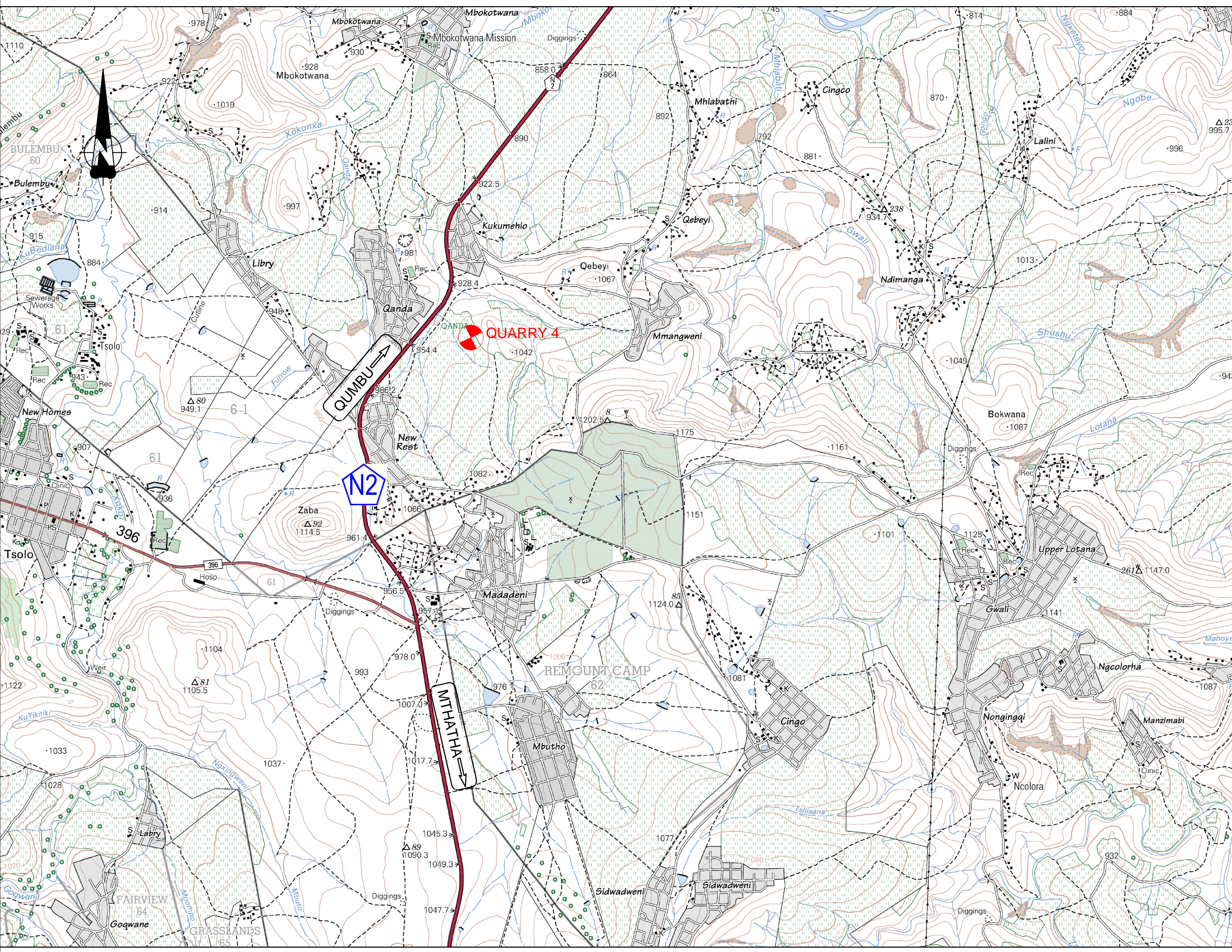


ORIGINAL 1 : 50 000
3128 BD

QUARRY 4 CO-ORDINATES
Y -17234.640 X +3463377.310



LAYOUT PLAN

N.T.S

LEGEND

- POSITION OF BORROWPIT
- MATERIAL DESCRIPTION : Hard rock
- PROPOSED USAGE : Pavement Layers, concrete and surface aggregate
- TOTAL CAPACITY : 313 160m³
- FENCE AREA : 4.55Ha

