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***Appendix 8: COMMUNICATIONS REGARDING  
CAPACITY OF THE ULUNDI WASTE WATER  
TREATMENT WORKS***

Zululand

DISTRICT MUNICIPALITY  
UMKHANDLU WESIFUNDA



Private Bag X76  
Ulundi  
3838

Tel/Ucingo: 035 874 5500  
Fax/feksi: 035 874 5589  
035 874 5591

Ref: 13/1/12/47

Enq: B. Mnguni

Email: [bmnguni@zululand.org.za](mailto:bmnguni@zululand.org.za)

Date: 13/12/2017

The Manager  
Afri Infra Group (Pty) Ltd  
161 Wes Street  
Vrueheid  
South Africa  
3100

Att: Mr. K de Bruin

**Re: Zululand District Municipality Contract No: ZDM 1050/2012 – P700 Nodal Development Phase 1, Confirmation of capacity for disposal of sludge.**

Dear Sir,

With reference to the Environmental Basic Assessment and the WULA application requirements on the above project and more specifically your letter dated 21<sup>st</sup> June 2017 (your reference 2008/02/05.L86) refers.

This letter serves to confirm Zululand District Municipality is aware of the P700 Nodal Development point and future planned phases, of which will form part of the Water and Sanitation Services Master Plan.

As such the Planning Department in conjunction with the Technical Services Department under Operational & Maintenance Section can confirm capacity availability at the Ulundi Waste Water Treatment works for the treatment of sludge that may be generated by the 27 property stands as part of phase one (1) of the development which require a capacity of wet sludge of approximately **0.25kg/m<sup>3</sup> or 125kg** to be treated per day.

The following conditions are required as part of the this conditional application,

- Construction of sludge drying beds or
- Provision for a 15m<sup>3</sup> honey sucker as part of the project to be made, hence there is adequate capacity in Ulundi WWTW where sludge can be stockpiled.

As part of the above confirmation and approval, it is of imperative that the Planning Department in conjunction with the Technical Services Department under Operational & Maintenance Department be consulted during the implementation of establishment of Waste Water Treatment Package Plant to ensure compliance to the Departments requirements and for planning purposes.

Your office is to liaison with the Deputy HOD Planning, which in this case is Mr Xolani Buthelezi, shall be contacted, provided with the approved WULA and the date upon which work will commence prior to any work undertaken and be updated, consulted during the project implementation. Mr Xolani Buthelezi can be contacted at 035 874 5500 or via email on [xbuthelezi@zululand.org.za](mailto:xbuthelezi@zululand.org.za).

Should any further sewage capacity be required either as part of Phase one (1) or any subsequent phases that the Deputy HOD Planning or the HOD Planning on 035 874 5500 or via email on [bmnguni@zululand.org.za](mailto:bmnguni@zululand.org.za) be consulted prior to further implementation.

We trust that you will find the above in order

Regards,

**B. MNGUNI**  
**HOD: PLANNING DEPARTMENT**  
**ZULULAND DISTRICT MUNICIPALITY**

**HEAD OFFICE**

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**AFRI-INFRA  
GROUP (Pty) Ltd**

CONSULTING ENGINEERS AND PROJECT MANAGERS

KWAZULU INFRA (PTY) LTD - VRYHEID  
LIMPOPO INFRA (PTY) LTD - MOKOPANE  
MPUMALANGA INFRA (PTY) LTD - BETHAL  
MPUMALANGA INFRA (PTY) LTD - MIDDELBURG

**P700 WATER DEMAND CALCULATION SHEET**

**WATER CONSUMING FACTORS**

Exiting/Future Storage Reservoir Elevation 350m  
New Bulk Connection Elevation 282m  
Static Height 68m

**Zoning - General (Based on Red Book)**

	unit/day	Area m <sup>2</sup>	% Developed Area	Consump kl	No of units	Total l/s	Stands no.
<b>Industrial Phase 1</b>							
Offices and Shops	kl/100m <sup>2</sup> developed	3347	50%	0.4	1	0.077477	7
Offices and Shops	kl/100m <sup>2</sup> developed	3350	50%	0.4	1	0.077546	10
Offices and Shops	kl/100m <sup>2</sup> developed	3371	50%	0.4	1	0.078032	11
Offices and Shops	kl/100m <sup>2</sup> developed	3379	50%	0.4	1	0.078218	12
Offices and Shops	kl/100m <sup>2</sup> developed	3330	50%	0.4	1	0.077083	13
Offices and Shops	kl/100m <sup>2</sup> developed	3700	50%	0.4	1	0.085648	15
Offices and Shops	kl/100m <sup>2</sup> developed	3651	50%	0.4	1	0.084514	16
Offices and Shops	kl/100m <sup>2</sup> developed	3602	50%	0.4	1	0.083380	17
Offices and Shops	kl/100m <sup>2</sup> developed	3552	50%	0.4	1	0.082222	18
Offices and Shops	kl/100m <sup>2</sup> developed	3396	50%	0.4	1	0.078611	19
Offices and Shops	kl/100m <sup>2</sup> developed	9111	50%	0.4	1	0.210903	21
Offices and Shops	kl/100m <sup>2</sup> developed	6725	20%	0.4	1	0.062269	22
Offices and Shops	kl/100m <sup>2</sup> developed	5245	40%	0.4	1	0.097130	23
Offices and Shops	kl/100m <sup>2</sup> developed	3966	65%	0.4	1	0.119347	24
Offices and Shops	kl/100m <sup>2</sup> developed	3771	50%	0.4	1	0.087292	25
Offices and Shops	kl/100m <sup>2</sup> developed	4721	50%	0.4	1	0.109282	26
Government & Municipal	kl/100m <sup>2</sup> developed	6165	65%	0.4	1	0.185521	1
Government & Municipal	kl/100m <sup>2</sup> developed	3721	65%	0.4	1	0.111975	2
Government & Municipal	kl/100m <sup>2</sup> developed	3972	65%	0.4	1	0.119528	5
Government & Municipal	kl/100m <sup>2</sup> developed	4674	65%	0.4	1	0.140653	6
Government & Municipal	kl/100m <sup>2</sup> developed	3271	65%	0.4	1	0.098433	8
Government & Municipal	kl/100m <sup>2</sup> developed	5037	65%	0.4	1	0.151576	14
Clinic	kl/100m <sup>2</sup> developed	5184	65%	0.5	1	0.195000	3
Clinic		5747	65%	0.5	1	0.216178	4
Public open spaces	ha of erf area	4300	10%	1.5	1	0.074653	20
				<b>Total (l/s)</b>		<b>2.782469</b>	
				<b>Total (kl/day)</b>		<b>240.405350</b>	
Developed parks	<2ha	ha of erf area			15	0.000000	
	>2ha<10ha	ha of erf area			12.5	0.000000	
	>10ha	ha of erf area			10	0.000000	
School, chreche	<2ha	ha of erf area			15	0.000000	
	>2ha<10ha	ha of erf area	26856	15%	12.5	0.388542	337
	>2ha<10ha	ha of erf area	51382	15%	12.5	0.743374	28
	>10ha	ha of erf area			10	0.000000	
Municipal, government development	kl/100m <sup>2</sup> developed				0.4	0.000000	
Sports ground	<2ha	ha of erf area			15	0.000000	
	>2ha<10ha	ha of erf area	33840	10%	12.5	0.489583	27
	>10ha	ha of erf area			10	0.000000	
				<b>Total (l/s)</b>		<b>1.621499</b>	
				<b>Total (kl/day)</b>		<b>140.097500</b>	