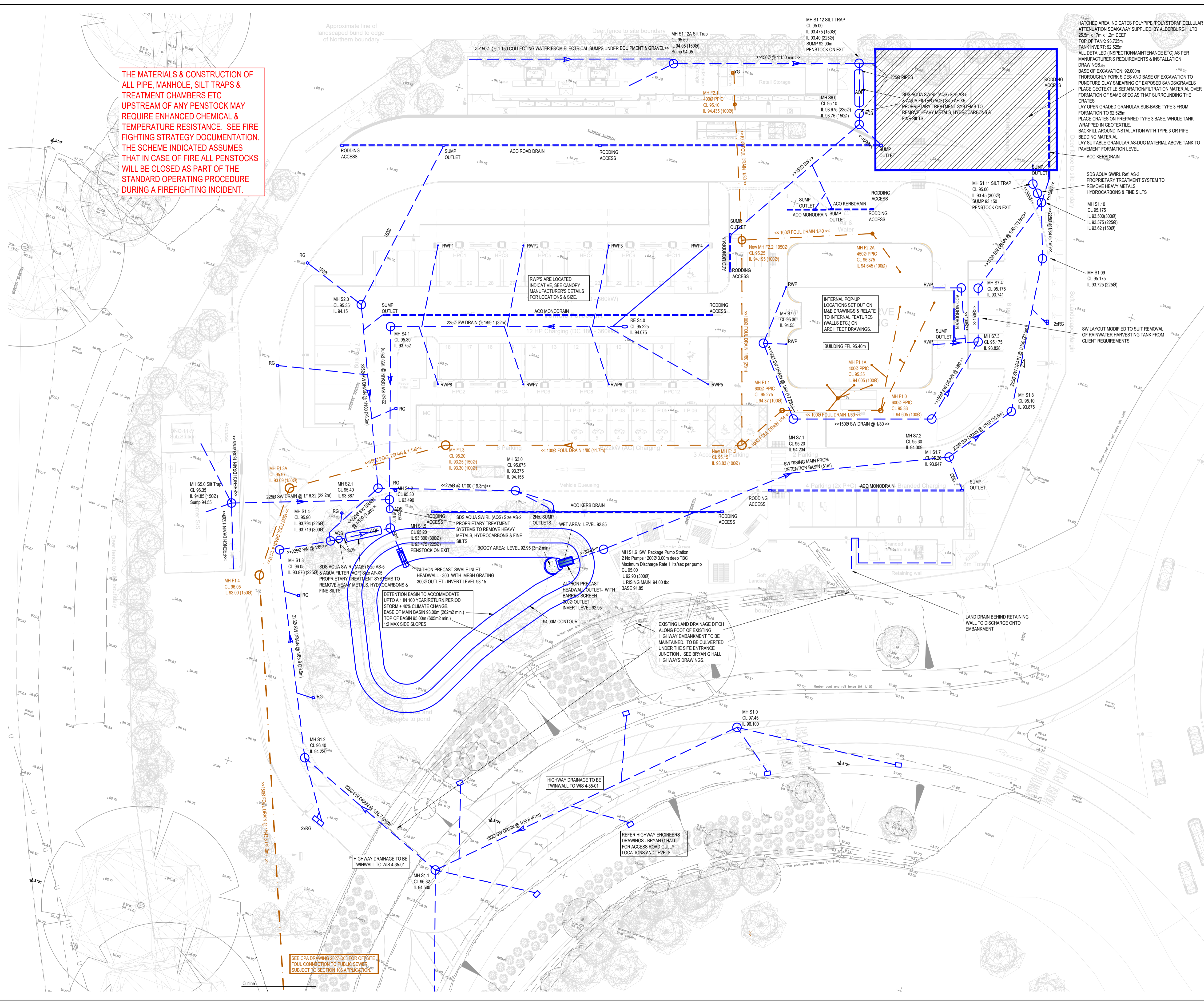


THE MATERIALS & CONSTRUCTION OF ALL PIPE, MANHOLE, SILT TRAPS & TREATMENT CHAMBERS ETC UPSTREAM OF ANY PENSTOCK MAY REQUIRE ENHANCED CHEMICAL & TEMPERATURE RESISTANCE. SEE FIRE FIGHTING STRATEGY DOCUMENTATION. THE SCHEME INDICATED ASSUMES THAT IN CASE OF FIRE ALL PENSTOCKS WILL BE CLOSED AS PART OF THE STANDARD OPERATING PROCEDURE DURING A FIREFIGHTING INCIDENT.