QUARRY4 - XOKOXNA 4

QUARRY No. 04
OWNER : Chief N. Dingo
ADDRESS : Community/Tribal Land
TEL : 078 629 4020 / 063 006 1162

NOTES:

- ANY INVADER SPECIES WILL BE REMOVED FROM THE SITE BEFORE ANY TOPSOIL IS CLEARED. THE TOPSOIL WILL BE STRIPPED TO A MINIMUM DEPTH OF 0.30m IF AVAILABLE AND STORED AWAY FROM DRAINAGE LINES ALONG THE EDGES OF THE EXCAVATED AREA. STOCKPILES WILL NOT EXCEED 1m IN HEIGHT AND WILL NOT BE COMPACTED FOR MORE THAN SIX MONTHS BEFORE BEING USED FOR REHABILITATION. TOPSOIL WILL BE SPREAD ON THE SURFACE AS SOON AS THE QUARRY EXCAVATION HAS BEEN COMPLETED AND ITS SLOPES HAVE BEEN FINISHED OFF AS REQUIRED.
- THE QUARRY SITE AND EXISTING ACCESS ROAD WILL BE PROPERLY DEMARCATED AND FENCED OFF BEFORE COMMENCEMENT OF MINING OPERATION.
- DUST EMISSIONS WILL BE EFFECTIVELY CONTROLLED BY APPROPRIATE MEASURES SUCH AS SPRAYING WATER AND/OR OTHER DUST CONTROL MEASURES. EXCAVATED MATERIAL STOCKPILES WILL BE ADEQUATELY PROTECTED AGAINST THE WIND, WHERE NECESSARY, THROUGH MEASURES SUCH AS SHADE CLOTH SCREENS OR HESSIAN COVERING. IN THE SHORT TERM, STOCKPILES MAY ALSO BE DAMPENED TO MINIMIZE DUST GENERATION.
- VEHICLE SPEEDS WILL BE RESTRICTED TO PREVENT ACCIDENTS, TO REDUCE DUST AND NOISE POLLUTION AND TO PREVENT ANY POSSIBLE INJURY TO LIVESTOCK.
- ACCESS TO ALL GATES WILL BE CONTROLLED AS AGREED WITH THE LANDOWNER / LESSEE AND IN ACCORDANCE WITH THEIR REQUIREMENTS.
- A TEMPORARY EATING AREA WILL BE PROVIDED WITHIN THE QUARRY AREA TO ENSURE THAT SITE PERSONNEL DO NOT MOVE OFF SITE TO EAT. ABUTMENT FACILITIES WILL BE PROVIDED AND WILL BE LOCATED TO PREVENT THE POLLUTION OF GROUNDWATER. TOILET PAPER WILL BE PROVIDED.
- TEMPORARY WASTE DISPOSAL AREAS WILL BE DEMARCATED AND FENCED IF NECESSARY AND WASTE WILL BE COLLECTED AND STORED IN WEATHERPROOF CONTAINERS (WITH LIDS) WITHIN THIS AREA FOR DISPOSAL AT A LICENSED WASTE DISPOSAL FACILITY. ALL WASTE WILL BE REMOVED FROM SITE BY THE CONTRACTOR. NO BURNING, ON-SITE DUMPING OR BURYING OF WASTE WILL OCCUR.
- MINING OF QUARRY WILL REQUIRE BLASTING AND CRUSHING.
- ALL WORKED AREAS WILL BE LEVELLED WITH SURPLUS OVERBURDEN AS AVAILABLE FROM STOCKPILE. HARD ROCK BATTERS WILL BE TRIMMED OF LOOSE MATERIAL TO MAKE SAFE.
- ALL DISTURBED AREAS NOT MINED WILL BE REINSTATED BY SCARIFYING AND SPREADING AVAILABLE TOPSOIL FROM STOCKPILE AND REVEGETATED AS REQUESTED.
- A REHABILITATION SPECIALIST TO BE CONTACTED PRIOR TO WORK COMMENCING ON SITE TO DETERMINE REQUIREMENTS FOR SEARCH AND RESCUE AND BRUSH CUTTING.

