PIER 05 BASE BENDING SCHEDULE

STRUCTURAL MEMBER	BAR MARK	TYPE & SIZE	No OF MEMBERS	No OF BARS	TOTAL No.	BAR LENGTH	SHAPE CODE	DIMENSIONS (mm)				
								A	B	C	D	E/R
PIER 05 FOUNDATION	1	Y32	1	66	66	7975	55	600	1100	4900	1100	600
PIER 05 FOUNDATION	2	Y32	1	66	66	5950	38	600	4900	600		
PIER 05 FOUNDATION	5	Y20	1	25	25	8400	37	650	7800			
PIER 05 FOUNDATION	5	Y20	1	25	25	8400	37	650	7800			
PIER 05 FOUNDATION	5	Y20	1	25	25	8400	37	650	7800			
PIER 05 FOUNDATION	5	Y20	1	25	25	8400	37	650	7800			
PIER 05 FOUNDATION	6	Y20	1	5	5	6325	38	800	4825	800		
PIER 05 FOUNDATION	6	Y20	1	5	5	6325	38	800	4825	800		
PIER 05 FOUNDATION	7	Y20	1	4	4	12900	20	12900				
PIER 05 FOUNDATION	7	Y20	1	4	4	12900	20	12900				
PIER 05 FOUNDATION	10	Y16	1	12	12	3050	60	1075	300			
PIER 05 FOUNDATION	10	Y16	1	12	12	3050	60	1075	300			
PIER 05 FOUNDATION	10	Y16	1	12	12	3050	60	1075	300			
PIER 05 FOUNDATION	10	Y16	1	12	12	3050	60	1075	300			
PIER 05 FOUNDATION	10	Y16	1	12	12	3050	60	1075	300			
PIER 05 FOUNDATION	14	Y32	1	50	50	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	50	50	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			
PIER 05 FOUNDATION	14	Y32	1	1	1	3125	37	2750	450			

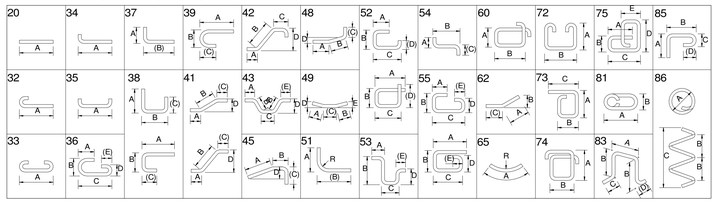
PIER 05 WALL BENDING SCHEDULE

STRUCTURAL MEMBER	BAR MARK	TYPE & SIZE	No OF MEMBERS	No OF BARS	TOTAL No.	BAR LENGTH	SHAPE CODE	DIMENSIONS (mm)				
								A	B	C	D	E/R
PIER 05 WALL	1	Y20	1	54	54	2300	39	950	800	950		
PIER 05 WALL	1	Y20	1	54	54	2300	39	950	800	950		
PIER 05 WALL	2	Y20	1	54	54	10200	20	10200				
PIER 05 WALL	2	Y20	1	54	54	10200	20	10200				
PIER 05 WALL	3	Y32	1	50	50	7400	37	300	7175			
PIER 05 WALL	3	Y32	1	50	50	7400	37	300	7175			
PIER 05 WALL	3	Y32	1	1	1	7400	37	300	7175			
PIER 05 WALL	3	Y32	1	1	1	7400	37	300	7175			
PIER 05 WALL	3	Y32	1	1	1	7400	37	300	7175			
PIER 05 WALL	3	Y32	1	1	1	7400	37	300	7175			
PIER 05 WALL	4	Y32	1	1	1	7425	37	325	7175			
PIER 05 WALL	4	Y32	1	1	1	7425	37	325	7175			
PIER 05 WALL	4	Y32	1	1	1	7425	37	325	7175			
PIER 05 WALL	4	Y32	1	1	1	7425	37	325	7175			
PIER 05 WALL	5	Y32	1	1	1	7400	37	300	7175			
PIER 05 WALL	5	Y32	1	1	1	7400	37	300	7175			
PIER 05 WALL	5	Y32	1	1	1	7400	37	300	7175			
PIER 05 WALL	5	Y32	1	1	1	7400	37	300	7175			
PIER 05 WALL	6	Y32	1	50	50	6100	20	6100				
PIER 05 WALL	6	Y32	1	50	50	6100	20	6100				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	7	Y32	1	1	1	6050	20	6050				
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			
PIER 05 WALL	8	Y12	1	12	12	2400	60	275	800			

