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BASIC ASSESSMENT REPORT

DEVELOPMENT OF A ROAD AND ASSOCIATED INFRASTRUCTURE AT FABLE SMALLHOLDINGS RESULTING IN THE CLEARANCE OF INDIGENOUS VEGETATION, DEVELOPMENT OF INFRASTRUCTURE WITHIN 32M OF A WATERCOURSE AND THE INFILLING AND EXCAVATION OF MATERIAL WITHIN A WATERCOURSE

KWADUKUZA MUNICIPALITY

DC29/0010/2022

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Stephanie Denison
+27 (0) 82 929 4662
steph@confluencesd.co.za
www.confluencesd.co.za

CONFLUENCE
Strategic Development & Environmental Partner

AUTHOR OF REPORT

This Basic Assessment Report was compiled by *Stephanie Denison* from Confluence Strategic Development (Pty) Ltd. A full curriculum vitae of the author is provided under Appendix A as well as a Declaration of Independence. Contact details for the Environmental Assessment Practitioner (EAP) are provided in the table below:

EAP:	Stephanie Denison
Postal address:	30 Ashley Road, Ballito
Postal code:	4399
Contact number:	082 929 4662
E-mail:	steph@confluencesd.co.za
Professional affiliation(s)	PR. Nat. Sci. Environmental Science (#120455) EAPASA Registered 2019/888

The EAP confirms that:

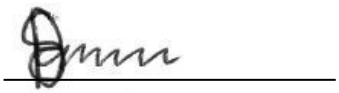
a) All information contained in the Basic Assessment Report is, to the best of my knowledge, accurate and correct.

b) Comments and input from stakeholders and registered Interested and Affected Parties have been included in the Basic Assessment Report.

c) Input and relevant recommendations contained in the attached specialist reports have been included in the Basic Assessment Report and Environmental Management Programme.

d) All relevant, available information has been provided to registered Interested and Affected Parties; and

e) Responses to comments or inputs made by registered Interested and Affected Parties has been included under Appendix D.



Stephanie Denison

07th June 2022

EXECUTIVE SUMMARY

The Iron Property Group (Pty) Ltd are in the process of developing "*Fable Smallholdings*" located on the Remainder of Portion 2 and Portion 631 (of 2) of the Farm Lot 61 No. 1521, KwaDukuza Municipality, iLembe District. Fable Smallholdings itself does not trigger any listed activities (confirmed by the Department of Economic Development, Tourism and Environmental Affairs for query DC29/Q0079/2020). A new gravel road is proposed to access Fable Smallholdings from the Mount Richmore road network, south-east of the development. The new road traverses a watercourse and is therefore subject to Environmental Authorisation.

The new gravel road traverses Portion 585 and REM of Portion 2 of Farm Lot 61 No. 1521. A gatehouse will be constructed on the boundary of Portion 585 of Farm Lot 61 No. 1521. The proposed road is 285m in length and 3m wide. Concrete strips are proposed in steeper sections. The road crosses over an existing dam wall, which will be re-enforced using gabion baskets. The road traverses one wetland system. A precast concrete culvert is proposed at this watercourse crossing.

All infrastructure, including the gatehouse, will be constructed within 32m of watercourses. During the construction of the road and culvert, material will be excavated / infilled into a watercourse. The entire area is located within a critically endangered ecosystem (Northern Coastal Grassland Ecosystem). A total of 879.5m^2 of indigenous vegetation will be cleared. These activities require Environmental Authorisation from the Department of Economic Development, Tourism and Environmental Affairs through a Basic Assessment process.

The following provides a summary of the key findings of the Environmental Impact Assessment:

1. Clearance of indigenous vegetation altering the local habitat. This impact cannot be avoided however can be minimised by ensuring that the authorised development footprint is clearly demarcated, and no unnecessary clearing is carried out during the earthworks phase. After mitigation, the significance of the impact has been reduced to "*very low*".
2. Erosion during earthworks resulting in sedimentation of adjacent wetland and alteration of local hydrological regime. Stormwater management measures have been specified to ensure surface flow is regularly dispersed away from the road and runoff does not result in erosion gullies and/or sedimentation of the downstream wetland. This impact has been rated as having "*low"* significance after mitigation.
3. General construction-related impacts (i.e. dust, noise, waste management, site camp etc.) will be managed in accordance with the EMPr attached under Appendix E.
4. The infilling of 287m^2 of hillside seep wetland. This impact cannot be avoided due to the position of the wetland along the property boundary. The preferred layout alternative avoids and minimises the impact as far as possible with the preferred technology alternative allowing for greater flow underneath the road. The remainder of the largely modified wetland system within Fable Smallholdings will be registered as a non-development servitude ensuring conservation in the long-term and is subject to rehabilitation interventions recommended by the specialist. There is therefore an opportunity to improve the state of the remaining portions of wetland within the study area.

Impacts identified in the Environmental Impact Assessment can be mitigated to an acceptable level of risk. This is provided that the measures included in the attached EMPr are adhered to. The Environmental Assessment Practitioner is therefore of the opinion that the Development of a Road and Associated Infrastructure at Fable Smallholdings Resulting in The Clearance of Indigenous Vegetation, Development of Infrastructure Within 32m of a Watercourse and The Infilling and Excavation of Material Within a Watercourse, be authorised by EDTEA.

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APPENDICES

1.0 INTRODUCTION

1.1 DESCRIPTION OF ACTIVTY TO BE UNDERTAKEN

The Iron Property Group (Pty) Ltd are in the process of developing "*Fable Smallholdings*" (previously known as Foxhill Smallholdings Development). Fable Smallholdings is located within Ward 22 of the KwaDukuza Local Municipality, iLembe District. Fable Smallholdings itself does not trigger any listed activities (confirmed by the Department of Economic Development, Tourism and Environmental Affairs for query DC29/Q0079/2020) however a new road is proposed which traverses a watercourse. Environmental Authorisation is therefore required for the proposed gravel road.

The road traverses two properties; Portion 585 and REM of Portion 2 of the Farm Lot 61 No. 1521. The road starts at 29°29'34.10"S; 31°13'34.88"E and ends at 29°29'30.89"S; 31°13'43.41"E (Locality map provided in Figure 1). A gatehouse will be constructed on Portion 585 of the Farm Lot 61 No. 1521. Fable Smallholdings falls within the critically endangered Northern Coastal Grassland ecosystem.

The proposed road is 285m in length and is a 3m wide gravel road. Concrete strips are proposed in steeper sections (2 x 0.5m concrete strips with a grass island in the middle).

- 16.95m^2 of concrete infrastructure will be located within 32m of watercourses. Of this, 4.95m^2 will be located within a watercourse.
- 67.5m^3 of material will be excavated from wetland during the construction of the road.
- 620m^2 of indigenous vegetation will be cleared during earthworks for the new road.

The road crosses an existing dam wall. The width of the road across the dam wall will be increased by 1m by constructing a gabion basket retaining wall on the eastern side of the dam wall (Figure 2). Gabion baskets (1m x 1m) will be placed on top of one another at intervals. The gabion retaining wall will be constructed within the footprint of the existing dam wall embankment and therefore no excavation / infilling of wetland is anticipated. The rudimentary spillway will be formalised using cement and reno-mattresses.

- A total footprint of 165m^2 of infrastructure will be constructed within 32m of a watercourse (gabion baskets and cement spillway).
- The re-enforcement of the dam wall will result in 132m^2 of indigenous vegetation being cleared.

The road crosses a hillside seep wetland (WC1). A precast concrete structure will be constructed at this point (Figures 3 & 4). The structure consists of:

- 2 x 1 200mm wide x 3 500mm long x 1 200mm high precast concrete culverts;
- Infrastructure will be constructed on a 1 000mm thick rockfill base layer wrapped in geotextile to allow sub-surface flow.
- Gabion basket wingwalls and reno-mattresses will be constructed at the entrance and exit of the culvert for scour protection.
- Compacted backfill will be placed between the wingwalls.
- A total footprint of 67.5 m^2 of infrastructure will be constructed within wetland.
- The construction of the culvert will result in the infilling of 228m^3 of material into wetland.
- The construction of the culvert will result in 107.5m^2 of indigenous vegetation being cleared.

A security gatehouse is proposed at the boundary of the property (Figure 5).

- The gatehouse is 2.95m wide x 6.78m long and will be constructed within 32m of a watercourse (20m^2).
- The construction of the gatehouse will result in 20m^2 of indigenous vegetation being cleared.

The construction of new road infrastructure within 32m of wetlands, the infilling / excavation of material from wetland and the clearance of indigenous vegetation requires Environmental Authorisation through a Basic Assessment process. A summary of the total development footprints and volume of material to be infilled into / excavated from wetland, is provided in Table 1. All listed activities being applied for are provided in Table 2.

Table 1: Summary of Infrastructure to be Constructed Within the Watercourses, Volume of Material Excavated From / Infilled Into the Watercourse and Extent of Indigenous Vegetation Cleared for the Construction of the Fable Road.

Activity	Infrastructure Footprint within watercourse (m^2)	Infrastructure within 32m of watercourse (m^2)	Volume of material excavated from / infilled into watercourse (m^3)	Area of indigenous vegetation cleared (m^2)
Road	4.95	16.95	67.5	620
Dam Wall Re-enforcement	0	165	0	132
Culvert	67.5	0	228	107.5
Gatehouse	0	20	0	20
Total:	**72.45**	**201.95**	**295.5**	**879.5**

Table 1: Listed and Specified Activities Triggered and Being Applied for.

Activity #	**Relevant Listing Notice**	**Description of Listed Activity as Per the Project Description**
12 (ii)(c)	Listing Notice 1 (GNR327) 04th December 2014 as amended.	Approximately 274.4m^2 of road infrastructure will be developed within watercourses and within 32m of watercourses (concrete road strips, dam wall re-enforcement, culvert and gatehouse).
19	Listing Notice 1 (GNR327) 04th December 2014 as amended.	The road traverses one section of wetland. The total volume of material excavated and infilled into the wetland during the construction of the road and culvert is 295.5m^3.
12 (d)(iv)	Listing Notice 3 (GNR324) 04th December 2014 as amended.	The total area of indigenous vegetation to be cleared within the critically endangered Northern Coastal Grassland Ecosystem is 879.5m^2 (3m wide dirt road, dam wall re-enforcement, culvert and gatehouse).

Figure 1: Locality Map with the Site Indicated in Red.

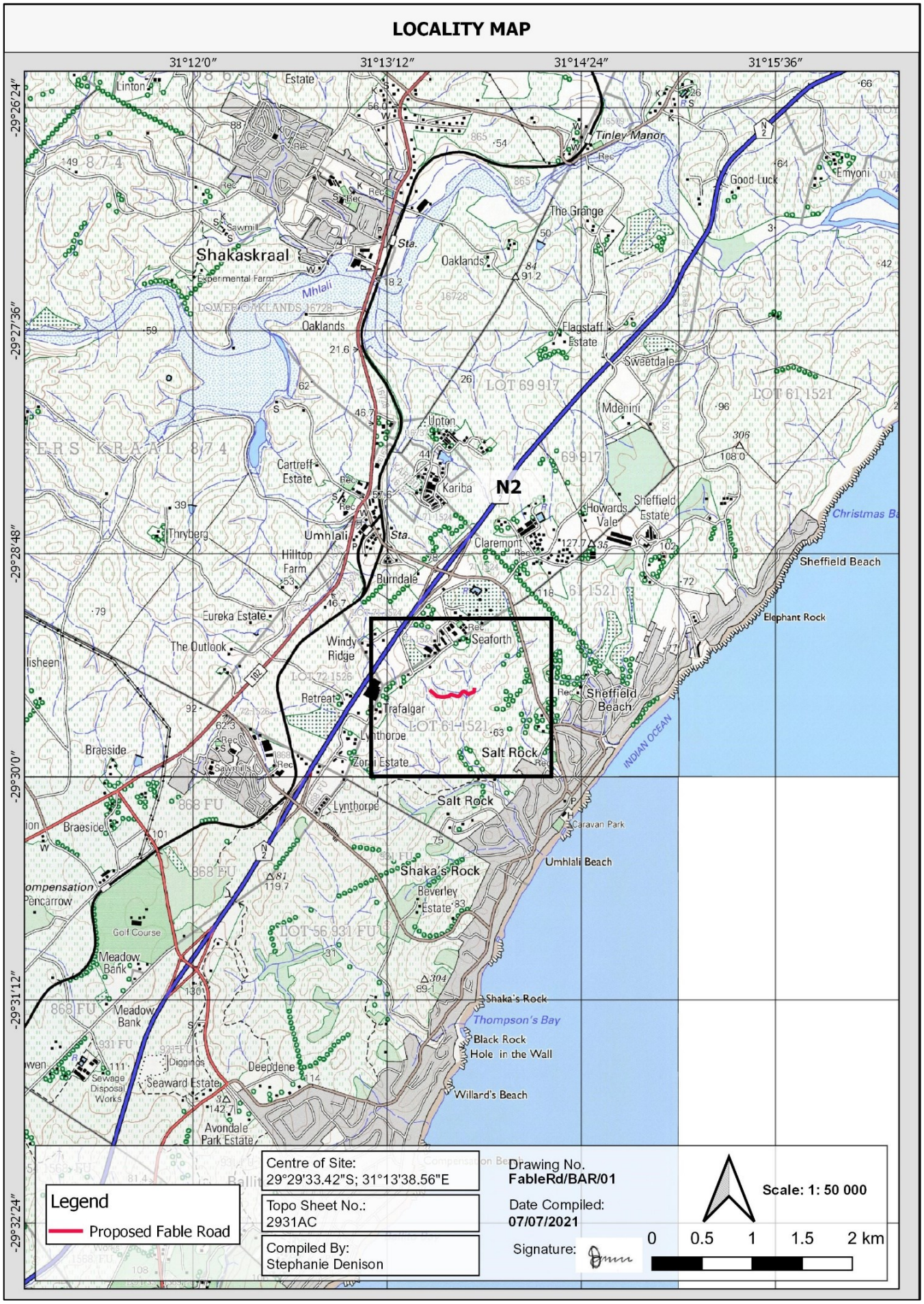


Figure 2: Typical Detail of the Gabion Basket Retaining Wall Proposed for the Re-Enforcement of the Dam Wall (Source: Struxit Projects, 2022).

