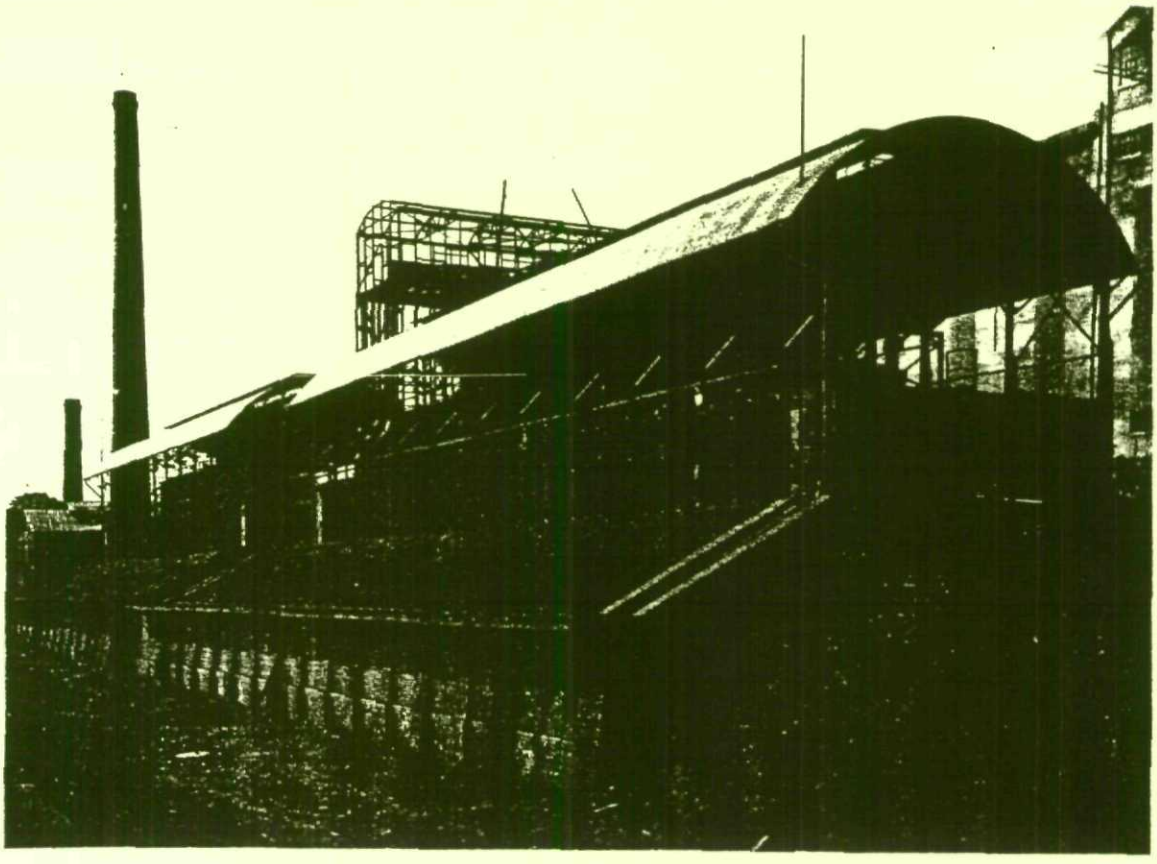
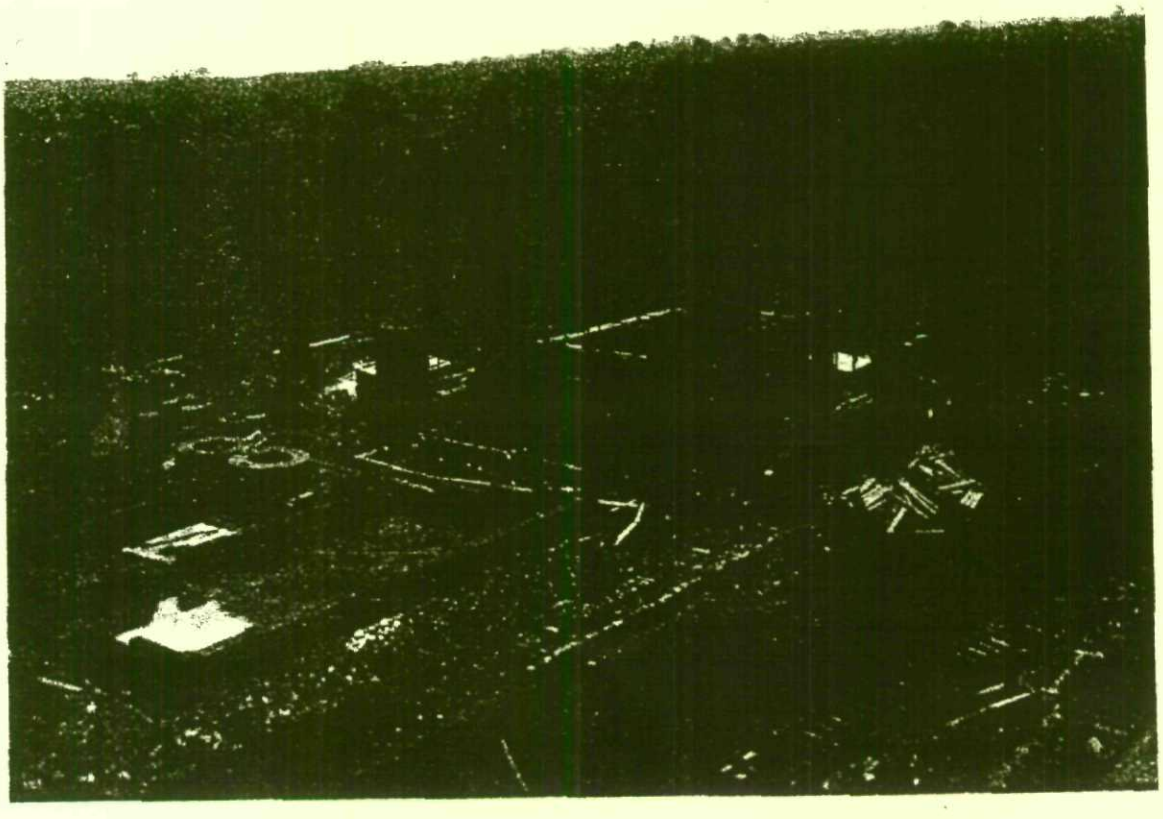
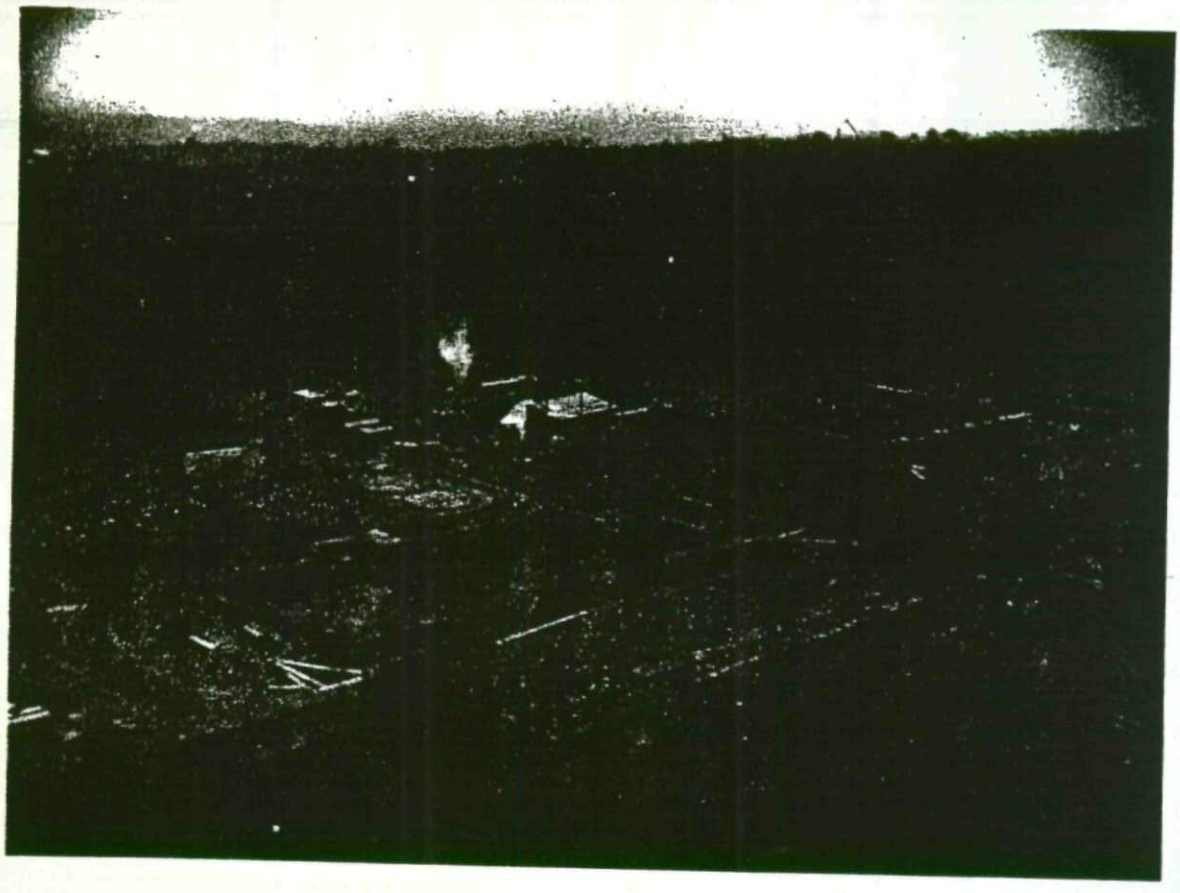


