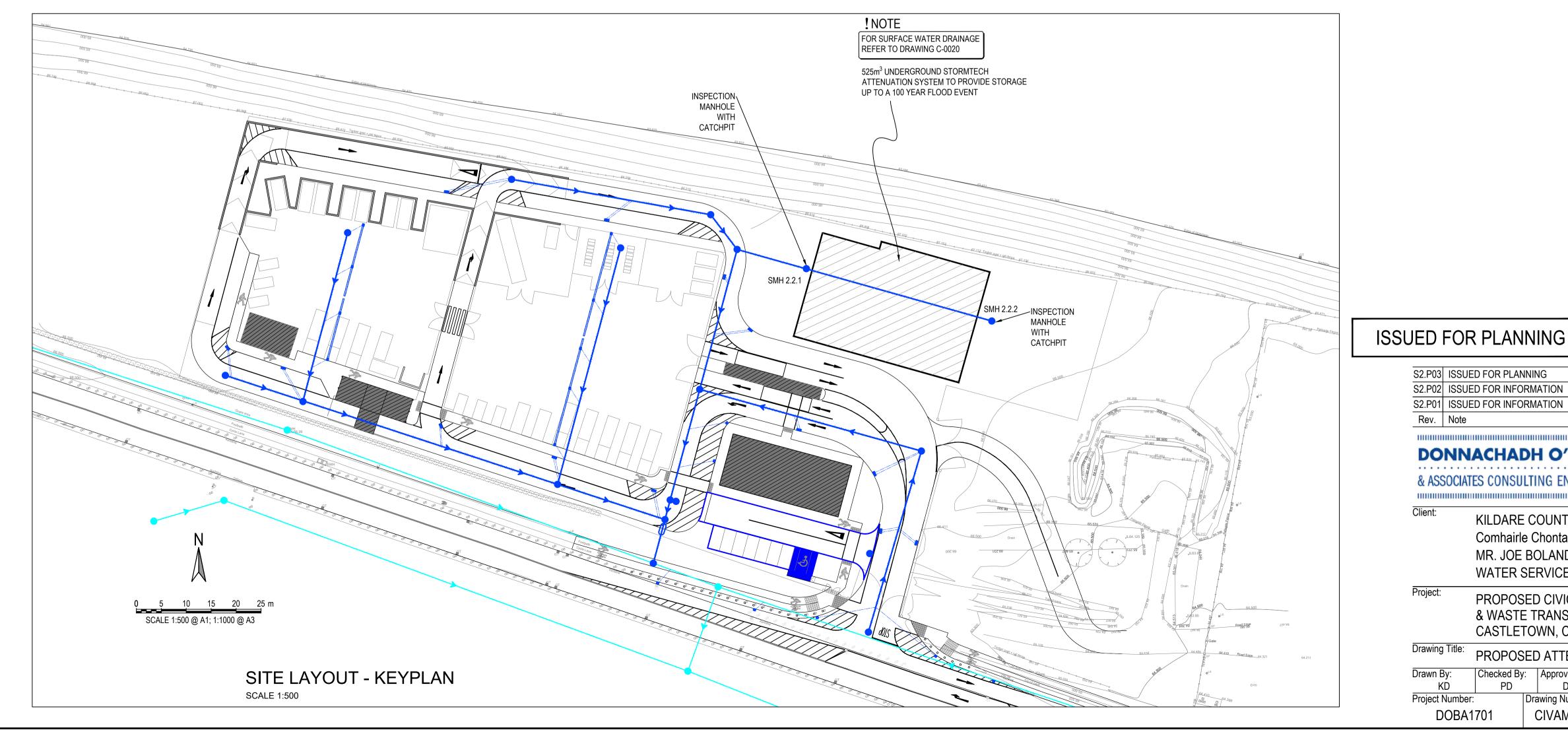


ATTENUATION TANK TO BE WRAPPED IN 2 LAYERS OF PERMEABLE GEOTEXTILE — REFER TO DRAWING MEMBRANE — C-006 FOR SURFACE PR. GL. VARIES **FINISHES** ~66.500m MINIMUM / MAXIMUM COVER & LAYER COMPOSITION TO BE SPECIFIED BY ATTENUATION TANK SYSTEM DESIGNER HEIGHT OF VOID FORMING UNIT TO **MANUFACTURERS** SPECIFICATIONS & I.L. +64.765m DETAILS BUILD-UP OF BASE & MATERIAL COMPOSITION OF BEDDING & - MINIMUM EDGE DISTANCE, TO BE SPECIFIED BY SURROUND MATERIAL TO BE SPACING & LAYOUT OF ATTENUATION TANK SYSTEM ATTENUATION TANK SYSTEM SPECIFIED BY SPECIALIST DESIGNER DESIGNER TO BE SPECIFIED BY THE MANUFACTURER TYPICAL CROSS-SECTION THROUGH ATTENUATION SYSTEM

TYPICAL ATTENUATION SYSTEM ARRANGEMENT



DO NOT SCALE: CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ANY ERRORS OR OMISSION **GENERAL NOTES:**

- 1. FOR STANDARD DOBA NOTES REFER TO DRAWING STJONS-DOB-XX-XX-DR-S00.1 & S00.2
- 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S & ENGINEER'S DRAWINGS AND SPECIFICATIONS.
- 3. USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- 4. ALL FFL AND SSL TO BE CONFIRMED BY ARCHITECT
- 5. ALL DPC's, DPM's, RADON BARRIERS, INSULATION AND ALL WEATHERING DETAILS TO ARCHITECT'S DRAWINGS & SPECIFICATIONS
- 6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LEVELS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER & ARCHITECT FOR RESOLUTION

ATTENUATION TANK NOTES:

- 1. ATTENUATION TANK SYSTEM IS TO CONSIST OF A VOID, FORMED FROM ONE OR MULTIPLE ROWS OF PARABOLIC ARCH SHAPED CHAMBERS WITH A CANTILEVER FOOT THAT IS A MINIMUM WIDTH
- 2. CHAMBERS SHALL BE MANUFACTURED FROM HDPE OR HDPP MATERIAL AND BE FORMED BY AN INJECTION MOLDED PROCESS. VIRGIN (NOT RECYCLED) POLYMER SHOULD BE USED.
