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Save the environment - think before you print.

From: Andrew Wood <Andrew.Wood@arun.gov.uk>

Sent: 05 February 2020 15:52

To: Planning.Responses <Planning.Responses@arun.gov.uk>

Subject: FW: Crete Nursery, Dappers Lane, Angmering - Culvert - Condition 10

Additional information for consultee response – Land Drainage Condition

Andrew Wood MRTPI | Senior Planning Officer, Planning Department, Arun District Council |
Location: 1st Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF
Internal: 37768 | External: +44 (0) 1903 737768 | E-mail: andrew.wood@arun.gov.uk



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Save the environment - think before you print.

From: Robert Steventon [REDACTED]

Sent: 05 February 2020 15:43

To: Andrew Wood <Andrew.Wood@arun.gov.uk>

Cc: Paul Cann <Paul.Cann@arun.gov.uk>; [REDACTED] 'Steve Butchart'
[REDACTED] Richard Sloman' <[REDACTED]>; 'Kevin Lang'

Subject: RE: Crete Nursery, Dappers Lane, Angmering - Culvert - Condition 10

Andrew,

Following Paul's e-mail confirming the Land Drainage Consent, please find enclosed a copy of the approved drawings for the discharge of Condition 10.

Kind regards,

Robert Steventon
Civil Engineer

From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: 05 February 2020 15:35
To: Robert Steventon [REDACTED]
Cc: [REDACTED] 'Steve Butchart' [REDACTED] Richard Sloman
[REDACTED] Kevin Lang [REDACTED] Andrew Wood
Subject: RE: Crete Nursery, Dappers Lane, Angmering - Culvert - Condition 10

Hi Robert

Land Drainage Consent enclosed. The contractor will need to notify us once works commence.

In respect to condition 10, I have copied in the planning officer, whereby you will probably have to submit the agreed drawings (specified in attached consent), etc to him, so the condition can be formally discharged.

Regards

Paul Cann
Principal Engineer (Drainage)

[Paul Cann](#) | Principal Engineer (Drainage), Engineering Services, [Arun District Council](#) | Location: First Floor, Arun Civic Centre,
Maltravers Road, Littlehampton, BN17 5LF
Internal: 37819 | External: +44 (0) 1903 737819 | Fax: +44 (0) 1903 716019 | E-mail: Paul.Cann@arun.gov.uk
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From: Robert Steventon [REDACTED]
Sent: 04 February 2020 16:40

To: Paul Cann <Paul.Cann@arun.gov.uk>

Cc: [REDACTED] 'Steve Butchart' [REDACTED]; Richard Sloman [REDACTED]; Kevin Lang [REDACTED]

Subject: RE: Crete Nursery, Dappers Lane, Angmering - Culvert - Condition 10

Paul,

Thanks for your comments, we have added these notes to the drawing, please find enclosed.

Therefore we believe all issues have been resolved and trust the consent can be issued.

Many thanks,

Robert Steventon

Civil Engineer

From: Paul Cann <Paul.Cann@arun.gov.uk>

Sent: 03 February 2020 14:58

To: Robert Steventon [REDACTED]

Cc: Kevin Lang [REDACTED]

Subject: RE: Crete Nursery, Dappers Lane, Angmering - Culvert - Condition 10

Hi Robert

The proposals seem reasonable. Regarding the root ingress, they will need to keep on this in the future (after cleaning) to ensure that flows are not restricted.

In respect to the headwall repairs and trash screen proposal – that is fine. Please add suitable notes – I suggest that the note mentions that the works need to be agreed with the ADC engineer. Also, the trash screen will need to be a cranked version – see <https://www.althon.co.uk/products/450mm-sloped-trash-screen-sides-45/detail/> for example. Please specify the detail/manufacture on the drawing.

Regards

Paul Cann

Principal Engineer (Drainage)

[Paul Cann](#) | Principal Engineer (Drainage), Engineering Services, [Arun District Council](#) | Location: First Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF

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Save the environment - think before you print.

From: Robert Steventon [REDACTED]
Sent: 30 January 2020 13:49
To: Paul Cann <Paul.Cann@arun.gov.uk>
Cc: Kevin Lang [REDACTED]
Subject: FW: Crete Nursery, Dappers Lane, Angmering - Culvert - Condition 10

Paul,

Please see below the e-mail from our client regarding the cleaning of the culvert.

If you could confirm your agreement and we will add these notes to our drawing.

Kind regards,

Robert Steventon
Civil Engineer

From: Wayne Stutchbury [REDACTED]
Sent: 30 January 2020 13:41
To: [REDACTED]
Cc: [REDACTED]
Subject: Crete Nursery, Dappers Lane, Angmering - Culvert - Condition 10

Dear Robert

During the last week, Steve and I have spoken to a number of drainage specialists, who have all had the opportunity to view the CCTV survey between the headwall and CP2. We asked them to provide advice on the state of the culvert, the clearing works required, repairs they might be necessary and the costs of such works.

