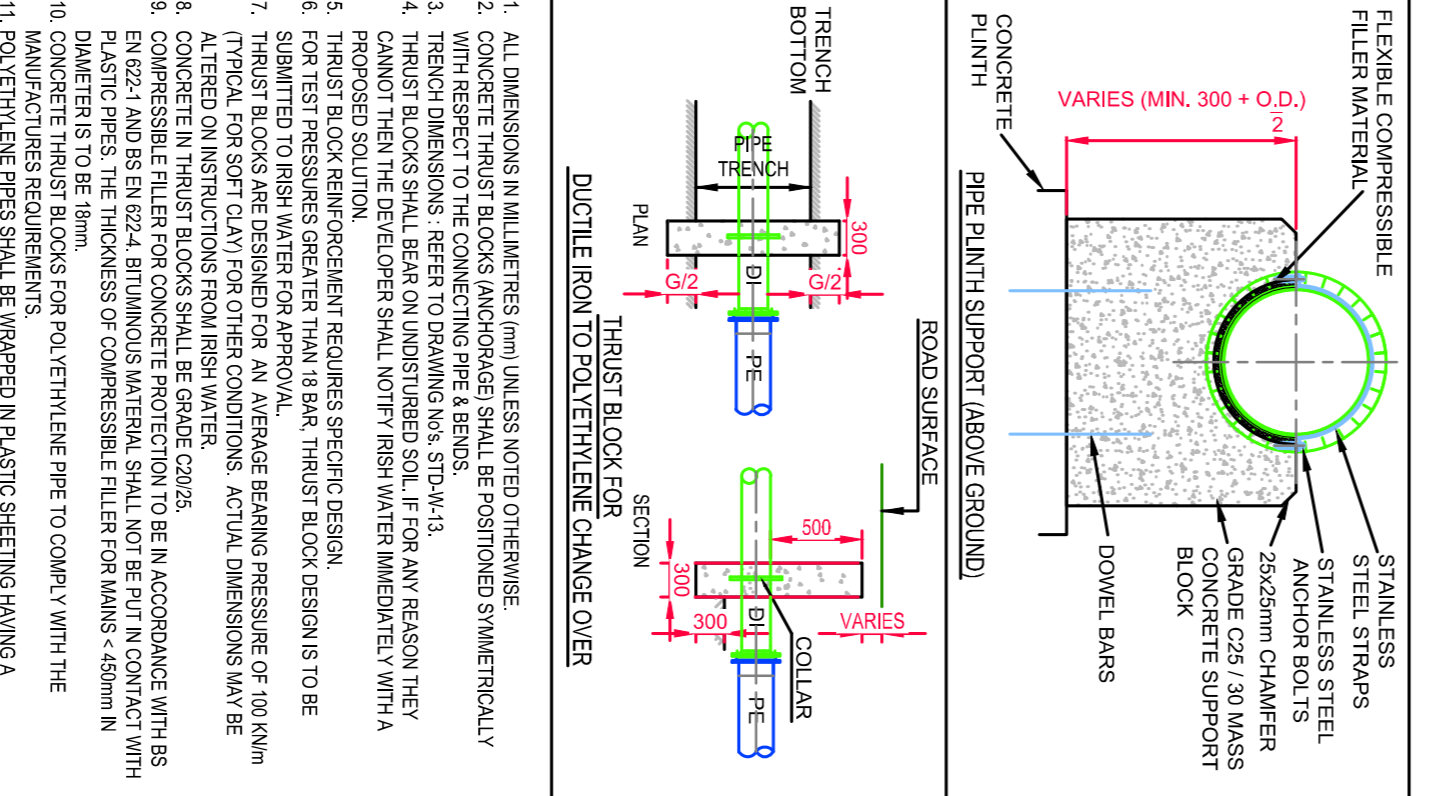