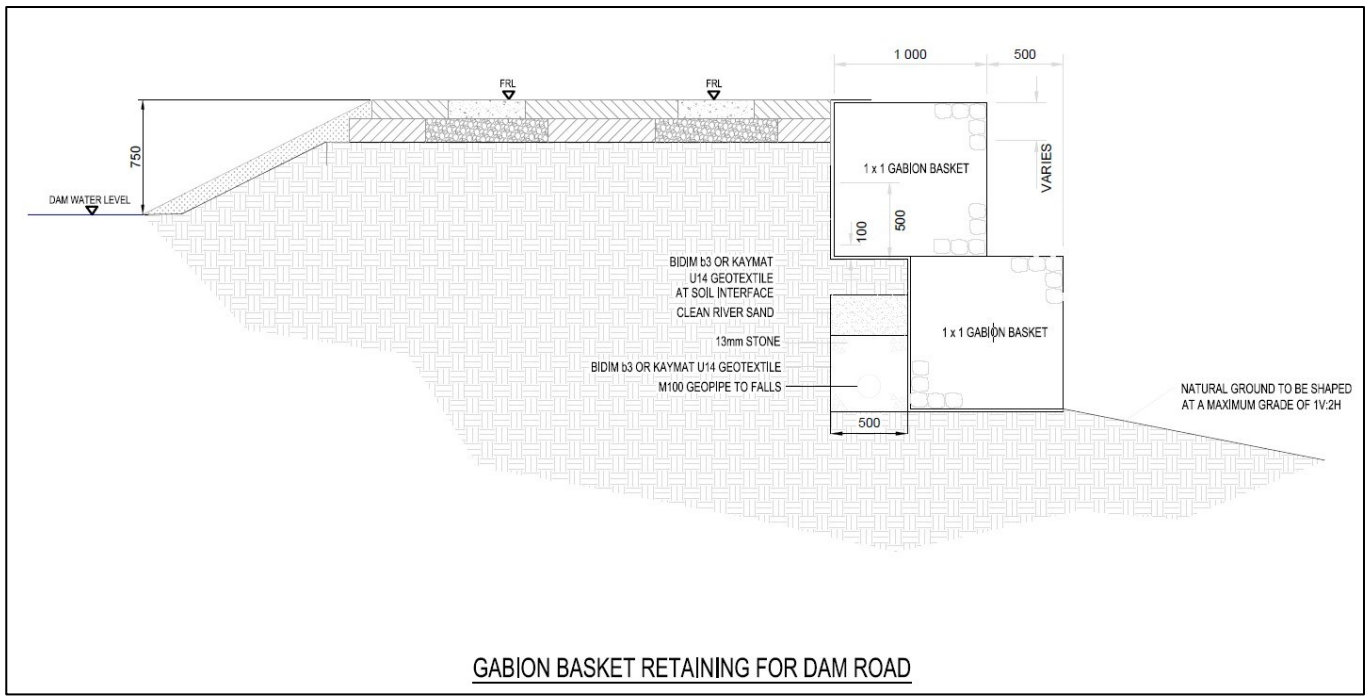


Figure 3: Section Through the Culvert Proposed at WC1 (Source: Struxit Projects, 2022).

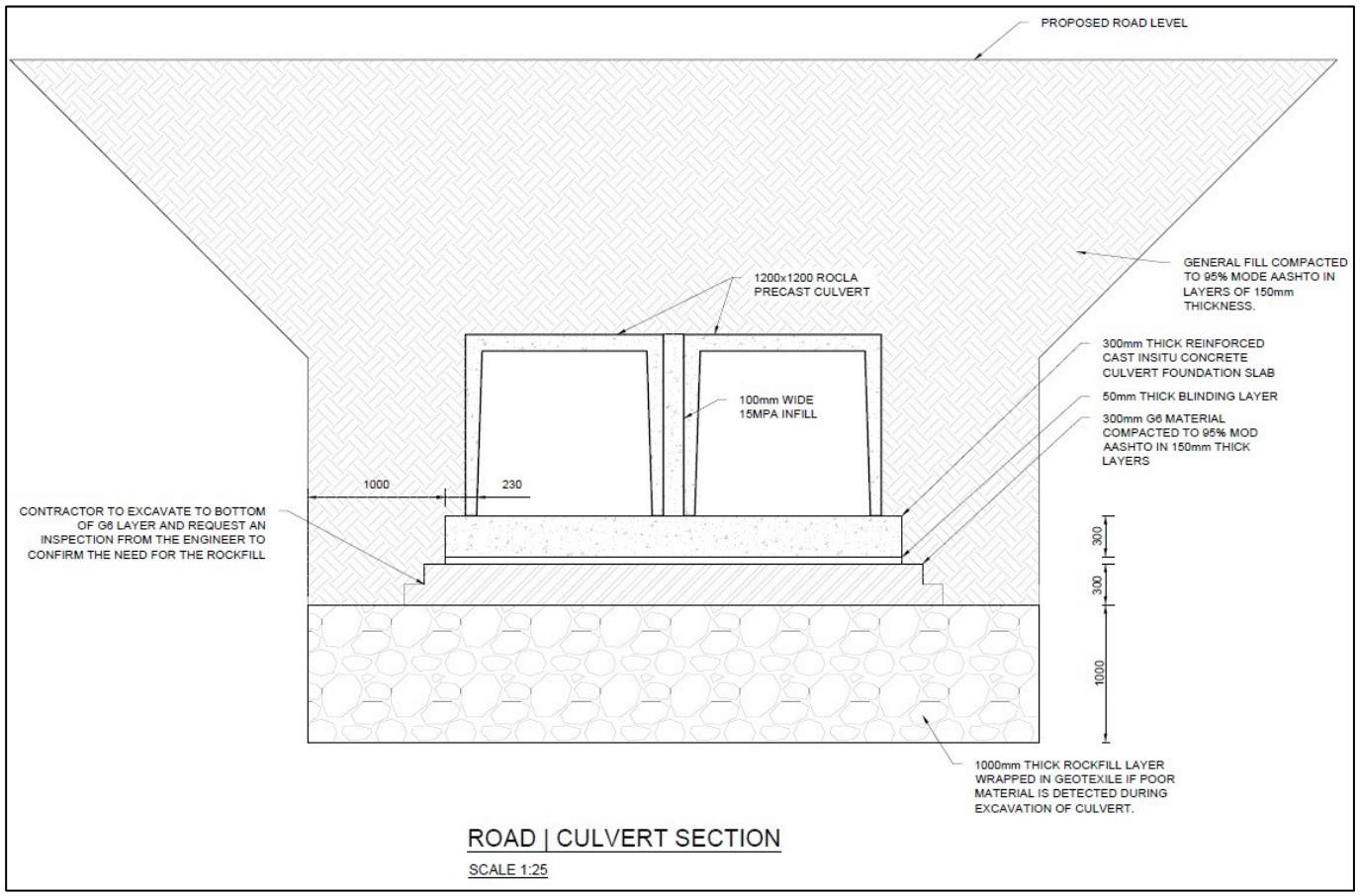


Figure 4: Overview of the Culvert Proposed at WC1, Including Erosion Control Measures (Source: Struxit Projects, 2022).

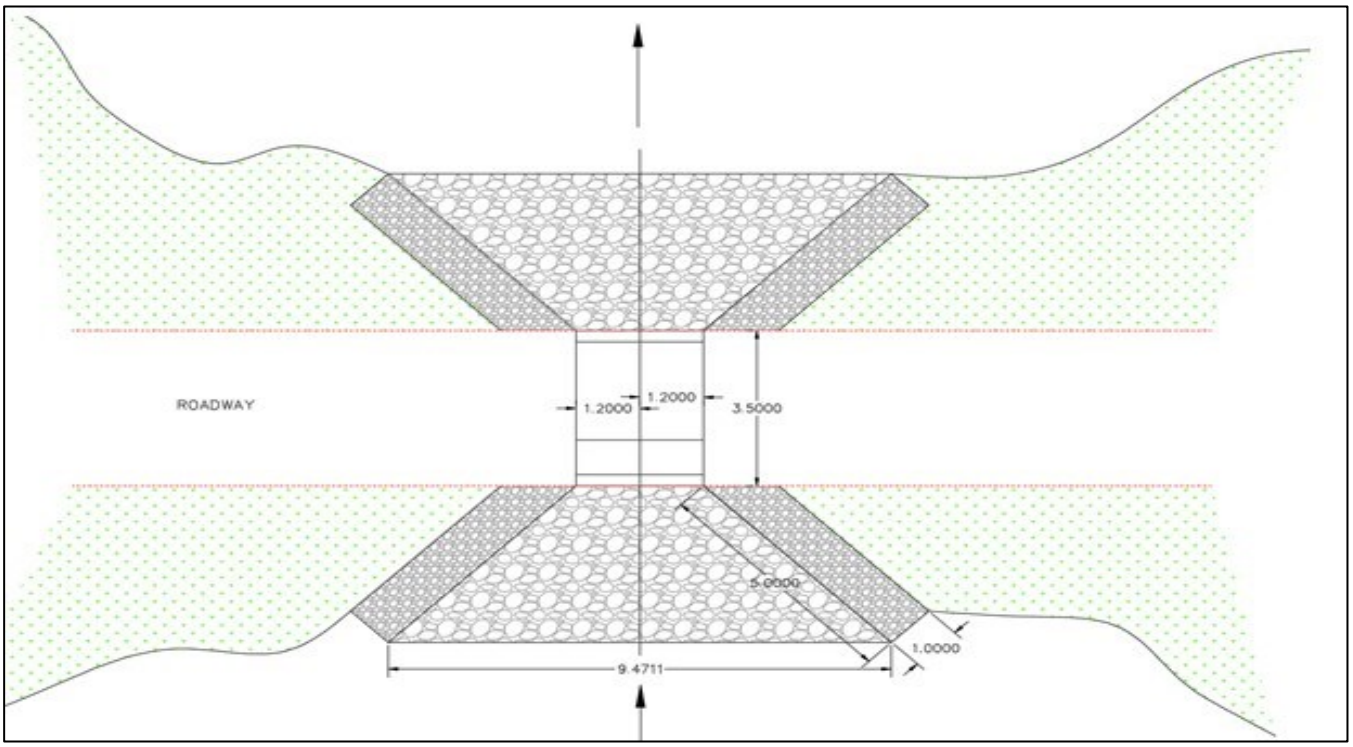
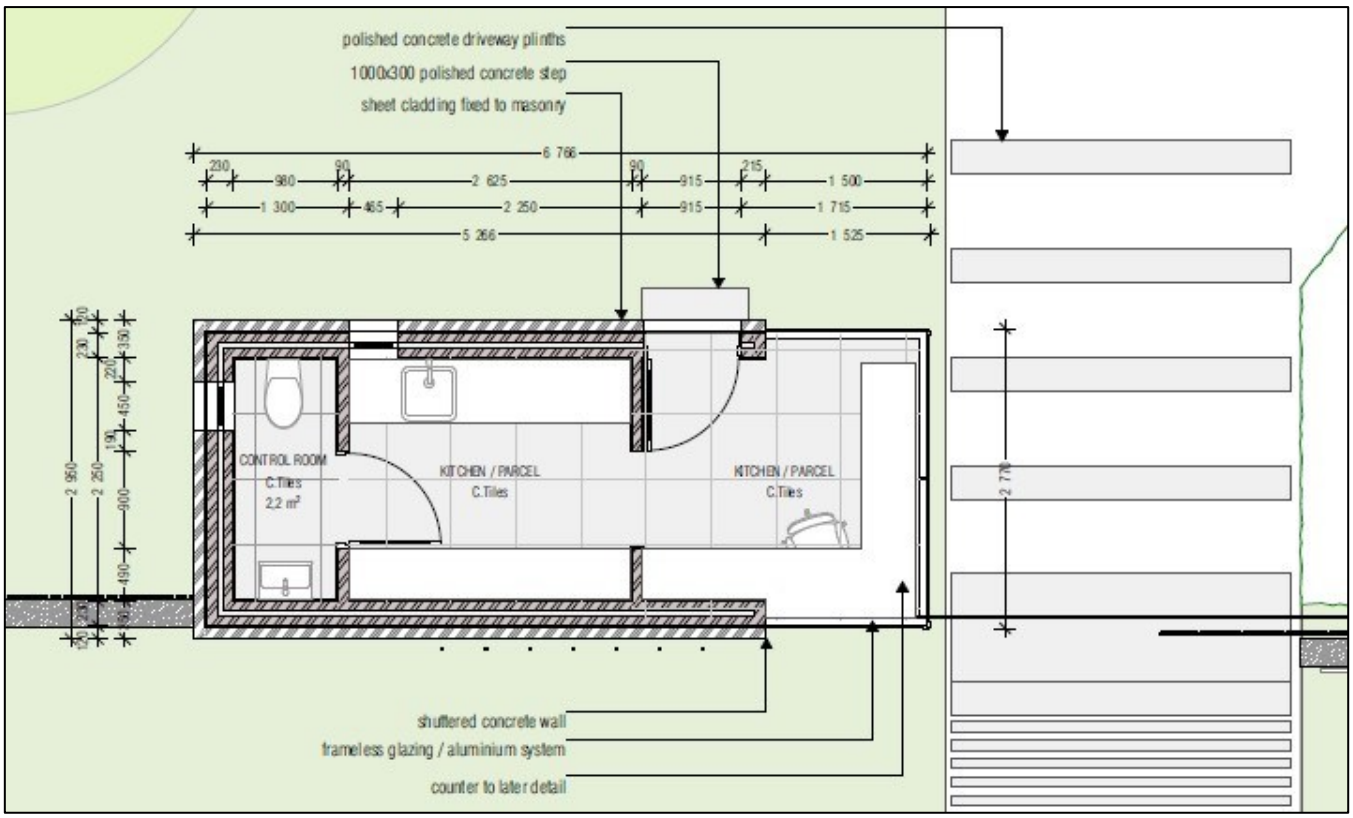


Figure 5: Ground Floor Plan of the Proposed Container Gatehouse Located in the South-Eastern Corner of Fable Smallholdings (Source: COA, 2021).