In summary the feedback received is as follows:

- The culvert is thought to be in good condition, with no evidence of collapse, structural failing or need of repair.
- It is thought that the first 47m (approx) from CP1 were in particularly good condition and in line with what would be expected.
- Beyond this point towards CP2, whilst it was viewed that the culvert was still in good order, a lot of debris was evident and it was suggested that the culvert would benefit from clearing and cleaning.
- The cost of clearing and cleaning works was estimated to range between £3,500 to £6,500. It should be noted that the largest proportion of this cost related to the works that are required beyond 47m between CP1 and CP2 (approx 85%).

Notwithstanding the fact, that the section of culvert in our responsibility amounts to a small part of the works required, we are aware that if we were just to clean our section of the culvert, due to set up costs etc, it would cost more than 15% of the estimated costs; probably in the order of £1,200.

With the above in mind, we propose agreement is reached for Countyoak Homes Ltd to carryout the following:

Between Headwall and first 33m of Culvert

- Clear and cut back foliage to ditch between our northern boundary and the headwall
- Clear and repair headwall, including installation of grill to prevent large objects entering culvert.
- Expose cover to CP1, raise and adjust cover height to suite existing/proposed levels. (NB cover currently buried)
- Jet and clean culvert between headwall and CP1
- Clear out CP1 and carryout necessary remedial works to chamber.
- Jet, clean and clear approx 30m of culvert from CP1 to end of our ownership.
- Carryout CCTV survey on completion. This will be done at the end of the project, in line with the already approved maintenance manual/regime.
- Works to be completed in line with development timetable.

If we can agree the above scope of work, as suggested by ADC, as a gesture of goodwill, we would be prepared to clear and clean (only) the rest of the culvert between our ownership (at 33m) and CP2. We will also clear out the CP2 chamber. In addition, we will include this section of pipe in the CCTV survey carried out as part of our works.

I hope the above proposal is acceptable to ADC and allows Condition 10 to now be signed off.

Kind regards

Wayne Stutchbury
Director
CountyOak Homes Ltd

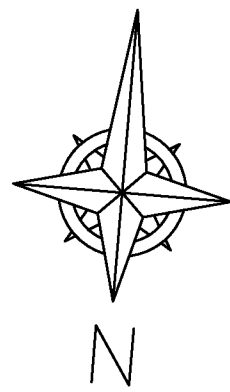


<http://www.arun.gov.uk>

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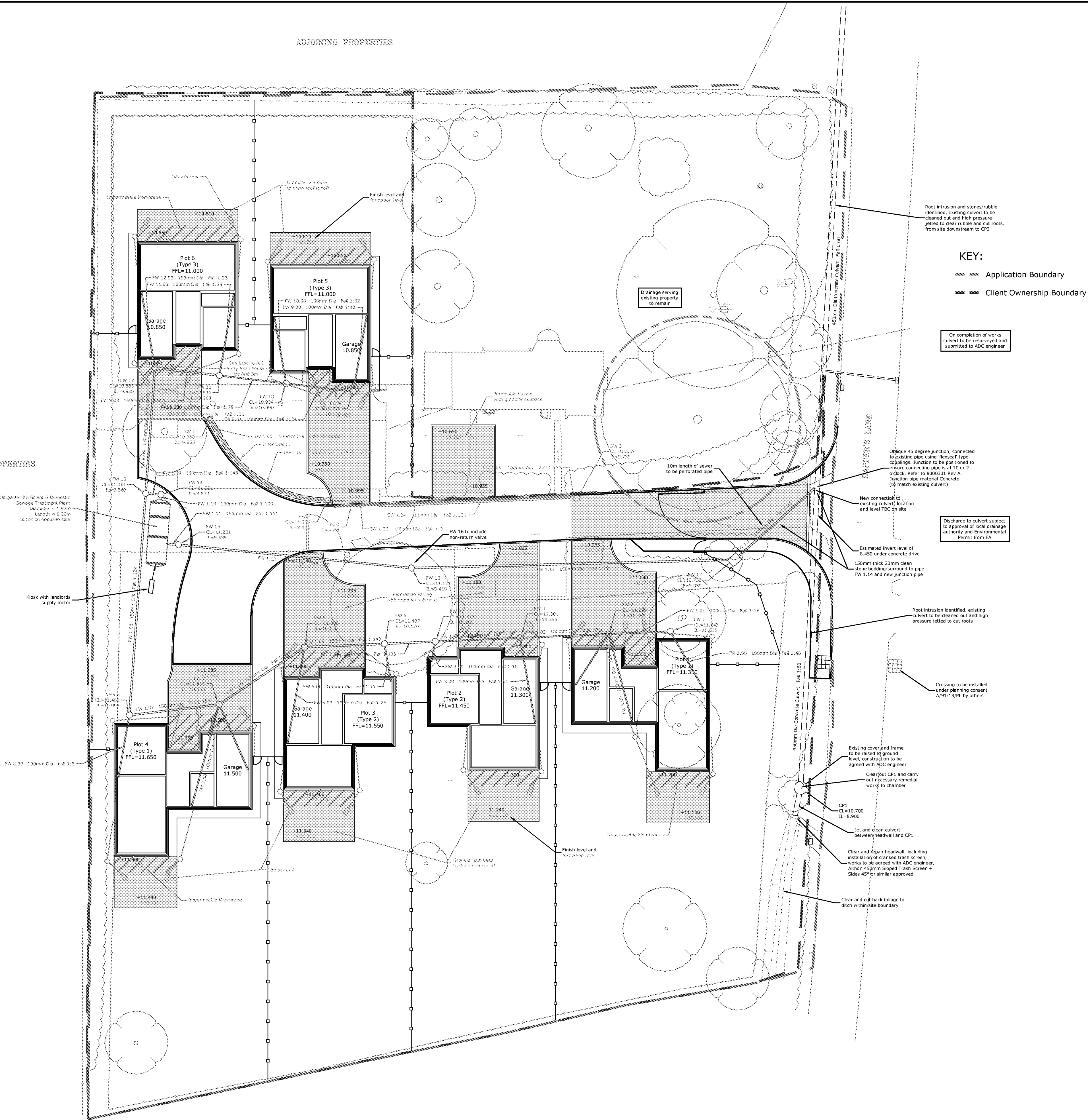


