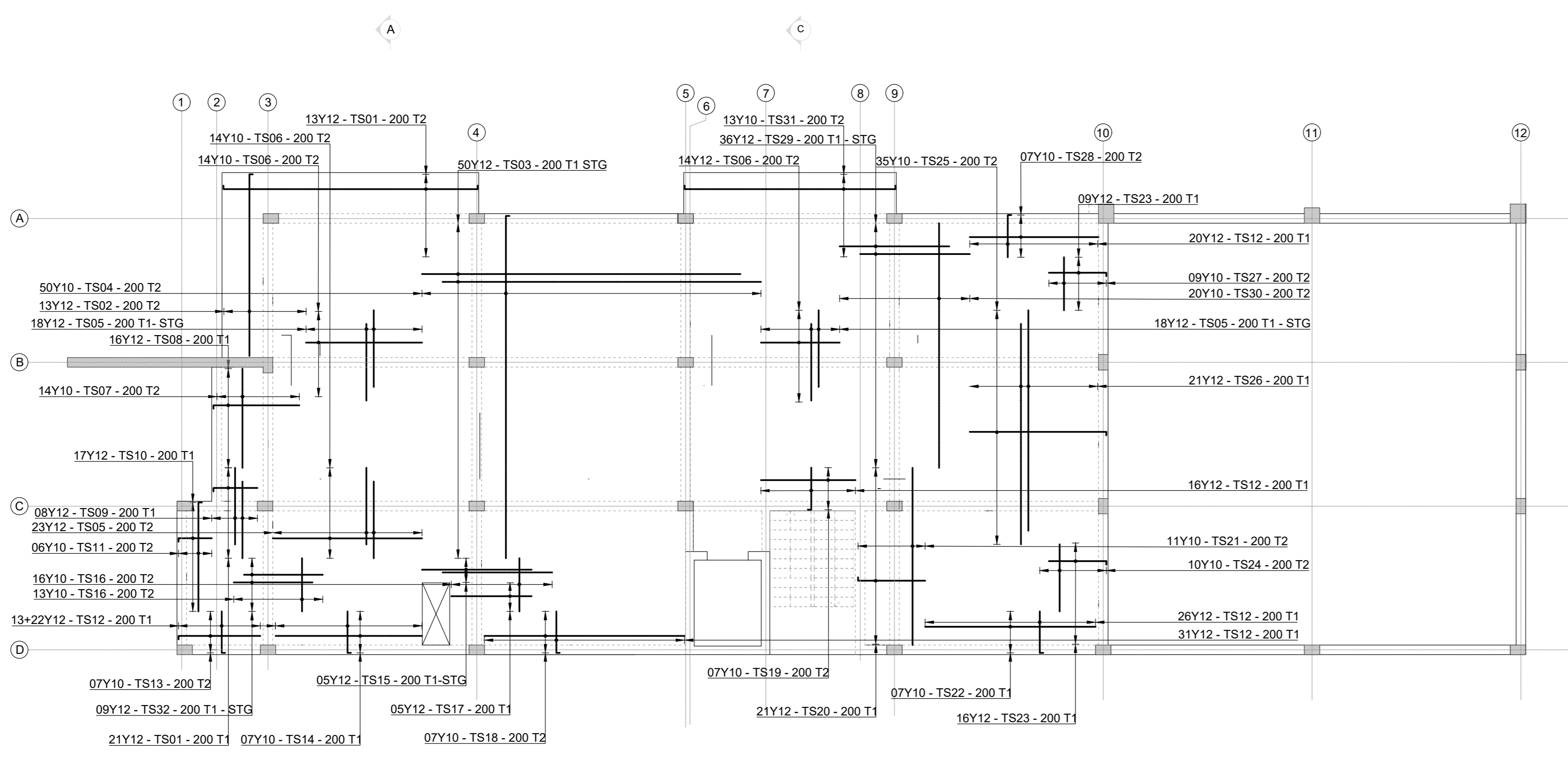


BOTTOM REINFORCEMENT DETAILS
1:100



TOP REINFORCEMENT DETAILS
1:100

MEMBER & SIZE	REINFORCEMENT							DIMENSIONS				
	UNITS	MARK	TYPE &	NO. PER	TOTAL No.	LENGTH	SHAPE CODE	A	B	C	D	E/R
200 RC SLAB BOTTOM REINFORCEMENT	1	BS01	Y12	30	30	7200	38	5650	150	2450		
		BS02	Y12	168	168	4600	37	4450	150			
		BS03	Y12	21	21	10100	38	7550	150	2450		
		BS04	Y12	105	105	6400	20	6400				
		BS05	Y12	63	63	6550	37	6400	150			
		BS06	Y12	120	120	4500	20	4500				
		BS07	Y12	21	21	9700	38	7850	150	1750		
		BS08	Y12	11	11	2000	38	1650	150	250		
		BS09	Y12	7	7	2550	37	2400	150			
		BS10	Y12	21	21	2900	37	2750	150			
		BS11	Y12	05	05	4650	38	4400	150	150		
		BS12	Y12	04	04	2700	38	2350	150	250		
		BS13	Y12	10	10	4950	38	4600	150	250		
		BS14	Y12	10	10	1200	38	850	150	250		
		BS15	Y12	15	15	1400	37	1250	150			
		BS16	Y10	345	345	550	83	250	100	100	100	
		BS17	Y12	30	30	8150	38	5650	80	2450		
TOP REINFORCEMENT	TS01	Y12	13	13	7500	20	7350	100	100			
	TS02	Y12	13	13	5550	20	5450	100				
	TS03	Y10	50	50	9300	20	9300					
	TS04	Y12	50	50	10100	20	10000	100				
	TS05	Y12	18	18	2250	20	2250					
	TS06	Y10	14	14	3400	20	3400					
	TS07	Y10	14	14	3100	20	3100					
	TS08	Y12	16	16	2650	20	2500	100				
	TS09	Y12	08	08	2250	20	2250					
	TS10	Y12	17	17	1150	20	1000	150				
	TS11	Y10	06	06	3300	20	3200	100				
	TS12	Y12	138	138	1350	20	1200	150				
	TS13	Y10	07	07	2500	20	2400	150				
	TS14	Y10	07	07	4250	20	4250					
	TS15	Y12	05	05	3200	20	3200					
	TS16	Y10	29	29	1550	20	1550					
	TS17	Y12	05	05	2350	20	2350					
TS18	Y10	07	07	5800	20	5800						
TS19	Y10	07	07	2750	20	2750						
TS20	Y12	21	21	1350	20	1200	150					
TS21	Y10	11	11	5150	20	5150						
TS22	Y10	07	07	5000	20	5000						
TS23	Y12	25	25	1850	20	1700	150					
TS24	Y10	10	10	2000	20	2000						
TS25	Y10	35	35	4100	38	4000	100					
TS26	Y12	21	21	6450	20	6450						
TS27	Y10	09	09	1550	20	1550						
TS28	Y10	07	07	3800	20	3800						
TS29	Y12	36	36	3200	20	3200						
TS30	Y10	20	20	7150	20	7150						
TS31	Y10	13	13	6250	38	6100	100	100				

