
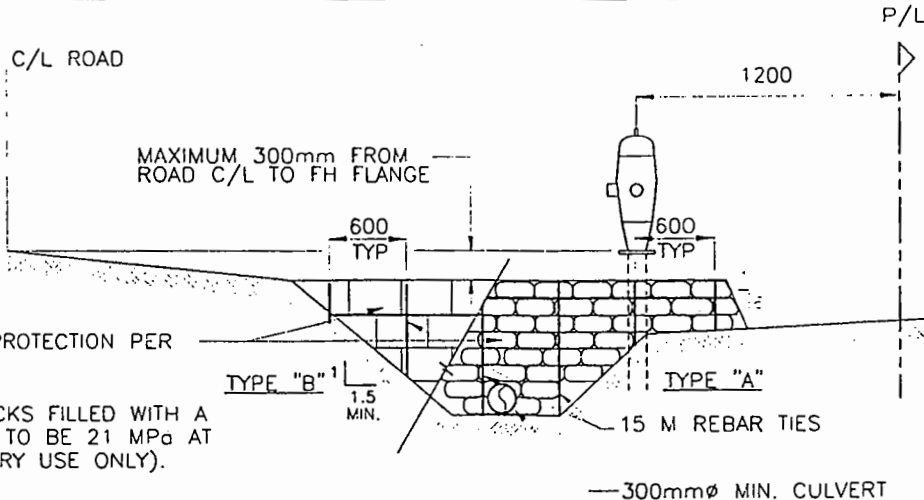


MINIMUM BEARING AREA OF THRUST BLOCKS		
FITTING	PIPE DIAMETER	BEARING AREA
CAPS AND TEES	150	0.4m <sup>2</sup>
	200	0.6m <sup>2</sup>
	250	1.0m <sup>2</sup>
	300	1.4m <sup>2</sup>
	350	1.9m <sup>2</sup>
	400	2.5m <sup>2</sup>
90° BENDS	150	0.5m <sup>2</sup>
	200	0.9m <sup>2</sup>
	250	1.4m <sup>2</sup>
	300	2.0m <sup>2</sup>
	350	2.7m <sup>2</sup>
	400	3.5m <sup>2</sup>
45° BENDS	150	0.3m <sup>2</sup>
	200	0.5m <sup>2</sup>
	250	0.7m <sup>2</sup>
	300	1.1m <sup>2</sup>
	350	1.5m <sup>2</sup>
	400	1.9m <sup>2</sup>
22½° & 11¼° BENDS	150	0.2m <sup>2</sup>
	200	0.3m <sup>2</sup>
	250	0.4m <sup>2</sup>
	300	0.5m <sup>2</sup>
	350	0.7m <sup>2</sup>
	400	1.0m <sup>2</sup>

NOTES:

1. THE ABOVE TABLE IS BASED ON A SOIL BEARING STRENGTH OF 70kPa AT 1380 kPa WORKING PRESSURE.
2. REFER TO CONTRACT DRAWINGS FOR SPECIFIED BEARING AREAS FOR DIFFERENT WORKING PRESSURES OR SOIL CONDITIONS.

No.	REVISION:	APPROVED		<b>DISTRICT OF HOPE</b>	TITLE
					THRUST BLOCK DIMENSIONS FOR WATERMAINS
SCALE:	N.T.S.				SDW-1
DATE:	JUNE, 1999				



CONSTRUCT BANK PROTECTION PER THE FOLLOWING:

TYPE "A" JUTE SACKS FILLED WITH A WET CONCRETE MIX TO BE 21 MPa AT 28 DAYS. (TEMPORARY USE ONLY).