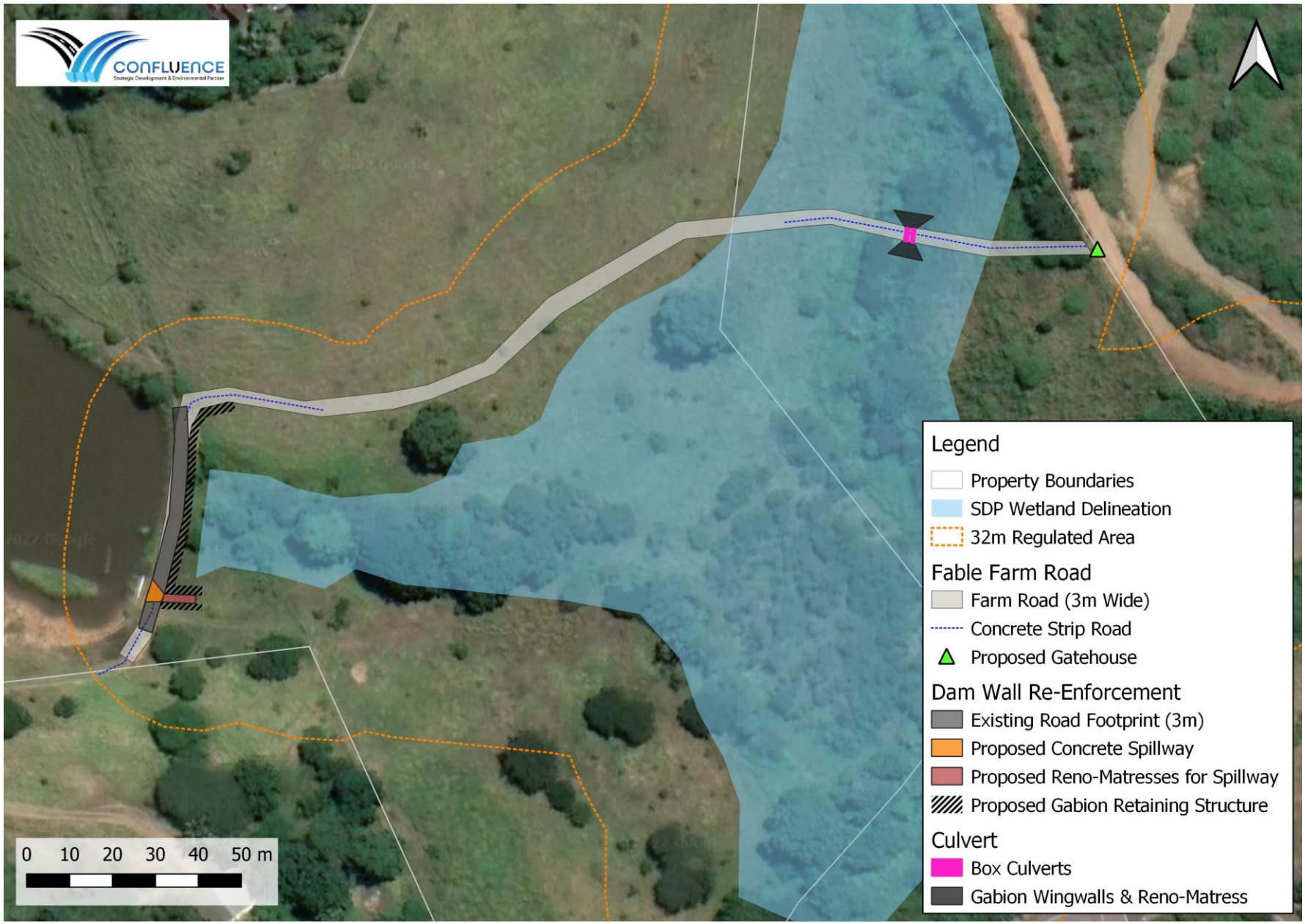


1.2 LOCATION OF ACTIVITY

The proposed new Fable Road will be located on Portion 585 and Remainder of Portion 2 of the Farm Lot 61 No. 1521. The study area is located in Ward 22 of KwaDukuza Local Municipality, iLembe District. Please refer to Figure 1 for the Locality Map and Figure 6 for the environmental sensitivity map.

Property Descriptions	Portion 585 of the Farm Lot 61 No. 1521; and REM of Portion 2 of the Farm Lot 61 No. 1521.
21 Digit Surveyor General codes	NOFU00000000152100002 NOFU00000000152100585
Co-ordinates	Start of Road: 29°29'34.10"S; 31°13'34.88"E. End of Road: 29°29'30.89"S; 31°13'43.41"E. Middle of Dam Wall: 29°29'32.93"S; 31°13'35.59"E. Middle of WC1: 29°29'30.80"S; 31°13'41.89"E.

Figure 6: Map Superimposing the Proposed Activity and Associated Infrastructure on the Environmentally Sensitivities of the Site.



2.0 ALTERNATIVES

2.1 DETAILS OF ALTERNATIVES CONSIDERED

"*Alternatives*" are defined as "*different means of meeting the general purpose and requirements of the activity*"[1]. Alternatives considered must be feasible and reasonable. The general purpose and requirement for this project is to provide an additional access road to Fable Smallholdings to secure access to the development in the long-term and divert traffic away from the Foxhill area (section 3.2 of the Basic Assessment Report describes the need and desirability of the project in detail).

2.1.1 Site Alternatives and Outcome of the Site Selection Matrix

Since the application is directly associated with the Fable Smallholdings development, no other feasible site alternatives have been considered. The site is considered well suited for the development of the gravel road, as the road will be an extension of the existing internal gravel road network within Fable Smallholdings.

2.1.2 Activity

As described above, the purpose of this project is to provide additional access to Fable Smallholdings. The need for the road is discussed under section 3.2 in more detail however no other feasible activities to meet the general purpose and requirements of the project have been identified.

2.1.3 Layout

Two layout alternatives have been assessed. The originally route proposed by the applicant was for the construction of a 300m gravel road, which follows the alignment of an old farm road (Layout Alternative 1). Layout Alternative 1 is drawn in pink in Figure 7. Half of the road, 150m, is located within delineated wetland as well as the gatehouse. Three new culverts are required where the road crosses drainage lines. These watercourse crossings are indicated in Figure 7 (WC1 – WC3). A Google Earth historic image of the site from 2006 is provided in Figure 8. The figure shows the alignment of the old farm road and where the road crossed the watercourses at WC1 and WC2, although no structures were constructed at these points. WC3 is a new crossing.

On receipt of the wetland delineation and input from the engineer, the road alignment was amended to take into consideration the sensitive environmental features. Layout Alternative 2 is therefore the preferred layout alternative (drawn in green in Figure 7). The road is 285m in length with 60m located within wetland. One culvert is required where the road crosses a drainage feature. The gatehouse is positioned outside of wetland. Layout Alternatives 1 and 2 are attached under Appendix C.

2.1.4 Technology

Two design alternatives have been provided by the engineer for the precast concrete culvert required at WC1 and the gabion retaining wall structure at the dam wall. Technology Alternative 1 is for one 2 000mm x 1 500mm precast concrete culvert to be constructed at WC1. The gabion structures used to re-enforce the dam wall, are proposed at the foot of the existing dam wall embankment. The footprint of the dam wall will therefore be increased by 1 200mm into the downstream wetland.

The preferred technology alternative is Technology Alternative 2, for the construction of two 1 200mm x 1 200mm precast concrete culverts at WC1, allowing a greater rate of through-flow. The gabion structures used to re-enforce the dam wall will be constructed within the existing dam wall embankment footprint avoiding any further infilling / excavation in wetland. The rudimentary spillway will be formalised using concrete and reno-mattresses reducing the potential for erosion in the future. Technology Alternatives 1 and 2 are attached under Appendix C.

2.1.5 No-Go Alternative

The new access road will not be constructed and the existing access off Old Fort Road, through the Foxhill area, will be the only access point to Fable Smallholdings. The Foxhill road network is described by KwaDukuza Municipality as "*operating at capacity*"[2] and therefore there would be added traffic congestion to the Foxhill/Tiffany's intersection. The new access road is proposed to create an additional/alternative access for Fable Smallholding residents, staff

[1] DEA & DP (2010) Guideline on Alternatives, EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning (DEA&DP).

[2] Reasons for Part 2 Refusal of Proposed Rezoning of the Litchi Orchard contained in the SPLUMA Record of Decision stamped 25th January 2022.

and visitors to use to bypass the Tiffany's intersection, especially at peak operating hours. There will however be no immediate negative environmental impacts that may result from the construction phase.

Figure 7: Map Comparing Layout Alternative 1 and Layout Alternative 2.

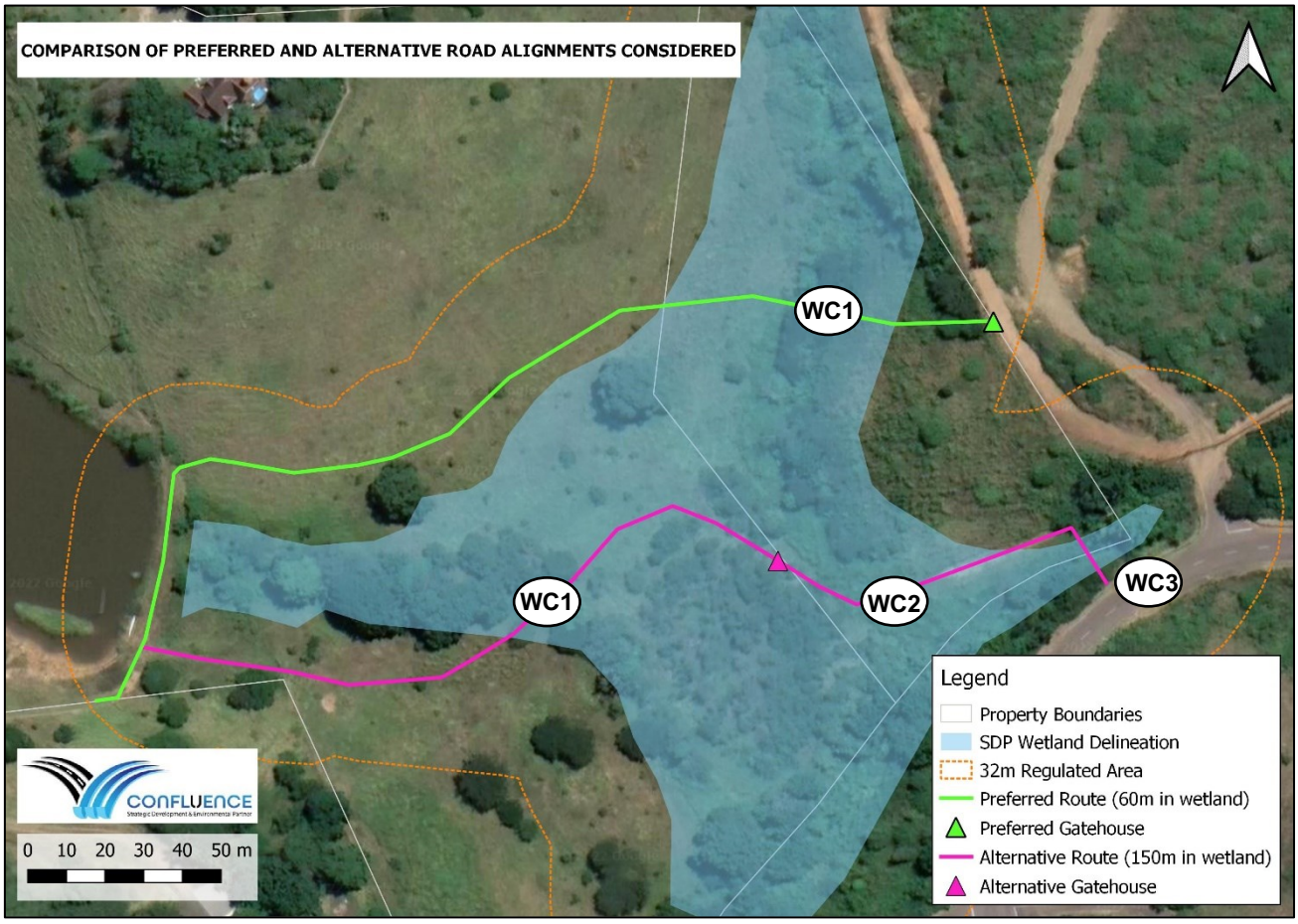


Figure 8: Historic Image of the Study Area Taken in 2006 Showing an Old Farm Track Crossing Two Drainage Features (WC1 & WC2 Relevant to Layout Alternative 1).

2.2 CONCLUDING STATEMENT INDICATING PREFERRED ALTERNATIVES

Since the project is for the construction of a road to Fable Smallholdings, no other feasible site or activity alternatives have been assessed. Two road alignment / layout alternatives have been assessed. Layout Alternative 2 minimises the length of road traversing wetland and avoids two perennial watercourse crossings. Layout Alternative 2 is therefore the preferred route alignment for the proposed Fable Road. Two technology alternatives have been assessed for where the road crosses a dam wall and a hillside seep wetland. The preferred technology alternative, Technology Alternative 2, is for two precast concrete culverts to be utilised at WC1 and the gabion retaining structure to be located within the existing dam wall embankment footprint (Technology Alternative 2).

2.3 MOTIVATION FOR PREFERRED ALTERNATIVE

The following provides a summary motivating the preferred layout and technology alternatives (Layout Alternative 2 and Technology Alternative 2):

- The preferred layout alternative will result in less wetland being traverses (60m of road compared to 150m of road traversing wetland in Layout Alternative 1). The volume of material excavated in the wetland has therefore been minimised in the preferred alternative.
- Where Layout Alternative 2 passes through permanent wetland at WC1, the narrowest point of the wetland has been traversed (refer to Figure 11 under section 4.4).
- The gatehouse has been located outside of wetland on the boundary of the property in the preferred layout alternative.
- Technology Alternative 2 is for larger precast concrete culverts to be utilised allowing better flow underneath the road during heavy rainfall. It is less likely for debris to build up in the culverts over time or during heavy rainfall events.
- The gabion retaining structure proposed along the downstream side of the dam wall remains within the existing disturbed footprint associated with the dam wall embankment in the preferred technology alternative. This is preferred compared to Technology Alternative 1, where the gabion retaining structure is 1.2m downstream of the toe of the wall embankment.
- The proposed road is well aligned with the KwaDukuza Roads Master Plan, providing direct access onto the New Salt Rock Drive through Mount Richmore. The road avoiding the Foxhill road network, which is currently operating at capacity (refer to section 3.2 below for more details).

