

TRANSNET LIMITED

(REGISTRATION No. 90/00900/06)

TRADING AS TRANSNET FREIGHT RAIL

SPECIAL INSTRUCTIONS AND SPECIFICATION FOR WORKS

VEGETATION MAINTENANCE WITHIN THE RAILWAY SERVITUDE
The felling, chemical treatment and removal of specified vegetation
within the Port Elizabeth Infrastructure Depot railway Servitude

TENDER NO.

1. SCOPE OF WORK

- 1.1 This contract covers the clearing and control of vegetation within the railway servitude that is under the jurisdiction of the Depot Engineering Manager, Port Elizabeth.
- 1.2 The scope of the work consists of:
- The eradication of declared and invasive species within any area of the specified servitude.
 - The clearing of bush encroachment within any area of the specified servitude.
 - The removal of any vegetative material where required, as a result of all vegetation cutting activities specified in this contract in areas indicated, specifically all cut vegetation in municipal built up areas is to be removed.
 - The chemical treatment as required of any trees, declared and invasive species, and any other vegetation specified in this contract within any area of the specified servitude.
 - The clearing of vegetation at level crossings.
- 1.3 This part covers the techniques, required standard of workmanship, inspections, measurement, payment, and acceptability of works in respect of this contract.
- 1.4 The essence of the contract is that TFR requires the maintenance and the management of the off track area, as well as vegetation in certain areas along the servitude to the extent that areas treated in terms of the contract are free from any form of obstacles (dead or otherwise) which may obstruct, hinder or interfere with operational activities, or have the potential to damage equipment or facilities, along tracks, in yards or other areas included in the contract.
- 1.5 The ways and means by which the above-mentioned results are obtained are the responsibility of the Respondent. TFR, however, shall have the right to monitor the materials

and activities of the Respondent to ascertain that all procedures, methods are in accordance with his/her tender, the relevant legislation and are conducive to the achievement of the contract objectives. Such right of monitoring shall be entirely without prejudice to TFR and shall in no way relieve the Respondent of his/her responsibility for satisfactory control of vegetation.

- 1.6 The successful respondent shall be required to be on site within five, (5) working days from date of site instruction to commence with the work. The work required as per the site instruction shall be completed timeously and without any unnecessary delays in the progress of the work.
- 1.7 Emergency tree felling and clearing may be required to take place at night, over weekends or on Public holidays. This work will be instructed telephonically.
- 1.8 Failure to comply with the minimum performance proposed by the Respondent in his/her tender may form the basis for non-payment for work done, pending the achievement of control as defined and/or termination or cancellation of the contract.

2. DEFINITIONS

2.1 CONTROL FOR TREES AND STUMP TREATMENT

Control is achieved when:

- The constituent parts of all trees occurring within the area of treatment cease to exceed 100mm in height.
- The dead or dry remains of any vegetation within the treated area cease to exceed 1m to 1.5m in length.
- All cut vegetative material in the rail reserve within built up areas with housing and industries, or in areas otherwise as required, is to be removed from site and disposed of at a registered municipal dump.
- Alternatively cut vegetative material can be chipped with a chipper on site and the chipped material can be spread in the rail reserve. All chipped material shall be spread no thicker than 500mm and so as not to clog or obstruct drainage beneath or alongside the track.
- At times of emergency work where tree felling is required, the supplier will be required to clear the track/roadway initially. Further logging and clearing of the area to make sure that culverts and drainage ditches are clear may take place during daylight hours within three days of the initial clearing.

2.2 CONTROL FOR DECLARED AND WEEDS AND INVADER SPECIES

2.2.1 Control is achieved when:

- All existing or potential growth of the declared weeds and declared plant invaders are permanently impaired or destroyed by the application and effects of chemical herbicides, to the extent that the constituent parts of the declared weeds and declared plant invaders occurring within the area of treatment (worklots) cease to exist as living organisms or entities; and
- Any Declared and Invader plants that are cut, the remaining stumps are not left taller than 100mm in height, and that the remaining stumps cease to exist as living organisms or entities.
- The cut stumps are treated with a registered herbicide to prevent regrowth.
- no new growth, such as seedlings or saplings, of declared weeds or declared plant invaders, of any height occur; and
- there are no dead or dry remains of the vegetation within the treated area (worklot) which may constitute a hazard, danger, or hindrance to Transnet Freight Rail personnel, equipment trucks or operations.
- All cut vegetative material in the rail reserve along areas that are built up with housing and industries needs to be removed from site and disposed of at a registered municipal dump site.
- Alternatively cut vegetative material can be chipped with a chipper on site and the chipped material can be spread in the rail reserve. All chipped material shall be spread no thicker than 500mm and so as not to clog or obstruct drainage beneath or alongside the track. Should the Supplier make want to make use of a chipper, this must be stated in their method statement to be submitted as part of the tender.
- All woody plants larger than one, (1) metre in height need to be cut and removed and cut stumps are treated with suitable herbicide.

2.2.2 Control constitutes a process or situation where the destruction of any new growth or re-growth of the declared weeds and declared plant invaders on treated areas occurs on an on-going basis and not only at the time of measurement and payment inspections.

