

Ministry of Local Government Rural Development and Co-operatives

Local Government Division

Local Government Engineering Department

Resilient Urban and Territorial Development Project (**RUTDP**)

Sub Project Name :

1. Re-habilitation of Poura Bhaban road (Ch. 0+000~2+400m)
2. Re-habilitation of Doulatpur road (Ch. 0+000~1+275m), with Doulatpur Choto Achra link road (Ch. 0+000 ~1+226m)

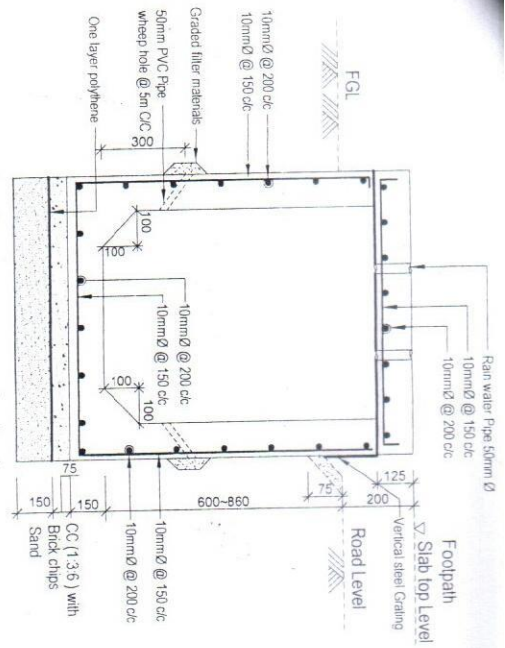
PACKAGE NO.: RUTDP/BEN/2022-23/W-01

Pourashava: Benapole, District: Jashore

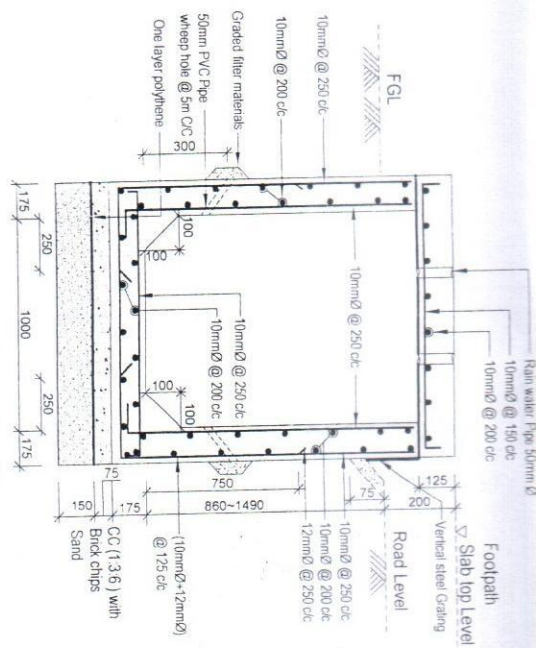
VOLUME - I

DRAWING PLATES

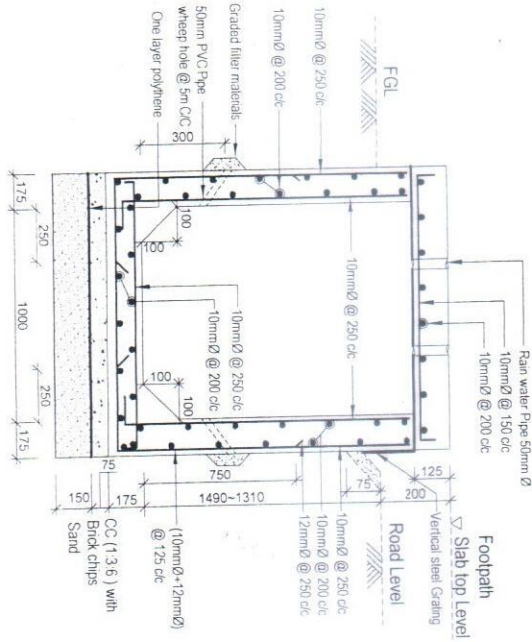
February. 2024



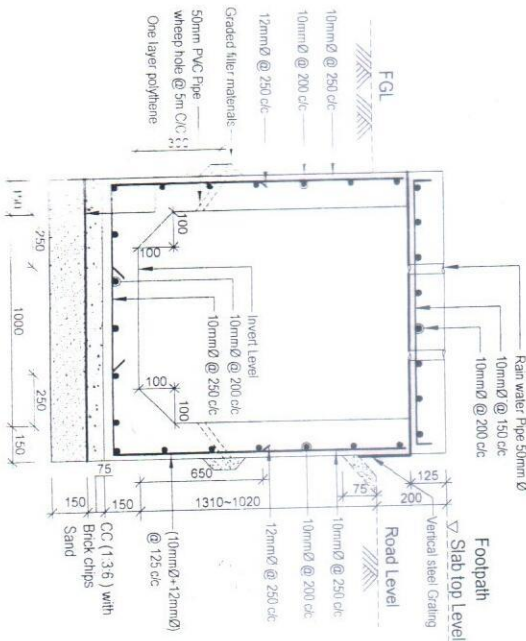
CROSS SECTION OF DRAIN (L/S)
CH. 1+500-1+650m, (Length = 150m)



CROSS SECTION OF DRAIN (L/S)
CH. 1+650m-1+700m, (Length = 050m)



CROSS SECTION OF DRAIN (L/S)
CH. 1+700m-1+750m, (Length = 050m)



CROSS SECTION OF DRAIN (L/S)
CH. 1+750-2+050m, (Length = 300m)

General Note :