BORROW PIT EXTENT CO-ORDINATES

NAME	Y	X
QUARRY1	17 155.523	3 463 449.817
QUARRY2	17 132.500	3 463 428.509
QUARRY3	17 129.633	3 463 335.201
QUARRY4	17 146.258	3 463 314.468
QUARRY5	17 318.757	3 463 314.094
QUARRY6	17 332.375	3 463 329.788
QUARRY7	17 335.904	3 463 431.216
QUARRY8	17 324.965	3 463 444.240

AREA OF PIT = 2.67 Ha

FENCE CO-ORDINATES

NAME	Y	X
QUARRY04_F01	17 359.266	3 463 462.930
QUARRY04_F02	17 106.610	3 463 432.850
QUARRY04_F03	17 106.785	3 463 474.056
QUARRY04_F04	17 107.088	3 463 268.032
QUARRY04_F05	17 359.096	3 463 287.952
QUARRY04_F06	17 106.920	3 463 309.020

FENCED AREA = 4.55 Ha

NEW ACCESS ROAD CO-ORDINATES

NAME	Y	X
P1	18 558.118	3 463 354.265
P2	18 544.551	3 463 349.420
P4	18 540.262	3 463 407.431
P3	18 534.390	3 463 406.198
P5	18 532.225	3 463 433.367
P6	18 527.812	3 463 426.661
P8	18 508.219	3 463 484.950
P7	18 502.754	3 463 482.453
P9	18 500.484	3 463 512.444
P10	18 494.531	3 463 511.687
P12	18 496.345	3 463 544.990
P11	18 490.401	3 463 544.194
P13	18 472.417	3 463 582.972
P14	18 471.083	3 463 576.652
P15	18 340.678	3 463 619.085
P16	18 345.219	3 463 655.915
P17	17 687.290	3 464 122.119
P18	17 686.038	3 464 116.214
P19	17 602.820	3 464 134.936
P20	17 604.128	3 464 140.829
P21	17 566.600	3 464 109.605
P22	17 560.641	3 464 110.416
P23	17 538.585	3 463 940.252

