

# APPENDIX D.1: Heritage Impact Assessment

**HERITAGE SPECIALIST REPORT CONDUCTED AS PART OF A BASIC  
ASSESSMENT FOR A PROPOSED NEW LIGHTHOUSE ON ERF 335,  
BEACH STREET, PORT NOLLOTH.**

(Assessment conducted under Section 38(8) of the  
National Heritage Resources Act 25 of 1999)

***Prepared for:***

CSIR Durban  
PO Box 17001  
Durban  
4013

*E-Mail:* kmoodley1@csir.co.za

*Phone* 031 2422385

*Fax* 031 2612509

February 20131



***Prepared by:***

Tim Hart ACO Associates  
8 Jacobs Ladder  
St James  
7945

Tim.Hart@aco-associates.com

*Phone* 021 7064104

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

# SUMMARY

---

Transnet Rail Freight proposes the construction of a new Lighthouse on Erf 335 at Port Nolloth, Northern Cape Province. This has triggered a Basic Impact Assessment which is being conducted by the CSIR, Durban. The following report is the heritage component of the study.

The new lighthouse will replace an existing aluminium lattice-tower structure which has reached the end of its working life. The facility which will consist of an 11 m high concrete structure and lantern house will be built on Erf 335 immediately adjacent to the bungalow which serves as the Transnet staff quarters. The proposed activity will require the demolition of a small lean-to attached to the south gable of the staff quarters. The heritage status of the staff quarters bungalow was in question relative to its position in the history of Port

Nolloth. A study was carried to establish its age.

The findings revealed that the structure was never one of the early buildings of Port Nolloth (established in 1860 onwards) but was probably built into its current form after 1955 with subsequent upgrades and modifications. The structure is of low heritage significance and not unique. The proposed demolition of the lean-to, to make way for the new lighthouse will not affect the status of this building.

No negative impacts will be experienced, however a positive gain for area will result as the envisaged lighthouse is designed in an aesthetically pleasing way to compliment the Beach Road streetscape.

No other mitigation measures are recommended, the proposed development activity is therefore supported.

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

# CONTENTS

---

<b>1</b>	<b>INTRODUCTION</b>	<b>4</b>
1.1	Terms of reference	4
1.2	Method	4
1.3	Limitations	5
1.4	Legislative Context	5
<b>2</b>	<b>HERITAGE BACKGROUND</b>	<b>6</b>
2.1	The Proposed Project	6
2.2	The study area	7
<b>3</b>	<b>FINDINGS</b>	<b>9</b>
3.1	Assessment of Impacts	10
<b>4</b>	<b>CONCLUSION</b>	<b>1</b>
4.1	Mitigation	1
<b>5</b>	<b>REFERENCES</b>	<b>1</b>

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

# Glossary

---

**Archaeology:** Remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures.

**Heritage:** That which is inherited and forms part of the National Estate (Historical places, objects, fossils as defined by the National Heritage Resources Act 25 of 1999).

**National Estate:** The collective heritage assets of the Nation

**Provincial Heritage site:** A heritage site of such high significance that it is recognized by Government and proclaimed by Section 27 of the National Heritage Resources Act as having special protection.

**SAHRA:** South African Heritage Resources Agency – the compliance authority which protects national heritage.

**Structure (historic):** Any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith. Protected structures are those which are over 60 years old.

# Acronyms

---

<b>DEA</b>	Department of Environmental Affairs
<b>GPS</b>	Global Positioning System
<b>HIA</b>	Heritage Impact Assessment
<b>NHRA</b>	National Heritage Resources Act
<b>SAHRA</b>	South African Heritage Resources Agency
<b>PHS</b>	Provincial Heritage site

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

# 1 INTRODUCTION

ACO Associates CC was appointed by the CSIR (Durban Office) to assess the potential impacts of the construction of a new light house at Port Nolloth. Transnet Rail Freight (RME) intend to replace an older aluminum lattice structure built in the mid-late 20<sup>th</sup> century which has reached the end of its working life. The proposal is to erect a new concrete tubular structure at a preferred site closer to the shoreline on Erf 335, Beach Street. The proposed project requires that a basic EIA process is undertaken of which this heritage report forms part of. In addition, indications are that a small part of a structure of low or little heritage significance will require demolition to accommodate the new structure.

