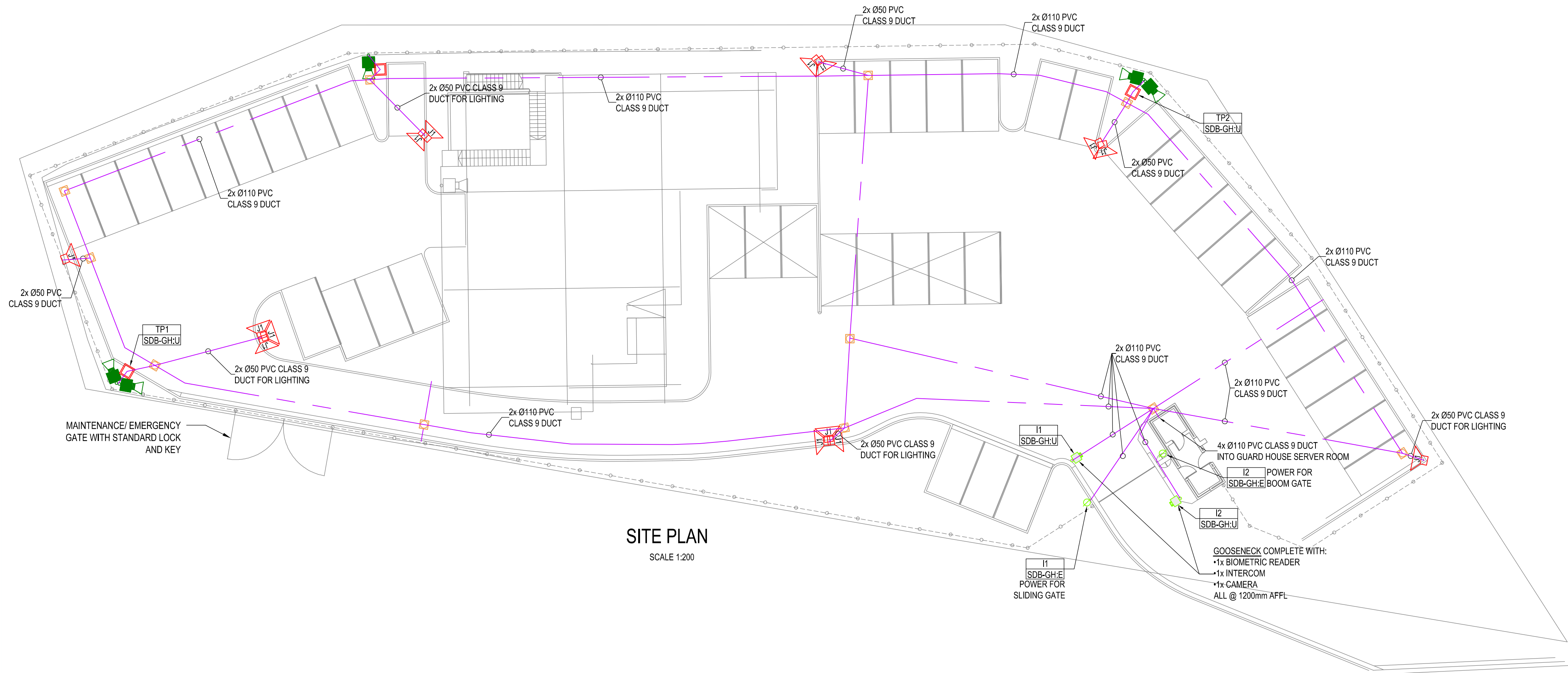
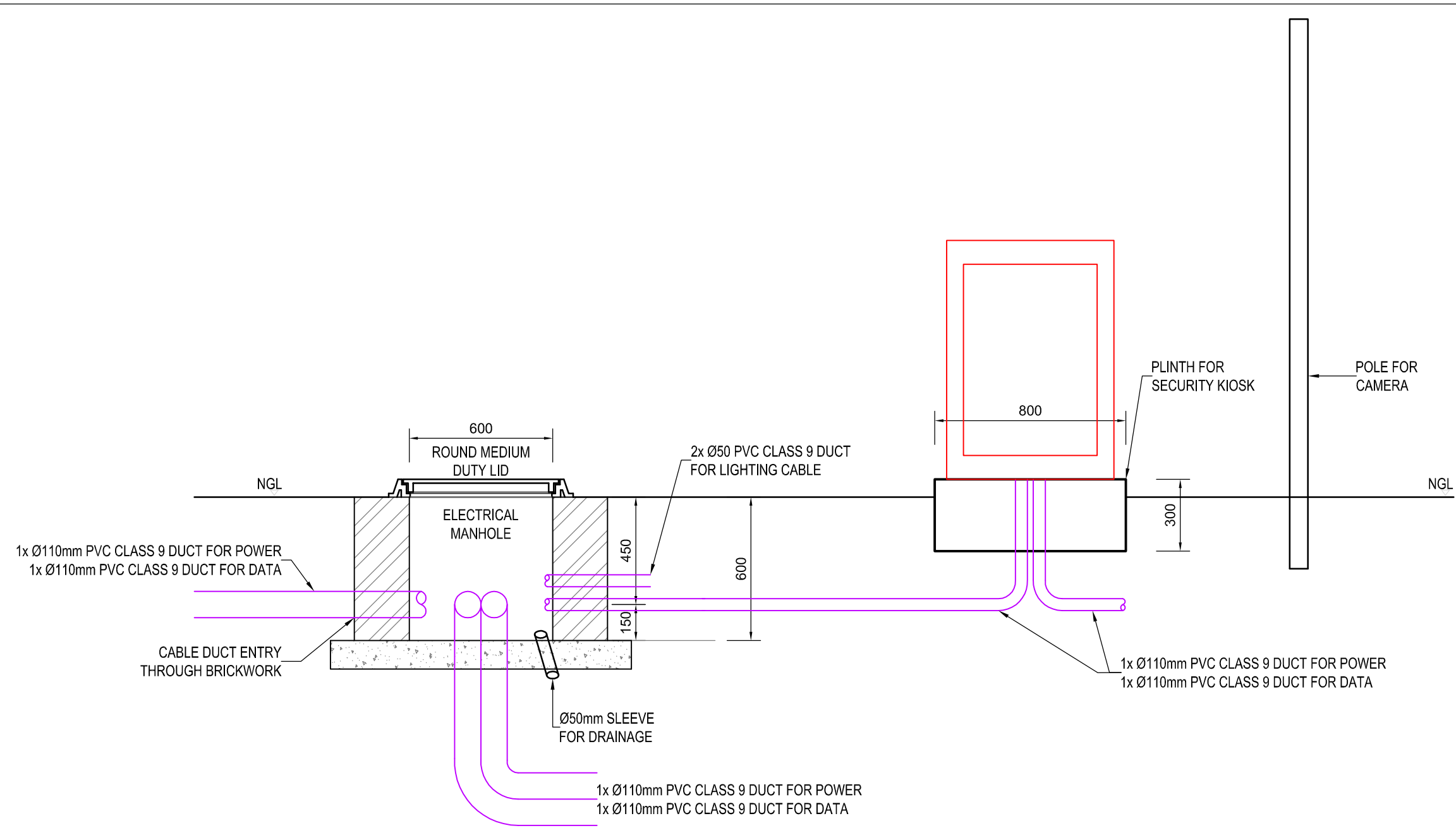




| TYPE | ELECTRICAL LEGEND                                                                           |
|------|---------------------------------------------------------------------------------------------|
|      | EXISTING CCTV CAMERA                                                                        |
|      | CCTV CAMERA, POLE MOUNT                                                                     |
|      | HIGH RESOLUTION DAY / NIGHT STATIC DOME CAMERA                                              |
|      | FLOODLIGHT ON POLE                                                                          |
|      | AREA LIGHT ON POLE                                                                          |
|      | PROXY CARD READER                                                                           |
|      | 600mm x 600mm x 600mm ELECTRICAL MANHOLE WITH ROUND MEDIUM DUTY MANHOLE COVER.              |
|      | PVC CLASS 9 RIPPED DUCT - SIZE AS INDICATED ON DRAWING. LONG RADIUS BENDS WHERE APPLICABLE. |
|      | SECURITY KIOSK                                                                              |

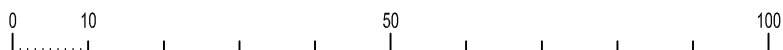
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| APPROVED<br>PORT ENGINEER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>ELECTRICAL MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>MANAGER<br>CIVIL MAINTENANCE<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>PORT FACILITIES MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |
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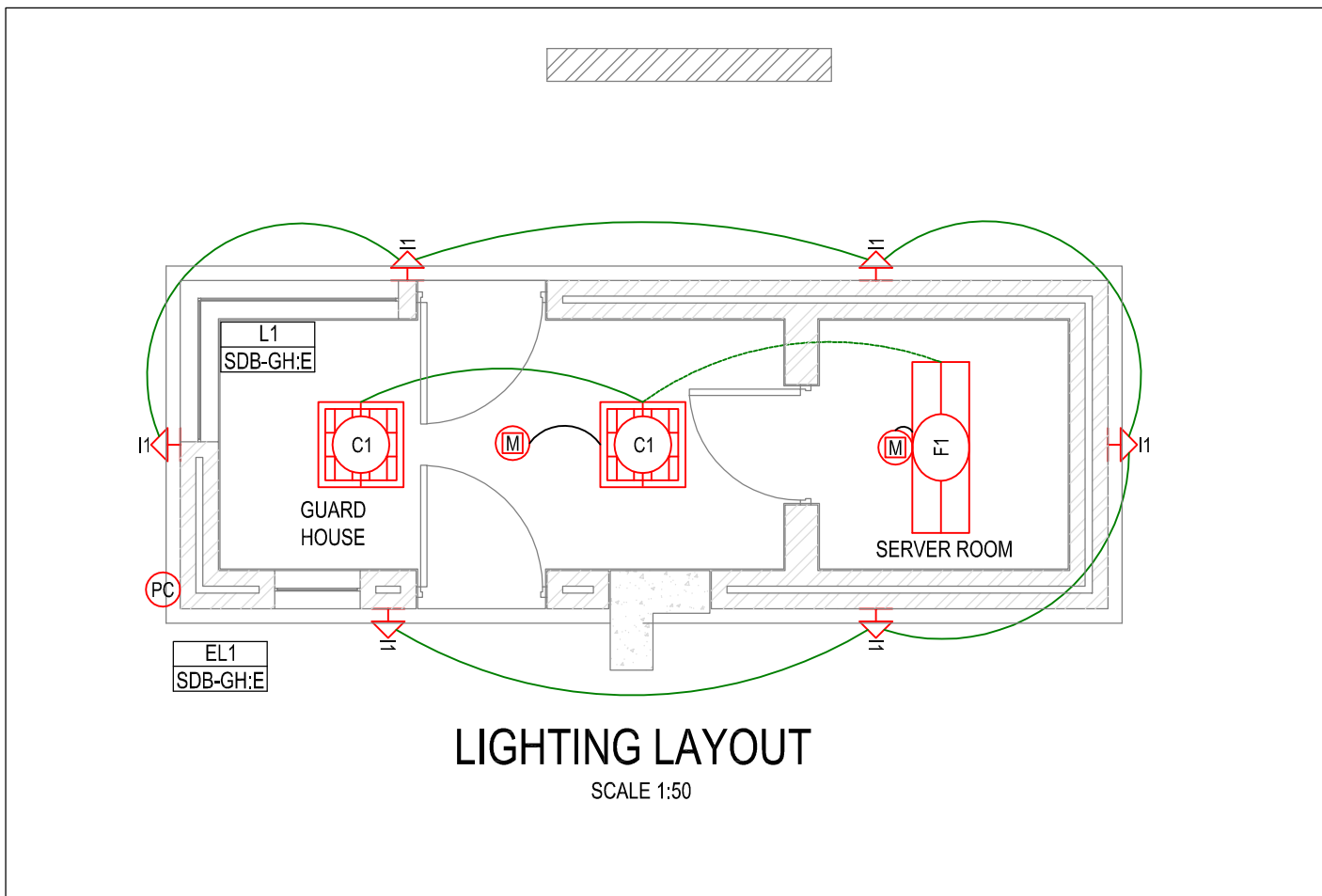
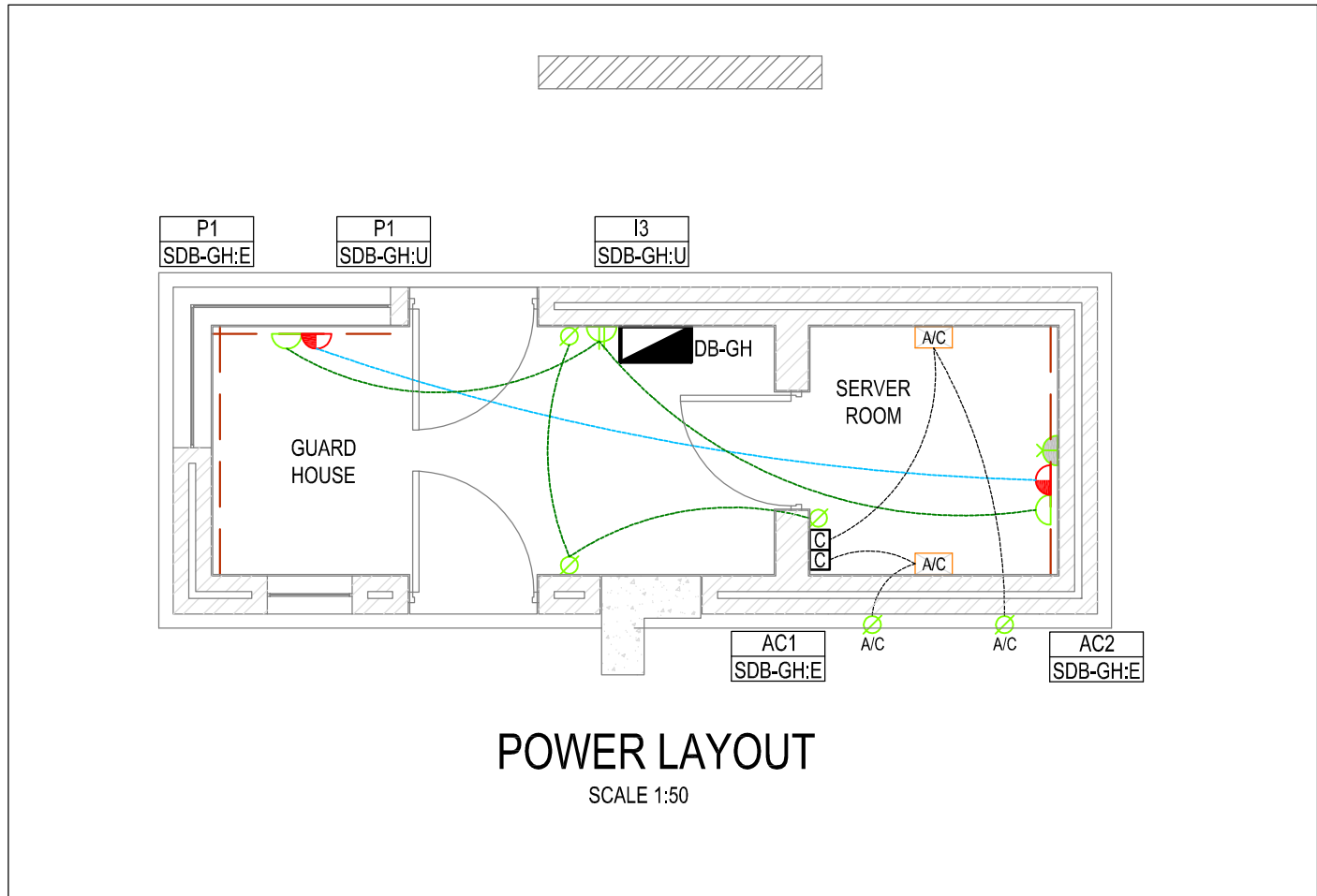
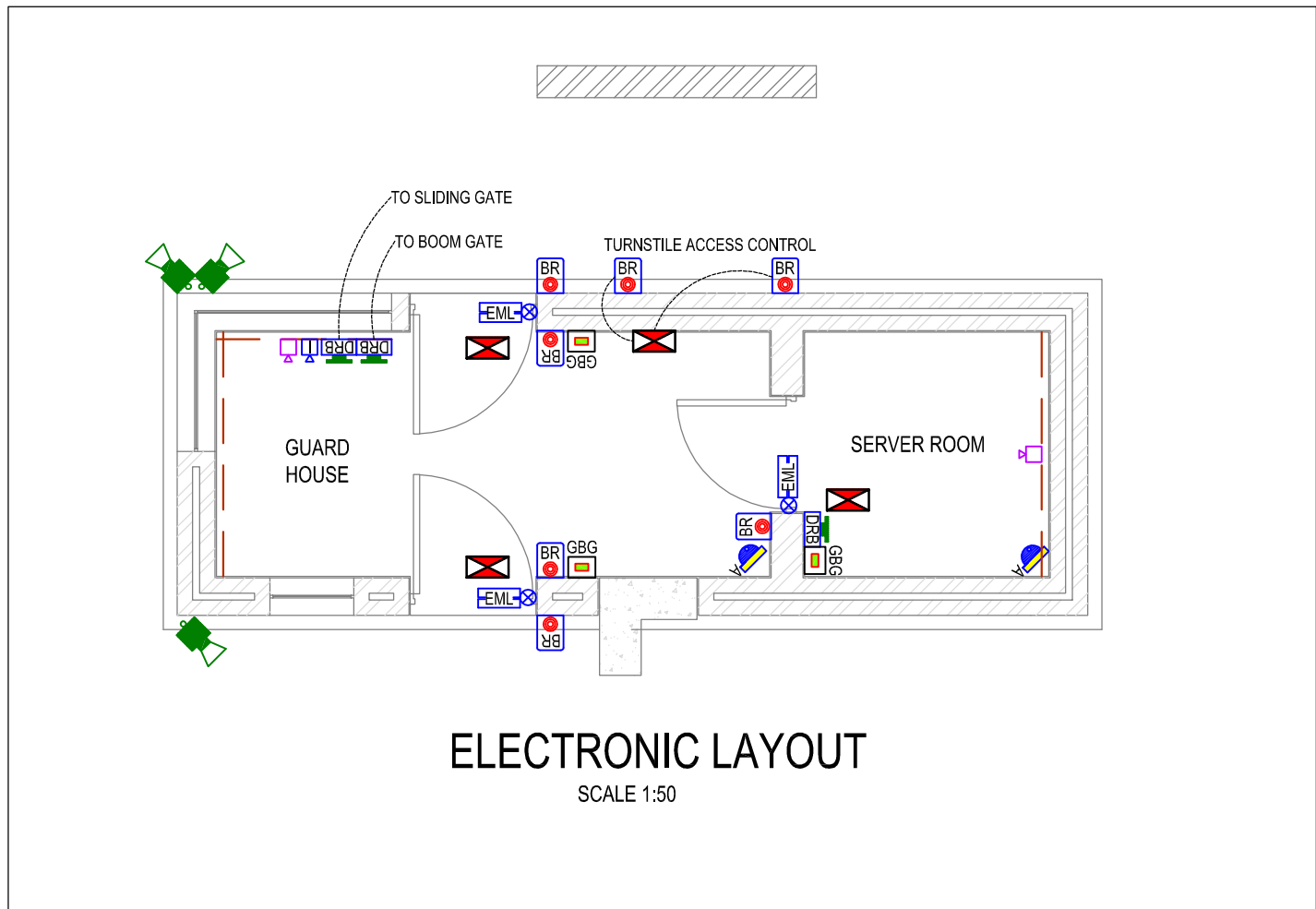
FOR TENDER



DETAIL A: ELECTRICAL MANHOLE & SLEEVES INSTALLATION

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                                     | DATE       | INITIAL | Rev. CODE | REVISION DESCRIPTION | CLIENT                                                                                                                                             | PROVINCE      | OFFICE         | EMAIL          | PROJECT                              | APPROVED BY BVI                                                          |
|----------------|------------------------------------------------------------------------------------------------------------------|------------|---------|-----------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|----------------|--------------------------------------|--------------------------------------------------------------------------|
|                | CITY ENGINEER / CLIENT<br>REG. NO. _____<br>DATE _____                                                           | 2021/11/18 | W.B     | T/D       | FOR TENDER PURPOSES  | <br>national ports authority                                                                                                                       | Gauteng       | Tshwane        | (012) 945-1111 | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST<br>20080282<br>18 November 2021  |
|                | AMENDMENTS CODE<br>A: BY CLIENT<br>B: BY ARCHITECT<br>C: BY MECHANICAL OR ELECTRICAL<br>D: BY BIA<br>E: BY OTHER |            |         |           |                      | <br>ENGINEERING PROCUREMENT<br>MANAGEMENT<br>INCORPORATING<br>basil nair<br>and associates<br>consulting mechanical engineers<br>CESA<br>Cape Town | Free State    | Pretoria       | (012) 251-5400 |                                      | SCALE 1:200 @ A1<br>DESIGNED GH<br>PLAN NUMBER 32442.00-300-01           |
|                |                                                                                                                  |            |         |           |                      |                                                                                                                                                    | Northern Cape | Upington       | (053) 535-4800 |                                      | DRAWN WB<br>CHECKED GH<br>REVISION NO. T0<br>DATE SAVED 18 November 2021 |
|                |                                                                                                                  |            |         |           |                      |                                                                                                                                                    | KwaZulu Natal | Durban         | (031) 386-6362 |                                      |                                                                          |
|                |                                                                                                                  |            |         |           |                      |                                                                                                                                                    | Eastern Cape  | Port Elizabeth | (041) 374-5453 |                                      |                                                                          |
|                |                                                                                                                  |            |         |           |                      |                                                                                                                                                    | Western Cape  | Cape Town      | (021) 527-7000 |                                      |                                                                          |





| TYPE | POWER OUTLETS LEGEND                                                                                                                             | MOUNTING TYPE / HEIGHT                                    |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|      | SINGLE SOCKET SWITCHED OUTLET, RATED 16A SANS 164-1, ON POWER SKIRTING (ESSENTIAL: WHITE)                                                        | POWER SKIRTING                                            |
|      | SINGLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, RATED 16A, ON POWER SKIRTING (UPS: RED)                                                      | POWER SKIRTING                                            |
|      | DOUBLE SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (ESSENTIAL: WHITE)                                                       | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|      | DOUBLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (UPS: RED)                                                     | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|      | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL, (ESSENTIAL)                                                                       | HEIGHT INDICATED ON DRAWING                               |
|      | DISTRIBUTION BOARD                                                                                                                               | HEIGHT INDICATED ON SINGLE LINE DIAGRAMS                  |
|      | WALL MOUNTED 3 COMPARTMENT POWER SKIRTING :COLOUR: BLACK, POWDER COATED, GALVANISED METAL, 0-LINE /0BO, TIER 1: POWER, TIER 2: DATA, TIER 3: VTS | FLOOR LEVEL UNLESS STATED OTHERWISE                       |
|      | Ø25mm ROUND BOX WITH Ø20mm CONDUIT MOUNTED AT 1500mm A.F.F.L. FOR AC CONTROLLERS                                                                 | 1500mm AFFL TO CENTER                                     |
|      | ISOLATOR POINT FOR A/C IN CEILING SPACE AGAINST SOFFIT. SUPPLY FROM OUTDOOR UNIT ON ROOF. (INSTALLED BY HVAC CONTRACTOR)                         | AGAINST SOFFIT                                            |
|      | SERVER SOCKET OUTLET                                                                                                                             | WALL MOUNT, 350mm AFFL                                    |

| TYPE | LIGHTING LEGEND SPECIFICATIONS                                                                                                      | MOUNTING TYPE / HEIGHT |
|------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|      | TYPE C1: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI CONTROL BALLASTS. COLOUR: WHITE. | CEILING                |
|      | TYPE F1: 1310mm x 172mm SURFACE MOUNT VAPOUR / WEATHER PROOF 53W LED LUMINAIRE RATED AT 4000K @ 500mA - 5365 LUMENS. IP65 RATED.    | SURFACE                |
|      | TYPE I1: WALL MOUNTED RECTANGULAR BULKHEAD WITH EYELID. 18W LED FITTING RATED AT 4000K @ 700mA - 1450 LUMENS. COLOUR: BLACK.        | WALL - EXTERNAL        |
|      | DALI OCCUPANCY SENSOR.                                                                                                              | CEILING                |
|      | 1 LEVER LIGHT SWITCH MOUNTED 1400mm AFFL. DALI                                                                                      | WALL                   |
|      | PHOTOCELL MOUNTED 2000mm AFFL.                                                                                                      | WALL                   |

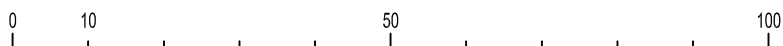
| TYPE | ELECTRONIC SERVICES LEGEND                                                         | MOUNTING TYPE / HEIGHT |
|------|------------------------------------------------------------------------------------|------------------------|
|      | DOOR RELEASE PUSH BUTTON                                                           | 1250mm AFFL TO CENTER  |
|      | GREEN BREAK GLASS UNIT FOR ACCESS CONTROL SYSTEM Ø25mm ROUND BOX WITH 25mm CONDUIT | 1250mm AFFL TO CENTER  |
|      | BIOMETRIC FINGERPRINT READERS                                                      | 1250mm AFFL TO CENTER  |
|      | ELECTRO MAGNETIC DOOR LOCK ON NON FIXED LEAF (DOOR CLOSER BY OTHERS)               | ON TOP OF DOOR FRAME   |
|      | ALARM SYSTEM MAGNETIC DOOR MONITOR ATTACHED ON SURFACE OF DOOR FRAME AND DOOR      | ON TOP OF DOOR FRAME   |
|      | ACCESS CONTROL DOOR CONTROL UNIT FOR MAGLOCK DOOR RELEASE                          | IN CEILING SPACE       |
|      | HIGH RESOLUTION DAY / NIGHT STATIC DOME CAMERA.                                    | CEILING                |
|      | CCTV CAMERA WALL MOUNT AT HEIGHT SPECIFIED.                                        | WALL MOUNTED           |
|      | RJ 45 DATA/VOICE COMBO OUTLET POINT ON POWER SKIRTING.                             | POWER SKIRTING         |
|      | INTERCOM OUTLET POINT                                                              | ABOVE DESK             |