3.0 PLANNING CONTEXT

3.1 ENVIRONMENTAL POLICY AND LEGISLATIVE CONTEXT

The table below provides a list of legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and instruments relevant to the Fable Smallholdings Road. The table includes comment on how the proposed development complies with and responds to the listed legislation.

Table 2: Legislation, Policies, Plans, Guidelines, Spatial Tools, Municipal Development Planning Frameworks, And Instruments Relevant to the Fable Smallholdings Road.

Legislation	Acronym	Comment
National Environmental Management Act (Act No. 107 of 1998 as amended).	NEMA	NEMA provides environmental management principles that are applicable across South Africa to fulfil section 24 of the Constitution, which is the right to "*an environment that is not harmful to their health or wellbeing*". Section 24 of NEMA defines the activities requiring Environmental Authorisation and the processes to be followed to obtain Environmental Authorisation (published in the Environmental Impact Assessment Regulations, 2014 as amended). This application triggers activities listed in Listing Notice 1 and 3 of the Environmental Impact Assessment Regulations, 2014 as amended. A Basic Assessment process is therefore underway to obtain Environmental Authorisation prior to any activities commencing.
DEA (2017), Public Participation guideline in terms of NEMA	-	To give effect to section 2 (4)(f) and (o) of NEMA, adequate and appropriate opportunity for public participation in decisions that may affect the environment is required. NEMA requires that any person

EIA Regulations, DEA, Pretoria, South Africa.		conducting public participation take into account any relevant guidelines applicable to the public participation process as contemplated in section 24J of NEMA. The public participation conducted as part of the Basic Assessment process complies with the NEMA EIA Regulations and has considered the relevant guidelines.
DEA (2017), Guideline on Need and Desirability, DEA, Pretoria, South Africa.	-	This guideline contains information on best practice and how to meet the requirements prescribed by NEMA when considering the need and desirability of a development. The need and desirability of the project has considered the list of questions outlined in the Need & Desirability Guidelines.
National Environmental Management: Waste Act (Act No. 59 of 2008 as amended).	NEM: WA	NEM: WA provides measures to protect health and the environment of South Africa by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development. There are no activities proposed that will trigger a Waste Management License however measures have been provided in the EMPr to ensure that waste management is compliant with the requirements of NEM: WA.
National Environmental Management Biodiversity Act (Act No. 10 of 2004).	NEM: BA	To manage and conserve South Africa's Biodiversity and protect species and ecosystems that warrant national protection. The proposed development does not require any specific permissions in terms of NEM:BA however the landowner must comply with the requirements of the Alien and Invasive Species Regulations (2020) which have been published in terms of section 97(1) of NEM:BA. These regulations categorise invasive species and outlines the way these species must be controlled by landowners. Section 52 of NEMBA allows for the publication of a national list of ecosystems that are threatened and in need of protection. The property is located within the Northern Coastal Grasslands Ecosystem which has been identified as "*critically endangered"* by the South African National Biodiversity Institute (SANBI).
National Environmental Management: Air Quality Act (Act No. 39 of 2004).	NEM: AQA	Regulates air quality to protect the environment by providing measures to prevent pollution and ecological degradation and for securing ecologically sustainable development. There are no activities on site that will trigger an Air Emissions License however measures have been provided in the EMPr to ensure that air quality is managed in line with the requirements of NEM: AQA.
National Water Act (Act No. 36 of 1998) (as amended).	NWA	Provides for fundamental reform of the law relating to water resources. Infrastructure will be constructed within 500m of various watercourses with the culvert at WC1 being constructed within wetland. A Water Use Authorisation is required from the Department of Water and Sanitation in terms of section 21(c) & (i) of the NWA.
National Forests Act (Act No. 84 of 1998).	NFA	To conserve and protect natural forests and woodlands as well as ensuring development with principles of sustainable management. The Department of Forestry Fisheries and Environment (DFFE) governs the removal, disturbance, cutting or damaging of protected tree species and natural forests. No natural forests or protected tree species will be impacted by the proposed development.
National Heritage Resources Act (Act No. 25 of 1999).	NHRA	For the management of national heritage resources and to nurture and conserve heritage resources so that they may be bequeathed to future generations. There is no existing infrastructure on site and therefore no structures with heritage or archaeological value. No graves are located on site. The property falls within a "*high*" palaeontological (i.e. fossils) sensitive area. A Palaeontological Impact Assessment was therefore carried out and is attached under Appendix B. The findings of the report are summarised in section 4.0 below.

KwaDukuza Spatial Development Framework	KDM SDF	The KDM SDF classifies Salt Rock as an area with short-term development potential. As per the town planners Spatial Planning Land Use Management Act (SPLUMA) application for Fable Smallholdings, the proposed development is well aligned to the KDM SDF and municipality's vision for the Mount Richmore area.
iLembe District Municipality Integrated Development Plan (2021/2022 Review).	iLembe IDP	The proposed gravel road and road infrastructure is directly associated with the Fable Smallholdings development. The Fable Smallholdings development was recently granted SPLUMA approval and is aligned with the iLembe District's vision which is "*by 2030 iLembe District Municipality will be a sustainable people-centred economic hub providing excellent services and quality of life*".

3.2 MOTIVATION FOR THE NEED AND DESIRABILITY

The need and desirability of a project is based on the principle of obtaining a sustainable development in that the proposal must be "*ecologically sustainable and socially and economically justifiable*"[3]. As stated in the Guideline on Need and Desirability, Department of Environmental Affairs "*the broader societal needs and the public interest should be considered*" when assessing the need and desirability of a project.

Existing access to Fable Smallholdings is via a single-track, gravel farm road which passes between to private properties at the end of Old Fort Road. Access to Old Fort Road is from the Foxhill / Tiffany's Centre intersection. The Foxhill area, where Fable Smallholdings is located, is comprised of residential, agricultural and mixed-use developments, including a church and school. All road networks in Foxhill feed onto Old Fort Road and the Foxhill / Tiffany's Centre intersection. The Litchi Orchard is the first development on the eastern side of Old Fort Road. The Litchi Orchard recently submitted a town planning application for the subdivision and redevelopment of the property[4]. The proposed Litchi Orchard development was comprised of three phases:

- Phase 1 for eight (8) houses and the formalisation and upgrading of the existing commercial node;
- Phase 2 for the extension of the commercial opportunities and establishment of high-density residential opportunities (i.e. apartments); and
- Phase 3 for the development of additional residential apartments.

The KwaDukuza Municipality's Planning Tribunal approved Phase 1 of the development however Phases 2 and 3 were refused due to the surrounding road network currently operating at capacity. The municipality also stated that the impact of traffic on the supporting road networks was not fully considered in the context of the KwaDukuza Roads Master Plan. The provision of an alternative access road into Fable Smallholdings using the Mount Richmore road network is therefore desirable for Fable Smallholdings residents as well as broader societal needs and public interest. Objections were raised during the Litchi Orchard town planning application by local Foxhill residents due to traffic concerns.

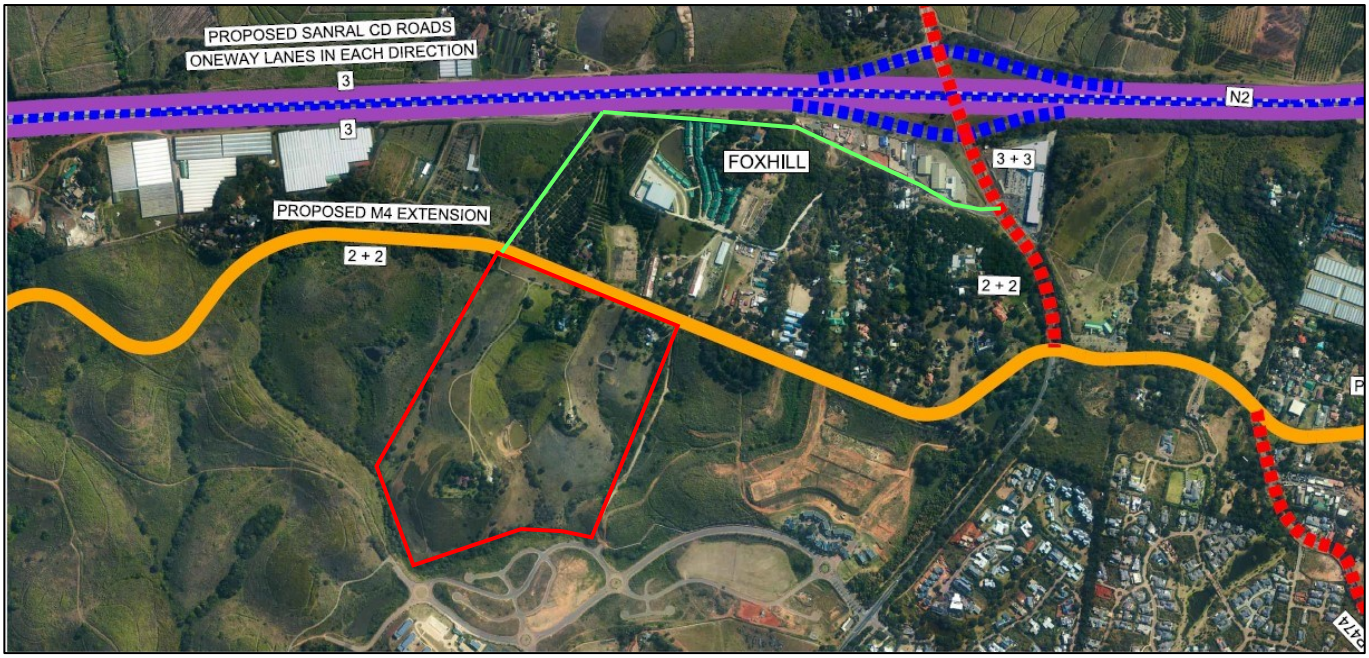
A snip of the KwaDukuza Roads Master Plan is provided in Figure 9. The Roads Master Plan has been approved by the South African National Roads Agency Limited (SANRAL), Department of Transport (DoT) and the KwaDukuza Local Municipality. The farm road off Old Fort Road currently used to access Fable Smallholdings is drawn in green in Figure 9 and traverses the proposed M4 Extension Road. Future access to Fable Smallholdings may therefore be disrupted or need to be moved with the implementation of the Roads Master Plan. The need for an alternative access point into Fable Smallholdings from the southern side of the development (i.e. using the Mount Richmore / New Salt Rock Road network) is therefore justifiable.

The wetland system within Fable Smallholdings is located along the eastern and southern boundary of Fable Smallholdings. The preferred layout of the new access road avoids the wetland system as much as possible however crossing wetland HGM Unit 3 is unavoidable. The narrowest portion of the wetland has therefore been crossed and the culvert designed to encourage flow and reduce erosion. The preferred road alignment, location of the gatehouse outside wetland and the preferred technology alternative ensures an ecologically sustainable development.

[3] DEA (2017), Guideline on Need and Desirability, Department of Environmental Affairs (DEA), Pretoria, South Africa.

[4] AF Planning SPLUMA Submission [MPT 32/2021 SPLUMA 39/2019 BA (DP)]. Record of Decision from KwaDukuza Municipality Planning Tribunal dated 25/01/2022.

Figure 9: Snip of the SMEC Roads Master Plan (Alignments & Class) Showing the Fable Smallholdings Study Area, Outlined in Red, and the Existing Access off Old Fort Road, Drawn in Green (Source: SMEC South Africa; Drawing No.: DM0176-RDS-ALIGN-01).



4.0 ENVIRONMENTAL ATTRIBUTES

A report was generated by the national web-based environmental screening tool in terms of section 24(5)(h) of NEMA and Regulation 16(1)(b)(v) of the EIA Regulations, 2014 as amended. The Department of Environment, Forestry and Fisheries (DEFF) Screening Tool is attached under Appendix B. The Screening Tool identifies potential specialist assessments which may be required for the application. It is the responsibility of the EAP to confirm this list and to motivate the reason for not including any of the identified specialist studies.

Table 3: List of Specialist Assessments identified in the Department of Environment, Forestry and Fisheries Screening Tool Report.

Specialist Assessment	Included in Appendix B	Motivation for Conducting / Not Conducting Assessment
Landscape / Visual Impact Assessment	No	The new gravel road is an extension of the existing, internal gravel roads on the properties. The project will therefore have no visual impact on the surrounding landscape.
Archaeological and Cultural Heritage Impact Assessment	No	No features of cultural or architectural importance were identified during the site assessment and therefore no Heritage Impact Assessment is required. The road is less than 300m in length and therefore falls below the threshold for a Heritage Impact Assessment (section 38 of the National Heritage Resources Act, 1999).
Palaeontology Impact Assessment	Yes	The property falls within a "*highly sensitive*" palaeontological area triggering a Palaeontological Impact Assessment. The findings of the Palaeontological Impact Assessment are summarised under section 4.5 of the Basic Assessment Report.
Terrestrial Biodiversity Impact Assessment	Yes	The terrestrial environment is disturbed and was previously under sugarcane. A full Terrestrial Biodiversity Impact Assessment was therefore not required. Comment on the vegetation and habitat associated with the development has been provided under section 6.1 of the SDP "Terrestrial and Wetland Impact Assessment" attached under Appendix B and summarised in section 4.0 below.