2.2.3 All vegetative matter produced as a result of cutting of trees and shrubs must be removed from all cuttings and the top five meters of embankments.

2.2.4 No cut material, may be left within two meters of the ballast profile of the work area.

2.3 CONTROL AT LEVEL CROSSINGS

- 2.3.1 Areas at Level Crossings will be maintained as per the attached **Diagram 1**.
- 2.3.2 Maintenance and work may not be required on all areas/sides at each maintenance cycle of the level crossings.
- 2.3.3 The area is to be cleared of all shrubs and trees for a width of 10m either side of the track for a length of 30m measured from the intersection of the centre line of the road and the centre line of the railway line.
- 2.3.4 All cut, dead or dry remains of any vegetation within the treated area is completely removed from Transnet property, or alternatively to sites designated on Transnet Property by the Technical Officer or his/her deputy, or cut into lengths not exceeding 1 metre long and neatly stacked on an area which will not obstruct the visibility at level crossings. No vegetation as a result of cutting may be left in cuttings.
- 2.3.5 All cut materials may be chipped on site and evenly distributed. Wood chips are to fall a minimum of 4 metres from the nearest outer most rail of any railway line and not clog any drainage system, walkway, apparatus case or mechanical equipment, become a fire hazard or lie on or near to the boundary fence.

2.4 AREAS

- 2.4.1 Areas shall be defined as the entire surface area of cuttings and embankments including flat areas. Areas may be separately measured and may not necessarily be consecutive.
- 2.4.2 LHS and RHS defining Left Hand Side and Right Hand Side respectively, facing increasing kilometres.
- 2.4.3 Where the fence line turns to provide protection over the culvert inlets and outlets, the boundary line shall be taken as a straight line between the two corner posts (See Part D 1: Diagram D2).
- 2.4.4 An area of a Level crossing shall consist of four parts, two parts LHS and RHS of the track respectively.
- 2.4.5 The area to be maintained at a level crossing will be a maximum of 5000m². Areas for treatment may not be required on all sides / parts of the level crossing at each visit. Areas where work is required will be communicated via site instruction prior to the Supplier doing maintenance at each site.
- 2.4.6 Service Road area means the entire road surface measured two, (2) metres outward from the edge of the road. Where the boundary fence lies within the two meters from the edge of the road, the supplier will be required to clear the vegetation where instructed up to the boundary fence.

2.5 WORKLOTS

2.5.1 WORKLOT FOR INVADER PLANTS AND BUSH CLEARING

- a) This is defined as an area measured stating from a designated km post measured for a width of eight metres, (8m) measured from centre of track, and the length of fifty meters, (50m), parallel to the railway line either on the LHS or RHS respectively facing increasing kilometre.
- b) Each side will be measured separately.
- c) Where individual trees, or shrubs or invaders are to be treated, an area 5m length will be used as a minimum measurement and can be either left or right or both sides of the railway line.

2.6.2 SERVICE ROAD WORKLOT

- a) A worklot will be 50m in length, measured 2m either side of the road from the edge of the roadway, thus a work lot is 50m length x 8m width. (See diagram 3)
- b) Where the service road is outside of the TRANSNET FREIGHT RAIL reserve, a worklot shall be 50m in length multiplied by three (3) metre width. The measurement of a work lot will be from the post where the service road exists the TRANSNET FREIGHT RAIL reserve.

2.6 DECLARED WEEDS

Declared weeds means category 1 plants and declared invader plants means category 2 and 3 plants proclaimed under the Conservation of Agricultural Resources Act, Act No. 43 of 1983, including amendments (GN Regulation 1048 of 25/05/1984 amended by GN Regulation 280 of 30/03/2001) thereto.

2.7 SLEEPER

A sleeper is defined as a rectangular support which may be concrete, steel or wood and supports the track.

2.8 SERVITUDE

Servitude is the area along which the railway line runs, defined by the boundary fence on either side of the railway line. In the absence of a fence, the fence posts will be used as the boundary and a straight line taken between posts will form the boundary.

2.9 OPEN LINE

Open line is the area outside of yards and station areas along which movement of TFR equipment and Trains operate.

2.10 CONTRACT MANAGER OR HIS/HER DEPUTY

Any person appointed by the Transnet Freight Rail to deputise for him / her in supervising and carrying out the Agreement.

2.11 RESPONDENT

Respondents are all persons/ companies who are tendering for the required services as stipulated in the document.

2.12 SUPPLIER

Person or company to whom is awarded the agreement to perform the required services.

2.13 TFR

TFR is the abbreviation used for Transnet Freight Rail.

3. METHOD OF VEGETATION CONTROL

The Respondent's methods and program shall provide rapid and effective control in all areas, where required to work and instructed by the Project Manager or his / her deputy.