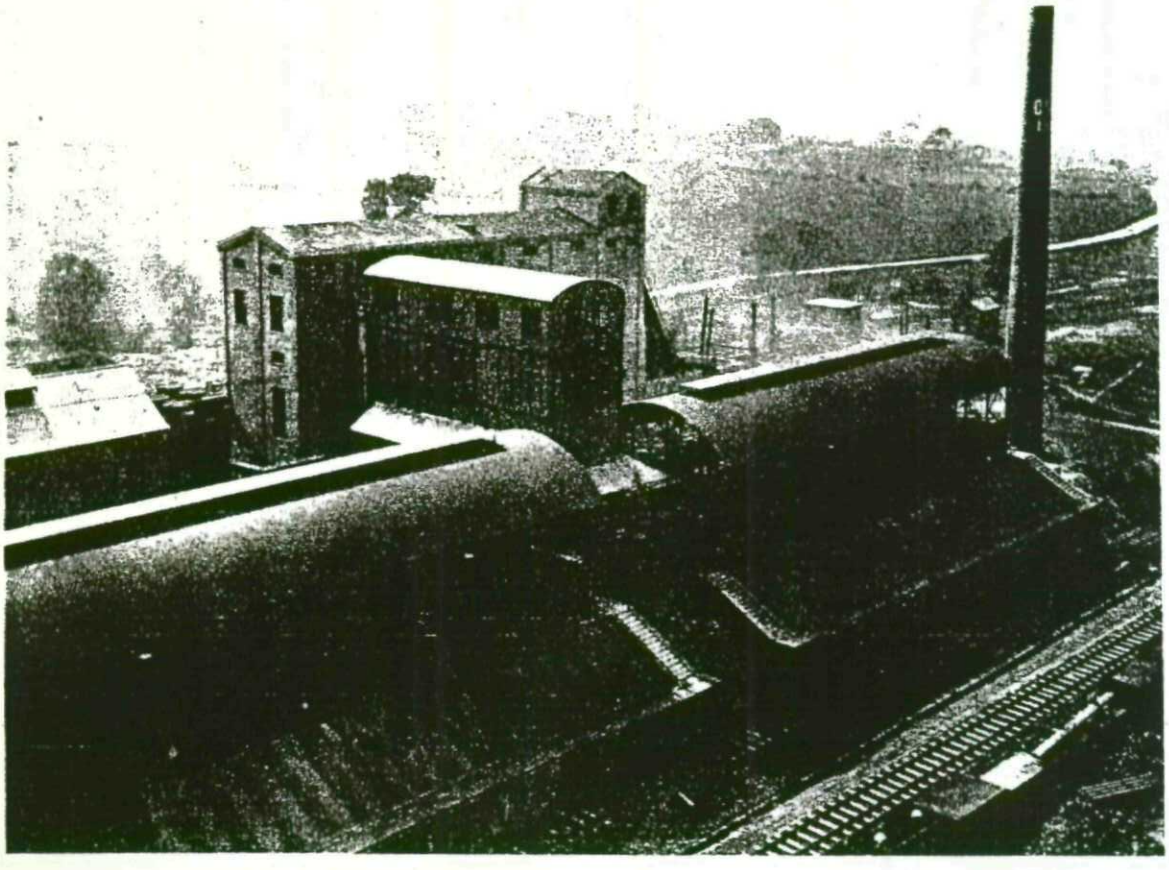
General view of works from South
End 26 04 1912



