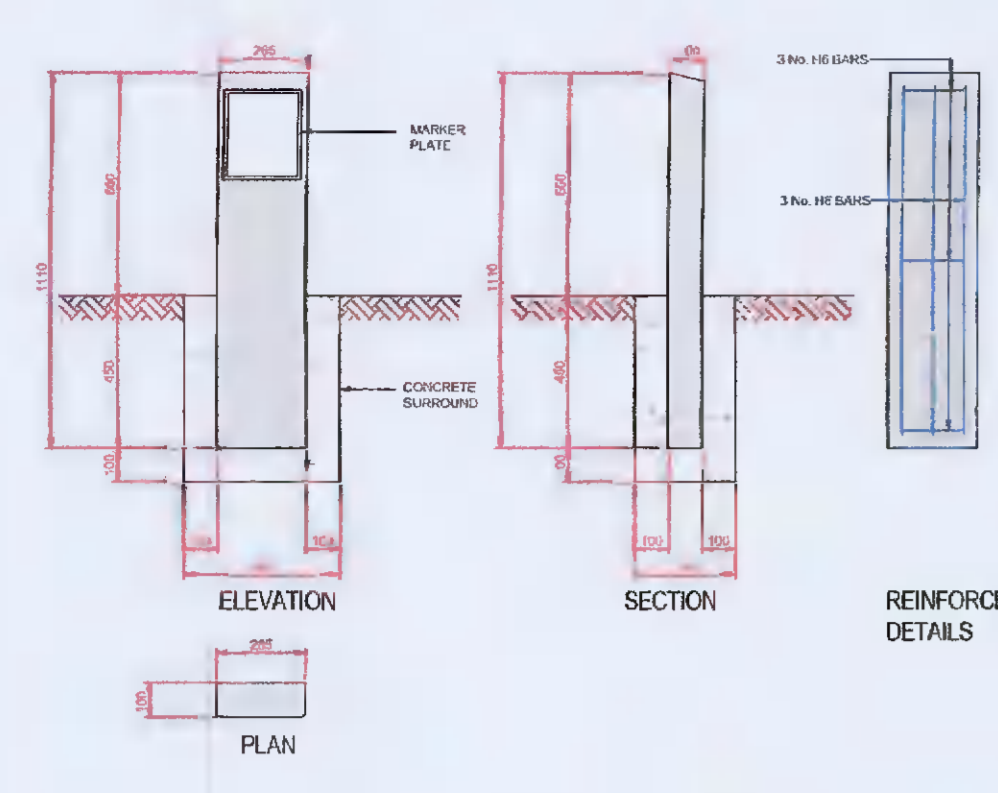
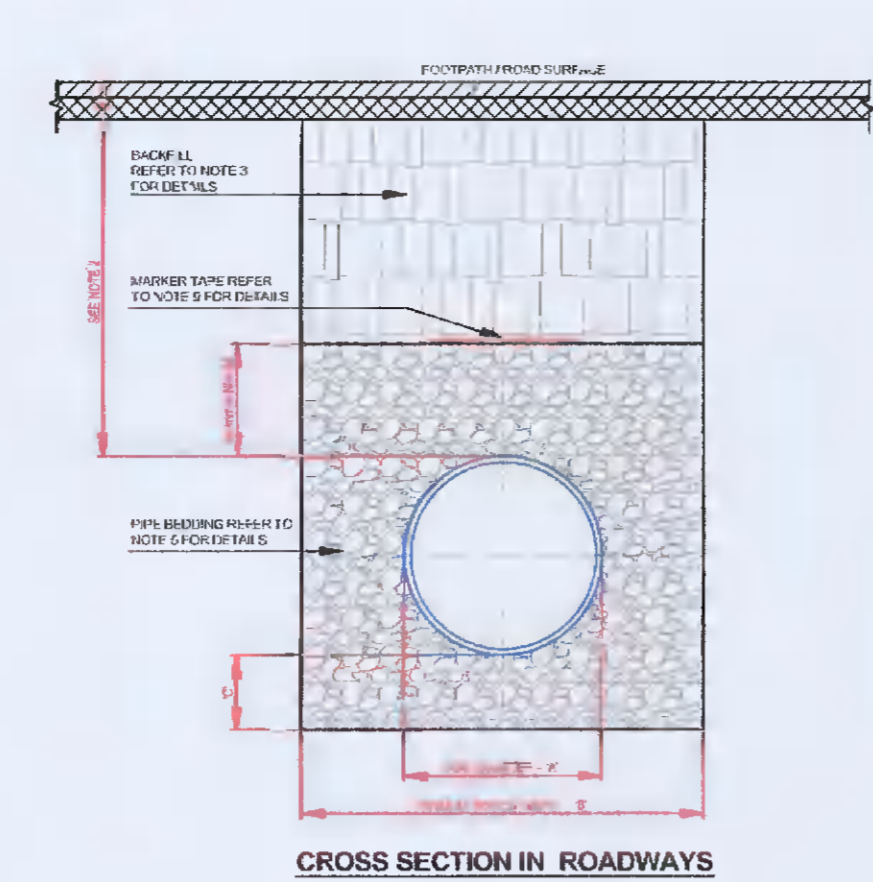


