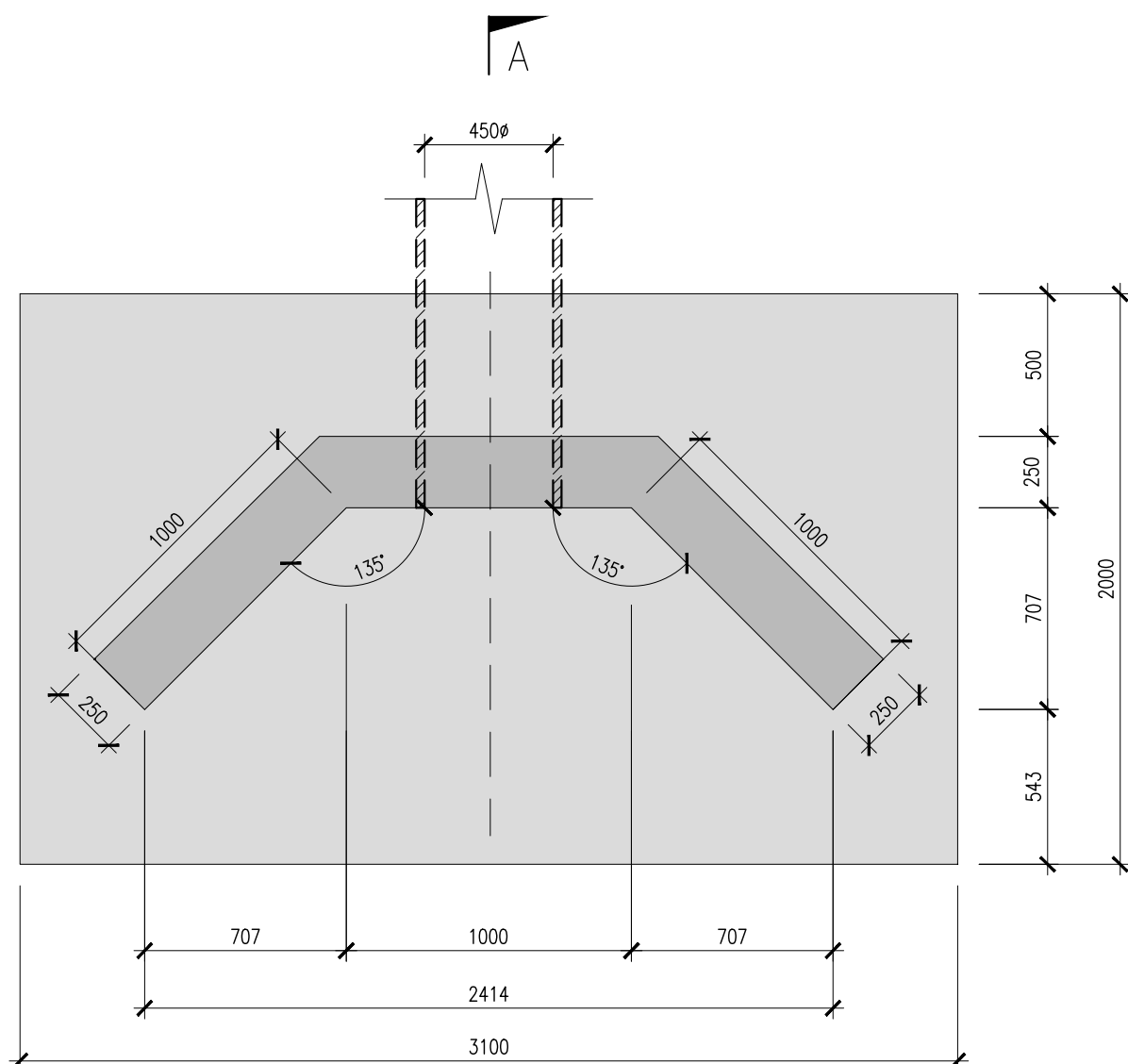
