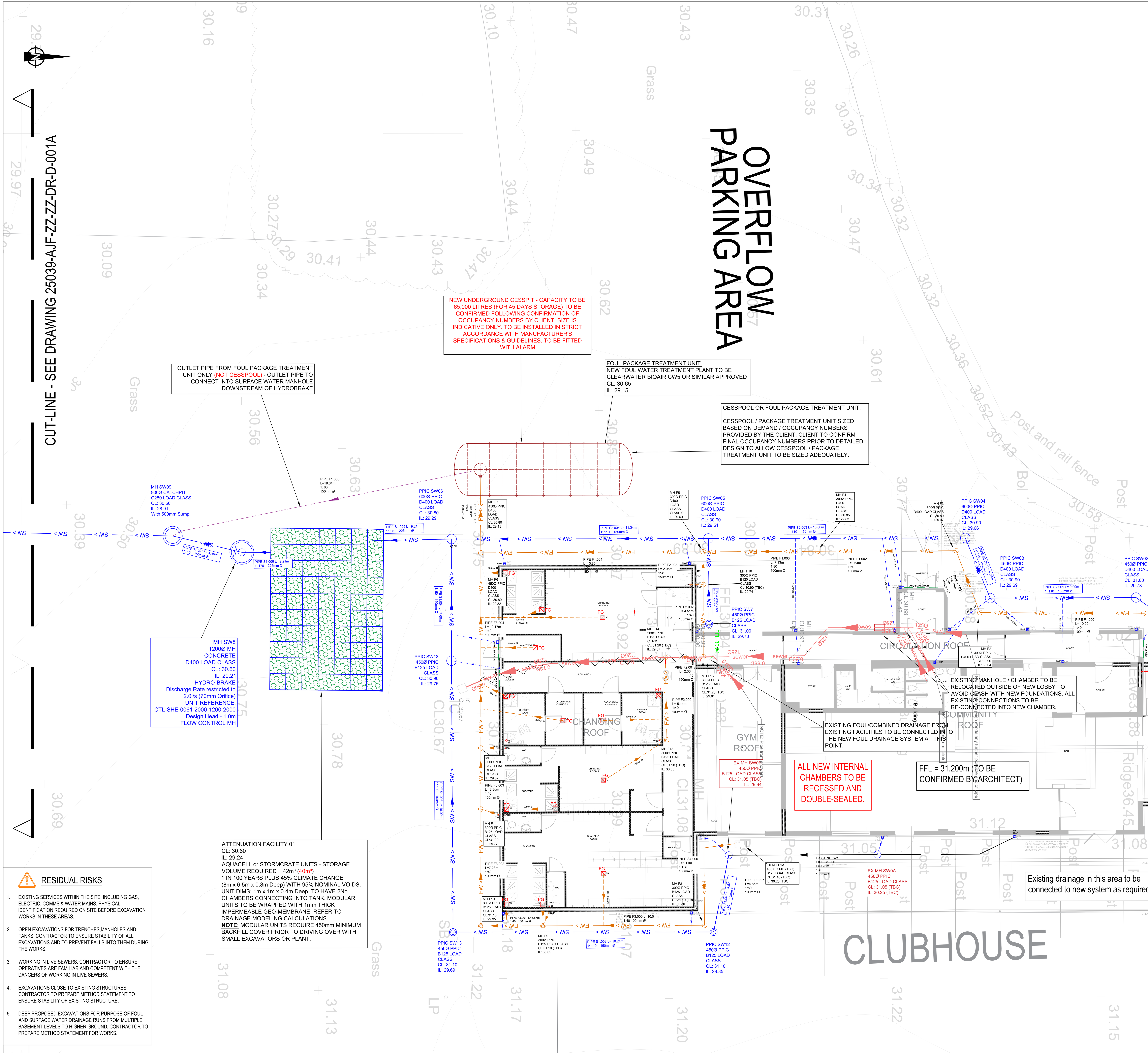


ATTENUATION FACILITY 01
CL: 30.60
IL: 29.24
AQUACELL or STORMCRATE UNITS - STORAGE VOLUME REQUIRED : 42m³ (40m³)
1 IN 100 YEARS PLUS 45% CLIMATE CHANGE (8m x 6.5m x 0.8m Deep) WITH 95% NOMINAL VOIDS. UNIT DIMS: 1m x 1m x 0.4m Deep. TO HAVE 2No. CHAMBERS CONNECTING INTO TANK. MODULAR UNITS TO BE WRAPPED WITH 1mm THICK IMPERMEABLE GEO-MEMBRANE REFER TO DRAINAGE MODELING CALCULATIONS.
NOTE: MODULAR UNITS REQUIRE 450mm MINIMUM BACKFILL COVER PRIOR TO DRIVING OVER WITH SMALL EXCAVATORS OR PLANT.

