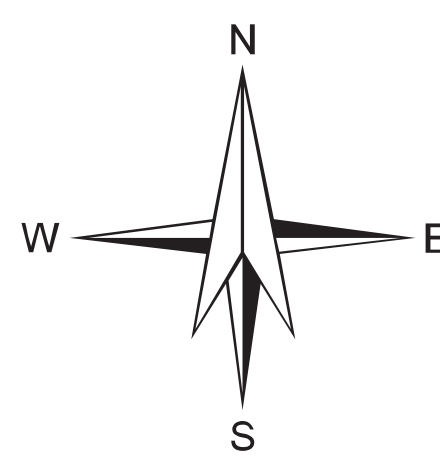
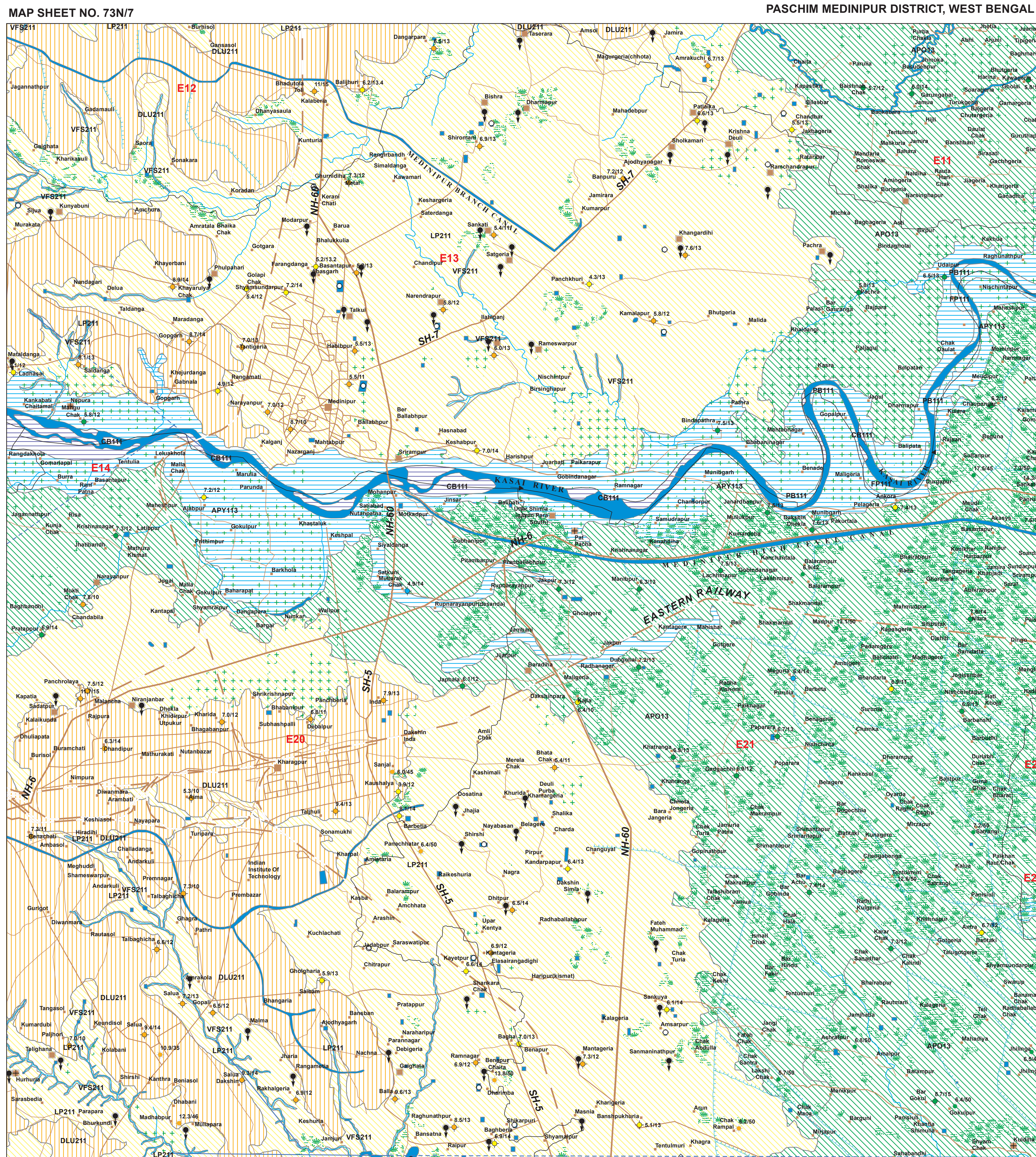


