * sloping concave skirting. The floor is to have a fall towards the door to the passage, to drain water under the door and into the passage.

3.2.7 The finished floor levels at the lowest point of the exercise yards, are to be at least **170 mm** lower than the floor level of the cells, and **85 mm** higher than the floor level of the passage.

3.2.8 Concrete capping to be provided on all external walls against * weather with water drip.

3.3 WINDOWS

3.3.1 All screens to cell windows are to be in accordance with drawing no. POL 2006/W1 to W3. No protrusions are allowed, that may serve as a possible foothold. Screens and windows between yards and cells are to be installed at a soffit height of **2100 mm** from finished floor level.

3.4. DOORS AND GATES

3.4.1 Hinges in accordance with the specifications as per drawing no. POL 2006/D4.

3.4.2 Frames, doors, gates or trellis work are to be in accordance with drawings POL2006/D1, D2, D3, D4 and D5.

3.4.3 The cell door and gate lock box to have a keyhole only on the exercise yard side. Cell side to be blocked off.

3.4.4 **ALL** doors and gates have to open against the wall, see Annexure “A” and “B”.

3.4.5 The finishes and specifications of doors and gates, are the same as in 2.4.

3.4.6 **ALL** trellis gates are to be supplied with an opening to pass a plate through, see drawing no. POL 2006/D1.

3.5 ELECTRICAL

3.5.1 Lights in exercise yard to be fixed against the walls between the yard and passage, directly under steel mesh, preferably at a minimum of **3,7 metres** from the finished floor level. The type of light fitting to be installed is the same as for the cells. See Annexure “D”.

3.5.2 All light fittings to be positioned similar to Annexure “A”.

* = Rev. A

4. SECURITY PASSAGE

4.1 GENERAL REQUIREMENTS

4.1.1 A **1,5 m** wide security passage has to be provided in front of all exercise yards, for the length of the cell block.
See Annexure "A - C".

4.1.2 The passage to be divided into a high security area and a lower security lobby. The different zones to be divided by trellis gates. The two trellis gates have to be built in, one at the entrance to the passage, and the other in the passage, between the entrances to the kitchen yard and the first of the exercise yards.
See Annexure "A".

4.2 GENERAL CONSTRUCTION

4.2.1 The height of the walls of the passage to be **3000 mm** high. The walls are to be flush jointed, smooth face brick.

4.2.2 * The passage is to be covered with a conventional roof structure, e.g. tiles or corrugated iron. "Mentex 70" mesh screen to be installed as a ceiling, at a min height of **2700 mm** from finished floor level (see drawing POL 2006/G1) Preferable directly below trusses. **All steel to be hot dipped galvanised and welding spots to be finished with cold galvanising on site.**

4.2.3 The floor is to be finished with a wooden trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting. The floor is to have a fall towards the seep holes in the external wall, or covered drains in the passage, with outlets to the exterior. Lid on drain to be bolted onto drain framework.

4.2.4 The finished floor level of the passage is to be at least **85 mm** lower than the finished floor level of the exercise yards.

4.3 WINDOWS

4.3.1 Breezeblock openings can be built into the external wall, but **Not** directly opposite any doors to exercise yards, and **Not** in the wall between the yards and passage. Expanded metal screens (Annexure G and H) in angle iron frames, are to be bolted to the inside wall over the full area of the openings. Screens and breeze openings are to be installed as high as possible, and should not extend to below **1500 mm** from finished floor level.

4.4. DOORS AND GATES

4.4.1 Hinges in accordance with the specifications on drawing no. POL 2006/D4.

4.4.2 Frames, gates or trelliswork are damaged beyond repair, it has to be replaced in accordance with drawings POL2006/D1, D2, D3, D4 and D5.

4.4.3 Only trellis gates (no solid doors) are to be installed in the passage. The gates have to open against the wall, see Annexure "A".

4.5 ELECTRICAL

4.5.1 Lights in the passage are to be fixed directly under the mesh, against the external walls, opposite the doors to the yards. See Annexure "A". The lights are to be the same as used in the cells (see Annexure "D") but without a night light.

4.5.2 Two light switches (one for the cell lights and one for the yard lights) have to be positioned in the passage outside each door, out of reach of persons in custody inside the yards. **Light switches to be watertight rotatable switchgear, of an industrial type. The switches for the cell lights to be two-way switches, to allow for the operation of the night-light**.

* 4.5.3 No power points allowed.

4.6 PLUMBING

4.6.1 A fire hose reel has to be provided in accordance to the National Building Regulations, but must not be accessible from the exercise yards.

5. CELL KITCHEN AND PANTRY

5.1 GENERAL REQUIREMENTS

5.1.1 The cell kitchen must preferably be built next to the first cell, with the same depth as the cells. The pantry is to be accessed off the cell kitchen. The kitchen is to be accessed via the kitchen yard, via a secured lobby off the admissions area. See Annexure "A".

5.2 GENERAL CONSTRUCTION

5.2.1 The walls are to be **230 mm** conventional brickwork, with a concrete ceiling over the kitchen and pantry. A conventional roof structure is to be installed over all concrete ceilings.

5.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"

5.2.3 All floors have to be finished in a steel trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting.

* 5.2.4 Architect to ensure that all door frames between off loading and kitchen (see drw. POL2006/A) to be a min of 1100 mm to accommodate boiler/stove.

* 5.3 GENERAL EQUIPMENT

5.3.1 * A stainless steel work top with shelf below is to be provided (Length ±**1500mm** min).

5.3.2 * A stainless steel (PS-L or PS-R) double combination pot sink is to be built in with bib tap extension peaces and flange. All equipment to be stainless steel grade 304.

5.3.3 * A handheld **4,5kg CO_2** fire extinguisher is to be fixed to a wall in an accessible position.

5.3.4 * Hardwood shelves (**350 mm**) have to be provided in the pantry, in accordance with drawing no. POL 2006/F1. The room has to be properly ventilated.

5.4 WINDOWS

5.4.1 Cell windows have to be built into the wall between the kitchen and yard, at a soffit height of **2100 mm**. The pantry is to be provided with ventilation bricks built into the external wall.

5.5. DOORS AND GATES

5.5.1 * Both the kitchen and the pantry have to be provided with a solid meranti door, type T4 fitted with a cylinder lock and aluminium louvre **(300 mm x 300 mm)** in bottom half.

5.6 ELECTRICAL

* 5.6.1 At least two double plugs have to be provided in the kitchen.

5.6.2 A double plug has to be provided in the pantry, to make provision for a fridge or freezer. An alternative position for the fridge needs to be provided in the cell kitchen as well.

5.6.3 The approved type of cell light (without night light) has to be installed in the kitchen and pantry. See Annexure “D”. Light switches to be watertight rotatable switchgear, of an industrial type, as used for the cells.

5.7 ELECTRICAL EQUIPMENT

5.7.1 * The kitchen is to be fitted with a three phase industrial type stove, with solid plates without oven, type Vulcan RE-3, T **OR** Bakers Price equipment **OR** similar and approved product. Other types of stoves can be investigated and the proposals submitted to SAPS: Expert Services for final approval.