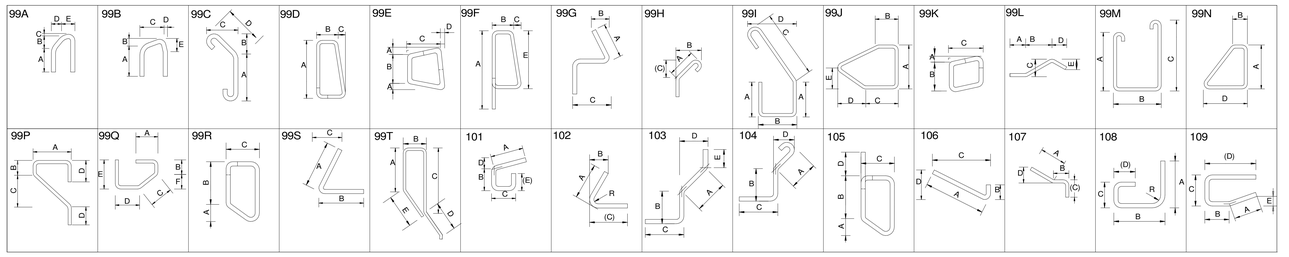
PIER 05 CAP BEAM BENDING SCHEDULE

STRUCTURAL MEMBER	BAR MARK	TYPE & SIZE	No OF MEMBERS	No OF BARS	TOTAL No.	BAR LENGTH	SHAPE CODE	DIMENSIONS (mm)				
								A	B	C	D	E/R
PIER 05 CAPPING BEAM	1	Y12	1	57	57	3550	60	1150	500			
PIER 05 CAPPING BEAM	2	Y12	1	69	69	4050	60	1400	500			
PIER 05 CAPPING BEAM	3	Y16	1	57	57	5400	60	1150	1400			
PIER 05 CAPPING BEAM	4	Y16	1	1	1	4900	60	900	1400			
PIER 05 CAPPING BEAM	4	Y16	1	1	1	5025	60	950	1400			
PIER 05 CAPPING BEAM	4	Y16	1	1	1	5125	60	1000	1400			
PIER 05 CAPPING BEAM	4	Y16	1	1	1	5250	60	1075	1400			
PIER 05 CAPPING BEAM	5	Y16	1	1	1	6625	60	1800	1350			
PIER 05 CAPPING BEAM	5	Y16	1	1	1	6725	60	1850	1350			
PIER 05 CAPPING BEAM	6	Y12	1	1	1	3050	60	900	500			
PIER 05 CAPPING BEAM	6	Y12	1	1	1	3150	60	950	500			
PIER 05 CAPPING BEAM	6	Y12	1	1	1	3275	60	1000	500			
PIER 05 CAPPING BEAM	6	Y12	1	1	1	3375	60	1050	500			
PIER 05 CAPPING BEAM	7	Y12	1	1	1	4850	60	1800	500			
PIER 05 CAPPING BEAM	7	Y12	1	1	1	4975	60	1850	500			
PIER 05 CAPPING BEAM	8	Y12	1	1	1	3050	60	900	500			
PIER 05 CAPPING BEAM	8	Y12	1	1	1	3150	60	950	500			
PIER 05 CAPPING BEAM	8	Y12	1	1	1	3275	60	1000	500			
PIER 05 CAPPING BEAM	8	Y12	1	1	1	3375	60	1050	500			
PIER 05 CAPPING BEAM	9	Y12	1	1	1	4850	60	1800	500			
PIER 05 CAPPING BEAM	9	Y12	1	1	1	4950	60	1850	500			
PIER 05 CAPPING BEAM	10	Y16	1	1	1	4900	60	900	1400			
PIER 05 CAPPING BEAM	10	Y16	1	1	1	5025	60	950	1400			
PIER 05 CAPPING BEAM	10	Y16	1	1	1	5125	60	1000	1400			
PIER 05 CAPPING BEAM	10	Y16	1	1	1	5250	60	1075	1400			
PIER 05 CAPPING BEAM	11	Y16	1	1	1	6600	60	1800	1350			
PIER 05 CAPPING BEAM	11	Y16	1	1	1	6700	60	1850	1350			
PIER 05 CAPPING BEAM	12	Y25	1	8	8	10925	20	10925				
PIER 05 CAPPING BEAM	13	Y20	1	4	4	7250	20	7250				
PIER 05 CAPPING BEAM	13	Y20	1	4	4	7250	20	7250				
PIER 05 CAPPING BEAM	13	Y20	1	4	4	7250	20	7250				
PIER 05 CAPPING BEAM	14	Y25	1	8	8	7800	37	7425	450			
PIER 05 CAPPING BEAM	14	Y25	1	8	8	7800	37	7425	450			
PIER 05 CAPPING BEAM	15	Y10	1	10	10	3450	60	225	1400			
PIER 05 CAPPING BEAM	15	Y10	1	9	9	3450	60	225	1400			
PIER 05 CAPPING BEAM	16	Y20	1	4	4	7325	20	7325				
PIER 05 CAPPING BEAM	17	Y20	1	1	1	6950	20	6950				
PIER 05 CAPPING BEAM	17	Y20	1	1	1	6375	20	6375				
PIER 05 CAPPING BEAM	18	Y20	1	1	1	6950	20	6950				
PIER 05 CAPPING BEAM	18	Y20	1	1	1	6375	20	6375				
PIER 05 CAPPING BEAM	19	Y20	1	1	1	6950	20	6950				
PIER 05 CAPPING BEAM	19	Y20	1	1	1	6375	20	6375				
PIER 05 CAPPING BEAM	20	Y20	1	1	1	6950	20	6950				
PIER 05 CAPPING BEAM	20	Y20	1	1	1	6375	20	6375				
PIER 05 CAPPING BEAM	21	Y12	1	8	8	3150	38	1500	225	1500		
PIER 05 CAPPING BEAM	21	Y12	1	8	8	3150	38	1500	225	1500		
PIER 05 CAPPING BEAM	22	Y20	1	8	8	3850	48	1200	1475	1175	425	1425
PIER 05 CAPPING BEAM	22	Y20	1	8	8	3850	48	1200	1475	1175	425	1425
PIER 05 CAPPING BEAM	23	Y10	1	4	4	1400	38	600	250	600		
PIER 05 CAPPING BEAM	23	Y10	1	4	4	1400	38	600	250	600		
PIER 05 CAPPING BEAM	23	Y10	1	4	4	1400	38	600	250	600		
PIER 05 CAPPING BEAM	23	Y10	1	4	4	1400	38	600	250	600		
PIER 05 CAPPING BEAM	23	Y10	1	4	4	1400	38	600	250	600		
PIER 05 CAPPING BEAM	23	Y10	1	4	4	1400	38	600	250	600		
PIER 05 CAPPING BEAM	23	Y10	1	4	4	1400	38	600	250	600		
PIER 05 CAPPING BEAM	23	Y10	1	4	4	1400	38	600	250	600		

