ARCHAEOLOGICAL WATCHING BRIEF AT THE NEW GARDEN OF REMEMBRANCE, BOURTON-ON-THE-WATER, GLOUCESTERSHIRE

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Part 1 Project summary

An archaeological watching brief was undertaken at the New Garden of Remembrance, Bourton-on-Water, Gloucestershire (SP 1718 2080). It was undertaken at the instruction of Paul Gajos of CgMs Consulting Ltd on behalf of their clients, Bourton-on-the-Water Parish Council. The Clients have received planning permission (ref: 06/02046/FUL) for the construction of a garden of remembrance on land adjoining the existing cemetery in Bourton-on-the-Water, which lies within Salmonsbury camp, a Scheduled Ancient Monument (SAM 32392). Scheduled Monument Consent for the works has been granted by the Department of Culture, Media and Sport (ref: HSD9/2/8256). Planning permission was subject to conditions including the requirement for an archaeological watching brief in accordance with a Written Scheme of Investigation. Consultation with the Senior Archaeological Officer for Gloucestershire County Council and English Heritage confirmed that the archaeological works should comprise archaeological monitoring and supervision to be undertaken during groundwork associated with the development.

The watching brief methodology was designed to ensure that the on-site contractors maintained an agreed depth during work preserving archaeological deposits thought likely to survive in the footprint of the cemetery extension. As part of this a level survey of the site was taken before and after the topsoil strip on a 1m grid and levels were checked throughout the process. No groundworks exceeded the depth of the topsoil existing on the site, a garden soil surviving from the allotments that were formerly on the site. No archaeological features were recorded and natural deposits were not encountered. A small assemblage of pottery was recovered from the topsoil that included abraded Roman sherds.

Part 2 Detailed report

1. Background

1.1 Reasons for the project

An archaeological watching brief was undertaken at the New Garden of Remembrance, Bourton-on-Water, Gloucestershire (SP 1718 2080). It was undertaken at the instruction of Paul Gajos of CgMs Consulting Ltd on behalf of their clients, Bourton-on-the-Water Parish Council. The Clients have received planning permission (ref: 06/02046/FUL) for the construction of a garden of remembrance on land adjoining the existing cemetery in Bourton-on-the-Water, which lies within Salmonsbury camp, a Scheduled Ancient Monument (SAM 32392). Scheduled Monument Consent for the works has been granted by the Department of Culture, Media and Sport (ref: HSD9/2/8256).

Planning permission was granted subject to conditions including the requirement for an archaeological watching brief in accordance with a Written Scheme of Investigation which was produced by CgMs Ltd ((CgMs 10028/09/01) superseding a previous specification produced by John Samuels Archaeological Consultants) and approved by English Heritage and the Senior Archaeological Officer for Gloucestershire. This specified that the archaeological works comprising monitoring and supervision during groundworks associated with the development.

1.2 Project parameters

The project conforms to the *Standard and guidance for an archaeological watching brief* (IfA 2008)

The project also conforms to a Written Scheme of Investigation prepared by CgMs Ltd (CgMs 2009) and for which a project proposal (including detailed specification) was produced (HEAS 2009).

1.3 Aims

The primary aim of the archaeological monitoring of the works were to ensure that there was no damage to the Scheduled Ancient Monument during groundworks associated with the construction of the new garden of remembrance and that any exposed archaeological remains were appropriately recorded.

2. Methods

2.1 Documentary search

As desk-based assessment (Bashford 2000) was undertaken in 2000 in association with a previous planning application.

2.2 Fieldwork methodology

2.2.1 Fieldwork strategy

A written scheme of investigation was prepared by CgMs Ltd (CgMs 2009) and a project proposal and method statement prepared by the service (HEAS 2009).

A detailed impact assessment outlining proposed works and mitigation is set out in the Written Scheme of Investigation (Section 3) and the methodology adopted is outlined in Section 4. In summary, archaeological features are known to survive at between 0.3m and 0.4m below the current ground surface and the footprint of the proposed garden of remembrance was stripped to a maximum depth of 100mm and a layer of geotextile laid prior to construction elements of the scheme. It was the responsibility of the monitoring archaeologist to check all levels as they were excavated and halt works if they did not adhere to the parameters laid out in the Written Scheme of Investigation. This involved monitoring the agreed levels, stripping and vehicle movements/rutting up to the point that the works present no further potential threat to the archaeological resource.

Fieldwork was undertaken between 6 March 2009 and 17 April 2009. The site was stripped using a small rubber tracked 360º excavator with a toothless grading bucket and a small dumper. The stripping proceeded from east to west to avoid driving over the newly exposed surface with the car park the last area to be stripped. To maintain the 100mm depth required the site was stripped in alternating bucket width strips approximately 10m in length across the site and the remaining areas were then machined to the adjoining stripped levels. The car park area was stripped in the same manner except the depth of topsoil removed was 150mm.

Prior to the commencement of the excavation spot heights to Ordnance Datum were taken across the site at 1m intervals, this was then repeated following the completion of the ground works to confirm the reduced levels adhered to the specification. No pre-excavation spot heights were possible 6m along the baseline, and 22 to 24m north of the base line, where a compost heap was present.

Deposits were recorded according to standard Service practice (CAS 1995). Clean surfaces were inspected under archaeological supervision.

2.2.2 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

2.3 Artefact methodology, by Dennis Williams

2.3.1 Artefact recovery policy

The artefact recovery policy conformed to standard Service practice (CAS 1995, appendix 4).

2.3.2 Method of analysis

All hand-retrieved finds were examined and a primary record was made on a Microsoft Access 2000 database. The finds were identified, quantified and dated to period. A *terminus post quem* date was produced for each stratified context. The date was used for determining the broad date of phases defined for the site. All information was recorded on *pro forma* sheets.

The pottery and ceramic building material was examined under ×20 magnification and recorded by fabric type and form according to the fabric reference series maintained by the Service (Hurst and Rees 1992; Hurst 1992; www.worcestershireceramics.org).

3. The methods in retrospect

The methods adopted allow a high degree of confidence that the aims of the project have been achieved. Several level readings at 23m from the baseline (Appendix 2) appear to show

a slight increase in height following ground reduction. It is thought that this is a result of an error in instrument reading.

4. Topographical and archaeological context

The background to the site has been described in both the desk-based assessment (Bashford 2000) and the Written Scheme of Investigation (CgMs 2009). The following extract is summarised from the Written Scheme of Investigation.

The desk-based (Bashford 2000) assessment concluded that the Iron Age fortified enclosure of Salmonsbury Camp is well preserved, with the exception of the western flank, which has been subject to modern development. Evidence exists within the monument for settlement spanning the late Neolithic/early Bronze Age through to the end of the Roman period. The monument clearly retained significance, being recorded as "Sulmonnes Burg" or 'ploughman's stead' in a charter of Offa of Mercia, dated to AD 779. The camp also gave its name to the Hundred in which Bourton-on-the-Water lies and the Court of the Hundred traditionally met at enclosure's northern entrance. Several Saxon burials have been recorded dug into the ramparts of the monument and two small cemeteries have also been discovered, one close to the northern rampart and the second close to the south-eastern corner of the enclosure.

Domesday Book (1086) records Bourton among the lands of Evesham Abbey, but it appears that the preference for Stow-on-the-Wold as the market centre for the abbey's estates meant that Bourton never achieved borough status. The present field pattern within Salmonsbury Camp has been interpreted as suggesting that it was divided into arable strip fields before enclosure.

The manor was granted to Edmund Brydges, Lord Chandos, following the Dissolution and it remained in secular hands, until it was sold off in small lots after 1834. In the 18th century the current allotment field and part of the present cemetery was known as 'Meeting House ground' and it is very likely to have been owned by a member of a non-conformist church. In 1700 the Baptists or Paedobaptists opened a new burial ground within the Meeting House Ground and in 1701 a meeting house was constructed within this burial ground. The meeting house was extended in 1744, rebuilt in 1764 and demolished some time before 1880. The burial ground itself was enlarged in 1763.

Following the granting of Scheduled Monument Consent, Bourton-on-the-Water Parish Council commissioned Stratascan to conduct magnetometer and resistivity surveys of the site. A large number of anomalies were identified which were suggestive of ditches and possible pits. The resistivity survey showed two clear low resistance anomalies that are reminiscent of enclosure ditches and possibly relate to internal divisions within Salmonsbury Camp. The results of the surveys were limited by the small size of the survey area and the complexity of anomalies identified.

Bourton-on-the-Water Parish Council also commissioned a trial trench evaluation of the site. This was conducted by Gloucestershire County Council Archaeology Service, in accordance with a specification approved by English Heritage. The evaluation report concluded that a large number of features were cut through the natural gravel in Trenches 1, 2 and 3 and cut through a deposit overlying the gravel in Trench 4. Two visually distinct groups of features were recorded comprising features filled with a mid-orangey brown silty clay which tended to pre-date features filled with a dark or mid-greyish brown silty-clay, some of which contained pottery of Iron Age and Roman date. The earlier features included a posthole, ditch, gully and ring ditch, while the later features included pits, postholes, a ditch, possible trackway and a pit probably containing a human burial. These features were spread across the entire evaluation area at a depth of between 0.3 and 0.4 m below ground level in the area of the cemetery extension and at a depth of 1.05 m below ground level in the proposed access area off Cemetery Lane.

Subsequent to the fieldwork described above a substantial part of the Scheduled Monument has been geophysically surveyed. This work has identified a possible causewayed enclosure and confirms that the Scheduled Area contains dense evidence for activity throughout the prehistoric period.

5. Results

5.1 Structural analysis

The area of the site strip recorded is shown in Fig 1-2 and Plates 1-5. The results of the structural analysis are presented in Appendix 1. The results of the level survey are present in Appendix 2.

5.1.1 Phase 1 Natural deposits

At no point was the natural undisturbed matrix observed.

5.1.2 Phase 2 Roman deposits

Abraded Roman pottery was retrieved from topsoil containing much later material indicating that it was residual in this context.

5.1.3 Phase 3 Post Medieval/Modern deposits

The topsoil comprised of dark brown/black humic sandy clay with frequent organic inclusions with occasional gravel and inclusions of flecks of charcoal. The topsoil was frequently disturbed and contained post medieval pottery and modern debris.

5.2 Artefact analysis, by Dennis Williams

5.2.1 The artefact assemblage

The artefactual assemblage comprised 38 finds with a combined weight of 572g, and dating from the Roman period onwards (Table 1). All of these were recovered from unstratified topsoil. The standard of preservation ranged from fair to good, with variable abrasion amongst the ceramic finds.

Period	Material class	Count	Weight(g)
Roman	Ceramic	7	64
Post-medieval	Ceramic	12	151
Post-medieval	Glass	2	9
Post-medieval	Metal	2	32
Post-med/modern	Ceramic	9	252
Undated	Bone	2	25
Undated	Glass	1	13
Undated	Slag	1	12
Undated	Stone	2	14
	Totals:	38	572

Table 1: Quantification of the assemblage.

Pottery

The pottery sherds were grouped and quantified according to fabric type, then dated to their broad production spans, as shown in Table 2. None of the pottery was diagnostic in terms of form.

Period	Fabric code	Fabric common name	Count	Weight(g)
Post-medieval	81.5	White salt-glazed stoneware	2	4
Post-medieval/ modern	85	Modern china	2	10
Post-medieval/ modern	100	Miscellaneous post-medieval wares	4	20
Post-medieval	90	Post-medieval orange ware	7	143
Roman	12	Severn Valley ware	3	38
Roman	15	Coarse sandy grey ware	2	20
Roman	22	Black-burnished ware, type 1 (BB1)	2	6
		Totals:	22	241

Table 2: Quantification of the pottery by period and fabric-type

The Roman pottery consisted of Severn Valley ware (fabric 12) and sandy grey wares (fabric 15). The Severn Valley ware sherds included small rim sections from a jar or flagon, and from a bowl, while one of the grey ware sherds was an everted and thickened rim from a jar. None of these commonly occurring forms could be precisely dated within the mid 1st-4th century period of Roman occupation.

No medieval pottery finds were identified. Post-medieval pottery dated from the 18th century. There were a number of orange ware (fabric 90) sherds with glazes ranging in colour from mid orange-brown to dark brown. These were from thick-walled vessels, but with the only evidence of form being an abraded sherd that probably came from a conical lid. Two small sherds of white, salt-glazed stoneware (fabric 81.5) dated from 1720-70.

The remainder of the pottery comprised mass-produced material from the 19th or 20th centuries, with two sherds each of china (fabric 85), glazed earthenware (fabric 100) and unglazed earthenware flowerpot (fabric 100).

5.2.2 **Other artefacts**

The non-pottery finds were few and unremarkable. Two pieces of flint may possibly have been *débitage* from prehistoric knapping of tools, though their irregular patterns of fracture could equally well have been the result of natural or accidental breakages within the soil.

Three clay pipe stem fragments lacked any stamps or other distinguishing features, so could have been from any time within a broad 17th-19th century date range. Other ceramic finds were fragments from glazed stoneware drain pipes, and part of a garden edging tile.

Other non-pottery finds were two hand-made nails with forged ‘rose-heads’, a sherd of green vessel glass, very small pieces of iron slag and black glass waste, and a horn core and skull fragment from a goat or sheep.

6. Synthesis

The groundworks did not exceed the depth of the topsoil existing on the site, a garden soil surviving from the allotments that were formerly on the site. The retrieval of Roman material

was not surprising given the known archaeological site within the area; it is usual in these circumstances to recover residual artefacts. No other archaeological deposits, features, layers or structures were recorded and natural deposits were not encountered.

6.1.1 Overview of artefactual evidence

The assemblage, recovered during of topsoil, is of limited archaeological significance, not only because of its small size and range of artefacts, but also as a result of the lack of stratified deposition. The presence of Roman pottery indicates the possibility of long, if not continuous occupation in the area, but it has to be acknowledged that movement of topsoil may have introduced these, and later post-medieval/modern finds from elsewhere. Table 3 presents a recent *terminus post quem* date that reflects, therefore, the uncertain deposition history of the site.

Context	Material class	Object specific type	Count	Weight(g)	Start date	End date	*Terminus post quem*
0	Ceramic	Clay Pipe	3	4	1600	1900	1850-2000
	Ceramic	Garden Edging	1	199	1850	1950	
	Ceramic	Pipe	2	23	1800	1950	
	Ceramic	Pot	3	38	43	400	
	Ceramic	Pot	2	20	43	400	
	Ceramic	Pot	2	6	120	400	
	Ceramic	Pot	2	17	1800	1970	
	Ceramic	Pot	7	143	1700	1800	
	Ceramic	Pot	2	10	1800	2000	
	Ceramic	Pot	2	4	1720	1770	
	Ceramic	Pot	2	3	1800	2000	
	Glass	Vessel	2	9	1800	2000	
	Glass	-	1	13	0	0	
	Metal	Nail	2	32	1600	1800	
	Slag	-	1	12	0	0	
	Stone	-	2	14	0	0	

Table 3 Summary of context dating based on artefacts

7. Publication summary

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

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8. Acknowledgements

The Service would like to thank the following for their kind assistance in the successful conclusion of this project, Paul Gajos, CgMs Consulting Ltd, Sue Cretney, Parish Clerk, Bourton-on-the-Water Parish Council and Charles Parry, Archaeological Officer, Gloucestershire County Council.

9. Personnel

The fieldwork was led by Matthew Simmonds and the report was written by Elizabeth Curran. The project manager responsible for the quality of the project was Tom Rogers. Fieldwork was undertaken by Matthew Simmonds and Sean Rice, finds analysis by Dennis Williams and illustration by Carolyn Hunt.

10. Bibliography

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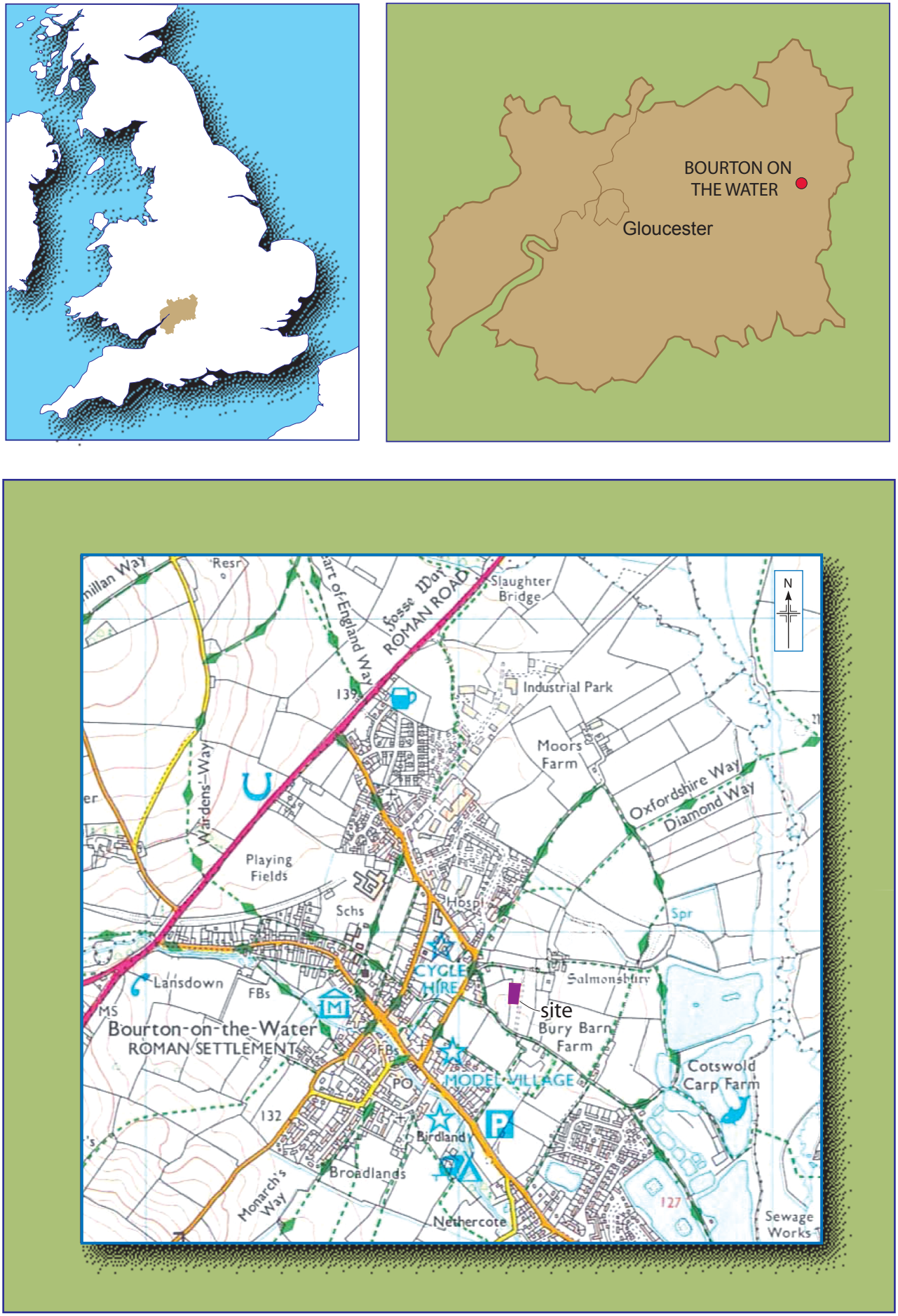
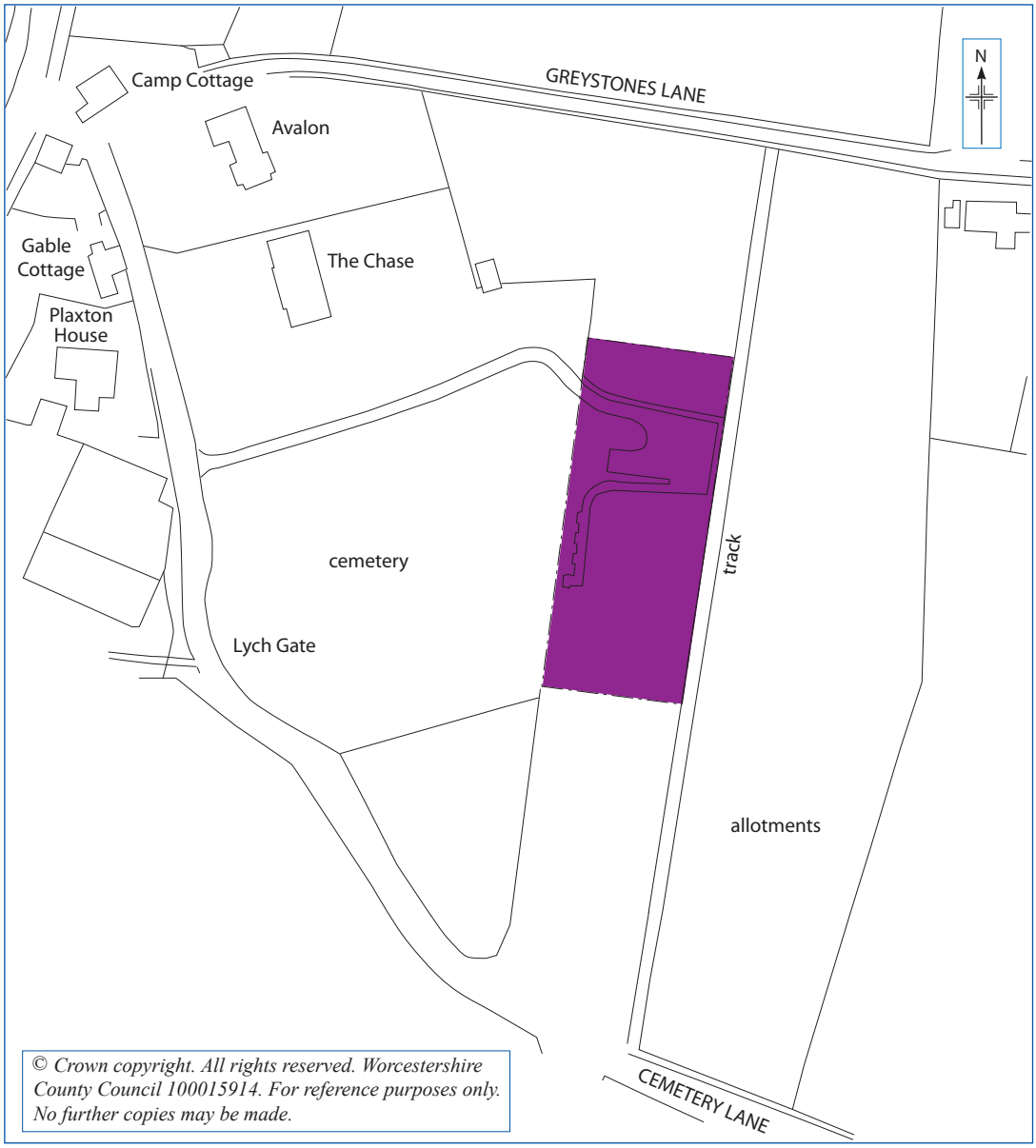
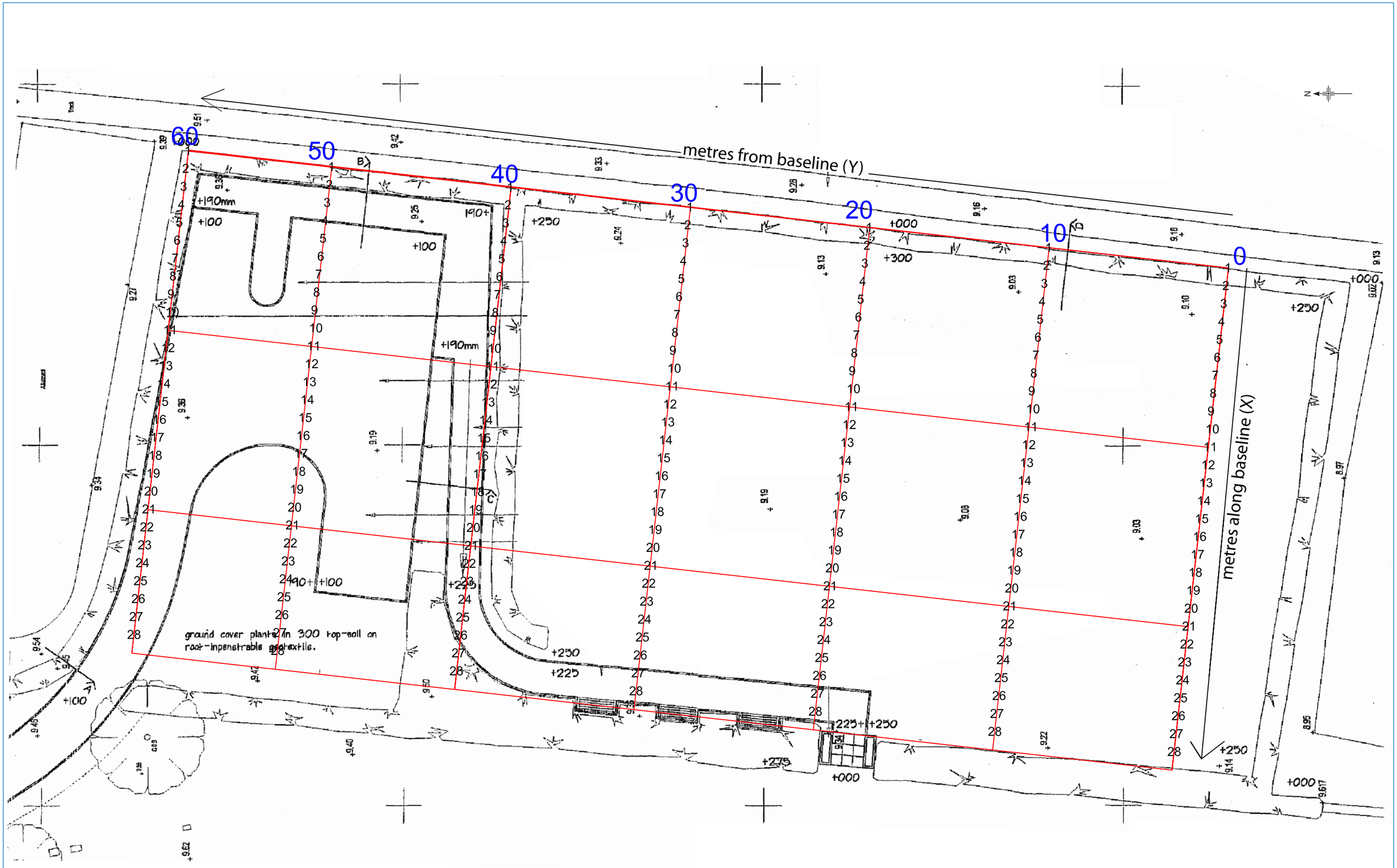
Figures



Location of the site *Figure 1*



Trench location plan *Figure 2*



Plan of site (based upon Alan Pinder drawing no 020904/p22c)

Figure 3

Plates

Plate 1: The site, prior to excavation, view north

Plate 2: Interim site strip, view north west.