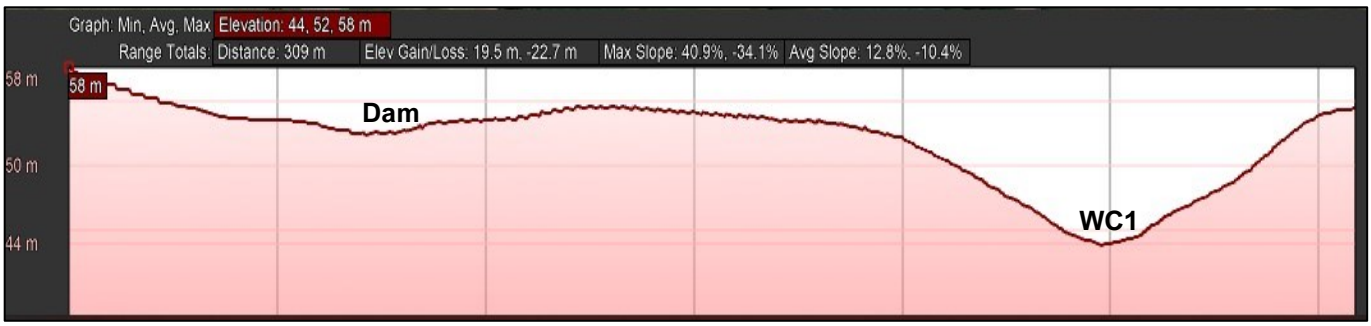
Aquatic Biodiversity Impact Assessment	Yes	A Wetland Impact Assessment has been carried out by SDP and is attached under Appendix B of the BAR.
Hydrology Assessment	No	The footprint of the proposed road will not significantly impact the surface hydrology of the area and therefore a Hydrological Assessment was not considered necessary. The wetland specialist has provided comment on the general hydrology of wetland and drainage line crossed by the road.
Socio-Economic Assessment	No	The project is a private development which will not impact the socio-economic environment of the area. This assessment is therefore not required.
Plant Species Assessment	Yes	A list of plant species has been included in the SDP Terrestrial Impact Assessment.
Animal Species Assessment	No	Considering the design of the road (minimal impact, concrete strips), no animal species will be impacted by the construction of the new access road and therefore no animal species assessment was deemed necessary.

Information provided in the specialist assessments has been used to describe the receiving environment. All mitigation measures and recommendations provided by the specialists has been incorporated into the Assessment of Impacts Table under section 6.0. and the EMPr provided under Appendix E. All specialist assessments are attached under Appendix B.

4.1 PHYSICAL CHARACTERISTICS OF THE SITE

The topography of the site is described as a "*moderately undulating landscape with slopes varying from having a convex to concave conformation of nearly 5° and 6°*"[5]. The preferred layout for the road follows the contour, across an existing dam wall and around a hill. The road traverses down a valley, where the precast culvert is proposed, allowing the road to cross a perennial watercourse (WC1). The road climbs steeply out the valley to the property boundary, where the gatehouse is located on top of the hill. Figure 10 provides an elevation profile of the preferred layout alternative.

Figure 10: Elevation Profile Along the Preferred Fable Access Road Route from West to East.



4.2 GEOGRAPHICAL ATTRIBUTES AND GEOLOGY

A geotechnical investigation was carried out by MonoBlock Ltd in September 2019 and is attached under Appendix B. Percolation testing was done on site to confirm whether the geology is appropriate for onsite disposal of sewage using septic tanks. The underlying geology of the site is described under sections 3.0 and 4.2 of the Monoblock report. The general area is underlain by the Berea Formation comprising of red sands, subordinate white, yellow, brown and purple sands as well as a basal conglomerate. This formation is overlain by aeolian sands which typically comprise of brown sands. In places, the Berea Formation is locally intruded by Jurassic dolerites dykes and sills which have completely weathered to produce the red clayey soils encountered on site. Locally, the site is mainly capped by the hillwash soils from the ground surface up to depths varying between 0.60 and 1.00m. This layer is underlain by the residual clayey sands or silty clayey soils up to 1.30m.

The wetland specialist describes the local Salt Rock geology as Permian Shales of the Ecca formation. These soils give rise to points of increased seep and regularly interspersed wetland environment, like the wetland found in Fable Smallholdings.

[5] Section 2 of the MonoBlock "*Percolation Test for the Proposed Sewage Disposal System*" September 2019; attached under Appendix B.

4.3 FAUNA AND FLORA

According to desktop mapping, the proposed road falls within the Northern Coastal Grasslands (KZN16) ecosystem. This ecosystem has been classified as "*critically endangered*" by the South African National Biodiversity Institute. The specialist describes the broader landscape surrounding Fable Smallholdings as having been largely transformed by agricultural activities. Sugarcane was grown across the site, including where the Fable road is proposed, up until 2006. Since then, the property has been used for grazing cattle and horses[6]. The grassland is therefore secondary in nature and still used for grazing livestock.

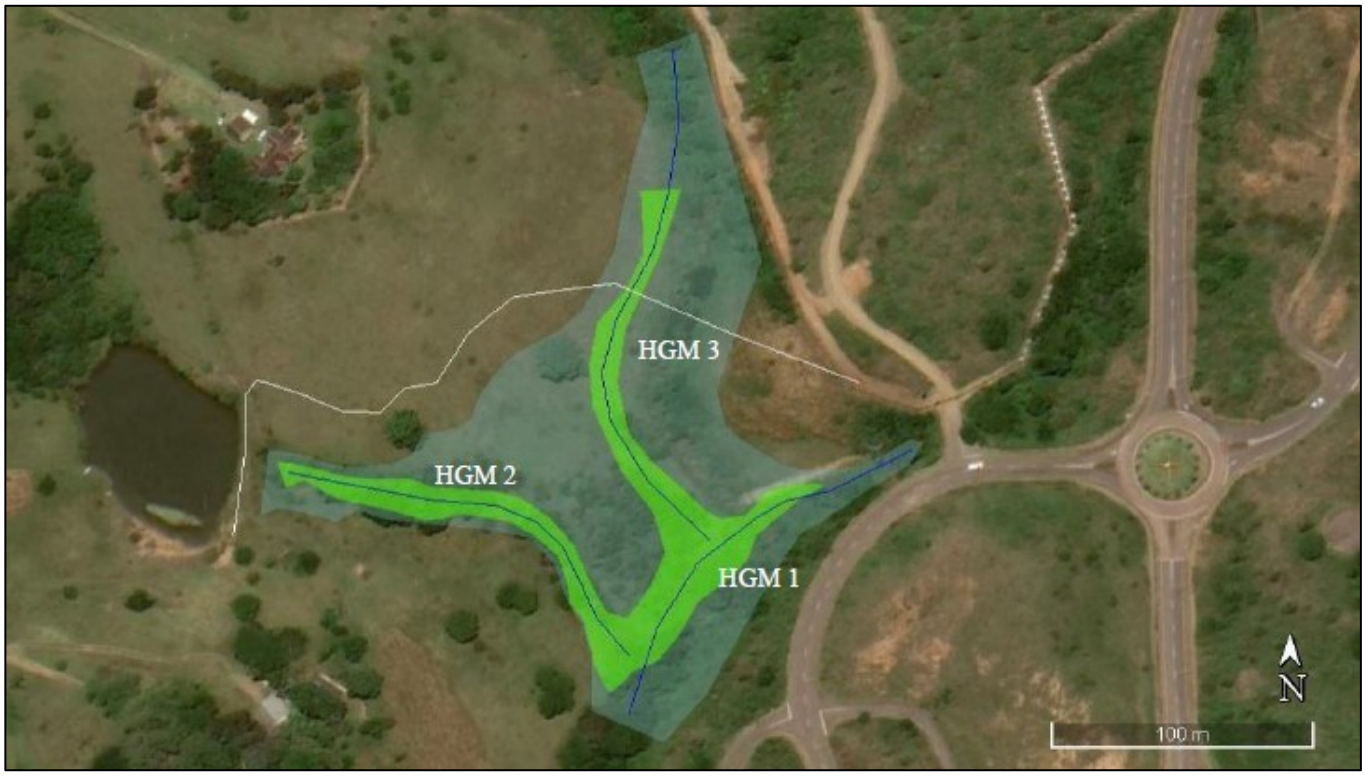
The vegetation is described by the specialist as "*dominated by typical coastal, early seral graminoids, including Aristida junciformis, Eragrostis curvula and Commelina benghalesis and the robust shrub, Leonotis leonurus".* Indigenous woody species are limited and fall outside of the preferred road footprint. Relic sugarcane crop and agricultural weeds were noted on site (*Centella asiatica, Chromolaena odorata* and *Bidens Pilosa).* The floral diversity is described as having "*low ecological value*"[7].

Fable Smallholdings is located in an area identified by Ezemvelo KwaZulu-Natal Wildlife as a region of critical biodiversity importance. These Critical Biodiversity Areas (CBAs) are considered to be areas of sound ecological condition and are irreplaceable in respect of Provincial biodiversity conservation targets[8].

4.4 WATERCOURSES

The study area falls within the U30E Quaternary Catchment within the Pongola to Mtamvuna Water Management Area (WMA 4). One wetland system, comprising of three hydrogeomorphic units has been delineated within Fable Smallholdings (Figure 11). The wetland is primarily driven by surface drainage and groundwater seep that arises to the west of the site.

Figure 11: Aerial Image Showing the Extent of the Wetlands Associated with Fable Smallholdings (Source: SDP, 2022).



[6] Section 6.0 of the SDP "*Terrestrial and Wetland Impact Assessment*" May 2022.

[7] Section 6.1 of the SDP "*Terrestrial and Wetland Impact Assessment*" May 2022.

[8] Please refer to Figure 7 in the SDP "*Terrestrial and Wetland Impact Assessment*" May 2022.

4.4.1 HGM 1 (Unchanneled Valley Bottom)

- Transformed primarily on account of grazing pressure and an old farm road which traversed this portion of wetland.
- Characterised by distinct channel banks and the presence of diffuse flows. The wetland has reduced riparian functionality as a result of reduced sedimentation caused by the upstream dam.
- The main channel is dominated by graminoid vegetation and sedges, in particular *Cyperus dives* and *Cyperus textilis*. Other wetland herbs include *Persicaria* spp and the floating aquatic *Lemna* spp.

4.4.2 HGM 2 (Riparian Zone)

- This hydrogeomorphic unit is immediately downstream of the dam wall and has been impacted by agricultural and grazing activities.
- Comprised of a primary channel with minor levels of seep from adjacent embankments. The channel supports a maturing sedge community consisting primarily of *Typha capensis* and *Phragmites australis.*
- The upstream dam has resulted in a reduction in sediment in this system causing erosion of the channel.

4.4.3 HGM 3 (Hillslope Seep)

- This is the largest wetland associated with the study area and is crossed by the access road.
- The wetland is driven by surface and subsurface flows. The wetland was formerly under sugarcane cultivation and therefore the channel has a moderate level of invasion by exotic species.
- Vegetation species common in this HGM unit include S*yzygium cordatum, A junciformis* and *Vachellia natalitia*.

The overall Present Ecological State (PES) of the wetland system is "*largely modified*" or PES Category D. The wetland has been subjected to a large change in ecological processes and the system is appreciably altered. The wetland system has functional attributes, which include maintenance of biodiversity and erosion control.

4.5 CULTURAL AND HERITAGE

The study area is highly transformed due to the long-term cultivation of sugarcane. No items of heritage or cultural importance were identified in the study area during the site inspections. The road is less than 300m in length and therefore falls below the threshold for a Heritage Impact Assessment. A protocol has been included in the EMPr should any items with historical or archaeological value be found during construction.

The proposed Fable road falls within a high fossil sensitivity area with the alignment of the road falling on moderately fossiliferous sands of the Umkwelane Formation that might preserve Miocene to Pliocene marine shells and trace fossils. The palaeontologist concluded that the probability of finding fossils during construction is "*extremely unlikely*"[9]. There is an extremely small chance that fossils may occur below ground in the sands below the surface and modern root layer and so a Fossil Chance Find Protocol has been included in the EMPr for Fossil Chance Finds during construction.

4.6 SOCIO-ECONOMIC PROFILE

Fable Smallholdings falls in the KwaDukuza Local Municipality within the iLembe District. iLembe Municipality has a population of 678 048 and had the fastest growing population in KwaZulu-Natal between 2007 – 2016[10]. Outside eThekwini, iLembe Municipality is the fifth biggest district economy of the ten district economies, contributing 8.15% to the KZN economy. Over 80% of the population of KwaDukuza live within urban areas[11].

[9] Prof Marion Bamford "*Palaeontological Impact Assessment for the proposed alignment of a road in Fable Smallholdings, near Mount Richmore, Salt Rock, KwaZulu-Natal Province*" March 2022.

[10] Department of Cooperative Governance & Traditional Affairs "*iLembe District Municipality Profile and Analysis District Development Model*" (June 2020).

[11] Statistics South Africa. Accessible on http://www.statssa.gov.za/ Accessed on 03rd March 2021.

4.5 SURROUNDING LAND USES

The table below shows the existing land uses surrounding the study area.

Table 4: Land Uses Surrounding the Proposed Fable Smallholdings Road.

N / W / E / S	Agricultural and Low Density Residential	Mount Richmore and Mixed-Use Development at Foxhill	Mount Richmore
	Agricultural Land	**Application Area**	Mount Richmore
	Mount Richmore	Mount Richmore and Curro School	Mount Richmore and Curro School

Figure 12: Photographs Showing the Characteristics of the Site Taken on the 30th November 2021: (a) Dam Wall Requiring Re-Enforcement on the Downstream Side; (b) Wetland HGM 2, Below the Dam Wall; (c) Photograph Taken Near the Confluence of HGM 3 and HGM 1. The Red Arrow Indicates the Alternative Position for the Gatehouse Within Wetland; and (d) Wetland HGM 3, Where the Precast Culvert is Proposed. The Preferred Gatehouse Location is On Top of the Hill.

