

Diagram illustrating the 66/11kV Transformers Cable Block Diagram, showing the arrangement of cables and components for TRFR 1 and TRFR 2.

**Legend:**

- 1. \* INDICATES CABLES USED.
- 2. # INDICATES LOOPING.
- 3. 1B IS FOR TRFR 1 & 1C FOR TRFR 2.
- 4. ALL RSA NUMBERED CABLES ARE TO BE TYPE, 4Pr, 1.5mm<sup>2</sup>, XLPE, ISO, PVC.
- 5. 1A IS FOR TRFR 1 & 1B IS FOR TRFR 2

**Diagram Components:**

- 66kV BUSBAR 1B/1C ISOLATOR MB
- 66kV CTs
- 66kV BKR MB
- 66kV CTJB
- PROTECTION RELAY PANEL
- NEC/R AUX TRFR MB
- NOTE 5 11kV BUSBAR 1A/1B ISOLATOR MB
- TRFR MARSHALLING KIOSK
- 11kV BREAKER MB
- NEUTRAL CT

**Cable Designation Table:**

CABLE No.	DESIGNATION	TRFR 1 66/11kV	TRFR 2 66/11kV
401	BVX12DCV	*	*
402	BVX12DCV	*	*
403	BVX12DCV	*	*
404	BVX12DCV	*	*
405	BVX4ECV	*	*
406	BVX12DCV	*	*
407	BVX19DCV	*	*
408	BVX12DCV	*	*
409	BVX4ECV	*	*
410	BVX12DCV	*	*
411	TPH5OAX	*	*
412	BVX19DCV	*	*
413	BVX4ECV	*	*
414	BVX19DCV	*	*
415	BVX12DCV	*	*
416	BVX12DCV	*	*
417	BVX4KCV	*	*
418	BVX12DCV	*	*
419	BVX19ECV	*	*
420	BVX4ECV	*	*
421	BVX4ECV	*	*
422	BVX12DCV	*	*
423	BVX4ECV	*	*
424	BVX12DCV	*	*
436	BVX2DCV	*	*

**Diagram Labels:**

- 66kV BUSZONE PANEL
- 11kV BUSSECTION RP
- KWT 1 11kV FEEDER 1 RP
- 11kV BUSSECTION RP
- KWT 2 11kV FEEDER 2 RP
- MEASUREMENTS PANEL 1
- AC DISTRIBUTION PANEL
- OLTC CONTROL PANEL
- DC DISTRIBUTION PANEL
- 11kV BUSBAR 1A VTJB
- STATISTICAL MEASUREMENTS PANEL (MEAS CT)
- 66kV BUSZONE PANEL
- LOOP BETWEEN TRFR 2 & TRFR 3 RP
- LOOP BETWEEN TRFR 2 & TRFR 3 RP
- LOOP BETWEEN TRFR 1 & TRFR 2 RP
- LOOP BETWEEN TRFR 1 & TRFR 2 RP
- 66kV FDR 3
- RECORDER INTERFACE PANEL FOR TRFR 1 ONLY
- RECORDER INTERFACE PANEL FOR TRFR 2 ONLY

**Notes:**

- NOTE 3
- NOTE 5

**Revision History:**

REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE
5	RECORDER PANEL ADDED	MH	SBT	AMAC	12/03/2013
4	CHANGED 66kV BREAKER FROM OSM10 TO ABB	MT	EN	AMAC	30/11/2012
3	INDOOR SWITCHGEAR REPLACEMENT	BSA	BSA	AMAC	10/07/2007
2	COMMISSIONING MARKUPS	MG	LLZ	LLZ	29/05/2005
1	TRFR 3 INSTALLED	LLZ	GHC	AMAC	24/12/2004

**Authorisation:**

AUTHORISED BY: S.TSHOBENI  
DATE: 27/02/2002  
CHECKED BY: S.TSHOBENI  
DATE: 27/02/2002  
DRAWN BY: JMB  
DATE: 30/01/2002

