

22.
Construction of Regulator 2 went at Chandimukha km 6.515 over chandimukha
khal in polder no-15 under "Rehabilitation of polder 15 at satkhira district"
Project under satkhira O&M Division-1, BWD, Satkhira during the year 2021-

NAME OF DIVISION	: SATKHIRA O&M DIVISION-1, BWD, SATKHIRA.
NAME OF CIRCLE	: KHULNA O & M CIRCLE, BWD, KHULNA.
NAME OF ZONE	: SOUTH-WESTERN ZONE, BWD, KHULNA.



لله الحمد (١)، وعاصي الله عاصي (٢)
ولله الحمد (٣)، ولله الحمد (٤)
لله الحمد (٥)، ولله الحمد (٦)
٢٥١١١٢

سے ملکہ کو اپنے بھائی کا
خواستہ کر رہا تھا۔

ପାଇଁ କିମ୍ବା କିମ୍ବା କିମ୍ବା

ପାଇଁ କିମ୍ବା କିମ୍ବା

6

ପ୍ରକାଶକ

| କୃତ୍ୟାନ୍ତ

ଶାନ୍ତିକାଳେ

፲፭፻፯

ପ୍ରକାଶକ

| ୧୯ |

(ପ୍ରକାଶକ ନାମ) ପାତାର ପାତାର ପାତାର ପାତାର ପାତାର ପାତାର ପାତାର ପାତାର ପାତାର ପାତାର

مکالمات اخلاقی

Station No.	Name of Station	Length of records available	Remarks

Yes No

Length of records available :

3.1.1 Is there any rainfall station within the catchments area? If so, specify the name(s) and

3.1 Rainfall Data :

3. HYDROLOGICAL DATA

- 2.1 Project Index Map : Attached
- 2.2 Basim Map : Attached
- 2.3 Site Plan : Attached

2. MAPS

	irrigation
1.1 Pre-monsoon Drainage	: <input checked="" type="checkbox"/>
1.2 Monsoon Drainage	: <input checked="" type="checkbox"/>
1.3 Post monsoon Drainage	: <input checked="" type="checkbox"/>
1.4 Prevention of pre-monsoon flood	: <input checked="" type="checkbox"/>
1.5 Prevention of flood	: <input checked="" type="checkbox"/>
1.6 Flushing of irrigation water	: <input checked="" type="checkbox"/>
1.7 Retention of post monsoon water for	: <input checked="" type="checkbox"/>

Identify the purpose(s) that has to be served by the structure and put tick mark accordingly :

1. PURPOSE OF THE STRUCTURE

Structure : 930 Ha

Catchments Area above the

Net : 3441 Ha

C Project Area Gross : 5500 Ha

B Name of the Structure : Construction of Regulator 2 near at Chandiukha km 6.515 over O&M Division-1, BWDB, Satkira under satkira O&M Division-1, BWDB, Satkira during the year 2021-22.

A Name of the Project : "Rehabilitation of polder 15 at satkira district" project under satkira mentioned herein.

While submitting proposal for the design of Sluice, Regulator or Water Control Structure, this Data Checklist shall be filled up and sent to the design office along with other requisites

REGULATOR/WATER RETENTION STRUCTURE

DATA CHECKLIST FOR THE DESIGN OF DRAINAGE SLUICE/

Annexure - A

available:

3.3.1 Is there any record of discharge in the drainage channel? If so, enclose the data as

3.3 Discharge Data :

From average public information.

H.F.L (ever experienced) = 3.95 m(PWD) from gauge level at 4.16m(PWD) May 2021 station/
of the record

3.2.4 Mention the highest flood level (H.F.L) ever experienced in the basin indicating the source

No

Yes

If so, specify the name.

3.2.3 Is there any water level station on the drainage channel corresponding the proposed structure?

D/S distance : 1.540 Km

D/S Station : Kobaik Forest Office

U/S distance : 19.500 km

U/S Station : Pratobnagar

distance :

3.2.2 Specify the name of at least one station U/S and one station D/S of the structure site with

Station No.	Name of Station	Length of records available	Distance (u/s or d/s) from structure	Remarks
SW 165	Kobaik Forest Office	1990-2020	1.540 Km (D/S)	

Yes

the name of the station(s) :

3.2.1 Is there any water level station on the outfall river at or near the structure site? If so, mention

3.2 Water Level Data :

Station No.	Name of Station	Length of records available	Remarks
CL- 506	Kaiikhali	1989-2017	

proposed structure :

3.1.2 Specify the name and length of records of the rainfall station close to the catchments of the

5.1.3 Type of expected traffic loading on road/embankment.

- i) Top Elevation : 5.00 m
- ii) Top Width : 5.00 m
- iii) C/S Slope : 1 : 2.5
- iv) R/S Slope : 1 : 3

structure site :

5.1.2 Existing or proposed top elevation, top width and side slopes of embankment / road at the New Embankment Design Data Submitted

proposed structure :

5.1.1 Existing or proposed road / embankment profile for at least 150m on each side of the

5.1 Data related with Embankment / Road connecting the structure

5. MISCELLANEOUS DATA

Enclosed 03 (Three) No(s) of cross section.

point of drainage channel and the outfall river.

4.4 Cross-section of the outfall river from length of 300m u/s and 300m d/s from the confluence

Enclosed 0(Zero) No(s) of long section.

the outfall river in the d/s

4.3 Long section of the drainage channel for at least 0 Km u/s from the structure site and up to

Enclosed 4 (Four) No(s) of cross section.

structure site at an interval of 250 m.

4.2 Cross-section of the drainage channel for at least 1.000 km u/s and 0.000 km d/s of the

Average rate of erosion m/year (approx.).

(c) What is the average rate of erosion in each year?

Enclosed No. of Map.

(b) If not, show the movement of the bank in each year in a map.

No

Yes

site stable?

4.1 (a) Are the banks of the out fall river and drainage channel at or near the structure

4. MORPHOLOGICAL DATA

Enclose discharge data for the year of at station

No

Yes

5.2.1 Are the existing section and bed slope of the drainage channel adequate for complete or desired level or drainage?

5.2 Data Related with Drainage Aspects :

5.2.2 If not, does the scheme include excavation of the drainage channel? If so, the design cross section and long section may be furnished as required indicated in Para 4.2 and 4.3

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Yes
<input type="checkbox"/>	<input type="checkbox"/>	No

5.2.3 (a) Is the complete drainage of the basin necessary?

Enclosed cross sections in 2 Sheet(s) & one long-section of the proposed drainage channel has to be prepared.

<input type="checkbox"/>	<input checked="" type="checkbox"/>	Yes
<input type="checkbox"/>	<input type="checkbox"/>	No

5.2.4 If not, mention the drainage level required & distance of such level from the proposed structure site.

5.2.4 From the field condition propose the invert level of the structure which can allow desired level of drainage from field condition.

- (a) Proposed invert level (-) 1.50 m(PWD)
- (b) Invert level nearby existing structure(s) (-) 1.60 m(PWD)

5.2.5 From the field condition, what is the maximum level of acceptable flooding on the basin during the drainage period?

Acceptable flooding level 1.60 m(PWD).

- 5.2.6 Desired Post Monsoon Drainage Level :
- Date: October 31 Level 1.50 m(PWD)
- Date: December 31 Level 1.30 m(PWD)
- Date: March 31 Level 1.40 m(PWD)

Cultivable Area 3441 Ha.
Irrigable Area 3441 Ha.

5.3.1 Specify the total cultivable and irrigable area within the project.

5.3 Data Related with Irrigation Aspects :

الحادي والعشرين، العاشر والعشرين، العاشر والعشرين
الحادي والعشرين، العاشر والعشرين، العاشر والعشرين
الحادي والعشرين، العاشر والعشرين، العاشر والعشرين

Period from December to 31st March.

5.3.4 For Irrigation by flushing of water, specify the period of such irrigation.

Retention Level : (-) 0.80 m(PWD)

irrigation.

5.3.3 Proposed retention level of water in the u/s of the drainage channel of the structure for

Enclosed in Shrimp Farming, Fisheries & Paddy cultivation number of sheet(s)

5.3.2 Principal crops with acreage in the basin with present and future cropping pattern.

Spot Level for Construction of Regulator 2vent at Chandnimukha km 6.515 over chandnimukha khal in polder no-15
under "Rehabilitation of polder 15 at satkhira district" project under satkhira O&M Division-1, BWDB, Satkhira during
the year 2021-22.