1. Wall & Base Slab Clear Cover 50mm. Top of Bottom
2. Clear Cover 30mm.
3. Reinforced Cement Concrete work using Stone chips down graded (LAA value not exceeding 30), sand (min FM 2.50) and cement having minimum 28 days ultimate cylinder crushing strength of 25 Mpa for road cross & road cross culverts, road level drains and road side suggested mix proportion is (1 : 1.5 : 3) with stone chips yield strength of reinforcement bar shall not be less than 400N/mm² (60 grade)
4. Dimensions are in mm unless otherwise specified
5. Only 50% of MS bars shall be lapped at one place a staggered way.
6. Weep hole 50mm dia @ 5m c/c along with long dire
7. Clear cover of reinforcement Wall=50mm, Slab=40mm
8. Grating @ 10 m c/c
9. Grating Size 300X250
10. Graded filter materials, sand FM = 1.75 & Brick chips 12mm-75mm
11. Opening slab 3.5m @ c/c for cleaning
12. Drain works should be started from outfall
13. Provision of sand filling for depression points - FM
14. TBM=

Resilient Urban and Territorial Development Project (RUTDP)

CLIENT

MINISTRY OF
Local Government, Rural Development & Co- Operatives
Local Government Division
Local Government Engineering Department (LGED)

Consultants:

Sub Project Name : 1. Re-habilitation of Poura Bhaban road
(Ch 0+000 to 2+400m)

Drawn by	Date	Checked by	Recommended by
Pourastava	February 2024	Hilasm	Ranjit Kumar Paul
Benapole			
District	Sheet Count	Scale	
Jalpaiguri	01 of 02	Not to Scale	

Md. Mosharraf Hossain
Executive Engineer
Benapole Pourash
Benapole Municipality



CROSS SECTION OF DRAIN (L/S)
Ch. 2+300~2+400m, (Length = 100m)
Outfall - Ch. 2+400m

MINISTRY OF
Local Government, Rural Development & Co-Operatives
Local Government Division
Local Government Engineering Department (LGED)

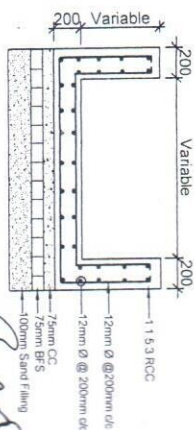
	Recommended by	Appr Md


 9.15.05.12
 Md. Mofizur Rahman
 Draftsman
 Benapole Municipality

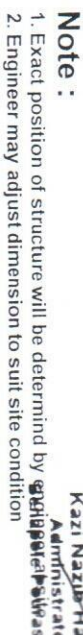
Dr. Mosharraf Hossain
Executive Engineer
Muniripole Pourashava

Mr. Showkat Mehrotra
Chief Executive Officer
Benapole, Paurat

**Kazi Nazim
Adminis
Benapole Po**



SECTION : B-B



Note :

1. Exact position of structure will be determined by **Engineering Survey**
2. Engineer may adjust dimension to suit site condition

Package No.	
RUTDP/BEN/2022	

Approved by:

Local Government Engineering Department (LGED)



1. Wall & Base Slab Clear Cover 50mm. Top of Bottom Slab
2. Reinforced Cement Concrete work using Stone chips 20 Clear Cover 30mm.
3. Reinforced Cement Concrete work using Stone chips 20 down graded (L.A. value not exceeding 30), sand (minimum FM 2.50) and cement having minimum 28 days ultimate cylinder crushing strength of 25 Mpa for road cross drain road cross culverts, road level drains and road side drains suggested mix proportion is (1 : 1.5 : .3) with stone chips
4. Yield strength of reinforcement bar shall not be less than 400N/mm². (60 grade)
5. Dimensions are in mm unless otherwise specified.
6. Only 50% of MS bars shall be lapped at one place and staggered way.
7. Weep hole 50mm dia @ 5m c/c along with long direction
8. Clear cover of reinforcement Wall=50mm, Slab=40mm.
9. Grating @ 10 m c/c
10. Grating Size 300X250
11. Graded filter materials, sand FM = 1.75 & Brick chips 8/12mm-75mm
12. Opening Slab 3.5m @ c/c for cleaning
13. Drain works should be started from outfall
14. Provision of sand filling for depression points - FM > 0

Consultants:

(Ch. 0+000 to 1+275m)

Type of Works

MINISTRY OF
Local Government, Rural Development & Co.-Operatives
Local Government Division
Local Government Engineering Department (LGED)