5.7.2 * A Stainless steel extractor hood with isolator has to be provided over stove and boiler pan in kitchen.

5.8 PLUMBING

5.8.1 * The double combination pot wash sink to be provided with heavy duty bib taps, extension pieces and flanges. (1 x hot and 1 x cold for **each bowl**)

* 5.8.2 One **100 litre** geyser to be installed for kitchen.

6. KITCHEN YARD

6.1 GENERAL REQUIREMENTS

6.1.1 A yard has to be built out to a length of **3,5 m** in front of the kitchen.

6.1.2 The kitchen yard is of a similar construction to the exercise yards. The kitchen has to be accessed from the yard. The yard is accessed from a secured lobby off the admissions area. See Annexure "A".

6.1.3 A concrete washing trough to be installed with heavy duty bib taps. Only the cold-water tap to be a hose type tap and hot water a union tap.

6.2 GENERAL CONSTRUCTION

6.2.1 * The height of the walls of the kitchen yards to be min **4500 mm** high.

6.2.2 Finishing of the walls is plaster and paint, Walls to be painted in heavy-duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"

6.2.3 * The approved type of high tensile metal mesh screen to be installed at a min height of **4000 mm** from finished floor level (see drawing POL 2006/G1) similar as exercise yards. **All steel to be hot dipped galvanised and welding spots to be finished with cold galvanising on site.**

6.2.4 The floors of the yard, is to be finished in a steel trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting. The floor is to have a fall towards the door to the passage to drain water under the door and into the passage.

6.2.5 The finished floor levels of the kitchen yards, is to be at least **170 mm** lower than the floor level of the kitchen.

6.2.6 A drying line, constructed of R10 reinforcing rods, or solid rods, welded to **50 mm x 50 mm** mild steel angle iron sections, bolted to the walls, has to be provided in a corner of the yard as indicated on Annexure "A".

6.3 WINDOWS

6.3.1 Cell windows have to be built into the wall between the kitchen and yard, at a soffit height of **2100 mm**. The pantry is to be provided with ventilation bricks built into the external wall.

6.4. DOORS AND GATES

6.4.1 A cell trellis gate to be provided from the passage, with the door swing against the wall. No solid cell door to be provided.

6.5 ELECTRICAL

6.5.1 Lights in the kitchen yard to be fixed against the walls between the yard and passage, directly under steel mesh, preferably at a minimum of **3,7 metres** from the finished floor level. The type of light fitting to be installed is the same as for the cells. See Annexure "D".

6.5.2 All light fittings to be positioned similar to Annexure "A".

6.6 PLUMBING

6.6.1 Two concrete wash troughs with bib taps have to be built in as shown on Annexure "A". (Cold water, hose type, Bib-tap to be provided for hosing down of cell block).

7. VISITOR'S ROOM

7.1 GENERAL REQUIREMENTS

7.1.1 The visitor's room is to be accessed from two sides, one from the secured passage or -lobby by the detainee and the other from the outside by the public. No contact can take place between the two parties. See Annexure "A". Dividing walls between cubicles to be **230 mm** brick walls built up to underside of concrete ceiling. Room to be accessible for disabled

7.2 GENERAL CONSTRUCTION

7.2.1 The walls to be conventional **230 mm** brick work walls, with a concrete ceiling, with conventional roof structure over the slab.

7.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"

7.2.3 The floor to be finished in a steel trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting.

*

7.2.4 The finished floor level of the visitor's room is to be at least **85 mm** higher than the floor level of the passage.

7.2.5 The entrance from the visitor's side is to be ramped, to allow for disabled access.

7.2.6 Seats and counters to be built in according to drawing no. POL2006/V1, V2, & V3.

7.3 WINDOWS

7.3.1 Cell windows and grilles have to be built into an external wall, on the detainee's side, as high as possible, in accordance with the standard drawings. The visitor's side is to be provided with a conventional window in an external wall. The security window between the two areas to be in accordance with POL2006/V1 to V3 with **16 mm** diameter mild steel vertical bars at **80 mm** centres over glass on detainees side.

7.4. DOORS AND GATES

7.4.1 A cell trellis gate to be provided from the passage, on the detainee's side. A solid meranti door type T4 with a cylinder lock to be provided on the visitor's / public's side.

*

7.5 ELECTRICAL

7.5.1 Cell type light to be fixed on the detainee's side, similar to cells, against concrete ceiling. See Annexure "D" Conventional bulkhead to be fixed on visitor's side, on ceiling. **No plugs are needed.**

7.6 PLUMBING

7.6.1 Nothing to be noted.

8. PRISONER'S PROPERTY STORE (SAP22)

8.1 GENERAL REQUIREMENTS

8.1.1 The prisoner's property store is a secured store with built in shelves, and steel cabinets (min 4 x 300w x 450d x 1.8h) with 4 louvre lockable doors preferably off the admissions area.
See Annexure "A".

*

8.2 GENERAL CONSTRUCTION

8.2.1 The walls to be conventional **230 mm** brick work walls, with a concrete ceiling, with conventional roof structure over the slab.

8.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"

8.2.3 * The floor to be finish in a steel trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting.

8.2.4 Shelving (±**350mm**) to be in accordance with drawing no. POL2006/F1.

8.3 WINDOWS

8.3.1 The room must be well ventilated, by means of vent bricks, or similar and approved methods, while still ensuring the security of the room.

8.4. DOORS AND GATES

* 8.4.1 A solid meranti door type T4 with a cylinder lock to be provided.

8.5 ELECTRICAL

8.5.1 Conventional bulkhead to be fixed to ceiling. No plugs are needed.

8.6 PLUMBING

8.6.1 Nothing to be noted.

9. BLANKET STORE

9.1 GENERAL REQUIREMENTS

9.1.1 The blanket store is for the storage of blankets and mattresses. It can be provided off the admissions area, or off the secured passage. See Annexure "

9.2 GENERAL CONSTRUCTION

9.2.1 The walls to be conventional **230 mm** brick work walls, with a concrete ceiling, with conventional roof structure over the slab.

9.2.2 Walls to be painted in heavy duty, oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"

9.2.3 * The floor to be finished in a steel trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting.

9.2.4 Shelving (±**450mm**) to be in accordance with drawing no POL2006/F1.

9.3 WINDOWS

9.3.1 The room must be well ventilated, by means of vent bricks, or similar and approved methods, while still ensuring the security of the room.

9.4. DOORS AND GATES

* 9.4.1 A solid meranti door type T4 with a cylinder lock to be provided.

9.5 ELECTRICAL

9.5.1 Conventional bulkhead to be fixed to ceiling. No plugs are needed.

9.6 PLUMBING

9.6.1 Nothing to be noted.

10. GEYSER ROOM

10.1 GENERAL REQUIREMENTS

10.1.1 This room is to be centrally located. This room should be easily accessible from the outside or security passage, for servicing the geysers within. See Annexure “A”.

