

**GOVERNMENT OF THE PUNJAB
IRRIGATION DEPARTMENT**



**FLOOD FIGHTING PLAN OF
GUJRANWALA DRAINAGE DIVISION
FOR THE YEAR 2025**

**GUJRANWALA DRAINAGE DIVISION,
GUJRANWALA**

**Lahore Irrigation Zone,
Lahore.**

**Lahore Drainage Circle,
Lahore.**

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		13.3.4 Departmental Machinery available	-
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FLOOD FIGHTING PLAN – 2025

PART – A

Chapter – 1

Salient Feature of Gujranwala Drainage Division, Gujranwala.

1.1 Location

The jurisdiction of Gujranwala Drainage Division, Gujranwala falls within Gujranwala and Sheikhupura and Sialkot Districts.

The fertility of area of these districts is directly related to the efficiency of the drainage facilities provided to these districts. The area of Gujranwala & Sialkot District is the outfall area of the Rachna Doab. It has to carry the surface run off and the inter-flows of the Upper Districts i.e. Gujranwala, Sialkot and Narowal.

1.2 General Description

The important natural Nullah in the jurisdiction of Gujranwala Drainage Division Gujranwala. These Nullahs enter in to Pakistan from Indian held Kashmir. During monsoon season, these Nullahs spill over at different locations creating havoc for human life and property.

Apart from this arrangement, a comprehensive drainage system has been provided to these areas, which cater for the drainage for the catchment area. This drainage network mainly comprises: -

1. Aik Nullah 0+000 to 97+000
2. Deg Nullah 191+920 to 418+943
3. Nikki Deg 149+578 to 233+278
4. Independent Drains

The above drainage systems outfall into Main Deg Nullah, Nikki Deg Drain and Q.B. Link, U.C.C Canal, Hassri Nullah, Aik Nullah, Palku Nullah, River Chenab and M&R link canal. This Division has no. of Drains, large and small. These drainage system act as a backbone for the riverain Districts, which are bounded by the Q.B Link Canal, LCC, U.C.C BRBD Link & Mr Link Canal and River Chenab and Ravi.

After construction of Lahore –Sialkot (M-11) Motorway, the natural flow lines in District Sialkot have been interrupted causing heading up of surface runoff along Motorway (M-11). The surface runoff (sheet flow) goes into the natural or man-made drainage networks and causes overflow / spillage from

drains situated in the vicinity of Sambrial City. Worst situation was experienced during monsoon 2017.

Executive Engineer, being overall in-charge of Gujranwala Drainage Division, Gujranwala with headquarter at Gujranwala, is responsible to look after all Drains, Nullahs and flood bunds in his jurisdiction of Gujranwala, Sialkot and Hafizabad Districts. Executive Engineer, of this Division has overall control with the following controlling officer:

Sr. No	Name and designation of officer	Headquarter	Telephone No
1	Sub Divisional officer, Daska Drainage Sub Division, Daska	Daska	Mr. Saqlain Nawaz 0344-4966588
2	Sub Divisional officer, Gujranwala Drainage Sub Division, Gujranwala	Gujranwala	Mr. Saqib Nadeem 0343-2423552
3	Sub Divisional officer, Deg Drainage Sub Division, Mianwali Rest House Sialkot	Mianwali Rest House Sialkot	-----

The jurisdiction of Sub Divisional officers is as under:

DASKA DRAINAGE SUB DIVISION DASKA.

The Sub Divisional Officer is in-charge of Daska Drainage Sub Division Daska look after the Drains and Natural Naullahs falls in District Sialkot transferred from Pasrur Link Division, Sialkot to Gujranwala Drainage Division, Gujranwala for better look after the Drainage Systems Specially during Moon Soon Season.

Palkhu Nullah.

Palkhu Nullah enters into Pakistan from Indian held Kashmir near village vans at LOC. It passes through Sialkot city, Sambrial, Wazirabad and outfalls in Chenab River upstream of Khanki Head works. The total length of the Nullah from LOC to outfall is 60 miles. The upper catchment area is hilly and the flood water enters Pakistan territory at high velocity and the water levels in the Nullah rises swiftly and abruptly.

JURISDICTION OF SUB ENGINEER IN DASKA DRAINAGE SUB DIVISION DASKA

Sr. No	Designation	Responsible for	Site of camp During flood Season	Additional Duty
1	Sub Engineer Marala Section	Gondal Drain	Village Tunnelwah	Hafiz Nadeem Abbass
		Dhalewali Drain	//	//
		Rodial Drain	//	//
		Tunnelwah Nullah	//	//
		Durgi No. I	//	//
		Durgi No.II	//	//
		Connecting Drains between MR Link UCC Canal	//	//
		Side Drains Along MR Link Canal 2-L, 1-R.	//	//
		Side Drains Along UCC	//	//
		1-L, 2-L, 3-L, 1-R, 2-R, 3-R	//	//
		Kotli Loharan Drian	//	//
		Neelwah Nullah	//	//
2	Sub Engineer Khambranwala Section	Central Seepage Drain	Khambranwala	Muhammad Frasat
		Connecting Drain	//	//
		Palkhu Nullah	//	//
		Jorian Drian	//	//
		Roras Drain	//	//
		Roras Try Drain	//	//
		Side seepage Drian Along M.R Link Drain 3-L, 4-L , 2-R, 3-R	//	//
		Side seepage Drain Along UCC 4-L, 5-L, 6-L, 7-L, 4-R, 5-R, 6-R, 7-R	//	//
3	Sub Engineer Sambrial Section	Responsible For	Site of camp During flood Season	Additional Duty
		Sambrial try Drain	Sambrial	Hafiz Nadeem Abbass
		Sambrial Drain	//	//
		Malluwali Drain	//	//
		Behowala Drain	//	//

		Aik Nullah	//	//
		Passia Drain	//	//
		Chak Kaka Drain	//	//
		Kot Daran Drain	//	//
		Drain along Pacca Road	//	//
		Sahowala Drain	//	//
		Side Drain along MR Link Canal	//	//
		Side Drain along UCC	//	//
		8-L, 9-L, 10-L, 11-L, 12-L, 8-R, 9-R, 10-R, 11-R, 12-R	//	//
4	Sub Engineer Daska Section	Daska Main Drain	Village Sahowala	Muhammad Frasat
		Daska 1 Drain	//	//
		Daska 2 Drain	//	//
		Cheema Try Drian	//	//
		Bombanwala Drain	//	//
		Side Drain along BRBD Link Canal	//	//
		Ratta Bajwa Drain	//	//
		Thatta Bajwa Drain	//	//
		Govindke Drain	//	//
		Budha Goraya Drain	//	//
		Sohawa Drain	//	//
		Lurriki Try Drain	//	//
		Bombanwala Try Drain	//	//
		Dholewali Try Drain	//	//
		Raja Ghuman Drain	//	//
		Raneke Drain	//	//
		Hassari Nullah 1	//	//
		Hassari Nullah 2	//	//
		Hassari Try Drain	//	//
		Pathanwali Drain	//	//
		Pathanwali Try Drian	//	//
		Mohindwali Drain	//	//
		Satrah Drain	//	//

**The Detail of Drains under the jurisdiction of Daska Drainage
Sub Division Daska are as under.**

Sr. #	Name of Drain	District	Outfall Location		Total Length (ft)	Design Discharge at outfall (Cusec)
			RD	Name of Drain		
1	Daska drain	GRW SKT	22444	Abdal drain	11.32	4.2
2	R/S seepage drain along BRBD	SKT	56575	Daska drain	1.10	2
3	Bambanwala drain	SKT	56575	Daska drain at syphon RD 10363 BRBD	1.60	1.4
4	Lurki drain	SKT	-	Hasri Nallah	15.40	
5	Dholewali Drain	SKT	45125	Lurki Main Drain	3.70	4.7
6	Budha Goraya Drain	SKT	18500	Dholewali Dr: at syphon R.D 65000 BRBD	4.65	3.1
7	Bharthanwala Drain	SKT	57198	Lurki Main Drain	1.46	4.2
8	Lurki Try Drain	SKT	64813	Lurki Main Drain	2.37	4.39
9	Raja Ghuman Drain	SKT	72444	Lurki Main Drain	3.11	3.07
10	Daska Drain-I	SKT	29640	Syphon BRBD Link	6.51	5.29
11	Daska Drain-II	SKT	37000	Syphon BRBD Link	16.00	4.32
12	Pathanwala Drain	SKT	134500	Syphon MR Link Canal	4.70	2.67
13	Ranike Drain	SKT	43475	Syphon BRBD Link		
14	Tunnelwah Drain	SKT		Chenab River	14.60	4.2
15	1-R Seepage Drain along UCC	SKT	0+00	Tannelwan Nullah Dr. D/S of Syp: R.D 17050 U.C.C	1.38	5
16	1-L Seepage Drain along UCC	SKT	0+00	Tannelwan Nullah Dr. D/S of Syp: R.D 17050 U.C.C	2.01	16
17	Neelwah Nullah	SKT		Tannelwan Nullah Dr. U/S of Syp: R.D 18100 MRL	7.04	2.9
18	Dhallwali Drain	SKT	0+00	Neel wah Nullah Drain U/S of Syphon RD 18100 MRL	2.23	2.4
19	Gondal Drain	SKT	12650	Dhallewali Drain	7.25	2.5
20	Rodial Drain	SKT	20250	Gondal Drain	1.60	1.2
21	Dugri Drain # 1	SKT		Palkhu Nullah	16.60	4.2
22	Dugri Drain # 2	SKT	20000	Dugri Drain #. 1	2.67	3.1
23	3-R Seepage Drain along UCC R/S	SKT	0+00	Dugri Drain #. 2 Syp: D/S RD.41600 UCC	0.60	45
24	3-R Seepage Drain along UCC L/S	SKT	0+00	Dugri Drain #. 2 Syp: D/S RD.41600 UCC	0.88	45

25	Connecting Drain between UCC & MRL	SKT	0+00	Dugri Drain #. 2	1.20	125
26	3-L Seepage Drain along UCC	SKT	0+00	Connecting Drain between UCC & MRL U/S of Syp: Rd.41600 UCC	1.16	25
27	4-L Seepage Drain along UCC	SKT	0+00	Connecting Drain between UCC & MRL U/S of Syp: Rd.41600 UCC	0.58	45
28	2-R Seepage Drain along UCC R/S of Dugri # 1	SKT	0+00	Dugri #. 1 at D/S of Syp: RD. 35800 UCC	3.36	45
29	2-R Seepage Drain along UCC L/S of Dugri # 1	SKT	0+00	Dugri #. 1 at D/S of Syp: RD. 35800 UCC	0.56	45
30	Connecting Drain between UCC & MRL	SKT	0+00	Dugri #. 1 at D/S of Syp: RD. 35800 UCC	1.10	45
31	2-L Seepage Drain along UCC	SKT		Connecting Drain U/S of Syp: Rd.35800 UCC	3.66	10
32	1-R Seepage Drain along MRL	SKT		Connecting Drain D/S of Syp: Rd.34100 MRL	0.52	25
33	1-R Seepage Drain along MRL	SKT	0+00	Connecting Drain U/S of Syp: Rd.35800 UCC	2.02	2.4
34	Kotli Loharan Drain	SKT	31300	Side seepage Drain	2.10	2.5
35	Palkhu outfall drain	SKT	153300	Palkhu Nullah 153300 from Chenab River	6.27	6
36	4-L Seepage Drain along UCC	SKT	0+00	Palkhu outfall Dr. D/S at Syp: 52200 UCC	0.64	45
37	5-R Seepage Drain along UCC	SKT	0+00	Palkhu outfall Dr. D/S at Syp: 52200 UCC	0.52	12
38	Palkhu Nallah	SKT		Palkhu outfall Dr. D/S at Syp: 52200 UCC	11.67	5.32
39	5-L Seepage Drain along UCC	SKT	184800	Palkhu outfall Dr. U/S at Syp: 52200 UCC	0.98	45
40	Central Seepage Drain	SKT	190000	Palkhu Nullah between UCC & MRL	5.20	3
41	Jourian Outfall Drain	SKT	31500	Palkhu Nullah	6.30	45
42	Roras Outfall Drain	SKT	23000	Jourian Outfall Drain	2.60	45
43	7-R Seepage Drain along UCC	SKT	0+00	Roras Outfall Dr: U/S Syp: 75800 UCC	1.66	45
44	8-R Seepage Drain along UCC	SKT	0+00	Roras Outfall Dr: U/S Syp: 75800 UCC	0.84	5
45	7-L Seepage Drain along	SKT	0+00	Roras Outfall Dr: U/S	1.80	110