ADJOINING PROPERTIES

ADJOINING PROPERTIES

ADJOINING PROPERTY

- Notes**
- All dimensions are in meters unless expressed otherwise and all levels are shown in meters above Ordnance Datum.
 - This drawing shall be read in conjunction with the drainage schedules and standard details.
 - All existing sewer routes are to be proved on site by the contractor and any discrepancies notified to engineer.
 - All sewers shall be constructed in accordance with Part H of the Building Regulations and Sewers for Adoption 7th Edition.
 - It is the contractors responsibility to ensure compliance with current building regulations and codes of practice.
 - Reference should be made to the structural engineers details for all aspects of foundation design and construction.
 - The contractor should check all dimensions on site. Any discrepancies shall be reported to the engineer immediately.
 - Connections to the adopted drainage authority sewers shall be made under the supervision of the authority. The contractor shall be responsible for obtaining the necessary consents required from the drainage authority.
 - Bed type B,F and N shall be used for rigid pipes. Bed type Z shall be used for all gully connections and pipes under proposed carriageways with less than 700mm cover. The concrete bed and surround is to extend to the side of the trench or be of minimum width and voids filled with well compacted selected backfill.
 - All precast concrete manhole units are to conform to B.S. 5911. Precast concrete cover slabs are to be heavy duty.
 - Downstream exit pipes of 600mm dia. and over should be fitted with heavy duty safety chains across their mouths.
 - Where large differential settlement is probable, several short lengths of pipe with flexible joints should be laid on either side of the chamber.
 - Where drains pass through foundations, a flexible joint should be provided within 150mm of the face of the structure.
 - Fast setting resin mortars may be used in lieu of cement mortar for bedding manhole frames where agreed with the Engineer to enable early cover loading.
 - The concrete base slab shall be 225mm minimum thickness for chambers up to 4500mm deep. Manholes over 4500mm deep require a slab 450mm thick.
 - All manholes over 2000mm deep are to be fitted with a "DANGER TEST FOR OXYGEN" sign
 - Appropriate measures (to be agreed with the district council's building control section) are to be taken to discourage rodent entry into the properties.
 - The contractor is to keep a record of any variations made on site, including the relocation of sewers or drains, so that an as built drawing can be prepared upon completion of the project.
 - Location of RWP's and SVP's to be confirmed by the architect, Sub Stacks shall not be used unless connected to a ventilated section of the sewer in accordance with Building Regulations.



NOTES

K	Revised to Client comments	RS	KBL	KBL	04/02/20
J	Revised to Council comments	RS	KBL	KBL	16/01/20
I	Revised to Client comments	RS	KBL	KBL	16/01/20
H	Revised to Council comments	RS	KBL	KBL	14/01/20
G	Revised to Client comments	RS	KBL	KBL	02/12/19
F	Revised to suit Local Authority comments	MK	KBL	KBL	19/11/19
E	Revised to Council comments	RS	KBL	KBL	15/10/19
D	Minor amendments	RS	KBL	KBL	10/09/19
C	Updated following CCTV survey of culvert Pumping station removed	RS	KBL	KBL	29/08/19
B	Revised to Client comments	RS	KBL	KBL	25/07/19
A	Revised to Client comments	RS	KBL	KBL	19/07/19
Rev	Amendment	Drawn	Checked	Approved	Date

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Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
e-mail: info@lanmor.co.uk
www.lanmor.co.uk

Countyoak Homes Ltd

Dappers Lane
Angmering
Drainage Layout
Site Plan

Sheet 1 of 4

DRAWN	RS	CHECKED	KBL	APPROVED	KBL
DATE	Jul-19	DATE	Jul-19	DATE	Jul-19
SCALE	1:200	PRJ No.	191183	SIZE	REV
DWG No.	191183/500/01			A1	K

