



Department of
Infrastructure, Planning and Natural Resources

**Report on the Assessment of
Development Application No. 03-3988
Pursuant to Section 80 of the Environmental Planning
and Assessment Act, 1979**

**Proposal by St Marys Land Limited to Remediate the
Eastern Sector of the Former ADI St Marys Site,
Blacktown Local Government Area**

July 2004

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1. INTRODUCTION

On 19 September 2003, Blacktown City Council received a development application (DA) from ComLand Ltd (the Applicant) for the proposed remediation of the Eastern Sector of the former Australian Defence Industries (ADI) site at St Marys, located in the Blacktown local government area (refer to Figure 1). Following a request from Blacktown City Council, on 27 October 2003 the Minister for Infrastructure and Planning directed under section 88A of the *Environmental Planning and Assessment Act 1979* (the Act) that the development application be determined by the Minister. Consequently, the proposal is classified as State significant development under section 76A(7)(c) of the Act and the Minister is the consent authority for the DA.

From the 1940's to 1990's, the site was used for the purposes of munitions manufacturing, which involved the testing and disposal of some munition materials at the site. Following ADI's announcement in 1990 of the gradual decommissioning of the facility and the future redevelopment of the site for urban development, the site has been subject to several Remedial Action Plans (RAP) and Site Audit Statements in order to permit future development.

An independent audit of the remediation work undertaken by the Applicant during the 1990's found that the site was suitable for urban development, with the exception of the Eastern Sector. In this regard, the site auditor concluded that additional remediation work and several access restrictions would be required for the Eastern Sector due to the potential for residual munition debris within this area.

As part of the Development Agreement between the Applicant and the Department of Environment and Conservation (DEC), the Applicant is required to remediate the Eastern Sector prior to the transfer of 850 hectares of bushland located in the Eastern Sector to the DEC, which is to be used as a regional park.

The Applicant is now proposing to undertake additional voluntary remediation works within the Eastern Sector in accordance with those additional measures identified by the auditor, to enable this area to be re-audited and new Site Audit statements to be issued for the purposes of the Development Agreement requirements. To achieve this objective, the Applicant has prepared a Remedial Action Plan (RAP) for the proposed remediation works, which has been formulated on the following objectives:

- remediation of the portion of the Eastern Sector for use as a Regional Park with unrestricted public access;
- remediation of the easement area to enable a mix of urban land uses;
- remediation of the QEL area to replace the current site audit statement requirements for the area; and
- remediation of all areas outside the Regional Park boundary for residential landuse and to reflect recent adjustments to the Regional Park boundaries.

This will require the slashing of vegetation within the Eastern Sector, which is known to contain several threatened species and communities listed under *Threatened Species Conservation Act 1995* (NSW) and/or *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth).

This report represents the Department's assessment of the proposed development, in accordance with the *Environmental Planning and Assessment Act 1979* following the Minister's direction. The Department recommends that the proposed development be approved, subject to conditions.

2. SITE CONTEXT

2.1 Site Location

The proposed development site is located on part of Lot 2 DP 803832, which is located within the eastern region of the former Australian Defence Industries (ADI) site at St Marys, in the Blacktown local government area. The specific references or titles provided to the areas affected by the proposed development are: the Eastern Sector (which comprises of the future Regional Park and developable areas), the Quality Evaluation Laboratory (QEL) area, the Eastern Easement and the Eastern Easement Developable areas; as shown in Figures 2 and 3.

2.2 Site Description

The proposed remediation site comprises approximately 80 hectares of the total 1,545 hectare area of the former ADI site. Formerly used for the purposes of munitions manufacturing from the 1940's to 1990's, certain sections of the total site have been substantially disturbed by these past activities. During the operation of the munitions manufacturing site, activities conducted at the proposed development site were primarily restricted to munitions testing and disposal, access tracks, vegetation clearance, and the construction of several buildings associated with the site operations.

Since the decommissioning of the ADI facility and the subsequent initial remediation works undertaken by ADI, the proposed development site has remained largely vacant, with the exception of several water storage towers and other utilities located in the far-eastern area of the site. The majority of the proposed development site is densely vegetated, with three endangered ecological communities present within the site. The bulk of the vegetated area, which includes Cumberland Plain Woodland, Cooks River Castlereagh Ironbark Forest and Shale/Gravel Transition Forest communities, has been reserved for future conservation within a Regional Park that would be managed by the Department of Environment and Conservation.

The remainder of the proposed development site largely consists of cleared vacant land, and is likely to be used for the purposes of residential development that would be subject to Precinct Plans adopted by Blacktown City Council.

2.3 Surrounding Land Uses

Landuse surrounding the former ADI site is a mixture of residential, recreational and industrial development. Areas immediately adjacent to the east and north of the Eastern sector site along Forrester Road and Palmyra Road are predominately residential. Further to the south of the development site is the Dunheved Industrial Area, the Dunheved Golf Course and several residential estates.

3. DEVELOPMENT PROPOSAL

3.1 Site History

In 1990, ADI announced that it would be closing its facility at St Marys, and would be proposing to redevelop the site for commercial, residential and recreational landuse. To permit any future use of the site, the site was subject to several Remedial Action Plans and validation reports between 1993 and 1999, which were approved and/or reviewed by the then Environment Protection Authority (EPA) at that time.

In addition to this process, the Department (then the Department of Urban Affairs and Planning) commissioned an independent audit of the work undertaken by ADI and to confirm the suitability of the site for residential development and to assist in the preparation of the *Sydney Regional Environmental Management Plan No.30 – St Marys*. This independent audit was conducted in two stages. Stage One of the audit concluded that remediation works conformed to regulatory guidelines and that the land was suitable for urban rezoning.

Stage Two of the independent audit, which covered the proposed remediation site, concluded that the completed remediation works conformed to relevant guidelines and that the majority of the site is suitable for residential land use, with the exception of the Eastern Sector. In this regard, the independent audit concluded that there was a low risk of residual contamination within the Eastern Sector, and as such, would require controlled access into this area of the former ADI site (in the absence of any additional remediation to address this matter).

Figure 1 - Proposed Remediation Site and Sub-Regional Context



Figure 2 – Remediation Areas within the Eastern Sector

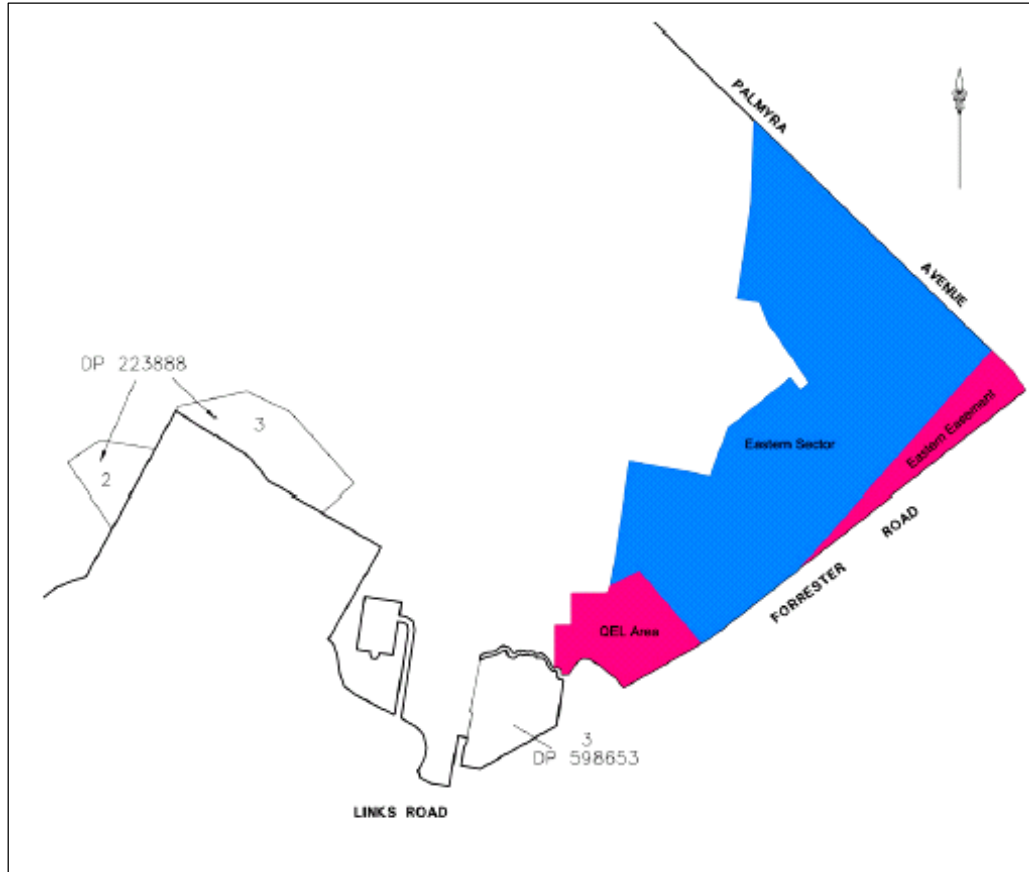
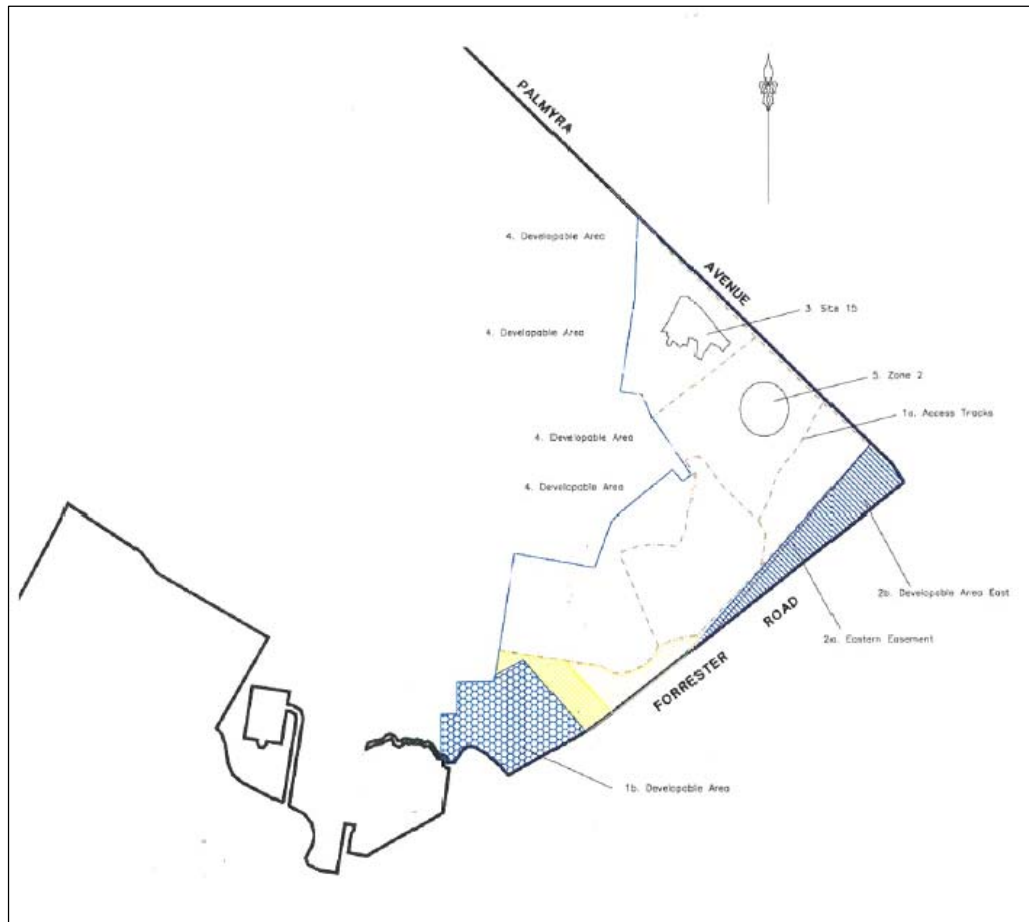


Figure 3 - Remediation Areas within the Eastern Sector



Measures recommended by the site auditor to restrict this access included:

- restriction of access to the Regional Park by construction of fencing along site boundaries;
- visitors to the Park are to be accompanied by a guide and restricted to nominated tracks; and
- requirement for the QEL area, Site 15 (Regional Park) and a five metre curtilage of Regional Park tracks to be further investigated and searched for munitions debris.