SAFETY, HEALTH & ENVIRONMENT (SHE) INFORMATION

In addition to the hazards / risks normally associated with the types of work detailed on this drawing and which a competent Contractor should be aware of, the Contractor should note the following:-

- Construction:**
1. THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES / SERVICES ARE TO BE IDENTIFIED PRIOR TO THE COMMENCEMENT OF WORKS. ALL NECESSARY PRECAUTIONS ARE REQUIRED WORKING WITHIN CLOSE PROXIMITY TO EXISTING UTILITIES/SERVICES.
 2. OFFSITE DRAINAGE CONNECTIONS FROM THIS SITE SHOULD BE SEALED AT THE COMMENCEMENT OF WORKS TO PREVENT SILT, DEBRIS & BUILDING MATERIAL PASSING DOWNSTREAM.
- Maintenance / Cleaning:**
1. DRAINAGE MAINTENANCE TO BE CARRIED OUT IN ACCORDANCE WITH THE CPA CONSULTING EXTERNAL DRAINAGE MAINTENANCE SCHEDULE WITHIN THE HEALTH & SAFETY FILE.
 2. MAINTENANCE TO BE CARRIED OUT BY AN EXPERIENCED DRAINAGE MAINTENANCE CONTRACTOR WITH CONFINED SPACES TRAINED OPERATIVES FOR ENTRY INTO MANHOLES.
 3. TRANSPORTATION AND DISPOSAL OF OILS AND SILTS TO BE BY A LICENSED WASTE DISPOSAL CONTRACTOR.
 4. UNDERGROUND FOUL AND SURFACE WATER DRAINS SHOULD BE CHECKED MINIMUM EVERY 12 MONTHS AND HIGH PRESSURE JETTED AS REQUIRED.
 5. ROAD GULLIES AND LINEAR DRAINAGE CHANNELS SHOULD BE CHECKED EVERY 6 MONTHS AND AFTER HEAVY RAINFALL EVENTS. THEY SHOULD BE EMPTIED/HIGH PRESSURE JETTED ON A MINIMUM 12 MONTH BASIS AND MORE FREQUENTLY IF NECESSARY.
 6. ALL CATCHPITS SHOULD BE CHECKED EVERY 6 MONTHS AND EMPTIED MINIMUM EVERY 12 MONTHS.
 7. BYPASS SEPARATORS AND PROPRIETARY TREATMENT SYSTEMS SHOULD BE CHECKED EVERY 6 MONTHS OR AFTER HEAVY RAINFALL EVENT & EMPTIED MINIMUM 12 MONTH OR MORE FREQUENTLY IF NECESSARY.
 8. UNDERGROUND CELLULAR ATTENUATION TANKS TO BE MAINTAINED AS PER MANUFACTURERS RECOMMENDATIONS.
 9. INFILTRATION BASIN TO BE MAINTAINED AS PER LANDSCAPING MAINTENANCE SCHEDULE.

- Decommissioning / Demolition:**
1. ALL DRAINAGE CONNECTIONS TO LIVE SEWERS/DRAINS ARE TO BE SEALED PRIOR TO ANY DEMOLITION WORKS TO PREVENT SILT/DEBRIS PASSING DOWNSTREAM.
 2. OILS AND SILTS TO BE REMOVED FROM BYPASS SEPARATORS ETC BY LICENSED MAINTENANCE DISPOSAL CONTRACTOR.

