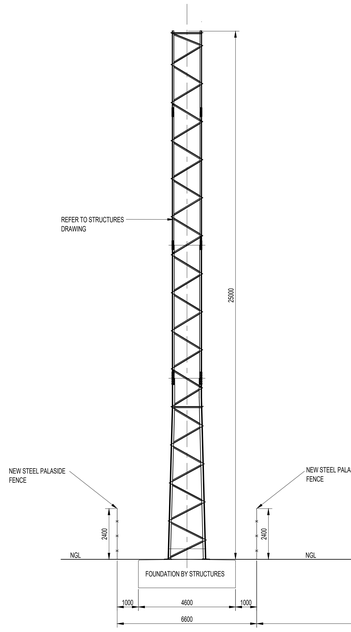
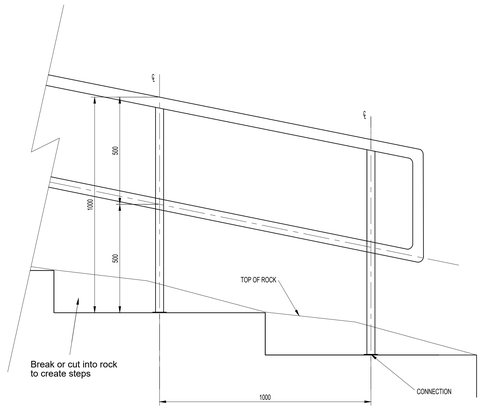
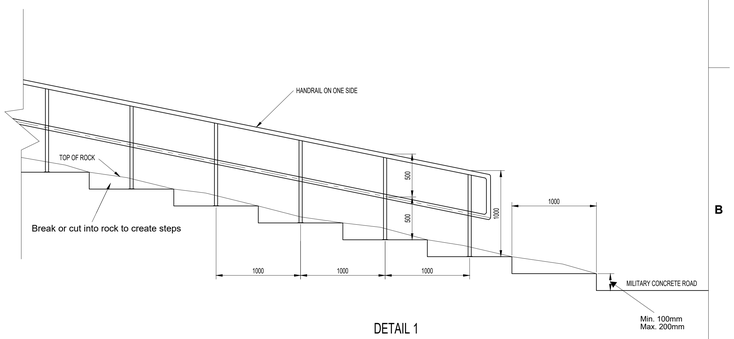




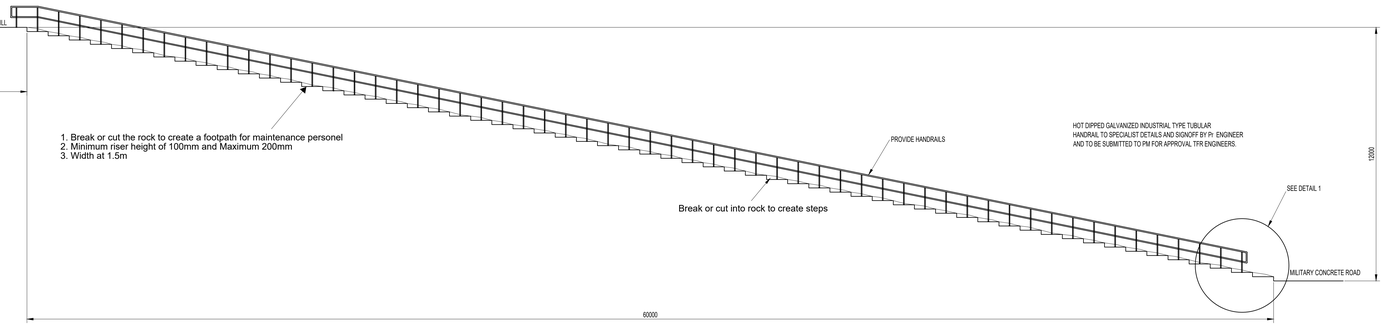
HANDRAIL DETAIL

SCALE 1:10



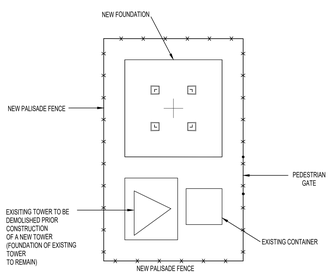
DETAIL 1

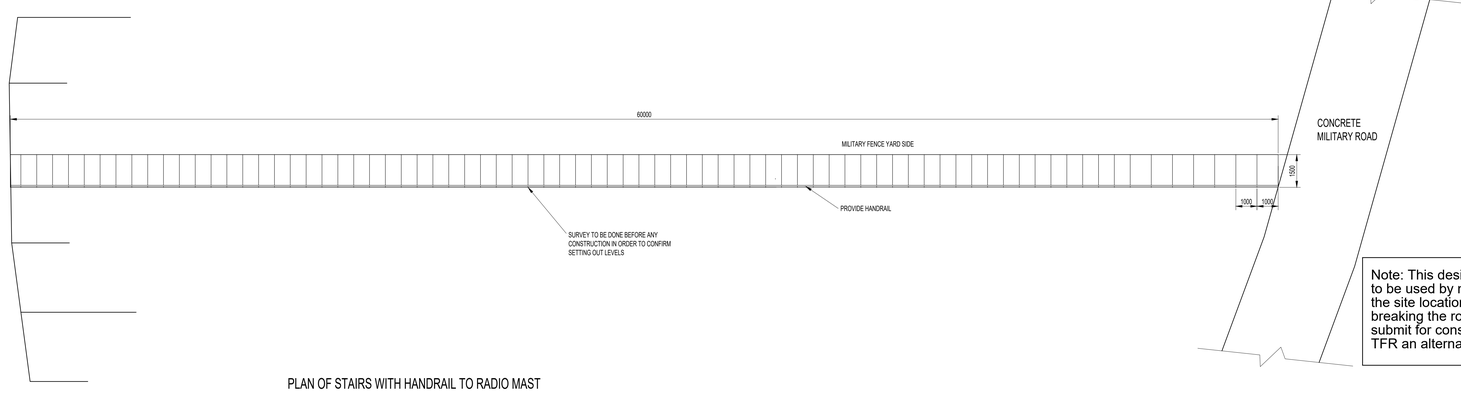
SCALE 1:25



SECTION OF STAIRS WITH HANDRAIL TO RADIO MAST

SCALE 1:100





Note: This design is TFR's proposal for a footpath to be used by maintenance staff to walk uphill to the site location, this proposal involves cutting or breaking the rock; however, the bidders are invited to submit for consideration to TFR an alternative footpath design.