Plate 3: Interim site strip, view north west

Plate 4: Interim site strip, view south west

Plate 5: The site following the completion of the strip, view south east

Appendix 1 Trench descriptions

Site Strip

Maximum dimensions: 2015m^2

Main deposit description

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
001	Topsoil	Topsoil comprised a dark brown/black humic sandy clay with frequent organic inclusions with occasional gravel and inclusions of flecks of charcoal.	0.0 -0.15m

Appendix 2 Level Survey

Where X is present the value is Metres along the base line. Y is Metres north of the base line. Z is the height difference.

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
0	0	134.22	1.3	1.31	134.21	134.22	1.16	1.23	134.15	0.06
1	0	134.22	1.3	1.31	134.21	134.22	1.16	1.24	134.14	0.07
2	0	134.22	1.3	1.33	134.19	134.22	1.16	1.245	134.135	0.055
3	0	134.22	1.3	1.34	134.18	134.22	1.16	1.27	134.11	0.07
4	0	134.22	1.3	1.36	134.16	134.22	1.16	1.29	134.09	0.07
5	0	134.22	1.3	1.385	134.135	134.22	1.16	1.305	134.075	0.06
6	0	134.22	1.3	1.41	134.11	134.22	1.16	1.315	134.065	0.045
7	0	134.22	1.3	1.42	134.1	134.22	1.16	1.325	134.055	0.045
8	0	134.22	1.3	1.41	134.11	134.22	1.16	1.325	134.055	0.055
9	0	134.22	1.3	1.42	134.1	134.22	1.16	1.34	134.04	0.06
10	0	134.22	1.3	1.4	134.12	134.22	1.16	1.34	134.04	0.08
11	0	134.22	1.3	1.42	134.1	134.22	1.16	1.35	134.03	0.07
12	0	134.22	1.3	1.42	134.1	134.22	1.16	1.325	134.055	0.045
13	0	134.22	1.3	1.42	134.1	134.22	1.16	1.325	134.055	0.045
14	0	134.22	1.3	1.42	134.1	134.22	1.16	1.32	134.06	0.04
15	0	134.22	1.3	1.4	134.12	134.22	1.16	1.31	134.07	0.05
16	0	134.22	1.3	1.415	134.105	134.22	1.16	1.315	134.065	0.04
17	0	134.22	1.3	1.4	134.12	134.22	1.16	1.31	134.07	0.05
18	0	134.22	1.3	1.4	134.12	134.22	1.16	1.32	134.06	0.06
19	0	134.22	1.3	1.4	134.12	134.22	1.16	1.32	134.06	0.06
20	0	134.22	1.3	1.4	134.12	134.22	1.16	1.34	134.04	0.08
21	0	134.22	1.3	1.415	134.105	134.22	1.16	1.35	134.03	0.075
22	0	134.22	1.3	1.405	134.115	134.22	1.16	1.37	134.01	0.105
23	0	134.22	1.3	1.47	134.05	134.22	1.16	1.37	134.01	0.04
24	0	134.22	1.3	1.41	134.11	134.22	1.16	1.375	134.005	0.105
25	0	134.22	1.3	1.36	134.16	134.22	1.16	1.35	134.03	0.13
26	0	134.22	1.3	1.28	134.24	134.22	1.16	1.235	134.145	0.095

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
27	0	134.22	1.3	1.19	134.33	134.22	1.16	1.165	134.215	0.115
28	0	134.22	1.3	1.13	134.39	134.22	1.16	1.075	134.305	0.085
0	1	134.22	1.3	1.32	134.2	134.22	1.16	1.24	134.14	0.06
1	1	134.22	1.3	1.335	134.185	134.22	1.16	1.26	134.12	0.065
2	1	134.22	1.3	1.35	134.17	134.22	1.16	1.265	134.115	0.055
3	1	134.22	1.3	1.355	134.165	134.22	1.16	1.285	134.095	0.07
4	1	134.22	1.3	1.37	134.15	134.22	1.16	1.305	134.075	0.075
5	1	134.22	1.3	1.38	134.14	134.22	1.16	1.32	134.06	0.08
6	1	134.22	1.3	1.405	134.115	134.22	1.16	1.33	134.05	0.065
7	1	134.22	1.3	1.405	134.115	134.22	1.16	1.34	134.04	0.075
8	1	134.22	1.3	1.425	134.095	134.22	1.16	1.35	134.03	0.065
9	1	134.22	1.3	1.425	134.095	134.22	1.16	1.35	134.03	0.065
10	1	134.22	1.3	1.42	134.1	134.22	1.16	1.35	134.03	0.07
11	1	134.22	1.3	1.41	134.11	134.22	1.16	1.35	134.03	0.08
12	1	134.22	1.3	1.41	134.11	134.22	1.16	1.34	134.04	0.07
13	1	134.22	1.3	1.395	134.125	134.22	1.16	1.34	134.04	0.085
14	1	134.22	1.3	1.33	134.19	134.22	1.16	1.33	134.05	0.14
15	1	134.22	1.3	1.345	134.175	134.22	1.16	1.32	134.06	0.115
16	1	134.22	1.3	1.365	134.155	134.22	1.16	1.315	134.065	0.09
17	1	134.22	1.3	1.345	134.175	134.22	1.16	1.32	134.06	0.115
18	1	134.22	1.3	1.335	134.185	134.22	1.16	1.32	134.06	0.125
19	1	134.22	1.3	1.36	134.16	134.22	1.16	1.33	134.05	0.11
20	1	134.22	1.3	1.385	134.135	134.22	1.16	1.33	134.05	0.085
21	1	134.22	1.3	1.4	134.12	134.22	1.16	1.345	134.035	0.085
22	1	134.22	1.3	1.43	134.09	134.22	1.16	1.36	134.02	0.07
23	1	134.22	1.3	1.44	134.08	134.22	1.16	1.37	134.01	0.07
24	1	134.22	1.3	1.44	134.08	134.22	1.16	1.36	134.02	0.06
25	1	134.22	1.3	1.375	134.145	134.22	1.16	1.34	134.04	0.105
26	1	134.22	1.3	1.31	134.21	134.22	1.16	1.275	134.105	0.105
27	1	134.22	1.3	1.2	134.32	134.22	1.16	1.2	134.18	0.14
28	1	134.22	1.3	1.12	134.4	134.22	1.16	1.125	134.255	0.145
0	2	134.22	1.3	1.34	134.18	134.22	1.16	1.29	134.09	0.09
1	2	134.22	1.3	1.355	134.165	134.22	1.16	1.285	134.095	0.07
2	2	134.22	1.3	1.375	134.145	134.22	1.16	1.295	134.085	0.06
3	2	134.22	1.3	1.37	134.15	134.22	1.16	1.305	134.075	0.075
4	2	134.22	1.3	1.4	134.12	134.22	1.16	1.305	134.075	0.045
5	2	134.22	1.3	1.415	134.105	134.22	1.16	1.315	134.065	0.04
6	2	134.22	1.3	1.4	134.12	134.22	1.16	1.33	134.05	0.07
7	2	134.22	1.3	1.395	134.125	134.22	1.16	1.34	134.04	0.085
8	2	134.22	1.3	1.42	134.1	134.22	1.16	1.365	134.015	0.085
9	2	134.22	1.3	1.415	134.105	134.22	1.16	1.36	134.02	0.085
10	2	134.22	1.3	1.415	134.105	134.22	1.16	1.345	134.035	0.07
11	2	134.22	1.3	1.4	134.12	134.22	1.16	1.345	134.035	0.085
12	2	134.22	1.3	1.39	134.13	134.22	1.16	1.33	134.05	0.08
13	2	134.22	1.3	1.35	134.17	134.22	1.16	1.325	134.055	0.115
14	2	134.22	1.3	1.385	134.135	134.22	1.16	1.32	134.06	0.075
15	2	134.22	1.3	1.385	134.135	134.22	1.16	1.32	134.06	0.075

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
16	2	134.22	1.3	1.375	134.145	134.22	1.16	1.315	134.065	0.08
17	2	134.22	1.3	1.375	134.145	134.22	1.16	1.305	134.075	0.07
18	2	134.22	1.3	1.38	134.14	134.22	1.16	1.32	134.06	0.08
19	2	134.22	1.3	1.385	134.135	134.22	1.16	1.32	134.06	0.075
20	2	134.22	1.3	1.38	134.14	134.22	1.16	1.315	134.065	0.075
21	2	134.22	1.3	1.405	134.115	134.22	1.16	1.32	134.06	0.055
22	2	134.22	1.3	1.4	134.12	134.22	1.16	1.33	134.05	0.07
23	2	134.22	1.3	1.4	134.12	134.22	1.16	1.35	134.03	0.09
24	2	134.22	1.3	1.39	134.13	134.22	1.16	1.37	134.01	0.12
25	2	134.22	1.3	1.36	134.16	134.22	1.16	1.34	134.04	0.12
26	2	134.22	1.3	1.31	134.21	134.22	1.16	1.26	134.12	0.09
27	2	134.22	1.3	1.23	134.29	134.22	1.16	1.18	134.2	0.09
28	2	134.22	1.3	1.14	134.38	134.22	1.16	1.1	134.28	0.1
0	3	134.22	1.3	1.37	134.15	134.22	1.16	1.29	134.09	0.06
1	3	134.22	1.3	1.385	134.135	134.22	1.16	1.31	134.07	0.065
2	3	134.22	1.3	1.385	134.135	134.22	1.16	1.315	134.065	0.07
3	3	134.22	1.3	1.39	134.13	134.22	1.16	1.32	134.06	0.07
4	3	134.22	1.3	1.405	134.115	134.22	1.16	1.33	134.05	0.065
5	3	134.22	1.3	1.41	134.11	134.22	1.16	1.34	134.04	0.07
6	3	134.22	1.3	1.4	134.12	134.22	1.16	1.33	134.05	0.07
7	3	134.22	1.3	1.395	134.125	134.22	1.16	1.335	134.045	0.08
8	3	134.22	1.3	1.405	134.115	134.22	1.16	1.35	134.03	0.085
9	3	134.22	1.3	1.415	134.105	134.22	1.16	1.355	134.025	0.08
10	3	134.22	1.3	1.39	134.13	134.22	1.16	1.36	134.02	0.11
11	3	134.22	1.3	1.395	134.125	134.22	1.16	1.34	134.04	0.085
12	3	134.22	1.3	1.36	134.16	134.22	1.16	1.325	134.055	0.105
13	3	134.22	1.3	1.34	134.18	134.22	1.16	1.31	134.07	0.11
14	3	134.22	1.3	1.34	134.18	134.22	1.16	1.315	134.065	0.115
15	3	134.22	1.3	1.36	134.16	134.22	1.16	1.31	134.07	0.09
16	3	134.22	1.3	1.36	134.16	134.22	1.16	1.31	134.07	0.09
17	3	134.22	1.3	1.375	134.145	134.22	1.16	1.32	134.06	0.085
18	3	134.22	1.3	1.395	134.125	134.22	1.16	1.31	134.07	0.055
19	3	134.22	1.3	1.39	134.13	134.22	1.16	1.33	134.05	0.08
20	3	134.22	1.3	1.385	134.135	134.22	1.16	1.33	134.05	0.085
21	3	134.22	1.3	1.375	134.145	134.22	1.16	1.33	134.05	0.095
22	3	134.22	1.3	1.375	134.145	134.22	1.16	1.345	134.035	0.11
23	3	134.22	1.3	1.395	134.125	134.22	1.16	1.345	134.035	0.09
24	3	134.22	1.3	1.42	134.1	134.22	1.16	1.35	134.03	0.07
25	3	134.22	1.3	1.36	134.16	134.22	1.16	1.34	134.04	0.12
26	3	134.22	1.3	1.33	134.19	134.22	1.16	1.25	134.13	0.06
27	3	134.22	1.3	1.19	134.33	134.22	1.16	1.155	134.225	0.105
28	3	134.22	1.3	1.14	134.38	134.22	1.16	1.085	134.295	0.085
0	4	134.22	1.3	1.37	134.15	134.22	1.16	1.31	134.07	0.08
1	4	134.22	1.3	1.395	134.125	134.22	1.16	1.32	134.06	0.065
2	4	134.22	1.3	1.385	134.135	134.22	1.16	1.345	134.035	0.1
3	4	134.22	1.3	1.41	134.11	134.22	1.16	1.34	134.04	0.07
4	4	134.22	1.3	1.39	134.13	134.22	1.16	1.34	134.04	0.09

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
5	4	134.22	1.3	1.405	134.115	134.22	1.16	1.35	134.03	0.085
6	4	134.22	1.3	1.41	134.11	134.22	1.16	1.335	134.045	0.065
7	4	134.22	1.3	1.39	134.13	134.22	1.16	1.33	134.05	0.08
8	4	134.22	1.3	1.41	134.11	134.22	1.16	1.34	134.04	0.07
9	4	134.22	1.3	1.42	134.1	134.22	1.16	1.35	134.03	0.07
10	4	134.22	1.3	1.39	134.13	134.22	1.16	1.355	134.025	0.105
11	4	134.22	1.3	1.405	134.115	134.22	1.16	1.325	134.055	0.06
12	4	134.22	1.3	1.37	134.15	134.22	1.16	1.31	134.07	0.08
13	4	134.22	1.3	1.35	134.17	134.22	1.16	1.3	134.08	0.09
14	4	134.22	1.3	1.365	134.155	134.22	1.16	1.3	134.08	0.075
15	4	134.22	1.3	1.36	134.16	134.22	1.16	1.295	134.085	0.075
16	4	134.22	1.3	1.365	134.155	134.22	1.16	1.31	134.07	0.085
17	4	134.22	1.3	1.375	134.145	134.22	1.16	1.31	134.07	0.075
18	4	134.22	1.3	1.39	134.13	134.22	1.16	1.32	134.06	0.07
19	4	134.22	1.3	1.39	134.13	134.22	1.16	1.34	134.04	0.09
20	4	134.22	1.3	1.41	134.11	134.22	1.16	1.33	134.05	0.06
21	4	134.22	1.3	1.41	134.11	134.22	1.16	1.32	134.06	0.05
22	4	134.22	1.3	1.4	134.12	134.22	1.16	1.36	134.02	0.1
23	4	134.22	1.3	1.4	134.12	134.22	1.16	1.355	134.025	0.095
24	4	134.22	1.3	1.42	134.1	134.22	1.16	1.345	134.035	0.065
25	4	134.22	1.3	1.33	134.19	134.22	1.16	1.315	134.065	0.125
26	4	134.22	1.3	1.28	134.24	134.22	1.16	1.225	134.155	0.085
27	4	134.22	1.3	1.19	134.33	134.22	1.16	1.14	134.24	0.09
28	4	134.22	1.3	1.125	134.395	134.22	1.16	1.055	134.325	0.07
0	5	134.22	1.3	1.35	134.17	134.22	1.16	1.295	134.085	0.085
1	5	134.22	1.3	1.425	134.095	134.22	1.16	1.31	134.07	0.025
2	5	134.22	1.3	1.46	134.06	134.22	1.16	1.34	134.04	0.02
3	5	134.22	1.3	1.42	134.1	134.22	1.16	1.34	134.04	0.06
4	5	134.22	1.3	1.415	134.105	134.22	1.16	1.335	134.045	0.06
5	5	134.22	1.3	1.39	134.13	134.22	1.16	1.325	134.055	0.075
6	5	134.22	1.3	1.39	134.13	134.22	1.16	1.32	134.06	0.07
7	5	134.22	1.3	1.42	134.1	134.22	1.16	1.32	134.06	0.04
8	5	134.22	1.3	1.415	134.105	134.22	1.16	1.335	134.045	0.06
9	5	134.22	1.3	1.42	134.1	134.22	1.16	1.345	134.035	0.065
10	5	134.22	1.3	1.41	134.11	134.22	1.16	1.345	134.035	0.075
11	5	134.22	1.3	1.4	134.12	134.22	1.16	1.33	134.05	0.07
12	5	134.22	1.3	1.37	134.15	134.22	1.16	1.305	134.075	0.075
13	5	134.22	1.3	1.37	134.15	134.22	1.16	1.31	134.07	0.08
14	5	134.22	1.3	1.36	134.16	134.22	1.16	1.3	134.08	0.08
15	5	134.22	1.3	1.385	134.135	134.22	1.16	1.3	134.08	0.055
16	5	134.22	1.3	1.385	134.135	134.22	1.16	1.315	134.065	0.07
17	5	134.22	1.3	1.37	134.15	134.22	1.16	1.295	134.085	0.065
18	5	134.22	1.3	1.365	134.155	134.22	1.16	1.305	134.075	0.08
19	5	134.22	1.3	1.395	134.125	134.22	1.16	1.325	134.055	0.07
20	5	134.22	1.3	1.42	134.1	134.22	1.16	1.325	134.055	0.045
21	5	134.22	1.3	1.42	134.1	134.22	1.16	1.345	134.035	0.065
22	5	134.22	1.3	1.42	134.1	134.22	1.16	1.35	134.03	0.07

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
23	5	134.22	1.3	1.425	134.095	134.22	1.16	1.345	134.035	0.06
24	5	134.22	1.3	1.4	134.12	134.22	1.16	1.34	134.04	0.08
25	5	134.22	1.3	1.36	134.16	134.22	1.16	1.305	134.075	0.085
26	5	134.22	1.3	1.31	134.21	134.22	1.16	1.23	134.15	0.06
27	5	134.22	1.3	1.18	134.34	134.22	1.16	1.145	134.235	0.105
28	5	134.22	1.3	1.115	134.405	134.22	1.16	1.065	134.315	0.09
0	6	134.22	1.3	1.375	134.145	134.22	1.16	1.325	134.055	0.09
1	6	134.22	1.3	1.45	134.07	134.22	1.16	1.325	134.055	0.015
2	6	134.22	1.3	1.45	134.07	134.22	1.16	1.34	134.04	0.03
3	6	134.22	1.3	1.41	134.11	134.22	1.16	1.335	134.045	0.065
4	6	134.22	1.3	1.435	134.085	134.22	1.16	1.325	134.055	0.03
5	6	134.22	1.3	1.405	134.115	134.22	1.16	1.32	134.06	0.055
6	6	134.22	1.3	1.4	134.12	134.22	1.16	1.33	134.05	0.07
7	6	134.22	1.3	1.4	134.12	134.22	1.16	1.355	134.025	0.095
8	6	134.22	1.3	1.395	134.125	134.22	1.16	1.345	134.035	0.09
9	6	134.22	1.3	1.405	134.115	134.22	1.16	1.34	134.04	0.075
10	6	134.22	1.3	1.405	134.115	134.22	1.16	1.33	134.05	0.065
11	6	134.22	1.3	1.395	134.125	134.22	1.16	1.315	134.065	0.06
12	6	134.22	1.3	1.38	134.14	134.22	1.16	1.305	134.075	0.065
13	6	134.22	1.3	1.37	134.15	134.22	1.16	1.3	134.08	0.07
14	6	134.22	1.3	1.38	134.14	134.22	1.16	1.3	134.08	0.06
15	6	134.22	1.3	1.375	134.145	134.22	1.16	1.3	134.08	0.065
16	6	134.22	1.3	1.36	134.16	134.22	1.16	1.3	134.08	0.08
17	6	134.22	1.3	1.36	134.16	134.22	1.16	1.295	134.085	0.075
18	6	134.22	1.3	1.37	134.15	134.22	1.16	1.31	134.07	0.08
19	6	134.22	1.3	1.39	134.13	134.22	1.16	1.325	134.055	0.075
20	6	134.22	1.3	1.4	134.12	134.22	1.16	1.32	134.06	0.06
21	6	134.22	1.3	1.405	134.115	134.22	1.16	1.355	134.025	0.09
22	6	134.22	1.3	1.39	134.13	134.22	1.16	1.335	134.045	0.085
23	6	134.22	1.3	1.4	134.12	134.22	1.16	1.325	134.055	0.065
24	6	134.22	1.3	1.41	134.11	134.22	1.16	1.33	134.05	0.06
25	6	134.22	1.3	1.35	134.17	134.22	1.16	1.285	134.095	0.075
26	6	134.22	1.3	1.27	134.25	134.22	1.16	1.235	134.145	0.105
27	6	134.22	1.3	1.16	134.36	134.22	1.16	1.15	134.23	0.13
28	6	134.22	1.3	1.08	134.44	134.22	1.16	1.07	134.31	0.13
0	7	134.22	1.3	1.37	134.15	134.22	1.16	1.315	134.065	0.085
1	7	134.22	1.3	1.41	134.11	134.22	1.16	1.32	134.06	0.05
2	7	134.22	1.3	1.42	134.1	134.22	1.16	1.335	134.045	0.055
3	7	134.22	1.3	1.39	134.13	134.22	1.16	1.33	134.05	0.08
4	7	134.22	1.3	1.395	134.125	134.22	1.16	1.33	134.05	0.075
5	7	134.22	1.3	1.4	134.12	134.22	1.16	1.32	134.06	0.06
6	7	134.22	1.3	1.375	134.145	134.22	1.16	1.31	134.07	0.075
7	7	134.22	1.3	1.375	134.145	134.22	1.16	1.32	134.06	0.085
8	7	134.22	1.3	1.385	134.135	134.22	1.16	1.34	134.04	0.095
9	7	134.22	1.3	1.385	134.135	134.22	1.16	1.335	134.045	0.09
10	7	134.22	1.3	1.385	134.135	134.22	1.16	1.33	134.05	0.085
11	7	134.22	1.3	1.38	134.14	134.22	1.16	1.3	134.08	0.06