	UCC			Syp: 75800 UCC		
46	7-L Seepage Drain along UCC	SKT	0+00	Roras Outfall Dr: U/S Syp: 75800 UCC	0.94	110
47	6-R Seepage Drain along UCC	SKT	0+00	Jourian Outfall Dr: U/S Syp: 63450 UCC	1.73	45
48	6-R Seepage Drain along UCC	SKT	0+00	Jourian Outfall Dr: U/S Syp: 63450 UCC	0.75	45
49	Jourian Dr. between UCC & MRL	SKT	0+00	Jourian Outfall Dr: U/S Syp: 63450 UCC	0.90	45
50	6-R Seepage Drain along UCC	SKT	4500	Jourian Drain between UCC & MRL	1.92	30
51	6-R Seepage Drain along UCC	SKT		Jourian Drain between U/S Syp: 63450 UCC	0.67	30
52	2-R Seepage Drain along MRL	SKT		Jourian Drain between MRL & UCC D/S Syp: 60500 MRL	1.30	2.2
53	3-R Seepage Drain along MRL	SKT		Jourian Drain between MRL & UCC D/S Syp: 60500 MRL	2.10	25
54	2-L Seepage Drain along MRL	SKT		Jourian Drain between MRL & UCC D/S Syp: 60500 MRL	1.90	16
55	3-L Seepage Drain along MRL	SKT		Jourian Drain between MRL & UCC D/S Syp: 60500 MRL	2.90	2
56	Roras Try: Drain	SKT	100	Jourian Outfall Drain	0.85	45
57	Aik Nullah Drain	SKT		Palkhu Nullah	19.50	13.7
58	Pasia Drain	SKT	6510	Aik Nullah	2.60	45
59	11-R Seepage Drain along UCC	SKT	0+00	Pasia Drain D/S Syp: 115900 UCC	1.08	5
60	12-R Seepage Drain along UCC	SKT	0+00	Pasia Drain D/S Syp: 115900 UCC	0.82	5
61	11-L Seepage Drain along UCC	SKT	0+00	Pasia Drain D/S Syp: 115900 UCC	0.98	5
62	12-L Seepage Drain along UCC	SKT	0+00	Pasia Drain D/S Syp: 115900 UCC	1.02	5
63	Chak Kakka Drain	SKT	6225	Pasia Drain	1.66	4
64	10-R Seepage Drain along UCC	SKT		Aik Nullah just D/S syp: 100650 UCC	1.23	5
65	9-L Seepage Drain along UCC	SKT		Aik Nullah just D/S syp: 100650 UCC	0.73	5
66	10-L Seepage Drain along UCC	SKT		Aik Nullah just D/S syp: 100650 UCC	0.72	5
67	Begowala Drain	SKT	35125	Aik Nullah Drain	10.70	7.5
68	Kot Daran Drain	SKT	16250	Begowala Drain	1.89	3.1
69	Sambrial Try Drain	SKT	14776	Sambrial Branch	1.53	45

70	Sambrial Br: Drain	SKT		Begowala Drain	1.63	45
71	Moulowali Drain	SKT	8000	Begowala Drain	2.34	138
72	Drain along pacca road	SKT	0+00	Moulowali Drain	3.10	3.13
73	9-R Seepage Drain along UCC R/S Begowala Drain	SKT	0+00	Begowala Drain U/S syp: 90275 UCC	0.64	5
74	Sahowala Drain	SKT	0+00	Begowala Drain U/S syp: 90275 UCC	3.94	3.1
75	8-L Seepage Drain along UCC L/S Sahowala Drain	SKT	0+00	Sahowala Drain	2.30	5
76	Hassri Main Drain	SKT		Dek Nullah	23.29	-
77	Hassri Nullah #. 1	SKT	85500	Syp. BRBD Link	12.80	8.5
78	Sohawa Drain	SKT	23000	Hassri Nullah No. 1	6.00	4.7
79	Ratta Bajwa Drain	SKT	6330	Sohawa Drain	1.35	3.6
80	Hassri Nullah #. 2	SKT	190850	Syp: M.R Link	15.70	5
81	Ramke Drain	SKT		Hassri Nullah No. 2	1.50	2.2
82	Hassri Try Drain	SKT	55000	Hassri Nullah No. 1	4.50	8.1
83	Bagowala Drain	SKT	90000	Hassri Drain	5.40	3.3
84	Maherwali Drain	SKT	46558	Hassri Drain	5.40	3.14

GUJRANWALA DRAINAGE SUB DIVISION GUJRANWALA.

There are Five No. Drainage Sections in Gujranwala Drainage Sub Division, no change in jurisdiction of Pandoki Section, Philoki Section & Gakhar Section and detail of drains Sub Engineer Section wise is as under: -

i. Pandoki Drainage Section at Pandoki. (Hafiz Maaz Hanif S/E)

Sr.	Name of Drains	From RD to RD.	Length (Miles)
1	Pandoke Harkaran Drain	0-60290	12.06
2	Jhamwala Drain	0-33700	6.74
3	Bucha Drain	0-19394	3.88
4	Ahmad Nagar Drain	0-79444	5.89
5	Ahmad Nagar Branch	0-6200	1.24
6	Seepage Drain along LCC	0-24500	4.90
7	Dilawr Cheema Drain	0-38500	7.70
Total			42.41

ii. Philoke Drainage Section at Philoke (Hafiz Maaz Hanif S/E)

Sr.	Name of Drains	From RD to RD.	Length (Miles)
1	Philoke Drain	0-139675	27.94
2	Manget Drain	0-30864	6.17
Total			34.11

iii. Ghakhar Drainage Section at Ghakhar. (Hafiz Maaz Hanif S/E)

Sr.	Name of Drains	From RD to RD.	Length (Miles)
1	Gakhar Drain	0-16000	3.20
2	Wazirke Drain	0-41500	8.30
3	Sethi Drain	0-35000	7.00
4	Sangowali Drain	0-166630	33.33
Total			51.83

iv. Gujranwala Drainage Section at Gujranwala (Amjad Ali Buttar S/E)

Sr.	Name of Drains	From RD to RD.	Length (Miles)
1	Aroop Drain	0-17370	3.47
2	Abdal Drain	0-22444	4.49

3	Hassri Main Drain	0-116426	23.29
4	Lurikki Main Drain	0-77000	15.40
5	Meharwali Drain	0-52415	10.48
6	Madherianwala Drain	0-22340	4.47
7	Wadala – I Drain	0-6250	1.25
8	Wadala – II Drain	0-4700	9.94
Total			63.79

v. Kamoki Drainage Section at Kamoki (Amjad Ali Buttar S/E)

Sr.	Name of Drains	From RD to RD.	Length (Miles)
1	Khoth Nullah Extension	0-58100	11.62
2	Pipliwala Drain	0-24400	4.88
3	Adhorai Drain	0-42500	8.50
4	Eimanabad Drain	0-17550	3.51
5	Jandiala Baghwala Drain	0-20270	4.05
6	Kamoki Drain	0-71800	14.36
7	Lalupur Drain	0-5650	1.13
8	Baghwala Drain	0-51500	10.30
Total			58.35

Total length of Drains in Gujranwala Drainage Sub Division = 250.49 Miles.

DEG DRAINAGE SUB DIVISION SIALKOT

The jurisdiction of newly proposed Sub Division has been discussed above in detail. It will consist of four drainage sections. Detail as below: -

The proposed jurisdiction of Drainage Section of Mianwali Drainage Sub Division will be as under: -

i. Tapiala Drainage Section at Tapiala Dost Muhammad (M. Rizwan)

Sr.	Name of Drains	From RD to RD.	Length (Miles)
1	Main Deg Nullah (From G.T Road outfall Kirto Drain)	119636-222425	20.55
2	Kirto Drain	0-45000	9.00
Total			29.55

ii. **Gharial Drainage Section at Nangal Dona Singh (M. Rizwan S/E)**

Sr.	Name of Drains	From RD to RD.	Length (Miles)
1	Main Deg Nullah (From O/F Kirto Drain to Distributor Point Nikki Deg)	222425-252130	5.94
2	Nikki Deg Drain	145778-233278	24.49
3	Gharial Drain	0-102000	20.40
4	Gharial Try: Drain	0-11500	2.30
Total			53.13

iii. **Mianwali Drainage Section at Mianwali CRH. (Javed Iqbal S/E)**

Sr.	Name of Drains	From RD to RD.	Length (Miles)
1	Main Deg Nullah (From Distributor Point Nikki Deg Drain to BRBD Link Canal)	253560-366670	20.62
2	Tong Ucha Drain	0-14000	2.80
3	Geowali Drain	0-34475	6.90
4	Nadda Drain	0-7510	1.50
5	Gorala Drain	0-16000	3.20
6	Dandian Drain	0-65000	13.00
7	Gulloke Drain	0-9000	1.80
8	Hachar Drain	0-43500	8.70
9	Main Deg Nullah (From BRBD Link Canal to MR Link Canal) For project purpose only	366670-418943	10.36
Total			68.88

Chapter – 2

Flood protection and River Training Works

2.1 Data of Flood Bunds/Embankments along Drains/Nullahs in Gujranwala Drainage Division, Gujranwala.

Sr. No.	Name of Channel/Nullah with location	Length (Miles)	Year of Construction	Top width (Ft)	Side Slope	
					Inner	Outer
Flood protection Bunds along Drain						
1	Bagowala Drain Bund 0-53 +500	10.88	1987	15	3:1	3:1
2	Mulowali Dran Bund 0-11+700	2.34	1939	15	3:1	3:1
3	Passia Drain Bund 0-13+000	2.6	1929	15	3:1	3:1
4	Khanna Flood protection Bund RD: 34+100 MR Link to RD: 35+800 UCC	1.14	2009	15	3:1	3:1

Chapter – 3

Brief History of Past Flood Events

Sialkot & Gujranwala (some part) District had experienced worst flood during the year 2014. Drains in the area over flew and floodwater entered into Sialkot City causing devastation. Due to newly constructed Motorway, which erupted the natural flood plain, causing heading up of the surface run off and inundated vast area and was alarmed to human life. Accumulative surface run off found its way through the drains, which had lost their carrying capacity due to deferred maintenance for the last couple of years. The drains flow all along Motorway to their outfalls and floodwater entered into the abadies of Sialkot, Wazirabad City.

FLOODS 2007:

The left food bund of Deg Nullah also washed away in reach RD 4500-5400 and a ring bund was constructed for the passage of flood to save the further damage. The winter rains also played havoc as the gauge rose to 6.5 ft on 13-3-2007, 14-3-2007 and also on 21-3-2007. Some damages were also restored on the nose of spur RD 4500. After this, during moon soon 2007, there were small freshets of low flood intensity in Deg Nullah and Aik Nullah, which passed safely without causing any damage to infrastructures in the area.

FLOODS 2008:

During 2008, flood bunds along Deg Nullah U/s Kingra Bridge were badly damaged. Flood fighting was made by the Department successfully to save the adjoining villages, abadies and other infrastructures in the area. For the most damaged and critical reaches, a work namely “Repairing flood bund along Deg Nullah U/S Kingra Bridge” was executed for the safety of the people and properties of adjoining villages.

FLOODS 2009:

During flood season 2009, the abnormal flood was received in Deg Nullah with high magnitude velocity. The duration of high flood was also more than 18 hours. These long duration and high velocity attacked the bunds in different reaches. Flood fighting was made by the department successfully to save the bunds, adjoining villages and other infrastructures in the area. For damaged & critical reaches, the works namely Strengthening left flood protection bund u/s Kingra bridge RD.7+000 to 8+500/R repairing flood protection bund RD.1+800 to

2+500/R are in progress for the safety of the people and proprieties of adjoining villages as well as government infrastructures i.e. Bridges culverts roads, schools, etc.

FLOODS 2010:

During the third & fourth week of July 2010, Heavy rainfalls occurred in Jammu & Kashmir which caused frequent freshet in Deg Nullah. On 22.07.2010, a freshet of High magnitude of about **42000 Cs** passed through Deg Nullah. The stream of flow changed its behaviour abruptly and hit the left Flood Embankment between reach R.D. 8+000 to 10+000 which was checked by using sand bags and Bamboos for support of sand bangs against slipping. The situation maintained till 05.08.2010.

On 06.08.2010, a freshet having discharge magnitude of about **40000** to **42000 Cs** occurred in the morning hours at 08:30 AM and attacked severely on the eroded bank in reach RD 8+000 to 9+000. The duration of the peak spanned up to 30 hours. Due to abrupt change in flow behaviour of Deg Nullah the velocity of Flood Water as experienced was 10-12 ft/ sec. Furthermore, freshets of high magnitude passed through Deg Nullah from time to time.

FLOODS 2011:

During the month July & August 2011, heavy rainfalls occurred in Jammu & Kashmir which caused frequent freshet of magnitude ranges 10000Cs to 22000Cs on 07/07/2011, 14/07/2011, 21/07/2011 and 25/07/2011 in Deg Nullah. The stream of flow hit the left Flood Embankment between Spurs which was controlled by using sand bags and Bamboos for Support of sand bags against slipping. The situation Continued till 10/08/2011.

On 12.08.2011, a freshet of High magnitude of about **30000 Cs** occurred and attacked severely on shank and mole head spurs No. 3 & 4. The stone aprons of Spurs were launched during the freshet which were restored later on.

FLOODS 2012:

During the month August 2012, heavy rain falls occurred in Jammu & Kashmir which caused frequent freshet of magnitude ranges 10000Cs to 21000Cs on 01/08/2012 and 24/08/2012 in Deg Nullah. The stream of flow changed its course from left Flood Embankment to its old creeks due to construction of 04 Nos, Spurs in reach RD 7+500 to S9+500

FLOODS 2013:

During the July - August 2013, Heavy rainfalls were occurred which caused frequent freshet in Deg and Aik Nullah. On 20/07/2013, 02/08/2013 & 09/08/2013, a freshet of High magnitude of about 26889, 26889 & 29783 Cs passed through Deg Nullah On 20/07/2013, 15/08/2013 & 16/08/2013, a freshet having discharge magnitude of about 33024, 40711 & 40711 Cs passed through Aik Nullah. The spill water accumulated along left bank of MR Link Canal RD 104+000 to RD 305+000/L & BRBD Link Canal RD 10+000 to 111+000/L.

Water came due to heavy rain fall in the catchment areas of Nullahs in India Occupied Jammu & Kashmir. The water spilt out from the banks of these Nullahs. This water hit MR Link Canal on left bank. A part of this water passed through the Sypons and Inlets upto their design capacities and balance were accumulated along left banks, there by damaging the crops, properties and even human lives. This inundation urged the inhabitants to cut the bank of the canal at their own. This practice is reported when this water touches BRBD Link Canal on its left bank.

