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A	20/11/19	SKETCH FOR SUBMISSION	D.P.W.

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service
 UPGRADING OF TEN (10) WASTE WATER TREATMENT WORKS (WWTW) SURROUNDING PRETORIA AREAS: BAVIAANSPOORT

WCS number: 054496
 drawing title: PIPELINE GENERAL ARRANGEMENT
 ref no: 498454 designed: BAUT
 scale: 1:3000 drawn: JZ
 date: 09/05/2018 checked: VESI
 drawing number: _____
C5804-BAV-009



SUB-DIRECTORATE: INFRASTRUCTURE PROTECTION, PRIVATE BAG X1, TOTIUSDAL, 0134

Enquiries: Technical: Tshepo Jiyane
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 Reference: 12/1/20/3/P2/5/SEW/001
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Attention : Tiaan Bauman

Dear Sir/Madam

APPROVAL NUMBER : 2T-2020/813

WAYLEAVE : Sewer pipes

ROAD NOs : P2/5

GPS COORDINATES :	TYPE	POINT	Y-COORDINATE	X-COORDINATE
	Crossing	Start	-25.678800	28.361279
	Crossing	End	-25.680086	28.361133

SERVICE DESCRIPTION : *A new 250mm Diameter HDPE Rising Main (Pumping Line) to be installed from Baviaanspoort Correctional Facility to Baviaanspoort Municipal Waste Water Works. The new pipeline will intersect an existing City of Tshwane Bulk Water supply Pipeline (600mm Diameter Steel) as well as the R513 Road Reserve. The intention is to Horizontal Drill underneath both the Road and the existing CoT Bulk Water Pipeline.*

ISSUED TO : Department of Public Works and Infrastructure

AREA DESCRIPTION : The location of the crossing is in the vicinity of the R513 Road Bridge over the Pienaars River close to the Baviaanspoort Correctional Facility entrance.

REGIONAL OFFICE : Tshwane (T)

APPROVED PLAN/S : Key Plan (C5804-BAV-009)
Road Layout indicating the position of the service (C5804-BAV-011)
Key Plan ()
Road Layout indicating the position of the service ()
Road Cross-Sections ()
Copy of Wayleave Application letters 1 ()

With reference to your letter **498454-GPG Road Wayleave Application.pdf dated July 2020** in connection with the above-mentioned, you are hereby informed that your application has been approved, as set out below, subject to the following conditions:

NB: This wayleave is granted in favour of Department of Public Works and Infrastructure and their successor(s) in title.

A. GENERAL CONDITIONS:

1. **The Regional Manager: Tshwane (T), Mantopa Mamabolo, contact info:**

Cell no (079) 666-9427 , Tel (012) 808-9913, e-mail mantopa.mamabolo@gauteng.gov.za

The department must be informed in writing within fourteen (14) days before commencement of any work, if not this application will render null and void and shortly before completion thereof in order to make the necessary arrangements for inspection.

The Completion certificate and Final inspection form must be completed during the final inspection and handed to the Regional Manager. (The certificate and forms are attached as **Annexure A & B**).

2. The necessary and prescribed road traffic signs (road signs and markings) for the proposed work must conform to the **S.A. Road Traffic Signs Manual (SARTSM)**. You must provide the signs and erect them as prescribed in the SARTSM, volume 2, Chapter 13, to the satisfaction of the Regional Manager before commencing with the work. The minimum lay-out of the road signs is shown on the sketches in **Annexure C**.
3. The necessary precautions are to be taken at all times to safeguard traffic while installation operations are in progress within the road reserve. Any accidents during installation operations due to negligence on the part of your own employees or contractors will be your responsibility.