**GENERAL NOTES:**

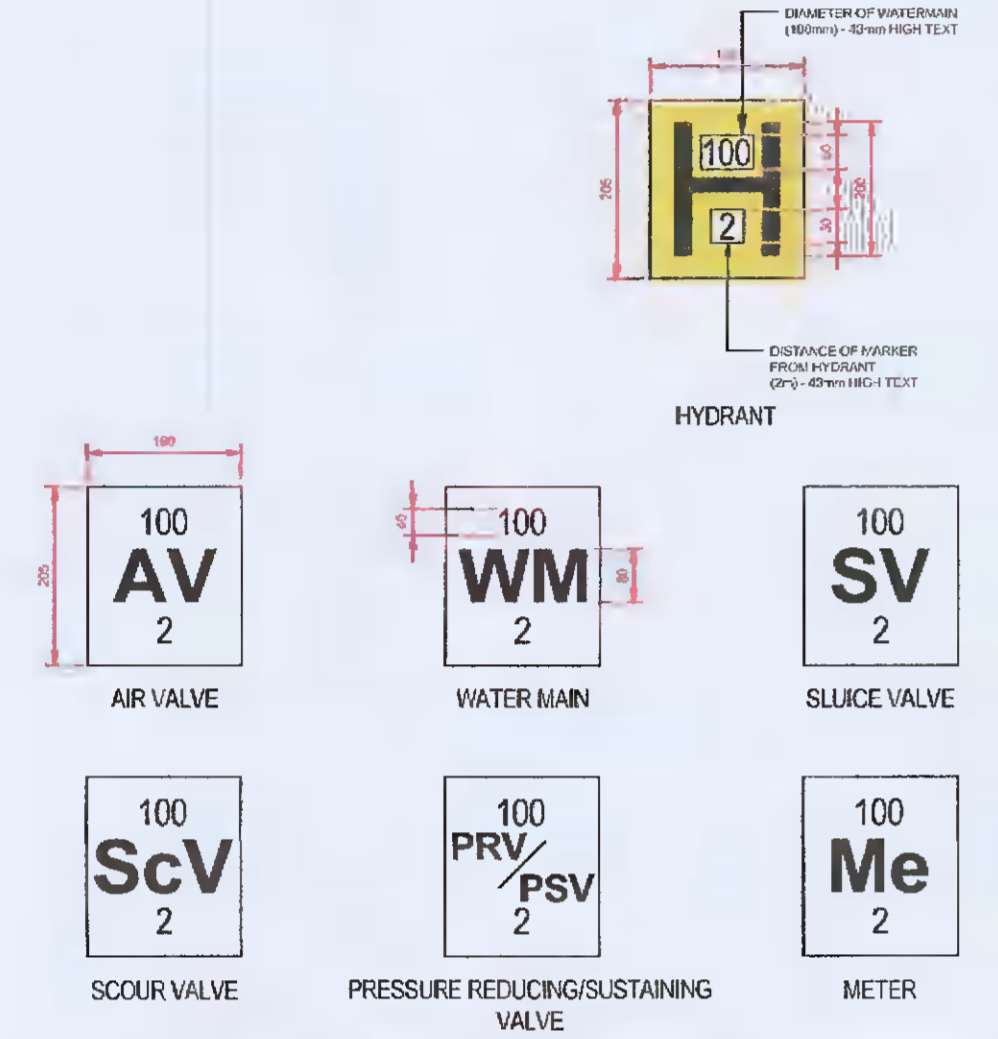
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEERS DRAWINGS AND SPECIFICATIONS.
- USE FIGURED DIMENSIONS ONLY. DO NOT SCALE
- ALL FFL AND SSL TO BE CONFIRMED BY ARCHITECT
- ALL DPC'S, DPM'S, RADON BARRIERS, INSULATION AND ALL WEATHERING DETAILS TO ARCHITECT'S DRAWINGS & SPECIFICATIONS
- 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
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL SITE & APPLICATION BOUNDARIES