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
12	7	134.22	1.3	1.375	134.145	134.22	1.16	1.3	134.08	0.065
13	7	134.22	1.3	1.375	134.145	134.22	1.16	1.29	134.09	0.055
14	7	134.22	1.3	1.34	134.18	134.22	1.16	1.275	134.105	0.075
15	7	134.22	1.3	1.355	134.165	134.22	1.16	1.295	134.085	0.08
16	7	134.22	1.3	1.355	134.165	134.22	1.16	1.3	134.08	0.085
17	7	134.22	1.3	1.345	134.175	134.22	1.16	1.285	134.095	0.08
18	7	134.22	1.3	1.33	134.19	134.22	1.16	1.285	134.095	0.095
19	7	134.22	1.3	1.35	134.17	134.22	1.16	1.295	134.085	0.085
20	7	134.22	1.3	1.36	134.16	134.22	1.16	1.32	134.06	0.1
21	7	134.22	1.3	1.375	134.145	134.22	1.16	1.32	134.06	0.085
22	7	134.22	1.3	1.38	134.14	134.22	1.16	1.32	134.06	0.08
23	7	134.22	1.3	1.395	134.125	134.22	1.16	1.33	134.05	0.075
24	7	134.22	1.3	1.4	134.12	134.22	1.16	1.3	134.08	0.04
25	7	134.22	1.3	1.35	134.17	134.22	1.16	1.285	134.095	0.075
26	7	134.22	1.3	1.26	134.26	134.22	1.16	1.22	134.16	0.1
27	7	134.22	1.3	1.15	134.37	134.22	1.16	1.14	134.24	0.13
28	7	134.22	1.3	1.085	134.435	134.22	1.16	1.055	134.325	0.11
0	8	134.22	1.3	1.37	134.15	134.22	1.16	1.28	134.1	0.05
1	8	134.22	1.3	1.39	134.13	134.22	1.16	1.3	134.08	0.05
2	8	134.22	1.3	1.4	134.12	134.22	1.16	1.325	134.055	0.065
3	8	134.22	1.3	1.415	134.105	134.22	1.16	1.34	134.04	0.065
4	8	134.22	1.3	1.405	134.115	134.22	1.16	1.33	134.05	0.065
5	8	134.22	1.3	1.4	134.12	134.22	1.16	1.325	134.055	0.065
6	8	134.22	1.3	1.395	134.125	134.22	1.16	1.315	134.065	0.06
7	8	134.22	1.3	1.38	134.14	134.22	1.16	1.32	134.06	0.08
8	8	134.22	1.3	1.375	134.145	134.22	1.16	1.325	134.055	0.09
9	8	134.22	1.3	1.38	134.14	134.22	1.16	1.315	134.065	0.075
10	8	134.22	1.3	1.385	134.135	134.22	1.16	1.305	134.075	0.06
11	8	134.22	1.3	1.37	134.15	134.22	1.16	1.3	134.08	0.07
12	8	134.22	1.3	1.36	134.16	134.22	1.16	1.29	134.09	0.07
13	8	134.22	1.3	1.35	134.17	134.22	1.16	1.275	134.105	0.065
14	8	134.22	1.3	1.32	134.2	134.22	1.16	1.28	134.1	0.1
15	8	134.22	1.3	1.335	134.185	134.22	1.16	1.295	134.085	0.1
16	8	134.22	1.3	1.335	134.185	134.22	1.16	1.285	134.095	0.09
17	8	134.22	1.3	1.335	134.185	134.22	1.16	1.275	134.105	0.08
18	8	134.22	1.3	1.325	134.195	134.22	1.16	1.265	134.115	0.08
19	8	134.22	1.3	1.345	134.175	134.22	1.16	1.29	134.09	0.085
20	8	134.22	1.3	1.365	134.155	134.22	1.16	1.305	134.075	0.08
21	8	134.22	1.3	1.38	134.14	134.22	1.16	1.3	134.08	0.06
22	8	134.22	1.3	1.38	134.14	134.22	1.16	1.31	134.07	0.07
23	8	134.22	1.3	1.375	134.145	134.22	1.16	1.32	134.06	0.085
24	8	134.22	1.3	1.4	134.12	134.22	1.16	1.29	134.09	0.03
25	8	134.22	1.3	1.385	134.135	134.22	1.16	1.29	134.09	0.045
26	8	134.22	1.3	1.28	134.24	134.22	1.16	1.235	134.145	0.095
27	8	134.22	1.3	1.26	134.26	134.22	1.16	1.18	134.2	0.06
28	8	134.22	1.3	1.165	134.355	134.22	1.16	1.12	134.26	0.095
0	9	134.22	1.3	1.365	134.155	134.22	1.16	1.245	134.135	0.02

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
1	9	134.22	1.3	1.38	134.14	134.22	1.16	1.31	134.07	0.07
2	9	134.22	1.3	1.395	134.125	134.22	1.16	1.325	134.055	0.07
3	9	134.22	1.3	1.41	134.11	134.22	1.16	1.325	134.055	0.055
4	9	134.22	1.3	1.395	134.125	134.22	1.16	1.32	134.06	0.065
5	9	134.22	1.3	1.405	134.115	134.22	1.16	1.32	134.06	0.055
6	9	134.22	1.3	1.39	134.13	134.22	1.16	1.33	134.05	0.08
7	9	134.22	1.3	1.395	134.125	134.22	1.16	1.35	134.03	0.095
8	9	134.22	1.3	1.375	134.145	134.22	1.16	1.335	134.045	0.1
9	9	134.22	1.3	1.375	134.145	134.22	1.16	1.32	134.06	0.085
10	9	134.22	1.3	1.39	134.13	134.22	1.16	1.305	134.075	0.055
11	9	134.22	1.3	1.345	134.175	134.22	1.16	1.295	134.085	0.09
12	9	134.22	1.3	1.365	134.155	134.22	1.16	1.29	134.09	0.065
13	9	134.22	1.3	1.355	134.165	134.22	1.16	1.275	134.105	0.06
14	9	134.22	1.3	1.34	134.18	134.22	1.16	1.27	134.11	0.07
15	9	134.22	1.3	1.355	134.165	134.22	1.16	1.275	134.105	0.06
16	9	134.22	1.3	1.315	134.205	134.22	1.16	1.28	134.1	0.105
17	9	134.22	1.3	1.28	134.24	134.22	1.16	1.27	134.11	0.13
18	9	134.22	1.3	1.25	134.27	134.22	1.16	1.285	134.095	0.175
19	9	134.22	1.3	1.255	134.265	134.22	1.16	1.285	134.095	0.17
20	9	134.22	1.3	1.345	134.175	134.22	1.16	1.3	134.08	0.095
21	9	134.22	1.3	1.35	134.17	134.22	1.16	1.32	134.06	0.11
22	9	134.22	1.3	1.35	134.17	134.22	1.16	1.3	134.08	0.09
23	9	134.22	1.3	1.38	134.14	134.22	1.16	1.31	134.07	0.07
24	9	134.22	1.3	1.375	134.145	134.22	1.16	1.295	134.085	0.06
25	9	134.22	1.3	1.34	134.18	134.22	1.16	1.27	134.11	0.07
26	9	134.22	1.3	1.335	134.185	134.22	1.16	1.25	134.13	0.055
27	9	134.22	1.3	1.29	134.23	134.22	1.16	1.22	134.16	0.07
28	9	134.22	1.3	1.245	134.275	134.22	1.16	1.16	134.22	0.055
0	10	134.22	1.3	1.37	134.15	134.22	1.16	1.29	134.09	0.06
1	10	134.22	1.3	1.44	134.08	134.22	1.16	1.31	134.07	0.01
2	10	134.22	1.3	1.41	134.11	134.22	1.16	1.325	134.055	0.055
3	10	134.22	1.3	1.39	134.13	134.22	1.16	1.33	134.05	0.08
4	10	134.22	1.3	1.4	134.12	134.22	1.16	1.33	134.05	0.07
5	10	134.22	1.3	1.395	134.125	134.22	1.16	1.35	134.03	0.095
6	10	134.22	1.3	1.395	134.125	134.22	1.16	1.335	134.045	0.08
7	10	134.22	1.3	1.39	134.13	134.22	1.16	1.33	134.05	0.08
8	10	134.22	1.3	1.385	134.135	134.22	1.16	1.33	134.05	0.085
9	10	134.22	1.3	1.38	134.14	134.22	1.16	1.32	134.06	0.08
10	10	134.22	1.3	1.39	134.13	134.22	1.16	1.305	134.075	0.055
11	10	134.22	1.3	1.38	134.14	134.22	1.16	1.3	134.08	0.06
12	10	134.22	1.3	1.37	134.15	134.22	1.16	1.305	134.075	0.075
13	10	134.22	1.3	1.36	134.16	134.22	1.16	1.29	134.09	0.07
14	10	134.22	1.3	1.35	134.17	134.22	1.16	1.285	134.095	0.075
15	10	134.22	1.3	1.355	134.165	134.22	1.16	1.27	134.11	0.055
16	10	134.22	1.3	1.33	134.19	134.22	1.16	1.255	134.125	0.065
17	10	134.22	1.3	1.325	134.195	134.22	1.16	1.27	134.11	0.085
18	10	134.22	1.3	1.27	134.25	134.22	1.16	1.26	134.12	0.13

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
19	10	134.22	1.3	1.285	134.235	134.22	1.16	1.25	134.13	0.105
20	10	134.22	1.3	1.335	134.185	134.22	1.16	1.285	134.095	0.09
21	10	134.22	1.3	1.35	134.17	134.22	1.16	1.305	134.075	0.095
22	10	134.22	1.3	1.36	134.16	134.22	1.16	1.3	134.08	0.08
23	10	134.22	1.3	1.31	134.21	134.22	1.16	1.305	134.075	0.135
24	10	134.22	1.3	1.315	134.205	134.22	1.16	1.275	134.105	0.1
25	10	134.22	1.3	1.355	134.165	134.22	1.16	1.265	134.115	0.05
26	10	134.22	1.3	1.305	134.215	134.22	1.16	1.245	134.135	0.08
27	10	134.22	1.3	1.31	134.21	134.22	1.16	1.26	134.12	0.09
28	10	134.22	1.3	1.245	134.275	134.22	1.16	1.24	134.14	0.135
0	11	134.22	1.72	1.785	134.155	134.22	1.65	1.77	134.1	0.055
1	11	134.22	1.72	1.85	134.09	134.22	1.65	1.78	134.09	0
2	11	134.22	1.72	1.86	134.08	134.22	1.65	1.79	134.08	0
3	11	134.22	1.72	1.83	134.11	134.22	1.65	1.79	134.08	0.03
4	11	134.22	1.72	1.8	134.14	134.22	1.65	1.795	134.075	0.065
5	11	134.22	1.72	1.795	134.145	134.22	1.65	1.79	134.08	0.065
6	11	134.22	1.72	1.81	134.13	134.22	1.65	1.77	134.1	0.03
7	11	134.22	1.72	1.795	134.145	134.22	1.65	1.78	134.09	0.055
8	11	134.22	1.72	1.79	134.15	134.22	1.65	1.76	134.11	0.04
9	11	134.22	1.72	1.805	134.135	134.22	1.65	1.77	134.1	0.035
10	11	134.22	1.72	1.79	134.15	134.22	1.65	1.775	134.095	0.055
11	11	134.22	1.72	1.77	134.17	134.22	1.65	1.75	134.12	0.05
12	11	134.22	1.72	1.77	134.17	134.22	1.65	1.76	134.11	0.06
13	11	134.22	1.72	1.77	134.17	134.22	1.65	1.795	134.075	0.095
14	11	134.22	1.72	1.78	134.16	134.22	1.65	1.765	134.105	0.055
15	11	134.22	1.72	1.76	134.18	134.22	1.65	1.755	134.115	0.065
16	11	134.22	1.72	1.715	134.225	134.22	1.65	1.75	134.12	0.105
17	11	134.22	1.72	1.685	134.255	134.22	1.65	1.73	134.14	0.115
18	11	134.22	1.72	1.715	134.225	134.22	1.65	1.73	134.14	0.085
19	11	134.22	1.72	1.75	134.19	134.22	1.65	1.74	134.13	0.06
20	11	134.22	1.72	1.77	134.17	134.22	1.65	1.75	134.12	0.05
21	11	134.22	1.72	1.75	134.19	134.22	1.65	1.75	134.12	0.07
22	11	134.22	1.72	1.755	134.185	134.22	1.65	1.735	134.135	0.05
23	11	134.22	1.72	1.73	134.21	134.22	1.65	1.735	134.135	0.075
24	11	134.22	1.72	1.725	134.215	134.22	1.65	1.68	134.19	0.025
25	11	134.22	1.72	1.76	134.18	134.22	1.65	1.72	134.15	0.03
26	11	134.22	1.72	1.77	134.17	134.22	1.65	1.735	134.135	0.035
27	11	134.22	1.72	1.7	134.24	134.22	1.65	1.69	134.18	0.06
28	11	134.22	1.72	1.66	134.28	134.22	1.65	1.695	134.175	0.105
0	12	134.22	1.72	1.795	135.94	134.22	1.65	1.745	134.125	1.815
1	12	134.22	1.72	1.8	134.145	134.22	1.65	1.79	134.08	0.065
2	12	134.22	1.72	1.825	134.14	134.22	1.65	1.795	134.075	0.065
3	12	134.22	1.72	1.815	134.115	134.22	1.65	1.79	134.08	0.035
4	12	134.22	1.72	1.815	134.125	134.22	1.65	1.805	134.065	0.06
5	12	134.22	1.72	1.8	134.125	134.22	1.65	1.79	134.08	0.045
6	12	134.22	1.72	1.79	134.14	134.22	1.65	1.78	134.09	0.05
7	12	134.22	1.72	1.775	134.15	134.22	1.65	1.78	134.09	0.06

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
8	12	134.22	1.72	1.77	134.165	134.22	1.65	1.78	134.09	0.075
9	12	134.22	1.72	1.78	134.17	134.22	1.65	1.815	134.055	0.115
10	12	134.22	1.72	1.79	134.16	134.22	1.65	1.78	134.09	0.07
11	12	134.22	1.72	1.755	134.15	134.22	1.65	1.77	134.1	0.05
12	12	134.22	1.72	1.76	134.185	134.22	1.65	1.76	134.11	0.075
13	12	134.22	1.72	1.755	134.18	134.22	1.65	1.81	134.06	0.12
14	12	134.22	1.72	1.725	134.185	134.22	1.65	1.755	134.115	0.07
15	12	134.22	1.72	1.695	134.215	134.22	1.65	1.745	134.125	0.09
16	12	134.22	1.72	1.73	134.245	134.22	1.65	1.735	134.135	0.11
17	12	134.22	1.72	1.705	134.21	134.22	1.65	1.7	134.17	0.04
18	12	134.22	1.72	1.745	134.235	134.22	1.65	1.725	134.145	0.09
19	12	134.22	1.72	1.74	134.195	134.22	1.65	1.71	134.16	0.035
20	12	134.22	1.72	1.76	134.2	134.22	1.65	1.735	134.135	0.065
21	12	134.22	1.72	1.755	134.185	134.22	1.65	1.7	134.17	0.015
22	12	134.22	1.72	1.73	134.21	134.22	1.65	1.72	134.15	0.06
23	12	134.22	1.72	1.71	134.23	134.22	1.65	1.715	134.155	0.075
24	12	134.22	1.72	1.715	134.225	134.22	1.65	1.71	134.16	0.065
25	12	134.22	1.72	1.72	134.22	134.22	1.65	1.69	134.18	0.04
26	12	134.22	1.72	1.76	134.18	134.22	1.65	1.755	134.115	0.065
27	12	134.22	1.72	1.735	134.205	134.22	1.65	1.74	134.13	0.075
28	12	134.22	1.72	1.66	134.28	134.22	1.65	1.69	134.18	0.1
0	13	134.22	1.72	1.735	134.205	134.22	1.65	1.73	134.14	0.065
1	13	134.22	1.72	1.78	134.16	134.22	1.65	1.75	134.12	0.04
2	13	134.22	1.72	1.81	134.13	134.22	1.65	1.805	134.065	0.065
3	13	134.22	1.72	1.82	134.12	134.22	1.65	1.795	134.075	0.045
4	13	134.22	1.72	1.79	134.15	134.22	1.65	1.805	134.065	0.085
5	13	134.22	1.72	1.785	134.155	134.22	1.65	1.78	134.09	0.065
6	13	134.22	1.72	1.79	134.15	134.22	1.65	1.79	134.08	0.07
7	13	134.22	1.72	1.78	134.16	134.22	1.65	1.77	134.1	0.06
8	13	134.22	1.72	1.77	134.17	134.22	1.65	1.785	134.085	0.085
9	13	134.22	1.72	1.78	134.16	134.22	1.65	1.76	134.11	0.05
10	13	134.22	1.72	1.765	134.175	134.22	1.65	1.77	134.1	0.075
11	13	134.22	1.72	1.75	134.19	134.22	1.65	1.75	134.12	0.07
12	13	134.22	1.72	1.725	134.215	134.22	1.65	1.775	134.095	0.12
13	13	134.22	1.72	1.7	134.24	134.22	1.65	1.785	134.085	0.155
14	13	134.22	1.72	1.69	134.25	134.22	1.65	1.7	134.17	0.08
15	13	134.22	1.72	1.655	134.285	134.22	1.65	1.72	134.15	0.135
16	13	134.22	1.72	1.66	134.28	134.22	1.65	1.69	134.18	0.1
17	13	134.22	1.72	1.695	134.245	134.22	1.65	1.675	134.195	0.05
18	13	134.22	1.72	1.685	134.255	134.22	1.65	1.705	134.165	0.09
19	13	134.22	1.72	1.67	134.27	134.22	1.65	1.69	134.18	0.09
20	13	134.22	1.72	1.69	134.25	134.22	1.65	1.72	134.15	0.1
21	13	134.22	1.72	1.695	134.245	134.22	1.65	1.695	134.175	0.07
22	13	134.22	1.72	1.66	134.28	134.22	1.65	1.68	134.19	0.09
23	13	134.22	1.72	1.695	134.245	134.22	1.65	1.69	134.18	0.065
24	13	134.22	1.72	1.7	134.24	134.22	1.65	1.725	134.145	0.095
25	13	134.22	1.72	1.68	134.26	134.22	1.65	1.705	134.165	0.095

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
26	13	134.22	1.72	1.655	134.285	134.22	1.65	1.72	134.15	0.135
27	13	134.22	1.72	1.635	134.305	134.22	1.65	1.685	134.185	0.12
28	13	134.22	1.72	1.535	134.405	134.22	1.65	1.575	134.295	0.11
0	14	134.22	1.72	1.73	134.21	134.22	1.65	1.71	134.16	0.05
1	14	134.22	1.72	1.775	134.165	134.22	1.65	1.76	134.11	0.055
2	14	134.22	1.72	1.74	134.2	134.22	1.65	1.78	134.09	0.11
3	14	134.22	1.72	1.775	134.165	134.22	1.65	1.81	134.06	0.105
4	14	134.22	1.72	1.785	134.155	134.22	1.65	1.81	134.06	0.095
5	14	134.22	1.72	1.78	134.16	134.22	1.65	1.775	134.095	0.065
6	14	134.22	1.72	1.78	134.16	134.22	1.65	1.79	134.08	0.08
7	14	134.22	1.72	1.78	134.16	134.22	1.65	1.775	134.095	0.065
8	14	134.22	1.72	1.755	134.185	134.22	1.65	1.79	134.08	0.105
9	14	134.22	1.72	1.76	134.18	134.22	1.65	1.765	134.105	0.075
10	14	134.22	1.72	1.77	134.17	134.22	1.65	1.755	134.115	0.055
11	14	134.22	1.72	1.75	134.19	134.22	1.65	1.76	134.11	0.08
12	14	134.22	1.72	1.73	134.21	134.22	1.65	1.75	134.12	0.09
13	14	134.22	1.72	1.715	134.225	134.22	1.65	1.775	134.095	0.13
14	14	134.22	1.72	1.695	134.245	134.22	1.65	1.73	134.14	0.105
15	14	134.22	1.72	1.64	134.3	134.22	1.65	1.68	134.19	0.11
16	14	134.22	1.72	1.66	134.28	134.22	1.65	1.665	134.205	0.075
17	14	134.22	1.72	1.675	134.265	134.22	1.65	1.68	134.19	0.075
18	14	134.22	1.72	1.69	134.25	134.22	1.65	1.7	134.17	0.08
19	14	134.22	1.72	1.695	134.245	134.22	1.65	1.7	134.17	0.075
20	14	134.22	1.72	1.64	134.3	134.22	1.65	1.68	134.19	0.11
21	14	134.22	1.72	1.665	134.275	134.22	1.65	1.675	134.195	0.08
22	14	134.22	1.72	1.69	134.25	134.22	1.65	1.66	134.21	0.04
23	14	134.22	1.72	1.695	134.245	134.22	1.65	1.685	134.185	0.06
24	14	134.22	1.72	1.69	134.25	134.22	1.65	1.68	134.19	0.06
25	14	134.22	1.72	1.67	134.27	134.22	1.65	1.65	134.22	0.05
26	14	134.22	1.72	1.63	134.31	134.22	1.65	1.645	134.225	0.085
27	14	134.22	1.72	1.59	134.35	134.22	1.65	1.58	134.29	0.06
28	14	134.22	1.72	1.48	134.46	134.22	1.65	1.55	134.32	0.14
0	15	134.22	1.72	1.77	134.16	134.22	1.65	1.75	134.12	0.04
1	15	134.22	1.72	1.81	134.175	134.22	1.65	1.755	134.115	0.06
2	15	134.22	1.72	1.775	134.19	134.22	1.65	1.795	134.075	0.115
3	15	134.22	1.72	1.755	134.23	134.22	1.65	1.815	134.055	0.175
4	15	134.22	1.72	1.79	134.215	134.22	1.65	1.87	134	0.215
5	15	134.22	1.72	1.8	134.26	134.22	1.65	1.78	134.09	0.17
6	15	134.22	1.72	1.79	134.285	134.22	1.65	1.77	134.1	0.185
7	15	134.22	1.72	1.775	134.28	134.22	1.65	1.77	134.1	0.18
8	15	134.22	1.72	1.77	134.27	134.22	1.65	1.77	134.1	0.17
9	15	134.22	1.72	1.765	134.275	134.22	1.65	1.76	134.11	0.165
10	15	134.22	1.72	1.78	134.285	134.22	1.65	1.75	134.12	0.165
11	15	134.22	1.72	1.765	134.29	134.22	1.65	1.75	134.12	0.17
12	15	134.22	1.72	1.75	134.285	134.22	1.65	1.73	134.14	0.145
13	15	134.22	1.72	1.71	134.285	134.22	1.65	1.735	134.135	0.15
14	15	134.22	1.72	1.725	134.295	134.22	1.65	1.75	134.12	0.175