4. Any damage to existing services or to the rights of other people or services owners as a result of your installation operations will be your responsibility. If you are not the registered land owner of the relevant property traversed by the road reserve within which the intended service is to be installed, this wayleave is granted to you without prejudice to the rights of the ownership of the owner or any other parties concerned.
When the road reserve ceases to exist, either by the closing or deviation of the road, the full authority and control of the land taken up by the road reserve, will revert to the owner or other parties concerned and removal of your service may be demanded. It will thus be necessary to obtain the consent to this wayleave from the owners of the land in question and/or other parties concerned in order to protect your interests.
5. This permission with regard to parallel services and services within the existing road reserve can expire later when you are instructed to shift/remove your services as a result of upgrading, maintenance or other work. The relocated service will not automatically be allowed within the future/new road reserve. Your service will then have to be placed outside the road reserve and the applicable building line.
6. You will be responsible for all liaison and co-ordination work including any correspondence between your organisation and any land owner(s). The Gauteng Department of Roads and Transport will not be involved with any individual property owners with regard to the service, as this is then still your responsibility. See also clauses 4 and 5 of this wayleave.
7. The responsible person in charge of the construction or maintenance work on the site must, at all times, be in possession of a complete copy of the letter of approval, including the general conditions, special conditions and specific conditions where applicable to the service concerned, as well as all plans that are required and are referred to in the correspondence, so that during an inspection the responsible person can submit it to the official(s) of the controlling authority when requested to do so. If no approval can be submitted the official of the controlling authority then can order that the road be secured and the work immediately ceased. If any cost is incurred by the Gauteng Department of Roads and Transport to secure the road, this will be for your account.
8. Parallel services may in terms of section 46 of the Gauteng Transport Infrastructure Act (Act no. 8 of 2001) not be laid nearer than 95 meters from the center line of the road or within a 500 meter radius measured from the centre line of the junction of a building restriction road and the centre line of any other road (except a national road), without the specific permission of the Gauteng Department of Roads and Transport.
If specific permission is granted in term of this wayleave for a parallel service within the road reserve, the service must be laid inside the 1, 0 meter as measured from the road reserve boundary and the top of the sleeve pipe must be laid at least 1,5 meters under the lowest point of the road or road reserve or drainage channels and follow a straight line.

9. **Where the service crosses the road it must be laid in a sleeve pipe over the full width of the road reserve. The top of the sleeve pipe must be laid at least 1,5 meters under the lowest point of the road or road reserve or drainage channels and follow a straight line.** The sleeve pipe must cross the road perpendicular as far as possible and no manholes/distribution cabinets, access chambers, etc., must be erected within the road reserve. Should permission be given to allow one or more of the foregoing structures within the road reserve, it shall not protrude above the surrounding surface and the structure must be of sufficient strength to withstand and carry axle loadings as prescribed by the Gauteng Department of Roads and Transport.
- The sleeve pipe or duct must be acceptable and comply with the standard types approved by the Gauteng Department of Roads and Transport. In the event of the sleeve/pipe being larger than 150 mm (inside diameter) a note on the detail plans is to be added confirming that the sleeve/pipe is strong enough for the required purpose. (Detail plans will normally encompass a lay-out plan, locality plan, longitudinal and cross sections to a suitable scale signed by a Professional Engineer).
10. Where the open trench method is used for crossings or for parallel services a bright durable plastic tape must be laid, where applicable, ± 300 mm above the sleeve to act as a warning for future works.
11. The material that is used for the services infrastructure must be of such quality that during the expected life of the road it will not be necessary to disturb the road surface to do repairs to the service.
12. The service crossing must be installed by jacking or drilling with minimum impact on the traffic. In the event that due to special circumstances, the open trench method has been approved, the sleeve pipe must be laid in two sections across the roadway to prevent interruption to the flow of traffic and only one lane may be closed to the public at a time. A deviation to make the crossing of the road easier, can be considered but it must be shown on a fully detailed plan and approved by the Regional Manager before commencement of the work.