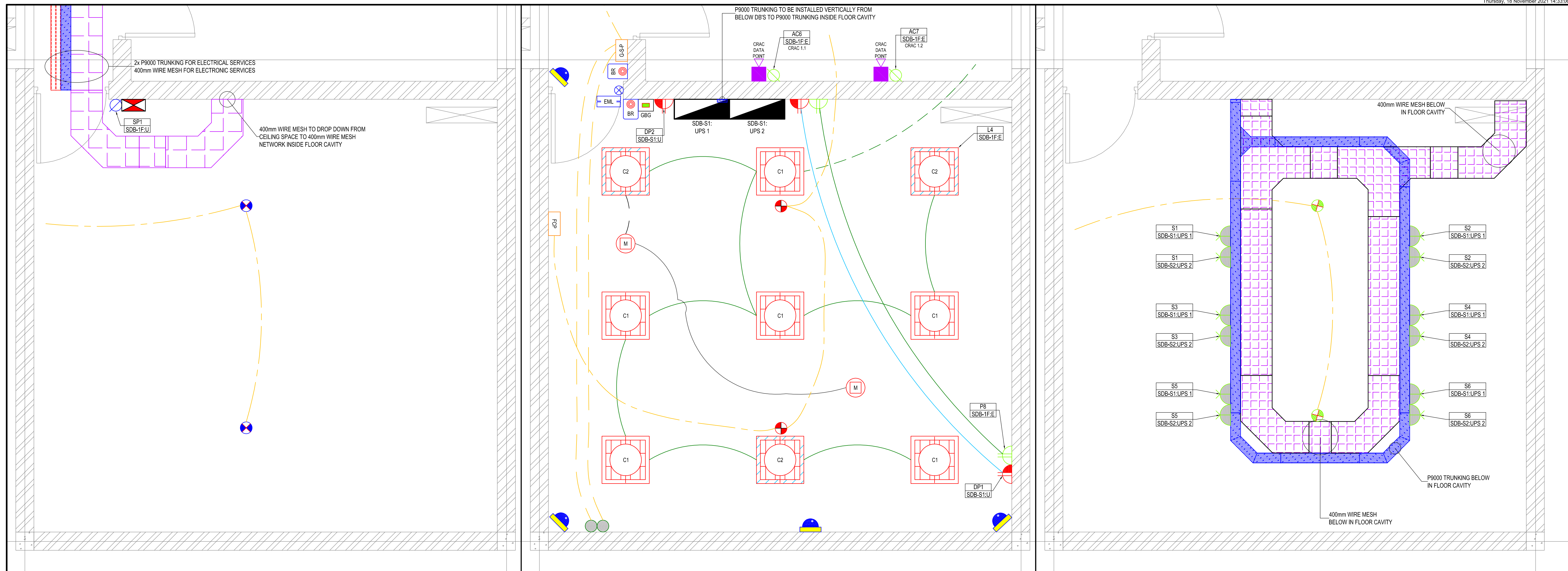
| TYPE | CONTAINMENT LEGEND SPECIFICATIONS                                                                             |
|------|---------------------------------------------------------------------------------------------------------------|
|      | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: ESSENTIAL CIRCUITS. (SIZE UNLESS OTHERWISE STATED) |
|      | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: UPS CIRCUITS (SIZE UNLESS OTHERWISE STATED)        |
|      | WIRE MESH CABLE TRAY, 300mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |
|      | WIRE MESH CABLE TRAY, 400mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |

|                                                                                                                                             |                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| APPROVED<br>PORT ENGINEER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>ELECTRICAL MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>MANAGER<br>CIVIL MAINTENANCE<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>PORT FACILITIES MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |
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FOR TENDER

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DATE       | INITIAL | No./CODE | REVISION DESCRIPTION | CLIENT                                                                                                            | PROVINCE                                                                                                                                                                                                                                                                                                                                                       |          |        |  | OFFICE | EMAIL                                | PROJECT                                 | APPROVED BY BVI |                  |  |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|----------|----------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|--|--------|--------------------------------------|-----------------------------------------|-----------------|------------------|--|--|
|                | CITY ENGINEER / CLIENT<br>REG. NO.<br>DATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2021/11/18 | W.B     | T/D      | FOR TENDER PURPOSES  | <br>national ports authority | <br>ENGINEERING<br>PROCUREMENT<br>MANAGEMENT<br><br><br>consulting mechanical engineers<br><br> | PROVINCE | OFFICE |  | EMAIL  | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST | 2008/0282       | 18 November 2021 |  |  |
|                | AMENDMENTS CODE<br>A,B,C,... : BEFORE TENDER<br>0 : 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 : 9 : 10 : 11 : 12 : 13 : 14 : 15 : 16 : 17 : 18 : 19 : 20 : 21 : 22 : 23 : 24 : 25 : 26 : 27 : 28 : 29 : 30 : 31 : 32 : 33 : 34 : 35 : 36 : 37 : 38 : 39 : 40 : 41 : 42 : 43 : 44 : 45 : 46 : 47 : 48 : 49 : 50 : 51 : 52 : 53 : 54 : 55 : 56 : 57 : 58 : 59 : 60 : 61 : 62 : 63 : 64 : 65 : 66 : 67 : 68 : 69 : 70 : 71 : 72 : 73 : 74 : 75 : 76 : 77 : 78 : 79 : 80 : 81 : 82 : 83 : 84 : 85 : 86 : 87 : 88 : 89 : 90 : 91 : 92 : 93 : 94 : 95 : 96 : 97 : 98 : 99 : 100 : 101 : 102 : 103 : 104 : 105 : 106 : 107 : 108 : 109 : 110 : 111 : 112 : 113 : 114 : 115 : 116 : 117 : 118 : 119 : 120 : 121 : 122 : 123 : 124 : 125 : 126 : 127 : 128 : 129 : 130 : 131 : 132 : 133 : 134 : 135 : 136 : 137 : 138 : 139 : 140 : 141 : 142 : 143 : 144 : 145 : 146 : 147 : 148 : 149 : 150 : 151 : 152 : 153 : 154 : 155 : 156 : 157 : 158 : 159 : 160 : 161 |            |         |          |                      |                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                |          |        |  |        |                                      |                                         |                 |                  |  |  |



ELECTRICAL & ELECTRONIC SERVICES  
IN CEILING VOID

## ELECTRICAL &amp; ELECTRONIC SERVICES INSIDE ROOM

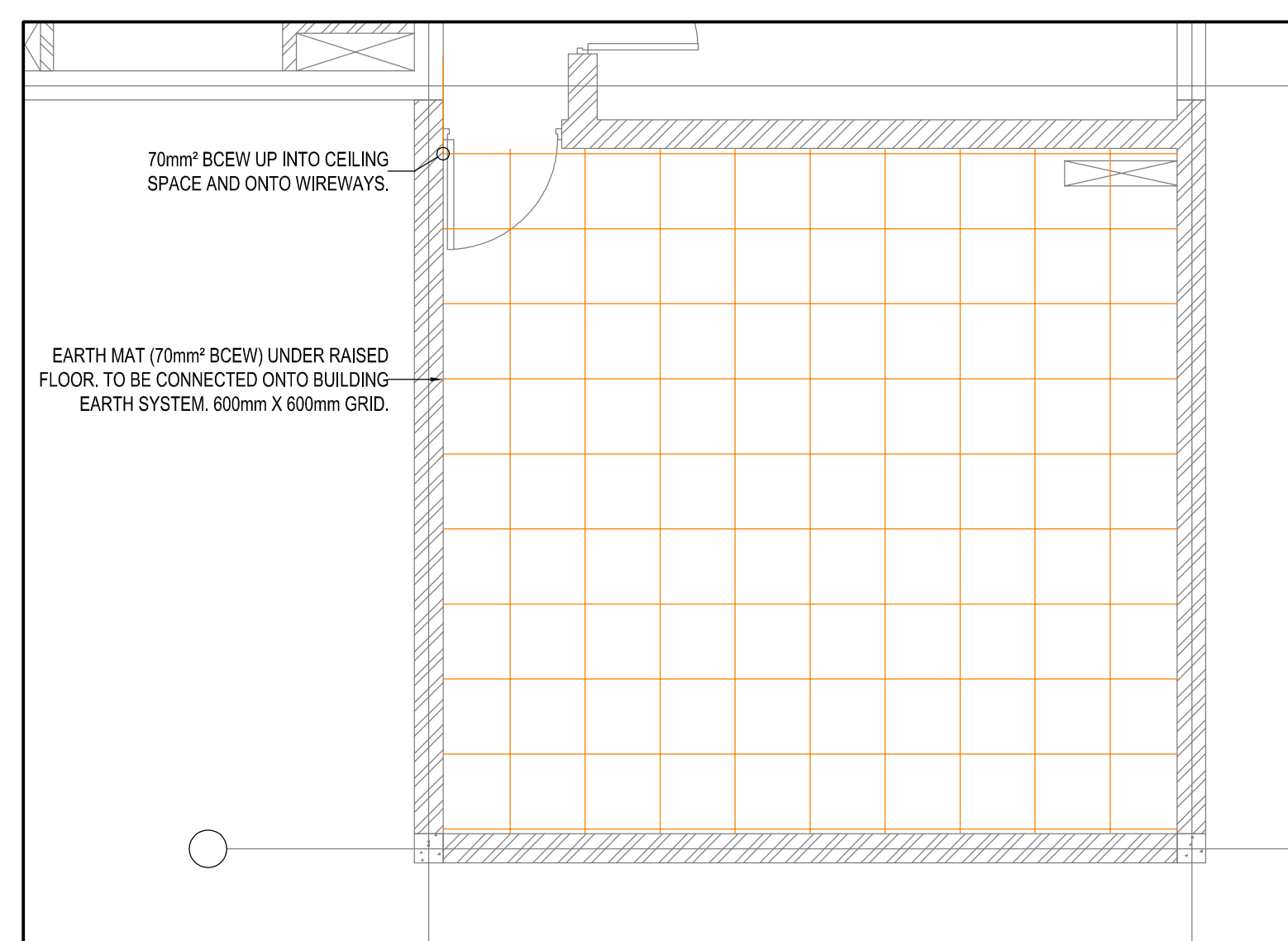
## ELECTRICAL &amp; ELECTRONIC SERVICES IN FLOOR CAVITY

| TYPE | POWER OUTLETS LEGEND                                                                          | MOUNTING<br>TYPE / HEIGHT                                    |
|------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------|
|      | DOUBLE SWITCHED SOCKET OUTLET SANS 164-1, EACH<br>RATED 16A, 100mm x 100mm (ESSENTIAL: WHITE) | WALL MOUNT/350mm AFFL TO CENTER, UNLESS<br>OTHERWISE STATED. |
|      | DOUBLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (UPS: RED)  | WALL MOUNT/350mm AFFL TO CENTER, UNLESS<br>OTHERWISE STATED. |
|      | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL, (ESSENTIAL)                    | HEIGHT INDICATED ON DRAWING                                  |
|      | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL, (UPS)                          | HEIGHT INDICATED ON DRAWING                                  |
|      | DISTRIBUTION BOARD, 250mm x 100mm TO TOP OF PANEL                                             | HEIGHT INDICATED ON SINGLE LINE DIAGRAMS                     |
|      | SERVER SOCKET OUTLET                                                                          | AGAINST POWER TRUNKING IN FLOOR SPACE BELOW SERVER<br>RACKS  |

| TYPE | LIGHTING LEGEND SPECIFICATIONS                                                                                                                                              | MOUNTING<br>TYPE / HEIGHT |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
|      | TYPE C1: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @<br>1050mA - 3251 LUMENS, COLOUR: WHITE.                                                                      | CEILING                   |
|      | TYPE C2: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @<br>1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS AND 1 HOUR<br>BATTERY BACK UP PACKS, COLOUR: WHITE. | CEILING                   |
|      | DALI OCCUPANCY SENSOR.                                                                                                                                                      | CEILING                   |

| TYPE | CONTAINMENT LEGEND                                                                                                  |
|------|---------------------------------------------------------------------------------------------------------------------|
|      | GALVANIZED WIRING TRUNKING, P9000 FOR<br>ELECTRICAL SERVICES: ESSENTIAL CIRCUITS.<br>(SIZE UNLESS OTHERWISE STATED) |
|      | GALVANIZED WIRING TRUNKING, P9000 FOR<br>ELECTRICAL SERVICES: UPS CIRCUITS<br>(SIZE UNLESS OTHERWISE STATED)        |
|      | WIRE MESH CABLE TRAY, 400mm FOR<br>ELECTRONIC SERVICES: IT &<br>COMMUNICATIONS. (SIZE UNLESS OTHERWISE<br>STATED)   |

| TYPE | ELECTRONIC LEGEND                                                                     | MOUNTING<br>TYPE / HEIGHT           |
|------|---------------------------------------------------------------------------------------|-------------------------------------|
|      | GREEN BREAK GLASS UNIT FOR ACCESS CONTROL<br>SYSTEM Ø25mm ROUND BOX WITH 25mm CONDUIT | 1250mm AFFL TO CENTER               |
|      | BIOMETRIC FINGERPRINT READERS                                                         | 1250mm AFFL TO CENTER               |
|      | ELECTRO MAGNETIC DOOR LOCK ON NON FIXED<br>LEAF (DOOR CLOSER BY OTHERS)               | ON TOP OF DOOR FRAME                |
|      | ALARM SYSTEM MAGNETIC DOOR MONITOR<br>ATTACHED ON SURFACE OF DOOR FRAME AND<br>DOOR   | TOP OF DOOR FRAME                   |
|      | ACCESS CONTROL DOOR CONTROL UNIT FOR<br>MAGLOCK DOOR RELEASE                          | IN CEILING SPACE                    |
|      | HIGH RESOLUTION DAY / NIGHT STATIC DOME<br>CAMERA.                                    | CEILING                             |
|      | RJ 45 DATA/VOICE COMBO OUTLET POINT, 100mm X<br>100mm.                                | WALL MOUNT/350mm AFFL TO<br>CENTER. |
|      | SMOKE DETECTOR                                                                        | CEILING                             |
|      | SMOKE DETECTOR IN FLOOR SPACE                                                         | IN FLOOR SPACE                      |
|      | SMOKE DETECTOR IN ROOF SPACE                                                          | SOFFIT                              |
|      | GAS SUPPRESSION ACTIVATION/DEACTIVATION<br>PANEL                                      | 1250mm AFFL TO CENTER               |
|      | INERGEN GAS SUPPRESSION CYCLINDER                                                     | -                                   |

DATA CENTER FLOOR EARTHING ARRANGEMENT IN FLOOR CAVITY  
SCALE 1:50

FOR TENDER

APPROVED

PORT ENGINEER

DATE \_\_\_\_\_

APPROVAL DOES NOT INDICATE ACCEPTANCE  
OF ANY RESPONSIBILITY FOR SAFETY OR  
ADEQUACY OF STRUCTURES

APPROVED

ELECTRICAL MANAGER

DATE \_\_\_\_\_

APPROVAL DOES NOT INDICATE ACCEPTANCE  
OF ANY RESPONSIBILITY FOR SAFETY OR  
ADEQUACY OF STRUCTURES

APPROVED

MANAGER  
CIVIL MAINTENANCE

DATE \_\_\_\_\_

APPROVAL DOES NOT INDICATE ACCEPTANCE  
OF ANY RESPONSIBILITY FOR SAFETY OR  
ADEQUACY OF STRUCTURES

APPROVED

PORT FACILITIES MANAGER

DATE \_\_\_\_\_

APPROVAL DOES NOT INDICATE ACCEPTANCE  
OF ANY RESPONSIBILITY FOR SAFETY OR  
ADEQUACY OF STRUCTURES

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                  | DATE       | INITIAL | Rev. CODE | REVISION DESCRIPTION | CLIENT   |
|----------------|-----------------------------------------------------------------------------------------------|------------|---------|-----------|----------------------|----------|
|                | CITY ENGINEER / CLIENT                                                                        | 2021/11/18 | W.B     | T.O.D     | FOR TENDER PURPOSES  | TRANSNET |
|                | REG. NO. _____ DATE _____                                                                     |            |         |           |                      |          |
|                | AMENDMENTS CODE                                                                               |            |         |           |                      |          |
|                | A: BY CLIENT<br>B: BY ARCHITECT<br>C: BY MECHANICAL OR ELECTRICAL<br>D: BY BIA<br>E: BY OTHER |            |         |           |                      |          |

national ports authority

bvi  
INCORPORATING  
basil nair  
ENGINEERING PROCUREMENT  
MANAGEMENT  
consulting mechanical engineers

CESA  
Cape Town

| PROVINCE      | OFFICE         | NAME           | PHONE | EMAIL         |
|---------------|----------------|----------------|-------|---------------|
| Gauteng       | Telaville      | (012) 945-1111 |       | pta@npt.co.za |
| Free State    | Pretoria       | (012) 251-5400 |       | jhb@npt.co.za |
|               | Bloemfontein   | (051) 442-1237 |       | wh@npt.co.za  |
|               | Wellington     | (051) 553-4569 |       | veg@npt.co.za |
| Northern Cape | Upington       | (054) 337-4800 |       | up@npt.co.za  |
|               | Springsbok     | (027) 715-3814 |       | sp@npt.co.za  |
|               | Orkney         | (031) 266-6562 |       | or@npt.co.za  |
|               | Port Elizabeth | (021) 754-1912 |       | pe@npt.co.za  |
| Eastern Cape  | Port Elizabeth | (041) 374-5453 |       | be@npt.co.za  |
|               | East London    | (043) 735-3859 |       | el@npt.co.za  |
| Western Cape  | Cape Town      | (021) 557-7000 |       | cpt@npt.co.za |

national ports authority

bvi  
INCORPORATING  
basil nair  
ENGINEERING PROCUREMENT  
MANAGEMENT  
consulting mechanical engineers

CESA  
Cape Town

PROJECT

**RICHARDS BAY -  
PORT CONTROL TOWER**

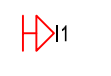
DRAWING TITLE

**SERVER ROOM:  
ELECTRICAL & ELECTRONIC  
LAYOUTS**

APPROVED BY BVI

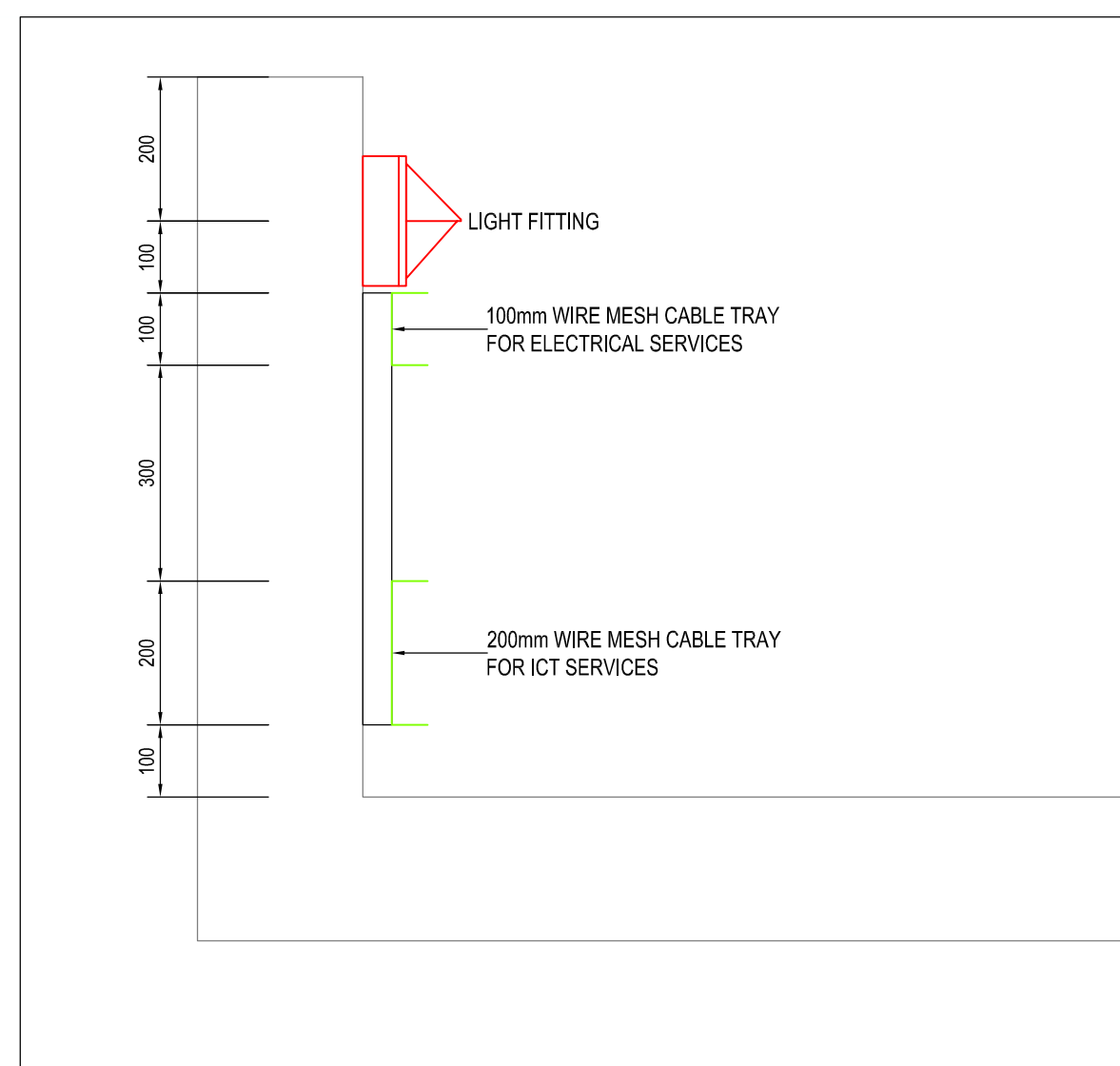
G. HALBERSTADT *G. Halberstadt* 2008/0282 18 November 2021

ENGINEER

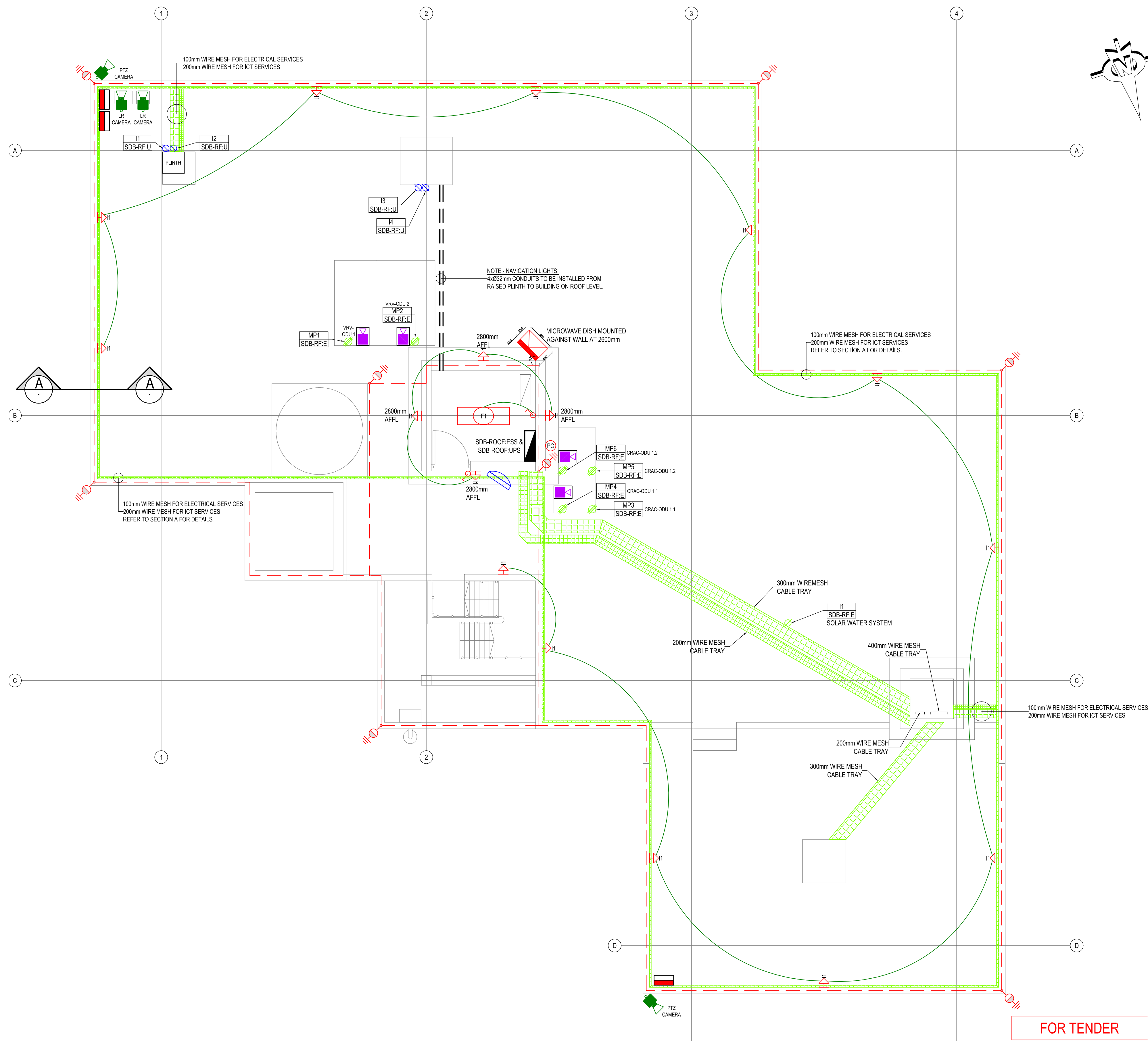
| TYPE                                                                              | LIGHTING LEGEND SPECIFICATIONS                                                                                                   | MOUNTING TYPE / HEIGHT |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------|
|  | TYPE F1: 1310mm x 172mm SURFACE MOUNT VAPOUR / WEATHER PROOF 53W LED LUMINAIRE RATED AT 4000K @ 500mA - 5385 LUMENS, IP65 RATED. | SURFACE                |
|  | TYPE I1: WALL MOUNTED RECTANGULAR BULKHEAD WITH EYELID, 18W LED FITTING RATED AT 4000K @ 700mA - 1450 LUMENS, COLOUR: BLACK.     | WALL - EXTERNAL        |
|  | 1 LEVER LIGHT SWITCH MOUNTED 1400mm AFFL.                                                                                        | WALL                   |

| TYPE                                                                              | POWER OUTLETS LEGEND                                                       | MOUNTING TYPE / HEIGHT                   |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------|
|  | DISTRIBUTION BOARD, 2100mm TO TOP OF PANEL.                                | HEIGHT INDICATED ON SINGLE LINE DIAGRAMS |
|  | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (UPS)       | HEIGHT INDICATED ON DRAWING              |
|  | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (ESSENTIAL) | HEIGHT INDICATED ON DRAWING              |
|  | 3 PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (ESSENTIAL)      | HEIGHT INDICATED ON DRAWING              |
|  | LIGHTNING PROTECTION                                                       | -                                        |