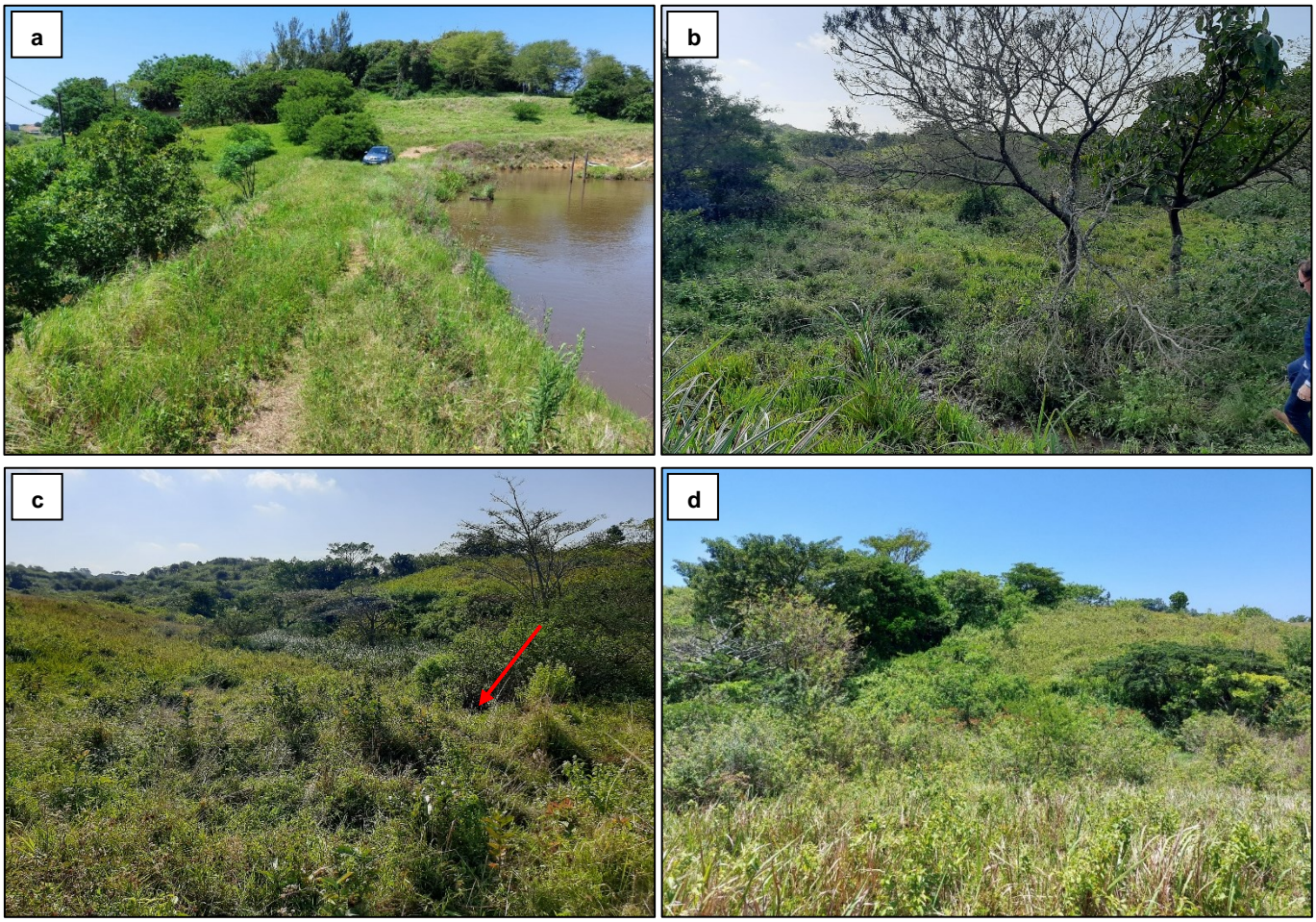
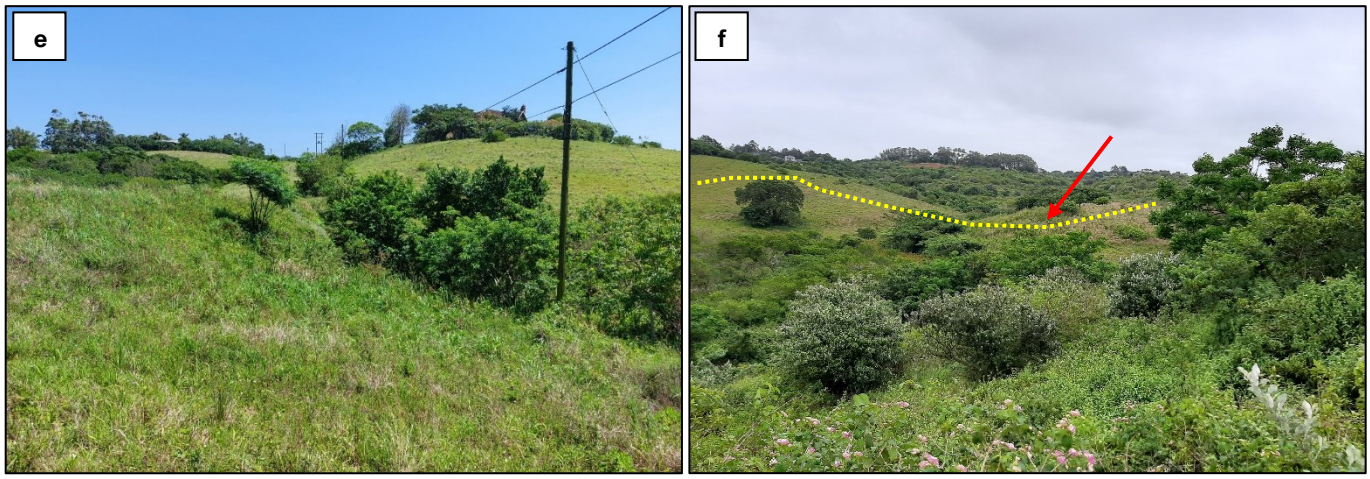


Figure 12 (cont.): Photographs Showing the Characteristics of the Site Taken on the 30th November 2021: (e) Photographer Facing North Along the Bottom of the Dam Wall Embankment where the Gabion Re-Enforcement Structure will be Located; and (f) Overview of the Preferred Road Alignment where the Road Crosses Wetland HGM 3 (Indicated by Red Arrow).



5.0 PUBLIC PARTICIPATION PROCESS

5.1. DETAILS OF PROCESS UNDERTAKEN IN TERMS OF REGULATION 41 OF THE EIA REGULATIONS

Please refer to the Public Participation Report attached under Appendix D for all details on the public participation process followed and proof of communications. Notification of all potentially Interested and Affected Parties (I & APs) took place using the following methods:

(a) Noticeboard on the boundary of the site;
(b) Written notification to adjacent landowners, adjacent occupiers, the relevant municipal ward councillor, the municipality and all other responsible organs of state; and
(c) Advertisement placed in the local newspaper.

A copy of the Draft Basic Assessment Report was provided to all I & APs for a 30-day comment period. Once all comments have been responded to, the Basic Assessment Report will be updated and submitted to EDTEA for assessment. I & APs will also be provided an opportunity to comment on the Final Basic Assessment Report. EDTEA have a legislated period of 107 days to assess the application. Registered I & APs will be notified of the outcome of the application.

5.2. SUMMARY OF ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Please refer to the Comments and Response Table attached to the Public Participation Report (Appendix D) for a full copy of all comments received on the application to date. No issues have been raised by Interested and Affected Parties to date.

6.0 IMPACT ASSESSMENT

The aspects and impacts listed in the table below have been identified by reviewing the receiving environmental characteristics of the site (geographical, physical, biological, social, economic, heritage and cultural), having an understanding of the environmental impacts caused by similar activities as well as input from the specialist team.

The significance of the impact (before and after mitigation) has been calculated using the recognised quantified methods described in the Department of Forestry, Fisheries and Environment Integrated Environmental Management Information Series (Series 5 on Impact Significance). The following criteria has been used to assess the significance of the impacts identified:

Table 5: Criteria Used to Assess the Significance of Impacts Identified.

Criteria	Rating
Extent of Impact *Size of area that will be affected by the impact*	▪ Site ▪ Local (<10km from site) ▪ Regional (>10km from site)
Duration of the Impact *Timeframe during which the impact will be experienced*	▪ Short / once off ▪ Medium / during operation ▪ Long-term / permanent
Severity of the Impact *Anticipated consequence of impact*	▪ Slight ▪ Moderate ▪ Substantial ▪ Severe ▪ Extreme
Probability *Probability of the impact occurring*	▪ Very likely ▪ Likely ▪ Unlikely ▪ Very unlikely ▪ Extremely unlikely
Irreplaceability *Degree of which the impact causes irreplaceable loss of resources.*	▪ High (activity will destroy resources that cannot be replaced) ▪ Moderate ▪ Low
Degree of Certainty *Confidence of impact rating based on available information*	▪ High ▪ Moderate ▪ Low
Significance of Impact *(Severity x Probability calculated as per the figure below)*	▪ Very low (very minor alterations of the environment and can be easily avoided by implementing mitigation measures) ▪ Low (minor alterations of the environment and can be easily avoided by implementing mitigation measures) ▪ Moderate (moderate alteration of the environment and can be reduced/avoided by implementing mitigation measures) ▪ High (major alteration to the environment even with the implementation of mitigation measures) ▪ Very high (Very major alteration to the environment even with the implementation of mitigation measures. The impact will have an influence on decision-making)
Ranking of residual impacts *Ranking of impact remaining after mitigation*	▪ 5 (very low) ▪ 4 (low) ▪ 3 (moderate) ▪ 2 (high) ▪ 1 (very high)

The significance of the impacts has been assessed both with and without mitigation actions. Describing the impacts in terms of the above criteria aims to provide a consistent and systematic approach for authorities to rate the effectiveness of the mitigation measures provided and assist with the assessment of the application. The *Significance of Impact* rating is calculated according to the guide below.

Figure 13: Guide to Calculating the Significance of an Impact Based on the Severity and Probability of the Impact Occurring.

Probability	Significance of Impact = Severity x Probability					
	Very Likely	Very Low	Low	Moderate	High	Very High
	Likely	Very Low	Low	Moderate	High	High
	Unlikely	Very Low	Low	Moderate	Moderate	Moderate
	Very Unlikely	Very Low	Low	Low	Low	Low
	Extremely Unlikely	Very Low	Very Low	Very Low	Very Low	Very Low
		Slight	Moderate	Substantial	Severe	Extreme
		Severity				

Table 6: Assessment of Impacts Associated with the Preferred Layout and Technology Alternatives for the Access Road at Fable Smallholdings (Layout Alternative 2; Technology Alternative 2).

Aspect	Impact	Extent	Duration	Severity	Probability	Irreplaceability	Mitigation	Significance of Impact (Severity x Probability)		Ranking of residual impacts	Degree of Certainty
								Without mitigation	With Mitigation (residual impact)		
CONSTRUCTION											
1. Stripping of vegetation during earthworks phase of new road.	**a. Clearance of 879.5m^2 of indigenous vegetation altering the local habitat (SDP, 2022).**	Site	Long-term	Moderate	Very Likely	Low	The clearance of vegetation for the road will see minor alteration of habitat on site. The form and structure of the habitat to be impacted on has been described by the specialist as having "*low ecological significance*" with vegetation comprising of primarily graminoid species, sugarcane and alien invasive plant species [12]. The following measures must be put in place to mitigate against excessive habitat destruction: • Prior to excavations taking place on site, an independent Environmental Control Officer (ECO) must be appointed and conduct Environmental Awareness training as per section 5.0 of the EMPr (Appendix E). The induction training must include: - An indication of the location of the environmentally sensitive areas (i.e. wetland systems and the 32m regulated area). - The importance of the environmentally sensitive areas. - Restrictions associated with the wetland system (i.e. No Go areas). • Prior to earthworks commencing, the development footprint must be determined and cordoned (shown in Figure 14).	Low	Very Low	5	High

[12] Section 7.2 of the SDP "*Terrestrial and Wetland Impact Assessment*" May 2022.

							• Excavation and clearance activities must be restricted to the approved project footprint (grey in Figure 14). • To prevent excessive clearance of vegetation, heavy machinery must not be permitted to move beyond the demarcated footprint • No vegetation may be cleared from outside of the authorised developable area. • Topsoil cleared from the road footprint must be stored during construction, returned to the bank after earthworks and compacted. • Topsoil must not be stockpiled directly adjacent to the wetland but remain 15m from the edge of the wetland (15m buffer shown in Figure 14). • The road must avoid larger, woody plant species. • The site-specific rehabilitation plan describing grassing and remediation activities must be implemented post-construction (refer to section 4.4 of the EMPr). The alteration of habitat has a "*very low*" significance rating after mitigation.				
	b. Disturbance leading to establishment and proliferation of alien invasive vegetation on site and into the surrounding wetland environment.	Site	Medium-term	Moderate	Very Likely	Low	Construction activities, primarily vegetation clearance, typically provides an opportunity for the proliferation of exotic species within the disturbed area. The establishment and spread of alien invasive species within the disturbance footprint must be managed throughout the construction phase by the Contractor. • The "*Eradication of Alien Invasive Plant*" Management Plan must be implemented on site during construction (section 5.4.2 of the EMPr). This Management Plan includes a list of common alien invasive plant species anticipated on site, identification photographs and eradication measures. • Alien invasive species must not be permitted to establish within the disturbance footprint.	Low	Very Low	4	High

							• The clearance of alien vegetation must take place in phases and make use of registered herbicides, where necessary.				
	c. Alteration of faunal ethos (SDP, 2022).	Local	Long-term	Moderate	Very Likely	Low	The site does offer some refugia to localised fauna (vertebrates and invertebrates). The specialist concludes that "*although very limited, the removal of such habitat would see the ousting of fauna at this point*"[13]. Mitigation measures are the same as those provided for Impact (a) above, to minimise the clearance of vegetation and potential faunal habitat during construction. The significance of this impact is rated as *very low* by the specialist after mitigation.	Low	Very Low	4	High
	d. Localised erosion of banks during rain resulting in sedimentation of adjacent wetland. This has the potential to alter the local hydrological regime of the wetland system (SDP, 2022).	Local	Short-term	Substantial	Likely	Moderate	The alteration of natural ground levels and compaction of soil will result in silt running off the site into the adjacent wetland system, especially during heavy rainfall. To reduce the volume of silt washing into the wetlands, resulting in erosion and reduced functionality, the following must be implemented: • Stormwater management (temporary / permanent) must be established at an early point in the construction programme. This must ensure appropriate channelling of stormwater runoff from the road (i.e. regularly placed cut-off drains directing stormwater off road at intervals). • Erosion prevention and sediment control measures must be established. These include silt fences, sandbags, interceptor ditches, seeding and sodding. • The stormwater management system must be inspected by the ECO during audits and any significant topography anomalies identified and rectified immediately. • Construction within wetland HGM 3 must take place in the dry season (i.e. March - August) when water levels are lowest and the risk of erosion and downstream siltation is lower.	Moderate	Low	4	Moderate

[13] Section 7.2 of the SDP "*Terrestrial and Wetland Impact Assessment*" May 2022.