- 3.1 All woody vegetation which is cut and cleared must be treated with a registered herbicide to prevent regrowth if applied correctly. Where there are reeds present, the correct horticultural principals need to be applied for proper control of the area.
- 3.2 When felling of emergency trees takes place, the supplier is to report to person in charge of the site, Electrical personnel in the case of tree fallen on railway line with OHTE equipment. This is a requirement to sign permit for occupation. The occupation will guarantee that the power is switched off or the section is isolated, and it is safe for cutting of trees. When completed, the Supplier or his representative in charge of the works must report to Electrical personnel or site supervisor that the work is completed.
- 3.3 The clearing of the site, and logging of the felled tree may take place at a later stage if the initial work is done at night or on weekends or public holidays, after the initial work required is cleared and safe for TFR operations to continue.
- 3.4 The results from mowing/cutting of vegetation in areas where required is even and will not constitute a hazard to pedestrians and workers moving in the area. Vegetation to be cut to a height of not more than 100mm. Some areas may require mowing / cutting quarterly in built up, residential and industrial areas.

- 3.5 Vegetation control in terms of the contract will normally be required in respect of the off track, depot and ancillary areas where applicable. The type of herbicides and the methods of application to be employed are as specified by the contract and is to be monitored by the Contract Manager or his/her deputy.
- 3.6 The Respondent shall not damage any existing structures (e.g. fences) in or adjacent to TFR property originating from the execution of the works. The Respondent shall be held responsible for the full reinstatement / repair thereof should avoidable damage of any nature occur.
- 3.7 Declared and Invader plants should be controlled by cutting and cut stump treatment. Chemical application on the cut stumps must be effective and be capable of preventing regrowth of the plants when correctly applied to the area and plants.
- 3.8 All vegetative matter resulting from the cutting of invader plants shall be treated as per clause 2.3 above.
- 3.9 The supplier shall make-due allowance for some of the work to be carried out on steep slopes and uneven terrain.
- 3.10 A further follow-up or application of quarterly maintenance may be required in areas where Declared and Invader plants have been treated with applicable herbicides previously with Initial and Follow-up treatments. These areas for work however may not include all the areas, but be required in areas where plant spp. Such as *Arundo donax* and *Cortaderia Selloana* are occurring to name a couple.
- 3.11 Access to the mountain line and to areas without service road access may be possible with the use of TFR RRV. This Supplier will have to co-ordinate with the Technical officer and the Track personnel 1 month prior to wanting access to the areas.
- 3.12 Supplier personnel must be capable of traveling on an open vehicle up the mountain to access difficult areas.
- 3.13 Supplier personnel must be capable to operate hand nozzles of spray equipment of TFR with confidence and proficiency.
- 3.14 ***Burning will not be allowed under any circumstances as a means of control of Declared and Invader plants. The making of fire on site is also strictly prohibited, unless instruction is given to create a fire break by means of burning moribund and thick vegetation where cutting is not possible.***

4. STANDARDS OF WORKMANSHIP

- 4.1 Control shall be such that there be no dry or dead remains of trees and woody vegetation / shrubs treated greater than 500mm in height and 1-1.5m in diameter in that it constitutes a hazard, hindrance or danger to TFR operations.
- 4.2 Suitable areas and/or methods will be agreed to with the Contract Manager or his/her deputy on site prior to disposal of cut material of large trees.
- 4.3 All vegetation cut and treated within the rail reserve must be cleared out of side drains, culverts, waterways and walkways. Such vegetation shall not be stacked in areas which can obstruct the view to signals or cause any hindrance or obstruction to the normal working of Transnet Freight rail equipment, vehicles or personnel.
- 4.4 Vegetative matter is to be removed is not allowed to take place across the railway lines without the necessary protection in place and agreed to by the Contract Manager or his/her deputy.
- 4.5 All vegetative matter as a result of mowing or cutting with brush cutters shall be raked and removed from site.
- 4.6 Where cutting of vegetation at level crossings is required, vegetation will be cut to a height of no more than 100mm.
- 4.7 All vegetative matter produced from cutting and mowing at level crossings is to be removed from the site.
- 4.8 All shrubs, reeds and trees occurring within the area as indicated in Diagram 1, shall be cut to a height not exceeding 100mm and the resulting vegetation is to be removed from the cut area so as to prevent the cut material from being a hindrance to TFR operations.
- 4.9 The vegetation at level crossings is to be cleared as per the attached diagram, Diagram 1.
- 4.10 All vegetative matter resulting from the cutting of Invader plants and from bush clearing shall be either mulched with a chipper or removed from the area where work has taken place, especially in cuttings and at approaches to tunnel portals. The material shall be cut up and spread in the reserve. No stacking of material to take place as to produce a fire hazard.
- 4.11 Where full cover spraying of herbicides is done, vegetation may be left in place initially for dieback to take place and possibly removed after the first follow-up.

5. PROGRAM OF WORK

- 5.1. There is no program of work required, but work may be required to take place after hours or over weekends and or public holidays in an emergency situation for tree felling.