Existing G.L(mPWD)											
100	-1.34	-1.46	-1.39	-1.50	-1.40	-1.30	-0.90	-1.10	-1.70	-0.20	
90	2.01	1.94	1.99	2.06	2.051	2.01	1.93	2.11	2.12	2.10	2.12
80	3.87	3.91	3.95	4.00	4.04	3.77	3.92	4.04	4.16	3.77	3.88
70	1.74	1.89	1.84	1.93	1.77	1.82	1.78	2.02	2.17	3.14	4.01
60	1.21	1.01	0.45	0.33	0.36	1.74	1.45	1.35	1.27	1.12	-0.01
50	0.03	0.12	0.21	1.50	1.50	1.74	2.04	0.59	1.55	1.21	-1.12
40	1.38	1.45	1.49	1.56	1.72	2.09	0.18	-0.17	1.61	2.88	-1.95
30	1.39	1.33	1.49	1.55	1.53	1.61	1.62	0.27	1.70	2.99	-1.40
20	1.46	1.50	1.53	1.51	1.50	1.52	0.04	-0.51	-0.69	2.38	-0.47
10	-0.98	-1.08	-0.31	-0.17	-1.24	0.38	-1.08	-0.35	0.13	2.86	-0.47
0	-0.16	-0.26	-0.11	-0.15	-0.06	-0.01	0.03	-0.44	-0.06	2.66	-0.26

(মোট জাকিম হোসেন)
উপ-বিত্তীয় প্রকৌশলী (অরঞ্জেজড)
শান্তিনগর পথের উপ-বিত্তীয়
বাগড়িয়া, শান্তিনগর, সাতক্ষীরা।

১২৫/১/২১

২৫/১/২১
(স্বত্ত্বালক্ষ্য)

Google Map for Construction of Regulator 2vent at Chandnimukha km 6.515 over chandnimukha khal in polder no-15 under “Rehabilitation of polder 15 at satkhira district” project under satkhira O&M Division-1, BWDB, Satkhira during the year 2021-22.

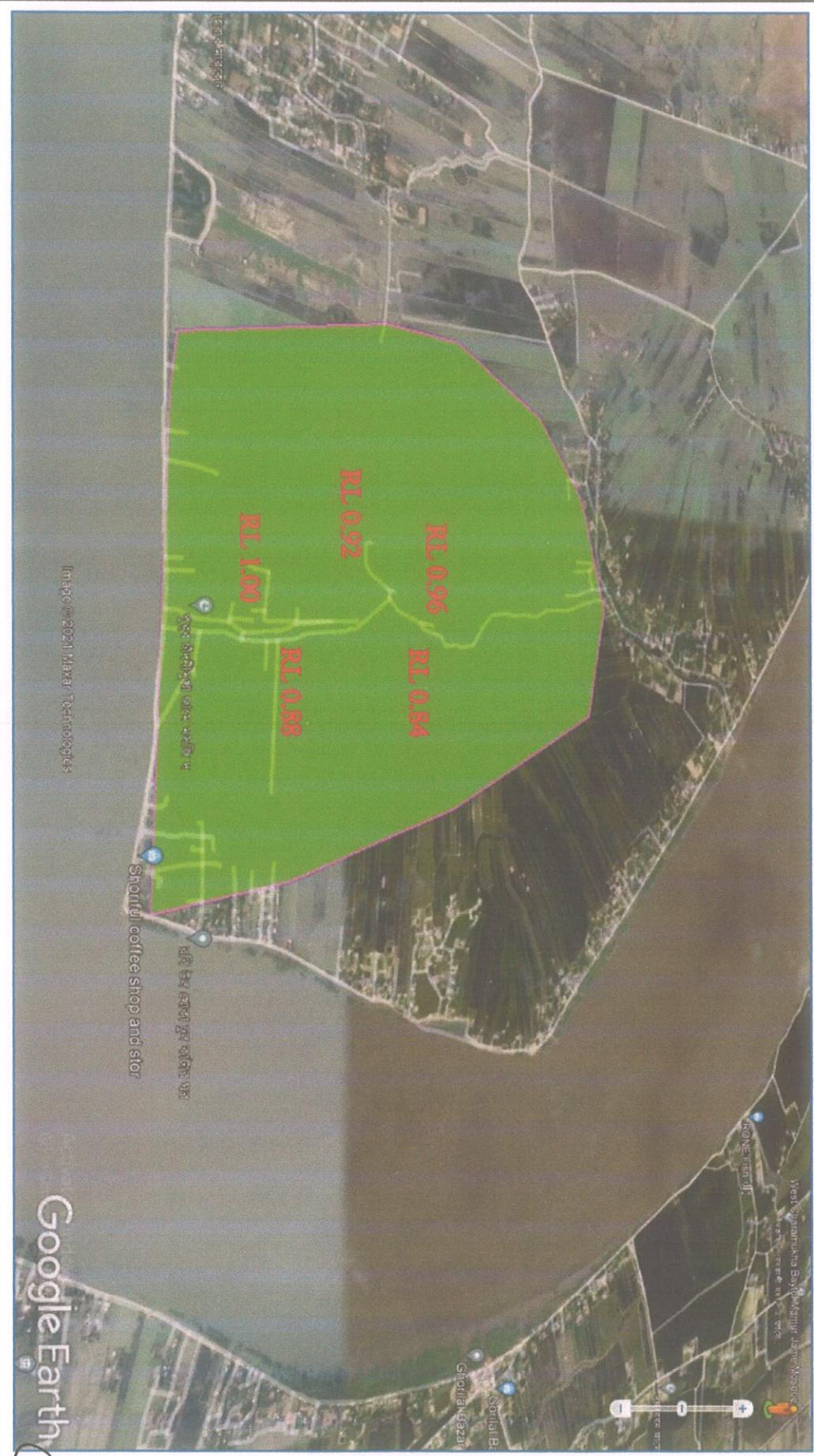


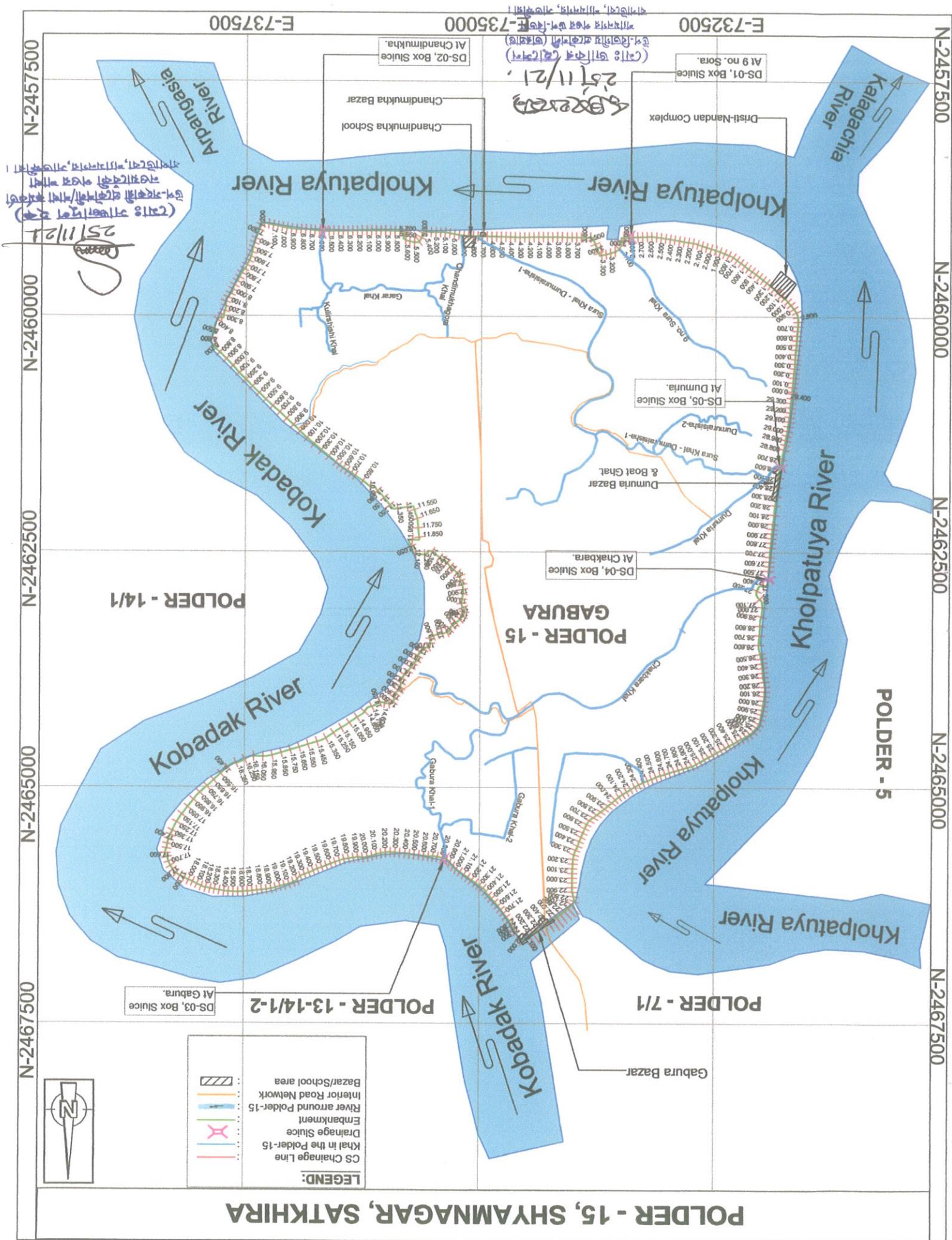
(ମୋହାର୍ଦ୍ଦିତ ଜୀବନ ପାଇଁ କାହାରେ ଯେତେବେଳେ
ଶାମଳର ପରମ ଧର୍ମ ଉଚ୍ଛଵିତ କରିଲାମା)

Google

25/11/21

Basin Map for Construction of Regulator 2event at Chandrimukha Km 6.515 over chandrimukha khal in polder no-15 under "Rehabilitation of polder 15 at saithna district" project under saithna O&M Division-1, BWDR, Saitkha during the year 2021-22.