FLOODS 2014:

During the month of September 2014, heavy rainfalls occurred which caused frequent freshet in Deg and Aik Nullah. On 05/09/2014 & 06/09/2014 a freshet of High magnitude of about 75102 Cs passed through Deg Nullah. On 05/09/2014 & 06/09/2014 and a freshet having discharge magnitude of about 25296s 44356 Cs passed through Aik Nullah. The spill water accumulated along left bank of MR Link Canal RD 117+000 to RD 304+000/L & BRBD Link Canal RD 10+000 to 104+000/L. The Zamindars of the area made cuts from RD.117+000 to RD 304+000/L of MR Link Canal and RD 10+000 to 164+000/L of BRBD Link Canal for the drain off flood rain water into Canals On 6th September morning. exceptional high discharge of 75102 Cs was recorded in the Deg Nullah at Kingra Bridge but the full effect of this flood could not approach the reach of Nullah under the jurisdiction of this Division due to occurrence of breaches in the upper reach Of Narowal Flood water passed without making any considerable damages through the channelized reach of Nullah having capacity of 12000 Cs from BRBD canal to Muridke- Narowal road. Upstream of BRBD canal and downstream of Muridke-Narowal road up to its outfall where Nullah is not channelized, flood water spilled over and huge damages were occurred. Vast

area of Tehsil Muridke, Ferozwal and Sheikhupura inundated not only due to this flood water but sheet flow from breached sites of Narowal contributes much to make the conditions worst and developed breaches in the Deg.

HASSRI NULLAH & LURRIKI DRAIN:

Lurriki Main Drain (RD. 0+000 to 7+000) originates from the Siphon at RD 37+000/R of BRBD Canal with the design discharge capacity of 462 Cs. where as capacity of the siphon is 1850 Cs. Discharge of Daska-I & II Drains and most of the spill of Aik Nullah on the left side of BRBD Canal is accommodated in Lurriki Drain. Lurriki Drain outfalls into Hassri Main Drain at R.D. 75+000/R with the design capacity of 980 Cs.

Hassri Main Drain having design capacity of 2/50 Cs at source, accommodates the Discharge of Hassri Nullah-I after passing through the siphons at RD 85+500 & RDD86+040 of BRBD with design capacities of 5000 Cs. and 2500 Cs. Respectively During the food season of 2013, excessive discharges in the Lurriki and Hassri Drains spilled over and adopted its natural route / low lying area towards Kamoki City after inundating lands of Sheeniwala, Kotli Nagra, Tokrian, Hameedpur etc villages.

Flood water entered and inundated a part of Kamoki City and made huge losses there. It is worth mentioning here that there are about 80 culverts under the Railway Line passing through the city area, which confirms that flood water used to adopt this route in the past.

After flood season 2013, to safeguard the Kamoki City area and other abadies of the area, an embankment was constructed along the right side of the Lurriki Drain and Hassri Drain from R.D 0-000 to 37+000/R and R.D. 54+500 to 75+000/R respectively.

During the flood season of 2014, exceptional high floods were observed in the Nullah and drains of District Sialkot, Gujranwala and Sheikhupura, from 6th August to 8th August Lurriki Drain discharge also raised upto 1180 Cs at source against design discharge of 462 Cs at BRBD. Similarly, Hassri Drain also reached exceptional high flood levels with the discharge of 11126 CS. against design capacity of 5000 Cs at outfall. Higher level of flood water in Hassri Drain, hardly allowed entering the flood water of Lurriki Drain. Due to this blockage and construction of embankment along right side of the Lurriki Drain flood water started over spill from left side of the Lurriki Drain and inundated lands and abadies of villages Wandala Sandhwan, Ramke, Aminpur Syedan etc severely.

Ultimately to get some relief people on the left side of the Lurriki Drain made cuts in the embankment forcefully, from R.D 1+000 to 10+000/R and R.D. 17+000-18+000/R.

Immediately action was taken with the help of Police and Local Civil Administration to stop further damages to the embankment and FIR was got registered against the culprits.

Flood water of Lurriki Drain passed through these said cuts inundated the hundreds of acres of the villages Sheeniwala, Kotli Nagra, Tokrian, Hameedpur etc before it entered into Kamoki, but due to 2/000 ft. intact portion of embankment and diverting the flood water into Hassri Drain and Sadhoki Disty very less / manageable effect of sheet flow reached Kamoki.

It is evident from the above explained site experiences that construction of embankment could not achieve the objectives in full due to its adverse action on the left side area of the drain and excessive discharges in the Luriki and Hassri Drain against their design discharge. During peak flood days' site was visited by the Superintending Engineer, Lahore Drainage Circle, Lahore and Local Public Representatives. To seek out the comprehensive solution District Coordination Officer, Gujranwala presided over a meeting in the office of Assistant Commissioner

Kamoki in this regard on 04/10/2014 besides site visit along with Local MPA, MNA and Irrigation Staff on 26/09/2014.

As an outcome of all discussions and site visit following proposals were finalized by Department to safeguard the Kamoki City and agricultural lands of the area.

1) Remodelling of Lurikki & Hassri System.

The peak discharges in the Lurikki and Hassri Drains observed during flood season 2014 can only be accommodated by enhancing the capacity or Lurikki drain from 980 to 2000 Cs and Hassri drain from 5000 to 7110 Cs downstream of super passage at Sadhoki Disty. It is further proposed that Lurriki Drain from R.D. 0+000 to 13+600 will also be re-aligned and constructed parallel to the Hassri Drain in a length 15600 ft. passing through independent new proposed super passage at Sadhoki Disty with a capacity of 2000 Cs. This proposed reach of Luriki Drain will ultimately meet at R.D. 64+400/R of Hassri Drain in a parallel manner to overcome the situation of blockage of Lurriki Drain water by Hassri Drain during peak flood days.

2) Kamoki Escape Channel / Drain.

Apart from above proposed remedy / solution to save the Kamoki city from the threat of flood water there must be an escape channel /drain starting from a safe distance or Kamoki urban area to accommodate the flood water in case of any disaster occurs in future. It is proposed to construct a drain, namely Kamoke drain of 36 Mile in length having discharge capacity of 260 CS. and remodelling of Drajke Drain as this proposed drain will outfall into Drajke Drain.

An ADP Scheme namely "**Flood Protection of Kamoke & adjoining areas**" was prepared & approved by the Government, work on the Scheme is in progress and mostly flood inundation problems or area will be solved after completion of scheme. Another PSDP scheme for "**Channelization or Deg Nullah**" has also been approved, the execution of scheme will be started before onset of flood 2017.

FLOOD 2015:

A spell of heavy rainfall in catchment area of Deg Nullah started in 2nd week of July 2015 and flow began increase gradually. Hence rainfall and un precedent freshet occurred which Caused frequent flood having high magnitude about 33329 Cs on 10.07.2015 in Deg Nullah.

Due to meandering action of flow of Nullah, change its behaviour abruptly, erosion along left embankment between RD. 11+600 to 11+950 started due to parallel flow in some length. The magnitude and velocity was too high that hit the spur RD. 7+000IL and launched/damaged the apron of said spur.

Afterwards the freshet trend developed toward just U/S Hanjli Bridge, it caused launched /damaged. The pitching and apron of flood protection bund and guide bank of bridge which was protected by dumping of stone on war footed basis. The situation had been controlled with engineering solution & instructions of higher officers.

FLOOD 2016:

Exceptionally high flood of about 38127 Cs passed through Aik Nullah on 27-07-2016 at 09:00 P.M. The discharge at Ura Bridge was 596 Cs on 27.07.2016 at 02:00 P.M, gauge abruptly rose 16 ft within 4 hours and discharge passed through Nullah was 28651 Cs at 06:00 P.M against the capacity of 25000 Cs. In next 3 hours, the discharge in Aik Nullah rose to 38127 Cs at 09:00 P.M. and became into exceptionally high flood, resultantly the Nullah over topped in

some reaches and breached at R.D 149+500/L in city area due to highest H. F.L attained.

A parallel flow along right side on Haji Pura flood Protection Bund was seriously observed during exceptionally high flood and eroded some patches of protection wall. A serious erosion occurred at R.D 135-136 resultantly brick wall in a length of 130 ft on Haji Pura Bund was collapsed and other eroded sites were controlled by placing the sand bags and bushing.

A series of breaches occurred D/s Daska Road Bridge where the work was not taken up due to complication of land issue.

Similarly, freshet of high magnitude of about 35102 Cs passed through Deg Nullah on 27.07.2016 at 0r00 PM. The freshet safely passed upto Choor Bridge but breaches occurred on left side on D/S Choor bridge. The water accumulated along left bank of M.R Link Canal and a part of this water passed through syphons and inlets upto design capacity. Resultantly the spilled over water accumulated along left bank of BRBD Link Canal at RD.92+000 to 120+000 after passing through M.R Link Canal. All inlets were opened and operational on 27.07.2016 before receipt of flood.

FLOOD 2017 IN AIK NULLAH.

Aik Nullah is widened upto 160 ft and banks are constructed on both Sides of the Nullah upto Bridge RD.102+990 which is also to be widened under the Flood Protection of Sialkot Against Aik & Palkhu Nullah project. There is a gap or about 100 ft on the left side of under construction embankment due to the grave yard of Christian community. On the morning of 1st August, 2017, flood was received in Aik Nullah at this point i.e. RD.103+000 and water spilled over through this gap, where the bank has not yet been constructed at site as the Irrigation Department is engaged with the Christian Community for shirting or the graves. Now, the spilled water is flowing along the periphery of village Ismail Awan and will ultimately opt its natural route and cross the Siphon of MR Link. No damage was observed at site. Ample machinery and manpower were available to fill the gap without loss of time.

FLOOD 2017 IN DEG NULLAH:

During flood 2017, the situation of Deg Nullah remained normal and maximum discharge recorded at Kingra road Bridge was 21597 Cs on 09-08-2017.

During the first week of September 2017, heavy rainfalls occurred in occupied Kashmir and upper & Northern parts of the Punjab due to collision of monsoon and western seasonal low pressure coming from Behra-e-Arab which caused frequent freshets in Deg Nullah on 01-09-2017. A freshet having magnitude of about 17233 Cs observed in Deg Nullah. The stream of flow changed its behaviour abruptly and hit main embankment on right side in between RD.5+000 to 6+000 US

Choor Bridge and eroded the Nullah side slope of Bank upto top edge in length of 300ft which was protected by launching the trees and sand bags on war footed basis to save the abadies i.e. village Jatoke & Kotli etc agricultural land, infrastructures and matured valuable crops as temporary solution.

FLOOD 2017 IN DEG NULLAH:

The Palkhu is a natural Nullah which originates from the hilly catchment area across the border and enters in Pakistan territory from occupied Jammu & Kashmir near vains village in the East of Sialkot city. The design Discharge of Nullah is 1000 Cs, but maximum observed Discharge on 06 Sept-2014 was 3031Cs during flood 2017 maximum recorded discharge was 3070Cs on 02-08-2017. ADP scheme namely flood protection of Sialkot against Aik & Palkhu Nullah” is in progress. The widening of channel upto design parameters has almost been completed. Flood water overtopped between RD.216-217L but was controlled on the same day. No Significant loss was observed in any kind.

During rainy/ flood season 2017, mostly normal rain fall was observed in District Sheikhpura and heavy rain tall observed in District Gujranwala and Narowal and Rachna Drainage Division effected excessive discharge of District Sialkot Drain sand Nullahs which ultimately entered in to the Jurisdiction of Rachna Drainage Division and the sheet flow rainy water in the Nullahs & drains was received too enough due to the rain tall in the catchment area in Jammu & Kashmir on July & August 2017.

The highest discharge in Deg Nullah was observed 15900 Cs on 02-08-2017 and it resulted out flanked water from various places and it timely controlled.

The highest discharge in Nikki Deg Drain was observed 6800 Cs on 02-08-2017 it resulted out flanked water from various places and damages to crops by outflanked water Nikki Deg Drain from R.D 186+000 187+000/R near Village Ladhawala Virkan and Tamboli but it timely controlled. The existing full capacity level of the drain is higher side to NSL. Scheme for remodelling of Nikki Deg

Drain has been approved and in future the bed level lowered equal to NSL and no situation like this will be occurred during flood.

The capacity of Hassri Main Drain enhanced from 4435 Cs to 7110 Cs and Lurriki Main drain 980 Cs to 1975 Cs. Due to enhance the capacity the flood water was passes safely during flood.

Due to normal rains in area of District Sheikhpura Laila & Bhed Drain flows normally and smoothly.

FLOOD 2018 IN DEG NULLAH:

On 30-06-2018, a freshet having magnitude of about 6848 Cs was observed in Deg Nullah. The flood water hit main embankment on right side and started eroding the site which was protected by dumping stone from reserve stock of stone after getting approval from the competent authority on war footing basis to save the abadies i.e. village Jatoke & Kotli etc agricultural land infrastructures and matured valuable crops as temporary solution. Keeping in view the above situation, the competent authorities were approved the construction of three 3 No. spurs for protecting the site which have been constructed at site and now the Site is safe

The fertility of area of these districts is directly related to the efficiency of the drainage facilities provided to these districts. The area of Sheikhpura District is the outfall area or the Rachna Doab. It has to carry the surface run off and the inter-flows of the Upper Districts i.e. Gujranwala, Sialkot and Narowal. Rachna Drainage Division has to face the sheet flow/ spill of Deg Nullah, Hassri Main Drain, Lurriki Drain, Nikki Deg & Bhed Nullah received rainy/ flood water in District Gujranwala & Sheikhpura through Super passages & syphons on M. R. Link canal and B. R. B.D. Link Canal.

During rainy/flood season 2018, mostly normal rain fall was observed in District Sheikhpura and heavy rain tall observed in District Gujranwala and Narowal and Rachna Drainage Division effected excessive discharge of District Sialkot Drains and Nullahs which ultimately entered in to the Jurisdiction of Rachna Drainage Division and the sheet flow / rainy water in the Nullahs & drains was received too enough due to the rain tall in the catchment area in Jammu & Kashmir in flood season 2018.

The highest discharge in Deg Nullah was observed 19170 Cs on 23-09-2018 at Kingra Bridge and it resulted out flanked water from various places in villages Changi, Koti Baba Heera, Mianwali Bangla, Satrah and Khery Sokin Wind in

District Sialkot which was timely controlled and no damage occurred in District Gujranwala & Sheikhupura.

Remodelling of Nikki Deg Drain is in progress and critical reaches were taken up so the flood water passes safely during flood season.

The capacity of Hassri Main Drain enhanced from 4435 Cs to 7110 Cs and Lurriki Main drain 980 Cs to 1975 Cs. Due to enhancement of capacity the flood water was passed safely during flood season.

