1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 0
Number of Online Controls 1 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.360
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 18.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.000	S5.3	15 Winter	1	+0%				
S1.001	S5.8	15 Winter	1	+0%	100/15 Summer			
S1.002	S5	15 Winter	1	+0%	100/15 Summer			
S1.003	S6	30 Winter	1	+0%	100/15 Summer			
S1.004	S7	30 Winter	1	+0%	100/15 Summer			
S1.005	S8	30 Winter	1	+0%	100/15 Summer			
S1.006	S9	30 Winter	1	+0%	100/15 Summer			
S1.007	S10	30 Winter	1	+0%	100/15 Summer			
S1.008	S11	30 Winter	1	+0%	100/15 Summer			
S1.009	S12	30 Winter	1	+0%	1/15 Winter	100/30 Winter		
S1.010	S-C3	30 Winter	1	+0%				

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S5.3	49.376	-0.176	0.000	0.10			5.4	OK

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.001	S5.8	49.012	-0.146	0.000	0.26			11.7	OK
S1.002	S5	47.480	-0.133	0.000	0.35			14.4	OK
S1.003	S6	45.890	-0.786	0.000	0.02			15.3	OK
S1.004	S7	45.887	-0.746	0.000	0.02			14.3	OK
S1.005	S8	45.885	-0.717	0.000	0.02			16.0	OK
S1.006	S9	45.882	-0.625	0.000	0.05			20.3	OK
S1.007	S10	45.880	-0.601	0.000	0.05			18.9	OK
S1.008	S11	45.878	-0.590	0.000	0.07			28.9	OK
S1.009	S12	45.876	0.020	0.000	0.45			27.7	SURCHARGED
S1.010	S-C3	44.139	-0.211	0.000	0.19			27.7	OK

PN	US/MH Name	Level Exceeded
S1.000	S5.3	
S1.001	S5.8	
S1.002	S5	
S1.003	S6	
S1.004	S7	
S1.005	S8	
S1.006	S9	
S1.007	S10	
S1.008	S11	
S1.009	S12	4
S1.010	S-C3	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 0
Number of Online Controls 1 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.360
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 18.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.000	S5.3	15 Winter	30	+0%				
S1.001	S5.8	15 Winter	30	+0%	100/15 Summer			
S1.002	S5	15 Winter	30	+0%	100/15 Summer			
S1.003	S6	30 Winter	30	+0%	100/15 Summer			
S1.004	S7	30 Winter	30	+0%	100/15 Summer			
S1.005	S8	30 Winter	30	+0%	100/15 Summer			
S1.006	S9	30 Winter	30	+0%	100/15 Summer			
S1.007	S10	30 Winter	30	+0%	100/15 Summer			
S1.008	S11	30 Winter	30	+0%	100/15 Summer			
S1.009	S12	30 Winter	30	+0%	1/15 Winter	100/30 Winter		
S1.010	S-C3	30 Summer	30	+0%				

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S5.3	49.405	-0.147	0.000	0.26			13.3	OK

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.001	S5.8	49.077	-0.081	0.000	0.71			31.8	OK
S1.002	S5	47.568	-0.045	0.000	0.97			39.6	OK
S1.003	S6	46.384	-0.292	0.000	0.05			36.1	OK
S1.004	S7	46.382	-0.251	0.000	0.04			25.4	OK
S1.005	S8	46.380	-0.222	0.000	0.03			23.6	OK
S1.006	S9	46.371	-0.136	0.000	0.05			22.0	OK
S1.007	S10	46.363	-0.118	0.000	0.07			23.5	OK
S1.008	S11	46.357	-0.111	0.000	0.10			38.3	OK
S1.009	S12	46.347	0.491	0.000	0.49			30.0	SURCHARGED
S1.010	S-C3	44.142	-0.208	0.000	0.21			30.0	OK

PN	US/MH Name	Level Exceeded
S1.000	S5.3	
S1.001	S5.8	
S1.002	S5	
S1.003	S6	
S1.004	S7	
S1.005	S8	
S1.006	S9	
S1.007	S10	
S1.008	S11	
S1.009	S12	4
S1.010	S-C3	

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
Hot Start Level (mm) 0 Inlet Coeffiecient 0.800
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Storage Structures 0
Number of Online Controls 1 Number of Time/Area Diagrams 0
Number of Offline Controls 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.360
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 18.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status ON

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years) 1, 30, 100
Climate Change (%) 0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.000	S5.3	15 Winter	100	+40%				
S1.001	S5.8	15 Winter	100	+40%	100/15 Summer			
S1.002	S5	60 Winter	100	+40%	100/15 Summer			
S1.003	S6	60 Winter	100	+40%	100/15 Summer			
S1.004	S7	60 Winter	100	+40%	100/15 Summer			
S1.005	S8	60 Winter	100	+40%	100/15 Summer			
S1.006	S9	60 Winter	100	+40%	100/15 Summer			
S1.007	S10	60 Winter	100	+40%	100/15 Summer			
S1.008	S11	60 Winter	100	+40%	100/15 Summer			
S1.009	S12	60 Winter	100	+40%	1/15 Winter	100/30 Winter		
S1.010	S-C3	60 Summer	100	+40%				