In accordance with SREP 30 and the Planning Strategy for the site, the Applicant has entered into a Development Agreement with the DEC with respect to the transfer of 850 hectares of vegetation within the Eastern Sector, which is to be used as a Regional Park. This agreement requires the Applicant to remediate the site in accordance with the auditor's requirements before the land is able to be transferred to the DEC. In addition, the Applicant states that the remediation methodologies for the sector have been revised and improved to facilitate a higher level of remediation whilst protecting conservation levels of the site. These methodologies will enable unrestricted access to the Regional Park, should DEC as eventual owner of the land, consider it appropriate to permit unrestricted public access.

3.2 Outline of the Proposal

The Applicant proposes to undertake additional voluntary remediation works within the Eastern Sector and the QEL area of the former ADI site before the area is re-audited and new Site Audit Statements are issued to reflect the remediated outcomes of the land. To achieve this objective, the Applicant has prepared a Remedial Action Plan (RAP) for the proposed remediation works, which has been formulated on the following objectives:

- remediation of the portion of the Eastern Sector for use as a Regional Park with unrestricted access;
- remediation of the easement area to enable a mix of urban land uses;
- remediation of the QEL area to replace the current site audit statement requirements for the area; and
- remediation of all areas outside the Regional Park boundary to be remediated for residential landuse and to reflect recent adjustments to the Regional Park boundaries.

The RAP, outlining the remediation methodologies and works, has been reviewed and approved by a site auditor accredited under the NSW *Contamination Land Management Act 1997*.

Although this RAP has been prepared for the above intended end uses, it should be noted that the final access arrangements will be dependent on the validation and auditing process following the completion of the remediation works. Any development consent that may be issued in relation to the proposed remediation works does not place any constraint on the role of the independent site auditor, who may, having considered the outcomes of the remediation works, specify that access restrictions should remain in place. Further, the Regional Park boundaries, landuse and access arrangements would also be dependent upon precinct approvals from Blacktown Council and administrative requirements of the Department of Environment and Conservation (the former National Parks and Wildlife Service), which is responsible for the long-term management of the future Regional Park.

In order to achieve the objectives of the RAP, the Applicant is proposing to undertake the following remediation works within the following areas of the Eastern Sector of the site.

Regional Park

Access Tracks

In order to permit unrestricted access into the Regional Park, the Applicant is proposing to investigate areas along access tracks in order to detect any munition debris that may have been lost in transit to disposal areas during past operations. The proposed investigation works would entail the slashing of vegetation within a five metre curtilage of the access tracks, with this area to be systematically scanned with remote sensing equipment to detect any misplaced munition debris and/or any other anomalies.

The proposed works would only involve the removal of mature trees or vegetation should it be required to enable the proper investigation of any anomalies detected during the scanning process or provide a suitable level of confidence to the proposed remediation works.

Site 15

This site covers approximately 2.2 hectares and was once used as a burning ground for munitions disposal. Although the Stage Two audit of the site and a subsequent investigation in 2001 concluded that the site was suitable for the intended use (vegetation conservation area) and that the risk of functional munitions present in the area was very minimal, it was recommended that an additional barrier would be required to permit unrestricted access to the regional park.

Consequently, the Applicant is proposing to transport validated material from elsewhere from the ADI site to Site 15 to provide a final cover of 300mm. The Applicant is proposing to contour this site and allow it to naturally regenerate with local native species.

Zone Two Post Hole Area

This site covers approximately 16 hectares, and several surface tips have been identified within this area following visual and sub-surface inspections. As part of the proposed development, the Applicant is proposing to investigate the detected tips further to determine the nature of contamination and implement an appropriate remediation process.

In addition to these works, the Applicant is proposing to undertake a further investigation of a known in-ground munition destruction site within Zone Two using remote sensing equipment to locate any munition debris. The nature of the screening would be conducted in the same manner as for the access tracks outlined above. Based on the results of this screening, a requirement for additional clearance and investigations would be determined.

Developable Areas

Areas Outside Regional Park

Located to the west and south of the future Regional park boundaries, these areas were originally incorporated into the Regional Park boundaries. As such, these areas were not remediated to the same level as other future residential areas of the ADI site due to the perceived conservation values of the site.

With the recent shift of the Regional Park boundaries, these areas are now considered to be 'developable' and as such require a greater level of remediation to obtain suitable validation and clearance in order to permit future residential development. To achieve this, the Applicant is proposing to substantially slash vegetation within the site and systematically screen the area in accordance with the procedures prepared for the access tracks.

Eastern Easement and Eastern Easement Developable Areas

These areas cover approximately seven hectares and are located along the south-eastern boundary of the proposed development site. It has been presumed that there is a possibility of the presence of unrecorded tip sites within this area. Consequently, the Applicant is proposing to screen these areas with a magnetometer to locate any unrecorded tip sites, and should any be discovered, then these areas would be suitably excavated, tested and the contents appropriately disposed of. The Applicant has also indicated that the presence of tip sites and/or munition debris is unlikely considering the distance from the former ADI factory and the presence of overhead power lines.

QEL Area

The Quality Evaluation Laboratory (QEL) area, located in the southern section of the proposed development site, was originally used for the manufacture and testing of munition debris. Due to these past activities, this has resulted in the detection of munition debris at this site during past remediation works. The site audit issued for Stage Two specified a requirement that the QEL be further investigated (shallow searched following completion of the final surface) in order to permit residential development. To permit the use of the land for residential development, the Applicant is proposing to remove this requirement of the existing Site Audit Statement and alternatively undertake either of the following to ensure that any remediation works are not delayed until residential development:

- *excavate a sample area* – a nominated area would be scraped, searched and validated, including those areas located within this excavation area. The Applicant is proposing for this material to be used at Site 15. Should the sample be free of munitions debris, the Applicant is proposing to apply to the site auditor to remove the requirement for a shallow search of the entire site; or

- *iterative process* – this would involve the inspection of excavated areas (and surrounding soil) during the installation of trunk services, subdivision re-contouring, road construction, etc. Soil removed from the excavations would be spread out and shallow searched within a designated area. Soil will then be used elsewhere on site following validation. Final surfaces of the final contours would then be shallow searched to provide greater certainty to the works.

The appropriateness of removing this requirement on the existing Site Audit Statement is to be determined by the independent accredited Site Auditor, when issuing a new Site Audit Statement following the completion of the proposed remediation works.

Table 1: Brief Outline of the Proposed Remediation Works within Designated Areas

Area	Testing		Remediation	SAS Land Uses
	Chemical	Debris		
Access Tracks (Regional Park)	Not Required	Conduct shallow search on and five metres each side of nominated roads and tracks	Remove debris	Regional Park, with public access (note: final access arrangements is the decision of DEC)
Site 15	None. Backfill material to be validated	None	Cap area with minimum 300mm clean fill	Regional Park, with public access (note: final access arrangements is the decision of DEC)
Zone 2	None unless more anomalies investigated	Reassess the anomaly investigation	None unless more anomalies investigated	Regional Park, with public access (note: final access arrangements is the decision of DEC)
Developable Areas	Not required	Conduct electromagnetic digital sub surface investigation for discrete non ferrous items	Remove debris	Urban development
Eastern Easement and Eastern Easement Developable Area	Investigate tip sites and in accordance with EPA sampling guidelines	Conduct electromagnetic digital sub surface investigation	Remove debris and any contaminated soil	Transmission lines and Commercial development
QEL	None unless more anomalies investigated	Either sample an excavated area or conduct iterative sampling	Remove debris and any contaminated soil	Urban development

Proposed Remediation	Areas to be Slashed (hectares)	Area to be filled (hectares)
<i>Areas within Regional Park</i>		
Site 15 – capping with 0.3m of clean fill obtained onsite		1.9
Ten access tracks will be shallow searched within a five metre curtilage of nominated tracks	3.1	
<i>Areas Outside the Regional Park</i>		
Boundary Adjustments – an area of western Regional Park boundary	2.3	
Developable area east	1.3	
Eastern easement	5.7	
Developable Areas	7.8	
Total Area Impacted	20.2	1.9

3.3 Justification for the Proposal

In accordance with SREP 30 and Planning Strategy for the site, the Applicant has entered into a Development Agreement with the DEC with respect to the transfer of 850 hectares of vegetations within the Eastern Sector to be used as a regional park. This agreement requires the Applicant to remediate the site in accordance with the auditor's requirements before the land is able to be transferred to the DEC. In addition, the Applicant states that the proposal is required as the remediation methodologies for the sector have been revised and improved to facilitate a higher level of remediation whilst protecting conservation values of the site. The Applicant states that this will eliminate restrictions on the future landuse, and permit the DEC to consider a range of access/management options for the future Regional Park (i.e. unrestricted access).

4. STATUTORY PLANNING FRAMEWORK

4.1 Permissibility

With the exception of the Eastern Easement and Eastern Easement Developable Areas, the proposed development site lies on land to which *Sydney Regional Environmental Plan No.30 – St Marys* (SREP 30) applies. SREP 30 removes all provisions of the *Blacktown Local Environmental Plan 1988* that would otherwise apply to the site, and forms the main environmental planning instrument under which permissible uses for the land are specified.

Land covered by SREP 30, the proposed development site is zoned as either 'Urban' or 'Regional Park'. Both zonings prohibit the remediation works within these areas. The Eastern Easement and Eastern Easement Developable Areas is zoned Special Uses – 5(a) under the *Blacktown Local Environmental Plan 1988* (BLEP 1988). Remediation works are also prohibited development in this zoning.

Although SREP 30 and BLEP 1988 prohibit remediation works within the applicable zonings, these instruments do not affect the application of *State Environmental Planning Policy No.55 – Remediation of Land* (SEPP 55) which applies to the proposed development. Clause 19 of SEPP 55 states that a person may carry out remediation work in accordance with SEPP 55 despite any provision to the contrary in any other environmental planning instrument.

Consequently, in accordance with SEPP 55, the majority of the proposed remediation works constitute Category 1 work, and is permissible with development consent. In addition, a small majority of the proposed remediation works would constitute Category 2 works under SEPP 55, and is permissible without development consent.

4.2 Minister's Role

Aspects of the proposed development would involve category 1 remediation work under *State Environmental Planning Policy No.55 – Remediation of Land* (SEPP 55) because it is likely to have a significant effect on critical habitat or a threatened species, population or ecological community. Consequently, the proposed development is classified as development requiring consent under SEPP 55 with Blacktown City Council as the relevant consent authority for these works.

During discussions between the Applicant, Blacktown City Council and the Department prior to the lodgement of a development application for the proposal, Council requested that the Minister for Infrastructure and Planning direct under section 88A of the *Environmental Planning and Assessment Act 1979* (the Act) that the proposal be referred to the Minister for his determination. Council requested that the Minister direct the DA to be determined by him as:

- the contamination audit and certification process to inform the preparation of SREP 30 was managed by the Department. Council's involvement in the continued management of contamination and remediation issues at this late stage is not considered by Council to be appropriate;
- Council suggested that it lacks the resources and expertise to assess and determine the proposed remediation in an adequate and timely manner; and
- the remediation of the site is required prior to the transfer of ownership of the Regional Park to be established under SREP 30, and the remediation works are required under the Development Agreement between the State Government and the Joint Venture.