6. PERFORMANCE MONITORING AND EVALUATION

- 6.1. The Respondent shall at all times be responsible for supervision of the work and for follow-up inspections to monitor the successful control achieved over areas of completed vegetation control. He/she shall immediately take appropriate remedial action in areas where the specified standards of control are not achieved.
- 6.2. The Contract Manager or his/her deputy shall at any time during the operational periods carry out routine inspections of the Respondent's performance methods and procedures. The Contract Manager or his/her deputy shall, during the duration of the contract, carry out official inspections of the work for the purpose of evaluating whether control, as defined, has been achieved and measuring progress. The inspections shall be performed visually and the Supplier shall be present or forfeit his/her right to dispute the measurements and evaluation of the Contract Manager or his/her deputy. During each of these inspections the worklots treated will each be measured and evaluated. A worklot that does not comply with the specified level of control will be recorded as a "rejected worklot".
- 6.3. The clearing of bush encroachment and the control of Declared and Invader plants shall be measured in two parts:
- Part one will be for Initial cut and removal of vegetation.
 - Part two will be for the completion of follow-up treatment which will take place of the area treated in the Initial treatment where control was not initially achieved.
- 6.4. The rejection of worklot/s that do not comply with the standard of control will be final and valid for that inspection only in that particular year.
- 6.5. The rejection of a worklot at a particular inspection shall remain final for that inspection for payment purposes, notwithstanding the fact that the Supplier may execute further remedial work in order to achieve control at further and final inspections. The Supplier shall prepare an appropriate record of all disputed worklots in order that such disputes may be resolved by way of the disputes resolution procedures stipulated in the general conditions of contract for maintenance works

- 6.6. The Contract Manager or his/her deputy reserves the right to forego an inspection by giving the Respondent written notice of his/her intention to do so. Should the Contract Manager or his/her deputy decide to forego the inspection, he should thereby indicate that he is satisfied with the standard of workmanship. The Contract Manager or his/her deputy would then make full payment to the Respondent to the value associated with that inspection.

7. REMEDIAL WORK

- 7.1 The Supplier shall carry out remedial work to all worklots or hectares where control has not been achieved, or where the quality of work does not meet the required standards prior to the official inspections in terms of clause 6.2 taking place. Such remedial work shall include the removal of dry or dead growth with any dimensions in excess of 150mm and forming a nuisance or hazard to Transnet Freight Rail Operations, from the treated worklots or hectares.
- 7.2 The Contract Manager or his/her deputy may, at any time after the first measurement order the Supplier to carry out remedial action, to commence within 2 weeks, ten, (10), working days, after being so ordered, prior to the commencement of this proposed remedial action an envisaged remedial work program must be submitted to the Contract Manager or his/her deputy for his/her approval. Failing to do so, the Contract Manager or his/her deputy may arrange for such action to be carried out by others at the cost of the Supplier.

8. SUFFICIENCY OF TENDER

- 8.1 The Supplier shall tender for all the sites as described in the BOQ.
- 8.1.1 In the case for Tree felling, the supplier shall submit proof of his capability with experience to perform in the fields of the felling of tall and problematic trees near live overhead electric cables and industrial herbicide application in Southern Africa.
- 8.1.2 In the case for Declared and Invader plant control, the supplier shall submit proof of his capability with experience to apply industrial herbicide application in Southern Africa.
- 8.1.3 Supplier who wants to be considered for the clearing and treatment of Declared and Invader plant species must have a registered Pest Control Operator who shall be in direct control of work taking place on site.
- 8.2 A site inspection certificate (Section 9) signed by the Contract Manager or his/her deputy or his/her deputy, must be submitted with the tender and the submission thereof will be deemed to indicate the Respondent's acquaintance with the occurrence and extent of species of vegetation to be controlled and all aspects that will and/or may affect such control and costs thereof.

9. COMPLIANCE WITH STATUTES

- 9.1 The Respondent's procedures for the procurement, storage, handling, transportation, application and general use of chemicals shall comply with all applicable legislation, Codes of Practice and Local, Regional or Provincial Authorities, including but not restricted to:
- a) The Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act 36 of 1947) as amended.
 - b) The Hazardous Substance Act (Act 15 of 1973) as amended.
 - c) The Water Act (Act 54 of 1956) and the Water Amendment Act (Act 96 of 1984),(where applicable).
 - d) National Environmental Management Act (Act 73 of 1998).
 - d) The Environmental Conservation Act (Act 73 of 1989).
 - e) SABS Code of Practice No. 0206-1985 "Safety procedures for the disposal of surplus pesticide and associated toxic waste".
 - f) Conservation of Agricultural resources Act (Act 43 of 1983),(CARA) as amended.
 - g) Common law of nuisance.
 - h) Mountain Catchments Area Act (Act 63 of 1970).
 - i) The National Veld a Forest Fire act (Act 101 of 1998).
- 9.2 The respondent's team shall report to TFR personnel in control of all sites before any work commences.
- 9.3 No work may be undertaken in which any part of a person's body or piece of equipment comes within three (3) meters of any high voltage electrical equipment without competent TFR Supervision.
- 9.4 The Supplier must make sure that all electrical lines are isolated if broken before he commences with work.
- 9.5 **The Respondent's authorised representative when applying chemical herbicides shall be a registered Pest Control Operator, specialising in the field of weed control and registered in terms of the Farm Feeds Agricultural and Stock Remedies Act, Act 36 of 1947 as amended. A registered Pest Control Operator shall be in direct control of work taking place on site.**

10. GENERAL SPECIFICATIONS

The following general specifications will be applicable to this agreement:

- 10.2 Standard specifications

10.2.1 SANS 1200A – General

10.2.2 SABS Code of Practices no 0206-1983”Safety procedures for the disposal of surplus pesticides and associated toxic waste.”

