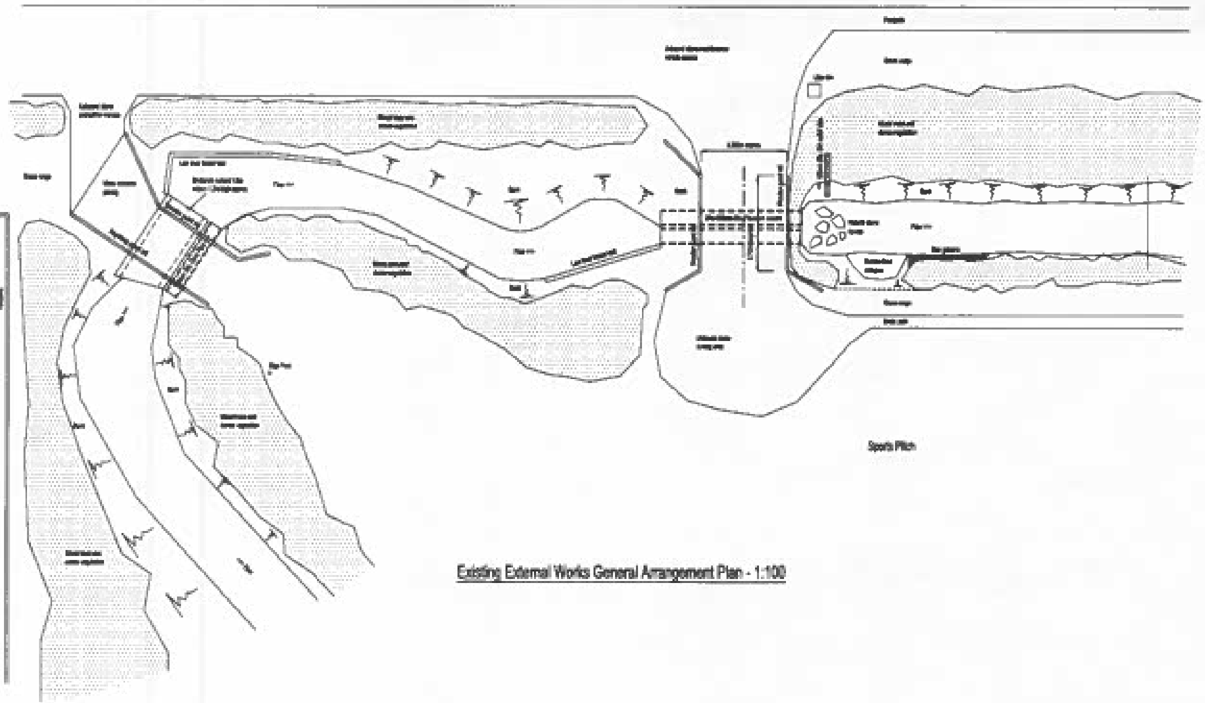
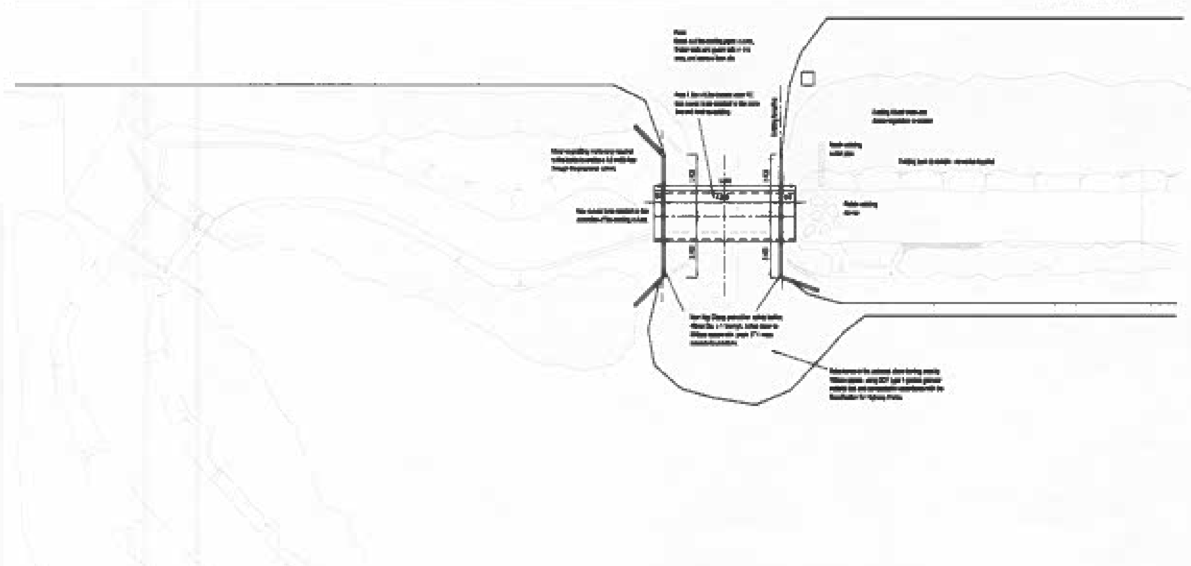
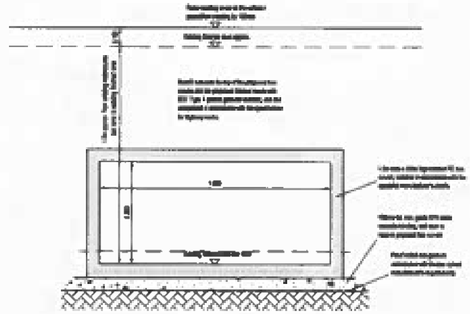
APPENDIX 1