The development application for the proposed remediation was lodged with Blacktown City Council on Friday 19 September 2003. Blacktown City Council notified the Department of this in writing on 29 September 2003.

The Minister for Infrastructure and Planning considered Council's request with regard to matters that are of State and regional environmental planning significance, and subsequently determined on 27 October 2003 that it was expedient in the public interest to direct under section 88A of the Act that Council refer the DA to the Minister for his determination. As such, the Minister for Infrastructure and Planning is the consent authority for the proposal.

4.3 Legislative Context

State Significant Development

The proposed remediation works constitute State Significant development under section 76A(7)(c) of the *Environmental Planning and Assessment Act 1979*, by virtue of the direction made by the Minister under section 88A of the Act on 27 October 2003 (refer to section 4.2). The Minister for Infrastructure and Planning is the consent authority for State significant development.

Integrated Development

The proposed development constitutes integrated development, as defined by section 91 of the *Environmental Planning and Assessment Act 1979*. In addition to development consent, the proposed remediation works requires an additional consent from the Department of Environment and Conservation (the former National Parks and Wildlife Service) under section 90 of the *National Parks and Wildlife Act 1974*.

The Department of Environment and Conservation reviewed the proposed development and subsequently determined that it could issue its General Terms of Approval (GTAs). These GTAs have been incorporated into the recommended conditions of consent.

Non-Designated Development

A particular development is considered "designated development" if it meets the criteria specified in Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). Of the development categories listed in the Regulation, the only development type that relates to contaminated soil, and therefore the only designation category that may possibly apply to the proposal is "contaminated soil treatment works". The Regulation provides for designation if the following provisions are met:

Contaminated soil treatment works (being works for on-site or off-site treatment of contaminated soil, including incineration or storage of contaminated soil, but excluding excavation for treatment at another site):

- (a) *that treat or store contaminated soil not originating from the site on which the development is proposed to be carried out and are located:*
 - (i) *within 100 metres of a natural waterbody or wetland, or*
 - (ii) *in an area of high watertable or highly permeable soils, or*
 - (iii) *within a drinking water catchment, or*
 - (iv) *on land that slopes at more than 6 degrees to the horizontal, or*
 - (v) *on a floodplain, or*
 - (vi) *within 100 metres of a dwelling not associated with the development, or*
- (b) *that treat more than 1,000 cubic metres per year of contaminated soil not originating from the site on which the development is located, or*
- (c) *that treat contaminated soil originating exclusively from the site on which the development is located and:*
 - (i) *incinerate more than 1,000 cubic metres per year of contaminated soil, or*
 - (ii) *treat otherwise than by incineration and store more than 30,000 cubic metres of contaminated soil, or*
 - (iii) *disturb more than an aggregate area of 3 hectares of contaminated soil*

In considering whether the proposed remediation constitutes "designated development", one must first consider whether the proposal in fact can be categorised as a "contaminated soil

treatment work". From a technical perspective, treatment of contaminated soils involves an engineered process to chemically or physically remove, alter, contain or otherwise separate contaminants that may be adhered to or interspersed within soil particles. Common examples of contaminated soil treatment processes include bioremediation, thermal treatment (desorption or incineration), stabilisation/ cementation, vitrification or general chemical treatment. In this context, the Department considers that the location and physical removal by excavation of macro-contaminants (solid, visible, large munitions debris) is not strictly consistent with the common understanding of contaminated soil treatment, as opposed to the broader super-category of contaminated soil remediation. To highlight this point, the Department presents a hypothetical site contaminated with hydrocarbons that may be subject to remediation through simple excavation and removal of contaminated soils off-site. It is difficult to view such a proposal as "treatment" of contaminated soils given that no action is taken to address the contamination, other than physical removal of the contaminated materials. In a similar manner, the proposed remediation would involve the location of potentially contaminated soils, with the remediation process involving the excavation and removal of the contaminants (munition debris), rather than any activity that could be considered in an engineering context to constitute "treatment".

Notwithstanding the above, one may apply a more liberal interpretation of the word "treatment", with no constraints necessarily applied by restriction to common engineering understanding of remedial treatment activities. The verb "to treat" is defined in various sources as follows:

- subject to a process or treatment, with the aim of readying for some purpose, improving, or remedying a condition (<http://www.hyperdictionary.com>);
- deal with (person, thing) with view to a result, apply process to, subject to chemical agent etc. (Oxford Concise Dictionary); and
- to act or behave towards in some specified way, to deal with, to subject to some agent or action in order to bring about a particular result (The Macquarie Dictionary).

It is therefore possible that one may consider "treatment" as any action, process or behaviour applied to contaminated soil with the aim of addressing that contamination. With this interpretation, further consideration of the designation potential of the proposal would be warranted. While the Department does not agree with such an interpretation, and considers that the proposal in fact does not constitute a contaminated soil treatment work, it is important to take into account the effects the alternative interpretation.

If the proposal is characterised as a "contaminated soil treatment work", it is clear that clauses 15a) and 15b) of Schedule 3 of the Regulation would not apply simply because the proposal would not receive contaminated materials from off-site for treatment. Clause 15c) relates to "treatment" of contaminated soils on the originating site, which would be the case for the proposed remediation, and specifies that any of the following would trigger designation:

- incinerate more than 1,000 cubic metres per year of contaminated soil, or
- treat otherwise than by incineration and store more than 30,000 cubic metres of contaminated soil, or
- disturb more than an aggregate area of 3 hectares of contaminated soil.

The proposed remediation does not involve any incinerative or other heat-related treatment process, and as such could not be classified as designated development by this means, regardless of the quantity of material to be remediated. If one applies the broad interpretation of treatment and considers excavation of contaminants as treatment, then the proposal may be designated if more than 30,000 cubic metres of contaminated soil is treated and stored. The Department considers that this subclause could not be applied to the proposal for the following reasons:

- the proposed remediation includes the identification of contaminated areas, with excavation of those materials for disposal as soon as reasonably possible. There is no proposal for any storage of contaminated materials on the site, and certainly not in excess of 30,000 m³ of such;
- if one considers that treatment and storage are separable issues in this designation category (which would seem tenuous given the words *treat otherwise than by incineration and store*), the total quantity of contaminated soil requiring treatment would need to exceed 30,000 m³ (some 15,000 to 20,000 tonnes). This seems unreasonable given that the land is characterised as having low potential for residual contamination, rather than having been assessed through the site audit process as being broadly contaminated over

significant areas. Further, the nature of the “contamination” to be remediated is macro-materials (munitions debris), which would be excavated. As such, the total quantity of “contaminated soils” to be excavated would approximate the total quantity of munitions debris to be excavated (ie minimal additional soil removed at the same time as excavating munitions debris). The Department considers that even from the most conservative point of view, it is highly unlikely that munitions debris would exceed or even approach 30,000 m³ in volume.

A further argument on this point, and relevant to the next designation trigger of “disturbs more than an aggregate area of 3 hectares of contaminated soil” is the actual definition of the term “contaminated soil”. The Regulation (clause 38, Part 4) provides the definition for contaminated soil as follows:

Contaminated soil means soil that contains a substance at a concentration above the concentration at which the substance is normally present in soil from the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment, where harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment

For the proposed remediation to be reasonably considered further as possibly representing designated development, one must first be convinced that more than 30,000 m³ or three hectares of contaminated soils would be affected by the proposal. While many areas of the land the subject of the development application may in fact be characterised by remnant munitions debris, this debris must in the first instance represent a risk of harm to human health or any other aspect of the environment.

The Department considers that the potential risks posed by any contamination on the subject site is a result of impacts on human health/ safety, rather than ecological risks posed by such contamination. This point of view is shared by the site auditor who, through the original site audit statement, has “signed-off” on the land for its intended ecological outcomes, but restricted public access to the site given uncertainties in relation to potential residual (unexploded) munitions debris. The Department considers that the land could be left in its current state with no significant on-going ecological risks posed by any contamination that may be present on the site.

The principal potential risk associated with any contamination relates therefore to effects on human health and safety. One can reasonably form the view that buried exploded munitions debris does not pose a significant risk to humans if the public is granted access to the land. With no explosion potential remaining, and assuming residual chemical components are buried, there would be no clear connected series of contaminants, exposure routes and exposed populations. In light of the definition provided in the Regulation, the Department considers that these materials cannot strictly be classed as “contaminated soils” as no risk of harm is present. Following on from this, “contaminated soils” would therefore only include unexploded munitions and any soils subject to surface contamination with certain chemical residues.

The question then remains: what is the likelihood of encountering “contaminated soils” and would the likely volumes of contaminated soils and the areas affected by those soils be sufficient to exceed 30,000 m³ or three hectares? The Remedial Action Plan presents results of initial subsurface imaging of Zone 1 (Area 15) and Zone 2 (post hole area), which are considered the most likely areas of the site have contaminated soils, given that these areas were historically used for the disposal of munitions. From the subsurface imaging in Zone 1, the Applicant identified that of the 736 ordnance-related items identified, only nine (ie 1.2%) included explosive material. Of all of the items identified (including general metallic and tip items), explosive items represented 0.1% of all potential contamination components. In Zone 2, no explosive materials were identified, with only non-explosive metal fragments discovered.

If Zone 1 represents the greatest probability for unexploded materials (and therefore, strict “contaminated soils” in the context of this proposal), it may be reasonable to extrapolate the findings from Zone 1 to the entire site to provide a very conservative assessment of potential contaminated soil volumes/ areas. Zone 1 has an area 2.2 hectares, compared with the total potential area for remediation of some 22.1 hectares. One may conservatively expect that approximately 1.2% of items discovered over the entire site (assuming that the land is as

contaminated as Zone 1) would related to explosive materials. Extrapolating, one might expect up to 10,000 (7,360 based on Zone 1 findings) of which no more than 120 would be explosive (therefore representing a risk of harm, and classed as contaminated soil). The Department considers it extremely unlikely that even with this overly conservative estimate of contaminated soils, the 30,000 m³ or three hectare thresholds would be exceeded.

Notwithstanding the above consideration, the Department does not consider that the proposal can be characterised as a “contaminated soil treatment work”. However, even if it is, the Department is satisfied that it would not trigger designation thresholds. It is therefore appropriate and consistent with the *Environmental Planning and Assessment Act 1979* that the proposal has been assessed as non-designated development and not the subject of a formal Environmental Impact Statement. A Statement of Environmental Effects was, however, submitted by the Applicant in support of the subject development application.

4.4 Relevant Environmental Planning Instruments

The assessment of the proposed development is subject to the following environmental planning instruments:

- *State Environmental Planning Policy No.33 – Hazardous and Offensive Development;*
- *State Environmental Planning Policy No. 55 - Remediation of Land;*
- *Sydney Regional Environmental Plan No.30 – St Marys;*
- *Blacktown Local Environmental Plan 1988;*
- *St Marys Environmental Planning Strategy 2000;* and
- *St Marys Eastern Precinct Plan.*

Consideration of the proposed development in the context of the objectives and provisions of these environmental planning instruments in detail in Appendix A of this report.

4.5 Commonwealth Approvals

As the proposed remediation works will result in the destruction of species or communities listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), an additional approval is required from the Commonwealth Minister for Environment and Heritage to enable the proposed remediation works to proceed.

The Applicant referred the matter to the Department of the Environment and Heritage in order to obtain the necessary approvals and permits under the EPBC Act to enable the proposed remediation works to commence. This process was undertaken separate to the assessment process undertaken for this development application under the *Environmental Planning and Assessment Act 1979*. A conditional permit was granted to the Applicant for the proposed works by the Department of Environment and Heritage on 27 November 2003.

As portions of the proposal had already been assessed by the Commonwealth government under the *Environment Protection (Impact of Proposals) Act 1979*, the Applicant also applied for certification under the *Environmental Reform (Consequential Provisions) Act 1999* in order to certify that the assessment for these works were still applicable to the proposed remediation works. This was granted to the Applicant by the Department of Environment and Heritage on 23 July 2002.

