

FMSC sug #9  
to PCW 27-11-15



**ACT**  
Government

Territory and Municipal Services

WORK BRIEF

Specialist trail building contractor

Isaacs Ridge Pine Plantation:  
Mountain Bike trail network upgrade

2015-16

November 2015

On Behalf of Client Agency

Capital Works Design & Delivery

TERRITORY AND MUNICIPAL SERVICES DIRECTORATE

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### ATTACHMENTS:

- Attachment A: Isaacs Ridge Trails Management Plan
- Attachment B: Isaacs Ridge – Location Map
- Attachment C: PCS General Site Conditions
- Attachment D: Downhill Mountain Bike Upgrade & Construction
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- Attachment F: Procedure for variations

## 1.0 INTRODUCTION

Capital Works Design and Delivery (CWDD) is the project and infrastructure delivery arm of the Territory and Municipal Services (TAMS) Directorate of the ACT Government. CWDD deliver projects on behalf of the services areas of TAMS including ACT NOWaste, Roads ACT, ACTION and Parks and Territory Services. This project is being delivered for ACT Parks & Conservation Service (PCS).

This project will be delivered by CWDD and the ACT Government Procurement agency – Procurement Capital Works (PCW).

## 2.0 BACKGROUND

### Recreational use and mountain bike trails at Isaacs Pines

*Isaacs Pines is an important recreational area for a number of different users groups and is located in close proximity to a residential area. The suburb of Isaacs backs on to the Pines and further to north, the suburb of O'Malley backs on to the reserve area.*

It is estimated there are more than 5 kilometres of existing mountain bike trails in Isaacs Pines that have been constructed by members of the public unofficially which includes technical downhill mountain biking trails generally designed to be ridden at high speed.

Community members and groups have conducted events on this trail network for many years. The ACT Parks and Conservation Service (PCS) has significant concerns with the safety of the site and presently do not have knowledge of the surety of these trails in terms of safety, stability, suitability or environmental impact.

### Public Consultation and Trail Management Plan

The ACT Government undertook open public consultation in August 2015 on current recreational use and demand of the area.

Anthony Burton and Associates were then commissioned to develop a Trails Management Plan for the area of the Isaacs Ridge pines.

Refer [Attachment A: Trails Management Plan](#)

## 3.0 PROJECT FUNCTION

To address the need for formalised downhill mountain bike trails within the Isaacs Pines to improve safety of users, better manage use and meet community needs while maintaining the area as well used recreational area for all users.

This project will construct selected priority elements of the trail infrastructure recommended by the approved *Isaacs Pines Trails Management Plan*.

## 4.0 SITE

The area of pines at Isaacs Ridge is located behind the suburbs of Isaacs and O'Malley in South Canberra in the Woden Valley.

The site encompasses Block No. 159 Jerrabomberra and Block No.6; Section 593 Isaacs.

Refer Attachment B: Location map

#### **Site context – Isaacs Ridge pine plantation**

1. The Isaacs Pines area is bordered by Isaacs Ridge Nature Reserve.
2. Includes an area of 23 Ha of ACT Forestry commercial pine plantation
3. The commercial pine plantation is managed by ACT Foresters within Parks and Conservation Service.
4. The land is managed by the South District, Urban Reserves, Parks and Conservation Service.
5. This area is routinely used by local residents and day walkers. The Centenary Trail passes through the pines.
6. The area is part of the commercial pine plantation estate; however the proximity to urban development may dictate future management decisions.

#### **Zoning**

##### Isaacs Ridge

- *Jerrabomberra Block No. 159: DES designated land*  
DES: DESIGNATED  
Pc: Nature Reserve; Pd: Special Purpose Reserve.
- *Isaacs Block No.6; Section 593*  
DES: DESIGNATED; NUZ3: HILLS, RIDGES AND BUFFER AREAS  
Pc: Nature Reserve; Pd: Special Purpose Reserve; Pe: Urban Open Space; PUBLAN: Public Land

#### **Access**

Access is via the PCS gate off Shepherdson Place, Isaacs. Access and access requirements are to be confirmed with the Parks and Conservation Service (PCS) South District Ranger.

The area is not to be accessed off Long Gully Road.

The contractor is to liaise with the PCS Ranger to arrange access. Contact details provided below.

## **5.0 PROJECT OBJECTIVES AND OUTCOMES**

This project will deliver the recommendations of the Isaacs Pines Trails Management Plan through the construction of selected priority elements.sz

## **6.0 PROJECT SCOPE**

A suitably qualified and experienced specialist trail building contractor is required to construct elements of the selected trails and associated infrastructure in accordance with this work brief and the *Isaacs Ridge Pines Trails Management Plan*:

The successful construction contractor is to:

- Undertake detailed design and alignment of the three proposed trails in consultation with Superintendent, TAMS and Volunteer representatives.
- Undertake construction of elements and features of the proposed trails in accordance with this brief and the specifications detailed below.
- Run three trail building workshops with the newly formed volunteer group to construct sections and elements of these trails
- Undertake ongoing stakeholder liaison with PCS, CWDD and the volunteer group

TAMS will engage a suitably qualified and experienced Superintendent with specialist skills in trail building to supervise the work during construction to the satisfactory completion of the project and consistent with the alignment that is approved.

### **6.1 Variations to Project Scope**

Scope change proposals must be submitted for review and approval to the Client consistent with Attachment F: Procedure for variations, before any changes are implemented. The procedure for variations will be confirmed at the inception meeting for this project.

### **6.2 General project requirements**

1. The successful contractor and all nominated personnel working on the project are to attend a site induction with the CWDD Project Officer and the PCS Ranger prior to work commencing on site.
2. Due diligence must be undertaken in relation to identifying underground services to ensure works are designed to minimise opportunities for disturbing these and for scope change during construction. Dial-before-dig must be conducted by the Contractor if applicable.
3. Conform to all requirements relating to working in a reserve area, including conditions for access, issue of keys, prohibition of dogs, fires, littering, firearms and others to be provided in writing.
4. Conform to the conditions set out in the PCS General Site Conditions. Refer Attachment C
5. Put in place management measures to ensure the work site, materials and machinery are secured and that potential public hazards are mitigated at all times during construction.
6. Ensure all materials are stored appropriately and in a way that minimises risk of contamination to the environment.
7. Identify if a Waterways Works License is required for work in drainage lines and if required, obtain the necessary approval for this work.
8. There are no known existing heritage sites, however Aboriginal artefacts have been found in the general area of works. In the instance that the contractor uncovers a potential Aboriginal artefact all work is to be stopped in the immediate area and the PCS Ranger is to be contacted. The artefact should be retained and handed over to the PCS Ranger.
9. No soil is to be removed from site without EPA approval.
10. TAMS will seek a Works Approval from the National Capital Authority for the proposed works on designated land.