Existing External Works General Arrangement Plan - 1:100



Proposed External Works General Arrangement Plan - 1:100



Typical Detail Through Proposed Box Culvert
At The Vehicle / Pedestrian Crossing - 1:20

NOTES

Preliminary

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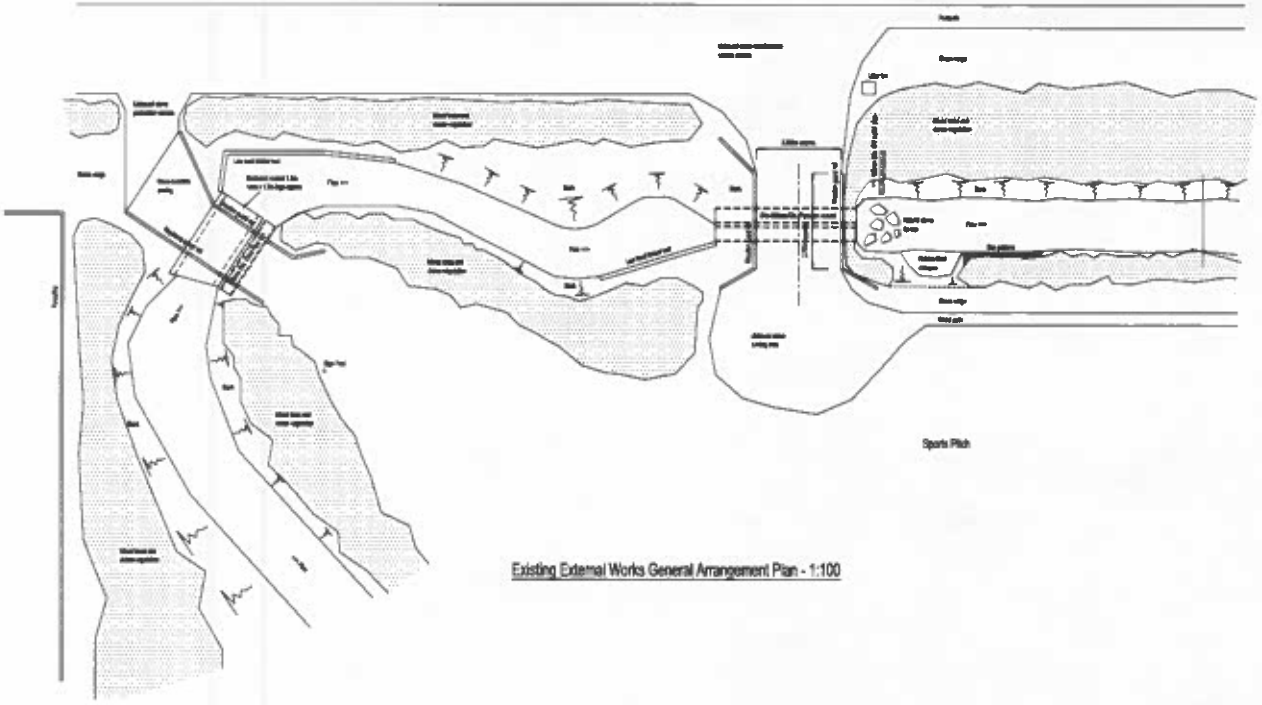
Mossdale Meadows Culvert,
Braunstone.