| TYPE                                                                                | ELECTRONIC LEGEND                                                    | MOUNTING TYPE / HEIGHT           |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------|
|    | RJ 45 DATA OUTLET POINT, 100mm X 100mm INSIDE WEATHERPROOF ENCLOSURE | WALL MOUNT 350mm AFFL TO CENTER. |
|    | CCTV CAMERA, TYPE SPECIFIED ON DRAWING.                              | TO BE INDICATED ON DRAWING       |
|   | CCTV CAMERA FIELD BOX                                                | WALL MOUNT 350mm AFFL            |
|  | SATELLITE DISH                                                       | WALL MOUNT 2200mm AFFL           |



|                                                                                                                                             |                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| APPROVED<br>PORT ENGINEER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>ELECTRICAL MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>MANAGER<br>CIVIL MAINTENANCE<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>PORT FACILITIES MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |
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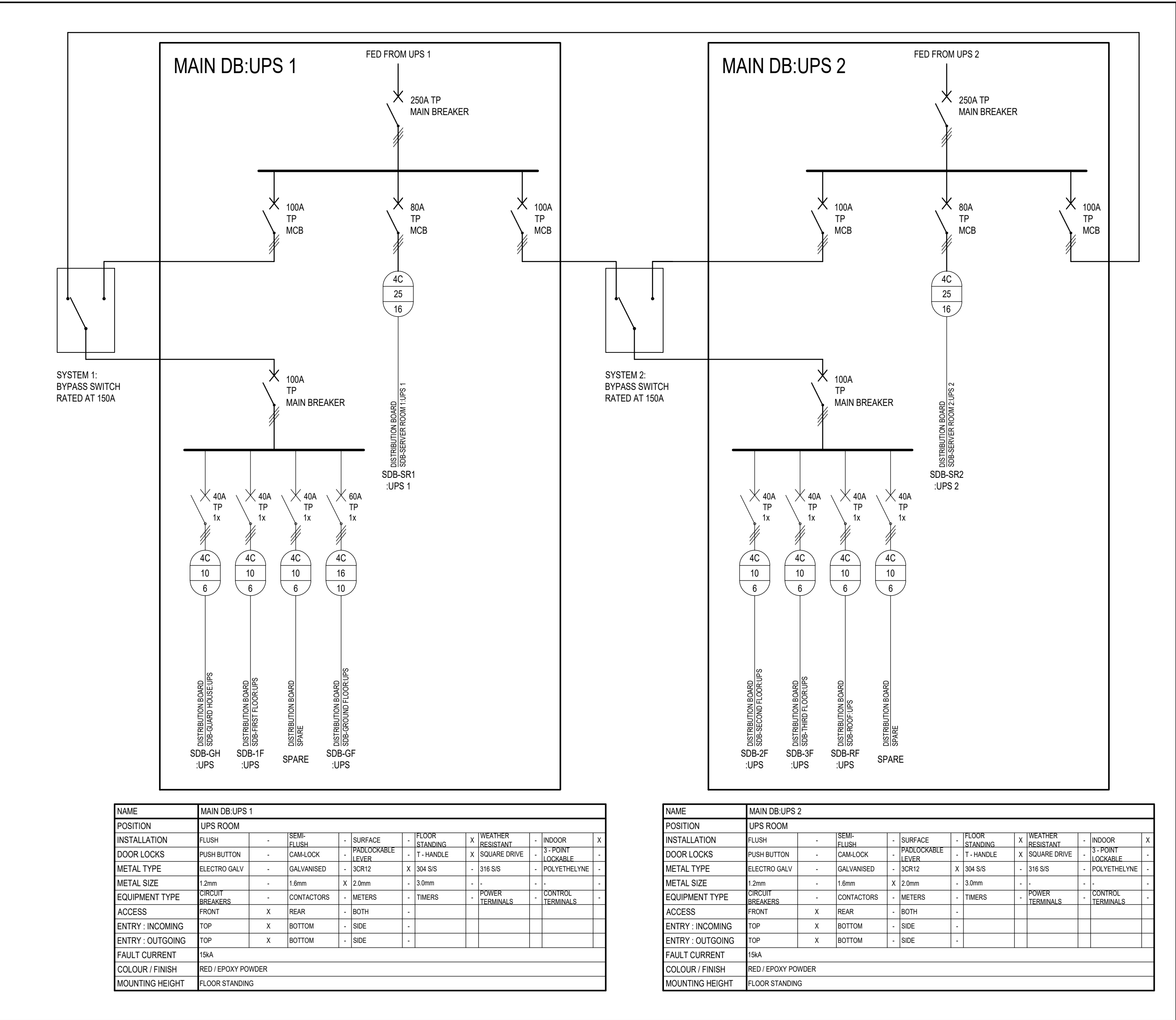
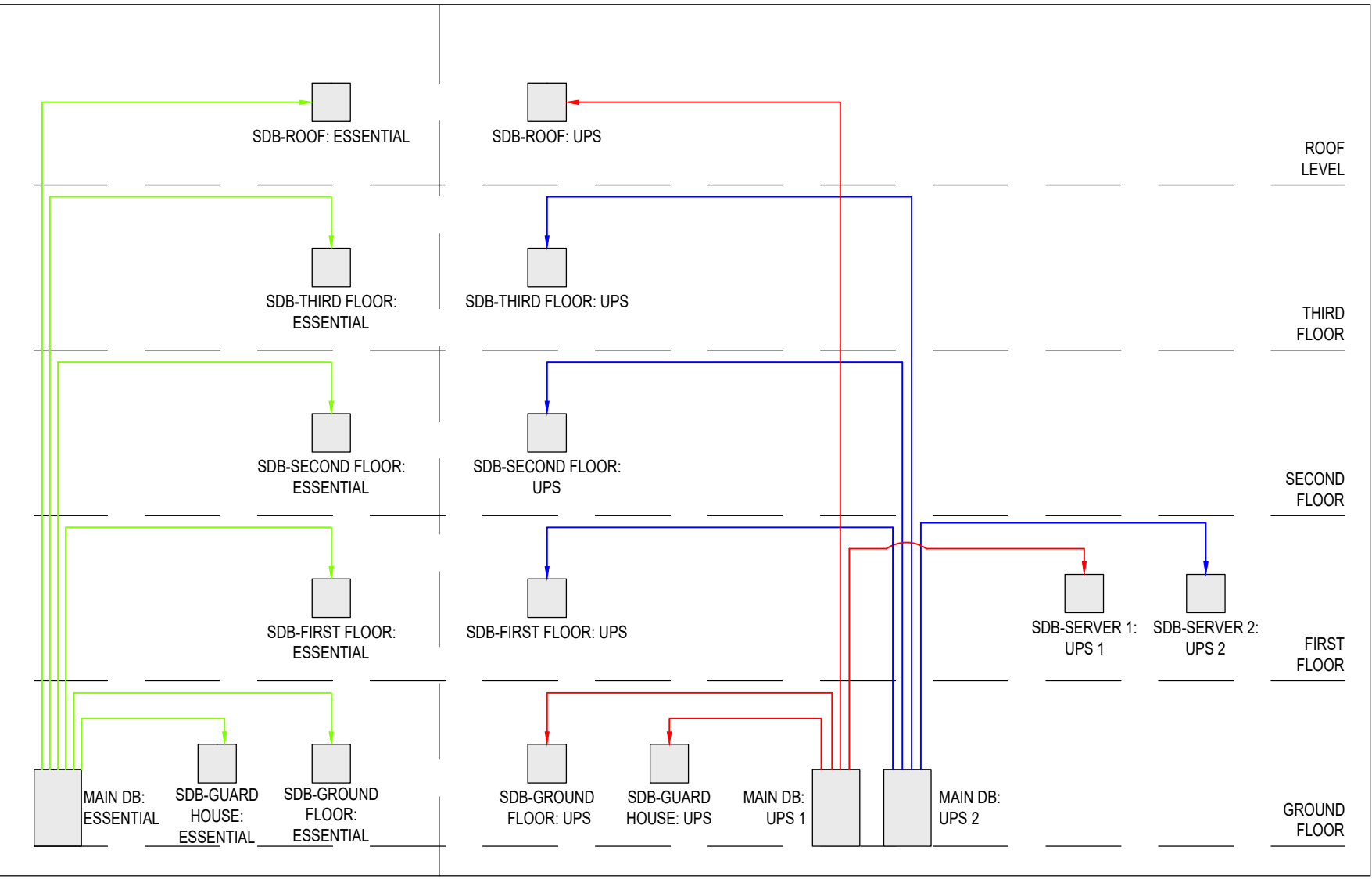
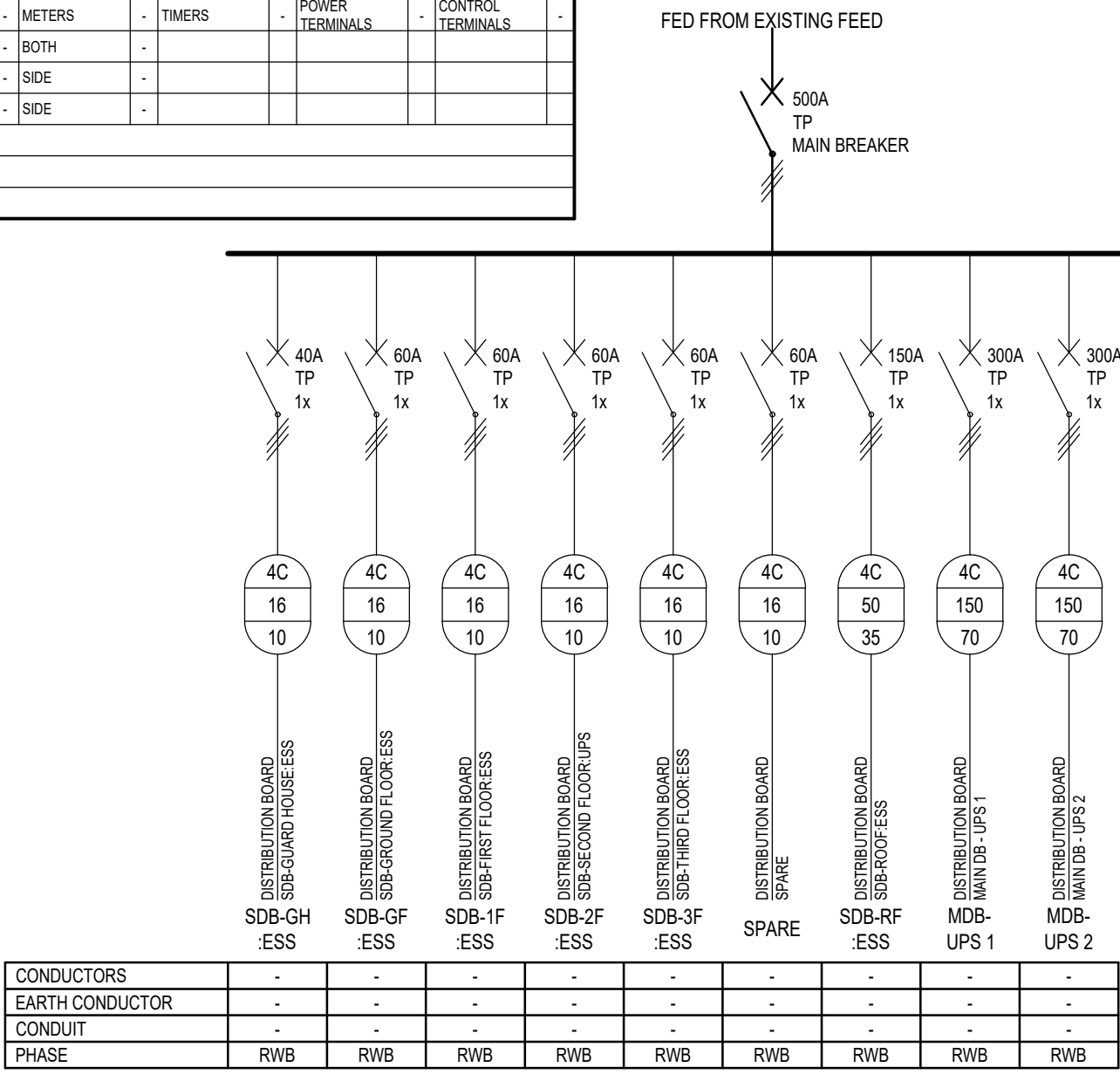


| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                                     | DATE       | INITIAL | Rev. CODE | REVISION DESCRIPTION | CLIENT                               | PROVINCE      | OFFICE         | EMAIL          | PROJECT                              | APPROVED BY BVI                                                                  |
|----------------|------------------------------------------------------------------------------------------------------------------|------------|---------|-----------|----------------------|--------------------------------------|---------------|----------------|----------------|--------------------------------------|----------------------------------------------------------------------------------|
|                | CITY ENGINEER / CLIENT<br>REG. NO. _____<br>DATE _____                                                           | 2021/11/18 | W.B     | T/D       | FOR TENDER PURPOSES  | TRANSNET<br>national ports authority | Gauteng       | Tshwane        | (012) 945-1111 | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST<br>20080282<br>18 November 2021          |
|                | AMENDMENTS CODE<br>A: BY CLIENT<br>B: BY ARCHITECT<br>C: BY MECHANICAL OR ELECTRICAL<br>D: BY BIA<br>E: BY OTHER |            |         |           |                      |                                      | Free State    | Pretoria       | (012) 251-5400 |                                      | SCALE: 1:50 @ A1<br>DESIGNED: GH<br>DRAWN: WB                                    |
|                |                                                                                                                  |            |         |           |                      |                                      | Northern Cape | Wellington     | (051) 442-1237 |                                      | CHECKED: GH                                                                      |
|                |                                                                                                                  |            |         |           |                      |                                      | KwaZulu-Natal | Springbok      | (053) 333-4800 |                                      | PLAN NUMBER: 32442.00-301-05<br>REVISION NO.: T0<br>DATE SAVED: 18 November 2021 |
|                |                                                                                                                  |            |         |           |                      |                                      | Eastern Cape  | Durban         | (031) 266-6362 |                                      |                                                                                  |
|                |                                                                                                                  |            |         |           |                      |                                      | Western Cape  | Port Elizabeth | (041) 374-5453 |                                      |                                                                                  |
|                |                                                                                                                  |            |         |           |                      |                                      |               | Cape Town      | (021) 527-7000 |                                      |                                                                                  |

0 10 50 100

|                  |                      |     |            |   |                   |   |                |   |                   |   |
|------------------|----------------------|-----|------------|---|-------------------|---|----------------|---|-------------------|---|
| NAME             | MDB                  |     |            |   |                   |   |                |   |                   |   |
| POSITION         | GENERATOR ROOM       |     |            |   |                   |   |                |   |                   |   |
| INSTALLATION     | FLUSH                | -   | SEMI-FLUSH | - | SURFACE           | - | FLOOR STANDING | X | WEATHER RESISTANT | - |
| DOOR LOCKS       | PUSH BUTTON          | -   | CAM-LOCK   | - | PADLOCKABLE LEVER | - | T-HANDLE       | X | SQUARE DRIVE      | - |
| METAL TYPE       | ELECTRO GALV         | -   | GALVANISED | - | SCR12             | X | 304 S/S        | - | 316 S/S           | - |
| METAL SIZE       | 1.2mm                | -   | 1.6mm      | - | 2.0mm             | X | 3.0mm          | - | -                 | - |
| EQUIPMENT TYPE   | CIRCUIT BREAKERS     | ABB | CONTACTORS | - | METERS            | - | TIMERS         | - | POWER TERMINALS   | - |
| ACCESS           | FRONT                | X   | REAR       | - | BOTH              | - | -              | - | CONTROL TERMINALS | - |
| ENTRY : INCOMING | TOP                  | X   | BOTTOM     | - | SIDE              | - | -              | - | -                 | - |
| ENTRY : OUTGOING | TOP                  | X   | BOTTOM     | - | SIDE              | - | -              | - | -                 | - |
| FAULT CURRENT    | 25kA                 |     |            |   |                   |   |                |   |                   |   |
| COLOUR / FINISH  | WHITE / EPOXY POWDER |     |            |   |                   |   |                |   |                   |   |
| MOUNTING HEIGHT  | FLOOR STANDING       |     |            |   |                   |   |                |   |                   |   |

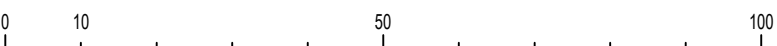
MAIN DB: ESSENTIAL



|                                                                                                                                       |                                                                                                                                            |                                                                                                                                                   |                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| APPROVED<br>PORT ENGINEER<br>DATE<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>ELECTRICAL MANAGER<br>DATE<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>MANAGER CIVIL MAINTENANCE<br>DATE<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>PORT FACILITIES MANAGER<br>DATE<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |
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FOR TENDER

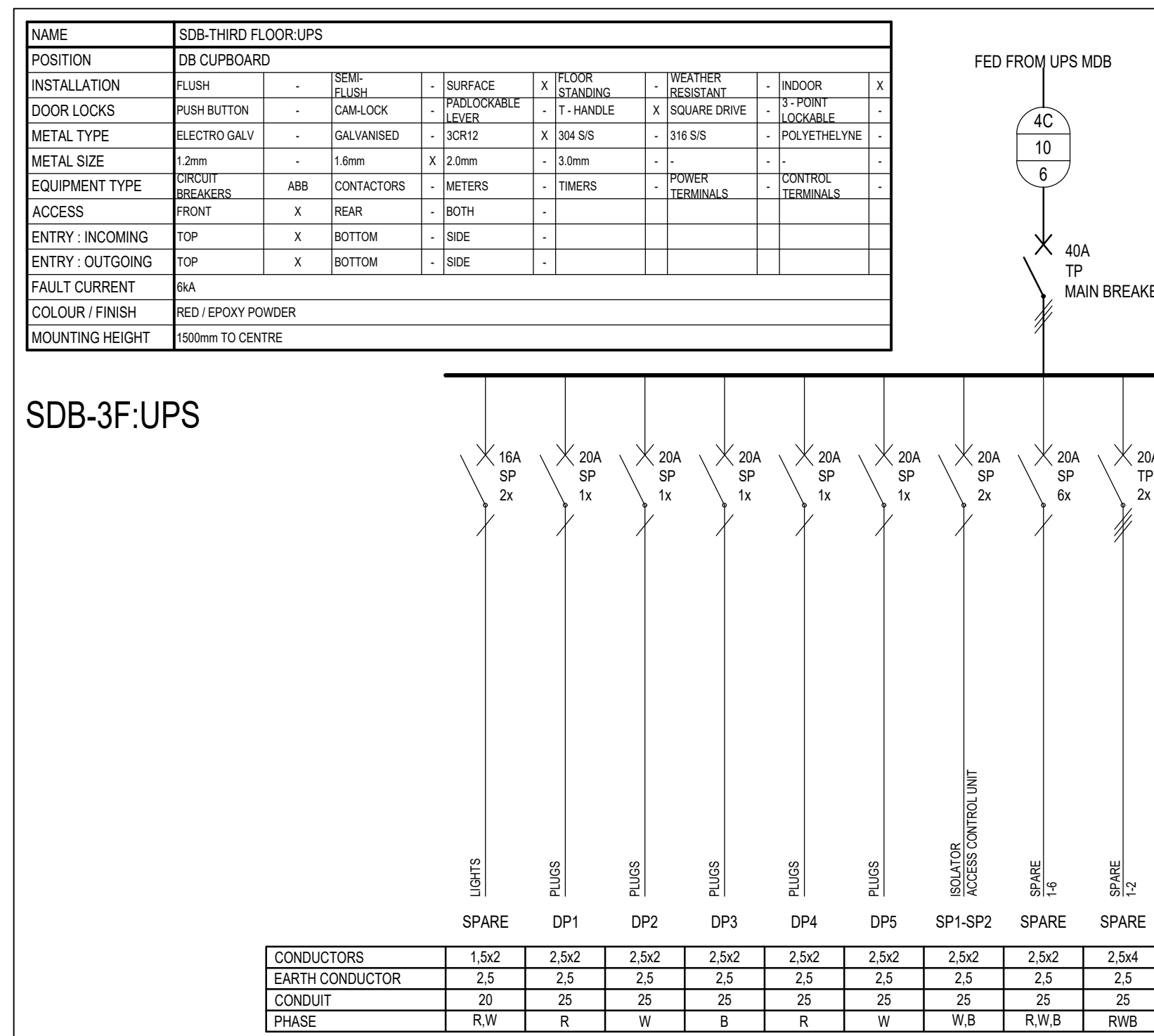
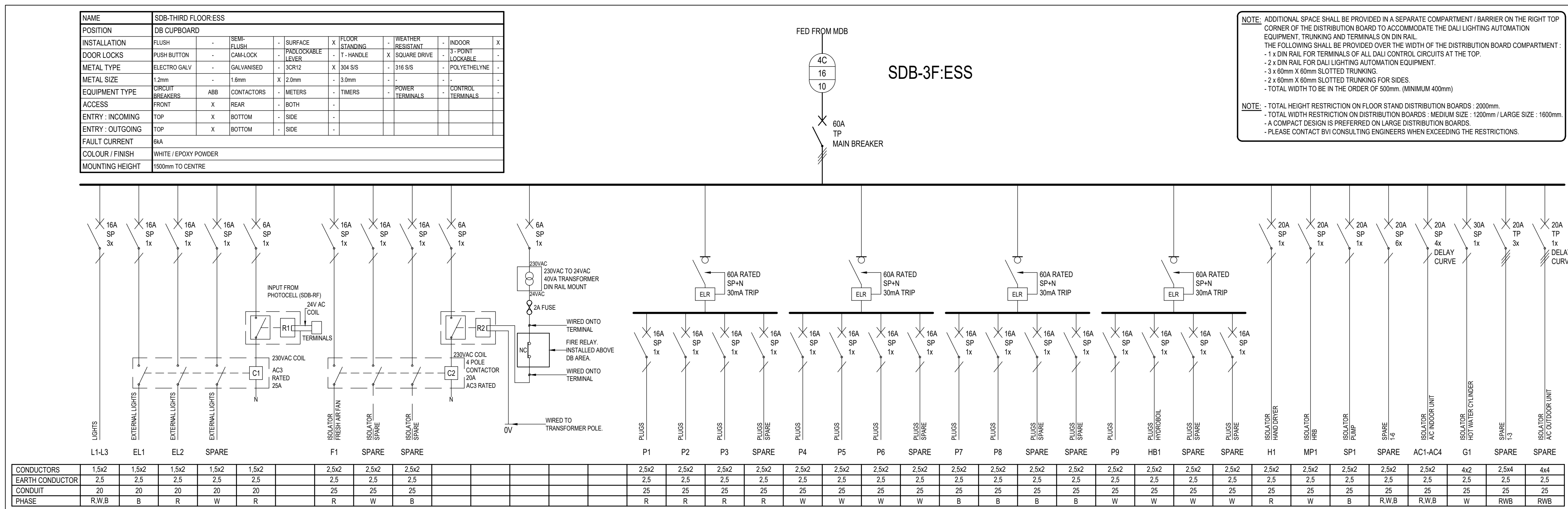
| NOTES / LEGEND                                                                                                                                                |                          | APPROVED BY COUNCIL / CLIENT |                             | DATE | INITIAL    | No. CODE | REVISION DESCRIPTION | CLIENT              | PROVINCE                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                 |          |        | OFFICE | EMAIL | PROJECT                              | APPROVED BY BVI                         |          |                  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------|-----------------------------|------|------------|----------|----------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|--------|-------|--------------------------------------|-----------------------------------------|----------|------------------|--|--|--|--|--|
| NOTE:<br>- TERMINALS: PRE-WIRE TERMINAL FROM MCB TO TERMINALS ON BOTTOM OF BOARD<br>- WIRING: ALL TERMINALS AND BUSBARS MUST BE COVERED WITH POLYCARB COVERS. | CITY ENGINEER / CLIENT   |                              | REG. NO.                    | DATE | 2021/11/18 | W.B      | TOD                  | FOR TENDER PURPOSES | <br> | <br>INCORPORATING<br><br>ENGINEERING<br>PROCUREMENT<br>MANAGEMENT<br><br>consulting mechanical engineers<br><br> | Province | Office |        |       | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST | 20080282 | 18 November 2021 |  |  |  |  |  |
|                                                                                                                                                               | AMENDMENTS CODE          |                              |                             |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               | A.B.C. / : BEFORE TENDER | 9 / : TENDER DRAWING         | B. BY CLIENT                |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               | 123. / : AFTER TENDER    | Z / : AS BUILT               | C. BY MECHANICAL/ELECTRICAL |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               |                          | D. BY BVI                    |                             |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               |                          | E. BY OTHER ( )              |                             |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               |                          |                              |                             |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               |                          |                              |                             |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               |                          |                              |                             |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               |                          |                              |                             |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |
|                                                                                                                                                               |                          |                              |                             |      |            |          |                      |                     |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                 |          |        |        |       |                                      |                                         |          |                  |  |  |  |  |  |











