0	P – a	×
File Me	sage Help PDFsam Enhanced 6 Creator	
Delete	$\sim \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	• •
Save 4	Dundo 🕐 Redo ↑↑ Previous Item 👃 Next Item 🔵 Edit Message 🗢	
FW: Bo	schendal Founders Estates: Capacity at solid waste disposal site	
DC	Rudolph Schoonwinkel <rudolph@lyners.co.za> \bigcirc Reply \bigotimes Reply All \rightarrow Forward \bigcirc</rudolph@lyners.co.za>	••
KS O	To S Claudette@chand.co.za Thu 2022/04/21 1: Cc ○ William George; ○ Donia Kamstra	5:34
i You rep	lied to this message on 2022/04/21 16:04.	5.01
8		
From: Rud Sent: Thur	lph Schoonwinkel < <u>rudolph@lyners.co.za</u> > day, 21 April 2022 08:41	
To: Claytor Cc: Donia k	Hendricks < <u>Clayton.Hendricks@stellenbosch.gov.za</u> > amstra < <u>Donia@profica.co.za></u> William George < <u>specialoroiect1@boschendal.co.za></u>	
Subject: [E	(] Boschendal Founders Estates: Capacity at solid waste disposal site	
Good morr	ing Clayton,	
We are inv while CL Tr per month	olved in the development of 18 estates on the farm Boschendal. The municipality currently removes the landfill waste collected from the residents ading is removing recyclables and landfill waste from the rest of its operations. It is expected that approximately 9m3 of solid waste will be generate on the 18 estates.	ed
I was advis	ed by Jan Palm of JPCE that the municipality is currently upgrading the existing landfill site and that all waste is transported to Vissershok.	
Can you pl	ase advise if capacity is available to accommodate the 18 estates, and if not, by when?	
Regards		- 11
Rudolph	Schoonwinkel Head of Dept: Roads T +27(0)21 914 0300 082 807 2826	
E	📕 🙆 🖸 🕅 🔞 👘 👘 🐂 🔕 🔨 🔍 🔩 🔩 🛥 🖫 👬 ENG 10:21	
0	р — а	×
۲ile Me	Sage Help PDFsam Enhanced 6 Creator	×
File Mes	Sage Help PDFsam Enhanced 6 Creator $\sim ext{ □ } ext{ □ } ext{ √ Reply } ext{ Reply All } o ext{ Forward } ext{ Mark Unread } ext{ □ } ext{ □ } ext{ □ } ext{ □ } ext{ Find } ext{ 3} ext{ √ } ext{ Q Zoom } ext{ ···}$	× • •
File Mes Delete Save	sage Help PDFsam Enhanced 6 Creator \sim \boxdot \frown Reply \frown Reply All \rightarrow Forward \fbox \blacksquare <t< td=""><td>× </td></t<>	×
File Mee	sage Help PDFsam Enhanced 6 Creator \checkmark \boxdot \bigcirc \bigcirc \bigcirc \bigcirc \checkmark \boxdot \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \checkmark \boxdot \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \checkmark \bigcirc	× • •
File Mee	Sage Help PDFsam Enhanced 6 Creator $\sim \Box \Box \checkmark \land Reply \land Reply All \rightarrow Forward \@ Mark Unread \\\\ \Sigma Prive \overline \overline Find \\\ \Sigma \overline \overline$	×
File Mee	sage Help PDFsam Enhanced 6 Creator 	× • •
File Mee Delete	sage Help PDFsam Enhanced 6 Creator 	× • •
File Mee Delete Save C FW: BO RS O You rep You rep You rep Trom: Clave	sage Help PDFsam Enhanced 6 Creator $\sim \square \square$	× • •
File Mee Delete Save FW: BO RS O You rep You rep You rep You rep Trom: Clay Sent: Thur	sage Help PDFsam Enhanced 6 Creator $\sim \square \square_{1} \land \square_{2} \square \square_{2} \square \square_{2} \land \square_{2} \square \square_{2} \land \square_{2} \land \square_{2} \land \square_{$	× • •
File Mer Delete Save C FW: BO RS O You rep From: Clay Sent: Thur: To: Rudolp Cc: Donia H	sage Help PDFsam Enhanced 6 Creator	× • • 5:34
File Mee Delete Save FW: BO RS To rom: Clay Sent: Thur: To: Rudola P Ce: Donia R Subject: R	sage Help PDFsam Enhanced 6 Creator · · ·	× ••••••••••••••••••••••••••••••••••••
File Mer File Mer Delete Save C FW: BO RS O vou rep FV: 101 From: Clay Sent: Thur To: Rudolp Cc: Donia H Subject: RE Good day I	sage Help PDFsam Enhanced 6 Creator	× • •
File Mee File Mee Save FW: BO FW: BO RS O Your ere From: Clay Sent: Thur To: Rudolp C:: Donia H Subject: Rd Good day I Your email	sage Help PDFsam Enhanced 6 Creator	× ••••••••••••••••••••••••••••••••••••
File Mee File Mee Save G FW: BO RS i Your rep Your clay Sent: Thur: To: Rudolp Cc: Donia H Subject: Rif Good day I Your email My colleage	sage Help PDFsam Enhanced 6 Creator · · ·	× ••••••••••••••••••••••••••••••••••••
File Mee File Mee Save C FW: BO RS O You rep From: Clay Sent: Thur To: Rudolp Ce: Donia H Subject: RU Good day I Your email My colleage @Tyrone K	sage Help PDFsam Enhanced 6 Creator · · ·	× ••••••••••••••••••••••••••••••••••••
File Mee File Mee Save FW: BO FW: BO FV: FO FW: BO FV: FO FV: FV FV: FO FV: FV FV: FV FV FV FV FV FV FV FV FV FV	sage Help PDFsam Enhanced 6 Creator · · ·	×
File Mee File Mee Save C FW: BC FW: BC FV: FV: BC FV: FV: FV FV: FV FV: FV FV: FV FV: FV FV: FV FV: FV FV: FV FV FV: FV FV FV FV FV FV FV FV FV FV	sage Help PDFsam Enhanced 6 Creator	× ••••••••••••••••••••••••••••••••••••
	sage Help PDFsam Enhanced 6 Creator · □ □··· □ □···· □ □······ □ □····································	× ••••••••••••••••••••••••••••••••••••
Image: Save Image: Save	sage Help PDFsam Enhanced 6 Creator · □ □· · · · · · · · · · · · ·	× ••••••••••••••••••••••••••••••••••••