10.2 GENERAL CONSTRUCTION

10.2.1 The walls to be conventional **230 mm** brick work walls, with a conventional ceiling.

10.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. “See Annexure E”

10.2.3 * The floor to be finished in a wooden trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting.

10.3 WINDOWS

10.3.1 The room must be well ventilated, by means of vent bricks, or similar and approved methods, while still ensuring the security of the room.

10.4. DOORS AND GATES

* 10.4.1 A solid meranti door type T4 with a cylinder lock to be provided.

10.5 ELECTRICAL

10.5.1 Conventional bulkhead to be fixed to ceiling. No plugs are needed.

10.5.2 Three-phase power is to be provided.

10.6 PLUMBING

10.6.1 **200 Litre** hot water to be provided per two cells. The water to be pre mixed to an acceptable temperature. (Max 25° – 30°)

11. ADMITTANCE AREA

11.1 GENERAL REQUIREMENTS

11.1.1 This room is to be built onto all cell blocks under Project Five Star. This room is for the processing and booking of detainees before they are admitted to the cells. It also serves as access control for the cell block. See Annexure "A".

11.1.2 See POL2006/A – Admission Counter

11.2 GENERAL CONSTRUCTION

11.2.1 The walls to be conventional **230 mm** brick work walls, with the approved high tensile steel mesh between the skins. A concrete ceiling at ± **2,7m** high is to be provided over the area, with a conventional roof structure over the slab.

11.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"

11.2.3 The floor to be finished in a steel trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting. The finished floor level has to be **85 mm** higher than the secured passage.

11.2.4 A counter with brick support and steel trowel grano, with a drop in stainless steel prep bowl, has to be constructed in accordance with POL2006/A. See Annexure "A".

11.2.5 A concrete bench, similar to those in the cells has to be built against one of the walls. See Annexure "A" and POL2006/B1

11.3 WINDOWS

11.3.1 Cell windows and screens according to drawing no. POL2006/W1 to W3 has to be built in as high as possible from finished floor level.

11.4. DOORS AND GATES

11.4.1 A cell door and gate combination (as on drawing no. POL2006/D1 to D4) has to be built in, as entrance to the admission area. A trellis gate has top be built in as access to the

secured lobby. See Annexure "A".

11.5 ELECTRICAL

11.5.1 Vandal proof wall and ceiling lights, as for cells, but without night-lights, are to be used throughout. See Annexure "D".

11.5.2 Lights to be fixed out of reach, against the ceiling and never near any element that can serve as a possible foothold. The lights to be a vandal proof fluorescent light without a night-light. See Annexures "A" and "D".

11.5.3 A lock-able sub-distribution board is to be installed behind the counter to house the network for the entire cell block. One plug and computer plug must be provided in cell guard office. (Power skirting as per specification.)

* 11.5.4 3 way power skirting to be installed (data cable, IT cable and power point.

11.6 PLUMBING

11.6.1 The taps used with the prep bowl have to be robust and vandal proof as far as possible. See POL2006/A.

12. HOLDING CELL

12.1 GENERAL REQUIREMENTS

12.1.1 This room is for the holding of detainees while they are being processed/booked. It should be directly off the admittance area. See Annexure "A".

12.2 GENERAL CONSTRUCTION

12.2.1 The walls to be conventional **230 mm** brick work walls, with the approved high tensile steel mesh between the skins in the exterior walls. A concrete ceiling (at ± **2,7m** high) is to be provided over the area, with a conventional roof structure over the slab.

12.2.2 Walls to be painted in heavy duty, light coloured oil base coating. Proposed colours: ivory, light grey, etc. Approved undercoat Alkali resistant primer. No Contractors PVA. "See Annexure E"

12.2.3 * The floor to be finished in a steel trowel grano finish with a **250 mm high monolithic** upwards sloping concave skirting. The finished floor level has to be **85 mm** higher than the secured passage.

12.2.4 * A concrete bench, similar to those in the cells, **see Annexure "A"**

12.3 WINDOWS

12.3.1 No windows are necessary, as the area is ventilated via the gate.

12.4. DOORS AND GATES

12.4.1 A trellis gate (as on drawing no. POL2006/D1 to D4) has to be built in according to Annexure "A". Blank off inside keyhole.

12.5 ELECTRICAL

12.5.1 Vandal proof ceiling lights, as for cells, are to be used throughout. See Annexure "D".

12.5.2 Lights to be fixed out of reach, against the ceiling and never near any element that can serve as a possible foothold. The lights to be a vandal proof fluorescent light without a night-light. See Annexures "A" and "D".

12.5.3 No plugs are needed.

12.6 PLUMBING

12.6.1 No plumbing to this area.

13. SECURED SERVICE DUCT

13.1 GENERAL REQUIREMENTS

13.1.1 A secured service duct is to be built behind all external windows, to prevent access to the windows and plumbing services. See Annexure "A".

13.2 GENERAL CONSTRUCTION

13.2.1 The walls to be conventional **230mm** face brick walls of ±**3m** high (height will be dictated by roof height and -overhang), with flush joints. Wall to be built in 3000 mm segments with an expansion joint between sections. A 460 mm column to be built on each end of segment.

13.2.2 * "Mentex 70" steel mesh to be hot dipped galvanised (according to drawing no. POL2006/G1) and to be built in over entire duct area.

13.2.3 A concrete apron to be provided around cell block, and extended to the screen wall in the service duct, to serve as a floor for this area.

13.3 WINDOWS

13.3.1 No windows are necessary.

13.4. DOORS AND GATES

13.4.1 A trellis gate (as on drawing no. POL2006/D1 to D4) has to be built in according to Annexure "A", at one end of the duct.

13.5 ELECTRICAL

* 13.5.1 1 Waterproof (outdoor) plug is needed in the duct.

13.5.2 Bulkhead light fitting to be fixed above the trellis gate and linked to the existing external lighting circuit.
One bulkhead light has to be provided between windows at **6 metre** centres.

13.6 PLUMBING

13.6.1 No plumbing to this area. The main sewerage line from the cell block to be either located inside this duct or just outside it, according to National Building Regulations, with the cleaning eyes, etc. clearly marked.

14. ELECTRICAL GENERAL

14.1 The electrical consultant must inspect the condition of the electrical reticulation for compliance with Regulations. Everything found to be non-compliant, to be replaced or repaired under the contract. The contractor has to leave at least **10 lamps** of each type on site after completion of the contract. These are to be handed to the station commissioner for safekeeping.

14.2 The external lighting, especially around the cell block, has to be sufficient to ensure a secure environment. The lighting can either be wall-mounted fittings against the cell block, but not positioned as to blind any person doing inspections of the area. Another alternative is to provide conventional post top lighting on powder coated galvanised poles.

14.3 Where conduit has to be laid/chased in the walls or slabs (inside cells), a SABS approved PVC conduit has to be used for wiring. Where wiring has to be surface mounted (only allowed in rare circumstances, and only on external surfaces and out of reach of detainees) the type of conduit to be of the galvanised type.