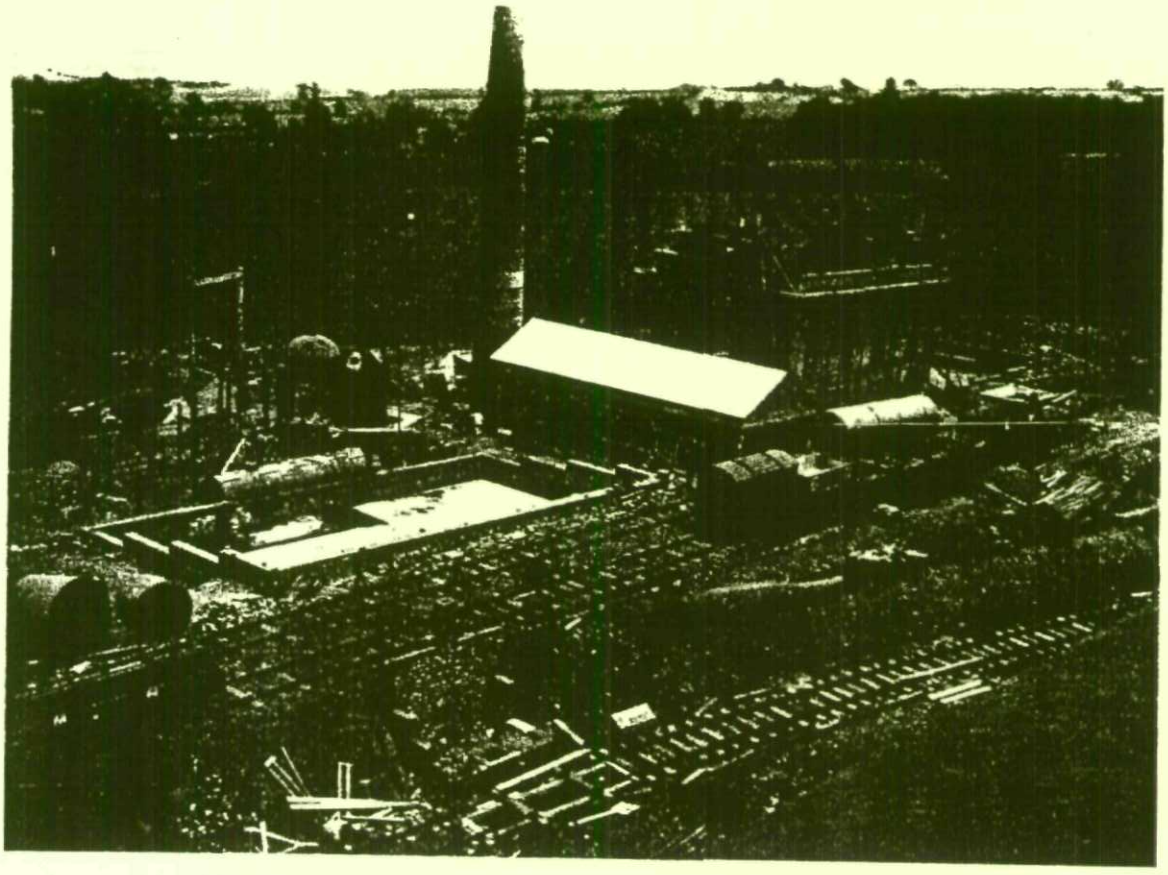
General view of Tar Plant pot May 1912



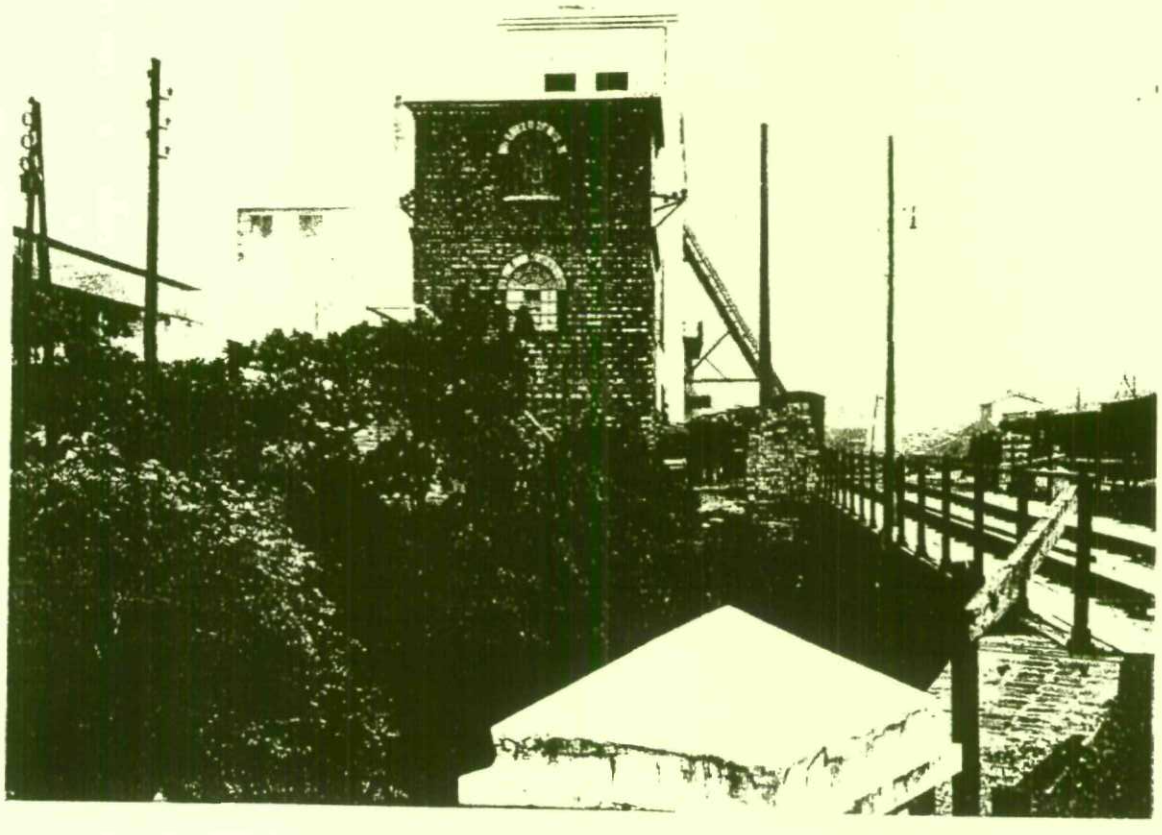
General view of Tar Plant 24 05 1912

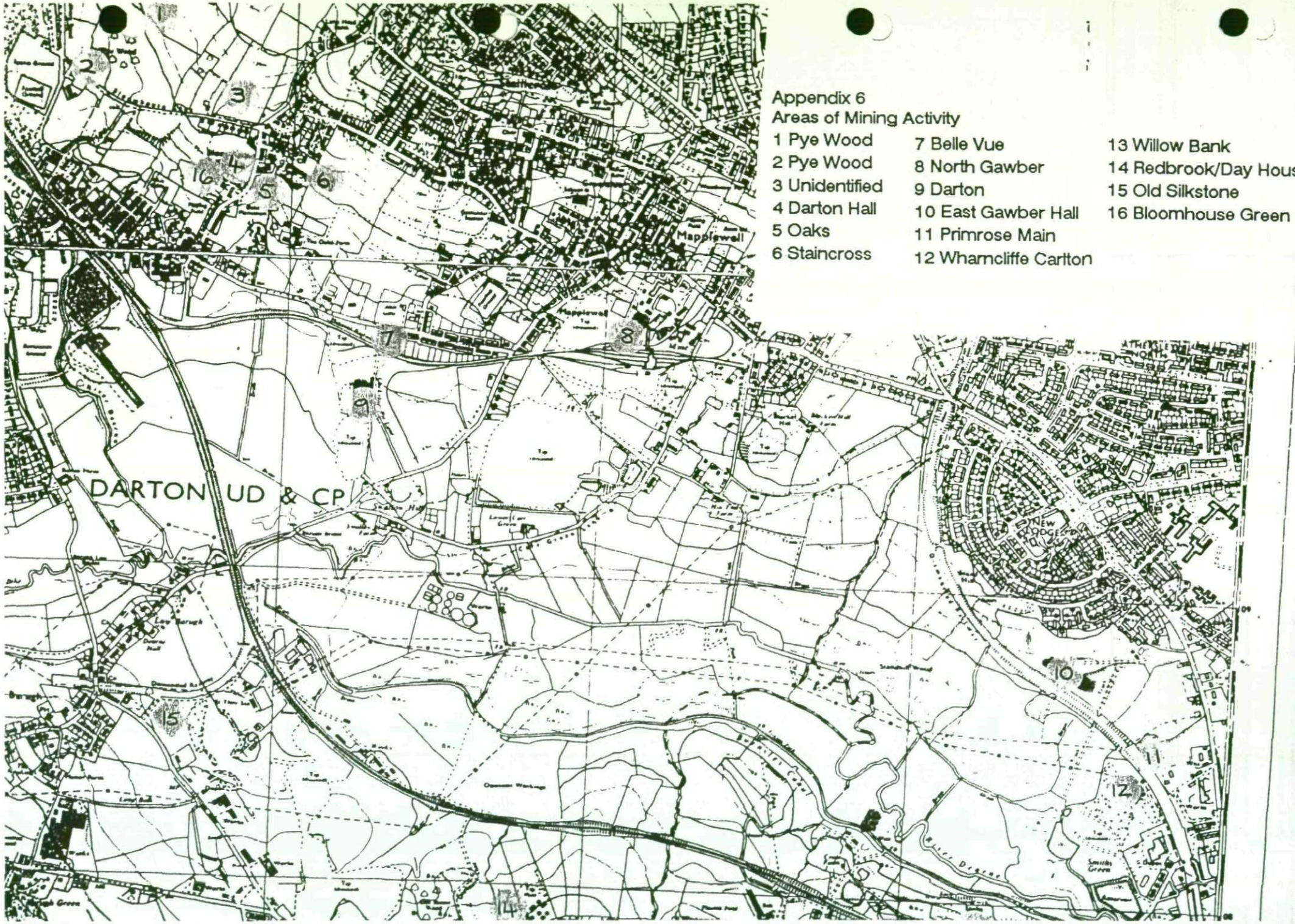


Completed Works



Unidentified





Appendix 6
Areas of Mining Activity

1 Pye Wood
2 Pye Wood
3 Unidentified
4 Darton Hall
5 Oaks
6 Staincross
7 Belle Vue
8 North Gawber
9 Darton
10 East Gawber Hall
11 Primrose Main
12 Wharncliffe Carlton
13 Willow Bank
14 Redbrook/Day House
15 Old Silkstone
16 Bloomhouse Green

Darton Local Plan

Appendix 7

5:4

DERELICT, DESPOILED, DEGRADED LAND & POTENTIAL OPENCAST SITES



Plan area boundary .....