**Project Information:**

KING WILLIAMS TOWN S/S  
66/11kV TRANSFORMERS  
CABLE BLOCK DIAGRAM

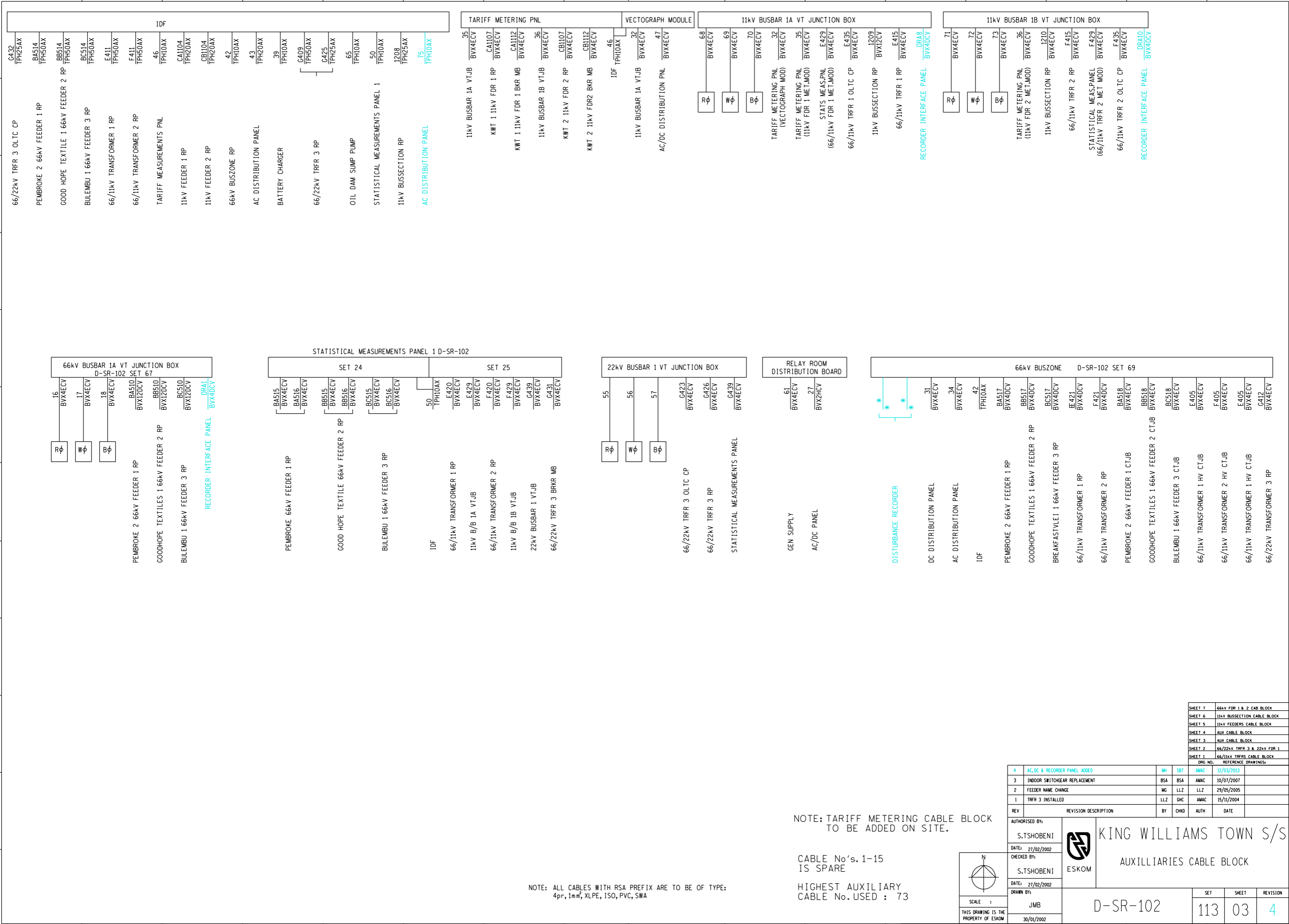
**Scale:** 1 : 113  
THIS DRAWING IS THE PROPERTY OF ESKOM

**Revision:** 5

This figure is a detailed cable block diagram for a power distribution system at King Williams Town. The diagram illustrates the connections between various electrical components, including busbars, breakers, isolators, CTs, relays, TRFRs, and control panels, all interconnected via a network of cables.