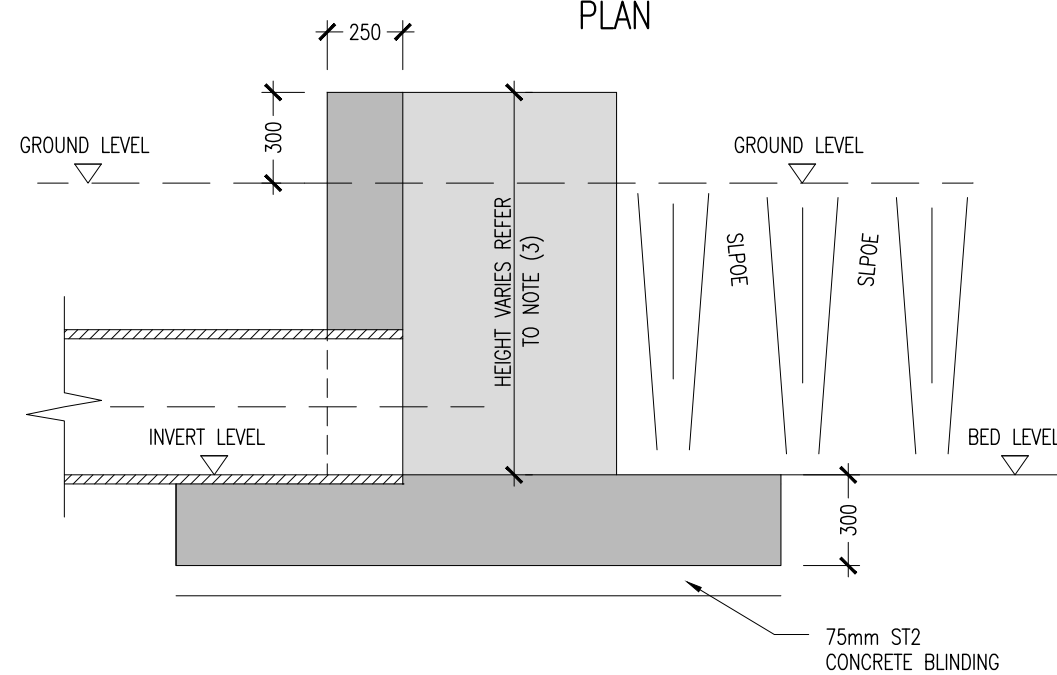