### **6.3 Trail Building Workshops**

The successful contractor is to hold three trail building workshops with the volunteer group, to be held on weekends. Duration up to 4 hours each session.

The trail building workshops are key aspect of the project to pass on skills and knowledge to the volunteer group members on standards and techniques for good trail design and construction.

The volunteer group will be based on the model used at Bruce Ridge and Majura Pines using the existing Parks and Conservation Service Parkcare group volunteer framework.

PCS will work with members of the local mountain bike community identified in the consultation process to establish the group. Canberra Off-road Cyclists club representatives from the downhill group will be part of this group.

It is important that the successful contactor engages with the volunteer group throughout the process, from design through construction, as ongoing management and maintenance of the trails will be undertaken by the volunteer group.

#### **6.4 Detailed trail alignment**

The Trails Management Plan shows the trail alignment within an approximate 10 metre corridor and details landscape features to be used. The Successful Contractor is to propose the detailed trail alignment within this corridor.

The draft detailed trail alignment is to be marked on site with appropriate markers/flags. The marked alignment for each trail is to be reviewed on site with PCS Ranger, CWDD Officer, the Superintendent and nominated representatives from the volunteer group for approval prior to construction commencing.

The final trail alignment will be informed by:

- The Isaacs Ridge Trails Management Plan
- Site investigations with the Superintendent, PCS and CWDD Officer
- Consultation with PCS, CWDD and the volunteer group
- IMBA trail building standards
- Designed to minimise earthworks and impact to surrounding area.
- The exact location of the crossing points of the reserve management tracks is specified in the Trails Management Plan. These must not change.

Design Acceptance will be issued to the contractor in writing by the CWDD Officer after the draft trail alignment site visit.

At Design Acceptance the contractor is to confirm the proposed alignment meets the IMBA standards and the relevant IMBA grades for each section of trail.

Construction must not commence until Design Acceptance is issued for the particular section of trail.

#### **6.5 Trail Construction**

*The successful contractor is to construct the work in accordance with:*

1. the approved final trail alignment and infrastructure locations as approved by TAMS;
2. the trail and infrastructure specifications detailed below; and
3. the IMBA standards (IMBA 2004 and IMBA Australia trail grading system) (IMBA 2012).

The contractor is responsible for engagement of any sub-consultants required to complete the works.

Construction will be regularly reviewed by the Superintendent, PCS Ranger and the CWDD Officer at specified hold points as work proceeds.

#### **6.6 Construction practices**

The tender submission is to specify what procedures, methods and work practices will be used for construction.

The successful contractor is to prepare a construction environment management plan including an erosion and sediment control plan that shows how the impacts of construction will be managed and any potentially adverse impacts mitigated.

## **6.7 Site Safety**

### **The successful contractor will**

- Demonstrate that construction will be staged in a way that minimises disturbance to nearby residents.
- Provide Temporary Traffic Management Plans (TTM) if applicable; plans for project site safety fencing; Construction Environment Management Plan and WHS clauses must also be included in documentation. Plans must be approved by Client and authorising agencies as relevant.
- Submit a Project Quality Plan (PQP) to PCW incorporating the activities to be undertaken during the course of the project. The PQP is to be submitted 14 days after the contract is signed.
- Develop all relevant Safe Work Method Statements (SWMS) that addresses all OHS, site access requirements and environmental aspects of the construction phase.

## **6.8 Site Cleanup and Remediation**

The successful contractor is to undertake any site remediation work required.

At the end of each day the site must be left in a clean and tidy state with no material or rubbish from the works left on site.

The successful contractor is responsible for removal of all left over material and rubbish they bring on to the site.

## **6.10 All relevant administration and preparation of handover material**

The successful contractor will be responsible for all aspects of the construction and administration required to complete the works.

The successful contractor will be responsible for the preparation of all handover material as follows:

Works as Executed drawings: GPS mapped trails as shape files including location of main features on the trail such as rock gardens, large jumps and berms.

These must be compatible with ACT Government GIS software to enable ready transfer of information

## 7.0 TRAIL DESIGN AND SPECIFICATIONS

The successful contractor is to undertake detailed on ground design/ alignment and construction of the following trails:

1. **Down Hill Corridor north – northern trail (DH-1)** (approx. 850m).  
One way downhill only trail
2. **Down Hill Corridor south – southern trail (DH-2)** (approx. 730m).  
One way downhill only trail
3. **Multiuser trail upgrade – the spine (XC1 & XC2)**(approx. 1,300m)  
Shared user walking, running and bike riding trail, bi-directional
4. **Rest areas** – three x informal rest areas at specified locations

### 7.1 Contractor built/ volunteer built trail sections/ features

The successful contractor is to propose the sections and features of the three trails to be built by the contractor (specialist trail builders) and those to be built by the volunteer group.

### 7.2 General trail design and construction requirements

- Historically Isaacs Ridge downhill trails have been advanced trails with a high level of challenging technical features that take advantage of the steep, rocky nature of the natural terrain.
- The feedback from the mountain bike community is to maintain the nature of the original trails to provide technically difficult trails for riders to develop and advance their skills.
- The trails are to be a natural surface finish with hand built features that take advantage of the landscape to create technical difficulty.
- It is expected some features will need to be machine built or machine assisted, such as moving large rocks or building large jumps.
- Features should be used to create advanced or very advanced lines with a minimum of a B-line option to allow less confident riders to ride around the feature/s. In many instances there will be the opportunity to build B and C lines to allow skills progression.
- Machine built berms should be recommended by the contractor only where necessary to manage the type of use and slope in the area.
- Road gap jumps are not to be constructed and existing road gap jumps are not to be reinstated. Opportunities for jumps of a similar nature and technical difficulty are to be identified in the areas between the fire roads.