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S5.3	49.437	-0.115	0.000	0.46			24.0	OK

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.001	S5.8	49.257	0.099	0.000	1.26			56.0	SURCHARGED
S1.002	S5	47.912	0.299	0.000	0.95			38.8	SURCHARGED
S1.003	S6	47.819	1.143	0.000	0.06			40.7	SURCHARGED
S1.004	S7	47.818	1.185	0.000	0.06			34.9	SURCHARGED
S1.005	S8	47.817	1.215	0.000	0.05			40.4	SURCHARGED
S1.006	S9	47.816	1.309	0.000	0.15			64.9	SURCHARGED
S1.007	S10	47.815	1.334	0.000	0.18			63.4	SURCHARGED
S1.008	S11	47.814	1.346	0.000	0.24			94.9	FLOOD RISK
S1.009	S12	47.812	1.956	24.099	0.49			30.0	FLOOD
S1.010	S-C3	44.142	-0.208	0.000	0.21			30.0	OK

PN	US/MH Name	Level Exceeded
S1.000	S5.3	
S1.001	S5.8	
S1.002	S5	
S1.003	S6	
S1.004	S7	
S1.005	S8	
S1.006	S9	
S1.007	S10	
S1.008	S11	
S1.009	S12	4
S1.010	S-C3	

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GENERAL NOTES

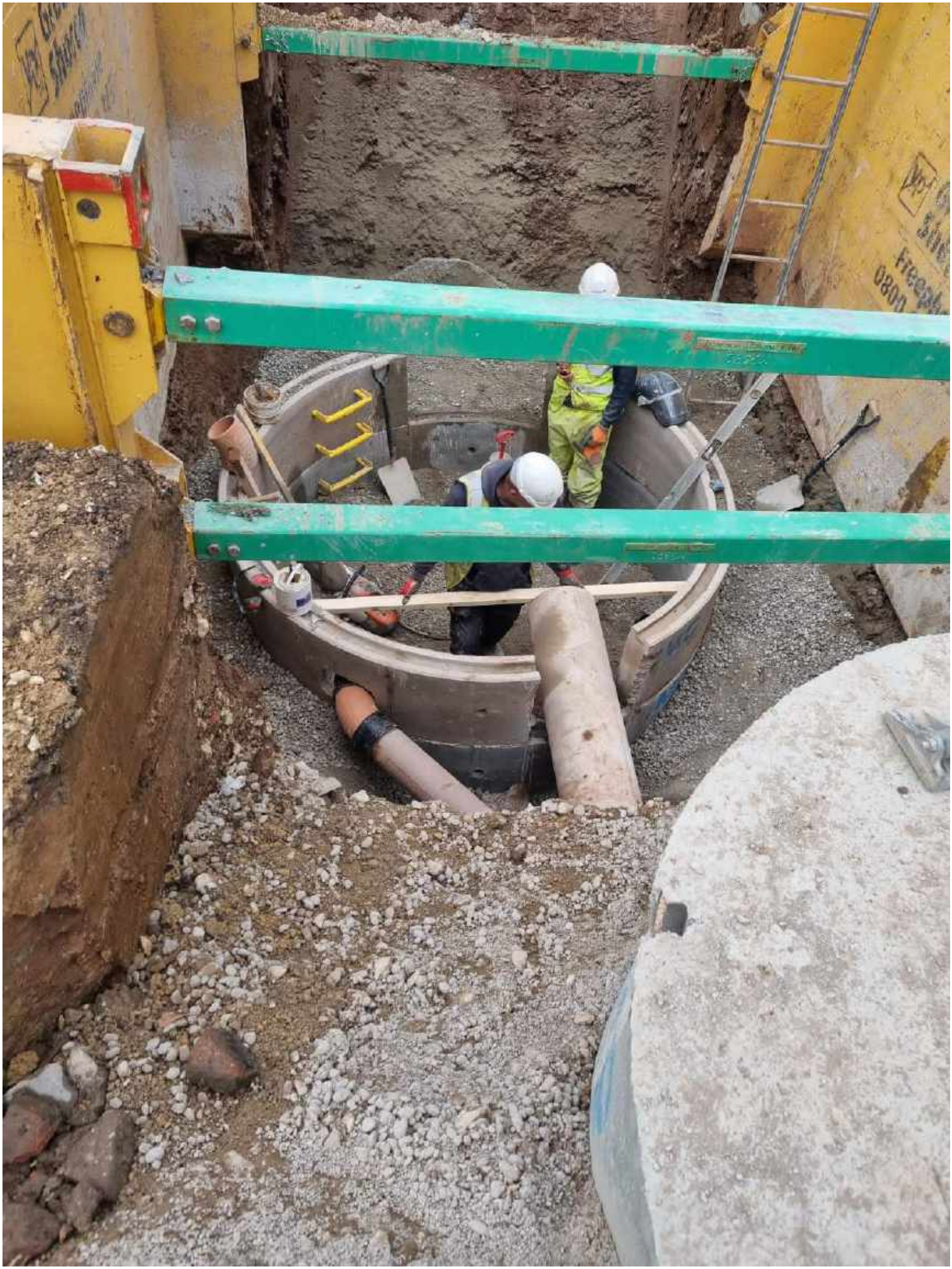
1. DO NOT SCALE FROM THIS DRAWING WORK TO FIGURED DIMENSIONS ONLY.
2. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS ALLOWED WITHOUT PRIOR PERMISSION IN WRITING.
3. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS AND THE SPECIFICATION.
4. THE CONTRACTOR SHALL INCORPORATE ALL THE REQUIREMENTS OF THE PRE-TENDER STAGE HEALTH & SAFETY PLAN.
5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH WML DRAWINGS;
   - 9003-WML-ZZ-XX-DR-C-1052
   - 9003-WML-ZZ-XX-DR-C-1054
   - 9003-WML-ZZ-XX-DR-C-1055
   - 9003-WML-ZZ-XX-DR-C-1056