DWG No. 191183/51001

FOUL MANHOLE SCHEDULE							
MH Ref	MH Internal Diameter	Cover Level	Depth of MH	MH Type	MH Cover	Pipe Connections	Comments
FW 1	450 mm	11.243 m	0.708 m	PVC	Min Opening 430 x 430 Grade B125	No of pipe connections 2 FW 1.00 100 mm Dia IL=10.535 m FW 1.01 100 mm Dia IL=10.535 m	
FW 2	450 mm	11.200 m	0.740 m	PVC	Min Opening 430 x 430 Grade D400	No of pipe connections 3 FW 1.01 100 mm Dia IL=10.460 m FW 2.00 100 mm Dia IL=10.675 m FW 1.02 100 mm Dia IL=10.460 m	
FW 3	450 mm	11.301 m	0.946 m	PVC	Min Opening 430 x 430 Grade D400	No of pipe connections 3 FW 1.02 100 mm Dia IL=10.355 m FW 3.00 100 mm Dia IL=10.570 m FW 1.03 100 mm Dia IL=10.355 m	
FW 4	450 mm	11.315 m	1.110 m	PVC	Min Opening 430 x 430 Grade B125	No of pipe connections 3 FW 1.03 100 mm Dia IL=10.255 m FW 4.00 100 mm Dia IL=10.470 m FW 1.04 150 mm Dia IL=10.205 m	
FW 5	450 mm	11.407 m	1.237 m	PVC	Max Opening 300 x 300 Grade B125	No of pipe connections 3 FW 1.04 150 mm Dia IL=10.170 m FW 5.00 100 mm Dia IL=10.435 m FW 1.05 150 mm Dia IL=10.170 m	
FW 6	450 mm	11.385 m	1.265 m	PVC	Max Opening 300 x 300 Grade D400	No of pipe connections 3 FW 1.05 150 mm Dia IL=10.120 m FW 6.00 100 mm Dia IL=10.385 m FW 1.06 150 mm Dia IL=10.120 m	
FW 7	450 mm	11.435 m	1.380 m	PVC	Max Opening 300 x 300 Grade D400	No of pipe connections 3 FW 1.06 150 mm Dia IL=10.055 m FW 7.00 100 mm Dia IL=10.320 m FW 1.07 150 mm Dia IL=10.055 m	
FW 8	450 mm	11.460 m	1.460 m	PVC	Max Opening 300 x 300 Grade B125	No of pipe connections 3 FW 1.07 150 mm Dia IL=10.000 m FW 8.00 100 mm Dia IL=10.265 m FW 1.08 150 mm Dia IL=10.000 m	
FW 9	450 mm	10.878 m	0.708 m	PVC	Min Opening 430 x 430 Grade D400	No of pipe connections 2 FW 9.00 100 mm Dia IL=10.170 m FW 9.01 100 mm Dia IL=10.170 m	
FW 10	450 mm	10.934 m	0.844 m	PVC	Min Opening 430 x 430 Grade B125	No of pipe connections 3 FW 9.01 100 mm Dia IL=10.090 m FW 10.00 100 mm Dia IL=10.355 m FW 9.02 100 mm Dia IL=10.090 m	
FW 11	450 mm	10.934 m	0.974 m	PVC	Min Opening 430 x 430 Grade B125	No of pipe connections 3 FW 9.02 100 mm Dia IL=10.010 m FW 11.00 100 mm Dia IL=10.280 m FW 9.03 150 mm Dia IL=9.960 m	
FW 12	450 mm	10.883 m	0.963 m	PVC	Min Opening 430 x 430 Grade D400	No of pipe connections 3 FW 9.03 150 mm Dia IL=9.920 m FW 12.00 100 mm Dia IL=10.240 m FW 9.04 150 mm Dia IL=9.920 m	
FW 13	450 mm	11.181 m	1.341 m	PVC	Max Opening 300 x 300 Grade B125	No of pipe connections 3 FW 9.04 150 mm Dia IL=9.840 m FW 1.08 150 mm Dia IL=9.840 m FW 1.09 150 mm Dia IL=9.840 m	
FW 14	450 mm	11.201 m	1.371 m	PVC	Max Opening 300 x 300 Grade B125	No of pipe connections 2 FW 1.09 150 mm Dia IL=9.830 m FW 1.10 150 mm Dia IL=9.830 m	
FW 15	450 mm	11.231 m	1.546 m	PVC	Max Opening 300 x 300 Grade B125	No of pipe connections 2 FW 1.11 150 mm Dia IL=9.685 m FW 1.12 150 mm Dia IL=9.685 m	
FW 16	450 mm	11.121 m	1.711 m	PVC	Max Opening 300 x 300 Grade B125	No of pipe connections 2 FW 1.12 150 mm Dia IL=9.410 m FW 1.13 150 mm Dia IL=9.410 m	Manhole to include non-return valve
FW 17	1,350 mm	10.756 m	1.726 m	Brickwork Manhole Type '4' (no sump)	Opening 600 x 900 Grade D400	No of pipe connections 2 FW 1.13 150 mm Dia IL=9.030 m FW 1.14 150 mm Dia IL=9.030 m	Refer to Arun District Council drawing 80000502 Rev A

