## CSA 2361: KLOOF ARCHIVE - STRUCTURAL ELEMENT SIZES

| Str Note | CONCRETE | REV | All sizes in mm (w x d) |
|---|---|---|---|
| **D11** | **Foundations** | | |
| 11.1 | Pad Footings to Columns | | 2000 x 2000 x 500 |
| 11.2 | Strip Footings Under Brickwork | | 690 x 230 |
| 11.3 | Downstand Groundbeam | C | 400 x 500 |
| 11.4 | R.conc footing to conc core walls | C | 1800x300 |
| 11.5 | Pad Footing to Columns | | 1500 x 1500 x 400 |
| **D12** | **Surface Beds** | | |
| 12.1 | Surface Bed to Offices | | 120 |
| 12.2 | Surface Bed to Loading Area | D | 200 |
| 12.3 | Surface Bed to Repositories | | 220 |
| **D13** | **Floor and Roof Slabs** | | |
| 13.1 | Ground Slab to Repositories Block B/C | | 340 |
| 13.2 | Ground Slab to Repositories Block D. incl dropped slab at columns | | 340mm thick + 2250x2250x 300 mm details |
| 13.3 | U/G Floor slab to Repositories | | 340 |
| 13.4 | U/G Floor slab to Offices | | 255 |
| 13.5 | Roof Slabs | D | 200 |
| 13.6 | Concrete to Ramp | | 120 |
| 13.7 | Recess in Slab for external surfacing | B | 85mm recess |
| 13.8 | Upper Admin Foyers. Topping over slab | C | 85+255mm |
| 13.9 | U/G Floor ground-slab to Repositories | E | 255 |
| **D14** | **Downstands Beams** | | |
| 14.1.1 | Downstand Beam to Office U/G Floor Slab (G16 internal edge) | | 300 x 680 |
| 14.1.2 | increased depth to downstand Beam Grid 16 / S-T | | 300 x 1530 (255 slab) |
| 14.1.3 | increased depth to downstand Beam Grid 16 T-U | | 300 x 1020 (255 slab) |
| 14.2 | | | |
| 14.3 | Downstand Beam to U/G Floor Office Slab along Grid V-W16, V-W17, W16-18 | B | 300 x 680 |
| | **Upstand beams** | | |
| 14.4 | Upstand Beam to Office Slab along Grid 18 (External Edge) | | 230 x 935 |
| 14.5 | Upstand Beam to Roof Slab – Admin entrance | | 230 x 200 |
| | **R. Conc beams** | | |
| 14.6 | Beam above Circular Columns UG Ceiling lev. Grid 18 | | 415 x 380 |
| 14.7 | 120x1000 | | 120x1000 |
| 14.8 | Concrete Beam U/G at apex Gr16/V-W | C | 230x510 |
| 14.9 | Concrete Beam to repository columns | C | 310x595 |
| 14.10 | Conc ringbeam to Rm A-3 | | 310x610 |
| 14.11 | Conc sunshade projection to Rm A-3 | | 1300x200 |
| **D15** | **Concrete Columns** | | |
| 15.1 | Square Columns to Repositories | | 400 x 400 |
| 15.2 | Rectangular Columns to Office Area | | 300 x 600 |
| 15.3 | Square Columns to Office Area | A | 300 x 300 |
| 15.4 | Round Columns to Office Area | | 300 dia |
| 15.5 | Conc Columns to Office Area, new | C | 230 x 300 |
| 15.6 | Grid 17 | | 230 x 300 |
| **D16** | **Structural Walls** | | |
| 16.1 | Repositories | | 200 |
| 16.2 | Off-shutter reinforced concrete wall. Admin at Grid 18 | B | 230 |
| 16.3 | Off-shutter reinforced concrete wall. Admin at Grid 16-18W | C | 230 |
| 16.4 | Off-shutter reinforced concrete wall. Admin at Grid 16/P-Q | C | 230 |
| 16.5 | 340mm R conc core F/brickwork wall | C | 340 |
| 16.6 | 340mm R conc core brickwork wall P-P | C | 340 |
