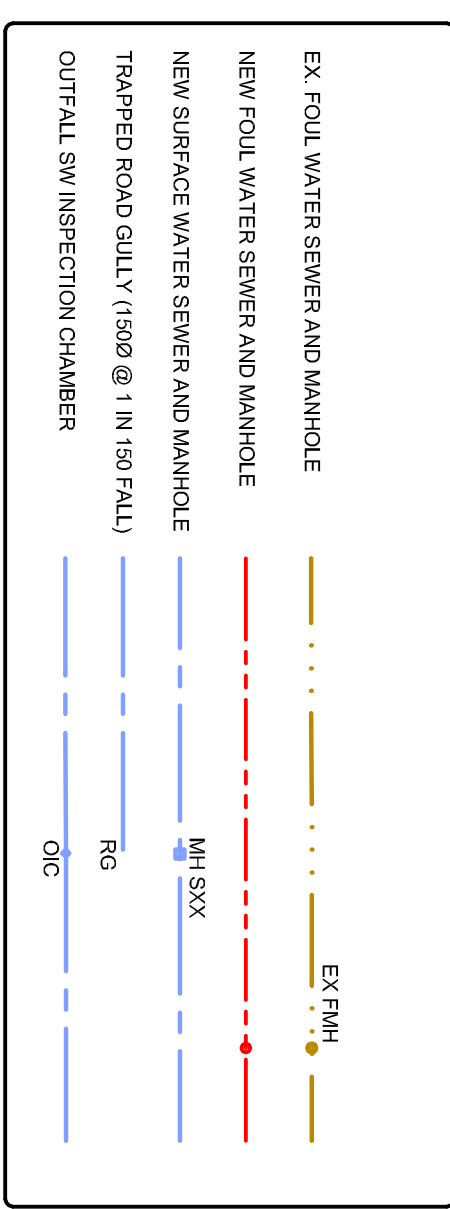
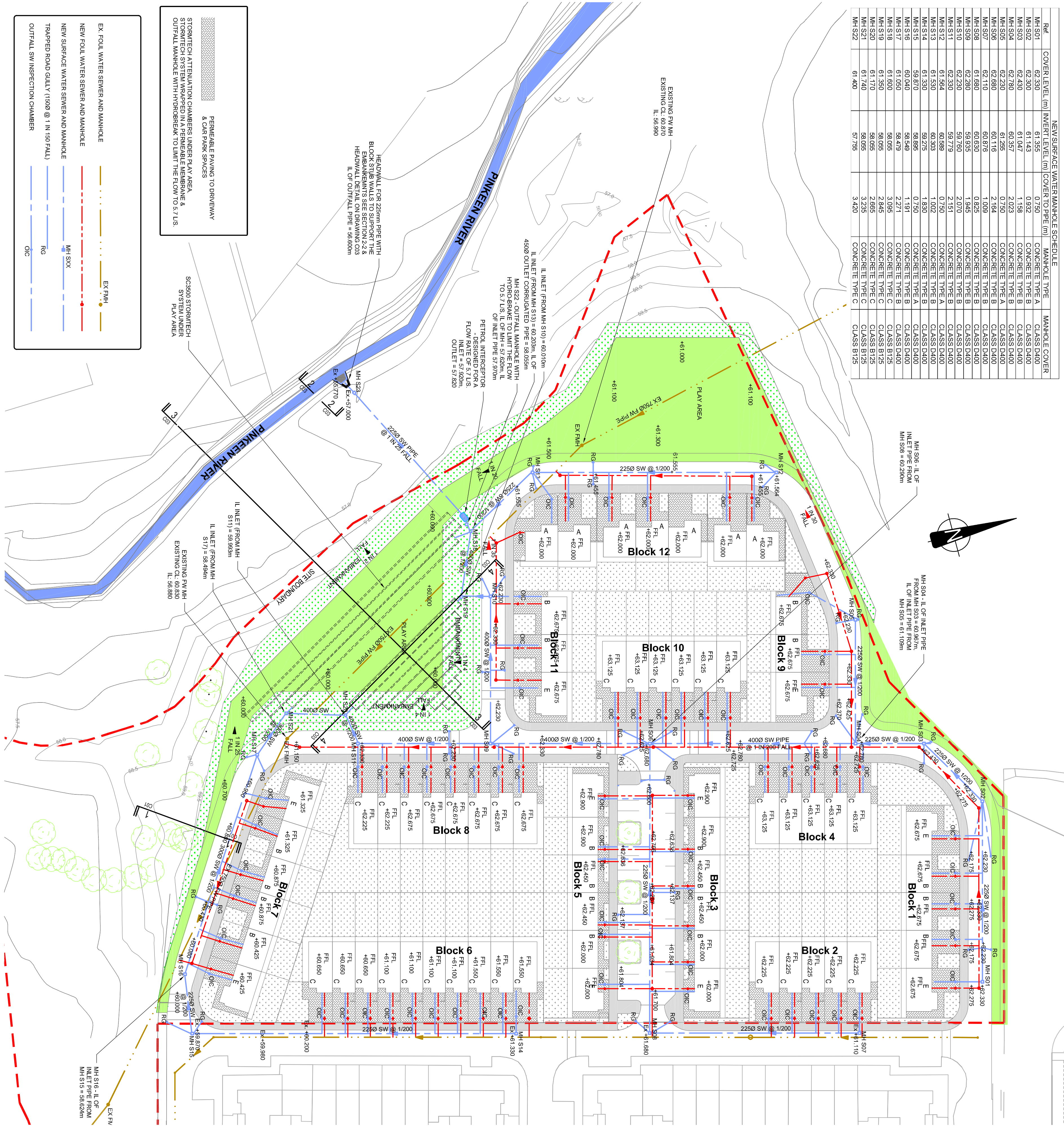


