

DRAINAGE NOTES

- ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND SPECIFICATIONS AS ISSUED BY THE ENGINEER AND DESIGN TEAM.
- ALL DRAINAGE TO BE INSTALLED TO THE SATISFACTION OF THE ADOPTING AUTHORITY OR ENGINEER AS REQUIRED.
- ALL MATERIALS AND WORKMANSHIP FOR PUBLIC DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH SEWERS FOR SCOTLAND 3rd EDITION (UNO). ALL MATERIALS AND WORKMANSHIP FOR PRIVATE DRAINAGE TO BE IN ACCORDANCE WITH ENGINEERS REQUIREMENTS (UNO).
- BEDDING INSTALLATION TO BE AS PER AECOM PIPE BEDDING DRAWING. ROOT PROTECTION MEASURES TO BE INSTALLED ALSO. GENERAL BEDDING AND BACKFILL REQUIREMENT AS FOLLOWS:-

Location	Cover to Soffit	Bedding
Roads	>1.5m	Class 'S' Granular Bed and Surround.
	<1.5m	Concrete Protection.
Non-adoptable Sewers below Car Parking	>0.9m	Class 'S' Granular Bed and Surround.
	<0.9m	Concrete Protection.
Hard and Soft Landscaping	>0.6m	Class 'S' Granular Bed and Surround.
	<0.6m	Concrete Protection.
Underslab		Class 'S' Granular Bed and Surround

- WHERE PIPES OF UNEQUAL DIAMETER CONNECT INTO A MANHOLE, PIPE SOFFITS TO BE LEVEL (UNO).
- TESTING OF SEWERS TO BE IN ACCORDANCE WITH BS EN 1610 AND AECOM DRAINAGE WORKS SPECIFICATION.
- CONTRACTOR TO COMPLY WITH THE CONTROLLED ACTIVITY (SCOTLAND) REGULATIONS 2013. CONTRACTORS METHOD OF WORKS TO COMPLY WITH THE GENERAL BINDING RULES (GBR's) OR APPROVED LICENCE IF REQUIRED AS PART OF WORKS.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING TEMPORARY SUDS OR EQUIVALENT AS REQUIRED UNDER 'GBR 10 - DISCHARGE OF SURFACE WATER RUN OFF FROM A SURFACE WATER DRAINAGE SYSTEM TO THE WATER ENVIRONMENT FROM CONSTRUCTION SITES, BUILDINGS, ROADS, YARDS AND OTHER BUILT UP AREAS'.
- THE CONTRACTOR WILL NOT BE PERMITTED TO UTILISE DEVELOPMENT SUDS FOR TEMPORARY TREATMENT PURPOSES UNLESS OTHERWISE AGREED WITH ENGINEER.
- GROUNDWATER CONTROL MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO ENSURE EXCAVATIONS ARE FREE OF GROUNDWATER DURING INSTALLATION AND BACKFILLING OF NEW WORKS. THE CONTRACTOR SHOULD CONSIDER THEIR CONSTRUCTION ACTIVITIES AGAINST THE PROVISION OF THE CONTROLLED ACTIVITY (SCOTLAND) REGULATIONS 2013 AND IS RESPONSIBLE FOR OBTAINING ANY APPROPRIATE AUTHORISATION ASSOCIATED WITH THEIR METHOD OF WORKS.
- THE CONTRACTOR MUST ENSURE NO FINES ARE DRAWN FROM THE ADJACENT SOIL DURING GROUNDWATER CONTROL OPERATIONS.
- FURTHER INVESTIGATION WORKS ARE REQUIRED TO ESTABLISH ANY EXISTING SERVICES.
- FOR LOCATION OF EXISTING AND PROPOSED SERVICES REFER TO THE SERVICE ENGINEERS DRAWINGS.
- THE FOLLOWING CONCRETE MIXES ARE TO BE USED (ALL IN ACCORDANCE WITH BS 532):-
CONCRETE SURROUND TO PIPES TO BE C20
CONCRETE BASE & HAUNCH TO MANHOLES TO BE C20.
THE ABOVE CONCRETE MIXES IN CONTACT WITH THE GROUND ARE TO BE GRADE ??? AND ACEC CLASSIFICATION ???, DETERMINED IN ACCORDANCE WITH THE BRE SPECIAL DIGEST 1, PART 2, TABLES 5-8.