The diagram is organized into a grid with columns numbered 1 to 16 and rows labeled A to M. Key components and their associated cable numbers are as follows:

- 66kV ISOLATOR MB**: Connected to cable 406.
- 66kV BREAKER MB**: Connected to cables 407 and 408.
- 66kV CTs**: Connected to cables 409, 410, and 411.
- 66kV CTJB**: Connected to cable 412.
- RELAY PANEL**: Connected to cables 413, 414, and 415.
- TRFR MARSHALLING KIOSK**: Connected to cables 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

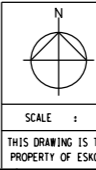



NOTE: ALL CABLES WITH RSA PREFIX ARE TO BE OF TYPE:  
4pr, 1mm<sup>2</sup>, XLPE, ISO, PVC, SWA

NOTE: TARIFF METERING CABLE BLOCK  
TO BE ADDED ON SITE.

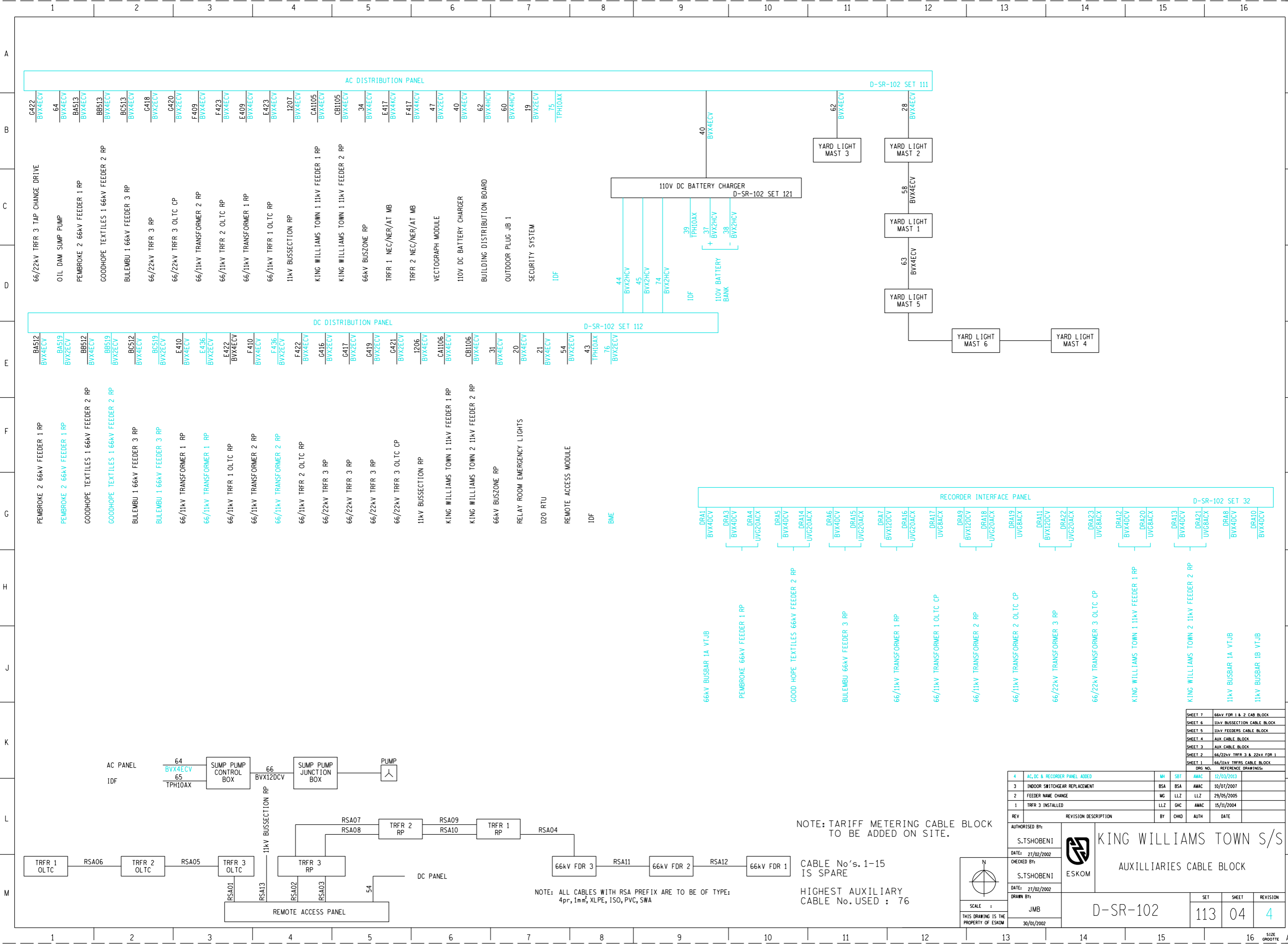
CABLE No's. 1-15  
IS SPARE

HIGHEST AUXILIARY  
CABLE No. USED : 73

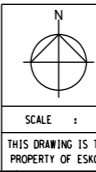


4	AC, DC & RECORDER PANEL ADDED	NH	SBT	AMAC	12/03/2013	
3	INDOOR SWITCHGEAR REPLACEMENT	BSA	BSA	AMAC	10/01/2007	
2	FEEDER NAME CHANGE	MG	LLZ	LLZ	29/05/2005	
1	TRFR 3 INSTALLED	LLZ	GHC	AMAC	15/11/2004	
REV	REVISION DESCRIPTION		BY	CHKD	AUTH	DATE
AUTHORISED BY:		 ESKOM	KING WILLIAMS TOWN S/S			
S.TSHOBENI			AUXILIARIES CABLE BLOCK			
DATE: 27/02/2002						