Existing & Proposed General Arrangement Plans

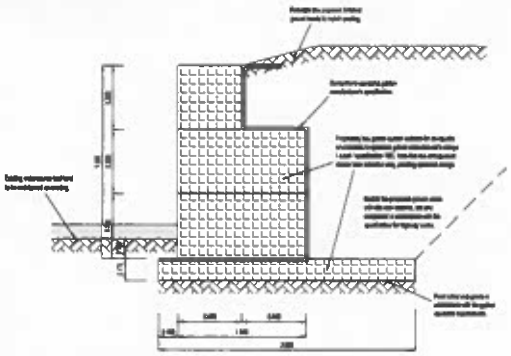
1:100 | A1 | H291

H291-CHG-Z0-00-DR-C-3000 | P03

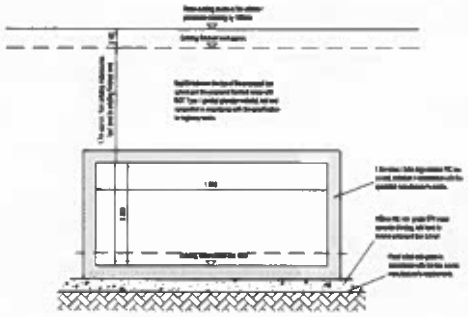
Do not scale



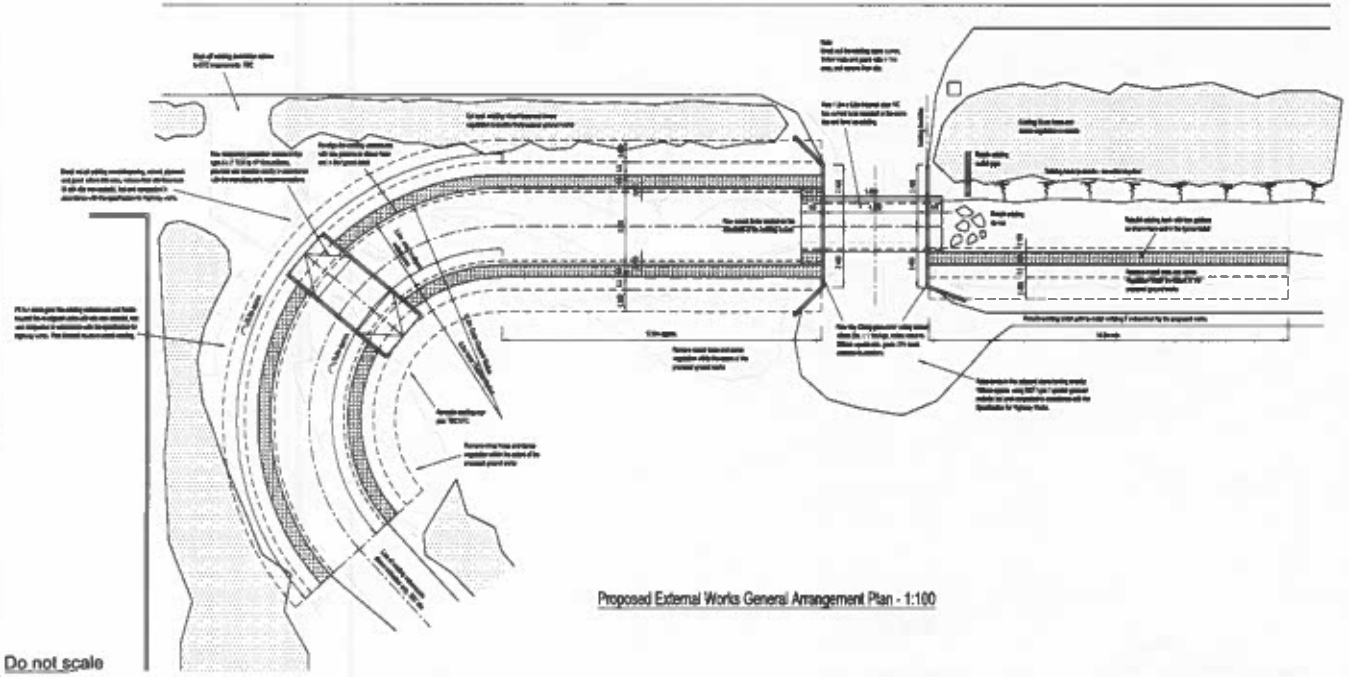
Existing External Works General Arrangement Plan - 1:100