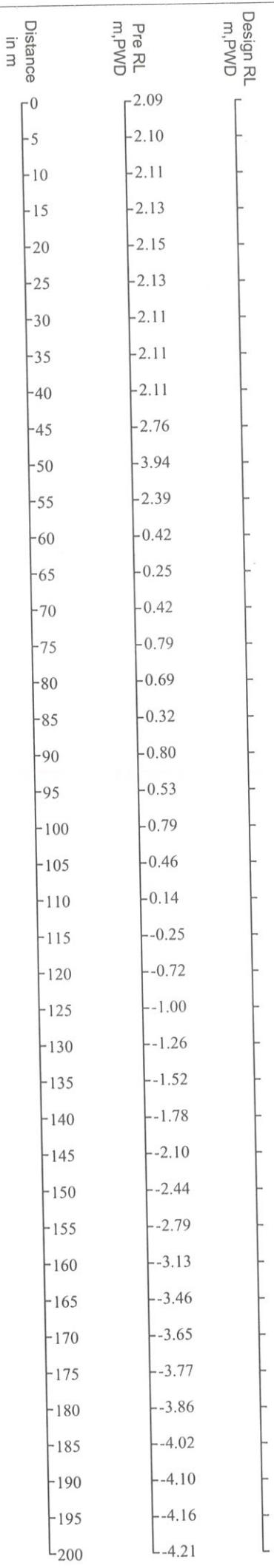
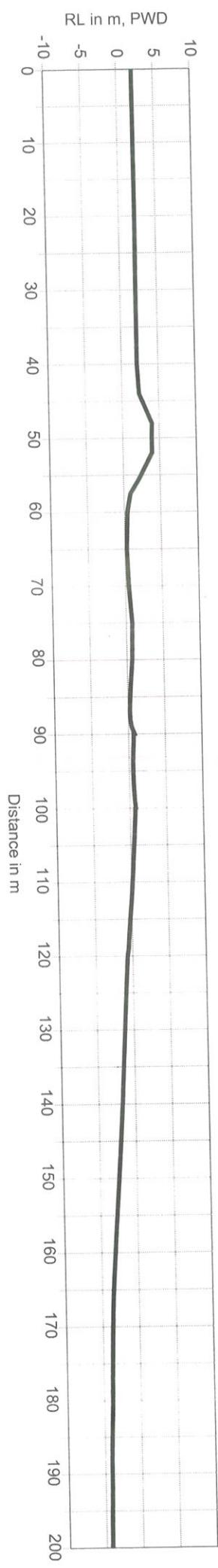


Outfall river cross section kholpatuya(300m U/S)

CS start at: E= 735492.70,N= 2459158.97

CS end at: E= 735485.91,N= 2458959.03

Km. 5.215



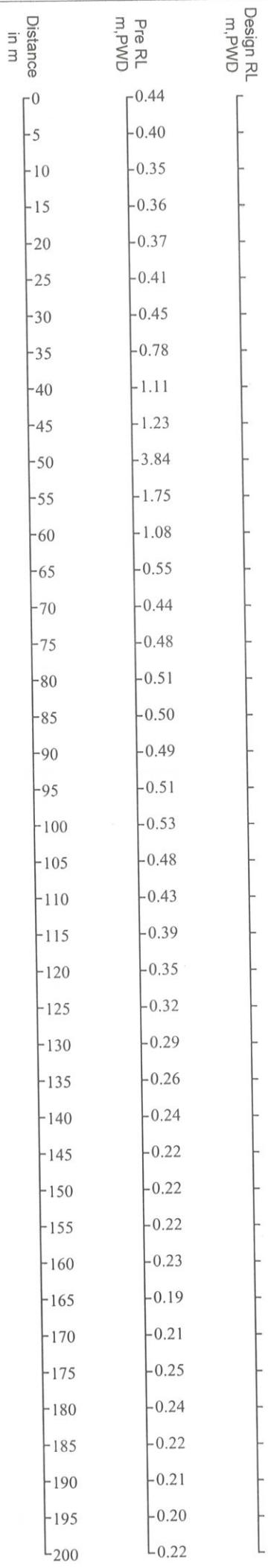
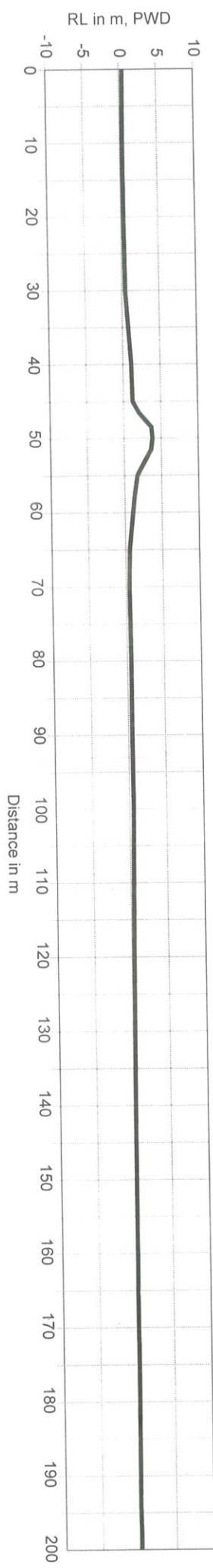
S

Outfall river cross section kholpatuya(C/L)

CS start at: E= 735718.85,N= 2459265.97

CS end at: E= 735711.44,N= 2459066.10

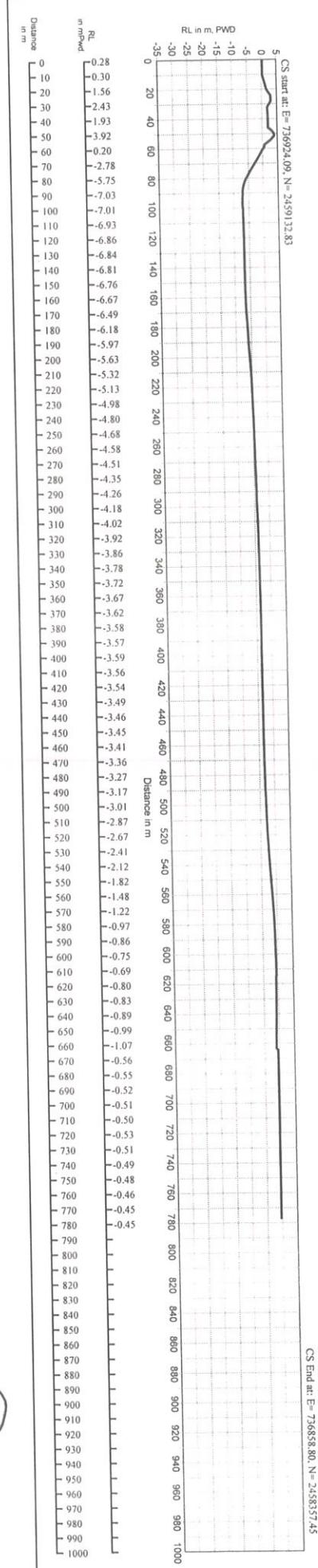
Km. 5.515



20

Outfall river cross section kholpatuya(300m D/S)

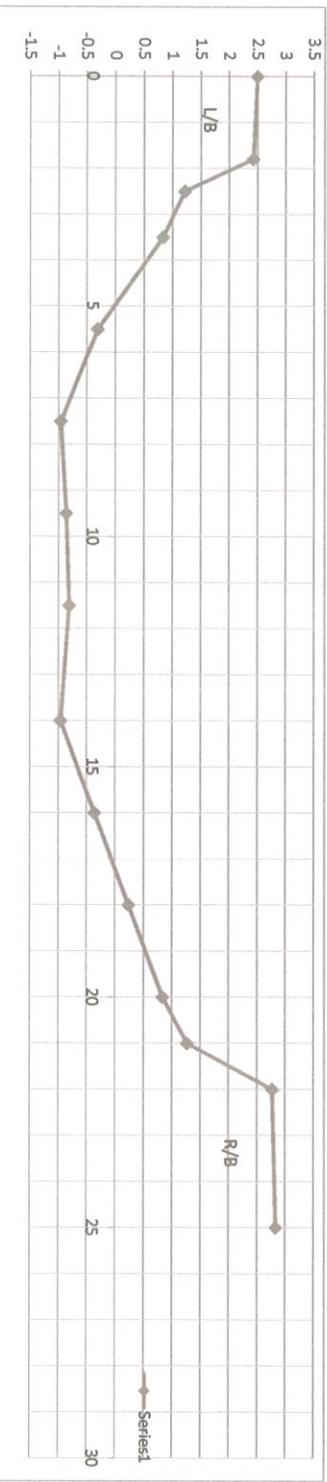
CS 87 (Km. 6.815)