Additional built up land

Derelict land

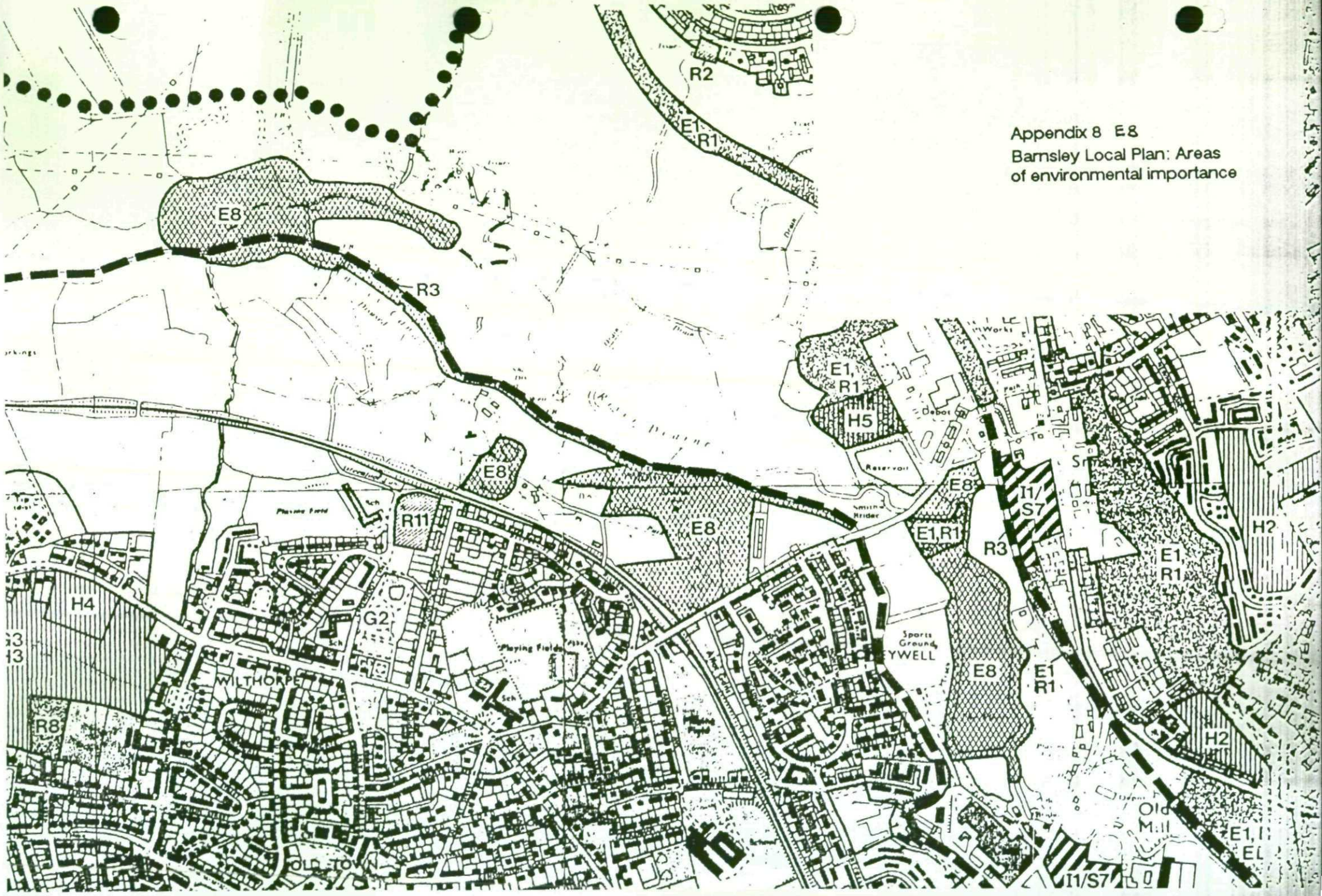
Neglected land

Underused land

Despoiled land

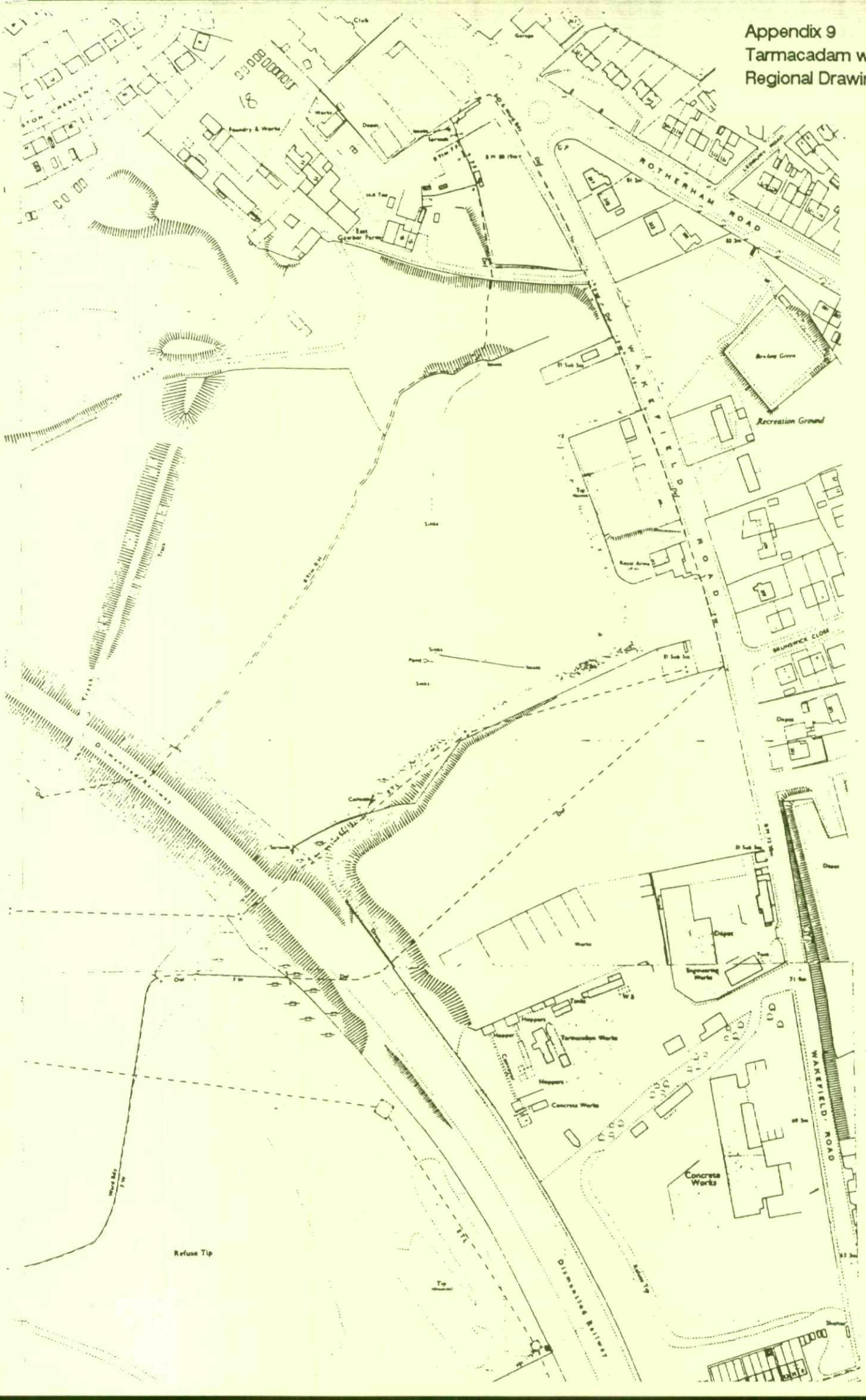
Areas of opencast coal interest

C - Former Coal Stocking Area
D - Former Coal Stocking Area
E - North Gawber (Hill End) Tip
F - North Gawber Colliery
H - Shaw Carpet Factory Tip
I - Blackerhill Tip
J - Spark Lane Quarry



Appendix 8 E8
Barnsley Local Plan: Areas of environmental importance

Appendix 9
Tarmacadam works
Regional Drawing 05/11



APPENDIX D

COPY OF COAL AUTHORITY MINING REPORT

The Coal Authority,
Mining Reports Office,
200 LICHFIELD LANE,
BERRY HILL,
MANSFIELD,
NOTTINGHAMSHIRE,
NG18 4RG
Telephone: 0845 762 6848
DX 716176 MANSFIELD 5
On-Line Service: www.coalminingreports.co.uk

The COAL AUTHORITY

The Coal Authority	
Cost:	£38.30
Plus V.A.T.	£6.70
Total Received:	£45.00
V.A.T. Reg Number	598 5850 68

SCOTT DOHERTY ASSOCIATES LTD,
CONSETT BUSINESS PARK,
VILLA REAL,
CONSETT,
COUNTY DURHAM,
DH8 6BP

This matter is being dealt with by Darren Moody

Our Ref: **00165380-04**
Your Ref: SDA/04014/01
Electronic Ref:
RRUID: 007.00001586360001
Date: 04 June 2004

Dear Sir,

Coal Mining Report
SITE AT, NORTH GAWBER COLLIERY, BARNSLEY

I refer to the enquiry dated 28th May 2004, received 03rd June 2004, in connection with the above.

This report is based on and limited to the records in the possession of The Coal Authority at the time the search is answered.

Ordnance Survey (O.S.) is undertaking a Positional Accuracy Improvement Programme of its mapping data. The Coal Authority (CA) has no control over the timing of issue of Positionally Improved mapping data by O.S. or over users of that data. In some instances the relative position between surface features and coal mining features may alter as a consequence of this programme. The CA will ensure that the integrity of its database is maintained by replotting some mining information to sustain the relationship between that mining information and the improved O.S. surface positions, some of which are now being released. However, mining reports are currently being produced against pre improved O.S. mapping whilst the Authority updates its database in line with the O.S. changes.

Past Underground Mining

The property is within the likely zone of influence on the surface from workings in 9 seams of coal at shallow to 340m depth, the last date of working being 1981.

Present Underground Mining

The property is not within the zone of likely physical influence on the surface from any present underground coal workings.

Future Underground Mining

The property is not within a geographical area for which a licence to extract coal by underground methods is awaiting determination by the Coal Authority.

The property is not within a geographical area for which a licence to extract coal by underground methods has been granted.

e property is not within the zone of likely physical influence at the surface from plans of future workings in our possession.

However reserves of coal exist in the locality which could be worked at some time in the future subject to feasibility, licences, and planning consents.

We have no record of any notice of the risk of the land being affected by subsidence being given under S.46 of the Coal Mining Subsidence Act 1991.

Shafts and Adits

Within or within 20 metres of the property there are 8 mine entries, the approximate positions of which are shown on the attached plan. Your attention is drawn to the statements made on that plan.

Our records disclose the following information:

433409-016. No treatment details.

433409-011. was filled in May 1987 .

433409-005. No treatment details.

433409-001. was filled to the surface in 1967 .

432409-028. No treatment details.

2409-027. No treatment details.

432409-026. No treatment details.

432409-025. No treatment details.

The records held by the Coal Authority may be incomplete. Consequently, there may exist in this locality mine entries of which we have no knowledge.

Surface Geology

Records in our possession do not disclose any fault or other line of weakness at the surface as having affected the stability of the property.

Past Opencast Mining

The property is located within the geographical boundary of an opencast site from which coal has been extracted by opencast methods.

Present Opencast Mining

The property does not lie within 200 metres of the geographical boundary of an opencast site within which coal is ing extracted by opencast methods.

Future Opencast Mining

The property is not within 800 metres of the geographical boundary of an opencast site for which a licence to extract coal by opencast methods is awaiting determination.

The property is within 800 metres of the geographical site boundary of the Barugh Bridge (Gawber) prospective opencast site for which a licence to extract coal by opencast methods was granted in October 1994. The grant of this licence is conditional on the applicant securing any other rights, permissions (including planning permissions) and consents to enable him to carry out his operations.

Subsidence

The records in our possession do not disclose any damage notice or claim having been given, made or pursued in respect of the property since 1 January 1984.

The records in our possession do not disclose any current "Stop Notice" affecting the property.

The records in our possession do not show any request having been made to execute preventative works under S.33 of the Coal Mining Subsidence Act 1991.

Withdrawal of Support

The property lies within a geographical area in respect of which notices of entitlement to withdraw support were published in 1946,1947,1947,1947,1979.

The property does not lie within a geographical area in respect of which a notice has been given under S.41 of the Coal Industry Act 1994, revoking the entitlement to withdraw support.

Working Facilities Orders

The property is not within a geographical area that is the subject of an Order made under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

Payments to Owners of Former Copyhold Land

The property is not within an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Additional Remarks

In view of the mining circumstances a prudent developer would seek appropriate technical advice before works are undertaken on site. All proposals should have regard to good engineering practice in mining areas as identified in authoritative publications on mining stability problems. In any event, no activities should be undertaken that intersect, disturb, or interfere with any coal or mines of coal without permission of the Coal Authority.

These replies are prepared in accordance with the 2003 editions of the Coal Authority's Terms and Conditions, User Guide and the Law Society's Guidance Notes.

Copyright in coal mining reports and certificates belongs to the Coal Authority. Information used to compile this report is protected by the Coal Authority's database right. All rights are reserved and unauthorised use is prohibited. Copyright and other intellectual property is not transferred to external parties by possession of a mining report or certificate, however those for whom the report is supplied have the right to use it.

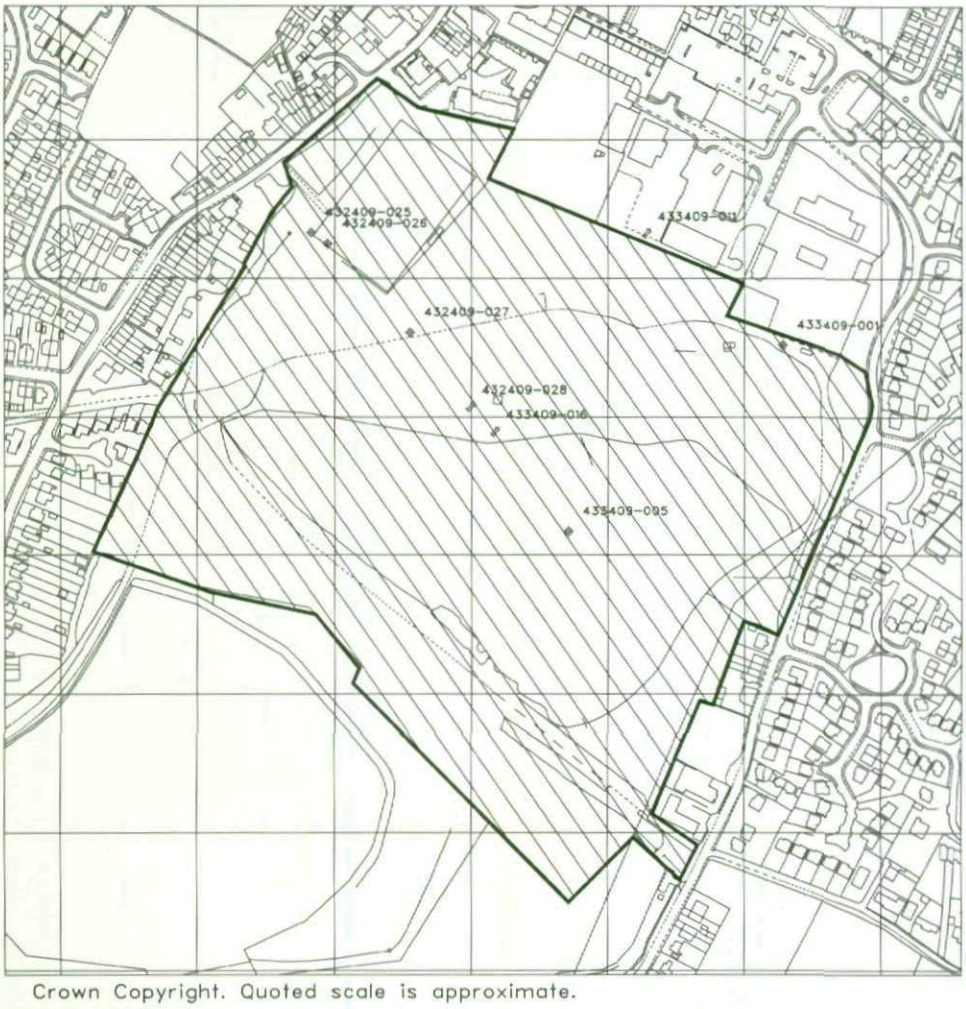
We acknowledge the receipt of your remittance in payment of our fee.