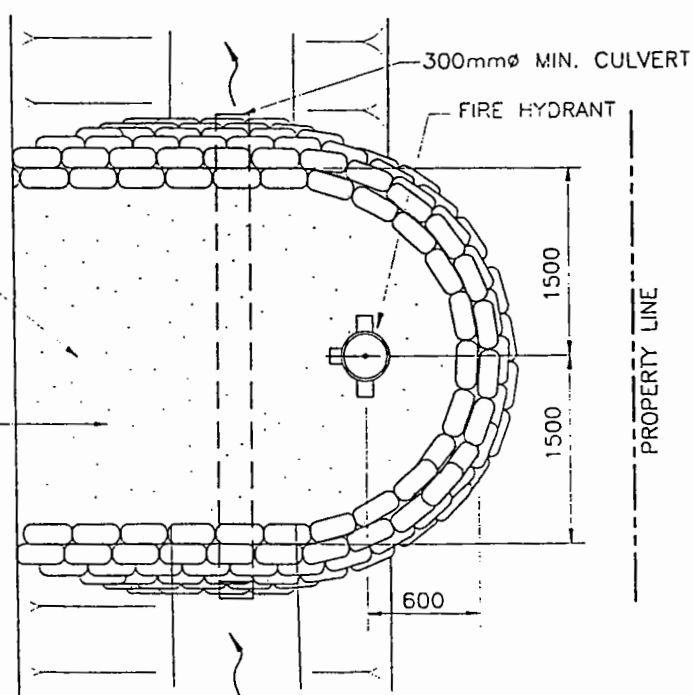
TYPE "B" 200mm x 200mm x 400mm "H" TYPE CONCRETE BLOCKS. REINFORCE AS SHOWN IN SKETCH. FILL BLOCKS WITH 20 MPa CONCRETE. THE TOP OF THE BULKHEAD IS NOT TO BE HIGHER THAN THE SURROUNDING GRADE.

TYPE "C" POURED IN PLACE CONCRETE USING FORMS TO MATCH THE DIMENSIONS OF TYPE "B" HEADWALLS. THE TOP OF THE BULKHEAD IS NOT TO BE HIGHER THAN THE SURROUNDING GRADE.

ELEVATION

100mmØ MINUS PIT RUN TO 95% MODIFIED PROCTOR

CROWNED TO FACILITATE DRAINAGE. ( 2% )



PLAN

NOTES:

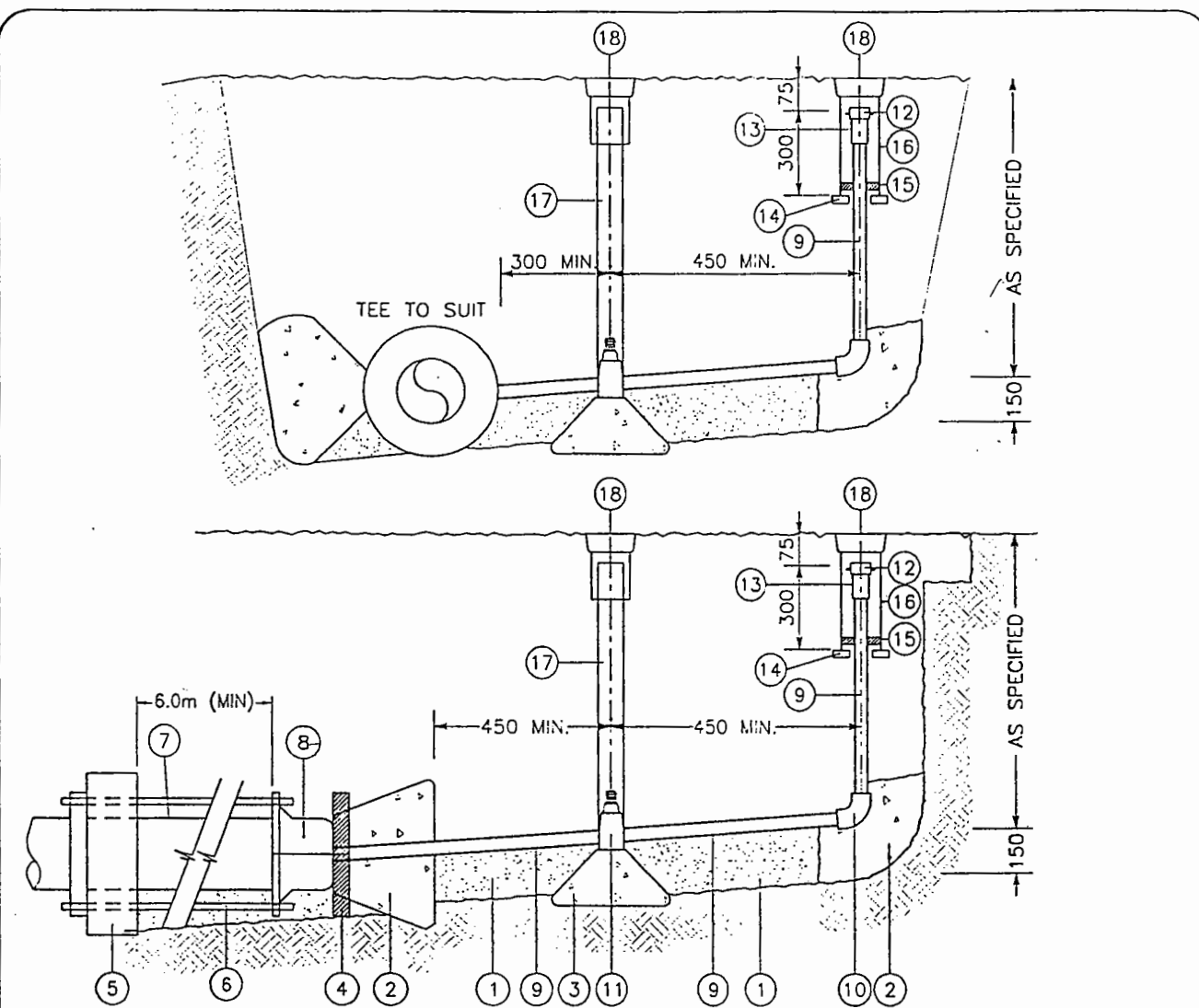
1. IN RURAL AREAS WHERE A DITCH IS REQUIRED IN A CUT, THE AREA AS SHOWN ABOVE SHALL BE RETAINED BY SUITABLE SIDESLOPES OR WALLS.
2. CULVERT SHALL BE CLASS 3 CONCRETE.
3. MINIMUM CULVERT LENGTH IS 4.0m.