Typical Detail Through Proposed Box Gabions To Be Installed As The Re-aligned Watercourse Sides - 1:20



Typical Detail Through Proposed Box Culvert At The Vehicle / Pedestrian Crossing - 1:20



Proposed External Works General Arrangement Plan - 1:100

Do not scale

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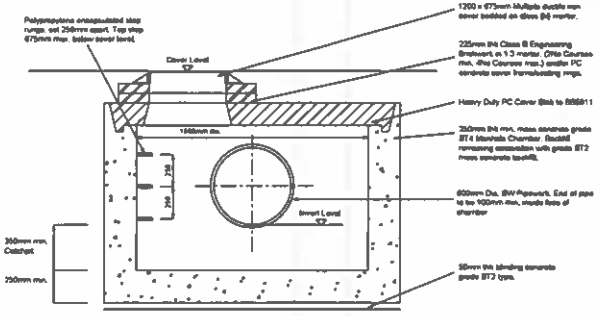
Mossdale Meadows Culvert, Braunstone.

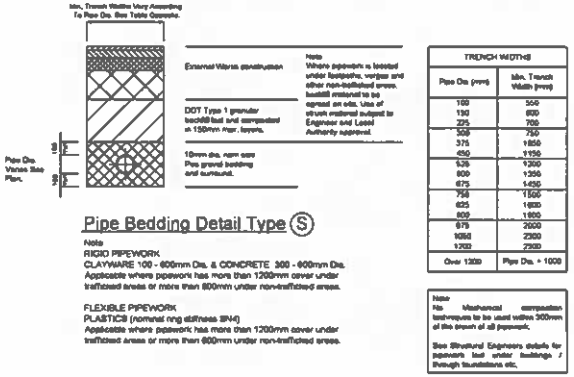
Existing & Proposed General Arrangement Plans

Drawing Scale	Drawn	Checked	CHG job no.
1:100	AL	-	H291

Drawing Number	Revision
H291-CHG-Z0-00-DR-C-3000	P02

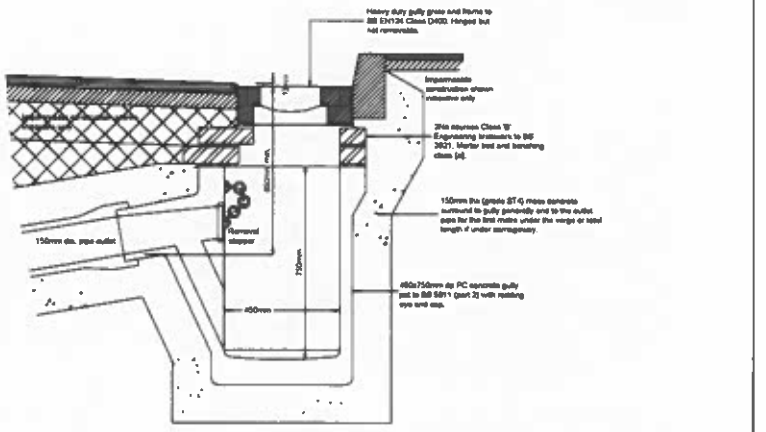


Typical Manhole Detail - 1:20

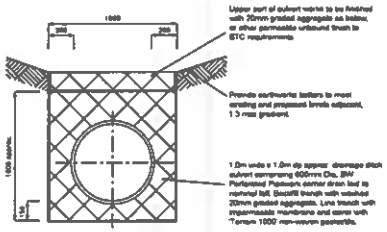


Pipe Bedding Detail Type (S)

