

Nuclear-1 EIA

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KEY FOCUS GROUP WORKSHOP

25 MAY 2010

Traffic & Transportation



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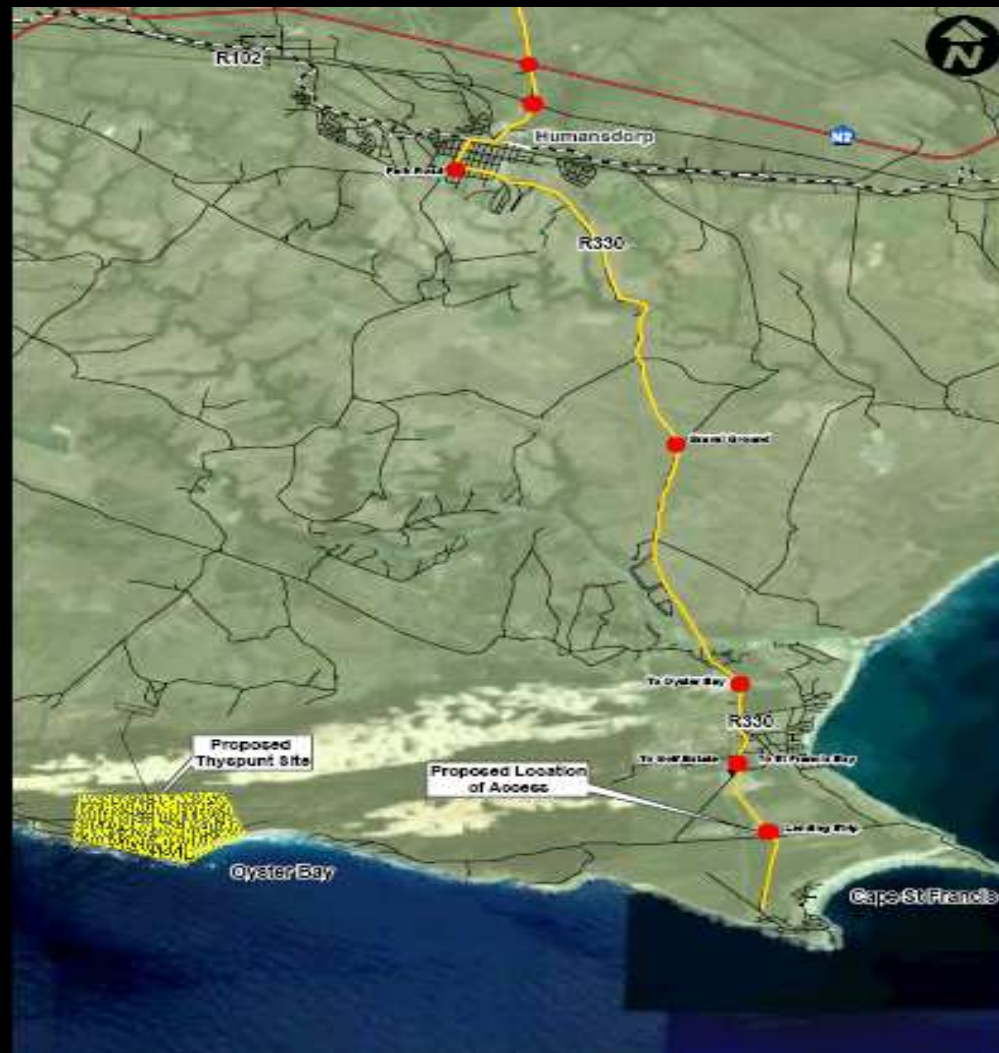
Status Quo Assessment

- Assess existing road & public transport



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Location of Intersections surveyed



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Intersections Surveyed and Analysed

2008 Background traffic and 2018 Background Traffic analysed (2% per annum growth)

- R330/Main Access Rd
- R330/St Francis Access Rd
- R330/Oyster Bay Access Rd
- R330/Gravel Rd
- Park Rd/Main St
- Main St/Humansdorp Access Rd
- Main St/N2 South Off-Ramp
- Main St/N2 North Off-Ramp

