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REHABILITATION & MANAGEMENT
: ELDEBSLIE SAND & SOIL DEPOSITS

CONTRIBUTIONS PLAN NO. 6

CAMDEN COUNCIL

1. PURPOSE OF THE PLAN

The purpose of this Plan is to facilitate the extraction, rehabilitation and management of the Elderslie sand and soil deposits by means of a levy imposed on all sand and soil extracted from Elderslie.

2. OBJECTIVES OF THE PLAN

The objectives of this Plan are to:

- provide a funding mechanism to implement the recommendations of the Elderslie Sand and Soil Deposits: Land Management Study, Volume VI-Summary Environmental Impact Statement as they apply to the extraction program, environmental safeguards, management guidelines and budget provisions of the Study;
- achieve a post-extractive land form compatible with future urban development;
- conform with government policies embodied in Regional Environmental Plan (REP) No. 9; and
- ensure effective and efficient achievement of Council's responsibilities pursuant to Section 94 of the Environmental Planning and Assessment Act.

3. AREA TO WHICH THE PLAN APPLIES

This Plan applies to the area shown on Map A in Appendix 1.

4. RELATIONSHIP BETWEEN THIS PLAN AND EXISTING PLANS AND POLICIES

This Plan relates to:

- Elderslie Sand and Soil Deposits: Land Management Study, Volume VI - Summary Environmental Impact Statement⁽¹⁾;
- REP No. 9⁽²⁾;
- The New Cities of Campbelltown, Camden, Appin Structure Plan⁽³⁾;
- Sydney Into Its Third Century⁽⁴⁾
- Sydney's Future⁽⁵⁾
- Local Environmental Plan (LEP) No. 48⁽⁶⁾;
- Section 94 Contributions Plan Manual⁽⁷⁾; and
- Statement of Duties for Extractive Industries Officer⁽⁸⁾.

5. ESTABLISHMENT OF NEXUS

5.1 Overview

Fundamental to the levying of developer contributions is the establishment of a nexus between proposed development and the need for increased services and facilities.

There are three aspects to nexus, namely:

- causal, ie. the need for the service or facility being a direct result of the development;
- physical, ie. the service or facility being near enough to provide benefit to the development; and
- temporal, ie. the service or facility being provided within a reasonable time.

In this Plan the nexus is the link between the need for high quality sand and soil resources created by new urban development and an increasing population within the Sydney region (particularly the Camden Local Government Area); and the ability to meet this need by the managed extraction of the Elderslie sand and soil deposits with the subsequent rehabilitation of the extraction sites for the general benefit of the local community.

Nexus is achieved in that:

- rehabilitation of the extraction sites is a direct consequence of the extraction process;
- the post-extractive land uses the rehabilitated sites will service the Elderslie area generally; and
- rehabilitation and post-extractive use of the deposits will occur progressively within a managed extraction program.

5.2 Determination of Need

5.2.1 Introduction

The following summary reiterates many of the comments made in Volume VI of the Land Management Study. The full study should be read in conjunction with this Plan.

The sand and soil deposits at Elderslie have been known and extracted on an irregular and intermittent basis for many years. As the Sydney region has developed, and more particularly, since the Structure Plan for Campbelltown/Camden/Appin has been implemented, the demand for sand and soil has increased. The situation has changed from an occasional truck load to regular extraction.

It is only in recent years that the strategic importance of this comparatively large deposit of both sand and soil has been realised. With the future urban growth in the Campbelltown/Camden/Appin area, land owners, extractive industry, Camden Council and the Department of Planning view the Elderslie deposits as a major resource and significant element in the planning of the area. There are concerns that this resource should not become sterilised by uncontrolled and unco-ordinated urban development and that the "highest and best" post-extractive use of this land should be achieved, having regard to the environmental sensitivity of the area.

5.2.2 Importance of the Deposits

There are a number of reasons why the sand and soil deposits at Elderslie are important. These reasons are identified in Volume VI of the Study and include:

- they contain an estimated 14 million tonnes of recoverable and saleable sand and 2.9 million tonnes of saleable soil;
- they are an important source of bricklayer's sand which is not found elsewhere;
- they can be extracted simply and economically;
- they are within economic transport distance of the Sydney region and are central to the Campbelltown/Camden/Appin area;

- they are serviced by a major arterial road network which links them to both the local and Sydney markets; and
- they can be worked so that the post-extraction landform blends into the surrounding area and the land used for new purposes.

5.2.3 Market Demand

The market demand for the Elderslie sand and soil deposits is discussed in Volume VI of the Study.

It is difficult to make specific estimates on the demand for sand from the Elderslie deposits as it is closely linked with the overall demand for sand in the Sydney region. The predictions of the Study have not eventuated and demand has fallen due to changing market conditions and added competition from new extraction ventures in surrounding districts. Nevertheless, the deposits are an important part of the sand resources for Sydney which are not yet subject to sterilisation by planning or environmental factors and their continued extraction is necessary to avoid shortfalls in the supply of mortar/bricklayer's sand and/or fine to medium grained sands.

Estimates of market demand for the soil deposits are also difficult to make because of the variable market. Most of the soils, after suitable mixing and blending, make a high quality top dressing soil that is used for cricket pitches, bowling greens and similar uses. The soil from these deposits is sold into the whole of the Sydney market.

In addition, the development of the Campbelltown/Camden/Appin area has opened up a substantial local market for garden topsoil.

5.2.4 The Land Management Study

In the mid 1970's a study was commissioned to investigate the environmental consequences of extracting the Elderslie deposits and to make recommendations for orderly extraction in a manner that would minimise environmental degradation. This study was the Elderslie Sand and Soil Deposits Land Management Study and was published in October 1977. It comprised:

- Volume I: Environmental Impact Statement
- Volume II: Land Management Report
- Volume III: Operational Manual
- Volume IV: Figures and Summary of Findings

The Study had the following objectives:

- to determine the "highest and best" use of the extraction area;
- to evaluate the environmental consequences of extraction;
- to select a feasible extraction program; and
- to suggest a conceptual post-extractive land use for a variety of purposes of general benefit to the community.

The Study proposals were placed on public exhibition and submissions invited from landowners, extractors and affected parties.

Volume V: Land Management Review was published in November 1978 and reviewed the original study recommendations together with the public submissions received. It became the basis for the operation of the land management plan. Volume V was adopted by Camden Council, concurred with by the Macarthur Development Board as the then local agent of the Department of Planning and endorsed by the then Minister for Planning and Environment.

With the introduction of the Environmental Planning and Assessment Act in 1979, sand and soil extraction at Elderslie became a 'designated development' requiring each development application to be accompanied by an environmental impact statement. The Department of Planning directed that an environmental impact statement be prepared to update and condense all material contained in earlier volumes of the Study into a single environmental impact statement.

Accordingly, the material contained in Volumes 1 to V was drawn together into Elderslie Sand and Soil Deposits: Land Management Study, Volume VI - Summary Environmental Impact Statement.

Volume VI is a broad review of the strategy and extraction program, assesses the environmental consequences of the overall extraction program and sets the framework for extraction of individual sites. Site specific Environmental Impact Statements will accompany development applications to extract each site.

5.2.5 Sydney Regional Environmental Plan (REP) No. 9 - (Extractive Industry)

In addition to the Land Management Study, the Elderslie deposits are also subject to REP No. 9 which came into effect in October, 1986. The REP is shown in Map B in Appendix 2.

The REP aims to facilitate the development of extractive resources in proximity to the population of the Sydney region by inter alia, identifying land which contains extractive material of regional significance and ensuring that the land is not developed for purposes which are incompatible with the future extraction of that material.