Yours faithfully

A Schofield

Albert Schofield

Director of Mining Information and Services



Crown Copyright. Quoted scale is approximate.

SCALE: 1:5000

This map is reproduced from the Ordnance Survey material by The Coal Authority [or division thereof] with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: AL51060A001.

This is a plan of the boundaries of the property in respect of which this report has been prepared. It is the responsibility of the user to ensure that the boundaries shown correspond with those of the property.

APPROXIMATE POSITION OF ENQUIRY BOUNDARY SHOWN

APPROXIMATE POSITION OF DISUSED MINE SHAFTS SHOWN

APPROXIMATE POSITION OF DISUSED MINE ADITS SHOWN

This plan shows the approximate location of the disused mine entry/entries referred to in the attached mining report. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.
Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage from disused coal mine workings including disused coal mine entries. A DTI leaflet setting out the rights and the obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by telephoning 0845 762 6848.
If you wish to discuss the relevance of any of the information contained in the attached report you should seek the advice of a qualified mining engineer or surveyor. If you or your adviser wish to examine the source plans from which the information has been taken these are available at our Mansfield office, free of charge, by prior appointment, telephone 01623 638233. Should you or your advisor wish to carry out any physical investigations that may enter, disturb or interfere with any disused mine entry the prior permission of the owner must be sought. For coal mine entries the owner will normally be the Coal Authority.
The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries). Our emergency telephone number at all times is 01623 646333.

APPENDIX E

TRIAL PIT LOGS

Photograph:



Strata

Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)
		MADE GROUND (Black very clayey sand and gravel of coal, brick, siltstone and mudstone. Gravel is fine to coarse, angular to subrounded).	(0.30) 0.30	70.29
1.00		MADE GROUND (Firm brown black and grey sandy gravelly clay. Gravel is fine to coarse, angular to subrounded and consists of coal, mudstone, siltstone and rare sandstone).	(1.20) 1.50	69.09
2.00		MADE GROUND (Firm and soft brown black and red very gravelly sandy clay gravel is fine to coarse, angular to subrounded and consists of mudstone, brick, burnt shale and siltstone. Slight seepage at 1.8m.	(0.70) 2.20	68.39
			2.40	68.19
		MADE GROUND (Wet, brown very clayey angular to subangular sand and gravel of brick, burnt shale, coal, mudstone and sandstone).	(0.40) 2.80	67.79
3.00			(0.30) 3.10	67.49
4.00		Possibly reworked, firm light brown, grey and yellow sandy gravelly CLAY with pockets of coal and mudstone gravel. Gravel is fine to coarse, subangular to subrounded and consists of coal, mudstone and sandstone.		
5.00		Stiff friable light brown and grey mottled sandy gravelly CLAY with occasional subrounded		

Continued next sheet

Samples

Depth (m)	Type
0.40	D
1.50	D
2.20	D
2.70	D
2.90	D

Tests

Depth (m)	MEXE	Shear Vane (Peak/Res)

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 70.6
Coordinates: 433116E - 409465N

Groundwater:
Slight seepage at 1.8m.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable.

Trial Pit: TP01

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		cobbles of sandstone. Gravel is fine to coarse, subangular to subrounded and consists of sandstone, siltstone and mudstone.							
		End of Trial Pit at 3.10 m							
6.00									
7.00									
8.00									
9.00									
10.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 70.6
Coordinates: 433116E - 409465N

Groundwater:
Slight seepage at 1.8m.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable.

Trial Pit: TP01

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Grass over firm and stiff brown black and red very gravelly sandy clay. Gravel is fine to coarse, subangular to subrounded and consists of burnt shale and coal with occasional sandstone, mudstone and brick. Contains cobbles of sandstone, timber fragments, many whole bricks, plastic and metal fragments)	(2.20)		0.60	D			
1.00									
2.00		Very faint odour of hydrogen sulphide from 1.9m.	2.20	69.89	1.90	D			
		MADE GROUND (Firm brown slightly gravelly sandy clay. Gravel is fine to coarse, angular to subangular and consists of sandstone, siltstone, coal and burnt shale).	(0.30) 2.50	69.59					
3.00			(0.80)		2.80	D			
		Firm light orange brown and grey sandy gravelly CLAY. Slightly friable. Gravel is fine to coarse, subangular to subrounded and consists of mudstone, sandstone and rare coal.	3.30	68.79					
4.00		End of Trial Pit at 3.30 m							
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 72.1
Coordinates: 433043E - 409489N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.

Trial Pit: TP02

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata

Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)
		MADE GROUND (Rough grass over firm and stiff dark brown and black sandy gravelly clay. Gravel is fine to coarse, angular to subangular and consists of mudstone, coal and sandstone).	(1.00)	
1.00			1.00	72.70
		MADE GROUND (Firm grey and black sandy gravelly clay. Gravel is fine to medium angular subangular and consists of mudstone, sandstone and coal. Many cobbles and boulders of siltstone and mudstone, timber fragments, brick and burnt shale gravel). (Occasional whole bricks and much fine to coarse gravel of burnt shale from 1.9m with mudstone cobbles).	(1.90)	
2.00			2.90	70.80
3.00		MADE GROUND (Very moist black clayey sand with fine to medium gravel of burnt shale and mudstone. Moderate seepage into pit from 3.1m).	(0.35) 3.25	70.45
		Firm and soft grey brown, mottled black, sandy CLAY/SILT becoming orange brown sandy slightly gravelly clay with depth.	3.40	70.30
4.00		End of Trial Pit at 3.40 m		
5.00				

Samples

Depth (m)	Type
0.70	D
1.80	D
3.20	D
3.30	D

Tests

Depth (m)	MEXE	Shear Vane (Peak/Res)

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 73.7
Coordinates: 432969E - 409544N

Groundwater:
Moderate seepage into pit at 3.1m.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides unstable from 2.9m.

Trial Pit: TP03

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Grass over firm brown and light brown sandy gravelly clay. Gravel is fine to coarse angular to subangular and consists of sandstone and mudstone).	(0.40) 0.40	74.97					
1.00		MADE GROUND (Firm and stiff light brown and grey sandy gravelly clay. Gravel is fine to coarse angular to subangular and consists of coal, siltstone, sandstone and mudstone. Many timber fragments).	(1.00) 1.40	73.97	0.90	D			
2.00		MADE GROUND (Firm light brown and grey friable sandy gravelly clay. Gravel is fine to coarse, subangular to subrounded and consists of sandstone, mudstone and coal. Possibly reworked clay).	(0.80) 2.20	73.17					
		Soft and firm black and brown sandy peaty CLAY/SILT. Many decayed rootlets and plant material. Possibly old topsoil).	(0.30) 2.50	72.87	2.40	D			
3.00		Stiff orange brown and grey sandy gravelly CLAY. Gravel is fine to coarse, angular to subrounded and consists of sandstone and mudstone.	(0.80) 3.30	72.07					
4.00		End of Trial Pit at 3.30 m							
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 75.4
Coordinates: 432838E - 409589N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides unstable throughout.

Trial Pit: TP04

TRIAL PIT RECORD

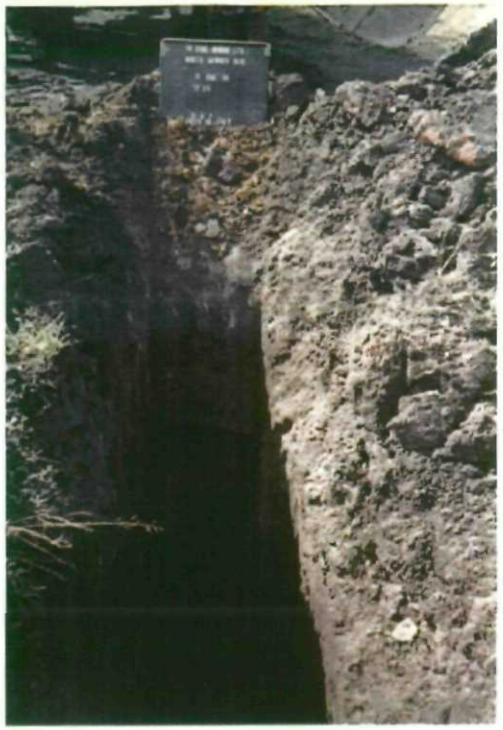
North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Grass over black and brown firm sandy very gravelly clay. Gravel is fine to coarse angular to subrounded and consists of mudstone and burnt shale. Large sandstone boulder, metal wires and pockets of orange brown sandy clay).	(1.10) 1.10	74.63	0.80	D			
1.00		Soft and firm black and grey CLAY/SILT becoming more clayey with depth. Moderately strong hydrogen sulphide odour.	(0.40) 1.50	74.23	1.70	D			
2.00		Firm light brown and yellow CLAY/SILT.	(0.50) 2.00	73.73					
		Stiff friable orange brown and grey sandy slightly gravelly CLAY. Gravel is fine to medium, subangular to subrounded and consists of sandstone and mudstone.	(1.10) 3.10	72.63					
3.00		End of Trial Pit at 3.10 m							
4.00									
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 75.7
Coordinates: 432868E - 409632N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.
Concrete pipe encountered running east-west parallel with culvert at 0.8m bgl. TP moved 2m south to avoid it.

