

PROPOSED COLWYN DRIVE SEWER PIPELINE WITH SUPPORTING INFRASTRUCTURE, KWA DUKUZA, KWAZULU NATAL

BACKGROUND INFORMATION DOCUMENT FOR BASIC ASSESSMENT PROCESS/ENVIRONMENTAL PROCESS

November 2017

BACKGROUND

Sembcorp Siza Water wishes to construct a connecting sewer line that will service residences lying between Christmas Bay in the north and the Hugh Dent pump station in the south of Sheffield Beach. Sheffield Beach is a residential suburb of Salt Rock, with properties lying primarily along the coastal road of Colwyn Drive. Due to significant development along Colwyn Drive, as well as increased development inland of this area, primarily in the form of residential estates, Sembcorp Siza Water has identified the need to ensure the safe collection and transfer of sewerage to its regional treatment works at Tinley Manor. To this end, a sewer pipeline and supporting pump station is to be established in and along Colwyn Drive. The establishment of the sewer line requires the issuance of an Environmental Authorisation from the Department of Economic Development, Tourism and Environmental Affairs, while a Water Use License Application (WULA) to the Department of Water and Sanitation and subsequent permitting of such activity, is also required.

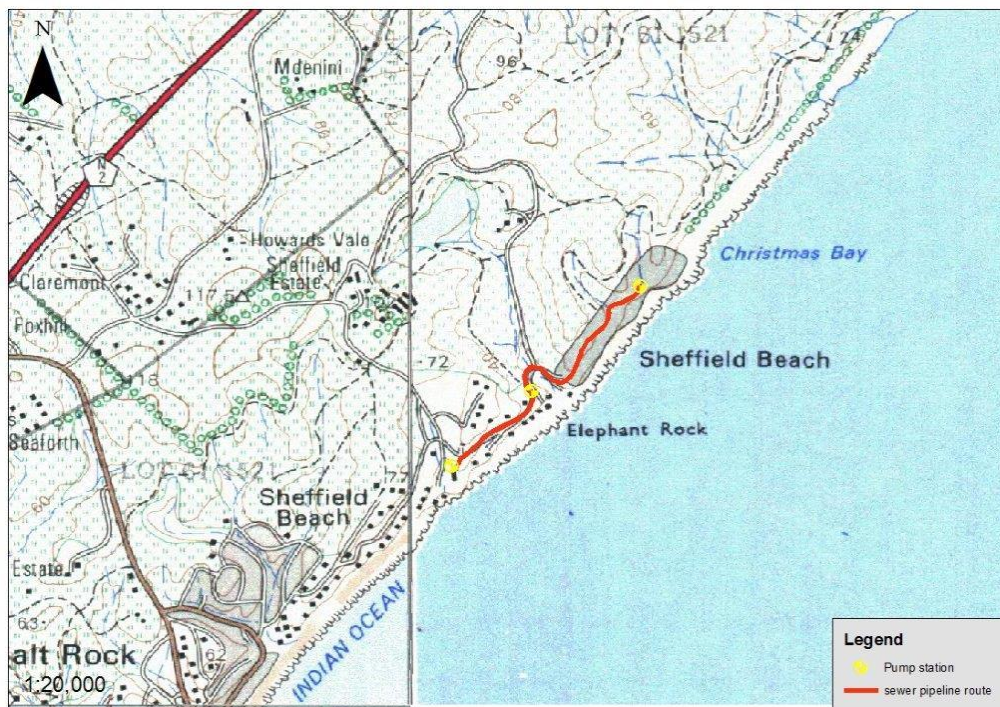


Figure 1: Topographic map image of the subject site.

The Environmental Authorisation and WULA are subject to specific processes (i.e. The National Environmental Management Act and National Water Act) that requires *inter alia*, the undertaking of a number of bio-physical, social and economic considerations, as well as the identification of interested and affected parties, who are given the opportunity to provide input into the process, voicing their concerns, opinions and recommendations on the matter. Such input is incorporated into the EIA process and is evaluated by both the environmental assessment practitioner and the mandated authorities, prior to the provision of any environmental authorisation. This BID (Background Information Document) has been compiled to inform the reader about the proposed development, associated construction activities and allow for the identification of interested and affected parties who may wish to make further input into the process.

LEGAL

The National Environmental Management Act, (NEMA) identifies a number of activities that trigger the requirement for the mandated authority (the Department of Economic Development Tourism and Environmental Affairs) to issue an environmental authorisation, before proceeding with such activity. These activities are contained within Regulations 324, 325, 327 of NEMA. The proposed bulk sewer line development will ‘trigger’ the following listed activities;

Regulation	Activity	Description
327	10	The development and related operation of infrastructure exceeding 1000 meters in length for the bulk transportation of sewerage, effluent, process water, waste water, return water, industrial discharge or slimes- (i) with an internal diameter of 0,36 meters or more; or (ii) with a peak throughput of 120 litres per second or more Excluding where - (a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.
327	12	The development of infrastructures or structures with a physical foot print of 100 square meters or more; where such development occurs (c) if no development setback exists, within 32 metres of a water course, measured from the edge of the water course; Excluding (dd) where such development occurs within existing roads [or] road reserves or railway line reserves
327	17	Development- (v) if no development setback exists, within a distance of 100 meters inland of the high water mark of the sea or an estuary, whichever is greater; in respect of- (e) buildings of 50 square meters or more, or (f) infrastructures or structures with a development foot print of 50 square meters or more- excluding (dd) where such development occurs within an urban area.
327	19	The infilling or depositing of any material of more than [5] 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than [5] 10 cubic meters from (i) a water course, or ; (ii) the littoral active zone, an estuary or a distance of 100 meters inland of the high water mark of the sea or estuary, which ever distance is the greater.
327	19 A	The infilling or depositing of any material of more than [5] 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than [5] 10 cubic meters from (iii) the littoral active zone, an estuary or a distance of 100 meters inland of the high water mark of the sea or an estuary, whichever distance is the greater