							• Wetland areas not within the direct construction footprint must be demarcated as 'no-go' areas (refer to Figure 14). No site staff or vehicles are permitted to enter these No-Go areas at any time. • No excavated material or fill material may be stored within the No-Go areas. • No excavated material or fill material may be stored over an extended period of time (i.e. more than 24hours) within the 15m wetland buffer (indicated in Figure 14). • Sandbags or pack rock must be placed below the soil stockpiles as berms should erosion start to occur from these areas. • Vegetation must remain in place wherever possible and for as long as possible during earthworks. • Recommendations made in the Geotechnical Investigation must be adhered to. These are as follows: - Sloughing of the upper hill washed sandy soils can be expected. - Stormwater management, erosion and subsoil drainage control measures must therefore be adhered to whilst construction takes place.				
	e. Excavations destroying fossils impacting on palaeontology.	Regional	Long-term	Substantial	Extremely Unlikely	High	The palaeontologist concluded that it is unlikely that any fossils occur in the development footprint however, given the potentially very high sensitivity of the rocks underlying the site, a Fossil Chance Find Protocol has been provided under section 4.3 of the EMPr. • During earthworks, should any objects with historical, archaeological or cultural significance be uncovered, all work in this area must cease and the heritage authority, AMAFA, notified.	Very Low	Very Low	5	Moderate
2. Construction of Precast Concrete Culvert in Wetland HGM 3.	**a. Infilling of 287m^2 of hillside seep wetland.**	Site	Long-term	Substantial	Very Likely	Moderate	Due to the position of the wetland system along the eastern and southern property boundary, any access road from Fable Smallholdings to the Mount Richmore road network must traverse the	Moderate	Low	4	High

							wetland system. The section of hillslope wetland to be infilled is described by the specialist as *largely modified* (PES Category D). Using the mitigation hierarchy, the preferred alternative has avoided the impact as far as possible by utilising an existing crossing across wetland HGM 2. The infilling of wetland has been minimised by re-aligning the route of the road outside wetland as far as feasibly possible. The crossing of the wetland at WC1 is unavoidable and therefore the impact has been reduced by ensuring that the narrowest point of permanent wetland is traversed in Layout Alternative 2 (see Figure 11). To remediate the loss of wetland, the wetland specialist recommends that the applicant implement measures to improve the state of the remaining portions of wetland (shown in Figure 14). The rehabilitation interventions include: • Removal of any material previously infilled into wetland when the land was under cultivation. • An alien vegetation removal program must be implemented within the wetland system (see section 5.4.2 of the EMPr). • The remaining wetland area within Fable Smallholdings must be retained for conservation (non-development servitude registered). The following measures are applicable to the culvert at WC1 and road traversing HGM 3: • The engineer must cater for such flow through the installation of a below-ground box culvert / piping system to allow free flow of water beneath the road (i.e. two large precast culverts to be constructed; Technology Alternative 2). • Grass block road in between concrete strips must be established to increase the percolation of water proximal to the wetland, while facilitating stability of the surface.				

							• The smallest excavator that is practically feasible must be used to carry out any work within wetland. • The excavator driver must undergo environmental induction training with the ECO / wetland specialist to understand the sensitivity of the area and the relevant restrictions. • All excavations to be carried out under supervision of the ECO / wetland specialist. • The excavator and other construction equipment must be limited to specific areas of the wetland where work is required. No other disturbance to the bed / banks of the wetlands is permitted. • No ad-hoc roads through the wetland are permitted. • All areas disturbed by the excavator must be ripped and rehabilitated using suitable hygrophilous indigenous grasses / plant species, as advised by the ECO. • A Water Use Authorisation from the Department of Water and Sanitation is required prior to any work commencing within wetland.				
	b. Unintentional increase in the development footprint resulting in further loss of wetland and reduction in overall wetland functionality.	Local	Short-term	Substantial	Likely	Low	• Prior to any excavations taking place on site, the independent ECO must conduct Environmental Awareness training with the Contractor responsible for the earthworks. This training must include an indication of the wetland systems and the restrictions associated with the wetlands. • Where the road traverses wetland, the authorised development footprint must be clearly demarcated to ensure minimal wetland loss occurs. • Distinct fences (i.e. shade cloth fencing) must be established to demarcate adjacent wetland areas (position of shade cloth fencing indicated in Figure 14).	Moderate	Very Low	4	High

							• Areas outside of the authorised footprint must be treated as No-Go areas. No site staff or vehicles are permitted to enter these areas. • Should staff personnel enter the No-Go area beyond the shade cloth fences or dispose of any waste or construction material into the No-Go areas, that staff member must be given a disciplinary warning. • The contractor must limit work within the wetlands to minimize bed, bank and flow disturbance. • No storage areas are permitted within the No-Go areas. • Any areas disturbed outside of the authorised construction footprint must be rehabilitated within a month of occurrence to the satisfaction of the ECO (see section 4.4 of the EMPr). • All activity within the wetland must be carried out strictly according to the approved layout and technology alternatives (Appendix C).				
	c. Greywater / hydrocarbons / chemicals washing into wetlands polluting the systems.	Site	Short-term	Moderate	Likely	Low	During construction, minor spills of material, particularly hydrocarbons, may occur. This will pose a localised threat on the immediate environment and adjacent wetland. This impact can be prevented by ensuring the mitigation measures provided below are adhered to. • Waste management during construction must be carried out in accordance with section 4.3. of the EMPr. • No chemicals to be stored on site. • All machinery and equipment working within the wetland must be inspected for faults and leaks to reduce the likelihood of hydrocarbons entering the adjacent watercourses. • Any spills on site must be cleaned up immediately using the Spill Response Procedure provided in section 5.4.1 of the EMPr. • The seven step Spill Response Procedure must be included in the ECO's environmental toolbox talk.	Low	Very Low	5	High

							• If a spill does occur, every effort must be made to prevent the spill from entering the adjacent wetland systems (berms, booms etc.). • No vehicles or equipment must be washed on site unless at a designated wash bay where dirty water must drain into a sump where hydrocarbons / contaminated material is separated out before the water is discharged into the surrounding environment. • The vehicle wash bay must be located outside of the 32m regulated area (indicated in Figure 14). • No refuelling of machinery / vehicles on site. • Drip trays must be available near the hazardous storage area and where hazardous materials are being used on the site. • A Spill Kit / similar must be available near the hazardous storage area. • Reduce the requirements for storage and use of noxious liquids, such as fuel, on site.				
3. Re-Enforcement of the Existing Dam Wall Using Gabion Basket Retaining Wall and Formalisation of Spillway within 32m of Wetland.	**a. Direct and indirect impact on wetland HGM 2, directly downstream of the dam wall.**	Site	Short-term	Moderate	Likely	Low	• Prior to construction commencing in this section, the Contractor and ECO must clearly demarcate the construction footprint (i.e. the outer limit of the gabion basket retaining wall). • The footprint of the gabion basket retaining wall must remain within the existing dam wall embankment footprint to avoid any infilling of wetland downstream (Technology Alternative 2; shown in Figure 14). • No large, woody tree species must be cleared during the construction of the gabion basket retaining wall. • Vehicles and machinery used to excavate material and place the gabion baskets must be as small as practically possible and must not traverse the wetland system downstream (see No-Go areas indicated in Figure 14). • All staff working on the re-enforcement of the dam wall must have undergone environmental induction training and the training register retained in the site file for auditing purposes.	Low	Very Low	4	High

							• A distinct fence (i.e. shade cloth fencing) must be erected immediately downstream of the dam wall embankment to demarcate the adjacent wetland area. The recommended position of the shade cloth fencing is indicated in Figure 14. • The ECO must inspect the fencing prior to excavations taking place for the dam wall re-enforcement. • Any areas outside of the authorised development footprint unintentionally disturbed during construction must be rehabilitated in accordance with section 4.4 of the EMPr.				
4. Construction of Fable Smallholdings Road and Gatehouse Within 32m of Wetland.	**a. Direct and indirect impacts on the adjacent wetland (HGM 1, 2 & 3).**	Site	Short-term	Moderate	Unlikely	Low	During the construction of the Fable Smallholdings Road, the Contractor must adhere to the following to prevent any negative impact on the adjacent wetland system: • All construction staff must have undergone environmental induction training as per section 5.3 of the EMPr (Appendix E). • Proof of environmental induction training must be retained in the site file for auditing purposes. • The authorised development footprint (Figure 14) must be strictly adhered to so that construction work within the 32m regulated area is minimised.	Low	Very Low	5	High
5. General construction-related impacts.	**a. Dust coating adjacent wetland vegetation reducing functionality.**	Site	Short-term	Moderate	Unlikely	Low	Due to the small construction footprint and earthworks required, the generation of dust on site is anticipated to be low and temporary in nature. • During high winds, dust suppression must take place using water carts / hose to prevent excessive dust on site. • Any fine materials stockpiled on site must be covered to prevent dust from being blown around. • Material transported to site on the back of trucks must be covered, • A complaints register must be maintained on site and any complaints received addressed timeously.	Low	Very Low	5	High

							• A shade cloth fence / other screening techniques must be used to reduce dust from entering adjacent wetland systems if required. • All construction vehicles and equipment must be well maintained to reduce emissions generated on site. • No water may be abstracted from the dam or other watercourses on site unless authorisation has been granted from DWS.				
	b. Littering and improper storage / disposal of waste accumulating on site and within adjacent sensitive wetland areas.	Site	Short-term	Moderate	Likely	Low	The following measures are included in the EMPr to manage waste during construction so that it is contained within the development footprint and correctly disposed of: • All waste generated on site must be disposed of in the designated waste management area to ensure that it is not blown around the site into the environmentally sensitive areas or adjacent properties. • The waste management area must be located outside of the 32m regulated area. • All waste must be stored under cover to prevent rain ingress and/or waste from being blown around site. • No waste must be buried or burnt on site. • Potentially hazardous substances [14] to be stored in a fenced off area that is undercover to prevent contamination of rainwater. • All potentially hazardous substances must be stored, in a bunded area (110% capacity of largest container) with an impermeable surface to prevent soil contamination during handling. • The use of hydrocarbons and other potentially hazardous liquids on site must be managed in accordance with section 4.3 of the EMPr attached under Appendix E.	Low	Very Low	5	High

[14] Hazardous substances refer to substances scheduled in the Hazardous Substances Act (1973) and Hazardous Chemical Substances Regulations (1995) and include paint, oils, fuels, solvents, pesticides.

							• No bulk storage of fuel is permitted on site (>30m^3). • A full inventory of all hazardous materials must be retained on site with the respective Material Safety Data Sheets. • All solid waste must be disposed of at an appropriate landfill site and records of such disposal must be retained on site for auditing purposes.				
	c. Improper placement and management of toilet facilities negatively impacting adjacent sensitive wetland area.	Site	Short-term	Moderate	Unlikely	Low	Sufficient toilet facilities must be provided on site to prevent construction staff from utilising the surrounding areas. • Toilets must be located within the site camp, outside of the 32m regulated area. • Staff must use the toilets provided and must not use any other areas on site as toilet facilities. • Toilets should be screened as far as is practically possible. • Ablution facilities must be checked regularly and kept in a clean state.	Low	Very Low	5	High
	d. Incorrect placement of the site camp indirectly impacting adjacent sensitive wetland area.	Local	Short-term	Slight	Likely	Low	• The site camp must be located outside of the 32m regulated area (visible in Figure 14). • The site camp must be located on a flat portion of land and must include a parking area for vehicles. • Signage is to be erected outside site camp indicating relevant contact details of responsible person in case of complaints or emergencies after hours.	Very Low	Very Low	5	High
OPERATION											
6. Operational phase of the new Fable Smallholdings Road and Gatehouse.	**a. Reduced groundwater percolation and increased surface flows resulting in the alteration of the local hydrological regime of the wetland (SDP, 2022).**	Local	Long-term	Substantial	Likely	Low	Since the proposed road is gravel with concrete strips only being used in the steeper sections (±17m^2 of concrete infrastructure within 32m of watercourse), this impact is rated as having low significance before mitigation. Provided that the stormwater management system is in place once construction is complete (i.e. cut-off drains and reno mattresses) and the areas adjacent to the road are re-vegetated, there is no further	Low	Very Low	5	High

							mitigation measures required during the operational phase of the project.				
	b. Alteration of flow through hillside wetland (HGM Unit 3) because of unsuitable placement of the concrete culvert in wetland.	Local	Medium-term	Moderate	Unlikely	Low	The following measures must be carried out to avoid potential alteration of flow dynamics within the wetland HGM Unit 3 in the long-term: • The contractor must build the culvert underneath the road as per the approved design (Technology Alternative 2 in Appendix C). • The in-situ concrete boxes must be installed at a downward sloping angle of to ensure that the water velocity flowing through the culvert is high enough to avoid sedimentation accumulation in the culvert. • Gabion mattresses / baffling structures must be constructed at both the inlet and outlet points to prevent erosion. • Should the culvert become blocked / require maintenance work, only material within the culvert may be removed (i.e. no excavation within the wetland area to take place).	Low	Very Low	4	Moderate
	c. Diversion of traffic away from Foxhill / Tiffany's Centre intersection.	'	'	'	'	'	This is a positive impact.	Positive	Positive	'	'
CUMULATIVE											
7. Development of the Fable Smallholdings Road and Gatehouse.	**a. Cumulative transformation of habitat (terrestrial and wetland) on site and within the Salt Rock area.**	Local	Long-term	Substantial	Very Likely	Moderate	Prevailing impacts on the wetland system are described under section 7.1 of the Terrestrial and Wetland Impact Assessment attached under Appendix B. These include the historic land use (sugarcane farming), the establishment of the dam within HGM 2 and alien vegetation establishment within the wetland system. There is another structure within HGM 3, approximately 60m upstream of WC1, where a fence line traverses a watercourse. The alteration of surface flow and deposition of sediment into HGM 3 during the construction of the precast concrete culvert at WC1 is therefore a cumulative impact associated with the wetland system.	Moderate	Low	4	High

							The cumulative transformation of terrestrial habitat within Fable Samllholdings and the greater Salt Rock area is of low significance in terms of ecology (fauna and flor) due to the low level of diversity sustained by the habitat on site[15]. • Mitigation measures listed in the table above must be adhered to so that impacts associated with the construction phase are limited.				

Table 7: Assessment of Impacts Associated with the Layout and Technology Alternatives for the Access Road at Fable Smallholdings (Layout Alternative 1 and Technology Alternative 1).