## 1.1 Terms of reference

Tim Hart of the ACO had a number of discussions with CSIR personnel with respect to the project and the scope of work. Initially it was requested that the work focus on the demolition of the existing light house which was of unknown age, however a small amount of desktop work revealed it was less than 60 years of age and did not require any form of heritage permitting. The site for the new light house closer to the shoreline involves removing an addition to an existing building which may have been of heritage significance therefore the impact of demolishing a portion of this structure had to be assessed.

- ACO was required to undertake desktop research to determine the age of the building.
- Produce a specialist heritage report assessing the impact of the proposed demolition in terms of heritage significance.
- Engage with the Northern Cape Heritage authority with respect to the required permit applications (if applicable).

## 1.2 Method

This study is based on desktop research in that the site has not been physically inspected. Images of the study area are covered by Google Earth Street view. Information was obtained from secondary published sources (site specific information is scarce) and a survey of aerial photographs dating from 1937 until the present day obtained from the Chief Directorate: National Geo-spatial Information.

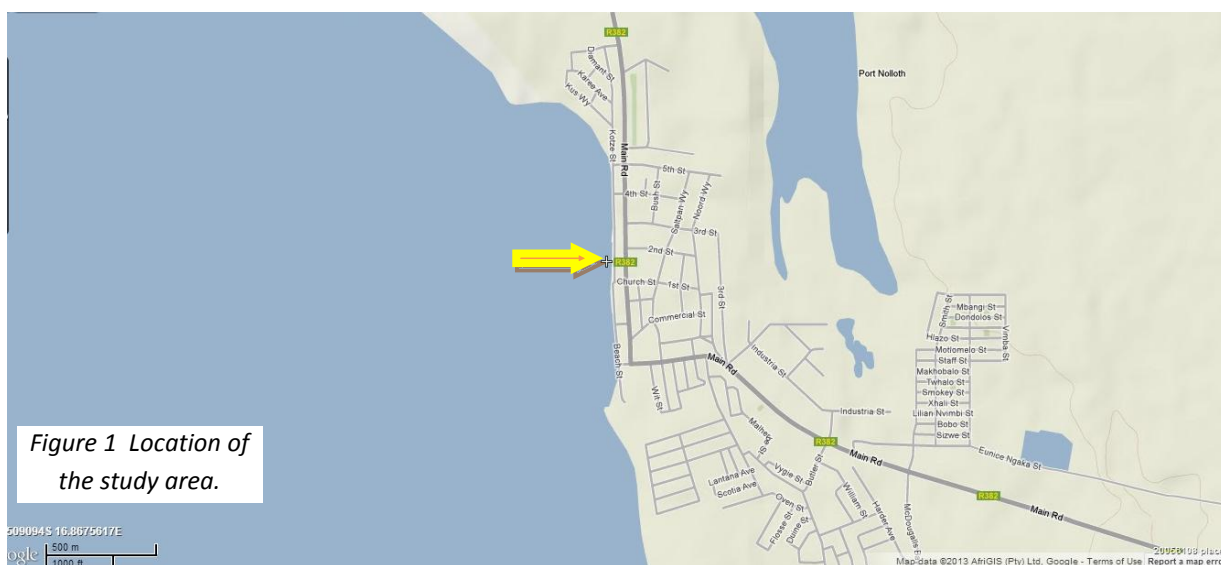


Figure 1 Location of the study area.

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

### 1.3 Limitations

This study has been carried out without a physical site inspection. However, Tim Hart is very familiar with Port Nolloth, the site and its context due to a long history of working in the area.

Plans of the proposed new lighthouse were made available for review and are included in Appendix A.

Historical aerial photography was of indifferent quality.

### 1.4 Legislative Context

The basis for all heritage impact assessments is the National Heritage Resources Act 25 (NHRA) of 1999, which in turn prescribes the manner in which heritage is assessed and managed. The National Heritage Resources Act 25 of 1999 has defined certain types of heritage resources as being worthy of protection, by either specific or general protection mechanisms. In South Africa the law is directed towards the protection of human made heritage, although places and objects of scientific importance are also covered.