	×
File Message Help PDFsam Enhanced 6 Creator	
$ \widehat{\blacksquare} \text{Delete} \checkmark \textcircled{P} \rule{P} \rule{P}$	~
🔚 Save 🥠 Undo 🕐 Redo ↑ Previous Item 👃 Next Item 🍥 Edit Message 🤝	
FW: Boschendal Founders Estates: Capacity at solid waste disposal site Rudolph Schoonwinkel <rudolph@lyners.co.za> To Claudette@chand.co.za Cc William George; Onia Kamstra Ivoureptied to this message on 2022/04/21 16:04. Freilance of the contents of this information is strictly prohibited and may be unlawful. Powered by 1000</rudolph@lyners.co.za>	4
From: Tyrone King <tyrone.king@stellenbosch.gov.za> Sent: Thursday, 21 April 2022 12:37 To: Clayton Hendricks <<u>Clayton.Hendricks@stellenbosch.gov.za</u>>; Rudolph Schoonwinkel <<u>rudolph@lyners.co.za</u>> Cc: Donia Kamstra <<u>Donia@profica.co.za</u>>; William George <<u>specialproject1@boschendal.co.za</u>> Subject: RE: Boschendal Founders Estates: Capacity at solid waste disposal site</tyrone.king@stellenbosch.gov.za>	
Hi Clayton	
Can you confirm if the solid waste dept has the capacity to transport the 9m3 to Vissershok until capacity becomes available at Stellenbosch again?	
Regards Tyrone King Pr Tech Eng Manager: Development Infrastructure Services T:+27 21 808 8214 F:+27 21 883 9874 1 st Floor, Ecclesia Building, 71 Plein Street, Stellenbosch, 7600	
📲 🗹 🧏 🄕 🖸 🔊 🕐 🚾 🕅 📴 👘 👼 🛞 🔨 🔨 🆓 🌚 😭 🖓 👘 🕫	Ę
ه – ۹	
File Message Help PDFsam Enhanced 6 Creator	×
File Message Help PDFsam Enhanced 6 Creator Im Delete \Box	×
File Message Help PDFsam Enhanced 6 Creator Image: Delete \sim	×
File Message Help PDFsam Enhanced 6 Creator	×
File Message Help PDFsam Enhanced 6 Creator	× •
File Message Help PDFsam Enhanced 6 Creator	× • • • • • • • • • • • • • • • • • • •
File Message Help PDFsam Enhanced 6 Creator Delete Image: The transmission of the state	×
File Message Help PDFsam Enhanced 6 Creator	×