PLAN OF STAIRS WITH HANDRAIL TO RADIO MAST

SCALE 1:100

DRAWING NO.	REFERENCE
.	.

REFERENCE DRAWINGS

NOTES:

1. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND LEVELS ON THE SITE AND NOTIFY THE NEC SUPERVISOR OF ANY VARIATIONS BEFORE CONSTRUCTION.
3. CHARACTERISTIC STRENGTHS :
   MASS CONCRETE FOOTING :
   BLINDING LAYER / CONCRETE INFILL : 20 MPa / 19mm
4. CONCRETE WORK TO BE DONE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS.

4.1 CONCRETE WORK TO TRANSNET SPECIFICATION 5420 AND SANS 1200G.

4.2 CONCRETE PLACING TO BE DONE IN ACCORDANCE WITH SANS 10100 PART 2: CLAUSE 10.2.

5. COVER TO REINFORCEMENT: 50mm
6. FORMWORK AND SURFACE FINISHED FORMED SURFACES:
   a) VISIBLE SURFACE: SMOOTH
   b) UNEXPOSED SURFACE: ROUGH
7. STEELWORK TO BE FABRICATED AND ERECTED IN ACCORDANCE WITH SPECIFICATIONS SANS 2001-CS1 AND SANS 1921-3.
8. HOT-ROLLED STEEL SECTIONS TO BE GRADE S355JR TO EN10025.
9. COLD-FORMED STEELWORK MAY BE COMMERCIAL GRADE, BUT WITH A YIELD STRESS OF AT LEAST 200 MPa.
10. ALL BOLTS TO BE NOT LESS THAN M16 GRADE 8.8 UNLESS OTHERWISE SHOWN.
    A MINIMUM OF TWO BOLTS PER CONNECTION UNLESS OTHERWISE SHOWN.
11. CORROSION PROTECTION OF STEELWORK:

11.1 ALL BOLTS, NUTS AND WASHERS TO BE HOT DIP GALVANIZED TO SANS 121 (ISO 1461), TABLE 3.

11.2 ALL STEELWORK TO BE HOT DIP GALVANIZED TO SANS 121 (ISO 1461)

12. THE CONTRACTOR IS TO SUBMIT TWO COPIES OF SHOP DRAWINGS TO TRANSNET FREIGHT RAIL, ENGINEERING & DESIGN SERVICES, CIVIL & PERWAY OFFICE FOR APPROVAL PRIOR TO FABRICATION. CONTRACTOR TO ISSUE DETAILED METHOD STATEMENT AND DETAILED SEQUENCING DRAWING FOR APPROVAL.
13. ALL WELDS TO BE 6mm FILLET UNLESS OTHERWISE SHOWN.
14. WELDING SHALL CONFORM WITH AWS D1.1-90 SPECIFICATION.
15. BUTT WELDS SHALL DEVELOP THE FULL STRENGTH OF ELEMENT JOINED.
16. WELDING ELECTRODE TO BE E70 XX UNLESS NOTED OTHERWISE.
17. GROUT TO BE A CEMENTITIOUS, NON-SHRINK, SELF-LEVELING GROUT. GROUTING TO BE DONE IMMEDIATELY AFTER ERECTION.

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
B	REVISED STEPS DIMENSIONS	PM	CN	DR	30/08/2024
A	ISSUED FOR TENDER	LM	CN	DR	21/11/2022

REVISIONS

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CONTRACTOR / CONSULTANT				TRANSNET FREIGHT RAIL			
TITLE	NAME	SIGN	DATE	TITLE	NAME	SIGN	DATE
.	.	.	. . .	DRAWN	PM		21 11 22
.	.	.	. . .	CHECKED	CN		21 11 22
.	.	.	. . .	DESIGNED	LM		21 11 22
.	.	.	. . .	CHECKED	CN		21 11 22
.	.	.	. . .	.	.	.	. . .
OPERATING DIVISIONS				.	.	.	. . .
TITLE	NAME	SIGN	DATE	PR.ENG. / PR.TECH./PR. ARCH			
.	.	.	. . .	NAME:	DYKE RAMOKOTJO		DATE
.	.	.	. . .	SIGNATURE:			21 11 22
.	.	.	. . .	REG. NUMBER	20057040		
.	.	.	. . .	SCALE :	AS SHOWN		

Transnet Freight Rail
15 GIRTON ROAD
INYANDA HOUSE 2
PARKTOWN
TEL NO: 0860 690 730
FAX NO: 0866 770815

SCHNELLSKOP HIGH SITE POLOKWANE

SCHNELLSKOP

STAIRS WITH HANDRAIL TO RADIO MAST

DETAILS

PROJECT NUMBER	OD	FBS	DIS	TYPE	DRAWING NO.	SHEET	REV	ID
A0 V R 2 A 1 A A - 4 1 1 1 - C D E - 0 0 0 1 - 0 3 - B								LM