Fourashava	Benapole
Distincl	Jashore

Drawing No	XD-1
Sheet Count	01 of 06

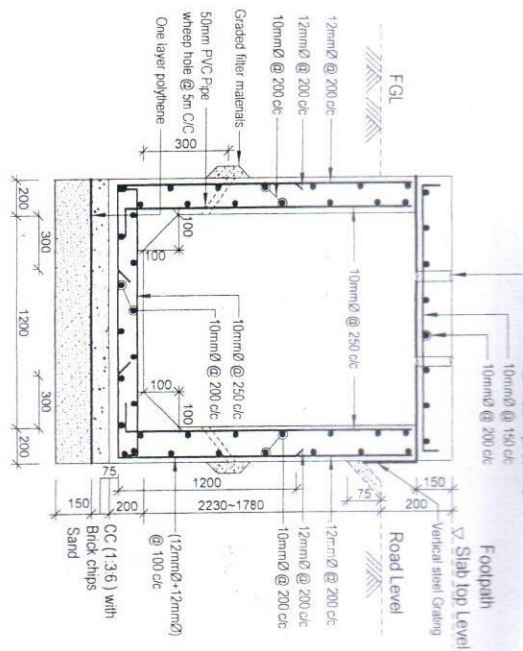
Date:	February, 202
Scale:	Not to Scale

Drawn by:	H. Iasmin
-----------	-----------

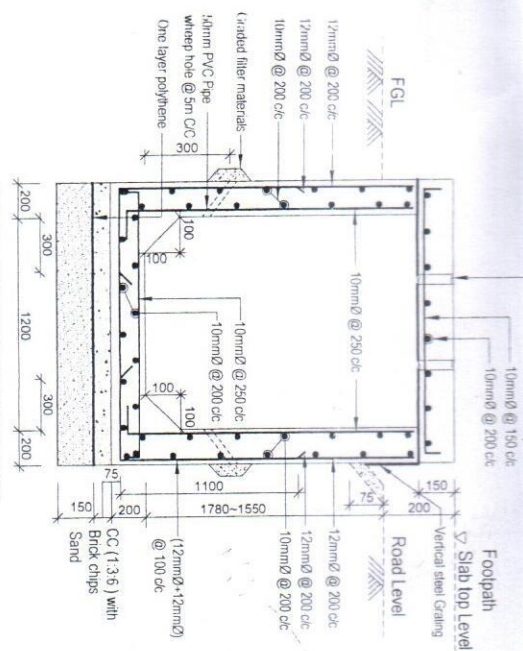
Designed by	Ranjit Kumar Paul
-------------	-------------------

checked by

Recommenced by	



CROSS SECTION OF DRAIN (L/S)
CH. 0+275-0+050m, (Length = 225m)



CROSS SECTION OF DRAIN (L/S)
CH. 0+050-0+000m, (Length = 50m)
Outfall - Ch. 0+000m

Chainage	Road			Drain		
	Existing Level	Design Level	Invert Level	Water Level	Drain top Level	Drain Height invert to Road level (m)
00+275	10.725	10.875	8.642	9.242	11.125	2.233
00+250	10.500	10.500	8.617	9.217	10.750	1.883
00+200	10.560	10.560	8.567	9.167	10.810	1.993
00+150	10.550	10.550	8.517	9.117	10.800	2.033
00+100	10.450	10.450	8.467	9.067	10.700	1.983
00+050	10.200	10.200	8.417	9.017	10.450	1.783
00+000	9.815	9.815	8.367	8.967	10.065	1.448

- General Note :**
1. Wall & Base Slab Clear Cover 50mm. Top of Bottom Slab Clear Cover 30mm.
 2. Reinforced Cement Concrete work using Stone chips 20mm down graded (LAA value not exceeding 30), sand (minimum FM 2.50) and cement having minimum 28 days ultimate cylinder crushing strength of 25 Mpa for road cross drains, road cross culverts, road level drains and road side drains the suggested mix proportion is (1 : 1.5 : 3) with stone chips
 3. Yield strength of reinforcement bar shall not be less than 400N/mm² (60 grade)
 4. Dimensions are in mm unless otherwise specified.
 5. Only 50% of M/S bars shall be lapped at one place and staggered way.
 6. Weep hole 50mm dia @ 5m c/c along with long direction.
 7. Clear cover of reinforcement Wall=50mm, Slab=40mm.
 8. Grating @ 10 m c/c
 9. Grating Size 300X250
 10. Graded filter materials, sand FM = 1.75 & Brick chips size = 12mm-75mm
 11. Opening slab 3.5m @ c/c for cleaning
 12. Drain works should be started from outfall
 13. Provision of sand filling for depression points - FM > 0.80
 14. TBM=

Resilient Urban and Territorial Development Project (RUTDP)

MINISTRY OF
Local Government, Rural Development & Co-Operatives

Consultants:

Local Government Division
Local Government Engineering Department (LGED)

Sub Project Name : 2 Re-habilitation of Doulapur road
(Ch. 0+000 to 1+275m)

Type of Works
Details of RCC Drain

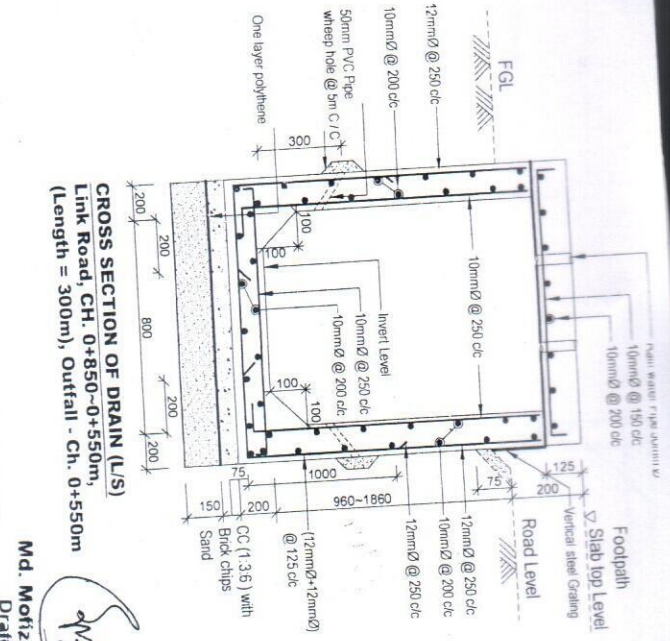
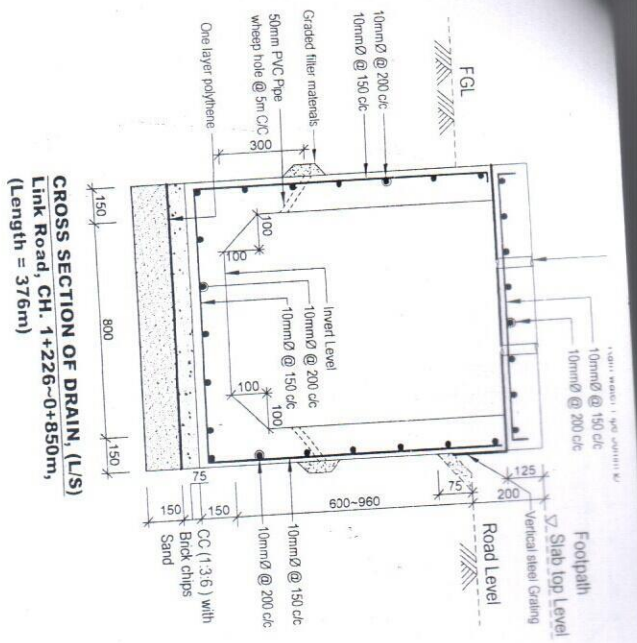
Pourashava	Drawing No	Date	Drawn by	Designed by	Checked by	Recommended by	Appr
Benapole	XS-2	February 2024	H Isam	Ranjit Kumar Paul			Md
District	Sheet Count	Scale					
Jashore	02 of 06	Not to Scale					

Md. Mosharraf Hossain
Executive Engineer
Benapole Pourashava

Md. Shewasthi
Chief Executive
Benapole P.O.

