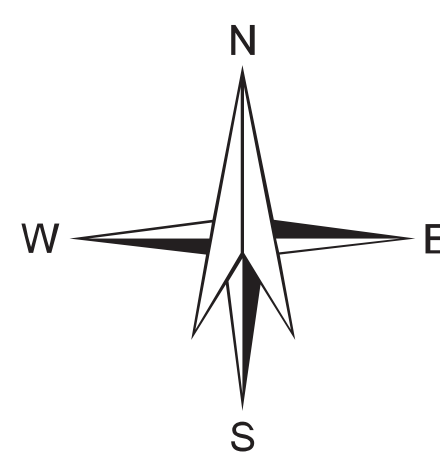
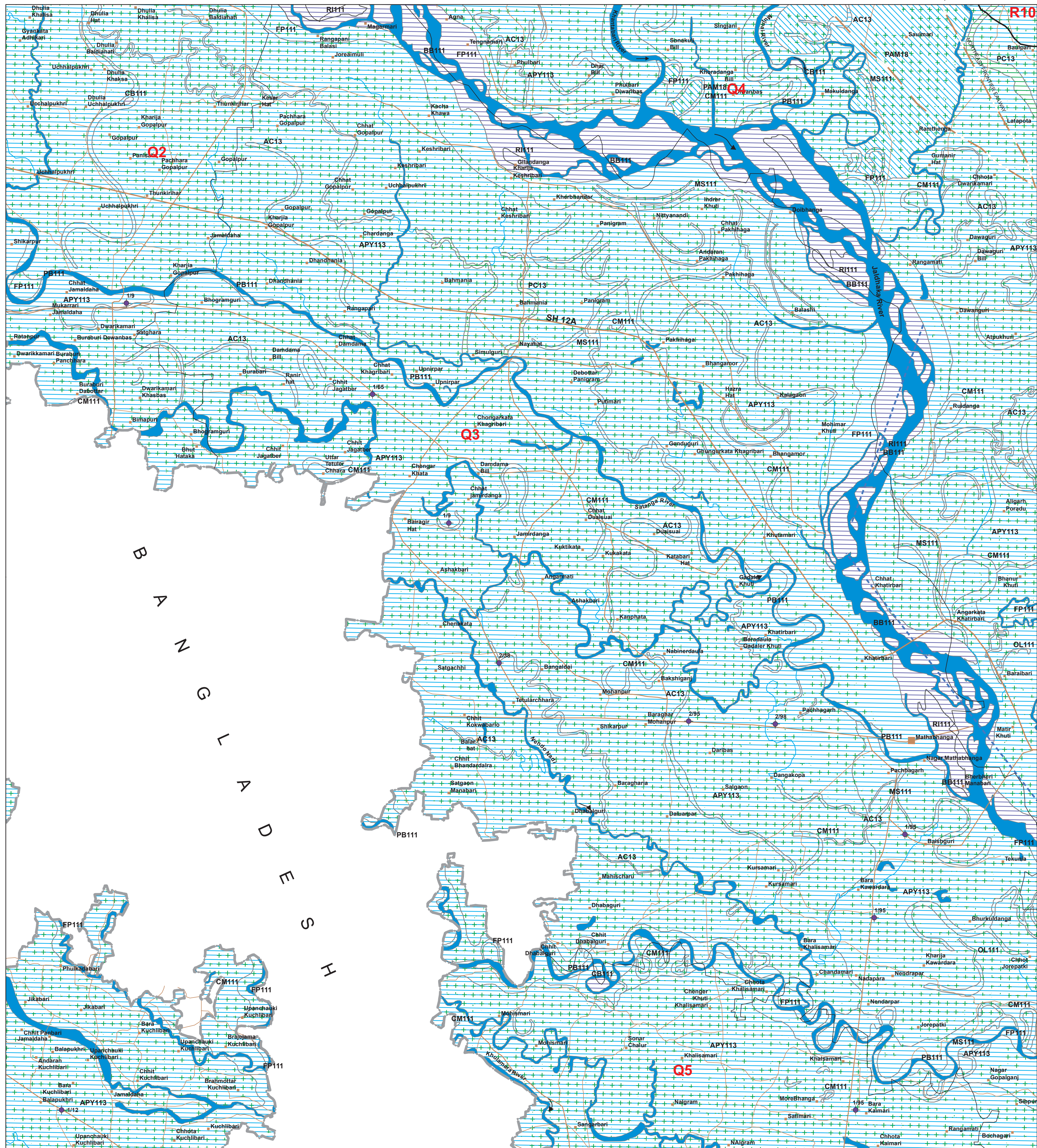