10.3 The Supplier shall at all times comply with the *Basic Conditions of Employment Act* as well as all other relevant labour legislation. The Supplier must conduct his own formal risk assessment to identify all risks. The Supplier is to clearly indicate in his tender submission the processes and procedures he intends implementing to mitigate the total of all these risks: e.g.

- Working with herbicides
- live OHTE
- Executing work on one line while a normal train service is running on adjacent line/s
- Sanitation and refuse disposal as a threat to the environment.
- HEALTH AND SAFETY

10.4 The Supplier shall at all times comply with safety rules, regulations and legislation, as well as Transnet Freight Rail (TFR) Safety Guidelines for Infrastructure (Latest Edition).

10.5 The Supplier shall be responsible to ensure the use of only technically competent trained staff on all types of work. The Supplier will have to ensure that the Supplier’s personnel operating his/her own equipment and machines are fully trained with regards to safety and safe work procedures while using the machines.

10.6 Any locomotives, haulage equipment, road rail vehicles or any other track vehicles on Transnet Freight Rail lines undergo a Transnet Freight Rail Operating course and also receive a certificate of track section competency. This cost is to be borne by the Supplier.

11. DURATION OF CONTRACT

The contract shall commence with the acceptance of the award letter and will be valid for thirty six months. TFR reserves the right to cancel the contract if the standards of workmanship and safety as specified herein are not achieved.

12. TO BE PROVIDED BY SUPPLIER

12.1.1 In addition to all labour materials, plant equipment and incidentals needed to complete the work; the Supplier shall provide all accommodation and toilet facilities for his/her employees.

- 12.2 Where necessary, the Supplier shall provide safe and secure storage facilities for all herbicides or chemicals brought onto and in use on the site. Such facilities shall be capable of ensuring that unauthorized persons or animals cannot gain access to such chemicals.
- 12.3 The Supplier shall provide at his/her own cost any security measures he/she may deem necessary for safe and effective execution of the work within the contract area.
- 12.4 The Supplier shall provide his/her employees with high visibility garments. The high visibility garments are to be worn by the employees at all times when on site.
- 12.5 When required the Supplier shall appoint at each work site sufficient personnel whose sole task shall be to be on the lookout for approaching rail traffic. These employees shall operate an audible warning device to timeously warn all people on the work site of approaching rail traffic.
- 12.6 An effective safety procedure to be followed by all personnel on any work site in the case of approaching rail traffic shall be compiled by the Respondent and implemented before any work commences. The procedure shall be updated whenever the need arises and any changes shall be communicated to all employees on a work site before work proceeds.
- 12.7 The Supplier shall make available employees to be trained, certificated and used as Lookouts when required. The training shall be done at no charge to the Supplier.
- 12.8 Supplier and his personnel shall at all times wear reflective vests (similar to those used by TRANSNET FREIGHT RAIL) while working on TRANSNET FREIGHT RAIL premises or in any rail reserve according to TRANSNET Freight Rail's "Directive and procedures for issuing and wearing of reflective vests within service delivery zones"(Document Ref. No. CIR / OD / 0261 of 1 November 2004) and the reflective vests will be supplied by the Supplier during the course of this contract to his personnel.

13. TO BE PROVIDED BY TFR

- 13.1 Inspections of the areas of work may be arranged with the Contract Manager or his/her deputy, but will have to coincide with normal hours of work with the technical staff of the Depot.
- 13.2 When required, TFR will arrange for occupations for the felling of large trees or on the line with access by RRV.

14. INFORMATION TO BE PROVIDED WITH TENDER

The Respondent shall submit the following information at the time of tendering:

- 14.1 The Schedule of Quantities and Prices in Part C of the Special Conditions must be completed in full.
- 14.2 Respondents must furnish proof that they have had actual experience in the felling of trees. A statement of works recently and successfully carried out must be completed and submitted with the tender.
- 14.3 Respondents must furnish proof that they have work experience in Declared and Invader plant control, and should include in the tender documents a list of Declared and Invader plants to control, including the Trade name of chemicals to be used and the rates at which these chemicals will be applied.
- 14.4 The Supplier shall be regarded as the employer as defined in Section 1 (1) of Act 85 of 1993 (Machinery and Occupational Safety Act) and shall be responsible for ensuring that the requirements of the Act and the regulation are implemented on the work site.

Also refer to E7/1 Specification and work adjacent to live lines.

- 14.5 An undertaking that all spraying equipment will be ready for operation and that the spraying can commence timeously, to comply with requirements of the contract.
- 14.6 A list of registered products to be used in the work, supported by specimen labels, indicating:
- Trade name
 - Generic name
 - Registration Number
 - Ingredients (type and content) as shown on the label
 - Application rates

The Contract Manager or his/her deputy's approval shall first be obtained for use of other herbicides.

- 14.7 A description of the methods to be used for general vegetation control must be provided. This must include the description and rate of application of chemicals, design mixtures, the precautions to be taken to prevent damage of adjacent vegetation, the type and method of use of the proposed equipment and any other relevant information.

The description and rates of application submitted shall serve as the minimum basis for estimating performance and vegetation control by the Supplier. The herbicides so specified shall be used as the basis for evaluating the efficacy of the Supplier's proposed method of work.