Kazi Nazim
Administrator
Benapole P.O.

Md. Mohtazur Razzam
Draftsman
Benapole P.O.



Station	Level	Level	Level	Level	Level	Invert
01+226	7.632	7.832	7.732	7.832	8.082	
01+200	7.435	7.635	7.206	7.806	7.885	
01+150	7.524	7.724	7.156	7.756	7.974	
01+100	7.440	7.640	7.106	7.706	7.890	
01+050	7.522	7.722	7.073	7.673	7.972	
01+000	7.539	7.739	7.039	7.639	7.989	
00+950	7.580	7.780	7.006	7.606	8.030	
00+900	7.599	7.799	6.973	7.573	8.151	
00+850	7.701	7.901	6.939	7.539	8.505	
00+800	8.055	8.255	6.906	7.506	8.568	
00+750	8.118	8.318	6.873	7.473	8.606	
00+700	8.156	8.356	6.839	7.439	8.571	
00+650	8.121	8.321	6.806	7.406	8.848	
00+600	8.398	8.598	6.773	7.373	8.851	
00+550	8.401	8.601	6.739	7.339	8.851	
00+500	9.880	10.080	9.180	10.080	10.330	
00+450	9.788	9.988	9.530	9.530	10.238	
00+400	9.810	10.010	9.747	9.747	10.260	
00+350	9.843	10.043	9.763	9.763	10.293	
00+300	9.778	9.978	9.580	9.580	10.228	
00+250	9.297	9.497	9.597	9.597	9.747	
00+200	9.449	9.649	9.513	9.513	9.699	
00+150	9.273	9.473	9.330	9.330	9.723	
00+100	9.215	9.415	9.347	9.347	9.665	
00+050	9.108	9.308	8.263	9.163	9.558	
00+000	8.968	9.168	8.180	9.080	9.418	
00+550	8.593	8.793	8.097	8.997	9.243	

Md. Motizur Rahman
Draftsman
Benapole Municipality

General Note:

1. Wall & Base Slab Clear Cover 50mm.
2. Reinforced Cement Concrete work using Stone chip down graded (LAA value not exceeding 30), sand (F_M 2.50) and cement having minimum 28 days ultimate crushing strength of 25 Mpa for road cross cylinder crushing strength of 25 Mpa for road cross road cross culverts, road level drains and road side suggested mix proportion is (1 : 1.5 : 3) with stone yield strength of reinforcement bar shall not be less than 400N/mm² (60 grade).
3. Dimensions are in mm unless otherwise specified.
4. Only 50% of MS bars shall be lapped at one place staggered way.
5. Weep hole 50mm dia @ 5m c/c along with long clear cover of reinforcement Wall=50mm, Slab=40mm.
6. Clear cover of reinforcement Wall=50mm, Slab=40mm.
7. Grating @ 10 m c/c.
8. Grating Size 300X250.
9. Graded filter materials, sand F_M = 1.75 & Brick chips.
10. 12mm-75mm.
11. Opening slab 3.5m @ c/c for cleaning.
12. Drain works should be started from outfall.
13. Provision of sand filling for depression points.
14. TBM=

CROSS SECTION OF DRAIN, (L/S)
Link Road, CH. 0+200-0+550m,
(Length = 350m), Outfall - Ch. 0+550m

CROSS SECTION OF DRAIN, (L/S)
Link Road, CH. 0+000-0+200m,
(Length = 200m)

Sub Project Name : 2 Doulatpur Choto Achira link Road.
Ch. (0+000-1+226m)

Type of Works
Details of RCC Drain

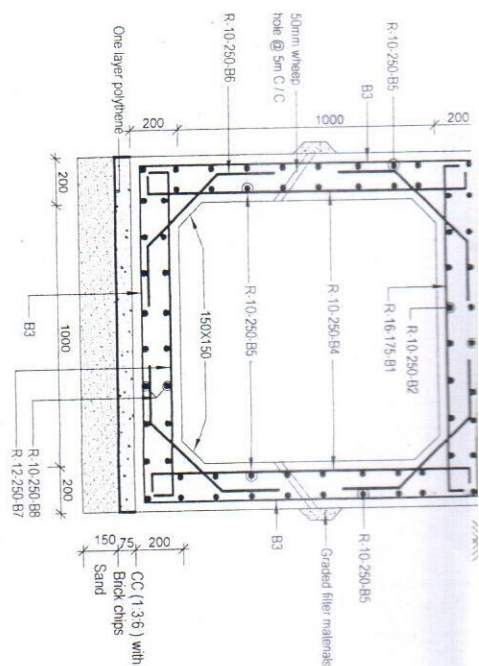
Resilient Urban and Territorial Development Project (RUTDP)

MINISTRY OF
Local Government, Rural Development & Co-Operatives
Local Government Division
Local Government Engineering Department (LGED)