EXCEEDANCE FLOW ROUTES SHEET 2

APPENDIX C

Photographic record of the installation

Harpurs
Harpurs



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DN1350/1500
MC

Harpurs
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Leica

Harpurs
Harpurs

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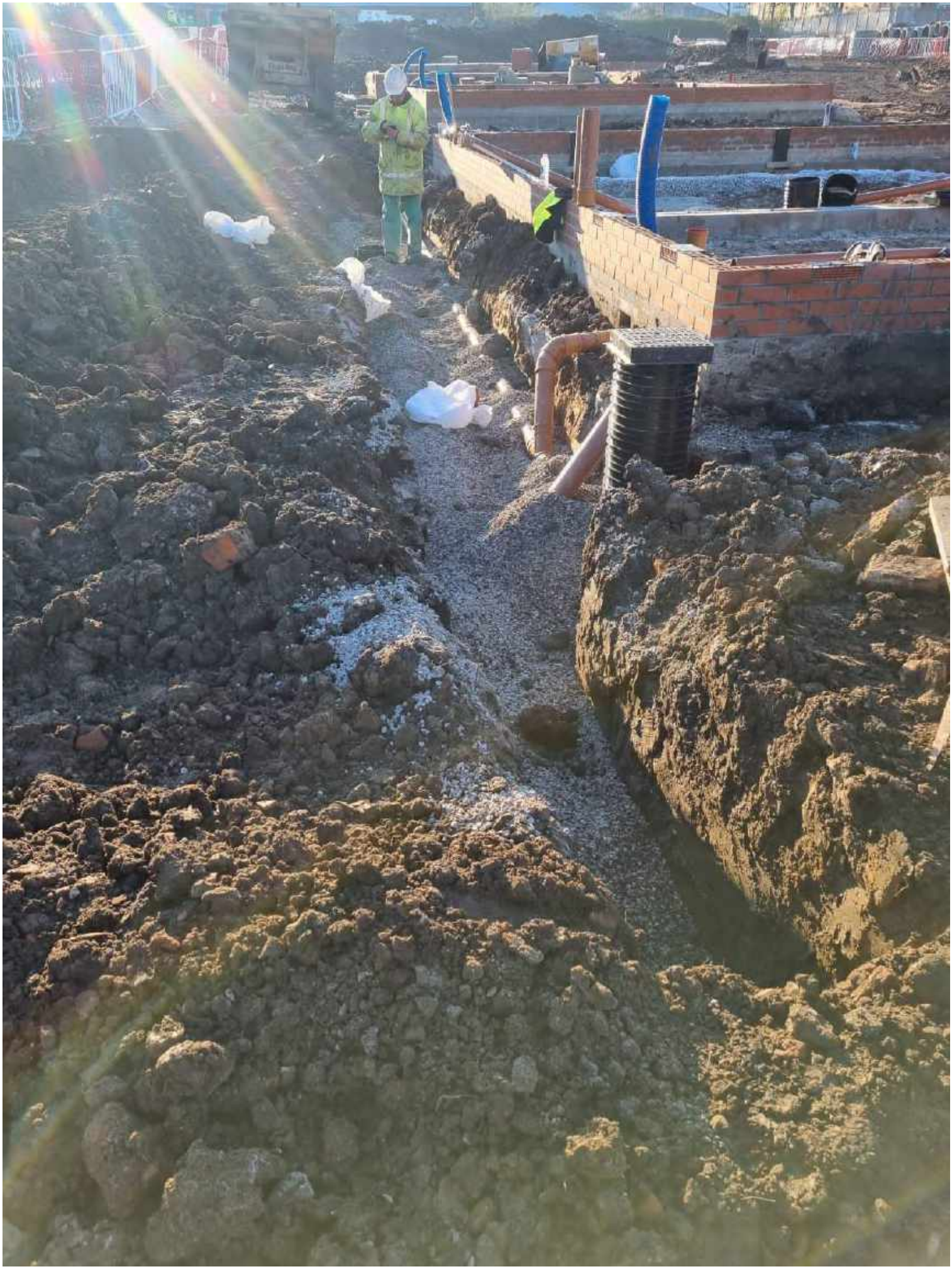
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