NO.	REVISION	APPROVED
SCALE:	N.T.S.	
DATE:	JUNE, 1999	



DISTRICT OF HOPE

TITLE	RURAL FIRE HYDRANT ASSEMBLY
	SDW-2



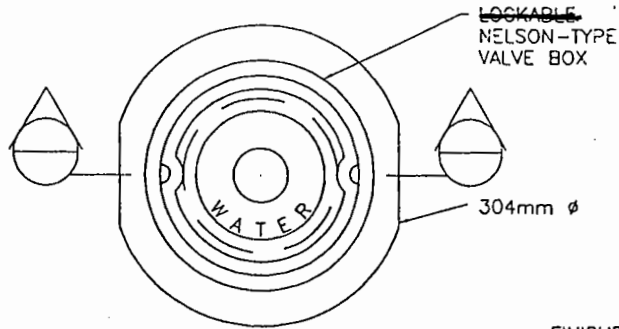
- ① BEDDING
- ② THRUST BLOCK
- ③ CONCRETE BRICK SUPPORT
- ④ 300 x 300 PRECAST CONCRETE BLOCK
- ⑤ CONCRETE ANCHOR BLOCK AS SPECIFIED BY ENGINEER
- ⑥ TIE RODS: 2-19mm $\phi$  FOR MAINS 300mm $\phi$  OR LESS  
4-25mm $\phi$  FOR MAINS LARGER THAN 300mm $\phi$
- ⑦ MAIN LINE
- ⑧ CAP WITH THREADED BORE
- ⑨ 50mm $\phi$  COPPER PIPE
- ⑩ 50mm $\phi$  - 90° BRASS ELBOW
- ⑪ 50mm AUTOMATIC DRAIN VALVE
- ⑫ 65mm $\phi$  BRASS HYDRANT OUTLET THREADED WITH BRONZE CAP
- ⑬ 65 TO 50mm DIA. ADAPTER
- ⑭ CONCRETE ERICKS TO SUIT
- ⑮ 40mm THICK WOODEN PLUG TO SUIT
- ⑯ 150mm PVC PIPE
- ⑰ 150mm PVC PIPE
- ⑱ NELSON TYPE VALVE BOX

