04TH OCTOBER, 2021

TO ALL BIDDERS.

ADDENDUM No. 1: TENDER CLARIFICATION FOR ROAD REHABILITATION WORKS FOR TENDER No. KWS/OT/RMLF/04 - 26/2021-2022

Pursuant to Section 75 of the PPAD Act (2015) including Clause 8 of the tender documents, Kenya Wildlife Service wishes to make the following clarifications/Amendments: -

TENDER NO.	S/NO.	OBSERVATION (S)	AMENDMENT (S) / CLARIFICATION(S)
All Tenders	1	Submission of Schedule 1 and Pre tender meeting	The date of the pretender meeting is revised to 10.00am on 8th October 2021
	2	Tender Data Sheet(TDS), ITT 33.4 - Eligibility	The eligibility shall be as per the "Schedule of Road Tenders FY 2021-2022" found in KWS website www.kw.go.ke
	3	Section VII - Drawings	The drawings appearing on Pg 9 to Pg. 25 of this Addendum supersede those in the respective tender documents.
	4	Technical Evaluation Criteria Part A Financial Capabilities	Delete the sentence "*and marks awarded to each of the ratios*"
KWS/OT/RMLF/05/2021-2022	1	Bill of Quantities (BoQ) appearing on Pg. 93	Delete this page of BoQ and replace it with the one appearing on Pg 3 of this Addendum.
	2	Budget Amount in Tender Data Sheet(TDS), ITT 14.1 on Pg 29	Delete the line "*Twenty Six Million, Seventy Eight Thousand, One Hundred and Seven, and Thirty Two Cents (KES 26,078,107.32)*" and replace with "*Thirty Seven Million, One Hundred and Two Thousand, Seven Hundred and Seventy Eight and Twelve Cents.(KES 37,102,778.12)*"
KWS/OT/RMLF/07/2021-2022	1	Bill of Quantities (BoQ) appearing Pg. 91	Delete this BoQ Page and replace with the one on Page 4 and 5 of this Addendum.
	2	Summary Page appearing on Pg. 92	Delete this summary Page and replace with the one on Page 6 of this Addendum.

TENDER NO.	S/NO.	OBSERVATION (S)	AMENDMENT (S) / CLARIFICATION(S)
KWS/OT/RMLF/08/2021-2022	1	Summary Page appearing on Pg. 93	Delete this summary Page and replace with the one on Page 7 of this Addendum.
KWS/OT/RMLF/17/2021-2022	1	Invitation to Tender on Pg4	Delete this page and replace it with the one appearing on Page.8 of this Addendum

Note:

- This Addendum shall be construed to form part of the tender document
- All other conditions of the tender remain the same.
- The closing date, time and venue remains as earlier advertised.

HEAD SUPPLY CHAIN MANAGEMENT

BILL OF QUANTITIES FOR TENDER No. KWS/OT/RMLF/05/2021-2022

TENDER NO KWS/OT/RMLF/05/2021–2022					
Routine Maintenance of MOPEA – ITHUMBA – 104KM					
Item	**Description of Work Item**	**Unit**	**Quantity**	**Rate**	**Amount**
01-80-010	Allow a prime cost of sum of KES 100,000 for material testing as directed by the Engineer	PC SUM	1	100,000.00	100,000.00
01-80-011	Extra over item 01-80-010 for contractor's overheads and profits	%	100,000.00		
01-80-026	Allow a prime cost sum of KES 80,000 for the REs miscellaneous account	PC SUM	1	80,000.00	80,000.00
01-80-027	Extra over 01-80-026 for profits and overheads	%	80,000.00		
01-80-028	Allow a prime cost sum for off road Environmental Mitigation	PC SUM	1	100,000.00	100,000.00
01-80-029	Extra over 01-80-028 for profits and overheads	%	100,000.00		
01-80-034	Allow a prime cost sum for HIV/AIDS awareness on site	PC SUM	1	20,000.00	20,000.00
01-80-035	Include percentage of PC sum in item 01-80-034 for contractors overhead and profit	%	20,000		
04-50-004	Light Bush Clearing	M^2	280,000		
08-50-005	Ditch/Mitre drain /catch water drain excavation	M^3	2,000		
08-60-003	Culvert Cleaning- Partially blocked - 600mm	MT	28		
08-60-025	Provide, lay and joint 600mm pipe culvert with surround including headwalls, wing walls, toe walls and aprons. Rate to include excavation and backfilling over the culvert to specifications.	METERS	120		
10-50-001	Heavy grading - Trim with motor grader existing carriageway to camber including slopes and ditches without watering and compaction	M^2	612,000		
10-60-001	Prepare road formation, excavate from approved borrow pit, haul, spread, water and compact gravel wearing course as per specifications	M^3	9,215		
	(II) Total carried to Summary page				

BILL OF QUANTITIES FOR TENDER No. KWS/OT/RMLF/07/2021-2022

TENDER NO KWS/OT/RMLF/07/2021-2022					
Routine Maintenance of MANYANI GATE – SALA GATE ROAD C103 – 111KM					
Item	**Description of Work Item**	**Unit**	**Quantity**	**Rate**	**Amount**
01-80-010	Allow a prime cost of sum of KES 50,000 for material testing as directed by the Engineer	PC SUM	1	50,000.00	50,000.00
01-80-011	Extra over item 01-80-010 for contractor's overheads and profits	%	50,000.00		
01-80-026	Allow a prime cost sum of KES 100,000 for the REs miscellaneous account	PC SUM	1	100,000.00	100,000.00
01-80-027	Extra over 01-80-026 for profits and overheads	%	100,000.00		
01-80-028	Allow a prime cost sum of KES 120,000 for off road Environmental Mitigation	PC SUM	1	120,000.00	120,000.00
01-80-029	Extra over 01-80-028 for profits and overheads	%	120,000.00		
01-80-034	Allow a prime cost sum of KES 20,000 for HIV/AIDS awareness on site	PC SUM	1	20,000.00	20,000.00
01-80-035	Include percentage of PC sum in item 01-80-034 for contractors overhead and profit	%	20,000.00		
04-50-004	Light Bush Clearing	M^2	18,000		
07-50-001	Excavate for structure in soft material	M^3	38		
07-50-002	Excavate for structure in hard material	M^3	12		
07-60-013	Provide place and compact rock fill to specifications below structure	M^3	468		
08-50-005	Ditch/Mitre drain /catch water drain excavation	M^3	2,000		
08-60-003	Culvert Cleaning- Partially blocked - 600mm	MT	140		
08-60-004	Culvert Cleaning- Partially blocked - 900mm	MT	77		
08-60-017	Headwall repair - concrete	NO	8		
08-60-025	Provide, lay and joint 600mm pipe culvert with surround including headwalls, wing walls, toe walls and aprons. Rate to include excavation and backfilling over the culvert to specifications.	MT	28		
08-60-027	Provide, lay and joint 900mm pipe culvert with surround including headwalls, wing walls, toe walls and aprons. Rate to include excavation and backfilling over the culvert to specifications.	MT	35		
08-70-004	Provide and place Gabion Installation	NO	10		
08-70-005	Provide and place Rock fill to Gabions	M^3	20		
08-70-025	Provide and place A252 fabric mesh reinforcement or equivalent	M^2	150		
08-90-028	Excavate and remove existing 600mm	M	28.00		

TENDER NO KWS/OT/RMLF/07/2021-2022					
Routine Maintenance of MANYANI GATE – SALA GATE ROAD C103 – 111KM					
Item	**Description of Work Item**	**Unit**	**Quantity**	**Rate**	**Amount**
	culvert and cut away as directed by the Engineer				
08-90-029	Excavate and remove existing 900mm culvert as directed by the Engineer	M	35.00		
10-50-003	Light grading as instructed by the Engineer	M^2	606,000.00		
10-60-001	Prepare road formation, provide gravel wearing course including, haulage, water and compact gravel to specifications	M^3	3,000.00		
17-60-001	Provide place and compact concrete class 15/20 for blinding	M^3	12		
17-60-002	Provide place and compact concrete class 20/25 concrete	M^3	56		
17-60-003	Vertical framework class F2 finish	M^2	100		
17-80-005	Provide, cut, bend and fix steel reinforcement of diameter greater than 16mm diameter per the drawing or as instructed by the Engineer	TON	2		
20-50-004	Edge marker posts	NO.	4		
	(II) Total carried to Summary page				

SUMMARY PAGE FOR TENDER No. KWS/OT/RMLF/07/2021-2022

TENDER NO. KWS/OT/RMLF/07/2021 - 2022		
Summary Page		
Item	Description of Work Item	Amount
I	Routine Maintenance of BACHUMA – ARUBA – SOBO ROAD E683 – 84KM	
II	Routine Maintenance of MANYANI GATE – SALA GATE ROAD C103 – 111KM	
A	SUB TOTAL	
B	ADD 16% VAT	
	Total Carried Forward to Form of Tender(A+B)	

SUMMARY PAGE FOR TENDER No. KWS/OT/RMLF/08/2021-2022

TENDER NO. KWS/OT/RMLF/08/2021-2022		
Summary Page		
Item	Description of Work Item	Amount
I	Routine Maintenance of VOI GATE – SALA GATE ROAD E682 – 95KM	
II	Routine Maintenance of PHQS – LUGARDS – MIFUPA NDOVU ROAD E684 – 100KM	
A	SUB TOTAL	
B	ADD 16% VAT	
	Total Carried Forward to Form of Tender(A+B)	

SECTION I INVITATION TO TENDER

KENYA WILDLIFE SERVICE,
P.O.BOX 40241 – 00100
NAIROBI.
hps@kws.go.ke

TENDER NO. KWS/OT/RMLF/17/2021-2022:

ROUTINE MAINTENANCE OF KANJORA - RUHURUINI – MUTUBIO E580 / JUNCTION E580 – TOSHA – KINUNGI IN ABERDARE NATIONAL PARK.

1. Kenya Wildlife Service invites sealed tenders for **Routine Maintenance of Kanjora - Ruhuruini – Mutubio E580 / Junction E580 – Tosha – Kinungi**

2. Tendering will be conducted under National open competitive method using a standardized tender document. Tendering is Open to All qualified and interested Tenderers

   "Tenderers will not be allowed to tender for more than one bid".