ELEVATION

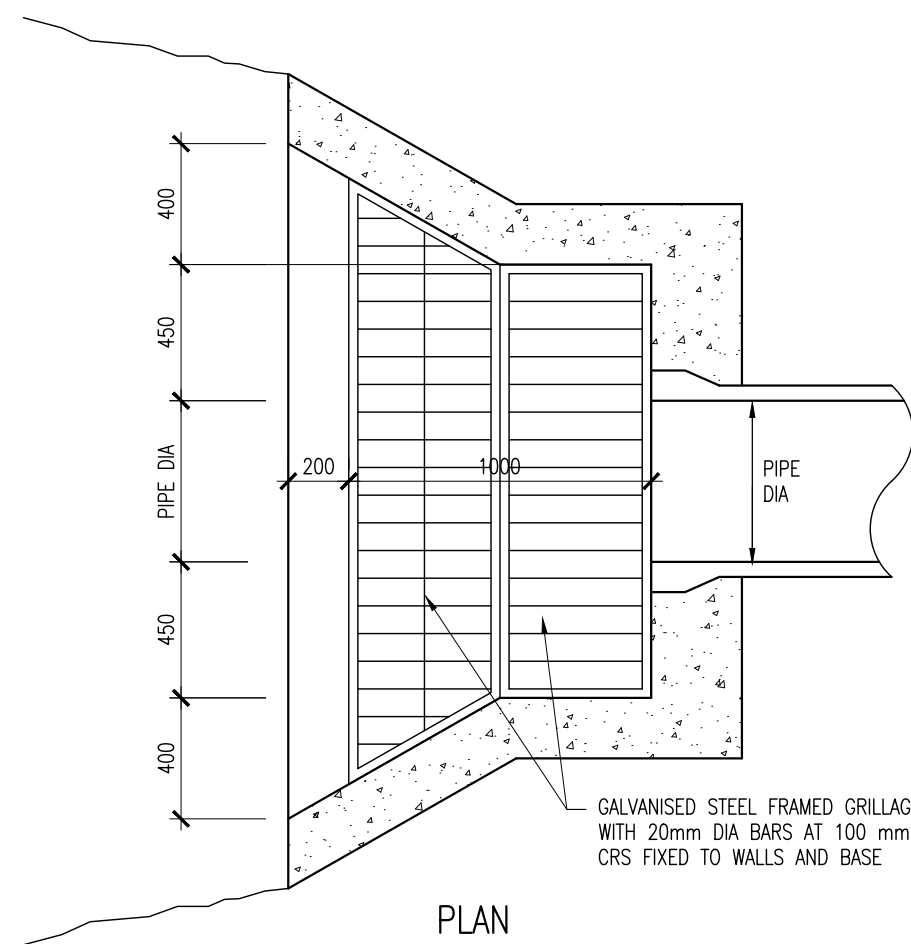


PLAN

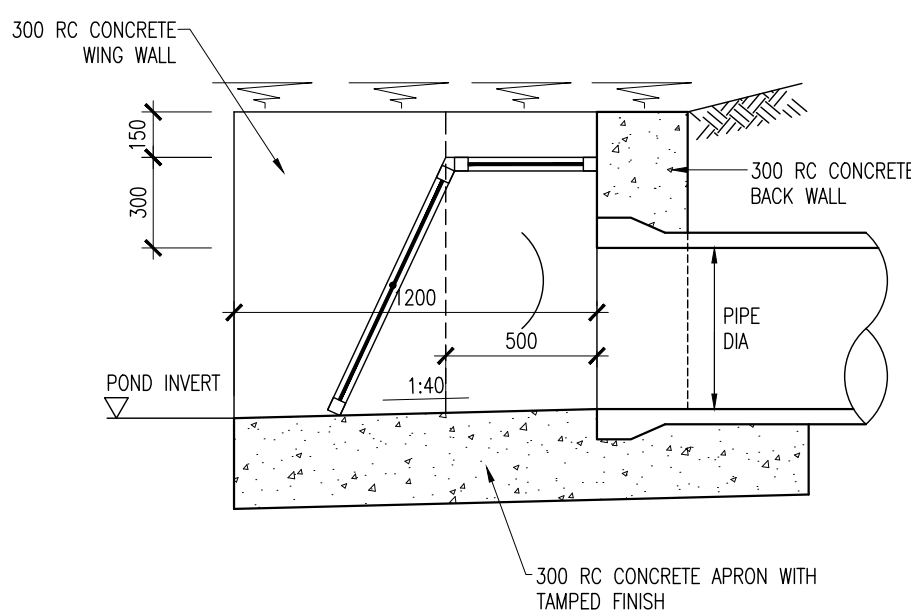


SMALL HEADWALL – SECTION A-A

- NOTES:
1. THIS RCD IS ONLY TO BE USED IN ASSOCIATION WITH A UNIQUE STRUCTURAL DESIGN CARRIED OUT FOR THE HEADWALLS ON A PROJECT IN ACCORDANCE WITH THE RELEVANT DESIGN CODES AND SITE GROUND CONDITIONS.
 2. ALL EXPOSED CONCRETE SURFACES FROM 100mm BELOW GROUND LEVEL TO BE CLASS F3 FINISH. ALL OTHER CONCRETE SURFACES TO BE CLASS F1 FINISH UNLESS OTHERWISE SPECIFIED.
 3. REFER TO DRAINAGE LONGITUDINAL SECTIONS AND/OR DRAINAGE SCHEDULES FOR PIPE DIAMETER SIZES, INVERT LEVELS AND HEADWALL HEIGHTS. MAXIMUM PIPE DIAMETER 450mm AND MAXIMUM HEADWALL HEIGHT 2.3m.
 4. HEADWALL WINGWALLS TO BE SLOPED WHERE APPROPRIATE.