SURFACE WATER MANHOLE SCHEDULE							
MH Ref	MH Internal Diameter	Cover Level	Depth of MH	Sump Depth	MH Type	MH Cover	Pipe Connections
SW 1	450 mm	10.980 m	1.125 m	0.000 m	PVC	Min Opening 430 x 430 Grade B125	No of pipe connections 2 SW 1.00 100 mm Dia IL=10.520 m SW 1.01 100 mm Dia IL=9.855 m
SW 2	450 mm	11.003 m	1.148 m	0.000 m	PVC	Min Opening 430 x 430 Grade B125	No of pipe connections 2 SW 1.02 100 mm Dia IL=9.855 m SW 1.03 100 mm Dia IL=10.553 m
SW 3	450 mm	10.859 m	1.129 m	0.000 m	PVC	Min Opening 430 x 430 Grade D400	No of pipe connections 1 SW 1.05 100 mm Dia IL=9.730 m

FOUL PIPE SCHEDULE							
Pipe Name	Diameter	Length	Slope	Material	Pipe Bed	Upstream Manhole	Upstream Invert
FW 1.00	100 mm	6.536 m	1:40	PVC	Class S		10.700 m
FW 1.01	100 mm	5.734 m	1:76	PVC	Class S	FW 1	10.535 m
FW 1.02	100 mm	8.246 m	1:79	PVC	Class S	FW 2	10.460 m
FW 1.03	100 mm	7.903 m	1:79	PVC	Class S	FW 3	10.355 m
FW 1.04	150 mm	4.735 m	1:135	PVC	Class S	FW 4	10.205 m
FW 1.05	150 mm	7.438 m	1:149	PVC	Class S	FW 5	10.170 m
FW 1.06	150 mm	9.570 m	1:147	PVC	Class S	FW 6	10.120 m
FW 1.07	150 mm	8.400 m	1:153	PVC	Class S	FW 7	10.055 m
FW 1.08	150 mm	20.702 m	1:129	PVC	Class S	FW 8	10.000 m
FW 1.09	150 mm	1.427 m	1:143	PVC	Class S	FW 13	9.840 m
FW 1.10	150 mm	0.500 m	1:100	PVC	Class S	FW 14	9.830 m
FW 1.11	150 mm	1.109 m	1:111	PVC	Class S	Treatment	9.695 m
FW 1.12	150 mm	21.776 m	1:79	PVC	Class S	FW 15	9.685 m
FW 1.13	150 mm	30.082 m	1:79	PVC	Class S	FW 16	9.410 m
FW 1.14	150 mm	10.000 m	1:26	Perforated PVC	Granular	FW 17	9.030 m
FW 2.00	100 mm	8.295 m	1:66	PVC	Class S		10.800 m
FW 3.00	100 mm	7.976 m	1:61	PVC	Class S		10.700 m
FW 4.00	100 mm	1.841 m	1:10	PVC	Class S		10.650 m
FW 5.00	100 mm	3.516 m	1:11	PVC	Class S		10.750 m
FW 6.00	100 mm	8.977 m	1:25	PVC	Class S		10.750 m
FW 7.00	100 mm	9.695 m	1:14	PVC	Class S		11.000 m
FW 8.00	100 mm	5.862 m	1:8	PVC	Class S		11.000 m
FW 9.00	100 mm	7.145 m	1:40	PVC	Class S		10.350 m
FW 9.01	100 mm	6.284 m	1:79	PVC	Class S	FW 9	10.170 m
FW 9.02	100 mm	6.260 m	1:78	PVC	Class S	FW 10	10.090 m
FW 9.03	150 mm	6.039 m	1:151	PVC	Class S	FW 11	9.960 m
FW 9.04	150 mm	11.707 m	1:146	PVC	Class S	FW 12	9.920 m
FW 10.00	100 mm	6.239 m	1:32	PVC	Class S		10.550 m
FW 11.00	100 mm	7.678 m	1:28	PVC	Class S		10.550 m
FW 12.00	100 mm	7.107 m	1:23	PVC	Class S		10.550 m

SURFACE WATER PIPE SCHEDULE							
Pipe Name	Diameter	Length	Slope	Material	Pipe Bed	Upstream Manhole	Upstream Invert
SW 1.00	100 mm	0.645 m	1:38	PVC	Class S	ACO	10.537 m
SW 1.01	100 mm	2.106 m	Horizontal	Perforated PVC	Filter Drain	SW 1	9.855 m
SW 1.02	100 mm	11.998 m	Horizontal	Perforated PVC	Filter Drain	SW 1.01	9.855 m
SW 1.03	100 mm	5.995 m	1:9	PVC	Class S	SW 2	10.553 m
SW 1.04	100 mm	16.554 m	1:138	Perforated PVC	Filter Drain	SW 1.03	9.855 m
SW 1.05	100 mm	0.659 m	1:132	PVC	Class S	SW 1.04	9.735 m

NOTES

D

Revised to Client comments

RS

KBL

KBL

02/12/19

C

Revised to Council comments

RS

KBL

KBL

15/10/19

B

Updated following CCTV survey of culvert Pumping station removed

RS

KBL

KBL

29/08/19

A

Revised to Client comments

RS

KBL

KBL

19/07/19

Rev

Amendment

Drawn

Checked

Approved

Date

LANMOR Consulting

Civil Engineers & Transport Planning

Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW

Telephone: 0208 339 7899 Fax: 0208 339 7898

e-mail: info@lanmor.co.uk

www.lanmor.co.uk

Countyoak Homes Ltd

Dappers Lane

Angmering

Drainage Layout

Manhole & Sewer Schedules

Sheet 2 of 4

DRAWN

RS

CHECKED

KBL

APPROVED

KBL

DATE

Jul-19

DATE

Jul-19

DATE

Jul-19

SCALE

N/A

PRJ No.