### 7.3 Reserve management track crossings – downhill trails

- Design and construction of the four reserve management track crossing points on the downhill trails are crucial to the success of this project.
- The trail network design intentionally limits these to four crossing points.
- The fire roads which the downhill trails cross are well used by a range of users including; horse riders, walkers, dog walkers, runners and mountain bike riders.
- The safety and recreational experience of these users is not to be compromised by this upgrade of the downhill trails.

- The trail alignment has been designed to allow good sight lines on the approach to the crossing points; the successful contractor is to ensure these are achieved. Tree pruning may be required.
- The on-ground design of the approach to the crossing point and the actual entry onto the fire road is to be carefully considered to ensure the descending rider is slowed down significantly (to walking pace) when crossing the fire road.

#### 7.4 DH1: Down Hill Corridor north – northern trail

The trail to be constructed in the Downhill corridor north is the northern most downhill alignment and follows an alignment similar to an existing (little utilised) downhill trail. To be built in combination with trail building contractor and volunteer group.

**Length:** approx. 850m

**Trail type:** Downhill only, one-way.

**Width & approx. grade:** 900mm to 1,200 mm, between 4% and 25%.

**Features:** This trail has significant rock features including rollovers, drop-offs and jumps. It has two road crossings.

**IMBA Rating:** The overall trail rating is expected to be Black Diamond (Advanced) or Double Black Diamond (very advanced) with a B-line option around/ to roll-over feature at a minimum. A Blue (intermediate) line would be formed if all B and C lines are included.

Figure 1 – DH1



<b>Trail section</b>	<b>Specifications and design requirements</b>
<b>DH1 – A</b> <b>Upper section</b>  <i>Above upper management track</i>	Starts among boulders atop ridge, the trail parallels the existing ridgeline management track for 250m until it crosses the upper management track.  <u>Features:</u> <ul style="list-style-type: none"> <li>- Start point atop the boulders</li> <li>- Limited rock features in this section.</li> <li>- A series of jumps, possibly up to 4 or 5, could be incorporated in this section.</li> <li>- Linking trail between features.</li> </ul>
<b>DH1 – B</b> <b>Mid section</b>  <i>Between the two</i>	Following close to the fall line the trail makes use of a large rock shelf with a 1m high rock drop-off (Figure 1) there are opportunities for B and C lines allowing for rider progression). This shelf acts as a filter for riders to identify the nature of the trail they will be riding.

<p><i>management tracks</i></p>	<p>Making the most of the slope riders traverse the hillside riding through a series of significant rock gardens. Following these rock garden riders will negotiate a large rock rollover before negotiating a series of sweeping turns through younger pine trees. The next 100m of this trail is on a gentler slope allowing riders to slow prior to crossing the second management track.</p> <p><u>Features:</u></p> <ul style="list-style-type: none"> <li>- There is a large existing jump in this section that is well built and is to be retained and tidied up.</li> <li>- 4 – 5 features that are a mixture of rock gardens and jumps are to be built in this section.</li> <li>- Features could include two large double jumps with B-line around jumps in the lower area of this section.</li> <li>- Linking trail between features.</li> </ul>
<p><b>DH1 – C Lower section (jump line only)</b></p>	<p><u>Features:</u> The final section is on a gentler slope. The trail here uses the multi-user Spine trail to a finish point on the cut-off drain at the base of the ridge.</p> <p>It may be possible to build a separate line with a series of jumps here that runs parallel to the multi user Spine trail. This line with jumps is not a priority. <i>Refer to Multiuser spine.</i></p>

**7.5 DH2: Down Hill Corridor south – southern trail**

The trail to be constructed in the Downhill corridor south is the southernmost downhill alignment and follows an alignment similar to an existing (little utilised) downhill trail. To be built in combination with trail building contractor and volunteer group.

**Length:** 730m

**Trail type:** Downhill only, one-way.

**Width & approx. grade:** 900mm to 1,200mm, between 6% and 25%.

**Issues:** This trail has many significant rock features including rollovers, drop-offs and jumps. It has two road crossings.

**IMBA Rating:** The overall trail rating is expected to be Black Diamond (Advanced) or Double Black Diamond (very advanced) with a B-line option around/ to roll-over feature at a minimum. A Blue (intermediate) line would be formed if all B and C lines are included.

Figure 2 – DH2



<b>Trail section</b>	<b>Specifications and design requirements</b>
<b>DH2 - A</b> <b>Upper section</b> <i>Above upper management track</i>	<p>Starts among boulders atop the ridge (Figure 2) and heads south down the slope. Crossing into natural vegetation the trail then enters an area of boulders where a series of drop-offs, jumps and rock gardens are to be constructed.</p> <p>The trail follows close to the fall line and weaves through trees making use of a series of rock gardens to check speed and act as a filter for riders.</p> <p>An existing downhill alignment makes use of a large rock drop-off before crossing the upper management track 15m north of the existing road crossing.</p> <p>The use of the rocks in this area will allow for the development of B and C lines allowing for rider progression, in addition to the primary Advanced and/or Very Advanced lines.</p> <p><u>Features:</u></p> <ul style="list-style-type: none"> <li>- Start point atop the boulders</li> <li>- 3 features to be constructed in this section using the landscape and natural rock gardens.</li> <li>- At minimum B lines are to be provided and if possible C lines.</li> <li>- Linking trail between features.</li> </ul>
<b>DH2 – B</b> <b>Mid section</b> <i>Between the two management tracks</i>	<p>After crossing the management track the trail continues to meander downhill making use of a series of rock gardens and could incorporate a series of small berms, off camber turns and jumps to add to the experience.</p> <p><u>Features:</u></p> <ul style="list-style-type: none"> <li>- Minimum of 4 features to be constructed in this section; 2 rock gardens and 2 jumps.</li> <li>- Consider small berms at specific locations.</li> <li>- Linking trail between features.</li> </ul>
<b>DH2 - C</b> <b>Lower section</b>	<p>The trail crosses the lower management track, using an existing rock and then makes use of the slope, it could incorporate a series of berms.</p>

## 7.6 Multi-user trail upgrade – the spine (XC1 & XC2) (approx. 1,300m)

The multi-user spine climbs partway up the ridge, making use of rock shelves, large trees and views to the west looping back towards the management trail. Designed for gentle climbing and descending, this trail is aimed at low impact users, it offers residents, walkers, runners and cross-country bike riders an opportunity to parallel the management track and equestrian trail.

