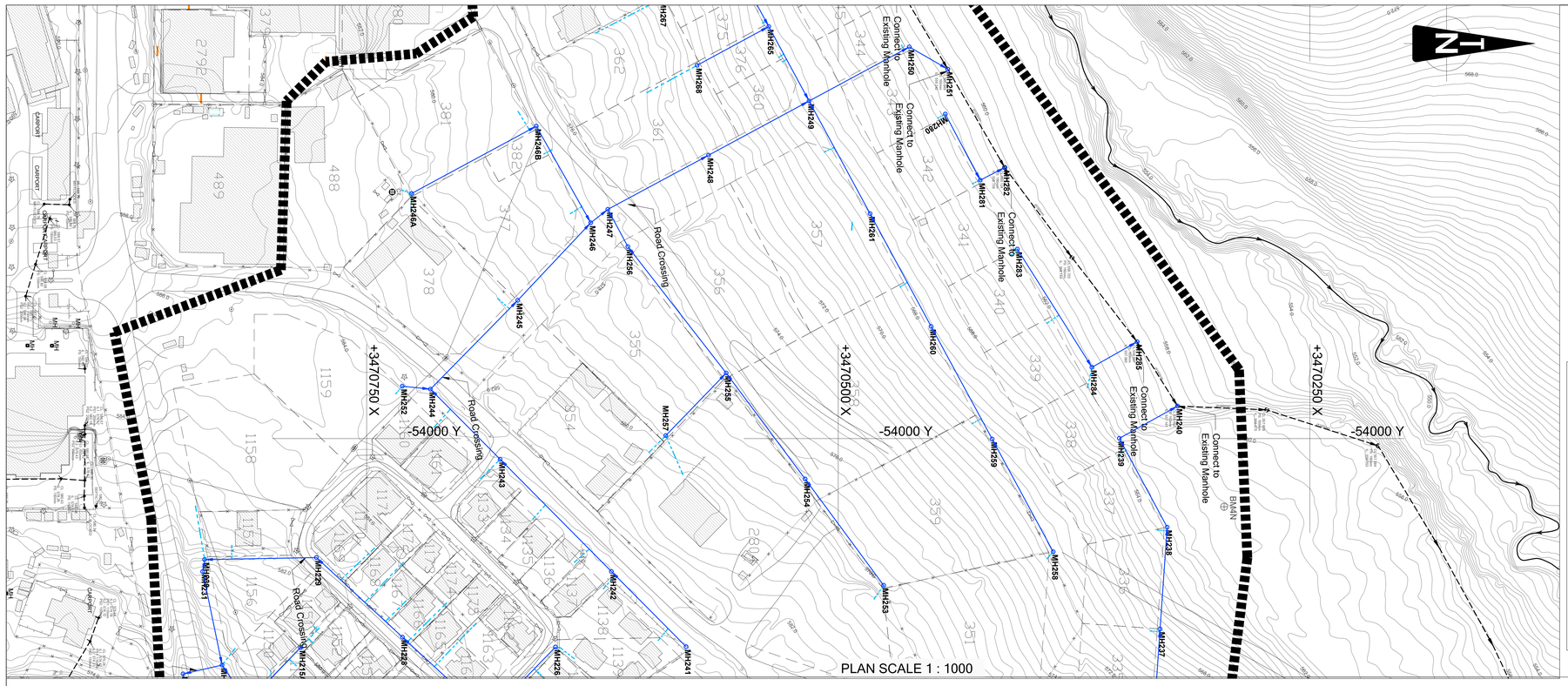


Sewer Schedule

Name	Y-Coord	X-Coord	Cover	Inlet	Depth	Length	Slope	Type	Size
MH241	-54110.36	3470580.66	584.06	582.70	1.36				
						56.20	1.25 %	PVC-U	160 mm
MH242	-54070.46	3470620.24	584.13	582.00	2.13				
						83.73	1.25 %	PVC-U	160 mm
MH243	-54011.03	3470679.22	583.16	580.95	2.21				
						52.47	1.25 %	PVC-U	160 mm
MH244	-53973.78	3470716.17	582.75	580.26	2.48				
						65.96	2.56 %	PVC-U	160 mm
MH245	-53926.73	3470669.95	579.93	578.57	1.36				
						56.51	5.68 %	PVC-U	160 mm
MH246	-53885.57	3470631.22	576.73	575.35	1.38				
						11.53	16.84 %	PVC-U	160 mm
MH247	-53878.48	3470622.13	576.12	573.41	2.72				
						60.58	3.76 %	PVC-U	160 mm
MH248	-53849.77	3470568.78	572.50	571.13	1.37				
						60.59	10.90 %	PVC-U	160 mm
MH249	-53821.01	3470515.46	566.62	564.50	2.12				
						60.35	7.13 %	PVC-U	160 mm
MH250	-53792.35	3470462.35	561.55	560.16	1.39				
						23.54	3.37 %	PVC-U	160 mm
MH251	-53804.11	3470441.96	560.65	559.37	1.28				
						15.03	12.43 %	PVC-U	160 mm
MH252	-53972.25	3470731.13	583.52	582.16	1.36				
						15.03	12.43 %	PVC-U	160 mm
MH244	-53973.78	3470716.17	582.75	580.26	2.48				