The Supplier shall not be allowed to use broad-spectrum herbicides without prior written approval from the Contract Manager or his/her deputy.

The Supplier shall not depart from the minimum material usage tendered, without approval from the Contract Manager or his/her deputy.

14.8 Information relating to SHEQ

The Safety Plan must be in accordance with the Construction Regulations, 2003 (refer to the E4E (August Transnet 2006)). The health and safety file must consist of but not restricted to:

14.8.1 HEALTH AND SAFETY PLAN

- Completed Risk Assessment with regards the above works (identification & evaluation)
- Documented plan of safe work procedures to mitigate, reduce or control risks.
- Fall protection plan - (where applicable)
- A complete H&S plan

14.8.2 WSWP AND JOB OBSERVATIONS

- Specific safe working procedures for all safety critical tasks.

14.8.3 APPOINTMENTS

- Trained and certified first aiders for the above works
- SHE Rep's for the above works.
- Documented Health and Safety organigram (including sub-Suppliers where applicable)

14.8.4 CERTIFICATES

- Site access certificate (Annexure 4 of E4E)
- Machine operators
- Copies of medical surveillance records for personnel on this work site
- Fitness certificates "e.g. working at heights"

14.8.5 AUDITS AND INSPECTIONS

- Record of site inspections
- Applicable Checklist completed e.g. ladders, winches, snatch blocks etc
- Documented emergency procedures
- Reports on condition of plant /equipment (in site diary)

14.8.6 TRAINING

- Copies of Certificates of other training (e.g. Flagmen, technical training etc.)

14.8.7 GENERAL

- Notice of construction work to Dept. of Labour (where applicable)

- Notices served by Dept. of Labour
- Environmental Plan
- Work programme
- Method and detail of process including but not restricted to:
 - List of registered herbicides to be used in the work, supported by full specimen labels indicating trade name, generic name, registration number, ingredients (type and content) and application rates
 - Application rates of herbicides to be applied by the Supplier
 - Product mixtures
 - Detail and function of personnel to carry out operation
 - List of support resources to carry out operation
- Proposed Amendments and Qualifications
- Proposed Organization and Staffing structure including quantity of personnel to be trained in aspects of safety.
- Certified copies of valid Pest Control Operators registration certificates of the supervisory staff that are accountable for the works in this tender. The name of the Pest Control Operator must be linked in the staffing structure to a specific team responsible for spraying.

14.9 **A copy of the certificate issued by the Department of Agriculture to certify that the tenderer or his/her representative is a pest control operator in terms of Act 36 of 1947, as stipulated under clause A4.3, must be submitted.**

15. SITE MEETINGS

The Respondent shall attend site meetings where required. The meetings will be held under chairmanship of the Contract Manager or his/her deputy. When sub-Respondents are required to attend, the Respondent shall ensure their attendance.

16. SITE DIARY AND INSTRUCTION BOOK

16.1 The site instruction book shall have numbered sheets for receiving and recording instructions by the Contract Manager or his/her deputy and shall be clearly marked "Site Instruction Book".

16.2 The site diary referred to shall be clearly marked "Day Book". At the end of each day a line shall be drawn below the last entry of the day and both the Respondent and the Contract Manager or his/her deputy or his/her deputy shall sign across the line. If no entry was made, a "NIL" return must be entered and signed. Any claim arising from delays, which cannot be substantiated by reference to the site diary, will not be considered.

- 16.3 The site diary shall serve as a daily record of all relevant information prevailing on site as well as herbicides applied as required in terms of section 16 of act 36 of 1947.
- 16.4 Only persons authorized in writing by the Contract Manager or his/her deputy or Respondent may make entries in the site books.
- 16.5 Receipt of materials supplied by TFR shall be recorded in the "Day Book".

17. DAMAGE TO FAUNA AND FLORA

- 17.1 The Respondent shall ensure that his/her employees at all time exercise care and consideration for the fauna and flora within and adjacent to the area to be sprayed. The Respondent shall take the presence of drainage works within yards or depot into account and shall ensure that no water-borne movement of herbicides is possible.
- 17.2 Dumping or polluting of any kind will not be permitted. This stipulation is also applicable to the washing of tanks and equipment containing harmful chemicals and pollutants.
- 17.3 The Respondent shall institute and maintain procedures for the safe disposal of all chemicals and residual materials originating from the execution of the works.
- 17.4 The Respondent shall take note of the environmentally sensitive areas and shall plan and execute his/her work with utmost care and responsibility.

18. HOURS OF WORK

The Respondent shall be required to work between 7h00 and 16h00 on weekdays and weekend work will only be permitted in emergency situations and shall also take into account standby working will also be applicable. The Respondent must take note that as this is a "As and When" required contract, the Respondent will have to make himself/herself available on short notice for the felling of emergency trees.