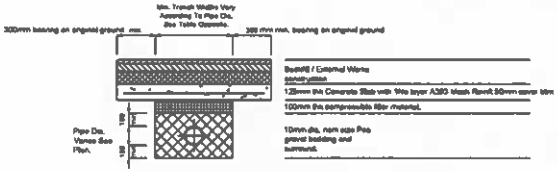
TRENCH WIDTHS	
Pipe Dia (mm)	Min. Trench Width (mm)
100	500
150	600
225	700
300	750
375	1850
450	1150
525	1300
600	1350
675	1450
750	1500
825	1600
900	1800
975	2000
1050	2300
1200	2300
Over 1200	Pipe Dia. + 1000



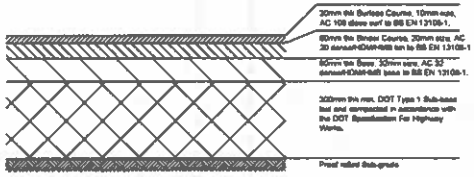
Typical Road Gully Detail - 1:10



Drainage Ditch Reinstatement Detail - 1:20



Protection For Pipes Laid At Shallow Depths



Car Park Construction Detail

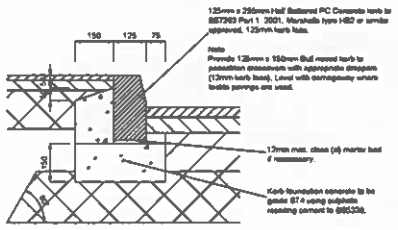
Note:
This detail to be read in accordance with the Department of Transport's Specification for Highway Works.

The above construction thicknesses are all subject to onsite CBR tests prior to construction. A CBR Value of 3% has been assumed.

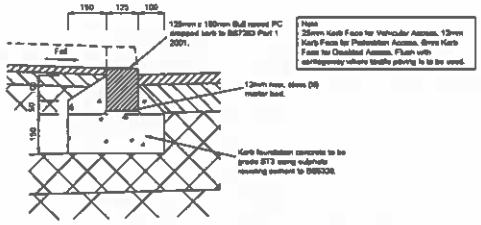
Minimum overall pavement construction thickness 450mm.

Capping Layer and Sub-base Thicknesses min.		
Sub-Grade (CBR)	Capping + Sub-base (mm)	Sub-base Only (mm)
2%	600 + 150	-
2.5%	400 + 150	350
3%	350 + 150	300
4%	300 + 150	275
5%	250 + 150	225
8%	225 + 150	200
10%	175 + 150	175
15%	-	150

Note: Min.Pavement Construction Thickness 450mm



Typical Half Battered Kerb Detail - 1:10



Typical Dropped Kerb Detail - 1:10

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The Contractor shall comply with environmental regulations and working rules relating to safety health and welfare of workpeople.