To be built in combination with trail building contractor and volunteer group.

**Trail type:** Multi-use, bi-directional

**Width & approx. grade:** 1.2m to 1.8m, between 4% and 12%.

**Issues:** This trail has many significant rock features, steep side slopes and several smaller gullies to cross.

**IMBA Rating:** Green (easy), Australian Walking Track Standard Grade 3.

**Construction:** This section includes challenges such as significant slopes, rocks and significant boulders

Figure 3 – XC 1 and 2



<b><i>Trail section</i></b>	<b><i>Specifications and design requirements</i></b>
<p><b>XC 1 – Northern section from DH1 management track crossing to (figure 3)</b></p>	<p>Once the trail crosses the management trail it turns north and gradually climbs a short distance before paralleling the management track along the steep lower slopes of Isaacs Ridge cutting through numerous rock outcrops and over several small gullies. The trail traverses a large rock platform affording rewarding views back over the suburb of Isaacs. Here the trail splits to allow users access to the higher slopes of the ridge on the existing management trail, with a further linking section heading north west to service residents in the northern sections of Isaacs, taking users from the lower management trail to the rock platform identified above.</p>
<p><b>XC 2 (DH 1 - C Lower section 350 m)</b></p>	<p>Starting at the cut-off drain at the base of the Northern Downhill Corridor this trail makes use of some of the gentler slopes at the base of the ridge and follows the finish of the northern downhill alignment.</p> <p>The open nature of this section of forest affords good sightlines to allow all active users to use this trail.</p>

## 7.6 Rest Areas

Three informal rest areas to be constructed using hardwood logs as seats. The logs are to be sourced off site by the contractor.

Rest area locations are to be agreed on site with PCS Ranger and CWDD Officer.

The rest areas are to be approximately 4 x 4 metres natural surface, levelled to an even surface.

## 8.0 CRITICAL DATES

### 8.1 Program constraints:

This project is Capital Upgrade Funding. All work must be complete by 27 May 2016

Orienteering Australia are holding an internationally ranked event at Easter 2016 from 25 - 28 March. To ensure the event is not impacted by the works the following applies to the construction timing;

- Construction of DH 2 can commence prior to Easter.
- Construction of the DH 1 crossing point 2 (lower crossing point) can commence prior to Easter 2016.
- Construction of DH 1 and XC1 cannot commence until after Easter 2016.
- DH 1 and XC 1 trail alignments can be marked on site and approved prior to Easter 2016.
- Marker flags can be retained on site during the orienteering event.

### 8.2 Project program

#### 8.2.1 Indicative Program

Task	Scheduled date
RFT close	17 December 2015
Construction contractor engaged	22 December 2015
Trail alignment agreed by PCS and volunteer group	February 2016
Construction commenced	February/ March 2016
Easter break and Orienteering event	25 – 28 March 2016
Construction complete (10 weeks)	29 April 2016
Opening event	May 2016
Project complete	Tuesday 31 May 2016

#### 8.2.2 Contractor's Program

A project program is to be submitted with the proposal that:

1. Shows significant project milestones and stage completion dates.
2. Allows adequate float for unforeseeable circumstances.

A detailed program to construct each section and the expected completion date is to be provided with the tender. Construction start and end dates and consolidation period should be included. The potential for wet weather and other possible delays should be factored into the program.

The consultant may suggest modifications to above indicative program if these are expected to improve the program delivery targets.

The Client requires early notification if a milestone is unlikely to be achieved by the due date so that suitable corrective action can be taken to avoid unnecessary or hasty work later in the project.

## 9.0 PROPOSAL

A tender proposal that specifies what procedures, methods and work practices will be used for construction is to be submitted. Refer Short Form Contract schedule of rates for fee submission details.

The project is to be funded from the TAMS Capital Upgrades 2015-16 budget. All work must be complete **by 27 May 2015.**

## 10.0 STANDARDS

Unless otherwise specified in the project brief, all design, documentation and construction for this project must be in accordance with the:

- a) *Trail Solutions: IMBA's Guide to Building Sweet Singletrack*, International Mountain Bicycling Association (IMBA), June 2004
- b) *Managing Mountain Biking: IMBA's Guide to providing Great Riding*, International Mountain Bicycling Association (IMBA), 2007.
- c) *IMBA – Australia Trail Difficulty Rating System, IMBA – Australia 2012*
- d) All construction work must comply with current and relevant *Australian /New Zealand Standards* which are available at [www.standards.com](http://www.standards.com) relevant to working in a non-urban reserve area.
- e) The construction work must also comply with standards, guidelines, Acts and Ordinances currently in force in the ACT and relevant to working in a non-urban reserve area.
- f) The consultant should refer to the relevant (to working in a non-urban reserve) environment protection measures outlined in: *Environment Protection Guidelines for Construction and Land Development in the ACT 2007*  
[http://www.environment.act.gov.au/environment/environment\\_protection\\_authority/business\\_and\\_industry/environment\\_protection\\_guidelines](http://www.environment.act.gov.au/environment/environment_protection_authority/business_and_industry/environment_protection_guidelines)

## 11.0 HANDOVER PROCEDURE

### Procedures for Handover/ Works as Executed (WAE) and Project Completion requirements

The Project Team comprises the Contractor, PCS Ranger, CWDD Officer, PCW Officer and the Superintendent

#### 1. Physical Completion and works consolidation

The works will be inspected by the project team upon completion of construction of the contractor built elements for each section of trail.

Prior to this inspection the Superintendent is to inspect the works to identify any defects and to confirm the trails meet the IMBA sustainable design principles and the IMBA standard for the grade specified for each section of trail.

A four week consolidation period for the works will follow. During this period the structural integrity of the trails should be checked by the PCS Ranger and construction contractor for the following defects:

- evidence of erosion,
- subsidence, and
- construction defects.

If found they must be rectified before the operational acceptance inspection.

