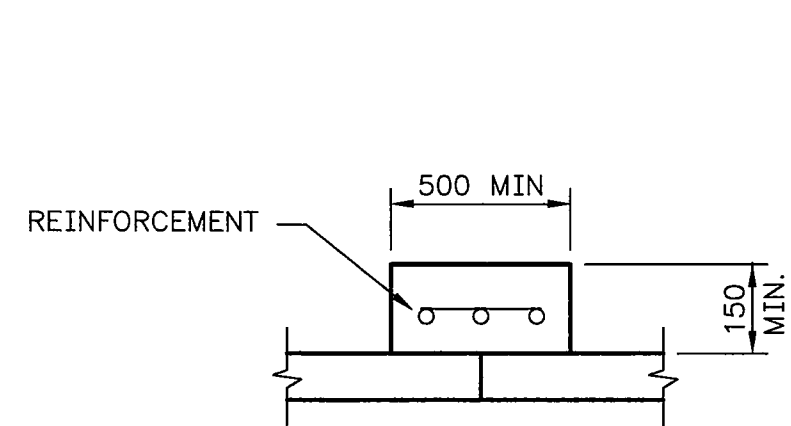
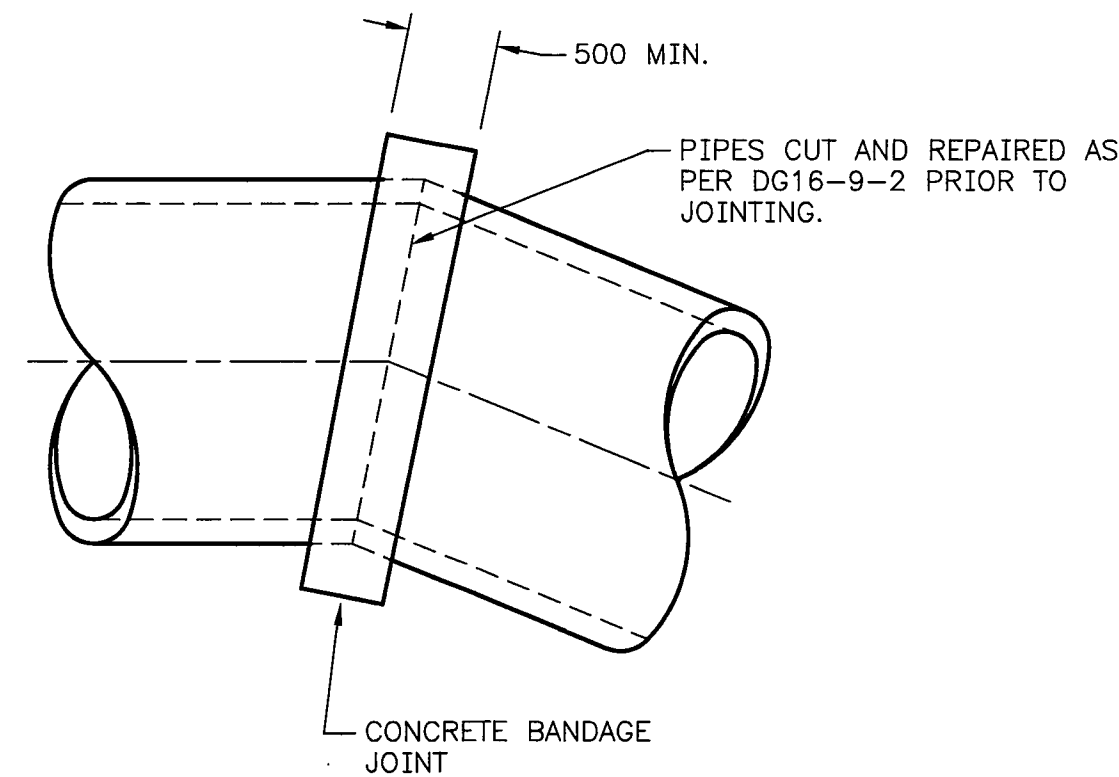