The REP requires that a plan of management must be in place before extraction can take place over any land. Volume VI of the Land Management Study is the plan of management.

5.3 Provision of Services and Facilities

5.3.1 The Extraction Program

The strategy for the ordered development and extraction of the deposits is detailed in Volume VI of the Study. Extraction will progressively move through both the sand and soil deposits leaving behind a landform and foundation condition that will be suitable for post-extractive land use. Only a portion of the deposits will be worked at any time with soil deposits extracted separately from the sand deposits.

A cost-benefit analysis and evaluation of the 'highest and best' use of the land in both environmental as well as economic terms, has shown that certain areas should not be extracted.

The extraction program has been developed to ensure adequate disposal areas for the waste products of extraction, such as tailings, and also to ensure that run-off from the extraction areas avoids pollution of the Nepean River.

The extraction program is integrated with a conceptual post-extractive land use. Succeeding stages of the extraction program depend on earlier phases to be completed so that extraction and

rehabilitation can be undertaken at minimal cost and with the least environmental disturbance.

The extraction program is designed to be flexible and adaptable to change during the anticipated life of the deposits. However, if an alteration to the program is required, it is vital that the overall objectives and philosophy set out for the Study are followed so that an acceptable final result is achieved.

5.3.2 Post-Extractive Land Use

Investigations were undertaken as a part of the Land Management Study to determine the most suitable final land use for the extraction area. The extraction program, the post-extractive landform and constraints on fill and tailings disposal are all directed to the proposed final use of the area.

The possible post-extractive land use as shown on Map C in Appendix 1 is conceptual only and is not to be taken as a statutory land use plan. Council will prepare an LEP for the area which may incorporate the following post-extractive land uses as indicated in the conceptual plan:

- a residential area;
- an industrial park;
- retention of existing housing;
- retention of the flood plain for non-urban uses;
- an open space network based on existing natural waterways; and
- active recreational areas.

These represent post-extractive land uses consistent with the planning strategy for the Camden/Campbelltown/Appin area and ensure a satisfactory end use and integration with the surrounding area.

5.3.3 Schedule of Works

The Schedule of Works to manage the extraction program and achieve the conceptual post-extractive land use is shown in Table A in Appendix 2.

This Plan selects a time frame of 24 years from 1994 until 2017 inclusive. It differs from the time frame of 25-30 years from 1981 suggested in the Study because of the slowdown in extraction caused by the reduced market demand referred to earlier.

The selected time frame is divided into four year phases to provide some degree of flexibility in implementing the Schedule of Works. While the Schedule indicates that items of expenditure will occur within specific years, the Plan allows the works expenditure to take place at any time within the affected four year phase should circumstances warrant it.

The estimated costs in the Schedule of Works assume an annual increase of 4% in the Consumer Price Index (CPI) for the whole time frame⁽⁹⁾ and have been estimated to balance with the expected income.

Land acquisition costs have been estimated from the Valuer General's Department rating valuations for 1992 for all properties in the Elderslie deposits and dividing the total costs by the total area to arrive at an average cost per hectare.

Contribution and landscaping costs have been estimated from Council's rates for similar works in 1992.

This Plan allows the estimated costs within the Schedule of Works to be varied to a maximum of 10% without the need for Council to publicly re-exhibit or re-approve the Plan pursuant to Clause 41K(1) of the Regulations.

The following rehabilitation and management proposals are set out in the Land Management Study and are included in the Schedule of Works to this Plan.

- land acquisition for relocation of Springs Road;
- rebuilding Springs Road and part of Richardson Road to existing standards;
- construction of access roads and temporary road diversions for staged works;
- relocation of existing water, telephone and electricity services to new alignments;
- design of relocated roads;

- supply of plant material, planting, revegetation and landscaping of areas not normally undertaken by extractors as part of their restoration work;
- design, rehabilitation and construction of playing fields and oval;
- land acquisition for open space, playing fields and oval;
- land acquisition of areas uneconomical to extract on their own;
- relocation of the Clutha weighbridge; and
- Council supervision and administration.

Due to the budget headings of the Study being of a general nature and containing inconsistencies and omissions in road lengths and land areas, this Plan necessarily estimates the costs of items of works on re-measured criteria. There will therefore be some differences between the Study and this Plan.

There are also some items of works listed in the Land Management Study which are excluded from this Plan. These are:

- land acquisition for:
 - a 40 metre wide alignment for the new Springs Road;
 - a barrier reserve on the north side of Springs Road;
 - a golf course;
- construction of a temporary access road to the Narellan South reservoir;
- landscaping of the barrier reserve on the north side of Springs Road; and
- some landscaping of open space along the Nepean River and the proposed playing fields and oval.

The reasons for their exclusion are outlined as follows:

Council has determined that Springs Road remain as a local road and accordingly, a 40 metre wide alignment is not required. Consequently, there is no need for land acquisition of a barrier reserve on the north side of Springs Road nor any need to landscape this reserve.

In addition, it is considered that the acquisition of land for a golf course will not only meet the needs of the urban development proposed for the Elderslie deposits, but will also serve the needs of the whole Camden Local Government Area as well as

adjoining local government areas. Accordingly, under the provisions of S.94, it is inappropriate that levies from the Elderslie sand and soil deposits should totally fund such land acquisition.

Furthermore, the construction of a temporary access road to the Narellan South reservoir is now not required as access will be provided as part of the future residential subdivision to be undertaken by Landcom.

Finally, since completion of the Land Management Study the following events have contributed to a shortfall in expected income to fund the management and rehabilitation program:

- a slowdown in the rate of extraction caused by changing market conditions;
- the formula in the Study which allowed Council to apply only 90% of any CPI increase to the calculation of annual levy rates; and
- the depth of extractable material as indicated in the Study was not achievable with the clay bed on some sites being up to three metres higher than anticipated.

Therefore, in order to achieve a financial balance at the end of the management and rehabilitation program, some landscaping of open space areas have had to be excluded from this Plan.

5.3.4 Management

The Land Management Study made provision for the costs of supervision, implementation and financial administration to be included in the levy on extractors. Given the scope of the extraction and rehabilitation program and the lengthy time frame, it is appropriate that the program be properly managed and that these costs be incorporated into the levy contributions of this Plan. Table B in Appendix 2 indicates these costs.

An Extractive Industries Officer is employed full-time to oversee the extraction and rehabilitation program and to administer this Plan. These costs are itemised in Part B1 of the Table.

In addition, there are administrative costs of a financial nature which are borne by Council from time to time and these are indicated in Part B2 of the Table.

The time frame for management of this Plan is reduced to a period of 21 years compared with 24 years for the Schedule of Works. This is because by the end of the year 2014 all the extraction program will have been completed and all income to the Plan collected. The rehabilitation program will continue for the years 2015-2017 but this can be satisfactorily managed within normal works programs replacing the need for a full-time Extractive Industries Officer.

As with the Schedule of Works, the estimated costs in Table B assume an annual increase in the CPI of 4% for the whole time frame.

This Plan also allows the estimated management costs to be varied to a maximum of 10% without the need for Council to publicly re-exhibit or re-approve the Plan pursuant to Clause 41K(1) of the Regulations.

5.3.5 Anticipated Income

In accordance with the Land Management Study, this Plan receives income from the following sources:

- levies on extractors;
- rental from O'Neill houses;
- sale of land from O'Neill houses;
- sand royalties from beneath O'Neill houses;
- sale of land of Clutha Road reserve and weighbridge site;
- sand royalties from beneath Clutha Road reserve and weighbridge site;
- sale of land of existing Springs Road reserve when the road is re-aligned; and
- sand royalties from beneath existing Springs Road reserve.

These income resources are itemised in Table C in Appendix 2.

