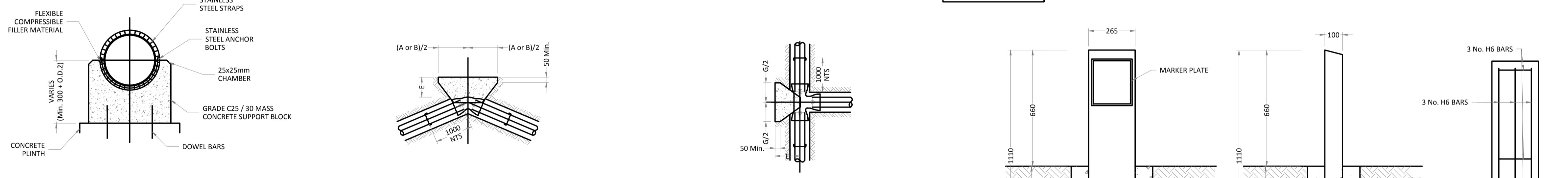


- THRUST BLOCKS NOTES:**
- CONCRETE THRUST BLOCKS (ANCHORAGE) SHALL BE POSITIONED SYMMETRICALLY WITH RESPECT TO THE CONNECTING PIPE & BENDS.
  - TRENCH DIMENSIONS: REFER TO DRAWING No's. STD-W-13.
  - THRUST BLOCKS SHALL BEAR ON UNDISTURBED SOIL. IF FOR ANY REASON THEY CAN NOT THEN THE DEVELOPER SHALL NOTIFY IRISH WATER IMMEDIATELY WITH A PROPOSED SOLUTION.
  - THRUST BLOCK REINFORCEMENT REQUIRES SPECIFIC DESIGN.
  - FOR TEST PRESSURES GREATER THAN 18 BAR, THRUST BLOCK DESIGN IS TO BE SUBMITTED TO IRISH WATER FOR APPROVAL.
  - THRUST BLOCKS ARE DESIGNED FOR AN AVERAGE BEARING PRESSURE OF 100 KN/m<sup>2</sup> (TYPICAL FOR SOFT CLAY) FOR OTHER CONDITIONS. ACTUAL DIMENSIONS MAY BE ALTERED ON INSTRUCTIONS FROM IRISH WATER.
  - CONCRETE IN THRUST BLOCKS SHALL BE GRADE C20/25.
  - COMPRESSIBLE FILLER FOR CONCRETE PROTECTION TO BE IN ACCORDANCE WITH BS EN622-1 AND BS EN 622-4. BITUMINOUS MATERIAL SHALL NOT BE PUT IN CONTACT WITH PLASTIC PIPES. THE THICKNESS OF COMPRESSIBLE FILLER FOR MAINS < 450mm IN DIAMETER IS TO BE 18mm.
  - CONCRETE THRUST BLOCKS FOR POLYETHYLENE PIPE TO COMPLY WITH THE MANUFACTURERS REQUIREMENTS.
  - POLYETHYLENE PIPES SHALL BE WRAPPED IN PLASTIC SHEETING HAVING A COMPOSITION IN ACCORDANCE WITH BS 6076 BEFORE BEING CAST INTO CONCRETE.