As this development is the subject of a Basic Assessment (BA), heritage is dealt with under section 38 (8) of the NHRA. This requires that aspects of the NHRA are addressed as part of the BA. The Provincial Heritage Authority is a commenting authority and must determine if the BA process has adequately addressed heritage issues as required by the NHRA. A comment in this regards will be sent to Department of Environment Affairs or any other compliance authority involved.

The National Heritage Resources Act also protects intangible heritage such as traditional activities, oral histories and places where significant events happened. Generally protected heritage which must be considered in any heritage assessment includes:

- Buildings and structures;
- Archaeological sites (greater than 100 years of age);
- Paleontological sites and specimens;
- Shipwrecks and aircraft wrecks;
- Graves and grave yards; and
- Cultural Landscape

With respect to the last bullet, a Visual Impact Assessment (VIA) is being conducted by a VIA specialist. Nevertheless, in terms of Section 3 (2)(d) of the NHRA, No 25 of 1999, the national estate may include “landscapes and natural features of cultural significance”. It is therefore important that the VIA specialist examines the impact of the development on the cultural landscape or consults with a heritage practitioner in this regard.

While not specifically mentioned in the NHRA, No 25 of 1999, Scenic Routes are recognised by the Department of Environment Affairs and Development Planning (DEA&DP) as a category of heritage resources. In the DEA&DP Guidelines used for the Western Cape (referred to in the absence of guidelines for the Northern Cape) for involving heritage specialists in the EIA process, Baumann & Winter (2005) comment that the visual intrusion of development on a scenic route or place should be considered a heritage issue.

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

## 2 HERITAGE BACKGROUND

Within the context of the Northern Cape, Port Nolloth is a place of regional heritage significance as it was the first Port in the area and one of the earliest towns of the Province. Its existence is due to the presence of copper ore in Namaqualand – a fact that had originally been determined by Governor Van der Stel (and other early explorers) on one of his earlier explorations (Steenkamp, 1975). Indigenous people of the area, the Nama knew about the metal and had been trading in items made from native copper for millenia. The first commercial exploitation of copper commenced in the mid-19<sup>th</sup> century with commencement of mining at Okiep in 1852 by John Alexander (Smalberger, 1975), however exporting the ore down the escarpment and shipping it was a logistical nightmare. Attempts were even made to use lighters and barges on the Orange River however the varying flood levels of the river made this an unsustainable operation. The Government of the Cape commissioned various surveys to indentify a Port where suitable sized vessels could be accommodated (Steenkamp 1975, Smalberger 1975, Joel and Fold 2003). The site named Port Nolloth (after the surveyor who found it) was deemed appropriate. A jetty was built in 1855. A narrow-guage railway line (one of the first in the country) was built down the escarpment in 1874. Mules were used to haul the empty trucks up the escarpment while loaded trucks were allowed to “free-wheel” down to the Port under the control of the “brakemen” who controlled the descent. Eventually a steam locomotive (Clara) was acquired and provided safer service (Steenkamp, 1975). The railway line ended at the jetty at Port Nolloth where coasters (sail and steam) collected the ore. When the railway line was extended to Bitterfontein in the 1920’s, Port Nolloth lost some status as ore was transported by road to the rail head which was favoured over the risky port. The entire landscape of early mining and industry (older than the diamond or gold mining enterprises in the interior) is considered to be a significant cultural landscape that is currently nominated for declaration as a UNESCO World Heritage Site.

The jetty at Port Nolloth is sheltered from the large Atlantic swells by an off-shore reef which serves as a natural wave breaker and makes bringing a sizeable ship into the Port possible (up to 500 tons). However, the same reef also makes navigation into the Port a challenge. The navigable gap through the reef is very small and there are virtually no margins for error. The safe route is marked by buoys and navigation lights. Masters of vessels have to align their ships with the markers to navigate the deep channel. Not with standing this, numerous wreckings have occurred due to often foggy conditions or heavy swell.