RESIDUAL RISKS

1. EXISTING SERVICES WITHIN THE SITE INCLUDING GAS, ELECTRIC, COMMS & WATER MAINS, PHYSICAL IDENTIFICATION REQUIRED ON SITE BEFORE EXCAVATION WORKS IN THESE AREAS.
2. OPEN EXCAVATIONS FOR TRENCHES,MANHOLES AND TANKS. CONTRACTOR TO ENSURE STABILITY OF ALL EXCAVATIONS AND TO PREVENT FALLS INTO THEM DURING THE WORKS.
3. WORKING IN LIVE SEWERS. CONTRACTOR TO ENSURE OPERATIVES ARE FAMILIAR AND COMPETENT WITH THE DANGERS OF WORKING IN LIVE SEWERS.
4. EXCAVATIONS CLOSE TO EXISTING STRUCTURES. CONTRACTOR TO PREPARE METHOD STATEMENT TO ENSURE STABILITY OF EXISTING STRUCTURE.
5. DEEP PROPOSED EXCAVATIONS FOR PURPOSE OF FOUL AND SURFACE WATER DRAINAGE RUNS FROM MULTIPLE BASEMENT LEVELS TO HIGHER GROUND. CONTRACTOR TO PREPARE METHOD STATEMENT FOR WORKS.

A0

SURFACE WATER DRAINAGE STRATEGY

THE DRAINAGE STRATEGY HAS BEEN DESIGNED FOR 1-IN-100 YEAR STORM EVENTS, WITH THE ALLOWANCE OF 45% FOR CLIMATE CHANGE. SURFACE WATER IS TO DISCHARGE INTO THE EXISTING WATERCOURSE AS SHOWN AT RESTRICTED RATE OF 2.0 L/S AS REQUESTED BY WIRRAL COUNCIL LLFA.

ATTENUATION STRATEGY: ALL STORAGE BELOW GROUND - 41m³ (1 in 100yr + 45% CC)

FOUL WATER DRAINAGE STRATEGY

PROPOSED FOUL WATER TO DISCHARGE INTO A CESSPOOL OR FOUL TREATMENT UNIT AS SHOWN. FOUL TREATMENT UNIT TO HAVE CONNECTION INTO SURFACE WATER - DOWNSTREAM OF HYDRO-BRAKE. CESSPOOL AND TREATMENT UNIT SIZED BASED ON DEMAND / USAGE FIGURES PROVIDED BY THE CLIENT. THESE ARE TO CONFIRMED AT DETAILED DESIGN.

PROPOSED WASTEWATER PEAK FLOWS TO BE CALCULATED AT DETAILED DESIGN STAGE. DISCHARGE OUTFALL POINTS TO SUIT DRAINAGE STRATEGY.

EXISTING SITE DRAINAGE TO BE INVESTIGATED BY CONTRACTOR ON SITE PRIOR TO UNDERTAKING DRAINAGE WORKS.

THE CONTRACTOR IS RESPONSIBLE FOR DEALING WITH THE EXISTING DRAINAGE INFRASTRUCTURE AND REPORTING CONNECTIVITY & CONDITION TO ENGINEER.

ARCHITECT TO FINALISE ALL DRAINAGE CONNECTION POINTS (FOUL AND SURFACE WATER) & THRESHOLD DRAIN REQUIREMENTS.