CHECKED BY:						
S.TSHOBENI						
DATE: 27/02/2002						
DRAWN BY:						
JMB		D-SR-102		SET	SHEET	REVISION
30/01/2002				113	03	4

SHEET 7	66kV FOR 1 & 2 CAB BLOCK
SHEET 6	11kV BUSSECTION CABLE BLOCK
SHEET 5	11kV FEEDERS CABLE BLOCK
SHEET 4	AUX CABLE BLOCK
SHEET 3	AUX CABLE BLOCK
SHEET 2	66/22kV TRFR 3 & 22kV FOR 1
SHEET 1	66/11kV TRFRS CABLE BLOCK
DRG NO.	REFERENCE DRAWINGS:



REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE
4	AC, DC & RECORDER PANEL ADDED	NH	SBT	AMAC	12/03/2013
3	INDOOR SWITCHGEAR REPLACEMENT	BSA	BSA	AMAC	10/07/2007
2	FEEDER NAME CHANGE	MG	LLZ	LLZ	29/05/2005
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SHEET 3	AUX CABLE BLOCK				
SHEET 2	66/22kV TRFR 3 & 22kV FOR 1				
SHEET 1	66/11kV TRFRS CABLE BLOCK				
AUTHORISED BY: S.TSHOBENI					
DATE: 27/02/2002					
CHECKED BY: S.TSHOBENI					
DATE: 27/02/2002					
DRAWN BY: JMB					
30/01/2002					
KING WILLIAMS TOWN S/S				SET	SHEET
AUXILLIARIES CABLE BLOCK				113	04
D-SR-102				REVISION	4



NOTE: TARIFF METERING CABLE BLOCK TO BE ADDED ON SITE.

CABLE No's. 1-15 IS SPARE

HIGHEST AUXILIARY CABLE No. USED : 76

NOTE: ALL CABLES WITH RSA PREFIX ARE TO BE OF TYPE: 4pr, 1mm<sup>2</sup>, XLPE, ISO, PVC, SWA