APPROVED

PORT ENGINEER

DATE \_\_\_\_\_

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

ELECTRICAL MANAGER

DATE \_\_\_\_\_

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

MANAGER CIVIL MAINTENANCE

DATE \_\_\_\_\_

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

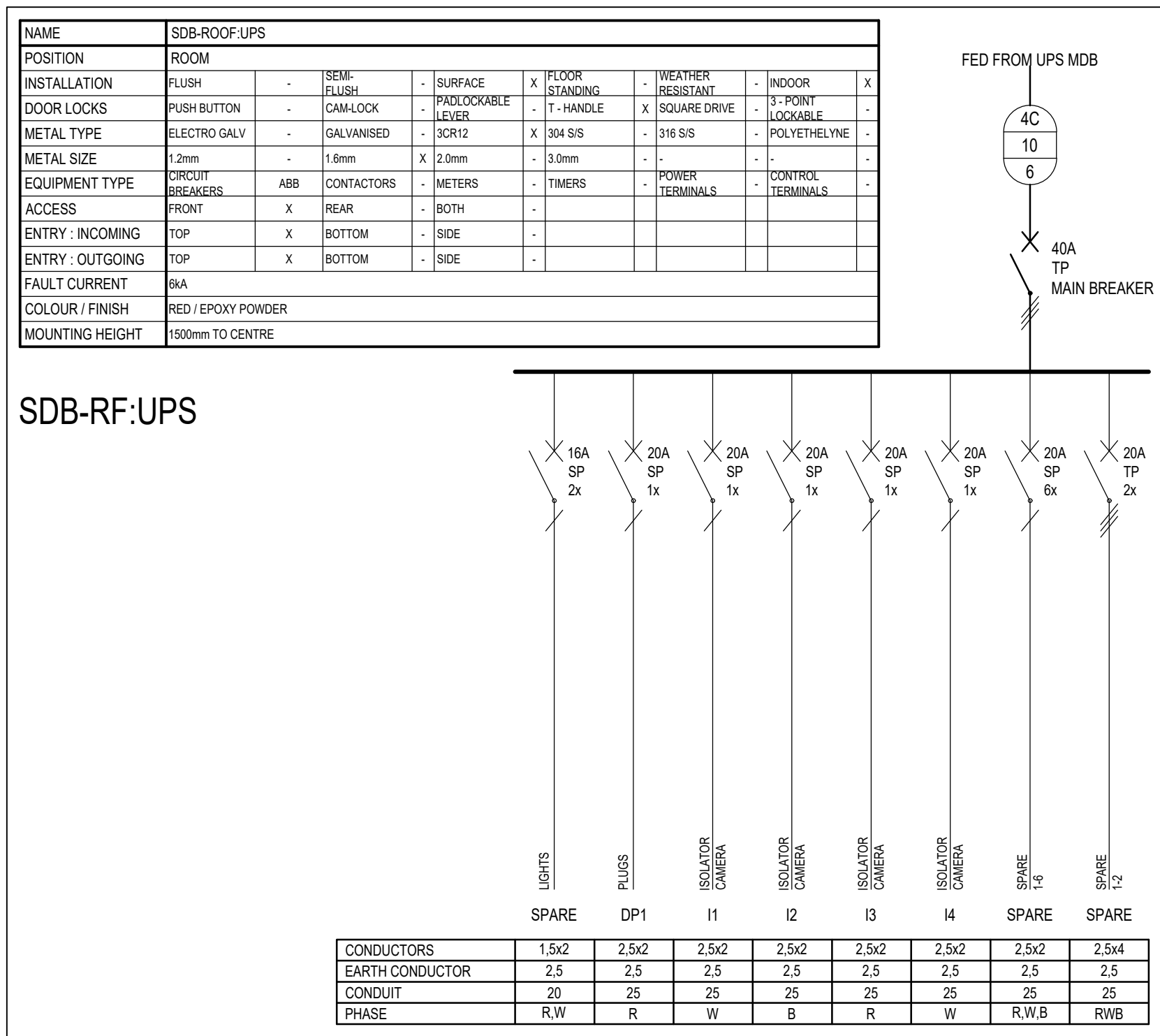
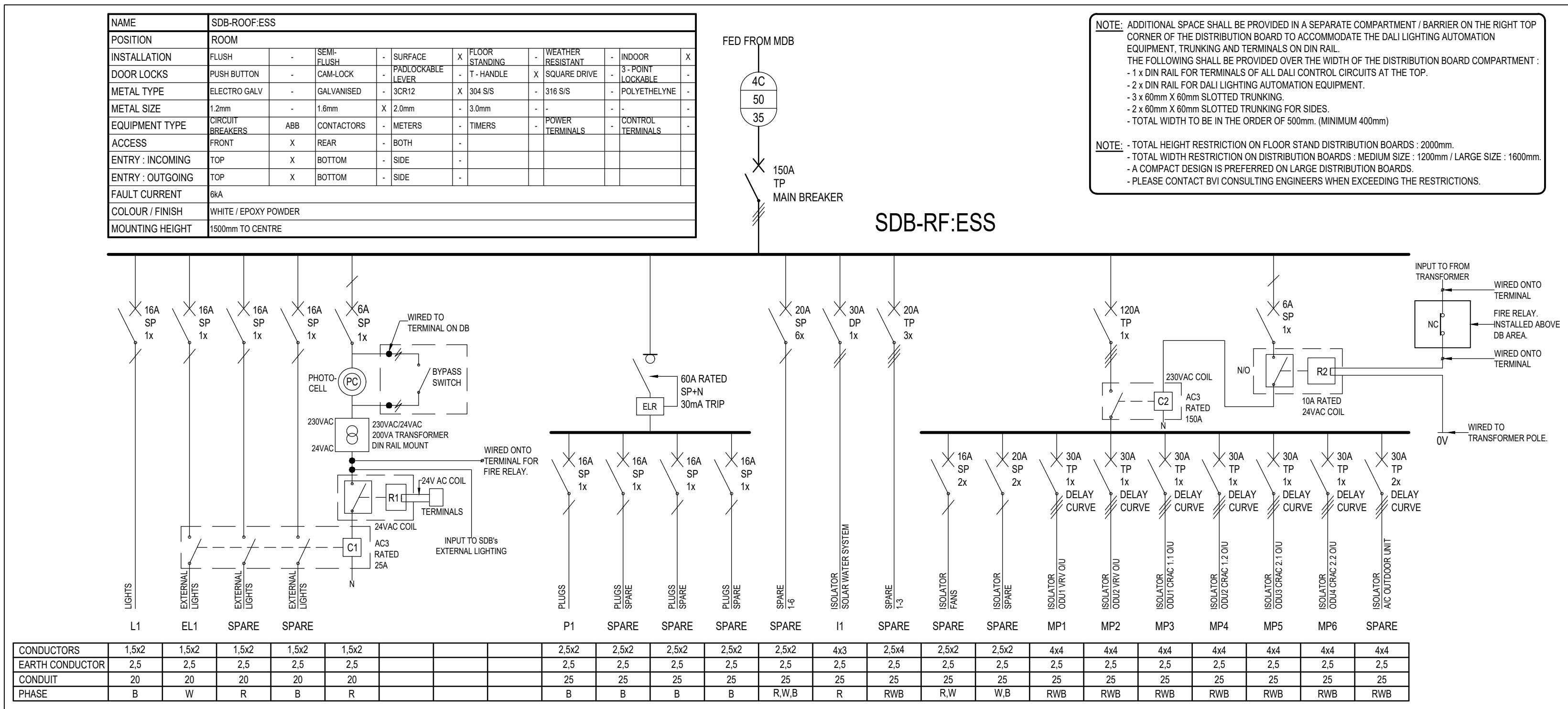
PORT FACILITIES MANAGER

DATE \_\_\_\_\_

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

FOR TENDER

| NOTES / LEGEND                                                                                                                                                | APPROVED BY COUNCIL / CLIENT | DATE | INITIAL | No. CODE | REVISION DESCRIPTION | CLIENT | PROVINCE | OFFICE | E-MAIL | PROJECT | APPROVED BY BVI |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------|---------|----------|----------------------|--------|----------|--------|--------|---------|-----------------|
| NOTE:<br>- TERMINALS: PRE-WIRE TERMINAL FROM MCB TO TERMINALS ON BOTTOM OF BOARD<br>- WIRING: ALL TERMINALS AND BUSBARS MUST BE COVERED WITH POLYCARB COVERS. | CITY                         |      |         |          |                      |        |          |        |        |         |                 |



APPROVED

PORT ENGINEER

DATE

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APPROVED

ELECTRICAL MANAGER

DATE

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

MANAGER CIVIL MAINTENANCE

DATE

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

PORT FACILITIES MANAGER

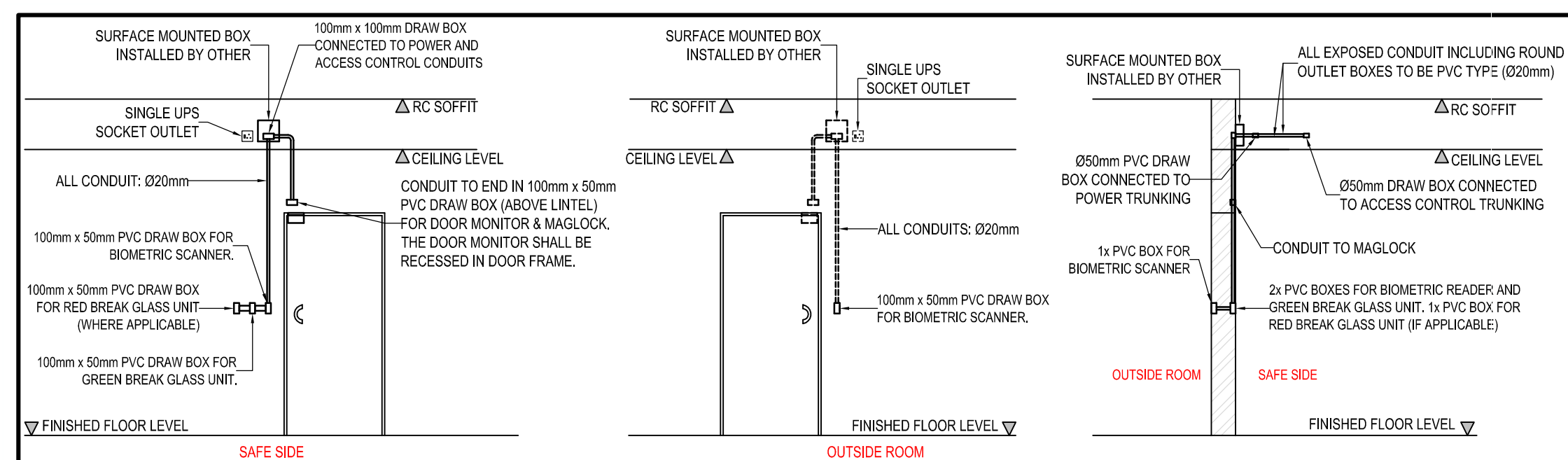
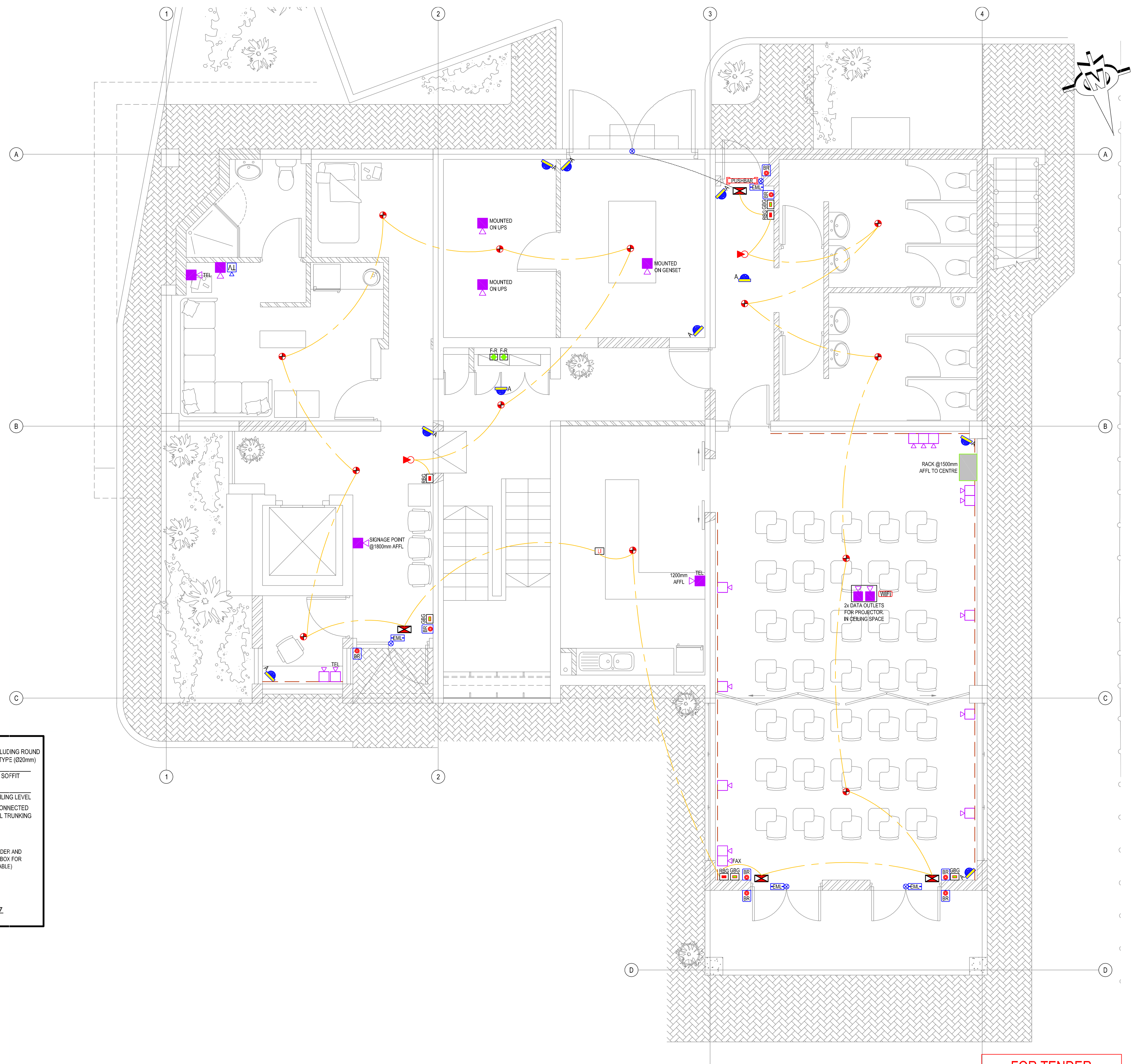
DATE

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

FOR TENDER

| NOTES / LEGEND                                                                                                                                                |  | APPROVED BY COUNCIL / CLIENT   |  | DATE       | INITIAL | No. CODE | REVISION DESCRIPTION | CLIENT   |  | PROVINCE      |  | OFFICE         |  | E-MAIL        |  | PROJECT                           |  | APPROVED BY BVI       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------|--|------------|---------|----------|----------------------|----------|--|---------------|--|----------------|--|---------------|--|-----------------------------------|--|-----------------------|--|
| NOTE:<br>- TERMINALS: PRE-WIRE TERMINAL FROM MCB TO TERMINALS ON BOTTOM OF BOARD<br>- WIRING: ALL TERMINALS AND BUSBARS MUST BE COVERED WITH POLYCARB COVERS. |  | CITY ENGINEER / CLIENT         |  | 2021/11/18 | W.B     | TOD      | FOR TENDER PURPOSES  | TRANSNET |  | Gauteng       |  | Tshwane        |  | pja@vwc.co.za |  | RICHARDS BAY - PORT CONTROL TOWER |  | G. HALBERSTADT        |  |
|                                                                                                                                                               |  | REG. NO.                       |  |            |         |          |                      |          |  | Free State    |  | Pretoria       |  | ja@vwc.co.za  |  | DRAWING TITLE                     |  | ENGINEER/TECHNOLOGIST |  |
|                                                                                                                                                               |  | DATE                           |  |            |         |          |                      |          |  | Western Cape  |  | Bloemfontein   |  | wa@vwc.co.za  |  | SCALE                             |  | REG. NO.              |  |
|                                                                                                                                                               |  | AMENDMENTS CODE                |  |            |         |          |                      |          |  | Northern Cape |  | Upington       |  | up@vwc.co.za  |  | DESIGNED                          |  | DATE                  |  |
|                                                                                                                                                               |  | A. BY CLIENT                   |  |            |         |          |                      |          |  | KwaZulu Natal |  | Durban         |  | du@vwc.co.za  |  | PLAN NUMBER                       |  | REVISION NO.          |  |
|                                                                                                                                                               |  | B. BY ARCHITECT                |  |            |         |          |                      |          |  | Eastern Cape  |  | Port Elizabeth |  | pe@vwc.co.za  |  | 32442.00-312-06                   |  | T0                    |  |
|                                                                                                                                                               |  | C. BY MECHANICAL OR ELECTRICAL |  |            |         |          |                      |          |  | Cape Town     |  | Cape Town      |  | ct@vwc.co.za  |  | DATE SAVED                        |  | 18 November 2021      |  |
|                                                                                                                                                               |  |                                |  |            |         |          |                      |          |  |               |  |                |  |               |  |                                   |  |                       |  |

| TYPE | ELECTRONIC LEGEND                                                                                                                                | MOUNTING TYPE / HEIGHT              |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
|      | GREEN BREAK GLASS UNIT FOR ACCESS CONTROL SYSTEM Ø25mm ROUND BOX WITH 25mm CONDUIT                                                               | 1250mm AFFL TO CENTER               |
|      | BIOMETRIC FINGERPRINT READERS                                                                                                                    | 1250mm AFFL TO CENTER               |
|      | ELECTRO MAGNETIC DOOR LOCK ON NON FIXED LEAF (DOOR CLOSER BY OTHERS)                                                                             | ON TOP OF DOOR FRAME                |
|      | ALARM SYSTEM MAGNETIC DOOR MONITOR ATTACHED ON SURFACE OF DOOR FRAME AND DOOR                                                                    | TOP OF DOOR FRAME                   |
|      | ACCESS CONTROL DOOR CONTROL UNIT FOR MAGLOCK DOOR RELEASE                                                                                        | IN CEILING SPACE                    |
|      | PUSHBAR FOR EMERGENCY ESCAPE DOOR                                                                                                                | AGAINST DOOR FRAME                  |
|      | HIGH RESOLUTION DAY / NIGHT STATIC DOME CAMERA.                                                                                                  | CEILING                             |
|      | CCTV CAMERA WALL MOUNT AT HEIGHT SPECIFIED.                                                                                                      | TO BE INDICATED ON DRAWING          |
|      | RJ 45 DATA/VOICE COMBO OUTLET POINT ON POWER SKIRTING.                                                                                           | POWER SKIRTING                      |
|      | RJ 45 DATA/VOICE COMBO OUTLET POINT, 100mm X 100mm.                                                                                              | WALL MOUNT/350mm AFFL TO CENTER.    |
|      | RJ 45 VOIP TELEPHONE TO VOICE RECORDER SWITCH OUTLET POINT ON POWER SKIRTING.                                                                    | POWER SKIRTING                      |
|      | RED BREAK GLASS UNIT FOR FIRE DETECTION SYSTEM Ø25mm ROUND BOX WITH 25mm CONDUIT                                                                 | 1250mm AFFL TO CENTER               |
|      | SMOKE DETECTOR                                                                                                                                   | CEILING                             |
|      | SMOKE DETECTOR IN FLOOR SPACE                                                                                                                    | IN FLOOR SPACE                      |
|      | SMOKE DETECTOR IN ROOF SPACE                                                                                                                     | SOFFIT                              |
|      | LINE ISOLATORS FOR FIRE DETECTION SYSTEM                                                                                                         | CEILING                             |
|      | FIRE SOUNDER ONLY                                                                                                                                | CEILING                             |
|      | MAIN FIRE CONTROL PANEL FOR FIRE DETECTION SYSTEM                                                                                                | 1250mm AFFL TO CENTER               |
|      | GAS SUPPRESSION ACTIVATION/DEACTIVATION PANEL                                                                                                    | 1250mm AFFL TO CENTER               |
|      | INERGEN GAS SUPPRESSION CYLINDER                                                                                                                 | -                                   |
|      | 1x CAT 6 OUTLET TERMINATED IN CEILING FOR WIFI ROUTER.                                                                                           | CEILING                             |
|      | TV POINT WALL MOUNTED IN 100mm X 100mm WALL BOX.                                                                                                 | 1250mm AFFL TO CENTER               |
|      | FIRE RELAY TO DISABLE MECHANICAL LOADS INSIDE DB                                                                                                 | -                                   |
|      | WALL MOUNTED 3 COMPARTMENT POWER SKIRTING :COLOUR: BLACK, POWDER COATED, GALVANISED METAL, O-LINE /OBO. TIER 1: POWER, TIER 2: DATA, TIER 3: VTS | FLOOR LEVEL UNLESS STATED OTHERWISE |



DETAIL A: ACCESS CONTROL FOR EXIT DOOR

|                                                                                                  |                                                                                                  |                                                                                                  |                                                                                                  |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| APPROVED                                                                                         | APPROVED                                                                                         | APPROVED                                                                                         | APPROVED                                                                                         |
| PORT ENGINEER                                                                                    | ELECTRICAL MANAGER                                                                               | MANAGER<br>CIVIL MAINTENANCE                                                                     | PORT FACILITIES MANAGER                                                                          |
| DATE _____                                                                                       | DATE _____                                                                                       | DATE _____                                                                                       | DATE _____                                                                                       |
| APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                  | DATE       | INITIAL | No. CODE | REVISION DESCRIPTION | CLIENT   | PROVINCE      | OFFICE         | EAWL           | PROJECT                           | APPROVED BY BIA              |
|----------------|-----------------------------------------------------------------------------------------------|------------|---------|----------|----------------------|----------|---------------|----------------|----------------|-----------------------------------|------------------------------|
|                | CITY ENGINEER / CLIENT                                                                        | 2021/11/18 | W.B     | T.O.D    | FOR TENDER PURPOSES  | TRANSNET | Gauteng       | Tshwane        | (012) 945-1111 | RICHARDS BAY - PORT CONTROL TOWER | G. HALBERSTADT               |
|                | REG. NO. DATE                                                                                 |            |         |          |                      |          | Free State    | Pretoria       | (012) 251-5400 |                                   | 20080282                     |
|                | AMENDMENTS CODE                                                                               |            |         |          |                      |          | Western Cape  | Bloubaai       | (051) 442-1237 |                                   | 18 November 2021             |
|                | A: BY CLIENT<br>B: BY ARCHITECT<br>C: BY MECHANICAL OR ELECTRICAL<br>D: BY BIA<br>E: BY OTHER |            |         |          |                      |          | Northern Cape | Upington       | (053) 535-4569 |                                   | REG. NO. DATE                |
|                |                                                                                               |            |         |          |                      |          | KwaZulu Natal | Springbok      | (054) 337-4800 |                                   | SCALE: 1:50 @ A1             |
|                |                                                                                               |            |         |          |                      |          | Eastern Cape  | Durban         | (031) 266-5502 |                                   | DRAWN: WB                    |
|                |                                                                                               |            |         |          |                      |          | Western Cape  | Port Elizabeth | (041) 754-9112 |                                   | DESIGNED: GH                 |
|                |                                                                                               |            |         |          |                      |          |               | East London    | (043) 735-3869 |                                   | CHECKED: GH                  |
|                |                                                                                               |            |         |          |                      |          |               | Cape Town      | (021) 527-7000 |                                   | PLAN NUMBER: 32442.00-320-01 |
|                |                                                                                               |            |         |          |                      |          |               |                |                |                                   | REVISION NO.: T0             |
|                |                                                                                               |            |         |          |                      |          |               |                |                |                                   | DATE SAVED: 18 November 2021 |

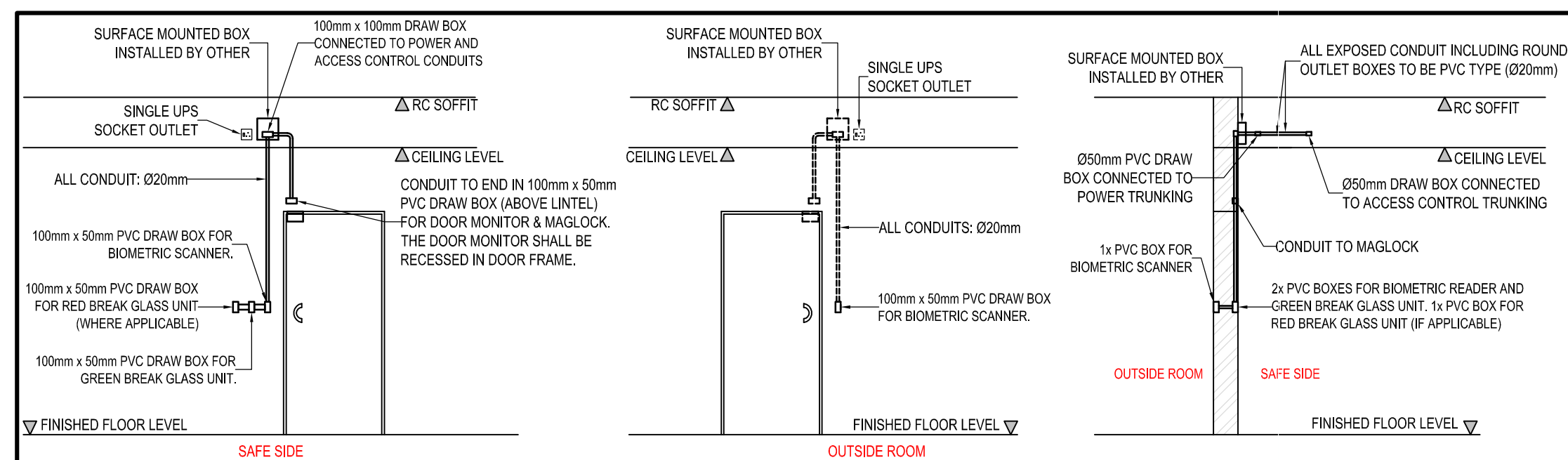
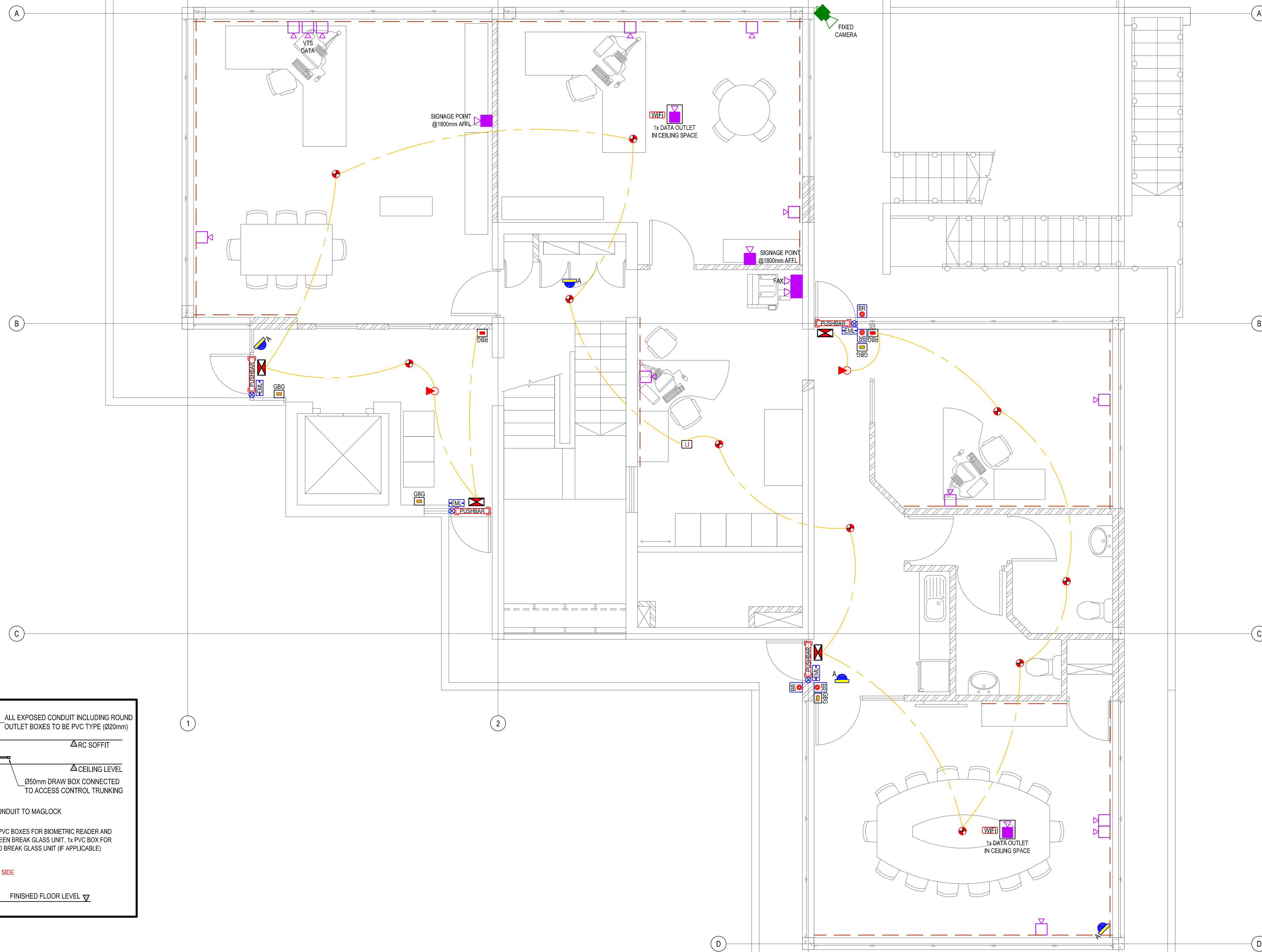
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32442.00-301-01 GROUND FLOOR REV T0.DWG