3. Qualified and interested tenderers may obtain further information and inspect the Tender Documents during office hours *i.e. 0800 to 1700 hours* at the address given below.

4. A complete set of tender documents may be obtained free of charge electronically from our website; **www.kws.go.ke** or the Public Procurement Information Portal **https://www.tenders.go.ke.**

5. Tender documents may be viewed and downloaded for free from the website (**www.kws.go.ke** or the Public Procurement Information Portal **https://www.tenders.go.ke**). Tenderers who download the tender document must forward their particulars immediately to hps@kws.go.ke, Kenya Wildlife Service, P.O Box 40241-00100, Nairobi and Telephone number 0202379407 to facilitate any further clarification or addendum.

6. All Tenders must be accompanied by an Original Tender Security of KES 800,000.00 (Eight hundred thousand Shillings). The tender security shall be issued in Kenya Shillings in the form of a Bank Guarantee or an Insurance Guarantee from Insurance Companies approved by PPRA / deposit-taking Microfinance institutions, SACCO societies, Youth Enterprise Development Fund or Women Enterprise Development Fund

7. The Tenderer shall chronologically serialize all pages of the tender documents submitted.

8. Completed tenders must be delivered to the address below on or before **26th October 2021 at 1000hrs**. Electronic Tenders ***will not*** be permitted.

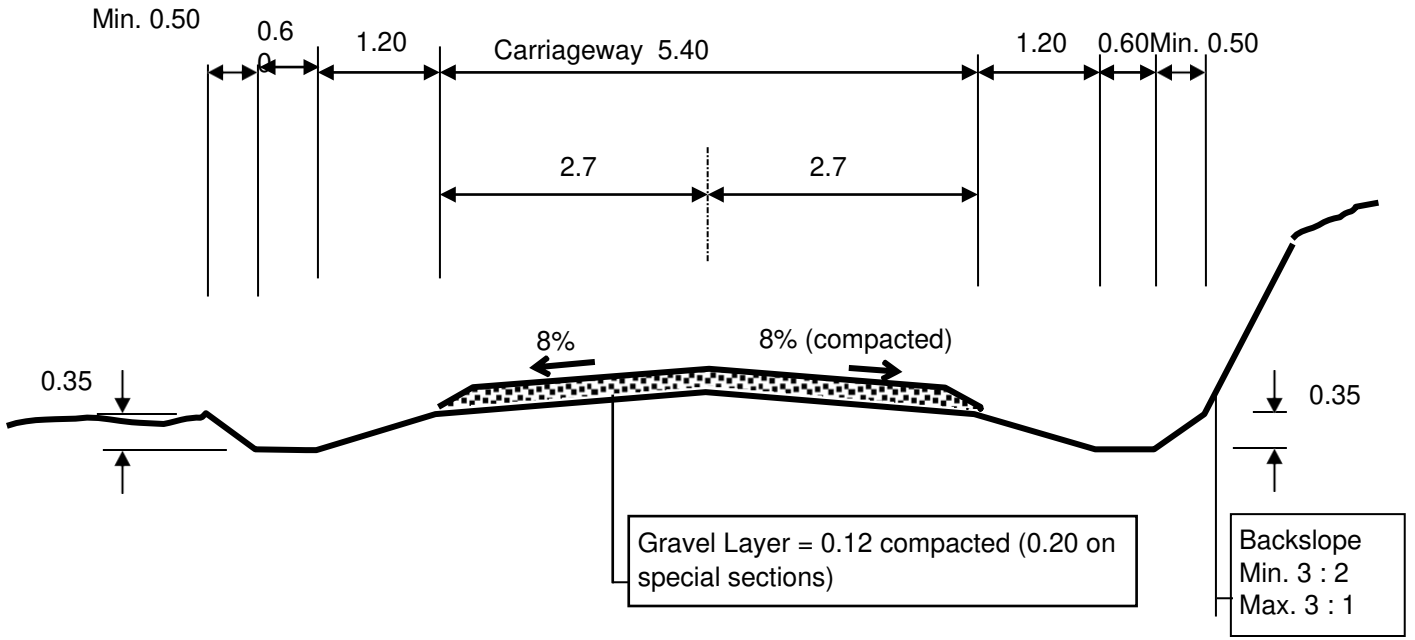
9. Tenders will be opened immediately after the deadline date and time specified above or any deadline date and time specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.

10. Late tenders will be rejected.

11. The addresses referred to above are:

DRAWINGS

FIGURE C.1 - CROSS SECTION A (MINOR STANDARD CROSS-SECTION)



NOTE:

- ALL SPECIFIED DIMENSIONS IN m.

- TRAFFIC LEVELS OF MORE THAN 200 VPD MAY JUSTIFY RUNNING SURFACE WIDTH INCREASE TO 6.50 METRES

FIGURE C.2 - CROSS SECTION B (REDUCED CROSS-SECTION)