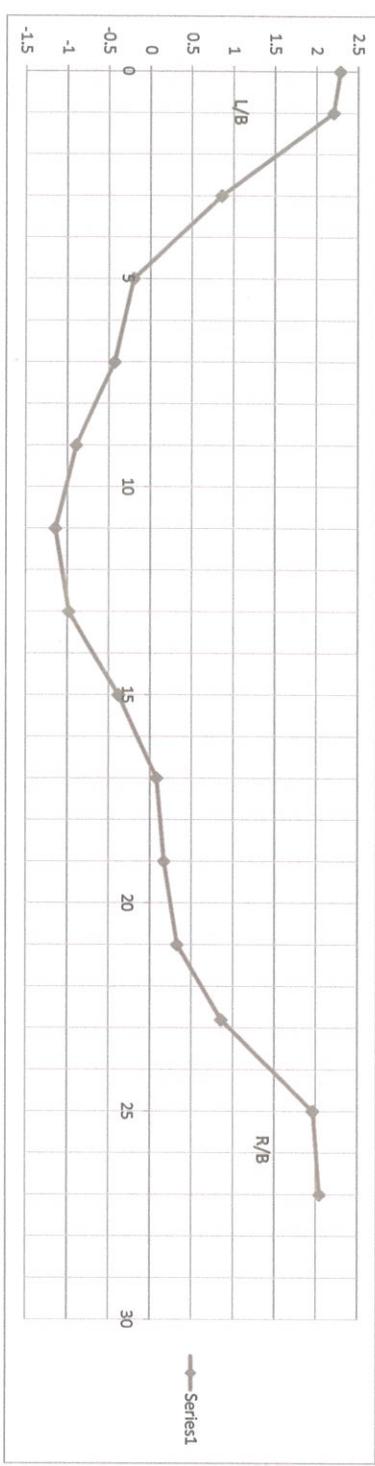
କୋଲପତ୍ତୁଆ ନାମରେ
କୋଲପତ୍ତୁଆ ନାମରେ
(ମୋଟ ଜାକିର ହୋସନ)
ଉପ-ବିଭାଗୀୟ ଅଧିକାରୀ ତରଫେରେ
ଶ୍ରୀମଦ୍ଭଗବତପ୍ରକାଶକାରୀ
ନାମରେ ପରିଚାରକ
ରାଷ୍ଟ୍ରପତ୍ରୀ, ପ୍ରାମନଗର, ଶାତକିରା।
ବାଲାଙ୍ଗିବା, ଶାତକିରା, ଶାତକିରା।

X-SECTION OF CHANDNIMUKHA KHAL AT CHANDNIMUKHA FROM KM 0.000 TO KM 1.000 = 1.000 KM IN POLDER NO-15 UNDER 'REHABILITATION OF POLDER-15 IN SATKHIRA DISTRICT' UND SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA DURING THE YEAR 2021-22.

Distance	0	1.3	2.5	3.5	5.5	7.5	9.5	11.5	14	16	18	20	21	22	25
Existing R/L	2.5	2.43	1.22	0.84	-0.31	-0.96	-0.86	-0.81	-0.96	-0.36	0.24	0.84	1.27	2.78	2.84

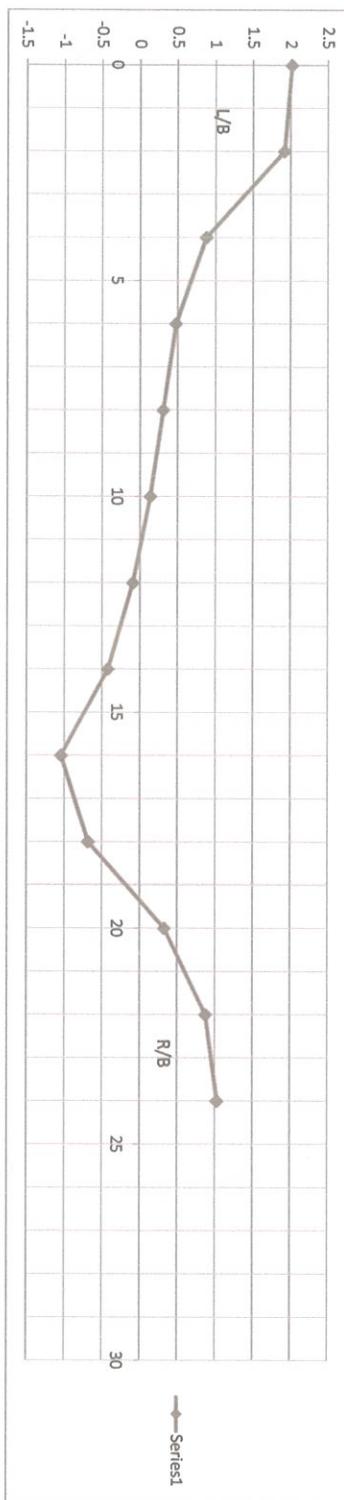


Distance	0	1	3	5	7	9	11	13	15	17	19	21	22.8	25	27
Existing R/L	2.29	2.21	0.86	-0.2	-0.43	-0.89	-1.14	-0.98	-0.38	0.08	0.17	0.33	0.86	1.97	2.05

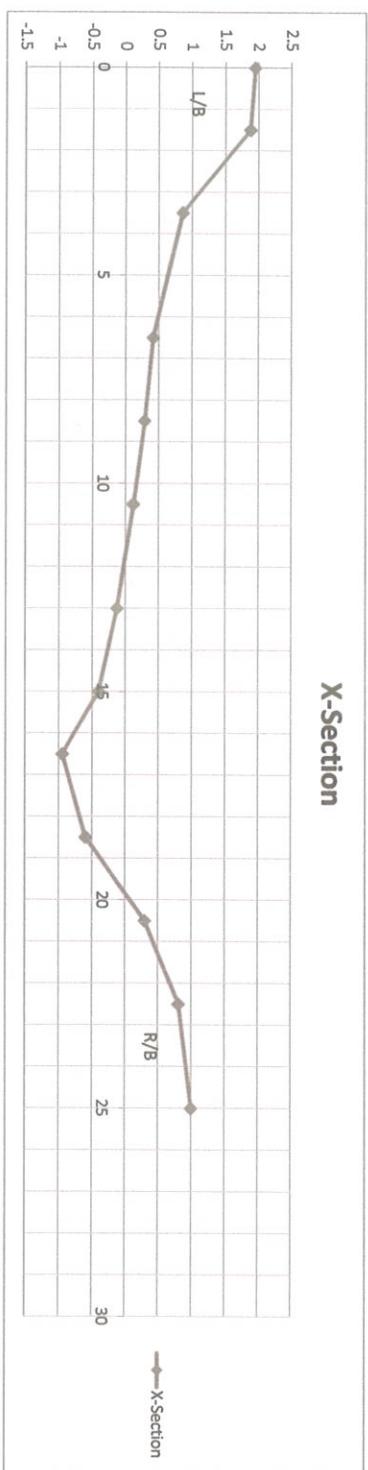


2

C/S at Km 0.500	
Distance	C/S
0	2
2	4
4	6
6	8
8	10
10	12
12	14
14	16
16	18
18	20
20	22
22	24
Existing R/L	1.92
Existing R/L	0.88
Existing R/L	0.48
Existing R/L	0.31
Existing R/L	0.14
Existing R/L	-0.09
Existing R/L	-0.42
Existing R/L	-1.04
Existing R/L	-0.68
Existing R/L	0.33
Existing R/L	0.88
Existing R/L	1.03

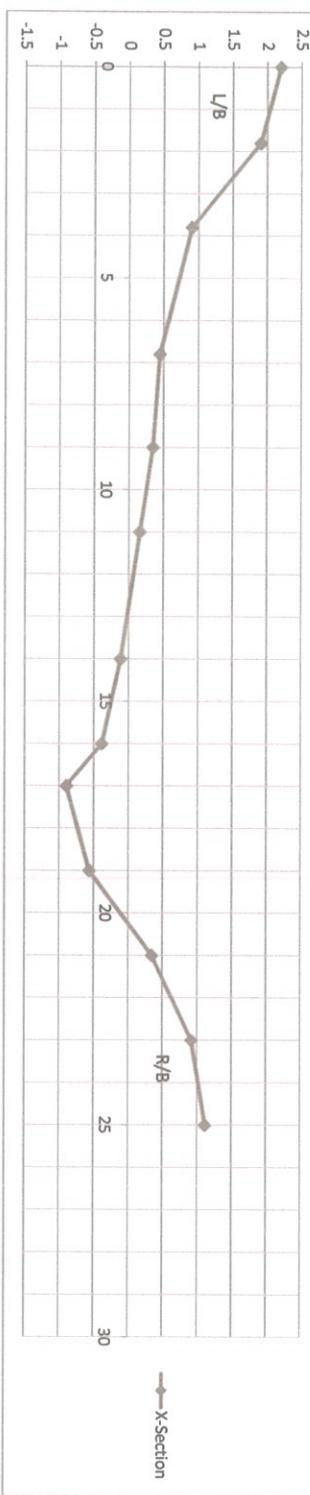


X-Section



	C/S at Km 1.000												
Distance Existing R/L	0	1.8	3.8	6.8	9	11	14	16	17	19	21	23	25
	2.2	1.91	0.91	0.45	0.35	0.16	-0.11	-0.38	-0.89	-0.56	0.35	0.92	1.12

X-Section



Md. Abul Khaer
(Md. Abul Khaer)
Executive Engineer
Satkhira O&M Division-1
BWDB, Satkhira.