14.4 Ensure that the UPS system for computers is integrated in the power supply network. (20 min Standby time)

14.5 The present bulk electricity supply has to be investigated in terms of consistency of supply, the installation of a new emergency generator needs to be investigated and included under the contract. This generator has to be able to service the essential areas in the station and cell block. (Entire cell block, security/external/passage lights, station commissioner office, entire community service centre, radio room and computer rooms). See Annexure “D”. To ensure uniformity nationally, the type and size of generator to be discussed with:

The Electrical Section : Building Services Capt. Booysen
Tel: (012)841-7324 Cell: 083 399 1839

* = Rev. A

15. GENERAL NOTES

15.1 Where the suitability of the water supply is suspect, a consultant has to be appointed as a disbursement under the architect's appointment, to do a complete investigation and compile a report about the suitability of the water for human consumption, the
* **water pressure, the lime concentration, the consistency of the water supply, and any other relevant factors. Recommendations have to be made about booster pumps, filtering systems, de-liming systems, etc. (see 2.6.3)**

* 15.2 Screen frame to be bolted at least a min of 6 brick layers below top edge of wall.

15.3 All plumbing and storm water drainage must be inspected by the consultant responsible, and be supplied under the contract. An adequate number of manholes must be provided, to enable easy cleaning, as foreign objects often block the sewerage system.

15.4 A **1 metre** wide apron is to be built around the cell block, where possible, but especially where there are entrances to the building.

15.5 Should circumstances necessitate it, changes to all or some of the aforementioned requirements will be determined by the surveying team during inspections.

15.6 Proposals for **similar approved products or materials** to be submitted to Division: Sypply Chain Management, Expert Services, South African Police Service; through the regional office of the Department of Public Works, for evaluation and approval.

15.7 The perimeter- or boundary wall adjacent to the cell block has to be built as part of the contract, to ensure strict security of the area around the cell block.

15.8 Concrete capping must be provided on all external walls against weather with water drip.

THE FINAL DOCUMENTATION HAS TO BE APPROVED AND SIGNED BY SAPS: EXPERT SERVICES, PRIOR TO TENDERS. THIS SECTION HAS TO BE INFORMED OF ALL SITE MEETINGS AND PROGRESS OF THE PROJECT.

15.10 Signage also has to be provided under the contract. All exercise yards have to be numbered and named in the passage, namely: Male and Female. All other rooms also have to be named, e.g. Geyser Room, Kitchen, Pantry, Visitor's Room, etc. Signage components, like plates, screws, etc. must not be accessible to detainees in the cell yards.

15.11 For more information on cell blocks or questions on this document, contact:

Expert Services

Division: Supply Chain Management
Private Bag X254
Pretoria
0001

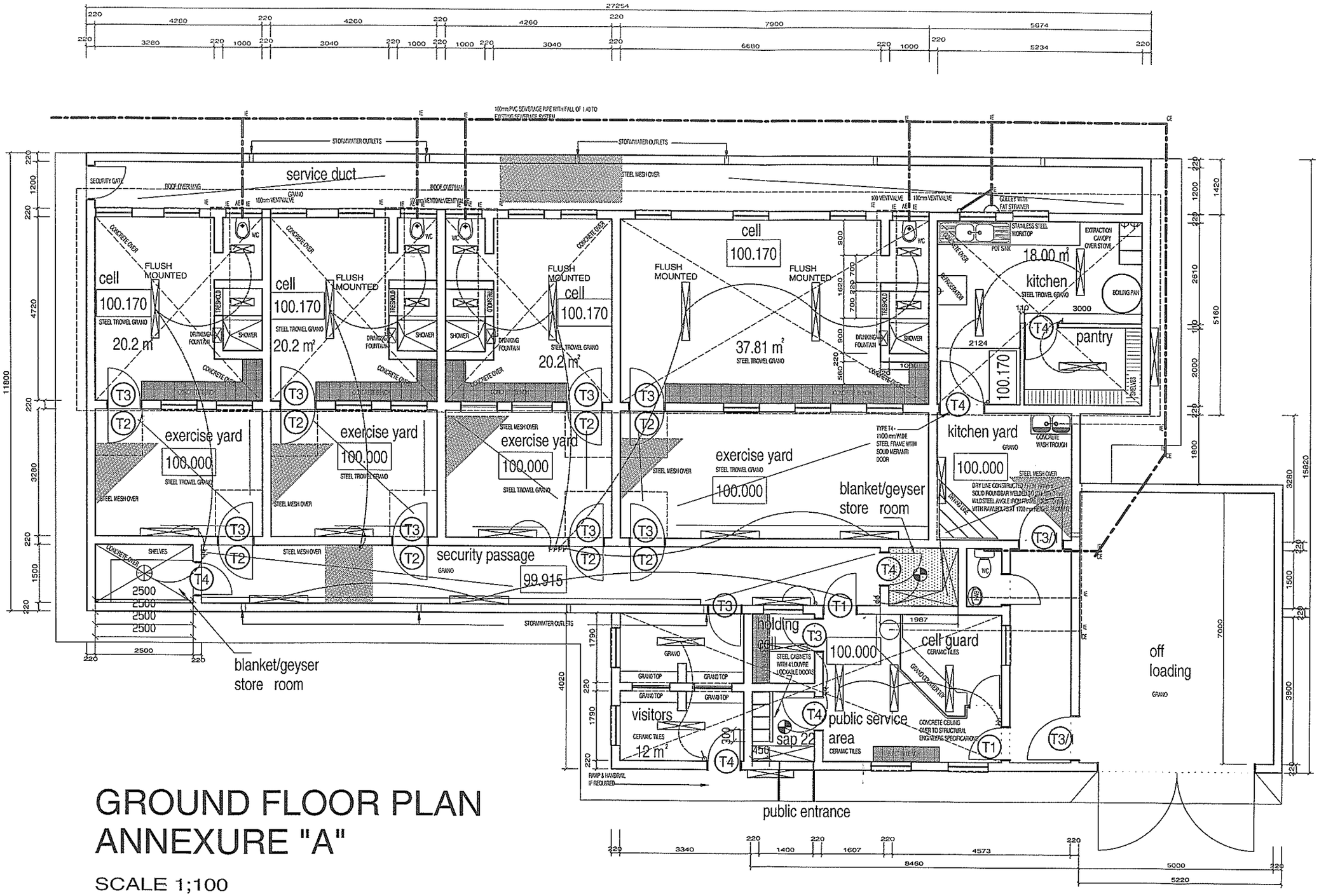
Mr. Dirk Els
(012) 845-8726 (T)
(012) 845-8762 (F)
(082) 499-0335 (C)

15.12 The abovementioned office has to be kept informed as to **dates** for **site hand over**, and **ALL** dates for **site meetings**, during the construction phase. **All** site meeting minutes, etc are to be forwarded to the above address and/or fax number.

15.13 Initial concept layouts can be faxed to the above number for inputs/comments, to enable possible changes to be made at an early stage of the project.