Survey Pegs and Beacons

13. Care must be taken that survey beacons/pegs are not damaged or interfered with by excavations.
- 13.1. Any survey pegs/beacons that are damaged as a result of your activities must be replaced at your own cost by a surveyor who is on an approved panel of surveyors appointed by the Gauteng Department of Roads and Transport.
- 13.2 Cadastral beacons and road reserve beacons however, must be replaced by a Registered Land Surveyor.
- 13.3 After the beacons have been replaced a Completion Certificate, marked for the specific attention of the **Deputy Director: Survey**, must be handed in at the office of the Director Design for approval at 1225 Nico Smit Street Koedoespoort Industrial.

- 13.4 All arrangements for the implementation of the abovementioned procedures will be arranged by the service owner/applicant and will they accept full responsibility thereof.

Backfilling and Pavement Designs

14. Treatment of the layers for the reinstatement of service excavations must conform to the Standard Specifications for Road and Bridge Works (COLTO) Section 3207(b ii) as well as the Material and Pavement Design Manual (L4/49, as amended) issued by Gauteng Department of Roads and Transport, Should these specifications in any instance be less stringent and/or a lesser standard than the general specifications as specified below, the following will apply:
- 14.1 Backfilling alongside and over all sleeve pipes must be placed and compacted in layers of at most 100 mm after compaction to a density required for the material in adjacent fill, subgrade or subbase layer. The density of the backfill in excavations in natural ground must be at least 90% of modified AASHTO density. You will be responsible to provide evidence that the acquired densities through applicable tests results.
- 14.2 You will be held responsible for any subsidence in the backfill or accidents due to such subsidence.

Excavation and Safety

15. No excavation in the **road reserve** nearer than **3 meters** from the roadway (edge of tar) may be left open overnight, unless protected by temporary traffic barriers. Excavation within the **road reserve** must be fenced and secured during all hours for the safety of traffic and pedestrians.
16. Arrangements must be made with the Department of Community Safety: Traffic Services or local traffic department to be present while work is in progress on the road. This clause may be ignored if you make use of the method where the pipe is pushed underneath the road, but clause 3 above regarding the required precautions will still apply.
17. The joints of the pipes beneath the road must be watertight and you will be responsible for any damage to the road and road reserve because of leakages. (Refer also to clauses 9 and 10 above)
18. You must reinstate the road surface to the entire satisfaction of the **Directorate Design: Sub directorate Materials** and the repair works must be to the specifications of the Department of Roads and Transport. (Refer also to clause 14 above)

19. The work must be carried out to the entire satisfaction of the abovementioned Regional Manager. No fencing may be removed or damaged. If such fences were removed or damaged you will have to replace it to the satisfaction of the Regional Manager.
20. Permission must be obtained from the Regional Manager before any trees or shrubs can be pruned or removed for erection/installation of services or for the maintenance thereof. All branches and tree trunks or other waste must be removed and the road reserve must be cleaned up before the final inspection takes place. The service(s) must be erected in such a manner that no trees are affected or will fall within the safe area of the service(s).
21. Drainage systems (surface and sub-surface) must not be interfered with or damaged in any way. The storm water waterways must be reinstated and left free of obstructions and all waste must be removed.
22. No permanent access to and from the road to the service will be allowed. Temporary access points must be approved by the Regional Manager.

Maintenance and Repairs

23. You agree to maintain at all times underground services and appurtenant items including repair work to the surface of the road if requested and to take the necessary precautions to safeguard the travelling public.
24. Service markers indicating the nature, position and depth of the service will have to be erected on both sides at crossings, by the service owner. For parallel services within the road reserve the markers must be erected at least at every 100 meters alongside the underground service. The markers must be at least 200 mm high and also be clearly visible.
25. You will not be allowed to excavate at any time to effect repairs to the service.
In the event that:
 - a) The repairs requires an excavation nearer that 3 meters from the roadway, and/or
 - b) The repairs or maintenance requires upgrading or enlargement of the service;
you must apply for a new wayleave.