8. 19. PENALTIES

Penalties for non-compliance to specifications and control not achieved will be as follows:

- 19.1 Invader Plants and Bush clearing

- 19.1.1 Measurement for payment will be done after ten (10) to fourteen (14) days after completion of the initial work. The presence of regrowth of treated Declared and Invader plants will constitute non conformance and result in deductions of worklots as defined from payments.
- 19.1.2 Measurement for payment will be done after ten, (10) to fourteen, (14) days after completion of the follow-up work. The presence of regrowth of treated Declared and Invader plants will constitute non-conformance and result in deductions of worklots as defined from payments.
- 19.1.3 Measurement for payment will be done after ten, (10) to fourteen, (14) days after completion of the quarterly maintenance work. The presence of regrowth of treated Declared and Invader plants will constitute non-conformance and result in deductions of worklots as defined from payments.

20. MEASUREMENT AND PAYMENT

- 20.1 The rates and prices tendered in the schedule of quantities and prices are composite and be fully inclusive of all the Respondents costs in respect of establishment on site, labour, materials consumables, head Office overhead costs, the Suppliers profit, for all delay and consequential costs and for everything of whatever nature required of the Supplier for completion of the work included in the contract.
- 20.2 Payments will be based on work successfully completed by the supplier for the different operations required, i.e.:
 - 20.2.1 the number of trees cut and treated which are larger than 5m in height and or diameter, and require occupations to cut.
 - 20.2.2 the number of hectares cleared for both Initial and follow-up treatment adjacent to the track and to the service road.
 - 20.2.3 The number of worklots on the service road where successful Declared plant and Invader control as well as bush clearing has been achieved.
 - 20.2.4 Payments for the maintenance of vegetation at level crossing will take place as per the payment schedule for each level crossing or for each portion cleared as per site instruction.
 - 20.2.5 Where the side of a level crossing falls wholly in an area where bush clearing and or Declared Invader control is taking place, the measurement will not be done

separately and additionally from the bush clearing / Declared Invader plant operation.
Payment will be done on the rates for Bush clearing / Declared Invader Control.

- 20.3 Quantities are estimated and may be more or less than stipulated in the Schedule of Prices. These quantities are estimated for the duration of the contract, i.e. As per C.1.1, this is the total amount of hectares estimated to be treated over a period of 12 months.
- 20.4 Payment for the work completed will be made within approximately 30 days from receiving a VAT invoices, once inspection of completed works is done.
- 20.5 No additional payment will be made for the procurement, handling transport and incidental costs in the amount tendered for the removal, treatment and disposal of trees and shrubs and other plant material which may occur as the result of removal / cutting.
- 20.6 No payment will be made for rejected worklots where control achieved does not meet the standards of control specified.
- 20.7 Measurement and payment for the work completed will be made monthly at the end of each month of work taking place.

SPECIAL CONDITIONS OF CONTRACT AND SPECIFICATIONS

PART C: SCHEDULE OF QUANTITIES

VEGETATION MANAGEMENT

Camfer – Mossel Bay and Kyilersnek – Belvedere (Knysna)

Item	Description	Unit	Quantity	Rate	Total
C.1.1	Invader Plant Control Initial	Ha	20		
C.1.2	Invader Plant Control Follow-up	Ha	20		
C.1.3	Quarterly Invader Follow-up	Ha	20		
C.1.4	Level Crossings	Ha	4		
C.1.5	Tree Felling	Ea.	3		
Total Year 1:					

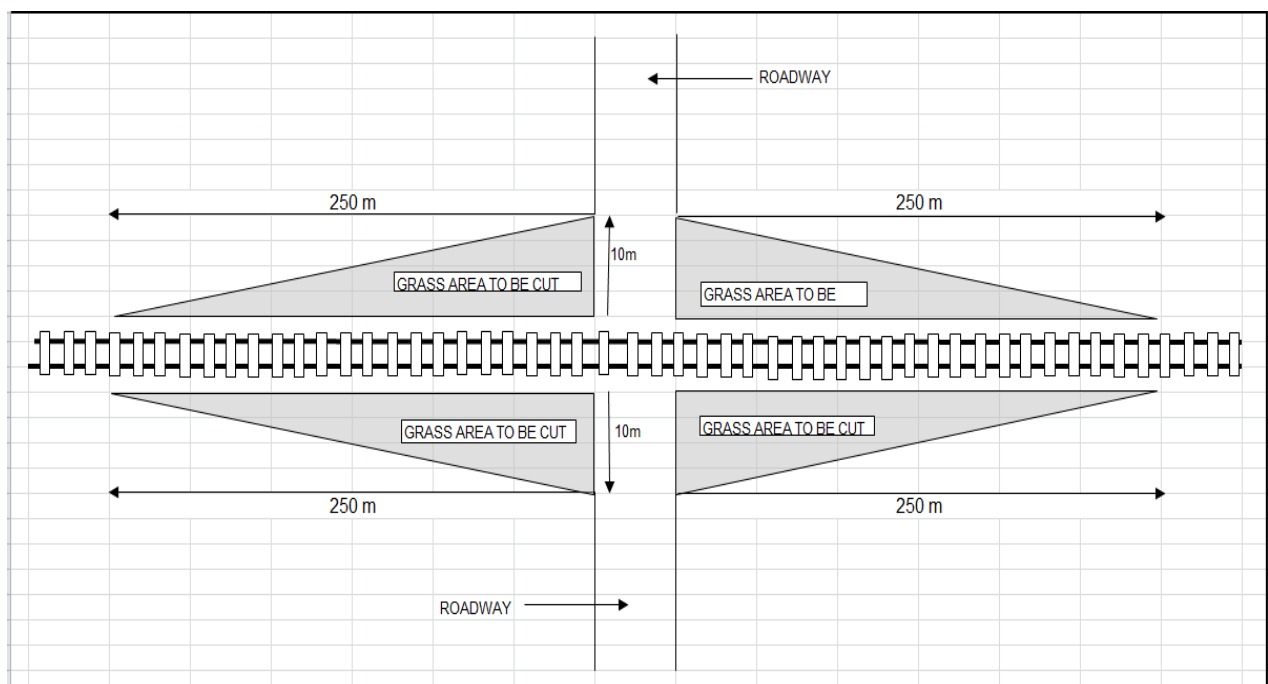
Item	Description	Unit	Quantity	Rate	Total
C.2.1	Invader Plant Control Initial	Ha	56		
C.2.2	Invader Plant Control Follow-up	Ha	56		
C.2.3	Quarterly Invader Follow-up	Ha	76		
C.2.4	Level Crossings	Ha	6		
C.2.5	Tree Felling	Ea.	5		
Total Year 2:					