Ref	COVER LEVEL (m)	INVERT LEVEL (m)	MANHOLE TYPE	MANHOLE COVER
MH S01	62.500	61.935	CONCRETE TYPE A	CLASS D400
MH S02	62.400	61.840	CONCRETE TYPE A	CLASS D400
MH S03	62.400	61.840	CONCRETE TYPE B	CLASS D400
MH S04	62.280	61.720	CONCRETE TYPE B	CLASS D400
MH S05	62.280	61.720	CONCRETE TYPE A	CLASS D400
MH S06	62.160	61.600	CONCRETE TYPE B	CLASS D400
MH S07	62.160	61.600	CONCRETE TYPE A	CLASS D400
MH S08	62.040	61.480	CONCRETE TYPE B	CLASS D400
MH S09	62.040	61.480	CONCRETE TYPE A	CLASS D400
MH S10	61.920	61.360	CONCRETE TYPE B	CLASS D400
MH S11	61.920	61.360	CONCRETE TYPE A	CLASS D400
MH S12	61.800	61.240	CONCRETE TYPE B	CLASS D400
MH S13	61.800	61.240	CONCRETE TYPE A	CLASS D400
MH S14	61.680	61.120	CONCRETE TYPE B	CLASS D400
MH S15	61.680	61.120	CONCRETE TYPE A	CLASS D400
MH S16	61.560	61.000	CONCRETE TYPE B	CLASS D400
MH S17	61.560	61.000	CONCRETE TYPE A	CLASS D400
MH S18	61.440	60.880	CONCRETE TYPE B	CLASS D400
MH S19	61.440	60.880	CONCRETE TYPE A	CLASS D400
MH S20	61.320	60.760	CONCRETE TYPE B	CLASS D400
MH S21	61.320	60.760	CONCRETE TYPE A	CLASS D400
MH S22	61.200	60.640	CONCRETE TYPE B	CLASS D400
MH S23	61.200	60.640	CONCRETE TYPE A	CLASS D400



PERMEABLE PAVING TO DRIVEWAY & CAR PARK SPACES

STORMTECH ATTENUATION CHAMBERS UNDER PLAY AREA

STORMTECH SYSTEM WRAPPED IN PERMEABLE MEMBRANE & OPTIMAL MANHOLE WITH THROUGHSLAB TO LIMIT THE TOWN TO 3/1.5

HEADWALL FOR 225mm PIPE WITH BLOCK STYLE WALLS TO SUPPORT THE HEADWALLS UNDER SECTION 2 & HEADWALLS UNDER SECTION 3

IL OF OUTFALL PIPE = 60.600m

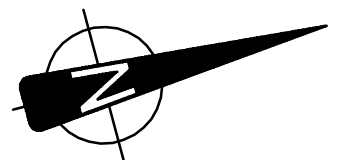
IL INLET (FROM MH S10) = 60.010m

IL INLET (FROM MH S13) = 60.205m, IL OF 4500 OUTLET CORRUGATED PIPE = 58.055m

MH S22 - OUTFALL MANHOLE WITH HYDRO-PNEUMATIC TANK (10.5/1.5) OF INLET PIPE 57.97m

PETROL INTERCEPTOR FLOW RATE OF 5.7 L/S, IL OF INLET PIPE 57.97m

DESIGNED FOR A FLOW RATE OF 5.7 L/S



SITE PLAN - SURFACE WATER DRAINAGE PLAN

SCALE 1:500

STORMWATER ATTENUATION:

TOTAL SITE AREA = 2.88 HECTARES

SITE ATTENUATED TO 2.0 UT/PERSECOND OR 5.7

FOR: 100 YEAR RETURN EVENT

MAXIMUM DISCHARGE FLOW RATE = 6.1 UT/PERSECOND

20% INCREASE IN ATTENUATION VOLUME FOR CLIMATE CHANGE

MAX ATTENUATE VOLUME REQUIRED = 720,000 L

ATTENUATE VOLUME PROVIDED = 731,100 L

GENERAL NOTES:

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS AND DRAWINGS AND SPECIFICATIONS.

DO NOT SCALE DIMENSIONS, REFER TO ARCHITECT'S DRAWINGS FOR ALL SETTING OUT DIMENSIONS. WORK TO FIGURED DIMENSIONS ONLY.