Cost of Installation and Relocation of Service

26. **The Gauteng Department of Roads and Transport will NOT be liable for any costs related to the laying, erection, installation, testing or maintenance of your services.**
If the Gauteng Department of Roads and Transport decides to widen, relocate, maintain or repair any transport infrastructure, and service infrastructure will be affected in the process, the relevant service provider must take the necessary steps to safeguard or relocate the service infrastructure, at the request of the Gauteng Department of Roads and Transport, and all of the costs of having to relocate or adapt the service infrastructure as a result of relocating, maintaining or repairing the transport infrastructure will be for the account of the service provider.

This includes everything related to the service(s) such as meter boxes, meters, transformers, poles, street distribution cabinets, anchors, stays, manholes or any other fittings or parts thereof. Where special conditions were allowed, you will still be held responsible for all costs incurred should your service(s) and all appurtenant items have to be relocated.

This approval is given without prejudice to any of the rights that the department may have and on the express understanding that you will remain liable for any relocation costs as aforementioned.

Liability

27. You will be held responsible for any damage suffered by the Gauteng Department of Roads and Transport or claims emanating from your negligence to shift the service(s) within the prescribed period(s).
28. If it is deemed necessary in the future by the Gauteng Department of Roads and Transport to resurface or do repair work directly as a result of the presence of your service (in spite of the duration of when the service was installed), you will have to accept full responsibility for the extra costs (that is those repair costs directly attached to the presence of your service within the road reserve) incurred by the Department of Roads and Transport. You will have to pay the full amount, within three months from date of the written notice, to the abovementioned Regional Manager.
29. You indemnify the Premier of Gauteng Province and exempt him from any claim or damage which may be instituted or suffered by any person, including legal costs, as a result of the laying or erection of any service or any other works caused or erected by you, or as a result of negligence on your part to protect or maintain the service or other works caused by any other person unless you can prove gross negligence on the part of the Department of Roads and Transport or its officials.
30. The Department of Roads and Transport will not be liable for any damage suffered by the applicant as a result of operations carried out on road construction or road maintenance or any other operations whatsoever, unless negligence on the part of the Department of Roads and Transport or its officials can be proved.

31. The work must be done within **twelve months** from the date of this letter. If for any reason at all, the work is delayed for a longer period, extension of time must be requested in writing or a new application will have to be submitted.
32. The conditions of this wayleave are applicable to you as well as your successor-in-title (where applicable). If property rights of your service are transferred to any other person or institution, it will be your responsibility to bring the contents of this wayleave to the attention of your successor-in-title as the conditions of this wayleave together with your property rights will be transferred to your successor-in-title and will still be applicable.
33. If you fail to comply with any of the general, specific and special conditions of this wayleave during the laying/installation/erection or maintenance of the concerned service, the MEC responsible for provincial roads in Gauteng Province reserves the right to withdraw this wayleave and you will be obliged to cease all work immediately or to rectify the situation or in failure of the latter you can be ordered in terms of Section 46(7) of Act No. 8 of 2001, to remove the service from the road reserve and/or building restriction area.
34. **Any damage to existing infrastructure in the road reserve shall be compensated by you in full. This Department shall not be held liable for such loss.**
35. **DOLOMITIC AREAS: The installation of any services in Dolomitic Areas must conform to the standards and requirements as prescribed in SANS 1936 standards. (Refer Clause 29 above)**
36. **Work must be carried out in accordance with the Occupational Health and Safety & Welfare Act 2005 (as amended).**

B. SPECIAL CONDITIONS FOR UNDERGROUND PIPELINES, WATER OR GAS CROSSINGS:

The Special and Specific Conditions shall have precedence in the interpretation of any ambiguity of inconsistency between it and the General Conditions.

- S.1. These services must be installed in sleeves or either culverts or pipes, unless otherwise specified in the application and accepted.
- S.2. The minimum cover of 1,0m from the top of the sleeve to the lowest point in the road reserve applies.
- S.3. Sleeves are to extend over the entire width of the road reserve with access chambers no closer than 1 m outside the reserve boundary.
- S.4. Pipe marker posts are to be installed 10 m beyond the edge of tar on either side of the road.