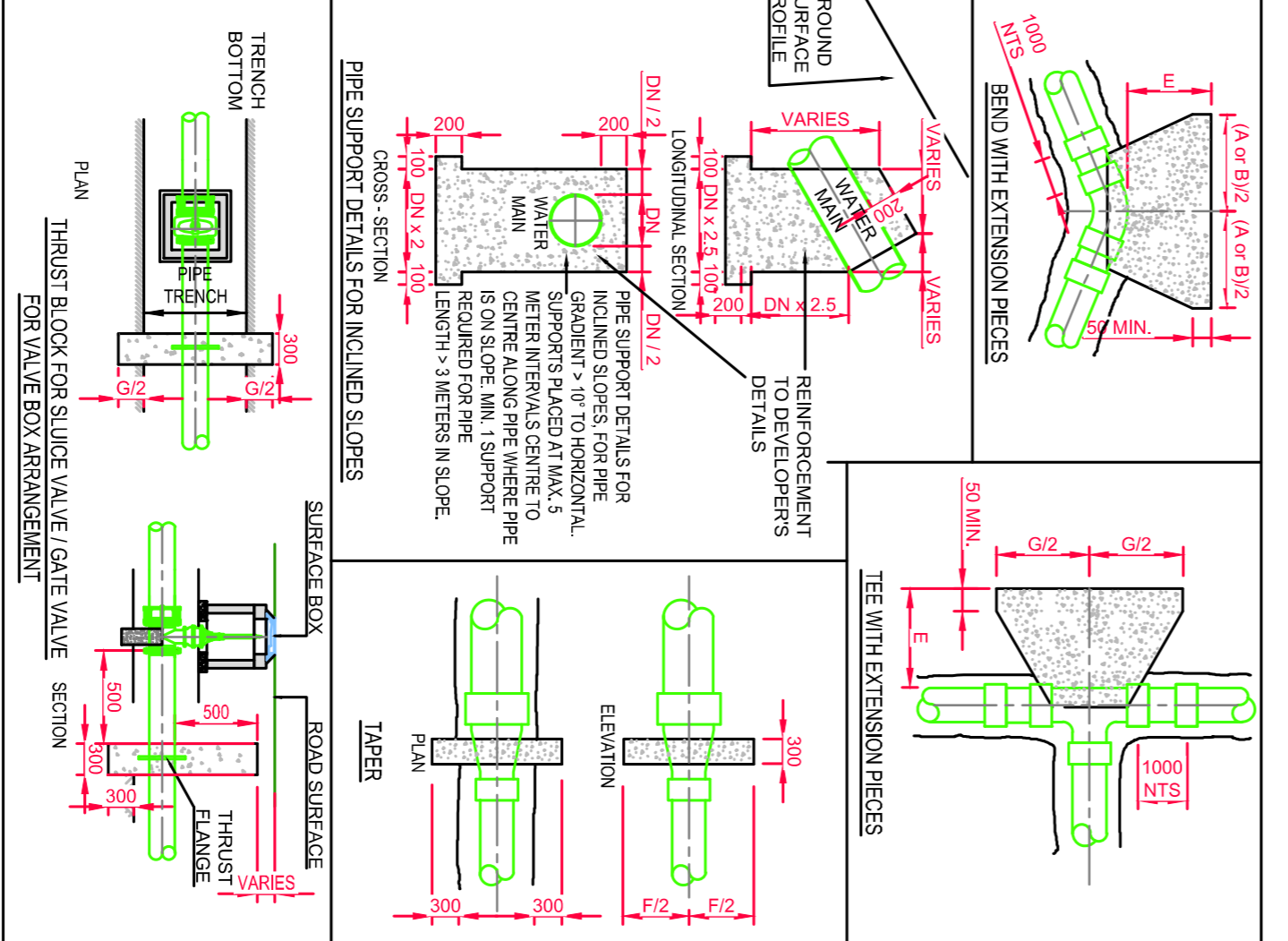
