

FLOOD WATER DRAINAGE PHILOSOPHY:

THE FLOOD WATER WILL BE DISPOSED OF OFF SITE INTO THE SOUTHERN WATER COMBINED SEWER DRAINAGE NETWORK.

IT HAS BEEN ASSUMED THE OFF SITE FLOOD WATER CONNECTION WILL REQUIRE SOUTHERN WATER APPROVAL VIA A ST06.

THE EXISTING FLOOD DISCHARGE RATE HAS BEEN CALCULATED AS 6.17 L/S

THE PROPOSED FLOOD DISCHARGE RATE HAS BEEN CALCULATED AS 1.80 L/S AT F.W.M.H.S. I.E. A BETTERMENT OF 75%.

STORM WATER DRAINAGE PHILOSOPHY

THE SITE HARD STANDING AREA EQUATES TO APPROXIMATELY 0.57 HA. ALL STORM WATER RUNOFF FROM THE SITE WILL BE COLLECTED AND DISCHARGED INTO THE OFFSITE COMBINED SEWER AS INDICATED ON THE PLAN.

THE EXISTING STORM WATER DISCHARGE RATE HAS BEEN CALCULATED AS 109 L/S FOR THE 100 YEAR RETURN PERIOD. THE PROPOSED DESIGN HAS BEEN LIMITED TO 21.4 L/S AT SW.M.H.3 FOR THE 100 YEAR PERIOD PLUS AN ALLOWANCE OF 30 % FOR CLIMATE CHANGE. I.E. A BETTERMENT OF CIRCA 80%.

STORM WATER IS TO BE STORED WITHIN THE BELOW GROUND CULVERTS FOR RETURN PERIODS UP TO 30 YEARS. THIS VOLUME EQUATES TOIALS APPROXIMATELY 64M³.

A FURTHER 20M³ OF STORAGE IS PROVIDED BY THE PROPOSED PIPE NETWORK AND MANHOLES FOR RETURN PERIODS OF UP TO 100 YEARS PLUS 30% FOR CLIMATE CHANGE. IN ADDITION A FURTHER 11M³ IS TO BE PROVIDED AS OVERLAND STORAGE WITHIN THE ROADS.

DRAINAGE NOTES:

ALL DRAINAGE SHALL COMPLY WITH THE TYPICAL DRAINAGE CONSTRUCTION DETAILS AND THE REQUIREMENTS OF BS EN 752 AND SEWERS FOR ADOPTION 7th EDITION.

ACCESS COVERS AND FRAMES SHALL COMPLY WITH THE LOADINGS SPECIFIED AND TO BS EN 124 AND KITE MARKED OR IF RECESSED COVERS ARE SPECIFIED THEN IN ACCORDANCE WITH FACTA ASSOCIATION EQUIVALENT.

THE PROPOSED BUILDING OUTLINES SHOWN ON THIS DRAWING ARE FOR INFORMATION ONLY. REFER TO ARCHITECTS PLANS FOR PRECISE LOCATION SETTING OUT INFORMATION AND DETAILS.

ALL DRAINAGE PIPEWORK SHOWN SHALL BE 150MM DIAMETER UNLESS NOTED OTHERWISE.

ALL UNDERSLAB DRAINAGE SHALL BE LAID AT GRADIENTS OF 1:40 MIN. FOR FOUL PIPEWORK AND 1:80 MIN. FOR SURFACE WATER UNLESS NOTED OTHERWISE.

ALL GUTTERS SHALL BE FITTED WITH A LEAF FILTER AT EACH OUTLET TO REDUCE THE RISK OF BLOCKAGE.

ALL RAINWATER DOWNPIPES SHALL BE ACCESSIBLE ABOVE GROUND FOR ROOING PURPOSES.

ANY PART OF THE EXISTING DRAINAGE SYSTEM TO BE RETAINED AS PART OF THE NEW SCHEME SHALL BE CLEANED AND INSPECTED BY CCTV SURVEY. ANY STRUCTURAL DEFECTS SHALL BE REPAIRED OR REPLACED AS MAY BE REQUIRED USING APPROPRIATE AND APPROVED METHODS.

