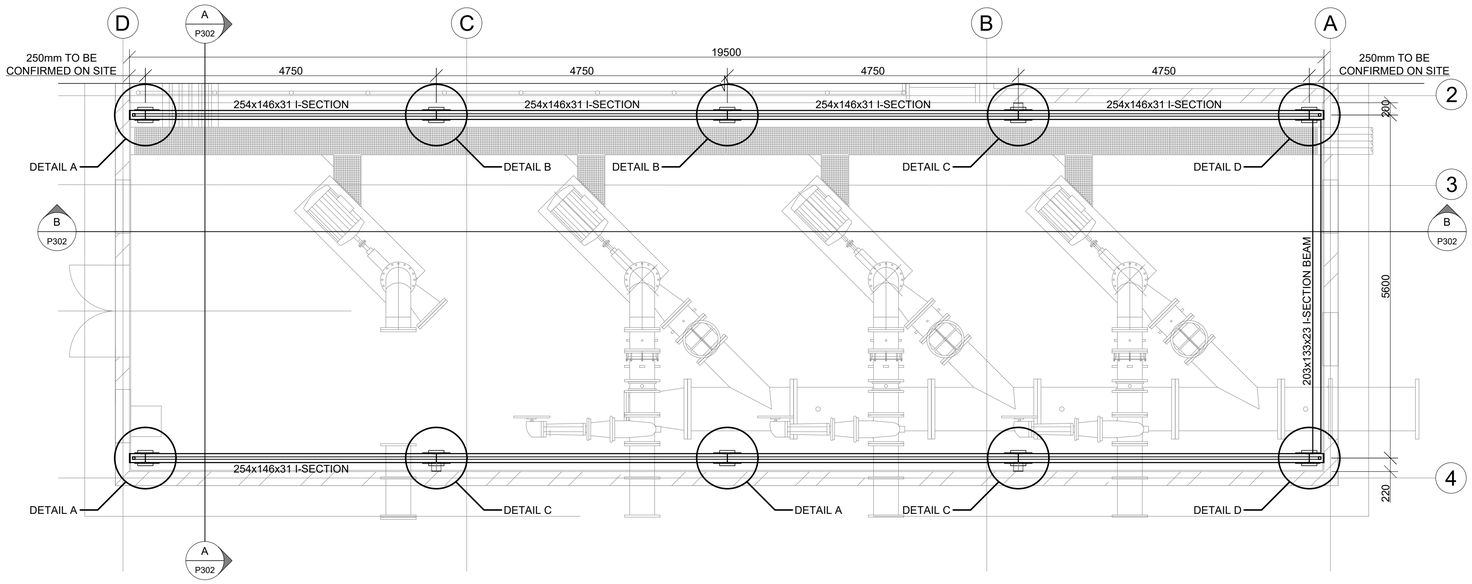
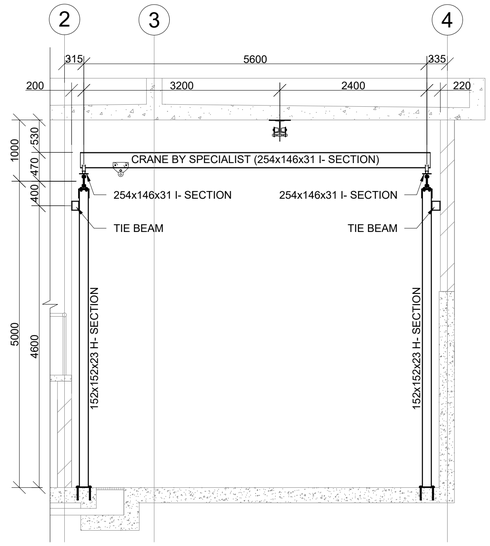