| TYPE | ELECTRONIC LEGEND                                                                                                                                | MOUNTING TYPE / HEIGHT              |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
|      | GREEN BREAK GLASS UNIT FOR ACCESS CONTROL SYSTEM Ø25mm ROUND BOX WITH 25mm CONDUIT                                                               | 1250mm AFFL TO CENTER               |
|      | BIOMETRIC FINGERPRINT READERS                                                                                                                    | 1250mm AFFL TO CENTER               |
|      | ELECTRO MAGNETIC DOOR LOCK ON NON FIXED LEAF (DOOR CLOSER BY OTHERS)                                                                             | ON TOP OF DOOR FRAME                |
|      | ALARM SYSTEM MAGNETIC DOOR MONITOR ATTACHED ON SURFACE OF DOOR FRAME AND DOOR                                                                    | TOP OF DOOR FRAME                   |
|      | ACCESS CONTROL DOOR CONTROL UNIT FOR MAGLOCK DOOR RELEASE                                                                                        | IN CEILING SPACE                    |
|      | PUSHBAR FOR EMERGENCY ESCAPE DOOR                                                                                                                | AGAINST DOOR FRAME                  |
|      | HIGH RESOLUTION DAY / NIGHT STATIC DOME CAMERA,                                                                                                  | CEILING                             |
|      | CCTV CAMERA WALL MOUNT AT HEIGHT SPECIFIED.                                                                                                      | TO BE INDICATED ON DRAWING          |
|      | RJ 45 DATA/VOICE COMBO OUTLET POINT ON POWER SKIRTING.                                                                                           | POWER SKIRTING                      |
|      | RJ 45 DATA/VOICE COMBO OUTLET POINT, 100mm X 100mm.                                                                                              | WALL MOUNT/350mm AFFL TO CENTER.    |
|      | RJ 45 VOIP TELEPHONE TO VOICE RECORDER SWITCH OUTLET POINT ON POWER SKIRTING.                                                                    | POWER SKIRTING                      |
|      | RED BREAK GLASS UNIT FOR FIRE DETECTION SYSTEM Ø25mm ROUND BOX WITH 25mm CONDUIT                                                                 | 1250mm AFFL TO CENTER               |
|      | SMOKE DETECTOR                                                                                                                                   | CEILING                             |
|      | SMOKE DETECTOR IN FLOOR SPACE                                                                                                                    | IN FLOOR SPACE                      |
|      | SMOKE DETECTOR IN ROOF SPACE                                                                                                                     | SOFFIT                              |
|      | LINE ISOLATORS FOR FIRE DETECTION SYSTEM                                                                                                         | CEILING                             |
|      | FIRE SOUNDER ONLY                                                                                                                                | CEILING                             |
|      | MAIN FIRE CONTROL PANEL FOR FIRE DETECTION SYSTEM                                                                                                | 1250mm AFFL TO CENTER               |
|      | GAS SUPPRESSION ACTIVATION/DEACTIVATION PANEL                                                                                                    | 1250mm AFFL TO CENTER               |
|      | INERGEN GAS SUPPRESSION CYLINDER                                                                                                                 | -                                   |
|      | 1x CAT 6 OUTLET TERMINATED IN CEILING FOR WIFI ROUTER.                                                                                           | CEILING                             |
|      | TV POINT WALL MOUNTED IN 100mm X 100mm WALL BOX.                                                                                                 | 1250mm AFFL TO CENTER               |
|      | FIRE RELAY TO DISABLE MECHANICAL LOADS INSIDE DB                                                                                                 | -                                   |
|      | WALL MOUNTED 3 COMPARTMENT POWER SKIRTING: COLOUR: BLACK, POWDER COATED, GALVANISED METAL, O-LINE/JOBO. TIER 1: POWER, TIER 2: DATA, TIER 3: VTS | FLOOR LEVEL UNLESS STATED OTHERWISE |



DETAIL A: ACCESS CONTROL FOR EXIT DOOR

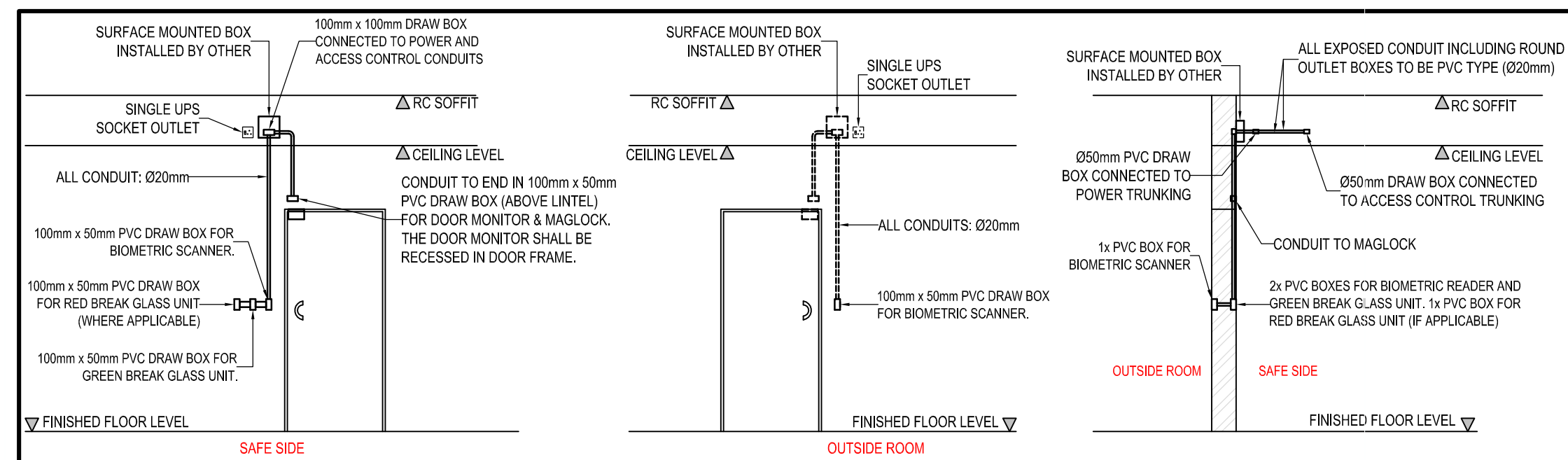
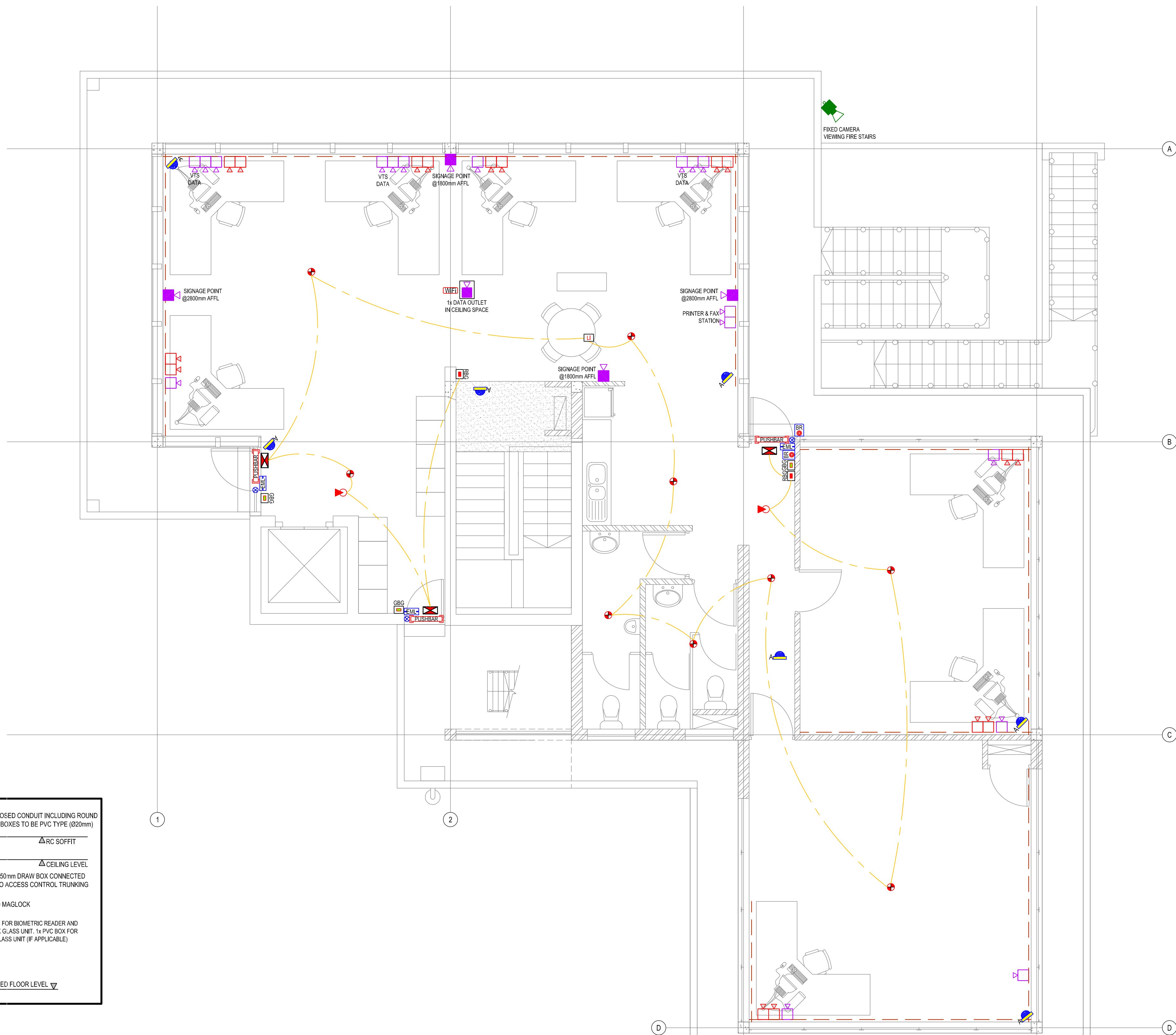
|                                                                                                  |                                                                                                  |                                                                                                  |                                                                                                  |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| APPROVED                                                                                         | APPROVED                                                                                         | APPROVED                                                                                         | APPROVED                                                                                         |
| PORT ENGINEER                                                                                    | ELECTRICAL MANAGER                                                                               | MANAGER<br>CIVIL MAINTENANCE                                                                     | PORT FACILITIES MANAGER                                                                          |
| DATE _____                                                                                       | DATE _____                                                                                       | DATE _____                                                                                       | DATE _____                                                                                       |
| APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |

FOR TENDER

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT   | DATE       | INITIAL | No./CODE | REVISION DESCRIPTION | CLIENT   | PROVINCE       | OFFICE      | EMAIL         | PROJECT                           | APPROVED BY BVI  |
|----------------|--------------------------------|------------|---------|----------|----------------------|----------|----------------|-------------|---------------|-----------------------------------|------------------|
|                | CITY ENGINEER / CLIENT         | 2021/11/18 | W.B     | T/D      | FOR TENDER PURPOSES  | TRANSNET | Gauteng        | Tshwane     | gpa@nrc.co.za | RICHARDS BAY - PORT CONTROL TOWER | G. HALBERSTADT   |
|                | REG. NO. DATE                  |            |         |          |                      |          | Free State     | Pretoria    | j.h@nrc.co.za | ENGINEER/TECHNOLOGIST             | 20080282         |
|                | AMENDMENTS CODE                |            |         |          |                      |          | Western Cape   | Bloubaai    | wh@nrc.co.za  | SCALE 1:50 @ A1                   | 18 November 2021 |
|                | A: BY CLIENT                   |            |         |          |                      |          | Northern Cape  | Upington    | up@nrc.co.za  | DRAWN WB                          | DATE             |
|                | B: BY ARCHITECT                |            |         |          |                      |          | KwaZulu Natal  | Springbok   | sp@nrc.co.za  | DESIGNED GH                       | CHECKED GH       |
|                | C: BY MECHANICAL OR ELECTRICAL |            |         |          |                      |          | Eastern Cape   | Durban      | du@nrc.co.za  | PLAN NUMBER                       | REVISION NO.     |
|                | D: BY BIA                      |            |         |          |                      |          | Port Elizabeth | Engenagel   | eng@nrc.co.za | 32442.00-320-03                   | T0               |
|                | E: BY OTHER                    |            |         |          |                      |          | Cape Town      | East London | el@nrc.co.za  | DATE SAVED                        | 18 November 2021 |
|                |                                |            |         |          |                      |          |                |             | cp@nrc.co.za  |                                   |                  |

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| TYPE | ELECTRONIC LEGEND                                                                                                                                 | MOUNTING TYPE / HEIGHT              |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
|      | GREEN BREAK GLASS UNIT FOR ACCESS CONTROL SYSTEM Ø25mm ROUND BOX WITH 25mm CONDUIT                                                                | 1250mm AFFL TO CENTER               |
|      | BIOMETRIC FINGERPRINT READERS                                                                                                                     | 1250mm AFFL TO CENTER               |
|      | ELECTRO MAGNETIC DOOR LOCK ON NON FIXED LEAF (DOOR CLOSER BY OTHERS)                                                                              | ON TOP OF DOOR FRAME                |
|      | ALARM SYSTEM MAGNETIC DOOR MONITOR ATTACHED ON SURFACE OF DOOR FRAME AND DOOR                                                                     | TOP OF DOOR FRAME                   |
|      | ACCESS CONTROL DOOR CONTROL UNIT FOR MAGLOCK DOOR RELEASE                                                                                         | IN CEILING SPACE                    |
|      | PUSHBAR FOR EMERGENCY ESCAPE DOOR                                                                                                                 | AGAINST DOOR FRAME                  |
|      | HIGH RESOLUTION DAY / NIGHT STATIC DOME CAMERA.                                                                                                   | CEILING                             |
|      | CCTV CAMERA WALL MOUNT AT HEIGHT SPECIFIED.                                                                                                       | TO BE INDICATED ON DRAWING          |
|      | RJ 45 DATA/VOICE COMBO OUTLET POINT ON POWER SKIRTING.                                                                                            | POWER SKIRTING                      |
|      | RJ 45 DATA/VOICE COMBO OUTLET POINT, 100mm X 100mm.                                                                                               | WALL MOUNT/350mm AFFL TO CENTER.    |
|      | RJ 45 VOIP TELEPHONE TO VOICE RECORDER SWITCH OUTLET POINT ON POWER SKIRTING.                                                                     | POWER SKIRTING                      |
|      | RED BREAK GLASS UNIT FOR FIRE DETECTION SYSTEM Ø25mm ROUND BOX WITH 25mm CONDUIT                                                                  | 1250mm AFFL TO CENTER               |
|      | SMOKE DETECTOR                                                                                                                                    | CEILING                             |
|      | SMOKE DETECTOR IN FLOOR SPACE                                                                                                                     | IN FLOOR SPACE                      |
|      | SMOKE DETECTOR IN ROOF SPACE                                                                                                                      | SOFFIT                              |
|      | LINE ISOLATORS FOR FIRE DETECTION SYSTEM                                                                                                          | CEILING                             |
|      | FIRE SOUNDER ONLY                                                                                                                                 | CEILING                             |
|      | MAIN FIRE CONTROL PANEL FOR FIRE DETECTION SYSTEM                                                                                                 | 1250mm AFFL TO CENTER               |
|      | GAS SUPPRESSION ACTIVATION/DEACTIVATION PANEL                                                                                                     | 1250mm AFFL TO CENTER               |
|      | INERGEN GAS SUPPRESSION CYLINDER                                                                                                                  | -                                   |
|      | 1x CAT 6 OUTLET TERMINATED IN CEILING FOR WIFI ROUTER.                                                                                            | CEILING                             |
|      | TV POINT WALL MOUNTED IN 100mm X 100mm WALL BOX.                                                                                                  | 1250mm AFFL TO CENTER               |
|      | FIRE RELAY TO DISABLE MECHANICAL LOADS INSIDE DB                                                                                                  | -                                   |
|      | WALL MOUNTED 3 COMPARTMENT POWER SKIRTING : COLOUR: BLACK, POWDER COATED, GALVANISED METAL, O-LINE /OBO. TIER 1: POWER, TIER 2: DATA, TIER 3: VTS | FLOOR LEVEL UNLESS STATED OTHERWISE |



DETAIL A: ACCESS CONTROL FOR EXIT DOOR

|                                                                                                  |                                                                                                  |                                                                                                  |                                                                                                  |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| APPROVED                                                                                         | APPROVED                                                                                         | APPROVED                                                                                         | APPROVED                                                                                         |
| PORT ENGINEER                                                                                    | ELECTRICAL MANAGER                                                                               | MANAGER<br>CIVIL MAINTENANCE                                                                     | PORT FACILITIES MANAGER                                                                          |
| DATE _____                                                                                       | DATE _____                                                                                       | DATE _____                                                                                       | DATE _____                                                                                       |
| APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |

FOR TENDER

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT   | DATE       | INITIAL | Rev. CODE | REVISION DESCRIPTION | CLIENT   | PROVINCE      | OFFICE         | EMAIL         | PROJECT                           | APPROVED BY BVI  |
|----------------|--------------------------------|------------|---------|-----------|----------------------|----------|---------------|----------------|---------------|-----------------------------------|------------------|
|                | CITY ENGINEER / CLIENT         | 2021/11/18 | W.B     | T.O.D     | FOR TENDER PURPOSES  | TRANSNET | Gauteng       | Tshwane        | gpa@bvi.co.za | RICHARDS BAY - PORT CONTROL TOWER | G. HALBERSTADT   |
|                | REG. NO.                       |            |         |           |                      |          | Free State    | Pretoria       | jhb@bvi.co.za | ENGINEER/TECHNOLOGIST             | 20080282         |
|                | DATE                           |            |         |           |                      |          | Northern Cape | Blantyre       | blb@bvi.co.za | SCALE                             | 1:50 @ A1        |
|                | AMENDMENTS CODE                |            |         |           |                      |          | Western Cape  | Wellness       | wel@bvi.co.za | DRAWN                             | WB               |
|                | A: BY CLIENT                   |            |         |           |                      |          | Eastern Cape  | Upington       | up@bvi.co.za  | CHECKED                           | GH               |
|                | B: BY ARCHITECT                |            |         |           |                      |          | Free State    | Springs        | spr@bvi.co.za | DESIGNED                          | GH               |
|                | C: BY MECHANICAL OR ELECTRICAL |            |         |           |                      |          | Free State    | Durban         | dur@bvi.co.za | PLAN NUMBER                       | 32442.00-320-04  |
|                | D: BY BIA                      |            |         |           |                      |          | Free State    | Port Elizabeth | pep@bvi.co.za | REVISION NO.                      | T0               |
|                | E: BY OTHER                    |            |         |           |                      |          | Free State    | Cape Town      | cap@bvi.co.za | DATE SAVED                        | 18 November 2021 |

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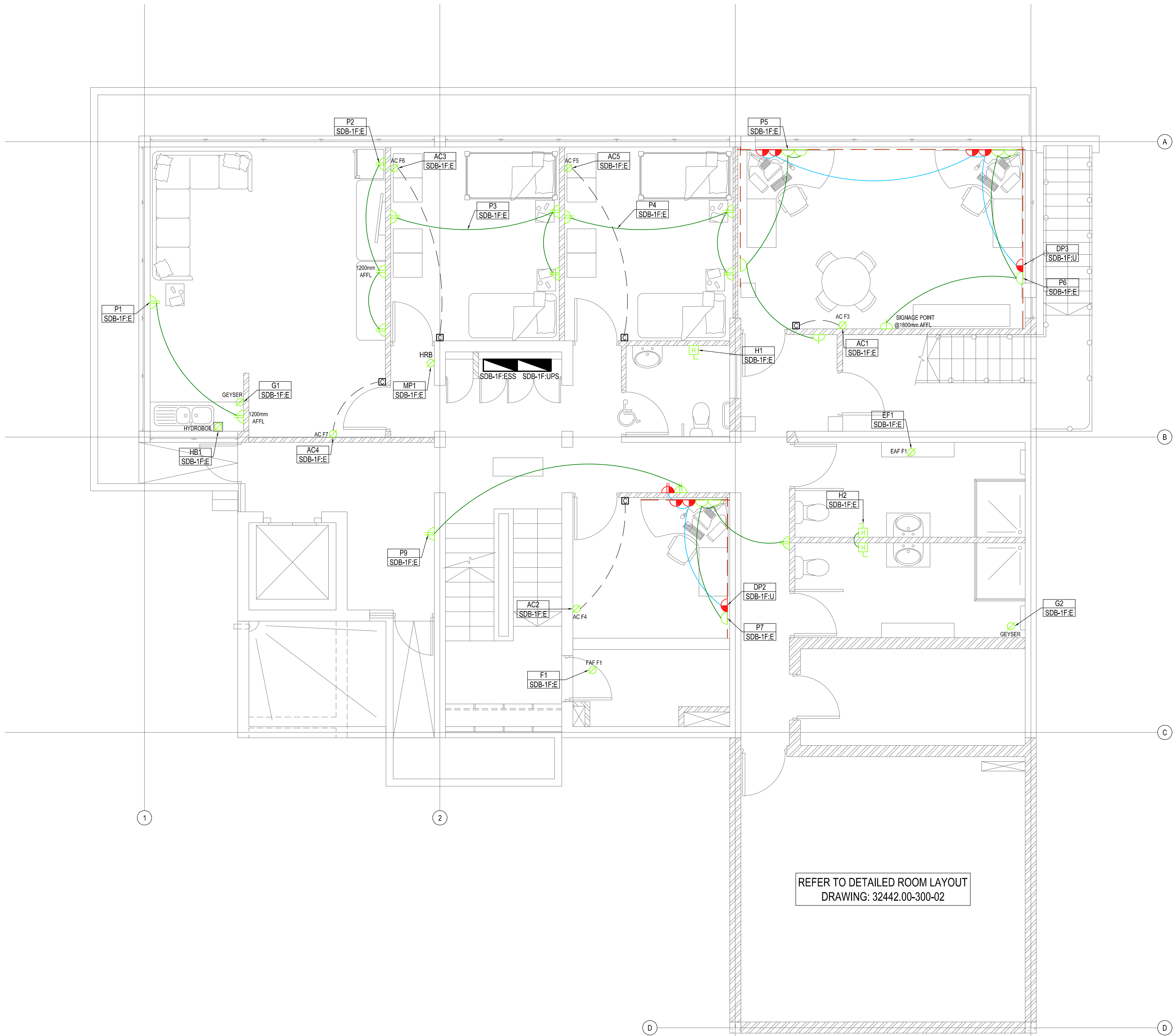
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32442.00-301-04 THIRD FLOOR REV T0.DWG