BENCH MARKS
(WGS 84 Lo = 29)
16mm PEG IN CONCRETE

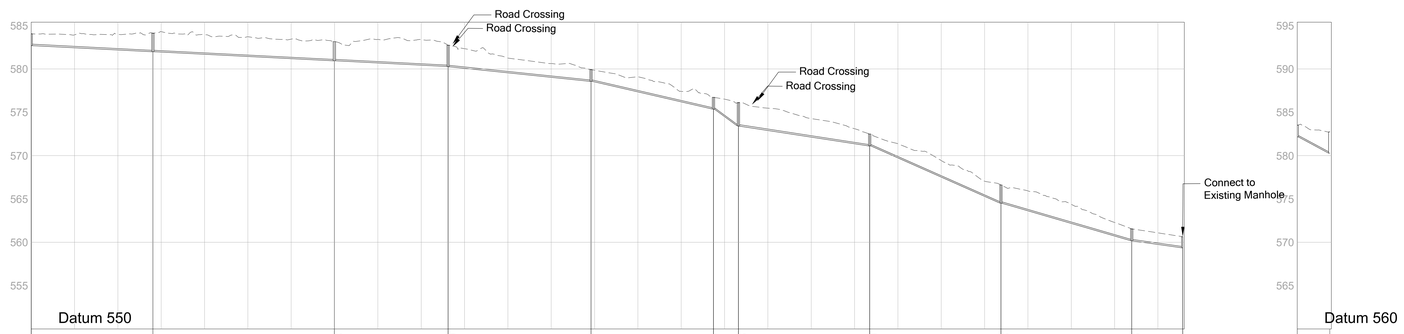
Name	Y Co-ord	X Co-ord	Height
BM1	-53150.18	3470371.65	592.722
BM2	-53259.02	3470743.49	569.596
BM3	-53559.38	3470582.26	563.413
BM4N	-54036.16	3470295.45	561.691
BM5	-54194.64	3469845.94	552.584
BM6N	-54173.62	3469551.30	541.106
BM7	-54420.47	3469534.59	542.937
BM8	-54692.56	3469690.56	534.734
BM9	-54962.68	3469858.32	532.258
BM10	-55124.69	3470097.31	539.505
BM11N	-55278.77	3470209.37	538.395
BM12	-55417.76	3470206.85	532.658
BM13	-55527.25	3470489.30	534.251
BM14	-55198.47	3470857.30	550.636
BM15	-55113.18	3471213.19	533.338
BM16	-54702.83	3471105.37	547.184
BM17N	-54589.10	3470816.37	557.286
BM18N	-54387.38	3471152.73	560.729
BM19	-54188.47	3471552.44	562.323
BM20	-53810.21	3471607.79	567.013
BM21	-53562.80	3471835.51	579.429
BM22	-54888.93	3471535.68	572.038
BM23	-55124.29	3471495.36	580.627
BM24	-55357.29	3471755.64	582.194
BM25N	-55452.25	3471979.79	581.060
BM26	-55422.32	3472343.53	590.483
BM27	-55148.29	3472567.22	597.988
BM28N	-55493.80	3472732.48	602.445
BM29	-55670.40	3472398.99	600.959
BM30	-56074.52	3472314.47	610.769

GENERAL NOTES:

1. All Work To Be Done According To The Project Specifications.
2. All Levels And Dimensions To Be Checked On The Site Prior To Commencement Of Any Construction.
3. All Setting Out Coordinates Are On The WGS84, LO29 System. Coordinates To Be Checked Prior To Any Construction.
4. All Existing Services To Be Exposed To Establish Exact Levels Before Construction May Commence.
5. The Contractor Must Liaise With Responsible Service Providers With Respect To Affected Services And Protection Thereof.
6. The Contractor Must Liaise With The Roads & Stormwater Division With Respect To Reinstatement Of Road Surfacing & Sidewalks.
7. Where Applicable Trenchfill To Extend 1m On Either Side Of The Road Edge.
8. All Conditions As Specified In The Environmental Management Plan, Must Be Complied With.
9. Maximum Deflection Angle At Couplings To Comply With Minimum Recommended By Pipe Manufacturer.
10. All Future Sewer Reticulation Pipelines to be 160mmØ. Connections Into Manholes To Be As Directed On Site By The Engineer.
11. Existing Sewer Reticulation To Be Confirmed On Site. Connections Into Manholes To Be As Directed On Site By The Engineer.
12. Existing Septic and Conservancy Tanks to be confirmed on site and house connections to be adjusted as directed by the Engineer
13. Where two invert levels are given, they refer to invert levels at the centre of the manhole.

LEGEND

- LUSIKISIKI HILBROW SITE LIMITS
- PROPOSED Ø110mm ERF CONNECTING SEWERS Each Connection to be fixed on site
- PROPOSED Ø160mm SEWER RETICULATION
- EXISTING INTERCEPTOR SEWERS



SEWER PIPE
NGL

SCALE	
VERTICAL	1 : 250
HORIZONTAL	1 : 1000

Chainage	0.000		56.200		139.928		192.400		258.357		314.867	326.395		386.980		447.566		507.915		531.451	0.000		15.034
Ground Level	584.056		584.127		583.161		582.746		579.930		576.731	576.124		572.499		566.616		561.582		560.649	583.519		582.746
Manhole Name	MH241		MH242		MH243		MH244		MH245		MH246	MH247		MH248		MH249		MH250		MH251	MH252		MH244
Invert Level	582.699		581.997		580.950		580.264 580.264		578.573		575.384 575.354	573.438 573.408		571.131		564.530 564.500		560.195 560.165		559.372 559.342	582.162		580.264 580.264
Link Type / Link Size	PVC-U 160 mm		PVC-U 160 mm		PVC-U 160 mm		PVC-U 160 mm		PVC-U 160 mm		PVC-U 160 mm	PVC-U 160 mm		PVC-U 160 mm		PVC-U 160 mm		PVC-U 160 mm			PVC-U 160 mm		
Length / Slope	56.200 m 1.249 %		83.728 m 1.250 %		52.472 m 1.250 %		65.957 m 2.564 %		56.510 m 5.683 %		11.528 m 16.844 %	60.585 m 3.758 %		60.586 m 10.896 %		60.349 m 7.134 %		23.537 m 3.369 %			15.034 m 12.425 %		
Flow	0.043 l/s		0.205 l/s		0.270 l/s		0.357 l/s		0.357 l/s		0.562 l/s	0.779 l/s		0.779 l/s		1.417 l/s		1.417 l/s			0.043 l/s		
Capacity	14.496 l/s		14.504 l/s		14.502 l/s		20.768 l/s		30.921 l/s		53.232 l/s	27.889 l/s		41.069 l/s		34.642 l/s		25.386 l/s			45.720 l/s		
Velocity/Full-bore Velocity	0.297 m/s 1.242 m/s		0.387 m/s 1.243 m/s		0.418 m/s 1.243 m/s		0.587 m/s 1.780 m/s		0.772 m/s 2.650 m/s		1.287 m/s 4.562 m/s	0.879 m/s 2.390 m/s		1.191 m/s 3.519 m/s		1.227 m/s 2.969 m/s		0.986 m/s 2.175 m/s			0.938 m/s 3.918 m/s		
Depth	1.357		2.130		2.211		2.482		1.357		1.377	2.716		1.367		2.116		1.367		1.307	1.357		2.482

MH241 to MH251

MH252 to MH244

FOR TENDER PURPOSES

REV	DATE	BY	DESCRIPTION	CHECKED	APPR'D
A	MAY 2020	LA	FIRST ISSUE FOR TENDER	NL	IF

CLIENT: O.R. TAMBO DISTRICT MUNICIPALITY

SCALE:	AS SHOWN
DRAWN:	N. LELALA
DISCIPLINE:	CIVIL
DATE:	MAY 2020

DESIGNED BY: NAME: N. LELALA SIGNATURE:
CHECKED BY: NAME: I. FIELD SIGNATURE:

HATCH — IN JOINT VENTURE WITH — Tshiki Consulting Engineers (CIVIL, STRUCTURAL AND PROJECT MANAGEMENT)

PROJECT: LUSIKISIKI SEWER RETICULATION

TITLE: PHASE 3A : HILBROW
PLAN AND LONSECTIONS
SHEET 3 OF 6

SHEET	CONTRACT No.	DRAWING No.	REVISION
A0	20209	20209/03A/00/500/202	A