STANDARD SHAPE CODES



SPECIAL SHAPE CODES



NOTES

1. BEFORE ORDERING AND BEFORE CUTTING AND BENDING OF REINFORCEMENT COMMENCES, THE CONTRACTOR MUST CHECK ALL SCHEDULES TO ENSURE CORRECTNESS, WHERE CHANGES ARE NECESSARY, THEY SHALL BE REFERRED TO THE ENGINEER.
2. ALL BENDING SHALL BE DONE IN ACCORDANCE WITH SABS 82 (WITH THE LATEST AMENDMENTS).
3. THREE TYPE OF REINFORCEMENT CAN BE SPECIFIED ON REINFORCEMENT DRAWINGS AND BENDING SCHEDULE viz.
   a. R HOT-ROLLED MILD STEEL BARS OF PLAIN ROUND CROSS-SECTION HAVING A CHARACTERISTIC STRENGTH OF 250 MPa.
      Y HOT-ROLLED HIGH YIELD STRESS STEEL HAVING A CHARACTERISTIC STRENGTH OF 450 MPa.
   b. WELDED STEEL FABRIC IN ACCORDANCE WITH SABS 1024:1991.

   FOR EXAMPLE:

   R20 DENOTES A 20mm DIAMETER PLAIN ROUND HOT-ROLLED MILD STEEL

   Y25 DENOTES A 25mm DIAMETER HOT-ROLLED HIGH YIELD STRESS STEEL

   REF: 665 DENOTES FABRIC REFERENCE 665 MESH

Rev	Date	Description	Checked	Signed
A	28-09-2023	ISSUED FOR APPROVAL	BM	

AMMENDMENTS

AS BUILT

Supervising Engineer _____ Date _____

Supervising Authority _____

Continued from :	
Continued on :	
Cross Section No :	
Longitudinal Section No :	
Survey Plan No :	

Designed by :	T. Mhkize
Checked by :	B. Manyela
Drawn by :	S. Maphumulo
Checked by :	T. Mhkize
Date of approval :	

transport
Department:
Transport
Province of KwaZulu-Natal

Designed by :
IBHONGO CONSULTING
Director _____ Date _____

71 Fifth Avenue
Morningside
Durban 4001
Tel: (031) 324 2200
Fax: (031) 324 2222
email:info@ibhongo.co.za

Structural Design: Chief Engineer

Head: Transport

PROVINCIAL ROAD P52/3 - NONGOMA TO PONGOLA
S 27 39 47.18 E 31 43 12.14

PROPOSED MKHUZE RIVER BRIDGE

PIER 05 BENDING SCHEDULES

Staked km distance	27.400
Scale :	As indicated
Sheet :	17
of :	51
Ibhongo Dwg No:	2203-SBS-305
DOT Dwg No:	3801-17

3801-17