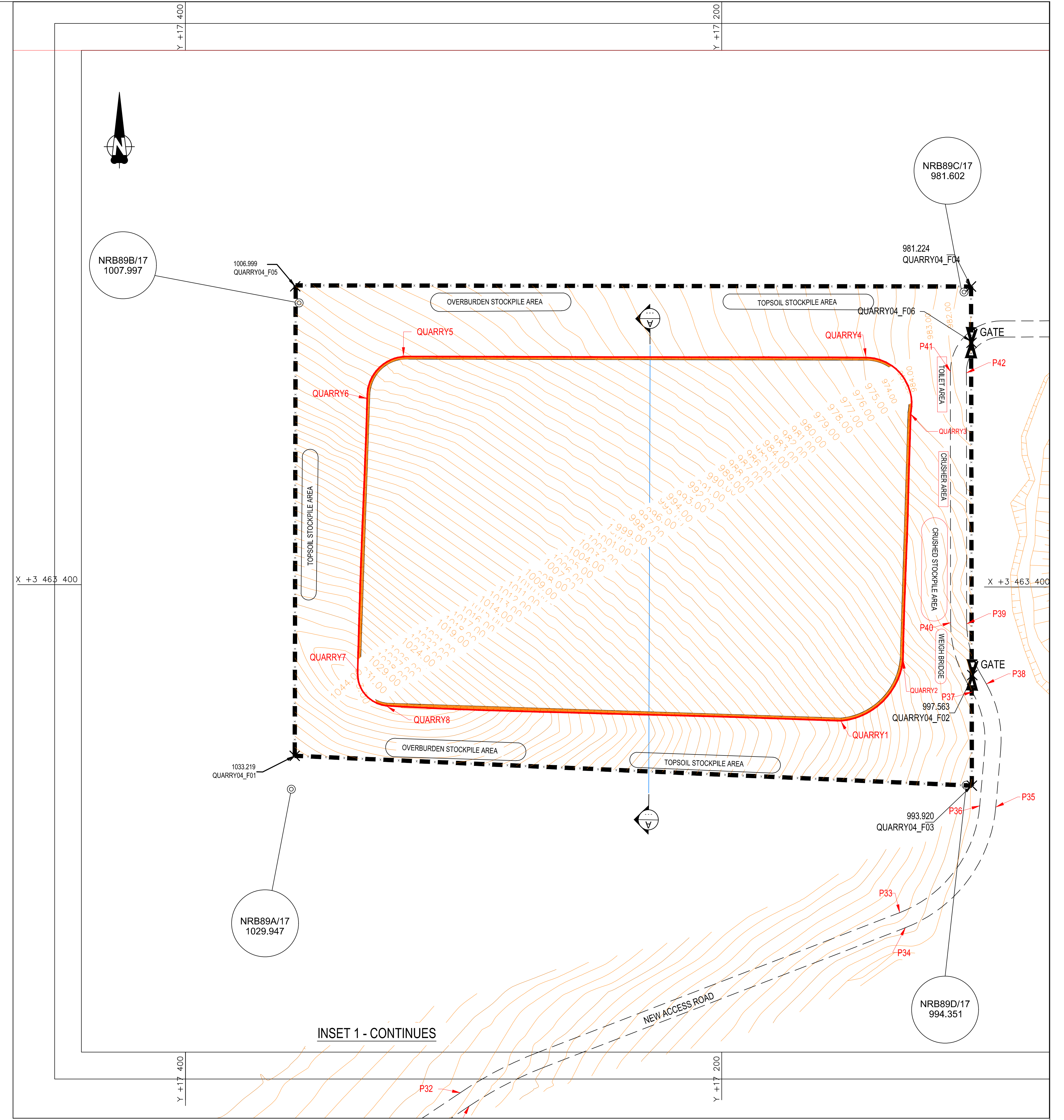
NEW ACCESS ROAD CO-ORDINATES

NAME	Y	X
P24	17 544.535	3 463 939.481
P25	17 540.755	3 463 925.510
P26	17 535.225	3 463 927.897
P27	17 509.416	3 463 747.739
P28	17 515.423	3 463 747.238
P29	17 504.710	3 463 727.120
P30	17 501.364	3 463 732.145
P31	17 294.268	3 463 593.504
P32	17 297.696	3 463 588.518
P33	17 133.760	3 463 521.369
P34	17 131.991	3 463 527.006
P35	17 097.863	3 463 482.015
P36	17 103.858	3 463 481.561
P37	17 106.620	3 463 439.098
P38	17 101.404	3 463 436.133
P39	17 108.728	3 463 413.748
P40	17 114.723	3 463 413.295
P41	17 114.814	3 463 319.768
P42	17 108.819	3 463 320.221

LEGEND

- TEST HOLES
- BORROW PIT BOUNDARY
- EXTENT OF BORROW PIT
- FENCE BOUNDARY
- FENCE LINE
- BATTER SLOPES
- ELECTRICAL POLE
- OVERHEAD LINE
- CADASTRAL BOUNDARIES