Due to normal rains in area of District Sheikhupura Laila & Bhed Drain flows normally and smoothly.

FLOOD 2019 IN DEG NULLAH:

A freshet of 12200 Cs hit the Right embankment of Deg Nullah RD. 5-6 Right on 17-08-2019 and caused serious erosion between spur No. 1 and 2. The flood fighting was done by launching of trees bamboos and plastic bags to save the embankment.

FLOOD 2020 IN PALKU & AIK NULLAH:

A freshet of 4450 Cs hit Palku Nullah by Sheet Flow of local rain and from LOC, India on 27-August-2020, which caused the Palku Nullah to beach from RD 222+000-223+000 and other locations.

Similarly, Freshet of 4500 Cs Passed through Aik Nullah in reach Rd 97+000 to D/s on 27-08-2020 which caused the Aik Nullah to overtop water and breached from various locations

FLOOD 2021.

No emergency has been experienced during flood 2021. All the structures, embankments remained quite safe against flood.

FLOOD 2022.

No emergency has been experienced during flood 2022. All the structures, embankments remained quite safe against flood.

FLOOD 2023.

No emergency has been experienced during flood 2023. All the structures, embankments remained quite safe against flood.

FLOOD 2024.

No emergency has been experienced during flood 2024. All the structures, embankments remained quite safe against flood.

Chapter – 4

Design Data, Historic Peak Flood Data & Previous Five Years Flood Data of Head Works / Barrages and Other Control Points

4.1 Flood Limits

Not Related

4.2 Time Lags of Floods

Not Related

4.3 Highest Floods

Not Related

4.4 Peak discharges

Not Related

Chapter – 5

Flood Fighting Strategy

Flood Embankments / Protection Bunds

Bunds along drains are not designed to provide protection against the rivers but to check spills from drains. Accordingly, less watching arrangement are required as compared to that on rivers.

Nikki Deg Drain RD 149+578 to 233+278

Sub Divisional Officer, Gujranwala Drainage Sub Division along with Sub Engineer Kamoki section will be in-charge of watching operation. 1 No watching camp will be established at Dholan Village and will has necessary watching material. Day & night watching operation will be exercised during floods.

Flood fighting strategy at different limits of Aik, Deg Nullah:

A heavy flood is expected in Nullah Aik & Deg. Strict watching arrangement will be started by 15th June 2025 according to the scale fixed by the department as per this flood fighting plan. The pre-flood arrangements necessarily required are given below.

STAGE-I

i. Low Flood:-

Deg Nullah	Aik Nullah
10000	2000

When river discharges ranges between these limits, watching establishment shall be deploy for two shifts in a day. Sub Engineer, concerned will supervise the entire watching operation. Sub Divisional Officer concerned will act as the officer in-charge of watching operation.

STAGE- II

ii. Medium Floods.

Deg Nullah	Aik Nullah
10000-15000	2000-9000

Supervisory staff will be same as in stage-1.

STAGE- III

iii. **High Floods.**

Deg Nullah	Aik Nullah
15000-30000	9000-16000

Supervisory staff will be same as in stage-. But Excavators, Front blade tractor would be hired to control the situation.

STAGE- IV

iv. **Exceptional High Floods.**

Deg Nullah	Aik Nullah
Above 30000 Cs	Above 16000 Cs

Watching establishment would be increased from 1st three stage as per requirement. Similarly, Machinery deployment would be increase.

Drains

Worst situation was faced during heavy rains in monsoon, many drain was over flowed at many places and storm water entered in City areas and damaged public property.

For watching arrangement, a camp will be established under the supervision of Sub Divisional officer and Sub Engineer. Necessary watching material such as lanterns, Axes, Torches, Kassi etc, will be arranged. Day & night watching will be arranged in 3 shifts in case of heavy rainfall and heading up of flow in drains. Civil Administration of Sialkot & Gujranwala City will be informed accordingly well in time for assistance by Sub Divisional Officer Incharge.

General

All the Sub Divisional Officers will keep a close liaison with Executive Engineer Gujranwala Drainage Division, Gujranwala and Civil Administration. They being responsible for respective jurisdiction will take proper action to cope with the alarming situation. They will arrange communication of rainfall / flood position and colossal damages, to all concerned quarters. The rain gauges and flow position in various drains especially Aik Nullah below Motorway will be regularly recorded under their supervision through regular establishment in normal season and through work charge gauge readers in case of flood/ rains.

Sub Divisional Officer In charge may direct other Sub Engineers to shift their camps at vulnerable points along with their establishment.

Municipal Committee Gujranwala, Sialkot will be checking overflow from drain, passing through the City, by making necessary arrangements such as raising bank level along right bank of drain and arranging earth filled jute bags during rainy season. Local bodies will consult drainage staff for technical guidance and hydrological data required for fixing optimum top level of right bank along drains.

Chapter – 6

Flood damages restoration works

There are no major damages to bund in the Division. No major flood restoration work regarding bund executed, therefore been undertaken during the current financial year.

LIST OF MINOR WORK EXECUTED DURING THE YEAR 2023-2024 UNDER THE HEAD OF A13501- EMBANKMENTS.

Sr. #	Name of work	Amount in Million	Date of Start	Date of Completion
1	NIL	NIL	NIL	NIL
2	NIL	NIL	NIL	NIL

Chapter – 7

Flood Fighting Arrangements

7.1 Pre-Flood Arrangement

All the bunds are inspected by a committee constituted by the Secretary to Government of the Punjab, Irrigation Department in May of every year. Inspection of all bunds and spurs by the Team of Military personals is also carried out before the flood season to ensure that the bunds are safe against the coming flood season.

To provide swift and disposal of any information related to flood situation in order to intimate prompt action, Gauge readers are appointed at Deg Nullah & Aik Nullah. Camps are established on all vulnerable sites to monitor the situation during flood season. Cell Phones are provided and generator sets are installed at important/ vulnerable reaches. The flood watching material is procured and shifted to the camp sites.

Keeping in new the possibility of receiving floods, precautionary measures have to be taken from 1st July to 15th October. Watching Establishment is employed for the flood season as per limits of flood already fixed for various magnitude of Discharge in Deg, Aik Nullah & Palkhu Nullah.

1. Arrangements for the establishment of flood centres in the office of Executive Engineer, Gujranwala Drainage Division, and Sub Divisional Officer Daska Drainage Sub Division at Daska, Sub Divisional Officer Gujranwala Drainage Sub Division Gujranwala, and Sub Divisional Officer Development Sub Division-III at Mianwali Benglow will be finalized.

2. All flood fighting material and work charge establishment arrangements will be framed well before the season.

3. No reserve stock for stone is sanctioned, hence no stone available.

7.2 Watching Establishment

In view of possibility of receiving timely flood warnings, precautionary measures have to be taken from 1st July to 15th October, every year. The watching establishment is employed for the flood season as per limits of floods already fixed for various magnitude of discharge in the Nullahs i.e. Aik Nullah and

Deg Nullah. In case the flood is not received, the establishment will be utilized in filling rain cuts etc.

Hassri Main Drain

From R.D 0+000-116+000 Length = 23 miles

2 No. Beldar for Night watching and 1 No for Day watching per mile.
Beldars. $23 \times 3 = 69$

Mate One per Eight mile per shift.
 $3 \times 2 = 6$

Gauge Reader One per shift for camp site
 $1 \times 2 = 2$

Dak Runner One per shift for camp site
 $1 \times 2 = 2$

Chowkidars One per shift for camp site
 $1 \times 2 = 2$

Nikki Deg Drain

From R.D 149+578- RD. 233+278 Length =17 miles

2 No. Beldar for Night watching and 1 No for Day watching per mile.
Beldars. $17 \times 3 = 51$

Mate One per Eight mile per shift.
 $2 \times 2 = 4$

Gauge Reader One per shift for camp site
 $1 \times 2 = 2$

Dak Runner One per shift for camp site
 $1 \times 2 = 2$

Chowkidars One per shift for camp site
 $1 \times 2 = 2$

Deg Nullah

From R.D 191+920-RD. 418+943 Length= 45 miles

2 No. Beldar for Night watching and 1 No for Day watching per mile.

Beldars. $45 \times 3 = 135$

Mate One per Eight mile per shift.
 $6 \times 2 = 12$

Gauge Reader One per shift for camp site
 $1 \times 2 = 2$

Dak Runner One per shift for camp site
 $1 \times 2 = 2$

Chowkidars One per shift for camp site
 $1 \times 2 = 2$

Aik Nullah

From R.D 0+000-RD. 97+000 Length= 20 miles

2 No. Beldar for Night watching and 1 No for Day watching per mile.

Beldars. $20 \times 2 = 40$

Mate One per Eight mile per shift.

$$3 \times 2 = 6$$

Gauge Reader One per shift for camp site

$$1 \times 2 = 2$$

Dak Runner One per shift for camp site

$$1 \times 2 = 2$$

Chowkidars One per shift for camp site

$$1 \times 2 = 2$$

7.3 Arrangement at Sensitive Sites. (Detail in Chapter 12)

- (i) The establishments can be increased after consultation with Executive Engineer, Gujranwala Drainage Division, Gujranwala / Superintending Engineer, Lahore Drainage Circle, Lahore in emergency and in accordance with the site requirements.
- (ii) The establishment employed will be responsible for protection of flood Embankment / Banks of Drains etc. They will carry out minor repairs to bund / drains top, side slopes, removal of weed growth, opening / filling rat holes etc. It will also be responsible for filling gharas / rain cuts etc as occurred due to rains during monsoon season.

In the jurisdiction of Gujranwala Drainage Division, Gujranwala District Sialkot and Gujranwala, no flood bund exists to check the river floodwater, so there is no need of pitching stone at any structure / bund.

7.4 Watching Material for Gujranwala, Deg & Daska Sub Division:

Sr. No.	Description	Required	Available	Balance
1	Nylon bags (New)	4300 No.	-	4300 No.
2	Kassies with handles	60 No	-	60 No
3	Axes	15 No	-	15 No
4	Hand Saw	15 No	-	15 No
5	Torches (3 Cells/Rechargeable)	15 No	-	15 No
6	Cells for Torches (Toshiba or equivalent)	50 No	-	50 No

7	Shouldaries	26 No.	-	26 No.
8	Needles	10 No	-	10 No
9	Sutli / Seba	6 Kg	-	6 Kg
10	Rain Dress	15 No	-	15 No
11	Water Cooler	5 No	-	5 No
12	Iron Charpaies	6 No	-	6 No
13	Rain long shoes	8 Pairs	-	8 Pairs
14	Plastic Chair	24 No	-	24 No
15	Generator	6 No	-	6 No
16	Nylon Rope	6000 Ft	-	6000 Ft
17	Umbrella	10 No	-	10 No
18	Rain Coat	5 No	-	5 No
19	Search light with rods	10 No	-	10 No

Note: - Quantity will be procured before flood season 2025

7.5 Arrangement for Sounding & Probing

Not related.

7.6 Lighting Arrangement

Detail given in the list of watching material at sr. No. 7.4 above.

7.7 Ration Arrangement

The Food Department will mobilize their sources for supplying foods for Human and cattle population.

7.8 P.O.L Arrangement for Vehicle

P.O.L facilities/ arrangements will be made by the Civil Administration.

7.9 Transportation

Transportation facilities will be provided by the Civil Authorities

7.10 Law and order

Law and order situation will be tackled by the Civil Administration with the help of Police Department

7.11 Medical arrangement for Labour

Health Department will be responsible for mobilizing their sources to carrying out necessary operation for providing medical facilities to the labour

7.12 Liaison with other Departments

All the flood embankments bunds are required to be inspected during the month of March, so as to identify weak points and if necessary, after repairing such sites, the Certificate regarding hydraulic fitness of bunds is to be submitted.

The flood embankments are inspected by a committee constituted by the Secretary Irrigation Department in May every year. Fitness of bunds is ensured before the flood season, keeping in view the priorities are fixed according to resources

The Executive Engineer, Gujranwala Drainage Division, Gujranwala and Sub Divisional Officer Gujranwala will keep close liaison with the District Administration of Gujranwala District during flood season.

7.13 Role of the Army

Army shall be deployed through District Administration if deemed necessary. All necessary arrangements for evacuation of affected people will be done by Army.

7.14 Duties of Telephone Attendant

The duties of telephone attendant are to apprise the Department Civil Administration about the flood situation during the rain / flood season i.e 15-06-2025 to 15-10-2025.

7.15 Wireless Arrangements

Wireless system arrangement will be made available for the vehicles under use of Officers of Gujranwala Drainage Division during the period of 15th June 2025 to 15th October 2025.

Chapter – 8

Detail of Encroachment

There is no encroachment on flood bunds / embankments in the jurisdiction of Gujranwala Drainage Division Gujranwala.

Total No. of Encroachment	Removed	Balance	Action to be taken
Nil	Nil	Nil	Nil

Chapter- 9

Duty Roster/ Flood Fighting Program

Staff of Gujranwala Drainage Division Gujranwala, looking after flood bunds and drains, has to be very vigilant through out the monsoon season and set on alert during day and night from 15th June up to 15th October. The flood watching camps are to be established with the onset of monsoon season at vulnerable points with adequate materials and arrangements to cope with any flood / rain emergency. The concerned Sub Divisional officers are responsible for reporting about any mishaps to the Executive Engineer, Superintending Engineer, Chief Engineer and Secretary Irrigation Department. It is also the duty of Sub Divisional officer to deliver written messages well in time, to the District Administration concerned about the flood / weather forecast, flood situation and any other mishaps.