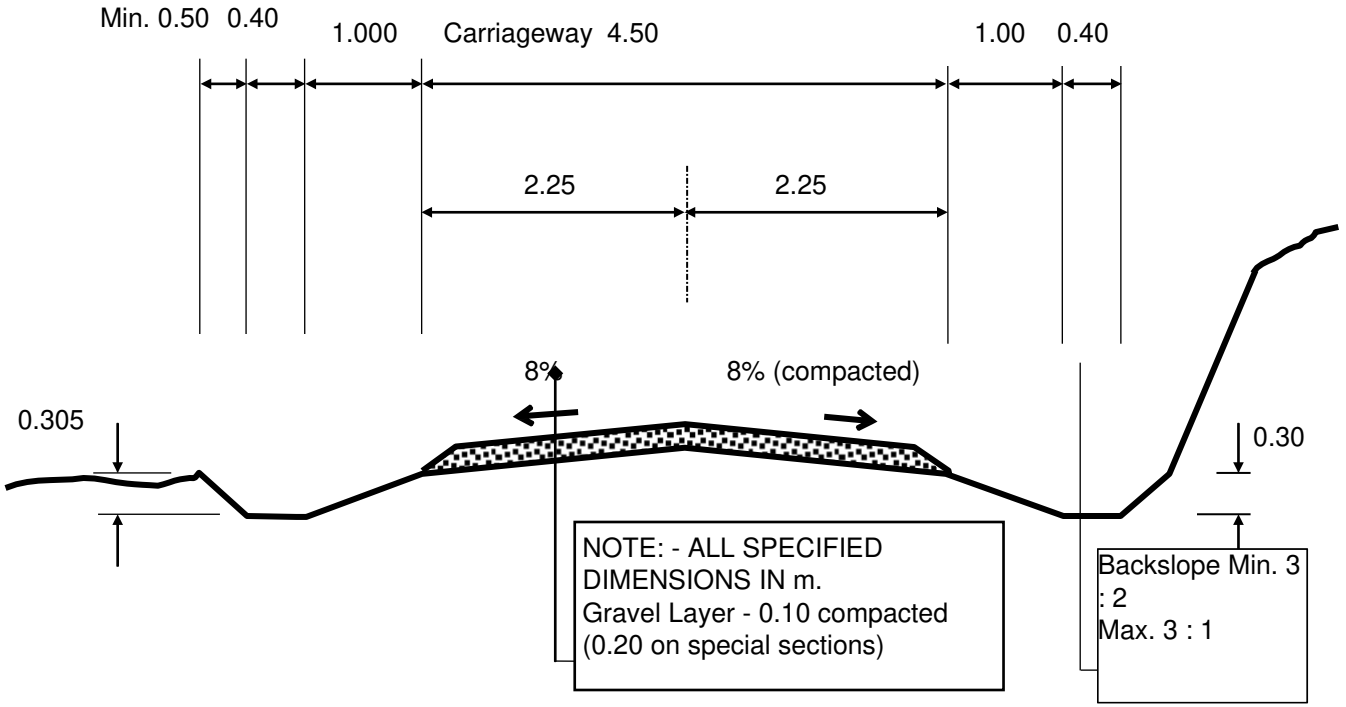


FIGURE C.3 - MITRE DRAINS

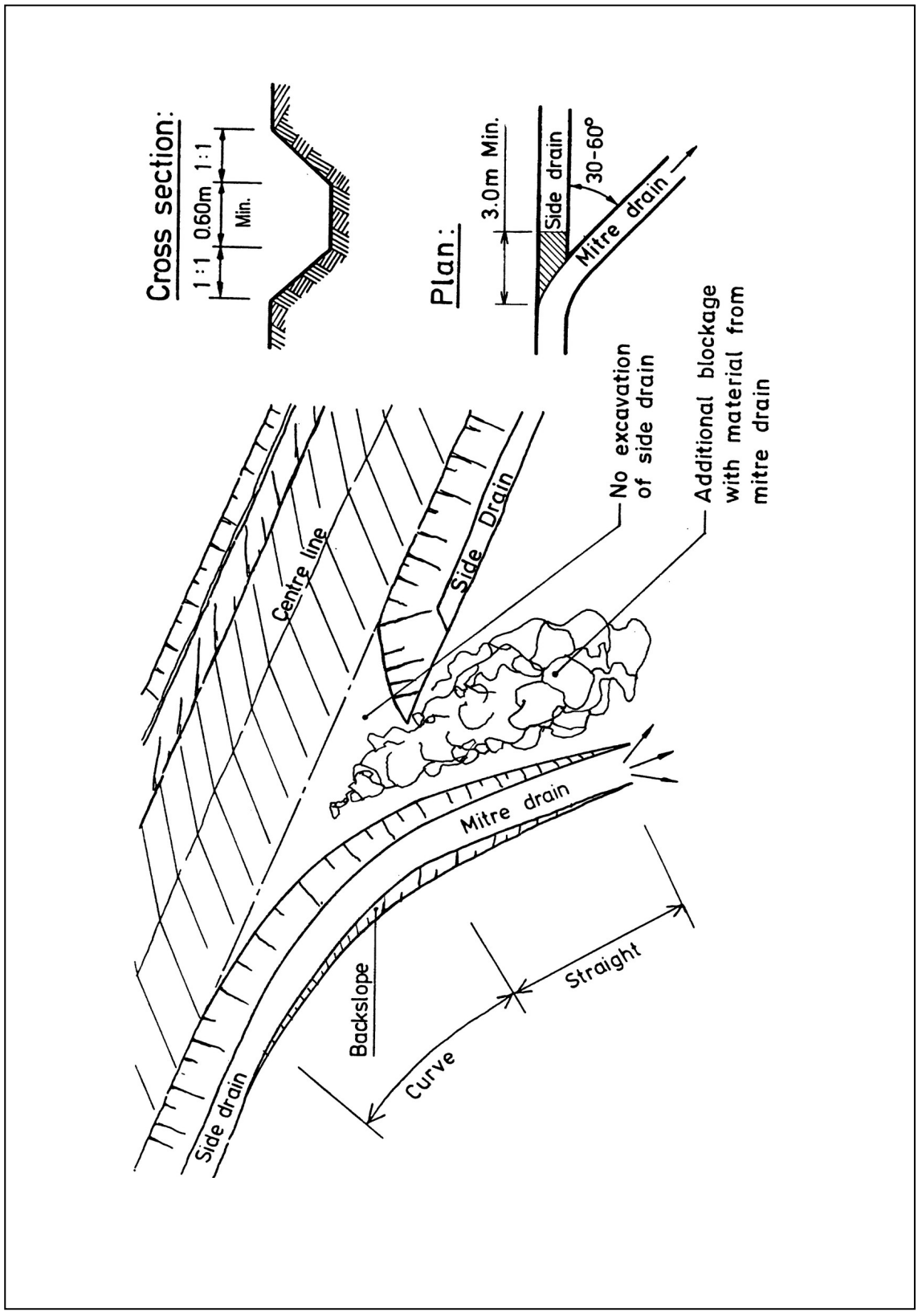


FIGURE C.4 - SCOUR CHECKS

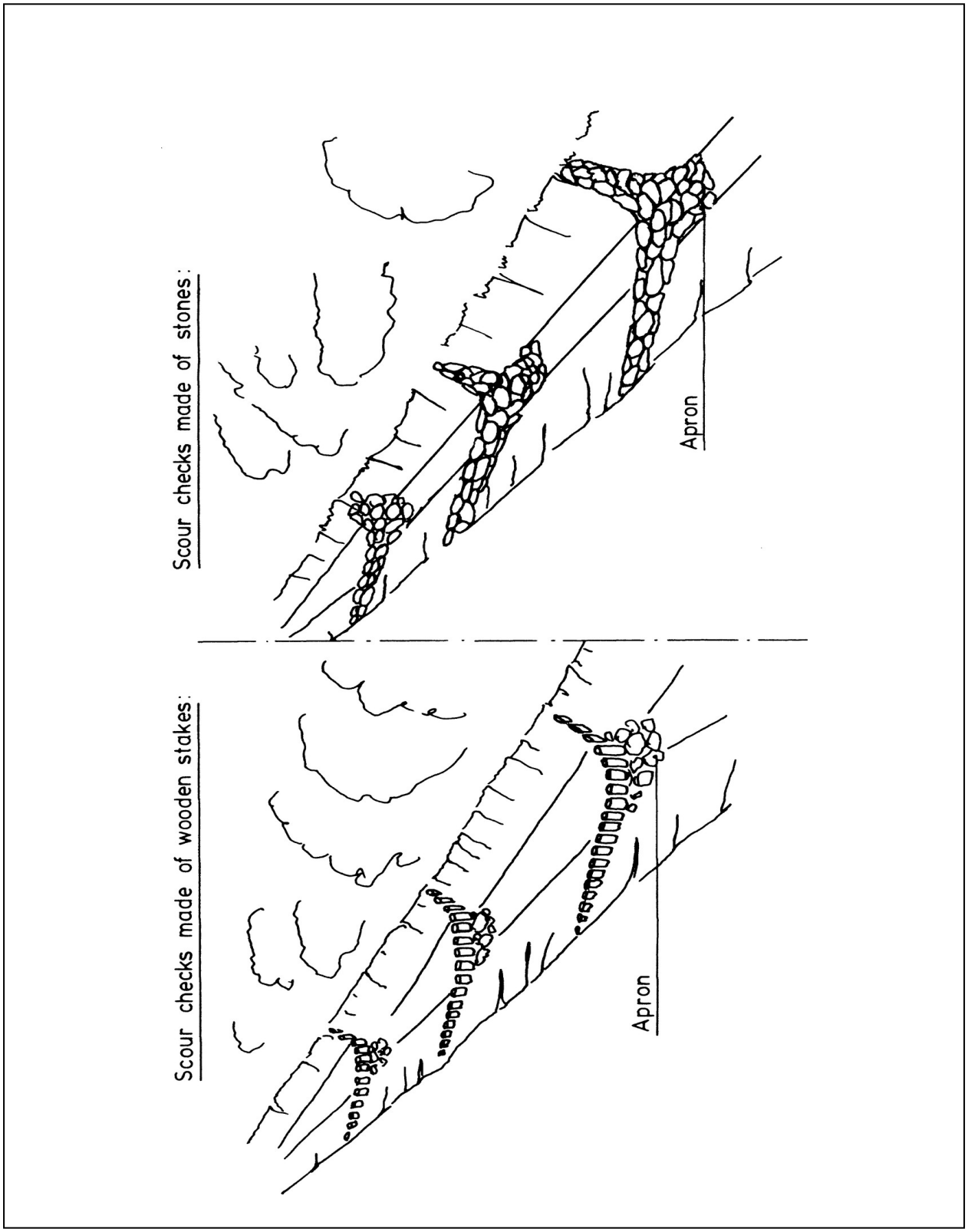


FIGURE C.5 - DIMENSIONS OF SCOUR CHECKS FOR STANDARD DRAIN

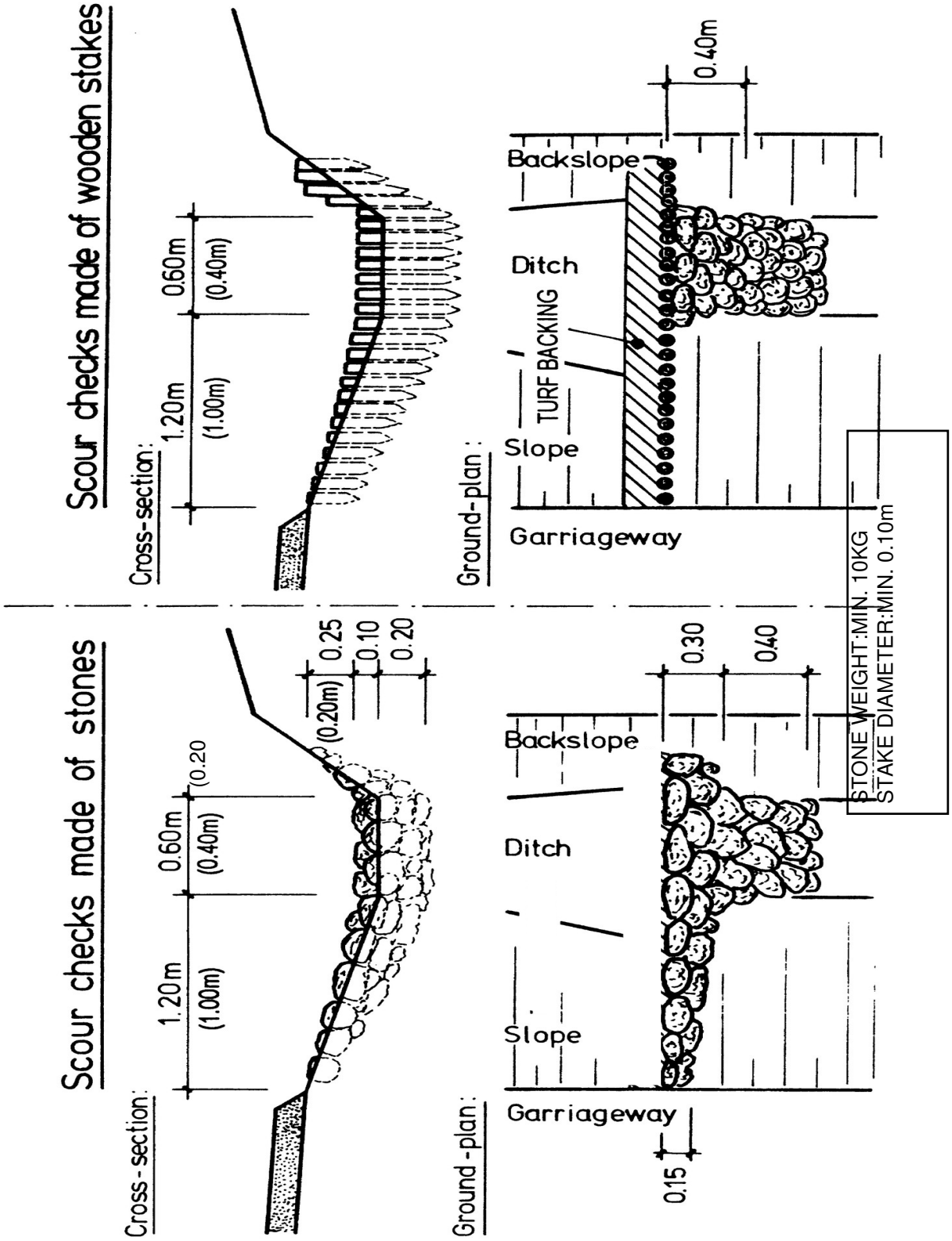
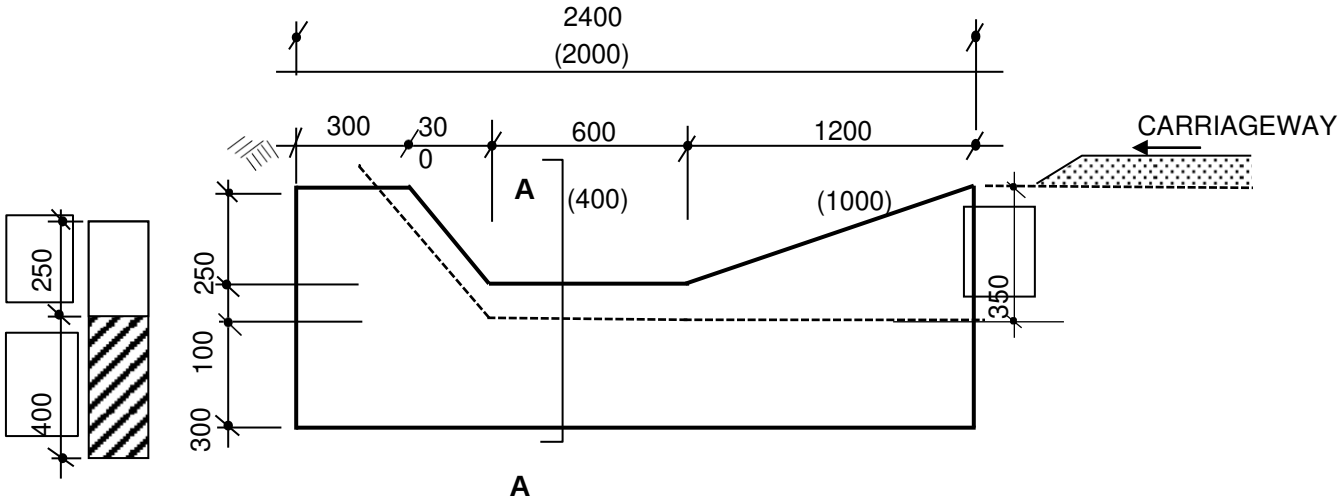
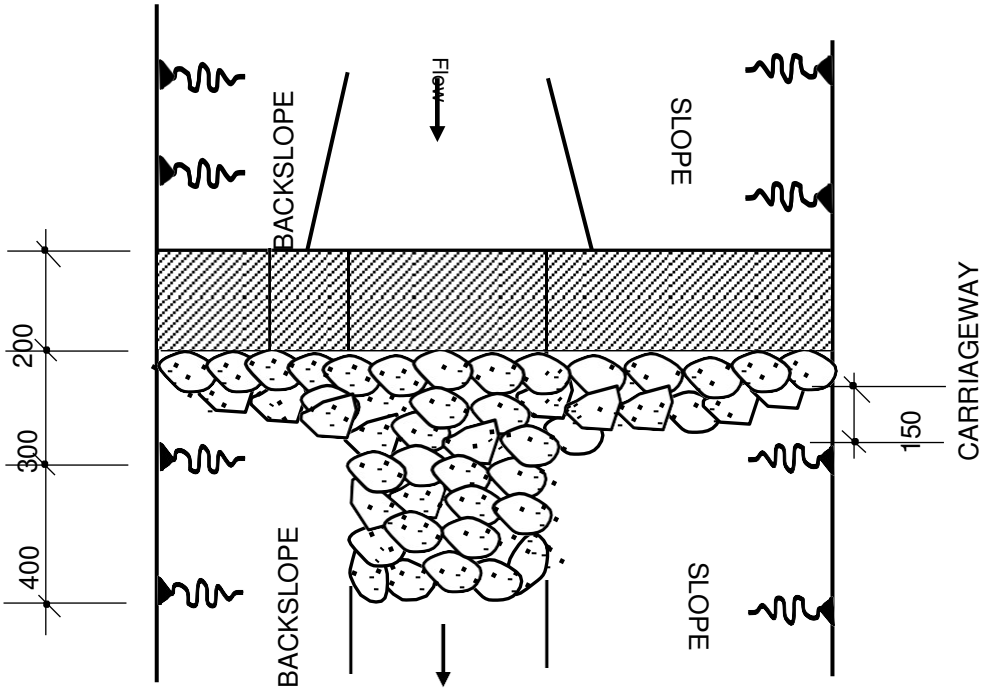