191183

SIZE

REV

DWG No.

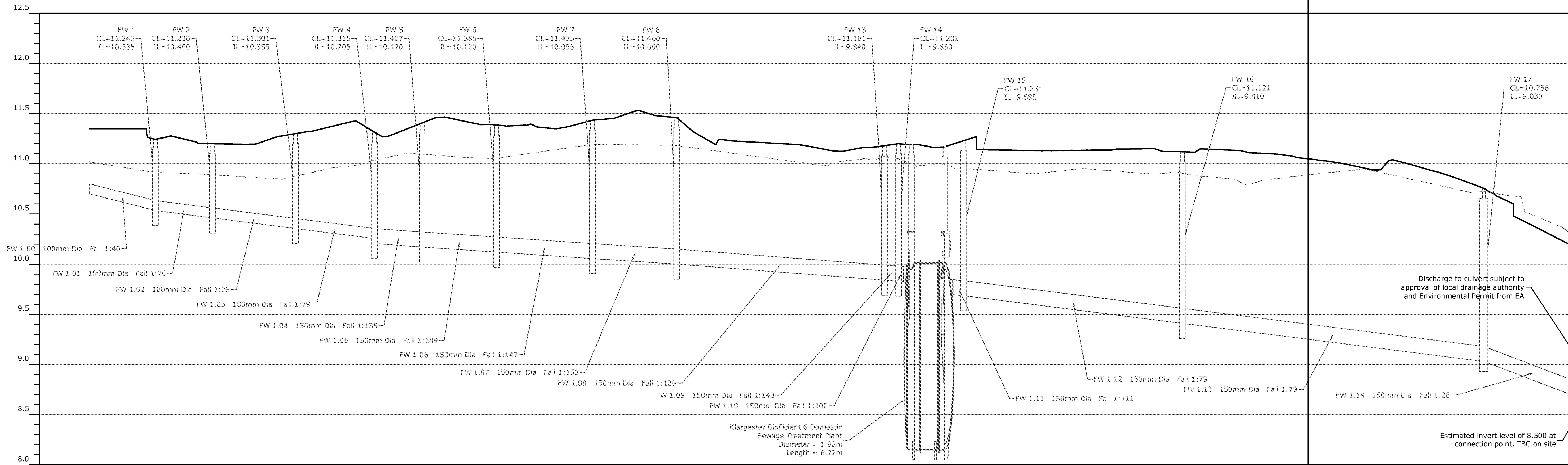
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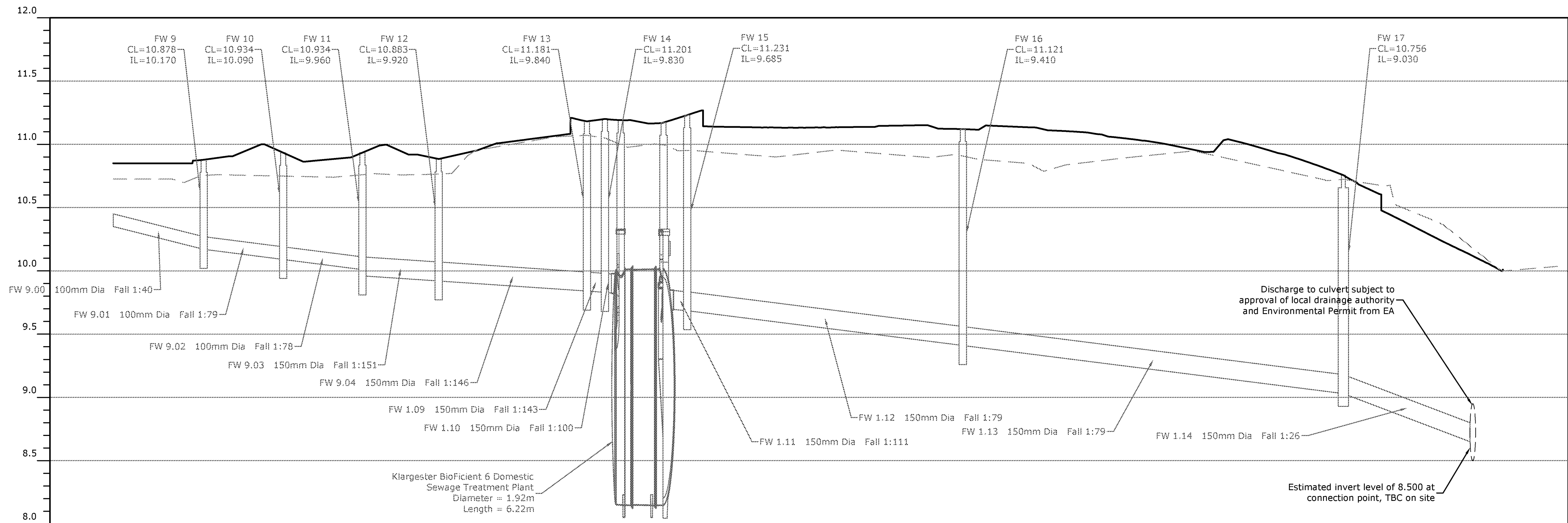
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ARUN DISTRICT COUNCIL A/131/K00C