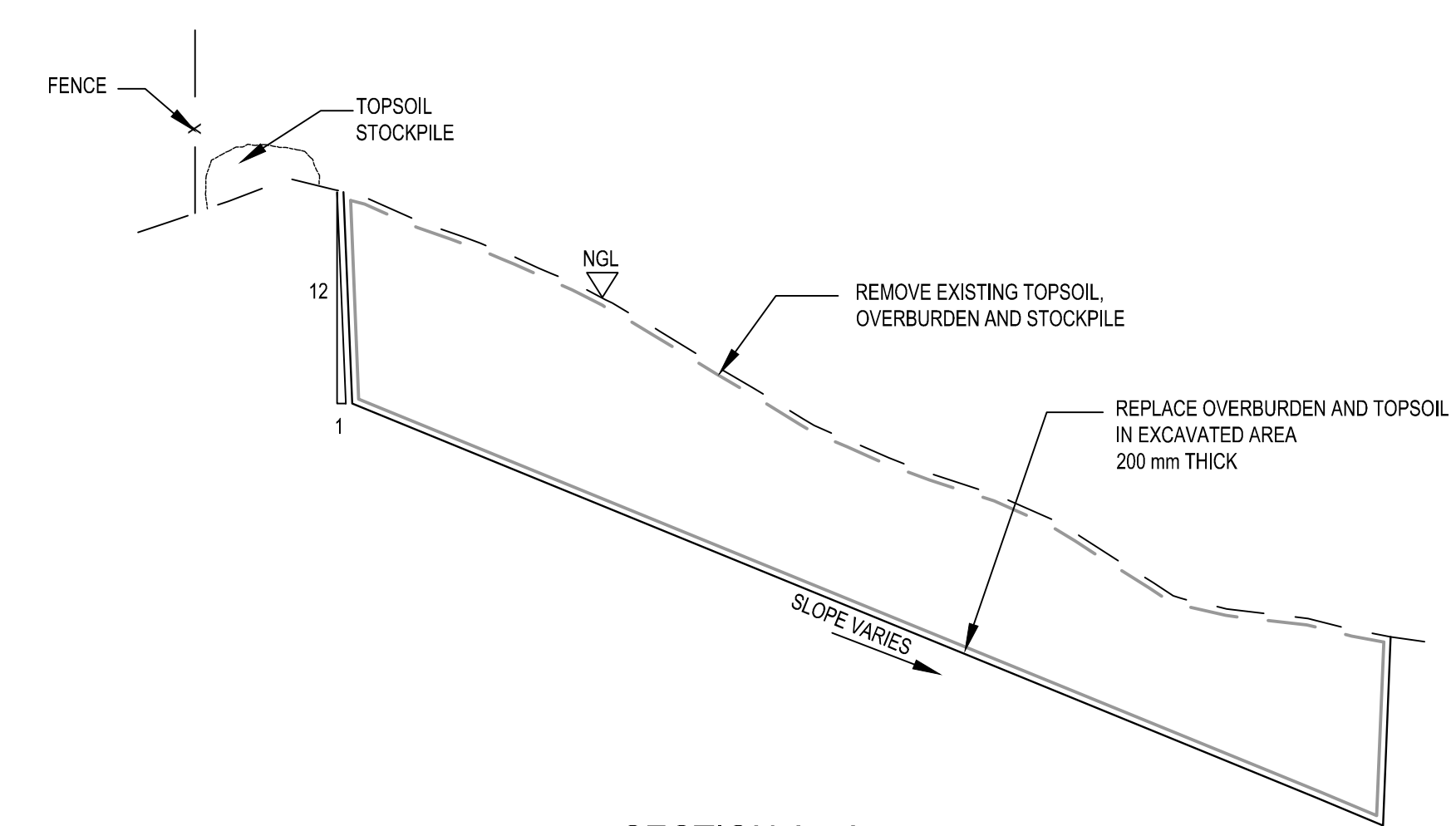
CO-ORDINATES		SYSTEM	WG 29°
POINT	Y _a	X _a	Z
NRB89C/17	17109.69	3463290.11	981.602
NRB89B/17	17357.63	3463294.16	1007.997
NRB89A/17	17360.54	3463475.38	1029.947
NRB89D/17	17108.87	3463473.89	994.351