Concerns have been raised in public submissions that the proposed remediation should be assessed by the Commonwealth under the *Environment Protection and Biodiversity Conservation Act 1999*, rather than the *Environment Protection (Impact of Proposals) Act 1979*. The Department has highlighted these concerns to the Applicant so that any appropriate action may be taken on the Applicant's part. The Department highlights however, that the issue in question is a Commonwealth matter that does not affect assessment and determination of the subject development application. The provisions of Commonwealth legislation, and any necessary permits, approvals or licences are the responsibility of the Applicant in consultation with relevant Commonwealth bodies.

5. EXHIBITION

The DA and Statement of Environmental Effects (SEE) were lodged with Blacktown City Council on 19 September 2003. Following Council's notification of the lodgement of the DA on 29 September 2003, the Minister for Infrastructure and Planning directed that the DA and SEE be referred to him for determination on 27 October 2003. As Blacktown City Council had not exhibited the DA and SEE during this period, the exhibition and notification requirements set out in the *Environmental Planning and Assessment Regulations 2000* (the Regulation) were undertaken by the Department.

The DA and SEE were publicly exhibited from 25 November 2003 to 5 January 2004 in accordance with the *Environmental Planning and Assessment Act 1979*. The DA and SEE were exhibited at the following locations:

- Department of Infrastructure, Planning and Natural Resources, Planning Centre, 20 Lee Street, Sydney;
- Department of Infrastructure, Planning and Natural Resources, Regional Planning Office, Level 8, 2-10 Wentworth Street, Parramatta; and
- Blacktown City Council, 62 Flushcombe Road, Blacktown.

The public notification of the proposal was comprehensive, with notices of the proposal placed in the local *Mt Druitt Standard*, *St Marys Star* and on the Department's Website. A number of site signs were also placed on various parts surrounding the proposed DA area, particularly at places along the neighbouring residential streets and at the site entrance.

The Department also advised all adjoining and surrounding landowners of the proposed development by letter. The Department consulted the Council concerning the proposed notification area, who advised that it was satisfied.

Submissions were received until the close of the exhibition period, with the exception of the ADI Residents Action Group (RAG) which was provided with an extension to the 16 January 2004 (a period of 52 days, which exceeds statutory requirements by some 73%). The Department is satisfied that the statutory process for public consultation for the proposal was undertaken in accordance with the *Environmental Planning and Assessment Act 1979*.

In response to the exhibition period, the Department received a total of 10 submissions: two submissions from government authorities and eight from the general public.

Two of the submissions did not relate directly to the proposed development, and the issues identified relevant to the future residential development at the site. Five of the six submissions from the general public opposed the proposed remediation. The key issues raised in the submissions received from the general public include:

- *flora and fauna impacts* – resulting from the proposed slashing activities and the level of assessment undertaken by the Applicant;
- *remediation methodology* – with respect to the level of remediation and any residual risk to future users of the site should unrestricted access be permitted;
- *heritage impacts* on Aboriginal relics located within the development site; and
- *consistency with Environmental Planning Instruments* and the justification for the proposed works.

Submissions were received from Blacktown City Council and Department of Environment and Conservation (with respect to flora and fauna issues). Both authorities did not object to the development, but recommended a number of issues (and conditions) that the Department should consider in its assessment.

REQUEST FOR ADDITIONAL INFORMATION

As part of its assessment of the development application, the Department and the DEC requested additional information from the Applicant. These requests related to the following issues:

- flora and fauna, particularly with respect to clarification on certain considerations in the flora and fauna assessment, assessment of regionally significant plants and Commonwealth Government approvals,

- impacts relating to construction impacts during remediation activities, such as noise, dust and traffic;
- hazards and risk, relating to consideration on the management of detected munitions debris;
- aboriginal heritage, particularly relating to the clarification on the extent of potential impacts, and the management of these impacts during remediation activities.

The Applicant subsequently provided this information, which the Department and DEC concluded that it satisfactorily addressed the issues in the above requests for additional information.

PROVISION OF GENERAL TERMS OF APPROVAL

The DEC advised the Department that the proposal meets its legislative requirements relating to Aboriginal heritage, and subsequently issued their General Terms of Approval (GTAs), which have been incorporated into the proposed development consent conditions.

6. CONSIDERATION OF ENVIRONMENTAL ISSUES

The Department has reviewed the Statement of Environmental Effects for the proposed development, and duly considered all submissions from the public, government authorities and Council. As a result, the Department has identified the following environmental issues associated with the proposal. The issues have been classified as being of significance, or major significance, depending upon the magnitude and extent of environmental impacts, and the responses of the public, authorities and councils with respect to the impacts. A full consideration of each of the issues listed is provided from section 6.1 to section 6.6 of this report.

Issues identified as being of **major significance** to environmental planning and assessment:

- flora and fauna impacts;
- remediation methodology; and
- impacts on heritage items.

Issues identified as being of **significance** to environmental planning and assessment:

- construction impacts, including noise, water and air quality impacts;
- impacts of waste production and management.

6.1 Flora and Fauna Impacts

Applicant's Position

The majority of the proposed development site is densely vegetated, with three endangered ecological communities and several threatened flora and fauna species known to be present within the development site, which are listed under the *Threatened Species Conservation Act 1995* (NSW) and/or *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth). The Applicant states that large and viable populations of these threatened species and communities, with the exception of *Persoonia nutans* (which is present in smaller numbers), will be retained within the proposed Regional Park. Furthermore, portions of the proposed remediation site have also been listed on the Register of the National Estate due to the high conservation values of the site.

Consequently, the Applicant has acknowledged that the proposed remediation activities (slashing/capping) do have the potential to generate significant impacts on any one of the species or communities, and affect the ecological value of the future Regional Park and/or the values of the St Marys site.

To assess what impact the proposal could have on threatened species/communities present on the site, the Applicant conducted an eight-part test in accordance with section 5A of the *Environmental Planning and Assessment Act 1979* for the following:

- Shale/Gravel Transition Forest;
- Cooks River Castlereagh Ironbark Forest;
- Shale Plains Woodland (Cumberland Plain Woodland);
- *Grevillea juniperina* subsp. *juniperina* (Prickly Spider Flower);

- *Pultenea parviflora* (Bush Pea);
- *Dillwynia tenuifolia* (Parrot Pea);
- *Micromyrtus minutiflora*;
- *Miniopterus schreibersii* (Common Bent-wing Bat);
- *Scoteanax rueppellii* (Greater Broad-nosed Bat).

The eight-part tests for the above species and communities concluded that the proposed remediation works would not have a significant impact on threatened flora and fauna species, and as such no Species Impact Statements were undertaken for the proposal. The Applicant states that this conclusion was based on the following:

- The proposed slashing activities will not result in the complete removal or destruction of individuals or communities, thus providing potential for threatened species and communities to regenerate naturally;
- Unless absolutely necessary, mature trees will not be destroyed as part of this proposal;
- As the majority of the communities affected by the proposal are re-growth, no hollow bearing trees were detected in areas affected by the proposal. Therefore, there should be minimal impact on fauna habitat;
- The number of threatened flora species and communities found within the areas to be affected represents a small percentage of the total number of individuals located within protected areas or elsewhere on the site (refer to Table 2 and Table 3);
- Only species present within Site 15 will be destroyed (buried), which represents a relatively small percentage of total numbers (refer to Table 2);
- A number of the threatened species located within 'slashed' areas are known colonisers of disturbed habitats and therefore are likely to effectively re-establish within these areas;
- The species, *Micromyrtus minutiflora*, is the only threatened species to be affected that does not respond well to the proposed slashing activities, however only a small minority of individuals of this species will be affected by the proposed works (refer to Table 2);
- Considerable foraging habitat for fauna species are provided elsewhere at the site, and the proposed activities would only affect a small minority of foraging habitat; and
- Areas affected by the proposed remediation have been disturbed in the past and represent areas of re-growth at the site. Consequently, higher valued vegetation areas and habitat will not be affected by the proposed works and will remain protected within the future Regional Park.

Table 2: Percentages of Threatened Flora Species to be Affected by the Proposed Remediation

Slashed	
<i>Grevillea juniperina</i> subsp. <i>juniperina</i>	~2.6% of total estimated plants within Eastern Precinct
<i>Dillwynia tenuifolia</i>	~2.7% of total estimated plants within Eastern Precinct.
<i>Pultenaea parviflora</i>	~4.2% of total estimated plants within Eastern Precinct
<i>Micromyrtus minutiflora</i>	~2% of total estimated plants within Eastern Precinct
Removed/Destroyed by Capping	
<i>Grevillea juniperina</i> subsp. <i>juniperina</i>	~0.1% of total estimated plants within Eastern Precinct.
<i>Dillwynia tenuifolia</i>	~0.4% of total estimated plants within Eastern Precinct.
<i>Pultenaea parviflora</i>	~5.7% of total estimated plants within Eastern Precinct
<i>Micromyrtus minutiflora</i>	~0% of total estimated plants within Eastern Precinct

Table 3: Hectares of Protected Threatened Communities to be Affected by the Proposed Remediation

Vegetation Community	Land Tenure	Impact		Total
		Slashed	Filled	
<i>In Regional Park (ha)</i>				
Shale/Gravel Transition Forest	54	3.25	0	3.25
Cooks River Castlereagh Ironbark Forest	80	0.58	0	0.58
Cumberland Plain Woodland	420	1.47	0	1.47
<i>Outside Regional Park (ha)</i>				
Shale/Gravel Transition Forest	43	0	0	0
Cooks River Castlereagh Ironbark Forest	8	7.13	0	7.13
Cumberland Plain Woodland	19	2.39	0	2.39

Nevertheless, the Applicant is proposing a number of mitigation measures to ensure the minimisation of impacts on the ecological significance of the site, and protect threatened species and communities:

- clearly mark areas to be slashed prior to commencing works, and to clearly mark individual plants to be remain unharmed during slashing activities;
- monitor slashed and capped areas following the completion of remediation works to ensure the re-generation of native species within these areas;
- use of validated material from the QEL area to Site 15 to ensure the re-growth of local species with the transfer of the seedbank to this area.

Issues Raised in Submissions

Four submissions from the general public objected to the proposed development due to the impacts on flora and fauna. One submission, from the ADI Residents Action Group, raised a number of issues that included:

- the proposal was inconsistent with the St Marys Environmental Planning Strategy, with respect to the minimisation on impacts of natural values of the site;
- that the flora and fauna impact assessment did not consider a number other listings of threatened species, such as the Australian Museum Database;
- that the impact assessment only considered a 5 kilometre radius of the proposed development site;
- that the Applicant did not obtained an approval from the Commonwealth for species or communities listed under the EPBC Act;
- that the impact assessment did not consider impacts on mitigatory species;
- that the impact assessment did not consider impacts on the following endangered species under the TSC Act :-*Pimelea spicata*, *Marsdenia viridiflora*, *Meridolum corneovirens* or *Litoria aurea* (the Green and Golden Bell Frog);
- that *Persoonia nutens* will be impacted on by the proposal, which is known to be present within the Eastern Precinct;
- that *Mircomyrtus minutiflora* has been detected in areas outside the Eastern Precinct and will be impacted by the proposed slashing activities; and
- that the impact assessment should be revised, namely the Eight Part Tests, and to conduct additional Eight Part Tests for species not considered.

Given the nature of the issues raised in the above submission, the Department requested that the Applicant respond to these issues and provide additional information on the proposed works and impact assessment. This additional information was considered in the Department's assessment.

The DEC (former National Parks and Wildlife Service) also provided a submission on the proposed development, following consultation in accordance with SREP No.30. The DEC did not raise any objections to the proposal on the grounds of flora and fauna, however recommended a number of conditions with respect to the pre-remediation preparation works and post-

remediation management. The Department has considered these recommendations and has incorporated the majority of these measures in the recommended conditions of consent.