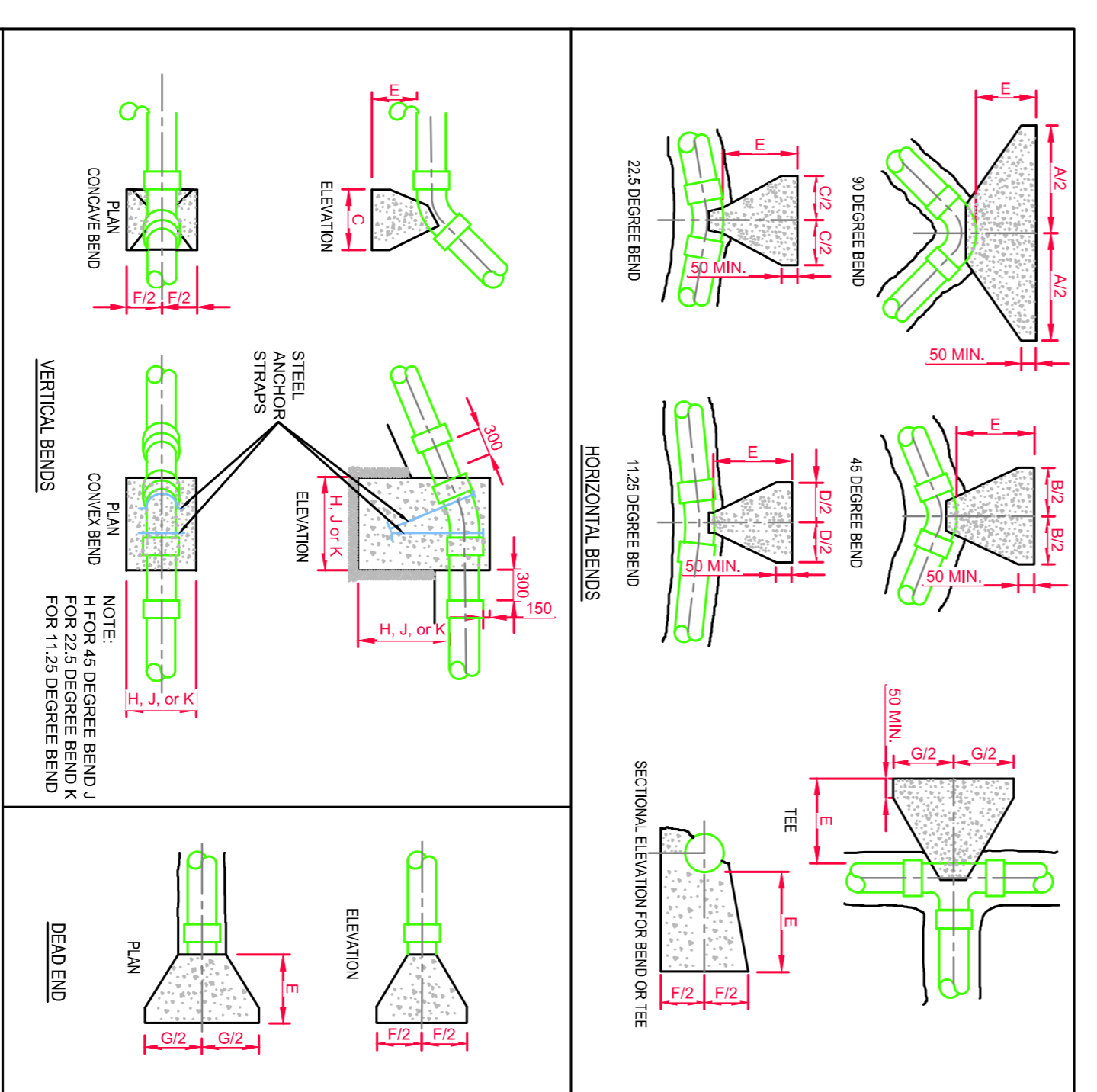