Part C1 of the Table indicates the expected annual income from the levy imposed on sand and soil extracted from all the sites in Elderslie based on an annual extraction rate from 1981 to 1992 for all materials removed and averaged for the remaining deposits. Map D in Appendix 1 indicates the location of these sites.

Income from other sources is detailed in part C2 of the Table.

As explained earlier, a combination of events have contributed to a shortfall in expected income to fund the management and rehabilitation program as originally outlined in the Land Management Study. Therefore, in order to achieve a balance between income and expenditure at the end of the time frame, some landscaping works included in the Study are excluded from this Plan.

Part C3 of the Table indicates the achievement of a financial balance.

5.4 Conclusion

Having regard to the detailed proposals contained in the Land Management Study, it is concluded that extraction of the Elderslie sand and soil deposits is:

- necessary to meet anticipated market demand;
- compatible with the "highest and best" use of the land;
- necessary in achieving a more socially, economically and environmentally sound land use; and
- consistent with good planning for the area.

To achieve the objectives of the Land Management Study, the imposition of a rehabilitation and management levy is necessary to assist in funding the budget requirements of the Study as itemised in Tables A, B and C of this Plan.

6. CALCULATION OF CONTRIBUTIONS

Contributions under this Plan will be levied via a condition of development consent and will be known as a rehabilitation and management levy. The levy will be imposed on all sand and soil extracted from the Elderslie deposits on a rate per tonne basis.

The rehabilitation and management levy will be adjusted annually from the first day of January in accordance with the following formula:

$$AL = OL \times \frac{B_1}{N_1}$$

Where:

AL is the adjusted levy rate payable per tonne of material extracted and carried away from the land;

OL is the levy payable during the preceding year;

N₁ is the Index number for Sydney of selected major building materials; sand; aggregate and filling; as set out in the Price Index of Materials Used in Building Other Than House Building published by the Australian Bureau of Statistics for the month of November of the year in which levy rates are to be adjusted;

B₁ is the Index number for Sydney of selected major building materials; sand; aggregate and filling; as set out in the Price Index of Materials used in Building Other Than House Building published by the Australian Bureau of Statistics for the month of November for the year previous to the year in which levy rates are to be adjusted.

The levy rate for 1994 is set at 72 cents per tonne.

Should the ABS figure not be available or obsolete, the Consumer Price Index (All Groups, Sydney) will be used in calculating the levy.

7. GOODS AND SERVICES TAX

In circumstances where the cost of providing the public amenities and services identified in this Plan is increased as a result of Council becoming obliged to pay Goods and Services Tax (GST) for the supply of these public amenities and services, the contribution rate payable under this Plan will be increased by an equivalent amount.

8. METHOD OF PAYMENT OF CONTRIBUTIONS

The rehabilitation and management levy will be paid monthly within ten days of the last day of each calendar month during the life of the development consent.

- with each monthly payment, the extractor will provide Council with a certified statement indicating the quantity of sand and/or soil removed from the site during the month.
- the extractor will keep for at least 24 months after the end of each year during the life of the consent, evidence of the quantities (e.g. delivery dockets, weighbridge slips) of sand and/or soil removal in the previous year. Council will have the right to inspect and audit books of account, statements, documents and files of the extractor relating to the removal

- of sand and/or soil. At the request of Council the extractor will make these available for inspection or audit.
- the contractor will pay to Council the cost of audit if the audited error exceeds 3%.
- should Council initiate a survey that identifies a variance of more than 8% between the certified statement and the material measures as extracted from the land, the extractor will pay the cost of the survey.