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
15	15	134.22	1.72	1.68	134.31	134.22	1.65	1.67	134.2	0.11
16	15	134.22	1.72	1.655	134.38	134.22	1.65	1.68	134.19	0.19
17	15	134.22	1.72	1.66	134.37	134.22	1.65	1.695	134.175	0.195
18	15	134.22	1.72	1.67	134.48	134.22	1.65	1.69	134.18	0.3
19	15	134.22	1.72	1.665	134.18	134.22	1.65	1.69	134.18	0
20	15	134.22	1.72	1.655	134.285	134.22	1.65	1.675	134.195	0.09
21	15	134.22	1.72	1.65	134.29	134.22	1.65	1.68	134.19	0.1
22	15	134.22	1.72	1.655	134.285	134.22	1.65	1.655	134.215	0.07
23	15	134.22	1.72	1.655	134.285	134.22	1.65	1.655	134.215	0.07
24	15	134.22	1.72	1.645	134.295	134.22	1.65	1.63	134.24	0.055
25	15	134.22	1.72	1.63	134.31	134.22	1.65	1.605	134.265	0.045
26	15	134.22	1.72	1.56	134.38	134.22	1.65	1.585	134.285	0.095
27	15	134.22	1.72	1.57	134.37	134.22	1.65	1.515	134.355	0.015
28	15	134.22	1.72	1.46	134.48	134.22	1.65	1.465	134.405	0.075
0	16	134.22	1.72	1.76	134.18	134.22	1.65	1.715	134.155	0.025
1	16	134.22	1.72	1.76	134.18	134.22	1.65	1.715	134.155	0.025
2	16	134.22	1.72	1.76	134.18	134.22	1.65	1.77	134.1	0.08
3	16	134.22	1.72	1.775	134.165	134.22	1.65	1.8	134.07	0.095
4	16	134.22	1.72	1.785	134.155	134.22	1.65	1.845	134.025	0.13
5	16	134.22	1.72	1.76	134.18	134.22	1.65	1.79	134.08	0.1
6	16	134.22	1.72	1.795	134.145	134.22	1.65	1.765	134.105	0.04
7	16	134.22	1.72	1.76	134.18	134.22	1.65	1.77	134.1	0.08
8	16	134.22	1.72	1.75	134.19	134.22	1.65	1.775	134.095	0.095
9	16	134.22	1.72	1.75	134.19	134.22	1.65	1.76	134.11	0.08
10	16	134.22	1.72	1.75	134.19	134.22	1.65	1.74	134.13	0.06
11	16	134.22	1.72	1.725	134.215	134.22	1.65	1.735	134.135	0.08
12	16	134.22	1.72	1.715	134.225	134.22	1.65	1.73	134.14	0.085
13	16	134.22	1.72	1.69	134.25	134.22	1.65	1.75	134.12	0.13
14	16	134.22	1.72	1.675	134.265	134.22	1.65	1.715	134.155	0.11
15	16	134.22	1.72	1.65	134.29	134.22	1.65	1.68	134.19	0.1
16	16	134.22	1.72	1.61	134.33	134.22	1.65	1.7	134.17	0.16
17	16	134.22	1.72	1.63	134.31	134.22	1.65	1.72	134.15	0.16
18	16	134.22	1.72	1.65	134.29	134.22	1.65	1.67	134.2	0.09
19	16	134.22	1.72	1.67	134.27	134.22	1.65	1.685	134.185	0.085
20	16	134.22	1.72	1.62	134.32	134.22	1.65	1.655	134.215	0.105
21	16	134.22	1.72	1.635	134.305	134.22	1.65	1.65	134.22	0.085
22	16	134.22	1.72	1.64	134.3	134.22	1.65	1.66	134.21	0.09
23	16	134.22	1.72	1.62	134.32	134.22	1.65	1.64	134.23	0.09
24	16	134.22	1.72	1.6	134.34	134.22	1.65	1.65	134.22	0.12
25	16	134.22	1.72	1.59	134.35	134.22	1.65	1.58	134.29	0.06
26	16	134.22	1.72	1.58	134.36	134.22	1.65	1.59	134.28	0.08
27	16	134.22	1.72	1.45	134.49	134.22	1.65	1.52	134.35	0.14
28	16	134.22	1.72	1.47	134.47	134.22	1.65	1.48	134.39	0.08
0	17	134.22	1.72	1.745	134.195	134.22	1.65	1.755	134.115	0.08
1	17	134.22	1.72	1.74	134.2	134.22	1.65	1.77	134.1	0.1
2	17	134.22	1.72	1.755	134.185	134.22	1.65	1.78	134.09	0.095
3	17	134.22	1.72	1.77	134.17	134.22	1.65	1.79	134.08	0.09

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
4	17	134.22	1.72	1.76	134.18	134.22	1.65	1.82	134.05	0.13
5	17	134.22	1.72	1.78	134.16	134.22	1.65	1.825	134.045	0.115
6	17	134.22	1.72	1.79	134.15	134.22	1.65	1.79	134.08	0.07
7	17	134.22	1.72	1.76	134.18	134.22	1.65	1.79	134.08	0.1
8	17	134.22	1.72	1.785	134.155	134.22	1.65	1.785	134.085	0.07
9	17	134.22	1.72	1.73	134.21	134.22	1.65	1.735	134.135	0.075
10	17	134.22	1.72	1.725	134.215	134.22	1.65	1.74	134.13	0.085
11	17	134.22	1.72	1.74	134.2	134.22	1.65	1.765	134.105	0.095
12	17	134.22	1.72	1.71	134.23	134.22	1.65	1.745	134.125	0.105
13	17	134.22	1.72	1.69	134.25	134.22	1.65	1.7	134.17	0.08
14	17	134.22	1.72	1.66	134.28	134.22	1.65	1.695	134.175	0.105
15	17	134.22	1.72	1.67	134.27	134.22	1.65	1.695	134.175	0.095
16	17	134.22	1.72	1.625	134.315	134.22	1.65	1.685	134.185	0.13
17	17	134.22	1.72	1.625	134.315	134.22	1.65	1.665	134.205	0.11
18	17	134.22	1.72	1.63	134.31	134.22	1.65	1.68	134.19	0.12
19	17	134.22	1.72	1.64	134.3	134.22	1.65	1.7	134.17	0.13
20	17	134.22	1.72	1.66	134.28	134.22	1.65	1.675	134.195	0.085
21	17	134.22	1.72	1.63	134.31	134.22	1.65	1.695	134.175	0.135
22	17	134.22	1.72	1.63	134.31	134.22	1.65	1.675	134.195	0.115
23	17	134.22	1.72	1.59	134.35	134.22	1.65	1.65	134.22	0.13
24	17	134.22	1.72	1.6	134.34	134.22	1.65	1.64	134.23	0.11
25	17	134.22	1.72	1.57	134.37	134.22	1.65	1.58	134.29	0.08
26	17	134.22	1.72	1.505	134.435	134.22	1.65	1.56	134.31	0.125
27	17	134.22	1.72	1.46	134.48	134.22	1.65	1.45	134.42	0.06
28	17	134.22	1.72	1.45	134.49	134.22	1.65	1.43	134.44	0.05
0	18	134.22	1.72	1.73	134.21	134.22	1.65	1.735	134.135	0.075
1	18	134.22	1.72	1.745	134.195	134.22	1.65	1.75	134.12	0.075
2	18	134.22	1.72	1.69	134.25	134.22	1.65	1.8	134.07	0.18
3	18	134.22	1.72	1.745	134.195	134.22	1.65	1.79	134.08	0.115
4	18	134.22	1.72	1.775	134.165	134.22	1.65	1.79	134.08	0.085
5	18	134.22	1.72	1.76	134.18	134.22	1.65	1.795	134.075	0.105
6	18	134.22	1.72	1.8	134.14	134.22	1.65	1.77	134.1	0.04
7	18	134.22	1.72	1.78	134.16	134.22	1.65	1.75	134.12	0.04
8	18	134.22	1.72	1.785	134.155	134.22	1.65	1.77	134.1	0.055
9	18	134.22	1.72	1.755	134.185	134.22	1.65	1.74	134.13	0.055
10	18	134.22	1.72	1.745	134.195	134.22	1.65	1.74	134.13	0.065
11	18	134.22	1.72	1.72	134.22	134.22	1.65	1.735	134.135	0.085
12	18	134.22	1.72	1.69	134.25	134.22	1.65	1.72	134.15	0.1
13	18	134.22	1.72	1.665	134.275	134.22	1.65	1.695	134.175	0.1
14	18	134.22	1.72	1.655	134.285	134.22	1.65	1.655	134.215	0.07
15	18	134.22	1.72	1.645	134.295	134.22	1.65	1.66	134.21	0.085
16	18	134.22	1.72	1.625	134.315	134.22	1.65	1.67	134.2	0.115
17	18	134.22	1.72	1.61	134.33	134.22	1.65	1.685	134.185	0.145
18	18	134.22	1.72	1.62	134.32	134.22	1.65	1.7	134.17	0.15
19	18	134.22	1.72	1.62	134.32	134.22	1.65	1.675	134.195	0.125
20	18	134.22	1.72	1.64	134.3	134.22	1.65	1.655	134.215	0.085
21	18	134.22	1.72	1.59	134.35	134.22	1.65	1.67	134.2	0.15

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
22	18	134.22	1.72	1.625	134.315	134.22	1.65	1.645	134.225	0.09
23	18	134.22	1.72	1.61	134.33	134.22	1.65	1.635	134.235	0.095
24	18	134.22	1.72	1.6	134.34	134.22	1.65	1.635	134.235	0.105
25	18	134.22	1.72	1.575	134.365	134.22	1.65	1.575	134.295	0.07
26	18	134.22	1.72	1.48	134.46	134.22	1.65	1.49	134.38	0.08
27	18	134.22	1.72	1.475	134.465	134.22	1.65	1.46	134.41	0.055
28	18	134.22	1.72	1.45	134.49	134.22	1.65	1.415	134.455	0.035
0	19	134.22	1.72	1.71	134.23	134.22	1.72	1.84	134.1	0.13
1	19	134.22	1.72	1.75	134.19	134.22	1.72	1.835	134.105	0.085
2	19	134.22	1.72	1.69	134.25	134.22	1.72	1.83	134.11	0.14
3	19	134.22	1.72	1.69	134.25	134.22	1.72	1.84	134.1	0.15
4	19	134.22	1.72	1.745	134.195	134.22	1.72	1.83	134.11	0.085
5	19	134.22	1.72	1.75	134.19	134.22	1.72	1.835	134.105	0.085
6	19	134.22	1.72	1.745	134.195	134.22	1.72	1.815	134.125	0.07
7	19	134.22	1.72	1.785	134.155	134.22	1.72	1.83	134.11	0.045
8	19	134.22	1.72	1.78	134.16	134.22	1.72	1.88	134.06	0.1
9	19	134.22	1.72	1.755	134.185	134.22	1.72	1.81	134.13	0.055
10	19	134.22	1.72	1.735	134.205	134.22	1.72	1.81	134.13	0.075
11	19	134.22	1.72	1.71	134.23	134.22	1.72	1.82	134.12	0.11
12	19	134.22	1.72	1.7	134.24	134.22	1.72	1.83	134.11	0.13
13	19	134.22	1.72	1.69	134.25	134.22	1.72	1.79	134.15	0.1
14	19	134.22	1.72	1.66	134.28	134.22	1.72	1.78	134.16	0.12
15	19	134.22	1.72	1.65	134.29	134.22	1.72	1.74	134.2	0.09
16	19	134.22	1.72	1.615	134.325	134.22	1.72	1.75	134.19	0.135
17	19	134.22	1.72	1.62	134.32	134.22	1.72	1.74	134.2	0.12
18	19	134.22	1.72	1.605	134.335	134.22	1.72	1.73	134.21	0.125
19	19	134.22	1.72	1.62	134.32	134.22	1.72	1.755	134.185	0.135
20	19	134.22	1.72	1.63	134.31	134.22	1.72	1.73	134.21	0.1
21	19	134.22	1.72	1.625	134.315	134.22	1.72	1.77	134.17	0.145
22	19	134.22	1.72	1.65	134.29	134.22	1.72	1.76	134.18	0.11
23	19	134.22	1.72	1.585	134.355	134.22	1.72	1.71	134.23	0.125
24	19	134.22	1.72	1.62	134.32	134.22	1.72	1.67	134.27	0.05
25	19	134.22	1.72	1.56	134.38	134.22	1.72	1.63	134.31	0.07
26	19	134.22	1.72	1.495	134.445	134.22	1.72	1.58	134.36	0.085
27	19	134.22	1.72	1.47	134.47	134.22	1.72	1.52	134.42	0.05
28	19	134.22	1.72	1.415	134.525	134.22	1.72	1.5	134.44	0.085
0	20	134.22	1.72	1.735	134.205	134.22	1.72	1.84	134.1	0.105
1	20	134.22	1.72	1.75	134.19	134.22	1.72	1.86	134.08	0.11
2	20	134.22	1.72	1.765	134.175	134.22	1.72	1.825	134.115	0.06
3	20	134.22	1.72	1.75	134.19	134.22	1.72	1.84	134.1	0.09
4	20	134.22	1.72	1.715	134.225	134.22	1.72	1.82	134.12	0.105
5	20	134.22	1.72	1.73	134.21	134.22	1.72	1.82	134.12	0.09
6	20	134.22	1.72	1.755	134.185	134.22	1.72	1.79	134.15	0.035
7	20	134.22	1.72	1.765	134.175	134.22	1.72	1.795	134.145	0.03
8	20	134.22	1.72	1.76	134.18	134.22	1.72	1.83	134.11	0.07
9	20	134.22	1.72	1.76	134.18	134.22	1.72	1.77	134.17	0.01
10	20	134.22	1.72	1.735	134.205	134.22	1.72	1.78	134.16	0.045

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
11	20	134.22	1.72	1.69	134.25	134.22	1.72	1.82	134.12	0.13
12	20	134.22	1.72	1.69	134.25	134.22	1.72	1.82	134.12	0.13
13	20	134.22	1.72	1.68	134.26	134.22	1.72	1.77	134.17	0.09
14	20	134.22	1.72	1.65	134.29	134.22	1.72	1.78	134.16	0.13
15	20	134.22	1.72	1.66	134.28	134.22	1.72	1.78	134.16	0.12
16	20	134.22	1.72	1.64	134.3	134.22	1.72	1.765	134.175	0.125
17	20	134.22	1.72	1.62	134.32	134.22	1.72	1.715	134.225	0.095
18	20	134.22	1.72	1.64	134.3	134.22	1.72	1.72	134.22	0.08
19	20	134.22	1.72	1.64	134.3	134.22	1.72	1.72	134.22	0.08
20	20	134.22	1.72	1.62	134.32	134.22	1.72	1.78	134.16	0.16
21	20	134.22	1.72	1.62	134.32	134.22	1.72	1.73	134.21	0.11
22	20	134.22	1.72	1.65	134.29	134.22	1.72	1.73	134.21	0.08
23	20	134.22	1.72	1.62	134.32	134.22	1.72	1.75	134.19	0.13
24	20	134.22	1.72	1.59	134.35	134.22	1.72	1.7	134.24	0.11
25	20	134.22	1.72	1.59	134.35	134.22	1.72	1.695	134.245	0.105
26	20	134.22	1.72	1.465	134.475	134.22	1.72	1.63	134.31	0.165
27	20	134.22	1.72	1.455	134.485	134.22	1.72	1.57	134.37	0.115
28	20	134.22	1.72	1.44	134.5	134.22	1.72	1.52	134.42	0.08
0	21	134.22	1.72	1.69	134.25	134.22	1.72	1.82	134.12	0.13
1	21	134.22	1.72	1.705	134.235	134.22	1.72	1.835	134.105	0.13
2	21	134.22	1.72	1.7	134.24	134.22	1.72	1.82	134.12	0.12
3	21	134.22	1.72	1.71	134.23	134.22	1.72	1.82	134.12	0.11
4	21	134.22	1.72	1.695	134.245	134.22	1.72	1.82	134.12	0.125
5	21	134.22	1.72	1.665	134.275	134.22	1.72	1.79	134.15	0.125
6	21	134.22	1.72	N\A		134.22	1.72	1.79	134.15	
7	21	134.22	1.72	1.765	134.175	134.22	1.72	1.78	134.16	0.015
8	21	134.22	1.72	1.735	134.205	134.22	1.72	1.86	134.08	0.125
9	21	134.22	1.72	1.73	134.21	134.22	1.72	1.78	134.16	0.05
10	21	134.22	1.72	1.69	134.25	134.22	1.72	1.77	134.17	0.08
11	21	134.22	1.72	1.69	134.25	134.22	1.72	1.78	134.16	0.09
12	21	134.22	1.72	1.7	134.24	134.22	1.72	1.8	134.14	0.1
13	21	134.22	1.72	1.66	134.28	134.22	1.72	1.78	134.16	0.12
14	21	134.22	1.72	1.675	134.265	134.22	1.72	1.735	134.205	0.06
15	21	134.22	1.72	1.65	134.29	134.22	1.72	1.73	134.21	0.08
16	21	134.22	1.72	1.64	134.3	134.22	1.72	1.75	134.19	0.11
17	21	134.22	1.72	1.66	134.28	134.22	1.72	1.72	134.22	0.06
18	21	134.22	1.72	1.64	134.3	134.22	1.72	1.72	134.22	0.08
19	21	134.22	1.72	1.65	134.29	134.22	1.72	1.74	134.2	0.09
20	21	134.22	1.72	1.62	134.32	134.22	1.72	1.74	134.2	0.12
21	21	134.22	1.72	1.62	134.32	134.22	1.72	1.77	134.17	0.15
22	21	134.22	1.72	1.655	134.285	134.22	1.72	1.71	134.23	0.055
23	21	134.22	1.72	1.61	134.33	134.22	1.72	1.7	134.24	0.09
24	21	134.22	1.72	1.615	134.325	134.22	1.72	1.69	134.25	0.075
25	21	134.22	1.72	1.58	134.36	134.22	1.72	1.65	134.29	0.07
26	21	134.22	1.72	1.505	134.435	134.22	1.72	1.62	134.32	0.115
27	21	134.22	1.72	1.45	134.49	134.22	1.72	1.57	134.37	0.12
28	21	134.22	1.72	1.445	134.495	134.22	1.72	1.48	134.46	0.035

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
0	22	134.22	1.72	1.66	134.28	134.22	1.72	1.8	134.14	0.14
1	22	134.22	1.72	1.67	134.27	134.22	1.72	1.81	134.13	0.14
2	22	134.22	1.72	1.69	134.25	134.22	1.72	1.79	134.15	0.1
3	22	134.22	1.72	1.71	134.23	134.22	1.72	1.77	134.17	0.06
4	22	134.22	1.72	1.715	134.225	134.22	1.72	1.77	134.17	0.055
5	22	134.22	1.72	1.78	134.16	134.22	1.72	1.8	134.14	0.02
6	22	134.22	1.72	N\A		134.22	1.72	1.78	134.16	
7	22	134.22	1.72	1.755	134.185	134.22	1.72	1.78	134.16	0.025
8	22	134.22	1.72	1.75	134.19	134.22	1.72	1.81	134.13	0.06
9	22	134.22	1.72	1.71	134.23	134.22	1.72	1.77	134.17	0.06
10	22	134.22	1.72	1.72	134.22	134.22	1.72	1.76	134.18	0.04
11	22	134.22	1.72	1.71	134.23	134.22	1.72	1.76	134.18	0.05
12	22	134.22	1.72	1.66	134.28	134.22	1.72	1.79	134.15	0.13
13	22	134.22	1.72	1.655	134.285	134.22	1.72	1.76	134.18	0.105
14	22	134.22	1.72	1.645	134.295	134.22	1.72	1.73	134.21	0.085
15	22	134.22	1.72	1.68	134.26	134.22	1.72	1.73	134.21	0.05
16	22	134.22	1.72	1.645	134.295	134.22	1.72	1.77	134.17	0.125
17	22	134.22	1.72	1.625	134.315	134.22	1.72	1.715	134.225	0.09
18	22	134.22	1.72	1.625	134.315	134.22	1.72	1.7	134.24	0.075
19	22	134.22	1.72	1.615	134.325	134.22	1.72	1.705	134.235	0.09
20	22	134.22	1.72	1.62	134.32	134.22	1.72	1.72	134.22	0.1
21	22	134.22	1.72	1.64	134.3	134.22	1.72	1.76	134.18	0.12
22	22	134.22	1.72	1.6	134.34	134.22	1.72	1.71	134.23	0.11
23	22	134.22	1.72	1.595	134.345	134.22	1.72	1.695	134.245	0.1
24	22	134.22	1.72	1.555	134.385	134.22	1.72	1.68	134.26	0.125
25	22	134.22	1.72	1.58	134.36	134.22	1.72	1.675	134.265	0.095
26	22	134.22	1.72	1.46	134.48	134.22	1.72	1.61	134.33	0.15
27	22	134.22	1.72	1.43	134.51	134.22	1.72	1.55	134.39	0.12
28	22	134.22	1.72	1.43	134.51	134.22	1.72	1.47	134.47	0.04
0	23	134.22	1.38	1.635	133.965	134.22	1.72	1.78	134.16	-0.195
1	23	134.22	1.38	1.63	133.97	134.22	1.72	1.8	134.14	-0.17
2	23	134.22	1.38	1.665	133.935	134.22	1.72	1.78	134.16	-0.225
3	23	134.22	1.38	1.665	133.935	134.22	1.72	1.79	134.15	-0.215
4	23	134.22	1.38	1.72	133.88	134.22	1.72	1.81	134.13	-0.25
5	23	134.22	1.38	1.72	133.88	134.22	1.72	1.81	134.13	-0.25
6	23	134.22	1.38	N\A		134.22	1.72	1.76	134.18	
7	23	134.22	1.38	1.72	133.88	134.22	1.72	1.76	134.18	-0.3
8	23	134.22	1.38	1.685	133.915	134.22	1.72	1.83	134.11	-0.195
9	23	134.22	1.38	1.7	133.9	134.22	1.72	1.74	134.2	-0.3
10	23	134.22	1.38	1.695	133.905	134.22	1.72	1.77	134.17	-0.265
11	23	134.22	1.38	1.695	133.905	134.22	1.72	1.78	134.16	-0.255
12	23	134.22	1.38	1.67	133.93	134.22	1.72	1.78	134.16	-0.23
13	23	134.22	1.38	1.62	133.98	134.22	1.72	1.74	134.2	-0.22
14	23	134.22	1.38	1.62	133.98	134.22	1.72	1.71	134.23	-0.25
15	23	134.22	1.38	1.625	133.975	134.22	1.72	1.74	134.2	-0.225
16	23	134.22	1.38	1.685	133.915	134.22	1.72	1.76	134.18	-0.265
17	23	134.22	1.38	1.58	134.02	134.22	1.72	1.71	134.23	-0.21

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
18	23	134.22	1.38	1.62	133.98	134.22	1.72	1.715	134.225	-0.245
19	23	134.22	1.38	1.59	134.01	134.22	1.72	1.74	134.2	-0.19
20	23	134.22	1.38	1.62	133.98	134.22	1.72	1.76	134.18	-0.2
21	23	134.22	1.38	1.635	133.965	134.22	1.72	1.73	134.21	-0.245
22	23	134.22	1.38	1.555	134.045	134.22	1.72	1.71	134.23	-0.185
23	23	134.22	1.38	1.55	134.05	134.22	1.72	1.67	134.27	-0.22
24	23	134.22	1.38	1.57	134.03	134.22	1.72	1.7	134.24	-0.21
25	23	134.22	1.38	1.59	134.01	134.22	1.72	1.64	134.3	-0.29
26	23	134.22	1.38	1.46	134.14	134.22	1.72	1.6	134.34	-0.2
27	23	134.22	1.38	1.43	134.17	134.22	1.72	1.54	134.4	-0.23
28	23	134.22	1.38	1.37	134.23	134.22	1.72	1.46	134.48	-0.25
0	24	134.22	1.7	1.655	134.265	134.22	1.72	1.73	134.21	0.055
1	24	134.22	1.7	1.65	134.27	134.22	1.72	1.76	134.18	0.09
2	24	134.22	1.7	1.635	134.285	134.22	1.72	1.76	134.18	0.105
3	24	134.22	1.7	1.66	134.26	134.22	1.72	1.76	134.18	0.08
4	24	134.22	1.7	1.645	134.275	134.22	1.72	1.78	134.16	0.115
5	24	134.22	1.7	N\A		134.22	1.72	1.77	134.17	
6	24	134.22	1.7	N\A		134.22	1.72	1.74	134.2	
7	24	134.22	1.7	1.66	134.26	134.22	1.72	1.75	134.19	0.07
8	24	134.22	1.7	1.685	134.235	134.22	1.72	1.73	134.21	0.025
9	24	134.22	1.7	1.665	134.255	134.22	1.72	1.77	134.17	0.085
10	24	134.22	1.7	1.665	134.255	134.22	1.72	1.74	134.2	0.055
11	24	134.22	1.7	1.595	134.325	134.22	1.72	1.74	134.2	0.125
12	24	134.22	1.7	1.655	134.265	134.22	1.72	1.77	134.17	0.095
13	24	134.22	1.7	1.615	134.305	134.22	1.72	1.74	134.2	0.105
14	24	134.22	1.7	1.595	134.325	134.22	1.72	1.71	134.23	0.095
15	24	134.22	1.7	1.575	134.345	134.22	1.72	1.71	134.23	0.115
16	24	134.22	1.7	1.565	134.355	134.22	1.72	1.71	134.23	0.125
17	24	134.22	1.7	1.56	134.36	134.22	1.72	1.75	134.19	0.17
18	24	134.22	1.7	1.565	134.355	134.22	1.72	1.7	134.24	0.115
19	24	134.22	1.7	1.585	134.335	134.22	1.72	1.71	134.23	0.105
20	24	134.22	1.7	1.62	134.3	134.22	1.72	1.71	134.23	0.07
21	24	134.22	1.7	1.61	134.31	134.22	1.72	1.74	134.2	0.11
22	24	134.22	1.7	1.565	134.355	134.22	1.72	1.71	134.23	0.125
23	24	134.22	1.7	1.54	134.38	134.22	1.72	1.69	134.25	0.13
24	24	134.22	1.7	1.59	134.33	134.22	1.72	1.69	134.25	0.08
25	24	134.22	1.7	1.53	134.39	134.22	1.72	1.66	134.28	0.11
26	24	134.22	1.7	1.515	134.405	134.22	1.72	1.63	134.31	0.095
27	24	134.22	1.7	1.435	134.485	134.22	1.72	1.56	134.38	0.105
28	24	134.22	1.7	1.39	134.53	134.22	1.72	1.47	134.47	0.06
0	25	134.22	1.7	1.645	134.275	134.22	1.72	1.75	134.19	0.085
1	25	134.22	1.7	1.6	134.32	134.22	1.72	1.77	134.17	0.15
2	25	134.22	1.7	1.6	134.32	134.22	1.72	1.74	134.2	0.12
3	25	134.22	1.7	1.605	134.315	134.22	1.72	1.75	134.19	0.125
4	25	134.22	1.7	1.59	134.33	134.22	1.72	1.76	134.18	0.15
5	25	134.22	1.7	1.555	134.365	134.22	1.72	1.72	134.22	0.145
6	25	134.22	1.7	1.58	134.34	134.22	1.72	1.73	134.21	0.13