Department's Position

The Department has considered the potential impacts of the proposed remediation works and has determined that although the proposal would have a level of impact on protected species/communities that these impacts would be acceptable given:

- the purpose for the proposed works, that is to remediate the site to meet safety requirements of the site auditor;
- the minimal number of species to be affected in comparison to total numbers present elsewhere within the Regional Park or overall site; and
- the characteristics of the majority of the affected species/communities to recover from the proposed level of disturbance.

Furthermore, the Department notes that the proposed 'slashing' activities would not involve large-scale removal of the vegetation at the site, and would only require the removal of mature trees should remediation validation require it.

The Department does acknowledge that the minimisation of the flora and fauna impacts is highly dependent on the ability of the affected areas to regenerate. In particular, the Department is concerned that the Applicant relies on natural regeneration, as opposed to undertaking active plantings or sowing, to argue that the proposed development would not result in any significant impacts on flora and fauna. Consequently, the Department has recommended that the Applicant be required to implement a Vegetation Rehabilitation Program for the rehabilitation of the areas located within the future Regional Park affected by capping and/or slashing activities at the site. This management plan would set out measures for the Applicant to implement a formal monitoring program of these areas, implement weed infestation preventative measures as well as ameliorative measures should the progress of the natural rehabilitation fail.

In addition to the above management plan, the Department and DEC have recommended the following measures to formalise commitments made by the Applicant or minimise impacts during and following the proposed remediation works:

- clearly mark areas that capping or slashing is to occur, and for the Applicant to ensure the works are confined to these areas;
- that no mature trees within defined areas to be removed unless absolutely necessary for the purposes of survey works and remediation activities;
- to limit the height of slashing on vegetation within defined areas to improve likelihood of regeneration of slashed vegetation;
- to cease works and immediately notify the Director-General and DEC should any unrecorded threatened species be detected within the defined areas (including *Persoonia nutens*), and not recommence work within these areas until suitable advice in relation to minimisation and management of impacts is obtained;
- to ensure all persons involved in the works are suitably educated about the ecological significance of the site and the environmental safeguards to be applied during these works;
- to ensure that soil used for capping works is suitably validated and originated from an area of minimal weed infestation. Should the soil be sourced from an area besides Site 15, the Applicant will need to submit details of the source to the DEC prior to the transfer of this material.

With respect to the issues identified by the ADI RAG, the Department is satisfied that the issues have been satisfactorily addressed and do not affect the overall conclusions of the flora and fauna impact assessment. In particular, the Department is satisfied that:

- the data used in the impact assessment was adequate, and although only one study was cited in the flora and fauna impact assessment report, considerable data has been used to assess the impacts of the proposal. Furthermore, the use of the five kilometre radius in the Applicant's database search is reasonable given the context of the proposed works;
- approvals under Commonwealth Government have been sought and issued for species listed under Commonwealth legislation;

- migratory species are unlikely to be affected by the proposed works given the minor nature of the proposed works and are considerations under Commonwealth legislation (see above);
- consideration for assessment of the Green and Golden Bell Frog or the Koala is not necessary given this frog species only occurs in riparian areas, and that no mature trees (unless absolutely necessary) will be removed that may provide habitat for koalas;
- that, although individuals of *Mircomyrtus minutiflora* do occur in areas outside the future regional park, these largely occur in areas of the Eastern Sector that are not subject of this development application; and
- eight-part tests for *Pyrrholaemus sagittate* (Speckled Warbler) and *Meridolum corneovirens* (Cumberland Land Snail) conclude that the proposed development would not have a significant impact on these species. Other fauna species highlighted in the submission have not been detected in past surveys, and are unlikely to be dependent on the vegetation to be slashed;
- the presence of *Pimelea spicata* at the site has not been detected, and the only recording of this species was in the central-western portion of the site; and
- the presence of *Marsdenia viridiflora* has not been found within the proposed remediation area and suitable habitat for this species does not occur in the areas to be affected.

Consequently, the Department concludes that the proposed remediation activities would not result in any adverse impacts on the ecological values of the St Marys site, and that any potential impacts can be effectively mitigated through the recommended conditions of consent.

6.2 Remediation Methodology

Applicant's Position

As required under *State Environmental Planning Policy No.55 – Remediation of Land*, the Applicant has prepared and submitted as part of the development application, a Remedial Action Plan for the site. The RAP sets out the objectives of the remediation works, risk of contamination (based on past surveys and historical evidence) and the methodologies determined to achieve these objectives.

The RAP states that the proposed remediation site has two distinct levels of risk, with:

- Site 15, Zone 2 and areas along past fence perimeters posing a high probability of ferrous debris and ordnance related material due to past activities within or in close proximity to these areas; and
- the remaining areas pose a low probability of ferrous debris and ordnance related material. These areas include areas adjacent to access tracks and the QEL area. However, it is recognised that there is a potential for unrecorded tip sites within these areas.

The above basic risk screening, in association with standard soil contamination criteria, were used to determine the proposed remediation methodologies, which have been summarised in section 3.2 of this report. The Applicant states that these methodologies provide the optimal outcome for the Eastern sector, and that more intrusive remediation options, such as large-scale removal of vegetation to test and detect for soil contamination and ordnance material was not considered necessary, given:

- the likelihood that ordnance material along access tracks is likely only to have resulted during the transit of these materials to locations elsewhere within the Eastern Sector (i.e. Site 15), and are unlikely to be projected beyond the proposed five metre curtilage or buried below the sub-surface;
- the results of previous remediation and survey activities, which although detected ordnance materials, found that these materials were a small percentage of total objects detected and predominately consisted of inert ordnance materials. Consequently, any materials beyond area to be slashed and scanned are unlikely to pose a significant threat to any future users of the park;
- it is envisaged that the distribution of ordnance materials will diminish eastwards (i.e. towards the Regional park), due to the distance from past activities at the site and historical evidence (written and verbal); and
- ecological or aboriginal heritage values of the area would outweigh any benefits from the large scale vegetation removal and validation, with the concentrated remediation of identified risk areas providing certainty for any permitted future access to this park.

Issues Raised in Submissions

Three of the six submissions from the general public objected to the proposed on the grounds that the RAP for the proposed development did not sufficiently address the residual risk to human health following the completion of the works. The ADI Residents Action Group (RAG) which objected to the proposal on these grounds, also expressed concern with any unrestricted access to the future regional park due to residual risk and ecological protection.

Blacktown City Council did not object to the proposal, but requested that the Department ensure that no further reporting on remediation matters be required. Council also stated that the capping depth at Site 15 appeared to be insufficient and that it should only be capped if soil contamination levels were below ANZECC Guidelines. It should be noted that the capping depth is a requirement of the auditor, and that risk of disturbance and past remediation excavation activities have been taken into account when determining this depth. With respect to reporting, the Department will be requiring the Applicant to provide a copy of the Site Audit Statement, and any requirements on this audit will need to be met by the Applicant (or future landowners) in accordance with the *Contaminated Land Management Act 1997*.

Department's Position

The Department acknowledges the concerns the general public have raised in submissions regarding on-going risk to users of the future regional park and residential areas from munitions debris, the suitability of the proposed remediation methods and the future proposed unrestricted access to the Regional Park.

In this regard, the Department has considered the objectives of the RAP (and the methods used to achieve these objectives) and is satisfied that the land could be remediated to a level to permit the site to be used as a Regional Park and/or urban development, as may be permitted under the relevant environmental planning instruments. The Department is satisfied that past remediation survey works within the proposed remediation site, which detected largely non-ordnance material with only a small percentage of inert ordnance items, has demonstrated that the type and/or extent of the contamination is minimal and unlikely to include any significant number of items including explosive materials. The Department is also satisfied that the use of historical documentation (verbal and written) has ensured that the calculation of contamination risk reflects the past activities within the region, with the risk of contamination appropriately addressed through the proposed remediation methodologies.

This is supported through the approval of the Remedial Action Plan by an accredited EPA site auditor under the *Contaminated Land Management Act 1997*, which demonstrates that the risk assessment, the remediation criteria and methodologies proposed are appropriate for the site and could enable the Applicant to meet the objectives of the RAP. Furthermore, should the accredited site auditor determine that there is a residual risk to future land users following the completion of the proposed works, restrictions may be imposed/ recommended by the auditor through the Site Audit Statement for the eastern sector to ensure the risk is appropriately managed and human health protected.

With respect to the issues raised in submissions relating to unrestricted access to the Regional Park, and the potential impacts to human health and ecological values of the site, this is an issue that is separate to this proposal. That is, although it is the objective of the RAP to achieve unrestricted access to the future Regional Park, it is highlighted by the Department that the final access arrangements will be dependent on:

- the final conditions placed on the land within a Site Audit Statement issued by an accredited site auditor;
- any outcomes of the Precinct Plan adopted by Council in relation to the Eastern Sector, and more broadly for the ADI site as a whole; and
- any decision made by DEC, as the future land owner, which is only partially reliant on the outcomes of the RAP. For instance, unrestricted access may be permitted by the site auditor, however DEC may determine to restrict access due to ecological (not safety) reasons.

Consequently, any future access arrangements to the site and fencing will be dependent on the Site Audit Statement that would be re-issued for the site and the management decisions taken by DEC. It is the Department's opinion that while the objective to permit unrestricted access would provide the opportunity to enable this, any determination by the Minister for this proposal will not override the DEC's right to determine the on-going management strategy for this park.

6.3 Heritage

Applicant's Position

As part of the overall development strategy for the entire St Marys site, the proposed development site has been subject to numerous studies including the *Interim Heritage Management Report, ADI Site, St Marys* (McDonald, J. 1997), and *Archaeological assessment of Indigenous Heritage values in the Eastern Precinct of the former ADI Site, St Marys* (McDonald, J. July 2003). The former study established four archaeological zones, which rated areas within the former ADI site by level of potential for intact archaeological evidence, and the latter involving more detailed investigations for the Eastern Precinct Plan and establishment of management protocols during future developments.

The proposed development site as a result of these studies has been classified as Zone 1, 2, 3 and 4, with Zone 1 and 2 representing very high and moderate potential for intact archaeological items, and Zone 4 representing low to no potential for intact archaeological items. Zone 1 and 3 areas within the development site are largely contained within the future Regional Park (Zone 1) or Eastern Easement Areas (Zone 3). The majority of the areas outside the Regional Park are classified as Zone 4, however an area of Zone 1 does extend outside the southern boundary of the park. The latter area of Zone 1 contains the Aboriginal site PAD 1, which consists of a former silcrete extraction area that requires salvage as a result of this proposal. An area further north, located with the future park boundaries (ADI-57), consisting of an Aboriginal Quarry Site, would not be disturbed by these works and will remain intact during the proposed remediation works. No other aboriginal sites were identified within the proposed remediation area.

To mitigate the potential impacts on Aboriginal heritage, the Applicant proposes to implement the following measures:

- During works involving considerable ground penetration, to have an appropriately qualified archaeologist and Aboriginal representatives to monitor the works;
- during works in the vicinity of PAD 1, to have an appropriately qualified archaeologist and Aboriginal representatives to monitor the works to ensure items are suitably recorded, treated and excavated;
- to obtain a section 90 permit from DEC for the above works;
- to prohibit remediation works into ADI-57 site, with investigation works to extend into the boundaries of ADI-57 only; and
- consult with the local Aboriginal groups, Deerubin Local Aboriginal Land Council, and the Darug Tribal Aboriginal Corporation, and the Darug Custodian Local Aboriginal Land Council, throughout the proposed remediation works, and to invite representatives to be part of the field team.

The Applicant also notes that should investigation works conducted during the proposed remediation detect munition debris up to the boundary of ADI-57 that works would not extend into this area due to the aboriginal significance of the site. Instead, the Applicant states that this exclusion would be reflected in the final remediation report and the Site Audit Statement (SAS) for the works. The Applicant states it would obtain from the DEC (as future land owner) an acknowledgement that it is aware that there is a potential for munition debris to be present within the ADI-57 site.