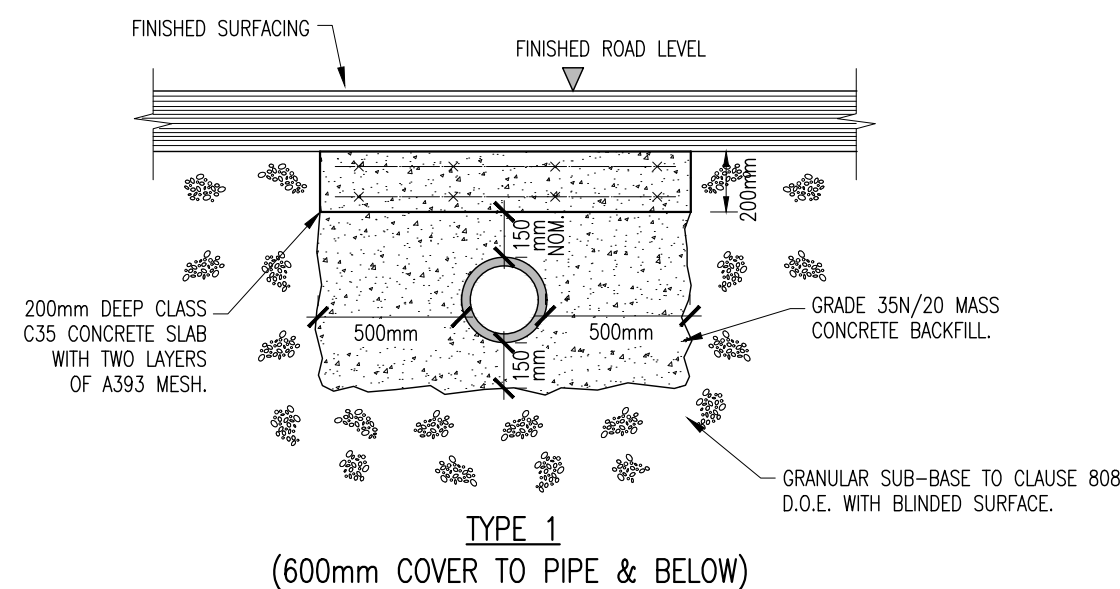


PLAN



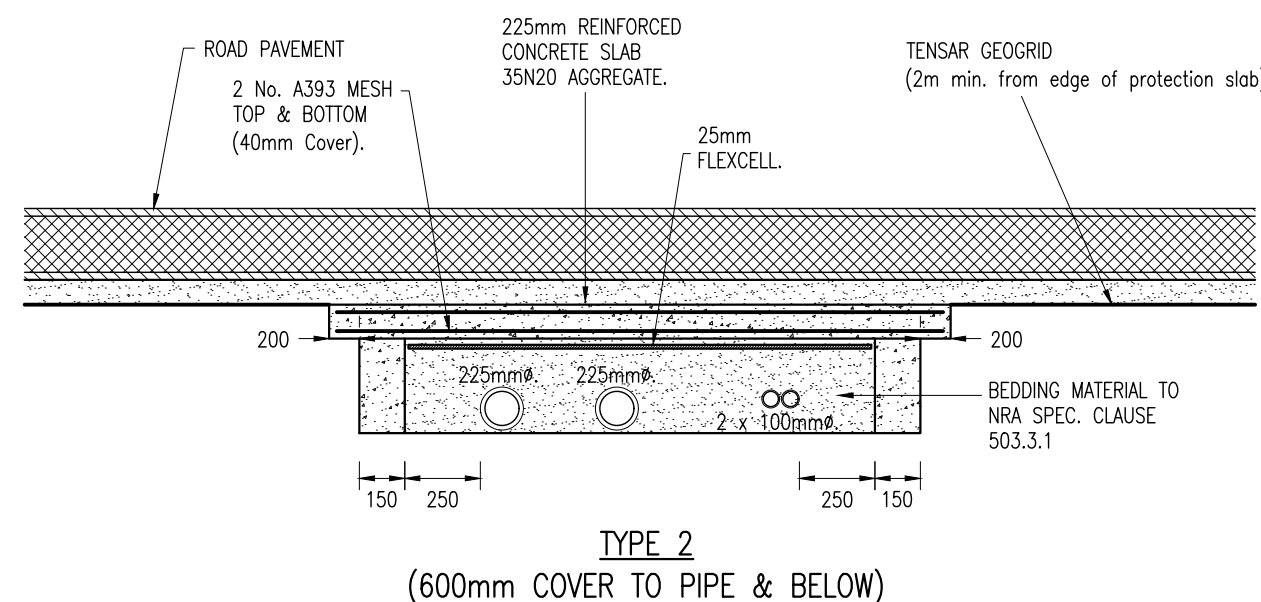
SECTION

LARGE HEADWALL DETAIL



TYPE 1

(600mm COVER TO PIPE & BELOW)

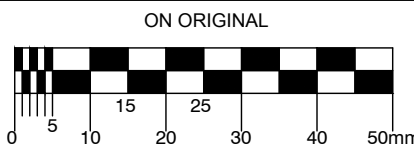


TYPE 2

(600mm COVER TO PIPE & BELOW)

TYPICAL SERVICES PROTECTION DETAIL

© COPYRIGHT OF THIS DRAWING IS RESERVED BY DBFL CONSULTING ENGINEERS. NO PART SHALL BE REPRODUCED OR TRANSMITTED WITHOUT THEIR WRITTEN PERMISSION.