All intersections are Level of Service A or B – no upgrades required
Poor public transport services



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Construction Phase Impact Assessment

- Nature of activity
- Trips generated
- Distribute trips on transport network
- Capacity analysis
- Mitigate impacts



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Staffing

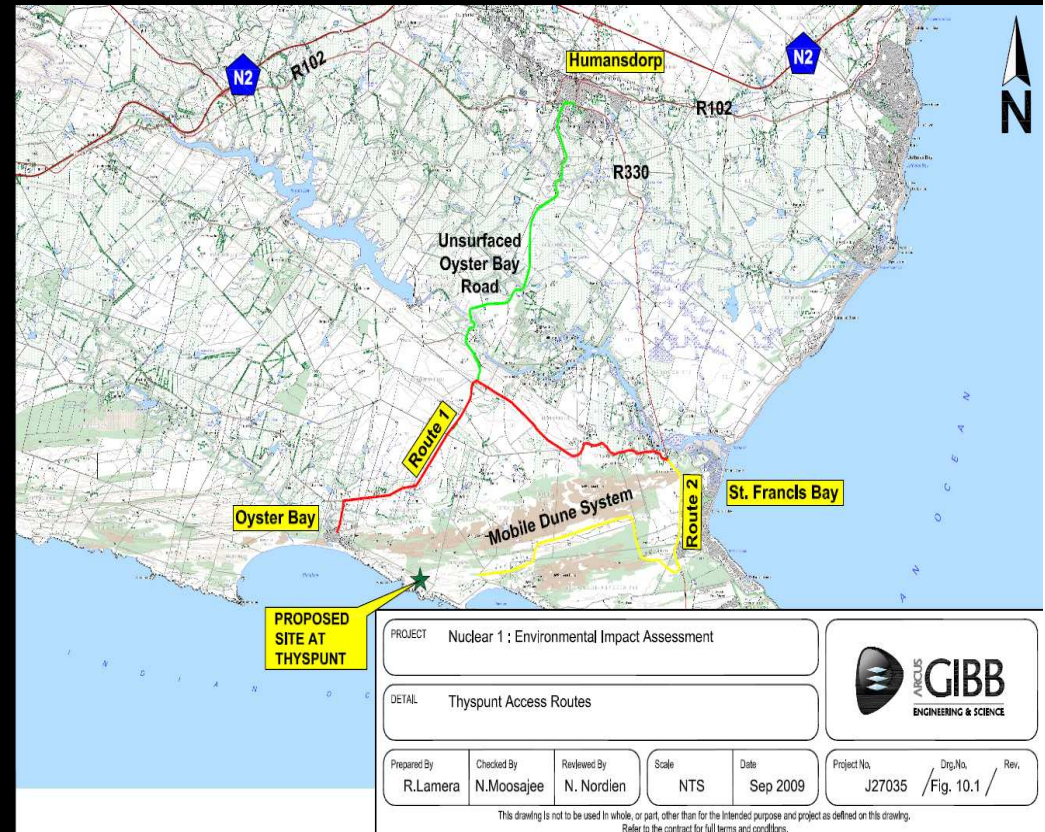
- Approximately 5 000 construction staff
- 2 000 Vendor staff
- 1 300 Operational Eskom staff
- 250 Eskom project staff