Foul Water Branch 1

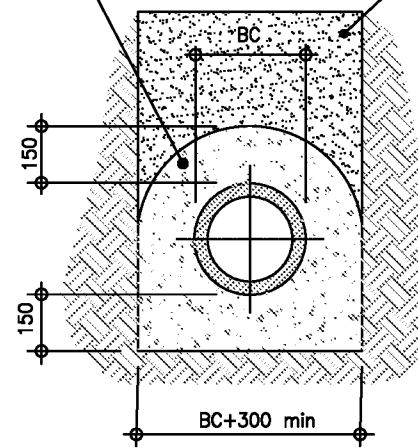


Foul Water Branch 9



NOTES									
C	Revised to Client comments						RS	KBL	KBL
B	Updated following CCTV survey of culvert Pumping station removed						RS	KBL	KBL
A	Revised to Client comments						RS	KBL	KBL
Rev	Amendment						Drawn	Checked	Approved
Date									
29/08/19									
19/07/19									
02/12/19									
LANMOR Consulting Civil Engineers & Transport Planning Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW Telephone: 0208 339 7899 Fax: 0208 339 7898 e-mail: info@lanmor.co.uk www.lanmor.co.uk									
Countyoak Homes Ltd									
Dappers Lane Angmering Drainage Layout Sewer Long Sections									
Sheet 3 of 4									
DRAWN	RS	CHECKED	KBL	APPROVED	KBL				
DATE	Jul-19	DATE	Jul-19	DATE	Jul-19				
SCALE	H 1:200 V 1:20	PRJ No.	191183	SIZE	REV				
DWG No.	191183/520/01				A1	C			

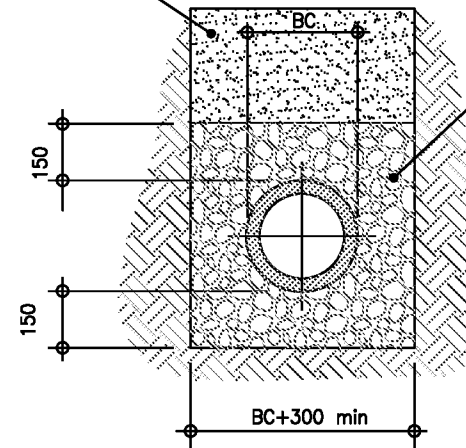
PLAIN CONCRETE CLASS ST4 TO BE SEPARATED AT EACH JOINT WITH AN APPROVED COMPRESSIBLE MATERIAL.



CONCRETE SURROUND (CLASS Z)

TO BE USED WHERE COVER TO CROWN OF PIPE IS LESS THAN 1200mm IN VEHICULAR AREAS OR LESS THAN 900mm UNDER OTHER AREAS

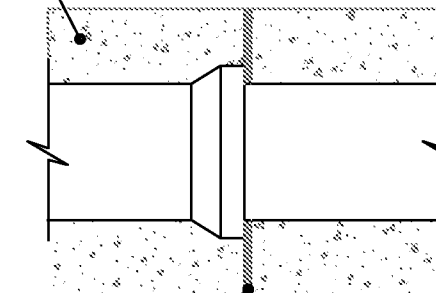
SELECTED EXCAVATED MATERIAL TO BE FREE FROM STONES >40MM, FROZEN MATERIAL, AND NON ORGANIC MATTER. BUT CLASS 6F1 MATERIAL TO BE USED UNDER CARRIAGEWAYS AND ELSEWHERE WHERE DIRECTED BY THE ENGINEER OR THE HIGHWAY AUTHORITY



GRANULAR SURROUND (CLASS S)

TO BE USED WHERE COVER TO CROWN OF PIPE IS GREATER THAN 1200mm IN VEHICULAR AREAS OR <900mm ELSEWHERE

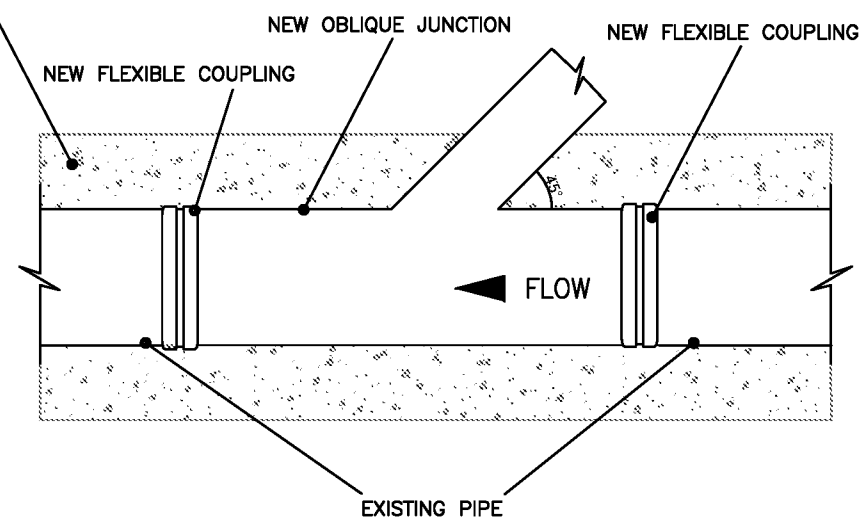
PLAIN CONCRETE CLASS ST4 TO BE SEPARATED AT EACH JOINT WITH AN APPROVED COMPRESSIBLE MATERIAL.