- S.5. The method of *pipe jacking or drilling beneath* road must be used without disturbing the traffic, the road surface or road pavement. The openings, after completion of the work must be sealed and backfilled to the satisfaction of our Regional Manager.
- S.6. No excavations will be allowed in the median of dual carriage way roads.
- S.7. You may not use the open trench method for the crossing of the road and **clause 10** will not be applicable.
- S.8. Excavation at the advancing face may not be by means of water jetting and permission must be obtained from the Department if blasting is required.
- S.9. If the above-mentioned method is unsuccessful a new application for an alternative method/position must be submitted. When possible the jacking or drilling of pipe sleeves across the reserve should be in zones of road fill as the soil conditions are more predictable and the depth of excavations for pits is less extensive.
- S.10. Access pits and work areas for this method (on both sides of the road) may not be closer than **3 meters** to the "edge of tar" provided that no excavations be left open overnight, otherwise a distance of **10 meters** will apply. For roads constructed on fill the face of the excavation shall be no closer than 2 m to the toe of the embankment.
- S.11. No manholes will be allowed inside the road reserve boundaries.
- S.12. All work must be carried out in such a manner as not to delay motorists on the provincial roads.
- S.13. **Buried pipelines, water and gas services parallel to the road reserve:**
No services may be placed inside the road reserve.
The pipelines, water and gas services may not be placed closer than the applicable building line.

C. SPECIFIC CONDITIONS and NOTES

SC1.

Commencement and Acceptance

FINAL INSPECTION AND COMPLETION FORM

Road number(s)

NB: This form must be signed by the Regional Manager of the Gauteng Department Roads and Transport concerned. This signature is just for administrative control and by no means implies that the work has been done according to the specifications of the way leave. The onus and responsibility of ensuring that the service has been correctly placed, is that of the applicant.

8

Gauteng Province Reference Number and Date:

Description of the wayleave.....

.....

(Give the heading of the wayleave as a description)

Name and address of the owner/applicant

.....

.....

Responsible person

(For the construction/erection/installation of the service)

Tel No:

Address:

..... *(If it differs from the address above)*

.....

It is hereby certified that

1. The owner/applicant has made arrangements with the Regional Manager concerned before commencement of work and
2. The abovementioned service has been completely constructed/erected/installed on above road and that the work has been done strictly according to the way leave conditions.

.....

CONSULTING ENGINEER (PRINT NAME) SIGNATURE DATE

NOTES:

1. This form must be completed by die owner/applicant and must be handed to the Regional Manager concerned (see way leave for address) immediately after completion of the service for his signature. It may also be completed when the final inspection has been done and handed to the Regional Manager who must be present.
2. The Regional Manager must send one copy of the completed certificate to the Chief Engineer: Infrastructure Protection (Way leaves) within one month, if the work was completed to his satisfaction.

ADMINISTRATIVE CONTROL – INTERNAL USE ONLY

.....
REGIONAL MANAGER: (PRINT NAME) SIGNATURE DATE

ANNEXURE B

FINAL APPROVAL CERTIFICATE

The Works shall not be considered as completed in all respects until a Final Approval Certificate has been signed and delivered by the Engineer to the Department of Roads and Transport and the Contractor stating the date on which the Works were completed and defects corrected, all in accordance with the Approved Wayleave

APPROVAL NUMBER:

Road number(s)

Service description:

.....
.....
.....

We hereby certify that the works described as in way leave approval numberhave been satisfactorily completed in conformity with the provisions of the way leave standard conditions, special conditions and approved plans.