Caring Innovative Focussed





Consulting Engineers & Project Managers Postal Address : P O Box 4901 TYGERVALLEY 7536

Street Address : Office 2, Ground Floor, Riverside Place

Tel: +27 (0) 21 914 0300 Fax: +27 (0) 21 914 0437

E-mail: <u>bellville@lyners.co.za</u> Website: <u>www.lyners.co.za</u>

South Gate Entrance, Carl Cronjé Drive Tyger Valley Waterfront BELLVILLE 7530

Our reference : E19111/COR/HB/hb/02

Your reference :

29 April 2022

Boschendal Estate (Pty) Ltd P.O. Box 25 GROOT DRAKENSTEIN 7680

Attention : Mr W George

Dear Sir

ELECTRICAL ENGINEERING SERVICES FOR BOSCHENDAL FOUNDER'S ESTATES : CONFIRMATION OF SUFFICIENT ELECTRICITY SUPPLY CAPACITY

Lyners herewith confirm that sufficient bulk electrical capacity is available to support the proposed Founders Estates development on the Farm Boschendal situated between Stellenbosch and Franschhoek close to the townships of Lanquedoc, Johannesdal and Pniel.

Our capacity assessment was based on the following criteria.

1. Existing Supply

Boschendal Farm has multiple electricity supply points from both Eskom and Stellenbosch Municipality.

The area of the Farm west of the R310 (Helshoogte Road) is supplied by Stellenbosch Municipality via two 11kV bulk supply points, Meter No. 10400029 (Goodhope) and Meter No. 17170014 (Excelsior Line). Both metering points has a notified maximum demand (NMD) of 952 kVA and is located in the positions as shown on Figure 2 below.



Figure 2: Bulk Metering Point Locality Plan

SABS

Neil Lyners & Associates (RF) (Pty) Ltd (2015/438525/07)



DIRECTORS: Neil Lyners Pr Eng FSAICE • Mario Filippi Pr Eng MSAICE • Fred Laker Pr Tech Eng MSAICE • Ermelinde Lyners

Two separate private 11kV overhead line networks extend into the Farm from each of the Municipal bulk supply points that supplies the various existing buildings and facilities on the Farm west of the R310.

The new Founders Estates will be developed to the west of the R310 and it is the intention that the new estates will be supplied from the existing private 11kV overhead lines on the farm.

2. Available Electricity Supply Capacity

Each Founders Estate (FE) will be supplied with a 100Amp three phase (70KVA) low voltage (400 Volt) connection. The total average electricity demand for the 19 FE's using a diversity factor of 70% is therefore 931kVA.

A total of nine (9) FE's will be connected to the 11kV overhead line supplied from the Excelsior bulk meter point (Meter No. 17170014) which will add an additional diversified load of 441 kVA to this meter point.

A total of ten (10) FE's will be connected to the 11kV overhead line supplied from the Goodhope bulk meter point (Meter No. 10400029) which will add an additional diversified load of 490 kVA to this meter point.

The current peak maximum demand drawn and spare capacity available at each metering point is show in Table 2 below.

METER No.	SUPPLY TO FE	NOTIFIED MAXIMUM DEMAND (kVA)	CURRENT PEAK MAXIMUM DEMAND (kVA)	AVAIALBLE SPARE CAPACITY (kVA)
Meter No. 17170014	2, 3, 4, 5, 6, 7, 9, 10 & 11	952	460	492
Meter No. 10400029	8, 12, 13, 14, 15, 16, 16b, 17, 18 & 19	952	194	758

Table 2: Available Spare Capacity

3. Conclusion

The new FE's will be supplied from the existing private 11kV overhead lines on the farm via two existing Municipal 11kV bulk supply points, Meter No. 17170014 (Excelsior Line) and Meter No. 10400029 (Goodhope). Both metering points has a notified maximum demand (NMD) of 952 kVA.

A total of nine FE's (2, 3, 4, 5, 6, 7, 9, 10 & 11) with an anticipated maximum load of 441kVA will be supplied from the Excelsior bulk meter point (Meter No. 17170014). The Excelsior bulk meter point has available spare capacity of 492kVA which is sufficient to supply the anticipated maximum load of the nine additional FE's (441kVA).