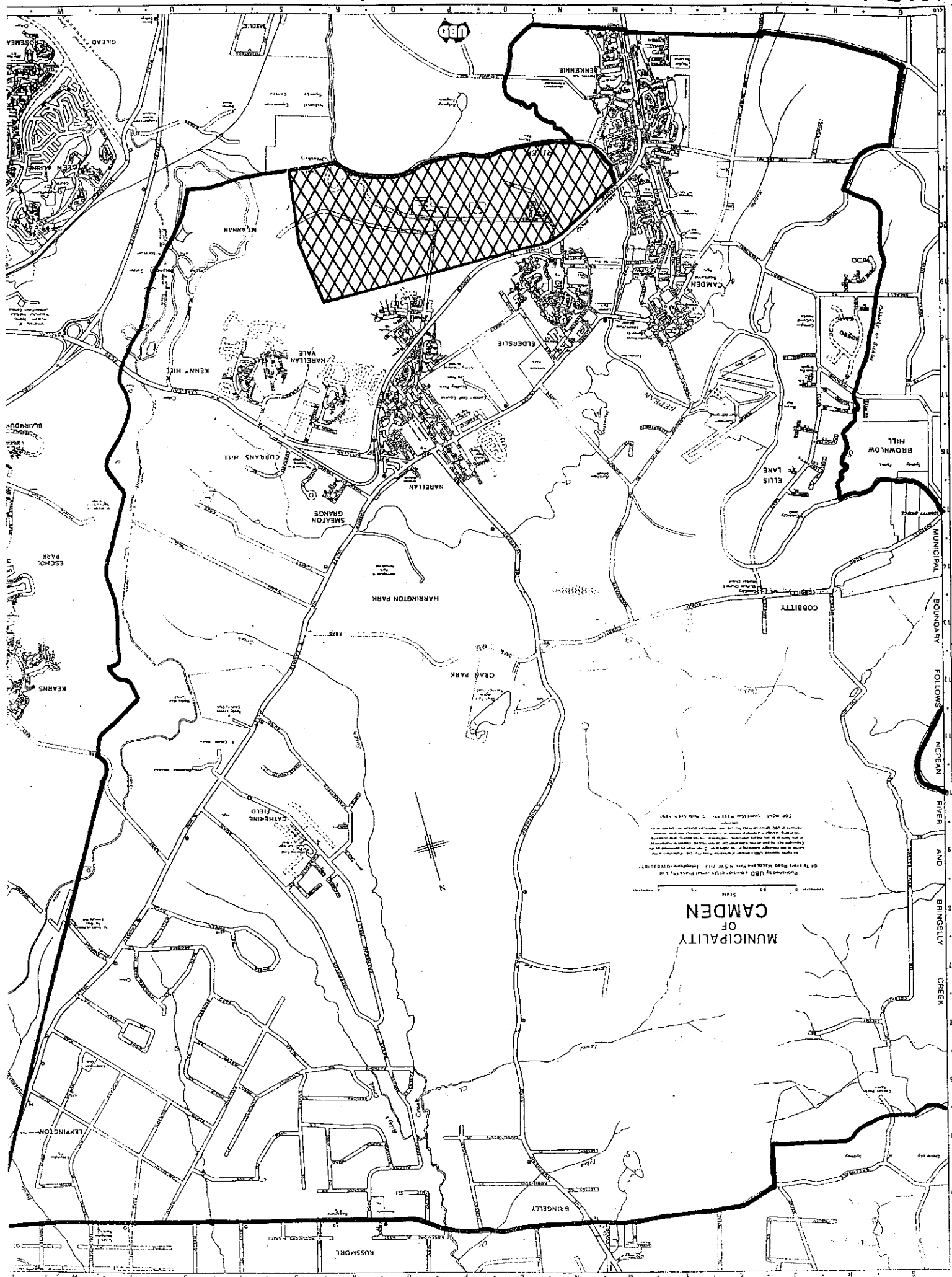
9. REVIEW OF THE PLAN

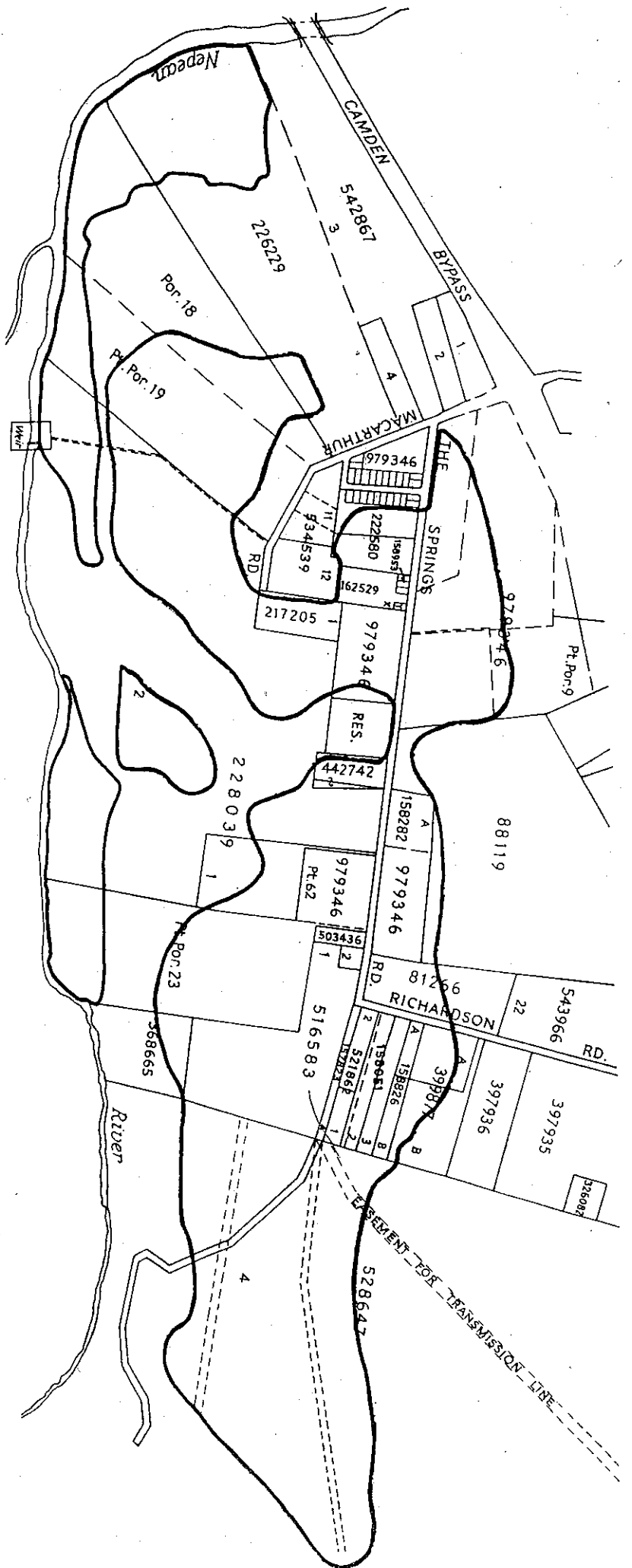
This Plan will be reviewed by Council at the end of each 4 year phase of the Schedule of Works or such lesser time as Council deems necessary.

MAP A: AREA TO WHICH THE PLAN APPLIES

PLAN AREA 

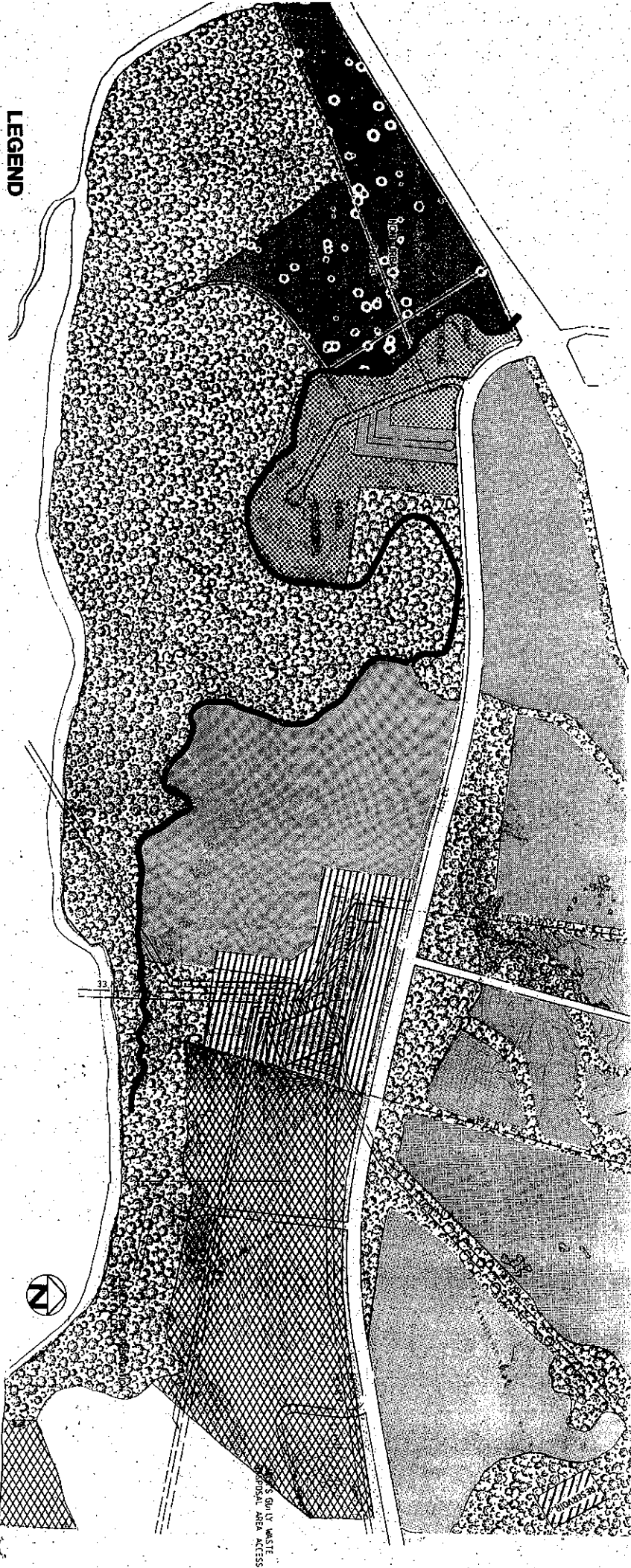
COUNCIL BOUNDARY





MAP B: EXTRACT FROM REGIONAL ENVIRONMENTAL PLAN NO.9 (EXTRACTIVE INDUSTRY)