0 1 2 3 4 5 Kilometers

SCALE - 1 : 50,000



MAP UNIT (HYDROGEOMORPHIC 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) NO. OF WELLS OBSERVED	RECHARGE CONDITIONS BASED ON AVAILABILITY OF WATER (RAINFALL & OTHER SOURCES)	GROUND WATER PROSPECTS							RECHARGE STRUCTURES SUITABLE & PRIORITY	REMARKS (PROBLEMS/LIMITATIONS)	
					AQUIFER MATERIAL	TYPE OF WELLS SUITABLE	DEPTH RANGE OF WELLS (SUGGESTED) MIN - MAX (IN METERS)	YIELD RANGE OF WELLS (EXPECTED) (IN LPM or m ³ /day) (PROBABILITY)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (VERY HIGH MODERATE LOW)	QUALITY OF WATER (TOTALLY POTABLE OR NOT) (RELATIVE GRADIENT P NON-POTABLE)	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)			
					LS = LISSUE SEDIMENTS PS = PERMEABLE ROCK FS = FRACTURED ROCK PA = PALAEOTOP ROCK WM + WEATHERED ROCK WR = WEATHERED MATERIAL IR = IMPERVIOUS ROCK	DW = DUG WELL TW = TUBE WELL DW+TW = DUG CUM BORE WELL DTW = DUG CUM TIE WELL								
		Channel Bar (CB)	<u>5 - 6</u> 2	Excellent	LS	TW	5 - 10 m	400-500 LPM	Very High	P	42%	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.	
		Alluvium (Sand Dominant) (111)	Point Bar (PB)	<u>8</u> 1	Very Good	LS	RW TW	5 - 10 m	300-400 LPM	Very High	P	7%	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
		Flood Plain (FP)	<u>5 - 22</u> 104	Very Good	LS	RW TW	<30 m	250-350 LPM	Very High	P	93%	RW Low	Groundwater prospects very high with high recharge potential. Recharge structures not required.	
		Alluvium (Sand and Silt) (113)	Alluvial Plain Younger (APY)	<u>5.8 - 7.2</u> DW - 3	Very Good	LS	DW TW	10 - 12 m 20 - 30 m	100 - 125 m ³ day 200-250 LPM	Very High	P	60%	Not Required	Aquifer is formed of sandy part of alluvium. Recharge structures are not required as good recharge condition prevails
		Alluvium (Sand, Silt and Clay) (13)	Alluvial Plain Older (APO)	<u>4.9 - 8.7</u> DW - 30 HP - 11	Good	LS	DW TW	10 - 15 m 40 - 60 m	50 - 75 m ³ day 150 - 200 LPM	High	P	30%	Not Required	Aquifer is formed of sandy part of alluvium. Recharge structures are not required as good recharge condition prevails
		Palaeo-channel (PC)	No well observed	Very Good	LS	RW TW	10 - 15 m	200-250 LPM	Very High	P	11%	Not Required	Areas of very high groundwater potential at shallow depth. Most suitable for extraction of groundwater.	
			Valley Fill Shallow (VFS)	No wells observed	Moderate	LS Underlain by WM + FR	TW / BW	40 - 50 m	50 - 100 LPM	Moderate	P	75%	DT Moderate	Recharge structure will increase the sustainability of ground water prospects
		Laterite (Ferrirete-hard crust, lateritic nodules and lithomarge clay) (Z11)	Lateralitic Plain (LP) (Lithomarge Clay)	<u>4.3 - 11</u> DW - 37 HP - 3	Limited	WM + FR	DW TW / BW	15 - 20 m 50 - 60 m	15 - 25 m ³ day 50 - 100 LPM	Moderate	P	15%	RW / DT High	Recharge wells have high priority as the lithomarge clay layer needs to be penetrated to recharge underlying aquifer formed of weathered material and fractured rock
		Dissected Lateritic Upland (DLU) (Hard crust and Lateritic nodules)	<u>3.9 - 11.7</u> DW - 19 HP - 3	Poor to limited	WM + IR (Impervious Material)	TW / BW	80 - 100	30 - 50 LPM	Low	P	Nil	Not Required	Essentially run-off zone where hard crust is present. Areas of lateritic nodules are recharge zones with deep water table conditions. Primarily forest areas with sparse settlements. Not suitable for large scale development of ground water.	
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 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.														

[illegible]