- 3. CHAMBERS SHOULD HAVE A MINIMUM WALL THICKNESS THAT IS CONSISTENT OVER BOTH THE CREST AND VALLEY. THICKNESS IS DEPENDENT ON THE NOMINAL HEIGHT OF THE CHAMBER AND SHOULD MEET THE FOLLOWING; 400MM HIGH CHAMBER = 3.1MM, 800MM HIGH CHAMBER = 4.4MM, 1100MM = 5.8MM, 1500MM = 6.4MM.
- 4. CHAMBER SHOULD BE RATED TO TAKE TRAFFIC AND EMERGENCY ACCESS HEAVY VEHICLES (FIRETRUCK). THIS IS DEFINED AS PER EN BS 9295, A 112.5KN WHEEL (937.5KN/M2 BASED ON 0.2M X 0.6M WHEEL). THE CHAMBER SHALL BE BURIED TO A MINIMUM DEPTH TO RESIST THIS LOAD WITH A FACTOR OF SAFETY OF 1.75 APPLIED. MANUFACTURER TO SHOW INDEPENDENT TESTING TO VERIFY MINIMUM CHAMBER DEPTH REQUIRED TO MEET THE LIVE LOAD DESCRIBED ABOVE.
- 5. CHAMBER SHALL HAVE A DESIGN LIVE OF MINIMUM 50YEARS WHEN UNDER CONSTANT DEAD LOAD. MANUFACTURE TO SHOW INDEPENDENT TESTING VERIFYING MAXIMUM DEPTH OF BURIAL. A FACTOR OF SAFETY OF 1.95 THROUGH THE DESIGN LIFE TO BE APPLIED. A CREEP REDUCTION BASED ON A 10,000 HOUR CREEP MODULUS TEST TO BE ALSO FACTORED IN FOR THE DESIGN LIFE REQUIRED. MATERIALS SHALL HAVE A 50 YEAR TENSILE CREEP MODULUS NOT LESS THAN 165MPA
- 6. TOTAL SUSPENDED SOLIDS REMOVAL EFFICIENCY SHOULD AT LEAST AVERAGE AN EFFICIENCY OF 80%, AND BE TESTED AND APPROVED BY A RECOGNIZED EPA (ENVIRONMENTAL PROTECTION AGENCY) 7. SYSTEM SHOULD BE FULLY ACCESSIBLE BY MAINTENANCE
- PERSONNEL AND SHOULD NOT BE RESTRICTED TO CAMERA INSPECTION ALONE.
- 8. SYSTEM SHOULD BE CERTIFIED BY AT LEAST ONE INTERNATIONAL DESIGN STANDARD. I.E. IAB, BBA, CTSB
- 9. ATTENUATION SYSTEM IS TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S DETAILS AND SPECIFICATIONS.

