



- NOTES**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
  - ALL EXISTING SEWERS, CONNECTIONS, PIPE SIZES AND INVERT LEVELS TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS TO ENSURE CONNECTIVITY. ANY VARIANCE FROM THE INFORMATION SHOWN SHOULD BE REPORTED TO THE ENGINEER FOR REVIEW.
  - ALL DETAILS AND DIMENSIONS ARE TO BE CHECKED BY THE CONTRACTOR. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
  - ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM (AOD) UNLESS OTHERWISE NOTED.
  - WHERE EXISTING DRAINAGE IS BEING USED, ALLOWANCES SHOULD BE MADE TO REMEDIATE THIS DRAINAGE IN LINE WITH AVAILABLE CCTV SURVEY INFORMATION. IF NO SURVEY IS AVAILABLE IT IS ADVISED TO OBTAIN ONE PRIOR TO COMMENCEMENT OF WORKS.
  - ALL EXISTING SERVICES TO BE LOCATED PRIOR TO COMMENCEMENT OF ANY DRAINAGE WORKS AND WHERE NECESSARY PROTECTION OR DIVERSIONS TO BE UNDERTAKEN TO AVOID CONFLICT WITH THE PROPOSED WORK.
  - ALL PIPE DIAMETERS GIVEN ARE NOMINAL. INTERNAL PIPE DIAMETERS, PIPE DIAMETERS NOT SPECIFIED TO BE 150mm AT 1.80.
  - WHERE SUBJECT TO VEHICULAR LOADING CHAMBERS TO HAVE 150mm GEN3 CONCRETE SURROUND AND D400 COVERS.
  - WHERE PIPEWORK IS SUBJECT TO VEHICULAR LOADING AND HAS LESS THAN 0.9m COVER 150mm GEN3 CONCRETE BED AND SURROUND TO BE USED.
  - LINEAR CHANNEL DRAINS IN VEHICULAR AREAS TO BE GATIC CAST SLOT DRAIN 225mm OR SIMILAR APPROVED WITH D400 LOAD RATING MINIMUM. GATIC PAVE SLOT DRAIN 150mm WITH MINIMUM B125 LOAD RATING WHERE PEDESTRIAN TRAFFICATED FINISH TO BE AGREED WITH ARCHITECT. ALL OUTLETS FROM LINEAR DRAINS TO BE FITTED WITH SUMP UNITS WITH ADEQUATE ACCESS.
  - CHAMBERS AT RISK OF VEHICULAR LOADING TO HAVE D400 COVERS. PEDESTRIAN LOADED COVERS B125.
  - ALL INTERNAL EFFLUENT MANHOLES TO HAVE ADEQUATE DOUBLE SEALED LOCKABLE COVERS TO PREVENT EGRESS OF COULERS.
  - LOCATION OF SWPS AND RWPS TO BE COORDINATED BY ARCHITECT AND M&E CONSULTANT. UNDERGROUND DRAINAGE STRATEGY MAY BE REQUIRED TO BE REVISED TO SUIT.
  - GRADIENTS OF BELOW GROUND FOUL DRAINAGE TO BE CONFIRMED AFTER ABOVE GROUND DRAINAGE HAS BEEN CONFIRMED BY OTHERS.
  - NEW BELOW GROUND EFFLUENT DRAINAGE TO BE CONFIRMED BY SPECIALIST.
  - EXTERNAL SURFACE WATER COLLECTION STRATEGY TO BE DEVELOPED FOLLOWING RECEIPT OF LANDSCAPE ARCHITECT'S DETAILS AND SURROUNDING DETAILS.
  - BELOW GROUND SURFACE WATER DRAINAGE STRATEGY MAY CHANGE IF ADDITIONAL IMPERMEABLE AREAS ARE INCLUDED BEYOND THOSE NOTED ON THIS DRAWING.
  - EXTERNAL HARD SURFACED AREAS ARE TO DRAIN AS CURRENTLY. TO THE EXISTING BELOW GROUND SURFACE WATER DRAINAGE SYSTEM. NEW IMPERMEABLE BUILDING AREA AND HARD SURFACED EXTERNAL AREAS TO DRAIN TO NEW SURFACE WATER SYSTEM.
  - ALL COVER LEVELS SUBJECT TO ARCHITECT'S EXTERNAL LEVELS DESIGN.
  - ALL STAINLESS STEEL GULLIES TO BE BY BLUCHER OR SIMILAR APPROVED.
  - ALL EFFLUENT DRAINAGE TO BE CHEMICAL RESISTANT POLYETHYLENE (PE) (PIPEX OR SIMILAR APPROVED) UNLESS NOTED OTHERWISE. IN ACCORDANCE WITH CHEMICAL REQUIREMENTS BY ARLA. ALLOWANCE TO BE MADE BY CONTRACTOR FOR SIGNIFICANT LEAD IN TIMES OF SUCH PIPEWORK BY APPROPRIATE MANUFACTURER.
  - ALL SIPHONIC RWPS TO DISCHARGE TO VENTED MANHOLE WITH SUITABLE VENTED MANHOLE COVER. EXACT SIZE OF SIPHONIC PIPEWORK AND ASSOCIATED BELOW GROUND PIPEWORK THAT IS REQUIRED, TO BE CONFIRMED BY SPECIALIST.