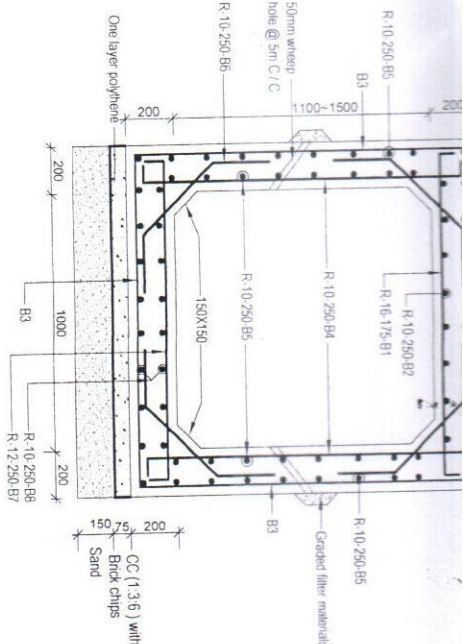
Consultants:

Pourashava
Benapole
Drawing No
XD-4
Date
February 2024
Drawn by
Hassan
Checked by
Ranjit Kumar Paul
Hassan
Scale
As per drawing
Hassan

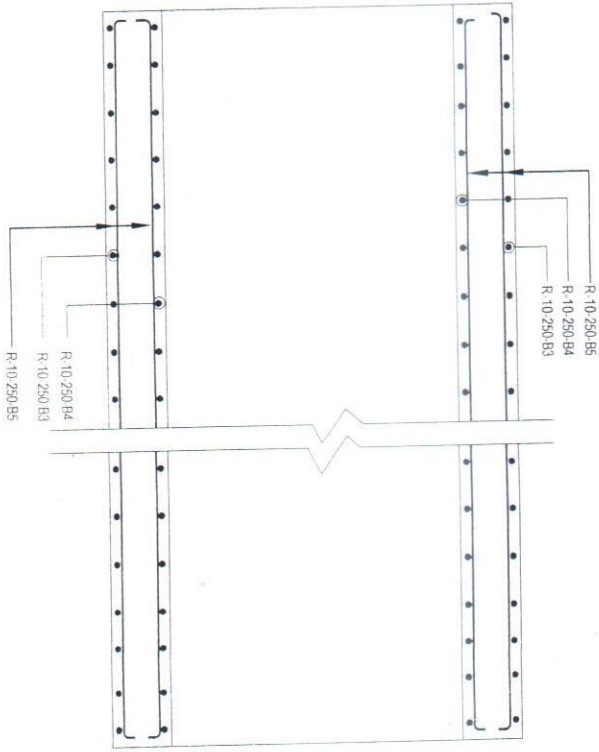
Recommended by



CROSS SECTION OF ROAD CROSS DRAIN
Length (L/S) = 15m
(WIDTH & HEIGHT SHALL BE ADJUSTED
AS PER ACTUAL SIZE OF THE DRAIN)



CROSS SECTION OF ROAD CROSS DRAIN
Length (L/S) = 15m
(WIDTH & HEIGHT SHALL BE ADJUSTED
AS PER ACTUAL SIZE OF THE DRAIN)



LONG SECTION REINFORCEMENT
DETAIL OF CROSS DRAIN

General Note :

1. Wall & Base Slab Clear Cover 50mm, Top of Bottom Slab Clear Cover 30mm.
2. Reinforced Cement Concrete work using Stone chips 20mm down graded (LAA value not exceeding 30), sand (minimum FM 2.50) and cement having minimum 28 days ultimate cylinder crushing strength of 25 Mpa for road cross drains, road cross culverts, road level drains and road side drains the suggested mix proportion is (1 : 1.5 : 3) with stone chips.
3. Yield strength of reinforcement bar shall not be less than 400N/mm² (60 grade)
4. Dimensions are in mm unless otherwise specified.
5. Only 50% of MS bars shall be lapped at one place and staggered way.
6. Weep hole 50mm dia @ 5m c/c along with long direction.
7. Clear cover of reinforcement Wall=50mm, Slab=40mm.
8. Grating @ 10 m c/c
9. Grating Size 300X250
10. Graded filter materials, sand FM = 1.75 & Brick chips size = 12mm-75mm
11. Opening slab 3.5m @ c/c for cleaning
12. Drain works should be started from outfall
13. Provision of sand filling for depression points - FM > 0.80
14. TBM=

Resilient Urban and Territorial Development Project (RUTDP)

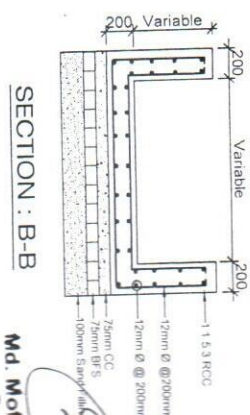
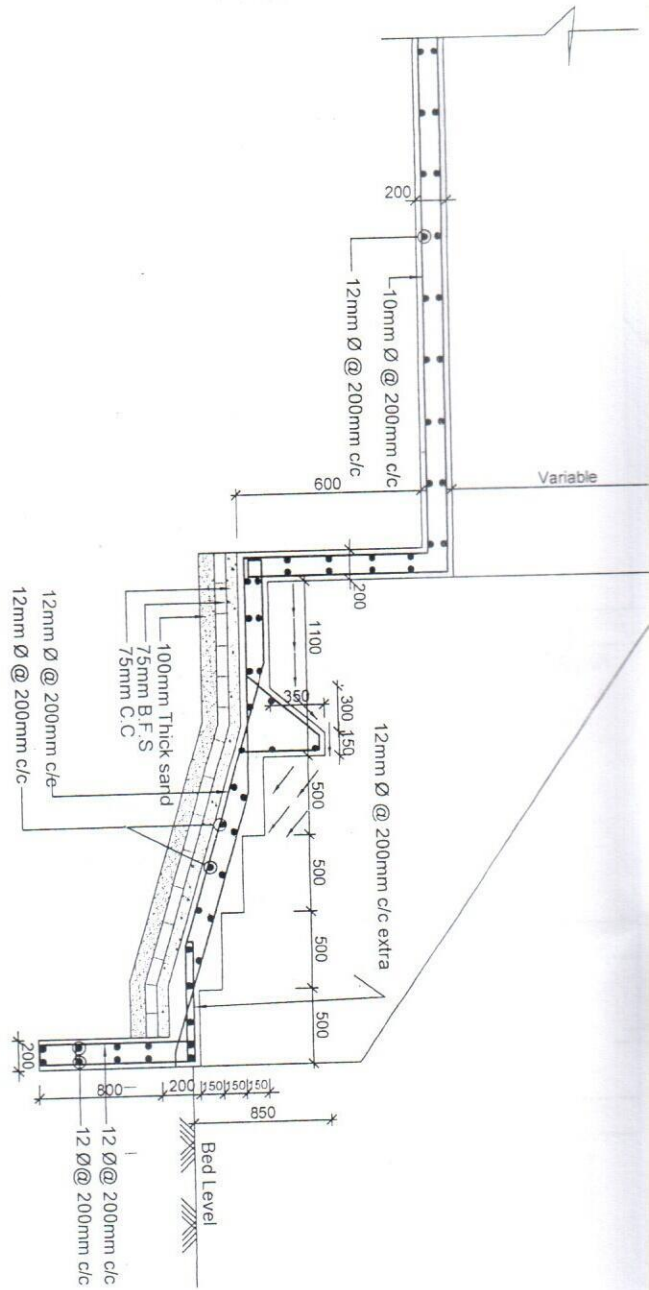
CLIENT	MINISTRY OF Local Government, Rural Development & Co- Operatives		Consultants:															
	Local Government Division																	
	Local Government Engineering Department (LGED)		District Jashore		Drawing No XD-4		Date February, 2024		Drawn by H. Jasin		Designed by Ranjit Kumar Paul		Checked by		Recommended by		M	
			Sheet Count 04 of 05		Scale Not to Scale													