0 1 2 3 4 5 Kilometers

SCALE - 1 : 50,000



MAP SHEET NO. 78/F3



MAP UNIT (HYDROGEOLOGIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE (COLOUR INDICATES YIELD RANGE AND HATCHING INDICATE DEPTH RANGE)		GEOLOGICAL SEQUENCE / ROCK TYPE (REPRESENTED IN THE MAP WITH NUMERIC CODE)	GEOMORPHIC UNIT / LANDFORM (REPRESENTED IN THE MAP WITH ALPHABETIC CODE)	DEPTH TO WATER LEVEL PRE / POST MONSOON (AVERAGE IN METERS)	RECHARGE CONDITIONS BASED ON AVAILABILITY OF WATER (RAINFALL & OTHER SOURCES)	GROUND WATER PROSPECTS						RECHARGE STRUCTURES SUITABLE & PRIORITY	REMARKS (PROBLEMS / LIMITATIONS)		
						AQUIFER MATERIAL LS = LOOSE SEDIMENTS PS = FRAGMENTAL ROCK FR = FRACTURED ROCK WR = WEATHERED ROCK RM = RECHARGE MATERIAL R = IMPERVIOUS ROCK	TYPE OF WELLS SUITABLE SP = SLO WELL RW = RING WELL DW = DUG WELL T = TUBE WELL GRW = DUG (CUM DOME WELL) DTW = DUG CUM TUBE WELL	DEPTH RANGE OF WELLS (SUGGESTED) MIN - MAX (IN METERS)	YIELD RANGE OF WELLS (EXPECTED) (L / MIN IN M ³ / DAY)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABILITY) (INDICATE REASONS IF NOT PROBABLE)	QUALITY OF WATER FOURABLE (P) NON-FOURABLE (NP) (INDICATE REASONS IF NOT PROBABLE)	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)	PT = RECHARGE TANK CD = CHECK DAM NB = NALA BARRAGE DW = DUG WELL DT = DUG TUBE OF TANK RS = RECHARGE OF R = RECHARGE OF R = RECHARGE OF DT = DUG TUBE OF TANK RS = RECHARGE OF R = RECHARGE OF DT = DUG TUBE OF TANK RS = RECHARGE OF R = RECHARGE OF		
CB111		Shallow Formation (Present Day Deposits) (Present Day)	Channel Bar (CB)	No Well Observed	Excellent	LS	TW	5-10 m	400-500 LPM	Very High	P	Nil	Not Required	Highly productive shallow aquifer with good recharge from the river base flow.	
BB111				Braid Bar (BB)	No Well Observed	Excellent	LS	TW	5-10 m	400-500 LPM	Very High	P	Nil	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
PB111				Point Bar (PB)	No Well Observed	Very Good	LS	RW TW	5-10 m	300-400 LPM	Very High	P	Nil	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
RI111				River Island (RI)	No Well Observed	Very Good	LS	TW	5-10 m	400-500 LPM	High	P	Nil	Not Required	Highly productive aquifer at shallow depth. Good recharge
OL111				Oxbow Lake (OL)	No Well Observed	Good	LS	TW	20-30 m	200-300 LPM	Moderate	P	Nil	Not Required	Though occur as water bodies, but highly productive aquifer occurs at depth.
CM111				Cut-off Meander (CM)	No Well Observed	Very Good	LS	RW TW	10-20 m	300-400 LPM	Very High	P	Nil	Not Required	Highly productive shallow aquifers with good recharge.
MS111				Meander Scar (MS)	No Well Observed	Very Good	LS	TW	10-15 m	200-250 LPM	High	P	Nil	Not Required	Highly productive shallow aquifers with good recharge.
FP111				Flood Plain (FP)	No Well Observed	Very Good	LS	TW	<30 m	250-350 LPM	Very High	P	85	Not Required	Receives good recharge and forms shallow aquifer. Overall quality of the water is potable.
APY113		Medium Formation (Early-Late Holocene) (Early-Late Holocene)	Alluvium (Sand and Silt) (113)	1 / 1 10	Good	LS	TW	25-30 m	200-250 LPM	High	P	98	Not Required	Highly productive aquifer at shallow depth with good recharge.	
AC13			Abandoned Channel (AC)	No Well Observed	Excellent to Very Good	LS	TW	10-15 m	250-300 LPM	Very High	P	Nil	Not Required	Highly productive shallow aquifers with good recharge from base flow.	
PC13			Palaeo-channel (PC)	No Well Observed	Very Good	LS	TW	15-20 m	150-200 LPM	Very High	P	Nil	Not Required	Highly productive shallow depth aquifers with good recharge.	
PAM19		Shallow Formation (Present Day Deposits) (Present Day)	Alluvium (Gravel Dominant) (19)	Piedmont Alluvium Moderate (PAM)	No Well Observed	Good	LS	TW	40 - 60m	300-400 LPM	Moderate	P	85	Not Required	Good ground water prospect at greater depth along piedmont slop.
F --- F / --- F --- These are fault / fracture zones, which generally act as conduits for movement of ground water in hard rocks. Along these zones, the yields are significantly higher and wells are likely to be sustainable for longer duration. However, the inferred fractures need to be confirmed by detailed ground surveys.															
D --- D / Q --- Q / P --- P --- These are dykes, quartz reefs and pegmatite veins, which generally act as barriers for ground water movement.															
N.B.-The depth range and yield range of wells may vary within the unit because of certain inhomogeneities. Fractures/Lineaments which are clearly observed / inferred from the satellite image are indicated on the map. There could be some obscured fractures which also influence the ground water prospects. Locations of the recharge structures shown in the map are tentative. This map is useful for narrowing down the target zones, and exact location on the ground for wells and recharge structures should be identified based on follow-up ground hydrogeological/geophysical surveys.															