* **15.14 All steelwork and door frames to be inspected on site or manufacturer before installation.**

* **15.15 The principal agent and contractor will be held responsible and liable for any deviations and additional costs due to any unapproved deviations from this 5 Star Specification.**



GROUND FLOOR PLAN
ANNEXURE "A"

SCALE 1;100

NO	DATE	AMENDMENT	D.P.W

NOTE

References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SAPS SCM (Expert Services) Pretoria.
Tel (012) 845 8726
Fax (012) 845 8762

cad file name
5-st-a.DRW
ANNEXURE "A"

DEPARTMENT OF PUBLIC WORKS
Private Bag X65
Pretoria
0001
Tel (012) 337 2000
Director-General:
T.M. Sokutu

consultant/departmental

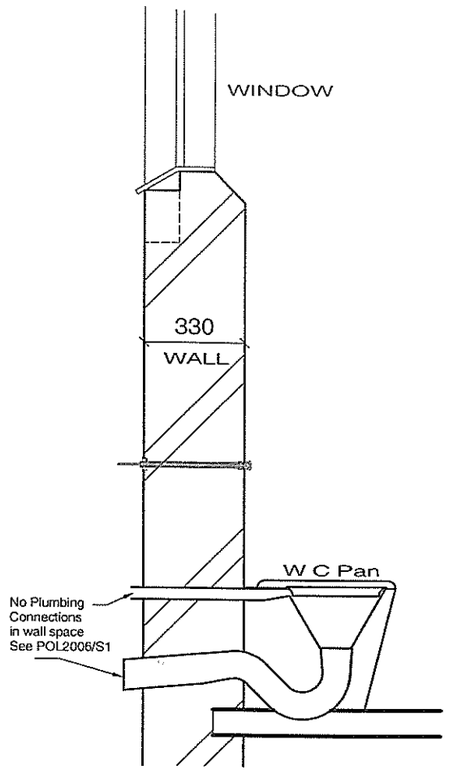
discipline
ARCHITECTURAL

service
SOUTH AFRICAN POLICE SERVICE

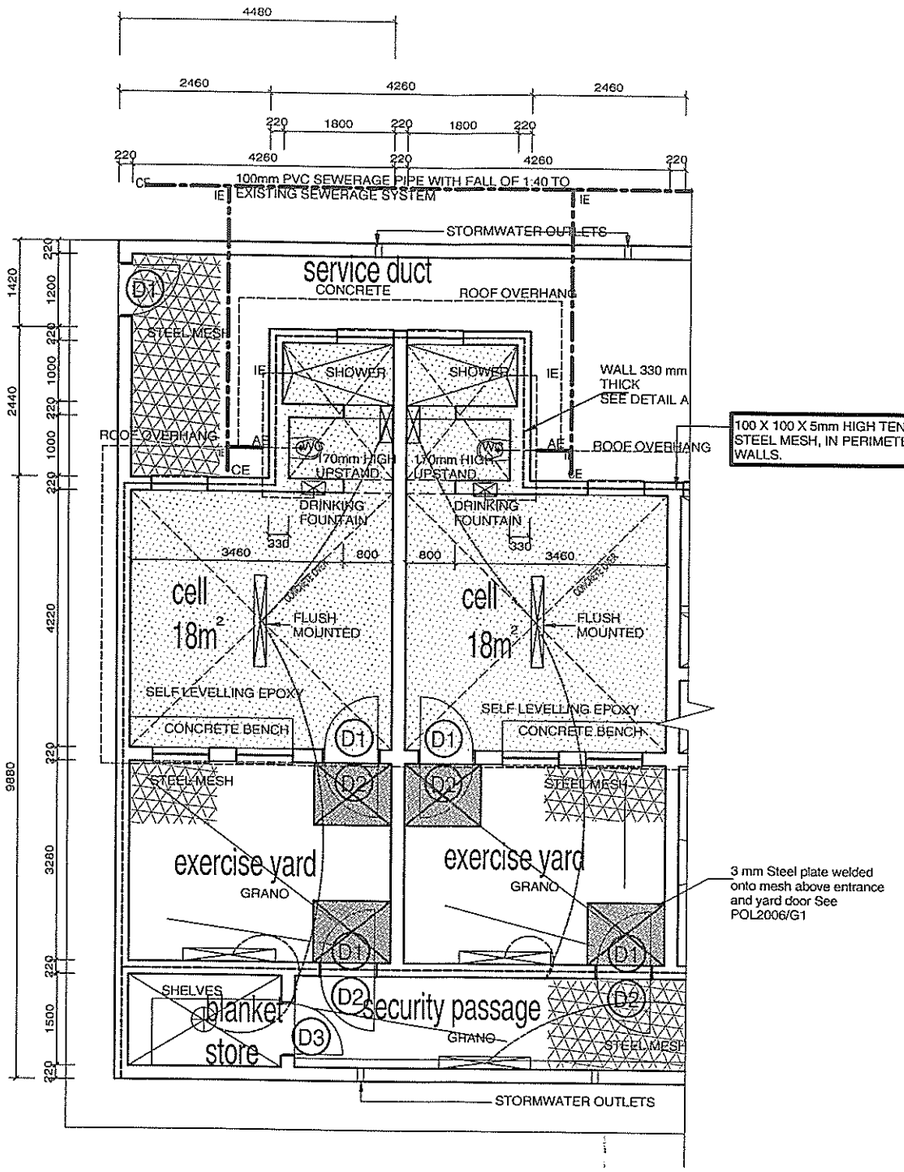
WCS number

drawing title
ANNEXURE "A" GROUND FLOOR PLAN

ref.no	designed
scale As Shown	drawn cds
date JUNE 2006	checked
type number	
drawing number	



DETAIL A
SCALE 1: 20



GROUND FLOOR PLAN
ANNEXURE "B"
SCALE 1;100

NO	DATE	AMENDMENT	D.P.W.

NOTE

References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SAPS SCM (Expert Services) Pretoria.
Tel (012) 845 8726
Fax (012) 845 8762

cad file name
5-ST-B.DRW
ANNEXURE "B"