1. ALL LEVELS ARE IN METRES RELATED TO ORDNANCE DATUM UNLESS OTHERWISE STATED.
2. THIS DRAWING SHOULD NOT BE SCALED.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH CPA SPECIFICATION FOR DRAINAGE WORKS, STANDARD DRAINAGE DRAWINGS & OTHER CPA SPECIFICATIONS.
4. ALL DRAINAGE WORKS SHALL COMPLY WITH SEWERS FOR ADOPTION 7TH EDITION 2012 PUBLISHED BY WRc PLC AND TO THE CURRENT WRc INFORMATION & GUIDANCE NOTES (IGNS).
5. UNDERGROUND DRAINAGE WORKS BENEATH AND AROUND BUILDINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST VERSION OF BUILDING REGULATION PART H - DRAINAGE & WASTE DISPOSAL REQUIREMENTS.
6. PRIOR TO COMMENCEMENT OF NEW DRAINAGE WORKS, THE LOCATION, DIAMETER AND INVERT LEVEL OF EXISTING MANHOLES / INSPECTION CHAMBERS / SEWERS AND DRAINS AS SHOWN ON THE DRAWINGS ARE TO BE VERIFIED ON SITE BY THE CONTRACTOR. UNLESS PREVIOUSLY CARRIED OUT OFFSITE CONNECTIONS TO EXISTING SEWERS/OUTFALLS SHALL BE CCTV DRAIN SURVEYED TO VERIFY CONDITION AND SERVICEABILITY.
7. LOCATION AND DEPTH OF ALL EXISTING UTILITIES / SERVICES ARE TO BE IDENTIFIED PRIOR TO COMMENCEMENT OF WORKS. ALL NECESSARY PRECAUTIONS REQUIRED WORKING WITHIN CLOSE PROXIMITY TO EXISTING UTILITIES / SERVICES.
8. ALL NEW PIPEWORK AND RAINWATER PIPEGULLY CONNECTIONS IN TRAFFICED AREAS, WHERE COVER FROM CROWN OF THE PIPES TO FINISHED GROUND LEVEL IS LESS THAN 1.2M SHALL HAVE CONCRETE PROTECTION AS PER CPA STANDARD DETAILS WITH DTP TYPE 1 WELL COMPACTED GRANULAR BACKFILL. ALL OTHER PIPEWORK GREATER THAN 1.2M DEPTH TO FINISHED GROUND LEVEL SHALL HAVE CLASS 3 GRANULAR BACKFILL AND DTP TYPE 1 WELL COMPACTED GRANULAR BACKFILL. THE MINIMUM DEPTH OF COVER TO THE CROWN OF THE PIPES WITHOUT PROTECTION CAN BE REDUCED TO 900MM IN SOFT LANDSCAPING AREAS INCLUDING AGRICULTURAL LAND AND PUBLIC OPEN SPACE WITH SELECTED BACKFILL AS AGREED WITH THE ENGINEER.
9. ALL ADAPTABLE DRAINAGE WORKS SHALL BE CONSTRUCTED USING MATERIALS AS SPECIFIED ON THE DRAWINGS. ALL PRIVATE SURFACE WATER AND FOUL SYSTEMS SHALL BE CONSTRUCTED USING PLASTIC PIPEWORK TO CPA SPECIFICATIONS OR AS SPECIFIED BY THE CLIENT SPECIFICATION EMPLOYERS REQUIREMENTS.
10. ON COMPLETION OF DRAINAGE WORKS ALL NEW AND EXISTING SEWER/DRAINS SHALL BE CLEANED WITH HIGH PRESSURE JETTING AS NECESSARY AND A CCTV DRAIN SURVEY COMPLETED TO VERIFY CONDITION & SERVICEABILITY.
11. FULL RETENTION & BYPASS SEPARATORS SHALL BE FITTED WITH OIL HIGH LEVEL ALARMS AND CATS CABLE LINK TO AN ALARM PANEL WITHIN THE BUILDING AND/OR COORDINATED WITH THE BUILDING MAINTENANCE SYSTEM (BMS).

REV	DATE	DESCRIPTION	BY	CHK	APP
C5	25.03.24	ARCH BASE LAYOUT REPLACED. BESS AREA DRAINAGE & CRANE BASES DELETED	RNM	mm	GS
C4	07.12.23	TANK SPEC AMENDED DUE TO MATERIALS AVAILABILITY AND WEATHER AFFECTED GROUND CONDITIONS. FOUL AMENDED TO SUIT CORRECTED LVL AT PU SEWER.	RNM	mm	GS
C3	15.11.23	LIFT PIT DRAINAGE AMENDED. MH F2.2A ADDED. HIGHWAY DRAINAGE SPECIFICATION ADDED. CHANNEL DRAIN ADDED TO REAR OF BUILDING.	SCH	SCH	GS
C2	13.11.23	MINOR AMENDMENTS TO SUIT MH SCHEDULE.	RNM	RNM	AP
C1	09.11.23	CONSTRUCTION ISSUE	RNM	RNM	AP
T4	23.02.23	TANK SIZE & ENTRANCE LEVELS REVISED	RNM	RNM	AP
T3	02.02.23	UPDATED TO LATEST ARCH LAYOUT	MR	RNM	AP
T2	01.03.22	CELLULAR SOAKAWAY INCREASED - ACCESS ROAD GULLIES UPDATED. S1.0 to S1.3 REVISED	DJB	DJB	AP
T1	09.03.22	TENDER ISSUE - UPDATED TO LATEST LAYOUT - FOUL DRAINAGE DETAILS ADDED	DJB	DJB	AP
P3	13.10.21	UPDATED FOLLOWING INFILTRATION RESULTS	DJB	DJB	AP
P2	19.08.21	UPDATED FOLLOWING LLFA COMMENTS 10.08.21	DJB	DJB	AP
P1	30.03.21	PLANNING ISSUE	CSG	DJB	DJB

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CLIENT
GRIDSERVE

PROJECT
ELECTRIC FORECOURT, STEVENAGE JUNCTION 7 A1(M), STEVENAGE SG1 2AX

TITLE
PROPOSED DRAINAGE LAYOUT

SCALE	1:250	DRAWING SIZE	A1
PROJECT No.	2027	DRAWING No.	D02
		REV.	C5