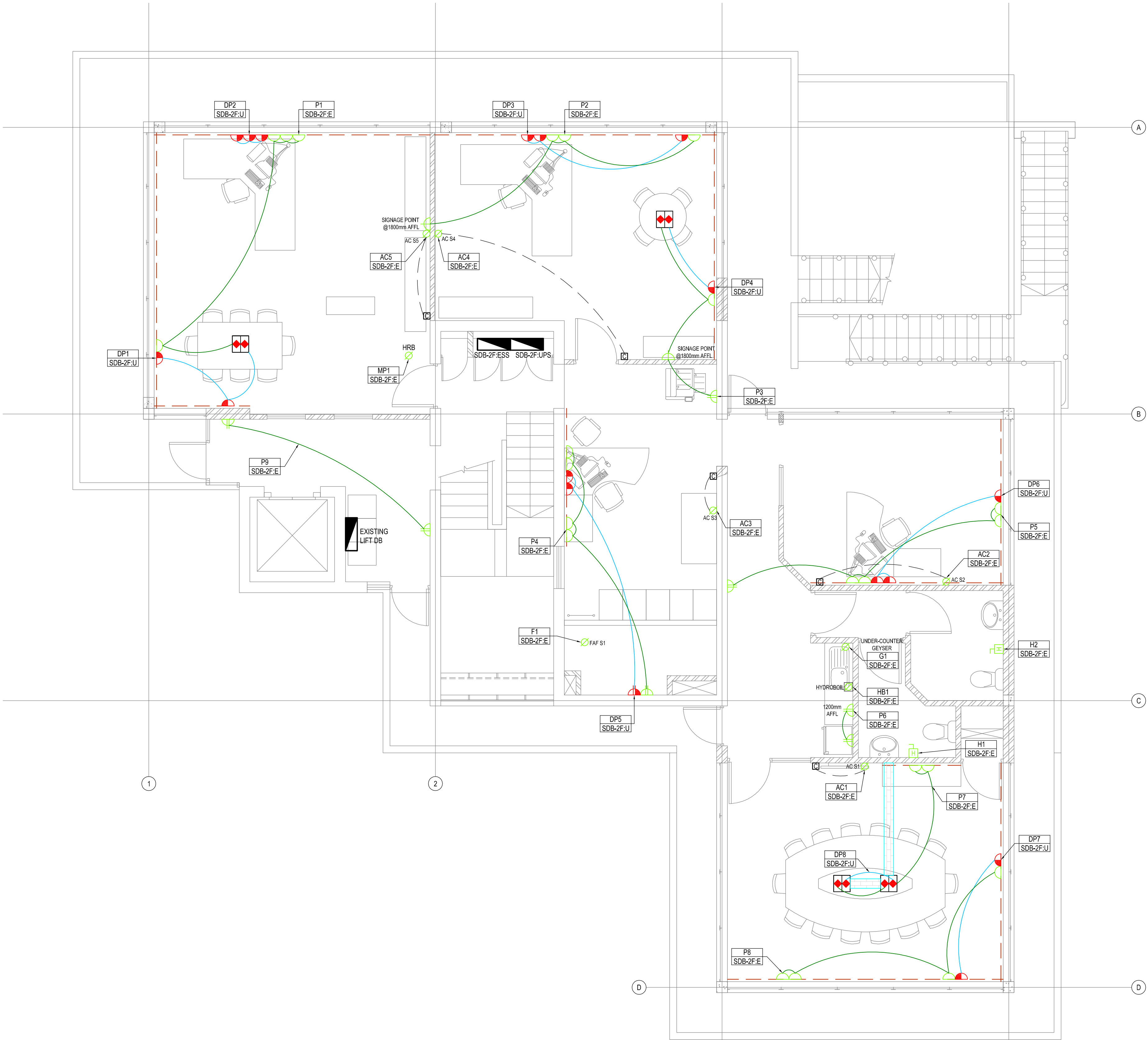
| TYPE                                                                                | POWER OUTLETS LEGEND                                                                                                                             | MOUNTING TYPE / HEIGHT                                    |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|    | SINGLE SOCKET SWITCHED OUTLET, RATED 16A SANS 164-1, ON POWER SKIRTING (ESSENTIAL: WHITE)                                                        | POWER SKIRTING                                            |
|    | SINGLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, RATED 16A, ON POWER SKIRTING (UPS: RED)                                                      | POWER SKIRTING                                            |
|    | SINGLE SWITCHED SOCKET OUTLET SANS 164-1, RATED 16A, 100mm x 100mm (ESSENTIAL: WHITE)                                                            | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (ESSENTIAL: WHITE)                                                       | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (UPS: RED)                                                     | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (UPS: RED)                                                     | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (ESSENTIAL)                                                                       | HEIGHT INDICATED ON DRAWING                               |
|    | SINGLE PHASE ISOLATOR, RECESSED IN WALL. (ESSENTIAL)                                                                                             | HEIGHT INDICATED ON DRAWING                               |
|    | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (UPS)                                                                             | HEIGHT INDICATED ON DRAWING                               |
|    | 3 PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (ESSENTIAL)                                                                            | HEIGHT INDICATED ON DRAWING                               |
|    | 20A SINGLE PHASE HAND DRYER ISOLATOR WITH ISOLATOR POINT @ 2300mm AFFL & OUTLET POINT 1400mm AFFL.                                               | ISOLATOR @ 2300mm AFFL & OUTLET 1400mm AFFL.              |
|    | DISTRIBUTION BOARD. 2100mm TO TOP OF PANEL.                                                                                                      | HEIGHT INDICATED ON SINGLE LINE DIAGRAMS                  |
|   | WALL MOUNTED 3 COMPARTMENT POWER SKIRTING. COLOUR: BLACK, POWDER COATED, GALVANISED METAL. O-LINE /OBO, TIER 1: POWER, TIER 2: DATA, TIER 3: VTS | FLOOR LEVEL UNLESS STATED OTHERWISE                       |
|  | FD4 SURFACE FLOOR MOUNTED PEDESTAL WITH 1x16A NORMAL SSO, 1x16A DEDICATED SSO & 2x DATA POINT, UNLESS OTHERWISE STATED.                          | IN FLOOR SLAB - SURFACE MOUNT                             |
|  | 4x Ø25mm CONDUITS UNDER FLOOR TO WALL MOUNT POWER SKIRTING.                                                                                      | UNDER FLOOR SLAB                                          |
|  | Ø25mm ROUND BOX WITH Ø20mm CONDUIT MOUNTED AT 1500mm A.F.F.L. FOR AC CONTROLLERS                                                                 | 1500mm AFFL TO CENTER                                     |
|  | ISOLATOR POINT FOR A/C IN CEILING SPACE AGAINST SOFFIT. SUPPLY FROM OUTDOOR UNIT ON ROOF. (INSTALLED BY HVAC CONTRACTOR)                         | AGAINST SOFFIT                                            |
|  | SERVER SOCKET OUTLET                                                                                                                             | AGAINST POWER TRUNKING IN FLOOR SPACE BELOW SERVER RACKS  |

NOTE - HYDROBOIL INSTALLATION:  
FLUSH MOUNTED 25A ISOLATOR FOR HYDROBOIL, MOUNTED IN 100x100mm BOX. FLUSHED WALL BELOW SINK COMPLETE WITH CONDUIT TO 60mm ROUND BOX AT 1250mm AFFL. HYDROBOIL SUPPLY AND CONNECT BY OTHERS.



| TYPE                                                                                | POWER OUTLETS LEGEND                                                                                                                             | MOUNTING TYPE / HEIGHT                                    |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|    | SINGLE SOCKET SWITCHED OUTLET, RATED 16A SANS 164-1, ON POWER SKIRTING (ESSENTIAL: WHITE)                                                        | POWER SKIRTING                                            |
|    | SINGLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, RATED 16A, ON POWER SKIRTING (UPS: RED)                                                      | POWER SKIRTING                                            |
|    | SINGLE SWITCHED SOCKET OUTLET SANS 164-1, RATED 16A, 100mm x 100mm (ESSENTIAL: WHITE)                                                            | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (ESSENTIAL: WHITE)                                                       | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (UPS: RED)                                                     | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (UPS: RED)                                                     | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (ESSENTIAL)                                                                       | HEIGHT INDICATED ON DRAWING                               |
|    | SINGLE PHASE ISOLATOR, RECESSED IN WALL. (ESSENTIAL)                                                                                             | HEIGHT INDICATED ON DRAWING                               |
|    | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (UPS)                                                                             | HEIGHT INDICATED ON DRAWING                               |
|    | 3 PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (ESSENTIAL)                                                                            | HEIGHT INDICATED ON DRAWING                               |
|    | 20A SINGLE PHASE HAND DRYER ISOLATOR WITH ISOLATOR POINT @ 2300mm AFFL & OUTLET POINT 1400mm AFFL.                                               | ISOLATOR @ 2300mm AFFL & OUTLET 1400mm AFFL.              |
|    | DISTRIBUTION BOARD. 2100mm TO TOP OF PANEL.                                                                                                      | HEIGHT INDICATED ON SINGLE LINE DIAGRAMS                  |
|   | WALL MOUNTED 3 COMPARTMENT POWER SKIRTING :COLOUR: BLACK, POWDER COATED, GALVANISED METAL, O-LINE /OBO. TIER 1: POWER, TIER 2: DATA, TIER 3: VTS | FLOOR LEVEL UNLESS STATED OTHERWISE                       |
|  | FD4 SURFACE FLOOR MOUNTED PEDESTAL WITH 1x16A NORMAL SSO, 1x16A DEDICATED SSO & 2x DATA POINT, UNLESS OTHERWISE STATED.                          | IN FLOOR SLAB - SURFACE MOUNT                             |
|  | 4x Ø25mm CONDUITS UNDER FLOOR TO WALL MOUNT POWER SKIRTING.                                                                                      | UNDER FLOOR SLAB                                          |
|  | Ø25mm ROUND BOX WITH Ø20mm CONDUIT MOUNTED AT 1500mm A.F.F.L. FOR AC CONTROLLERS                                                                 | 1500mm AFFL TO CENTER                                     |
|  | ISOLATOR POINT FOR A/C IN CEILING SPACE AGAINST SOFFIT. SUPPLY FROM OUTDOOR UNIT ON ROOF. (INSTALLED BY HVAC CONTRACTOR)                         | AGAINST SOFFIT                                            |
|  | SERVER SOCKET OUTLET                                                                                                                             | AGAINST POWER TRUNKING IN FLOOR SPACE BELOW SERVER RACKS  |

NOTE - HYDROBOIL INSTALLATION:  
FLUSH MOUNTED 25A ISOLATOR FOR HYDROBOIL, MOUNTED IN 100x100mm BOX. FLUSHED WALL BELOW SINK COMPLETE WITH CONDUIT TO 60mm ROUND BOX AT 1250mm AFFL. HYDROBOIL SUPPLY AND CONNECT BY OTHERS.



|                                                                                                                                             |                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| APPROVED<br>PORT ENGINEER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>ELECTRICAL MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>MANAGER<br>CIVIL MAINTENANCE<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>PORT FACILITIES MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |
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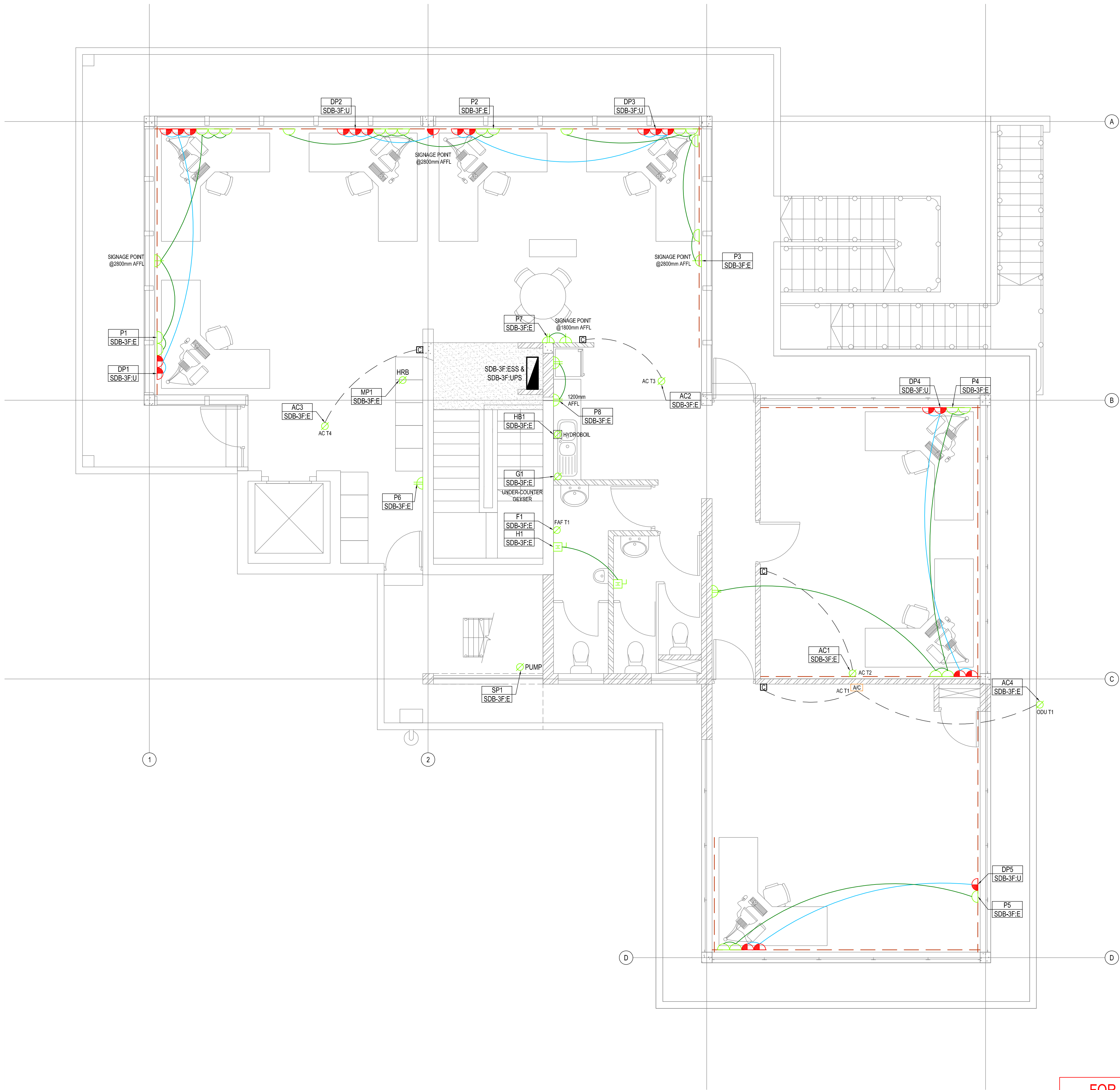
FOR TENDER

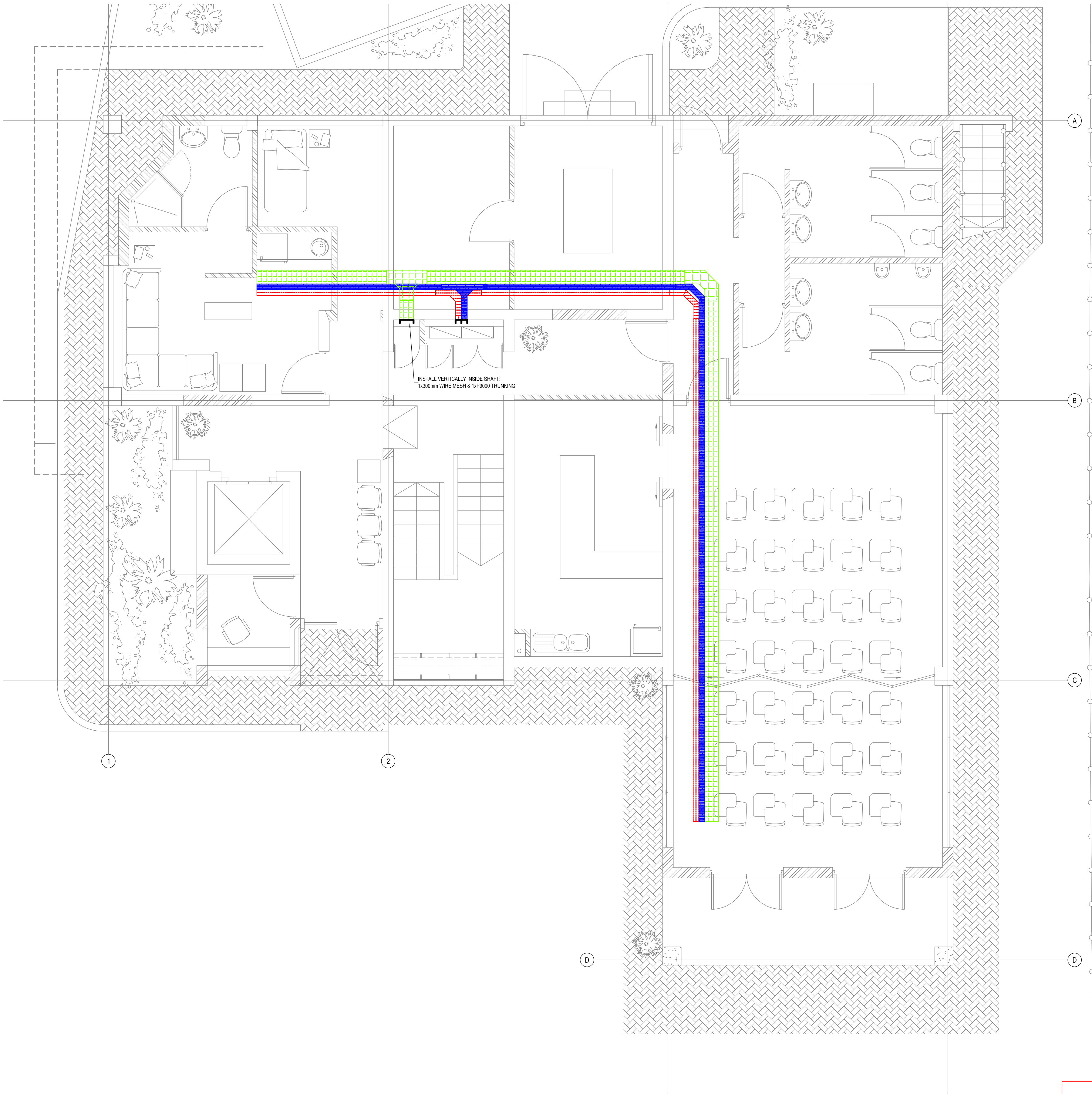
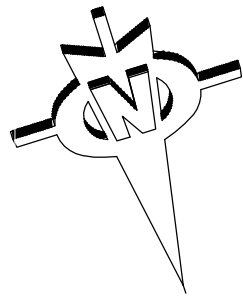
| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                                     | DATE       | INITIAL | Rev. CODE | REVISION DESCRIPTION | CLIENT                                                                                | PROVINCE      | OFFICE    | EMAIL                   | PROJECT                                | APPROVED BY BVI                                                            |
|----------------|------------------------------------------------------------------------------------------------------------------|------------|---------|-----------|----------------------|---------------------------------------------------------------------------------------|---------------|-----------|-------------------------|----------------------------------------|----------------------------------------------------------------------------|
|                | CITY ENGINEER / CLIENT<br>REG. NO. _____<br>DATE _____                                                           | 2021/11/18 | W.B     | T/D       | FOR TENDER PURPOSES  |  | Free State    | Pretoria  | g.halberstadt@bvi.co.za | RICHARDS BAY - PORT CONTROL TOWER      | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST                                    |
|                | AMENDMENTS CODE<br>A: BY CLIENT<br>B: BY ARCHITECT<br>C: BY MECHANICAL OR ELECTRICAL<br>D: BY BIA<br>E: BY OTHER |            |         |           |                      |  | Northern Cape | Upington  | g.halberstadt@bvi.co.za | SECOND FLOOR RENOVATIONS: POWER LAYOUT | SCALE: 1:50 @ A1<br>DESIGNED: GH<br>PLAN NUMBER: 32442.00-370-03           |
|                |                                                                                                                  |            |         |           |                      |  | Western Cape  | Cape Town | g.halberstadt@bvi.co.za |                                        | 2008/0282<br>REG. NO. _____<br>DATE 18 November 2021                       |
|                |                                                                                                                  |            |         |           |                      |  |               |           | g.halberstadt@bvi.co.za |                                        | DRAWN: WB<br>CHECKED: GH<br>REVISION NO. T0<br>DATE SAVED 18 November 2021 |

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| TYPE                                                                                | POWER OUTLETS LEGEND                                                                                                                             | MOUNTING TYPE / HEIGHT                                    |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|    | SINGLE SOCKET SWITCHED OUTLET, RATED 16A SANS 164-1, ON POWER SKIRTING (ESSENTIAL: WHITE)                                                        | POWER SKIRTING                                            |
|    | SINGLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, RATED 16A, ON POWER SKIRTING (UPS: RED)                                                      | POWER SKIRTING                                            |
|    | SINGLE SWITCHED SOCKET OUTLET SANS 164-1, RATED 16A, 100mm x 100mm (ESSENTIAL: WHITE)                                                            | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (ESSENTIAL: WHITE)                                                       | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (UPS: RED)                                                     | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | DOUBLE DEDICATED SWITCHED SOCKET OUTLET SANS 164-1, EACH RATED 16A, 100mm x 100mm (UPS: RED)                                                     | WALL MOUNT/350mm AFFL TO CENTER, UNLESS OTHERWISE STATED. |
|    | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (ESSENTIAL)                                                                       | HEIGHT INDICATED ON DRAWING                               |
|    | SINGLE PHASE ISOLATOR, RECESSED IN WALL. (ESSENTIAL)                                                                                             | HEIGHT INDICATED ON DRAWING                               |
|    | SINGLE PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (UPS)                                                                             | HEIGHT INDICATED ON DRAWING                               |
|    | 3 PHASE ISOLATOR, SURFACE MOUNTED AGAINST SOFFIT OR WALL. (ESSENTIAL)                                                                            | HEIGHT INDICATED ON DRAWING                               |
|    | 20A SINGLE PHASE HAND DRYER ISOLATOR WITH ISOLATOR POINT @ 2300mm AFFL & OUTLET POINT 1400mm AFFL.                                               | ISOLATOR @ 2300mm AFFL & OUTLET 1400mm AFFL.              |
|    | DISTRIBUTION BOARD. 2100mm TO TOP OF PANEL.                                                                                                      | HEIGHT INDICATED ON SINGLE LINE DIAGRAMS                  |
|   | WALL MOUNTED 3 COMPARTMENT POWER SKIRTING :COLOUR: BLACK, POWDER COATED, GALVANISED METAL, O-LINE /OBO. TIER 1: POWER, TIER 2: DATA, TIER 3: VTS | FLOOR LEVEL UNLESS STATED OTHERWISE                       |
|  | FD4 SURFACE FLOOR MOUNTED PEDESTAL WITH 1x16A NORMAL SSO, 1x16A DEDICATED SSO & 2x DATA POINT, UNLESS OTHERWISE STATED.                          | IN FLOOR SLAB - SURFACE MOUNT                             |
|  | 4x 025mm CONDUITS UNDER FLOOR TO WALL MOUNT POWER SKIRTING.                                                                                      | UNDER FLOOR SLAB                                          |
|  | 025mm ROUND BOX WITH 020mm CONDUIT MOUNTED AT 1500mm A.F.F.L. FOR AC CONTROLLERS                                                                 | 1500mm AFFL TO CENTER                                     |
|  | ISOLATOR POINT FOR A/C IN CEILING SPACE AGAINST SOFFIT. SUPPLY FROM OUTDOOR UNIT ON ROOF. (INSTALLED BY HVAC CONTRACTOR)                         | AGAINST SOFFIT                                            |
|  | SERVER SOCKET OUTLET                                                                                                                             | AGAINST POWER TRUNKING IN FLOOR SPACE BELOW SERVER RACKS  |

NOTE - HYDROBOIL INSTALLATION:  
FLUSH MOUNTED 25A ISOLATOR FOR HYDROBOIL, MOUNTED IN 100x100mm BOX. FLUSHED WALL BELOW SINK COMPLETE WITH CONDUIT TO 60mm ROUND BOX AT 1250mm AFFL. HYDROBOIL SUPPLY AND CONNECT BY OTHERS.





| TYPE | CONTAINMENT LEGEND SPECIFICATIONS                                                                             |
|------|---------------------------------------------------------------------------------------------------------------|
|      | CABLE LADDER, 100mm FOR POWER CABLES. (SIZE UNLESS OTHERWISE STATED)                                          |
|      | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: ESSENTIAL CIRCUITS. (SIZE UNLESS OTHERWISE STATED) |
|      | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: UPS CIRCUITS (SIZE UNLESS OTHERWISE STATED)        |
|      | WIRE MESH CABLE TRAY, 300mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |
|      | WIRE MESH CABLE TRAY, 400mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |

NOTE: ALL CABLE WIREWAYS TO BE CORRECTLY EARTHED AND BONDED

APPROVED

PORT ENGINEER

DATE

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

ELECTRICAL MANAGER

DATE

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APPROVED

MANAGER  
CIVIL MAINTENANCE

DATE

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APPROVED

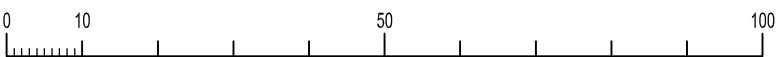
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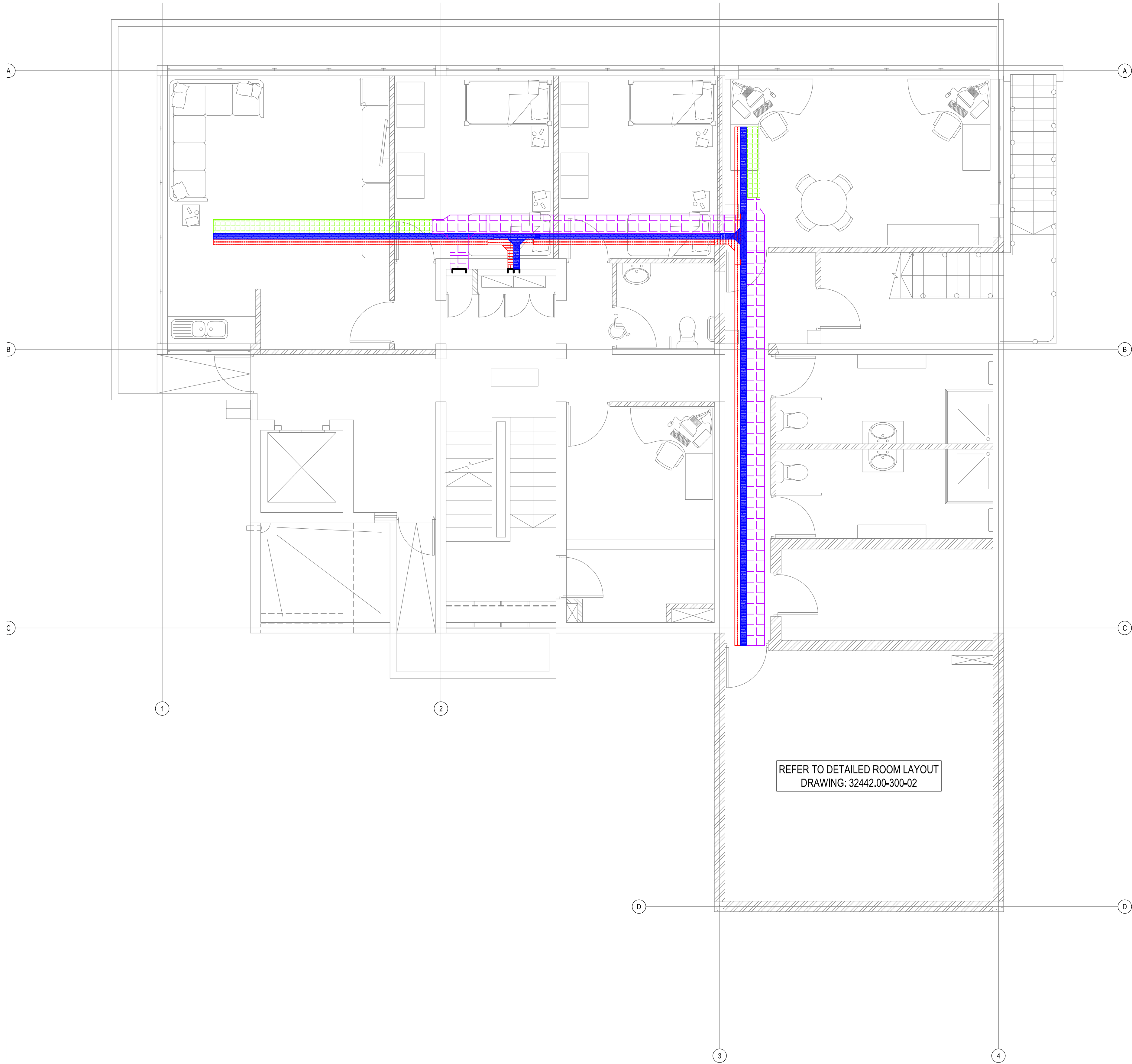
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FOR TENDER

| NOTES / LEGEND         | APPROVED BY COUNCIL / CLIENT | DATE       | INITIAL | No./CODE | REVISION DESCRIPTION | CLIENT | PROVINCE     | OFFICE         | EMAIL         | PROJECT                              | APPROVED BY BVA  |
|------------------------|------------------------------|------------|---------|----------|----------------------|--------|--------------|----------------|---------------|--------------------------------------|------------------|
|                        | CITY ENGINEER / CLIENT       | 2021/11/18 | W.B     | T/D      | FOR TENDER PURPOSES  |        | Gauteng      | Tshwane        | gpa@ngp.co.za | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT   |
|                        | REG. NO.                     |            |         |          |                      |        | Free State   | Pretoria       | jhb@bvi.co.za |                                      | 20080282         |
|                        | AMENDMENTS CODE              |            |         |          |                      |        | North West   | Blantyre       | wnb@bvi.co.za |                                      | 18 November 2021 |
| A: BY CLIENT           |                              |            |         |          |                      |        | Western Cape | Wellington     | web@bvi.co.za | SCALE                                | 1:50 @ A1        |
| 0 : / -TENDER DRAWING  |                              |            |         |          |                      |        |              | Springbok      | spr@bvi.co.za | DRAWN                                | WB               |
| 1,2,3, / -AFTER TENDER |                              |            |         |          |                      |        |              | Durban         | dur@bvi.co.za | CHECKED                              | GH               |
| Z : / -AS BUILT        |                              |            |         |          |                      |        |              | Port Elizabeth | pep@bvi.co.za | PLAN NUMBER                          | 32442.00-377-01  |
|                        |                              |            |         |          |                      |        |              | East London    | el@bvi.co.za  | REVISION NO.                         | T0               |
|                        |                              |            |         |          |                      |        |              | Cape Town      | cap@bvi.co.za | DATE SAVED                           | 18 November 2021 |





| TYPE                                                                              | CONTAINMENT LEGEND SPECIFICATIONS                                                                             |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  | CABLE LADDER, 100mm FOR POWER CABLES. (SIZE UNLESS OTHERWISE STATED)                                          |
|  | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: ESSENTIAL CIRCUITS. (SIZE UNLESS OTHERWISE STATED) |
|  | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: UPS CIRCUITS. (SIZE UNLESS OTHERWISE STATED)       |
|  | WIRE MESH CABLE TRAY, 300mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |
|  | WIRE MESH CABLE TRAY, 400mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |

NOTE: ALL CABLE WIREWAYS TO BE CORRECTLY EARTHED AND BONDED

REFER TO DETAILED ROOM LAYOUT  
DRAWING: 32442.00-300-02

APPROVED

PORT ENGINEER

DATE

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MANAGER  
CIVIL MAINTENANCE

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PORT FACILITIES MANAGER

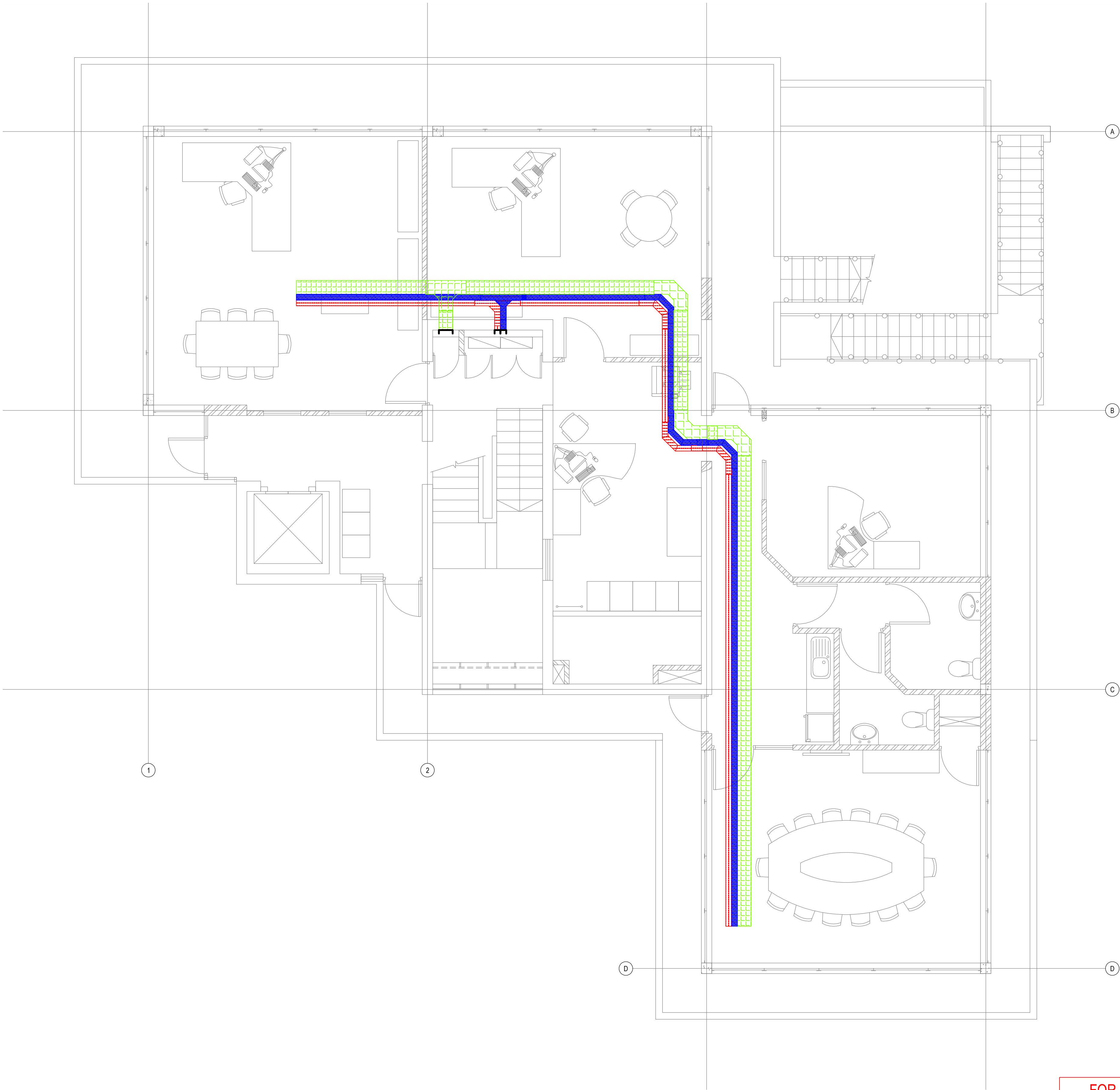
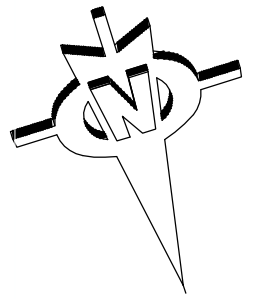
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ADEQUACY OF STRUCTURES

FOR TENDER

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                  | DATE       | INITIAL | Rev. CODE | REVISION DESCRIPTION | CLIENT                                                                                | PROVINCE      | OFFICE         | EMAIL          | PROJECT                              | APPROVED BY BVI                         |
|----------------|-----------------------------------------------------------------------------------------------|------------|---------|-----------|----------------------|---------------------------------------------------------------------------------------|---------------|----------------|----------------|--------------------------------------|-----------------------------------------|
|                | CITY ENGINEER / CLIENT<br>REG. NO.<br>DATE                                                    | 2021/11/18 | W.B     | T/D       | FOR TENDER PURPOSES  |  | Gauteng       | Tshwane        | (012) 945-1111 | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST |
|                | AMENDMENTS CODE                                                                               |            |         |           |                      |                                                                                       | Free State    | Pretoria       | (012) 251-5400 |                                      | 20080282                                |
|                | A: BY CLIENT<br>B: BY ARCHITECT<br>C: BY MECHANICAL OR ELECTRICAL<br>D: BY BIA<br>E: BY OTHER |            |         |           |                      |                                                                                       | Western Cape  | Bloubaai       | (021) 551-4207 |                                      | 18 November 2021                        |
|                |                                                                                               |            |         |           |                      |                                                                                       | Northern Cape | Upington       | (053) 535-4889 |                                      | REG. NO.                                |
|                |                                                                                               |            |         |           |                      |                                                                                       | KwaZulu Natal | Springbok      | (054) 337-4800 |                                      | DATE                                    |
|                |                                                                                               |            |         |           |                      |                                                                                       | Eastern Cape  | Durban         | (031) 266-6362 |                                      | SCALE                                   |
|                |                                                                                               |            |         |           |                      |                                                                                       |               | Port Elizabeth | (041) 374-5453 |                                      | 1:50 @ A1                               |
|                |                                                                                               |            |         |           |                      |                                                                                       |               | East London    | (043) 735-3859 |                                      | DRAWN                                   |
|                |                                                                                               |            |         |           |                      |                                                                                       |               | Cape Town      | (021) 527-7000 |                                      | WB                                      |
|                |                                                                                               |            |         |           |                      |                                                                                       |               |                |                |                                      | CHECKED                                 |
|                |                                                                                               |            |         |           |                      |                                                                                       |               |                |                |                                      | GH                                      |
|                |                                                                                               |            |         |           |                      |                                                                                       |               |                |                |                                      | PLAN NUMBER                             |
|                |                                                                                               |            |         |           |                      |                                                                                       |               |                |                |                                      | 32442.00-377-02                         |
|                |                                                                                               |            |         |           |                      |                                                                                       |               |                |                |                                      | REVISION NO.                            |
|                |                                                                                               |            |         |           |                      |                                                                                       |               |                |                |                                      | T0                                      |
|                |                                                                                               |            |         |           |                      |                                                                                       |               |                |                |                                      | DATE SAVED                              |
|                |                                                                                               |            |         |           |                      |                                                                                       |               |                |                |                                      | 18 November 2021                        |





| TYPE | CONTAINMENT LEGEND SPECIFICATIONS                                                                             |
|------|---------------------------------------------------------------------------------------------------------------|
|      | CABLE LADDER, 100mm FOR POWER CABLES. (SIZE UNLESS OTHERWISE STATED)                                          |
|      | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: ESSENTIAL CIRCUITS. (SIZE UNLESS OTHERWISE STATED) |
|      | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: UPS CIRCUITS (SIZE UNLESS OTHERWISE STATED)        |
|      | WIRE MESH CABLE TRAY, 300mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |
|      | WIRE MESH CABLE TRAY, 400mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |

NOTE: ALL CABLE WIREWAYS TO BE CORRECTLY EARTHED AND BOUNDED

APPROVED

PORT ENGINEER

DATE

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ELECTRICAL MANAGER

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MANAGER  
CIVIL MAINTENANCE

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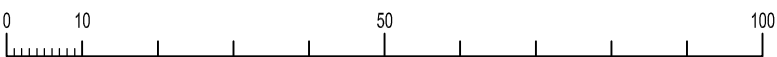
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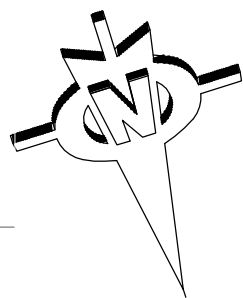
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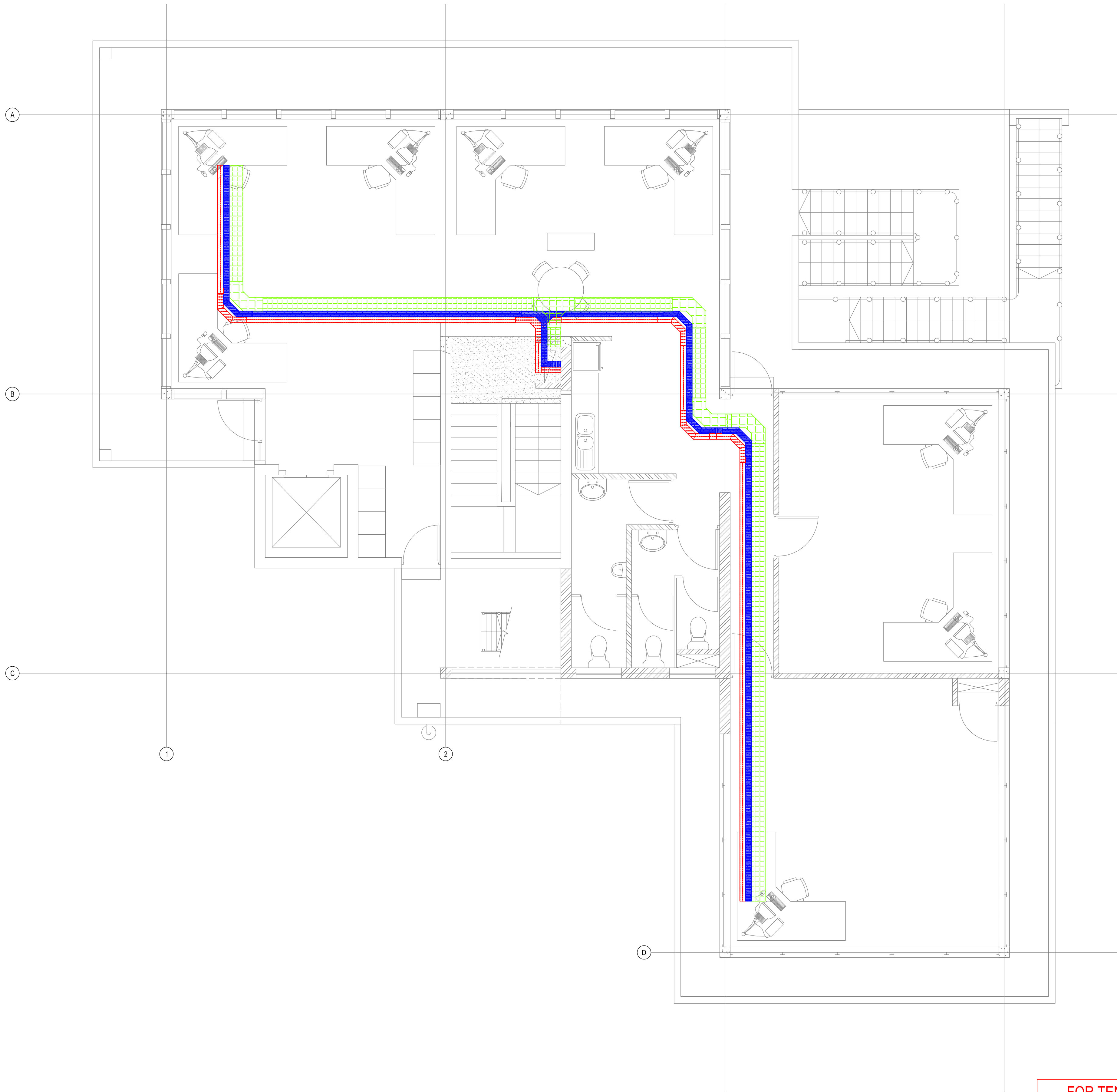
FOR TENDER

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                  | DATE       | INITIAL | Rev. CODE | REVISION DESCRIPTION | CLIENT | PROVINCE     | OFFICE         | EMAIL          | PROJECT                              | APPROVED BY BVI                         |
|----------------|-----------------------------------------------------------------------------------------------|------------|---------|-----------|----------------------|--------|--------------|----------------|----------------|--------------------------------------|-----------------------------------------|
|                | CITY ENGINEER / CLIENT<br>REG. NO.<br>DATE                                                    | 2021/11/18 | W.B     | T/D       | FOR TENDER PURPOSES  |        | Gauteng      | Tshwane        | (012) 945-1111 | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST |
|                | AMENDMENTS CODE                                                                               |            |         |           |                      |        | Free State   | Pretoria       | (012) 251-5400 |                                      | 20080282                                |
|                | A: BY CLIENT<br>B: BY ARCHITECT<br>C: BY MECHANICAL OR ELECTRICAL<br>D: BY BIA<br>E: BY OTHER |            |         |           |                      |        | North West   | Bloubaai       | (051) 542-1237 |                                      | 18 November 2021                        |
|                |                                                                                               |            |         |           |                      |        | Western Cape | Upington       | (053) 535-4569 |                                      | DATE                                    |
|                |                                                                                               |            |         |           |                      |        |              | Springbok      | (054) 337-4800 |                                      | SCALE                                   |
|                |                                                                                               |            |         |           |                      |        |              | Orkney         | (027) 715-3814 |                                      | 1:50 @ A1                               |
|                |                                                                                               |            |         |           |                      |        |              | Port Elizabeth | (031) 266-6362 |                                      | DRAWN                                   |
|                |                                                                                               |            |         |           |                      |        |              | East London    | (033) 715-4112 |                                      | WB                                      |
|                |                                                                                               |            |         |           |                      |        |              | Cape Town      | (021) 527-7000 |                                      | CHECKED                                 |
|                |                                                                                               |            |         |           |                      |        |              |                |                |                                      | GH                                      |
|                |                                                                                               |            |         |           |                      |        |              |                |                |                                      | DATE SAVED                              |
|                |                                                                                               |            |         |           |                      |        |              |                |                |                                      | 18 November 2021                        |





| TYPE | CONTAINMENT LEGEND SPECIFICATIONS                                                                             |
|------|---------------------------------------------------------------------------------------------------------------|
|      | CABLE LADDER, 100mm FOR POWER CABLES. (SIZE UNLESS OTHERWISE STATED)                                          |
|      | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: ESSENTIAL CIRCUITS. (SIZE UNLESS OTHERWISE STATED) |
|      | GALVANIZED WIRING TRUNKING, P9000 FOR ELECTRICAL SERVICES: UPS CIRCUITS (SIZE UNLESS OTHERWISE STATED)        |
|      | WIRE MESH CABLE TRAY, 300mm FOR ELECTRONIC SERVICES: IT & COMMUNICATIONS. (SIZE UNLESS OTHERWISE STATED)      |
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PORT FACILITIES MANAGER

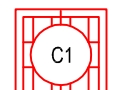
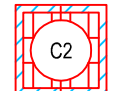
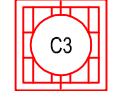
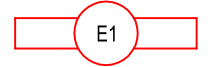
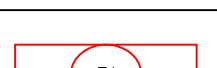
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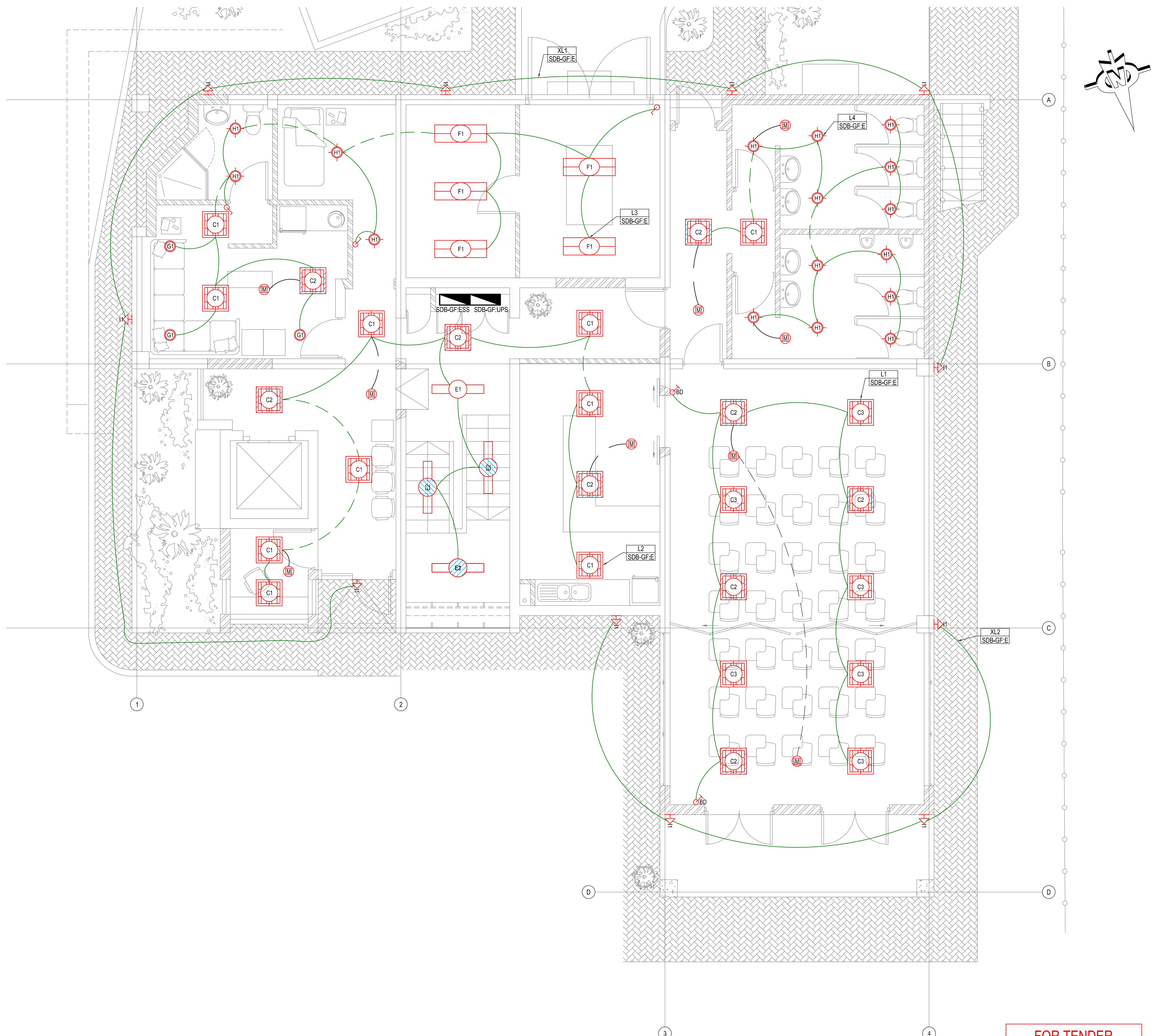
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FOR TENDER

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                       | DATE       | INITIAL | Rev./CODE | REVISION DESCRIPTION | CLIENT | PROVINCE      | OFFICE         | EMAIL          | PROJECT                              | APPROVED BY BVI                         |
|----------------|----------------------------------------------------------------------------------------------------|------------|---------|-----------|----------------------|--------|---------------|----------------|----------------|--------------------------------------|-----------------------------------------|
|                | CITY ENGINEER / CLIENT<br>REG. NO.<br>DATE                                                         | 2021/11/18 | W.B     | T/D       | FOR TENDER PURPOSES  |        | Gauteng       | Tshwane        | (012) 945-1111 | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST |
|                | AMENDMENTS CODE                                                                                    |            |         |           |                      |        | Free State    | Pretoria       | (012) 251-5400 |                                      | 20080282                                |
|                | A.S.C./ : BEFORE TENDER<br>0 : / : TENDER DRAWING<br>1,2,3,4 : AFTER TENDER<br>Z : / : AS BUILT    |            |         |           |                      |        | Western Cape  | Bloubaai       | (021) 551-4207 |                                      | 18 November 2021                        |
|                | A : BY CLIENT<br>B : BY ARCHITECT<br>C : BY MECHANICAL OR ELECTRICAL<br>D : BY BIA<br>E : BY OTHER |            |         |           |                      |        | Northern Cape | Upington       | (053) 535-4569 | SCALE                                | 1:50 @ A1                               |
|                |                                                                                                    |            |         |           |                      |        | KwaZulu Natal | Springbok      | (027) 715-3814 | DRAWN                                | WB                                      |
|                |                                                                                                    |            |         |           |                      |        | Eastern Cape  | Durban         | (031) 266-6362 | CHECKED                              | GH                                      |
|                |                                                                                                    |            |         |           |                      |        |               | Port Elizabeth | (041) 317-4343 | DESIGNED                             | GH                                      |
|                |                                                                                                    |            |         |           |                      |        |               | East London    | (043) 735-3869 | PLAN NUMBER                          | 32442.00-377-04                         |
|                |                                                                                                    |            |         |           |                      |        |               | Cape Town      | (021) 527-7000 | REVISION NO.                         | T0                                      |
|                |                                                                                                    |            |         |           |                      |        |               |                |                | DATE SAVED                           | 18 November 2021                        |



| TYPE                                                                                | LIGHTING LEGEND SPECIFICATIONS                                                                                                                                        | MOUNTING TYPE / HEIGHT |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|    | TYPE C1: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS. COLOUR: WHITE.                                                                   | CEILING                |
|    | TYPE C2: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS AND 1 HOUR BATTERY BACK UP PACKS. COLOUR: WHITE. | CEILING                |
|    | TYPE C3: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS. COLOUR: WHITE.                                  | CEILING                |
|    | TYPE E1: 1200mm SURFACE MOUNT LED LUMINAIRE COMPLETE WITH 32W LED LAMP, 4000K @ 700mA - 2984 LUMENS. COLOUR: WHITE.                                                   | SURFACE                |
|    | TYPE E2: 1200mm SURFACE MOUNT LED LUMINAIRE INCLUDING 1 HOUR BATTERY BACK UP PACK, COMPLETE WITH 32W LED LAMP, 4000K @ 700mA - 2984 LUMENS. COLOUR: WHITE.            | SURFACE                |
|    | TYPE F1: 1310mm x 172mm SURFACE MOUNT VAPOUR / WEATHER PROOF 53W LED LUMINAIRE RATED AT 4000K @ 500mA - 5385 LUMENS. IP65 RATED.                                      | SURFACE                |
|    | TYPE G1: RECESSED DOWNLIGHT WITH 10W LED LAMP, 3100K @ 500mA - 865 LUMENS INCLUDING ECG. COLOUR: WHITE.                                                               | CEILING                |
|    | TYPE H1: RECESSED 240mm ROUND LUMINAIRE - 16W LED, 4000K - 1100 LUMENS. ULTRA THIN 13mm THICKNESS. COLOUR: WHITE.                                                     | CEILING                |
|    | TYPE I1: WALL MOUNTED RECTANGULAR BULKHEAD WITH EYELID. 18W LED FITTING RATED AT 4000K @ 700mA - 1450 LUMENS. COLOUR: BLACK.                                          | WALL - EXTERNAL        |
|    | DALI OCCUPANCY SENSOR.                                                                                                                                                | CEILING                |
|    | 1 LEVER LIGHT SWITCH MOUNTED 1400mm AFFL. DALI                                                                                                                        | WALL                   |
|    | DALI DIMMER CONTROL SWITCH MOUNTED 1400mm AFFL.                                                                                                                       | WALL                   |
|  | ROTARY DALI LIGHTING DIMMER CONTROL SWITCH MOUNTED 1400mm AFFL.                                                                                                       | WALL                   |
|  | PHOTOCELL MOUNTED 2000mm AFFL.                                                                                                                                        | WALL                   |