The importance of the Port received renewed significance after 1930 and the establishment of the West Coast diamond industry. It was used for the provisioning of the area, supplying of mining equipment as a base for local fishing and off-shore diamond mining. After a series of significant shipping disasters in the 1950’s an attempt was made to regularise the Port for larger vessels. This involved widening the gap in the reef by blasting it open and deeper. This was achieved with limited success – the Port remains a challenge to navigate but was for a time regularly visited by coastal freighters and light tankers. Since the 1970’s it has only been used by smaller fishing and diamond dredgers. Today siltation has taken place and dredging is required before larger vessels can enter ([http://en.wikipedia.org/wiki/Port\\_nolloth](http://en.wikipedia.org/wiki/Port_nolloth)).

### 2.1 *The Proposed Project*

The project involves the demolition of the aluminium lattice tower light house located on Erf 44, and its replacement with a new lighthouse located in a more visible and suitable position on Erf 335. The new lighthouse will be a concrete tubular structure of 11 m in height and 4m in width. The

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

lantern house will be constructed on a concrete slab on top of the column. The lantern house will contain a bulb (100 watts) and rotating lens system projecting 6-8 thin beams which will be blanked off on the landward side. The new light house position is closer to (if not on) the original site of the 1905 lighthouse which was demolished in the 1970's.

### 2.2 The study area

The study area consists of a single structure on the seaward side of the coastal road. It is a single story bungalow with an asbestos roof which is used as staff quarters for Transnet personnel. The joinery and fenestration is typically mid-late 20<sup>th</sup> century, the building which is owned by Transnet is maintained in good condition. A small lean-to has been constructed on the south side gable of the building. This lean-to will have to be demolished to make way for the new lighthouse building which will be on Transnet Property. The age of the bungalow has been in question, so a brief study has been conducted to establish its possible age with a view to determining whether it should be graded or not and what the impact of its alteration will be.

A small structure nearby consists of an explosive magazine said to have been built in the early 20<sup>th</sup> century (confirmed to exist in 1937 by aerial photography).

The staff quarters is situated on the seaward side of Beach Street. Beach Street is a residential sea-side street which constrains an historic conservation area (south of the study area) well known for the Bedrock Lodge and its associated 19<sup>th</sup> century cottages and Museum (Figure 1).



*Figure 2 The existing lighthouse.*



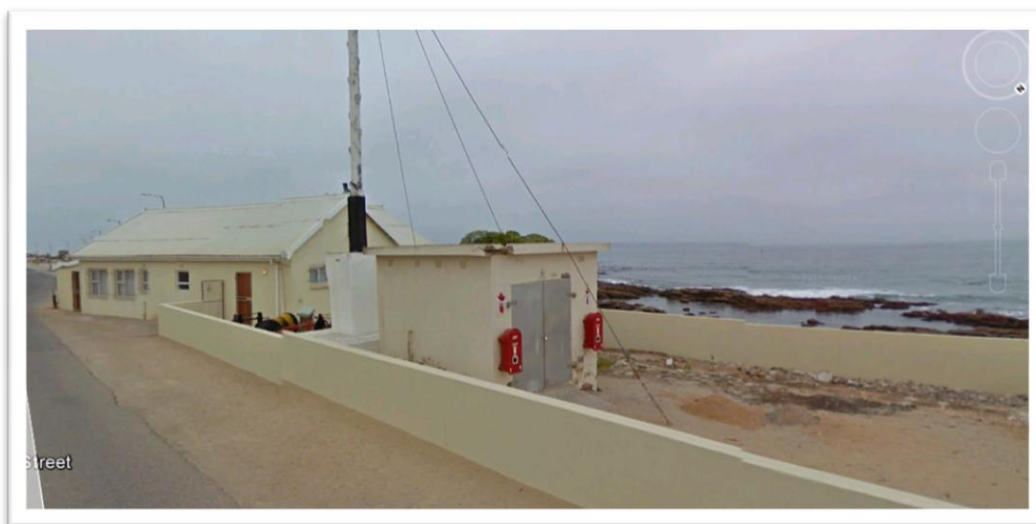
## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---



*Figure 3 The structure which is the subject of this enquiry. The lean-to extension to the building requires demolition. View is from south to north. The pitched roof bungalow and magazine is to remain.*



*Figure 4 View of the structure from north to south.*

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

### 3 FINDINGS

The study revealed that the bungalow was not present in 1937, but the adjacent magazine was in place (see *Figure 5*).



