**Safe Work Method Statement**

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| Initiators of SWMS are responsible for consulting the supervisor, engineer or other persons in charge of the work and all personnel involved in performing the work for input into the SWMS. Other persons may be consulted for technical advice and review of the SWMS to see proposed measures are effective and workable. The Project Administrator/WHS Representative is responsible for ensuring that work activity is carried out in accordance with the SWMS. **All involved in the task must review and sign this form as acceptance to the requirements and responsibilities detailed herein. SWMS must be located on jobsite permanently** | | | | **SWMS: EWP DRILLING** | | |
| ***Contractor:* Specialised Geo Pty Ltd** | | |
| ***Employer: Earthtec*** | | | | **Initiated by: PCBU & WHS Representative** | | |
| ***Project name/location: Kuranda Range*** | | | | **Created by: Specialised Geo Management** | | |
| ***Job/Task: EWP drilling*** | | | | **Management review: Date:**  **(Signature required before work commences on site to certify SWMS is compliant with WHS legislation)** | | |
| ***Supervisor:*** | | | | **Date:** | | |
| **SWMS Sign off and acceptance of proposed work method and associated responsibilities**  All workers associated with these works must sign this SWMS before commencing works on site | | | | | | |
| ***No*** | ***Surname*** | ***Christian name*** | ***Classification/Qualification*** | | ***Employed by*** | ***Signature*** |
| **1** |  |  |  | |  |  |
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| ***Brief description of work to be undertaken:*** Drilling works using an EWP for access | | | | | | |
| ***Key safety issues to be managed and key safety controls to be implemented:*** | | | | | | |
| Falls from heights, falling/flying debris, manual handling, safe access/egress to site, compressed air, leaks from plant into | | | | | | |
| environment, cold/hot environments, dehydration | | | | | | |
| ***Reference and detail applicable section/s of:*** | | | | | | |
| Legislation 0 Codes of Practice 0 Project WHS Management Plan 0 Specialised Geo Policies 0 | | | | | | |
| Manufacturer/Supplier recommendations/Specifications 0 Australian Standard/s 0 .other guidelines...................... 0 | | | | | | |
| WHS Act 2011, WHS Regulations 2011, AS/NZS 1891.4 (Industrial Fall Arrest Systems). | | | | | | |
| Code of Practice for Excavation, Hazardous manual tasks, How to manage WHS risks ,Managing noise & preventing | | | | | | |
| Hearing loss at work, Preventing and managing fatigue in the workplace, First aid, Managing risks in the workplace | | | | | | |
| Manage risks of plant in the workplace, Managing risks of hazardous chemicals, Managing risks of falls | | | | | | |
| ***List key individual qualifications and experience:*** | | | ***Key individual safety duties/responsibilities:*** | | ***Detail training required to complete work*** | |
| Leigh Henness – 14 years drilling/rope access experience | | | Supervision, daily project records | | Construction card, project induction, project records, Workcover tickets, site specific induction | |
| Rachel Metcalf – 14 years drilling experience/supervision | | | Project management, OH&S certificate 4 | | Construction card, project induction, project records, Workcover tickets, site specific induction | |
| Peter Dark – 7 years drilling/ rope access experience | | | Supervision, daily project records | | Construction card, project induction, project records, Workcover tickets, Site specific induction | |
| Anne-Marie Timmermans – 3 years management experience | | | Site management, WHS activities on site, daily project records | | Construction card, project induction, project records, Workcover tickets, Site specific induction | |
| ***Detail any approvals required eg Permit to Excavate:*** | | | | ***List Certificates/Licenses required to operate plant or perform tasks:*** | | |
| SWMS to be completed by supervisor before commencing work and signed by all parties involved in all tasks. It is the employees responsibility to fully understand procedures involved in the task. If at any time the employee is not familiar | | | | Construction card, LE Workcover ticket, Australian class C drivers license, site specific license, working at heights | | |
| ***List plant, equipment and/or safety inspections required:*** | | |
| with procedures it is there responsibility to cease work and gain further training, Toolbox talks held daily. Relevant permits acquired e.g Ground Disturbance, Excavation Permit | | | | Daily inspections of all equipment. Plant to be checked when first on site then daily checks required | | |
| ***List Plant, resources and equipment required:***  Hand tools, air compressor,Ewp drill, Blow pipe, Rattle gun, jack hammers, hoses, safety harnesses, EWP | | | | Report any areas where site has been altered making it unsafe.  Visual inspection of hoses/clips, tools/leads tagged monthly. | | |
| ***Key Contact Numbers:*** | Leigh Henness | Anne-Marie Timmermans | | Peter Dark | | Spec Geo Office |
|  | 0400 722 111 | 0458 722 333 | | 0488 722 110 | | 024934 2040 |