FIGURE C.6 - MASONRY SCOUR CHECKS



A SECTION OF MASONRY SCOUR CHECKS



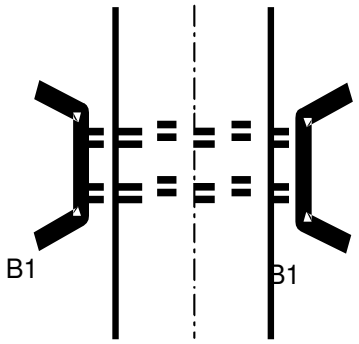
PLAN OF DRAIN WITH EROSION CHECKS

QUANTITIES TABLE

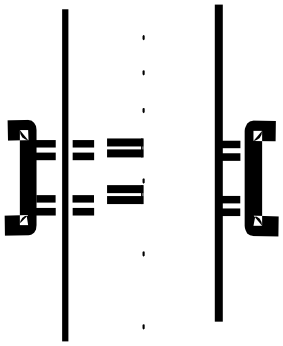
Cross-Section	Sizes in mm			Excav. (m^3)	Stone masonry (m^3)	Apron stone pitching (m^3)
	Length	Width	Depth			
A	2400	200	550	0.22	0.25	0.18
B	2000	200	500	0.18	0.2	0.14

FIGURE C.7 - CULVERT ENTRY / EXIT STRUCTURE TYPES

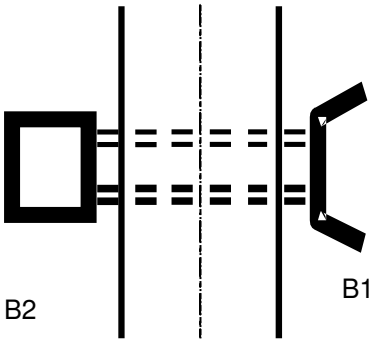
TYPE 1 (ENTRY AND EXIT)



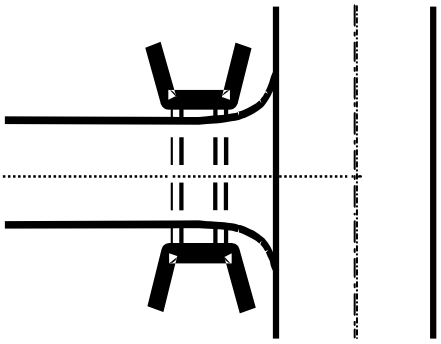
TYPE 3 (ENTRY AND EXIT)



TYPE 2 (ENTRY ONLY!)



TYPE 4 (ENTRY AND EXIT ON ACCESS)



NOTE:

Coding system has been used in describing the standardized designs of the various culvert entry and exit structures. The code names consist of a number to specify shape and function as elaborated in above while the used construction materials are identified through an alphabetic symbol as follows:

A = Concrete block
B = Stone masonry
C = Dressed stones

An example code of "B2" would therefore stand for a drop inlet type structure to be built in stone masonry.

FIGURE C.8 - HEADWALL TYPE 1 (HEAD AND WINGWALLS)

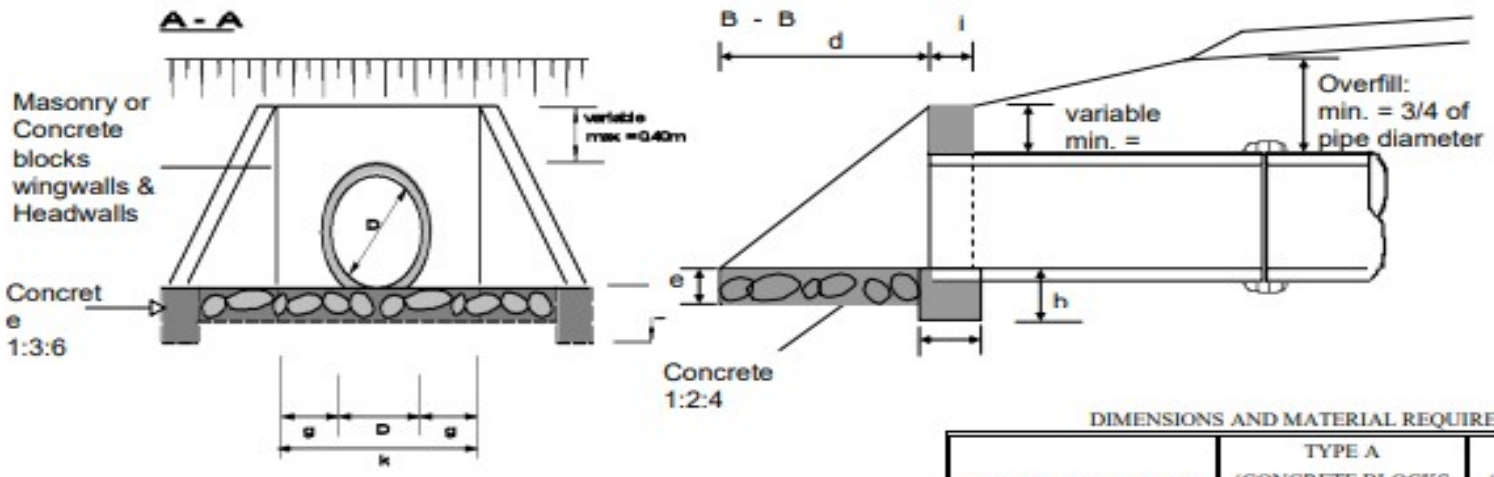
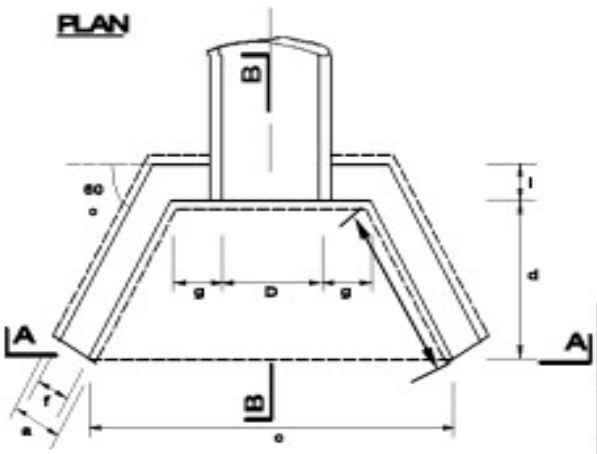


FIGURE C.8 - HEADWALL TYPE 1 (HEAD AND WINGWALLS)