NO.	REVISION	APPROVED
SCALE	N.T.S.	
DATE	JUNE, 1999	

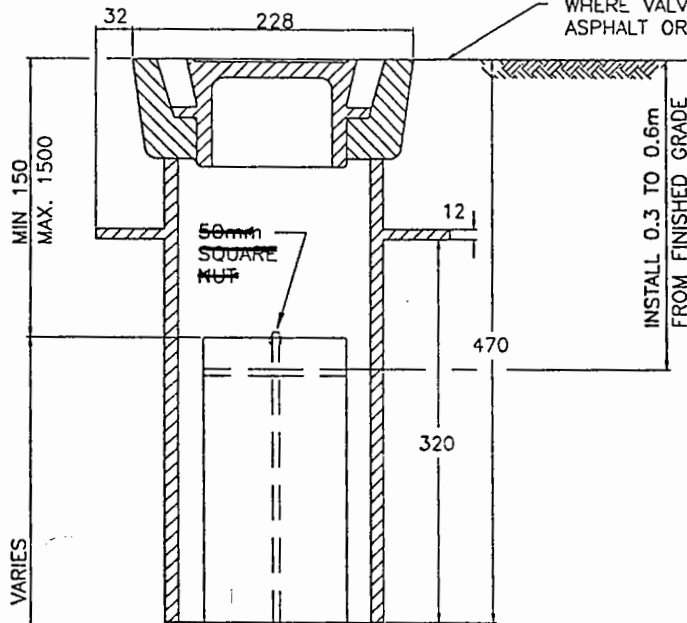


DISTRICT  
OF  
HOPE

TITLE	PERMANENT BLOW - OFF
	SDW-3



FINISHED GRADE, CONSTRUCT APRON OF 1000mmø, 50mm THICK, 19mm ASPHALT WHERE VALVE BOX IS NOT IN ASPHALT OR CONCRETE.

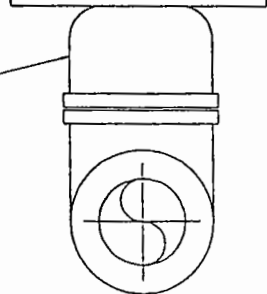


RISER 150mm PVC DR35 OR BETTER WATER PIPE

