

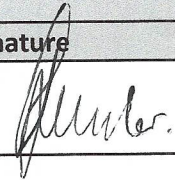
	SHEC MANAGEMENT SYSTEM	Doc no:	SHEC 3.2
		Rev no:	001
	3. SAFE OPERATING PROCEDURES & METHOD STATEMENTS	Rev date:	18/10/2021
		File name:	214 - MS-012-Surveying

Contract no: #214

Contract name: Hemel en Aarde

METHOD STATEMENT 012 – SURVEYING

BASELINE CIVIL CONTRACTORS (PTY) LTD SUBMISSION FOR ACCEPTANCE				
	Name	Designation	Date	Signature
Prepared	Christoff Els	Site Agent	18/10/2021	
Approved	Thomas Moolman	Contracts Manager	18/10/2021	
Submitted	Christoff Els	Site Agent	18/10/2021	

ENGINEERS APPROVAL				
	Name	Designation	Date	Signature
Engineers Acceptance	GAVIN LAUNDER	SUPERVISOR	20/10/21	

WHAT work is to be undertaken?

Surveying all the construction works

WHERE are the works to be undertaken?

Hemel en Aarde (Hermanus) and Caledon

WHEN are the works to start, what is the anticipated finish date?

September 2021 - December 2022

HOW are the works to be undertaken?**Resources**Labour

- Labourers;
- Surveyor;
- Surveyor Assistant(s);
- Supervisor.

Plant and equipment

- Global positioning system (GPS);
- Dumpy Level;
- Theodolite;
- Staffs;
- Hand tools.

Material

- Wood pegs (1.8m);
- Tape;
- Number tags;
- Spray paint/Paint.

PPE

- Overall;
- Safety boots;
- Gloves;
- Reflective vest;
- Dust mask (if windy and dusty)
- Safety glasses (if windy and dusty)

1. REFERENCE

- 1.1. Contract document with work scope
- 1.2. Profile drawings
- 1.3. Surveying positions (GPS co-ordinates)
- 1.4. Foundation drawings

2. DEFENITIONS

- 2.1. **Site manager**, means a person appointed, to manage construction on site
- 2.2. **Client**, means a person who sponsors the project
- 2.3. **RE**, means Resident Engineer
- 2.4. **ECO**, means a person appointed, by the employer to monitor and report on the Contractor's compliance to environmental requirements
- 2.5. **EO**, means a person appointed, by the contractor to direct and control the Contractor's environmental management activities
- 2.6. **Surveyor**, means a person appointed, by the contractor to survey and do setting out
- 2.7. **GPS** means global positions system
- 2.8. **Settings out** means the identifying and marking specific positions of the works
- 2.9. **EMP** means environmental management plan as set out for specific project
- 2.10. **PROFILES** mean the drawing of positions and ground profiles of terrain

3. RESPONSIBILATIES

- 3.1. It is the responsibility of the survey supervisor to ensure that accepted survey methods are used
- 3.2. That the positions of all the work are clearly marked, as per contract and profile documents for specific contracts
- 3.3. Checks will be done to ensure correct setting out as stipulated on profile drawings

4. METHOD

- 4.1. The scope of surveying is to determine benchmarks for road levels for the reseal and rehabilitation of MR269 and upgrading of drainage culvert on DR1257.
- 4.2. This will be done using the GPS co-ordinates and levels provided on the drawings
- 4.3. The positions will be marked by driving pegs into the ground
- 4.4. The surveyor will also note any problems and report to the construction manager
- 4.5. The top 300mm of every peg is to be painted with white paint, 1.5m of the peg is to protrude above the ground once it has been installed
- 4.6. The contractor shall check and re-survey all positions throughout construction of the works
- 4.7. The contractor shall ensure that no damage to the client's property or infrastructure occurs as a result of the survey and pegging operations

5. HEALTH AND SAFETY

- 5.1. All employees will be inducted prior to site access
- 5.2. PPE will be provided to ensure that harmful contact with any products and materials does not occur
- 5.3. All existing services will be pointed out to the excavation supervisor

- 5.4. Provision of adequate fire-fighting equipment and training
- 5.5. Provision of adequate medical aid boxes and trained first aiders
- 5.6. Risk assessments will be used to train site personnel on all the risks within their working environment
- 5.7. Machine operators will be medically tested and deemed fit
- 5.8. Employees will attend annual medical evaluation by an occupational health practitioner to evaluate their health
- 5.9. All machine operators will be licensed and competent
- 5.10. Daily, weekly and monthly monitoring, reviewing and reporting will be done on site
- 5.11. Emergency control numbers and procedures will be readily available on site at all times
- 5.12. All the required warning and safety signage will be in place
- 5.13. All incidents and accidents will be reported immediately to the H&S Officer

6. ENVIRONMENTAL

- 6.1. All employees will be inducted prior to site access
- 6.2. All areas used for storing of hazardous products and materials will be pre-approved by the ECO and RE
- 6.3. All areas will be demarcated and where this hazardous materials is present there will be a bund area constructed and ground coverage will be placed to reduce the risk of natural ground exposure
- 6.4. Storage facilities will be within a safe distance from water sources and plantation
- 6.5. Signage will be placed at no-go areas
- 6.6. All works will be monitored and minimum environmental disturbance will be enforced
- 6.7. All incidents and accidents will be reported immediately to the ECO and RE
- 6.8. Care will be taken by all when smoking on site
- 6.9. The minimum clearing will be allowed