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
7	25	134.22	1.7	1.58	134.34	134.22	1.72	1.73	134.21	0.13
8	25	134.22	1.7	1.63	134.29	134.22	1.72	1.775	134.165	0.125
9	25	134.22	1.7	1.595	134.325	134.22	1.72	1.73	134.21	0.115
10	25	134.22	1.7	1.615	134.305	134.22	1.72	1.73	134.21	0.095
11	25	134.22	1.7	1.59	134.33	134.22	1.72	1.73	134.21	0.12
12	25	134.22	1.7	1.615	134.305	134.22	1.72	1.765	134.175	0.13
13	25	134.22	1.7	1.6	134.32	134.22	1.72	1.71	134.23	0.09
14	25	134.22	1.7	1.6	134.32	134.22	1.72	1.69	134.25	0.07
15	25	134.22	1.7	1.56	134.36	134.22	1.72	1.69	134.25	0.11
16	25	134.22	1.7	1.555	134.365	134.22	1.72	1.675	134.265	0.1
17	25	134.22	1.7	1.515	134.405	134.22	1.72	1.66	134.28	0.125
18	25	134.22	1.7	1.565	134.355	134.22	1.72	1.66	134.28	0.075
19	25	134.22	1.7	1.55	134.37	134.22	1.72	1.66	134.28	0.09
20	25	134.22	1.7	1.56	134.36	134.22	1.72	1.69	134.25	0.11
21	25	134.22	1.7	1.555	134.365	134.22	1.72	1.74	134.2	0.165
22	25	134.22	1.7	1.55	134.37	134.22	1.72	1.7	134.24	0.13
23	25	134.22	1.7	1.525	134.395	134.22	1.72	1.67	134.27	0.125
24	25	134.22	1.7	1.51	134.41	134.22	1.72	1.65	134.29	0.12
25	25	134.22	1.7	1.54	134.38	134.22	1.72	1.63	134.31	0.07
26	25	134.22	1.7	1.47	134.45	134.22	1.72	1.59	134.35	0.1
27	25	134.22	1.7	1.45	134.47	134.22	1.72	1.52	134.42	0.05
28	25	134.22	1.7	1.4	134.52	134.22	1.72	1.46	134.48	0.04
0	26	134.22	1.7	1.625	134.295	134.22	1.72	1.77	134.17	0.125
1	26	134.22	1.7	1.65	134.27	134.22	1.72	1.79	134.15	0.12
2	26	134.22	1.7	1.595	134.325	134.22	1.72	1.77	134.17	0.155
3	26	134.22	1.7	1.595	134.325	134.22	1.72	1.72	134.22	0.105
4	26	134.22	1.7	1.61	134.31	134.22	1.72	1.74	134.2	0.11
5	26	134.22	1.7	1.61	134.31	134.22	1.72	1.7	134.24	0.07
6	26	134.22	1.7	1.59	134.33	134.22	1.72	1.7	134.24	0.09
7	26	134.22	1.7	1.59	134.33	134.22	1.72	1.71	134.23	0.1
8	26	134.22	1.7	1.605	134.315	134.22	1.72	1.78	134.16	0.155
9	26	134.22	1.7	1.615	134.305	134.22	1.72	1.76	134.18	0.125
10	26	134.22	1.7	1.6	134.32	134.22	1.72	1.72	134.22	0.1
11	26	134.22	1.7	1.61	134.31	134.22	1.72	1.69	134.25	0.06
12	26	134.22	1.7	1.59	134.33	134.22	1.72	1.705	134.235	0.095
13	26	134.22	1.7	1.59	134.33	134.22	1.72	1.7	134.24	0.09
14	26	134.22	1.7	1.52	134.4	134.22	1.72	1.71	134.23	0.17
15	26	134.22	1.7	1.56	134.36	134.22	1.72	1.68	134.26	0.1
16	26	134.22	1.7	1.53	134.39	134.22	1.72	1.7	134.24	0.15
17	26	134.22	1.7	1.54	134.38	134.22	1.72	1.69	134.25	0.13
18	26	134.22	1.7	1.55	134.37	134.22	1.72	1.67	134.27	0.1
19	26	134.22	1.7	1.565	134.355	134.22	1.72	1.67	134.27	0.085
20	26	134.22	1.7	1.53	134.39	134.22	1.72	1.695	134.245	0.145
21	26	134.22	1.7	1.515	134.405	134.22	1.72	1.68	134.26	0.145
22	26	134.22	1.7	1.57	134.35	134.22	1.72	1.68	134.26	0.09
23	26	134.22	1.7	1.52	134.4	134.22	1.72	1.69	134.25	0.15
24	26	134.22	1.7	1.515	134.405	134.22	1.72	1.66	134.28	0.125

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
25	26	134.22	1.7	1.51	134.41	134.22	1.72	1.64	134.3	0.11
26	26	134.22	1.7	1.495	134.425	134.22	1.72	1.6	134.34	0.085
27	26	134.22	1.7	1.425	134.495	134.22	1.72	1.56	134.38	0.115
28	26	134.22	1.7	1.49	134.43	134.22	1.72	1.53	134.41	0.02
0	27	134.22	1.7	1.61	134.31	134.22	1.72	1.71	134.23	0.08
1	27	134.22	1.7	1.63	134.29	134.22	1.72	1.74	134.2	0.09
2	27	134.22	1.7	1.62	134.3	134.22	1.72	1.76	134.18	0.12
3	27	134.22	1.7	1.605	134.315	134.22	1.72	1.725	134.215	0.1
4	27	134.22	1.7	1.625	134.295	134.22	1.72	1.73	134.21	0.085
5	27	134.22	1.7	1.63	134.29	134.22	1.72	1.735	134.205	0.085
6	27	134.22	1.7	1.59	134.33	134.22	1.72	1.715	134.225	0.105
7	27	134.22	1.7	1.63	134.29	134.22	1.72	1.755	134.185	0.105
8	27	134.22	1.7	1.62	134.3	134.22	1.72	1.72	134.22	0.08
9	27	134.22	1.7	1.615	134.305	134.22	1.72	1.73	134.21	0.095
10	27	134.22	1.7	1.585	134.335	134.22	1.72	1.695	134.245	0.09
11	27	134.22	1.7	1.61	134.31	134.22	1.72	1.7	134.24	0.07
12	27	134.22	1.7	1.56	134.36	134.22	1.72	1.7	134.24	0.12
13	27	134.22	1.7	1.575	134.345	134.22	1.72	1.68	134.26	0.085
14	27	134.22	1.7	1.56	134.36	134.22	1.72	1.665	134.275	0.085
15	27	134.22	1.7	1.5	134.42	134.22	1.72	1.65	134.29	0.13
16	27	134.22	1.7	1.525	134.395	134.22	1.72	1.67	134.27	0.125
17	27	134.22	1.7	1.535	134.385	134.22	1.72	1.64	134.3	0.085
18	27	134.22	1.7	1.545	134.375	134.22	1.72	1.63	134.31	0.065
19	27	134.22	1.7	1.53	134.39	134.22	1.72	1.65	134.29	0.1
20	27	134.22	1.7	1.505	134.415	134.22	1.72	1.66	134.28	0.135
21	27	134.22	1.7	1.5	134.42	134.22	1.72	1.63	134.31	0.11
22	27	134.22	1.7	1.57	134.35	134.22	1.72	1.64	134.3	0.05
23	27	134.22	1.7	1.525	134.395	134.22	1.72	1.64	134.3	0.095
24	27	134.22	1.7	1.53	134.39	134.22	1.72	1.64	134.3	0.09
25	27	134.22	1.7	1.52	134.4	134.22	1.72	1.63	134.31	0.09
26	27	134.22	1.7	1.44	134.48	134.22	1.72	1.6	134.34	0.14
27	27	134.22	1.7	1.4	134.52	134.22	1.72	1.58	134.36	0.16
28	27	134.22	1.7	1.43	134.49	134.22	1.72	1.47	134.47	0.02
0	28	134.22	1.7	1.635	134.285	134.22	1.72	1.71	134.23	0.055
1	28	134.22	1.7	1.6	134.32	134.22	1.72	1.72	134.22	0.1
2	28	134.22	1.7	1.615	134.305	134.22	1.72	1.71	134.23	0.075
3	28	134.22	1.7	1.6	134.32	134.22	1.72	1.715	134.225	0.095
4	28	134.22	1.7	1.635	134.285	134.22	1.72	1.73	134.21	0.075
5	28	134.22	1.7	1.61	134.31	134.22	1.72	1.735	134.205	0.105
6	28	134.22	1.7	1.69	134.23	134.22	1.72	1.735	134.205	0.025
7	28	134.22	1.7	1.6	134.32	134.22	1.72	1.765	134.175	0.145
8	28	134.22	1.7	1.56	134.36	134.22	1.72	1.73	134.21	0.15
9	28	134.22	1.7	1.58	134.34	134.22	1.72	1.695	134.245	0.095
10	28	134.22	1.7	1.595	134.325	134.22	1.72	1.7	134.24	0.085
11	28	134.22	1.7	1.58	134.34	134.22	1.72	1.71	134.23	0.11
12	28	134.22	1.7	1.56	134.36	134.22	1.72	1.72	134.22	0.14
13	28	134.22	1.7	1.56	134.36	134.22	1.72	1.68	134.26	0.1

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
14	28	134.22	1.7	1.575	134.345	134.22	1.72	1.65	134.29	0.055
15	28	134.22	1.7	1.545	134.375	134.22	1.72	1.65	134.29	0.085
16	28	134.22	1.7	1.53	134.39	134.22	1.72	1.64	134.3	0.09
17	28	134.22	1.7	1.495	134.425	134.22	1.72	1.645	134.295	0.13
18	28	134.22	1.7	1.53	134.39	134.22	1.72	1.62	134.32	0.07
19	28	134.22	1.7	1.53	134.39	134.22	1.72	1.65	134.29	0.1
20	28	134.22	1.7	1.485	134.435	134.22	1.72	1.65	134.29	0.145
21	28	134.22	1.7	1.5	134.42	134.22	1.72	1.68	134.26	0.16
22	28	134.22	1.7	1.5	134.42	134.22	1.72	1.64	134.3	0.12
23	28	134.22	1.7	1.515	134.405	134.22	1.72	1.64	134.3	0.105
24	28	134.22	1.7	1.51	134.41	134.22	1.72	1.64	134.3	0.11
25	28	134.22	1.7	1.475	134.445	134.22	1.72	1.635	134.305	0.14
26	28	134.22	1.7	1.435	134.485	134.22	1.72	1.59	134.35	0.135
27	28	134.22	1.7	1.38	134.54	134.22	1.72	1.55	134.39	0.15
28	28	134.22	1.7	1.41	134.51	134.22	1.72	1.49	134.45	0.06
0	29	134.22	1.7	1.615	134.305	134.22	1.72	1.7	134.24	0.065
1	29	134.22	1.7	1.595	134.325	134.22	1.72	1.72	134.22	0.105
2	29	134.22	1.7	1.59	134.33	134.22	1.72	1.72	134.22	0.11
3	29	134.22	1.7	1.595	134.325	134.22	1.72	1.7	134.24	0.085
4	29	134.22	1.7	1.59	134.33	134.22	1.72	1.73	134.21	0.12
5	29	134.22	1.7	1.58	134.34	134.22	1.72	1.72	134.22	0.12
6	29	134.22	1.7	1.59	134.33	134.22	1.72	1.71	134.23	0.1
7	29	134.22	1.7	1.63	134.29	134.22	1.72	1.71	134.23	0.06
8	29	134.22	1.7	1.64	134.28	134.22	1.72	1.72	134.22	0.06
9	29	134.22	1.7	1.66	134.26	134.22	1.72	1.7	134.24	0.02
10	29	134.22	1.7	1.58	134.34	134.22	1.72	1.68	134.26	0.08
11	29	134.22	1.7	1.575	134.345	134.22	1.72	1.68	134.26	0.085
12	29	134.22	1.7	1.565	134.355	134.22	1.72	1.695	134.245	0.11
13	29	134.22	1.7	1.57	134.35	134.22	1.72	1.66	134.28	0.07
14	29	134.22	1.7	1.55	134.37	134.22	1.72	1.64	134.3	0.07
15	29	134.22	1.7	1.53	134.39	134.22	1.72	1.63	134.31	0.08
16	29	134.22	1.7	1.5	134.42	134.22	1.72	1.63	134.31	0.11
17	29	134.22	1.7	1.495	134.425	134.22	1.72	1.625	134.315	0.11
18	29	134.22	1.7	1.5	134.42	134.22	1.72	1.63	134.31	0.11
19	29	134.22	1.7	1.52	134.4	134.22	1.72	1.615	134.325	0.075
20	29	134.22	1.7	1.48	134.44	134.22	1.72	1.605	134.335	0.105
21	29	134.22	1.7	1.495	134.425	134.22	1.72	1.59	134.35	0.075
22	29	134.22	1.7	1.495	134.425	134.22	1.72	1.6	134.34	0.085
23	29	134.22	1.7	1.495	134.425	134.22	1.72	1.615	134.325	0.1
24	29	134.22	1.7	1.485	134.435	134.22	1.72	1.6	134.34	0.095
25	29	134.22	1.7	1.42	134.5	134.22	1.72	1.6	134.34	0.16
26	29	134.22	1.7	1.42	134.5	134.22	1.72	1.57	134.37	0.13
27	29	134.22	1.7	1.36	134.56	134.22	1.72	1.55	134.39	0.17
28	29	134.22	1.7	1.4	134.52	134.22	1.72	1.515	134.425	0.095
0	30	134.22	1.79	1.695	134.315	134.22	1.72	1.685	134.255	0.06
1	30	134.22	1.79	1.66	134.35	134.22	1.72	1.7	134.24	0.11
2	30	134.22	1.79	1.67	134.34	134.22	1.72	1.695	134.245	0.095

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
3	30	134.22	1.79	1.7	134.31	134.22	1.72	1.71	134.23	0.08
4	30	134.22	1.79	1.685	134.325	134.22	1.72	1.73	134.21	0.115
5	30	134.22	1.79	1.7	134.31	134.22	1.72	1.72	134.22	0.09
6	30	134.22	1.79	1.7	134.31	134.22	1.72	1.73	134.21	0.1
7	30	134.22	1.79	1.68	134.33	134.22	1.72	1.74	134.2	0.13
8	30	134.22	1.79	1.69	134.32	134.22	1.72	1.73	134.21	0.11
9	30	134.22	1.79	1.685	134.325	134.22	1.72	1.72	134.22	0.105
10	30	134.22	1.79	1.65	134.36	134.22	1.72	1.7	134.24	0.12
11	30	134.22	1.79	1.665	134.345	134.22	1.72	1.72	134.22	0.125
12	30	134.22	1.79	1.665	134.345	134.22	1.72	1.73	134.21	0.135
13	30	134.22	1.79	1.65	134.36	134.22	1.72	1.67	134.27	0.09
14	30	134.22	1.79	1.6	134.41	134.22	1.72	1.63	134.31	0.1
15	30	134.22	1.79	1.575	134.435	134.22	1.72	1.66	134.28	0.155
16	30	134.22	1.79	1.595	134.415	134.22	1.72	1.66	134.28	0.135
17	30	134.22	1.79	1.615	134.395	134.22	1.72	1.635	134.305	0.09
18	30	134.22	1.79	1.585	134.425	134.22	1.72	1.63	134.31	0.115
19	30	134.22	1.79	1.61	134.4	134.22	1.72	1.63	134.31	0.09
20	30	134.22	1.79	1.58	134.43	134.22	1.72	1.625	134.315	0.115
21	30	134.22	1.79	1.6	134.41	134.22	1.72	1.62	134.32	0.09
22	30	134.22	1.79	1.55	134.46	134.22	1.72	1.6	134.34	0.12
23	30	134.22	1.79	1.595	134.415	134.22	1.72	1.555	134.385	0.03
24	30	134.22	1.79	1.55	134.46	134.22	1.72	1.56	134.38	0.08
25	30	134.22	1.79	1.545	134.465	134.22	1.72	1.56	134.38	0.085
26	30	134.22	1.79	1.515	134.495	134.22	1.72	1.575	134.365	0.13
27	30	134.22	1.79	1.48	134.53	134.22	1.72	1.54	134.4	0.13
28	30	134.22	1.79	1.45	134.56	134.22	1.72	1.48	134.46	0.1
0	31	134.22	1.79	1.705	134.305	134.22	1.72	1.71	134.23	0.075
1	31	134.22	1.79	1.68	134.33	134.22	1.72	1.7	134.24	0.09
2	31	134.22	1.79	1.66	134.35	134.22	1.72	1.7	134.24	0.11
3	31	134.22	1.79	1.7	134.31	134.22	1.72	1.72	134.22	0.09
4	31	134.22	1.79	1.67	134.34	134.22	1.72	1.73	134.21	0.13
5	31	134.22	1.79	1.675	134.335	134.22	1.72	1.73	134.21	0.125
6	31	134.22	1.79	1.675	134.335	134.22	1.72	1.72	134.22	0.115
7	31	134.22	1.79	1.68	134.33	134.22	1.72	1.73	134.21	0.12
8	31	134.22	1.79	1.655	134.355	134.22	1.72	1.75	134.19	0.165
9	31	134.22	1.79	1.71	134.3	134.22	1.72	1.74	134.2	0.1
10	31	134.22	1.79	1.675	134.335	134.22	1.72	1.715	134.225	0.11
11	31	134.22	1.79	1.655	134.355	134.22	1.72	1.71	134.23	0.125
12	31	134.22	1.79	1.655	134.355	134.22	1.72	1.71	134.23	0.125
13	31	134.22	1.79	1.65	134.36	134.22	1.72	1.68	134.26	0.1
14	31	134.22	1.79	1.59	134.42	134.22	1.72	1.655	134.285	0.135
15	31	134.22	1.79	1.62	134.39	134.22	1.72	1.62	134.32	0.07
16	31	134.22	1.79	1.6	134.41	134.22	1.72	1.62	134.32	0.09
17	31	134.22	1.79	1.61	134.4	134.22	1.72	1.63	134.31	0.09
18	31	134.22	1.79	1.59	134.42	134.22	1.72	1.61	134.33	0.09
19	31	134.22	1.79	1.575	134.435	134.22	1.72	1.6	134.34	0.095
20	31	134.22	1.79	1.54	134.47	134.22	1.72	1.6	134.34	0.13

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
21	31	134.22	1.79	1.59	134.42	134.22	1.72	1.61	134.33	0.09
22	31	134.22	1.79	1.615	134.395	134.22	1.72	1.58	134.36	0.035
23	31	134.22	1.79	1.57	134.44	134.22	1.72	1.56	134.38	0.06
24	31	134.22	1.79	1.58	134.43	134.22	1.72	1.55	134.39	0.04
25	31	134.22	1.79	1.51	134.5	134.22	1.72	1.555	134.385	0.115
26	31	134.22	1.79	1.495	134.515	134.22	1.72	1.57	134.37	0.145
27	31	134.22	1.79	1.45	134.56	134.22	1.72	1.5	134.44	0.12
28	31	134.22	1.79	1.48	134.53	134.22	1.72	1.475	134.465	0.065
0	32	134.22	1.79	1.75	134.26	134.22	1.72	1.69	134.25	0.01
1	32	134.22	1.79	1.68	134.33	134.22	1.72	1.705	134.235	0.095
2	32	134.22	1.79	1.695	134.315	134.22	1.72	1.71	134.23	0.085
3	32	134.22	1.79	1.655	134.355	134.22	1.72	1.715	134.225	0.13
4	32	134.22	1.79	1.675	134.335	134.22	1.72	1.705	134.235	0.1
5	32	134.22	1.79	1.7	134.31	134.22	1.72	1.69	134.25	0.06
6	32	134.22	1.79	1.675	134.335	134.22	1.72	1.68	134.26	0.075
7	32	134.22	1.79	1.67	134.34	134.22	1.72	1.685	134.255	0.085
8	32	134.22	1.79	1.67	134.34	134.22	1.72	1.72	134.22	0.12
9	32	134.22	1.79	1.685	134.325	134.22	1.72	1.7	134.24	0.085
10	32	134.22	1.79	1.7	134.31	134.22	1.72	1.68	134.26	0.05
11	32	134.22	1.79	1.69	134.32	134.22	1.72	1.695	134.245	0.075
12	32	134.22	1.79	1.655	134.355	134.22	1.72	1.685	134.255	0.1
13	32	134.22	1.79	1.63	134.38	134.22	1.72	1.64	134.3	0.08
14	32	134.22	1.79	1.62	134.39	134.22	1.72	1.64	134.3	0.09
15	32	134.22	1.79	1.61	134.4	134.22	1.72	1.64	134.3	0.1
16	32	134.22	1.79	1.65	134.36	134.22	1.72	1.655	134.285	0.075
17	32	134.22	1.79	1.615	134.395	134.22	1.72	1.665	134.275	0.12
18	32	134.22	1.79	1.615	134.395	134.22	1.72	1.625	134.315	0.08
19	32	134.22	1.79	1.59	134.42	134.22	1.72	1.63	134.31	0.11
20	32	134.22	1.79	1.595	134.415	134.22	1.72	1.66	134.28	0.135
21	32	134.22	1.79	1.59	134.42	134.22	1.72	1.605	134.335	0.085
22	32	134.22	1.79	1.55	134.46	134.22	1.72	1.62	134.32	0.14
23	32	134.22	1.79	1.59	134.42	134.22	1.72	1.61	134.33	0.09
24	32	134.22	1.79	1.52	134.49	134.22	1.72	1.59	134.35	0.14
25	32	134.22	1.79	1.49	134.52	134.22	1.72	1.57	134.37	0.15
26	32	134.22	1.79	1.45	134.56	134.22	1.72	1.56	134.38	0.18
27	32	134.22	1.79	1.48	134.53	134.22	1.72	1.52	134.42	0.11
28	32	134.22	1.79	1.52	134.49	134.22	1.72	1.47	134.47	0.02
0	33	134.22	1.79	1.68	134.33	134.22	1.72	1.67	134.27	0.06
1	33	134.22	1.79	1.69	134.32	134.22	1.72	1.68	134.26	0.06
2	33	134.22	1.79	1.705	134.305	134.22	1.72	1.69	134.25	0.055
3	33	134.22	1.79	1.66	134.35	134.22	1.72	1.69	134.25	0.1
4	33	134.22	1.79	1.68	134.33	134.22	1.72	1.69	134.25	0.08
5	33	134.22	1.79	1.655	134.355	134.22	1.72	1.695	134.245	0.11
6	33	134.22	1.79	1.635	134.375	134.22	1.72	1.72	134.22	0.155
7	33	134.22	1.79	1.68	134.33	134.22	1.72	1.74	134.2	0.13
8	33	134.22	1.79	1.685	134.325	134.22	1.72	1.72	134.22	0.105
9	33	134.22	1.79	1.665	134.345	134.22	1.72	1.72	134.22	0.125