The Applicant also notes that detailed investigations into the eastern precinct have determined that the area of Zone 1 extending into developable areas (Zone 4) may require the revision of the zone boundaries due to the level of disturbance to these areas by past activities. However, this is subject to separate discussions/negotiations outside the scope of this development application.

Issues Raised in Submissions

One submission from the general public objected to the proposed development, as it considered that any potential impact on an Aboriginal relic should only be permitted following community consultation, and that it is preferred that any Aboriginal relic be maintained in-situ.

The Department of Environment and Conservation (DEC) requested additional information on the proposed works, archaeological procedures to be implemented during these works, and further information on the items to be affected by the proposal. Following the provision of this information by the Applicant, the DEC concluded that it would be able to issue a section 90 permit (consent to destroy) under the *National Parks and Wildlife 1974* and subsequently issued its General Terms of Approval (GTAs) for the proposal for Aboriginal site "PAD 1". The DEC also concluded that Aboriginal site 'ADI-57' would not be impacted by the proposal. The GTAs have been incorporated into the recommended conditions of consent, which includes the preparation of a Plan of Management for the proposed remediation works (distinct from the Plan of Management currently under preparation for the entire St Marys site).

Department's Position

The Department has considered the proposed works and the potential impacts on heritage items, and believes that the potential impacts associated with the disturbance of Aboriginal relics have been appropriately addressed by the Applicant. Furthermore, the conditions recommended by the Department and the GTAs issued by the DEC would ensure that the potential impacts are appropriately minimised and/or managed. These conditions include the following:

- to provide local aboriginal groups with the opportunity to monitor the site for any Aboriginal relic during the proposed remediation activities;
- protection of ADI-57 site from any activity associated with the development;
- to require the Applicant to cease works following the discovery of any relic and the immediately notification of DEC and the relevant local Aboriginal groups. The Applicant shall also be required to meet the requirements of the DEC with respect to the treatment, management and/or preservation of any relics discovered;
- management of proposed remediation works in accordance with archaeological strategies implemented for the entire St Marys site; and
- implementation of a Plan of Management for the proposed remediation works, which will include long-term management strategies and protocols for Aboriginal heritage located within the area affected by the development

With respect to the objection from the general public, any proposed works that could impact on any item of Aboriginal origin requires consultation with the relevant Aboriginal groups, which in this case involved the Deerubin Local Aboriginal Land Council, and the Darug Tribal Aboriginal Corporation, and the Darug Custodian Local Aboriginal Land Council. The Department considers that the level of consultation undertaken by the Applicant, as well as the process undertaken to obtain a permit under section 90 of the *National Parks and Wildlife 1974* has satisfied the consultation procedures required for these works. Furthermore, the Department has recommended that the Applicant should provide these groups with the opportunity to be present during the proposed remediation works to monitor the site for any Aboriginal relics. Consequently, the Department has concluded that a suitable level of involvement by the local Aboriginal groups will ensure that their issues are taken into account during the proposed remediation works.

6.4 Waste Management

The proposed remediation works are expected to generate three general waste products: contaminated soil, munition debris and slashed vegetative material. These key waste products have been considered separately below.

Contaminated Soil Management

As outlined in the RAP for the proposed remediation works, the Applicant has indicated that the proposed works may detect contaminated soil within the Eastern Sector should previously undetected tip sites be found. Although the likelihood of detecting unrecorded tips sites is relatively low, the nature of contamination (if any) is unknown at this stage. As such, the Applicant has only recommended that any contaminated soil would be appropriately handled and disposed of at a licensed facility when this material is identified.

The Department is generally satisfied with this approach, however does not believe that it provides certainty or information to the Department in relation to the nature and proper management of any contaminated soil. As such, the Department has recommended that the Applicant be required to implement the following, should the Minister determine to approve the proposed development:

- implementation of a general Contaminated Soil Protocol during the proposed remediation works to establish the notification procedures following the detection of contaminated soil, and the management and remediation of these soils; and
- implementation of a reporting mechanism should previously undetected tip sites be discovered within the Eastern Easement and Zone 2 areas, which requires the Applicant to cease works in the vicinity of these areas cease, until studies and protocols have been approved by the Director-General.

Munitions Management

The management and disposal of any munitions debris would be undertaken by a specialist contractor to ensure the proper handling of this material with respect to risk and environmental impacts. Debris likely to be detected during the proposed remediation works would be categorised into two distinct groups:

- Unexploded ordnance (UXO) and explosive ordnance (EO), which is identified as containing energetic material; or
- Other munitions debris or scrap metal, which does not contain any explosive materials.

Should UXO or EO be detected, and following necessary recording, the debris will be inspected by a qualified Ammunition Technical Officer (ATO) to determine the appropriate handling, transport and disposal of this material. This may or may not require the implementation of a coordinated program with the Police department and/or Department of Defence.

In addition, the Applicant states that all debris detected during the proposed remediation works will be managed and disposed of in accordance with the RAP, the Remnant Contamination Management Plan and the St Marys Eastern Precinct Contamination Management Plan.

The Department has reviewed the proposed development and has concluded that it is unlikely that the volumes of detected munitions would exceed the thresholds set out for Class 1.2 and Class 1.3 in the *State Environmental Planning Policy No.33 – Hazardous and Offensive Development* (SEPP 33). Nevertheless, due to the hazardous nature of the proposed development, it is the Department's opinion that the Applicant would need to apply the objectives of SEPP 33 and applicable hazards guidelines prepared by the Department during the proposed remediation works and transport of explosive waste from the site. While it is acknowledged that the Applicant has identified the need for the safety considerations during the handling and transport of this material, the Department recommends that the Applicant would need to implement a Waste Management Protocol for the works in order to formalise these requirements and ensure that these systems adequately meet the requirements of the Department's guidelines.

This Waste Management Protocol would require the Applicant to set out the protocols for the handling, management, transportation and removal of munition materials. The protocol would need to also identify safety risks associated with the management, transportation and removal of munition materials and detail what measures would be implemented to minimise these risks to levels as low as possible. This would be implemented in accordance with the general principles and objectives of the Department's draft guideline *Route Selection and Hazardous Industry Planning Advisory Paper No.9 – Safety Management*.

Slashed Vegetated Material

The Applicant intends to leave the slashed material in-situ during and following the completion of the proposed remediation works. However, no management procedures have been proposed for this material as part of the proposed development. Although the Department does not perceive the in-situ management of this waste as a significant issue and provides favourable conditions for re-generation of flora within these areas (seed bank and/or composting characteristics), the Department believes that the material would need to be properly managed to ensure that this waste does not generate any dust, soil or water quality impacts. Due to the minor nature of this issue, the Department recommends that this can be properly managed through a Dust, Erosion

and Sedimentation Management Plan. Should the monitoring of these measures indicate that the material cannot be properly managed, the Department also recommends that the Applicant consider a more formalised management method for this compost material to be elsewhere on-site.

6.5 Noise Impacts

The proposed remediation works are expected to be undertaken over an 88 day period and are to be conducted Monday to Saturday 7:00am to 6:00pm. Noise is likely to be generated during these works during the slashing, site capping and contamination remediation works.

The Applicant states that the proposed activities are unlikely to generate any adverse impacts on neighbouring residential areas as:

- the proposed contamination investigations would be restricted to hand held remote and subsurface sensing equipment, shovels for shallow excavations, and possible minimal use of a backhoe for soil sampling. Consequently, the Applicant states that the type of equipment to be used are therefore unlikely to generate significant noise levels beyond the site boundaries;
- de-vegetation activities would only be undertaken with a tractor mounted mower and motorised hand tools (ie chainsaw), and as such should not generate noise levels that would extend past the site boundaries;
- site capping works will require approximately 700 truck movements, which will be restricted to a five day period, and will be distanced 100 metres from residential areas; and
- noise generated during iterative process (QEL area) would be undertaken as part of the preliminary works associated with the residential development, and would be subject to noise conditions attached to these consents.

The Applicant has subsequently concluded that no mitigation measures would be required. Nevertheless, the Applicant states that should any noise be detected beyond site boundaries, the noise would be similar to that generated by general Council maintenance activities, and should therefore not generate any adverse impacts on neighbouring residential areas.

The Department has considered the Applicant's position and has concluded that the minor nature of these works, coupled with the distance to residential areas (approximately 60-100 metres for the majority of the works), the type of equipment used and the buffering capacity of vegetated areas, would ensure that the proposed works would not generate any significant noise impacts on neighbouring residential areas. Nevertheless, the Department has recommended that, should the Minister determine to approval the proposal, that the Applicant:

- comply with relevant noise limits set in the NSW EPA's *Environmental Noise Control Manual*;
- conduct the proposed works between 7am – 6pm Monday to Friday and 8am – 1pm Saturday; and
- prepare and implement a Noise Management Plan to provide for the implementation of noise control measures and contingency measures, should any noise complaints be received.

The Department is satisfied that the implementation of these additional measures will ensure that residential amenity is properly protected throughout the proposed remediation works.

6.6 Air and Soil Impacts

The disturbance to the topsoil, capping and de-vegetation impacts have the potential to generate dust and erosion impacts if not properly managed. With the exception of access tracks along Palmyra Ave and eastern easement works, the proposed activities are distanced approximately 100m from residential areas and as such, the Applicant has concluded that residential areas area unlikely to be affected by dust generated during remediation works. For land located closer to residential areas, the Applicant is proposing to implement standard construction dust suppression measures, including use of water carts.

The Department is generally satisfied with the proposed measures given the nature and extent of the proposed remediation works. However, given that the Applicant intends to leave slashed

material in-situ at the site and has not provided for the management of this material or considered the potential for soil erosion during the remediation works, the Department considers that the Applicant should be required to formalise commitments and implement additional measures during the proposed remediation works. In addition, formalised erosion and dust control will be required at sites where capping and soil scraping is proposed to be undertaken. Should the Minister determine to approve the proposal, the Department is satisfied that appropriate measures can be appropriately implemented through a Dust, Erosion and Sedimentation Environmental Management Plan for the proposed works.

With respect to the long-term management of soil and dust impacts following the completion of the proposed remediation works, the Department is satisfied that the regeneration of vegetation within these areas would sufficiently manage these impacts. However, this would be dependent on the successful regeneration of vegetation in these areas. The Department is satisfied that the recommended Vegetation Rehabilitation Management Plan, which requires the monitoring of regeneration, would adequately ensure the long-term management of these issues (refer to section 6.1 of this report for further detail).

7. SECTION 79C CONSIDERATION

Section 79C of the *Environmental Planning and Assessment Act 1979* sets out matters that a consent authority must take into consideration when it determines a development application. The Department has assessed the development application in the context of Section 79C of the Act, having regard to the identified heads of consideration. This consideration is provided in Appendix B. The Department is satisfied that the merits of the proposed development warrant approval subject to the recommended measures outlined in this report.

8. RECOMMENDED CONDITIONS OF CONSENT

Should the Minister determine to approve the proposed development, the Department recommends the imposition of a number of conditions to mitigate, manage and monitor environmental impacts, as outlined in the recommended instrument of consent (attached, tagged "A"). The conditions take into consideration the General Terms of Approval and other issues raised by Council, and all other submitters including land owners and community groups. Key matters covered by the recommended conditions include:

- management of flora and fauna impacts during and following the completion of remediation activities at the site;
- provision for the management, treatment and monitoring for Aboriginal objects during the remediation activities;
- provision for the implementation of waste management protocols to ensure the appropriate handling, treatment, and disposal of any inert or explosive materials;
- implementation of procedures to manage noise, water, soil and dust impacts associated with the proposed remediation activities;
- provision for the handling and response to any community complaints regarding the remediation activities; and
- establishment of an environmental management plan for the works.