Md. Zakir Hossain
(Md. Zakir Hossain)
Sub-Divisional Engineer
Shyamnagar O&M Sub-Division
.BWDB, Shyamnagar.

Md. Sazzadul Haque
(Md. Sazzadul Haque)
Sub-Assistant Engineer/SO
Nowabgoni O&M Section
BWDB, Shyamnagar.

جاءكم من ربكم، فلما رأى ذلك أبا طالب^ع قال^ع:

25/11/21



RiverName	StationID	StationName	Year	MaxOFWL	MinOFWL
Betma-Kholopeuta	SW26	Pratobnagar	1990	2.61	-2.46
Betma-Kholopeuta	SW26	Pratobnagar	1991	2.88	-2.44
Betma-Kholopeuta	SW26	Pratobnagar	1992	3.09	-1.99
Betma-Kholopeuta	SW26	Pratobnagar	1993	3.10	-2.08
Betma-Kholopeuta	SW26	Pratobnagar	1994	2.89	-2.18
Betma-Kholopeuta	SW26	Pratobnagar	1995	3.47	-2.31
Betma-Kholopeuta	SW26	Pratobnagar	1996	2.64	-2.40
Betma-Kholopeuta	SW26	Pratobnagar	1997	2.92	-2.50
Betma-Kholopeuta	SW26	Pratobnagar	1998	3.11	-2.59
Betma-Kholopeuta	SW26	Pratobnagar	1999	2.66	-2.89
Betma-Kholopeuta	SW26	Pratobnagar	2000	3.22	-2.82
Betma-Kholopeuta	SW26	Pratobnagar	2001	2.97	-2.87
Betma-Kholopeuta	SW26	Pratobnagar	2002	2.81	-1.77
Betma-Kholopeuta	SW26	Pratobnagar	2003	2.62	-1.97
Betma-Kholopeuta	SW26	Pratobnagar	2004	2.68	-1.61
Betma-Kholopeuta	SW26	Pratobnagar	2006	2.75	-1.99
Betma-Kholopeuta	SW26	Pratobnagar	2009	2.96	-1.76
Betma-Kholopeuta	SW26	Pratobnagar	2010	3.49	-1.87
Betma-Kholopeuta	SW26	Pratobnagar	2011	3.90	-1.80
Betma-Kholopeuta	SW26	Pratobnagar	2012	3.76	-1.81
Betma-Kholopeuta	SW26	Pratobnagar	2013	3.01	-1.72
Betma-Kholopeuta	SW26	Pratobnagar	2014	2.77	-1.89
Betma-Kholopeuta	SW26	Pratobnagar	2015	2.69	-1.42
Betma-Kholopeuta	SW26	Pratobnagar	2017	3.11	-1.85
Betma-Kholopeuta	SW26	Pratobnagar	2018	3.23	-1.40
Betma-Kholopeuta	SW27	Pratobnagar	2019	3.410	-1.340
Betma-Kholopeuta	SW28	Pratobnagar	2020	3.490	-2.300

گلزاری از مطالعات آنالوگیک و دیجیتالی
برای ارزیابی احتمالی خسارت های
آبگیری و سیلی در مناطق حفاظت شده
(۱۴۰۲) مطابق با این دستور

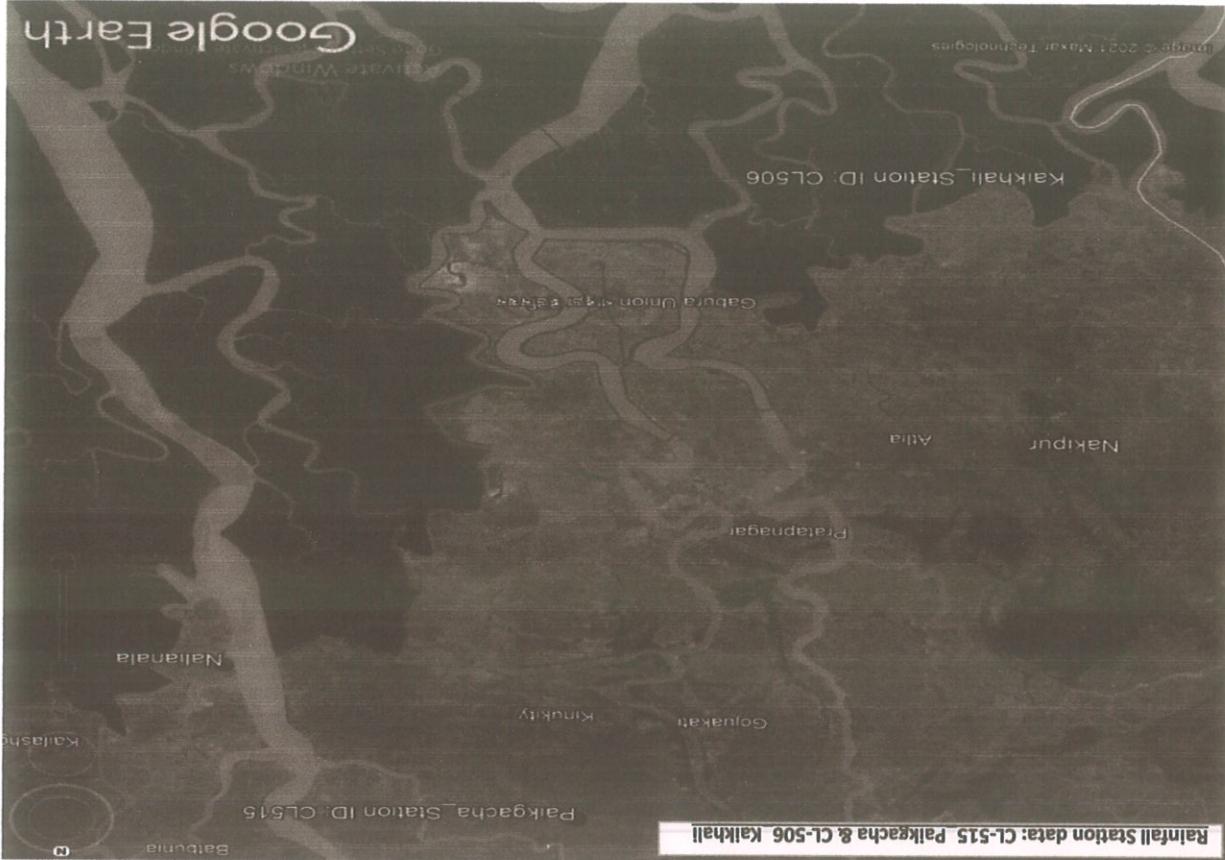
ZSI-N12



RiverName	StationID	Station	Year	MaxWFL	MinWFL
Kobadak	SW165	Kobadak Forest Office	1990	2.93	-1.78
Kobadak	SW165	Kobadak Forest Office	1991	2.49	-1.84
Kobadak	SW165	Kobadak Forest Office	1992	2.55	-2.25
Kobadak	SW165	Kobadak Forest Office	1993	3.00	-2.30
Kobadak	SW165	Kobadak Forest Office	1994	2.49	-2.16
Kobadak	SW165	Kobadak Forest Office	1995	2.53	-2.32
Kobadak	SW165	Kobadak Forest Office	1996	2.95	-2.45
Kobadak	SW165	Kobadak Forest Office	1998	2.23	-2.65
Kobadak	SW165	Kobadak Forest Office	2000	2.22	-2.44
Kobadak	SW165	Kobadak Forest Office	2001	1.85	-2.87
Kobadak	SW165	Kobadak Forest Office	2008	2.62	-2.08
Kobadak	SW165	Kobadak Forest Office	2009	3.27	-2.28
Kobadak	SW165	Kobadak Forest Office	2011	2.63	-2.58
Kobadak	SW165	Kobadak Forest Office	2012	2.42	-2.80
Kobadak	SW165	Kobadak Forest Office	2013	4.00	-2.58
Kobadak	SW165	Kobadak Forest Office	2014	2.20	-2.57
Kobadak	SW165	Kobadak Forest Office	2015	2.26	-2.86
Kobadak	SW165	Kobadak Forest Office	2016	1.97	-2.73
Kobadak	SW166	Kobadak Forest Office	2020	3.54	-1.32