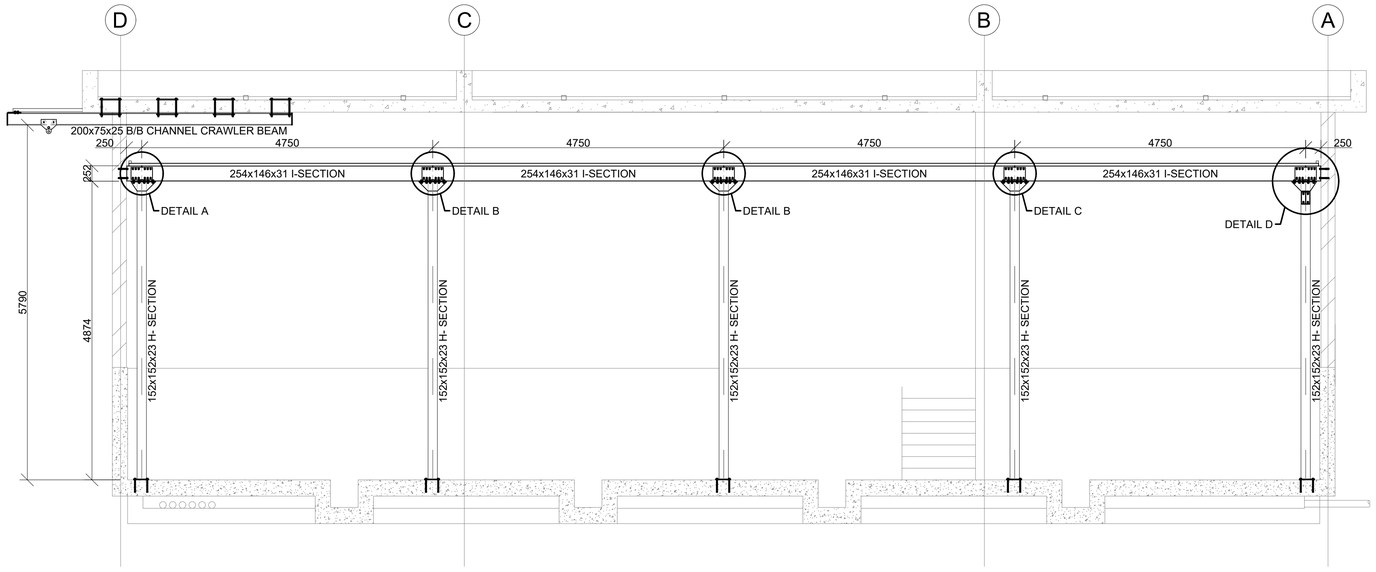
PLAN - PUMP HOUSE

SCALE 1:50



SECTION A-A

SCALE 1:50



PLAN - PUMP HOUSE

SCALE 1:50

FOR TENDER ONLY

1. GENERAL NOTES

1.1 The copyright on this dwg, including the design and details shown hereon, is reserved by the Consulting Engineers.

1.2 No scaling of dimensions from drawings allowed.

1.3 All dimensions and levels are to be verified on site by the contractor before commencing any work.

2. EARTHWORKS NOTES

2.1 All excavations to follow SANS 10400 PART G: Excavations

2.2 Lateral support and shoring of deep excavations to be designed and certified by a professional

2.3 Compacted fill in layers not exceeding 150mm to 97% MOD AASHTO

2.4 Approved insecticide & weedkiller to SABS spec. Code 0124 to sides and under foundations, surface-beds & paving. 10 year underwritten guarantee in favour of client supplied by specialist contractor.