Md. Mofizur R
Draftsman
Benapole Adm

Md. Moshar
Executive
Benapole P

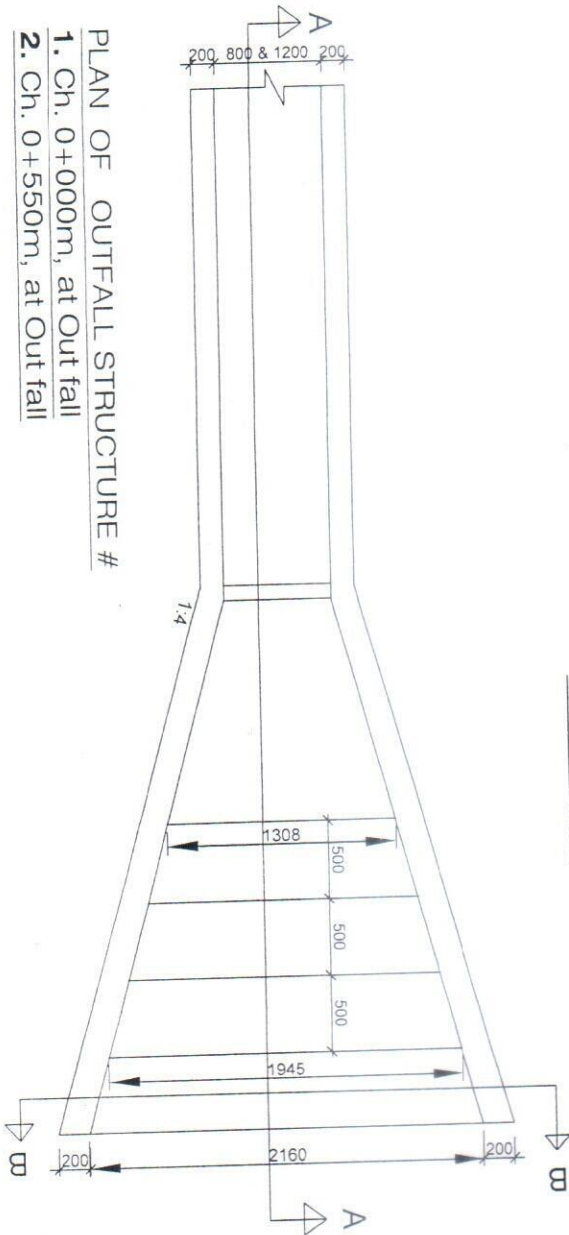
Md. Shewar
Chief Ex
Benapole

Kazi
Ad
Benap



SECTION A-A

SECTION B-B



Note :

1. Exact position of structure will be determined by engineer.
2. Engineer may adjust dimension to suit site condition.

Resilient Urban and Territorial Development Project (RUTDP)

CLIENT

MINISTRY OF
Local Government, Rural Development & Co-Operatives
Local Government Division
Local Government Engineering Department (LGED)

Consultants:

Sub Project Name: 2. Re-habilitation of Doulaipur road (Ch. 0+000 to 1+275m) with Doulaipur Choto Achra link Road Ch (0+000-1+226m)