COVER LEVELS SHOWN ON THIS DRAWING ARE APPROXIMATE AND SHALL BE ADJUSTED TO SUIT FINISHED PAVEMENT LEVELS ON SITE BY CONTRACTOR. COVERS SHALL BE ORIENTATED TO SUIT PAVEMENT FINISHES WHERE APPROPRIATE.

ALL PRIVATE DRAINAGE PIPEWORK FOR FOUL AND SURFACE WATER SYSTEMS HAVE BEEN DESIGNED ON THE BASIS OF UPVC TO BS EN 1401-1, UNLESS NOTED OTHERWISE.

ALL ADAPTABLE DRAINAGE PIPEWORK FOR FOUL AND SURFACE WATER SYSTEMS HAVE BEEN DESIGNED ON THE BASIS OF CLAYWARE TO COMPLY WITH SEWERS FOR ADOPTION 7TH EDITION.

CONCRETE ENCASEMENT OF THE PIPEWORK SHALL BE REQUIRED WHERE THE VERTICAL CLEARANCE BETWEEN TWO PIPES CROSSING IS LESS THAN 300MM

ALL EXISTING DRAINAGE SHALL BE ASSUMED TO BE 'LIVE' AND SHALL BE MAINTAINED AT ALL TIMES DURING THE WORKS. EXISTING DRAINAGE SHALL BE RECONNECTED TO THE NEW DRAINAGE SYSTEM UNLESS PROVEN TO BE REDUNDANT FOR ABANDONMENT. ALL EXISTING DRAINAGE TO BE ABANDONED SHALL BE SEALED BY APPROPRIATE MEANS.

ALL DRAINAGE CONNECTING TO THE PUBLIC SEWER NETWORK SHALL NOT COMMENCE UNTIL RECEIPT OF THE APPROVAL FROM THE DRAINAGE AUTHORITY AND SHALL COMPLY WITH REQUIREMENTS USING VITRIFIED CLAY PIPEWORK TO BS EN 295 WITH PLAIN STEEDED OR SOCKETED FEASIBLE JOINTS SUBJECT TO THEIR APPROVAL.

WHERE DRAINAGE WORKS ARE CARRIED OUT IN THE PUBLIC HIGHWAY THE RELEVANT NECESSARY APPROVALS AND ROAD OPENING NOTICES SHALL BE OBTAINED FROM THE HIGHWAY AUTHORITY AND UTILITY COMPANIES.

UPON COMPLETION ALL NEW DRAINAGE INSTALLATION TOGETHER WITH ANY EXISTING DRAINAGE RETAINED SHALL BE DETTED AND CCTV SURVEYED UPON COMPLETION. CONTRACTOR TO ENSURE THAT THE DRAINAGE SYSTEM IS FULLY OPERATIONAL, FREE OF EXCESS DEBRIS/SILT AND ALL IDENTIFIED FAILURES RECTIFIED.

HEALTH & SAFETY: FUTURE WORKS SHALL BE CARRIED OUT BY SPECIALIST COMPETENT AND EXPERIENCED CONTRACTORS. ALL OPERATORS SHALL HAVE RECEIVED FULL AND APPROPRIATE TRAINING WITH APPROPRIATE QUALIFICATIONS FOR THE OPERATIONS THEY ARE REQUIRED TO UNDERTAKE. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT HEALTH & SAFETY REGULATIONS.

GENERAL NOTES:

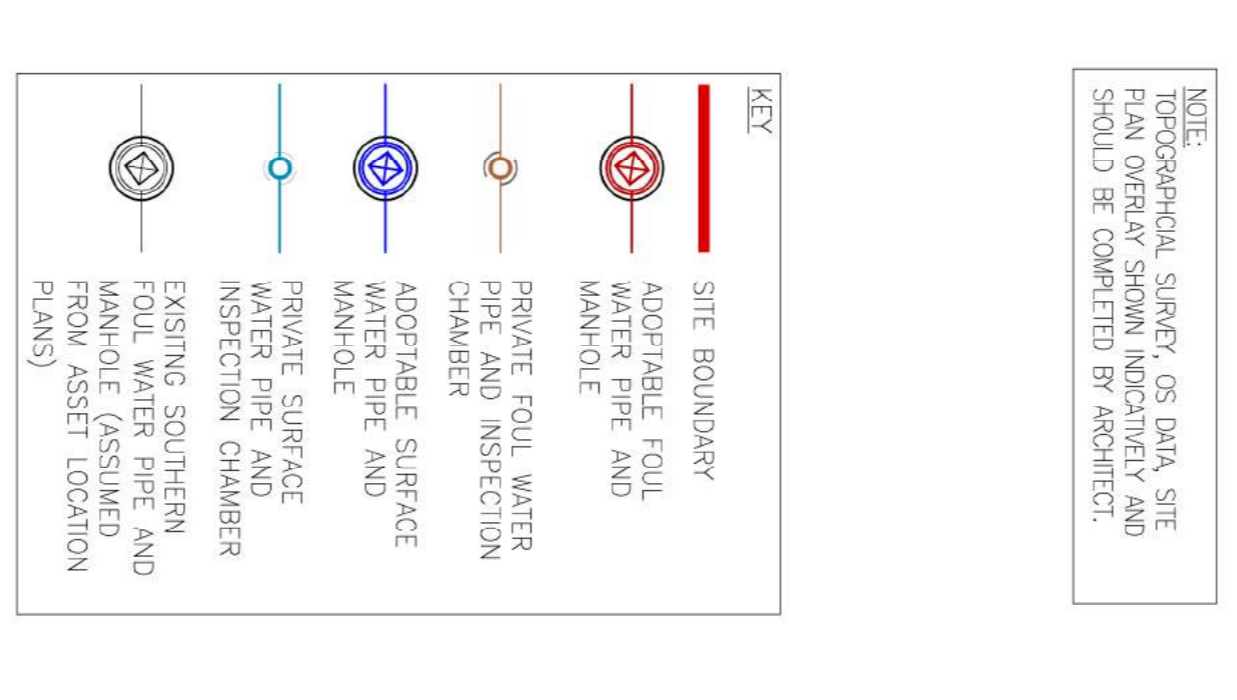
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
2. DO NOT SCALE FROM THIS DRAWING. WORK FROM FOLDED DIMENSIONS ONLY.
3. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES UNLESS OTHERWISE STATED.
4. ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
5. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS TO BE PERMITTED WITHOUT PERMISSION FROM THE ENGINEER AND WRITING OUT SHALL BE ASKED COMMENCEMENT OF THE WORKS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS FROM THE LOCAL AUTHORITY PRIOR TO COMMENCEMENT WORKS ON THE HIGHWAY I.E. ROAD CLOSURE NOTICES.
7. UNLESS STATED OTHERWISE, ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AT AN APPROVED 1P OFF-SITE.
8. THE PUBLIC HIGHWAY AND WORKS WILL BE KEPT CLEAN AND FREE OF DEBRIS BY USE OF WHEEL WASHING FACILITIES AND ROAD SWEEPERS TO THE COUNCIL'S SATISFACTION.
9. DRAINAGE DESIGN SUBJECT TO INPUT FROM ARBOCULTURIST. THE CURRENT DESIGN ASSUMES THERE ARE NO ISSUES WITH EXISTING TREES/TREE ROOT PROTECTION AREAS.
10. DRAWING BASED ON TOPOGRAHICAL SURVEY.

NOTE:

ALL FOUL AND STORM DRAIN POINTS TO BE ARCHITECT

NOTE:

TOPOGRAHICAL SURVEY OR DATA SITE PLAN OVERLAYS SHOWN INDICATELY AND SHOULD BE COMPLETED BY ARCHITECT.



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Client: **JENNER**

Architect: **OSG ARCHITECTS**

Project: **RESIDENTIAL DEVELOPMENT
ST PHILIP HOWARD SCHOOL, KENT**

Drawing Title: **BELOW GROUND DRAINAGE LAYOUT**

Drawn	Checked	Date	Scale
MC	GW	APRIL 17	A1 1:250
Issue Number	6457	Sheet	S2
Project	Original	Zone	Type
SPH - KSA-Z0-ZZ-DR-C-6000			P2