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| **Step No** | **Process Steps**  **List steps needed to do the job in the sequence to be done** | **Potential Hazard/s**  **Against each step list potential hazards that could cause injury when the job is done** | **Risk Level 1-4** | **Hazard Control Measures**  **For each hazard identify control measures to eliminate or minimise the risk of injury** | **Action By** |
| **1** | **Project Induction, Sign in SWMS** | * 1. Persons working outside of approved conditions or   SWMS | 1 | * + 1. All persons must complete the project induction, hold an OH&S construction card and sign in on this SWMS.     2. Ensure all approved controls and prevention measures are discussed and SWMS is given to all persons involved in the work.     3. PPE to be worn required for task. | All |
| **2** | **Familiarise with site and check for NO GO zones with client, first aid amenities and establish emergency protocols** | 2.1 Injury occurrence | 2 | 2.1.1 Mention in site induction the location of:  toilets, first aid box, fire extinguisher, muster point, spill kit, eye wash bay, NO GO zones, emergency contact details  2.1.2 All personnel to sign in  and out when arriving  and departing in work  area (this acts as a  register for emergency  protocols).  2.1.3 SWMS for particular  task will be reviewed  daily prior commencing  work  2.1.4 All persons on site of  Specialised Geo must  complete a Take 5 daily  prior to each work task  when required by client. | Supervisor |
| **3** | **Project Administrator/Supervisor – to provide safe access to embankment**  **Ensure TMP has been put in place by confirmation from Earthtec Supervisor before conducting works** | 3.1 Interactions with  workers  3.2 Falling rocks or  materials | 3 | 3.1.1 Supervisor to notify all  workers and operators  when safe access can  be gained.  3.1.2 All workers in the area  to notify of position.  3.1.3 Positive communication  procedures in place,  understood, and utilised  3.2.1 Establishment and regular  checks of exclusion zones,  signs and radio equipment | All |
| **4** | **Prestart checks** | 4.1 Uneven ground  4.2 Oil leaks  4.3 Trip hazards  4.4 EWP defaults | 2 | * + 1. Ground levelled out and compacted if necessary     2. Checks for oil leaks etc.     3. Spill kit available in work area     4. Remove rubbish and trip hazards from work area.     5. Daily check on EWP | All |
| **5** | **Check Plant** | 5.1 Poor plant  condition  5.2 Malfunction  5.3 Hazardous use | 4 | 5.1.1 Inspection to be carried out on  all plant when arriving on site by  site technician.  5.1.2 Inspect plant and complete  relevant safety/mechanical  check sheets daily.  5.2.1 Hoses to be in good condition,  safety clips to be in place  5.3.1Plant must be checked by  competent personnel only | All |
| 6 | **Drilling Set-Up**  1)Move equipment to site  2) Access embankment via EWP on level bench. | 6.1 Working at heights  hazard of fall  6.2 Rocks dislodging  6.3 Slips, trips and falls  6.4 Injuries by incorrect  lifting  6.5 Uneven and  incompact ground | 2 | 6.1.1Three points of contact to be  maintained during works.  6.1.2 When working at heights safety  harness must be worn and  attached to basket of EWP by  lanyard  6.2.1 Exclusion zone must be in place  at bottom of embankment  6.2.2 Spotter in place at bottom of  embankment when required  6.3.1 Floor of EWP basket must be  clean of debris and materials at  all times  6.4.1 Use correct manual handling  techniques  6.4.2 Use team lifting or mechanical  aid when required  6.5.1 Prior to commencing work out of EWP ground must be checked.  6.5.2 Daily check on ground condition  is required. | All |
| **7** | **Rescue equipment in place** | 7.1 Not hooked onto  anchors correctly  7.2 Incomplete rescue  bag | 3 | 7.1.1 Only competent and trained  personnel  7.1.2 Rope technicians to all observe  and double check that it is in  correct position to be hooked  up.  7.2.1 Check Rope rescue bag daily  prior commencing working at  heights activities | All |
| 8 | **Platform Positioning**  EWP operator/driller to position basket in correct location. | 8.1 Falling rock.  8.2 Fall from heights  8.3 Injuries by incorrect  manual handling  techniques  8.4 Overloading the  basket of the EWP | 2 | 8.1.1 Exclusion zone must be in place  at the bottom of the  embankment  8.1.2 Spotter in place at bottom of  embankment when required  8.2.1Three points of contact to be  maintained during works.  8.2.2 When working at heights safety  harness must be worn and  attached to basket of EWP by  lanyard.  8.3.1 Materials to be lifted as per  recommended lifting techniques.  To be reviewed prior to  commencement of work.  8.3.2 No overloading, use team lifts if  possible and avoid repetitive  lifting.  8.3.3 Use mechanical lifting if  available.  8.4.1The load sensing system  measure platform load and  when the platform load reaches  approx 110% of the rated  capacity , a lamp on the  platform control panel will  illuminate and the platform  alarm will sound . Whilst  overloaded no engine powered  platform function are allowed  only functions using the Aux  power . The ground controls  (emergency controls) are still  operational under engine power  8.4.2.The operations manual of the  EWP will be onsite at all times  and will be reviewed by all  operators prior use of the EWP  8.4.3 The maximum platform capacity  is 230 kilo. | All |