INSET 1 - CONTINUES

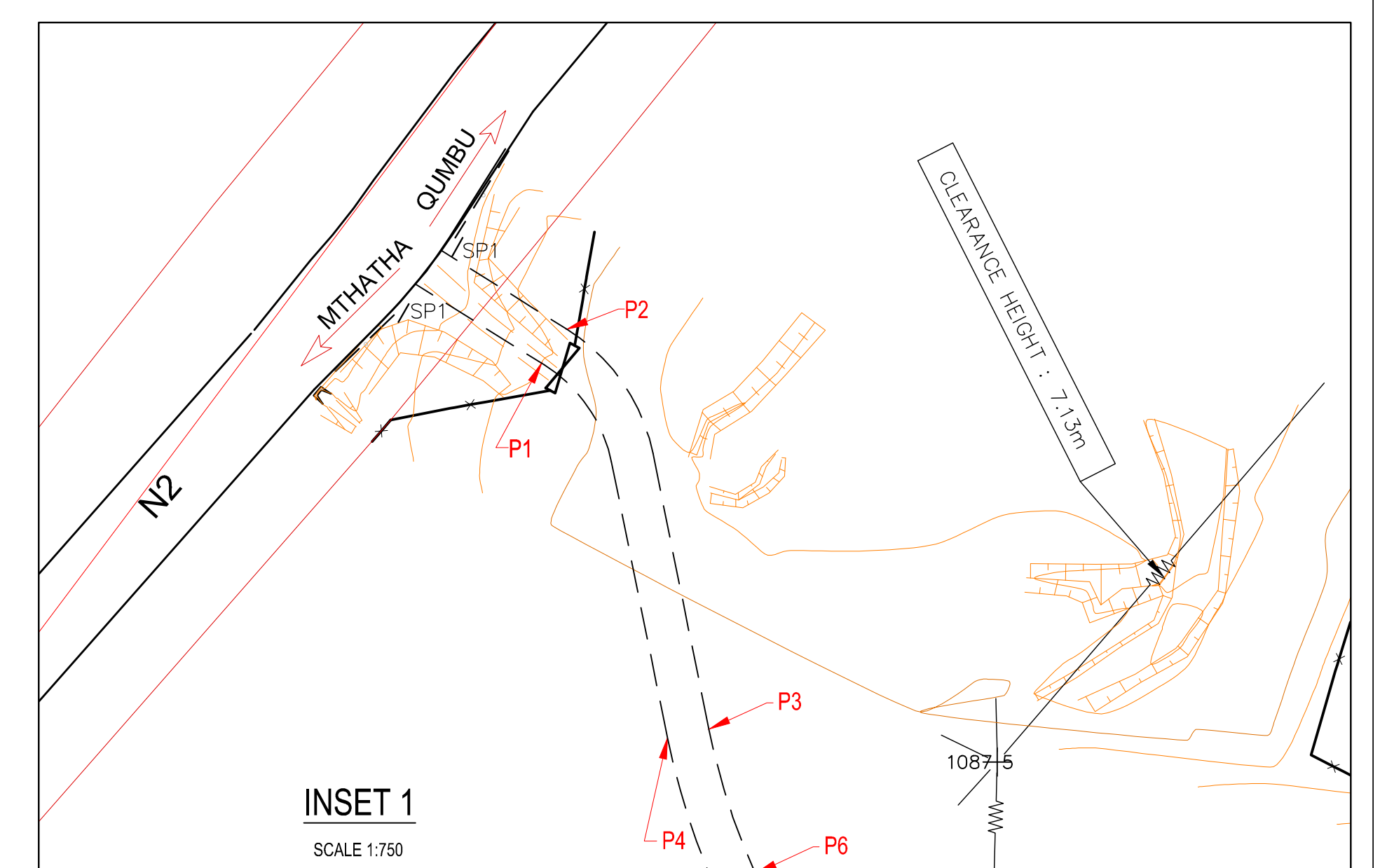
LAYOUT PLAN

SCALE 1:750



SECTION A - A

N.T.S



INSET 1

SCALE 1:750

No.	DATE	REVISION	CONSULT. ENG.
VO	15/02/2017	PRELIMINARY DESIGN	

DESIGNED BY
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PORT ELIZABETH
5201
TEL: (043) 721 - 0186
FAX: (086) 539 - 2880

V3 CONSULTING ENGINEERS
66 NEWTON STREET
NEWTON PARK
PORT ELIZABETH
6045
TEL: (041) 045 - 0430
FAX: (0)87 405 0471

DESIGNED BY		CONSULTANT APPROVAL	
NAME	Prof. Reg. No.	NAME	Prof. Reg. No.
S. BOSKALITSE		S. van WYK	9079132
			05122016

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SANRAL
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

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P.O. Box 24210
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Port Elizabeth
6034
Tel: (041) 398 3200

ACCEPTANCE
THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING

PROJECT DESCRIPTION
REHABILITATION OF NATIONAL ROUTE 2 SECTION 19 BETWEEN NQADU (km 21,7) AND MZEKE RIVER (km 55,4) AND SAFETY IMPROVEMENTS AT DAN'S (km 17,0 TO 19,0)

DESCRIPTION
QUARRY 4 - N2-19 Km 50 RIGHT

PROJECT NUMBER	N.002-190-2013/1F	
DRAWING LOCATION DATA	START	END
ROUTE SECTION	N2 19	N2 19
DRAWING km DISTANCE	QUARRY	
DRAWING TYPE		
BRIDGE/STRUCTURE No.		
CONSULTANT DRAWING No.	FA	25646-1242
SANRAL DOCUMENT #	VER VO	