*Figure 3 Excerpt from 1937 aerial photograph indicating the magazine. This is the only structure visible on the western side of Beach Street.*

The aerial photograph of 1955 (*Figure 6*) indicates the presence of a structure of increased size which may be the beginnings of the bungalow in question. Beach Street is substantially more developed with noticeable densification.



*Figure 4 Notwithstanding the poor quality of this 1955 aerial photograph, there is an indication of a structure at the study area – it is unclear if this is the old light house or a building.*

In all likelihood the building in its present form postdates 1955. It could further be suggested that its presence correlates to attempts to regularize the Port after the shipping disasters of 1955 with the construction of a building – possibly to manage engineering and Port related activities.

The structure in question is for the main part relatively recent and dubiously greater than 60 years of age. It has been maintained, modernized and in our opinion not worthy of inclusion of a regional heritage register nor is it worthy of formal grading. The only element worth grading is the explosive magazine (suggest III B-C). The proposed new lighthouse has minor consequences for the structure. The lean-to is quite recent and its removal will not detract from significance.

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

There is little lateral flexibility for positioning the new light house as it fulfills an essential navigation role. The position of the light house will not result in consequences that will detract from the character of the town; however the construction of an un-aesthetically appealing lighthouse will not contribute to the sense of place or the aesthetics of the Beach Street precinct. Plans supplied by the proponent are included in Appendix A. These depict a simple traditional design that will add value and interest to the streetscape and town at large.

Although archaeological material in the form of coastal shell middens is prolific around Port Nolloth, indications are that the study area is too transformed to be considered archaeologically sensitive.

### **3.1 Assessment of Impacts**

The proposed activity will have a negligible impact on all generally protected heritage. The site specific impact will be the demolition of a lean-to structure affixed to the south gable of the Transnet staff quarters. The main bungalow is of very low heritage significance, the demolition of the lean-to will have no negative impacts at all.

The existing aluminum lighthouse expresses itself as a utilitarian and somewhat odd structure does not “read” as a lighthouse to the casual observer. It is without argument one of the most unappealing structures within the context of this country’s rich lighthouse heritage. The construction of a more formal and recognizable structure within the Transnet owned enclave will better the landmark status and add a feature of interest to the Beach Street precinct.

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

**Table 1 Assessment of heritage impacts**

Impact description	Status	Extent	Duration	Reversibility	Irreplaceability	Intensity/ Magnitude	Probability	Significance (without mitigation)	Mitigation	Significance (with mitigation)	Confidence level
<u>Demolishing the lean-to</u>	Positive	Impact is local in extent and furthermore will be of benefit to the Beach Road streetscape in that it will create a new landmark and point of interest.	Permanent	High	High	Low	Definite	Medium	N/A	Low	High

## SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

### 4 CONCLUSION

There are no reasons in heritage terms why the proposed activity should not take place. There are no heritage resources that will be either direct or indirectly impacted. This report finds that the proposed action should be supported and that no further studies are required. The proposed design of the new lighthouse is appropriate.

#### 4.1 Mitigation

The magazine adjacent to the staff building is the only structure of any heritage significance and as such should be continue to be conserved.

This report along with the basic assessment should be sent to the heritage compliance authority of the Northern Cape. The authority will issue a record of comment which will either support or dismiss the application to demolish, or request further information. It is anticipated the Northern Cape heritage authority will issue the requisite permit for the proposed development. A demolition permit application has been obtained from Ngwao Boswa Kapa Bokoni (NBKB) – the Heritage Authority of the Northern Cape.

### 5 REFERENCES

- Aerial Photographs (historic series) Chief Directorate: National Spatial Information,  
Mowbray, Cape Town.
- Jowell, P and Fold A. 2003. Into Kokerboom Country. Johannesburg: Fernwood press.
- Smalberger, J. 1975. A history of mining in Namaqualand. Johannesburg: Struik.
- Steenkamp, W. 1975. Land of the Thirst King. Cape Town: Howard Timmins.