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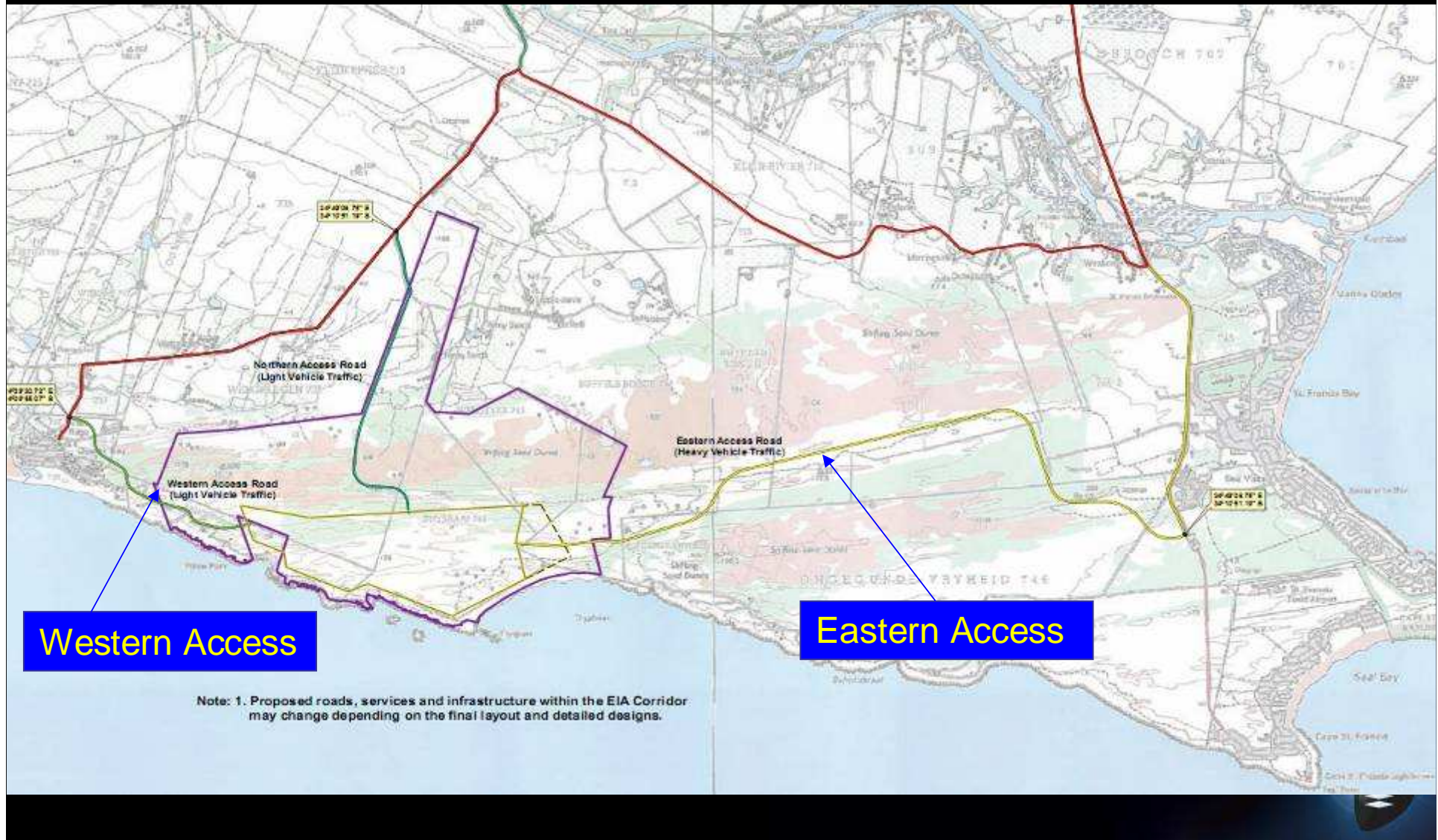
Construction Access Routes

- Route 1 – unsurfaced Oyster Bay Rd & Western Access (to be upgraded)
- Route 2 – (new surfaced road from R330) – R330 & Eastern Access (upgrade)
- Proposed -Route 1 for commuter construction traffic (bus & private car)
- Proposed – Route 2 light construction, heavy and exceptionally heavy (Section through Humansdorp – High Impact); R330 structural assessment



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Construction Access Routes



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Construction Access Routes

Humansdorp Main Road – High Impact (Reroute)