## 2. Works as Executed (WAE)

WAE documents must be submitted to the Client on or before Practical Completion Inspection.

## 3. Practical Completion/ Operational Acceptance Inspection

Upon completion of the consolidation period of the final section of trail completed a Practical Completion/ Operational Acceptance inspection will be held, to be arranged by the Superintendent and attended by the Project Team.

The following must be submitted to PCW at this time:

- Practical Completion Certificate signed by the contractor confirming that the necessary work has been completed to the standards specified, in particular confirming the IMBA rating for each section trail including any A, B or C lines.
- Contractor's defects rectification plan listing all defects and their rectification due dates. The plan shall be certified as satisfactory and signed by the Superintendent.

In the week following the inspection, an Operational Acceptance Certificate will be issued by the CWDD Officer confirming that the works are accepted and the DLP period may commence.

The 52 week defects liability period will commence from the date that the asset managers accept the work. The date that the defects liability period (DLP) begins is subject to the outcome of the operational acceptance inspection. The final acceptance inspection will be arranged by the superintendent at the end of this defects period.

The contractor, the PCS Ranger and the CWDD Officer are to conduct quarterly site inspections for the period of the DLP.

## 4. Final Acceptance

The following must be submitted to PCW at the end of the DLP.

Final Completion Certificate signed by the contractor confirming that the necessary work has been completed to the standards specified.

## 12.0 LIAISON AND ADMINISTRATION

The Capital Works Design Delivery (CWDD) Project Officer is:  
Sophie Clement  
Phone: 6207 4857  
Email: [Sophie.clement@act.gov.au](mailto:Sophie.clement@act.gov.au)  
Macarthur House, Wattle Street, Lyneham ACT

The Parks and Conservation Service (PCS) Ranger is:  
Ellyse Sheridan  
Phone: 6207 0220  
Email: [Ellyse.Sheridan@act.gov.au](mailto:Ellyse.Sheridan@act.gov.au)  
Athllon Depot, Athllon Drive, Farrer ACT

Attachment A.

Trail Mgmt Plan.
















Dated 23.11.15

# Attachment B: Location Map.

TERRITORY AND MUNICIPAL SERVICES  
PARKS AND CITY SERVICES



## Legend

-  Shelter
-  Toilet
-  Playground
-  Disabled Parking
-  BBQ
-  Gate
-  Power Outlet
-  Path
-  Fitness Site
-  Skate Park
-  Basketball Court
-  Carpark
-  Park
-  Reserve
-  Restricted Areas (Motor Sports)

Park Gate Closures from 6:00pm

N  
Data produced by:  
Territory and Municipal Services  
Parks & City Services  
Asset & Data Integration

Date: 01/08/2014  
Scale: 1:14,310 @A3  
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ISAACS RIDGE RESERVE  
Region: WODEN / WESTON  
Suburb: ISAACS





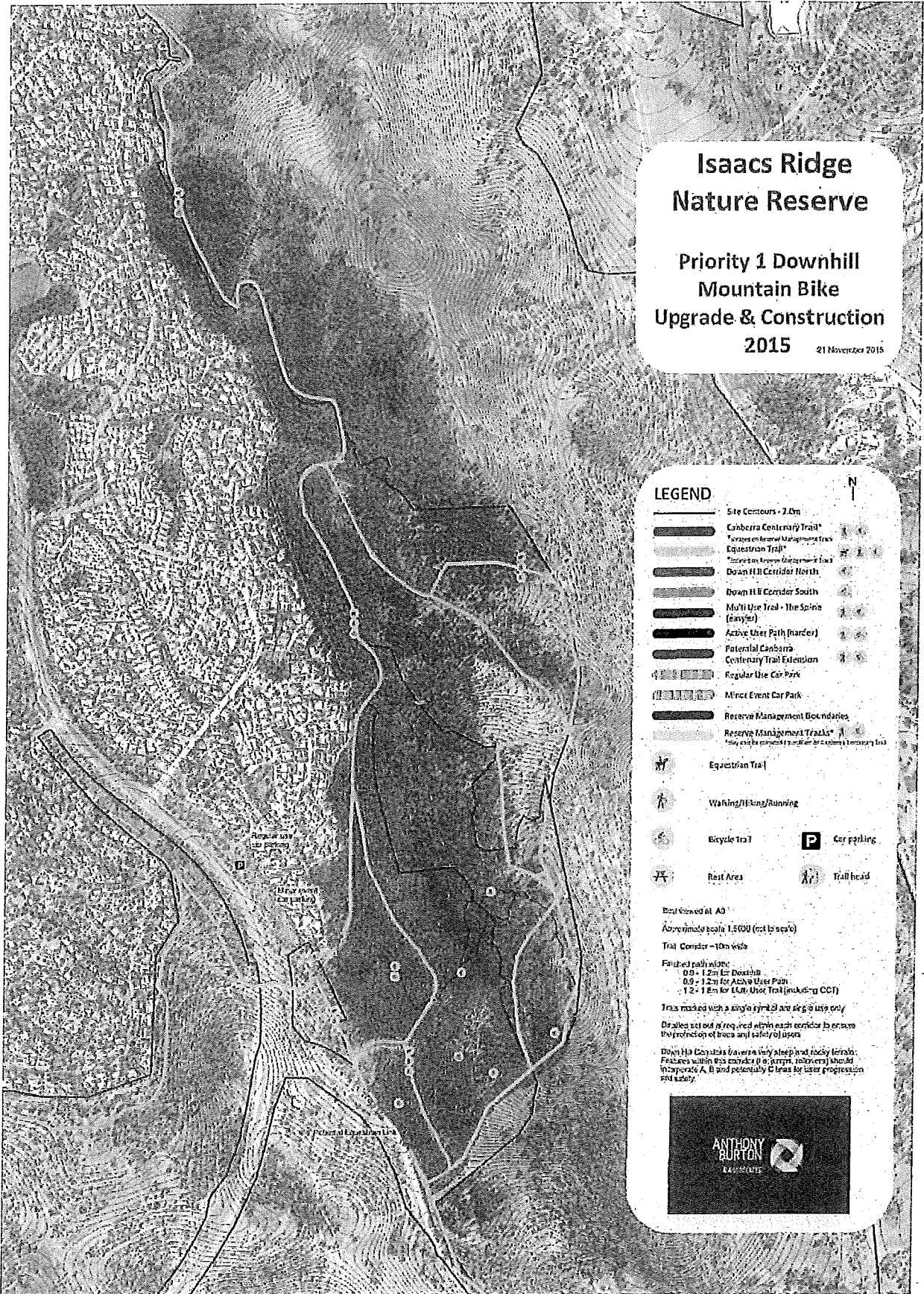
## General site controls for contractors working on the Parks and Conservation Service Estate