Preliminary

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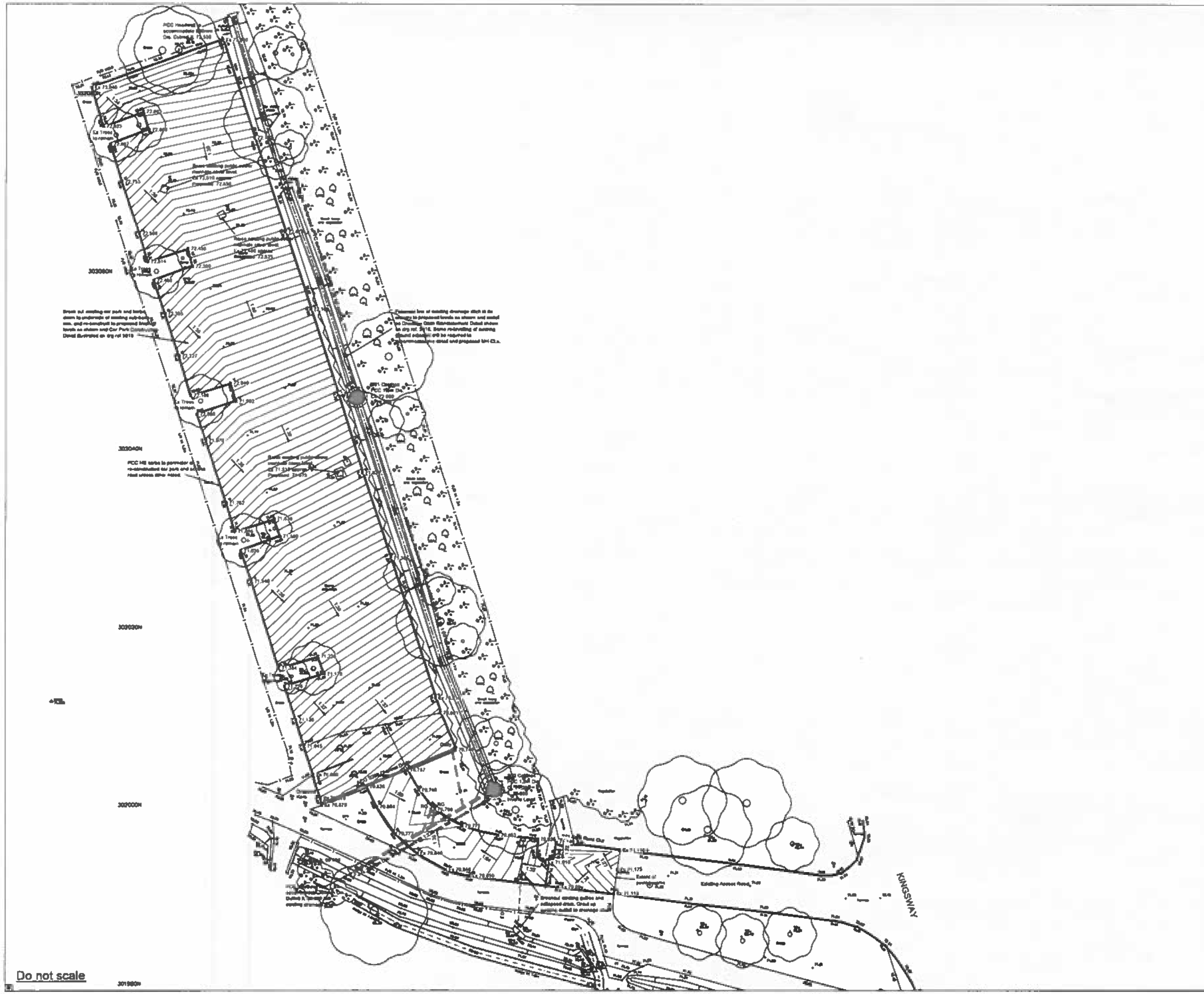
Project: Park Car Park Re-construction
Kingsway, Braunstone

Title: Typical External Works Details

Orig Scale	Drawn	Checked	Job no.
Noted	AL	-	J522

Drawing Number: J522-CHG-Z0-00-DR-C-5010
Revision: P01

Do not scale



NOTES

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The Contractor shall comply with enactments regulations and working rules relating to safety health and welfare of workpeople.

DRAINAGE NOTES:

1. ALL DISCREPANCIES NOTED ON SITE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
2. All dimensions in millimeters and levels in meters unless noted otherwise.
3. All work is to be carried out in accordance with the current British Standards, Codes of Practice and Building Regulations.
4. The exact position, level, size and use of existing sewers to be confirmed on site. Any discrepancies to be reported to the Engineer PRIOR TO COMMENCEMENT OF WORKS.
5. All uncovered and shallow pipework to be protected against construction traffic as part of the Contractors temporary works requirements.
6. Cover levels shown are approximate only, subject to the finished external works and landscaping scheme.
7. All connections to trapped road gullies and channels shall be 150mm nominal bore pipework run where not noted on the plan. No pipe work to be downsized in the direction of flow.
8. All un-noted buried pipework to be 150mm dia. unless subject to other notes or noted otherwise.
9. All buried pipework to be U-PVC type in accordance with Wis 4-35-01 unless noted otherwise.
10. All pipework entering and exiting manholes to be connected with pipe soffits level unless noted otherwise.
11. Pre-formed channels to be used at all manholes.
12. High strength concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections and laid in accordance with the Specification.
13. Pipe bends to be provided to suit direction of flow.
14. All manhole covers and frames to be Ductile Iron Heavy Duty Grade D400 double triangular to BS EN 124 unless noted otherwise.
15. First flexible joint in pipes adjacent to all manholes and inspection chambers to be 600mm max. from inside face of manhole / inspection chamber, connecting to rocker pipe. For pipe diameters 150mm - 450mm the rocker pipe length shall be 500mm - 750mm and for pipe diameters 451mm - 675mm the rocker pipe length shall be 750mm - 1000mm.
16. All soft spots encountered in the trench formation to be removed and replaced with graded granular material unless instructed otherwise.
17. All Specialist attenuation tanks, soakaways and water treatment units to be installed as per manufacturers installation details and specifications. Contractor to liaise with specialist suppliers for confirmation of bedding and surround requirements.
18. All buried concrete must cater for class DS1 sulphates conditions and AC1 aggressive chemical environment for concrete in accordance with BRE special digest 1.
19. The design of any temporary works required shall be the responsibility of the Contractor.
20. Abandoned buried pipework as a result of the works to be grubbed up, or sealed using ST2 concrete or 1:10 Cement:PFA mix grout. Specification and working method of grouting, strictly in accordance with Clause 508.3 of the Specification for Highway Works.
21. For new connections to existing manholes, existing benching is to be broken out and reformed to suit. Concrete / brickwork surround to be made good.
22. All RWPs and SVPs to be fitted with roddable access plates. All foul drains to have roddable access.
23. All proposed drainage to be constructed adjacent to new and proposed tree planting to be adequately protected against root activity using root barriers in accordance with the chosen manufacturer's recommendations.
24. Contractor to include for the modification of all existing buried services affected by the works. Note that levels across the site will change as a result of the proposals affecting covers and depths to services which may need to be raised or lowered.