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Estimated Construction Traffic Flows

	Bus	Car	Light Const	Heavy 10-100t	Ultra Heavy >100t	TOTAL
	One way/day	One way/day	One way/day	One way/day	/annum	
Western Access (Route 1)	85	380				465
Eastern Access (Route 2)		200	150	20	13	380

Peak in Year 6



THYSPUNT (Construction Mitigation Measures)

Road Upgrades

- Upgrade and surface Oyster Bay Road
- Construct Eastern Access Road
- Construct Western Access Road
- R330 pavement life assessment to be completed

Routing

- Alternative routing through Humansdorp

Intersections Analysis (2013)

- | | |
|--------------------------------|------------------------|
| • R330/Main Access Rd | (LOS F – upgrade) |
| • R330/St Francis Access Rd | (LOS F – upgrade) |
| • R330/Oyster Bay Access Road | (LOS A-D – no upgrade) |
| • R330/Gravel Rd | (LOS A-C – no upgrade) |
| • Park Rd/Main St | (LOS F – upgrade) |
| • Main St/Humansdorp Access Rd | (LOS A-D – no upgrade) |
| • Main St/N2 South Off-Ramp | (LOS A-B) |
| • Main St/N2 North Off-Ramp | (LOS A-C) |

Public Transport

- Dedicated bus service for construction workers



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Exceptionally Heavy Load Route

Detailed infrastructure assessment



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THYSPUNT Operational Phase Assessment

Traffic & Transportation



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Staffing

- Approximately 1 300 staff
- 80% Day shift
- 20% on three Shift
- Modal Split: 70% Private, 20% minibus taxis, 10% bus



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Intersections Analysis (2018)

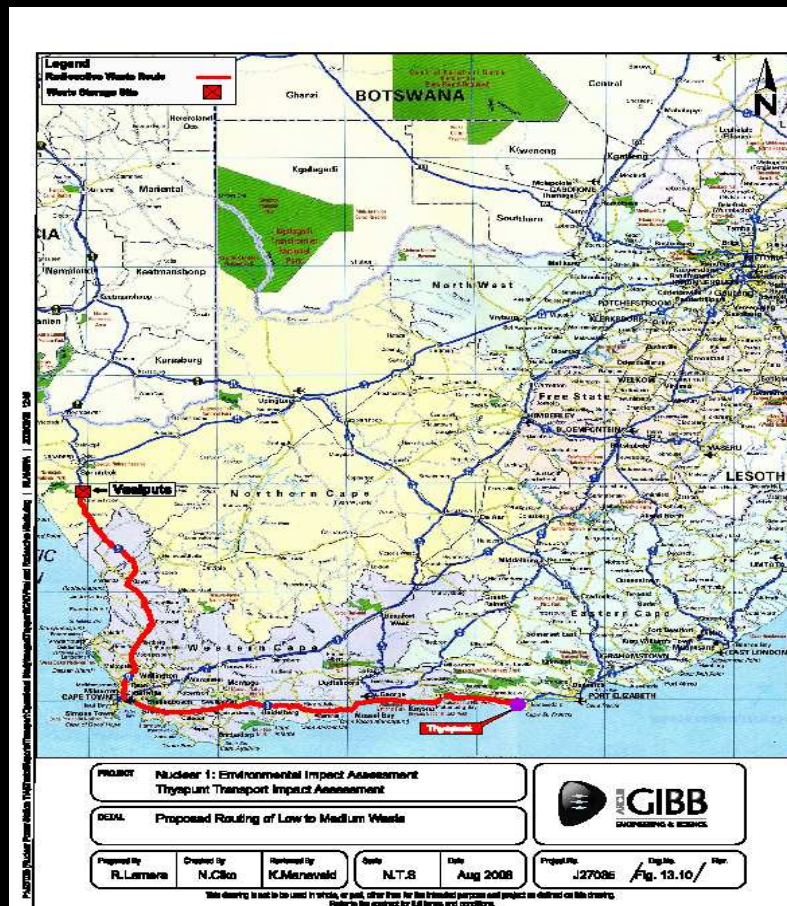
- R330/Main Access Rd (LOS A-B)
- R330/St Francis Access Rd (LOS A-B)
- R330/Oyster Bay Access Road (LOS A-C)
- R330/Gravel Rd (LOS A-B)
- Park Rd/Main St (LOS A-B)
- Main St/Jeffrey's Bay Access Rd (LOS A-C)
- Main St/N2 South Off-Ramp (LOS A-B)
- Main St/N2 North Off-Ramp (LOS A-B)