1. The Contractor must give Parks and Conservation (PCS) one week's notice of the date of commencement of works on site, and the likely completion date for these works.
2. The Contractor must provide Parks and Conservation with the name and contact details of the site supervisor.
3. The Contractor must get approval from Parks and Conservation for the siting of any site offices, yards or bulk storage areas.
4. No fuel is to be stored on site.
5. The Contractor must keep a spill kit on site capable of dealing with a leak or spill from any plant or machinery working on the development.
6. The Contractor must inform PCS as soon as possible of any major leak or spill of any hazardous substance.
7. The Contractor will gain access to the site by means of his own lock on the relevant gate. This must be locked into the existing chain.
8. The Contractor will ensure that other locks on the chain are not locked out of the chain.
9. The Contractor is allowed access only for the purposes of undertaking the specified works. Access for any other purpose is not permitted.
10. The Contractor assumes full responsibility for ensuring that the access gate is kept shut at all times.
11. Prior to entering the site for the first time any vehicles that have come to the works from outside the ACT must be cleaned, with a high pressure cleaner, of all dirt and plant material to prevent the introduction of new weed species. Any plant used for soil works, regardless of where it has been working previously, must also be cleaned in the same way.
12. Where possible plant, machinery and vehicles must use existing tracks. Where new tracks are formed, unless they are identified as permanent structures in the scope of

works, at the completion of the works the Contractor must rip these areas and establish a vegetation cover according to specifications provided by PCS.

13. If works extend into the prescribed bushfire season, the Contractor must take the following precautions:
  - a. All plant and equipment must be:
    - Maintained and operated in a way that it will minimise the risk of a fire starting, or catch fire itself
    - Fitted with a securely fixed, spark free exhaust in good, serviceable condition
    - Free of excessive build-up of either surplus oils, dust impregnated with oil, and/or vegetative matter.
  - b. All plant, machinery, vehicles and work crews must carry with them at all times a 20 litre Riga portable water pack.
  - c. Every plant item must carry a serviceable powder type fire extinguisher to AS 1841, Pt 5, minimum capacity 0.9kg to extinguish fires on the plant
  - d. No fires are permitted on site.
  - e. No work is permitted on site on when a Total Fire Ban is declared or on any given day when the Fire Danger Index exceeds 30.
14. Any fill brought on to the site must be free of the seeds of any plant material. This fill must be subsoil material that is not part of any soil seed bank. No top soil from outside the site can be used as fill unless it is certified weed free.
15. At the completion of works any earthworks must be returned to their original contour with sufficient fill and compaction to prevent any future subsidence.
16. At the completion of works the Contractor must establish a vegetation cover, according to specifications provided by PCS, over any areas disturbed during earthworks.
17. No dogs or other pets are permitted on site as the works area is part of a gazetted nature reserve.
18. If any wildlife is injured as a result of the works, the Contractor is to contact the Urban Wildlife Ranger on 6207 2087 as soon as possible.
19. Where the work site is adjacent to houses or other residential buildings, the Contractor must seek agreement from PCS as to the days, and time of day, during which works will be undertaken.
20. The Contractor must inform PCS as soon as possible, and no later than 24 hours after the event, of any injury to workers or the general public, that occurs on the work site.

D



# Isaacs Ridge Nature Reserve

## Priority 1 Downhill Mountain Bike Upgrade & Construction 2015

21 November 2015

**LEGEND**

	Site Contours - 2.0m		
	Canberra Centenary Trail*		Canberra Centenary Trail*
	Canberra Centenary Trail Extension*		Canberra Centenary Trail Extension*
	Down Hill Corridor North		Down Hill Corridor South
	Multi Use Trail - The Spine (Easy)		Active User Path (harder)
	Paternal Canberra Centenary Trail Extension		Regular Use Car Park
	Mixed Event Car Park		Reserve Management Boundaries
	Reserve Management Tracks*		Reserve Management Tracks*