A total of ten FE's (8, 12, 13, 14, 15, 16, 16b, 17, 18 & 19) with an anticipated maximum load of 490kVA will be supplied from the Goodhope bulk meter point (Meter No. 10400029). The Goodhope bulk meter point has available spare capacity of 758kVA with is sufficient to supply the anticipated maximum load of the ten additional FE's (490kVA).

Lyners are therefore satisfied that there are no electrical supply constraints in terms of available capacity.

We trust that you find the above in order and kindly request your signature below if in agreement.

Yours faithfully

Henk Brand Pr Tech Eng for LYNERS



20 April 2021

Lyners and Associates (Pty) Ltd South Gate Building Carl Cronjé Drive Tyger Valley Waterfront BELLVILLE PO Box 4901 7530

Attention: Mr Rudolph Schoonwinkel

Dear Sir,

PROPOSED RESIDENTIAL DEVELOPMENT ON PORTIONS 2 - 19 OF FARM 1685 (FOUNDERS ESTATE) AND AGRICULTURAL DEVELOPMENT ON PORTION 4 OF FARM 1674 (THE PACKSHED), BOSCHENDAL FARM - DWARS RIVER: CAPACITY ANALYSIS OF THE BULK WATER AND SEWER SERVICES

Your request regarding comments on the bulk water and sewer supply to the proposed development (proposed residential development on Portions 2 to 19 of Farm 1685 and agricultural development on Portion 4 of Farm 1674, Dwars River), refers.

This document should inter alia be read in conjunction with the Water Master Plan (performed for the Stellenbosch Municipality) dated June 2019 and the Sewer Master Plan dated June 2019 for the Stellenbosch Municipality.

The proposed Founders Estate development was conceptually taken into consideration for the June 2019 master plans for the water and sewer networks as future development area DR10. The Packshed was however not taken into consideration in the June 2019 master plans.

1. WATER DISTRIBUTION SYSTEM

1.1 *Distribution zone*

Ultimate solution

Refer to master plan items SDW.B1 to SDW.B7 and SDW.B17 to SDW.B19 on Figure SW6.5b in the June 2019 Dwars River Water Master Plan:

The master plan indicated that the proposed residential development area should be accommodated in the future Boschendal Upper reservoir water distribution zone. It is proposed that the Boschendal Upper reservoir be supplied from a proposed Boschendal Lower reservoir via the proposed Boschendal PS no. 2.

A second bulk connection to the City of Cape Town's (CCT) Wemmershoek bulk supply pipeline is proposed for the Dwars River area (on the western side of the Dwars River) that gravitates to a proposed sump, from where water should be pumped to the proposed Dwars River Lower reservoir.

From the Dwars River Lower reservoir bulk water should then be pumped to the new Boschendal Upper reservoir (via the proposed Boschendal PS no. 2) and to the existing Pniel Lower reservoir (via the proposed Boschendal PS no. 1), as indicated on Figure 6.5b in the June 2019 Stellenbosch Water Master Plan.

GLS Consulting (Pty) Ltd T +27 21 880 0388 | F +27 21 880 0389 13 Elektron Street, Techno Park, Stellenbosch, 7600 | PO Box 814, Stellenbosch, 7599 Reg no: 2007/003039/07 www.gls.co.za

Directors: MS Mokgosi, AG Hingeston, JJ Streicher, HA Baartman

Interim solution

In the interim (before the proposed Boschendal Lower reservoir is implemented) the proposed development can be accommodated with the implementation of a dedicated bulk pipeline from the Pniel Lower reservoir to the proposed Boschendal PS no. 2.

From the Boschendal PS no. 2 water should be pumped through a 75 mm diameter pipe to the proposed Boschendal Upper reservoir (Top Water Level (TWL) of approximately 428 metres above mean sea level (m a.s.l.)), from where water should be supplied under gravity to the Founders Estate development.

The proposed booster PS, bulk pipeline from the PS to the reservoir and the reservoir should be private infrastructure owned by the developer. The proposed bulk pipeline from the Pniel Lower reservoir to the Boschendal PS no. 2 should be Municipal infrastructure as it will form a link between the existing Pniel Lower reservoir and the proposed Boschendal Lower reservoir in future.

The Packshed development has existing water supply rights from the CCT bulk supply line to the north and will therefore be supplied directly from CCT.

The proposed development is situated inside the water priority area.