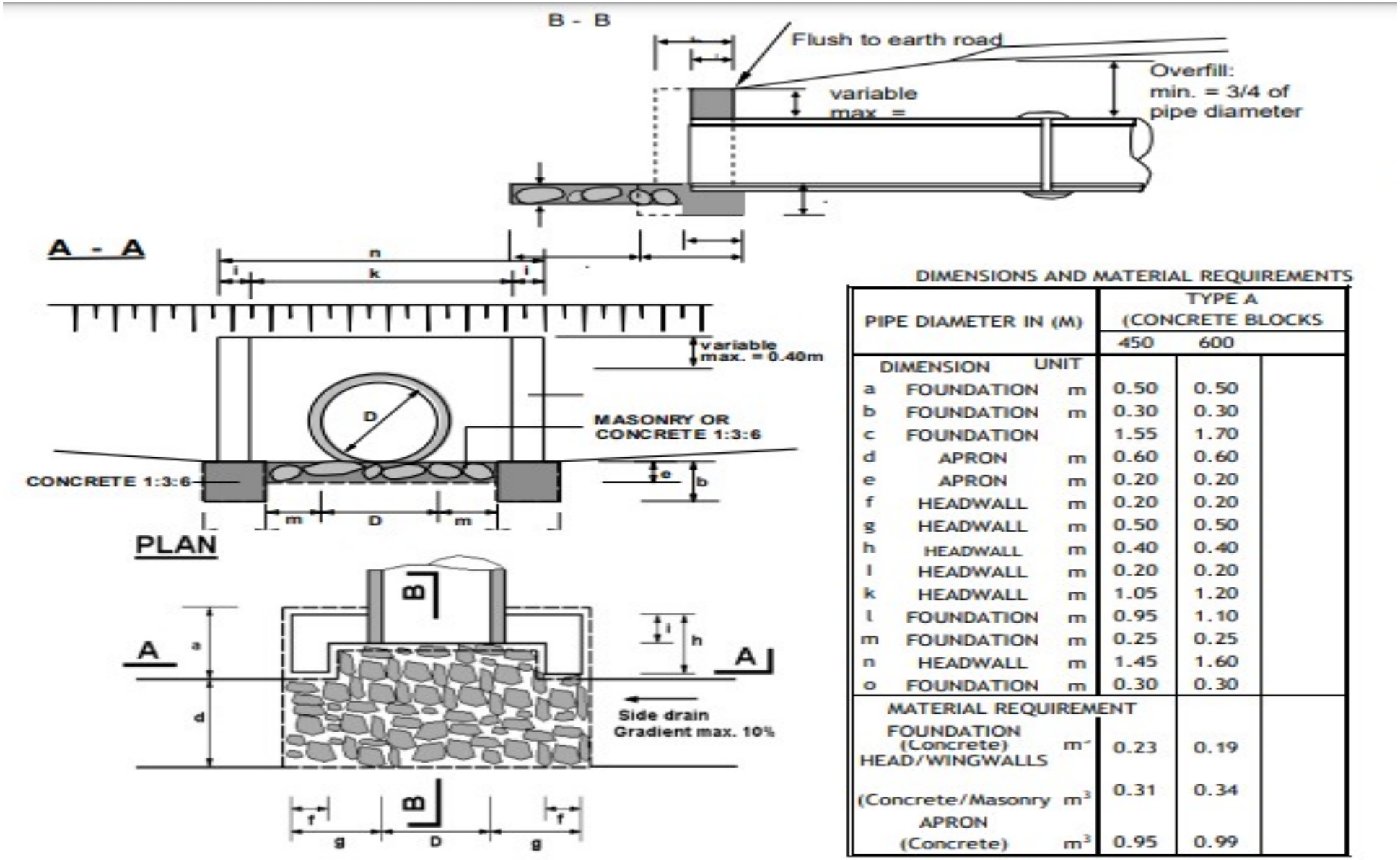
DIMENSIONS AND MATERIAL REQUIREMENTS

PIPE DIAMETER IN (M)			TYPE A (CONCRETE BLOCKS			TYPE B (STONE MASONRY)		
			450	600	900	450	600	900
DIMENSION		UNIT						
a	FOUNDATION	m	0.30	0.30	0.30	0.40	0.40	0.60
b	FOUNDATION	m	0.30	0.30	0.40	0.30	0.30	0.40
c	FOUNDATION		2.20	2.35	2.89	2.20	2.35	2.89
d	APRON	m	1.00	1.00	1.20	1.00	1.00	1.20
e	APRON	m	0.20	0.20	0.20	0.20	0.20	0.20
f	WALL	m	0.20	0.20	0.20	0.40	0.40	0.40
g	WALL	m	0.30	0.30	0.30	0.30	0.30	0.30
h	WALL	m	1.15	1.15	1.39	1.15	1.15	1.39
l	WALL	m	0.20	0.20	0.20	0.40	0.40	0.40
k	APRON	m	1.05	1.20	1.50	1.05	1.20	1.50
MATERIAL REQUIREMENT								
FOUNDATION (Concrete)		m^3	0.3	0.32	0.51	0.4	0.42	1.03
HEAD/WINGWALL (Concrete/Masonry)		m^3	0.4	0.47	0.67	0.8	0.93	1.35
APRON (Concrete)		m^3	0.33	0.36	0.53	0.33	0.36	0.53



CULVERT PIPES	
X-SECTION WIDTH	No. of Pipes
4.50	6.00
5.50	7.00
6.50	8.00

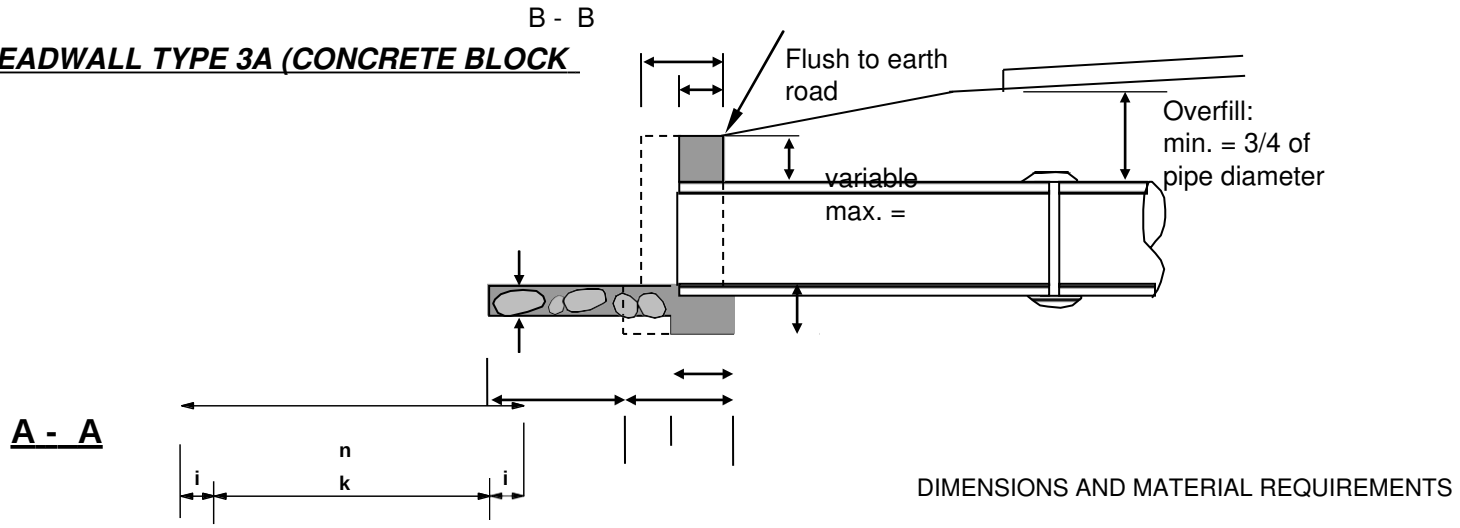
FIGURE C.9 - HEADWALL TYPE 2 (DROP INLET)

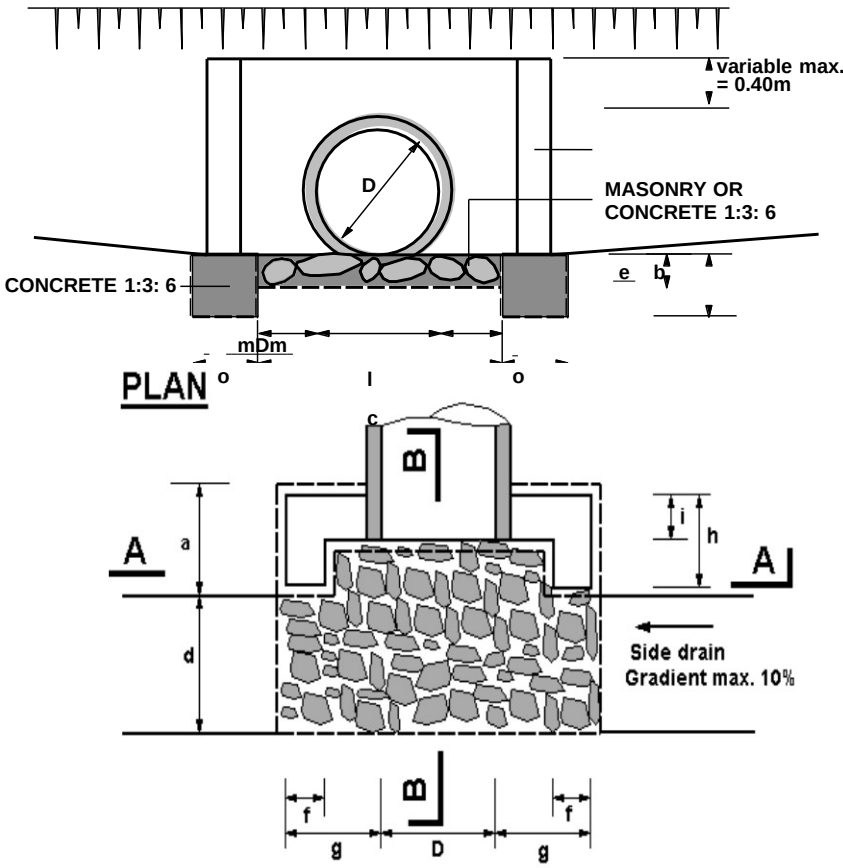


DIMENSIONS AND MATERIAL REQUIREMENTS

PIPE DIAMETER IN (M)			TYPE A (CONCRETE BLOCKS	
			450	600
DIMENSION		UNIT		
a	FOUNDATION	m	0.50	0.50
b	FOUNDATION	m	0.30	0.30
c	FOUNDATION		1.55	1.70
d	APRON	m	0.60	0.60
e	APRON	m	0.20	0.20
f	HEADWALL	m	0.20	0.20
g	HEADWALL	m	0.50	0.50
h	HEADWALL	m	0.40	0.40
I	HEADWALL	m	0.20	0.20
k	HEADWALL	m	1.05	1.20
l	FOUNDATION	m	0.95	1.10
m	FOUNDATION	m	0.25	0.25
n	HEADWALL	m	1.45	1.60
o	FOUNDATION	m	0.30	0.30
MATERIAL REQUIREMENT				
FOUNDATION (Concrete)		m^3	0.23	0.19
HEAD/WINGWALLS (Concrete/Masonry		m^3	0.31	0.34
APRON (Concrete)		m^3	0.95	0.99