327	25	The development and related operation of facilities or infrastructure for the treatment of effluent, waste water or sewerage with a daily throughput capacity of more than 2000 cubic metres but less than 15000 cubic metres.
325	6	The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding— (i) activities which are identified and included in Listing Notice 1 of 2014; (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; (iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 cubic metres or less; or (iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 cubic metres per day.
325	25	The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of 15 000 cubic metres or more.
324	14	The development of— (x) buildings exceeding 10 square metres in size; (xii) infrastructure or structures with a physical footprint of 10 square metres or more;] where such development occurs— (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback has been adopted, within 32metres of a watercourse, measured from the edge of a watercourse; (D). KwaZulu-Natal (x). Outside urban areas (bb) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or (xi). Inside urban areas: (cc) Areas seawards of the development setback line or within 100 metres from the high-water mark of the sea if no such development setback line is determined.

Other legislation that requires consideration includes:

1. The National Water Act (1998) and various regulations associated with this Act.
2. The NEM Biodiversity Act (2006).
3. The National Forest Act (1998).
4. The South African Heritage Resource Act.
5. The KZN Heritage Resource Act.

NATURE OF DEVELOPMENT AND RECEIVING ENVIRONMENT

Nature of Proposed Activity

The 2 kilometres of 200mm diameter sewerline will lie primarily within or adjacent to the existing Colwyn Drive road servitude and at its closest, approximately 40m from the high water mark of the sea. The sewer pipeline will require the excavation of a trench to a variable depth of between 1.5 to 2m below natural ground level, with a working width during construction of approximately 4m. The 200mm PVC pipe will be placed within the trench, atop a bedding of sand, before being backfilled. The proposed pump station near the Sheffield Beach parking, will see an excavation of approximately 200m³ of material and the establishment of a 2.2m high brick and mortar structure to house the pump and other facilities.

Presently, an existing sewerage sump has been established at Christmas Bay and in this instance a pump will be incorporated into the structure. One additional pump station is anticipated at the point identified in Figure 2 below, while the existing sump at Christmas Bay will be fitted with a pump. The newly established sewer line will link with the existing Villa Royal pump station and sewer, which serves the Hugh Dent main sump and pump station, from where sewerage is transferred to the Tinley Manor treatment works.

Sewer Line Route



Figure 2: Site specific map image illustrating significant features of the development.

Nature of Pipeline Route

The line route traverses a steep to undulating terrain. Much of the line route is underlain by dolerite, which gives rise to seep zones and other wetland environments, while sandstones may also be encountered at points. Minor areas of semi-natural habitat, this being primarily coastal forest environments, may be affected by the pipeline, particularly around the watercourse. Figures 3 and 4 indicate the general nature of the route to be followed.



Figure 3: Image along Colwyn Drive, indicating transformed environment



Figure 4: Image showing woody vegetation that may be encountered along the route

Alternatives Design and Route options

The applicant is limited by the terrain and nature of the project in respect of using alternative routes and technologies. The EIA process will allow for some consideration of minor alterations to the route and design of structures in order to reduce the negative externalities associated with the proposal.

Applicant

The applicant is Sembcorp Siza Water (Pty) Ltd.

Environmental Assessment Practitioner

SDP Ecological and Environmental Services has been appointed by the applicant as the independent environmental consultant to undertake the environmental authorization process. For more information on SDP

Ecological and Environmental Services, please see www.ecocoast.co.za or visit LinkedIn <https://www.linkedin.com/company/1791697>

Role of Interested and Affected Parties

Interested and Affected Parties are invited to comment on this proposal and all such comments will be incorporated into the scoping and EIR to be submitted to DEDTEA (Department of Economic Development, Tourism and Environmental Affairs for evaluation.

No public meeting is envisaged unless a high level of interest is shown in the proposal. Alternatively, interaction with individual interested and affected parties will be undertaken upon contact with the EAP by such parties.

Please forward all comments and queries within 14 days of receipt to:

SDP Ecological and Environmental Services

P O Box 1016, Ballito, 4420

Tel 032 – 946 0685 Fax 032-946 0784

luke@ecocoast.co.za

www.ecocoast.co.za or www.linkedin.com/company/1791697

RESPONSE FORM

COLWYN DRIVE - SEWERAGE INFRASTRUCTURE EIA PROCESS

Ihave been informed of the proposed development on the above mentioned property My response and comments on the proposed development are contained below.

Details:

Postal address.....

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Tel. number:

Fax number:

E-mail:

1. Are you a resident of adjacent properties?

If no, then please specify

Issues that are of concern to me emanating from this development are:

Issue and Description of Issue		Level of significance / concern		
		Low	Medium	High
Ecological	Issues relating to plant and animal life, destruction of habitat, destruction of habitat, impacts upon forest areas, etc.			
Social	Issues relating to change of “sense of place”, aesthetics, urban social requirements, job creation opportunities and standard of living.			
Services	Issues relating to services required during construction phase. All			

	services are provided by existing development on site.			
Aesthetics	Issues relating to architectural and visual design of the development.			
Other (please describe)				

The following opportunities for mitigation are proposed

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Additional comments

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Please attach any further correspondence or submission you may wish to make on this matter to this response form within 14 days of receipt:
Please return to P O Box 1016, Ballito or fax to 032-946 0784
Email: simon@ecocoast.co.za ; luke@ecocoast.co.za

Basic Assessment process

