



## Council Strategy

# Construction Material Resources

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## **Executive Summary**

The timely supply of cost effective road construction and maintenance raw materials is a critical element in achieving the City's infrastructure and asset management objectives.

The ever changing legislative environment in which the mining and extraction of raw materials operates continues to provide challenges for the City, particularly in being able to accommodate the long term needs of our large and ever expanding road network. Environmental constraints, rising transport costs, competing users and the simple availability of strategically located reserves also present many difficulties.

Whilst new technologies may provide solutions in the medium to long term, it is imperative that City has a sustainable raw material supply that is coordinated with the logistical requirements of our works programs. A realistic and sustainably funded commitment to rehabilitation of extraction sites is also necessary.

This strategy advocates a 4-part focus upon exploration, extraction, rehabilitation and research and development. Constant measurement of performance and review of implementation tasks will be necessary to achieve long-term strategic success.

Financial systems must be established to ensure that the real cost of exploration, extraction and rehabilitation is allocated back to jobs on a unit cost basis and that stockpiles are secure and part of inventory management systems.

## **Strategic Context**

This strategy is specifically aligned with the City of Albany's Corporate Plan as outline below

### **Community Vision**

A Thriving City – excellent community infrastructure and services;

### **Mission Statement**

The City of Albany is committed to sustainable managing of Albany's municipal assets.

### **Priority Project**

Major Review Strategy No. 13 – Gravel Supply Strategy: Review existing gravel sources and develop strategy that secures long term gravel supplies for City operations.

## Strategic Focus Areas

### **Exploration**

The availability of construction material is the critical element of the strategy. Ongoing exploration and quantity and quality analysis of materials is necessary along with detailed mapping of supply areas and identification of lead times for approval assessment processes relating to individual sites.

Expenditure related to the establishment of future supplies on privately owned land must be identified within the 5 year business plan and fifteen year financial plan as is the need to identify freehold purchase or prospective leasehold or licensing relationships with landowners. The true cost of exploration must reflect in the final cost of the job.

### **Extraction**

The extraction of materials should be coordinated with the demand requirements of the works program and be extracted and ready for supply at least 12months prior to actual need. Lead times for approval processes are important and changes to statutory processes and procedures may have a significant impact on delays.

A detailed demand analysis should be undertaken when designing and planning all maintenance and construction activities and this data should readily correlate with the location and supply capability of identified extraction pits. The true cost of extraction must reflect in the final cost of the job.

### **Rehabilitation**

Past performance in the rehabilitation of extraction sites has been only average with many sites still environmentally degraded and requiring significant intervention. It is important to accept that site rehabilitation is as important as extraction and must comply with licensing requirements.

Rehabilitation must be undertaken as soon as is realistically practical after extraction occurs and the costs thereon should reflect in the final cost of the job. An inventory of old sites that require remediation will be prepared and funding sought for their remediation.

### **Research and Development**

Rising fuel costs, complicated regulatory environments and diminishing gravel supplies are making alternative sources of supply more and more attractive. In order to evaluate the realistic possibility of using new and radical alternatives, research and understanding of best practices in road maintenance and construction is critical.

As important is a reliable system that can establish the true unit cost of using the existing resource, which should include all expenditure related to exploration, extraction, storage, transport, application and rehabilitation. An absence of true cost data will make comparison and analysis of new alternatives subjective and unreliable.

## Key Actions

### Strategic Focus Area 1: Exploration

<b>1. Establish inventory of all sites under City control and establish quality and quantity of resource and lead time for approval process.</b>	
Timeframe	Complete by 2007
Resources	In house Surveyors
Officer	Manager City Works/Construction Surveyor
References	Map progressing

<b>2. Identify suitable sites not under Council control and establish cost, preferred tenure, quality and quantity of resource and lead time for approval process.</b>	
Timeframe	Complete by 2007
Resources	\$20,000 (testing)
Officer	Manager City Works
References	To be developed

<b>3. Prepare Masterplan, mapping and identifying all sites, quantities, quality, actions necessary for release and extraction timeframe.</b>	
Timeframe	Complete by mid 2007
Resources	Nil
Officer	Manager City Works
References	Map developing

### Strategic Focus Area 2: Extraction

<b>4. Establish strategic resource requirements by analysing asset master plans and construction and maintenance schedules for input to Masterplan</b>	
Timeframe	Complete by mid 2007
Resources	Nil
Officer	Executive Director of Works & Services
References	To be developed

<b>5. Establish inventory of all existing degraded sites requiring rehabilitation for input into Masterplan.</b>	
Timeframe	Complete by Dec 2007
Resources	Nil
Officer	Manager City Works
References	See attached map showing location of site to be rehabilitated

**Key Actions (continued)**  
**Strategic Focus Area 3: Rehabilitation**

<b>6. Implement and continue annual rehabilitation of existing degraded sites.</b>	
Timeframe	Ongoing
Resources	Costs are offset by levy of \$1.00/m3 extracted
Officer	Manager City Works
References	See attached procedure for rehabilitation

**Strategic Focus Area 4: Research and Development**

<b>7. Undertake research into cost effective best practice road building materials.</b>	
Timeframe	Ongoing from 2007
Resources	(Works staff and equipment) \$50,000
Officer	Manager City Works
References	To be developed

**Performance Measures**

**Exploration**

Total number of m3 available/m3 approved for extraction.

**Extraction**

Total m3 used/Council supplied m3

**Rehabilitation**

Percentage of annual hectares rehabilitated against total unrehabilitated hectares

**Research and Development**

Percentage of total amount of gravel used/the amount of recycled for reconstituted gravel used

**Review**

Executive Director of Works & Services to review annually on or before 30<sup>th</sup> June.

## **Reference Documents**

### *Resource Location map*

- Local Government Access to Basic Raw Materials from State Forest and Timber Reserves, C.A.L.M. Policy Statement No 2, amended Feb 1993.
- Basic raw materials - Albany Regional Strategy, Land division, Sept 1996.
- Establishment and Rehabilitation of Material Pits and Reserves, City of Albany internal doc, Oct 2005.
- Guidelines for the Management and Rehabilitation of Gravel Pits, C.A.L.M