Type of Works

Drain Outfall details

Checked by

Recommended by

Drawing No

Date

Drawn by

Designed by

Checked by

Recommended by

Sheet Count

Scale

Not to Scale

Scale

Not to Scale

Not to Scale

District

Sheet Count

Scale

Not to Scale

Scale

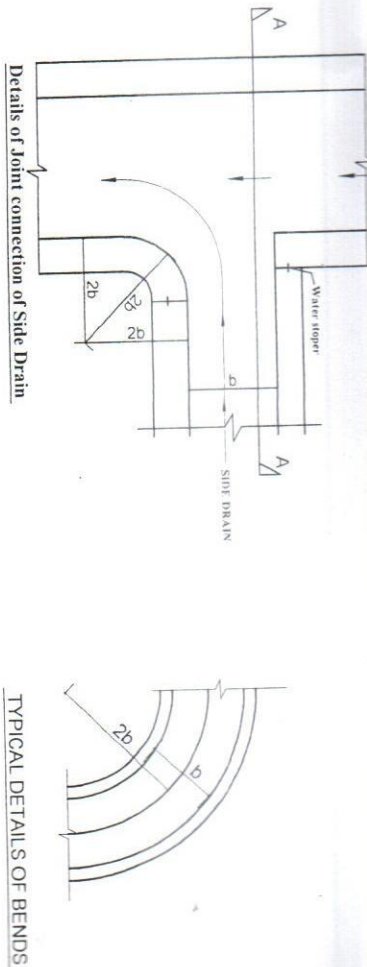
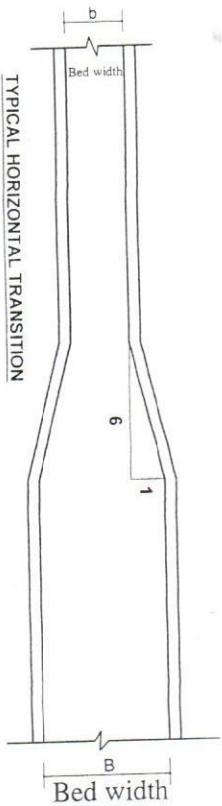
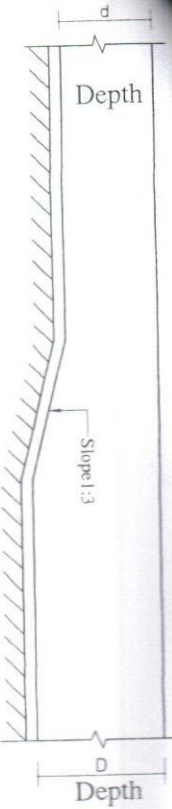
Not to Scale

Not to Scale

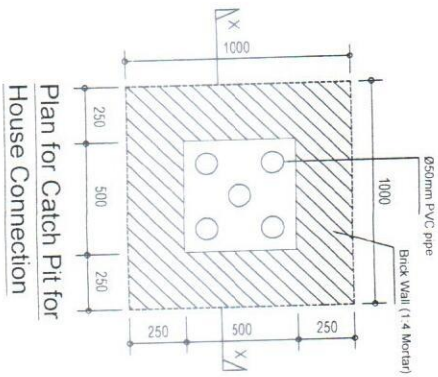
Md. M. C.
Exec
Benap

Md. M. C.
Exec
Benap

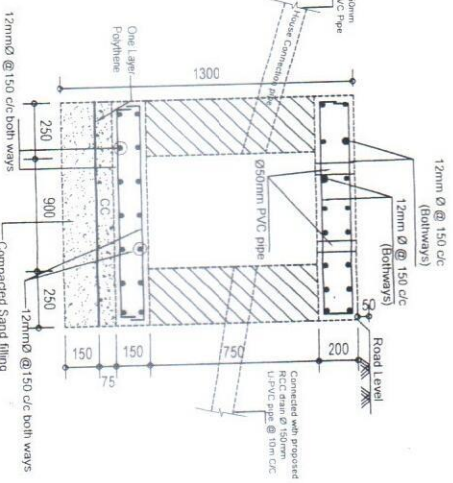
Md. S. H.
Chief E
Benap



TYPICAL DETAILS OF BENDS



SECTION X - X



General Note :

1. Wall & Base Slab Clear Cover 50mm. Top of Bottom Slab Clear Cover 30mm.
2. Reinforced Cement Concrete work using Stone chips 20mm down graded (LAA value not exceeding 30), sand (minimum FM 2.50) and cement having minimum 28 days ultimate cylinder crushing strength of 25 Mpa for road cross drains, road cross culverts, road level drains and road side drains the suggested mix proportion is (1 : 1.5 : 3) with stone chips yield strength of reinforcement bar shall not be less than 400N/mm². (60 grade)
3. Dimensions are in mm unless otherwise specified
4. Only 50% of MS bars shall be lapped at one place and staggered way.
5. Weep hole 50mm dia @ 5m c/c along with long direction.
6. Clear cover of reinforcement Wall=50mm, Slab=40mm.
7. Grating @ 10 m c/c
8. Grating Size 300X250
9. Graded filter materials, sand FM. = 1.75 & Brick chips size = 12mm~75mm
11. Opening slab 3.5m @ c/c for cleaning
12. Drain works should be started from outfall
13. Provision of sand filling for depression points - FM. > 0.80
14. TBM=

Resilient Urban and Territorial Development Project (RUTDP)

CLIENT	MINISTRY OF Local Government, Rural Development & Co- Operatives
	Local Government Division
	Local Government Engineering Department (LGED)

Consultants:

Sub Project Name :	1. Rehabilitation of Poura Brahman road (Ch 0+400 to 2+400m).	2. Re-habilitation of Doulatpur road (Ch 0+000 to 1+275m) with Doulatpur Choto Achra link Road (Ch 0+000-1+226m).
District	Pourashava	Benapole
Division	Benapole	Benapole
Sheet Count	XD-7	01 of 01
Scale	Not to Scale	Not to Scale

Type of Works

Typical Band Details	Recommended by
	Approved by

Md. Shoyeb
Chief Engineer
Benapole

Kazi Naasir
Admin
Benapole

Ministry of Local Government Rural Development and Co-operatives
Local Government Division
Local Government Engineering Department
Resilient Urban and Territorial Development Project (**RUTDP**)

- 01. Sub Project Name : Rehabilitation of Poura Bhaban Road (Ch.0+00 to 2+400)
- 02.Sub Project Name : Rehabilitation of Poura Bhaban Road (Ch.1+520 to 2+400)
- 03.Sub Project Name : Rehabilitation of Doulatpur Road (Ch.0+00 to 1+000)

PACKAGE NO. : RUTDP/BEN/2022-23/W/01
Pourashava: Benapole, District: Jashore

VOLUME-1
DRAWING PLATES

July. 2023

Type of Works:

DETAIL OF ROAD CROSS SECTION

40mm Thick Pre-mixed Dense Bituminous Surfacing as per Job Mix Design (item 3.06.5.2)

Provide sand blinding after surface rectification (item 3.10.02)

6000

125mm across
Brick on Edging

3% slope

Existing BC to be Scarified and (40%)
Surface to be rectified (item 3.10.01.2 & 3.05.1.2)

Existing Pavement

150 mm Compacted WBM BASE, Aggregate LAA max. 40%,
Compacted in Single Layer, Soaked CBR min 80%,
Compacted to min. 98% Modified (item 3.05.1.2.01)

Street Light Post
(See Detail in
electrical drawing)

WBM

Bituminous Sur

Existing Pavem

Existing Drain

PAVEMENT CROSS SECTION

Ch. 0+00 to 1+520m

[Signature]
15.05.25
Urattaram
Benapole Municipality

[Signature]
15.05.25
Md. Mosharraf Hossain
Executive Engineer
Benapole Pourashava

[Signature]
Md. Shawkat Meheedi Setu
Chief Executive Officer
Benapole, Paurashava.

Benapole

40mm Thick Pre mixed Dense Bituminous Surfacing as per Job Mix Design (item 3.06.5.2)

Provide sand binding after surface rectification (item 3.10.02)

Street Light Post (See Detail in electrical drawing)

125mm across Brick on Edging

Bituminous Surfacing
WBM
Aggregate-sand
Existing Pavement
Sand Fill

New Drain (See Detail in drain drawing)

Existing BC to be Scarified and (40%) Surface to be rectified (item 3.10.01.2 & 3.05.1.2)
Existing Pavement

150
150
400 mm Compacted WBM BASE, Aggregate LAA max. 40%, Compacted in Single Layer, Soaked CBR min. 80%, Compacted to min. 98% Modified (item 3.05.7.2.01)

200 mm Compacted Aggregate-sand Subbase (SAND : 1 MIX), Aggregate LAA max. 40%, Compacted in Two Layers, Soaked CBR min. 30%, Compacted TO min. 98% Modified
200 mm Sand fill FM 0.50, CBR min 8% at 98% Compaction modified (item 3.02.1.1)

PAVEMENT CROSS SECTION

Ch. 0+00 to 1+000m

[Signature]
15.05.95
Mr. Mohd. Yusoff
Draftsman
Benapole, Paurmahava

[Signature]
15.5.95
Sd. Muzsharraf Hussain
Executive Engineer
Benapole, Paurmahava

[Signature]
Md. Shoukat Meheddi Setu
Chief Executive Officer
Benapole, Paurmahava.

[Signature]
Kazi M. Adm
Benapole

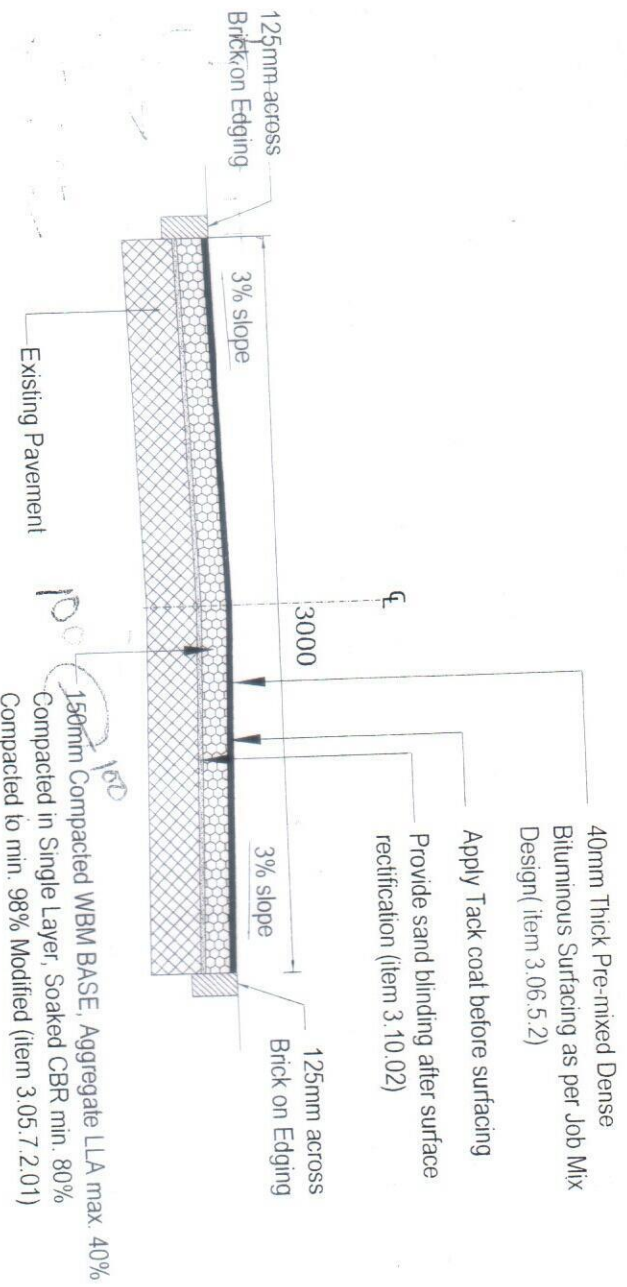
LEG

LEGEND

Bituminous Surfacing

WBM

Existing Pavement



PAVEMENT CROSS SECTION (Link Road)

Ch. 0+00 to 1+200m

1926m

[Signature]
Md. Mofizur Rahman
Draftsman
Benapole Municipality.

[Signature]
Md. Mosharraf Hossain
Executive Engineer
Benapole Pourashava

[Signature]
Md. Showkat Meheddi Selu
Chief Executive Officer
Benapole, Paurashava.

[Signature]
Kazi
Ad
Benap