TYPICAL IRISH WATER DETAIL FOR BACKFILLING AND BEDDING - NTS



1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

2. CONCRETE THRUST BLOCKS (ANCHORAGE) SHALL BE POSITIONED SYMMETRICALLY TO THE PIPE

3. THRUST BLOCKS SHALL BE MADE OF 20MPa CONCRETE

4. THRUST BLOCKS SHALL BEAR ON UNDISTURBED SOIL. IF FOR ANY REASON THEY CANNOT THEN THE BEDDER SHALL NOTIFY IRISH WATER IMMEDIATELY WITH A WRITTEN REPORT

5. THRUST BLOCK REINFORCEMENT REQUIRES SPECIFIC DESIGN

6. FOR TEST PRESSURES GREATER THAN 18 BAR, THRUST BLOCK DESIGNS TO BE SUBMITTED TO IRISH WATER FOR APPROVAL

7. TYPICAL FOR SOFT CLAY FROM OTHER CONDITIONS. ACTUAL DIMENSIONS MAY BE ALTERED ON INSTRUCTIONS FROM IRISH WATER

8. CONCRETE IN THRUST BLOCKS SHALL BE GRADE C35

9. REINFORCEMENT SHALL BE IN ACCORDANCE WITH BS 8862

10. DIMENSIONS TO BE THE THICKNESS OF COMPRESSIBLE FILLER FOR MANHOLES <math>450mm</math> IN DIAMETER TO BE THE THICKNESS OF COMPRESSIBLE FILLER TO COMPLY WITH THE MANUFACTURER'S REQUIREMENTS

11. POLYETHYLENE PIPES SHALL BE WRAPPED IN PLASTIC SHEETING HAVING A PERMEABILITY OF <math>10^{-10}</math> IN ACCORDANCE WITH BS 8862

12. ALL DIMENSIONS TO BE IN ACCORDANCE WITH BS 8862

FOR INFORMATION ONLY

|        |                        |          |       |       |
|--------|------------------------|----------|-------|-------|
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| Rev    | Note                   | Date     | Drawn | Check |

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Client: KILDARE COUNTY COUNCIL  
 Project: PROPOSED CIVIC AMENITY CENTRE AT KILMACREDDOCK  
 Drawing Title: TYPICAL WATERMAIN DETAILS SHEET 3 OF 3  
 Drawn By: [Name] Checked By: [Name] Date: 03.09.2018 Scale: NOT TO SCALE  
 Project Number: DOBA1701 Drawing Number: CVANY-DOB-XX-SI-DR-C-0132 Status Code: S2 Sheet Size: A1 Rev Number: P02

< 12 BAR TEST PRESSURE

| NOTED DIMENSIONS (mm) | A    | B    | C   | D   | E   | F    | G    | H    | J    | K |
|-----------------------|------|------|-----|-----|-----|------|------|------|------|---|
| 100                   | 600  | 350  | 160 | 80  | 200 | 300  | 700  | 600  | 400  |   |
| 150                   | 850  | 510  | 230 | 120 | 275 | 450  | 900  | 750  | 600  |   |
| 200                   | 1100 | 660  | 310 | 160 | 350 | 600  | 1050 | 900  | 700  |   |
| 250                   | 1350 | 810  | 390 | 200 | 425 | 750  | 1200 | 1050 | 850  |   |
| 300                   | 1600 | 960  | 470 | 240 | 500 | 900  | 1350 | 1200 | 950  |   |
| 350                   | 1850 | 1110 | 550 | 280 | 575 | 1050 | 1500 | 1350 | 1050 |   |
| 400                   | 2100 | 1260 | 630 | 320 | 650 | 1200 | 1650 | 1500 | 1150 |   |
| 450                   | 2350 | 1410 | 710 | 360 | 725 | 1350 | 1800 | 1650 | 1250 |   |
| 500                   | 2600 | 1560 | 790 | 400 | 800 | 1500 | 1950 | 1800 | 1350 |   |
| 550                   | 2850 | 1710 | 870 | 440 | 875 | 1650 | 2100 | 1950 | 1450 |   |
| 600                   | 3100 | 1860 | 950 | 480 | 950 | 1800 | 2250 | 2100 | 1550 |   |