APPROVALS & ADDITIONAL INFORMATION REQUIRED

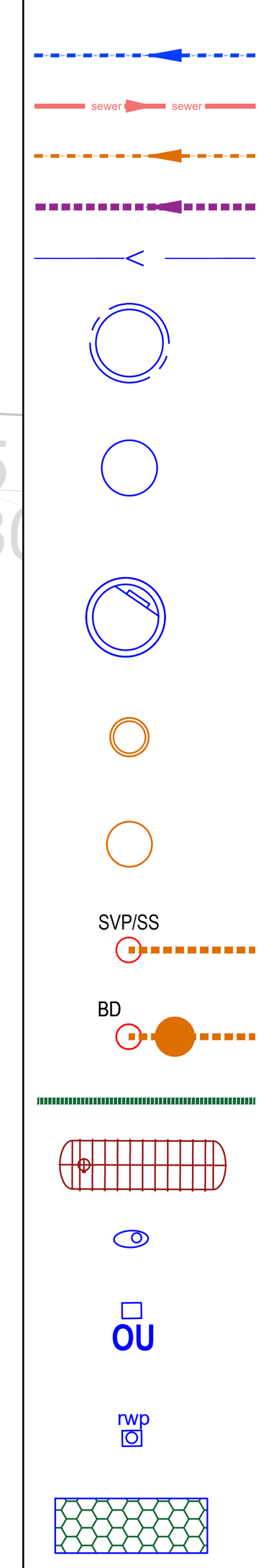
1. BUILDING CONTROL & LLFA APPROVAL OF THE PROPOSED FOUL AND SURFACE WATER DRAINAGE STRATEGY.
2. THRESHOLD DRAINAGE REQUIREMENTS.
3. FINAL SVP/SS AND RWP LOCATIONS FROM ARCHITECT.
4. EXISTING & PROPOSED SERVICES ROUTES FOR CLASH CHECKING.
5. FINAL LANDSCAPING AND EXTERNAL WORKS.