Sr. #	Officer/Official	Station / place of duty	Jurisdiction
1	Executive Engineer, Gujranwala Drainage Division, Gujranwala Gujranwala	Gujranwala	Executive Engineer, being overall in-charge of Gujranwala Drainage Division is responsible to look after flood bunds in his jurisdiction of Narowal, Hafizabad, Gujranwala and Sialkot Districts.
2	Sub Divisional Officer, Gujranwala Drainage Sub Division	Gujranwala	Inspection and checking of Flood protection works along Niki Deg and Deg Nullah in district Gujranwala and all Drains falls in the Jurisdiction
3	Sub Divisional Officer Deg Drainage Sub Division Deg Rest House	Mianwali Rest House	Inspection and checking of Flood protection works along Niki Deg and Deg Nullah in district Sialkot and all Drains falls in the Jurisdiction
4	Sub Divisional Officer Daska Drainage Sub Division Daska	Daska	Inspection and checking Aik Nullah R.D 0+000 TO 96+500 out fall to M.R Link Canal and all Drains falls in the jurisdiction of Daska Drainage Sub Division

On receipt of any flood warning from Flood Warning Centre and provincial Disaster management Authority, the flood controlling officer will inform immediately to the following: -

1. Executive Engineer, Gujranwala Drainage Division, Gujranwala
- 2- Executive Engineer, UCC Division, Gujranwala.
- 3- Superintending Engineer, Lahore Drainage Circle, Lahore.
- 4- Chief Engineer, Irrigation Lahore Zone, Lahore.
- 5- Director Regulation Punjab, Lahore.
- 6- Chief Engineer, Drainage & Flood Zone, Lahore.

- 7- Secretary to Govt. of the Punjab, Irrigation Department, Lahore
- 8- District Police Officer, Sialkot
- 9- District Police Officer, Gujranwala.

The flood controlling office at Gujranwala under the supervision of Flood Sub Division, Control Officer / Sub Divisional Officer, Gujranwala Drainage Sub Division, Gujranwala will inform Executive Engineers, UCC Division, Gujranwala, and Marala Division Marala, Superintending Engineer, Lahore Drainage Circle Lahore, Chief Engineer, Irrigation, Lahore, Director Regulation, Flood Control Office of District Sialkot, Secretary, Irrigation Department, Punjab Lahore. Any un-wanted happening will be reported to the Executive Engineer, Gujranwala Drainage Division, Gujranwala and all others concerned promptly.

All necessary arrangements for evacuation of the effected people will be done by District Administration and Army. Health Department will have its own arrangements to provide medical aid at the spot. All other departments such as WAPDA, Communication and Works, Police and Administration would be requested for co-operation, if required by the staff of Gujranwala Drainage Division, Gujranwala so as to fight against the flood.

Chapter – 10
Emergency Telephone Nos.

SR. NO.	DESIGNATION	OFFICE	RESIDENCE
1	Secretary, Irrigation Punjab	042-99212117-18 Fax: 042-99212116	042-99200954
2	Chief Engineer, Irrigation Lahore Zone	042-99212085-90 Fax: 042-99212084	042-35182339
3	Chief Engineer, D&F Punjab, Lahore.	042-99230602 Fax: 042-99230731	-
4	Superintending Engineer, L.D.C. Lahore	042-99250306	-
5	Executive Engineer, U.C.C. Division Gujranwala	055-9200199	055-9200199
6	Wireless Control, Gujranwala	055-9200624	-
7	Mr. Nisar Ahmad, Executive Engineer, Gujranwala Drainage Division Gujranwala	042-36862909	0301-9222296
8	District Co-ordination Officer, Gujranwala	055-9200043	055-9200051
9	Sr. Superintendent of Police, Gujranwala.	055-9200695	-
10	Assistant Commissioner, Gujranwala.	055-9200029	-
11	Assistant Commissioner, Kamoki	055-6608566	-
12	District Headquarters Hospital, GRW.	055-9200110	-
13	Executive Engineer, Highway Div: GRW.	055-9230069	-
14	Executive Engineer, WAPDA Div: GRW	055-9200519	-
15	Executive Engineer, Building Gujranwala	-	-
16	Director Flood, D&F Punjab, Lahore.	042-99233552	-
17	Flood Warning Centre Lahore.	042-99205372	-
18	Rescue 1122 Gujranwala	055-9201390	-
19	Mr. Saqib Nadeem, Sub Division Officer Gujranwala Drainage Sub Division Gujranwala.	0332-5223552 0343-2423552	-
20	Mr. Saqib Nadeem, Sub Division Officer Deg Drainage Sub Division at Mianwali Bangla	0332-5223552 0343-2423552	-
21	Mr. Saqlain Nawaz, Sub Division Officer Daska Drainage Sub Division Daska.	0344-4966588	-

Chapter – 11

Standard operating procedure (SOP) for Breaching Sections

11.1 History of the Breaching Section

There is no approved breaching section in the jurisdiction of Gujranwala Drainage Division Gujranwala.

11.2 Location, Design, Quantity and Variety of the explosive required for detonation.

Not Related.

11.3 Arrangement of explosives and security of explosive stores

Not Related.

11.4 List of security staff alongwith detail of their training etc

Not Related.

11.5 Detail of Mechanical means as a standby arrangement in case of detonation failure.

Not Related.

11.6 Duty Roster in case of critical situation

Not Related.

11.7 Breaching Committee with their action plan

Not Related.

11.8 List of the villages likely to be inundated in case of breach

Not Related.

11.9 Announcements and detail of evacuation arrangements.

Not Related.

11.10 Detail of coordination with Civil / Army Authorities.

Not Related.

11.11 Parallel Communication arrangements.

Not Related.

11.12 Index Plan.

Attached.

Superintending Engineer
Lahore Drainage Circle,
Lahore

Executive Engineer,
Gujranwala Drainage Division,
Gujranwala

Chief Engineer,
Irrigation Lahore Zone,
Lahore.

PART – B

Chapter – 12

Vulnerable Sites on Flood Bund / Structures.

12.1 Apprehended breaches in Flood Bunds/ Structures.

The following are the sites of Drains in District Sialkot & Gujranwala.

District Sialkot

- Site No. 1** Bopalwala Aik Nullah.
- Site No. 2** Chak Choday Aik Nullah.
- Site No. 3** Sahowala Drain R.D 15-16.
- Site No. 4** Dugri Nullah-01
- Site No. 5** Tunnelwah Nullah
- Site No. 6** Daska Drain-01

District Gujranwala

- Site No. 7** Nikki Deg Drain RD 149+578 - 233+000.
- Site No. 8** Main Deg Nullah RD 191+920 – 418+943.

12.2 Operation of breaching sections.

There is no breaching section exist in this Division.

12.3 Breaches due to rising of flood water, deterioration of flood bunds etc.

Not related.

Chapter – 13 (Site # 1)

Village Choday Chak, Bhopal Wala

Emergency Contingency Plan for vulnerable site.

- 13.1 Plan showing route of flood water coming out of the breach supported with levels.**

Plan Attached

- 13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan.**

Site No. 1

Daska Drainage Sub Division

- i) Village = Bhopal wala, Chak Choday, etc
Abadi = 250000 person

- 13.3 Strategy and action taken be explained in detail.**

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

- i) The camp will be established at Bhopal wala of Aik Nallah during the flood season to cope with any situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Sambrial Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
01	Bhopal Wala Village	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Hafiz Nadeem Abbass (Sub Engineer) 0311-7515499 0340-6589742

Work Charged Beldars: - 20 Nos in two shifts. (Day & Night)

Mates: - 05 Nos in two shifts.

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 1 Daska Drainage Sub Division

i)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sambrial
	Excavator Machine	2 Nos
	Tractor with Front Blade	02 Nos
	Tractor with Trollies	04 Nos

13.3.6
13.3.7

Flood Fighting / Watching Material. Required
Flood Fighting / Watching Material. Available

Sr. No.	Description	Quantity	Available	Balance	Remarks
1	Nylon bags (New)	1500 No	-	1500 No	The material will be procured / available before the flood season 2025.
2	Kassies with handles	10 No	-	10 No	
3	Axes	5 No	-	5 No	
4	Hand Saw	4 No	-	4 No	
5	Torches (3 Cells/Rechargeable)	5 No	-	5 No	
6	Table	1 No	-	1 No	
7	Swiss Cottage	1 No	-	1 No	
8	Needles	2 No	-	2 No	
9	Sutli / Seba	2 Kg	-	2 Kg	
10	Umbrella	5 No	-	5 No	
11	Rain Dress	5 No	-	5 No	
12	Water Cooler	1 No	-	1 No	
13	Search light with rods	2 No	-	2 No	
14	Rain long shoes	5 Pairs	-	5 Pairs	
15	Iron Charpaies	2 No	-	2 No	
16	Plastic Chair	6 No	-	6 No	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

- i) MR Link Canal.

Roads

- i) Sambrial - Daska Road.

Health Centre

- i) Rural Health Centre Sambrial.

Police Station

Sambrial

Telephone Exchange

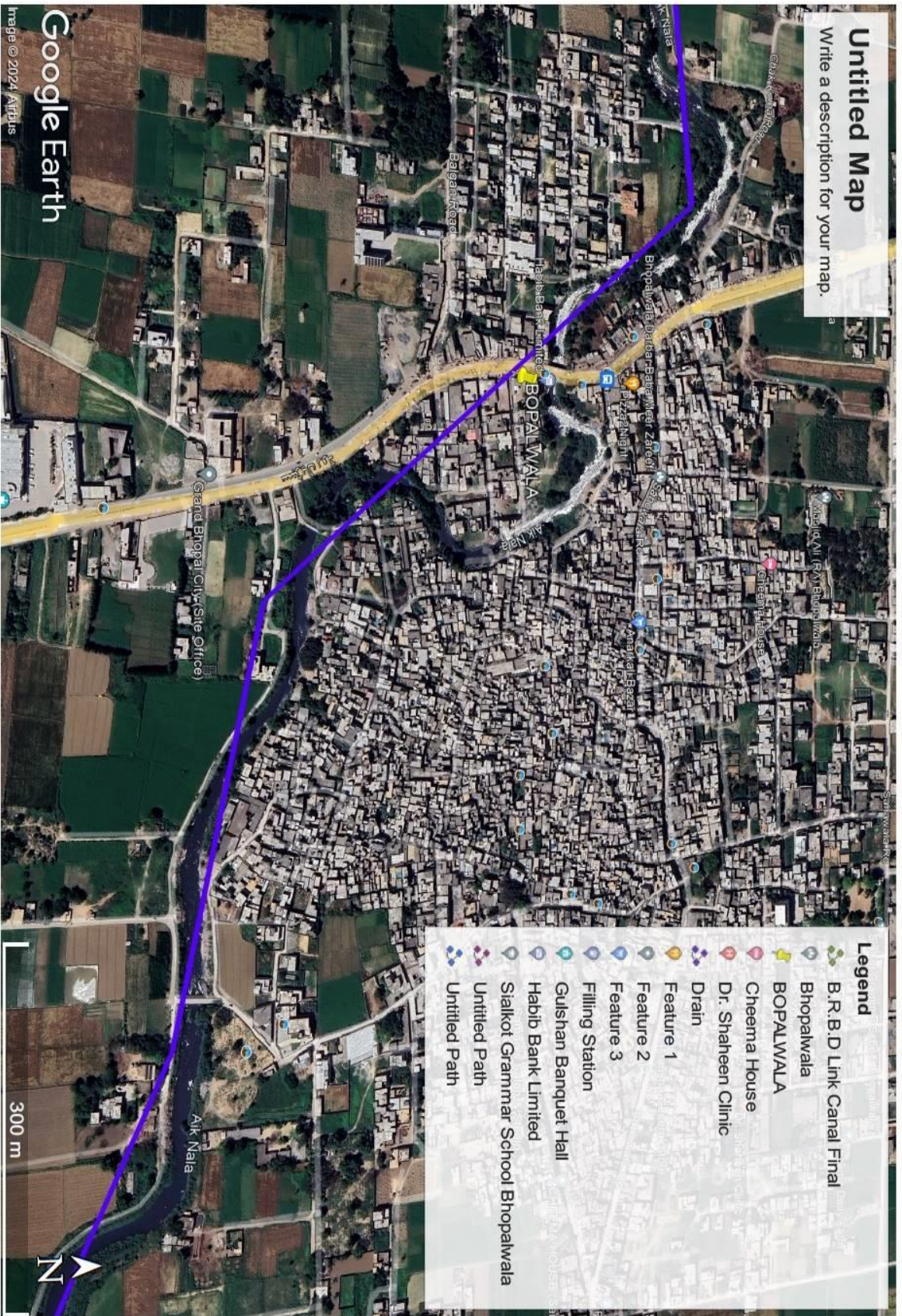
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Army infrastructure

-

Grid Station.

-



Chapter – 13 (Site # 2)

Chak Choday, Jamke Cheema

Emergency Contingency Plan for vulnerable site.

- 13.1 Plan showing route of flood water coming out of the breach supported with levels.**

Plan Attached

- 13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan.**

Site No. 2

Daska Drainage Sub Division

- ii) Village = Chak Choday, Jamke Cheema, etc
Abadi = 450000 person

- 13.3 Strategy and action taken be explained in detail. This may include:**

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

- 13.3.1 Arrangements**

- 13.3.2 Establishment of Flood Fighting Camps**

- ii) The camp will be established at village Chak Choday, Aik Nallah during the flood season to cope with any situation.

- 13.3.3 Duties of Officer / Officials and Their Camp Sites.**

The Sub Engineer Sambrial Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
02	Chak Choday, Jamke Cheema Village	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Hafiz Nadeem Abbass (Sub Engineer) 0311-7515499 0340-6589742

Work Charged Beldar :- 10 Nos

Mates: - -----

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 2 Daska Drainage Sub Division

i)	Name of owner: -	Ameer Khan
	Contact No: -	0300-7432434
	Location: -	Gujranwala
	Excavator Machine	2 Nos
	Tractor with Front Blade	02 Nos
	Tractor with Trollies	04 Nos

13.3.6 Flood Fighting / Watching Material. Required**13.3.7 Flood Fighting / Watching Material. Available**

Sr. No.	Description	Required	Available	Balance	Remarks
1	Nylon bags (New)	1600 No	-	1600 No	The material will be procured / available before the flood season 2025.
2	Kassies with handles	10 No	-	10 No	
3	Axes	5 No	-	5 No	
4	Hand Saw	4 No	-	4 No	
5	Torches (3 Cells/Rechargeable)	5 No	-	5 No	
6	Table	1 No	-	1 No	
7	Swiss Cottage	1 No	-	1 No	
8	Needles	4 No	-	4 No	
9	Sutli / Seba	2 Kg	-	2 Kg	
10	Umbrella	5 No	-	5 No	
11	Rain Dress	5 No	-	5 No	
12	Water Cooler	2 No	-	2 No	
13	Search light with rods	2 No	-	2 No	
14	Rain long shoes	5 Pairs	-	5 Pairs	
15	Iron Charpaies	2 No	-	2 No	
16	Plastic Chair	6 No	-	6 No	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

MR Link & U.C.C Canal.

