



BENDING SCHEDULE												
Member	Reinforcement						Bending Dimensions for Shape Codes (SANS 282:2011)					
	Bar Mark	Type & Dia	No. Off Mbrs	No. In Each	Total No. Off	Cut Length	Shape Code	A	B	C	D	E/r
PRECAST BEAM	01	Y25	6	68	408	3 850	62	470	100			
	02	Y16	6	272	1632	1 200	99a	440	650		120	
	03	Y20	6	16	96	10 000	20	10 000				
	04	Y20	6	16	96	4 300	20	4 300				
	05	Y32	6	17	102	12 000	20	12 000				
	06	Y32	6	17	102	6 000	20	6 000				
	07	Y16	6	100	600	2 050	72	640	430			
	08	Y20	6	24	144	1 750	39	1 500	160			
	09	R10	6	54	324	600	85	100	400	60		
	10	R10	6	54	324	550	85	100	350	60		
	11	R10	6	54	324	500	85	100	280	60		
	12	Y20	6	20	120	1 550	60	500	200			
	13	Y20	6	20	120	1 100	38	500	180			
	14	Y16	6	60	360	500	85	120	200	130		
	15	Y16	6	4	24	6 000	86	290	70	490		
	16	Y20	6	68	408	1 400	48	500	740		300	
	17	Y20	6	4	24	1 800	99b	160	670	250		
	18	Y12	6	68	408	1 000	39	160	700	100		
Total Masses		R BARS = 330 kg Y BARS = 29 861 kg				Drawing Number		1300042 - T - 4302		Sh A		

SHAPE CODES									
SHAPE CODE - SANS 282:2011									
20	A	48	B	85	B	99a	B	99b	B
38	B	60	B	96	B	99b	B	99b	B
60	B	62	B	96	B	99b	B	99b	B
62	B	72	B	96	B	99b	B	99b	B
96	B	72	B	96	B	99b	B	99b	B
99a	B	72	B	96	B	99b	B	99b	B
99b	B	72	B	96	B	99b	B	99b	B
A letter 'S' after the shape code indicated radius of 7.5d. In all other cases the radius is standard unless 'Y' is specified.									
All dimensions are external and all radii are internal.									

BARS SUMMARY			
Mild Steel Bars			
Dia.	Mass (kg/m)	Total Length (m)	Total Masses (kg)
R10	0,616	534,6	330
Total			330 kg
High Yield Steel Bars			
Dia.	Mass (kg/m)	Total Length (m)	Total Masses (kg)
Y12	0,888	408	362
Y16	1,58	3 512,4	5 550
Y20	2,47	2 557,2	6 316
Y25	3,85	1 570,8	6 048
Y32	6,31	1 836	11 585
Total			29 156 kg

- NOTES**
- CONCRETE CUBE STRENGTH AT 28 DAYS.....50 MPa/19mm
 - CONCRETE COVER = 50mm UNLESS OTHERWISE STATED
 - ALL EXPOSED ARRISSES TO HAVE 20mm x 20mm CHAMFERS UNLESS OTHERWISE STATED
 - BENDING DIMENSIONS MUST COMPLY WITH SANS 282:2011
R = MILD STEEL BARS (250 MPa) TO SANS 920:2011
Y = HIGH YIELD STEEL BARS (450 MPa) TO SANS 920:2011
 - LEGEND
T1 = HIGHEST OF THE TOP LAYERS
T2 = SECOND HIGHEST OF THE TOP LAYER
B1 = LOWEST OF THE BOTTOM LAYERS
B2 = SECOND LOWEST OF THE BOTTOM LAYERS
ABR = ALTERNATE BARS REVERSED
FF = FAR FACE
NF = NEAR FACE
EE = EACH END
EF = EACH FACE
STG = STAGGERED BARS
ALT = ALTERNATE