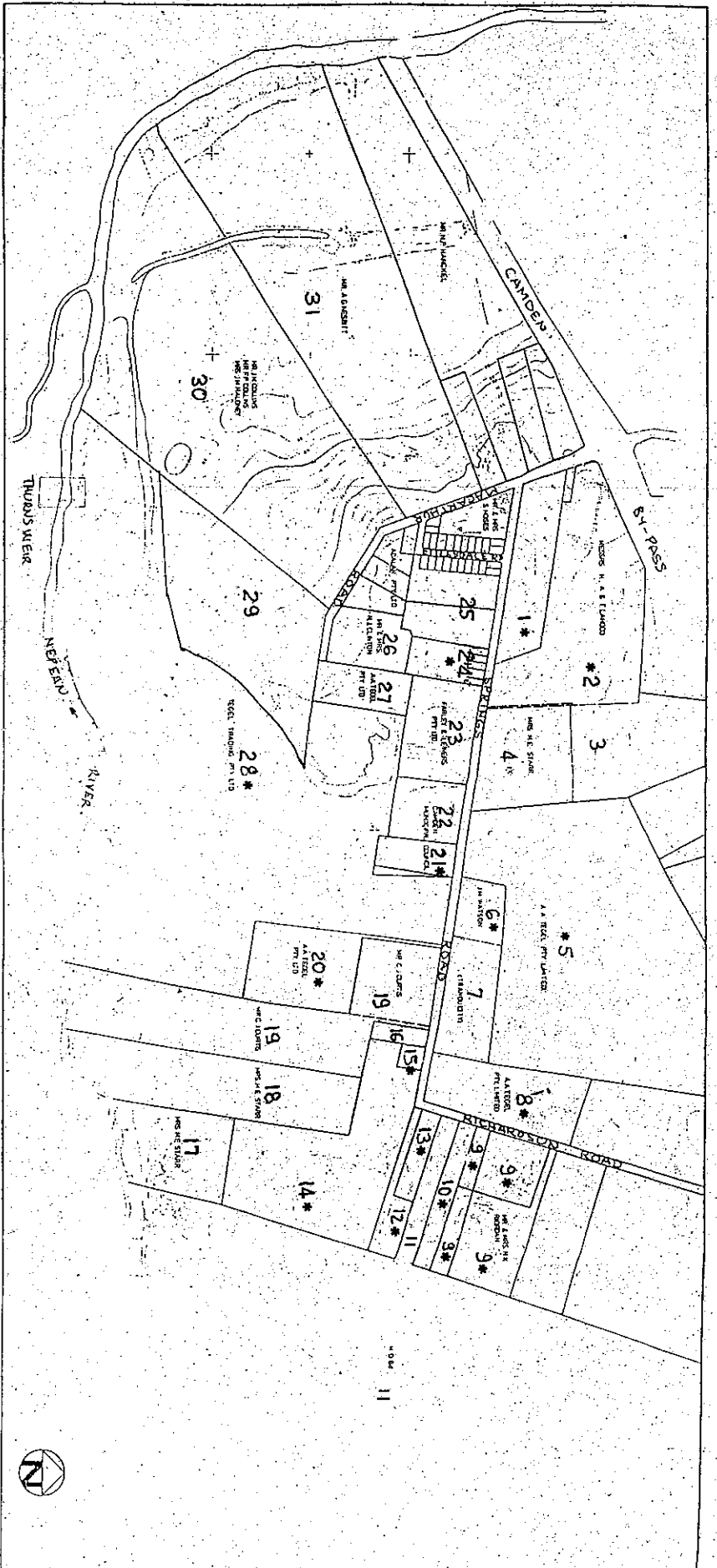
- LEGEND**
- 100 YEAR FLOOD LINE
 - RESIDENTIAL
 - RURAL RESIDENTIAL
 - RURAL
 - INDUSTRIAL
 - SPECIAL PURPOSES
 - OPEN SPACE & RECREATION



CONTOUR INTERVAL 1m - STANDARD DATUM

SCALE IN METRES

MAP C: CONCEPTUAL POST-EXTRACTIVE LAND USE



SITE	OWNER	SITE	OWNER
1 *	Seovic Civil Engineering P/L	17	Mrs M.E. Starr - Hoxeda P/L
2 *	H.A. & T. Lahood	18	Mrs M.E. Starr - Hoxeda P/L
3 *	J.M. & W.C. Tripodi	19	Springs S/S - Carmel Resources
4 *	Mrs M.E. Starr	20 *	A.A. Tegel P/L (Inghams)
5 *	A.A. Tegel P/L (Inghams)	21 *	Camden Municipal Council
6 *	Carmel Resources (Springs - Garmark)	22	Camden Municipal Council
7	J.M. & W.C. Tripodi	23	Springvale Sands P/L - Menangle S/S
8 *	A.A. Tegel P/L (Inghams)	24 *	Camden Municipal Council
9 *	N.K. & C.F. Riordan	25	Springvale Sands P/L - Menangle S/S
10 *	Riordan Family Trust	26	N.J. Clinton
11	Department of Housing	27	A.A. Tegel P/L (Inghams)
12 *	Cutha Services P/L	28 *	Indaal P/L - Cornish
13 *	Springvale Sands P/L - Menangle S/S	29	Tegel Trading P/L
14 *	Prospect County Council	30	M. Collins & Sons
15 *	Prospect County Council	31	M. Collins & Sons
16.	Springs S/S - Carmel Resources		

OWNERS	SITES
1	Seovic Civil Engineering P/L (1)
2	H.A. & T. Lahood (2)
3	J.M. & W.C. Tripodi (3, 2)
4	Mrs M.E. Starr - Hoxeda P/L (4, 17, 18)
5	A.A. Tegel P/L (Inghams) (5, 8, 20, 27)
6	Carmel Resources (Springs - Garmark) (6, 16, 19)
7	N.K. & C.F. Riordan (9)
8	Riordan Family Trust (10)
9	Department of Housing (11)
10	Cutha Services P/L (12)
11	Springvale Sands P/L - Menangle S/S (13, 23, 25)
12	Prospect County Council (14, 15)
13	Camden Municipal Council (21, 22, 24)
14	N.J. Clinton (26)
15	Indaal P/L - Cornish (28)
16	Tegel Trading P/L (29)
17	M. Collins & Sons (30, 31)