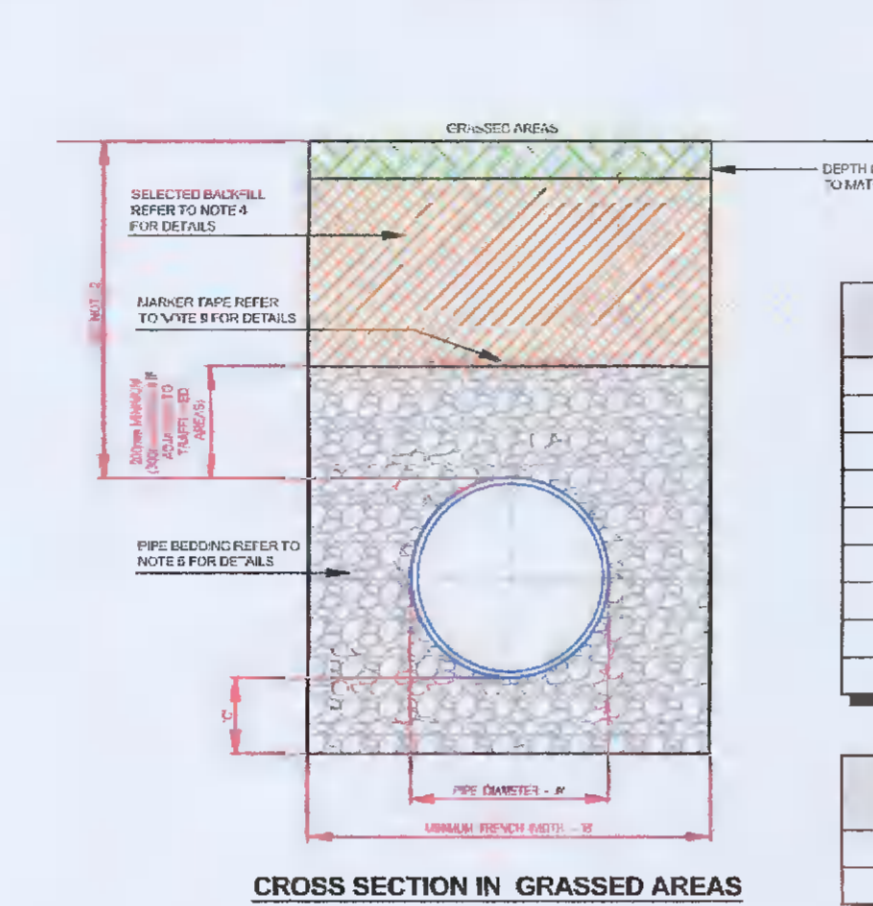
- WHERE PRACTICAL MARKER PLATES SHALL BE FABRICATED IN ALUMINIUM OR GALVANIZED STEEL TO MATCH THE FINISH OF THE SURROUNDING SURFACE.
- IF THE MARKER IS TO BE USED IN A ROAD OR DRIVEWAY THE MARKER SHALL BE FABRICATED IN ALUMINIUM OR GALVANIZED STEEL TO MATCH THE FINISH OF THE SURROUNDING SURFACE.
- MARKER PLATES TO BE FABRICATED IN ACCORDANCE WITH BS 589.
- FOR HORIZONTAL MARKER PLATES THE MARKER SHALL BE BLACK AND FOR VERTICAL MARKER PLATES THE MARKER SHALL BE WHITE. THE MARKER SHALL BE 100mm HIGH AND 100mm WIDE.
- PIPE DIMENSIONS TO BE IN ACCORDANCE WITH THE SPECIFICATION OF THE MANUFACTURER.
- SLICE VALVE APPLICABLE TO 100mm DIA. SLICE VALVE SHALL BE 100mm DIA. SLICE VALVE SHALL BE 100mm DIA. SLICE VALVE SHALL BE 100mm DIA.
- CONCRETE SURROUND TO BE 100mm DIA. CONCRETE SURROUND TO BE 100mm DIA. CONCRETE SURROUND TO BE 100mm DIA.
- PLASTIC MARKER POSTS ARE NOT ACCEPTABLE.
- ALL CONCRETE TO BE IN ACCORDANCE WITH EN 12620.



- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- THE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE CENTRE OF THE PIPE SHALL BE 100mm FOR SERVICE CONNECTIONS. 150mm FOR WATER MAINS. GREATER DEPTHS OF COVER MAY BE REQUIRED WHERE HIGH TRAFFIC LOADS OR UNUSUAL CONDITIONS APPLY. THE MINIMUM COVER SHALL NOT BE LESS THAN 100mm WHERE PRACTICABLE.
- ALL TYPES OF COVER OR ROAD SURFACING SHALL BE LAID ON A BED OF MATERIAL WHERE THE ROAD SURFACING IS LOCATED IMMEDIATELY ABOVE THE PIPE. THE BED SHALL BE 100mm THICK AND SHALL BE COMPACTED TO THE FULL DEPTH OF THE ROAD SURFACING. THE BED SHALL BE LAID ON A BED OF MATERIAL WHERE THE ROAD SURFACING IS LOCATED IMMEDIATELY ABOVE THE PIPE. THE BED SHALL BE 100mm THICK AND SHALL BE COMPACTED TO THE FULL DEPTH OF THE ROAD SURFACING.
- SELECTED REINFORCING MATERIAL MAY BE USED IN ROAD SURFACING ABOVE GRADE OR IN PIPE SURROUNDING MATERIAL. SUBJECT TO THE APPROVAL OF THE ENGINEER.
- PIPE BEDDING SHALL COMPLY WITH EN 12454-4:2004 AND EN 12454-5:2004. CONCRETE BEDDING SHALL BE 100mm THICK AND SHALL BE COMPACTED TO THE FULL DEPTH OF THE ROAD SURFACING. THE BED SHALL BE LAID ON A BED OF MATERIAL WHERE THE ROAD SURFACING IS LOCATED IMMEDIATELY ABOVE THE PIPE. THE BED SHALL BE 100mm THICK AND SHALL BE COMPACTED TO THE FULL DEPTH OF THE ROAD SURFACING.
- PIPE BEDDING SHALL NOT BE SUBSTITUTED BY OTHER MATERIAL UNLESS APPROVED BY THE ENGINEER. PIPE BEDDING SHALL NOT BE SUBSTITUTED BY OTHER MATERIAL UNLESS APPROVED BY THE ENGINEER. PIPE BEDDING SHALL NOT BE SUBSTITUTED BY OTHER MATERIAL UNLESS APPROVED BY THE ENGINEER.
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- DIAMETER OF WATERMAIN (mm) - 100mm HIGH TEXT
- DISTANCE OF MARKER FROM HYDRANT (mm) - 40mm HIGH TEXT
- 100 AV 2 AIR VALVE
- 100 WM 2 WATER MAIN
- 100 SV 2 SLICE VALVE
- 100 WO 2 WASHOUT HYDRANT
- 100 ScV 2 SCOUR VALVE
- 100 PRV/psv 2 PRESSURE REDUCING/SUSTAINING VALVE
- 100 Me 2 METER