١. لیکن ملکہ کے لئے اپنے بھائی کو اپنے بھائی کے لئے
ملکہ کے لئے اپنے بھائی کو اپنے بھائی کے لئے
لیکن ملکہ کے لئے اپنے بھائی کو اپنے بھائی کے لئے
(*) لیکن ملکہ کے لئے

25/11/21



Rainfall Station data: CL-515 Paligachha & CL-506 Kalikhali

District	StationName	StationID	Year	Rainfall (mm)
District	StationName	StationID	Year	Rainfall (mm)
Satkhira	Kalikhalli	CL506	1989	1641.70
Satkhira	Kalikhalli	CL506	1990	2773.30
Satkhira	Kalikhalli	CL506	1991	1709.20
Satkhira	Kalikhalli	CL506	1992	1990.10
Satkhira	Kalikhalli	CL506	1993	1789.40
Satkhira	Kalikhalli	CL506	1994	1788.00
Satkhira	Kalikhalli	CL506	1995	1870.10
Satkhira	Kalikhalli	CL506	1996	1245.20
Satkhira	Kalikhalli	CL506	1997	1771.10
Satkhira	Kalikhalli	CL506	1998	2718.10
Satkhira	Kalikhalli	CL506	1999	2023.90
Satkhira	Kalikhalli	CL506	2000	1648.70
Satkhira	Kalikhalli	CL506	2001	1839.90
Satkhira	Kalikhalli	CL506	2002	1585.50
Satkhira	Kalikhalli	CL506	2003	1474.40
Satkhira	Kalikhalli	CL506	2004	2239.20
Satkhira	Kalikhalli	CL506	2005	2288.10
Satkhira	Kalikhalli	CL506	2006	1743.50
Satkhira	Kalikhalli	CL506	2007	2499.20
Satkhira	Kalikhalli	CL506	2008	1635.70
Satkhira	Kalikhalli	CL506	2009	1264.37
Satkhira	Kalikhalli	CL506	2010	1433.50
Satkhira	Kalikhalli	CL506	2011	2208.25
Satkhira	Kalikhalli	CL506	2012	1557.30
Satkhira	Kalikhalli	CL506	2013	1517.90
Satkhira	Kalikhalli	CL506	2014	2409.80
Satkhira	Kalikhalli	CL506	2015	2230.80
Satkhira	Kalikhalli	CL506	2016	1868.90
Satkhira	Kalikhalli	CL506	2017	2110.20
Satkhira	Kalikhalli	CL506	2018	2017

Yearly Rainfall information of CL506 Kaliyakal & CL15 Paligachha nearest of Polder-15

BANGLADESH WATER DEVELOPMENT BOARD

GROUNDWATER HYDROLOGY DIVISION-2

FIELD BORE LOG

Project: Rehabilitation of polder no 15 at satkhira district under SITE: Chandrimukha

satkhira division

P.S.: Shyamnagar DIST: Satkhira

LOCATION: Chandrimukha khal HOLE NO: H1-H5 GROUND LEVEL:

CLIENT: XEN, O&M DIVISION-1, Satkhira DATE COMPLETED: 07-06-22 UNIT: Rig-21 TOTAL DEPTH: 72 ft

DATE STARTED: 03-06-2022 AT 7:00 HRS

TYPE: XEN, O&M DIVISION-1, Satkhira

SAMPLE NOS: DIMENSIONS: NO TAKEN: DRILLER: Md. Abu Jaffer GEOLOGIST: Md. Maniruzzaman Bhuiyan

A) UNDISTURB TYPE: SAMPLE NOS: DIMENSIONS: NO TAKEN: DRILLER: Md. Abu Jaffer GEOLOGIST: Md. Maniruzzaman Bhuiyan

b) DISTURB

SAMPLE NOS: D1-D1A DIMENSIONS: 1/4 ID X 24 inch NO TAKEN: 14 Nos

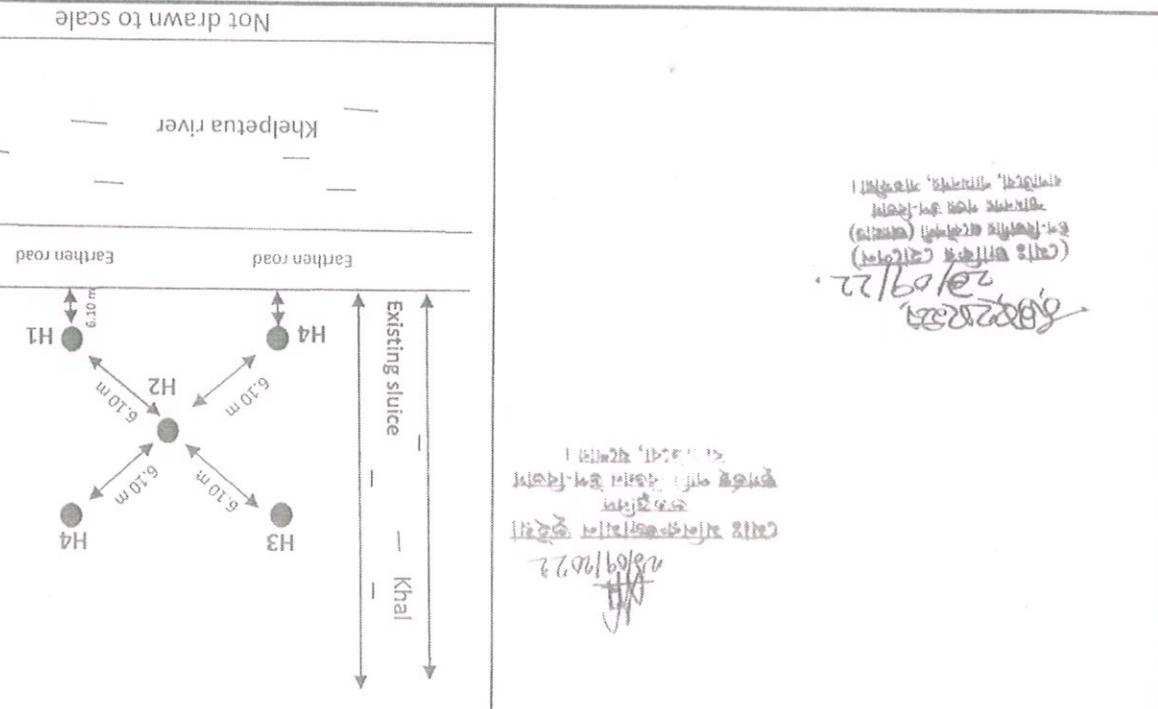
TYPE: Split Spoon WEIGHT OF HAMMER: 140 lb AVG. DROP: 30 inches

HOW SAMPLED: WOODEN/BOX/JARS/CANS/BAGS DESPATCHED ON:

CASING

REMARKS LOCATION SKETCH

Drilling was advanced by Chopping method.



FIELD BORE LOG									
GROUNDWATER HYDROLOGY									
BANGLADESH WATER DEVELOPMENT BOARD									
Project: Rehabilitation of polder no 15 at saltkira district under Sylhet division									
Client: Chandimukha khal									
HOLE NO: H1									
GROUNDD LEVEL: 1.55 m									
DIST: Saltkira									
P.S: Shyamnagar									
STL: Chandimukha									
DISTRICT: Sylhet									
DATE STARTED: 03-06-2022									
DATE COMPLETED: 03-06-22									
TOTAL DEPTH: 72 ft									
DRILLED BY: GWD-2									
UNIT: Rig-21									
PROJECT: GWD-2									
LITHOLOGICAL DESCRIPTION									
PHYSICAL		DISTURBED SAMPLES		PENETRATION TEST		INDEX		REMARKS	
DILATANCY	BLOWS ON SPOON	BLOWS ON CASING	NO OF BLOWS PER FT	PENETRATION	MOISTURE	DENSITY	COLOR	N.P.	V.=Non-plastic V.=soft=very soft
0	6	12	18	24	0	12	4	5	
1	1	1	1	1	1	1	1	1	
0	1	1	1	1	0	1	1	1	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	
2	3	4	8	2	2	5	9	2	
1	1	1	2	1	1	2	2	1	
0	1	1	1	0	1	1	1	0	
1	1	1	1	1	1	1	1	1	