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
10	33	134.22	1.79	1.67	134.34	134.22	1.72	1.725	134.215	0.125
11	33	134.22	1.79	1.665	134.345	134.22	1.72	1.68	134.26	0.085
12	33	134.22	1.79	1.65	134.36	134.22	1.72	1.68	134.26	0.1
13	33	134.22	1.79	1.635	134.375	134.22	1.72	1.71	134.23	0.145
14	33	134.22	1.79	1.635	134.375	134.22	1.72	1.66	134.28	0.095
15	33	134.22	1.79	1.6	134.41	134.22	1.72	1.65	134.29	0.12
16	33	134.22	1.79	1.63	134.38	134.22	1.72	1.64	134.3	0.08
17	33	134.22	1.79	1.64	134.37	134.22	1.72	1.63	134.31	0.06
18	33	134.22	1.79	1.65	134.36	134.22	1.72	1.63	134.31	0.05
19	33	134.22	1.79	1.565	134.445	134.22	1.72	1.615	134.325	0.12
20	33	134.22	1.79	1.575	134.435	134.22	1.72	1.615	134.325	0.11
21	33	134.22	1.79	1.58	134.43	134.22	1.72	1.615	134.325	0.105
22	33	134.22	1.79	1.57	134.44	134.22	1.72	1.61	134.33	0.11
23	33	134.22	1.79	1.55	134.46	134.22	1.72	1.59	134.35	0.11
24	33	134.22	1.79	1.515	134.495	134.22	1.72	1.57	134.37	0.125
25	33	134.22	1.79	1.5	134.51	134.22	1.72	1.6	134.34	0.17
26	33	134.22	1.79	1.48	134.53	134.22	1.72	1.57	134.37	0.16
27	33	134.22	1.79	1.48	134.53	134.22	1.72	1.52	134.42	0.11
28	33	134.22	1.79	1.495	134.515	134.22	1.72	1.485	134.455	0.06
0	34	134.22	1.79	1.68	134.33	134.22	1.72	1.7	134.24	0.09
1	34	134.22	1.79	1.65	134.36	134.22	1.72	1.7	134.24	0.12
2	34	134.22	1.79	1.67	134.34	134.22	1.72	1.69	134.25	0.09
3	34	134.22	1.79	1.67	134.34	134.22	1.72	1.69	134.25	0.09
4	34	134.22	1.79	1.675	134.335	134.22	1.72	1.695	134.245	0.09
5	34	134.22	1.79	1.655	134.355	134.22	1.72	1.72	134.22	0.135
6	34	134.22	1.79	1.665	134.345	134.22	1.72	1.725	134.215	0.13
7	34	134.22	1.79	1.705	134.305	134.22	1.72	1.73	134.21	0.095
8	34	134.22	1.79	1.67	134.34	134.22	1.72	1.755	134.185	0.155
9	34	134.22	1.79	1.695	134.315	134.22	1.72	1.725	134.215	0.1
10	34	134.22	1.79	1.64	134.37	134.22	1.72	1.72	134.22	0.15
11	34	134.22	1.79	1.68	134.33	134.22	1.72	1.715	134.225	0.105
12	34	134.22	1.79	1.635	134.375	134.22	1.72	1.71	134.23	0.145
13	34	134.22	1.79	1.66	134.35	134.22	1.72	1.67	134.27	0.08
14	34	134.22	1.79	1.66	134.35	134.22	1.72	1.64	134.3	0.05
15	34	134.22	1.79	1.625	134.385	134.22	1.72	1.63	134.31	0.075
16	34	134.22	1.79	1.63	134.38	134.22	1.72	1.64	134.3	0.08
17	34	134.22	1.79	1.595	134.415	134.22	1.72	1.61	134.33	0.085
18	34	134.22	1.79	1.57	134.44	134.22	1.72	1.59	134.35	0.09
19	34	134.22	1.79	1.57	134.44	134.22	1.72	1.57	134.37	0.07
20	34	134.22	1.79	1.56	134.45	134.22	1.72	1.595	134.345	0.105
21	34	134.22	1.79	1.57	134.44	134.22	1.72	1.6	134.34	0.1
22	34	134.22	1.79	1.58	134.43	134.22	1.72	1.63	134.31	0.12
23	34	134.22	1.79	1.54	134.47	134.22	1.72	1.6	134.34	0.13
24	34	134.22	1.79	1.52	134.49	134.22	1.72	1.58	134.36	0.13
25	34	134.22	1.79	1.48	134.53	134.22	1.72	1.57	134.37	0.16
26	34	134.22	1.79	1.495	134.515	134.22	1.72	1.57	134.37	0.145
27	34	134.22	1.79	1.48	134.53	134.22	1.72	1.54	134.4	0.13

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
28	34	134.22	1.79	1.515	134.495	134.22	1.72	1.51	134.43	0.065
0	35	134.22	1.79	1.66	134.35	134.22	1.72	1.67	134.27	0.08
1	35	134.22	1.79	1.655	134.355	134.22	1.72	1.69	134.25	0.105
2	35	134.22	1.79	1.64	134.37	134.22	1.72	1.69	134.25	0.12
3	35	134.22	1.79	1.62	134.39	134.22	1.72	1.7	134.24	0.15
4	35	134.22	1.79	1.64	134.37	134.22	1.72	1.69	134.25	0.12
5	35	134.22	1.79	1.64	134.37	134.22	1.72	1.69	134.25	0.12
6	35	134.22	1.79	1.64	134.37	134.22	1.72	1.71	134.23	0.14
7	35	134.22	1.79	1.675	134.335	134.22	1.72	1.74	134.2	0.135
8	35	134.22	1.79	1.67	134.34	134.22	1.72	1.76	134.18	0.16
9	35	134.22	1.79	1.68	134.33	134.22	1.72	1.73	134.21	0.12
10	35	134.22	1.79	1.64	134.37	134.22	1.72	1.7	134.24	0.13
11	35	134.22	1.79	1.69	134.32	134.22	1.72	1.68	134.26	0.06
12	35	134.22	1.79	1.615	134.395	134.22	1.72	1.67	134.27	0.125
13	35	134.22	1.79	1.655	134.355	134.22	1.72	1.65	134.29	0.065
14	35	134.22	1.79	1.59	134.42	134.22	1.72	1.63	134.31	0.11
15	35	134.22	1.79	1.585	134.425	134.22	1.72	1.605	134.335	0.09
16	35	134.22	1.79	1.585	134.425	134.22	1.72	1.62	134.32	0.105
17	35	134.22	1.79	1.58	134.43	134.22	1.72	1.6	134.34	0.09
18	35	134.22	1.79	1.565	134.445	134.22	1.72	1.6	134.34	0.105
19	35	134.22	1.79	1.57	134.44	134.22	1.72	1.59	134.35	0.09
20	35	134.22	1.79	1.54	134.47	134.22	1.72	1.6	134.34	0.13
21	35	134.22	1.79	1.55	134.46	134.22	1.72	1.6	134.34	0.12
22	35	134.22	1.79	1.57	134.44	134.22	1.72	1.61	134.33	0.11
23	35	134.22	1.79	1.59	134.42	134.22	1.72	1.65	134.29	0.13
24	35	134.22	1.79	1.505	134.505	134.22	1.72	1.62	134.32	0.185
25	35	134.22	1.79	1.49	134.52	134.22	1.72	1.56	134.38	0.14
26	35	134.22	1.79	1.48	134.53	134.22	1.72	1.54	134.4	0.13
27	35	134.22	1.79	1.52	134.49	134.22	1.72	1.56	134.38	0.11
28	35	134.22	1.79	1.49	134.52	134.22	1.72	1.52	134.42	0.1
0	36	134.22	1.79	1.61	134.4	134.22	1.72	1.68	134.26	0.14
1	36	134.22	1.79	1.64	134.37	134.22	1.72	1.675	134.265	0.105
2	36	134.22	1.79	1.655	134.355	134.22	1.72	1.685	134.255	0.1
3	36	134.22	1.79	1.6	134.41	134.22	1.72	1.685	134.255	0.155
4	36	134.22	1.79	1.62	134.39	134.22	1.72	1.68	134.26	0.13
5	36	134.22	1.79	1.635	134.375	134.22	1.72	1.705	134.235	0.14
6	36	134.22	1.79	1.665	134.345	134.22	1.72	1.72	134.22	0.125
7	36	134.22	1.79	1.675	134.335	134.22	1.72	1.72	134.22	0.115
8	36	134.22	1.79	1.655	134.355	134.22	1.72	1.725	134.215	0.14
9	36	134.22	1.79	1.66	134.35	134.22	1.72	1.73	134.21	0.14
10	36	134.22	1.79	1.68	134.33	134.22	1.72	1.695	134.245	0.085
11	36	134.22	1.79	1.67	134.34	134.22	1.72	1.68	134.26	0.08
12	36	134.22	1.79	1.59	134.42	134.22	1.72	1.67	134.27	0.15
13	36	134.22	1.79	1.62	134.39	134.22	1.72	1.65	134.29	0.1
14	36	134.22	1.79	1.59	134.42	134.22	1.72	1.63	134.31	0.11
15	36	134.22	1.79	1.56	134.45	134.22	1.72	1.595	134.345	0.105
16	36	134.22	1.79	1.575	134.435	134.22	1.72	1.63	134.31	0.125

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
17	36	134.22	1.79	1.535	134.475	134.22	1.72	1.635	134.305	0.17
18	36	134.22	1.79	1.55	134.46	134.22	1.72	1.605	134.335	0.125
19	36	134.22	1.79	1.55	134.46	134.22	1.72	1.605	134.335	0.125
20	36	134.22	1.79	1.505	134.505	134.22	1.72	1.58	134.36	0.145
21	36	134.22	1.79	1.53	134.48	134.22	1.72	1.595	134.345	0.135
22	36	134.22	1.79	1.495	134.515	134.22	1.72	1.58	134.36	0.155
23	36	134.22	1.79	1.53	134.48	134.22	1.72	1.585	134.355	0.125
24	36	134.22	1.79	1.495	134.515	134.22	1.72	1.555	134.385	0.13
25	36	134.22	1.79	1.53	134.48	134.22	1.72	1.515	134.425	0.055
26	36	134.22	1.79	1.47	134.54	134.22	1.72	1.54	134.4	0.14
27	36	134.22	1.79	1.48	134.53	134.22	1.72	1.515	134.425	0.105
28	36	134.22	1.79	1.46	134.55	134.22	1.72	1.47	134.47	0.08
0	37	134.22	1.79	1.64	134.37	134.22	1.72	1.675	134.265	0.105
1	37	134.22	1.79	1.63	134.38	134.22	1.72	1.71	134.23	0.15
2	37	134.22	1.79	1.66	134.35	134.22	1.72	1.69	134.25	0.1
3	37	134.22	1.79	1.635	134.375	134.22	1.72	1.685	134.255	0.12
4	37	134.22	1.79	1.64	134.37	134.22	1.72	1.69	134.25	0.12
5	37	134.22	1.79	1.665	134.345	134.22	1.72	1.705	134.235	0.11
6	37	134.22	1.79	1.65	134.36	134.22	1.72	1.72	134.22	0.14
7	37	134.22	1.79	1.695	134.315	134.22	1.72	1.73	134.21	0.105
8	37	134.22	1.79	1.66	134.35	134.22	1.72	1.73	134.21	0.14
9	37	134.22	1.79	1.67	134.34	134.22	1.72	1.74	134.2	0.14
10	37	134.22	1.79	1.655	134.355	134.22	1.72	1.715	134.225	0.13
11	37	134.22	1.79	1.68	134.33	134.22	1.72	1.69	134.25	0.08
12	37	134.22	1.79	1.705	134.305	134.22	1.72	1.675	134.265	0.04
13	37	134.22	1.79	1.63	134.38	134.22	1.72	1.645	134.295	0.085
14	37	134.22	1.79	1.64	134.37	134.22	1.72	1.62	134.32	0.05
15	37	134.22	1.79	1.555	134.455	134.22	1.72	1.625	134.315	0.14
16	37	134.22	1.79	1.57	134.44	134.22	1.72	1.655	134.285	0.155
17	37	134.22	1.79	1.55	134.46	134.22	1.72	1.625	134.315	0.145
18	37	134.22	1.79	1.53	134.48	134.22	1.72	1.575	134.365	0.115
19	37	134.22	1.79	1.535	134.475	134.22	1.72	1.59	134.35	0.125
20	37	134.22	1.79	1.55	134.46	134.22	1.72	1.59	134.35	0.11
21	37	134.22	1.79	1.52	134.49	134.22	1.72	1.58	134.36	0.13
22	37	134.22	1.79	1.61	134.4	134.22	1.72	1.58	134.36	0.04
23	37	134.22	1.79	1.53	134.48	134.22	1.72	1.585	134.355	0.125
24	37	134.22	1.79	1.515	134.495	134.22	1.72	1.53	134.41	0.085
25	37	134.22	1.79	1.575	134.435	134.22	1.72	1.56	134.38	0.055
26	37	134.22	1.79	1.48	134.53	134.22	1.72	1.51	134.43	0.1
27	37	134.22	1.79	1.48	134.53	134.22	1.72	1.51	134.43	0.1
28	37	134.22	1.79	1.43	134.58	134.22	1.72	1.49	134.45	0.13
0	38	134.22	1.79	1.665	134.345	134.22	1.72	1.68	134.26	0.085
1	38	134.22	1.79	1.615	134.395	134.22	1.72	1.72	134.22	0.175
2	38	134.22	1.79	1.67	134.34	134.22	1.72	1.705	134.235	0.105
3	38	134.22	1.79	1.645	134.365	134.22	1.72	1.72	134.22	0.145
4	38	134.22	1.79	1.635	134.375	134.22	1.72	1.735	134.205	0.17
5	38	134.22	1.79	1.69	134.32	134.22	1.72	1.72	134.22	0.1

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
6	38	134.22	1.79	1.69	134.32	134.22	1.72	1.73	134.21	0.11
7	38	134.22	1.79	1.68	134.33	134.22	1.72	1.72	134.22	0.11
8	38	134.22	1.79	1.645	134.365	134.22	1.72	1.735	134.205	0.16
9	38	134.22	1.79	1.645	134.365	134.22	1.72	1.705	134.235	0.13
10	38	134.22	1.79	1.655	134.355	134.22	1.72	1.685	134.255	0.1
11	38	134.22	1.79	1.64	134.37	134.22	1.72	1.66	134.28	0.09
12	38	134.22	1.79	1.64	134.37	134.22	1.72	1.64	134.3	0.07
13	38	134.22	1.79	1.635	134.375	134.22	1.72	1.635	134.305	0.07
14	38	134.22	1.79	1.6	134.41	134.22	1.72	1.61	134.33	0.08
15	38	134.22	1.79	1.57	134.44	134.22	1.72	1.595	134.345	0.095
16	38	134.22	1.79	1.56	134.45	134.22	1.72	1.625	134.315	0.135
17	38	134.22	1.79	1.54	134.47	134.22	1.72	1.61	134.33	0.14
18	38	134.22	1.79	1.56	134.45	134.22	1.72	1.625	134.315	0.135
19	38	134.22	1.79	1.575	134.435	134.22	1.72	1.605	134.335	0.1
20	38	134.22	1.79	1.55	134.46	134.22	1.72	1.585	134.355	0.105
21	38	134.22	1.79	1.525	134.485	134.22	1.72	1.58	134.36	0.125
22	38	134.22	1.79	1.535	134.475	134.22	1.72	1.57	134.37	0.105
23	38	134.22	1.79	1.535	134.475	134.22	1.72	1.54	134.4	0.075
24	38	134.22	1.79	1.5	134.51	134.22	1.72	1.51	134.43	0.08
25	38	134.22	1.79	1.52	134.49	134.22	1.72	1.52	134.42	0.07
26	38	134.22	1.79	1.475	134.535	134.22	1.72	1.495	134.445	0.09
27	38	134.22	1.79	1.42	134.59	134.22	1.72	1.495	134.445	0.145
28	38	134.22	1.79	1.47	134.54	134.22	1.72	1.45	134.49	0.05
0	39	134.22	1.79	1.625	134.385	134.22	1.72	1.675	134.265	0.12
1	39	134.22	1.79	1.64	134.37	134.22	1.72	1.705	134.235	0.135
2	39	134.22	1.79	1.67	134.34	134.22	1.72	1.72	134.22	0.12
3	39	134.22	1.79	1.675	134.335	134.22	1.72	1.705	134.235	0.1
4	39	134.22	1.79	1.67	134.34	134.22	1.72	1.72	134.22	0.12
5	39	134.22	1.79	1.67	134.34	134.22	1.72	1.71	134.23	0.11
6	39	134.22	1.79	1.695	134.315	134.22	1.72	1.72	134.22	0.095
7	39	134.22	1.79	1.67	134.34	134.22	1.72	1.715	134.225	0.115
8	39	134.22	1.79	1.655	134.355	134.22	1.72	1.715	134.225	0.13
9	39	134.22	1.79	1.65	134.36	134.22	1.72	1.68	134.26	0.1
10	39	134.22	1.79	1.685	134.325	134.22	1.72	1.67	134.27	0.055
11	39	134.22	1.79	1.645	134.365	134.22	1.72	1.67	134.27	0.095
12	39	134.22	1.79	1.65	134.36	134.22	1.72	1.65	134.29	0.07
13	39	134.22	1.79	1.62	134.39	134.22	1.72	1.635	134.305	0.085
14	39	134.22	1.79	1.605	134.405	134.22	1.72	1.645	134.295	0.11
15	39	134.22	1.79	1.585	134.425	134.22	1.72	1.62	134.32	0.105
16	39	134.22	1.79	1.59	134.42	134.22	1.72	1.63	134.31	0.11
17	39	134.22	1.79	1.555	134.455	134.22	1.72	1.615	134.325	0.13
18	39	134.22	1.79	1.57	134.44	134.22	1.72	1.615	134.325	0.115
19	39	134.22	1.79	1.575	134.435	134.22	1.72	1.615	134.325	0.11
20	39	134.22	1.79	1.54	134.47	134.22	1.72	1.58	134.36	0.11
21	39	134.22	1.79	1.57	134.44	134.22	1.72	1.57	134.37	0.07
22	39	134.22	1.79	1.57	134.44	134.22	1.72	1.575	134.365	0.075
23	39	134.22	1.79	1.53	134.48	134.22	1.72	1.57	134.37	0.11

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
24	39	134.22	1.79	1.555	134.455	134.22	1.72	1.545	134.395	0.06
25	39	134.22	1.79	1.575	134.435	134.22	1.72	1.53	134.41	0.025
26	39	134.22	1.79	1.46	134.55	134.22	1.72	1.515	134.425	0.125
27	39	134.22	1.79	1.455	134.555	134.22	1.72	1.48	134.46	0.095
28	39	134.22	1.79	1.455	134.555	134.22	1.72	1.455	134.485	0.07
0	40	134.22	1.79	1.67	134.34	134.22	1.72	1.685	134.255	0.085
1	40	134.22	1.79	1.66	134.35	134.22	1.72	1.7	134.24	0.11
2	40	134.22	1.79	1.68	134.33	134.22	1.72	1.7	134.24	0.09
3	40	134.22	1.79	1.715	134.295	134.22	1.72	1.72	134.22	0.075
4	40	134.22	1.79	1.71	134.3	134.22	1.72	1.73	134.21	0.09
5	40	134.22	1.79	1.7	134.31	134.22	1.72	1.73	134.21	0.1
6	40	134.22	1.79	1.67	134.34	134.22	1.72	1.69	134.25	0.09
7	40	134.22	1.79	1.685	134.325	134.22	1.72	1.7	134.24	0.085
8	40	134.22	1.79	1.655	134.355	134.22	1.72	1.7	134.24	0.115
9	40	134.22	1.79	1.635	134.375	134.22	1.72	1.71	134.23	0.145
10	40	134.22	1.79	1.665	134.345	134.22	1.72	1.705	134.235	0.11
11	40	134.22	1.79	1.655	134.355	134.22	1.72	1.69	134.25	0.105
12	40	134.22	1.79	1.63	134.38	134.22	1.72	1.66	134.28	0.1
13	40	134.22	1.79	1.68	134.33	134.22	1.72	1.63	134.31	0.02
14	40	134.22	1.79	1.62	134.39	134.22	1.72	1.64	134.3	0.09
15	40	134.22	1.79	1.6	134.41	134.22	1.72	1.625	134.315	0.095
16	40	134.22	1.79	1.61	134.4	134.22	1.72	1.62	134.32	0.08
17	40	134.22	1.79	1.585	134.425	134.22	1.72	1.62	134.32	0.105
18	40	134.22	1.79	1.575	134.435	134.22	1.72	1.61	134.33	0.105
19	40	134.22	1.79	1.565	134.445	134.22	1.72	1.63	134.31	0.135
20	40	134.22	1.79	1.55	134.46	134.22	1.72	1.62	134.32	0.14
21	40	134.22	1.79	1.555	134.455	134.22	1.72	1.59	134.35	0.105
22	40	134.22	1.79	1.59	134.42	134.22	1.72	1.575	134.365	0.055
23	40	134.22	1.79	1.55	134.46	134.22	1.72	1.59	134.35	0.11
24	40	134.22	1.79	1.555	134.455	134.22	1.72	1.535	134.405	0.05
25	40	134.22	1.79	1.55	134.46	134.22	1.72	1.53	134.41	0.05
26	40	134.22	1.79	1.49	134.52	134.22	1.72	1.545	134.395	0.125
27	40	134.22	1.79	1.485	134.525	134.22	1.72	1.54	134.4	0.125
28	40	134.22	1.79	1.455	134.555	134.22	1.72	1.51	134.43	0.125
0	41	134.22	1.79	1.72	134.29	134.22	1.72	1.695	134.245	0.045
1	41	134.22	1.79	1.695	134.315	134.22	1.72	1.7	134.24	0.075
2	41	134.22	1.79	1.715	134.295	134.22	1.72	1.72	134.22	0.075
3	41	134.22	1.79	1.735	134.275	134.22	1.72	1.73	134.21	0.065
4	41	134.22	1.79	1.725	134.285	134.22	1.72	1.735	134.205	0.08
5	41	134.22	1.79	1.715	134.295	134.22	1.72	1.725	134.215	0.08
6	41	134.22	1.79	1.715	134.295	134.22	1.72	1.7	134.24	0.055
7	41	134.22	1.79	1.7	134.31	134.22	1.72	1.705	134.235	0.075
8	41	134.22	1.79	1.71	134.3	134.22	1.72	1.675	134.265	0.035
9	41	134.22	1.79	1.66	134.35	134.22	1.72	1.68	134.26	0.09
10	41	134.22	1.79	1.715	134.295	134.22	1.72	1.69	134.25	0.045
11	41	134.22	1.79	1.69	134.32	134.22	1.72	1.71	134.23	0.09
12	41	134.22	1.79	1.65	134.36	134.22	1.72	1.69	134.25	0.11