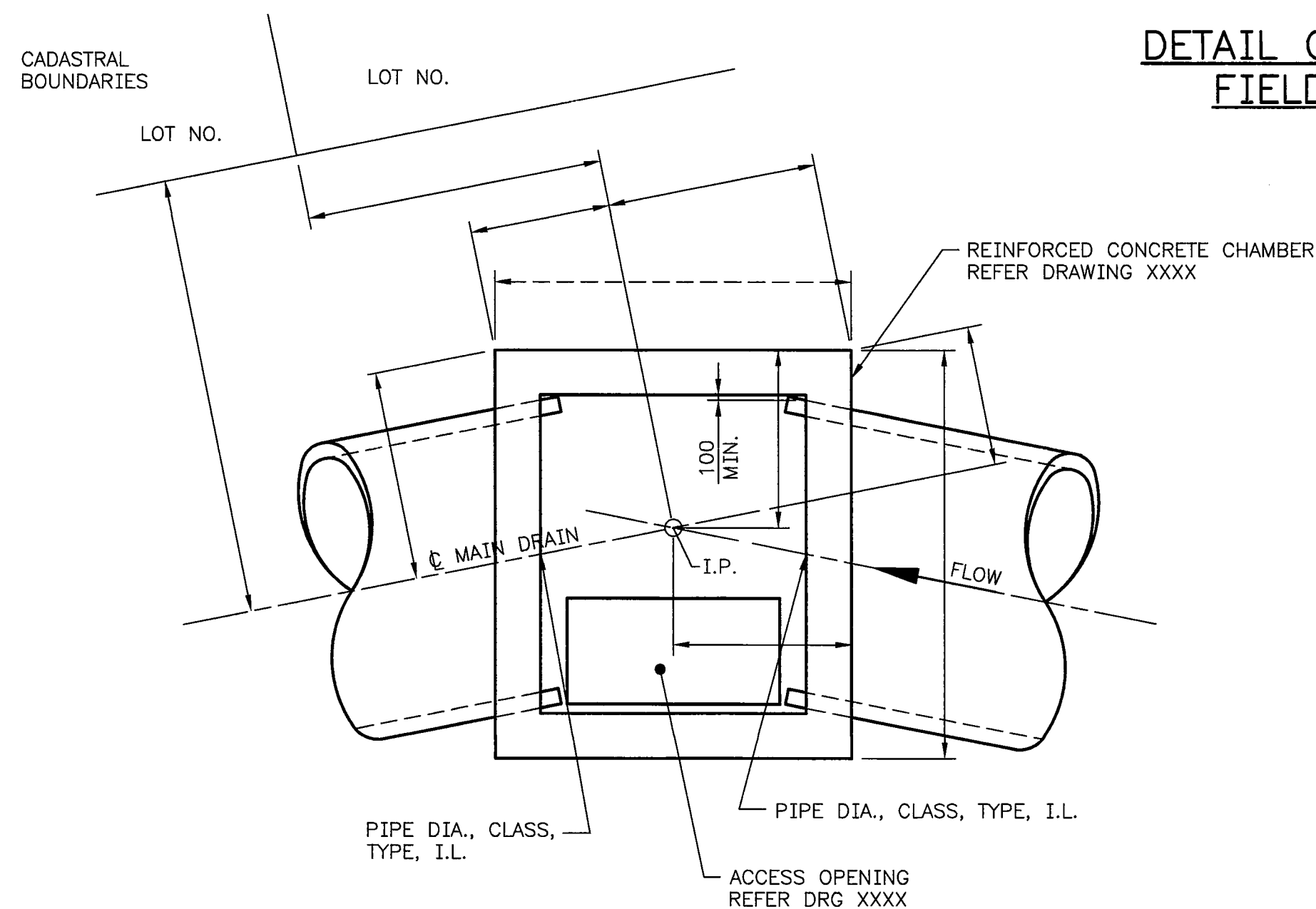
**TYPICAL SPLAY BEND ARRANGEMENT
(CONCRETE SURROUND NOT SHOWN)**