* EXTRACTION SITES SUBJECT TO A ROAD MAINTENANCE CONTRIBUTION PURSUANT TO CONTRIBUTIONS PLAN No. 7

MAP D - ELDERSLIE SAND AND SOIL DEPOSITS : EXTRACTION SITES

TABLES

APPENDIX 2

TABLE A - SCHEDULE OF WORKS YEARS 1994 TO 2017

ITEMS OF EXPENDITURE		1994 to 1997 JULY - JUNE	1998 to 2001 JULY - JUNE	2002 to 2005 JULY - JUNE	2006 to 2009 JULY - JUNE	2010 to 2013 JULY - JUNE	2014 to 2017 JULY - JUNE
LAND ACQUISITION							
(1.1)	New Springs Road (reserve) Jacks Gulley tip access road	66,602	54,642				286,834
(1.2)	Access Roads to Glenlea Washery (0.78ha)			18,355			134,087
(1.3)	Jacks Gulley tip (0.75ha)				11,842		1,783,574
(1.4)	Open Space along Nepean River (94.4ha)	643,816		2,028,711			3,531,751
(1.5)	Curra Road & Wainbridge Site (2.57ha)					192,168	
(2)	DESIGN & MAPPING						
(2.1)	Design of relocated road on new alignments			43,781			59,160
(2.2)	Design of playing fields & oval						
(3)	CONSTRUCTION						
(3.1)	RECONSTRUCTED ROADS						
(3.1.1)	Spring Road to existing 2 lane standard 1.758km			300,000	406,655		500,000 389,344
(3.1.2)	Spring Rd Extension to Jacks Gulley Tip 1.3km						
(3.1.3)	Richardson Road (part only) 220m				28,787		143,687
(3.1.4)	Enticedale Rd C/D-55c						
(3.2)	TEMPORARY ACCESS ROADS						
(3.2.1)	Spring Rd between old & new reserves			200,000	200,000		188,560
(3.3)	PERMANENT ACCESS ROADS						
(3.3.1)	to properties along reconstructed Springs Road			40,000	80,000		24,100 303,750
(3.3.2)	to Glenlea Washery (430m)						254,907
(3.3.3)	to Jacks Gulley tip (375m)						
(3.4)	PLAYING FIELDS & OVAL						
(3.4.1)	Footpaths						
(4)	REDEVELOPMENTS						
(4.1)	Existing water mains						
(4.2)	Existing telephone services						
(4.3)	Existing electricity services						
(4.4)	Transmission lines to southwest	13,000			500,000 517,245		152,295
(4.5)	Curra weighbridges						
(5)	LANDSCAPING						
(5.1)	Open space along Nepean River						
(5.2)	Playing fields & oval						
(6)	MANAGEMENT						
(6.1)	Extractive Industries Office (refer Table B.1)	1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	45,468 47,247 49,097 51,020 53,021 55,102 57,266 59,517 61,858 64,282 66,824 69,456 72,195 75,042 78,004 81,084 84,288 87,613 91,064 94,637 98,435 102,356 106,400 110,576 114,884 119,324 123,895 128,597 133,431 138,398 143,500 148,736 154,105 159,607 165,242 171,011 176,914 182,951 189,122 195,427 201,866 208,439 215,146 221,987 228,963 236,074 243,319 250,699 258,213 265,861 273,643 281,559 289,600 297,775 306,084 314,527 323,103 331,812 340,655 349,632 358,743 367,987 377,364 386,874 396,519 406,299 416,213 426,261 436,444 446,761 457,207 467,782 478,486 489,319 499,281 509,371 519,589 529,935 540,417 551,034 561,786 572,673 583,695 594,951 606,341 617,864 629,520 641,301 653,206 665,236 677,391 689,671 702,076 714,606 727,260 740,038 752,941 765,969 779,123 792,402 805,812 819,352 833,021 846,819 860,746 874,799 888,978 903,282 917,711 932,269 946,946 961,742 976,657 991,691 1,006,844 1,022,116 1,037,506 1,053,014 1,068,640 1,084,384 1,100,246 1,116,225 1,132,321 1,148,534 1,164,864 1,181,311 1,197,874 1,214,552 1,231,345 1,248,253 1,265,276 1,282,413 1,299,664 1,317,029 1,334,508 1,352,099 1,369,803 1,387,620 1,405,550 1,423,592 1,441,746 1,459,912 1,478,190 1,496,579 1,515,079 1,533,690 1,552,412 1,571,245 1,590,188 1,609,241 1,628,403 1,647,674 1,667,054 1,686,542 1,706,139 1,725,844 1,745,657 1,765,578 1,785,606 1,805,741 1,825,982 1,846,329 1,866,781 1,887,338 1,907,999 1,928,765 1,949,635 1,970,609 1,991,687 2,012,868 2,034,152 2,055,539 2,077,029 2,098,621 2,120,315 2,142,111 2,164,009 2,186,009 2,208,111 2,230,315 2,252,621 2,275,029 2,297,538 2,320,148 2,342,858 2,365,668 2,388,578 2,411,588 2,434,697 2,457,906 2,481,214 2,504,622 2,528,129 2,551,735 2,575,440 2,599,244 2,623,147 2,647,149 2,671,250 2,695,450 2,719,749 2,744,147 2,768,644 2,793,240 2,817,935 2,842,729 2,867,622 2,892,613 2,917,703 2,942,891 2,968,177 2,993,561 3,019,043 3,044,623 3,070,301 3,096,077 3,121,951 3,147,922 3,174,000 3,200,174 3,226,444 3,252,810 3,279,272 3,305,830 3,332,483 3,359,231 3,386,074 3,413,012 3,440,145 3,467,373 3,494,696 3,522,114 3,549,627 3,577,234 3,604,936 3,632,732 3,660,623 3,688,609 3,716,690 3,744,866 3,773,136 3,801,500 3,830,058 3,858,711 3,887,459 3,916,301 3,945,237 3,974,267 4,003,391 4,032,609 4,061,921 4,091,327 4,120,827 4,150,421 4,180,109 4,209,891 4,239,767 4,269,737 4,299,799 4,329,953 4,360,200 4,390,540 4,420,973 4,451,500 4,482,121 4,512,835 4,543,642 4,574,542 4,605,535 4,636,621 4,667,799 4,698,169 4,728,731 4,759,385 4,790,131 4,820,969 4,851,899 4,882,922 4,914,038 4,945,247 4,976,549 5,007,943 5,039,430 5,071,010 5,102,682 5,134,447 5,166,305 5,198,256 5,230,300 5,262,436 5,294,664 5,326,984 5,359,396 5,391,899 5,424,493 5,457,178 5,489,954 5,522,821 5,555,779 5,588,828 5,621,968 5,655,199 5,688,521 5,721,934 5,755,438 5,789,032 5,822,716 5,856,490 5,890,354 5,924,308 5,958,352 5,992,485 6,026,707 6,061,018 6,095,418 6,130,007 6,164,685 6,199,452 6,234,308 6,269,253 6,304,287 6,339,410 6,374,622 6,409,923 6,445,313 6,480,791 6,516,358 6,551,914 6,587,559 6,623,293 6,659,116 6,695,028 6,731,029 6,767,119 6,803,298 6,839,565 6,875,920 6,912,363 6,948,894 6,985,513 7,022,221 7,059,018 7,095,904 7,132,879 7,170,043 7,207,295 7,244,636 7,282,066 7,319,585 7,357,192 7,394,887 7,432,671 7,470,544 7,508,505 7,546,554 7,584,691 7,622,916 7,660,229 7,697,630 7,735,119 7,772,696 7,810,361 7,848,114 7,885,955 7,923,884 7,961,901 8,000,006 8,038,199 8,076,480 8,114,859 8,153,326 8,191,881 8,230,523 8,269,253 8,308,071 8,346,977 8,385,971 8,425,053 8,464,223 8,503,481 8,542,827 8,582,261 8,621,782 8,661,391 8,701,088 8,740,873 8,780,745 8,820,705 8,860,753 8,900,889 8,941,113 8,981,425 9,021,825 9,062,313 9,102,888 9,143,550 9,184,299 9,225,135 9,266,058 9,307,068 9,348,165 9,389,349 9,430,619 9,471,975 9,513,417 9,554,945 9,596,558 9,638,256 9,679,939 9,721,707 9,763,560 9,805,498 9,847,521 9,889,629 9,931,821 9,974,097 10,016,457 10,058,899 10,101,424 10,144,033 10,186,725 10,229,500 