NOTES

1. DO NOT SCALE FROM THIS DRAWING. USE ONLY WRITTEN DIMENSIONS.
2. ALL PIPE DIAMETERS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES UNLESS OTHERWISE STATED.
3. LOCATIONS AND LEVELS OF CONNECTIONS TO EXISTING SEWERS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO COMMENCING WORKS. ANOMALIES ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
4. COVER LEVELS FOR MANHOLES AND INSPECTION CHAMBERS ARE INDICATIVE ONLY - THEY SHALL BE LAID FLUSH WITH THE ADJACENT SURFACING.
5. ALL WORKS TO COMPLY WITH "SEWERS FOR ADOPTION-6th & 7th EDITIONS". ALL WORKMANSHIP TO BE IN ACCORDANCE WITH CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY (CESWI) UNLESS OTHERWISE STATED.
6. PLASTIC PIPEWORK IS TO BE INSTALLED (POLYPIPE OR SIMILAR APPROVED) IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.
7. ALL PIPEWORK TO HAVE CLASS B BEDDING WHERE 1.2m COVER IS PROVIDED. PIPEWORK WITH LESS THAN 1.2m COVER IS TO HAVE TYPE Z BEDDING AND SURROUND.
8. INSPECTION CHAMBERS IN DRIVEWAYS ARE TO HAVE CLASS C250 COVERS AND FRAMES.
9. PIPEWORK BUILT THROUGH STRUCTURAL WALL SHALL HAVE 50mm CLEARANCE AND A SUITABLE LINTEL INSTALLED TO OPENING.FLEXIBLE JOINTS EITHER SIDE OF THE WALL SHOULD BE LOCATED NOT MORE THEN 150mm FROM THE FACE.
10. TYPE E AND D PPIC'S ARE BY WAVIN OR SIMILAR APPROVED.
11. ANY 100mmDIA PIPE WITHOUT A WC CONNECTION SHOULD NOT BE FLATTER THAN 1:40
12. ALL RWP'S ARE TO OUTFALL VIA PLASTIDRAIN INLET HOPPER GULLY - BN 110 P/E OR SIMILAR APPROVED.
13. ALL AREAS TO BE SCANNED FOR EXISTING BURIED SERVICES OR OTHER OBSTRUCTIONS PRIOR TO EXCAVATION WORKS.
14. PROPOSED FOUL DRAINAGE TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS 2010 DRAINAGE & WASTE DISPOSAL - PART H 2015 EDITION.
15. ALL MANHOLE COVER LEVELS AND EXTERNAL FINISHED FLOOR LEVELS ARE TO BE CONFIRMED BY THE ARCHITECT. COVER LEVELS FOR MANHOLES AND INSPECTION CHAMBERS ARE INDICATIVE ONLY - THEY SHALL BE LAID FLUSH WITH THE ADJACENT SURFACING.
16. ALL SOIL STACK CONNECTIONS TO BELOW GROUND DRAINAGE TO BE 100mm Ø LAID AT MINIMUM 1:80 GRADIENT (MIN. 1WC), UNLESS OTHERWISE STATED ON DRAWING.
17. CONNECTIONS UPSTREAM TO SVPS/SS TO BE DESIGNED BY OTHERS.
18. THE DEVELOPER MUST SELF-VET AND CERTIFY THAT THE DESIGN CRITERIA, MATERIAL STANDARDS AND WORKMANSHIP SPECIFICATIONS FOR THE PROPOSED ADOPTABLE SEWERS ARE IN ACCORDANCE WITH THOSE SET OUT IN "SEWERS FOR ADOPTION" 6TH EDITION (SFA 6TH) & "SEWERS FOR ADOPTION" 7TH EDITION (SFA 7TH) AND THE REQUIREMENT OF UU AS THE STATUTORY SEWERAGE UNDERTAKER.
19. FOUL PIPEWORK TO BE VITRIFIED CLAY OR PLASTIC .VITRIFIED CLAY PIPES SHOULD COMPLY WITH REQUIREMENTS BS EN 295 FOR FOUL PIPES.
20. PLASTIC PIPEWORK IS TO BE INSTALLED (POLYPIPE OR SIMILAR APPROVED) IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION. ALL THERMOPLASTIC PIPEWORK SHALL COMPLY WITH THE REQUIREMENTS OF E2.21 & E2.22 (PAGE 89) OF SEWERS FOR ADOPTION 7TH EDITION.
21. PROPOSED PIPEWORK WITH LESS THAN THE FOLLOWING DEPTHS TO SOFFIT REQUIRES A CONCRETE SURROUND:
- PROPOSED PIPEWORK WITH <1.2M DEPTH TO SOFFIT IN ROADS/SERVICE AREAS.
- OR <0.9M DEPTH TO SOFFIT IN PEDESTRIAN AREAS & DOMESTIC DRIVEWAYS WITH 7.5T VEHICLE WEIGHT LIMIT.
- OR <0.5M DEPTH TO SOFFIT IN PEDESTRIAN AREAS & DOMESTIC DRIVEWAYS WITH NO VEHICLE WEIGHT LIMIT.
- OR <0.35M DEPTH TO SOFFIT IN LANDSCAPED AREAS REQUIRES CLASS Z BEDDING"

24. ANY GREASE DRAINS THAT ARE DIRECTED TO GREASE TRAPS MUST USE CAST IRON PIPING SYSTEMS THAT ALLOW MECHANICAL CLEANING WHEN BLOCKAGES OCCUR.
25. ALL SVP LOCATIONS AND DISCHARGE UNITS ARE PROVIDED BY M&E ENGINEER OR ARCHITECT.
26. ALL SVPs ARE TO HAVE LOW LEVEL ACCESS PLATES.
27. FOUL DRAINAGE REST BENDS TO BE MINIMUM -450mm DEEP.
28. PROPOSED FLOOR GULLIES TO BE RODDABLE.
29. CHANNEL / SLOT DRAINS TO HAVE RODDABLE ACCESS.

KEY



REV	DATE	DESCRIPTION	DRN	CH'D	APP'D
R8	09/05/25	REVISED TO SUIT UPDATED BUILDING LAYOUT.			
R7	18/03/25	FOR REVIEW & APPROVAL.	CLS	BBP	AJF

DRG. STATUS
FOR APPROVAL

CLIENT
PRENTON RUGBY CLUB

PROJECT
PRENTON RUGBY CLUB - EXTENSION WORKS

DRG. TITLE
PROPOSED FW & SW DRAINAGE PLAN
SHEET 1

Scale (@ A0): 1:80

DRG.NO.
25039-AJF-ZZ-ZZ-DR-D-001

REV
R8