**HORIZONTAL BENDS**      **DEAD END**      **VERTICAL BENDS**      **MARKER POSTS / PLATES**



**NOTES:**  
H FOR 45 DEGREE BEND  
J FOR 22.5 DEGREE BEND  
K FOR 11.25 DEGREE BEND

- MARKER POSTS NOTES:**
- WHERE PRACTICAL MARKER PLATES SHALL BE FIXED TO ADJACENT WALLS OR ALTERNATIVELY ATTACHED TO MARKER POSTS. PLATES TO BE FIXED IN POSITION USING WALL PLUGS AND STAINLESS STEEL SCREWS.
  - MARKER PLATES TO BE MANUFACTURED IN ACCORDANCE WITH BS 3251.
  - FOR HYDRANT PLATE ALL CHARACTERS SHOULD BE BLACK AND THE REMAINDER OF THE FRONT FACE SHOULD CONFORM TO COLOUR REFERENCE No. 309 (CANARY YELLOW) OF BS 381C.
  - PIPE DIAMETER ON HYDRANT PLATE TO REFER TO WATERMAIN NOT BRANCH.
  - SLUICE VALVE, AIR VALVE, SCOUR VALVE, WASHOUT HYDRANT AND METER PLATES SHOULD BE CAST IRON. ALL CHARACTERS SHOULD BE BLACK ON WHITE PAINT BACKGROUND.
  - CONCRETE SURROUND TO MARKER POST TO BE GRADE C25/30 AND IN ACCORDANCE WITH IS EN 206/2013
  - PLASTIC MARKER POSTS ARE NOT ACCEPTABLE.

**THRUST BLOCKS TABLES:**

NOM. DIA. (mm)	DIMENSIONS										
	A	B	C	D	E	F	G	H	J	K	
100	600	330	160	80	200	350	390	700	600	400	
150	950	510	260	130	225	450	660	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	1580	850	450	220	320	950	1110	1300	1100	850	
350	2100	1150	570	290	450	1000	1450	1550	1200	900	
400	2550	1400	700	350	500	1050	1800	1700	1250	1000	
450	3000	1650	830	420	600	1100	2100	1800	1450	1150	
500	3590	1950	990	500	800	1200	2540	1950	1600	1250	
600	4100	2200	1120	570	850	1400	2880	2100	1700	1300	

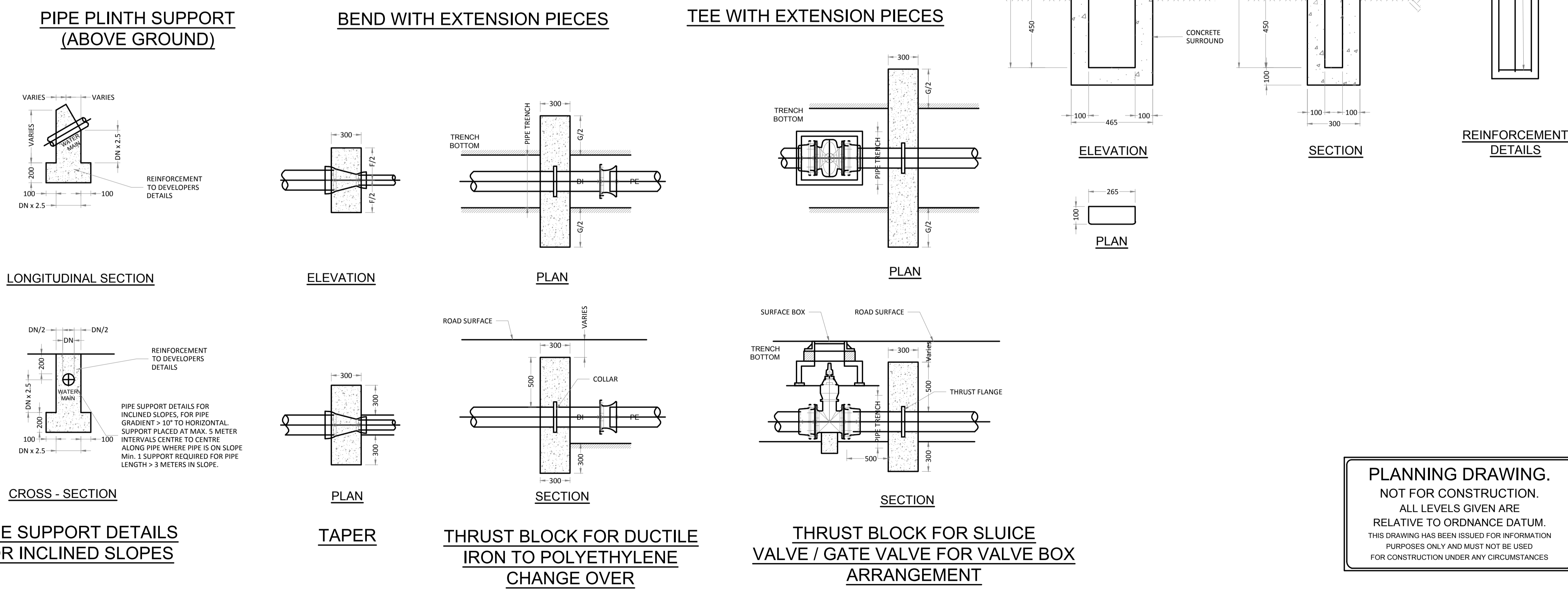
NOM. DIA. (mm)	DIMENSIONS										
	A	B	C	D	E	F	G	H	J	K	
100	700	380	190	100	200	350	510	750	600	400	
150	1135	620	310	160	225	450	760	950	750	600	
200	1400	750	380	190	300	650	980	1150	950	700	
250	1730	940	480	240	320	800	1210	1350	1050	850	
300	2090	1130	580	300	380	950	1480	1500	1200	950	
350	2400	1410	720	360	500	1050	1840	1700	1350	1050	
400	2980	1610	820	420	750	1200	2110	1850	1500	1150	
450	3400	1840	940	470	900	1300	2330	2000	1600	1250	
500	4090	2210	1130	570	1000	1400	2890	2200	1750	1350	
600	5010	2710	1380	700	1000	1500	3550	2350	1900	1500	