DESIGN AND COMPLETION

10. SPECIALIST DESIGNER & MANUFACTURER OF ATTENUATION TANK SYSTEM TO PROVIDE:

> PROOF AND COPY OF CURRENT IN DATE PROFESSIONAL INDEMNITY INSURANCE

PROVISION OF ANCILLARY CERTIFICATES OF COMPLIANCE FOR

DETAILED TECHNICAL SUBMISSION INCLUDING BUT NOT LIMITED TO; SITE SPECIFIC DRAWINGS AND DETAILS INDICATING LAYOUT OF SYSTEM, SITE SPECIFIC CALCULATIONS DEMONSTRATING SUITABILITY OF PROPOSED SYSTEM, TESTING INFORMATION & PROVING COMPLIANCE OF PRODUCT WITH **RELEVANT STANDARDS**

INSPECTION PLAN FOR THE ASSIGNED CERTIFIER'S ATTENTION FOR THE INSPECTION OF THE ATTENUATION TANK SYSTEM AS **INSTALLED ON SITE**

UPON COMPLETION OF EACH INSPECTION, A COPY OF THE INSPECTION REPORT ALSO TO BE FORWARDED TO THE ASSIGNED CERTIFIER

RELEVANT MANUFACTURER'S PRODUCT AND COLLATERAL WARRANTIES FOR THE PRE-CAST CONCRETE COLUMNS

RELEVANT CE MARKING AND DECLARATION OF PERFORMANCE CERTIFICATES FOR THE PRE-CAST CONCRETE COLUMNS

Rev.	Note	Date	Drawn	Check
S2.P01	ISSUED FOR INFORMATION	05.11.2018	KD	PD
S2.P02	ISSUED FOR INFORMATION	17.12.2018	KD	PD
S2.P03	ISSUED FOR PLANNING	22.02.2019	KD	PD

DONNACHADH O'BRIEN

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KILDARE COUNTY COUNCIL Comhairle Chontae Chill Dara MR. JOE BOLAND, DIRECTOR OF SERVICES

WATER SERVICES & ENVIRONMENT



PROPOSED CIVIC AMENITY CENTRE & WASTE TRANSFER FACILITY AT KILMACREDDOCK UPPER, CASTLETOWN, CELBRIDGE, Co. KILDARE

Drawing Title:	PROPOSE	D ATTENUAT	ION TANK DE	TAILS

Drawn By:	Checked By:	Approved By:	Date:	Scale:	Sheet Size	e:
KD	PD	DOB	AUG' 2017	1:25	A1	
Project Number:		Prawing Number:			Status Code:	Rev Numb
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