1.2 Water demand

The original water analysis for the master plan was performed with a total annual average daily demand (AADD) for the proposed development area (future development areas DR10 in the June 2019 water master plan) of 47,5 kL/d (excluding Packshed).

For this re-analysis of the water master plan the AADD and fire flow for the proposed development was calculated as follows:

•	18 Founders Estates @ 2,0 kL/d (as indicated by Lyners and Associates (Pty) Ltd)	= 36,0 kL/d
•	Fire flow criteria (Low risk)	= 15 L/s @ 10 m

1.3 Present situation

1.3.1 Network capacity

There is currently no water network infrastructure located within close proximity of the proposed development. New water infrastructure will therefore have to be implemented to accommodate the proposed development in the existing water system.

It is proposed that the connection to the existing Dwars River system is made through a connection at the existing Pniel Lower reservoir.

The existing Dwars River bulk infrastructure system has sufficient capacity to accommodate the proposed development via the proposed connection to the existing Pniel Lower reservoir.

1.3.2 Reservoir capacity

The criteria for total reservoir volume used in the Stellenbosch Water Master Plan for the Dwars River area is 72 hours of the AADD (of the reservoir supply zone).

The developers of the Founders Estate have indicated that a 100 kL reservoir at a TWL of approximately 428 m a.s.l. will be provided for the development.

1.4 Implementation of the master plan

The following master plan item will be required to connect the proposed private infrastructure of the proposed development to the existing Pniel Lower reservoir, as shown on Figure 1:

Bulk supply upgrades

• SDW.B7 : 690 m x 250 mm Ø supply pipeline R 1 730 000 *

The following link services items will be required to supply water from master plan item SDW.B7 to the proposed Boschendal Upper reservoir site and to provide sufficient reservoir storage capacity for the proposed development, as shown on Figure 1.

- SDW.B17 : New Boschendal PS no. 2 (2 L/s @ 205m)
- SDW.B18 : 2 380 m x 75 mm Ø supply pipeline
- SDW.B19 : New 100 kL Boschendal Upper reservoir

(cost not included, private infrastructure to be provided by the developer)

- (* Including P & G, Contingencies and Fees, but excluding VAT Year 2020/21 Rand Value. This
 is a rough estimate, which does not include major unforeseen costs).
- The routes of the proposed pipelines and positions of the proposed reservoir and pump station are schematically shown on Figure 1, but have to be finalised subsequent to detail pipeline route and reservoir and pump station position investigations.
- Master plan item SDW.B7 was sized according to the Water Master Plan to supply water via the
 proposed 250 mm Ø pipe from the proposed new Boschendal Lower reservoir (master plan item
 SDW.B5) to the existing Pniel Lower reservoir for further distribution to the Pniel, Johannesdal,
 Languedoc and Kylemore in future.

1.6 *Minimum items required*

The minimum requirements to connect the proposed development to the existing Pniel Lower reservoir are master plan item SDW.B7 and link services items SDW.B17, SDW.B18 & SDW.B19.

2. SEWER NETWORK

2.1 Drainage area

There is currently no sewer infrastructure located within close proximity of the proposed developments.

The proposed developments can however be accommodated within the existing Pniel PS sewer drainage area. Sewage is pumped from the Pniel PS directly to the existing Dwars River Wastewater Treatment Works (WWTW).

The developments are inside the sewer priority area.

2.2 Sewer flow

The original sewer analysis for the master plan was performed with a total peak day dry weather flow (PDDWF) for the proposed Founders Estate (future development area DR10 in the June 2019 sewer master plan) of 33,3 kL/d.

The Packshed was however not taken into consideration in the June 2019 master plan.

For this re-analysis, the total PDDWF for the proposed developments was calculated as follows:

•	18 Founders Estates @ 2 kL/d/estate with 90% sewages (as indicated by Lyners and Associates (Pty) Ltd)	ge portion	=	32,4 kL/d
•	Packshed @ 15 kL/d with 90% sewage portion (as indicated by Lyners and Associates (Pty) Ltd)		=	<u>13,5 kL/d</u>
		Total PDDWF	=	45,9 kL/d

2.3 Present situation

There is currently no sewer infrastructure located within close proximity of the proposed developments.

New sewer infrastructure will therefore be required to connect the proposed developments to the existing Dwars River sewer system. The existing sewer reticulation network downstream of the proposed connection point has sufficient capacity to accommodate the proposed developments in the existing sewer system.

