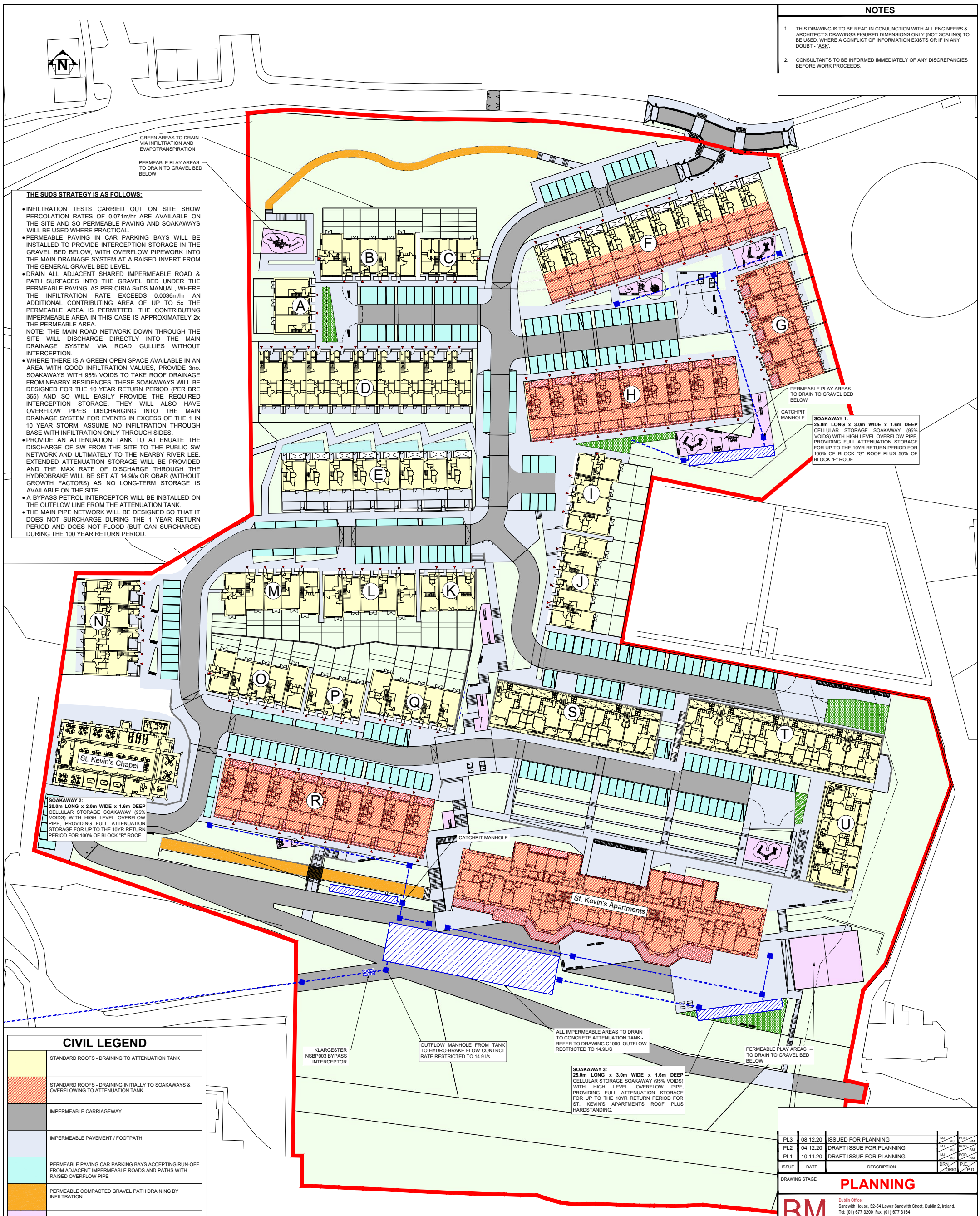
NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECT'S DRAWINGS.FIGURED DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - ' ASK'.
2. CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.



THE SUDS STRATEGY IS AS FOLLOWS:

- INFILTRATION TESTS CARRIED OUT ON SITE SHOW PERCOLATION RATES OF 0.071m/hr ARE AVAILABLE ON THE SITE AND SO PERMEABLE PAVING AND SOAKAWAYS WILL BE USED WHERE PRACTICAL.
- PERMEABLE PAVING IN CAR PARKING BAYS WILL BE INSTALLED TO PROVIDE INTERCEPTION STORAGE IN THE GRAVEL BED BELOW, WITH OVERFLOW PIPEWORK INTO THE MAIN DRAINAGE SYSTEM AT A RAISED INVERT FROM THE GENERAL GRAVEL BED LEVEL.
- DRAIN ALL ADJACENT SHARED IMPERMEABLE ROAD & PATH SURFACES INTO THE GRAVEL BED UNDER THE PERMEABLE PAVING. AS PER CIRIA SuDS MANUAL, WHERE THE INFILTRATION RATE EXCEEDS 0.0036m/hr AN ADDITIONAL CONTRIBUTING AREA OF UP TO 5x THE PERMEABLE AREA IS PERMITTED. THE CONTRIBUTING IMPERMEABLE AREA IN THIS CASE IS APPROXIMATELY 2x THE PERMEABLE AREA.
  NOTE: THE MAIN ROAD NETWORK DOWN THROUGH THE SITE WILL DISCHARGE DIRECTLY INTO THE MAIN DRAINAGE SYSTEM VIA ROAD GULLIES WITHOUT INTERCEPTION.
- WHERE THERE IS A GREEN OPEN SPACE AVAILABLE IN AN AREA WITH GOOD INFILTRATION VALUES, PROVIDE 3no. SOAKAWAYS WITH 95% VOIDS TO TAKE ROOF DRAINAGE FROM NEARBY RESIDENCES. THESE SOAKAWAYS WILL BE DESIGNED FOR THE 10 YEAR RETURN PERIOD (PER BRE 365) AND SO WILL EASILY PROVIDE THE REQUIRED INTERCEPTION STORAGE. THEY WILL ALSO HAVE OVERFLOW PIPES DISCHARGING INTO THE MAIN DRAINAGE SYSTEM FOR EVENTS IN EXCESS OF THE 1 IN 10 YEAR STORM. ASSUME NO INFILTRATION THROUGH BASE WITH INFILTRATION ONLY THROUGH SIDES.
- PROVIDE AN ATTENUATION TANK TO ATTENUATE THE DISCHARGE OF SW FROM THE SITE TO THE PUBLIC SW NETWORK AND ULTIMATELY TO THE NEARBY RIVER LEE. EXTENDED ATTENUATION STORAGE WILL BE PROVIDED AND THE MAX RATE OF DISCHARGE THROUGH THE HYDROBRAKE WILL BE SET AT 14.9l/s OR QBAR (WITHOUT GROWTH FACTORS) AS NO LONG-TERM STORAGE IS AVAILABLE ON THE SITE.
- A BYPASS PETROL INTERCEPTOR WILL BE INSTALLED ON THE OUTFLOW LINE FROM THE ATTENUATION TANK.
- THE MAIN PIPE NETWORK WILL BE DESIGNED SO THAT IT DOES NOT SURCHARGE DURING THE 1 YEAR RETURN PERIOD AND DOES NOT FLOOD (BUT CAN SURCHARGE) DURING THE 100 YEAR RETURN PERIOD.

CIVIL LEGEND

	STANDARD ROOFS - DRAINING TO ATTENUATION TANK
	STANDARD ROOFS - DRAINING INITIALLY TO SOAKAWAYS & OVERFLOWING TO ATTENUATION TANK
	IMPERMEABLE CARRIAGEWAY
	IMPERMEABLE PAVEMENT / FOOTPATH
	PERMEABLE PAVING CAR PARKING BAYS ACCEPTING RUN-OFF FROM ADJACENT IMPERMEABLE ROADS AND PATHS WITH RAISED OVERFLOW PIPE
	PERMEABLE COMPACTED GRAVEL PATH DRAINING BY INFILTRATION
	PERMEABLE PLAY AREA / MUGA TO LANDSCAPE ARCHITECT'S DETAILS WITH RAISED OVERFLOW PIPE
	PERMEABLE REINFORCED GRASS SUITABLE FOR VEHICULAR TRAFFIC TO LANDSCAPE ARCHITECT'S DETAILS DRAINING BY INFILTRATION
	PERMEABLE SOFT LANDSCAPING TO LANDSCAPE ARCHITECT'S DETAILS.
	REDLINE BOUNDARY

PROPOSED SuDS STRATEGY LAYOUT

SCALE @ A1: 1:500
SCALE @ A3: 1:1000

ISSUE	DATE	DESCRIPTION	DRN. / ORIG.	P.E. / P.D.
PL3	08.12.20	ISSUED FOR PLANNING	MJ / MJ	POD / BM
PL2	04.12.20	DRAFT ISSUE FOR PLANNING	MJ / MJ	POD / BM
PL1	10.11.20	DRAFT ISSUE FOR PLANNING	MJ / MJ	POD / BM

DRAWING STAGE
PLANNING

BM BARRETT MAHONY
Dublin Office:
Sandwith House, 52-54 Lower Sandwith Street, Dublin 2, Ireland.
Tel: (01) 677 3200 Fax: (01) 677 3164
London Office:
12 Mill Street, London SE1 2AY, United Kingdom
Tel: (0044) 20 3750 3530
Consulting Engineers, Civil . Structural . Project Management.E-mail: bmce@bmce.ie Web: www.bmce.ie
The Institution of Structural Engineers
ACEI
International Federation of Consulting Engineers

CLIENT
LAND DEVELOPMENT AGENCY

PROJECT TITLE
ST. KEVIN'S STRATEGIC HOUSING DEVELOPMENT

BM PROJECT No.
19305

MODEL REFERENCE
19305-BMD-ZZ-XX-DR-C-1003

MODEL REV. **P1**
SUITABILITY **S0**

DRAWING TITLE
PROPOSED SuDS STRATEGY LAYOUT

DRAWING No.
19305-BMD-ZZ-XX-DR-C-1003

ISSUE **PL3**