DRAWING NO.	DRAWING DESCRIPTION
1	REFERENCE DRAWINGS

General
This drawing to be read in conjunction with all relevant architects and engineers drawings.
Dimensions must not be scaled or assumed. After notification, discrepancies or missing dimensions will be corrected in writing by the engineer.
Levels shown to foundations are provisional and will be finalised by the engineer on site.
Reinforcement shall comply with SANS 500 and be bent to SANS 282.
Bearing capacity of founding walls assumed to be 1200kPa. Geotechnical engineer to inspect and approve foundation trenches prior to casting of foundation.
Symbols:
R = Mild steel bars with characteristic strength of 250 MPa.
Y = Hot rolled or cold worked high yield steel bars with characteristic strength of 450 MPa.
(Only reinforcement fabricated under the SANS mark shall be deemed to comply with SANS requirements).

Concrete (where applicable the following shall apply)
All concrete work shall conform with the latest amended issue of:
SANS 1000 - Standard Specification for concrete and
SANS 10150 - The structural use of concrete.
A set of six cubes must be made for every 100 cubic metres (or portion thereof) of concrete poured on a specific day. 3 of the cubes must be tested at seven days and the balance must be available for testing at 28 days.
The test results are to be submitted to the engineer immediately and should any problems be anticipated no shunting is to be attempted until further notice from the engineer.
All concrete shall be vibrated according to specification. All concrete must be cured continuously for seven days after pouring and effectively protected against dehydration.
All exposed concrete to be chamfered 25mm x 25mm.
LAP Length is 50d, where d is the diameter of the steel reinforcement.

All sub-structure and superstructure walling shall be constructed from NF4E 14 solid masonry units, laid on Class 1 Mortar.
SABS Approved Galvanneal "Butterfly" Wall ties - in accordance with SANS 28 - to be used in all cavity walls and spaced at 300mm centres Vertically & horizontally. Length of Butterfly Tie: 250mm.
2 x R8 reinforcing bars to be placed in every brick course above all wall openings (windows/doors/balconies) up to underside of concrete beams. Bars are to extend a minimum of 1000mm beyond the vertical edges of openings.
SABS Approved Galvanneal Bricks to be used in every brick course within substructure brickwork (above foundation level up to floor level) and in every second course above floor level up to top of wall openings.

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
E	ISSUED FOR TENDER	NN	MG	ML	21 05 2025
D	ISSUED FOR PRELIM REVIEW	NN	KP	KP	09 06 2023
C	ISSUED FOR GATE REVIEW	AH	KP	KP	12 12 2022
B	ISSUED FOR SQUAD CHECK	AH	KP	KP	19 09 2022
A	ISSUED FOR CLIENT REVIEW	AH	KP	KP	14 04 2022

REVISIONS
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PRIVATE OPERATOR LOGO
CONSULTANTS ENGINEERS LOGO

CONTRACTOR / CONSULTANT				TRANSET NATIONAL PORTS AUTHORITY			
NAME	SIGN	DATE	DATE	NAME	SIGN	DATE	DATE
DRAWN	M.G.OBA	21 05 25	21 05 25	DRAWN	M.G.OBA	21 05 25	21 05 25
CHECKED	M.G.OBA	21 05 25	21 05 25	CHECKED	M.G.OBA	21 05 25	21 05 25
DESIGNED	M.G.OBA	21 05 25	21 05 25	DESIGNED	M.G.OBA	21 05 25	21 05 25
CHECKED	M.G.OBA	21 05 25	21 05 25	CHECKED	M.G.OBA	21 05 25	21 05 25

PRENG. / PR. TECH. / PR. ARCH. NAME M. LETSIE
SIGNATURE DATE 21 05 25
REG. NUMBER XXXXXX REG. NUMBER 201200751
TITLE APPROVED
SCALE: XX PAPER SIZE: A0
TRANSET DRG. NO. NH63A0000 - 000 - 00 REV. 00 PROJECT DRG. NO. PLZENG00051 - 1 - 000 - S - RD - 1002 - 01 - NN E

Transnet National Ports Authority
TRANSET
(NATIONAL FIRE SERVICE INFRASTRUCTURE AND EQUIPMENT UPGRADE 2A)
(FIRST FLOOR SLAB REINFORCEMENT)
(LAYOUT & DETAILS)