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
13	41	134.22	1.79	1.645	134.365	134.22	1.72	1.655	134.285	0.08
14	41	134.22	1.79	1.62	134.39	134.22	1.72	1.685	134.255	0.135
15	41	134.22	1.79	1.63	134.38	134.22	1.72	1.66	134.28	0.1
16	41	134.22	1.79	1.605	134.405	134.22	1.72	1.64	134.3	0.105
17	41	134.22	1.79	1.6	134.41	134.22	1.72	1.63	134.31	0.1
18	41	134.22	1.79	1.59	134.42	134.22	1.72	1.65	134.29	0.13
19	41	134.22	1.79	1.55	134.46	134.22	1.72	1.625	134.315	0.145
20	41	134.22	1.79	1.58	134.43	134.22	1.72	1.61	134.33	0.1
21	41	134.22	1.79	1.56	134.45	134.22	1.72	1.585	134.355	0.095
22	41	134.22	1.79	1.59	134.42	134.22	1.72	1.585	134.355	0.065
23	41	134.22	1.79	1.545	134.465	134.22	1.72	1.565	134.375	0.09
24	41	134.22	1.79	1.525	134.485	134.22	1.72	1.54	134.4	0.085
25	41	134.22	1.79	1.54	134.47	134.22	1.72	1.58	134.36	0.11
26	41	134.22	1.79	1.5	134.51	134.22	1.72	1.57	134.37	0.14
27	41	134.22	1.79	1.5	134.51	134.22	1.72	1.555	134.385	0.125
28	41	134.22	1.79	1.455	134.555	134.22	1.72	1.515	134.425	0.13
0	42	134.22	1.79	1.67	134.34	134.22	1.775	1.755	134.24	0.1
1	42	134.22	1.79	1.68	134.33	134.22	1.775	1.77	134.225	0.105
2	42	134.22	1.79	1.67	134.34	134.22	1.775	1.775	134.22	0.12
3	42	134.22	1.79	1.7	134.31	134.22	1.775	1.79	134.205	0.105
4	42	134.22	1.79	1.68	134.33	134.22	1.775	1.795	134.2	0.13
5	42	134.22	1.79	1.7	134.31	134.22	1.775	1.8	134.195	0.115
6	42	134.22	1.79	1.7	134.31	134.22	1.775	1.775	134.22	0.09
7	42	134.22	1.79	1.7	134.31	134.22	1.775	1.77	134.225	0.085
8	42	134.22	1.79	1.69	134.32	134.22	1.775	1.76	134.235	0.085
9	42	134.22	1.79	1.69	134.32	134.22	1.775	1.76	134.235	0.085
10	42	134.22	1.79	1.69	134.32	134.22	1.775	1.77	134.225	0.095
11	42	134.22	1.79	1.68	134.33	134.22	1.775	1.77	134.225	0.105
12	42	134.22	1.79	1.655	134.355	134.22	1.775	1.75	134.245	0.11
13	42	134.22	1.79	1.665	134.345	134.22	1.775	1.765	134.23	0.115
14	42	134.22	1.79	1.66	134.35	134.22	1.775	1.775	134.22	0.13
15	42	134.22	1.79	1.67	134.34	134.22	1.775	1.785	134.21	0.13
16	42	134.22	1.79	1.63	134.38	134.22	1.775	1.795	134.2	0.18
17	42	134.22	1.79	1.605	134.405	134.22	1.775	1.8	134.195	0.21
18	42	134.22	1.79	1.63	134.38	134.22	1.775	1.77	134.225	0.155
19	42	134.22	1.79	1.6	134.41	134.22	1.775	1.735	134.26	0.15
20	42	134.22	1.79	1.595	134.415	134.22	1.775	1.77	134.225	0.19
21	42	134.22	1.79	1.58	134.43	134.22	1.775	1.725	134.27	0.16
22	42	134.22	1.79	1.59	134.42	134.22	1.775	1.72	134.275	0.145
23	42	134.22	1.79	1.57	134.44	134.22	1.775	1.72	134.275	0.165
24	42	134.22	1.79	1.545	134.465	134.22	1.775	1.72	134.275	0.19
25	42	134.22	1.79	1.53	134.48	134.22	1.775	1.72	134.275	0.205
26	42	134.22	1.79	1.525	134.485	134.22	1.775	1.72	134.275	0.21
27	42	134.22	1.79	1.52	134.49	134.22	1.775	1.705	134.29	0.2
28	42	134.22	1.79	1.52	134.49	134.22	1.775	1.645	134.35	0.14
0	43	134.22	1.79	1.69	134.32	134.22	1.775	1.735	134.26	0.06
1	43	134.22	1.79	1.685	134.325	134.22	1.775	1.745	134.25	0.075

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
2	43	134.22	1.79	1.685	134.325	134.22	1.775	1.735	134.26	0.065
3	43	134.22	1.79	1.675	134.335	134.22	1.775	1.77	134.225	0.11
4	43	134.22	1.79	1.68	134.33	134.22	1.775	1.78	134.215	0.115
5	43	134.22	1.79	1.67	134.34	134.22	1.775	1.75	134.245	0.095
6	43	134.22	1.79	1.675	134.335	134.22	1.775	1.73	134.265	0.07
7	43	134.22	1.79	1.675	134.335	134.22	1.775	1.725	134.27	0.065
8	43	134.22	1.79	1.655	134.355	134.22	1.775	1.72	134.275	0.08
9	43	134.22	1.79	1.665	134.345	134.22	1.775	1.715	134.28	0.065
10	43	134.22	1.79	1.665	134.345	134.22	1.775	1.725	134.27	0.075
11	43	134.22	1.79	1.645	134.365	134.22	1.775	1.715	134.28	0.085
12	43	134.22	1.79	1.605	134.405	134.22	1.775	1.715	134.28	0.125
13	43	134.22	1.79	1.635	134.375	134.22	1.775	1.75	134.245	0.13
14	43	134.22	1.79	1.63	134.38	134.22	1.775	1.755	134.24	0.14
15	43	134.22	1.79	1.665	134.345	134.22	1.775	1.76	134.235	0.11
16	43	134.22	1.79	1.645	134.365	134.22	1.775	1.785	134.21	0.155
17	43	134.22	1.79	1.64	134.37	134.22	1.775	1.785	134.21	0.16
18	43	134.22	1.79	1.64	134.37	134.22	1.775	1.74	134.255	0.115
19	43	134.22	1.79	1.575	134.435	134.22	1.775	1.74	134.255	0.18
20	43	134.22	1.79	1.64	134.37	134.22	1.775	1.745	134.25	0.12
21	43	134.22	1.79	1.62	134.39	134.22	1.775	1.73	134.265	0.125
22	43	134.22	1.79	1.61	134.4	134.22	1.775	1.725	134.27	0.13
23	43	134.22	1.79	1.61	134.4	134.22	1.775	1.73	134.265	0.135
24	43	134.22	1.79	1.61	134.4	134.22	1.775	1.715	134.28	0.12
25	43	134.22	1.79	1.58	134.43	134.22	1.775	1.685	134.31	0.12
26	43	134.22	1.79	1.53	134.48	134.22	1.775	1.655	134.34	0.14
27	43	134.22	1.79	1.52	134.49	134.22	1.775	1.61	134.385	0.105
28	43	134.22	1.79	1.5	134.51	134.22	1.775	1.575	134.42	0.09
0	44	134.22	1.95	1.84	134.33	134.22	1.775	1.7	134.295	0.035
1	44	134.22	1.95	1.82	134.35	134.22	1.775	1.74	134.255	0.095
2	44	134.22	1.95	1.81	134.36	134.22	1.775	1.76	134.235	0.125
3	44	134.22	1.95	1.815	134.355	134.22	1.775	1.765	134.23	0.125
4	44	134.22	1.95	1.825	134.345	134.22	1.775	1.73	134.265	0.08
5	44	134.22	1.95	1.78	134.39	134.22	1.775	1.735	134.26	0.13
6	44	134.22	1.95	1.785	134.385	134.22	1.775	1.74	134.255	0.13
7	44	134.22	1.95	1.785	134.385	134.22	1.775	1.725	134.27	0.115
8	44	134.22	1.95	1.795	134.375	134.22	1.775	1.7	134.295	0.08
9	44	134.22	1.95	1.775	134.395	134.22	1.775	1.705	134.29	0.105
10	44	134.22	1.95	1.765	134.405	134.22	1.775	1.7	134.295	0.11
11	44	134.22	1.95	1.76	134.41	134.22	1.775	1.7	134.295	0.115
12	44	134.22	1.95	1.76	134.41	134.22	1.775	1.72	134.275	0.135
13	44	134.22	1.95	1.77	134.4	134.22	1.775	1.73	134.265	0.135
14	44	134.22	1.95	1.79	134.38	134.22	1.775	1.74	134.255	0.125
15	44	134.22	1.95	1.8	134.37	134.22	1.775	1.755	134.24	0.13
16	44	134.22	1.95	1.78	134.39	134.22	1.775	1.76	134.235	0.155
17	44	134.22	1.95	1.785	134.385	134.22	1.775	1.745	134.25	0.135
18	44	134.22	1.95	1.78	134.39	134.22	1.775	1.72	134.275	0.115
19	44	134.22	1.95	1.735	134.435	134.22	1.775	1.73	134.265	0.17

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
20	44	134.22	1.95	1.74	134.43	134.22	1.775	1.745	134.25	0.18
21	44	134.22	1.95	1.74	134.43	134.22	1.775	1.725	134.27	0.16
22	44	134.22	1.95	1.75	134.42	134.22	1.775	1.71	134.285	0.135
23	44	134.22	1.95	1.75	134.42	134.22	1.775	1.7	134.295	0.125
24	44	134.22	1.95	1.725	134.445	134.22	1.775	1.685	134.31	0.135
25	44	134.22	1.95	1.7	134.47	134.22	1.775	1.68	134.315	0.155
26	44	134.22	1.95	1.7	134.47	134.22	1.775	1.67	134.325	0.145
27	44	134.22	1.95	1.695	134.475	134.22	1.775	1.675	134.32	0.155
28	44	134.22	1.95	1.66	134.51	134.22	1.775	1.61	134.385	0.125
29	44	134.22	1.95	1.6	134.57	134.22	1.775	1.54	134.455	0.115
0	45	134.22	1.95	1.83	134.34	134.22	1.775	1.71	134.285	0.055
1	45	134.22	1.95	1.8	134.37	134.22	1.775	1.74	134.255	0.115
2	45	134.22	1.95	1.78	134.39	134.22	1.775	1.74	134.255	0.135
3	45	134.22	1.95	1.805	134.365	134.22	1.775	1.745	134.25	0.115
4	45	134.22	1.95	1.785	134.385	134.22	1.775	1.72	134.275	0.11
5	45	134.22	1.95	1.8	134.37	134.22	1.775	1.74	134.255	0.115
6	45	134.22	1.95	1.775	134.395	134.22	1.775	1.715	134.28	0.115
7	45	134.22	1.95	1.775	134.395	134.22	1.775	1.71	134.285	0.11
8	45	134.22	1.95	1.77	134.4	134.22	1.775	1.69	134.305	0.095
9	45	134.22	1.95	1.73	134.44	134.22	1.775	1.69	134.305	0.135
10	45	134.22	1.95	1.75	134.42	134.22	1.775	1.69	134.305	0.115
11	45	134.22	1.95	1.755	134.415	134.22	1.775	1.685	134.31	0.105
12	45	134.22	1.95	1.735	134.435	134.22	1.775	1.71	134.285	0.15
13	45	134.22	1.95	1.55	134.62	134.22	1.775	1.7	134.295	0.325
14	45	134.22	1.95	1.765	134.405	134.22	1.775	1.72	134.275	0.13
15	45	134.22	1.95	1.765	134.405	134.22	1.775	1.715	134.28	0.125
16	45	134.22	1.95	1.785	134.385	134.22	1.775	1.75	134.245	0.14
17	45	134.22	1.95	1.77	134.4	134.22	1.775	1.75	134.245	0.155
18	45	134.22	1.95	1.76	134.41	134.22	1.775	1.705	134.29	0.12
19	45	134.22	1.95	1.74	134.43	134.22	1.775	1.72	134.275	0.155
20	45	134.22	1.95	1.705	134.465	134.22	1.775	1.72	134.275	0.19
21	45	134.22	1.95	1.725	134.445	134.22	1.775	1.7	134.295	0.15
22	45	134.22	1.95	1.755	134.415	134.22	1.775	1.68	134.315	0.1
23	45	134.22	1.95	1.72	134.45	134.22	1.775	1.68	134.315	0.135
24	45	134.22	1.95	1.715	134.455	134.22	1.775	1.66	134.335	0.12
25	45	134.22	1.95	1.7	134.47	134.22	1.775	1.67	134.325	0.145
26	45	134.22	1.95	1.66	134.51	134.22	1.775	1.66	134.335	0.175
27	45	134.22	1.95	1.7	134.47	134.22	1.775	1.62	134.375	0.095
28	45	134.22	1.95	1.66	134.51	134.22	1.775	1.6	134.395	0.115
29	45	134.22	1.95	1.595	134.575	134.22	1.775	1.54	134.455	0.12
0	46	134.22	1.95	1.765	134.405	134.22	1.775	1.69	134.305	0.1
1	46	134.22	1.95	1.78	134.39	134.22	1.775	1.715	134.28	0.11
2	46	134.22	1.95	1.79	134.38	134.22	1.775	1.72	134.275	0.105
3	46	134.22	1.95	1.77	134.4	134.22	1.775	1.72	134.275	0.125
4	46	134.22	1.95	1.765	134.405	134.22	1.775	1.71	134.285	0.12
5	46	134.22	1.95	1.775	134.395	134.22	1.775	1.715	134.28	0.115
6	46	134.22	1.95	1.77	134.4	134.22	1.775	1.725	134.27	0.13

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
7	46	134.22	1.95	1.76	134.41	134.22	1.775	1.7	134.295	0.115
8	46	134.22	1.95	1.765	134.405	134.22	1.775	1.69	134.305	0.1
9	46	134.22	1.95	1.74	134.43	134.22	1.775	1.685	134.31	0.12
10	46	134.22	1.95	1.75	134.42	134.22	1.775	1.69	134.305	0.115
11	46	134.22	1.95	1.74	134.43	134.22	1.775	1.69	134.305	0.125
12	46	134.22	1.95	1.73	134.44	134.22	1.775	1.7	134.295	0.145
13	46	134.22	1.95	1.735	134.435	134.22	1.775	1.705	134.29	0.145
14	46	134.22	1.95	1.75	134.42	134.22	1.775	1.7	134.295	0.125
15	46	134.22	1.95	1.75	134.42	134.22	1.775	1.73	134.265	0.155
16	46	134.22	1.95	1.77	134.4	134.22	1.775	1.73	134.265	0.135
17	46	134.22	1.95	1.77	134.4	134.22	1.775	1.705	134.29	0.11
18	46	134.22	1.95	1.75	134.42	134.22	1.775	1.7	134.295	0.125
19	46	134.22	1.95	1.72	134.45	134.22	1.775	1.69	134.305	0.145
20	46	134.22	1.95	1.725	134.445	134.22	1.775	1.69	134.305	0.14
21	46	134.22	1.95	1.69	134.48	134.22	1.775	1.685	134.31	0.17
22	46	134.22	1.95	1.69	134.48	134.22	1.775	1.67	134.325	0.155
23	46	134.22	1.95	1.73	134.44	134.22	1.775	1.68	134.315	0.125
24	46	134.22	1.95	1.665	134.505	134.22	1.775	1.67	134.325	0.18
25	46	134.22	1.95	1.67	134.5	134.22	1.775	1.66	134.335	0.165
26	46	134.22	1.95	1.67	134.5	134.22	1.775	1.67	134.325	0.175
27	46	134.22	1.95	1.69	134.48	134.22	1.775	1.63	134.365	0.115
28	46	134.22	1.95	1.695	134.475	134.22	1.775	1.56	134.435	0.04
29	46	134.22	1.95	1.595	134.575	134.22	1.775	1.57	134.425	0.15
0	47	134.22	1.95	1.76	134.41	134.22	1.775	1.695	134.3	0.11
1	47	134.22	1.95	1.79	134.38	134.22	1.775	1.715	134.28	0.1
2	47	134.22	1.95	1.755	134.415	134.22	1.775	1.72	134.275	0.14
3	47	134.22	1.95	1.76	134.41	134.22	1.775	1.73	134.265	0.145
4	47	134.22	1.95	1.755	134.415	134.22	1.775	1.7	134.295	0.12
5	47	134.22	1.95	1.775	134.395	134.22	1.775	1.715	134.28	0.115
6	47	134.22	1.95	1.775	134.395	134.22	1.775	1.71	134.285	0.11
7	47	134.22	1.95	1.775	134.395	134.22	1.775	1.705	134.29	0.105
8	47	134.22	1.95	1.76	134.41	134.22	1.775	1.7	134.295	0.115
9	47	134.22	1.95	1.725	134.445	134.22	1.775	1.69	134.305	0.14
10	47	134.22	1.95	1.745	134.425	134.22	1.775	1.68	134.315	0.11
11	47	134.22	1.95	1.735	134.435	134.22	1.775	1.69	134.305	0.13
12	47	134.22	1.95	1.735	134.435	134.22	1.775	1.695	134.3	0.135
13	47	134.22	1.95	1.73	134.44	134.22	1.775	1.71	134.285	0.155
14	47	134.22	1.95	1.73	134.44	134.22	1.775	1.705	134.29	0.15
15	47	134.22	1.95	1.765	134.405	134.22	1.775	1.715	134.28	0.125
16	47	134.22	1.95	1.765	134.405	134.22	1.775	1.71	134.285	0.12
17	47	134.22	1.95	1.77	134.4	134.22	1.775	1.68	134.315	0.085
18	47	134.22	1.95	1.735	134.435	134.22	1.775	1.685	134.31	0.125
19	47	134.22	1.95	1.735	134.435	134.22	1.775	1.7	134.295	0.14
20	47	134.22	1.95	1.71	134.46	134.22	1.775	1.68	134.315	0.145
21	47	134.22	1.95	1.675	134.495	134.22	1.775	1.675	134.32	0.175
22	47	134.22	1.95	1.66	134.51	134.22	1.775	1.65	134.345	0.165
23	47	134.22	1.95	1.68	134.49	134.22	1.775	1.64	134.355	0.135

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
24	47	134.22	1.95	1.685	134.485	134.22	1.775	1.63	134.365	0.12
25	47	134.22	1.95	1.67	134.5	134.22	1.775	1.665	134.33	0.17
26	47	134.22	1.95	1.685	134.485	134.22	1.775	1.66	134.335	0.15
27	47	134.22	1.95	1.67	134.5	134.22	1.775	1.6	134.395	0.105
28	47	134.22	1.95	1.715	134.455	134.22	1.775	1.59	134.405	0.05
29	47	134.22	1.95	1.63	134.54	134.22	1.775	1.54	134.455	0.085
0	48	134.22	1.95	1.8	134.37	134.22	1.775	1.695	134.3	0.07
1	48	134.22	1.95	1.77	134.4	134.22	1.775	1.725	134.27	0.13
2	48	134.22	1.95	1.755	134.415	134.22	1.775	1.715	134.28	0.135
3	48	134.22	1.95	1.75	134.42	134.22	1.775	1.7	134.295	0.125
4	48	134.22	1.95	1.77	134.4	134.22	1.775	1.7	134.295	0.105
5	48	134.22	1.95	1.755	134.415	134.22	1.775	1.7	134.295	0.12
6	48	134.22	1.95	1.75	134.42	134.22	1.775	1.71	134.285	0.135
7	48	134.22	1.95	1.765	134.405	134.22	1.775	1.715	134.28	0.125
8	48	134.22	1.95	1.765	134.405	134.22	1.775	1.7	134.295	0.11
9	48	134.22	1.95	1.73	134.44	134.22	1.775	1.7	134.295	0.145
10	48	134.22	1.95	1.755	134.415	134.22	1.775	1.7	134.295	0.12
11	48	134.22	1.95	1.75	134.42	134.22	1.775	1.68	134.315	0.105
12	48	134.22	1.95	1.74	134.43	134.22	1.775	1.695	134.3	0.13
13	48	134.22	1.95	1.735	134.435	134.22	1.775	1.7	134.295	0.14
14	48	134.22	1.95	1.73	134.44	134.22	1.775	1.7	134.295	0.145
15	48	134.22	1.95	1.75	134.42	134.22	1.775	1.705	134.29	0.13
16	48	134.22	1.95	1.74	134.43	134.22	1.775	1.705	134.29	0.14
17	48	134.22	1.95	1.77	134.4	134.22	1.775	1.695	134.3	0.1
18	48	134.22	1.95	1.74	134.43	134.22	1.775	1.685	134.31	0.12
19	48	134.22	1.95	1.715	134.455	134.22	1.775	1.69	134.305	0.15
20	48	134.22	1.95	1.71	134.46	134.22	1.775	1.69	134.305	0.155
21	48	134.22	1.95	1.67	134.5	134.22	1.775	1.68	134.315	0.185
22	48	134.22	1.95	1.68	134.49	134.22	1.775	1.67	134.325	0.165
23	48	134.22	1.95	1.68	134.49	134.22	1.775	1.615	134.38	0.11
24	48	134.22	1.95	1.67	134.5	134.22	1.775	1.625	134.37	0.13
25	48	134.22	1.95	1.66	134.51	134.22	1.775	1.645	134.35	0.16
26	48	134.22	1.95	1.615	134.555	134.22	1.775	1.645	134.35	0.205
27	48	134.22	1.95	1.63	134.54	134.22	1.775	1.63	134.365	0.175
28	48	134.22	1.95	1.675	134.495	134.22	1.775	1.575	134.42	0.075
29	48	134.22	1.95	1.605	134.565	134.22	1.775	1.535	134.46	0.105
0	49	134.22	1.95	1.79	134.38	134.22	1.775	1.69	134.305	0.075
1	49	134.22	1.95	1.775	134.395	134.22	1.775	1.7	134.295	0.1
2	49	134.22	1.95	1.77	134.4	134.22	1.775	1.7	134.295	0.105
3	49	134.22	1.95	1.76	134.41	134.22	1.775	1.69	134.305	0.105
4	49	134.22	1.95	1.755	134.415	134.22	1.775	1.7	134.295	0.12
5	49	134.22	1.95	1.755	134.415	134.22	1.775	1.7	134.295	0.12
6	49	134.22	1.95	1.755	134.415	134.22	1.775	1.7	134.295	0.12
7	49	134.22	1.95	1.76	134.41	134.22	1.775	1.72	134.275	0.135
8	49	134.22	1.95	1.77	134.4	134.22	1.775	1.705	134.29	0.11
9	49	134.22	1.95	1.74	134.43	134.22	1.775	1.695	134.3	0.13
10	49	134.22	1.95	1.735	134.435	134.22	1.775	1.68	134.315	0.12