Aspect	Impact	Extent	Duration	Severity	Probability	Irreplaceability	Mitigation	Significance of Impact (Severity x Probability)		Ranking of residual impacts	Degree of Certainty
								Without mitigation	With Mitigation (residual impact)		
CONSTRUCTION											
1. Stripping of vegetation during earthworks phase of new road.	**a. Clearance of approximately 1 070m^2 of indigenous vegetation altering the local habitat (SDP, 2022).**	Site	Long-term	Moderate	Very Likely	Low	An additional 190m^2 of indigenous vegetation would require clearing should the alternative layout (Layout Alternative 1) be authorised. This is due to the longer road length and the two additional culvert structures that would be required compared to the preferred layout alternative. The same mitigation measures apply to both alternatives however the severity of the impact is marginally higher in the alternative layout (still rated as *moderate* pre-mitigation).	Low	Very Low	5	High
	b. Disturbance leading to establishment and proliferation of alien invasive vegetation on site and into the surrounding wetland environment.	These impacts, mitigation measures and significance of impacts provided above for the preferred Layout Alternative remain the same for Layout Alternative 1.									
	c. Alteration of faunal ethos (SDP, 2022).										

[15] Section 7.2 of the SDP "*Terrestrial and Wetland Impact Assessment*" May 2022.

	d. Localised erosion of banks during rain resulting in sedimentation of adjacent wetland. This has the potential to alter the local hydrological regime of the wetland system (SDP, 2022).	Local	Short-term	Substantial	Very Likely	Moderate	The risk of erosion and sedimentation of adjacent wetland is significantly higher for the alternative layout since 150m of road is proposed within the wetland. This is compared to the 60m of road traversing wetland for Layout Alternative 2 (preferred). The same mitigation measures apply to both alternatives however the significance rating of the impact, after mitigation remains moderate and the ranking of residual impacts is moderate as well.	Moderate	Moderate	3	Moderate
	e. Excavations destroying fossils impacting on palaeontology.	Impact, mitigation measures and significance of impact provided above for the preferred Layout Alternative remains the same for Layout Alternative 1.									
2. Construction of Precast Concrete Culverts in Wetland HGM 1, 2 & 3.	**a. Infilling of approximately 680m^2 of wetland.**	Site	Long-term	Severe	Very Likely	Moderate	The alternative layout for the Fable Smallholdings Road traverses significantly more wetland compared to the preferred road alignment (more than double). Culvert structures would also need to be constructed downstream of the dam wall within HGM 2, within HGM 3 and within HGM 1 before the road connects to the Mount Richmore network. Since no designs were drawn by the engineers for the additional culverts that would have been required if Layout Alternative 1 was preferred, an estimated area of 680m^2 of wetland is anticipated to be infilled should the alternative layout be authorised (compared to 287m^2 for Layout Alternative 2). The severity rating is therefore higher and the significance of the rating before and after mitigation.	High	Moderate	3	Moderate
	b. Unintentional increase in the development footprint resulting in further loss of wetland and reduction in overall wetland functionality.	Local	Short-term	Substantial	Very Likely	Low	The likelihood of this impact occurring is greater for the alternative layout as significantly more road is being constructed within wetland. It is therefore more likely that adjacent wetland area would be disturbed during construction. The same mitigation measures apply to both alternatives however the significance rating of the impact, after mitigation remains moderate and the ranking of residual impacts is moderate as well.	Moderate	Moderate	3	Moderate

	c. Greywater / hydrocarbons / chemicals washing into wetlands polluting the systems.	This impact, mitigation measures and significance of impact provided above for the preferred Layout Alternative remains the same for Layout Alternative 1.									
3. Re-Enforcement of the Existing Dam Wall Using Gabion Basket Retaining Wall and Formalisation of Spillway within 32m of Wetland.	This aspect of the project is not applicable to Layout Alternative 1 as the proposed Fable Smallholdings road does not make use of the existing dam wall across HGM 2. The dam wall will not be re-enforced, and the spillway will not be formalised. It is noted that the road alignment in Layout Alternative 1 crosses the existing rudimentary spillway and is therefore at risk of being washed away / flooded should the dam overflow.										
4. Construction of Fable Smallholdings Road and Gatehouse Within 32m of Wetland.	**a. Direct and indirect impacts on the adjacent wetland (HGM 1, 2 & 3).**	Site	Short-term	Substantial	Very Likely	Low	As described above for Aspect 2, Impact b, the likelihood of this impact occurring is greater for the alternative layout as significantly more road is being constructed within wetland. It is therefore more likely that adjacent wetland area would be disturbed during construction. The same mitigation measures apply to both alternatives however the significance rating of the impact, after mitigation remains moderate and the ranking of residual impacts is moderate as well.	Moderate	Low	4	Moderate
5. General construction-related impacts.	This aspect of the project, associated impacts, mitigation measures and significance of impacts provided above for the preferred Layout Alternative remains the same for Layout Alternatives 1 and 2.										
OPERATION											
6. Operational phase of the new Fable Smallholdings Road and Gatehouse.	**a. Reduced groundwater percolation and increased surface flows resulting in the alteration of the local hydrological regime of the wetland (SDP, 2022).**	Local	Long-term	Substantial	Likely	Low	Due to the longer length of road traversing wetland for Layout Alternative 1, there is a greater probability that the road will alter the local hydrological regime of the wetland due to hard panning within a greater portion of the wetland system. The significance of the impact is therefore greater for Layout Alternative 1 however is still rated as “substantial”. The significance of the impact remains moderate despite the mitigation measures implemented.	Moderate	Moderate	3	High

	b. Alteration of flow through wetlands (HGM 1, 2 and 3) because of unsuitable placement of the concrete culverts in wetland.	Local	Medium-term	Moderate	Likely	Low	As stated above, culvert structures are required where Layout Alternative 1 crosses HGM 2, HGM 3 and HGM. Although no designs were drawn by the engineers for the additional culverts the probability of this impact occurring is higher since there are three structures within the wetland and not just the one associated with the preferred layout alternative.	Low	Low	0	Moderate
	c. Diversion of traffic away from Foxhill / Tiffany's Centre intersection.	'	'	'	'	'	This is a positive impact associated with both the preferred and alternative layouts.	Positive	Positive	'	'
CUMULATIVE											
7. Development of the Fable Smallholdings Road and Gatehouse.	**a. Cumulative transformation of habitat (terrestrial and wetland) on site and within the Salt Rock area.**	This aspect of the project, associated impacts, mitigation measures and significance of impacts provided above for the preferred Layout Alternative remains the same for Layout Alternatives 1 and 2.									

7.0 ENVIRONMENTAL IMPACT STATEMENT

7.1. SUMMARY OF KEY FINDINGS (POSITIVE AND NEGATIVE IMPACTS)

Fable Smallholdings is a low density, residential development located at the end of Old Fort Road, in the Foxhill area of Salt Rock. There is existing access to the development from the Foxhill / Tiffany's interchange. Due to current traffic congestion experienced in the Foxhill area and the layout of the KwaDukuza Roads Master Plan, the applicant proposes to extend the existing gravel, farm road network within Fable Smallholdings and connect to the adjacent Mount Richmore road network. Future residents will therefore be able to connect directly to the Mount Richmore road network and amenities (school, shops, offices, restaurants etc.), decreasing the pressure on the Foxhill road network and securing access to Fable Smallholdings in the future.

A preferred layout has been determined to avoid any unnecessary construction within wetland. The preferred layout reduces the number of wetland crossings from three to one. WC1 is unavoidable due to the position of the wetland along the property boundaries. The gatehouse has been relocated on top of a hill, outside wetland area. The preferred technology alternative is for the construction of two large precast concrete culverts to encourage through flow and minimise the risk of debris build up underneath the road. The gabion basket retaining wall proposed to re-enforce the dam wall, will be constructed within the dam wall embankment footprint, avoiding further infilling of wetland.

Construction activities can be managed in accordance with the measures provided in the EMPr so that all impacts are reduced to a *low* and *very low* level of significance, after mitigation. The proposed road and associated infrastructure will have a low impact in terms of ecology (fauna and flora). The infilling of wetland associated with WC1 poses the greatest risk to the environment. Construction must be carried out in accordance with the EMPr and as per the preferred Technology Alternative attached under Appendix C. Considering the PES of the wetland system within Fable Smallholdings (*largely modified*), there is opportunity "*to improve the state of the remaining portions of wetland*"[16]. Remediation measures include removal of infill previously set in place when the land was under cultivation, removal of alien vegetation and the registration of no-development servitudes across the wetland to ensure long-term conservation of the system. These are all recommended conditions for the Environmental Authorisation.

4.6 ASSUMPTIONS, UNCERTAINTIES AND GAPS IN KNOWLEDGE

The information in this report has been extracted from the various specialist reports attached under Appendix B as well as discussions with the engineer and applicant. The assessment assumes that information received from the specialist team, engineer and applicant is accurate. Assumptions and limitations of the specialist reports are listed under section 3.0 of the SDP Terrestrial and Wetland Impact Assessment and section 5.0 of the Palaeontological Impact Assessment. The EAP has assumed that the Mount Richmore Homeowners Association agree to Fable Smallholdings connecting into the Mount Richmore road network at the proposed point.

4.7 IMPACT MANAGEMENT OUTCOMES

Through the assessment process, impact management outcomes have been identified and are provided in the table below. Impact management measures and recommendations identified during the assessment have been included in the EMPr attached under Appendix E to ensure that the impact management outcome is achieved.

Table 8: Impact Management Outcomes Associated with the Development of the Fable Smallholdings Road.

Primary Impact Management Outcome: *To create a sustainable development by constraining the development footprint to minimise impacts on the adjacent wetland system and ensure the PES of the greater wetland system within Fable Smallholdings is improved.*		
#	**Impact Management Outcome**	**Measures in Place to Achieve Outcome**
1	To avoid unnecessary clearing of vegetation outside of the authorised development footprint, reducing erosion potential.	An independent ECO must clearly demarcate the wetland which falls outside of the authorised developable area. The wetlands must be treated as No-Go areas. The authorised development footprint must be clearly demarcated. Measures to manage the construction footprint have been included under section 4.3 of the EMPr.

[16] Section 7.2 of the SDP "*Terrestrial and Wetland Impact Assessment*" May 2022.

2	Staff to be aware of the sensitive wetland systems outside of the authorised development footprint and the restrictions associated with it.	Prior to any work commencing on site, an independent ECO must be appointed and conduct Environmental Awareness training as per section 5.0 of the EMPr. Should staff personnel enter the No Go areas beyond the shade cloth fences or dispose of any waste or construction material into these areas, that staff member must be given a disciplinary warning.
3	To avoid any further disturbance (direct or indirect) to the adjacent wetland system (HGM Units 1 - 3).	Shade cloth fencing must be established in strategic places (indicated in Figure 14 and the EMPr) which demarcates the wetland areas to be avoided during construction. Measures to prevent and manage direct and indirect impacts on the wetlands (i.e. stormwater management) have been included under section 4.3 of the EMPr.
4	Improve the state of the remaining portions of wetland within Fable Smallholdings.	Once construction is complete, the applicant is responsible for the removal of any infill previously set in place when the land was under cultivation, removal of alien vegetation within the wetland system (long-term maintenance) and the registration of no-development servitudes across the wetland to ensure long-term conservation of the system.

4.8 PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED

Construction of the Fable Smallholdings Road is likely to commence as soon as approval has been obtained and the necessary funding secured (i.e. within the next year or two). It is recommended that the EA remain valid until 2027. A post-construction audit must be undertaken by an independent Environmental Control Officer (ECO) and the report submitted to EDTEA: Compliance and Enforcement.

4.9 MONITORING REQUIRMENTS

An independent ECO must be appointed by the applicant to monitor the development in accordance with the EMPr attached under Appendix E.

- The ECO must, prior to any work commencing on site, conduct Environmental Awareness training with site personnel (as per section 5.0 of the EMPr). The wetland No-Go areas must be demarcated by the ECO in collaboration with the Contractor.
- The ECO must audit the earthworks phase of construction once a week to ensure that the authorised development footprint is strictly adhered to. One monthly audit report summarising the findings of the weekly audits must be submitted to EDTEA: Compliance and Enforcement.
- The auditing frequency can be reduced to once a month, once earthworks is complete.
- A monthly audit report must be submitted to the applicant, Contractor and EDTEA: Compliance and Enforcement.
- One post-construction audit must be undertaken when construction is complete.

4.10 REASONED OPINION AS TO WHETHER THE PROPOSED ACTIVITY SHOULD BE AUTHORISED AND CONDITIONS OF AUTHORISATION

Based on the outcome of this assessment, it is recommended that the construction of the Fable Smallholdings Road, as per the preferred layout and technology alternatives, be authorised by EDTEA (Layout and Technology Alternative 2). The authorised development footprint, attached under Appendix C, must be strictly adhered to, to avoid further infilling of wetland. It is important that all staff working on site are aware of the sensitive environmental areas at the onset of construction. After mitigation, the significance of all impacts associated with the construction phase will have "*low*" to "*very low*" significance.

Measures have been included in the attached EMPr to ensure that the impact management outcomes listed in Table 8 are achieved. It is therefore the reasoned opinion of the EAP that Development of a Road and Associated Infrastructure at Fable Smallholdings Resulting in The Clearance of Indigenous Vegetation, Development of Infrastructure Within 32m of a Watercourse and the Infilling and Excavation of Material Within a Watercourse, be authorised, as shown in Figure 14.

The following conditions are recommended for inclusion in the Environmental Authorisation:

- The Preferred Layout Alternative, attached under Appendix C, must be strictly adhered to. No-Go areas, indicated in Figure 14, must be avoided by all construction staff and equipment.

- The Contractor must construct the gabion retaining structure within the existing dam wall embankment footprint to avoid infilling of wetland (Technology Alternative 2; Appendix C).
- The Contractor must construct the culvert at WC1 as per the preferred engineering design (Technology Alternative 2; Appendix C).
- The EMPr attached under Appendix E must be adhered to during all phases of the project.
- A knowledgeable ECO with the necessary experience and skills to accurately demarcate and manage the construction interface with sensitive environmental areas must be appointed by the applicant to ensure compliance with the EMPr.
- The authorised development footprint must be clearly demarcated by the Contractor, in conjunction with the ECO, to avoid unnecessary encroachment into the adjacent wetland systems.
- The applicant is responsible for implementing an alien invasive removal program to remove alien vegetation from within the wetland system as well registering a non-developable servitude across the wetland.
- Construction within wetland systems must take place in the dry season (i.e. March – August).

Figure 14: Location of Fable Smallholdings Road Infrastructure and Sensitive Environmental Areas to be Avoided During Construction.