PIPE SURROUND EXPANSION JOINT DETAIL (CLASS Z)

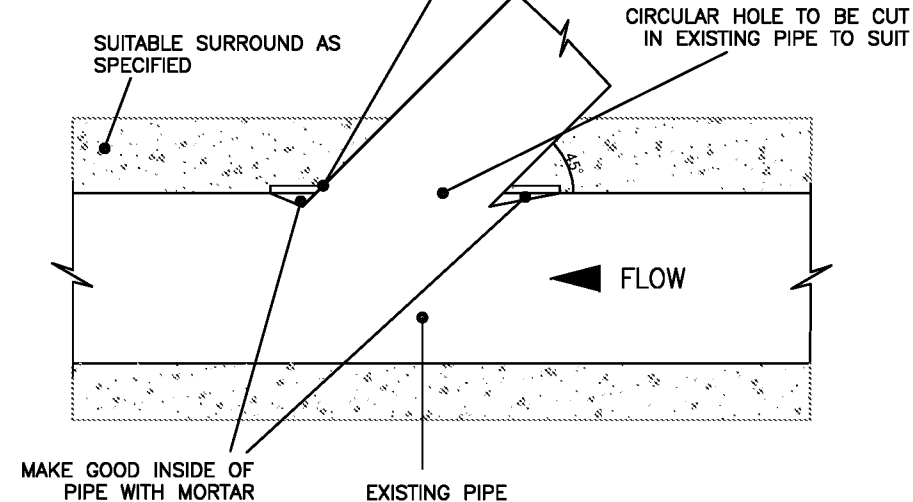
TO BE USED WHERE COVER TO CROWN OF PIPE IS LESS THAN 1200mm UNDER CARRIAGEWAYS OR LESS THAN 900mm UNDER OTHER AREAS

SUITABLE SURROUND AS SPECIFIED



PLAN OBLIQUE JUNCTION

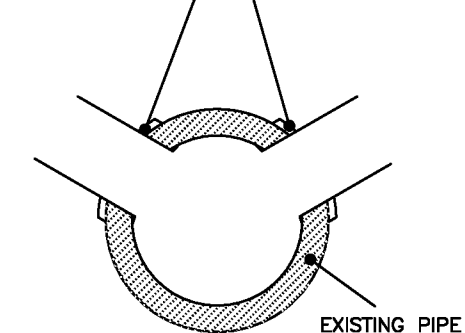
NEW SADDLE CONNECTION



PLAN OBLIQUE SADDLE CONNECTION (CONCRETE PIPE)

HDPE PIPE OBLIQUE SADDLE CONNECTIONS TO BE FIXED ON PIPE AS PER MANUFACTURERS RECOMMENDATIONS

NEW SADDLE CONNECTION



CROSS SECTION FOR ALL SADDLES

CONNECTION TO BE MADE AT 10 OR 2 O'CLOCK

Notes

1. ALL DIMENSIONS ARE IN MILLIMETRES.
 2. ALL INSITU CONCRETE TO BE CLASS ST4 (MIN. CLASS 3) TO BS 5328
 3. OBLIQUE JUNCTIONS UP TO A MAXIMUM PIPE DIAMETER OF 450MM.
 4. FLEXIBLE COUPLINGS TO BE FLEX-SEAL OR SIMILAR APPROVED
 5. SADDLES TO BE JOINED USING QUICK SET MORTAR
 6. ALL CONNECTIONS TO BE AT 45 DEGREES.
 7. GRANULAR BEDDING MATERIAL SIZE TO BE AS FOLLOWS
- | NOMINAL DIAMETER (MM) | SHINGLE SIZE (MM) | GRADED (MM) |
|-----------------------|-------------------|----------------------|
| 100-125 | 10 | - |
| 150-200 | 10 OR 14 | 14-5 |
| 225-300 | 10, 14 OR 20 | 14-5 OR 20-5 |
| 375-500 | 14 OR 20 | 14-5 OR 20-5 |
| >500 | 14, 20 OR 40 | 14-5 OR 20-5 OR 40-5 |

E			
D			
C			
B			
A	REVIEW CHANGES	LG	11/01/19
Rev	Description	By	Date

Project:
ADC Technical Standards

Drawing Title:
Pipe Bedding and Connections
Standard Details

Drawn by: LG

Checked by: PC

Date: 11/01/19

Scale: 1:20

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Original Sheet Size - A3

Drawing Number:
8000301

Rev:
A