INSTALL GATE VALVE OPERATING NUT EXTENSION ROD c/w ROCK STOPPER AND 50mm SQUARE OPERATING NUT WHERE DEPTH TO WATER MAIN EXCEEDS 1500mm

FASTEN VALVE RISER TO 50mm OPERATING NUT WITH SPLIT PIN

NRS GATE VALVE AS SPECIFIED



NOTE: EXTENSION ROD DIAMETER TO SUIT VALVE MANUFACTURER REQUIREMENTS.

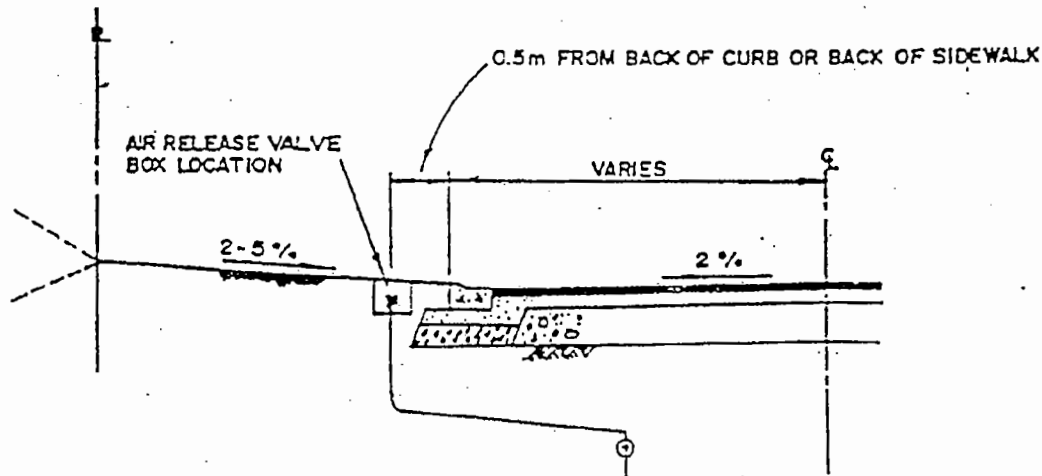
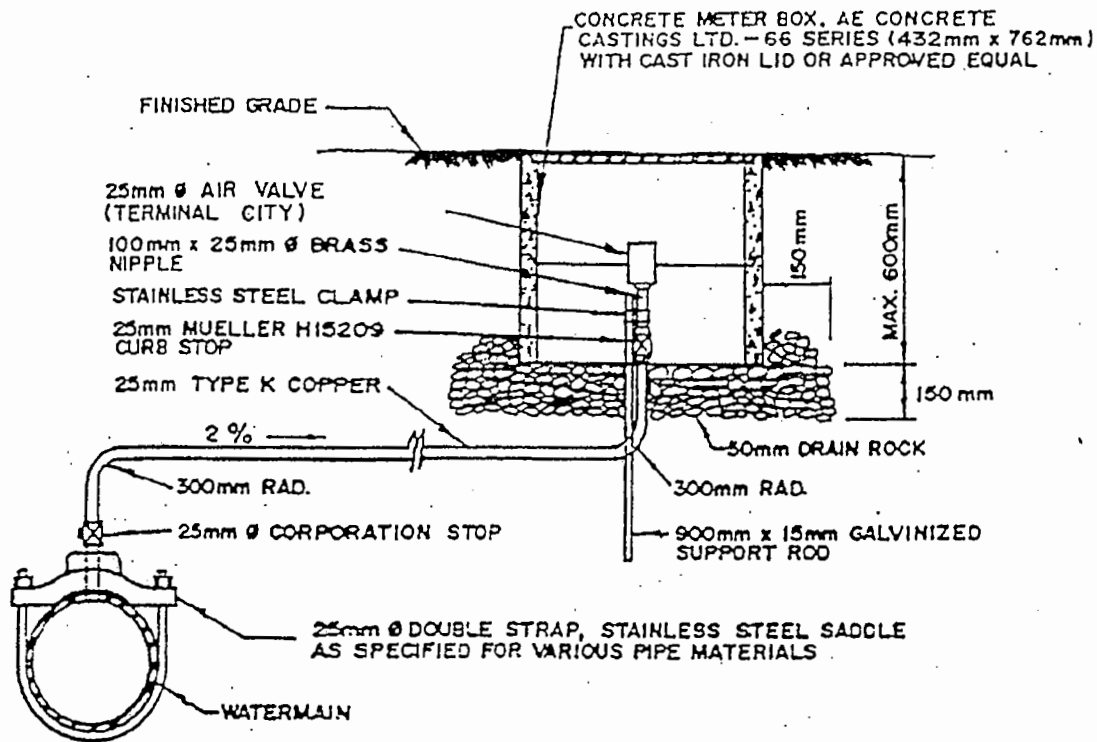
No.	DESIGN	APPROVED
SCALE	N.T.S.	
DATE	JUNE, 1999	