<table><tr><td>C</td><td>ISSUED FOR APPROVAL</td><td>03/08/2021</td><td>LAV</td><td>HAW</td></tr><tr><td>B</td><td>ISSUED FOR APPROVAL</td><td>08/12/2020</td><td>LAV</td><td>HAW</td></tr><tr><td>A</td><td>ISSUED FOR COMMENT</td><td>21/02/2019</td><td>LAV</td><td>HAW</td></tr><tr><td>REV</td><td>DESCRIPTION</td><td>DATE</td><td>REV BY</td><td>CHKD</td></tr></table>	C	ISSUED FOR APPROVAL	03/08/2021	LAV	HAW	B	ISSUED FOR APPROVAL	08/12/2020	LAV	HAW	A	ISSUED FOR COMMENT	21/02/2019	LAV	HAW	REV	DESCRIPTION	DATE	REV BY	CHKD	<table><tr><td>DRG. No.</td><td></td><td>DRAWING TITLE</td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>	DRG. No.		DRAWING TITLE						<table><tr><td>RCE Consultants 110 Sovereign Drive Route 21 Corporate Park Johannesburg 1502</td><td>APPROVED BY DESIGN ENGINEER: MUJI GRANGE SIGNATURE: _____ DATE: 03/08/2021 Prof. Reg. No.: 20160548</td><td>CONSULTANT/SUB CONSULTANT NAIDU CONSULTING</td><td>PROJECT GO! durban!</td></tr><tr><td>tel : +27 (12) 450 0040 fax : +27 (12) 450 0040</td><td>APPROVED BY CHECKING ENGINEER: H de WET SIGNATURE: _____ DATE: 03/08/2021 Prof. Reg. No.: 720570</td><td></td><td>CLIENT ETHEKWINI METROPOLITAN MUNICIPALITY</td></tr><tr><td></td><td>DRAWN BY: MU COSS DATE: 03/08/2021</td><td></td><td></td></tr></table>	RCE Consultants 110 Sovereign Drive Route 21 Corporate Park Johannesburg 1502	APPROVED BY DESIGN ENGINEER: MUJI GRANGE SIGNATURE: _____ DATE: 03/08/2021 Prof. Reg. No.: 20160548	CONSULTANT/SUB CONSULTANT NAIDU CONSULTING	PROJECT GO! durban!	tel : +27 (12) 450 0040 fax : +27 (12) 450 0040	APPROVED BY CHECKING ENGINEER: H de WET SIGNATURE: _____ DATE: 03/08/2021 Prof. Reg. No.: 720570		CLIENT ETHEKWINI METROPOLITAN MUNICIPALITY		DRAWN BY: MU COSS DATE: 03/08/2021			<table><tr><td>PROJECT TITLE ETHEKWINI TRANSPORT AUTHORITY BUS RAPID TRANSPORT NETWORK (BRT) PHASE 1: ROUTE C1A</td><td>DISCIPLINE T</td><td>AS BUILT PLAN (Full signature) CLIENT _____ DATE _____</td><td>SCALE 1:15</td><td>SHEET 1 OF 2</td></tr><tr><td>DRAWING DESCRIPTION SECTION 3 - INANDA ROAD PRECAST SLAB - REINFORCEMENT</td><td>PHASE T</td><td>ENGINEER _____ DATE _____</td><td>CONTRACT No. PROJECT No. 1300042</td><td></td></tr><tr><td></td><td></td><td></td><td>DRAWING No. 1300042-T-4302</td><td>REV 1</td></tr></table>	PROJECT TITLE ETHEKWINI TRANSPORT AUTHORITY BUS RAPID TRANSPORT NETWORK (BRT) PHASE 1: ROUTE C1A	DISCIPLINE T	AS BUILT PLAN (Full signature) CLIENT _____ DATE _____	SCALE 1:15	SHEET 1 OF 2	DRAWING DESCRIPTION SECTION 3 - INANDA ROAD PRECAST SLAB - REINFORCEMENT	PHASE T	ENGINEER _____ DATE _____	CONTRACT No. PROJECT No. 1300042					DRAWING No. 1300042-T-4302	REV 1
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