GROUND WATER PROSPECTS INFORMATION		HYDROLOGICAL INFORMATION		STRUCTURAL INFORMATION		BASE MAP INFORMATION		LOCATION INFORMATION	
YIELD RANGE OF WELLS >800 LPM 400-800 LPM 200-400 LPM 100-200 LPM 50-100 LPM 20-50 LPM 10-20 LPM Prospects with very low yield (less than 10 LPM) Prospects with low yield (10-20 LPM)	COLOR CODE VIOLET INDIGO BLUE GREEN YELLOW ORANGE BROWN PINK RED	DEPTH RANGE OF WELLS SHALLOW 10 METERS MODERATE 30-60 METERS DEEP 60 METERS	DESCRIPTION CANAL/TANK/IRRIGATED AREA GROUND WATER IRRIGATED AREA RIVER / STREAM (with sand) WATER BODY / SPRING CANAL RAIN GAUGE STATION [WBM average annual rainfall]	SYMBOL 	DIPS GENTLE (< 15°) MODERATE (15-45°) STEEP (45-80°) SUB-VERTICAL TO VERTICAL (> 80°) ANTICLINE / ANTIFORM SYNCLINE / SYNFORM TREND LINE ESCARPMENT LITHOLOGY / GEOMORPHIC UNIT BOUNDARY FAULT THRUST FRACTURE / LINEAMENT FRACTURE / LINEAMENT (Inferred) SHEAR ZONE DYKE QUARTZ REEF PEGMATITE VEIN Lithologic contacts are inferred at places & Geomorphic boundaries are gradational	SCHISTOSITY / FOLIATION 	SYMBOL NH-2 SH-9 METALLED ROAD OTHER ROAD RAILWAY CITY / VILLAGE HABITATIONS - NON-COVERED (NC) PARTIALLY COVERED (PC)	STATE INDEX 	DISTRICT INDEX
PREPARED BY GEOMATICS & REMOTE SENSING CELL W.B. STATE COUNCIL OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY GOVERNMENT OF WEST BENGAL 4TH FLOOR, BIKASH BHAVAN SALT LAKE, KOLKATA 700 091		TECHNICAL GUIDANCE & QUALITY CHECK NATIONAL REMOTE SENSING CENTRE NATIONAL SPACE RESEARCH ORGANISATION (ISRO) DEPT. OF SPACE, GOVT. OF INDIA BALANAGAR, HYDERABAD - 500 625		PARTICIPATING ORGANIZATIONS PHED, GOVT. OF WEST BENGAL GEOMATICS & REMOTE SENSING CELL W.B. STATE COUNCIL OF SCIENCE AND TECHNOLOGY, GOVT. STATE WATER INVESTIGATION DIRECTORATE, GOVT.		METHODOLOGY & PROJECT EXECUTION NATIONAL REMOTE SENSING CENTRE INDIAN SPACE RESEARCH ORGANISATION (ISRO) DEPT. OF SPACE, GOVT. OF INDIA BALANAGAR, HYDERABAD - 500 625		SPONSORED BY RAJIV GANDHI NATIONAL DRINKING WATER MISSION (PHASE IV) DEPARTMENT OF DRINKING WATER SUPPLY (DDWS) MINISTRY OF DRINKING WATER AND SANITATION (MDDWS) GOVERNMENT OF INDIA NEW DELHI	