9. CONCLUSION

The Department has assessed the DA, the accompanying SEE, and the submissions received on the development; and is satisfied that that all key environmental concerns have now been adequately addressed. In particular, the Department is confident that the potential impacts on flora and fauna at the site can be minimised through the Applicant's proposed mitigation measures and the conditions of consent recommended by the Department.

Consequently, it is recommended that the development application be approved subject to the Department's recommended conditions which have been formulated to manage, monitor and mitigate potential environmental impacts.

Caitlin Bennett
A/Senior Environmental Planning Officer
Major Development Assessment

ENDORSED:

Sam Haddad
Deputy Director-General
Office of Sustainable Development, Assessment and Approvals

APPENDIX A - PROVISIONS OF ENVIRONMENTAL PLANNING INSTRUMENTS

Follow are considerations of the proposed munitions facility upgrade in the context of the objectives and provisions of relevant environmental planning instruments.

STATE ENVIRONMENTAL PLANNING POLICY NO.33 – HAZARDOUS AND OFFENSIVE DEVELOPMENT

State Environmental Planning Policy No.33 – Hazardous and Offensive Development (SEPP 33) has the primary aim of ensuring that a consent authority has sufficient information to assess whether a proposal represents hazardous or offensive industry and consequently undertake an appropriate assessment regime to appropriately mitigate hazardous and or offensive environmental impacts.

The proposal does not strictly meet the definition of hazardous or offensive development, as defined in SEPP 33. As such, the policy does not apply to the proposed development. Nevertheless, the Department has applied the objectives of SEPP 33 to the assessment of the proposed development due to the potentially hazardous nature of any munition debris detected during the proposed remediation works. Refer to section 6 of this report for the consideration of the objectives of SEPP 33.

STATE ENVIRONMENTAL PLANNING POLICY NO.55 – REMEDIATION OF LAND

Clause 7 of the *State Environmental Planning Policy No.55 – Remediation of Land* (SEPP 55) states that a consent authority must not consent to the carrying out of any development on land unless:

- (a) *it has considered whether the land is contaminated, and*
- (b) *if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) *if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose*

Refer to Section 6 of this report.

SYDNEY REGIONAL ENVIRONMENTAL PLAN NO.30 – ST MARYS

The *Sydney Regional Environmental Plan No.30 – St Marys* (SREP 30) provides objectives and general principles to guide the future development of the former ADI site at St Marys, and requires the consent authority to consult with specific development controls and parties in relation to particular development applications.

Development Consent Restrictions

Clause 20 of SREP 30 requires a consent authority to consider the following when determining a development application

- (1) *Development consent must not be granted with respect to any development on land to which this plan applies unless the consent authority:***
 - (a) *is satisfied that the proposed development will not be inconsistent with achievement of the performance objectives, and the zone objectives and other requirements prescribed by this plan, and***
 - (b) *has considered the development control strategies contained in the environmental planning strategy, in so far as they relate to the proposed development.***

- (2) Consent must not be granted for development within a precinct unless:**
- (a) there is a precinct plan for the precinct and the consent authority has taken that precinct plan into account, and**
 - (b) the consent authority has taken into account whether the proposed development is consistent with the terms of any relevant development agreement.**

An Eastern Precinct Plan has been prepared and approved by Blacktown City Council at the time of writing this report. The purposes of these works is consistent with the zonings outlined in the SREP and precinct plan (ie commercial/residential/conservation), and as such as is considered consistent with the achievement of the performance objectives and strategies outlined in the SREP and Eastern Precinct Plan. However, it should be noted that the site audit statement for these works, subsequent development approvals and administrative decisions by NPWS will dictate future development within these areas (refer to sections 3.2 and 6.2 of this report).

Zoning

Part 6 of the SREP 30 sets out the zoning objectives for the St Marys ADI site. The relevant zonings are the Regional Park and Urban zones. Although the proposed remediation works are not permissible within these zonings, the objectives of the zones have been considered.

37 Regional Park zone

(1) The objectives of the Regional Park zone are:

- (a) to identify land that is to be or is reserved or dedicated under the National Parks and Wildlife Act 1974, and**

Not relevant.

- (b) to conserve and enhance the range and variety of ecological communities, native flora and fauna species and plant and animal habitats within the area, and**

The proposed development will have a level of impact on the certain threatened species and/or communities. However, the level of impact is minimal given the context of the disturbance and the number of the affected species located else at the site (which will be affected by the proposed works). The Department is also satisfied that the implementation of mitigation measures will ensure that these impacts will be further minimised. Refer to section 6 of this report for further information.

- (c) with regard to the views of local Aboriginal communities, to conserve the Aboriginal values of the area to ensure they are available for interpretation to future generations, and**

Refer to section 6 regarding the issues associated with the Aboriginal site PAD 1 located within the proposed remediation site.

- (d) to provide recreational facilities that are consistent with the natural and cultural values of the land to which this plan applies.**

Not relevant. However, the proposed remediation works will allow the future use of the land for these purposes, and is therefore considered consistent with this objective.

(2) In the Regional Park zone:

- (a) development for the purpose of any land use authorised by or under the National Parks and Wildlife Act 1974 and any land use ordinarily incidental or ancillary to any such land use may be carried out without development consent, and**
- (b) any other development is prohibited.**

The proposed development is considered prohibited development. However, SEPP 55 overrides SREP 30 (refer to section 4.1 of this report)

40 Urban zone

(1) The objectives of the Urban zone are:

- (a) to ensure that buildings and works within the zone are primarily used for residential purposes and associated facilities, and**
- (b) to limit the range and scale of non-residential uses to ensure that they are compatible with residential amenity and primarily serve local residents, and**
- (c) to provide for local retailing and related services, including supermarkets, which will complement established centres in the Blacktown City and Penrith City local government areas and not have a significant adverse effect on the viability of established retail centres, and**
- (d) to provide for medium density residential development in locations which provide optimum access to employment, public transport and services, while ensuring residential amenity, and**
- (e) to promote home based industries where such activities are unlikely to adversely affect the living environment of neighbours, and**
- (f) to ensure that development adjacent to the Regional Park zone does not have a negative impact on biodiversity or conservation within that zone.**

The proposed development is transient in nature and as such, the urban zone objectives, which have been prepared to strategically direct any future urban development, are not entirely applicable to the proposed development. Nevertheless, the general purpose of the objectives has been considered and the proposed development is considered to be generally consistent with the intent of the objectives (refer to section 6 of this report). However, it should be noted that the site audit statement for these works, subsequent development approvals and administrative decisions by NPWS will dictate future development within these areas (refer to sections 3.2 and 6.2 of this report). These matters are separate to the proposed development.

Development Controls

Part 7 of the SREP outlines a number of development controls that must be taken into account in the assessment of a development application. The relevant clauses to the proposed development are:

Clause 44 - Consultation with National Parks and Wildlife Service

(1) This clause applies to the following:

- (a) development of land adjoining land within the Regional Park zone, and**
- (b) development for the purpose of a road or public utility undertaking on land zoned Regional Park that is subject to an existing easement, where the application is lodged prior to the land being reserved or dedicated under the National Parks and Wildlife Act 1974.**

(2) The consent authority must not grant development consent for development unless it has referred a copy of the development application to the Director-General of National Parks and Wildlife.

- (3) Where a copy of a development application has been forwarded to the Director-General of National Parks and Wildlife pursuant to this clause, the consent authority must not grant consent to the application until:**
- (a) it has received and considered advice with respect to the application from that Director-General, or**
 - (b) the consent authority has been notified that that Director-General does not wish to submit any advice with respect to the application, or**
 - (c) 28 days have elapsed after the date on which the application was referred to the Director-General,**
- whichever occurs first.**

The Department referred the development application to DEC in accordance with the SREP. A submission from DEC with respect to the flora and fauna impacts has been received and taken into account in the Department's assessment of the proposal.

52 Tree preservation

- (1) A person must not ringbark, cut down, lop, top, remove, injure or wilfully destroy any tree, or cause any tree to be ringbarked, cut down, topped, lopped, removed, injured or wilfully destroyed by any action (including the addition of soil or drainage works around the base of the tree), except with the consent of the consent authority.**

The proposal may require the removal of mature trees, however will only be undertaken if absolutely necessary for the purposes of remediation certainty. The Department has considered the potential impacts of this removal, the low probability of this being required, the extent of the area likely to be affected and need for the remediation works, and has concluded that any removal of a mature tree is low and unlikely to have a significant impact on the ecological values of the site.

55 Conservation of items of environmental heritage

- (5) Before granting consent for a development that is likely to have an impact on an Aboriginal place, or that will be carried out on an archaeological site that has Aboriginal cultural significance or a potential archaeological site that is reasonably likely to have Aboriginal cultural significance, the consent authority must:**
- (a) consider a heritage impact statement explaining how the proposed development would affect the conservation of the place or site and any relic known or reasonably likely to be located at the place or site, and**
 - (b) notify the local Aboriginal communities (in such a way as it thinks appropriate) and the Director-General of National Parks and Wildlife of its intention to do so and take into consideration any comments received in response within 28 days after the relevant notice is sent.**

The requirements have been met (refer to section 6 of this report)

BLACKTOWN LOCAL ENVIRONMENTAL PLAN 1988

The Eastern Easement and Eastern Easement Developable Areas fall under *Blacktown Local Environmental Plan 1988* and is zoned Special Uses 5(a) – Special Uses General.

Aims of the Plan

The *Blacktown Local Environmental Plan 1988* provides the following general aims and objectives:

(2) The objectives of this plan are:

- (a) to allow for a variety of rural based activities while maintaining the urban potential of relevant rural land,**
- (b) to allow for a variety of residential lifestyles,**
- (c) to allow for a variety of business uses while consolidating existing commercial centres,**
- (d) to enable a variety of uses in industrial areas while protecting the viability of existing retail centres,**
- (e) to prohibit offensive or hazardous industries,**
- (f) to ensure space is provided for community services and facilities,**
- (g) to ensure space is provided for recreational activities and facilities,**
- (h) to ensure land is available to accommodate all required special land uses in the most effective manner, and**
- (i) to protect Blacktown's environmental heritage.**

The proposed development is transient in nature and as such, the objectives, which have been prepared to strategically direct any future development, are not entirely applicable to the proposed development. Nevertheless, the general purpose of the objectives has been considered and the proposed development is considered to be generally consistent with the intent of the objectives (refer to section 6 of this report). However, it should be noted that the site audit statement for these works and subsequent development approvals will dictate future development within these areas (refer to sections 3.2 and 6.2 of this report). These matters are separate to the proposed development.

Objectives of the Zone

The 5(a) Special Uses Zone carries the following objectives, being:

- (a) to identify land which is currently used by public authorities, organisations and the council to provide certain community facilities and services,**
Not relevant to this development application.
- (b) to identify land reserved for future acquisition by the council for a range of community facilities and services,**
Not relevant to this development application.
- (c) to identify land which has been reserved at the request of certain public authorities for its future acquisition to provide a range of community facilities and services, and**
Not relevant to this development application.
- (d) in relation to land marked "Corridor" on the map:**
 - i. to set aside land for the development of certain major long-term services and facilities, and special uses carried out by public authorities in an economic, safe and environmentally sensitive manner, and**
 - ii. to allow the identified land to be used for recreational or other purposes where that use does not conflict with the existing or likely future use of the land by public authorities.**

Not relevant to this development application. This land has been allocated for the purposes of an electricity easement, and will continue to be used for this purpose. Portions of the eastern easement (called Eastern Easement Developable Area) will be developed at a latter stage, and has been remediated to permit this, however this will be subject to separate planning processes.