DEPARTMENT OF PUBLIC WORKS
Private Bag X65
Pretoria
0001
Tel (012) 337 2000
Director-General:
T.M. Sokutu

consultant/departmental

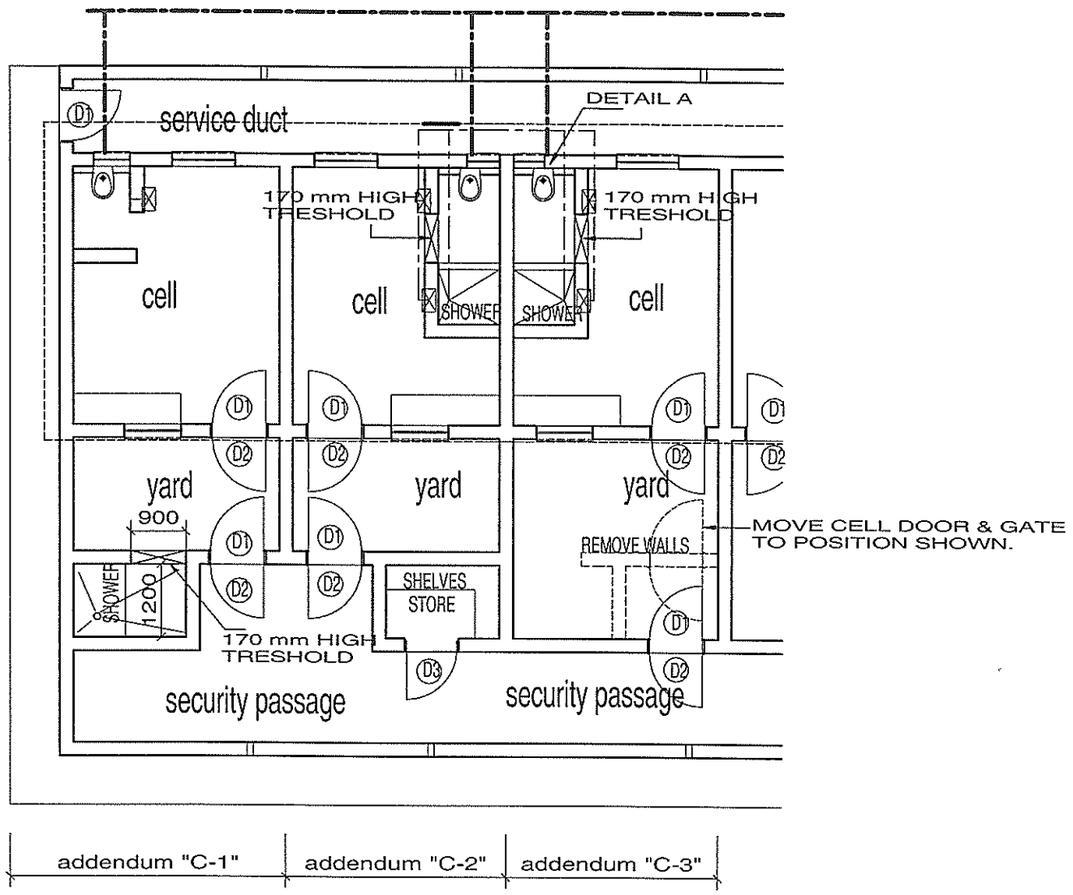
discipline
ARCHITECTURAL

service
SOUTH AFRICAN POLICE SERVICE

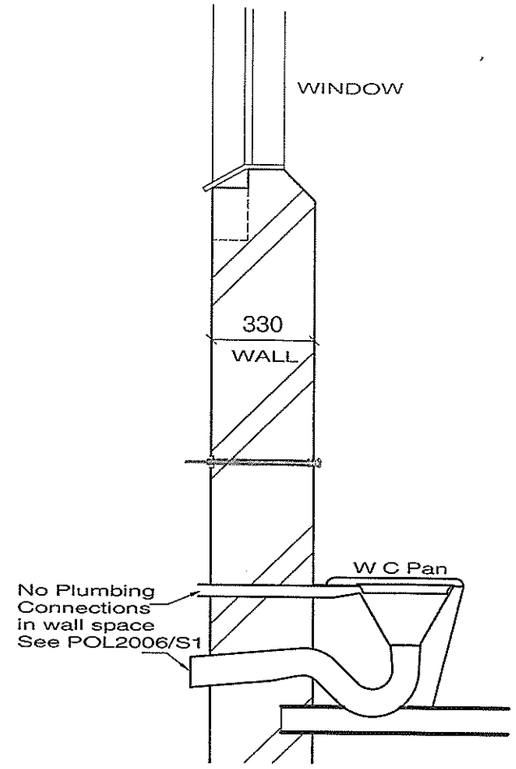
WCS number

drawing title
ANNEXURE "B" GROUND FLOOR PLAN

ref.no	designed
scale As Shown	drawn cds
date JUNE 2006	checked
type number	
drawing number	



GROUND FLOOR PLAN
ANNEXURE "C"
SCALE 1;100



DETAIL A
SCALE 1: 20

NO	DATE	AMENDMENT	D P W

NOTE

References to trade names are used only to simplify detailing. Various similar and approved products are available and can be substituted with prior approval from SAPS SCM (Expert Services) Pretoria.
Tel (012) 845 8726
Fax (012) 845 8762

cad file name
5-st-c.DRW
ANNEXURE "C"

DEPARTMENT OF PUBLIC WORKS
Private Bag X65
Pretoria
0001
Tel (012) 337 2000
Director-General:
T.M. Sokutu

consultant/departmental

discipline
ARCHITECTURAL

service
SOUTH AFRICAN POLICE SERVICE

WCS number

drawing title
ANNEXURE "C" GROUND FLOOR PLAN

ref.no	designed
scale As Shown	drawn cds
date JUNE 2006	checked
type number	
drawing number	

TECHNICAL SPECIFICATION: GUARDLITE

A locally designed and manufactured light fitting for use in areas that could be subject to extreme misuse or physical attack.

BODY

Manufactured from stainless steel minimum thickness 0,8 mm gauge, formed to give the best light distribution.
6 Brass Riv nuts provided for fixing of diffuser to body.
The gear tray support brackets act as reinforcing for the mounting bolts to prevent distortion.
The body is 22 mm deep and straight sided. The body has provision for rear entry, 20 mm diameter.

Fits flush with mounting surface to prevent prying.
The gear try is secured to the body by means of tamper resistant screws and is wired with SABS approved control gear. The gear tray has a quick disconnect terminal block system for ease of maintenance.

DIFFUSER

One piece injection moulded 4 mm thick polycarbonate prismatic diffuser. The diffuser has a tapered profile which prevents anchoring of ropes.
The corners are rounded to eliminate sharp edges.

Six vandal resistant round head screws secure the frame to the body in the case of the 36w and 54w version. The frame and body pull securely together to prevent ingress of foreign matter or objects and prevent finger hold.

Prior to drilling mounting holes and cable entry the enclosure test to IP65 specification. The light fitting has a compliance certificate and is marked SABS 1464. Single and twin lamp versions have the same body dimensions.

SABS Photo metrics are available on request.

CONTROL GEAR

All fittings to be fitted with Electronic Control Gear of reputable manufacture, Osram Phillips, Tridonic or similar.

Annexure "D"

Options Available

AREA / ROOM	TYPE	LAMPS	NITE LITE
Female Cell	PL Nite lite	2 X 36w	1 x 9 w
Male Cell	PL Nite lite	2 X 54w	1 x 9 w
Toilet & Shower no screen wall	PL Nite lite	2 X 18w	1 x 9 w
Toilet & Shower with screen wall	PL Standard	2 X 11w	-
Court yards, Stores & Cell Guard	PL Standard	2 X 36w	-
Passage, Kitchen, Line up Area & Off Loading Area	PL Standard	2 X 54w	-
Visitors Room & Pantry	Standard	2 X 18w	-

SAPS
5-STAR PROJECT

PAINT SPECIFICATIONS

UPGRADE OF PAINTED SURFACES

"ANNEXURE E"

SPECIFICATIONS FOR THE UPGRADE OF PAINTED SURFACES

Cleaning of unsound surfaces - plaster cracks and holes, peeling paint, lichen and algae, dirt and debris, greasy, chalky, and powdery surfaces.