BANGLADESH WATER DEVELOPMENT BOARD
GROUNDWATER HYDROLOGY
GROUNDWATER HYDROLOGY DIVISION-2

Project: Rehabilitation of polder no 15 at Sakkhra district under

Sakkhra DGM division

FIELD BORE LOG

P.S.: Shyamnagar DIST: Sakkhra

LOCATION: Chandrimukha Khal HOLE NO: H2 GROUND LEVEL: 1.7 m

CLIENT: XEN, Q8M DIVISION-1, Sakkhra

DATE STARTED: 04-06-2022 DATE COMPLETED: 04-06-22 OF DATE-

WATER LEVEL: .90 m AT 7:00 HRS

DRILLED BY: GWHD-2 UNIT: Rig-21 TOTAL DEPTH: 72 ft

DATE STARTED: 04-06-2022 DATE COMPLETED: 04-06-22 OF DATE-

WATER LEVEL: .90 m AT 7:00 HRS

DRILLED BY: GWHD-2 UNIT: Rig-21 TOTAL DEPTH: 72 ft

LITHOLOGICAL DESCRIPTION				INDEX	TEST	SAMPLES	SCALE (ft)	No. of Sample	Type of Sample
PHYSICAL	DISTURBED SAMPLES	PENETRATION TEST	TEST						
DILATANCY	BLOWS ON SPOON	BLOWS ON SPOON	CASING	AIR	DENSITY	REMARKS			
	0	6	12	18	NO OF BLOWS PER 1 FT				
	6	12	18	24	0				
	12	18	24	30	0				
	18	24	30	36	0				
	24	30	36	42	0				
	30	36	42	48	0				
	36	42	48	54	0				
	42	48	54	60	0				
	48	54	60	66	0				
	54	60	66	72	0				
	60	66	72	78	0				
	66	72	78	84	0				
	72	78	84	90	0				
	78	84	90	96	0				
	84	90	96	102	0				
	90	96	102	108	0				
	96	102	108	114	0				
	102	108	114	120	0				
	108	114	120	126	0				
	114	120	126	132	0				
	120	126	132	138	0				
	126	132	138	144	0				
	132	138	144	150	0				
	138	144	150	156	0				
	144	150	156	162	0				
	150	156	162	168	0				
	156	162	168	174	0				
	162	168	174	180	0				
	168	174	180	186	0				
	174	180	186	192	0				
	180	186	192	198	0				
	186	192	198	204	0				
	192	198	204	210	0				
	198	204	210	216	0				
	204	210	216	222	0				
	210	216	222	228	0				
	216	222	228	234	0				
	222	228	234	240	0				
	228	234	240	246	0				
	234	240	246	252	0				
	240	246	252	258	0				
	246	252	258	264	0				
	252	258	264	270	0				
	258	264	270	276	0				
	264	270	276	282	0				
	270	276	282	288	0				
	276	282	288	294	0				
	282	288	294	300	0				
	288	294	300	306	0				
	294	300	306	312	0				
	300	306	312	318	0				
	306	312	318	324	0				
	312	318	324	330	0				
	318	324	330	336	0				
	324	330	336	342	0				
	330	336	342	348	0				
	336	342	348	354	0				
	342	348	354	360	0				
	348	354	360	366	0				
	354	360	366	372	0				
	360	366	372	378	0				
	366	372	378	384	0				
	372	378	384	390	0				
	378	384	390	396	0				
	384	390	396	402	0				
	390	396	402	408	0				
	396	402	408	414	0				
	402	408	414	420	0				
	408	414	420	426	0				
	414	420	426	432	0				
	420	426	432	438	0				
	426	432	438	444	0				
	432	438	444	450	0				
	438	444	450	456	0				
	444	450	456	462	0				
	450	456	462	468	0				
	456	462	468	474	0				
	462	468	474	480	0				
	468	474	480	486	0				
	474	480	486	492	0				
	480	486	492	498	0				
	486	492	498	504	0				
	492	498	504	510	0				
	498	504	510	516	0				
	504	510	516	522	0				
	510	516	522	528	0				
	516	522	528	534	0				
	522	528	534	540	0				
	528	534	540	546	0				
	534	540	546	552	0				
	540	546	552	558	0				
	546	552	558	564	0				
	552	558	564	570	0				
	558	564	570	576	0				
	564	570	576	582	0				
	570	576	582	588	0				
	576	582	588	594	0				
	582	588	594	600	0				
	588	594	600	606	0				
	594	600	606	612	0				
	600	606	612	618	0				
	606	612	618	624	0				
	612	618	624	630	0				
	618	624	630	636	0				
	624	630	636	642	0				
	630	636	642	648	0				
	636	642	648	654	0				
	642	648	654	660	0				
	648	654	660	666	0				
	654	660	666	672	0				
	660	666	672	678	0				
	666	672	678	684	0				
	672	678	684	690	0				
	678	684	690	696	0				
	684	690	696	702	0				
	690	696	702	708	0				
	696	702	708	714	0				
	702	708	714	720	0				
	708	714	720	726	0				
	714	720	726	732	0				
	720	726	732	738	0				
	726	732	738	744	0				
	732	738	744	750	0				
	738	744	750	756	0				
	744	750	756	762	0				
	750	756	762	768	0				
	756	762	768	774	0				
	762	768	774	780	0				
	768	774	780	786	0				
	774	780	786	792	0				
	780	786	792	798	0				
	786	792	798	804	0				
	792	798	804	810	0				
	798	804	810	816	0				
	804	810	816	822	0				
	810	816	822	828	0				
	816	822	828	834	0				
	822	828	834	840	0				
	828	834	840	846	0				
	834	840	846	852	0				
	840	846	852	858	0				
	846	852	858	864	0				
	852	858	864	870	0				
	858	864	870	876	0				
	864	870	876	882	0				
	870	876	882	888	0				
	876	882	888	894	0				
	882	888	894	900	0				
	888	894	900	906	0				
	894	900	906	912	0				
	900	906	912	918	0				
	906	912	918	924	0				
	912	918	924	930	0				
	918	924	930	936	0				
	924	930	936	942	0				
	930	936	942	948	0				
	936	942	948	954	0				
	942	948	954	960	0				
	948	954	960	966	0				
	954	960</td							

S
06/06/2022

Note: >50% = Dominant size, 50%-50% = and, 20%-40% = some, 10%-20% = little, <10% = trace.