| **M17** | **Structural Steel Columns / Beams** | | |
| 17.1 | Columns: Universal Steel Column - Office & Processing. Gr16 | D | 203 x 133 x 30 |
| 17.2 | Columns: Universal Steel Column - Repositories | | 203 x 203 x 46 |
| 17.3 | Stub Columns: Universal Steel Columns- Offices, Grid 14 | D | 203 x 133 x 30 |
| 17.4 | Beam across Grid 14: Universal Steel Beams | | 254 x 146 x 43 |
| 17.5 | Beams: Universal Steel Beams. Eaves Beams, Gr 14+16+18 | C | 203 x 203 x 46 |
| 17.6 | Rafters: Universal Steel Beams - Office & Processing | | 203 x 133 x 30 |
| 17.7 | Rafters: Universal Steel Beams - Repositories | | 254x146x43 |
| 17.8 | Lattice trusses- Repositories. 600Mm depth | | 600 Depth |
| 17.9 | Columns: Universal Steel Column - Office & Processing Gr14 | B | 203 x 203 x 46 |
| 17.10 | Columns: Universal Steel Column – as Rafter to Grid 14-16V | C | 203 x 203 x 46 |
| 17.11 | Inclined Univ column for cladding | C | 152x152x23 |
| **M18** | **Structural steel – Lipped channels** | | |
| 18.1 | Purlins to Office and Processing Area at 1200 c/c (0.8 Aluminium Brownbuilt Sheet) | D | 125 x 65 x 20 x 2.5 |
| 18.2 | Purlins to Repositories at 1300 to 1650 c/c (0.8 Aluminium Brownbuilt Sheet) | B | 175 x 65 x 20 x 2.5 |
| 18.3 | Girts – Lipped Channels | | 175 x 65 x 20 x 2.5 |
| 18.4 | Lipped channel studs for fire proof ceiling at 1200cc. To same bearer hung | C | 100 x 75 x 20 x 2.5 |
| 18.5 | Purlin verge trim. GMS Angle | | 70x70x6 |
| 18.6 | Purlin raking apex trim – Lipped Channels | C | 175 x 65 x 20 x 2.5 |
| **M19** | **Structural Steel Ramp / Stair stringers** | | |
| 19.1 | Stringer to Ramp – Channel | B | 260 x 90 x 34 |
| 19.2 | Stringer to Stairs – Channel | | 260 x 90 x 34 |
| 19.3 | Column Bracing to Stringers- U Col | C | 254x146x43 |
| **M20** | **Structural Steel Bracing** | | |
| 20.1 | Circular Hol.Sec Bracing to repository columns | | 139x5 |
| 20.2 | Repository brickwork wall brace. U Col. | | Omit |
| 20.3 | Curtain wall bracing. Rect Hol/Sec | C | 160x80x4 |
| | **External works** | | |
| U.19 | Gabion basket retaining wall. To include certification of installation by supplier. | | |

**Upper Ground Admin** — T.o.C. Lev 530.000 +0.000
**Upper Ground Archive** — T.o.C. Lev 528.385 −1.615

North

---

### City Architects
sustainable & integrated services

### ETHEKWINI MUNICIPALITY
Procurement & Infrastructure Cluster
Engineering Unit
Architecture Department
166 K.E.Masinga Road, Durban, 4001
Tel: 031 311 7109
Fax: 031 311 7111

**Project Description:**
Kloof Archives Repository and Print Facility for the City Hall Administration Secretariat Unit, eThekwini Municipality, At 11 Emolweni Road, on Lot 5454 of Kloof.

| | | | |
|---|---|---|---|
| Contract No. | CSA / 2361 | | |
| DRAWING TITLE | **U.G. Layout** | | |
| Designed | P.D. | Signed | |
| Drawn | P.D. | Name | |
| Scale/s | 1:100 (A0) | Date | 2020 - 06 - 30 |
| Drawing No. | **A - 121 . H** | Revision | |