10,272,358 10,315,299 10,358,323 10,401,431 10,444,623 10,487,898 10,531,256 10,574,697 10,618,221 10,661,828 10,705,518 10,749,291 10,793,147 10,837,086 10,881,107 10,925,210 10,969,395 1,001,762 1,006,122 1,010,475 1,014,821 1,019,160 1,023,492 1,027,817 1,032,135 1,036,446 1,040,750 1,045,047 1,049,337 1,053,620 1,057,896 1,062,165 1,066,427 1,070,682 1,074,930 1,079,171 1,083,405 1,087,632 1,091,852 1,096,065 1,099,971 1,104,079 1,108,180 1,112,283 1,116,379 1,120,468 1,124,559 1,128,651 1,132,745 1,136,841 1,140,938 1,145,036 1,149,135 1,153,235 1,157,336 1,161,438 1,165,541 1,169,645 1,173,750 1,177,856 1,181,963 1,186,071 1,190,180 1,194,290 1,198,401 1,202,513 1,206,625 1,210,738 1,214,851 1,218,965 1,223,080 1,227,195 1,231,311 1,235,428 1,239,545 1,243,662 1,247,780 1,251,898 1,256,016 1,260,135 1,264,254 1,268,373 1,272,492 1,276,611 1,280,731 1,284,851 1,288,971 1,293,091 1,297,211 1,301,331 1,305,451 1,309,571 1,313,691 1,317,811 1,321,931 1,326,051 1,330,171 1,334,291 1,338,411 1,342,531 1,346,651 1,350,771 1,354,891 1,359,011 1,363,131 1,367,251 1,371,371 1,375,491 1,379,611 1,383,731 1,387,851 1,391,971 1,396,091 1,400,211 1,404,331 1,408,451 1,412,571 1,416,691 1,420,811 1,424,931 1,429,051 1,433,171 1,437,291 1,441,411 1,445,531 1,449,651 1,453,771 1,457,891 1,462,011 1,466,131 1,470,251 1,474,371 1,478,491 1,482,611 1,486,731 1,490,851 1,494,971 1,499,091 1,503,211 1,507,331 1,511,451 1,515,571 1,519,691 1,523,811 1,527,931 1,532,051 1,536,171 1,540,291 1,544,411 1,548,531 1,552,651 1,556,771 1,560,891 1,565,011 1,569,131 1,573,251 1,577,371 1,581,491 1,585,611 1,589,731 1,593,851 1,597,971 1,602,091 1,606,211 1,610,331 1,614,451 1,618,571 1,622,691 1,626,811 1,630,931 1,635,051 1,639,171 1,643,291 1,647,411 1,651,531 1,655,651 1,659,771 1,663,891 1,668,011 1,672,131 1,676,251 1,680,371 1,684,491 1,688,611 1,692,731 1,696,851 1,700,971 1,705,091 1,709,211 1,713,331 1,717,451 1,721,571 1,725,691 1,729,811 1,733,931 1,738,051 1,742,171 1,746,291 1,750,411 1,754,531 1,758,651 1,762,771 1,766,891 1,771,011 1,775,131 1,779,251 1,783,371 1,787,491 1,791,611 1,795,731 1,800,851 1,804,971 1,809,091 1,813,211 1,817,331 1,821,451 1,825,571 1,829,691 1,833,811 1,837,931 1,842,051 1,846,171 1,850,291 1,854,411 1,858,531 1,862,651 1,866,771 1,870,891 1,875,011 1,879,131 1,883,251 1,887,371 1,891,491 1,895,611 1,899,731 1,903,851 1,907,971 1,912,091 1,916,211 1,920,331 1,924,451 1,928,571 1,932,691 1,936,811 1,940,931 1,945,051 1,949,171 1,953,291 1,957,411 1,961,531 1,965,651 1,969,771 1,973,891 1,978,011 1,982,131 1,986,251 1,990,371 1,994,491 1,998,611 2,002,731 2,006,851 2,010,971 2,015,091 2,019,211 2,023,331 2,027,451 2,031,571 2,035,691 2,039,811 2,043,931 2,048,051 2,052,171 2,056,291 2,060,411 2,064,531 2,068,651 2,072,771 2,076,891 2,081,011 2,085,131 2,089,251 2,093,371 2,097,491 2,101,611 2,105,731 2,109,851 2,113,971 2,118,091 2,122,211 2,126,331 2,130,451 2,134,571 2,138,691 2,142,811 2,146,931 2,151,051 2,155,171 2,159,291 2,163,411 2,167,531 2,171,651 2,175,771 2,179,891 2,184,011 2,188,131 2,192,251 2,196,371 2,200,491 2,204,611 2,208,731 2,212,851 2,216,971 2,221,091 2,225,211 2,229,331 2,233,451 2,237,571 2,241,691 2,245,811 2,249,931 2,254,051 2,258,171 2,262,291 2,266,411 2,270,531 2,274,651 2,278,771 2,282,891 2,287,011 2,291,131 2,295,251 2,299,371 2,303,491 2,307,611 2,311,731 2,315,851 2,319,971 2,324,091 2,328,211 2,332,331 2,336,451 2,340,571 2,344,691 2,348,811 2,352,931 2,357,051 2,361,171 2,365,291 2,369,411 2,373,531 2,377,651 2,381,771 2,385,891 2,390,011 2,394,131 2,398,251 2,402,371 2,406,491 2,410,611 2,414,731 2,418,851 2,422,971 2,427,091 2,431,211 2,435,331 2,439,451 2,443,571 2,447,691 2,451,811 2,455,931 2,460,051 2,464,171 2,468,291 2,472,411 2,476,531 2,480,651 2,484,771 2,488,891 2,493,011 2,497,131 2,501,251 2,505,371 2,509,491 2,513,611 2,517,731 2,521,851 2,525,971 2,530,091 2,534,211 2,538,331 2,542,451 2,546,571 2,550,691 2,554,811 2,558,931 2,563,051 2,567,171 2,571,291 2,575,411 2,579,531 2,583,651 2,587,771 2,591,891 2,596,011 2,600,131 2,604,251 2,608,371 2,612,491 2,616,611 2,620,731 2,624,851 2,628,971 2,633,091 2,637,211 2,641,331 2,645,451 2,649,571 2,653,691 2,657,811 2,661,931 2,666,051 2,670,171 2,674,291 2,678,411 2,682,531 2,686,651 2,690,771 2,694,891 2,699,011 2,703,131 2,707,251 2,711,371 2,715,491 2,719,611 2,723,731 2,727,851 2,731,971 2,736,091 2,740,211 2,744,331 2,748,451 2,752,571 2,756,691 2,760,811 2,764,931 2,769,051 2,773,171 2,777,291 2,781,411 2,785,531 2,789,651 2,793,771 2,797,891 2,802,011 2,806,131 2,810,251 2,814,371 2,818,491 2,822,611 2,826,731 2,830,851 2,834,971 2,839,091 2,843,211 2,847,331 2,851,451 2,855,571 2,859,691 2,863,811 2,867,931 2,872,051 2,876,171 2,880,291 2,884,411 2,888,531 2,892,651 2,896,771 2,900,891 2,905,011 2,909,131 2,913,251 2,917,371 2,921,491 2,925,611 2,929,731 2,933,851 2,937,971 2,942,091 2,946,211 2,950,331 2,954,451 2,958,571 2,962,691 2,966,811 2,970,931 2,975,051 2,979,171 2,983,291 2,987,411 2,991,531 2,995,651 3,000,000 3,004,120 3,008,240 3,012,360 3,016,480 3,020,600 3,024,720 3,028,840 3,032,960 3,037,080 3,041,200 3,045,320 3,049,440 3,053,560 3,057,680 3,061,800 3,065,920 3,070,040 3,074,160 3,078,280 3,082,400 3,086,520 3,090,640 3,094,760 3,098,880 3,103,000 3,107,120 3,111,240 3,115,360 3,119,480 3,123,600 3,127,720 3,131,840 3,135,960 3,140,080 3,144,200 3,148,320 3,152,440 3,156,560 3,160,680 3,164,800 3,168,920 3,173,040 3,177,160 3,181,280 3,185,400 3,189,520 3,193,640 3,197,760 3,201,880 3,206,000 3,210,120 3,214,240 3,218,360 3,222,480 3,226,600 3,230,720 3,234,840 3,238,960 3,243,080 3,247,200 3,251,320 3,255,440 3,259,560 3,263,680 3,267,800 3,271,920 3,276,040 3,280,160 3,284,280 3,288,400 3,292,520 3,296,640 3,300,760 3,304,880 3,309,000 3,313,120 3,317,240 3,321,360 3,325,480 3,329,600 3,333,720 3,337,840 3,341,960 3,346,080 3,350,200 3,354,320 3,358,440 3,362,560 3,366,680 3,370,800 3,374,920 3,379,040 3,383,160 3,387,280 3,391,400 3,395,520 3,399,640 3,403,760 3,407,880				