FIELD BORE LOG									
GROUNDWATER HYDROLOGY									
BANGLADESH WATER DEVELOPMENT BOARD									
Project Rehabilitation of polder no 15 at Sakkhra district under SITE: Chandrimukha Khal									
Sakkhra 08m division									
P.S.: Shyamnagar DIST: Sakkhra									
CLIENT: XEN,08M DIVISION-1, Sakkhra									
DATE STARTED: 06-06-2022 DATE COMPLETED: 06-06-22 OF DATE-									
WATER LEVEL: 1.5 m AT 7:00 HRS									
GROUND LEVEL: 1.65 m									
HOLE NO: H4									
TOTAL DEPTH: 72 ft									
UNIT: Rig-21									
DRILLED BY: GWD-2									
LITHOLOGICAL DESCRIPTION									
PHYSICAL		DISTURBED SAMPLES		PENETRATION TEST		INDEX		REMARKS	
DILATANCY	BLows ON SPOON	BLows ON SPOON	NO OF BLOWS PER 1 FT	CASING	Penetration	DENSITY	COLOR	MOISTURE	
0	6	12	18	0	12	24	01	02	Disturb Undisturb
6	12	18	24	0	12	24	01	02	
12	18	24	30	0	18	36	06	03	
18	24	30	36	0	24	42	07	04	
24	30	36	42	0	30	48	08	05	
30	36	42	48	0	36	54	09	06	
36	42	48	54	0	42	60	10	07	
42	48	54	60	0	48	66	11	08	
48	54	60	66	0	54	72	12	09	
54	60	66	72	0	60	78	13	10	
60	66	72	78	0	66	84	14	11	
66	72	78	84	0	72	90	15	12	
72	78	84	90	0	78	96	17	14	
78	84	90	96	0	84	102	16	13	
84	90	96	102	0	90	108	18	15	
90	96	102	108	0	96	114	20	17	
96	102	108	114	0	102	120	22	19	
102	108	114	120	0	108	126	24	21	
108	114	120	126	0	114	132	26	23	
114	120	126	132	0	120	138	28	25	
120	126	132	138	0	126	144	30	27	
126	132	138	144	0	132	150	32	29	
132	138	144	150	0	138	156	34	31	
138	144	150	156	0	144	162	36	33	
144	150	156	162	0	150	168	38	35	
150	156	162	168	0	156	174	40	37	
156	162	168	174	0	162	180	42	39	
162	168	174	180	0	168	186	44	41	
168	174	180	186	0	174	192	46	43	
174	180	186	192	0	180	198	48	45	
180	186	192	198	0	186	204	50	47	
186	192	198	204	0	192	210	52	49	
192	198	204	210	0	198	216	54	51	
198	204	210	216	0	204	222	56	53	
204	210	216	222	0	210	228	58	55	
210	216	222	228	0	216	234	60	57	
216	222	228	234	0	222	240	62	59	
222	228	234	240	0	228	246	64	61	
228	234	240	246	0	234	252	66	63	
234	240	246	252	0	240	258	68	65	
240	246	252	258	0	246	264	70	67	
246	252	258	264	0	252	270	72	69	
252	258	264	270	0	258	276	74	71	
258	264	270	276	0	264	282	76	73	
264	270	276	282	0	270	288	78	75	
270	276	282	288	0	276	294	80	77	
276	282	288	294	0	282	300	82	79	
282	288	294	300	0	288	306	84	81	
288	294	300	306	0	294	312	86	83	
294	300	306	312	0	300	318	88	85	
300	306	312	318	0	306	324	90	87	
306	312	318	324	0	312	330	92	89	
312	318	324	330	0	318	336	94	91	
318	324	330	336	0	324	342	96	93	
324	330	336	342	0	330	348	98	95	
330	336	342	348	0	336	354	100	97	
336	342	348	354	0	342	360	102	99	
342	348	354	360	0	348	366	104	101	
348	354	360	366	0	354	372	106	103	
354	360	366	372	0	360	378	108	105	
360	366	372	378	0	366	384	110	107	
366	372	378	384	0	372	390	112	109	
372	378	384	390	0	378	396	114	111	
378	384	390	396	0	384	402	116	113	
384	390	396	402	0	390	408	118	115	
390	396	402	408	0	396	414	120	117	
396	402	408	414	0	402	420	122	119	
402	408	414	420	0	408	426	124	121	
408	414	420	426	0	414	432	126	123	
414	420	426	432	0	420	438	128	125	
420	426	432	438	0	426	444	130	127	
426	432	438	444	0	432	450	132	129	
432	438	444	450	0	438	456	134	131	
438	444	450	456	0	444	462	136	133	
444	450	456	462	0	450	468	138	135	
450	456	462	468	0	456	474	140	137	
456	462	468	474	0	462	480	142	139	
462	468	474	480	0	468	486	144	141	
468	474	480	486	0	474	492	146	143	
474	480	486	492	0	480	498	148	145	
480	486	492	498	0	486	504	150	147	
486	492	498	504	0	492	510	152	149	
492	498	504	510	0	498	516	154	151	
498	504	510	516	0	504	522	156	153	
504	510	516	522	0	510	528	158	155	
510	516	522	528	0	516	534	160	157	
516	522	528	534	0	522	540	162	159	
522	528	534	540	0	528	546	164	161	
528	534	540	546	0	534	552	166	163	
534	540	546	552	0	540	558	168	165	
540	546	552	558	0	546	564	170	167	
546	552	558	564	0	552	570	172	169	
552	558	564	570	0	558	576	174	171	
558	564	570	576	0	564	582	176	173	
564	570	576	582	0	570	588	178	175	
570	576	582	588	0	576	594	180	177	
576	582	588	594	0	582	600	182	179	
582	588	594	600	0	588	606	184	181	
588	594	600	606	0	594	612	186	183	
594	600	606	612	0	600	618	188	185	
600	606	612	618	0	606	624	190	187	
606	612	618	624	0	612	630	192	189	
612	618	624	630	0	618	636	194	191	
618	624	630	636	0	624	642	196	193	
624	630	636	642	0	630	648	198	195	
630	636	642	648	0	636	654	200	197	
636	642	648	654	0	642	660	202	199	
642	648	654	660	0	648	666	204	201	
648	654	660	666	0	654	672	206	203	
654	660	666	672	0	660	678	208	205	
660	666	672	678	0	666	684	210	207	
666	672	678	684	0	672	690	212	209	
672	678	684	690	0	678	696	214	211	
678	684	690	696	0	684	702	216	213	
684	690	696	702	0	690	708	218	215	
690	696	702	708	0	696	714	220	217	
696	702	708	714	0	702	720	222	219	
702	708	714	720	0	708	726	224	221	
708	714	720	726	0	714	732	226	223	
714	720	726	732	0	720	738	228	225	
720	726	732	738	0	726	744	230	227	
726	732	738	744	0	732	750	232	229	
732	738	744	750	0	738	756	234	231	
738	744	750	756	0	744	762	236	233	
744	750	756	762	0	750	768	238	235	
750	756	762	768	0	756	774	240	237	
756	762	768	774	0	762	780	242	239	
762	768	774	780	0	768	786	244	241	
768	774	780	786	0	774	792	246	243	
774	780	786	792	0	780	798	248	245	
780	786	792	798	0	786	804	250	247	
786	792	798	804	0	792	810	252	249	
792	798	804	810	0	798	816	254	251	
798	804	810	816	0	804	822	2		

FIELD BORE LOG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
GROUNDWATER HYDROLOGY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
BANGLADESH WATER DEVELOPMENT BOARD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Project: Rehabilitation of polder no 15 at satkhira district under satkhira 08m division																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
LOCATION: Chandrimukha Khal																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
CLIENT: XEN.08M DIVISION-1, Satkhira																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
DATE STARTED: 07-06-2022 DATE COMPLETED: 07-06-22 OF DATE-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
DRILLED BY: GWHD-2 UNIT: Rig 21 TOTAL DEPTH: 72 ft																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
<table border="1"> <tr> <td>LOCATION:</td> <td>HOLE NO:</td> <td>HS</td> <td colspan="2">GROUND LEVEL: 1.55 m</td> </tr> <tr> <td></td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td>P.S.: Shyamnagar</td> <td>DIST: Satkhira</td> <td></td> <td colspan="2"></td> </tr> </table>										LOCATION:	HOLE NO:	HS	GROUND LEVEL: 1.55 m							P.S.: Shyamnagar	DIST: Satkhira																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
LOCATION:	HOLE NO:	HS	GROUND LEVEL: 1.55 m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
P.S.: Shyamnagar	DIST: Satkhira																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
<table border="1"> <tr> <td>PHYSICAL</td> <td colspan="3">DISTURBED SAMPLES</td> <td colspan="3">PENETRATION TEST</td> <td colspan="3">INDEX</td> </tr> <tr> <td>DILATANCY</td> <td colspan="3">BLOWS ON SPOON</td> <td colspan="3">BLOWS ON CASING</td> <td colspan="3">NO OF BLOWS PER FT</td> </tr> <tr> <td>0</td> <td>6</td> <td>12</td> <td>18</td> <td>0</td> <td>12</td> <td>24</td> <td>0</td> <td>12</td> <td>24</td> </tr> <tr> <td>001</td> <td>00</td> <td>02</td> <td>03</td> <td>04</td> <td>05</td> <td>06</td> <td>07</td> <td>08</td> <td>09</td> </tr> </table>										PHYSICAL	DISTURBED SAMPLES			PENETRATION TEST			INDEX			DILATANCY	BLOWS ON SPOON			BLOWS ON CASING			NO OF BLOWS PER FT			0	6	12	18	0	12	24	0	12	24	001	00	02	03	04	05	06	07	08	09																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
PHYSICAL	DISTURBED SAMPLES			PENETRATION TEST			INDEX																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
DILATANCY	BLOWS ON SPOON			BLOWS ON CASING			NO OF BLOWS PER FT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
0	6	12	18	0	12	24	0	12	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
001	00	02	03	04	05	06	07	08	09																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
<table border="1"> <tr> <td>DESCRIPTION</td> <td colspan="3">DILATANCY</td> <td colspan="3">DENSITY</td> <td colspan="3">MOISTURE</td> <td colspan="3">COLOR</td> <td colspan="3">REMARKS</td> </tr> <tr> <td>CLAY WITH TRACE SILT</td> <td>1</td> <td>2</td> <td>2</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>6</td> <td>4</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>Non-plastic</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Plastic</td> <td>1</td> </tr> <tr> <td>Moist</td> <td>3</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Clay</td> <td>1</td> </tr> <tr> <td>SILT WITH LITTLE CLAY</td> <td>1</td> </tr> <tr> <td>CLAY WITH SOME SILT</td> <td>2</td> <td>4</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>SILT</td> <td>3</td> <td>4</td> <td>5</td> <td>7</td> <td>8</td> <td>10</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td>Very fine sand with trace silt</td> <td>8</td> <td>12</td> <td>13</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>25</td> <td>26</td> </tr> <tr> <td>MEDIUM DENSE</td> <td>6</td> <td>8</td> <td>11</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>Gray</td> <td>4</td> <td>8</td> <td>10</td</td></tr></table>										DESCRIPTION	DILATANCY			DENSITY			MOISTURE			COLOR			REMARKS			CLAY WITH TRACE SILT	1	2	2	1	2	2	1	2	2	1	2	2	1	2	2	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	3	3	4	5	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	6	4	4	6	8	10	12	13	15	16	17	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23	Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7	Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7	SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20	Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26	MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24	Gray	4	8	10</td
DESCRIPTION	DILATANCY			DENSITY			MOISTURE			COLOR			REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
CLAY WITH TRACE SILT	1	2	2	1	2	2	1	2	2	1	2	2	1	2	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	3	3	4	5	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	6	4	4	6	8	10	12	13	15	16	17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10	12	13	14	15	16	17	18	19	20	21	22	23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Non-plastic	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Plastic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Moist	3	3	4	5	6	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Clay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT WITH LITTLE CLAY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CLAY WITH SOME SILT	2	4	4	6	7	7	7	7	7	7	7	7	7	7	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
SILT	3	4	5	7	8	10	12	13	14	15	16	17	18	19	20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Very fine sand with trace silt	8	12	13	15	16	17	18	19	20	21	22	23	24	25	26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
MEDIUM DENSE	6	8	11	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Gray	4	8	10</td																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										