Trial Pit: TP05

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Sparse grass over brown and black clayey sand and gravel of coal and mudstone).	(0.70) 0.70	80.35	0.50	D			
		MADE GROUND (Black and red angular - elongate fine to coarse gravel of burnt shale, coal and mudstone).	(0.30) 1.00	80.05	0.80	D			
1.00		MADE GROUND (Soft red, orange and pale yellow mottled fine ash of burnt shale with some fine coal pockets. Becoming gravel of burnt shale with coal and mudstone from 2.1m).	(1.70) 2.70	78.35	1.50	D			
2.00									
		MADE GROUND (Possibly reworked firm light brown and grey sandy gravelly clay with pockets of gravel and sand. Gravel is fine to coarse, subangular to subrounded and consists of sandstone, siltstone, coal and burnt shale).	(0.40) 3.10	77.95					
3.00		Soft and firm brown and grey CLAY/SILT with occasional fine gravel of mudstone.	3.30	77.75					
4.00		End of Trial Pit at 3.30 m							
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 81.1
Coordinates: 432846E - 409691N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides slightly unstable.

Trial Pit: TP06

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata

Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)
		MADE GROUND (Moist fine sludge of black and red fine sand of coal and burnt shale).	0.20	83.88
			(0.50)	
		MADE GROUND (Black slightly clayey sandy gravel. Gravel is fine to coarse, angular to subangular and consists of coal and mudstone).	0.70	83.38
1.00			(0.60)	
		MADE GROUND (Orange brown fine to coarse sandy gravel of angular to elongate burnt shale and black coal fragments).	1.30	82.78
			(0.50)	
		MADE GROUND (Possibly reworked orange and light brown silty sand with subangular to subrounded cobbles of sandstone).	1.80	82.28
2.00			(0.50)	
		MADE GROUND (Possibly reworked firm light orange brown sandy gravelly clay. Gravel is fine to coarse, subangular to subrounded and consists of sandstone, mudstone and rare coal).	2.30	81.78
			(0.70)	
3.00		Soft and firm grey and black mottled SILT/CLAY.	3.00	81.08
		Stiff grey and orange mottled sandy gravelly CLAY. Gravel is fine to coarse, subangular to subrounded and consists of mudstone, sandstone and coal.	3.20	80.88
4.00		End of Trial Pit at 3.20 m		
5.00				

Samples

Depth (m)	Type
0.60	D
1.40	D
2.50	D

Tests

Depth (m)	MEXE	Shear Vane (Peak/Res)

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 84.1
Coordinates: 432896E - 409738N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.
Natural ground observed to slope down to the south within the pit.

Trial Pit: TP07

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Small trees and wood chip overlying red orange and black fine to coarse, angular to elongate gravel of burnt shale and coal). To 1.5m in south of pit and 2m in north end.	(1.50)		1.00	D			
1.00			1.50	79.92					
		MADE GROUND (Stiff grey brown black and yellow sandy gravelly clay. Gravel is fine to coarse, angular to subangular and consists of coal, mudstone and rare sandstone).			2.00	D			
2.00			(2.00)						
3.00			3.50	77.92					
		End of Trial Pit at 3.50 m							
4.00									
5.00									

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 81.4
Coordinates: 432987E - 409662N

Groundwater:
Slight seepage from 1.5m.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.
Upper horizon deepening to the north.

Trial Pit: TP08

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata

Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)
		MADE GROUND (Stiff dark grey sandy gravelly clay. Gravel is fine to coarse, angular to subangular and consists of mudstone, coal and sandstone. Contains subangular cobbles of mudstone and sandstone).	(0.90)	
			0.90	74.46
1.00		MADE GROUND (Firm light grey and light brown sandy gravelly clay with dark brown, red and black pockets. Gravel is fine to coarse angular to subangular and consists of sandstone, mudstone, rare coal and burnt shale).	(1.40)	
2.00			2.30	73.06
		Stiff light brown and grey sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded and consists of mudstone and sandstone.	(0.90)	
3.00			3.20	72.16
		End of Trial Pit at 3.20 m		
4.00				
5.00				

Samples

Depth (m)	Type
0.80	D
1.30	D
3.00	D

Tests

Depth (m)	MEXE	Shear Vane (Peak/Res)

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 75.4
Coordinates: 433077E - 409579N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.

Trial Pit: TP09

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Firm grey sandy gravelly clay with cobbles of sandstone and mudstone. Gravel is fine to coarse angular to subrounded and consists of mudstone, sandstone and coal). (Moderate seepage into pit from 2m with a slight oily sheen and dark spots on top of the standing water).	(3.00)		0.60	D			
1.00									
2.00					2.50	D			
3.00		End of Trial Pit at 3.00 m	3.00	72.92					
4.00									
5.00									

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 75.9
Coordinates: 433150E - 409563N

Groundwater:
Moderate seepage from 2m.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable throughout.

Trial Pit: TP10

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Firm light brown and grey sandy gravelly clay with subangular cobbles of sandstone and many whole bricks).	(0.80)						
			0.80	94.95					
1.00		MADE GROUND (Firm dark brown and black sandy gravelly clay with subangular cobbles of sandstone, siltstone, mudstone and burnt shale. Gravel is fine to coarse, angular to subrounded and consists of sandstone, coal, siltstone, burnt shale and mudstone with rare glass fragments and whole bricks).	(0.60)						
			1.40	94.35					
2.00		MADE GROUND (Dark grey, black and red sand and gravel with occasional subangular cobbles and boulders of sandstone and siltstone. Gravel is fine to coarse, angular to subrounded and consists of sandstone, coal, burnt shale and mudstone. Contains some small clayey pockets and timber fragments).	(1.80)						
3.00			3.20	92.55					
		End of Trial Pit at 3.20 m							
4.00									
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By:
Ground Level: 95.7
Coordinates: 432987E - 409820N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides becoming unstable from 2m.

Trial Pit: TP11

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Rough grass over firm black sandy gravelly clay. Gravel is fine to coarse angular to subrounded and consists of coal, mudstone and siltstone. Occasional timber fragments, railway sleepers, metal pipes and wires).	(0.40) 0.40	86.85	0.50	D			
1.00		MADE GROUND (North end of trial pit. Black and red sand and gravel of burnt shale, coal and clinker underlain at 0.8m by reinforced concrete). (South end of trial pit, Reinforced concrete partially broken out to 0.8m).	(1.60)						
2.00		(1.5m wide gap between concrete, infilled with red and black sand and gravel of coal and burnt shale).	2.00 (0.40)	85.25					
		MADE GROUND (Orange fine to coarse gravel of clinker and burnt shale).	2.40 (0.40)	84.85	2.50	D			
3.00		Soft light brown and grey sandy slightly gravelly CLAY. Gravel is fine to medium and consists of sandstone and mudstone).	2.80	84.45					
4.00		End of Trial Pit at 2.80 m							
5.00									

Date of Excavation: 19/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 87.2
Coordinates: 433026E - 409762N

Groundwater:
Slight seepage into the trial pit from 2.6m.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides unstable above the concrete.

Trial Pit: TP12

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Firm and stiff brown grey black and yellow sandy gravelly clay with many subangular cobbles of coal, mudstone and sandstone. Gravel is fine to coarse, angular to subangular and consists of coal, mudstone and sandstone).			0.90	D			
1.00									
			(3.40)						
2.00									
					2.80	D			
3.00									
			3.40	81.26					
		End of Trial Pit at 3.40 m							
4.00									
5.00									

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 84.7
Coordinates: 432972E - 409717N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.

Trial Pit: TP13

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Grass over firm and stiff black grey and yellow sandy gravelly clay. Gravel is fine to coarse, angular to subangular and consists of coal, mudstone and siltstone).			0.60	D			
1.00			(3.00)						
2.00					2.00	D			
			3.00	84.09					
3.00		MADE GROUND (Black fibrous material, with strong odour of hydrogen sulpide, plus sheet of steel 50mm thick and thick twisted metal pulley rope approximately 100mm in diameter.	(0.30)		3.00	D			
			3.30	83.79					
4.00		End of Trial Pit at 3.30 m							
5.00									

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 87.1
Coordinates: 433191E - 409684N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable to 3m.

Trial Pit: TP14

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Black fine silty sand of coal and mudstone fines. Moderately strong hydrocarbon odour. Dislodged old metal pipe containing stagnant slightly oily water).	(1.20)		0.50	D			
1.00			1.20	86.34					
		MADE GROUND (Soft and firm light brown and grey sandy gravelly clay with coal traces. Not sampled as it was contaminated by the water from the old pipe).	1.40	86.14	1.60	D			
2.00		MADE GROUND (Red and black fine to coarse, angular to subangular sand and gravel of burnt shale, coal and mudstone. Contains metal fragments and some timber). Pocket of white ground chalk or calcium carbonate material at 1.6m.	(2.10)		2.00	D			
3.00			3.50	84.04					
		End of Trial Pit at 3.50 m							
4.00									
5.00									

Date of Excavation: 19/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 87.5
Coordinates: 433161E - 409705N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.
Moderate flow from old metal pipe, not persistent. Pipe was clearly disused.

Trial Pit: TP15

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Red black and brown fine to coarse sand and gravel of coal, burnt shale, sandstone and siltstone).	(0.40) 0.40	88.16	0.20	D			
1.00		MADE GROUND (Firm yellow brown grey and black sandy gravelly clay with many sandstone and mudstone cobbles. Gravel is fine to coarse, angular to subangular and consists of coal, mudstone and sandstone).	(2.20)		1.50	D			
2.00			2.60	85.96					
		Light brown and grey very clayey SAND becoming stiff friable light brown and grey sandy slightly gravelly CLAY from 2.8m. Gravel is fine to coarse, subangular to subrounded and consists of sandstone and mudstone.	(0.90)		2.70	D			
3.00			3.50	85.06					
		End of Trial Pit at 3.50 m							
4.00									
5.00									

Date of Excavation: 19/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 88.6
Coordinates: 433119E - 409743N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.