FIGURE C.10 - HEADWALL TYPE 3A (CONCRETE BLOCK HEADWALLS)

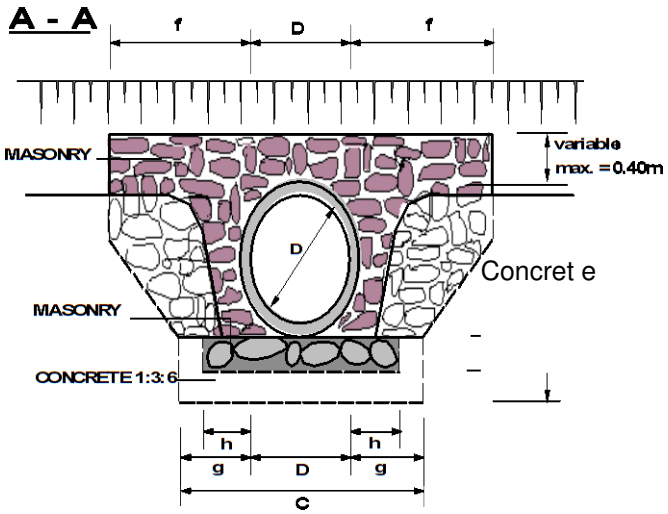


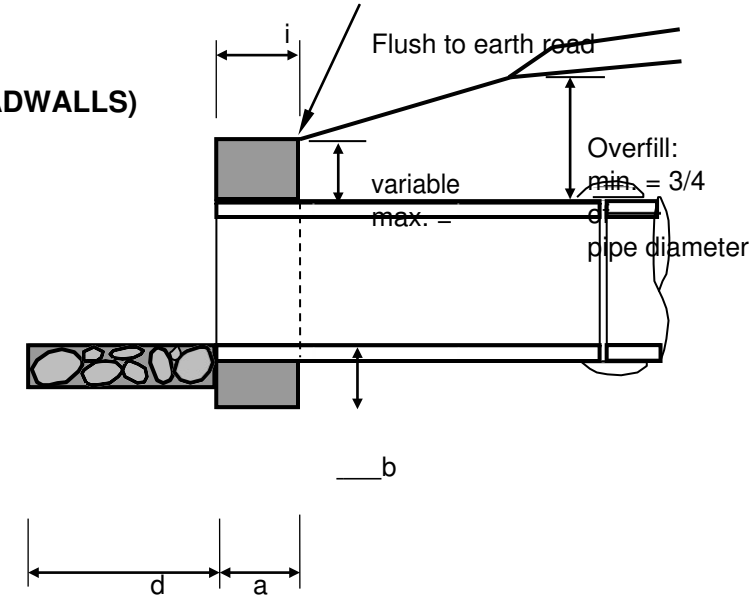


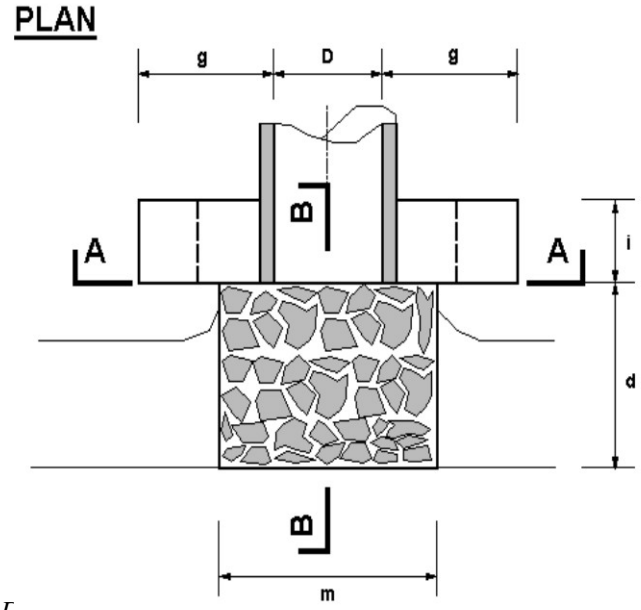
PIPE DIAMETER IN (M)			TYPE A (CONCRETE BLOCKS		
			450	600	
	DIMENSION	UNIT			
a	FOUNDATION	m	0.50	0.50	
b	FOUNDATION	m	0.30	0.30	
c	FOUNDATION		1.55	1.70	
d	APRON	m	0.60	0.60	
e	APRON	m	0.20	0.20	
f	HEADWALL	m	0.20	0.20	
g	HEADWALL	m	0.50	0.50	
h	HEADWALL	m	0.40	0.40	
I	HEADWALL	m	0.20	0.20	
k	HEADWALL	m	1.05	1.20	
l	FOUNDATION	m	0.95	1.10	
m	FOUNDATION	m	0.25	0.25	
n	HEADWALL	m	1.45	1.60	
o	FOUNDATION	m	0.30	0.30	
	MATERIAL REQUIREMENT				
	FOUNDATION (Concrete)	m	0.23	0.19	
	HEAD/WINGWALLS (Concrete/Masonry	m^3	0.31	0.34	
	APRON (Concrete)	m^3	0.95	0.99	

B -

FIGURE C.11 - HEADWALL TYPE 3B (STONE MASONRY HEADWALLS)

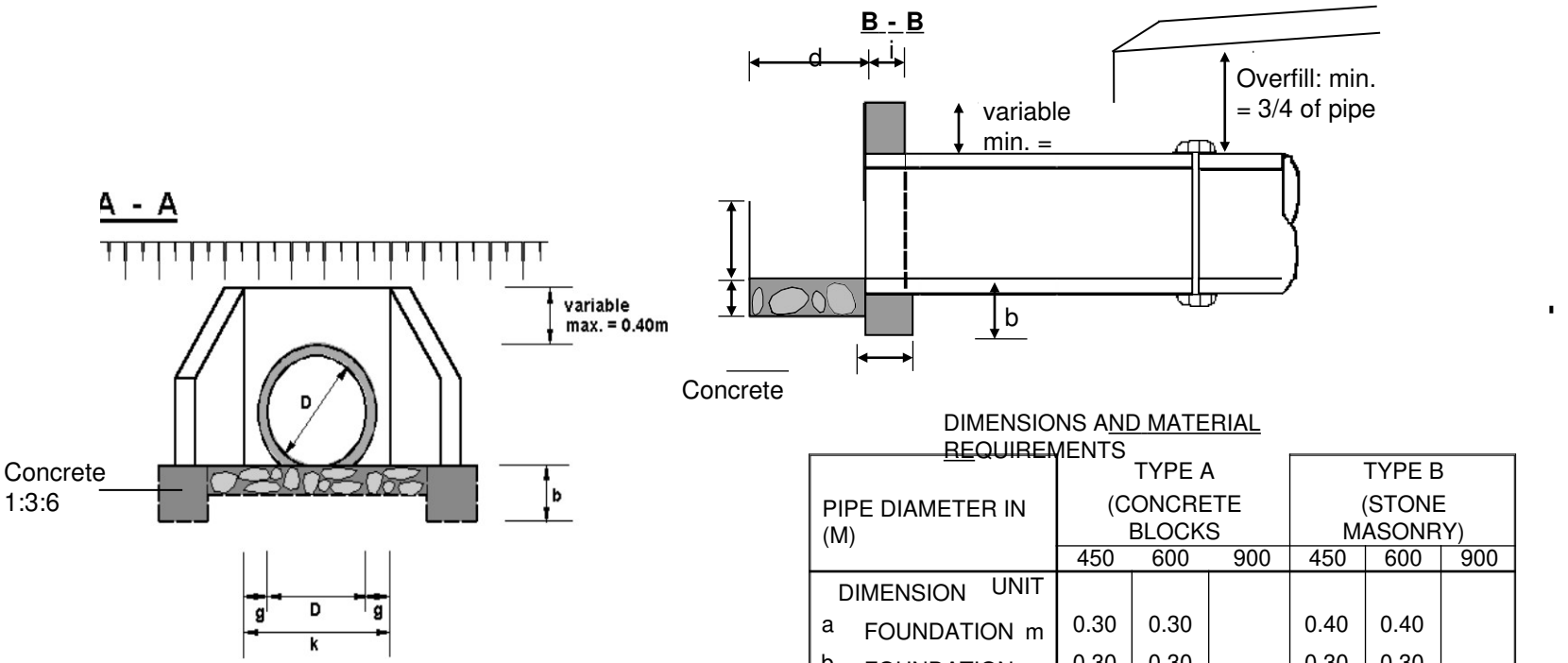






PIPE DIAMETER IN (M)			TYPE B (CONC. BLOCKS)	
			450	600
	DIMENSION	UNIT		
a	FOUNDATION	m	0.40	0.40
b	FOUNDATION	m	0.30	0.30
c	FOUNDATION		1.55	1.70
d	APRON	m	0.90	0.90
e	APRON	m	0.20	0.20
f	HEADWALL	m	0.75	0.75
g	HEADWALL	m	0.50	0.50
h	HEADWALL	m	0.30	0.30
I	HEADWALL	m	0.40	0.40
m	FOUNDATION	m	1.05	1.20
	MATERIAL REQUIREMENT			
	FOUNDATION (Concrete 1:3:6)	m^3	0.19	0.2
	HEAD/WINGWALLS (Concrete/Masonry)	m^3	0.62	0.69
	APRON (Concrete 1:3:4)	m^3	0.19	0.22

FIGURE C.12 - HEADWALL TYPE 4 (FOR ACCESS CULVERTS)