- GENERAL STAINLESS STEEL NOTES**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
  - STAINLESS STEEL EFFLUENT PIPES BY BLUCHER.
  - ALL STAINLESS STEEL TO BE GRADE 304 WITH JOINTS TO BE CHEMICAL RESISTANT TYPE. TO WITHSTAND EFFLUENT DISCHARGE FROM THE ARLA SITE.

- NOTE: MAJORITY OF PROPOSED EFFLUENT DRAINAGE TO BE PRE-FABRICATED CHEMICAL RESISTANT PIPEWORK AND MANHOLES (GEBERT/PIPEX).**
- EFFLUENT DRAINAGE PIPEWORK TO CIP AREAS AND BOILER BLOW DOWN TO BE STAINLESS STEEL DESIGNED FOR:**
- CAUSTIC 40%w/w, <20°C
  - NITRIC ACID 60%w/w, <20°C
  - NITRIC ACID <5%w/w, 70°C
- NOTE: ALL PROPOSED EFFLUENT BELOW GROUND DRAINAGE PIPEWORK TO CIP AREAS AND BOILER BLOWDOWN AREA TO BE STAINLESS STEEL - DETAILS BY PIPE MANUFACTURER BLUCHER UK**
- NOTE: CO-ORDINATION OF THE HDI RIGID INCLUSIONS AND DRAINAGE REQUIRED AS THERE IS NO DESIGN OF RIGID INCLUSIONS FROM THE SPECIES THEREFORE IT'S CURRENTLY ASSUMED THIS WILL NEED TO SUIT PROPOSED BELOW GROUND DRAINAGE.**
- NOTE: ALLOWANCE TO BE MADE FOR APPROPRIATE DIVERSION OF EXISTING EFFLUENT AND SURFACE WATER DRAINAGE TO SUIT NEW BUILDING OUTLINE, AS NOTED ON PLAN. EFFLUENT DIVERSIONS WILL NEED TO ENSURE ALL ACTIVE DRAIN POINTS WHICH ARE TO REMAIN ARE PICKED UP.**
- NOTE: ALL EXISTING DRAINAGE IS TO BE REPAIRED/ REMEDIATED IN LINE WITH THE PROPOSALS AS SPECIFIED IN THE CCTV SURVEY REPORT (S.P. DRAIN SURVEYS REPORT REF: GMP/18/3147) AND EXISTING DRAINAGE LINES TO BE APPROPRIATELY JETTED AND CLEANED TO REMOVE DEBRIS/ GREASE FROM LINES AS APPROPRIATE.**
- NOTE: TEMPORARY WORKS TO ATTENUATION TANK TO BE CONFIRMED BY MAIN CONTRACTOR**

DATE	BY	DESCRIPTION	CHK	APP
09.12.25	HB	UPDATED TO SUIT AND POP-UP NOTED BY ARCHITECT	HB	ML
24.11.25	HB	UPDATED TO SUIT LATEST POP-UP LOCATIONS, EPI'S AND M&E CONSULTANT COMMENTS AND CONTRACTOR COMMENTS	HB	ML
14.11.25	HB	UPDATED TO SUIT LATEST POP-UP LOCATIONS, CONCRETE PIPE SURROUNDING AND PIPE THROUGH FOUNDATION NOTED	HB	ML
16.10.25	HB	UPDATED TO SUIT LATEST POP-UP LOCATIONS	HB	ML
01.10.25	HB	DRAFT CONSTRUCTION	HB	ML
19.09.25	HB	UPDATED TO SUIT REVISIONS OF DIVERTED EXISTING DRAINAGE, MAIN EFFLUENT COLLECTOR TO BE RE-DESIGNED	ML	MR
05.06.25	HB	UPDATED TO SUIT TENDER QUERIES	ML	MR
11.04.25	HB	ISSUED FOR TENDER	ML	MR
25.03.25	HB	UPDATED TO SUIT LATEST SITE PLAN	ML	MR
24.01.25	HB	SIPHONIC RAINWATER POSITIONS AMENDED	ML	MR
10.01.25	HB	UPDATED TO SUIT CHEMICAL RESISTANT PIPEWORK REQUIREMENTS TO SOUTH OF SITE	ML	MR
03.01.25	HB	UPDATED FOR PLANNING RE-ISSUE	ML	MR
22.11.24	HB	STAGE 1	ML	MR
01.11.24	HB	DESCRIPTION	CHK	APP

DRAWING STATUS: **DRAFT CONSTRUCTION**

**Roscoe**  
CIVIL & STRUCTURAL ENGINEERS  
INSPIRING BUILT ENVIRONMENTS

CLIENT: **ARLA FOODS LTD**

ARCHITECT: **DLA ARCHITECTURE**

PROJECT: **ARLA FOODS TAIN VALLEY**

TITLE: **BELOW GROUND DRAINAGE (SHEET 1)**

SCALE: 1:200	CHECKED: MB	APPROVED: MB
PROJECT NUMBER: 23330	DESIGNED: HB	DRAWN: HB
DRAWING NO:	DATE: NOVEMBER 2024	REV:

ARLA-ROS-ZZ-XX-D-009111 | C05