Dirty, greasy surfaces, as well as paint coatings that have chalked, should be washed with a solution of SUGAR SOAP, or a water-soluble degreaser.

Rinse the complete wall surface thoroughly with clean water, removing residues of the cleaning solution and at the same time cleaning off dirt and debris from the walls.

The following conditions may cause poor adhesion of paint:
Moisture within the structure.
Friable or powdery substrate.
Numerous or excessively thick paint coatings.
Plaster cracks.

All loose and flaking paint should be removed down to sound substrate, using a sharp paint scraper and firm hand pressure. It is not necessary to remove well-bonded layers of paint.

Any existing waterproofing membrane must be completely removed.

Chalked and friable filling material must be removed.

It is recommended that crosshatch tests be done on all areas where the adhesion of paint is suspect.

Edges of tightly bonded paint are to be "feathered" with coarse to medium grit sandpaper to smooth them off and provide an even surface. The sanding will also serve to provide a profile.

Opened cracks, as well as all damp areas should be scrubbed with either of the following solutions in order to kill lichen and fungal growth: HTH (chlorine) and water 1 - 4 (20% solution), or JIK (sodium hypochlorite).

Ensure that the cracks are completely saturated, and allow the solution to react for a minimum of four (4) hours.

Rinse the complete wall surface thoroughly with clean water, removing residues of the cleaning solution and at the same time cleaning off dirt and debris from the walls.

The best method of cleaning away debris from walls is by high-pressure water blast - using a rotating nozzle, at a pressure of between 150 to 250 bars.

Filling of unsound surfaces - plaster cracks and holes, as well as the treatment of delaminating plaster.

It is recommended that all existing plaster with extensive crazed cracking be removed and replastered. Parapet wall tops between cells should be waterproofed (see below).

Every crack must be opened as follows:

Fine hair cracks (-0,3 mm) may just be sanded lightly.
Medium cracks (+0,3 mm and -2 mm) are to be raked out with a scraper blade.
Large cracks (+2 mm) must be opened out with a carborundum disk in an inverted V-shape to 3 mm or larger.

Medium cracks and holes should be filled with PROFILL, in accordance with the manufacturer's instructions.

Large cracks, as well as cracks occurring at joints or around windows, which are subject to movement, are to be filled with a soft, flexible crackfiller, such as PRATLEY FLEXISEAL. Ensure that the FLEXISEAL is forced right inside the crack and filled to the top. An industrial pump-gun may be used for this purpose.

It is recommended that all filling material be removed from joints and replaced with PRATLEY FLEXISEAL, or similar.

VERY LARGE CRACKS may be cleaned and wetted, then filled with a sand/cement mix.

Plaster of which the adhesion is suspect (delamination) must be removed down to sound brickwork, and replaced.

Mortar, which is soft and friable, must be scraped out between the bricks and replaced.

Water ingress on parapet wall tops

After all defects have been remedied in accordance with the instructions in this specification, all causes of water ingress must be established and cured. The waterproofing should be done after cleaning and filling; and just before the final finishing coats of paint.

One of the recommended methods of waterproofing is with an approved high build and membrane water proofing system. The system should be taken up, over, and down parapets, and extended 10 cm down the sides. Special care should be taken to work the waterproofing system well into the substrate to prevent capillary reaction (water cohesion), thereby causing water ingress again.

"E"

Unsound Concrete

Concrete where carbonating occurs must be chipped away and removed. Ensure that all concrete areas with a negative Ph (less than 12) be removed and repaired.

Damaged and rusted steel reinforcing is to be prepared and painted in accordance with an approved paint supplier specification for structural steel. If left unremedied, it may lead to further contamination of the concrete.

V-Joints, and medium to large cracks and holes may be filled with a flexible exterior crackfiller in accordance with the manufacturer's instructions. We recommend PRATLEY FLEXISEAL - a pure acrylic mastic.

Suspected water leaks within the structure or on roofs.

All causes of water ingress and leaks on roofs or within the structure, such as blocked or rusted pipes, must be established and repaired, or replaced. The walls must be allowed to dry out thoroughly - no more than 12% moisture content.

Rising dampness at or near ground level.

Floors in showers, toilets, and kitchens: In order to protect the walls from rising dampness, it is recommended that the floors be given an upwards sloping, concave skirting.

Rising dampness is a common cause of paint failure at or near ground level if the plaster has been continued below ground level, thereby breaching the damp proof course.

A reputable waterproofing specialist should remedy the problem in accordance with approved waterproofing methods. Alternatively, the following reasonably simple method may be used to remedy the situation:

Using an angle grinder, cut a slot through the plaster as near to ground/paving level as possible, the entire length of the wall (the width of a masonry disc is sufficient), until red brick dust is noticed.

Blow out all dust and debris, and fill the slot with PRATLEY FLEXISEAL, or similar product, flush with surrounding plaster.

Allow to dry/cure thoroughly. This acts as a second damp proof course and should prevent further problems.

Below the slot, remove all the paint and coat with a RUBBERISED WATERPROOFER.

Above the slot, remove all paint and efflorescence and allow the wall to dry out

thoroughly. Fill any cracks or holes in the bare plaster with PROFILL, or similar product, and allow to dry/cure. Finish with the required coating system.

"E"

Efflorescence and lime bloom.

Efflorescence and lime bloom are a result of water within the structure, dissolving salts and lime, then evaporating and leaving a white deposit on the surface.

It should be brushed down and wiped with a dampened (not wet) sponge. The brushing/wiping must be repeated as often as the deposits appear.

Painting must not commence until efflorescence has ceased.

Repainting of damaged painted surfaces

Where newly painted walls have been damaged, the same principle applies as for the redecoration of existing surfaces - *any patching must be done from corner to corner.*

Where patching is done on a wall, there will be a colour difference due to the extra depth of colour on that one spot.

The patch will also stand slightly proud on the walls, which will result in an uneven appearance, from which the light reflectance will differ.

Touch-ups and patching are usually done with a brush and these brush marks will contribute to the difference in appearance, against a background where a roller was previously used.

The effect of spot-patching are usually done with a brush and these brush marks will contribute to the difference in appearance, against a background where a roller was previously used.

Before painting can commence, every problem must be remedied in strict accordance of the Paint Supplier specifications, after which the surfaces must be allowed to dry out thoroughly - the moisture content should not exceed 12%.

Apply COAT 1 as a patch primer (alkali resistant primer) taking special care to seal bare and repaired substrate areas. COAT 1 may be thinned up to 15% with mineral turpentine to aid absorption.

Finish with COATS 2 and 3 to achieve a closed film and solid colour.