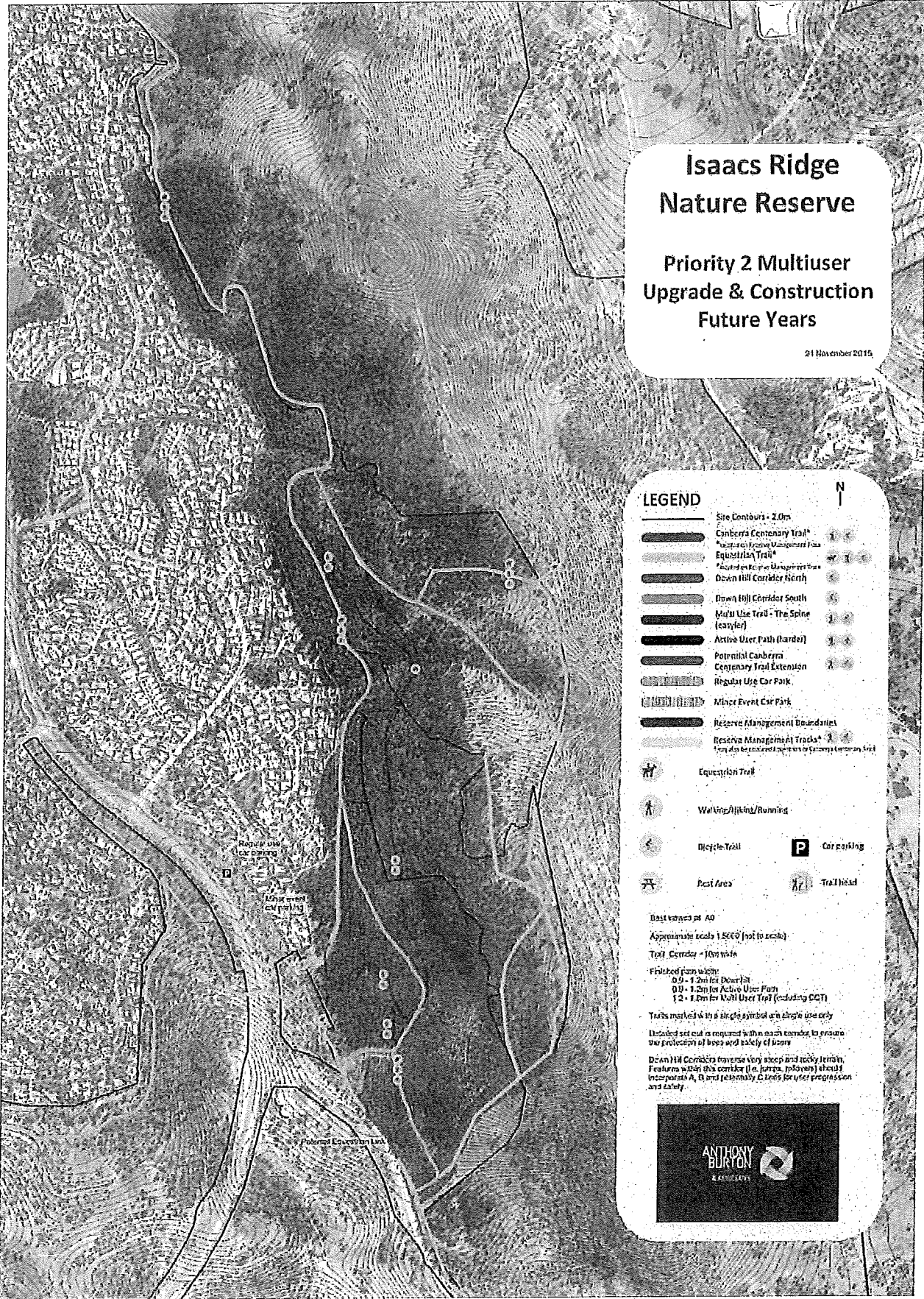
  

	Equestrian Trail		Car parking
	Walking/Hiking/Running		Bicycle Trail
	Bicycle Trail		Trail head
	Rest Area		

East viewed at A3  
 Approximate scale 1:5000 (not to scale)  
 Trail Corridor - 10m wide  
 Finished path width:  
 0.0 - 1.2m for Downhill  
 0.9 - 1.2m for Active User Path  
 1.2 - 1.8m for Multi-Use Trail (including CCI)  
 Trails marked with a single symbol are for use only  
 Drilled out of rock and within each corridor to ensure  
 the protection of trees and safety of users  
 Down Hill Corridor is a very steep and rocky terrain.  
 Features within this corridor (if appropriate) should  
 incorporate A, B and potentially C lines for user progression  
 and safety.



E



# Isaacs Ridge Nature Reserve

## Priority 2 Multiuser Upgrade & Construction Future Years

21 November 2015

**LEGEND**

	Site Contours - 20m	
	Canberra Centenary Trail*	1 4
	Canberra Centenary Trail*	1 4
	Equitation Trail*	1 4
	Equitation Trail*	1 4
	Down Hill Corridor North	1 4
	Down Hill Corridor South	1 4
	Multi Use Trail - The Spine (example)	1 4
	Active User Path (hard)	1 4
	Potential Canberra Centenary Trail Extension	1 4
	Regular Use Car Park	
	Minor Event Car Park	
	Reserve Management Boundaries	
	Reserve Management Tracks*	1 4
	Reserve Management Tracks*	1 4
	Equitation Trail	
	Walking/Jilking/Running	
	Bicycle Trail	
	Rest Area	

Distances at 40  
Approximate scale 1:5000 (not to scale)  
Trail Corridor - 10m wide  
Finished from within:  
0.0 - 1.0m for Down Hill  
0.0 - 1.0m for Active User Path  
1.2 - 1.0m for Multi User Trail (including COT)  
Trails marked with a single symbol are single use only  
Distances set out as required within each corridor to ensure the protection of trees and safety of users  
Down Hill Corridors traverse very steep and rocky terrain. Features in this corridor (i.e. jumps, jolays) should incorporate A, B and potentially C lines for user progression and safety.

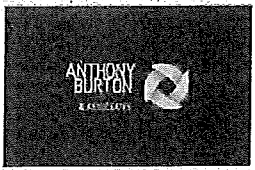


Plate 9 Multi-Use Parallel Trail

## CAPITAL WORKS PROCEDURE FOR VARIATIONS

### Variation Process

1. Scope change identified and proposed by contractor - necessary/unavoidable/will improve project outcomes.
2. Variation proposal and justification assessed by Superintendent-accepted/rejected.
3. Rejected - no further action.
4. Accepted - Superintendent submits variation proposal with a justification and cost estimate to the Client via PCW recommending that a quote be sought from the construction contractor.
5. Contractor/Superintendent submits a fee proposal (not a cost estimate) via the Superintendent to Client via PCW. PCW is to review the proposal against the budget and time schedule and make a written recommendation to the Client.
6. Fee proposal rejected by Client:
  - a. opportunity to submit revised fee or revised proposal
  - b. rejected - no further action
7. Fee proposal accepted - written acceptance from Client via PCW.
8. Contractor instructed to proceed with approved work by the Superintendent via PCW - after written instruction from PCW/Client.

### Variation summary

1. Maintained by consultant and to be current throughout the project with costs reconciled to contract financial status. Summary to be presented at each project progress meeting.
2. Unique number for each variation proposed together with a simple written description.
3. All variation proposals to remain on the summary sheet in sequential order, accepted or not, for consistent numbering.
4. Summary sheet to show - variations proposed and approved/not approved.
5. Variation summaries to offset negative and positive variation.
6. Variation costs allocated against provisional sums or as drawdown on the contingency sum should be clearly shown on the summary sheet.
7. Variation summary to show overall contract value progressively adjusted in accordance with approved variations to be maintained current for the duration of the project. (D&C and construction contracts).
8. PCW to regularly review the summary to ensure accuracy and compliance with contract.

