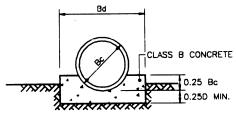
CIRCULAR PIPE

ELLIPTICAL AND ARCH PIPE

PRECAST CONCRETE BOX SECTIONS

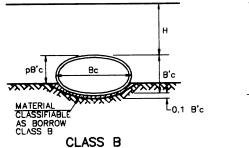
NOTES:

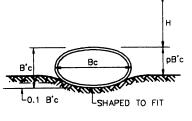
FOR CLASS B AND C BEDDINGS, SUBGRADES SHALL BE EXCAVATED, IF NECESSARY, SO A UNIFORM FOUNDATION FREE OF PROTRUDING ROCKS WILL BE PROVIDED.
SPECIAL CARE MAY BE NECESSARY WITH CLASS A OR OTHER UNYBLDING FOUNDATIONS TO CUSHION PIPE FROM SHOCK WHEN BLASTING CAN BE ANTICIPATED IN THE AREA.



CONCRETE CRADLE

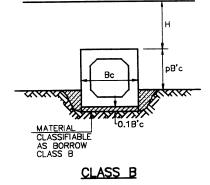
CLASS A

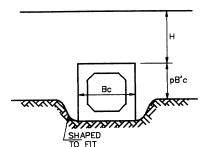




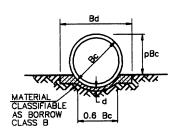
CLASS C

HORIZONTAL ELLIPTICAL PIPE

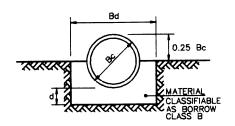




CLASS C



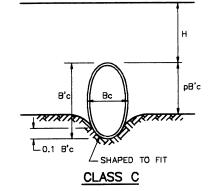
SHAPED SUBGRADE WITH GRANULAR FOUNDATION



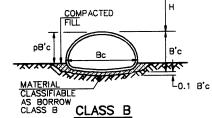
GRANULAR FOUNDATION

VERTICAL ELLIPTICAL PIPE

Ĺ0.1 B'c



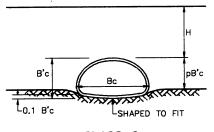




CLASS B

TANKAY !

MATERIAL CLASSIFIABLE AS BORROW CLASS B



CLASS C

ARCH PIPE

LEGEND:

Bc - OUTSIDE DIAMETER OR OUTSIDE HORIZONTAL SPAN OF THE PIPE
B'c - OUTSIDE VERTICAL HEIGHT OF THE PIPE
H - HEIGHT OF FILL ABOVE TOP OF PIPE
D - INSIDE DIAMETER OF PIPE
d - DEPTH OF BEDDING MATERIAL
BELOW PIPE
2 - PROJECTION RATIO

CLASS B

CLASS C

p - PROJECTION RATIO
Bd - MAXIMUM TRENCH WIDTH = Bc +0.90 M.

pB'c - VERTICAL DISTANCE BETWEEN TOP THE PIPE AND NATURAL GROUND SURFACE FOR ELLIPTICAL AND ARC PIPES.

pBc — VERTICAL DISTANCE BETWEEN TOP OF THE CIRCULAR PIPE AND NATURAL GROUND SURFACE.

DEPTH OF BEDDING MATERIAL BELOW PIPE	
D	d (MIN.)
27" & SMALLER	0.075m.
30" TO 60"	0.10m.
66" & LARGER	0.15m.

EFFECTIVE DATE: APRIL 1996