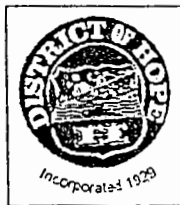
DISTRICT OF HOPE

TITLE  
NELSON TYPE LOCKABLE VALVE BOX & RISER

SDW-4

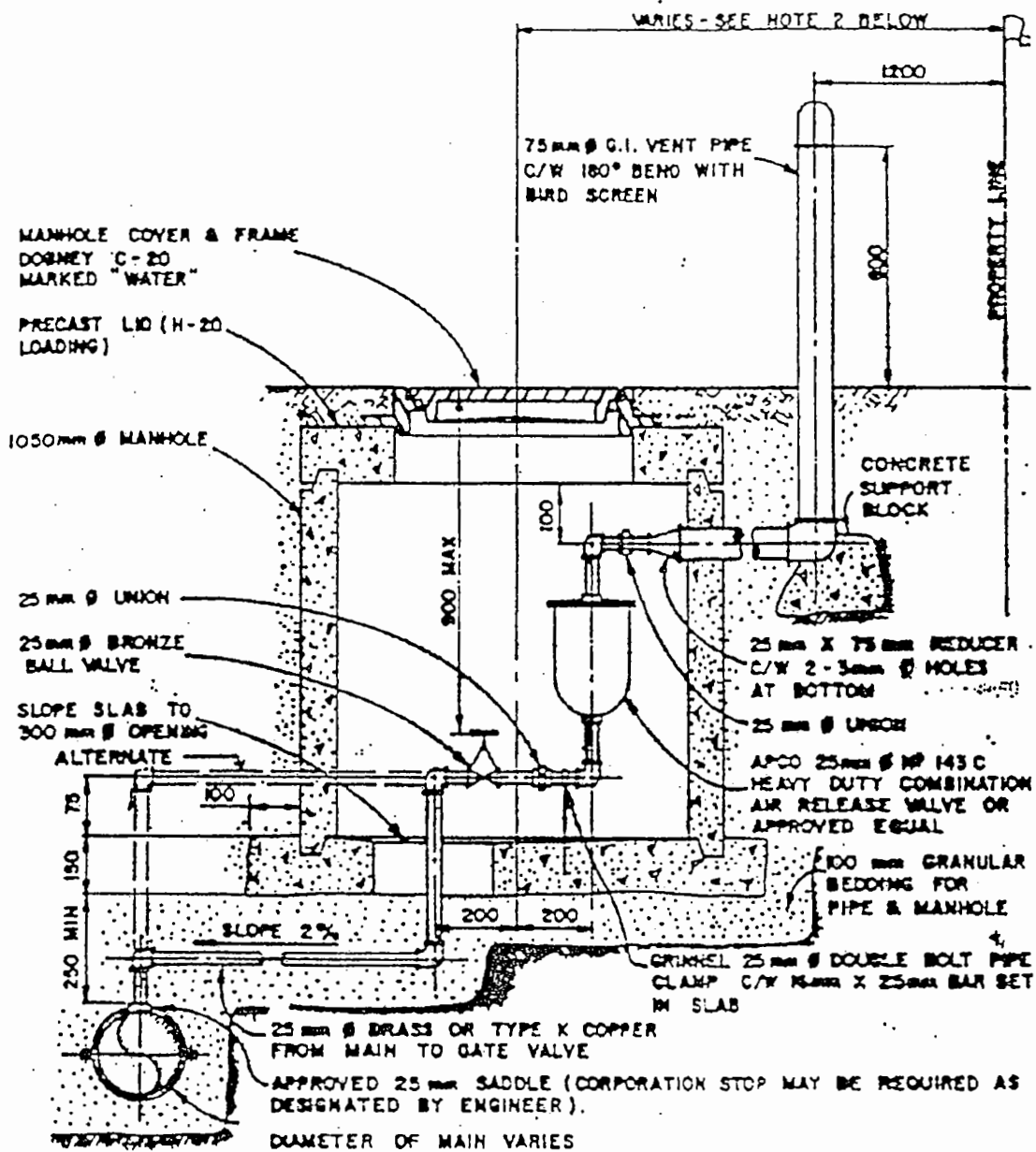


NO.	REVISION	APPROVED
SCALE:	N.T.S.	
DATE:	JUNE, 1999	



DISTRICT  
OF  
HOPE

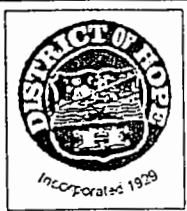
FILE	AIR VALVE INSTALLATION
	SDW-5



NOTES:

1. SPECIAL DESIGN REQUIRED WHEN DISTANCE FROM TOP OF MAIN TO MANHOLE COVER IS LESS THAN 1.2 m.
2. MANHOLE TO BE CENTERED 450mm FROM BACK OF SIDEWALK WHERE SIDEWALK IS ON THE SAME SIDE OF ROAD AS WATERMAIN OTHERWISE LOCATE IN BOULEVARD CENTRED AT 3m FROM PROPERTY LINE IN URBAN AREAS OR 4m FROM PROPERTY LINE IN RURAL AREAS C/W ACCESS PAD AND APPROVED CULVERT WHERE REQUIRED.