| **9** | **Drilling**   1. Mark out designated hole location. 2. Position drill ensuring EWP is stable 3. Place hole to desired depth | 9.1 Drop drill rods  9.2 Slips, trips and falls  9.3 Strains and sprains  9.4 Dust  9.5 Entanglement of  hoses  9.6 Fall from heights  9.7 Debris falling off  platform, flying  debris  9.8 Unauthorised  people entering site  9.9 High noise level  9.10 Dust, silicosis  9.11 Use of  compressed air  9.12 Fatigue  9.13.Hydraulic Injection  9.14 Overloading the  basket of the EWP  9.15 Damage to the  basket whilst  drilling | 2 | 9.1.1 Position dill using correct lifting  Procedures  9.1.2 Drill to be operated by  competent and trained  personnel only.  9.1.3 Once in position make sure area  is clear and other personnel  are aware that drilling is about  to commence   * + 1. Eyes on path     2. Materials to be lifted as per   recommended lifting techniques  to be reviewed prior to  commencement of work.  9.3.2 No overloading, use team lifts if  possible and avoid repetitive  lifting   * + 1. Use mechanical lifting if available     2. Water to be used to suppress   dust where applicable.   * + 1. Silt fencing to be in place to   stop contamination of water supply if required.   * + 1. P2 standard mask and safety glasses to be worn due to possible hazard of silicosis dust     2. Have hoses laid out in sequence to prevent entanglement     3. Three points of contact to be   maintained during works   * + 1. Standard lanyard & harness   equipment to be worn.   * + 1. When working above 1.5 metres a safety harness must be worn and hooked onto static line or anchored rope.     2. No one to work below working level when drilling in operation.     3. Wear eye protection at all times     4. Authorised personnel only   allowed in work area whilst  work is being carried out and  must be entered into daily  project records and SWMS   * + 1. Operators to acknowledge people wishing to enter work area   9.9.1 Wear suitable ear protection  and take regular breaks away  from the source of noise  9.10.1 Dust masks to be worn when in  the working area.  9.10.2 Risk of silicosis from sandstone  dust requires a P2 mask to be  worn  9.11.1 Ensure hoses are rated and are  in good condition.  9.11.2 Safety clips are in place  9.11.3 Whip checks  9.12.1 Work in pairs, rotate work  areas.  9.12.2 Regular breaks  9.13.1 Spiral rap on hydraulic lines  9.14.1 During drilling activities the  basket of the EWP will be  resting on the embankment  9.14.2The load sensing system  measure platform load and  when the platform load  reaches approx 110% of the  rated capacity , a lamp on the  platform control panel will  illuminate and the platform  alarm will sound . Whilst  overloaded no engine powered  platform function are allowed  only functions using the Aux  power . The ground controls  (emergency controls) are still  operational under engine power  9.14.3 The weight of the drill will be  supported by the floor of the  basket  9.15.1 The drill will be mounted to the  floor of the basket to prevent  any damage to the basket. |  |
| **10** | **Removal of debris/cleaning up** | 10.1 Debris falling off  platform, flying  debris  10.2 Obstruction of  walkways and  access points | 2 | 10.1.1 Authorised personnel only  allowed in work area whilst work  is being carried out.  10.1.2 Operators to acknowledge  people wishing to enter work  area.  10.1.3 No one to work below working  level when cleaning up in  operation.  10.1.4 Wear eye protection at all times  10.2.1 Keep work area clean of rubbish  and debris  10.2.2 Keep walk ways clear of stacked  materials. | All |

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| **Likelihood**  How likely is it that someone will get hurt? | **Consequence**  How severely could someone get hurt? | | | |
| **Catastrophic**  Death, very serious environmental/structural and/or plant damage | **Major**  Permanent disability, loss of production or major environmental/structural and/or plant damage | **Moderate**  Temporary disability or moderate environmental/structural and/or plant damage | **Minor**  Minor injury or minor environmental/structural and/or plant damage |
| **Very likely**  (could happen soon or regularly | **1** | **1** | **1** | **3** |
| **Likely**  (could happen occasionally) | **1** | **2** | **2** | **3** |
| **Moderate**  (possible it might happen) | **2** | **2** | **2** | **3** |
| **Unlikely**  (could happen but rarely) | **2** | **3** | **3** | **4** |
| **Very Unlikely**  (could happen but probably never will) | **3** | **3** | **4** | **4** |

Legend:

**1-Critical/Extreme Risk**

**2 – High Risk**

**3 – Moderate Risk**

**4 – Low Risk**