"ANNEXURE F"

EXTERIOR AND INTERIOR MILD STEEL DOORFRAMES, WINDOW FRAMES

[redacted]

MESH GRILLES

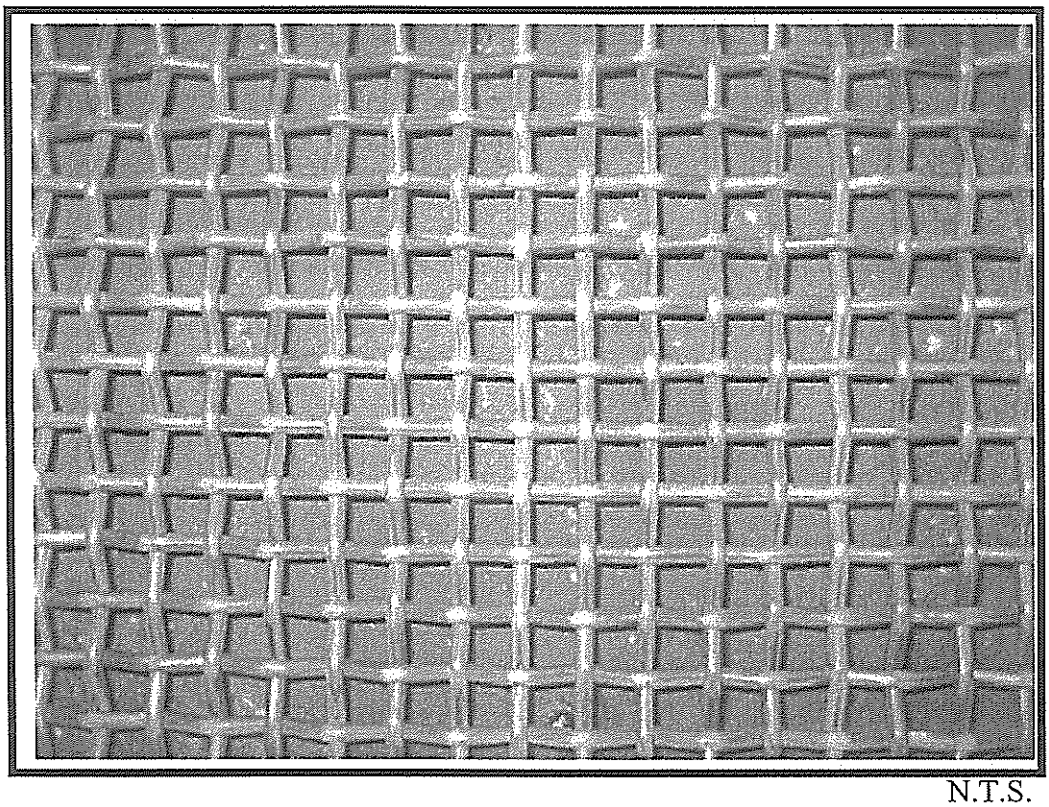
Inspect surface thoroughly. Use paint remover, scraping or other suitable means to remove all loose and defective paint.

All corrosion products must be removed from the bare steel. Rusted areas may be wire-brushed, chipped or sanded until a bright metal condition is achieved.

Annexure G

Pre-Galvanised Carbon Hardened Woven Steel Mesh

- Mesh Aperture : 12.00 mm x 12.00 mm
- Wire Diameter : 4.80 mm
- Coating : High Carbon (Spring Steel)
  Hot Dipped Galvanised SABS 763
  (Before weaving) ISO 1461
- Weave Type : SW
- Company : Screenex wire Weaving Manufacturers
- Assist. Sales Manager : Basil Shelver
- Tel number : (011) 864 2773
- Fax number : (011) 864 6800

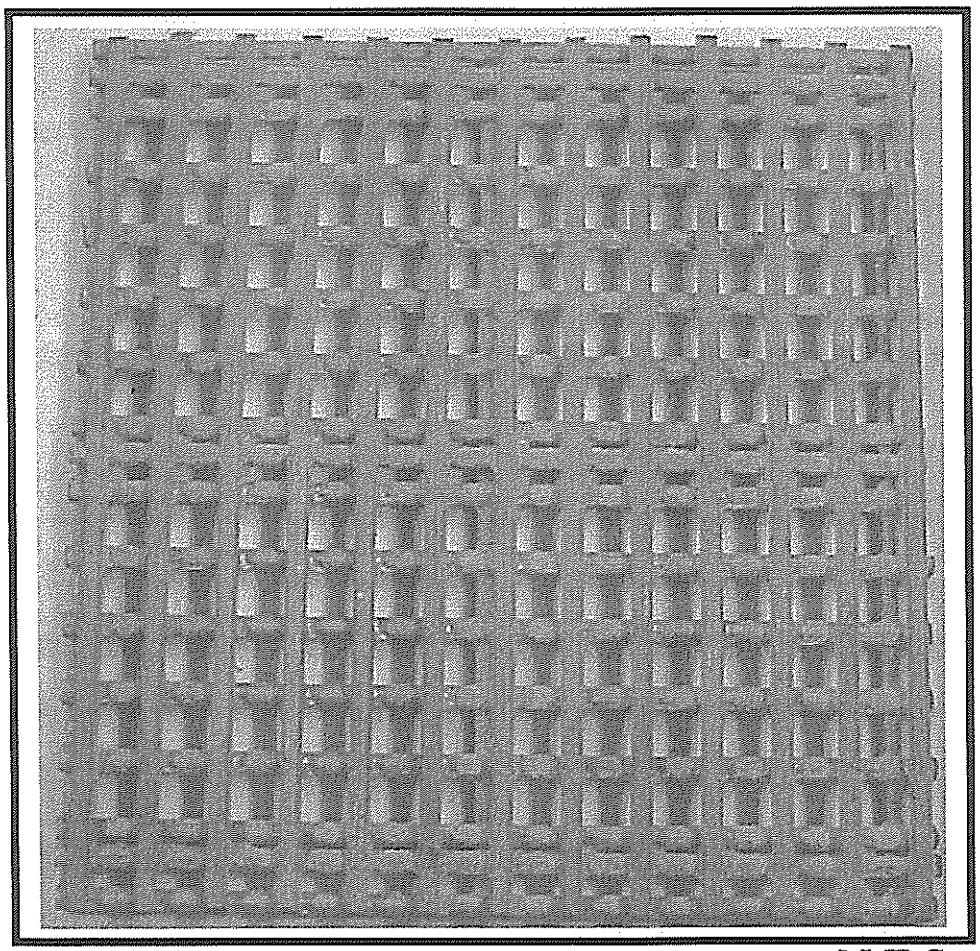


N.T.S.

Annexure H

358 Benzinal Coated Double Skin High Security Fencing

- Mesh Aperture : 12.70 mm x 12.70 mm
- Wire Diameter : 4.00 mm
- Coating : Hot dipped galvanised to SABS 763
- Company : Bekaert Fencing
- Senr. Sales Consultant : Gwen Henwood
- Cell number : 083 680 3797
- Tel number : (011) 706 5833
- Fax number : (011) 463 9388



N.T.S.