APPROVED

PORT ENGINEER

DATE \_\_\_\_\_

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APPROVED

ELECTRICAL MANAGER

DATE \_\_\_\_\_

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MANAGER  
CIVIL MAINTENANCE

DATE \_\_\_\_\_

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PORT FACILITIES MANAGER

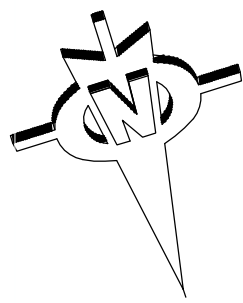
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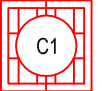
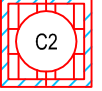
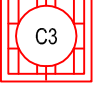
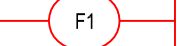
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FOR TENDER

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT   | DATE       | INITIAL | No. CODE | REVISION DESCRIPTION | CLIENT                                                                                | PROVINCE     | OFFICE    | EAWL           | PROJECT                                      | APPROVED BY BWA       |
|----------------|--------------------------------|------------|---------|----------|----------------------|---------------------------------------------------------------------------------------|--------------|-----------|----------------|----------------------------------------------|-----------------------|
|                | CITY ENGINEER / CLIENT         | 2021/11/18 | W.B     | T.O.D    | FOR TENDER PURPOSES  |  | Gauteng      | Tshwane   | (012) 945-1111 | RICHARDS BAY -<br>PORT CONTROL TOWER         | G. HALBERSTADT        |
|                | REG. NO.                       |            |         |          |                      |  | Free State   | Pretoria  | (015) 291-5400 | GROUND FLOOR RENOVATIONS:<br>LIGHTING LAYOUT | ENGINEER/TECHNOLOGIST |
|                | AMENDMENTS CODE                |            |         |          |                      |  | North West   | Bloubaai  | (051) 442-1237 | SCALE: 1:50 @ A1                             | DESIGNED              |
|                | A: BY CLIENT                   |            |         |          |                      |  | Western Cape | Worcester | (057) 553-5499 | GH                                           | CHECKED               |
|                | B: BY ARCHITECT                |            |         |          |                      |                                                                                       | Eastern Cape | Upington  | (054) 337-4800 | GH                                           | REVISION NO.          |
|                | C: BY MECHANICAL OR ELECTRICAL |            |         |          |                      |                                                                                       | Free State   | Springs   | (051) 384-8000 | 32442.00-380-01                              | DATE SAVED            |
|                | D: BY BIA                      |            |         |          |                      |                                                                                       | North West   | Kimberley | (053) 715-3814 | T0                                           | 18 November 2021      |
|                | E: BY OTHER                    |            |         |          |                      |                                                                                       | Free State   | Orkney    | (051) 384-8000 |                                              |                       |

0 10 50 100



| TYPE                                                                                | LIGHTING LEGEND SPECIFICATIONS                                                                                                                                        | MOUNTING TYPE / HEIGHT |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|    | TYPE C1: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS. COLOUR: WHITE.                                                                   | CEILING                |
|    | TYPE C2: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS AND 1 HOUR BATTERY BACK UP PACKS. COLOUR: WHITE. | CEILING                |
|    | TYPE C3: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS. COLOUR: WHITE.                                  | CEILING                |
|    | TYPE E1: 1200mm SURFACE MOUNT LED LUMINAIRE COMPLETE WITH 32W LED LAMP, 4000K @ 700mA - 2984 LUMENS. COLOUR: WHITE.                                                   | SURFACE                |
|    | TYPE E2: 1200mm SURFACE MOUNT LED LUMINAIRE INCLUDING 1 HOUR BATTERY BACK UP PACK, COMPLETE WITH 32W LED LAMP, 4000K @ 700mA - 2984 LUMENS. COLOUR: WHITE.            | SURFACE                |
|    | TYPE F1: 1310mm x 172mm SURFACE MOUNT VAPOUR / WEATHER PROOF 53W LED LUMINAIRE RATED AT 4000K @ 500mA - 5385 LUMENS. IP65 RATED.                                      | SURFACE                |
|    | TYPE G1: RECESSED DOWNLIGHT WITH 10W LED LAMP, 3100K @ 500mA - 865 LUMENS INCLUDING ECG. COLOUR: WHITE.                                                               | CEILING                |
|    | TYPE H1: RECESSED 240mm ROUND LUMINAIRE - 16W LED, 4000K - 1100 LUMENS. ULTRA THIN 13mm THICKNESS. COLOUR: WHITE.                                                     | CEILING                |
|    | TYPE H1: WALL MOUNTED RECTANGULAR BULKHEAD WITH EYELID. 18W LED FITTING RATED AT 4000K @ 700mA - 1450 LUMENS. COLOUR: BLACK.                                          | WALL - EXTERNAL        |
|  | DALI OCCUPANCY SENSOR.                                                                                                                                                | CEILING                |
|  | 1 LEVER LIGHT SWITCH MOUNTED 1400mm AFFL. DALI                                                                                                                        | WALL                   |
|  | DALI DIMMER CONTROL SWITCH MOUNTED 1400mm AFFL.                                                                                                                       | WALL                   |
|  | ROTARY DALI LIGHTING DIMMER CONTROL SWITCH MOUNTED 1400mm AFFL.                                                                                                       | WALL                   |
|  | PHOTOCELL MOUNTED 2000mm AFFL.                                                                                                                                        | WALL                   |

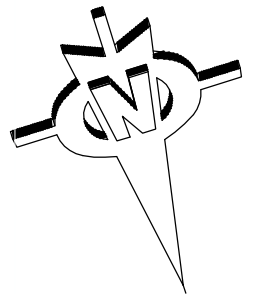


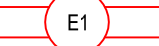
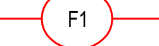
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| APPROVED<br>PORT ENGINEER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>ELECTRICAL MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>MANAGER<br>CIVIL MAINTENANCE<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES | APPROVED<br>PORT FACILITIES MANAGER<br>DATE _____<br>APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|

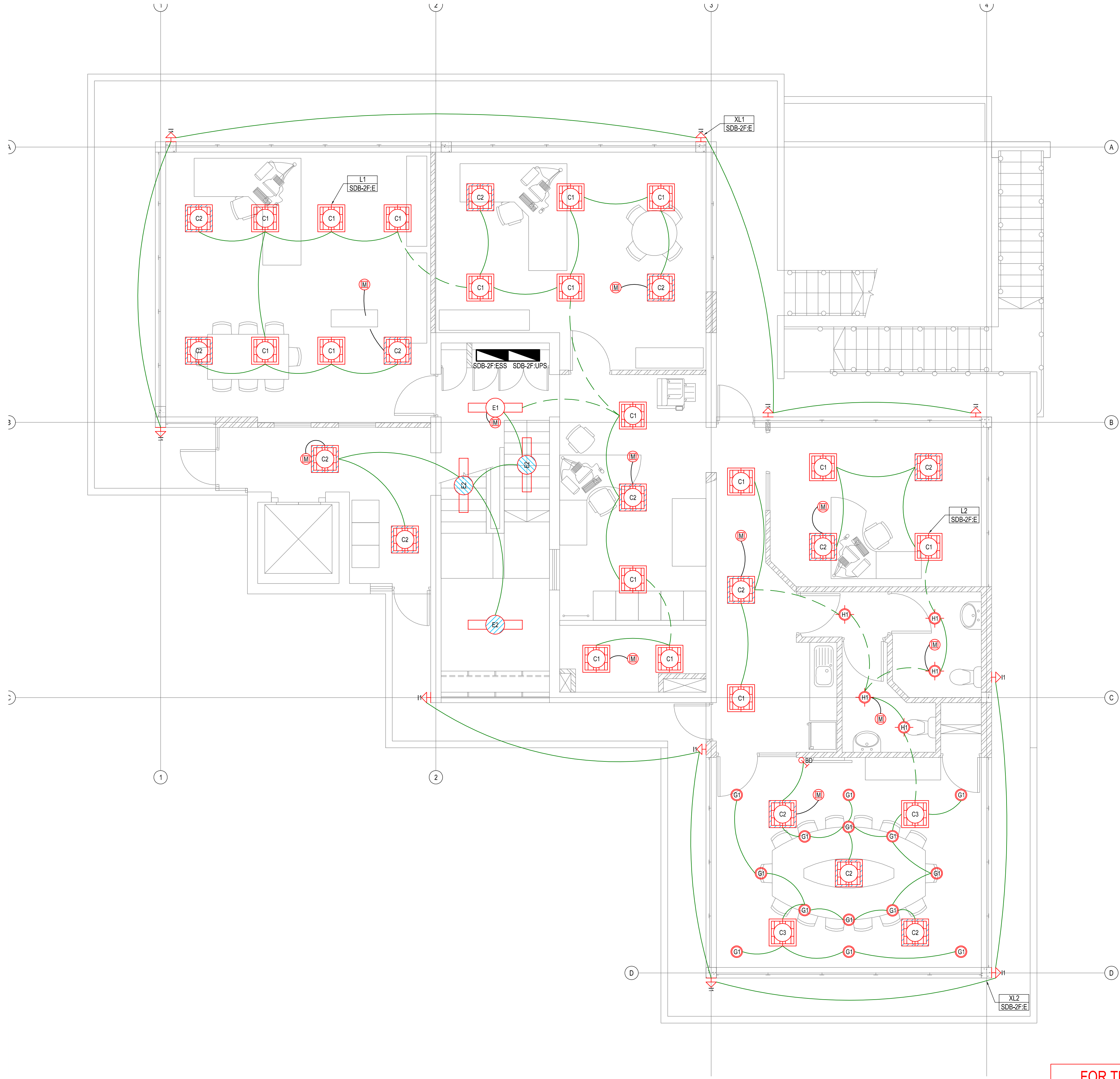
FOR TENDER

| NOTES / LEGEND | APPROVED BY COUNCIL / CLIENT                                                                                     | DATE       | INITIAL | Rev CODE | REVISION DESCRIPTION | CLIENT                                                                                | PROVINCE      |              |                |  | OFFICE        | EMAIL                                       | PROJECT                                 | APPROVED BY BVI  |                  |  |  |
|----------------|------------------------------------------------------------------------------------------------------------------|------------|---------|----------|----------------------|---------------------------------------------------------------------------------------|---------------|--------------|----------------|--|---------------|---------------------------------------------|-----------------------------------------|------------------|------------------|--|--|
|                | CITY ENGINEER / CLIENT<br>REG. NO.<br>DATE                                                                       | 2021/11/18 | W.B     | T/D      | FOR TENDER PURPOSES  |  | Gauteng       | Tshwane      | (012) 945-1111 |  | gha@nrc.co.za | RICHARDS BAY -<br>PORT CONTROL TOWER        | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST | 20080282         | 18 November 2021 |  |  |
|                | AMENDMENTS CODE<br>A: BY CLIENT<br>B: BY ARCHITECT<br>C: BY MECHANICAL OR ELECTRICAL<br>D: BY BIA<br>E: BY OTHER |            |         |          |                      |  | Free State    | Bloemfontein | (051) 442-1237 |  | fbh@nrc.co.za | DRAWING TITLE                               | SCALE<br>1:50 @ A1                      | DRAWN<br>WB      |                  |  |  |
|                |                                                                                                                  |            |         |          |                      |  | Western Cape  | Worcester    | (051) 553-4569 |  | wfb@nrc.co.za | FIRST FLOOR RENOVATIONS:<br>LIGHTING LAYOUT | DESIGNED<br>GH                          | CHECKED<br>GH    |                  |  |  |
|                |                                                                                                                  |            |         |          |                      |  | Northern Cape | Upington     | (054) 337-4800 |  | upb@nrc.co.za | PLAN NUMBER                                 | REVISION NO.                            | DATE SAVED       |                  |  |  |
|                |                                                                                                                  |            |         |          |                      |                                                                                       | KwaZulu Natal | Springbok    | (027) 715-3814 |  | spk@nrc.co.za | 32442.00-380-02                             | T0                                      | 18 November 2021 |                  |  |  |
|                |                                                                                                                  |            |         |          |                      |                                                                                       | Durban        | Durban       | (031) 266-6362 |  | dur@nrc.co.za |                                             |                                         |                  |                  |  |  |

0 10 50 100



| TYPE                                                                                | LIGHTING LEGEND SPECIFICATIONS                                                                                                                                        | MOUNTING TYPE / HEIGHT |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|    | TYPE C1: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS. COLOUR: WHITE.                                                                   | CEILING                |
|    | TYPE C2: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS AND 1 HOUR BATTERY BACK UP PACKS. COLOUR: WHITE. | CEILING                |
|    | TYPE C3: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS. COLOUR: WHITE.                                  | CEILING                |
|    | TYPE E1: 1200mm SURFACE MOUNT LED LUMINAIRE COMPLETE WITH 32W LED LAMP, 4000K @ 700mA - 2984 LUMENS. COLOUR: WHITE.                                                   | SURFACE                |
|    | TYPE E2: 1200mm SURFACE MOUNT LED LUMINAIRE INCLUDING 1 HOUR BATTERY BACK UP PACK, COMPLETE WITH 32W LED LAMP, 4000K @ 700mA - 2984 LUMENS. COLOUR: WHITE.            | SURFACE                |
|    | TYPE F1: 1310mm x 172mm SURFACE MOUNT VAPOUR / WEATHER PROOF 53W LED LUMINAIRE RATED AT 4000K @ 500mA - 5385 LUMENS. IP65 RATED.                                      | SURFACE                |
|    | TYPE G1: RECESSED DOWNLIGHT WITH 10W LED LAMP, 3100K @ 500mA - 865 LUMENS INCLUDING ECG. COLOUR: WHITE.                                                               | CEILING                |
|    | TYPE H1: RECESSED 240mm ROUND LUMINAIRE - 16W LED, 4000K - 1100 LUMENS. ULTRA THIN 13mm THICKNESS. COLOUR: WHITE.                                                     | CEILING                |
|    | TYPE H1: WALL MOUNTED RECTANGULAR BULKHEAD WITH EYELID. 18W LED FITTING RATED AT 4000K @ 700mA - 1450 LUMENS. COLOUR: BLACK.                                          | WALL - EXTERNAL        |
|    | DALI OCCUPANCY SENSOR.                                                                                                                                                | CEILING                |
|    | 1 LEVER LIGHT SWITCH MOUNTED 1400mm AFFL. DALI                                                                                                                        | WALL                   |
|  | DALI DIMMER CONTROL SWITCH MOUNTED 1400mm AFFL                                                                                                                        | WALL                   |
|  | ROTARY DALI LIGHTING DIMMER CONTROL SWITCH MOUNTED 1400mm AFFL                                                                                                        | WALL                   |
|  | PHOTOCELL MOUNTED 2000mm AFFL.                                                                                                                                        | WALL                   |



APPROVED

PORT ENGINEER

DATE

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

ELECTRICAL MANAGER

DATE

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

MANAGER  
CIVIL MAINTENANCE

DATE

APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

APPROVED

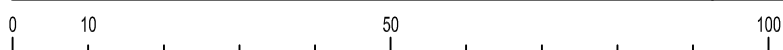
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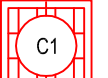
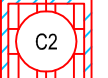
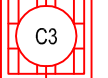
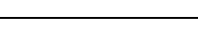
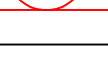
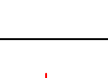
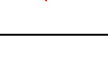
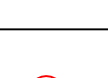
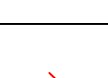
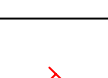
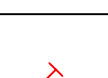
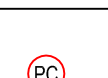
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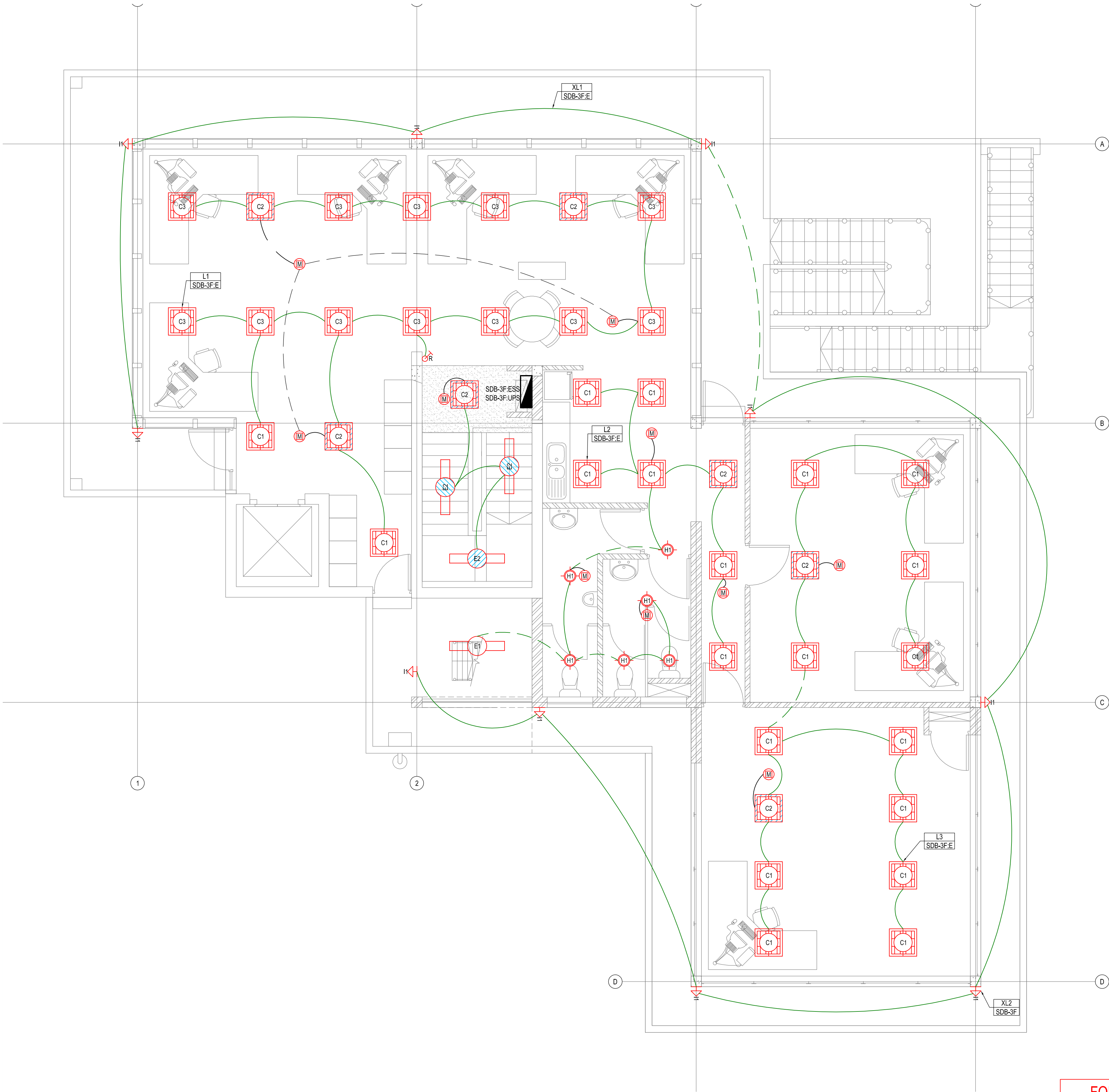
APPROVAL DOES NOT INDICATE ACCEPTANCE OF ANY RESPONSIBILITY FOR SAFETY OR ADEQUACY OF STRUCTURES

FOR TENDER

| NOTES / LEGEND       | APPROVED BY COUNCIL / CLIENT               | DATE       | INITIAL | Rev CODE | REVISION DESCRIPTION | CLIENT                                                                                | PROVINCE      | OFFICE         | EMAIL         | PROJECT                              | APPROVED BY BVI                         |
|----------------------|--------------------------------------------|------------|---------|----------|----------------------|---------------------------------------------------------------------------------------|---------------|----------------|---------------|--------------------------------------|-----------------------------------------|
|                      | CITY ENGINEER / CLIENT<br>REG. NO.<br>DATE | 2021/11/18 | W.B     | T/D      | FOR TENDER PURPOSES  |  | Gauteng       | Tshwane        | ptg@bvi.co.za | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST |
|                      | AMENDMENTS CODE                            |            |         |          |                      |                                                                                       | Free State    | Pretoria       | ph@bvi.co.za  | SCALE 1:50 @ A1                      | 20080282                                |
| A: BY CLIENT         |                                            |            |         |          |                      |                                                                                       | Western Cape  | Bloubaai       | wh@bvi.co.za  | DRAWN WB                             | 18 November 2021                        |
| 0 : TENDER DRAWING   |                                            |            |         |          |                      |                                                                                       | Northern Cape | Upington       | up@bvi.co.za  | DESIGNED GH                          | CHECKED GH                              |
| 1,2,3 : AFTER TENDER |                                            |            |         |          |                      |                                                                                       | KwaZulu Natal | Springbok      | sp@bvi.co.za  | PLAN NUMBER                          | REVISION NO.                            |
| Z : AS BUILT         |                                            |            |         |          |                      |                                                                                       |               | Durban         | db@bvi.co.za  | 32442.00-380-03                      | T0                                      |
|                      |                                            |            |         |          |                      |                                                                                       |               | Empangeni      | emp@bvi.co.za | DATE SAVED                           | 18 November 2021                        |
|                      |                                            |            |         |          |                      |                                                                                       |               | Port Elizabeth | pe@bvi.co.za  |                                      |                                         |
|                      |                                            |            |         |          |                      |                                                                                       |               | East London    | el@bvi.co.za  |                                      |                                         |
|                      |                                            |            |         |          |                      |                                                                                       |               | Cape Town      | cap@bvi.co.za |                                      |                                         |



| TYPE                                                                                | LIGHTING LEGEND SPECIFICATIONS                                                                                                                                        | MOUNTING TYPE / HEIGHT |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|    | TYPE C1: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS. COLOUR: WHITE.                                                                   | CEILING                |
|    | TYPE C2: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS AND 1 HOUR BATTERY BACK UP PACKS. COLOUR: WHITE. | CEILING                |
|    | TYPE C3: 600mmx600mm RECESSED LUMINAIRE: 40W LED LAMP, 4000K @ 1050mA - 3251 LUMENS INCLUDING DALI DIMMABLE BALLASTS. COLOUR: WHITE.                                  | CEILING                |
|    | TYPE E1: 1200mm SURFACE MOUNT LED LUMINAIRE COMPLETE WITH 32W LED LAMP, 4000K @ 700mA - 2984 LUMENS. COLOUR: WHITE.                                                   | SURFACE                |
|    | TYPE E2: 1200mm SURFACE MOUNT LED LUMINAIRE INCLUDING 1 HOUR BATTERY BACK UP PACK, COMPLETE WITH 32W LED LAMP, 4000K @ 700mA - 2984 LUMENS. COLOUR: WHITE.            | SURFACE                |
|    | TYPE F1: 1310mm x 172mm SURFACE MOUNT VAPOUR / WEATHER PROOF 53W LED LUMINAIRE RATED AT 4000K @ 500mA - 5385 LUMENS. IP65 RATED.                                      | SURFACE                |
|    | TYPE G1: RECESSED DOWNLIGHT WITH 10W LED LAMP, 3100K @ 500mA - 865 LUMENS INCLUDING ECG. COLOUR: WHITE.                                                               | CEILING                |
|    | TYPE H1: RECESSED 240mm ROUND LUMINAIRE - 16W LED, 4000K - 1100 LUMENS. ULTRA THIN 13mm THICKNESS. COLOUR: WHITE.                                                     | CEILING                |
|    | TYPE H1: WALL MOUNTED RECTANGULAR BULKHEAD WITH EYELID. 18W LED FITTING RATED AT 4000K @ 700mA - 1450 LUMENS. COLOUR: BLACK.                                          | WALL - EXTERNAL        |
|   | DALI OCCUPANCY SENSOR.                                                                                                                                                | CEILING                |
|  | 1 LEVER LIGHT SWITCH MOUNTED 1400mm AFFL. DALI                                                                                                                        | WALL                   |
|  | DALI DIMMER CONTROL SWITCH MOUNTED 1400mm AFFL                                                                                                                        | WALL                   |
|  | ROTARY DALI LIGHTING DIMMER CONTROL SWITCH MOUNTED 1400mm AFFL                                                                                                        | WALL                   |
|  | PHOTOCELL MOUNTED 2000mm AFFL.                                                                                                                                        | WALL                   |



APPROVED

PORT ENGINEER

DATE

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APPROVED

ELECTRICAL MANAGER

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PORT FACILITIES MANAGER

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FOR TENDER

| NOTES / LEGEND         | APPROVED BY COUNCIL / CLIENT               | DATE       | INITIAL | Rev. CODE | REVISION DESCRIPTION | CLIENT                                                                                | PROVINCE      | OFFICE         | EMAIL          | PROJECT                              | APPROVED BY BVI                         |
|------------------------|--------------------------------------------|------------|---------|-----------|----------------------|---------------------------------------------------------------------------------------|---------------|----------------|----------------|--------------------------------------|-----------------------------------------|
|                        | CITY ENGINEER / CLIENT<br>REG. NO.<br>DATE | 2021/11/18 | W.B     | T/D       | FOR TENDER PURPOSES  |  | Gauteng       | Tshwane        | (012) 945-1111 | RICHARDS BAY -<br>PORT CONTROL TOWER | G. HALBERSTADT<br>ENGINEER/TECHNOLOGIST |
|                        | AMENDMENTS CODE                            |            |         |           |                      |                                                                                       | Free State    | Pretoria       | (015) 291-5400 |                                      | 20080282                                |
| A: BY CLIENT           |                                            |            |         |           |                      |                                                                                       | Western Cape  | Bloubaai       | (051) 942-1237 |                                      | 18 November 2021                        |
| 0 : / TENDER DRAWING   |                                            |            |         |           |                      |                                                                                       | Northern Cape | Upington       | (057) 553-4569 | SCALE                                | 1:50 @ A1                               |
| 1,2,3,4 : AFTER TENDER |                                            |            |         |           |                      |                                                                                       | KwaZulu Natal | Springbok      | (054) 337-4800 | DRAWN                                | WB                                      |
| Z : / AS BUILT         |                                            |            |         |           |                      |                                                                                       |               | Durban         | (031) 266-6362 | DESIGNED                             | GH                                      |
|                        |                                            |            |         |           |                      |                                                                                       |               | Empergand      | (035) 775-4112 | CHECKED                              | GH                                      |
|                        |                                            |            |         |           |                      |                                                                                       |               | Port Elizabeth | (041) 374-5453 | PLAN NUMBER                          | 32442.00-380-04                         |
|                        |                                            |            |         |           |                      |                                                                                       |               | East London    | (043) 735-3869 | REVISION NO.                         | T0                                      |
|                        |                                            |            |         |           |                      |                                                                                       |               | Cape Town      | (021) 527-7000 | DATE SAVED                           | 18 November 2021                        |
|                        |                                            |            |         |           |                      |                                                                                       |               |                |                |                                      |                                         |