Preliminary

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Park Car Park Re-construction
Kingsway, Braunstone

External Works Drainage GA Plan

Scale	Drawn	Checked	Job no.
1:200	AL	-	J522

Drawing Number	Revision
J522-CHG-Z0-00-DR-C-5000	P01

NOTES

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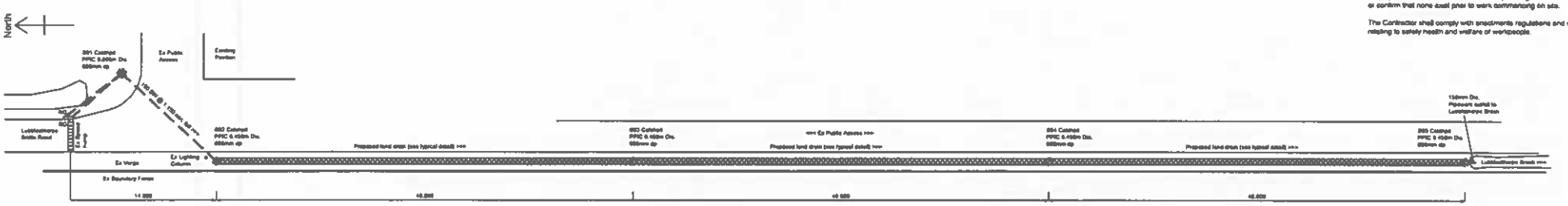
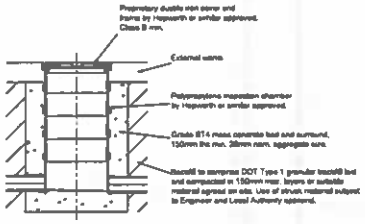
The Contractor shall comply with enactments regulations and working rules relating to safety health and welfare of workpeople.



External Works Land Drainage General Arrangement Plan - 1:200

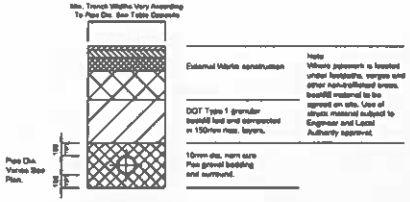


Typical PPIC Detail - 1:20

Note
Maximum depth for the type of Inspection Chamber 1.2m.

PPIC Only suitable for pipe diameters upto and including 150mm.

Where chambers of the type are also referenced as catchpit on the general arrangement plan, a pre-formed base unit with a built in sump / catchpit 150mm dp min. o.a to be provided.