No upgrades required for operational phase



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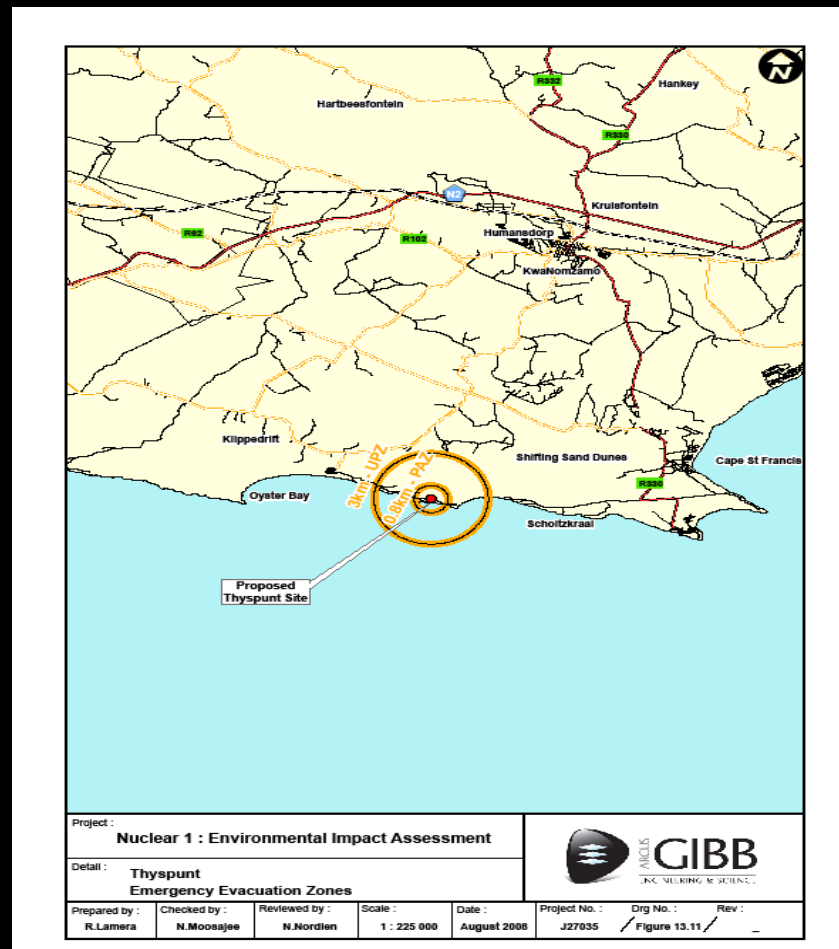
Low to medium Waste Route to Vaalputs
(2-4 shipments a week)



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Emergency Evacuation

- Sufficient road capacity to evacuate
- Detailed Emergency Evacuation Plan to be developed



Key Transport Study findings

Thyspunt:

- Construction traffic require significant road upgrading
- Western & Eastern Access Rds to be constructed
- Construction traffic use two routes (Eastern – heavy, ultra heavy, construction light; Western - construction staff, partial Eskom staff)
- Humansdorp Main Rd – High Impact - rerouting
- R330 pavement assessment
- Ultra heavy loads detailed investigation
- Good access to PE harbour
- Cross-country routing of low and medium waste to Vaalputs