- ALL PRECAST CONCRETE PRODUCTS (i.e. PIPE, MANHOLES, RINGS etc) SHALL BE TO DESIGN SULPHATE CLASS ??? AND CHEMICAL DESIGN CLASS ??? IN ACCORDANCE WITH BRE SPECIAL DIGEST 1 & BS 5911.
- ALL BELOW GROUND RAINWATER PIPE (RWP) TAILS TO MAIN LINE DRAINAGE TO BE A MINIMUM DIAMETER OF 150mm. TAILS TO BE LAID NO FLATTER THAN 1 IN 60 UNLESS OTHERWISE AGREED WITH THE ENGINEER.
- ROCKER PIPES ARE REQUIRED WHERE PIPE PASSES UNDER PROPOSED FOUNDATIONS STRUCTURES. DRAINAGE TRENCHES PASSING UNDER FOUNDS TO BE BACKFILLED USING MASS CONCRETE UP TO BASE LEVEL.
- ALL CHAMBER COVERS TO BE ORIENTED AND SET IN LINE WITH BUILDING GRIDLINE OR ADJACENT KERB LINES. ORIENTATION OF COVERS TO BE AGREED ON SITE PRIOR TO MANHOLE CONSTRUCTION TO ENSURE NO CONFLICT WITH KERBS, FENCE LINES AND SURFACE FEATURES. FINAL CONSTRUCTION TO BE AGREED WITH THE ARCHITECT/LANDSCAPE ARCHITECT.

KEY TO PIPE NOTATION

- 150ø uPVC 1:150 - S
- 1 2 3 4
- 1 INTERNAL PIPE DIAMETER
2 PIPE MATERIAL
uPVC - PLASTIC PIPEWORK
P-uPVC - PERFORATED PLASTIC PIPEWORK
VC - VITRIFIED CLAY
CONC - CONCRETE
- MATERIALS TO COMPLY WITH AECOM DRAINAGE WORKS SPECIFICATION
- 3 GRADIENT OF SEWER/DRAIN
4 BEDDING MATERIAL AND FILTER DRAIN DETAILS. REFER TO AECOM DETAIL DRAWINGS.

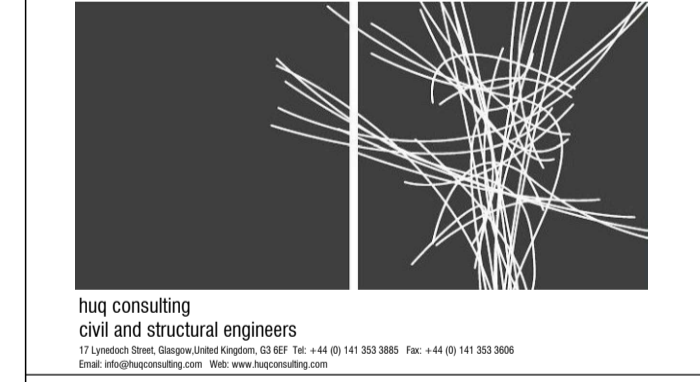
DRAINAGE LEGEND

- PROPOSED SURFACE WATER
--- EXISTING PUBLIC COMBINED SEWER
--- PROPOSED ACO CHANNEL AT DOORS
- PROPOSED CONCRETE MANHOLE ('ST' DENOTES SILT TRAP)
○ PROPOSED BRICK MANHOLE
○ EXISTING MANHOLE
○ PROPOSED GULLY
■ PROPOSED RODDING EYE
○ PROPOSED SWALE/SURFACE WATER STORAGE

HOLDS

- SURFACE WAER OUTFALL ROUTE TO BE INVESTIGATED.
- SURFACE WATER DISCHARGE RATES TO BE AGREED WITH NORTH LANARKSHIRE COUNCIL.
- STORAGE VOLUMES ARE FOR INFORMATION PURPOSES ONLY AND SUBJECT TO DETAIL DESIGN
- RAINWATER PIPES LOCATIONS ARE FOR INFORMATION ONLY LOCATIONS TO BE CONFIRMED BY THE ARCHITECT

MARK	DATE	BY	REVISIONS
A	01/03/22	PMC	REVISED & ISSUED FOR BUILDING WARRANT
-	28/02/22	PMC	ISSUED FOR PLANNING



PROJECT
YASKAWA
1 Hunt Hill Road,
Cumbernauld, Glasgow
G68 9LF

DRAWING TITLE
PROPOSED DRAINAGE LAYOUT

DRAWING No
2021252/C200

SCALE **1:500** SIZE **A1**
DRAWN BY **BMC** DATE **FEB 2021**

STATUS **BUILDING WARRANT**

DO NOT scale from this drawing