THE ENGINEER IS TO BE AFFORDED SUFFICIENT TIME TO CARRY OUT INSPECTION OF THE WORKS IN ACCORDANCE WITH THE PROJECT INSPECTION PLAN AND INSPECTION NOTIFICATION PROCEDURE.

ALL CONSTRUCTION PRODUCTS TO HAVE RELEVANT CE MARKING WHERE APPLICABLE.

ALL CONTRACTORS OR SUB-CONTRACTORS RESPONSIBLE FOR SPECIALIST DESIGN MUST PROVIDE PROFESSIONAL INDEPENDENT VERIFICATION CERTIFICATES FOR DESIGN AND ANGLICULAR VERIFICATION CERTIFICATES FOR INSPECTION IN ACCORDANCE WITH BOARD 2014.

GRANULAR MATERIAL

ALL GRANULAR FILL PLACED ON SITE MUST COMPLY WITH ISRI 2014 + A1319 AND S924201.

ALL GRANULAR FILL MUST BE ROLLED AND COMPACTED IN ACCORDANCE WITH SPECIFICATION FOR ROADWORKS.

THE CONTRACTOR MUST PROVIDE CERTIFICATES AND DELIVERY DOCKETS FOR ALL GRANULAR FILL MATERIAL PLACED ON SITE AND ALL MATERIAL PLACED DISPOSAL OFF SITE.

DRAINAGE

ALL DRAINAGE WORK TO BE CARRIED OUT IN ACCORDANCE WITH IS 754:2006 AND 150 PART 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

ALL 150mm CLASS CONCRETE BED A SURROUND TO BE PROVIDED TO ALL SEWER PIPELINES UNDER ROADS, VERGES AND FOOTPATHS.

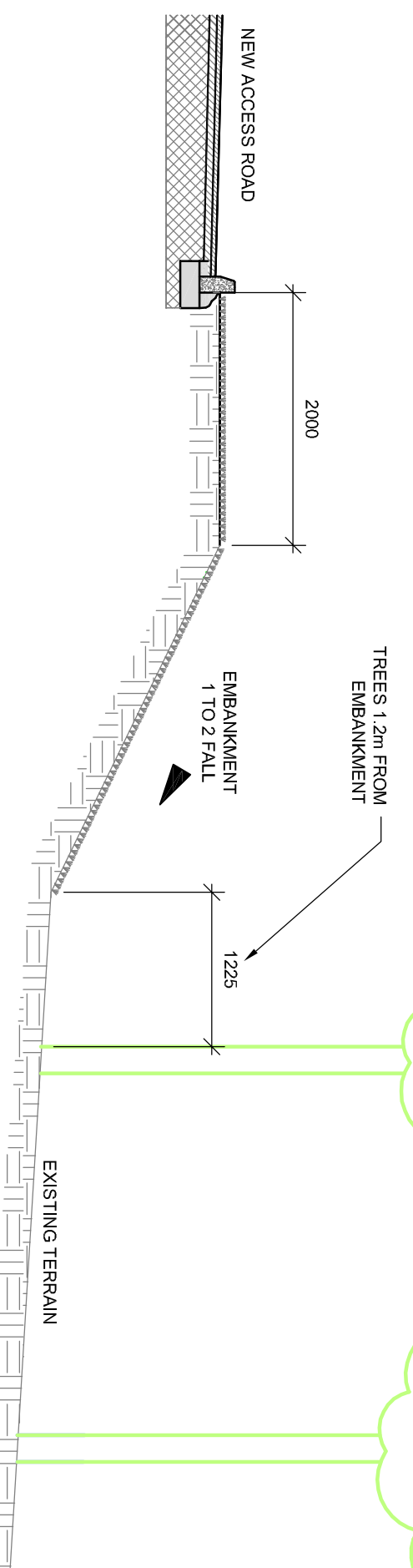
BACKFILL FOR ALL JWC PIPES TO BE FREE FROM STONE EXCEEDING 50mm FOR 300mm ABOVE GRANULAR SURROUND.

ALL REINSTATEMENT WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY.

ALL MANHOLES COVERS AND FRAME ARE TO BE CLASS B125 & D400 TO BS EN 124 UNO.

INSPECTION CHAMBERS ARE TO BE CONSTRUCTED IN ACCORDANCE TO IRIH/WATERWATER STANDARD DETAILS DRAWING STD-WW-13.

SEWER PIPE LINES TO BE TO IW SPEC AND INCLUDING 3000 TO IS 125 ON INSPECTION CHAMBERS AND SURROUND LAND STRICTLY TO MANUFACTURERS INSTRUCTIONS.



SECTION 1-1

SCALE 1:50

Rev	Date	By	Check	Description	Issue for Part 8 Submission
P1	26-10-2019	POC	X		

LOHAN & DONNELLY
Consulting Engineers

13 Gardiner Place, Mountjoy Square, Dublin 1. T. 01 8787770
W. www.lohan-donnelly.com E. info@lohan-donnelly.com

Job:	Housing Development Churchfields, Mulhuddart, Dublin	Scale:	@A1	Drawn:	Oct '19
Client:		Checked:		Reviewed:	
Project:	Surface Water Drainage Plan	Author:		Approved:	