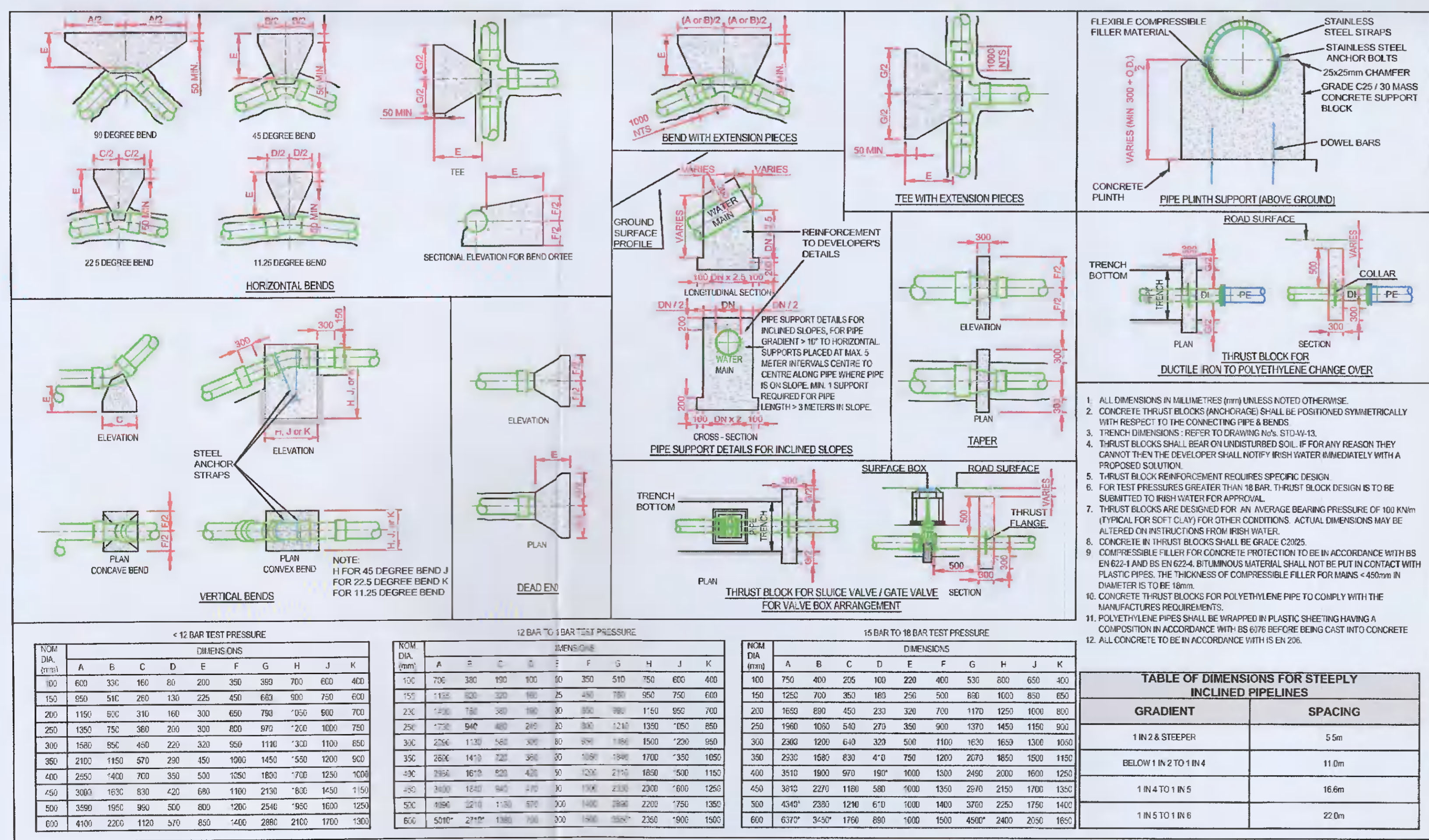
PIPE DIAMETER 'A' (mm)	TRENCH WIDTH 'B' (mm)
40	100
50	100
75	100
100	100
125	100
150	100
200	100
250	100
300	100
350	100
400	100