ENGINEER:

SIGNATURE NAME IN PRINT ECSA REGISTRATION Nr TEL/CELL

CONTRACTOR




SIGNATURE NAME IN PRINT REGISTRATION NR TEL/CELL

ANNEXURE C

13.8.2 SHORT TERM WORKS

13.8.3 Maintenance in Road Reserve

- 1 This application represents the lowest signing level covered in this Chapter. This signing level is appropriate ONLY when the work concerned does not encroach nearer to the edge of the roadway than the shoulder break point. Typical activities which might warrant this low level of signing are:
 - (a) verge grass-cutting;
 - (b) cleaning of side drains or cross drain inlets and outlets;
 - (c) fence repairs;
 - (d) kilometer post repair/maintenance/replacement.
- 2 As soon as workers are required to move closer to the travelled way, additional signing consistent with Figures 13.35, 13.36 or 13.41 to 13.43 should be used.
- 3 If the maintenance work gradually progresses along the road reserve, the TW336 signs should be moved forward with the work so that they are never more than 600 m from the work.
- 4 All workers should still be provided with the recommended bright clothing, even when working off the road edge (see Figure 13.30).
- 5 The sign inventory indicated is a minimum for the type of work concerned. Any work unit undertaking this type of work is likely to be a general maintenance unit and will probably have a minimum sign inventory consistent with most tasks in this section.

MAINTENANCE UNIT INVENTORY			
Sign	No	Size (mm)	Quantity
	TW336	1200	2
	TIN 11.3	1200	4
	FLAGS	450 X 450	2

Checklist

- is the site set up with adequately safe Buffer Zones (see Figure 13.20)?
- are workers likely to get within 3 m of passing vehicles?
- is the maintenance unit vehicle and equipment well off the road?
- can signs be clearly seen by approaching drivers - if not move them further out?
- is a higher level of signing appropriate to ensure worker and public safety?

ANNEXURE C

SHORT TERM WORKS

13.8.3

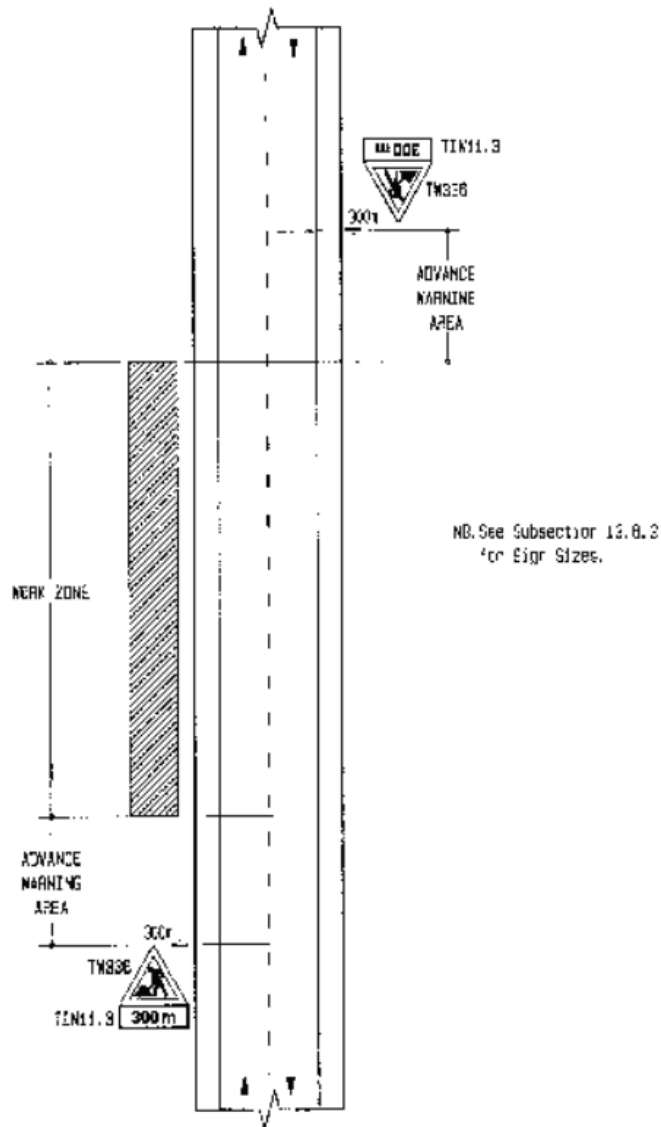


Fig. 13.32 Maintenance in Road Reserve (off the road)