Pipe Bedding Detail Type (S)

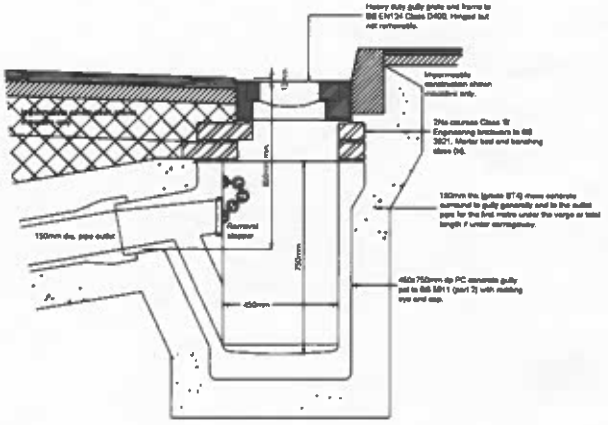
Note
RIGID PIPEWORK
CLAYWARE 100 - 600mm Dia. & CONCRETE 300 - 600mm Dia.
Applicable where pipework has more than 1200mm cover under trafficked areas or more than 600mm under non-trafficked areas.

FLEXIBLE PIPEWORK
PLASTICS (nominal ring stiffness SN4)
Applicable where pipework has more than 1200mm cover under trafficked areas or more than 600mm under non-trafficked areas.

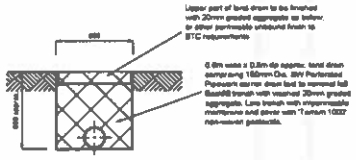
TRENCH WIDTHS	
Pipe Dia (mm)	Min. Trench Width (mm)
100	550
150	600
225	700
300	750
375	1000
450	1150
525	1300
600	1300
675	1450
750	1500
825	1600
900	1800
975	2000
1050	2200
1200	2300
Over 1200	Pipe Dia. + 1000

Note
Any Mechanical compaction techniques to be used within 300mm of the crown of all pipework.

See Structural Engineers details for pipework laid under buildings / through foundations etc.



Typical Road Gully Detail - 1:10



Land Drain Detail - 1:20

DRAINAGE NOTES:

1. ALL DISCREPANCIES NOTED ON SITE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
2. All dimensions in millimetres and levels in metres unless noted otherwise.
3. All work is to be carried out in accordance with the current British Standards, Codes of Practice and Building Regulations.
4. The exact position, level, size and use of existing sewers is to be confirmed on site. Any discrepancies to be reported to the Engineer PRIOR TO COMMENCEMENT OF WORKS.
5. All uncovered and shallow pipework to be protected against construction traffic as part of the Contractors temporary works requirements.
6. All connections to trapped road gullies and channels shall be 150mm nominal bore pipework run where not noted on the plan. No pipe work to be downsized in the direction of flow
7. All un-noted buried pipework to be 150mm dia. unless subject to other notes or noted otherwise.
8. All buried pipework to be U-PVC type in accordance with Wa 4-35-01 unless noted otherwise.
9. All pipework entering and exiting manholes to be connected with pipe soffits level unless noted otherwise.
10. Pre-formed channels to be used at all manholes.
11. Pipe bends to be provided to suit direction of flow.
12. All manhole covers and frames to be Ductile Iron Grade B125 min.
13. First flexible joint in pipes adjacent to all manholes and inspection chambers to be 600mm max. from inside face of manhole / inspection chamber, connecting to rocker pipe. For pipe diameters 150mm - 450mm the rocker pipe length shall be 300mm - 750mm and for pipe diameters 451mm - 675mm the rocker pipe length shall be 750mm - 1000mm.
14. All soft spots encountered in the trench formation to be removed and replaced with graded granular material unless instructed otherwise.
15. All buried concrete must cater for Class DS1 sulphates conditions and AC1 aggressive chemical environment for concrete in accordance with BRE special digest 1.
16. The design of any temporary works required shall be the responsibility of the Contractor.
17. All proposed drainage to be constructed adjacent to new and proposed tree planting to be adequately protected against root activity using root barriers in accordance with the chosen manufacturer's recommendations.
18. Contractor to include for the identification of all existing buried services affected by the works. Note that levels across the site will change as a result of the proposals affecting covers and depths to services which may need to be raised or lowered.

Rev	Description	By	Chk	Rev
26.05.21	Preliminary Issue	AL	-	P01
Date	Description	Drawn	Chkd	Rev

Drawing Status: Preliminary

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Project: Lubblethorpe Bridle Road Braunstone

Title: Proposed Land Drain GA Plan

Dig Date	Drawn	Checked	Orig job no
Noted	AL	-	J522

Drawing Number: J522-CHG-Z0-00-DR-C-5020 | Revision: P01

Do not scale