Roads

Health Centre

Rural Health Centre Sambrial

Police Station

Sambrial

Telephone Exchange

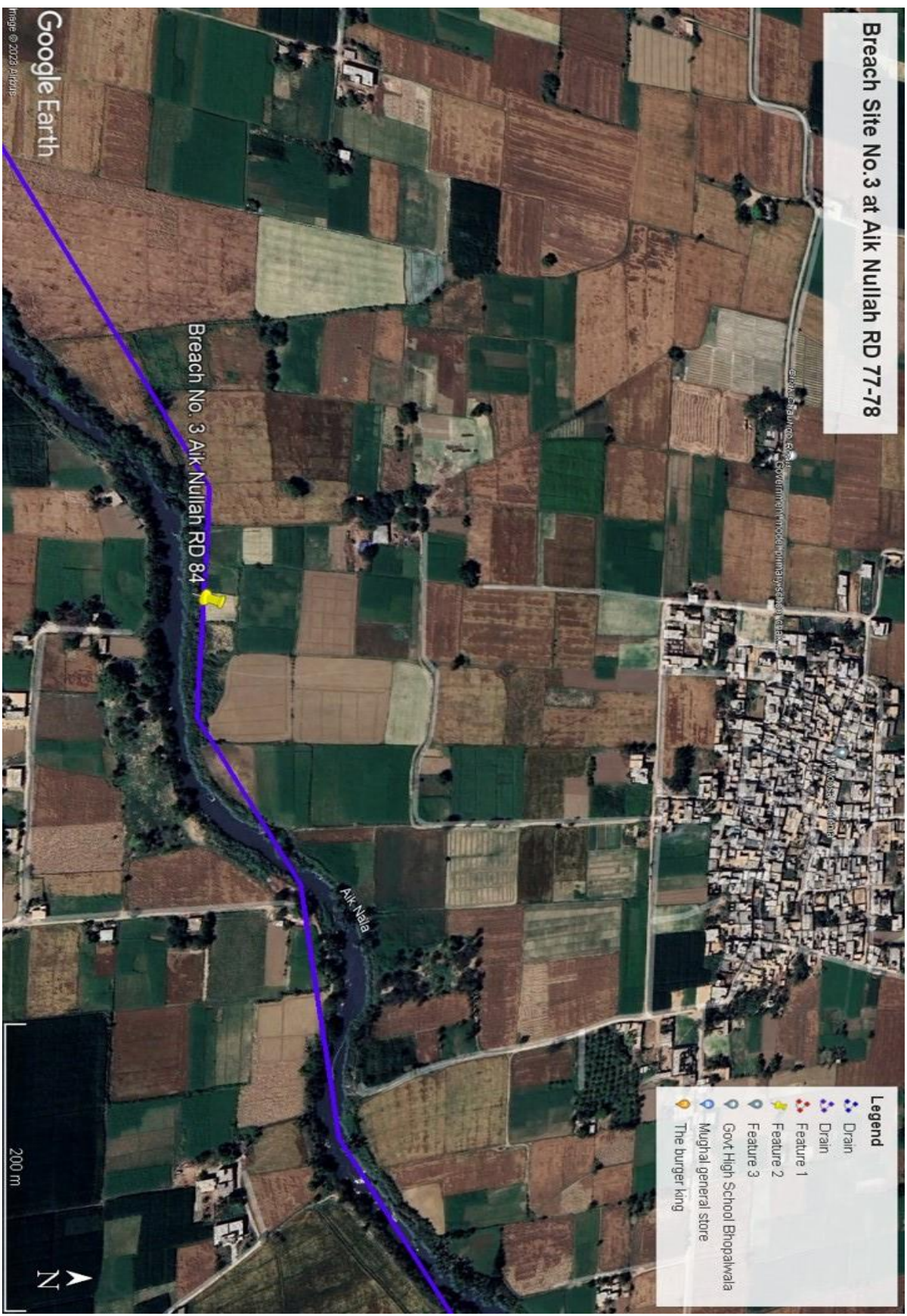
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Army infrastructure

-

Grid Station.

-



Chapter – 13 (Site # 3)

Sahowala Drain @ RD 15 – 16

Emergency Contingency Plan for vulnerable site.

- 13.1 Plan showing route of flood water coming out of the breach supported with levels.**

Plan Attached

- 13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan.**

Site No. 3

Daska Drainage Sub Division

- i) Village = Sahowala Drain RD: 15-16
Abadi = 40000 person

- 13.3 Strategy and action taken be explained in detail.**

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

- i) The camp will be established at village Sahowal Drain RD: 15-16 during the Season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Sambrial will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
03	Sahowala Drain RD: 15-16	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Hafiz Nadeem Abbass (Sub Engineer) 0311-7515499 0340-6589742

Work Charged Beldars:- 15

Mates: - 2

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 3 Daska Drainage Sub Division

i)	Name of owner: -	Ameer Khan
	Contact No: -	0300-7432434
	Location: -	Gujranwala
	Excavator Machine	2 Nos
	Tractor with Front Blade	02 Nos
	Tractor with Trollies	04 Nos

13.3.6 Flood Fighting / Watching Material. Required**13.3.7 Flood Fighting / Watching Material. Available**

Sr. No.	Description	Required	Available	Balance	Remarks
1	Nylon bags (New)	1600 No	-	1600 No	The material will be procured / available before the flood season 2025.
2	Kassies with handles	10 No	-	10 No	
3	Axes	5 No	-	5 No	
4	Hand Saw	4 No	-	4 No	
5	Torches (3 Cells/Rechargeable)	5 No	-	5 No	
6	Table	1 No	-	1 No	
7	Swiss Cottage	1 No	-	1 No	
8	Needles	4 No	-	4 No	
9	Sutli / Seba	2 Kg	-	2 Kg	
10	Umbrella	5 No	-	5 No	
11	Rain Dress	5 No	-	5 No	
12	Water Cooler	2 No	-	2 No	
13	Search light with rods	2 No	-	2 No	
14	Rain long shoes	5 Pairs	-	5 Pairs	
15	Iron Charpaies	2 No	-	2 No	
16	Plastic Chair	6 No	-	6 No	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.**Canals**

MR Link & U.C.C Canal.

Roads

Health Centre

Rural Health Centre Sambrial

Police Station

Sambrial

Telephone Exchange

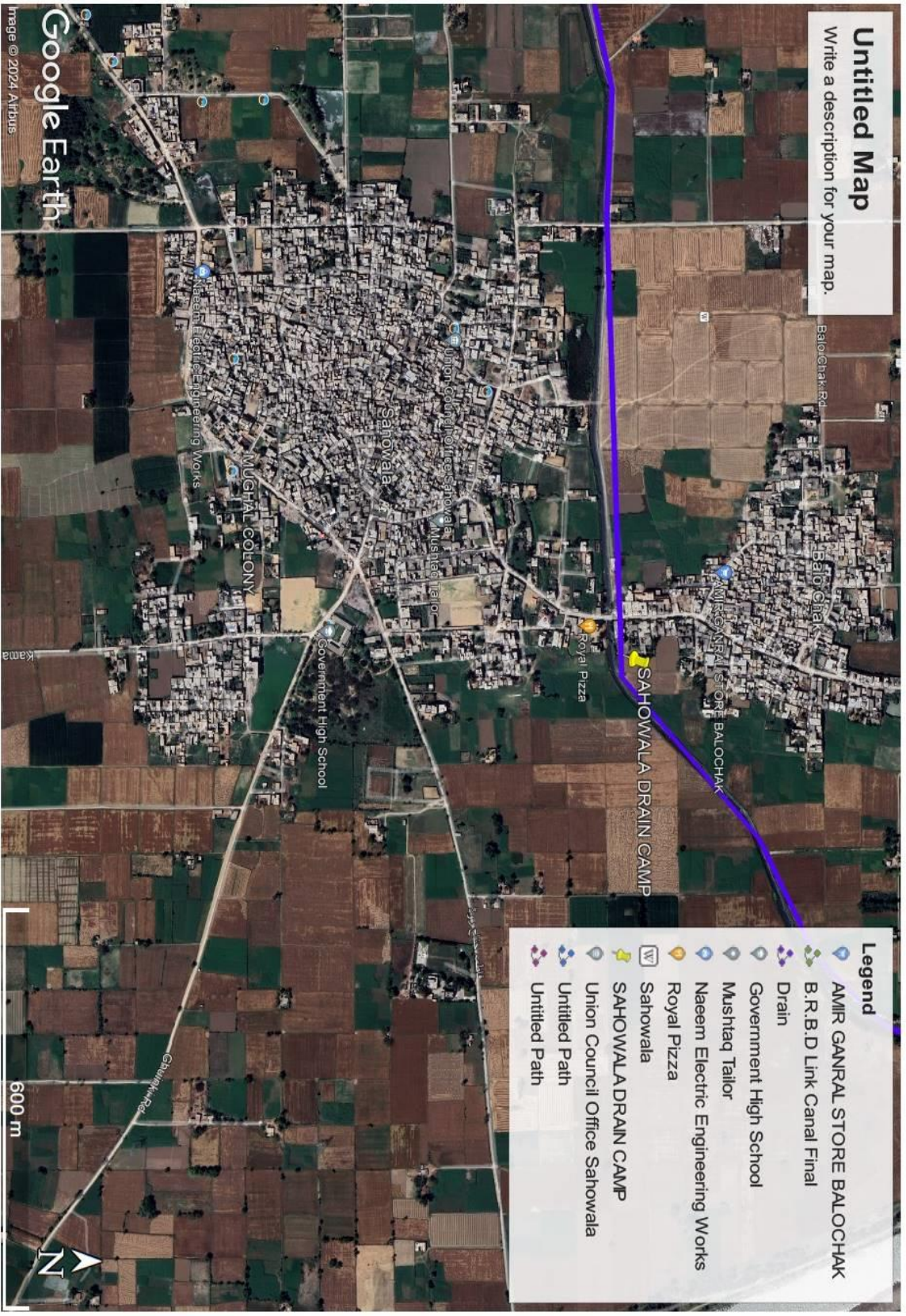
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Army infrastructure

-

Grid Station.

-



Chapter – 13 (Site # 4)
Marala Draining Section
Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan.

Site No. 4

Daska Drainage Sub Division

13.3 Strategy and action taken be explained in detail. This may include:

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

i) The camp will be established on Marala Draining section.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Marala Drainage Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
04	Marala Draining Section	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Hafiz Nadeem Abbass (Sub Engineer) 0311-7515499 0340-6589742

Work Charged Beldars:- 12.

Mates: - ---

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

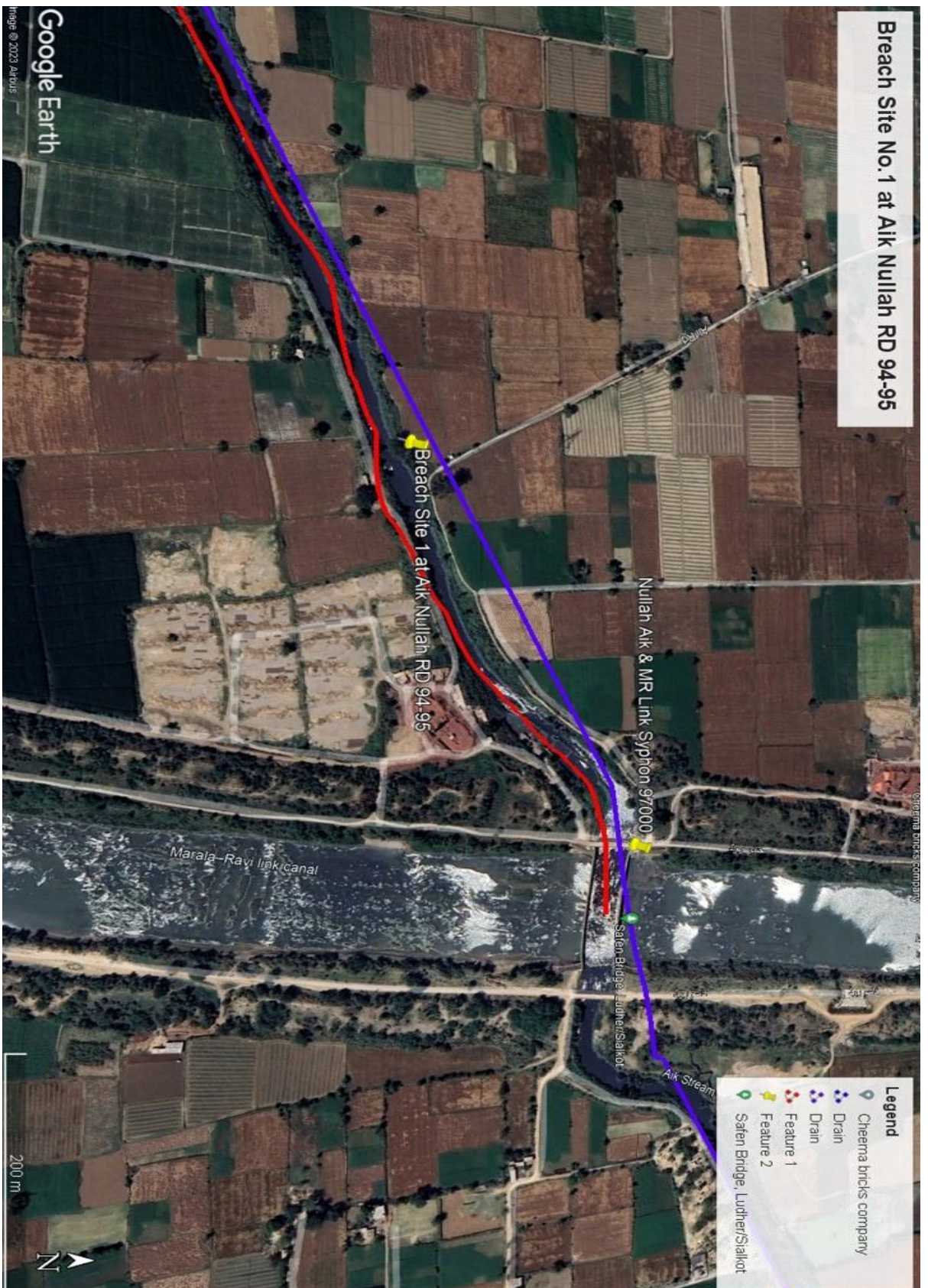
Site No. 4 Daska Drainage Sub Division

ii)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sialkot
	Excavator Machine	2 Nos
	Tractor with Front Blade	2 Nos
	Tractor with Trollies	4 Nos