Trial Pit: TP16

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Grass over firm black sandy clay with much fine to coarse gravel of coal, sandstone and mudstone. Contains many whole bricks, plastic, wires, large sandstone cobbles, timber fragments and sleepers, concrete kerb stones and black granite sets. Very thick twisted steel cable. Many concrete blocks).	(2.10)		1.00	D			
1.00									
2.00			2.10	85.46	2.10	D			
		End of Trial Pit at 2.10 m							
3.00									
4.00									
5.00									

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 87.6
Coordinates: 433213E - 409697N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable throughout.
Terminated due to concrete obstructions and instability.

Trial Pit: TP17

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Grass over black and brown clayey sandy gravelly cobbles and boulders of old tarmac and brick. Gravel is fine to coarse and consists of sandstone, brick and mudstone. Slight odour of bitumen from the tarmac. Many large pieces of tarmac with white quartz and limestone gravel)	(1.90)		0.80	D			
1.00			1.90	88.40					
		MADE GROUND (Firm brown and grey sandy very gravelly clay with some sandstone cobbles. Gravel is fine to coarse subangular to subrounded and consists of sandstone, siltstone and mudstone).	(1.10)		2.50	D			
2.00		Large tarmac obstruction at the base of the pit.	3.00	87.30					
3.00		End of Trial Pit at 3.00 m							
4.00									
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 90.3
Coordinates: 433171E - 409738N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable to 1.9m.

Trial Pit: TP18

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Reinforced concrete).	0.20	90.61					
		MADE GROUND (Very hard dark grey cemented slab beneath reinforced concrete).	0.40	90.41					
		MADE GROUND (Black slightly clayey sand and gravel of coal, mudstone, concrete and burnt shale. Contains cobbles of brick, burnt shale and some whole bricks).	(1.10)		0.60	D			
1.00			1.50	89.31					
		MADE GROUND (Red sandy gravel of burnt shale with coal traces. Occasional coarse angular to subangular gravel and cobbles of clinker).	(1.20)		1.70	D			
2.00			2.70	88.11					
		MADE GROUND (Orange sand with cobbles of orange clinker).	2.90	87.91	2.80	D			
3.00		MADE GROUND (Subangular gravel and cobbles of orange clinker).	(0.30) 3.20	87.61	3.10 3.20	D D			
		MADE GROUND (Soft red yellow and brown sandy SILT/CLAY of burnt shale ash).	3.30	87.51					
4.00		End of Trial Pit at 3.30 m							
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 90.8
Coordinates: 433171E - 409767N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides unstable throughout.

Trial Pit: TP19

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata

Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Samples Depth (m)	Samples Type	Tests Depth (m)	Tests MEXE	Tests Shear Vane (Peak/Res)
		MADE GROUND (Grass over black fine to coarse slightly clayey sandy gravel. Gravel is fine to coarse, angular to subangular and consists of coal and mudstone).	0.20	90.70					
			(0.40)						
		MADE GROUND (Reinforced concrete).	0.60	90.30					
			(0.40)						
1.00		MADE GROUND (Black slightly clayey sand and gravel of coal, sandstone and mudstone).	1.00	89.90	1.00	D			
		MADE GROUND (Black slightly gravelly sand of coal, mudstone, glass, clinker, ash, brick and sandstone. Gravel is fine to medium, angular to subangular. Many large blocks of bricks and mortar and metal wires).	(1.60)						
2.00					2.20	D			
		Large sandstone slab left undisturbed in north end of pit at 1m, approximately 0.8m thick and underlain by red brick wall.	2.60	88.30					
3.00		End of Trial Pit at 2.60 m							
4.00									
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 90.9
Coordinates: 433203E - 409755N

Groundwater:
Groundwater not encountered.

Legend:
D Small Disturbed Sample
B Large Disturbed Sample
W Water Sample
U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable below reinforced concrete.
Trial pit depth restricted by quantity of reinforced concrete.

Trial Pit: TP20

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Rough grass over light brown and dark brown clayey sand and gravel with cobbles of brick. Many pieces of old tarmac, cut sandstone and granite blocks and old kerb stones).	(1.90)		1.00	D			
1.00			1.90	88.32					
		MADE GROUND (Firm friable black and brown sandy gravelly clay with many cobbles of tarmac with white quartz gravel aggregate).	(0.70)						
2.00			2.60	87.62					
		MADE GROUND (Soft and firm light brown and orange sandy gravelly clay with some subangular cobbles of sandstone. Gravel is fine to coarse subangular to subrounded and consists of sandstone, mudstone, coal and siltstone. Becoming friable from 3m.	(0.80)		2.70	D			
3.00			3.40	86.82					
		End of Trial Pit at 3.40 m							
4.00									
5.00									

Date of Excavation: 19/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 90.2
Coordinates: 433225E - 409737N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides unstable to 2.6m

Trial Pit: TP21

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Grass over firm dark brown sandy gravelly clay. Gravel is fine to coarse angular to subrounded and consists of coal, mudstone and sandstone).	0.20	87.32					
1.00		MADE GROUND (Fine to coarse red brown and black angular to subangular gravel of burnt shale with pockets of fine coal and mudstone gravel).	(1.10) 1.30	86.22	0.80	D			
		Possibly reworked light orange brown slightly clayey gravelly SAND with subangular cobbles of sandstone.			1.45	D			
2.00		Possible rock head at 2.9m. Weathered orange brown sandstone.	(1.60)						
			2.90	84.62					
3.00		End of Trial Pit at 2.90 m							
4.00									
5.00									

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 87.5
Coordinates: 433242E - 409706N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Slightly unstable from 1.3m.

Trial Pit: TP22

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata

Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)
		MADE GROUND (Rough grass over black fine to coarse gravel of coal and mudstone.	0.20	86.95
			0.40	86.75
		MADE GROUND (Reinforced concrete).	(0.40)	
		MADE GROUND (Solid brick foundations underlain by solid concrete floor at 0.8m).	0.80	86.35
1.00		End of Trial Pit at 0.80 m		
2.00				
3.00				
4.00				
5.00				

Samples

Depth (m)	Type
0.00	

Tests

Depth (m)	MEXE	Shear Vane (Peak/Res)

Date of Excavation: 19/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 87.1
Coordinates: 433139E - 409723N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.
Concrete too thick to remove.

Trial Pit: TP23

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Black and grey slightly clayey sand and fine to medium gravel of coal and mudstone).	0.20	86.41					
			(0.25)						
		MADE GROUND (Reinforced concrete).	0.45	86.16					
			0.60	86.01					
		MADE GROUND (Solid brick foundations).			0.90	D			
1.00									
		MADE GROUND (Eastern end of trial pit - solid reinforced concrete approximately 0.6m thick, not broken out. Western end of trial pit - firm black, grey brown and yellow sandy gravelly clay with many mudstone and coal cobbles. Gravel is fine to coarse, angular to subangular and consists of coal, mudstone and sandstone. Occasional timber fragments).	(2.40)						
2.00									
					2.70	D			
3.00			3.00	83.61					
		End of Trial Pit at 3.00 m							
4.00									
5.00									

Date of Excavation: 19/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 86.6
Coordinates: 433111E - 409711N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides slightly unstable from 2.1m.
Terminated at maximum reach due to reinforced concrete encountered at 0.6m.

Trial Pit: TP24

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
1.00		MADE GROUND (Firm black sandy gravelly clay becoming clayey sand and gravel from 0.5m. Gravel is fine to coarse, angular to subangular and consists of coal, mudstone, sandstone and brick. Thick steel girders approximately 2m long, Wooden pit props, thick twisted steel ropes. Many whole bricks).	(1.50)		1.00	D			
		Red brick wall in southern side of trial pit.	1.50	85.19					
2.00		End of Trial Pit at 1.50 m							
3.00									
4.00									
5.00									

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 86.7
Coordinates: 433077E - 409696N

Groundwater:
Groundwater not encountered.

Legend:
D Small Disturbed Sample
B Large Disturbed Sample
W Water Sample
U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable.
Possibly old air shaft or mine entrance, fill very loose. Brick wall along southern side of pit.

Trial Pit: TP25

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Black fine moist gravelly sand of coal and mudstone).	0.20	85.72					
		MADE GROUND (Firm grey, black, brown and yellow slightly sandy gravelly clay. Gravel is fine to coarse, angular to subangular and consists of coal and mudstone. Also contains tabular cobbles of sandstone and mudstone).			0.45	D			
1.00									
2.00			(3.40)						
3.00					3.10	D			
			3.60	82.32					
4.00		End of Trial Pit at 3.60 m							
5.00									

Date of Excavation: 19/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 85.9
Coordinates: 433061E - 409724N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides stable.

Trial Pit: TP26

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Brown and grey very clayey sand and gravel. Gravel is fine to coarse, angular to subrounded and consists of mudstone and coal with pockets of burnt shale gravel. Occasional cobbles of clinker).	(1.00)		0.50	D			
1.00			1.00	89.63	1.00	D			
		MADE GROUND (Orange brown sandy gravel. Gravel is fine to coarse angular elongate and consists of clinker, brick, burnt shale and mudstone. Many whole bricks and cobbles of clinker).			1.60	D			
					1.80	D			
2.00		Light yellow brown clayey SAND in northern end of trial pit, probably not made ground.	(1.90)						
			2.90	87.73					
3.00		End of Trial Pit at 2.90 m							
4.00									
5.00									

Date of Excavation: 18/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 90.6
Coordinates: 433070E - 409774N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable.
Metal pipe encountered but not damaged in northern end of trial pit.

Trial Pit: TP27

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Firm black, brown, grey and yellow sandy gravelly clay. Gravel is fine to coarse, angular to subangular and consists of coal, sandstone and mudstone).	(1.40)		1.00	D			
1.00			1.40	83.59					
		MADE GROUND (Red, brown and yellow sandy gravel of burnt shale. Gravel is fine to coarse, angular to elongate).	(0.90)		1.80	D			
2.00			2.30	82.69					
		MADE GROUND (Black, fine to coarse, angular to subrounded sand and gravel of coal, mudstone, sandstone and clinker with pockets of silver coloured coke works slag).	(1.10)		2.50 2.60	D D			
3.00			3.40	81.59					
		End of Trial Pit at 3.40 m							
4.00									
5.00									

Date of Excavation: 20/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 85.0
Coordinates: 433152E - 409669N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides unstable.