12 BAR TO 15 BAR TEST PRESSURE

| NOTED DIMENSIONS (mm) | A    | B    | C   | D   | E   | F    | G    | H    | J    | K    |
|-----------------------|------|------|-----|-----|-----|------|------|------|------|------|
| 100                   | 700  | 380  | 180 | 100 | 200 | 300  | 510  | 750  | 600  | 400  |
| 150                   | 950  | 530  | 260 | 140 | 275 | 450  | 760  | 950  | 750  | 600  |
| 200                   | 1200 | 680  | 340 | 200 | 350 | 600  | 960  | 1150 | 950  | 700  |
| 250                   | 1450 | 830  | 420 | 240 | 425 | 750  | 1170 | 1350 | 1000 | 800  |
| 300                   | 1700 | 980  | 500 | 280 | 500 | 900  | 1380 | 1550 | 1150 | 900  |
| 350                   | 1950 | 1130 | 580 | 320 | 575 | 1050 | 1590 | 1750 | 1300 | 950  |
| 400                   | 2200 | 1280 | 660 | 360 | 650 | 1200 | 1800 | 1950 | 1450 | 1050 |
| 450                   | 2450 | 1430 | 740 | 400 | 725 | 1350 | 2010 | 2150 | 1600 | 1150 |
| 500                   | 2700 | 1580 | 820 | 440 | 800 | 1500 | 2220 | 2350 | 1750 | 1250 |
| 550                   | 2950 | 1730 | 900 | 480 | 875 | 1650 | 2430 | 2550 | 1900 | 1350 |
| 600                   | 3200 | 1880 | 980 | 520 | 950 | 1800 | 2640 | 2750 | 2050 | 1450 |

15 BAR TO 18 BAR TEST PRESSURE

| NOTED DIMENSIONS (mm) | A    | B    | C    | D   | E    | F    | G    | H    | J    | K    |
|-----------------------|------|------|------|-----|------|------|------|------|------|------|
| 100                   | 750  | 400  | 200  | 120 | 220  | 400  | 500  | 800  | 650  | 450  |
| 150                   | 1000 | 550  | 280  | 160 | 295  | 500  | 800  | 1000 | 850  | 650  |
| 200                   | 1250 | 700  | 360  | 200 | 370  | 600  | 1000 | 1200 | 1000 | 800  |
| 250                   | 1500 | 850  | 440  | 240 | 450  | 700  | 1200 | 1400 | 1150 | 900  |
| 300                   | 1750 | 1000 | 520  | 280 | 530  | 800  | 1400 | 1600 | 1300 | 1050 |
| 350                   | 2000 | 1150 | 600  | 320 | 610  | 900  | 1600 | 1800 | 1450 | 1150 |
| 400                   | 2250 | 1300 | 680  | 360 | 690  | 1000 | 1800 | 2000 | 1600 | 1250 |
| 450                   | 2500 | 1450 | 760  | 400 | 770  | 1100 | 2000 | 2200 | 1750 | 1350 |
| 500                   | 2750 | 1600 | 840  | 440 | 850  | 1200 | 2200 | 2400 | 1900 | 1450 |
| 550                   | 3000 | 1750 | 920  | 480 | 930  | 1300 | 2400 | 2600 | 2050 | 1550 |
| 600                   | 3250 | 1900 | 1000 | 520 | 1010 | 1400 | 2600 | 2800 | 2200 | 1650 |

TABLE OF DIMENSIONS FOR STEEPLY INCLINED PIPELINES

| INCLINED PIPELINES     | SPACING |
|------------------------|---------|
| 1 IN 2 & STEEPER       | 5.8m    |
| BELOW 1 IN 2 TO 1 IN 4 | 11.6m   |
| 1 IN 4 TO 1 IN 6       | 16.8m   |
| 1 IN 6 TO 1 IN 8       | 22.0m   |