No.	REV.	APPROVED
SCALE	N.T.S.	
DATE	JUNE, 1999	

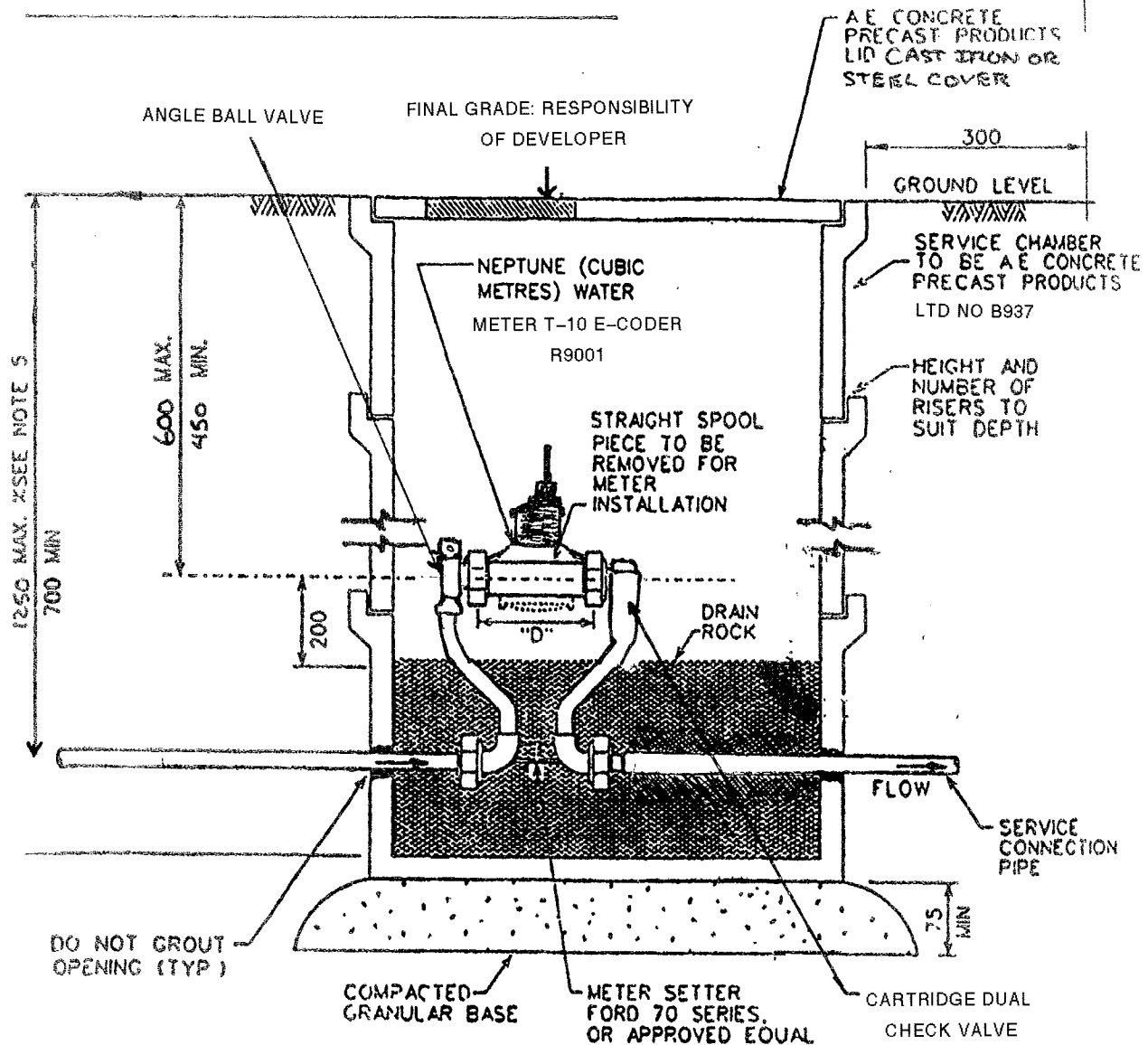


DISTRICT  
OF  
HOPE

TITLE	AIR AND VACCUUM VALVE CHAMBER
	SDW-6

NEW WATER SERVICE INSTALLATION

ROAD R.O.W. PRIVATE PROPERTY



- NOTE: 1) ALL CHAMBERS SHALL BE CONCRETE WITH CAST IRON LID TO H-20 TRAFFIC LOADING AE CONCRETE PRECAST PRODUCTS LTD OR APPROVED EQUAL  
 METERS 16mm to 25mm - CHAMBER No 37 OR EQUAL  
 METERS 38mm to 50mm - CHAMBER No 66 OR EQUAL  
 2) WATER METER SUPPLIED BY DISTRICT. INSTALLATION BY OWNER.  
 3) MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE BC PLUMBING CODE  
 4) DO NOT FILL CHAMBER WITH DRAIN ROCK UNTIL INSTALLATION HAS BEEN APPROVED BY THE PLUMBING INSPECTOR  
 5) IF DEPTH EXCEEDS 1.25m A 1050mm DIAMETER MANHOLE IS REQUIRED LID TO BE MARKED "WATER METER" . H-20 LOADING MANDATORY

METER SIZE	"D"
19	238
25	283
33	330
50	397

WATER METERS REQUIRED BY DISTRICT

No	REVISION	APPROVED
DATE	N.T.S.	
	FEB. 2010	



**DISTRICT OF HOPE**

TITLE

WATER METER  
50mmØ AND UNDER

SDW-7

10.03 U:\PROJECTS\16132\16132.dwg - METER DWG