PIPE DIAMETER 'A' (mm)	DEPTH OF BEDDING 'C' (mm)
40	50
50	50
75	50
100	50
125	50
150	50
200	50
250	50
300	50
350	50
400	50

TYPICAL IRISH WATER DETAIL FOR MARKER POSTS / PLATES - NTS

TYPICAL IRISH WATER DETAIL FOR BACKFILLING AND BEDDING - NTS



< 12 BAR TEST PRESSURE

ROD DIA (mm)	A	B	C	D	E	F	G	H	J	K
100	600	330	160	80	200	350	389	700	600	400
150	950	510	260	130	225	450	600	900	750	600
200	1150	600	310	160	300	650	790	1050	900	700
250	1350	750	380	200	300	800	970	1200	1000	750
300	1500	850	450	220	320	950	1100	1300	1100	850
350	1650	950	520	250	350	1100	1250	1450	1200	950
400	1800	1050	600	280	380	1250	1400	1600	1300	1050
450	1950	1150	680	310	410	1400	1550	1750	1400	1150
500	2100	1250	760	340	440	1550	1700	1900	1500	1250
550	2250	1350	840	370	470	1700	1850	2050	1600	1350
600	2400	1450	920	400	500	1850	2000	2200	1700	1450

12 BAR TO 16 BAR TEST PRESSURE

ROD DIA (mm)	A	B	C	D	E	F	G	H	J	K
100	700	380	190	100	30	350	510	750	600	400
150	1100	520	270	140	75	430	780	950	750	600
200	1300	700	360	190	30	500	980	1150	950	700
250	1500	840	440	240	20	600	1210	1350	1050	800
300	1700	1120	520	300	30	690	1460	1500	1200	950
350	1850	1410	600	360	30	780	1710	1700	1350	1050
400	2000	1610	680	420	30	870	2110	1850	1500	1150
450	2150	1810	760	480	30	960	2310	2000	1600	1250
500	2300	2010	840	540	30	1050	2510	2150	1700	1350
550	2450	2210	920	600	30	1140	2710	2300	1800	1450
600	2600	2410	1000	660	30	1230	2910	2450	1900	1550

15 BAR TO 18 BAR TEST PRESSURE

ROD DIA (mm)	A	B	C	D	E	F	G	H	J	K
100	750	400	200	100	220	400	530	800	650	400
150	1250	700	350	140	250	500	680	1000	850	650
200	1650	890	450	230	320	700	1170	1250	1000	800
250	1950	1050	540	270	350	900	1370	1450	1150	900
300	2260	1200	630	320	500	1100	1620	1650	1300	1050
350	2530	1480	730	360	550	1290	1840	1900	1500	1150
400	2850	1610	820	420	600	1490	2110	2150	1650	1250
450	3100	1810	910	480	650	1690	2360	2400	1800	1350
500	3360	2010	1000	540	700	1890	2610	2650	1950	1450
550	3610	2210	1090	600	750	2090	2860	2900	2100	1550
600	3870	2410	1180	660	800	2290	3110	3150	2200	1650

TABLE OF DIMENSIONS FOR STEEPLY INCLINED PIPELINES

GRADIENT	SPACING
1 IN 2 & STEEPER	5.0m
BELOW 1 IN 2 TO 1 IN 4	11.0m
1 IN 4 TO 1 IN 5	16.6m
1 IN 5 TO 1 IN 6	22.0m

PLANNING ISSUE

S4.P01	ISSUED FOR PLANNING	15.02.2022	TN	RK
Rev.	Note	Date	Drawn	Check
		UNIT 5C ELM HOUSE MILLENNIUM PARK NAAS CO. KILDARE		
Client: DUBLIN & DUN LAOGHAIRE ETB		Project: LUCAN COMMUNITY COLLEGE		
Drawing Title: TYPICAL WATERMAIN DETAILS SHEET 3 OF 3				
Drawn By: IK	Checked By: TN	Approved By: DOB	Date: SEPT '19	Scale: NTS
Project Number: DOBA1446	Drawing Number: LCC-DOB- XX-SI- DR-C-0012C	Status Code: S4	Rev Number: P01	Sheet Size: A1