Trial Pit: TP28

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Photograph:



Strata					Samples		Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	Depth (m)	MEXE	Shear Vane (Peak/Res)
		MADE GROUND (Grass over firm brown sandy gravelly clay. Gravel is fine to coarse, subangular and consists of mudstone, yellow limestone and sandstone. Many railway sleepers with creosote odour).	(0.30) 0.30	87.34					
1.00		MADE GROUND (Black fine to coarse, angular to subangular sand and gravel of coal, mudstone, sandstone and brick. Contains many old wires, plastic and rubber pipes).	(1.80)		1.00	D			
2.00			2.10	85.54					
		MADE GROUND (Red, yellow and brown fine to coarse, angular to elongate slightly sandy gravel of burnt shale).	(1.00)		2.30	D			
3.00			3.10	84.54					
		End of Trial Pit at 3.10 m							
4.00									
5.00									

Date of Excavation: 19/08/2004
Equipment: JCB 3CX
Logged By: SD
Ground Level: 87.6
Coordinates: 433161E - 409717N

Groundwater:
Groundwater not encountered.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- W Water Sample
- U Undisturbed U100 Sample

Remarks:
Trial pit sides very unstable from 2.1m.

Trial Pit: TP29

TRIAL PIT RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

APPENDIX F

CABLE PERCUSSION BOREHOLE LOGS

Strata					Sheet 1 of 1	Samples			Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)		Depth (m)	Type	U100 Blows	Depth (m)	SPT	Installation
		MADE GROUND (Firm greyish brown, black and red mottled sandy gravelly clay. Gravel is fine to coarse, angular to subrounded and consists of red burnt shale, coal, mudstone, sandstone and brick. Occasional cobbles of mudstone. Driller records occasional boulders).	(4.60)			2.00	B D				
			4.60	66.45		4.00	B D				
		Moderately weathered, moderately weak, thinly bedded orange and brown fine grained SANDSTONE/SILTSTONE.	(0.40)			4.70-5.00	B				
5.00			5.00	66.05							
		End of Borehole at 5.00 m									
6.00											
7.00											
8.00											
9.00											

Start Date: 19/08/2004
End Date: 19/08/2004
Method: DANDO 2000
Drilled By: J.B. Site Investigations.
Logged By: SD
Ground Level: 71.0 mAOD
Coordinates: 433071E - 409398N

Chiselling:
4.10m to 4.30m : 0.5 hr
4.70m to 5.00m : 0.75 hr

Water Strikes:
No Groundwater Encountered

Legend:
D Small Disturbed Sample
B Large Disturbed Sample
U Undisturbed U100 Sample
W Water Sample
S Standard Penetration Test (Split Spoon)
C Standard Penetration Test (Cone)

Remarks:

Borehole: BH01

BOREHOLE RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Strata			Sheet 1 of 1		Samples			Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	U100 Blows	Depth (m)	SPT	Installation
		MADE GROUND (Firm brown, grey and black sandy gravelly clay. Gravel is fine to coarse angular to subrounded and consists of burnt shale, coal, mudstone and sandstone. Less gravel and burnt shale with depth. Occasional subangular mudstone cobbles and boulders).								
1.00										
					2.00	B D				
2.00										
3.00										
					4.00	B				
4.00			(8.20)							
5.00										
					6.00	B D				
6.00										
7.00										
					8.00	B				
8.00			8.20	65.62						
		MADE GROUND (Wood) (Driller's description).	8.40	65.42						
			8.50	65.32	8.50-9.20 8.50	B D				
		MADE GROUND (Firm and soft dark brown and grey slightly peaty sandy gravelly clay. Gravel consists of coal and mudstone. Possibly old topsoil).	(0.60)							
9.00			9.10	64.72						
		Firm light brown and grey mottled sandy gravelly CLAY. Gravel is fine to coarse, angular to subrounded and consists of sandstone, mudstone and rare coal. Occasional sandstone cobbles.	(0.40)							
			9.50	64.32						
		Moderatyly weathered, weak, yellow and								
		Continued next sheet								

Start Date: 19/08/2004
End Date: 19/08/2004
Method: DANDO 2000
Drilled By: J.B. Site Investigations.
Logged By: SD
Ground Level: 73.8 mAOD
Coordinates: 432984E - 409478N

Chiselling:
4.30m to 4.60m : 0.5 hr
5.10m to 5.40m : 0.5 hr
8.20m to 8.40m : 0.25 hr
9.20m to 9.50m : 0.5 hr

Water Strikes:
No Groundwater Encountered

Legend:
D Small Disturbed Sample
B Large Disturbed Sample
U Undisturbed U100 Sample
W Water Sample
S Standard Penetration Test (Split Spoon)
C Standard Penetration Test (Cone)

Remarks:

Borehole: BH02

BOREHOLE RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Strata					Sheet 1+ of 1	Samples			Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	U100 Blows	Depth (m)	SPT	Installation
		brown fine grained SANDSTONE.								
		End of Borehole at 9.50 m								
11.00										
12.00										
13.00										
14.00										
15.00										
16.00										
17.00										
18.00										
19.00										

Start Date: 19/08/2004
End Date: 19/08/2004
Method: DANDO 2000
Drilled By: J.B. Site Investigations.
Logged By: SD
Ground Level: 73.8 mAOD
Coordinates: 432984E - 409478N

Chiselling:
4.30m to 4.60m : 0.5 hr
5.10m to 5.40m : 0.5 hr
8.20m to 8.40m : 0.25 hr
9.20m to 9.50m : 0.5 hr

Water Strikes:
No Groundwater Encountered

Legend:
D Small Disturbed Sample
B Large Disturbed Sample
U Undisturbed U100 Sample
W Water Sample
S Standard Penetration Test (Split Spoon)
C Standard Penetration Test (Cone)

Remarks:

Borehole: BH02

BOREHOLE RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Strata					Sheet 1 of 1	Samples			Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)		Depth (m)	Type	U100 Blows	Depth (m)	SPT	Installation
		MADE GROUND (Reddish brown, grey and black very sandy gravelly clay. Gravel is fine to coarse, angular to subangular and consists of burnt shale, coal and mudstone).	(4.20)			2.00	B D				
			4.20	70.96		4.00	B				
		Firm, possibly reworked, grey and light brown mottled black sandy gravelly CLAY. Gravel is fine to medium subangular to subrounded and consists of sandstone, mudstone and rare coal.	(0.30) 4.50	70.66		4.20	D B				
		Moderately weathered weak orange brown fine grained SANDSTONE.	(0.50) 5.00	70.16							
		End of Borehole at 5.00 m									

1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00

Start Date: 19/08/2004
End Date: 19/08/2004
Method: DANDO 2000
Drilled By: J.B. Site Investigations.
Logged By:
Ground Level: 75.2 mAOD
Coordinates: 432900E - 409553N

Chiselling:
1.30m to 1.70m : 0.5 hr
4.60m to 5.00m : 0.75 hr

Water Strikes:
No Groundwater Encountered

Legend:
D Small Disturbed Sample
B Large Disturbed Sample
U Undisturbed U100 Sample
W Water Sample
S Standard Penetration Test (Split Spoon)
C Standard Penetration Test (Cone)

Remarks:

Borehole: BH03

BOREHOLE RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Strata			Sheet 1 of 1		Samples			Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)	Depth (m)	Type	U100 Blows	Depth (m)	SPT	Installation
		MADE GROUND (Firm and soft grey and black sandy gravelly clay. Gravel is fine to coarse, angular to subrounded and consists of coal and mudstone).	(2.60)		2.00	B D				
			2.60	72.98						
		MADE GROUND (Probably rubber matting/ conveyor belt. No returns).	2.80	72.78						
		End of Borehole at 2.80 m								

1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00

Start Date: 20/08/2004
End Date: 20/08/2004
Method: DANDO 2000
Drilled By: J.B. Site Investigations.
Logged By: SD
Ground Level: 75.6 mAOD
Coordinates: 432817E - 409634N

Chiselling:
2.60m to 2.80m : 0.75 hr

Water Strikes:
1.80m. Rose to 1.30m after 20 mins

Legend:
D Small Disturbed Sample
B Large Disturbed Sample
U Undisturbed U100 Sample
W Water Sample
S Standard Penetration Test (Split Spoon)
C Standard Penetration Test (Cone)

Remarks:
Obstruction encountered, moved to BH04A

Borehole: BH04

BOREHOLE RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates

Strata					Sheet 1 of 1	Samples			Tests		
Depth (m)	Legend	Description	Strata Depth (Thickness) (m)	Reduced Level (mAOD)		Depth (m)	Type	U100 Blows	Depth (m)	SPT	Installation
		MADE GROUND (Soft grey and black sandy gravelly clay. Gravel is fine to coarse, angular to subangular and consists of coal and mudstone with occasional siltstone).	(3.60)			2.00	B D				
			3.60	71.60							
		MADE GROUND (Hard obstruction, possibly steel).	3.70	71.50							
		End of Borehole at 3.70 m									

1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00

Start Date: 20/08/2004
End Date: 20/08/2004
Method: DANDO 2000
Drilled By: J.B. Site Investigations.
Logged By: SD
Ground Level: 75.2 mAOD
Coordinates: 432841E - 409623N

Chiselling:
3.60m to 3.70m : 0.75 hr

Water Strikes:
1.80m.

Legend:
- D Small Disturbed Sample
- B Large Disturbed Sample
- U Undisturbed U100 Sample
- W Water Sample
- S Standard Penetration Test (Split Spoon)
- C Standard Penetration Test (Cone)

Remarks:
Obstruction encountered, moved to BH04B

Borehole: BH04A

BOREHOLE RECORD

North Gawber Site

Revision: Final

Project No. 04014

SCOTT DOHERTY associates