Development Controls

Clause 18(1) of the BLEP 1988 states that a person may, with the consent of council, carry out development for any purpose on land within Zone No 5 (a) (where that land is to be used by a public authority), 5 (c), 6 (a) or 6 (c) until the land is used or developed for the public purpose for which it is zoned. In addition, Clause 18(2), states that should development be permitted on land referred to in subclause (1), must not be permitted if it would render the land unfit for the purpose for which it is zoned.

Clause 18 of the BLEP does not apply specifically to the proposed development, as the proposed remediation works are transitional, and will not effect the purpose or objective of the zoning. Furthermore, it will not render the land unfit for the purpose of the zoning, but will enable any future use of the land (which will be subject to separate development applications).

ST MARYS ENVIRONMENTAL PLANNING STRATEGY 2000

The *St Marys Environmental Planning Strategy 2000* describes the approach to be taken in managing development and conservation at the St Marys ADI site, by setting out aims for future use and management of the site, the specific performance objectives for planning, actions to be undertaken by local and State governments and development controls.

Development Controls

The strategy sets out development controls that must be taken into account in the assessment of a development application. The relevant sections are:

- **CONSERVATION** (Chapter 4): 4.4.23 *Tree preservation and native plant use in the development areas* – the proposed development will not result (unless absolutely necessary) in the removal of mature trees. Vegetation will be slashed, and only a small portion removed. Existing seed banks within these areas should be sufficient for the recovery of these areas following the proposed remediation activities. However as part of the recommended conditions of consent, the Department has incorporated a Vegetation Management Plan which sets out monitoring and, if necessary, active plantings within these areas to ensure the re-establishment of locally native species in these areas.
- **CULTURAL HERITAGE** (Chapter 5): The requirements of the strategy with respect to aboriginal heritage has been met (refer to section 6 of this report)
- **WATER AND SOILS** (Chapter 6): The recommended conditions of consent require the Applicant to implement soil and erosion management plans, thus satisfying this requirement.
- **WASTE** (Chapter 9): Refer to section 6 of this report.
- **CONTAMINATION** (Chapter 12):
 2. A developer agreement requires the Applicant to remediate the Eastern Sector before the transfer of the land to DEC. This DA forms part of this agreement.
 9. The need for a chain mesh fence around the Regional park will be determined following the completion of the proposed remediation works and the issue of a new Site Audit Statement for the site.
 10. To be satisfied through the methodologies of the Remedial Action Plan (RAP).
 11. This is subject to DEC management plans, and the Site Audit Statement for the site.
 12. To be satisfied through the methodologies of the Remedial Action Plan (RAP) and the new Site Audit Statement for the site.
 13. To be satisfied through the methodologies of the Remedial Action Plan (RAP).
 14. To be satisfied through the methodologies of the Remedial Action Plan (RAP) and the new Site Audit Statement for the site.
 15. ComLand is a Commonwealth owned corporation.

EASTERN PRECINCT PLAN

The aim of the *Eastern Precinct Plan* is to provide the planning framework to assess and make decisions about the development of the Eastern Precinct, including the design of infrastructure and buildings. Only areas outside the future Regional Park have been incorporated into the Eastern Precinct Plan and is zoned for residential development.

Section 3.1/3.2 of the Eastern Precinct Plan sets out the flora and fauna objectives that are to be taken into account for future residential development within this area. The majority of these requirements set out the objectives to minimise impacts on flora and fauna in the long term, and to assist in the mitigation of impacts associated with the transfer of land use from open space to residential development (i.e. to minimise risk of pest species, and to protect the integrity of the future regional park). In this respect, the majority of the objectives set out in the precinct plan are not directly related to the proposed remediation works. However, the impacts of these works on flora and fauna have been considered in section 6 of this report. As such, the objectives of this plan have been met through the mitigation measures proposed by the Applicant and through the recommended conditions of consent.

Section 3.6 of the Eastern Precinct Plan sets out the aboriginal heritage objectives that are to be taken into account for future residential development within this area. This section sets out the steps required to undertake works within the vicinity of aboriginal site PAD 1. As set out in section 6 of this report, the Applicant has applied for an integrated approval from DEC to permit this. The DEC have subsequently issued its GTAs for the proposal, and as such have met the requirements of section 3.6 of the precinct plan.

Section 3.7 of the Eastern Precinct Plan sets out the objectives relating to water and soil management, which are to be taken into account for future residential development within this area. Although not related directly to the proposed works, as detailed in Section 6, the requirements for these works with respect to soil and water management have been met.

Section 3.13 of the Eastern Precinct Plan sets out the objectives relating to contamination that are to be taken into account for future residential development within this area. This section refers to a Contamination Management Plan, which describes reporting procedures and lines of responsibilities, which will be documented along with contact numbers for the relevant experts at the commencement of the works. This plan has been prepared on the premise that the proposed remediation works have been completed. As such, this plan does not relate directly to the proposal, however the Applicant has indicated that this plan will be implemented during the proposed remediation works. Consequently, this requirement has been met.

APPENDIX B - CONSIDERATION UNDER SECTION 79C

Section 79C requires that the consent authority, when determining a development application, takes into consideration the following matters.

(a) The provisions of:

(i) any environmental planning instrument;

In relation to the proposed munitions facility upgrade, the following environmental planning instruments apply.

- *State Environmental Planning Policy No.33 – Hazardous and Offensive Development*
- *State Environmental Planning Policy No. 55 - Remediation of Land;*
- *Sydney Regional Environmental Plan No.30 – St Marys;*
- *Blacktown Local Environmental Plan 1988;*
- *St Marys Environmental Planning Strategy 2000;* and
- *Eastern Precinct Plan St Marys.*

Consideration of the provisions of these instruments, in the context of the proposed development is considered in full in Appendix A of this report.

(ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority;

There are no draft environmental planning instruments that are, or have been, placed on public exhibition.

(iii) any development control plan;

There are no development control plans that relate to the proposed development.

(iv) any matters prescribed by the regulations that apply to the land to which the development application relates;

Not relevant.

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality;

Section 6 of this report considers the environmental impacts of the proposed development in detail. The Department is satisfied that all environmental impacts can be appropriately managed and mitigated.

(c) the suitability of the site for the development;

The proposed development site is currently vacant, with the future use of the land zoned for residential/commercial/conservation purposes. The methodologies of the proposed remediation of this site have been based on this future use, in particular, the remediation of the future regional park to enable unrestricted access, should Site Audit Statement permit it, and DEC choose to allow it. Consequently, the site is considered to be suitable for the proposed development.

(d) any submissions made in accordance with this Act or the regulations;

A total of 10 submissions were made in response to the exhibition of the development application for the proposed development. All matters raised in these submissions have been given due consideration, as outlined in sections 6 of this report.

(e) the public interest.

The Department considers that the proposed remediation works are in the public interests, as it would enable the remediation of the land to safe levels and to permit any future use of this site. The Department's recommendations include a number of controls, which the Department considers will mitigate any negative environmental impacts of the proposal. All issues raised by members of the public have been duly considered during the assessment of the proposed development.

APPENDIX C – SUBMISSIONS

Government Authorities

No	Details	Issues Raised
1.	Mr Ian Reynolds General Manager Blacktown City Council PO Box 63 BLACKTOWN NSW 2148	<ul style="list-style-type: none"> ▪ Proposed remediation should be of a standard to accommodate public access within the proposed regional park, as Plan of Management has not yet been determined and as such should cater for a range of possible access uses. ▪ Concerned that 30cm would be insufficient and likely to be disturbed by fauna. Capping should not occur unless area is certified as having contamination levels below thresholds set out in ANZECC Guidelines. ▪ No comments on biodiversity, considering it is anticipating that DEC would consider these issues. However, is requested that an update on the flora and fauna assessment be provided. ▪ Hours of work should be restricted to 7am – 5pm Monday to Friday, and 7am – 1pm Saturday.
2.	Mr Derek Steller Regional Planning Coordinator Central Conservation Programs and Planning Department of Environment and Conservation PO Box 1967 HURSTVILLE NSW 2220	<ul style="list-style-type: none"> ▪ Considered the assessment, as required by clause 44 and 55(5) of SREP No.30; ▪ Recommended a number of conditions: <ul style="list-style-type: none"> ○ Site Audit Statement be issued ○ Appropriate occupational health and safety management plans be developed ▪ Has no objections to the proposal, but recommends the Minister consider: <ul style="list-style-type: none"> ○ Capping material be validated, be of comparable soil type and minimal weed infestation ○ Monitor capping to ensure re-growth ○ Areas to be marked before works ○ Slashing be limited as much as possible ○ Vegetation not be slashed below 10 centimetres ○ That workers are trained so they are aware of the conservation values of the site ○ DEC to be notified prior to the commencement of works. ▪ These comments are not part of DEC's integrated approval role with respect to Aboriginal Heritage.

Public Submissions

No.	Position	Issues Raised
1.	Object	<ul style="list-style-type: none"> ▪ Concerned that destruction of records by former employees/employers would not permit proper remediation of site or pose a risk to workers during these works. States a Parliamentary Inquiry be held into the St Marys site.
2.	Object	<ul style="list-style-type: none"> ▪ Lack of local road and drainage infrastructure to cope with future development and impacts on surrounding network.
3.	Object	<ul style="list-style-type: none"> ▪ Opposes extensive clearing of vegetation of Cumberland Plain woodland and other endangered species.
4.	Object	<ul style="list-style-type: none"> ▪ Believes site should be developed as a zoo. ▪ Should remediate so the area is suitable for other uses besides a regional park ▪ How can you provide certainty that residential gardening would not expose munition waste. ▪ States that proposed remediation works could impact on unrecorded species.

5.	Object	<ul style="list-style-type: none"> ▪ Opposed to DA due to destruction of Cumberland Plain Woodland
6.	Support	<ul style="list-style-type: none"> ▪ No reason given
7.	N/A	<ul style="list-style-type: none"> ▪ Support given to installation of utilities (note: this will be part of separate DA process.
8.	Object	<ul style="list-style-type: none"> ▪ States that objectives of the remediation works are inconsistent with the activities indicated during the exhibition period for SREP 30 – relating to the change in access arrangements. ▪ Believe that the proposed works would not ensure that unrestricted access would be safe, and that remediation works only be carried out if they can be guaranteed to result in improved health and safety conditions for users and minimal environmental impact. ▪ Concerned that the removal of the fencing without extensive testing would put the public at risk. ▪ Proposal is inconsistent with the St Marys EPS objectives (minimisation of impacts on natural values). ▪ Believes the DA reflects commercial gain as opposed to health, safety and the environment ▪ Concerned auditing process has not properly considered anecdotal and recorded evidence regarding extensive dumping on-site and destroyed records. ▪ Believe any consent to destroy should only proceed if community is aware and the relics left in-situ. ▪ Assessment does not consider all listings for threatened species (Aust. Museum Database, etc) ▪ Only used a 5 Km radius for screening assessment. ▪ Application to the Commonwealth has not been considered for species/communities listed under EPBC Act ▪ No consideration of impacts on migratory species ▪ Concerned that <i>Persoonia nutens</i> will be impacted by the proposed slashing activities, which are known to occur in the Eastern Precinct ▪ No assessment of <i>Pimelea spicata</i> (endangered population TSC Act), <i>Marsdenia viridiflora</i> (endangered population TSC Act), <i>Meridolum corneovirens</i> (endangered TSC Act), or Green and Golden Bell Frog (endangered TSC Act). ▪ Assessment/8-part test hasn't considered a number of species identified in the NPWS Atlas, and other listings – this includes the Koala, Swift Parrot, etc. ▪ Inconsistencies in flora and fauna assessment – <i>Dillwynia tenuifolia</i> nos are given as 3,298, but actually is 3,928. Also, assessment doesn't recognise previous detection of these species outside park boundaries. ▪ <i>Mircomyrtus minutiflora</i> – evidence indicates species is present outside regional park and will be impacted by the proposed slashing activities. ▪ Should revise assessment for the DA, the eight-part tests, and conduct additional tests for species not considered.