13.3.6
13.3.7

Flood Fighting / Watching Material. Required
Flood Fighting / Watching Material. Available

Sr. No.	Description	Required	Available	Balance	Remarks
1	Nylon bags (New)	1600 No	-	1600 No	The material will be procured / available before the flood season 2025.
2	Kassies with handles	10 No	-	10 No	
3	Axes	5 No	-	5 No	
4	Hand Saw	4 No	-	4 No	
5	Torches (3 Cells/Rechargeable)	5 No	-	5 No	
6	Table	1 No	-	1 No	
7	Swiss Cottage	1 No	-	1 No	
8	Needles	4 No	-	4 No	
9	Sutli / Seba	2 Kg	-	2 Kg	
10	Umbrella	5 No	-	5 No	
11	Rain Dress	5 No	-	5 No	
12	Water Cooler	2 No	-	2 No	
13	Search light with rods	2 No	-	2 No	
14	Rain long shoes	5 Pairs	-	5 Pairs	
15	Iron Charpaies	2 No	-	2 No	
16	Plastic Chair	6 No	-	6 No	



13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

Roads

-----.

Health Centre

Sambrial.

Police Station

Sambrial.

Telephone Exchange

-

Army infrastructure

-

Grid Station.

-

Chapter – 13 (Site # 5)

Village Tunnelwah

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan.

Site No. 5

Daska Drainage Sub Division

13.3 Strategy and action taken be explained in detail. This may include:

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

i) The camp will be established at village Tunnelwah Nullah during the Flood season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Marala Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
05	Near Village Tunnelwah	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Hafiz Nadeem Abbass (Sub Engineer) 0311-7515499 0340-6589742

Work Charged Beldars:- 12.

Mates: - 2

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 5 Daska Drainage Sub Division

iii)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sialkot
	Excavator Machine	2 Nos
	Tractor with Front Blade	2 Nos
	Tractor with Trollies	4 Nos

13.3.6
13.3.7

Flood Fighting / Watching Material. Required
Flood Fighting / Watching Material. Available

Sr. No.	Description	Required	Available	Balance	Remarks
1	Nylon bags (New)	1600 No	-	1600 No	The material will be procured / available before the flood season 2025.
2	Kassies with handles	10 No	-	10 No	
3	Axes	5 No	-	5 No	
4	Hand Saw	4 No	-	4 No	
5	Torches (3 Cells/Rechargeable)	5 No	-	5 No	
6	Table	1 No	-	1 No	
7	Swiss Cottage	1 No	-	1 No	
8	Needles	4 No	-	4 No	
9	Sutli / Seba	2 Kg	-	2 Kg	
10	Umbrella	5 No	-	5 No	
11	Rain Dress	5 No	-	5 No	
12	Water Cooler	2 No	-	2 No	
13	Search light with rods	2 No	-	2 No	
14	Rain long shoes	5 Pairs	-	5 Pairs	
15	Iron Charpaies	2 No	-	2 No	
16	Plastic Chair	6 No	-	6 No	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

MR Link Canal

Roads

-----.

Health Centre

Sambrial.

Police Station

Sambrial.

Telephone Exchange

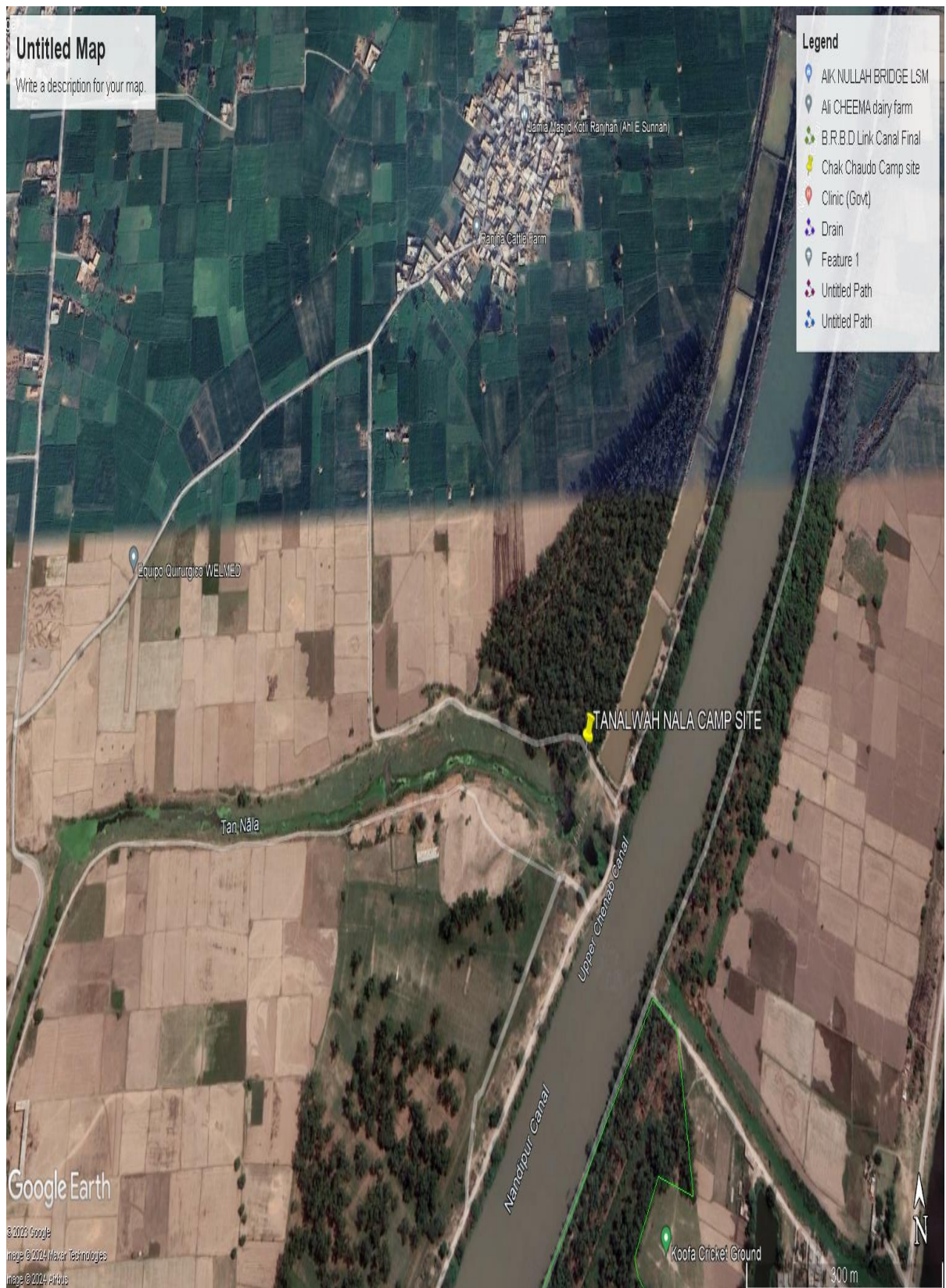
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Army infrastructure

-

Grid Station.

-



Chapter – 13 (Site # 6)
Daska Drain I
Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan.

Site No. 6

ii) Village = Daska etc.
Abadi = 25000 person

Daska Drainage Sub Division

13.3 Strategy and action taken be explained in detail. This may include:

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

The camp will be established on Daska I Drain during the Flood season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Sambrial Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
06	Daska Drain I	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Muhammad Frasat (Sub Engineer) 0302-6439938

Work Charged Beldars:- 30 Nos in two shifts

Mates: - 06 Nos in two shifts

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 6 Daska Drainage Sub Division

iv)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sambrial
	Excavator Machine	2 Nos
	Tractor with Front Blade	2 Nos
	Tractor with Trollies	4 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No.	Description	Required	Available	Balance	Remarks
1	Nylon bags (New)	1600 No	-	1600 No	The material will be procured / available before the flood season 2025.
2	Kassies with handles	10 No	-	10 No	
3	Axes	5 No	-	5 No	
4	Hand Saw	4 No	-	4 No	
5	Torches (3 Cells/Rechargeable)	5 No	-	5 No	
6	Table	1 No	-	1 No	
7	Swiss Cottage	1 No	-	1 No	
8	Needles	4 No	-	4 No	
9	Sutli / Seba	2 Kg	-	2 Kg	
10	Umbrella	5 No	-	5 No	
11	Rain Dress	5 No	-	5 No	
12	Water Cooler	2 No	-	2 No	
13	Search light with rods	2 No	-	2 No	
14	Rain long shoes	5 Pairs	-	5 Pairs	
15	Iron Charpaies	2 No	-	2 No	
16	Plastic Chair	6 No	-	6 No	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

Roads

Sialkot –Daska road.

Health Centre

Rural health Daska

Police Station

Daska

Telephone Exchange

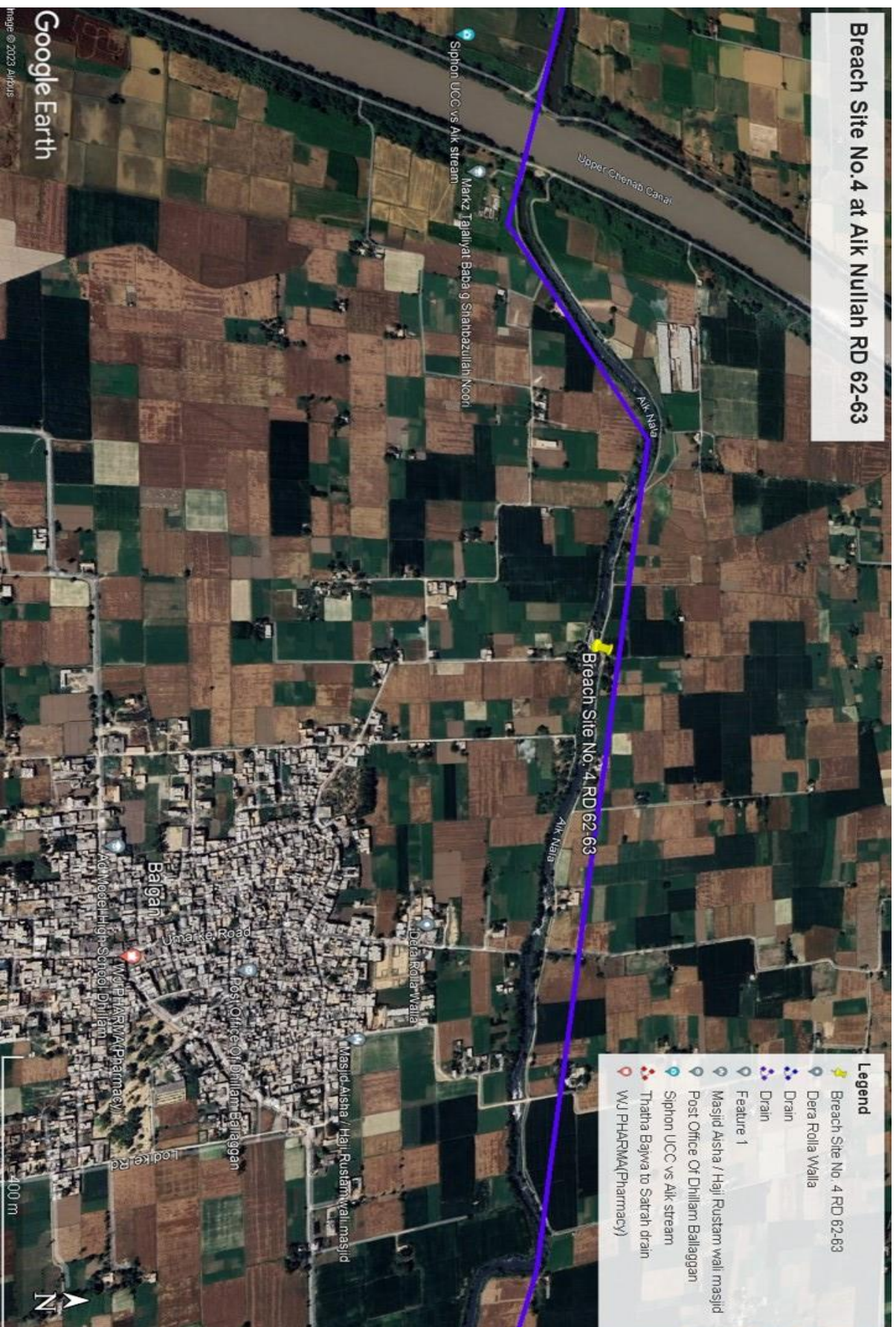
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Army infrastructure

-

Grid Station.

-



Chapter – 13 (Site # 7)

Village Changi

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan.

Site No. 7

ii) Village = Changi
Abadi = 15000 person

Deg Drainage Sub Division

13.3 Strategy and action taken be explained in detail. This may include:

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

Establishment of Flood Fighting Camps

The camp will be established at village BRBD 104+000 during the flood season to cope with any emergent situation.