### **Note**

1. Claim for payment submitted after the work is done is not a variation request.
2. Some change decisions may be made on site without prior written client approval, such as in an emergency.
3. Superintendent authorisation for changes to a given value can be contractually agreed, as in PM contracts. Client approval is usually required for all change proposals in a lump sum contract.

**Clement, SophieJ**

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**From:** Binks, Richard  
**Sent:** Friday, 27 November 2015 4:21 PM  
**To:** Clement, SophieJ  
**Subject:** RE: Isaacs Ridge PPM

Hi Sophie,

Are you happy with the weightings below or would you like me to talk to our WHS person on Monday to reduce the WHS section a bit so that criterion 1 can have an increased weighting?

I will amend the evaluation plan text accordingly and await confirmation regarding the weightings.

Regards

Richard

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**From:** Clement, SophieJ  
**Sent:** Friday, 27 November 2015 3:42 PM  
**To:** Binks, Richard  
**Subject:** RE: Isaacs Ridge PPM

Hi Richard,

Thanks for sending through the PPM – very much appreciated. A couple of change requests on the evaluation criteria:

- Methodology, risk management and understanding of tasks required are important from the client perspective and Stephen seems to have only referred in detail to availability and program under criteria 1. Could you please update this criterion as follows:

**1. Appreciation and understanding of the scope, requirements and tasks for this project and ability to undertake the works, including:**

- Project risks and project tasks identified and methodology proposed to properly manage these.
- Project program showing key milestones and dates
- plus the two dot points from the PPM (below)

- As criteria has quite a lot in it can the % weighting be distributed to reflect as follows:

- 1. 30%
- 2. 25%
- 3. 25%
- 4. 20%

Sorry I hadn't picked this up earlier, I had not seen a copy of the PPM until Monday this week. Let me know any questions on above.

Thanks,  
Sophie

1. Understanding of scope and Ability to undertake the Works

25%

- Tenderer to provide confirmation on the availability of all key personnel (internal staff and sub-consultants) nominated for the duration of the project. Include a list of any other projects or responsibilities that are being undertaken at the same time as the contract period for this project.
- Confirm ability to undertake and/or comment on RFT project program dates. Provide a statement and project program to demonstrate how the tenderer can commence and complete works within the required timeframe.

---

**From:** Binks, Richard  
**Sent:** Friday, 27 November 2015 1:57 PM  
**To:** Clement, SophieJ  
**Subject:** Isaacs Ridge PPM

Hi Sophie,

Please find enclosed the PPM for Isaacs Ridge.

Regards

Richard

Richard Binks | Project Officer , Procurement and Capital Works  
Phone 02 6207 6472 | Fax 02 6121 0433 | Mobile [REDACTED]  
Chief Minister, Treasury and Economic Development Directorate | ACT Government  
Level 2 Annex, Macarthur House, 12 Wattle St, Lyneham ACT. 2602 | [www.act.gov.au](http://www.act.gov.au)

**Clement, SophieJ**

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**From:** Binks, Richard  
**Sent:** Thursday, 3 December 2015 3:02 PM  
**To:** Clement, SophieJ  
**Cc:** Thomas, Stephen (ACTPS)  
**Subject:** RE: Isaacs RFT  
**Attachments:** PPM Isaacs Ridge R2.pdf

Hi Sophie,

This is the PPM with the revised evaluation plan to reflect the 30% WHS weighting. Just to cover off all bases.

Regards

Richard

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**From:** Clement, SophieJ  
**Sent:** Wednesday, 2 December 2015 4:15 PM  
**To:** Binks, Richard  
**Subject:** RE: Isaacs RFT

Hi Richard,

17/12

Sophie

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**From:** Binks, Richard  
**Sent:** Wednesday, 2 December 2015 2:34 PM  
**To:** Clement, SophieJ  
**Subject:** RE: Isaacs RFT

Hi Sophie,

Just spoken to Tenders ACT, we have two closing date options. 17/12 or /12/01/16. Which do you prefer?

Regards

Richard

---

**From:** Clement, SophieJ  
**Sent:** Wednesday, 2 December 2015 12:34 PM  
**To:** Binks, Richard  
**Subject:** RE: Isaacs RFT

Hi Richard,

Hmm, ok – let's make pp 20%.

Sophie

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**From:** Binks, Richard  
**Sent:** Wednesday, 2 December 2015 9:49 AM  
**To:** Clement, SophieJ  
**Subject:** RE: Isaacs RFT

Hi Sophie,

Barry's only comment was that we need to make the whs section 30% instead of 25. Where would you like the 5% to come from? Scope is 30, Past Performance is 25, whs 25, price 20. I would suggest past performance at 20 as it is a select tender past performance shouldn't really be a major concern.

Regards

richard

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**From:** Clement, SophieJ  
**Sent:** Wednesday, 2 December 2015 9:25 AM  
**To:** Binks, Richard  
**Subject:** RE: Isaacs RFT

Thanks Richard!  
Sophie

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**From:** Binks, Richard  
**Sent:** Wednesday, 2 December 2015 9:14 AM  
**To:** Clement, SophieJ  
**Subject:** RE: Isaacs RFT

Barry is reviewing it now. It should be right to go out today. If he wants to make any changes I'll call you. Otherwise I'll e-mail you when it's uploaded.

Regards

Richard

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**From:** Clement, SophieJ  
**Sent:** Wednesday, 2 December 2015 9:11 AM  
**To:** Binks, Richard  
**Subject:** Isaacs RFT

Hi Richard,  
I'm on site for a few hours this morning – if you have any q's on the Isaacs you can call my mobile – [REDACTED]  
And I'll check my emails in case you need anything approved to keep things moving with the RFT.

Thanks,  
Sophie

---

Sophie Clement | Project Officer  
Phone 02 6207 4857

DESIGN & DEVELOPMENT | CAPITAL WORKS DESIGN & DELIVERY | ROADS & PUBLIC TRANSPORT DIVISION | TERRITORY & MUNICIPAL SERVICES |  
Macarthur House | 12 Wattle St. LYNEHAM | GPO Box 158 Canberra ACT 2601 |



\*Think before you print: 1 ream of paper=6% of a tree and 5.4kg of CO<sub>2</sub> in the atmosphere; 3 sheets of A4 paper=1 litre of water