2.5 All foundation excavations to be approved by the Engineer prior to placement of any concrete

2.6 Min. ground bearing pressure - 150kPa

3. CONCRETE NOTES

3.1 All reinforced concrete to be vibrated

3.2 All column corners to receive chamfers

3.3 Half bricks or building debris may not be used as rebar spacers

3.4 Concrete Cube strength at 28 days
3.4.1 Blinding.....15MPa
3.4.2 Bases.....25MPa
3.4.3 Strip Footings.....25MPa
3.4.4 Surface Bed.....25MPa
3.4.5 1st & 2nd floors.....30MPa
3.4.6 Roof Slab.....30MPa
3.4.7 Columns.....35MPa

3.5 Concrete cover to reinforcement measured to stirrups
3.5.1 Base bottom.....75mm
3.5.2 Base sides.....50mm
3.5.3 Columns.....40mm
3.5.4 Beams.....30mm
3.5.5 Suspended slabs.....25mm

3.6 Proposed mix designs to be approved by the engineer prior to placement of any concrete

4. REINFORCEMENT NOTES

4.1 Reinforcement detailing based on SANS 10144

4.2 Minimum lapping of reinforcement: 50 x smaller diameter
All laps to be staggered

4.3 Reinforcement to be securely wired at all intersections

4.4 Reinforcement must be formed around, and as close as allowed to holes, and must not be cut
All holes and voids to be checked and approved by the Engineer prior to the placement of any concrete

4.5 Mild steel (R) to comply with SABS 920 type A - Grade 3
High tensile steel (Y) to comply SABS 920 type C - Grade 1

4.6 Bending dimensions in accordance with sans 282:2011
Dimensions are all outside dimensions
Dimension d must allways be greater than 2 x bar dia.
Radius of all bends are standard unless r is given

4.7 All reinforcement to be checked and approved by the Engineer prior to the placement of any concrete
Any reinforcing not inspected before concrete is poured will not be signed off by VBL

4.8 Reinforcement abbreviations:
BW - Both Ways
EF - Each Face
NF - Near Face
FF - Far Face
EW - Each Way
SF - Side Face
T1 - Highest of top layers
T2 - Second highest of top layers
B1 - Lowest of bottom layers
B2 - Second lowest of bottom layers
ALT - Alternative
ABR - Alternative Bar Reversed

5. STRUCTURAL STEEL NOTES

5.1 All steel to be of grade 300WA

5.2 All bolts to be grade 8.8 unless noted

5.3 All welds to be 6mm fillet welds unless noted

5.4 No site welding shall be permitted without the prior consent of the Engineer

5.5 All holes to be drilled, NO flame cutting allowed

5.6 All steelwork to be painted within 6 hours after cleaning with one coat red oxide

5.7 Engineer to inspect manufactured steel components prior to delivery to site

CONSULTING ENGINEERS:
TRI-M CONSULTING ENGINEERS
WEWORK
155 WEST STREET
SANDTON, JOHANNESBURG

CLIENT POSTAL ADRESS:
JOHANNESBURG WATER
P O BOX 61542
MARSHALLTOWN
2107

DESIGNED	P. S. Botha	05/08/2024
DRAWN	J. Nel	05/08/2024
CHECKED	P. S. BOTHA	05/08/2024
APPROVED BY: P. S. Botha	SIGNATURE	DATE
ECSA REG. No.		
CHECKED		
	SIGNATURE	DATE

Johannesburg Water

PHYSICAL ADDRESSES:
65 NTEMI PILISO STREET
NEWTOWN
JOHANNESBURG

TEL: (011) 688-1400
FAX: (011) 688-1529

Turffontein Corridors of Freedom
Water Upgrade
Foresthill Tower and Pump station

STEEL WORK - PUMP STATION
GANTRY CRANE STRUCTURE LAYOUT

SURVEY INFORMATION		APPROVAL BY JW DEPOT		
PROJECT SURVEYOR:		CHECKED		
		APPROVED BY:		
DATE:			SIGNATURE	DATE
CCTV INFORMATION		APPROVAL BY JW PLANNING		
CCTV COMPANY:		CHECKED		
		APPROVED BY:		
DATE:			SIGNATURE	DATE

SCALE	REV:	AMENDMENTS	DATE:
1: 75	0	TENDER PURPOSES	05/08/2024

JW14402 — CONTRACT NUMBER
ST07 - 0 — DRAWING No. — REV.
A1 — ORIGINAL PAGE SIZE
SHEET 1 OF 1
FILE No.