13.3.2 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Mianwali Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
07	Village Changi	Saqib Nadeem (SDO) 0332-5223552 0343-2423552	Javed Iqbal (Sub Engineer) 0300-4484585

Work Charged Beldars:- 12

13.3.3 Departmental Machinery available

Required Machinery has been intimated.

13.3.4 Machinery available from Private Source.

Site No. 7 Deg Drainage Sub Division

13.3.6
13.3.7

Flood Fighting / Watching Material. Required
Flood Fighting / Watching Material. Available

Sr. No.	Description	Required	Available	Balance	Remarks
1	Nylon bags (New)	1800 No	-	1800 No	The material will be procured / available before the flood season 2025.
2	Kassies with handles	20 No	-	20 No	
3	Axes	5 No	-	5 No	
4	Hand Saw	5 No	-	5 No	
5	Torches (3 Cells/Rechargeable)	5 No	-	5 No	
6	Table	1 No	-	1 No	
7	Swiss Cottage	1 No	-	1 No	
8	Needles	3 No	-	3 No	
9	Generator	1 No	-	1 No	
10	Sutli / Seba	2 Kg	-	2 Kg	
11	Umbrella	2 No	-	2 No	
12	Rain Dress	2 No	-	2 No	
13	Water Cooler	1 No	-	1 No	
14	Search light with rods	2 No	-	2 No	
15	Rain long shoes	2 Pairs	-	2 Pairs	
16	Iron Charpaies	2 No	-	2 No	
17	Plastic Chair	6 No	-	6 No	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

BRBD Canal

Roads

Health Centre

Police Station

Satrah

Telephone Exchange

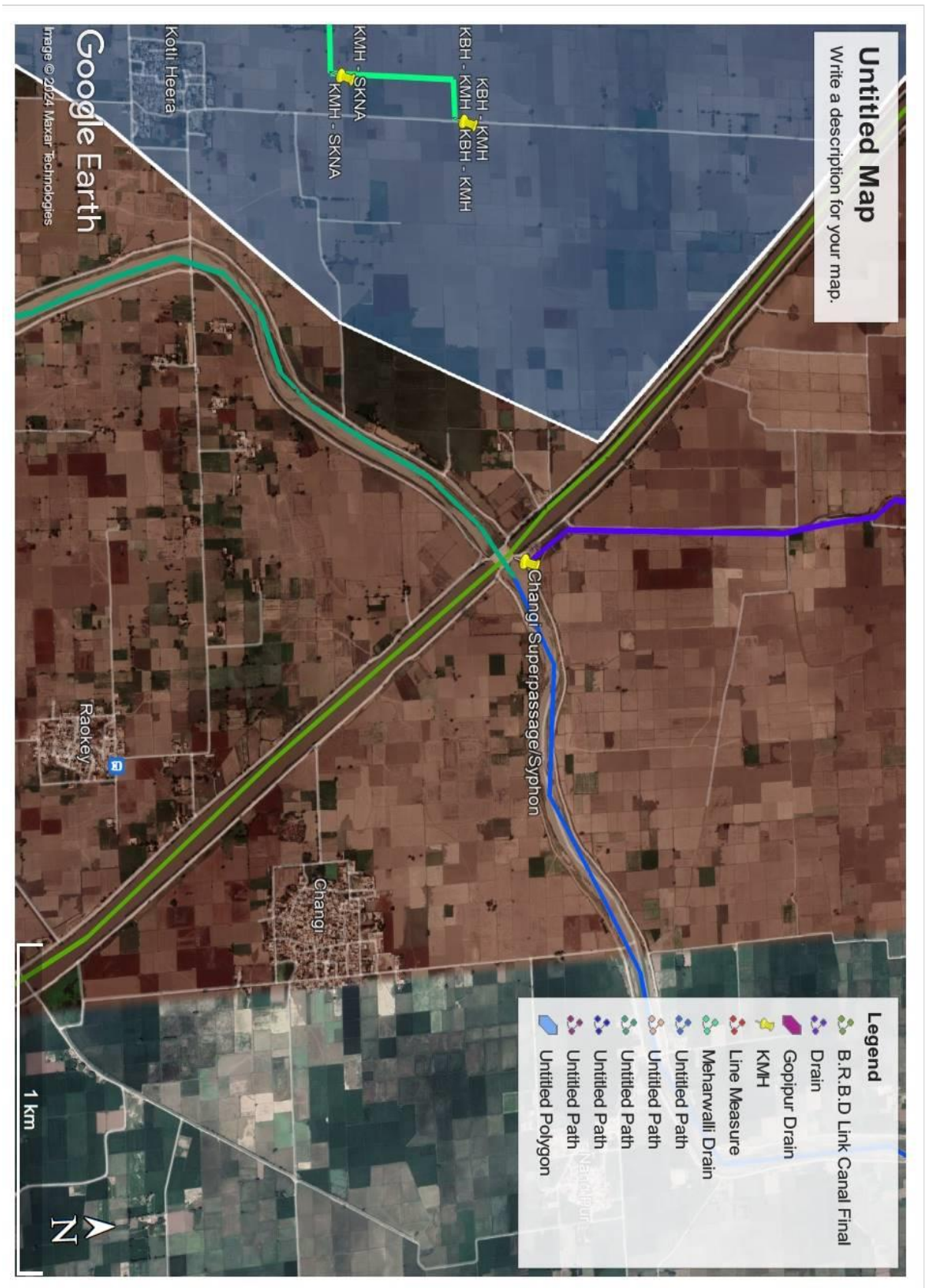
-

Army infrastructure

-

Grid Station.

-



Chapter – 13 (Site # 8)

Village Dholan

Emergency Contingency Plan for vulnerable site.

- 13.1 Plan showing route of flood water coming out of the breach supported with levels.**

Plan Attached

- 13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan.**

Site No. 8

Deg Drainage Sub Division

- 13.3 Strategy and action taken be explained in detail. This may include:**

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.2 Arrangements

13.3.2 Establishment of Flood Fighting Camps

The camp will be established at village Dhollen during the Flood season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Gharyal Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
08	Village Dhollan	Saqib Nadeem (SDO) 0332-5223552 0343-2423552	Muhammad Rizwan (Sub Engineer) 0300-8532231

Work Charged Beldars:- 10

Mates: -

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 8 Deg Drainage Sub Division

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No.	Description	Required	Available	Balance	Remarks
1	Nylon bags (New)	500 No	-	500 No	The material will be procured / available before the flood season 2025
2	Kassies with handles	30 No	-	30 No	
3	Axes	4 No	-	4 No	
4	Hand Saw	5 No	-	5 No	
5	Torches (3 Cells/Rechargeable)	5 No	-	5 No	
6	Cells for Torches (Toshiba or Equivalent)	2 No	-	2 No	
7	Shouldari	2 No	-	2 No	
8	Needles	5 No	-	5 No	
9	Generator	1 No	-	1 No	
10	Nylon Rope	1000 ft	-	1000 ft	
11	Umbrella	3 No	-	3 No	
12	Rain Coat	5 No	-	5 No	
13	Water Cooler	2 No	-	2 No	
14	Search light with rods	2 No	-	2 No	
15	Rain long shoes	2 Pairs	-	2 Pairs	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

Dholen Minor

Roads

Health Centre

Police Station

Telephone Exchange

-

Army infrastructure

-

Grid Station.

-



Chapter – 14

ACTION PLAN

14.1 RE-SHUFFLING / RECOUPING PLAN OF RESERVE STONE DEPARTMENTALLY

No reserve stone sanctioned in respect of Gujranwala Drainage Division Gujranwala.

14.2 DETAIL OF INLET/OUTLET CROSSING ALONG WITH CLOSING METHODOLOGY

There is no inlet / outlet crossing the flood embankments.

14.3 DEPLOYMENT OF MACHINERY (MEDIUM TO HIGH FLOOD)

Attached as Annexure-A.

14.4 DEPLOYMENT OF MACHINERY (HIGH TO VERY HIGH FLOOD)

Attached as Annexure-B.

14.5 DEPLOYMENT OF MACHINERY (HIGH TO EXCEPTIONALLY HIGH FLOOD)

Attached as Annexure-C.

14.6 POLICE DEPLOYMENT PLAN

Sr. No.	Vulnerable sites used for illegal cuts during floods	Concerned Canal Division	Concerned Police Station and District	Police Personnel to be deployed		Remarks (If any)
				Inspection /SI/ASI	Constables	
1.	8 No. Vulnerable sites fall in GDD GRW	Gujranwala Canal Division, UCC	Satrah / Wahndoo / Sambrial / Head Marala & Daska Police Station	ASI-5	20 Nos.	-

14.7 DETAIL OF SYNTHETIC BAGS WITH CAPACITY OF 500 KG AND 1000 KG

There is no requirement of 500kg or 1000 kg bags.

14.8 DETAIL OF POLYTHENE SHEETS OF BLACK COLOR TO PROTECT UPSTREAM SLOP AGAINST WAVE ACTION AND TO CONTROL SEEPAGE THROUGH EMBANKMENTS

Not required as there is no river embankment in the Division.

Annexure-A

**ACTION FOR DEPLOYMENT OF MACHINERY AND LABOUR AT CAMP SITES
(MEDIUM TO HIGH STAGE)**

Sr. No.	Name of Structure	Length (Mile)	Vulnerable Reach	Camp Location	Site in-charge By Name and Cell No.	Machinery / Labour Deployed					Availability of stone Cft.
						Excavator	Dozers	Trolleys / Dumpers	Tractor with front blade	Labour Beldar + Mate	
1	2	3	4	5	6	7	8	9	10	11	12
1	Bopalwala Aik Nullah			Bhopal wala Aik Nullah	Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	20+6	-
2	Chak Choda Aik Nullah			Chak Choday Aik Nullah	Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	12	-
3	15-16 RD Sahowala			15-16 RD Sahowala	Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	10+2	-
4	Daska Drian - I			Marala Section	Muhammad Frasat Sub Engineer 0302-6439938	1	-	4	2	10	-
5	Dugri Nullah-01			Tunnelwah	Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	10+2	-
6	Tunnelwah Nullah			Daska etc	Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	20+2	-
7	Nikki Deg	16.80	R.D 104+000	B.R.B.D 104+000	Rana Javed Sub Engineer 0300-4484585	1	-	4	2	12+2 For 2 Shifts	-
8	Main Deg Nullah	81.41		Dhollen	Muhammad Rizwan Sub Engineer 0300-8532231	1	-	4	2	12+2 For 2 Shifts	-
Total						8	-	32	16	106+20	-

Annexure-B

**ACTION FOR DEPLOYMENT OF MACHINERY AND LABOUR AT CAMP SITES
(HIGH TO VERY HIGH FLOOD)**

Sr. No.	Name of Structure	Length (Mile)	Vulnerable Reach	Camp Location	Site in-charge By Name and Cell No.	Machinery / Labour Deployed					Availability of stone Cft.
						Excavator	Dozers	Trolleys / Dumpers	Tractor with front blade	Labour Beldar + Mate	
1	2	3	4	5	6	7	8	9	10	11	12
1	Bopalwala Aik Nullah				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	25+6	-
2	Chak Choda Aik Nullah				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	15+2	-
3	15-16 RD Sahowala				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	20+2	-
4	Daska Drian - I				Muhammad Frasad Sub Engineer 0302-6439938	1	-	4	2	15+2	-
5	Dugri Nullah-01				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	20+3	-
6	Tunnelwah Nullah				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	1	-	4	2	30+5	-
7	Nikki Deg	16.80	R.D 149-233	R.D 224+000	Rana Javed Sub Engineer 0300-4484585	1	-	4	2	18+3 For 2 Shifts	-
8	Main Deg Nullah	81.41	R.D 191-418	R.D 355+000	Muhammad Rizwan Sub Engineer 0300-8532231	1	-	4	2	15+2 For 2 Shifts	-
Total						8	-	32	18	158+26	

Annexure-C

**ACTION FOR DEPLOYMENT OF MACHINERY AND LABOUR AT CAMP SITES
(HIGH TO EXCEPTIONALLY HIGH FLOOD)**

Sr. No.	Name of Structure	Length (Mile)	Vulnerable Reach	Camp Location	Site in-charge By Name and Cell No.	Machinery / Labour Deployed					Availability of stone Cft.
						Excavator	Dozers	Trolleys / Dumpers	Tractor with front blade	Labour Beldar + Mate	
1	2	3	4	5	6	7	8	9	10	11	12
1	Bopalwala Aik Nullah				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	2	-	6	3	50+8	-
2	Chak Choda Aik Nullah				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	2	-	6	3	30+6	-
3	15-16 RD Sahowala				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	2	-	6	3	35+5	-
4	Daska Drian - I				Muhammad Frasad Sub Engineer 0302-6439938	2	-	6	3	25+4	-
5	Dugri Nullah-01				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	2	-	6	3	30+5	-
6	Tunnelwah Nullah				Hafiz Nadeem Abbass Sub Engineer 0311-7515499	2	-	6	3	36+6	-
7	Nikki Deg	16.80	R.D 149-233	R.D 224+000	Rana Javed Sub Engineer 0300-4484585	2	-	6	4	30+5 For 2 Shifts	-
8	Main Deg Nullah	81.41	R.D 191-418	R.D 355+000	Muhammad Rizwan Sub Engineer 0300-8532231	2	-	6	4	25+4 For 2 Shifts	-
Total						16	-	48	26	291+43	-

Chapter – 15

15 BACKUP DIVISIONS

The Gujranwala Drainage Division, UCC, Gujranwala is allied canal Division and the jurisdiction of both Divisions i.e. Gujranwala Drainage Division and Gujranwala Canal Division, UCC are parallel with District Gujranwala.

Superintending Engineer
Lahore Drainage Circle,
Lahore

Executive Engineer,
Gujranwala Drainage Division,
Gujranwala

Chief Engineer,
Irrigation Lahore Zone,
Lahore.