The Pniel PS was analysed with a capacity of 15 L/s and accompanying 200 mm Ø rising main in the Sewer Master Plan. The capacity of 15 L/s was however assumed and is the minimum flow rate in order to achieve scouring velocity through the downstream rising main. The capacity of the Pniel PS and size of the accompanying rising main should however be verified by SM.

The assumed capacity of 15 L/s is sufficient to accommodate the proposed Founders Estate and Packshed developments.

It is however recommended that flow measurements be taken at the Pniel PS to verify that the capacity of the PS is at least 15 L/s.

If the PS capacity does not exceed 15 L/s, we recommend that the PS be upgraded to a capacity of 25 to 30 L/s (no upgrading required of the existing 200 mm \emptyset rising main).

2.4 Link services

The following link services items will be required to connect the proposed developments to the existing Pniel sewer system:

New sewer infrastructure

٠	Item 1	: New pump station (cost based on 4 L/s)	R	1 940 000 *
•	Item 2	: 3 535 m New rising main (cost based on 90 mm Ø)	R	3 140 000 *
٠	Item 3	: 1 825 m x 160 mm Ø New gravity outfall	R	3 093 000 *
٠	Item 4	: New pump station (cost based on 4 L/s)	R	1 940 000 *
٠	Item 5	: 430 m New rising main (cost based on 90 mm Ø)	R	394 000 *
		Total	R	10 507 000 *

Notes:

- (* Including P & G, Contingencies and Fees, but excluding VAT Year 2020/21 Rand Value. This is a rough estimate, which does not include major unforeseen costs).
- In the Sewer Master Plan for Dwars River it is proposed that sewage should gravitate from the proposed Founders Estate directly towards the existing Pniel PS drainage area if the topography of the area permits it. A detailed survey of the area has however showed that it is not possible to gravitate from the lowest point on the Founders Estate (see position of item 4 on Figure 2) along the Helshoogte Road towards the existing Pniel PS drainage area. A new internal PS and accompanying rising main (items 4 and 5) have therefore been proposed to connect the internal sewage system of the Founders Estate to the existing Pniel sewer network.
- An alternative option to connect the Founders Estate to the existing Pniel network is to gravitate from the position of the proposed PS (item 4) directly to the existing Pniel PS (if the topography of the area permits it).

 The routes of the proposed pipelines and positions of the proposed pump stations are schematically shown on Figure 2 attached, but have to be finalised subsequent to detail pipeline route and pump station position investigations.

2.5 Minimum items required

The minimum requirements to connect the proposed developments to the existing Pniel sewer system are link services items 1 to 5.

3. CONCLUSION

The developer of Portions 2 to 19 of Farm 1685 and Portion 4 of Farm 1674 in the Dwars River area may be liable for the payment of a Development Contribution (as calculated by Stellenbosch Municipality) for bulk water and sewer infrastructure as per Council Policy.

There is currently no water network infrastructure located within close proximity of the proposed Founders Estate development. New water infrastructure will therefore have to be implemented to accommodate the proposed Founders Estate development in the existing water system.

The Packshed development has existing water supply rights from the CCT bulk supply line and will be supplied directly from the CCT system.

It is proposed that the connection to the existing Dwars River system in order to accommodate the proposed Founders Estate development is made through a connection at the existing Pniel Lower reservoir.

The existing Dwars River bulk water system has sufficient capacity to accommodate the proposed development via the proposed connection to the Pniel Lower reservoir.

The minimum requirements to connect the proposed development to the existing Pniel Lower reservoir are master plan item SDW.B7 and link services items SDW.B17, SDW.B18 & SDW.B19.

There is currently no sewer infrastructure located within close proximity of the proposed Founders Estate and Packshed developments.

New sewer infrastructure will therefore be required to connect the proposed developments to the existing Dwars River sewer system. The existing sewer reticulation network downstream of the proposed connection point has sufficient capacity to accommodate the proposed developments in the existing sewer system.

The minimum requirements to connect the proposed developments to the existing Pniel sewer system are link services items 1 to 5.

We trust you find this of value.

Yours sincerely,

GLS CONSULTING (PTY) LTD REG. NO.: 2007/003039/07

1. Plessio

Per: P

PC DU PLESSIS

cc. The Director Directorate: Public Works Stellenbosch Municipality P. O. Box 17 STELLENBOSCH 7599

Attention: Mr Adriaan Kurtz