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
11	49	134.22	1.95	1.765	134.405	134.22	1.775	1.685	134.31	0.095
12	49	134.22	1.95	1.755	134.415	134.22	1.775	1.685	134.31	0.105
13	49	134.22	1.95	1.74	134.43	134.22	1.775	1.69	134.305	0.125
14	49	134.22	1.95	1.76	134.41	134.22	1.775	1.695	134.3	0.11
15	49	134.22	1.95	1.745	134.425	134.22	1.775	1.71	134.285	0.14
16	49	134.22	1.95	1.77	134.4	134.22	1.775	1.685	134.31	0.09
17	49	134.22	1.95	1.745	134.425	134.22	1.775	1.69	134.305	0.12
18	49	134.22	1.95	1.73	134.44	134.22	1.775	1.675	134.32	0.12
19	49	134.22	1.95	1.695	134.475	134.22	1.775	1.675	134.32	0.155
20	49	134.22	1.95	1.69	134.48	134.22	1.775	1.68	134.315	0.165
21	49	134.22	1.95	1.695	134.475	134.22	1.775	1.66	134.335	0.14
22	49	134.22	1.95	1.7	134.47	134.22	1.775	1.635	134.36	0.11
23	49	134.22	1.95	1.675	134.495	134.22	1.775	1.625	134.37	0.125
24	49	134.22	1.95	1.65	134.52	134.22	1.775	1.625	134.37	0.15
25	49	134.22	1.95	1.635	134.535	134.22	1.775	1.645	134.35	0.185
26	49	134.22	1.95	1.625	134.545	134.22	1.775	1.64	134.355	0.19
27	49	134.22	1.95	1.685	134.485	134.22	1.775	1.605	134.39	0.095
28	49	134.22	1.95	1.665	134.505	134.22	1.775	1.575	134.42	0.085
29	49	134.22	1.95	1.6	134.57	134.22	1.775	1.555	134.44	0.13
0	50	134.22	1.95	1.75	134.42	134.22	1.775	1.66	134.335	0.085
1	50	134.22	1.95	1.715	134.455	134.22	1.775	1.66	134.335	0.12
2	50	134.22	1.95	1.71	134.46	134.22	1.775	1.685	134.31	0.15
3	50	134.22	1.95	1.725	134.445	134.22	1.775	1.69	134.305	0.14
4	50	134.22	1.95	1.75	134.42	134.22	1.775	1.69	134.305	0.115
5	50	134.22	1.95	1.73	134.44	134.22	1.775	1.685	134.31	0.13
6	50	134.22	1.95	1.725	134.445	134.22	1.775	1.7	134.295	0.15
7	50	134.22	1.95	1.77	134.4	134.22	1.775	1.71	134.285	0.115
8	50	134.22	1.95	1.78	134.39	134.22	1.775	1.7	134.295	0.095
9	50	134.22	1.95	1.75	134.42	134.22	1.775	1.705	134.29	0.13
10	50	134.22	1.95	1.76	134.41	134.22	1.775	1.695	134.3	0.11
11	50	134.22	1.95	1.78	134.39	134.22	1.775	1.68	134.315	0.075
12	50	134.22	1.95	1.75	134.42	134.22	1.775	1.69	134.305	0.115
13	50	134.22	1.95	1.75	134.42	134.22	1.775	1.69	134.305	0.115
14	50	134.22	1.95	1.735	134.435	134.22	1.775	1.7	134.295	0.14
15	50	134.22	1.95	1.755	134.415	134.22	1.775	1.69	134.305	0.11
16	50	134.22	1.95	1.74	134.43	134.22	1.775	1.68	134.315	0.115
17	50	134.22	1.95	1.745	134.425	134.22	1.775	1.68	134.315	0.11
18	50	134.22	1.95	1.71	134.46	134.22	1.775	1.68	134.315	0.145
19	50	134.22	1.95	1.705	134.465	134.22	1.775	1.655	134.34	0.125
20	50	134.22	1.95	1.715	134.455	134.22	1.775	1.685	134.31	0.145
21	50	134.22	1.95	1.685	134.485	134.22	1.775	1.665	134.33	0.155
22	50	134.22	1.95	1.67	134.5	134.22	1.775	1.655	134.34	0.16
23	50	134.22	1.95	1.65	134.52	134.22	1.775	1.64	134.355	0.165
24	50	134.22	1.95	1.66	134.51	134.22	1.775	1.62	134.375	0.135
25	50	134.22	1.95	1.62	134.55	134.22	1.775	1.63	134.365	0.185
26	50	134.22	1.95	1.645	134.525	134.22	1.775	1.625	134.37	0.155
27	50	134.22	1.95	1.645	134.525	134.22	1.775	1.585	134.41	0.115

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
28	50	134.22	1.95	1.655	134.515	134.22	1.775	1.575	134.42	0.095
29	50	134.22	1.95	1.59	134.58	134.22	1.775	1.555	134.44	0.14
0	51	134.22	1.95	1.75	134.42	134.22	1.775	1.665	134.33	0.09
1	51	134.22	1.95	1.69	134.48	134.22	1.775	1.675	134.32	0.16
2	51	134.22	1.95	1.7	134.47	134.22	1.775	1.68	134.315	0.155
3	51	134.22	1.95	1.75	134.42	134.22	1.775	1.69	134.305	0.115
4	51	134.22	1.95	1.72	134.45	134.22	1.775	1.695	134.3	0.15
5	51	134.22	1.95	1.715	134.455	134.22	1.775	1.68	134.315	0.14
6	51	134.22	1.95	1.755	134.415	134.22	1.775	1.7	134.295	0.12
7	51	134.22	1.95	1.765	134.405	134.22	1.775	1.71	134.285	0.12
8	51	134.22	1.95	1.765	134.405	134.22	1.775	1.69	134.305	0.1
9	51	134.22	1.95	1.755	134.415	134.22	1.775	1.685	134.31	0.105
10	51	134.22	1.95	1.78	134.39	134.22	1.775	1.685	134.31	0.08
11	51	134.22	1.95	1.76	134.41	134.22	1.775	1.675	134.32	0.09
12	51	134.22	1.95	1.755	134.415	134.22	1.775	1.69	134.305	0.11
13	51	134.22	1.95	1.735	134.435	134.22	1.775	1.7	134.295	0.14
14	51	134.22	1.95	1.76	134.41	134.22	1.775	1.68	134.315	0.095
15	51	134.22	1.95	1.7	134.47	134.22	1.775	1.67	134.325	0.145
16	51	134.22	1.95	1.71	134.46	134.22	1.775	1.69	134.305	0.155
17	51	134.22	1.95	1.71	134.46	134.22	1.775	1.67	134.325	0.135
18	51	134.22	1.95	1.68	134.49	134.22	1.775	1.655	134.34	0.15
19	51	134.22	1.95	1.71	134.46	134.22	1.775	1.665	134.33	0.13
20	51	134.22	1.95	1.7	134.47	134.22	1.775	1.675	134.32	0.15
21	51	134.22	1.95	1.69	134.48	134.22	1.775	1.665	134.33	0.15
22	51	134.22	1.95	1.68	134.49	134.22	1.775	1.645	134.35	0.14
23	51	134.22	1.95	1.66	134.51	134.22	1.775	1.63	134.365	0.145
24	51	134.22	1.95	1.665	134.505	134.22	1.775	1.64	134.355	0.15
25	51	134.22	1.95	1.67	134.5	134.22	1.775	1.64	134.355	0.145
26	51	134.22	1.95	1.635	134.535	134.22	1.775	1.61	134.385	0.15
27	51	134.22	1.95	1.635	134.535	134.22	1.775	1.6	134.395	0.14
28	51	134.22	1.95	1.6	134.57	134.22	1.775	1.575	134.42	0.15
29	51	134.22	1.95	1.565	134.605	134.22	1.775	1.535	134.46	0.145
0	52	134.22	1.95	1.69	134.48	134.22	1.775	1.66	134.335	0.145
1	52	134.22	1.95	1.675	134.495	134.22	1.775	1.665	134.33	0.165
2	52	134.22	1.95	1.71	134.46	134.22	1.775	1.69	134.305	0.155
3	52	134.22	1.95	1.72	134.45	134.22	1.775	1.71	134.285	0.165
4	52	134.22	1.95	1.695	134.475	134.22	1.775	1.7	134.295	0.18
5	52	134.22	1.95	1.695	134.475	134.22	1.775	1.69	134.305	0.17
6	52	134.22	1.95	1.705	134.465	134.22	1.775	1.695	134.3	0.165
7	52	134.22	1.95	1.73	134.44	134.22	1.775	1.69	134.305	0.135
8	52	134.22	1.95	1.735	134.435	134.22	1.775	1.69	134.305	0.13
9	52	134.22	1.95	1.74	134.43	134.22	1.775	1.675	134.32	0.11
10	52	134.22	1.95	1.76	134.41	134.22	1.775	1.67	134.325	0.085
11	52	134.22	1.95	1.75	134.42	134.22	1.775	1.67	134.325	0.095
12	52	134.22	1.95	1.73	134.44	134.22	1.775	1.69	134.305	0.135
13	52	134.22	1.95	1.69	134.48	134.22	1.775	1.69	134.305	0.175
14	52	134.22	1.95	1.72	134.45	134.22	1.775	1.685	134.31	0.14

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
15	52	134.22	1.95	1.71	134.46	134.22	1.775	1.685	134.31	0.15
16	52	134.22	1.95	1.725	134.445	134.22	1.775	1.67	134.325	0.12
17	52	134.22	1.95	1.73	134.44	134.22	1.775	1.66	134.335	0.105
18	52	134.22	1.95	1.685	134.485	134.22	1.775	1.66	134.335	0.15
19	52	134.22	1.95	1.68	134.49	134.22	1.775	1.665	134.33	0.16
20	52	134.22	1.95	1.675	134.495	134.22	1.775	1.68	134.315	0.18
21	52	134.22	1.95	1.68	134.49	134.22	1.775	1.665	134.33	0.16
22	52	134.22	1.95	1.68	134.49	134.22	1.775	1.66	134.335	0.155
23	52	134.22	1.95	1.66	134.51	134.22	1.775	1.62	134.375	0.135
24	52	134.22	1.95	1.63	134.54	134.22	1.775	1.62	134.375	0.165
25	52	134.22	1.95	1.65	134.52	134.22	1.775	1.635	134.36	0.16
26	52	134.22	1.95	1.64	134.53	134.22	1.775	1.61	134.385	0.145
27	52	134.22	1.95	1.62	134.55	134.22	1.775	1.57	134.425	0.125
28	52	134.22	1.95	1.605	134.565	134.22	1.775	1.575	134.42	0.145
29	52	134.22	1.95	1.57	134.6	134.22	1.775	1.54	134.455	0.145
0	53	134.22	1.95	1.71	134.46	134.22	1.775	1.65	134.345	0.115
1	53	134.22	1.95	1.695	134.475	134.22	1.775	1.69	134.305	0.17
2	53	134.22	1.95	1.71	134.46	134.22	1.775	1.695	134.3	0.16
3	53	134.22	1.95	1.725	134.445	134.22	1.775	1.7	134.295	0.15
4	53	134.22	1.95	1.72	134.45	134.22	1.775	1.72	134.275	0.175
5	53	134.22	1.95	1.69	134.48	134.22	1.775	1.69	134.305	0.175
6	53	134.22	1.95	1.69	134.48	134.22	1.775	1.675	134.32	0.16
7	53	134.22	1.95	1.72	134.45	134.22	1.775	1.685	134.31	0.14
8	53	134.22	1.95	1.72	134.45	134.22	1.775	1.69	134.305	0.145
9	53	134.22	1.95	1.735	134.435	134.22	1.775	1.665	134.33	0.105
10	53	134.22	1.95	1.715	134.455	134.22	1.775	1.655	134.34	0.115
11	53	134.22	1.95	1.72	134.45	134.22	1.775	1.67	134.325	0.125
12	53	134.22	1.95	1.725	134.445	134.22	1.775	1.66	134.335	0.11
13	53	134.22	1.95	1.72	134.45	134.22	1.775	1.67	134.325	0.125
14	53	134.22	1.95	1.71	134.46	134.22	1.775	1.655	134.34	0.12
15	53	134.22	1.95	1.715	134.455	134.22	1.775	1.665	134.33	0.125
16	53	134.22	1.95	1.715	134.455	134.22	1.775	1.65	134.345	0.11
17	53	134.22	1.95	1.705	134.465	134.22	1.775	1.64	134.355	0.11
18	53	134.22	1.95	1.7	134.47	134.22	1.775	1.655	134.34	0.13
19	53	134.22	1.95	1.71	134.46	134.22	1.775	1.67	134.325	0.135
20	53	134.22	1.95	1.72	134.45	134.22	1.775	1.665	134.33	0.12
21	53	134.22	1.95	1.695	134.475	134.22	1.775	1.655	134.34	0.135
22	53	134.22	1.95	1.68	134.49	134.22	1.775	1.66	134.335	0.155
23	53	134.22	1.95	1.655	134.515	134.22	1.775	1.65	134.345	0.17
24	53	134.22	1.95	1.645	134.525	134.22	1.775	1.625	134.37	0.155
25	53	134.22	1.95	1.65	134.52	134.22	1.775	1.615	134.38	0.14
26	53	134.22	1.95	1.65	134.52	134.22	1.775	1.595	134.4	0.12
27	53	134.22	1.95	1.65	134.52	134.22	1.775	1.56	134.435	0.085
28	53	134.22	1.95	1.645	134.525	134.22	1.775	1.55	134.445	0.08
29	53	134.22	1.95	1.66	134.51	134.22	1.775	1.545	134.45	0.06
0	54	134.22	1.95	1.735	134.435	134.22	1.775	1.7	134.295	0.14
1	54	134.22	1.95	1.7	134.47	134.22	1.775	1.7	134.295	0.175

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
2	54	134.22	1.95	1.715	134.455	134.22	1.775	1.72	134.275	0.18
3	54	134.22	1.95	1.725	134.445	134.22	1.775	1.705	134.29	0.155
4	54	134.22	1.95	1.705	134.465	134.22	1.775	1.7	134.295	0.17
5	54	134.22	1.95	1.73	134.44	134.22	1.775	1.69	134.305	0.135
6	54	134.22	1.95	1.71	134.46	134.22	1.775	1.675	134.32	0.14
7	54	134.22	1.95	1.715	134.455	134.22	1.775	1.68	134.315	0.14
8	54	134.22	1.95	1.695	134.475	134.22	1.775	1.69	134.305	0.17
9	54	134.22	1.95	1.74	134.43	134.22	1.775	1.675	134.32	0.11
10	54	134.22	1.95	1.73	134.44	134.22	1.775	1.655	134.34	0.1
11	54	134.22	1.95	1.72	134.45	134.22	1.775	1.65	134.345	0.105
12	54	134.22	1.95	1.715	134.455	134.22	1.775	1.655	134.34	0.115
13	54	134.22	1.95	1.715	134.455	134.22	1.775	1.67	134.325	0.13
14	54	134.22	1.95	1.705	134.465	134.22	1.775	1.65	134.345	0.12
15	54	134.22	1.95	1.69	134.48	134.22	1.775	1.65	134.345	0.135
16	54	134.22	1.95	1.7	134.47	134.22	1.775	1.655	134.34	0.13
17	54	134.22	1.95	1.715	134.455	134.22	1.775	1.665	134.33	0.125
18	54	134.22	1.95	1.73	134.44	134.22	1.775	1.66	134.335	0.105
19	54	134.22	1.95	1.71	134.46	134.22	1.775	1.675	134.32	0.14
20	54	134.22	1.95	1.71	134.46	134.22	1.775	1.675	134.32	0.14
21	54	134.22	1.95	1.695	134.475	134.22	1.775	1.655	134.34	0.135
22	54	134.22	1.95	1.68	134.49	134.22	1.775	1.65	134.345	0.145
23	54	134.22	1.95	1.64	134.53	134.22	1.775	1.63	134.365	0.165
24	54	134.22	1.95	1.645	134.525	134.22	1.775	1.625	134.37	0.155
25	54	134.22	1.95	1.65	134.52	134.22	1.775	1.62	134.375	0.145
26	54	134.22	1.95	1.65	134.52	134.22	1.775	1.595	134.4	0.12
27	54	134.22	1.95	1.67	134.5	134.22	1.775	1.58	134.415	0.085
28	54	134.22	1.95	1.66	134.51	134.22	1.775	1.55	134.445	0.065
29	54	134.22	1.95	1.625	134.545	134.22	1.775	1.555	134.44	0.105
0	55	134.22	1.95	1.715	134.455	134.22	1.775	1.69	134.305	0.15
1	55	134.22	1.95	1.72	134.45	134.22	1.775	1.71	134.285	0.165
2	55	134.22	1.95	1.715	134.455	134.22	1.775	1.715	134.28	0.175
3	55	134.22	1.95	1.74	134.43	134.22	1.775	1.71	134.285	0.145
4	55	134.22	1.95	1.75	134.42	134.22	1.775	1.695	134.3	0.12
5	55	134.22	1.95	1.75	134.42	134.22	1.775	1.695	134.3	0.12
6	55	134.22	1.95	1.74	134.43	134.22	1.775	1.675	134.32	0.11
7	55	134.22	1.95	1.75	134.42	134.22	1.775	1.685	134.31	0.11
8	55	134.22	1.95	1.75	134.42	134.22	1.775	1.685	134.31	0.11
9	55	134.22	1.95	1.745	134.425	134.22	1.775	1.67	134.325	0.1
10	55	134.22	1.95	1.725	134.445	134.22	1.775	1.685	134.31	0.135
11	55	134.22	1.95	1.73	134.44	134.22	1.775	1.66	134.335	0.105
12	55	134.22	1.95	1.715	134.455	134.22	1.775	1.655	134.34	0.115
13	55	134.22	1.95	1.71	134.46	134.22	1.775	1.655	134.34	0.12
14	55	134.22	1.95	1.715	134.455	134.22	1.775	1.65	134.345	0.11
15	55	134.22	1.95	1.7	134.47	134.22	1.775	1.65	134.345	0.125
16	55	134.22	1.95	1.72	134.45	134.22	1.775	1.66	134.335	0.115
17	55	134.22	1.95	1.715	134.455	134.22	1.775	1.655	134.34	0.115
18	55	134.22	1.95	1.735	134.435	134.22	1.775	1.665	134.33	0.105

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
19	55	134.22	1.95	1.73	134.44	134.22	1.775	1.675	134.32	0.12
20	55	134.22	1.95	1.695	134.475	134.22	1.775	1.665	134.33	0.145
21	55	134.22	1.95	1.705	134.465	134.22	1.775	1.655	134.34	0.125
22	55	134.22	1.95	1.695	134.475	134.22	1.775	1.645	134.35	0.125
23	55	134.22	1.95	1.68	134.49	134.22	1.775	1.645	134.35	0.14
24	55	134.22	1.95	1.66	134.51	134.22	1.775	1.63	134.365	0.145
25	55	134.22	1.95	1.64	134.53	134.22	1.775	1.615	134.38	0.15
26	55	134.22	1.95	1.67	134.5	134.22	1.775	1.595	134.4	0.1
27	55	134.22	1.95	1.68	134.49	134.22	1.775	1.58	134.415	0.075
28	55	134.22	1.95	1.66	134.51	134.22	1.775	1.555	134.44	0.07
29	55	134.22	1.95	1.6	134.57	134.22	1.775	1.565	134.43	0.14
0	56	134.22	1.95	1.735	134.435	134.22	1.775	1.675	134.32	0.115
1	56	134.22	1.95	1.71	134.46	134.22	1.775	1.69	134.305	0.155
2	56	134.22	1.95	1.71	134.46	134.22	1.775	1.69	134.305	0.155
3	56	134.22	1.95	1.73	134.44	134.22	1.775	1.69	134.305	0.135
4	56	134.22	1.95	1.755	134.415	134.22	1.775	1.68	134.315	0.1
5	56	134.22	1.95	1.775	134.395	134.22	1.775	1.66	134.335	0.06
6	56	134.22	1.95	1.78	134.39	134.22	1.775	1.67	134.325	0.065
7	56	134.22	1.95	1.76	134.41	134.22	1.775	1.68	134.315	0.095
8	56	134.22	1.95	1.765	134.405	134.22	1.775	1.66	134.335	0.07
9	56	134.22	1.95	1.74	134.43	134.22	1.775	1.64	134.355	0.075
10	56	134.22	1.95	1.74	134.43	134.22	1.775	1.655	134.34	0.09
11	56	134.22	1.95	1.715	134.455	134.22	1.775	1.675	134.32	0.135
12	56	134.22	1.95	1.715	134.455	134.22	1.775	1.67	134.325	0.13
13	56	134.22	1.95	1.74	134.43	134.22	1.775	1.635	134.36	0.07
14	56	134.22	1.95	1.74	134.43	134.22	1.775	1.645	134.35	0.08
15	56	134.22	1.95	1.71	134.46	134.22	1.775	1.66	134.335	0.125
16	56	134.22	1.95	1.7	134.47	134.22	1.775	1.665	134.33	0.14
17	56	134.22	1.95	1.72	134.45	134.22	1.775	1.66	134.335	0.115
18	56	134.22	1.95	1.7	134.47	134.22	1.775	1.65	134.345	0.125
19	56	134.22	1.95	1.715	134.455	134.22	1.775	1.66	134.335	0.12
20	56	134.22	1.95	1.7	134.47	134.22	1.775	1.655	134.34	0.13
21	56	134.22	1.95	1.69	134.48	134.22	1.775	1.655	134.34	0.14
22	56	134.22	1.95	1.68	134.49	134.22	1.775	1.63	134.365	0.125
23	56	134.22	1.95	1.66	134.51	134.22	1.775	1.615	134.38	0.13
24	56	134.22	1.95	1.68	134.49	134.22	1.775	1.605	134.39	0.1
25	56	134.22	1.95	1.675	134.495	134.22	1.775	1.615	134.38	0.115
26	56	134.22	1.95	1.68	134.49	134.22	1.775	1.585	134.41	0.08
27	56	134.22	1.95	1.67	134.5	134.22	1.775	1.565	134.43	0.07
28	56	134.22	1.95	1.62	134.55	134.22	1.775	1.56	134.435	0.115
29	56	134.22	1.95	1.59	134.58	134.22	1.775	1.55	134.445	0.135
0	57	134.22	1.95	1.775	134.395	134.22	1.775	1.675	134.32	0.075
1	57	134.22	1.95	1.75	134.42	134.22	1.775	1.69	134.305	0.115
2	57	134.22	1.95	1.81	134.36	134.22	1.775	1.69	134.305	0.055
3	57	134.22	1.95	1.8	134.37	134.22	1.775	1.69	134.305	0.065
4	57	134.22	1.95	1.81	134.36	134.22	1.775	1.68	134.315	0.045
5	57	134.22	1.95	1.825	134.345	134.22	1.775	1.66	134.335	0.01

		Pre-excavation				Post-excavation				
X	Y	TBM	B.S.	F.S.	R.L	TBM	B.S.	F.S.	R.L	Z
6	57	134.22	1.95	1.815	134.355	134.22	1.775	1.67	134.325	0.03
7	57	134.22	1.95	1.8	134.37	134.22	1.775	1.68	134.315	0.055
8	57	134.22	1.95	1.8	134.37	134.22	1.775	1.66	134.335	0.035
9	57	134.22	1.95	1.81	134.36	134.22	1.775	1.64	134.355	0.005
10	57	134.22	1.95	1.81	134.36	134.22	1.775	1.635	134.36	0
11	57	134.22	1.95	1.78	134.39	134.22	1.775	1.655	134.34	0.05
12	57	134.22	1.95	1.77	134.4	134.22	1.775	1.66	134.335	0.065
13	57	134.22	1.95	1.755	134.415	134.22	1.775	1.65	134.345	0.07
14	57	134.22	1.95	1.745	134.425	134.22	1.775	1.635	134.36	0.065
15	57	134.22	1.95	1.74	134.43	134.22	1.775	1.655	134.34	0.09
16	57	134.22	1.95	1.705	134.465	134.22	1.775	1.655	134.34	0.125
17	57	134.22	1.95	1.69	134.48	134.22	1.775	1.63	134.365	0.115
18	57	134.22	1.95	1.71	134.46	134.22	1.775	1.615	134.38	0.08
19	57	134.22	1.95	1.72	134.45	134.22	1.775	1.645	134.35	0.1
20	57	134.22	1.95	1.72	134.45	134.22	1.775	1.64	134.355	0.095
21	57	134.22	1.95	1.71	134.46	134.22	1.775	1.615	134.38	0.08
22	57	134.22	1.95	1.715	134.455	134.22	1.775	1.615	134.38	0.075
23	57	134.22	1.95	1.68	134.49	134.22	1.775	1.6	134.395	0.095
24	57	134.22	1.95	1.66	134.51	134.22	1.775	1.59	134.405	0.105
25	57	134.22	1.95	1.67	134.5	134.22	1.775	1.59	134.405	0.095
26	57	134.22	1.95	1.66	134.51	134.22	1.775	1.585	134.41	0.1
27	57	134.22	1.95	1.64	134.53	134.22	1.775	1.57	134.425	0.105
28	57	134.22	1.95	1.61	134.56	134.22	1.775	1.545	134.45	0.11
29	57	134.22	1.95	1.55	134.62	134.22	1.775	1.535	134.46	0.16

Appendix 2 Technical information

The archive

The archive consists of:

11	Fieldwork progress records AS2
1	Photographic records AS3
11	Digital photographs
25	Levels record sheets AS19
1	Box of finds
1	Computer disk

The project archive is intended to be placed at:

Cheltenham Art Gallery and Museum
Clarence Street
Cheltenham
Gloucestershire
GL50 3JT