NOM. DIA. (mm)	DIMENSIONS										
	A	B	C	D	E	F	G	H	J	K	
100	750	400	205	100	220	400	530	800	650	400	
150	1250	700	350	180	250	500	890	1000	850	650	
200	1650	890	450	230	320	700	1170	1250	1000	800	
250	1960	1060	540	270	350	900	1370	1450	1150	900	
300	2300	1200	640	320	500	1100	1630	1650	1300	1050	
350	2930	1580	830	410	750	1200	2070	1850	1500	1150	
400	3510	1900	970	190	1000	1300	2490	2000	1600	1250	
450	3810	2270	1160	580	1000	1350	2970	2150	1700	1350	
500	4340	2380	1210	610	1000	1400	3700	2250	1750	1400	
600	6370	3450	1760	890	1000	1500	4500	2400	2050	1650	

**TABLE OF DIMENSIONS FOR STEEPLY INCLINED PIPELINES**

GRADIENT	SPACING
1 IN 2 & STEEPER	5.5m
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



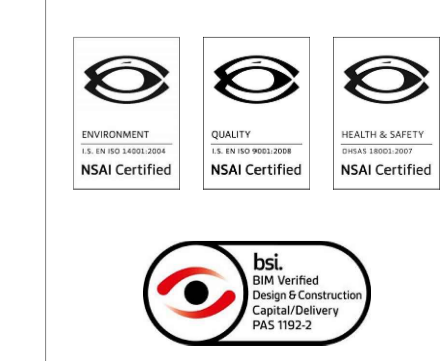
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Rev No.	Date	Revision Note	Drn by	Chkd by
C01	24.04.19	SUITABLE FOR PLANNING	DOM	MK
C02	22.10.2019	STAGE COMPLETE - PLANNING	MK	PR

Rev No.	Date	Revision Note	Drn by	Chkd by



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Client: GLENVEAGH HOMES LIMITED  
Project: RESIDENTIAL DEVELOPMENT CARPENTERSTOWN ROAD  
Title: PROPOSED WATERMAIN STANDARD DETAILS 2

Code	Originator	Zone	Level	Type	Role	Number	Status	Revision
G451	OCSC	XX	XX	DR	C	0552	A1	C02

Date: 24.04.19 Scale: NTS @ A1 Drn by: DOM Chkd by: MK Aprvd by: AOB