NOTES:

1. HYDRANTS SHALL BE MANUFACTURED IN ACCORDANCE WITH BS 750: 2012 TYPE 2 AND SHALL INCORPORATE A SCREWDOWN VALVE, UNDERGROUND "CLOSE ON LOAD" TYPE WITH BAYONET LEG OUTLETS AND FARE SPINDLE CAP OF CAST IRON AND IRON CHAIN. HYDRANT VALVE SHALL BE "ANTI CLOCKWISE OPENING".
2. SLUICE VALVES SHALL COMPLY WITH THE REQUIREMENT OF IS EN 1074. THEY SHALL "CLOSE BY TURNING ANTI CLOCKWISE" TO IRISH WATER SPECIFICATION.
3. VALVES AND HYDRANTS WHEN INSTALLED SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL SURFACE COVERS. THESE COVERS MUST CONFORM WITH IRISH WATER SPECIFICATIONS. COVERS TO BE HEAVY DUTY METAL COVERS TO IS EN 124 : 1994.
4. INDICATOR PLATES SHALL CLEARLY IDENTIFY HYDRANT, AIR VALVE AND SLUICE VALVE LOCATIONS AND BASE BOARD LOCATIONS SHALL BE APPROVED BY IRISH WATER. FIXED LETTERINGS SHALL COMPLY WITH BS3251. BACKGROUND COLOUR YELLOW TEXT COLOUR BLACK.
5. DRAINAGE MUST BE PROVIDED TO ENSURE THAT THE CHAMBERS CANNOT BECOME FLOODED WITH SURFACE OR GROUND WATER.
6. ALL WATERMANS SHALL BE HDPE SDR17 PVC-A "BLUE PIPE" EXCEPT UNDER ROADS WHERE DUCTILE IRON TO BE USED.
7. ALL SERVICE PIPES, CONNECTIONS AND WATER CONTROL UNITS SHALL BE AS PER IRISH WATER REQUIREMENTS. SERVICE PIPES TO BE 25mm(OD)PE (HEAVY DUTY AND BOUNDARY METER BOXES) ATPLAS BOUNDARY BOX OR EQUAL APPROVED
8. ALL WATERMANS AND FITTINGS ASHALL COMPLY WITH IRISH WATER "GUIDELINES FOR DRINKING WATER SUPPLY"
9. ALL WATERMANS SHALL BE TESTED IN ACCORDANCE WITH IRISH WATER GUIDELINES FOR DRINKING WATER SUPPLY.
10. CONNECTION TO EXISTING WATERMAN TO BE CO-ORDINATED WITH IRISH WATER.
11. CONTRACTOR TO LIASE WITH LOCAL OVERSEEING AUTHORITY FOR TESTING CLEANSING AND STERILISATION OF NEW WATERMANS.
12. ALL ROAD CONSTRUCTION MATERIALS TO COMPLY WITH NRA VOLUME 1 SPECIFICATIONS FOR ROADWORKS DATED MARCH 2011 AND SUBSEQUENT REVISIONS OF SAME. RCD REFERENCE DETAILS TO BE AS PER NRA VOLUME 4 ROAD CONSTRUCTION DETAILS DATED JUNE 2014

A 19/12/17 FINAL SUBMISSION, AN BORD PLEANALA PPK DMW

REV. DATE DESCRIPTION BY CHKD.

PLANNING

DESIGNED DG PREPARED PPK

DATE JULY 2017 CHECKED DMW



DUBLIN OFFICE Ormond House,
Upper Ormond Quay, Dublin 7, Ireland.
PHONE +353 1 400 4000
FAX +353 1 400 4050

WATERFORD OFFICE Unit 2, The Chandlery,
1-2 O'Connell Street, Waterford, Ireland.
PHONE +353 51 309 500
FAX +353 51 844 913

DBFL Consulting Engineers email: info@dbfl.ie site: www.dbfl.ie

PROJECT

FORTUNESTOWN LANE &
GARTERS LANE RESIDENTIAL
DEVELOPMENT

DRG. TITLE

TYPICAL DRAINAGE
DETAILS SHEET 3 OF 3

CLIENT

GREENACRE RESIDENTIAL DAC

SCALE AS SHOWN @A1 FILE REF. 162073-3060

DRG. NO. 162073-3062

A