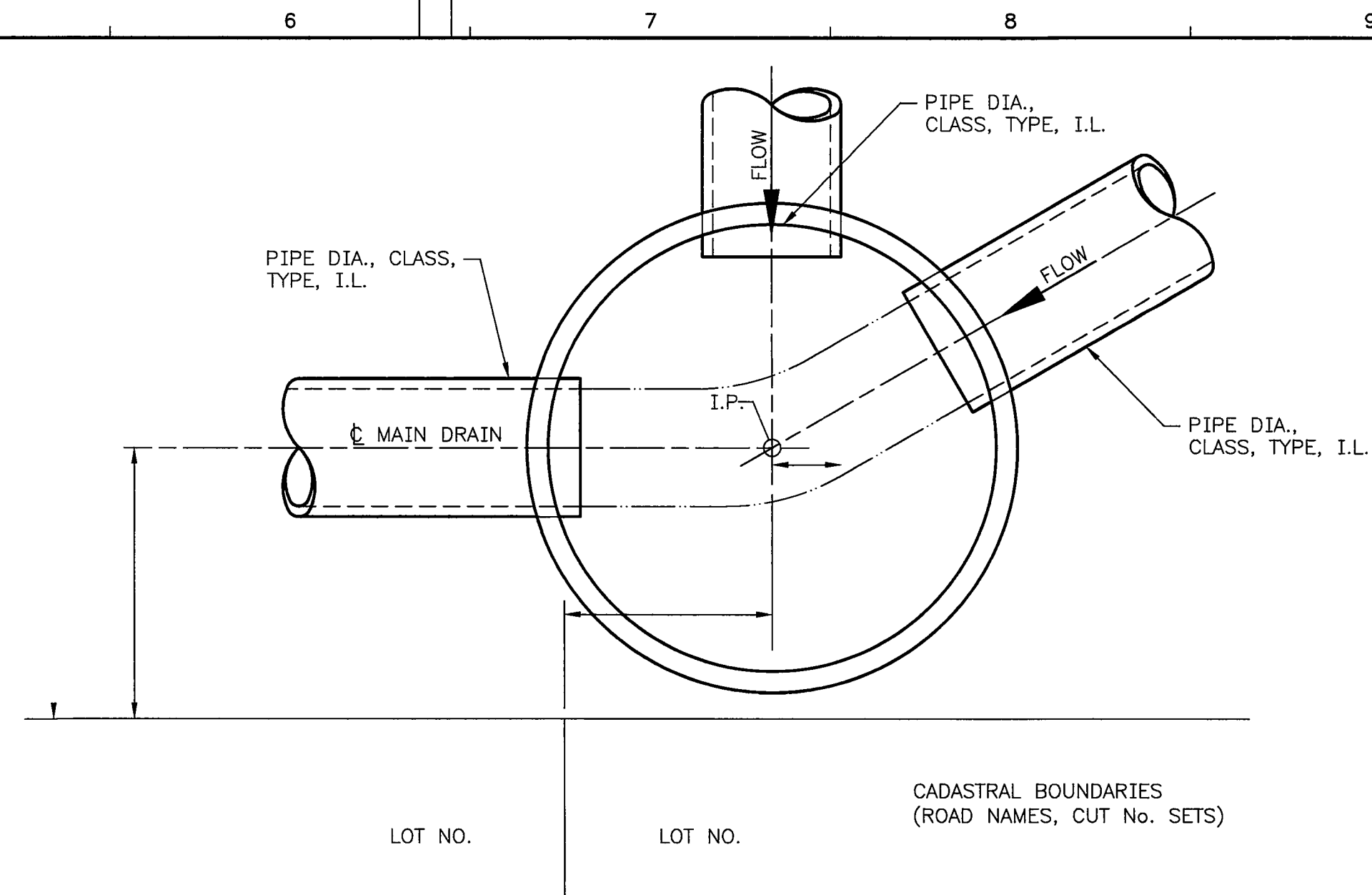
**SECTION THROUGH
CONCRETE BANDAGE**



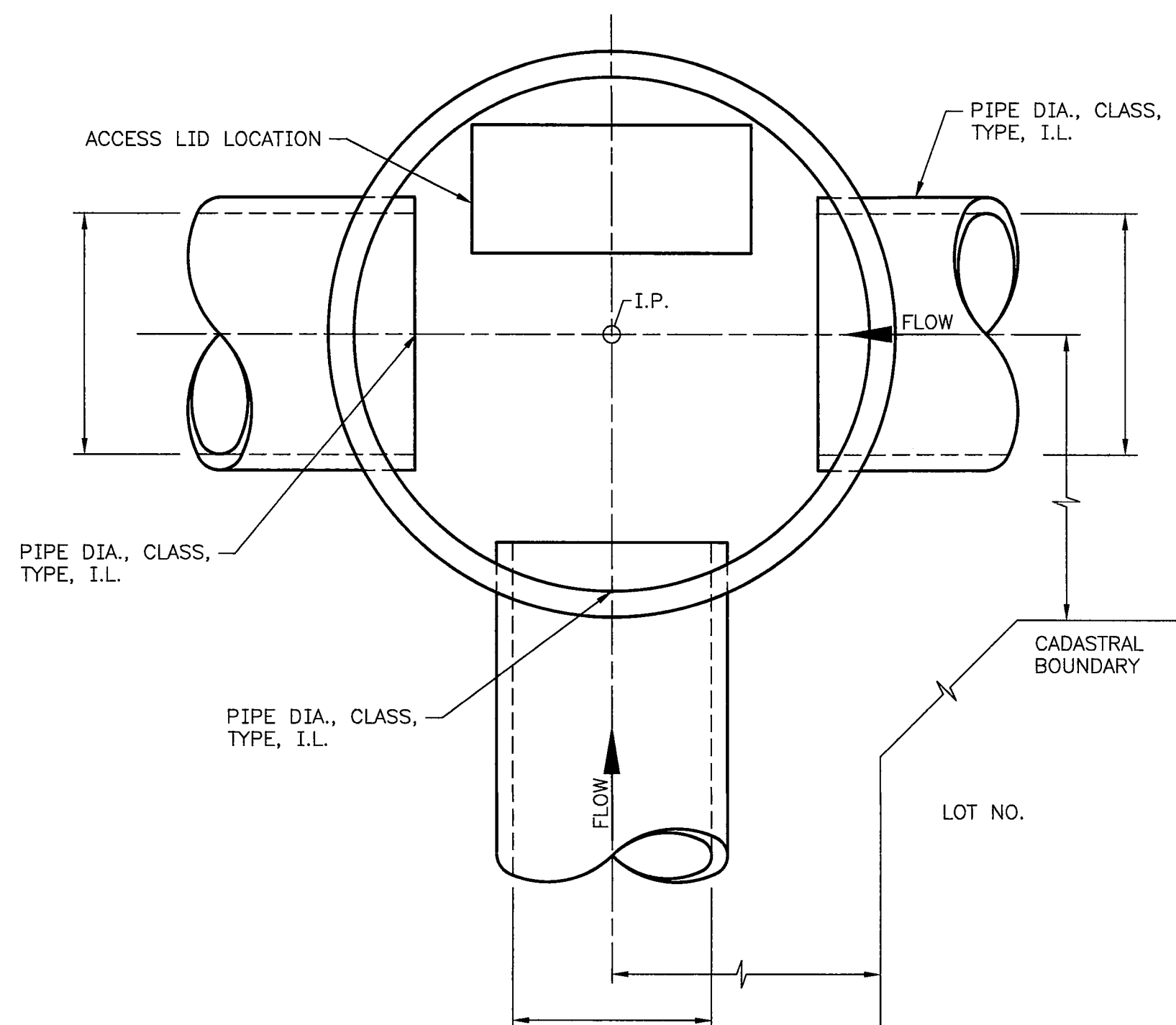
**DETAIL OF TYPICAL
FIELD JOINT**



**EXAMPLE BEND ARRANGEMENT
FOR LARGE PIPES WHERE CIRCULAR
CHAMBER PROVES IMPRACTICAL**



**EXAMPLE ACCESS CHAMBER ARRANGEMENT FOR
UP TO 600 NOMINAL DIA. PIPES**



EXAMPLE JUNCTION ARRANGEMENT

ACCESS CHAMBER CRITERIA

GENERAL

- ACCESS CHAMBERS ON PIPED DRAINS TO BE PROVIDED AS FOLLOWS:-
 - AT CHANGES OF GRADE.
 - AT CHANGES OF DIRECTION WHERE A SPLAY BEND IS NOT PERMISSIBLE.
 - AT CHANGES OF PIPE DIAMETER.
 - AT INTERSECTIONS OF MAIN DRAINS.
 - WHERE RATIO OF INSIDE DIAMETERS IS MORE THAN 1:3.
 - WITHIN 100m FROM A SPLAY BEND.
- MAXIMUM PIPED LENGTHS BETWEEN ACCESS CHAMBERS AND/OR STRUCTURES SHALL BE AS FOLLOWS:

FOR PIPE DIAMETER	300mm	100m
375mm	120m	
450mm	140m	
525mm	160m	
600mm	180m	
675mm	200m	
750mm	220m	
900mm	240m	
1050mm	260m	
1200mm	280m	
1350mm	300m	
1500mm	350m	
1650mm and over	400m	
- FOR EACH STANDARD ACCESS CHAMBER TO BE CONSTRUCTED A DETAILED ARRANGEMENT, SIMILAR TO THOSE SHOWN, SHALL BE PROVIDED SHOWING:-
 - A PLAN OF THE ACCESS CHAMBER SHOWING THE TYPE OF CONSTRUCTION, THE LOCATION OF THE STANDARD LADDER AND THE CORBEL SLAB OPENING.
 - THE LOCATION, SIZE, CLASS AND INVERT LEVEL (TO THE 0.1m) OF ALL PIPES AND THE INTERSECTION OF THEIR CENTRE LINES AT A COMMON POINT KNOWN AS THE I.P. (INTERSECTION POINT). FOR STRAIGHT THROUGH ACCESS CHAMBERS WITH NO INLETS, THE CENTRE OF THE ACCESS CHAMBER CAN BE TAKEN AS THE I.P.
 - THE I.P. LOCATED WITH RESPECT TO CADASTRAL BOUNDARIES AND THE ACCESS CHAMBER DIMENSIONED ABOUT THE I.P.
 - THE LOCATION OF THE ACCESS CHAMBER COVER RELEVANT TO CADASTRAL BOUNDARIES.
 - THE ACCESS CHAMBER NUMBER, NUMBER OF CORBEL SLAB, TYPE OF COVER AND ANY NECESSARY SURROUND.
 - THE PROPOSED TOP OF COVER LEVEL.
- ANY ACCESS CHAMBER NOT FITTING THE STANDARDS OR ANY NON STANDARD PORTION OF AN ACCESS CHAMBER, SHALL BE FULLY DETAILED.
- WHERE OTHER SERVICES PASS THROUGH A PIPE DRAIN, AN ACCESS CHAMBER SHALL BE PROVIDED. THE SERVICE IS TO BE PROTECTED IN ACCORDANCE WITH THE URBAN MAIN DRAINAGE MANUAL.
- CIRCULAR ACCESS CHAMBERS MUST BE DESIGNED IN ACCORDANCE WITH DG16-3-7

SPLAY BEND CRITERIA

- THE MINIMUM SPLAY BEND SHALL BE 900mm NOMINAL DIAMETER.
- SPLAY BENDS SHALL BE ACCOMPLISHED BY USING FACTORY MADE BENDS FABRICATED FROM RUBBER RING JOINTED PIPES.
- EACH PIPE LENGTH IN A SPLAY BEND SHALL INCORPORATE ONLY ONE CHANGE OF DIRECTION. THE MAXIMUM CHANGE OF DIRECTION IN EACH PIPE LENGTH SHALL BE 22.5°. WHERE A SPLAY BEND INCORPORATES MORE THAN ONE PIPE, THE CHANGE OF DIRECTIONS AT EACH PIPE SHALL BE EQUAL. ONLY ONE SPLAY BEND SHALL BE LOCATED BETWEEN ANY TWO ACCESS CHAMBERS OR ACCESSIBLE STRUCTURES.
- SPLAY BENDS IN PIPE DRAINS MAY BE PROVIDED AT CHANGES OF DIRECTION AS AN ECONOMICAL ALTERNATIVE TO AN ACCESS CHAMBER. MAXIMUM DISTANCE FROM AN ACCESS CHAMBER SHALL BE 100m.
- WHOLE SECTION OF SPLAY BEND SHALL BE SURROUNDED WITH 300 MIN. CONCRETE N25.
- FOR EACH SPLAY BEND TO BE CONSTRUCTED A DETAILED LAYOUT SIMILAR TO THAT SHOWN SHALL BE PROVIDED INDICATING:-
 - PLAN OF SPLAY BEND.
 - NUMBER OF PIPES IN BEND.
 - ANGLE OF BEND, PIPE SIZE AND CLASS.
 - I.P. LOCATED CADASTRALLY.
 - DIRECTION OF FLOW.
 - NORTH POINT.

THE REQUIREMENTS ON THIS DRAWING OUTLINE DESIGN INTENT ONLY. THE DESIGNER MUST PRODUCE A STRUCTURAL DESIGN DRAWING SPECIFIC TO THE ASSET.

SCALE : DIAGRAMMATIC

C	03/2020	ACCESS CHAMBER CHANGED TO CIRCULAR. GENERAL REVISIONS	JMS	SS	PF	DESIGN SURVEY	NONE	VERTICAL DATUM	AHD	DES CALC	A. ADAMS	NORTH POINT	RECOMMENDED	17/02/1998	METEROPOLITAN DRAINAGE	URBAN MAIN DRAINAGE STANDARD – DRAWINGS	ORIGINAL	SHEET	SIZE
B	06/2011	LADDERS SHOWN & NOTES AMENDED	BJ	SS	PF	DESIGN SURVEY	NONE	COORDINATE SYS	UNKNOWN	DES CHD	J. DAVIES		SUPERVISING ENGINEER		ACCESS CHAMBER AND SPLAY BEND CRITERIA				
						ASCON SURVEY	NONE	DES REF		DRN	K. BERG		APPROVED	18/02/1998					
										Q.C. CHD	S. SELLATHURAI		MANAGER	I.D. BRANCH					
ISSUE	DATE	GRID	REVISION	DRN	REC	APPD													
566																			
810																			