TABLE B MANAGEMENT

B-1 EXTRACTIVE INDUSTRIES OFFICER - SALARY, ONCOSTS, EXPENSES

DESCRIPTION	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CORPORATE TRAINING	522	543	565	587	611	635	660	687	714	743	773	804	836	869	904	940	978	1017	1057	1100	1144
SALARY-INCLUDES	34832	36225	37674	39181	40749	42378	44074	45837	47670	49577	51560	53622	55767	57998	60318	62730	65240	67849	70563	73386	76321
ENTITLEMENTS	1072	1115	1159	1206	1254	1304	1356	1411	1467	1526	1587	1650	1716	1785	1856	1931	2008	2088	2172	2259	2349
WORKERS COMPENSATION	3410	3546	3688	3836	3989	4149	4315	4487	4667	4853	5048	5250	5460	5678	5905	6141	6387	6642	6908	7184	7472
SUPERANNUATION	4632	4817	5010	5210	5419	5636	5861	6095	6339	6593	6856	7131	7416	7713	8021	8342	8676	9023	9384	9759	10149
VEHICLE EXPENSES - RUNNING COSTS	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
COMPUTOR EQUIPMENT	25608	26840	27914	29030	30192	31389	32665	33962	35320	36733	38202	39730	41319	42972	44691	46479	48338	50271	52282	54374	56549
VEHICLE PURCHASE	-25808	-26840	-27914	-29030	-30192	-31389	-32665	-33962	-35320	-36733	-38202	-39730	-41319	-42972	-44691	-46479	-48338	-50271	-52282	-54374	-56549
VEHICLE SALE	45463	47247	49087	51020	53021	55102	57266	59517	61858	64292	66824	69456	72195	75042	78004	81084	84288	87619	91084	94687	98435
YEARLY TOTALS	45463	47247	49087	51020	53021	55102	57266	59517	61858	64292	66824	69456	72195	75042	78004	81084	84288	87619	91084	94687	98435

B-2 FINANCIAL ADMINISTRATION

DESCRIPTION	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
TRUST FUND ADMIN.	2537	2638	2744	2854	2968	3087	3210	3339	3472	3611	3755	3906	4062	4224	4393	4569	4752	4942	5139	5345	5559
LEGAL OPINIONS ETC	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
VALUATIONS FOR AC	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
CONTINGENCY ITEMS	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
YEARLY TOTALS	4237	4338	4444	4554	4668	4787	4910	5039	5172	5311	5455	5606	5762	5924	6093	6269	6452	6642	6839	7045	7259

TABLE C ANTICIPATED INCOME

C-1 EXTRACTION PROGRAM & LEVY INCOME 1994 TO 2013

SITE	SITE NO.	TONNAGE EXTRACTED	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AA TEGEL SPRINGS RD LOT 1 DP228039	20	16000			4153	4395	4492																			
CAMDEN COUNCIL NIGHT SOIL DEPOT	21	30000																								
COLLINS - SPRING FARM	30	2355100	673108	28588	27980	28966	30009	31090	32209	33688	34670	35614	37108	38439	39823	41287	42742	44280	45875	47528	49237	51010				
COLLINS - MESSITT	31	1420000	63838	39234	42903	42106	44135	45838	47734	49644	51629	53695	55842	58076	60399	62815	65326	67941	70558	73185	75824	78481	82560			
CLINTONSTAR (SPRINGS SAND & SOIL)	16,17,18,19	1004000	1053919	23163																						
EAST-THURNS WEIR LOT 2 DP228039	28	89182	89102																							
INDAL PL (LOT 6) DP810892	2	647000																								
H & A LANDCO	12,13	520000																								
MEENANGLE (SPRINGVALE) & CLUTHA	4	650000																								
MRS M E STARR (HOVED)	24	750000																								
CAMDEN COUNCIL ONEILL HOUSES	11	3150000	761742	91948	95258	98688	102241	105821	109734	113665	117777	122017	126410	130981	135676	140560	145620	150862	156283	161920	167749	173788	180044			
PREMIUM SANDS DEPT OF HOUSING	14,15	550000	62277	43895	45851	47477	49378	51351	53405	55541																
PROSPECT COUNTY COUNCIL		40000																								
RICHARDSON ROAD RESERVE	5,10	302100			45242	47052	48335	50922	52928																	
R K & C F RICHARDSON	1	200000																								
SECON CIVIL ENGINEERING		455000																								
SPRINGVALE - OLD FARLEY & LEWERS	23,25	1774000	1770529	2152																						
AA TEGELWATSON BATTERS	5,6	15000	6162	6363																						
AA TEGEL LOT 1 END MACARTHUR ROAD	27	300000	180049																							
AA TEGEL ONE RICHARDSON ROAD	8	300000																								
TRANQUILITY - COMPLETED	7	380000	335142																							
WATSON - GARLAND (SPRINGS S/S)	6	65000	36642																							
WOODWARD AT THURNS WEIR (INDAL)	28	265000	132792	50902	52735																					
TOTAL LEVY			1492892	316225	100814	296326	298887	414164	430027	458719	477411	501698	465782	355604	306550	390054	517151	537095	525381	532109	609623	484629	404730			

C-2 OTHER INCOME

SITE	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1. ONEILL HOUSES																									
(1.1) Rental		22714	23923	24567	25550	26572	27635	28740	29890	31086	32323	33622	18156												
(1.2) Sale of land (1.194)													300000												
(1.3) Sand Royalty																									
2. CLUTHA ROAD & WEIGHBRIDGE																									
(2.1) Sale of land (2.57H)																									
(2.2) Sand Royalty																									
3. SPRINGS ROAD																									
(3.1) Sand Royalty																									
(3.2) Sale of Road Reserve (4.17H)																									
TOTAL INCOME		22714	23923	24567	25550	26572	27635	28740	29890	31086	32323	33622	18156	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571
In Trust 3-12-1993		22714	23923	24567	25550	26572	27635	28740	29890	31086	32323	33622	18156	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571

C-3 ANTICIPATED FINANCIAL BALANCE

1. TOTAL EXPENDITURE	56108	781692	115108	62777	65180	82879	70278	72962	113956	78718	389186	1648320	77957	80956	84097	134178	511412	34261	125312	444339	748369	1536011	678832	80723	0
2. LEVY INCOME	404814	399226	398887	414164	430027	458719	477411	501698	532109	565782	599623	633604	306550	390054	517151	537095	525381	532109	609623	484629	404730	0	0	0	0
3. OTHER INCOME	22714	23923	24567	25550	26572	27635	28740	29890	31086	32323	33622	18156	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571	148571
FINANCIAL BALANCE WITH INTEREST @ 4% C.P.I.	288950	2749376	3167597	3671942	4209815	4779475	5348305	5909556	6536616	7179228	7906656	2738319	3617519	4340726	5246892	6308632	6407967	7418315	8223135	8863874	1723060	342211	695	0	0

BIBLIOGRAPHY

APPENDIX 3

1. Longworth and McKenzie Pty Ltd, December 1981 "Elderslie Sand and Soil Deposits: Land Management Study. Vol VI - Summary Environmental Impact Statement".
2. Department of Environment and Planning "Sydney Regional Environmental Plan No. 9 (Extractive Industry) and Planning Report (1986)".
3. State Planning Authority of N.S.W., 1973 "The New Cities of Campbelltown, Camden, Appin, Structure Plan".
4. Department of Planning, 1988 "Sydney Into Its Third Century. Metropolitan Strategy for the Sydney Region".
5. Department of Planning, 1993 "Sydney's Future. A Discussion Paper On Planning The Greater Metropolitan Region".
6. Camden Municipal Council, Government Gazette, February 21, 1992 "Local Environmental Plan No. 48".
7. Department of Planning, Sydney, April 1992 "Section 94 Contributions Plan Manual".
8. Camden Municipal Council, "Engineering Department, Departmental Framework, Staff Position No. ENG 11" (Draft).
9. BIS Shrapnel Pty Ltd, "Long Term Forecasts, Australia 1992-2007".

MAPS

APPENDIX 1