## **SECTION F: APPENDICES**

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse –  
near Port Nolloth, Northern Cape

---

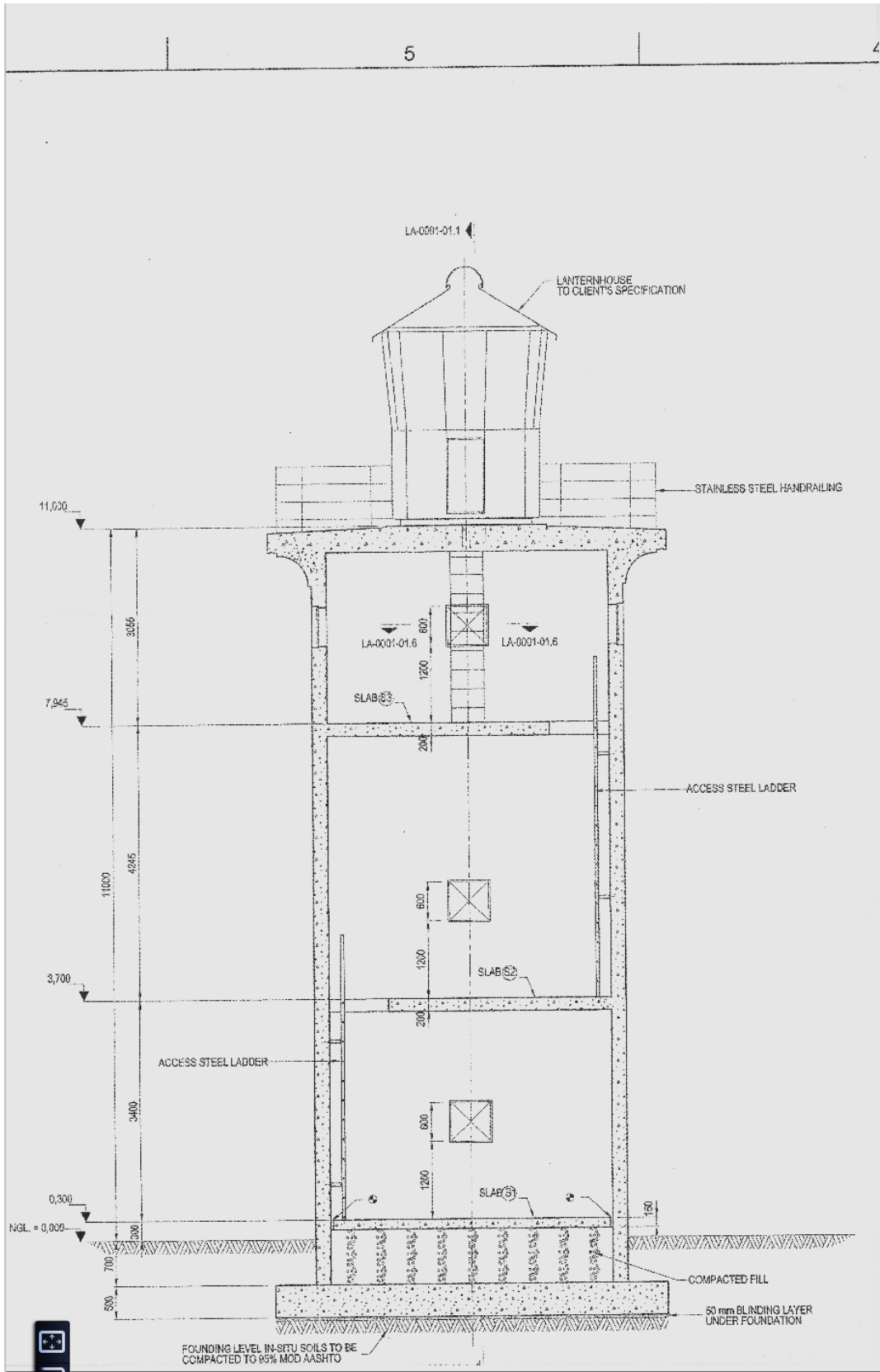
### **APPENDIX A**

Drawings of proposed site and structure provided by proponent.

- Site plan
- Elevation drawing of proposed lighthouse
- Sections of proposed lighthouse.

# SECTION F: APPENDICES

Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse – near Port Nolloth, Northern Cape



# SECTION F: APPENDICES

## Draft Basic Assessment Report for the Proposed Port Nolloth Lighthouse – near Port Nolloth, Northern Cape