Item	Description	Unit	Quantity	Rate	Total
C.3.1	Invader Plant Control Initial	Ha	24		
C.3.2	Invader Plant Control Follow-up	Ha	24		
C.3.3	Quarterly Invader Follow-up	Ha	100		
C.3.4	Level Crossings	Ha	6		
C.3.5	Tree Felling	Ea.	2		
Total Year 3:					

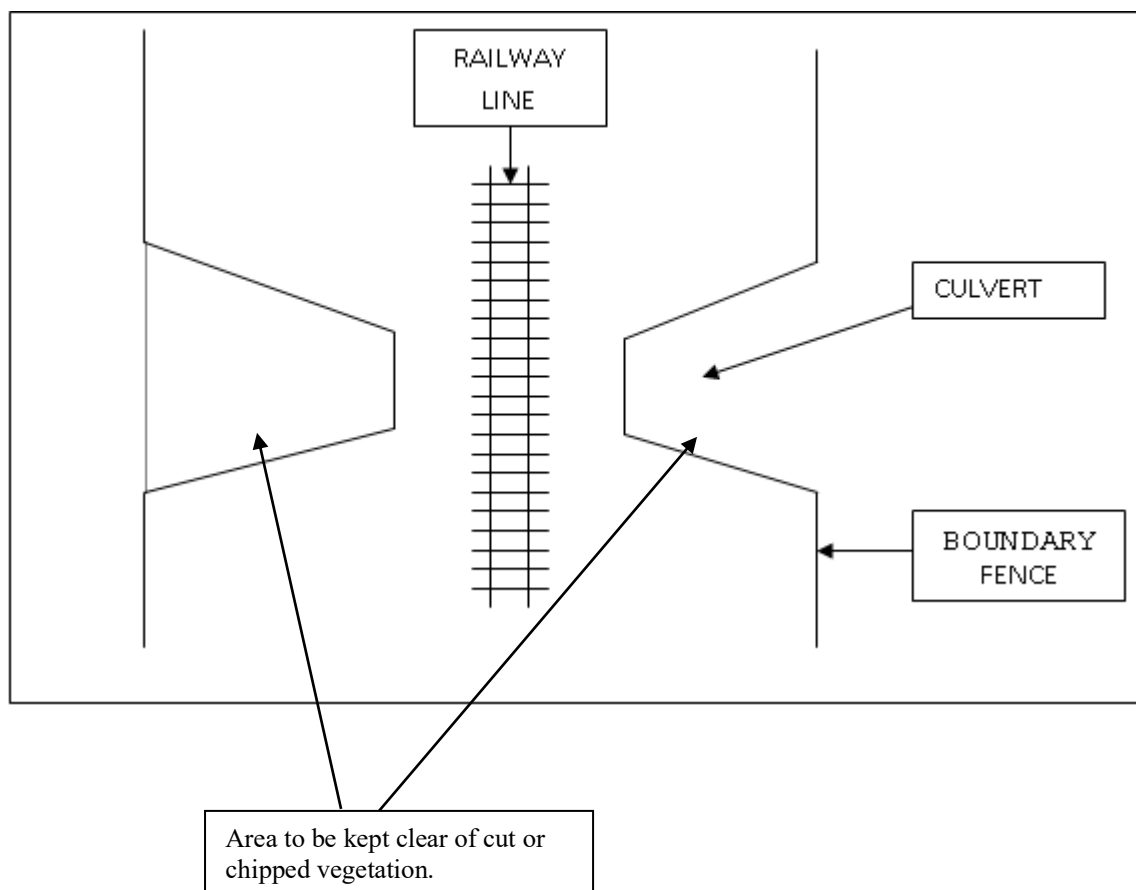
Description	Amount R. c.
Total Year 1	
Total Year 2	
Total Year 3	
Sub Total	
VAT 15 %	
Total	

PART D : SCHEDULE OF DIAGRAMMS

D1: DIAGRAM OF LEVEL CROSSING



D2: DIAGRAM OF CULVERT



D3: DIAGRAM OF RAIL RESERVE WITH SERVICE ROAD AND 11KV MASTS