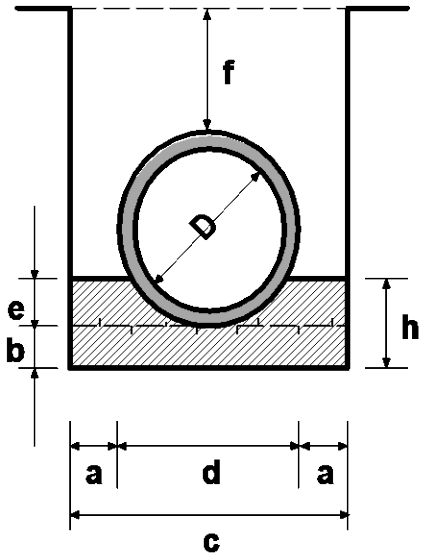
DIMENSIONS AND MATERIAL REQUIREMENTS

PIPE DIAMETER IN (M)		TYPE A (CONCRETE BLOCKS			TYPE B (STONE MASONRY)		
		450	600	900	450	600	900
DIMENSION	UNIT						
a	FOUNDATION m	0.30	0.30		0.40	0.40	
b	FOUNDATION m	0.30	0.30		0.30	0.30	
c	APRON	1.34	1.49		1.34	1.49	
d	APRON m	0.60	0.60		0.60	0.60	
e	APRON m	0.20	0.20		0.20	0.20	
f	WINGWALLS m	0.20	0.20		0.40	0.40	
g	WINGWALLS m	0.10	0.10		0.10	0.10	
h	HEADWALLS m	0.69	0.69		0.69	0.69	
I	HEADWALLS m	0.20	0.20		0.40	0.40	
k	HEADWALLS m	0.65	0.80		0.65	0.80	
l	HEADWALLS m	0.40	0.40		0.40	0.40	
MATERIAL REQUIREMENT							
FOUNDATION (Concrete 1:2:4, 1:3:6)	m^3	0.18	0.2		0.24	0.26	
HEAD/WINGWALLS (Concrete/Masonry	m^3	0.25	0.29		0.50	0.58	
APRON (Concrete)	m^3	0.12	0.14		0.12	0.14	

FIGURE C.13- BEDDING AND HAUNCH PROFILES TYPES I & II

PROFILE I

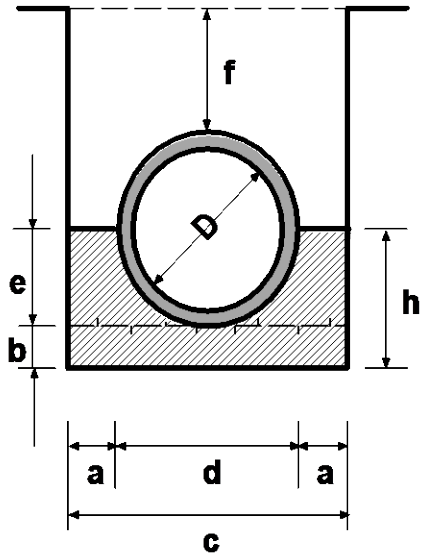
(CONCRETE)



Diameter (D)	450 (mm)	600 (mm)	900 (mm)
	Dimensions in (m)		
a	0.15	0.2	0.2
b	0.1	0.15	0.15
c	0.86	1.12	1.48
d	0.56	0.72	1.08
e	0.14	0.18	0.27
f (min.)	0.34	0.45	0.68
g	-	-	-
h	0.24	0.33	0.42
i	-	-	-
Concrete	Volume in (m3/m)		
	0.16	0.3	0.48
Application	- Fair subgrade condition; - Overfill > ¾ Diameter; - Seasonal waterflow only.		
Remarks	- Use gravel material for back/ overfill.		

PROFILE II

(CONCRETE)

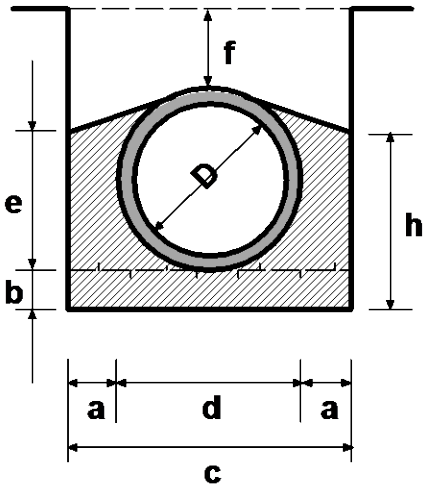


450 (mm)	600 (mm)	900 (mm)
Dimensions in (m)		
0.15	0.2	0.2
0.1	0.15	0.15
0.86	1.12	1.48
0.56	0.72	1.08
0.28	0.36	0.54
0.34	0.45	0.68
-	-	-
0.38	0.51	0.69
-	-	-
Volume in (m3/m)		
0.2	0.37	0.56
- Fair to poor subgrade Condition; - Overfill > ¾ Diameter; - Seasonal waterflow only.		
- Use gravel material for back/ overfill.		

FIGURE C.14 - BEDDING AND HAUNCH PROFILES TYPES III & IV

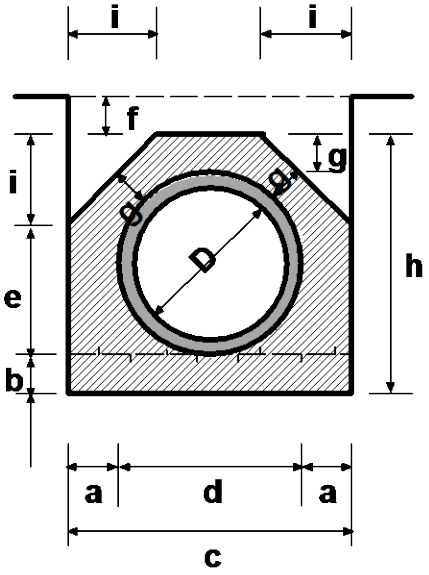
PROFILE III

(CONCRETE)



PROFILE IV

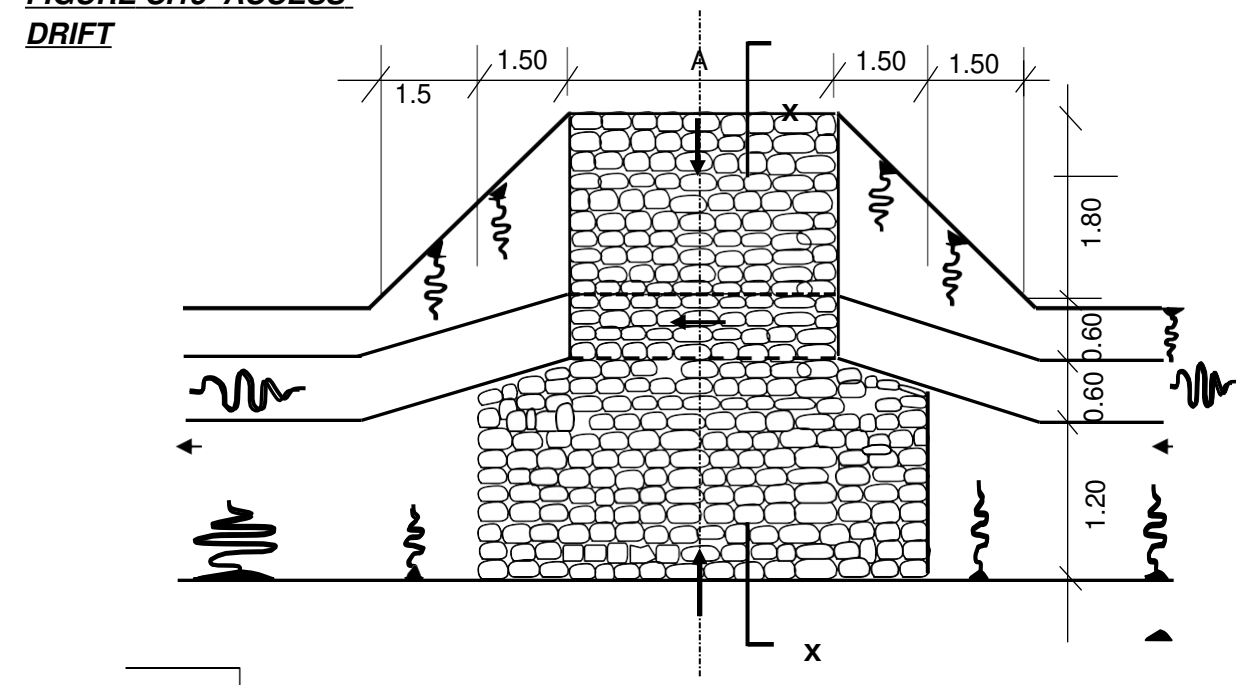
(CONCRETE)



Diameter (D)	450 (mm)	600 (mm)	900 (mm)
	Dimensions in (m)		
a	0.15	0.2	0.2
b	0.1	0.15	0.15
c	0.86	1.12	1.48
d	0.56	0.72	1.08
e	0.42	0.54	0.81
f (min.)	0.23	0.3	0.45
g	-	-	-
h	0.52	0.69	0.96
i	-	-	-
Concrete	Volume in (m3/m)		
	0.26	0.47	0.71
Application	- Fair subgrade condition; - Overfill > ¾ Diameter; - Seasonal waterflow only.		
Remarks	- Use gravel material for back/ overfill.		

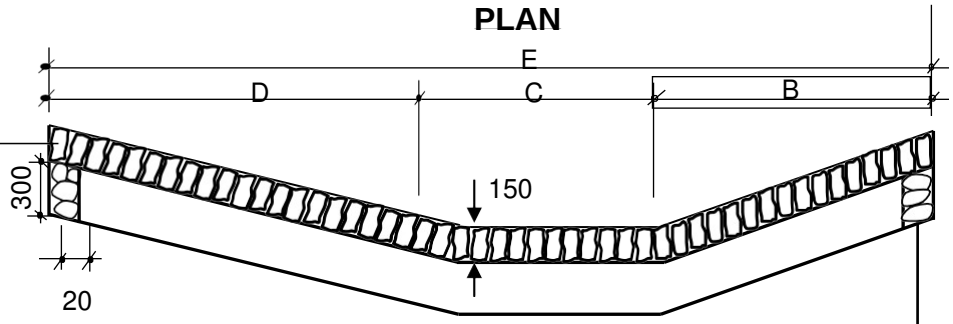
450 (mm)	600 (mm)	900 (mm)
Dimensions in (m)		
0.15	0.2	0.2
0.1	0.15	0.15
0.86	1.12	1.48
0.56	0.72	1.08
0.46	0.52	0.78
0.15	0.15	0.15
0.15	0.15	0.15
0.81	1.02	1.38
0.28	0.35	0.45
Volume in (m3/m)		
0.37	0.61	0.92
- Fair to poor subgrade Condition; - Overfill > ¾ Diameter; - Seasonal waterflow only.		
- Use gravel material for back/ overfill.		

FIGURE C.15 ACCESS DRIFT



150mm GROUTED STONE PITCHING

PLAN



X-SECTION X-X

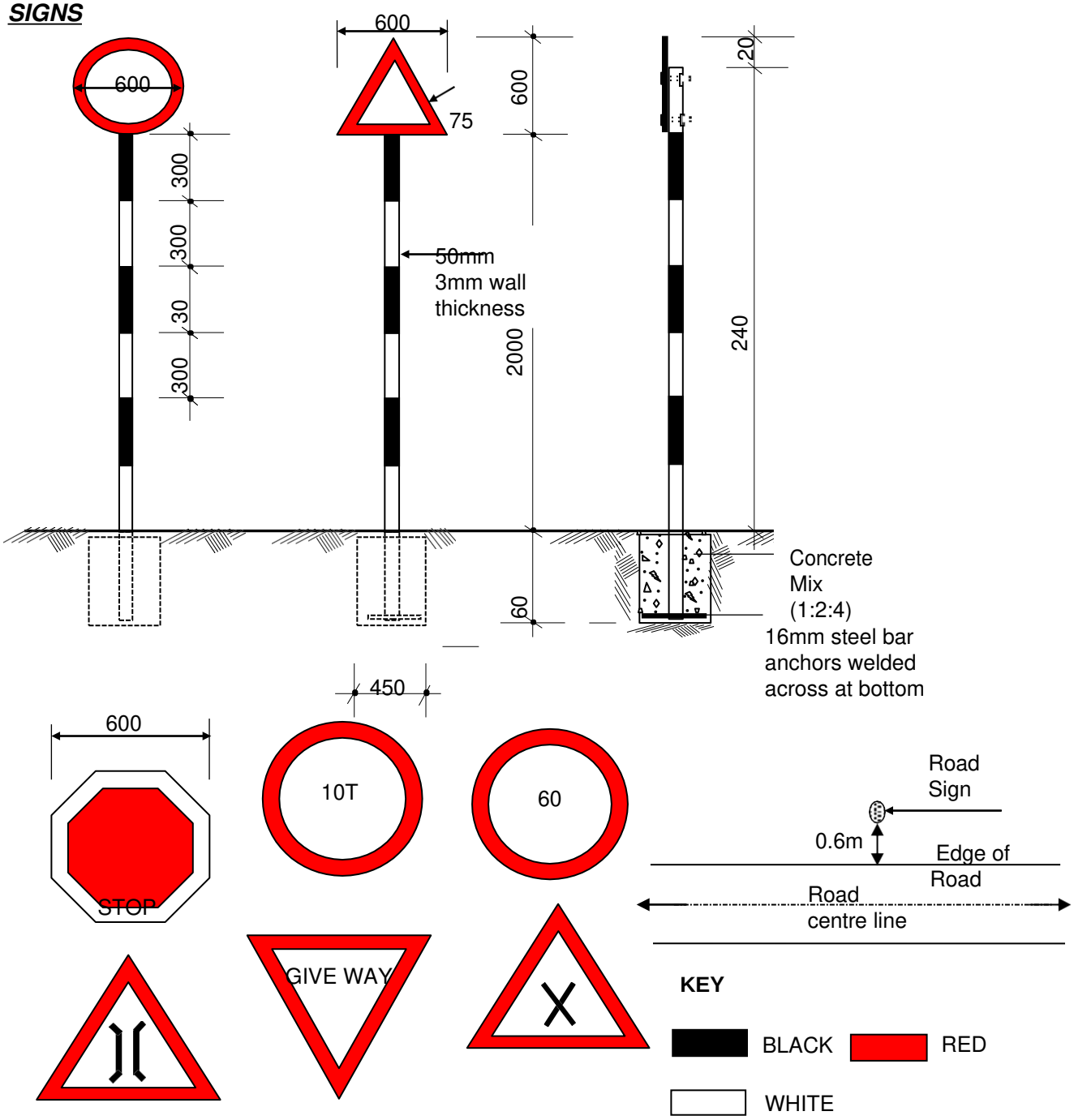
STONE MASONRY TOES ON FOUR SIDES OF STRUCTURE (200X300mm)

STONE MASONRY TOES ON FOUR SIDES OF

QUANTITIES TABLE

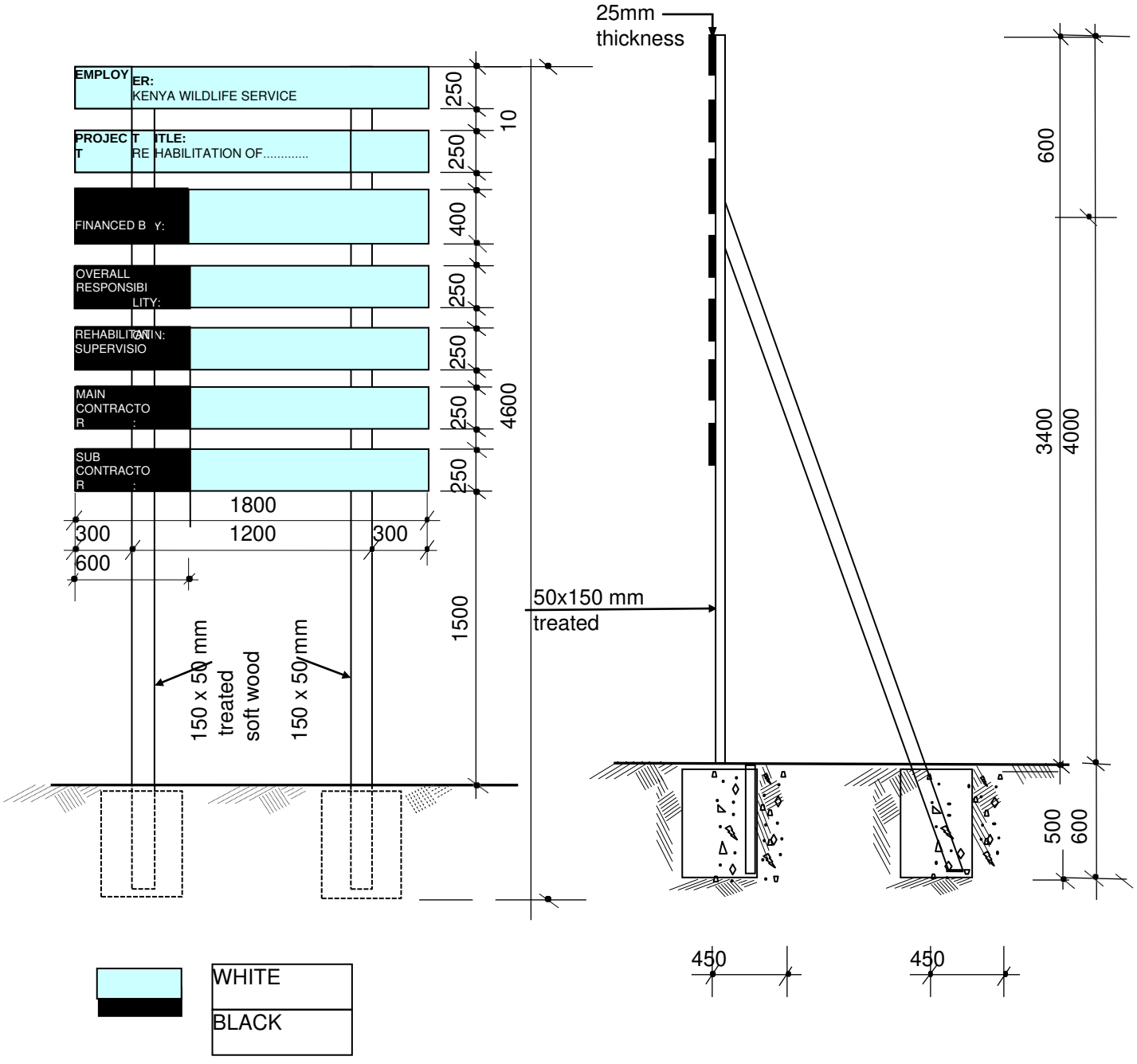
Cross section	DIMENSIONS					Excavation (m3)	Stone masonry (m^3)	150mm Grouted stone pitching (m3)
	A	B	C	D	E			
A	4000	1800	600	1800	4200	7.50	1.30	21.75
	6000	1800	600	1800	4200	10.00	1.60	30.15
B	4000	1400	400	1800	3600	7.00	1.20	18.30
	6000	1400	400	1800	3600	9.00	1.50	25.50

FIGURE C.16 - TRAFFIC SIGNS



1. The type of sign required and their location shall be as shown on the improvement plan and as directed by the Engineer
2. Sign plate to be 2 mm thick mild steel plate
3. Sign post to be 50 mm internal diameter steel pipe with wall thickness of 3 mm.
4. Sign plate to fixed to steel tube by 4 Nos M10 bolts and 2 Nos 50 mm f fixing clamps/brackets.
5. Sign paints shall be reflective.
6. The sign plate and post shall be treated by applying two coats of lead red oxide paint before applying priming and two finish coats of approved paints . Paints used shall have a hard, durable and glossy finish.

FIGURE C.17 - PUBLICITY SIGNBOARD



NOTES

1. The wording of the project signboard and the location to be installed to be as directed by the Engineer
2. Materials to be used for fabrication of signboard shall be pressure impregnated treated softwood timber sizes as indicated in the drawing
3. Wording boards to be nailed to the posts using nails.
4. Project board posts and struts to be embedded in concrete ratio 1:2:4