Minutes of the meeting

Topic	Minutes of the Technical Discussion on digitization project
Date	November 5th and 6th , 2009
Venue	Conference Room, Office of the Commissioner Land Records, Gwalior, MP
Participants	Mr. Upendranath Sharma, JCLR Mr. P R Upadhyay, Dy. Commissioner Mr. Vinod Singh, ASYO Mr. Rajeev Agrawal, Technical Director, NIC Mr. Ramesh Karunakaran, Consultant Mr. Pramoj Chandrasekharan, Consultant Mr. Sanjay Dhar, Manager BD, Infotech Mr. Aditya Sirohi, Project Manager, Infotech Mr. P Satyanarayana, Project Lead, Infotech Mr. Vinod Saini, GIS Engineer, PAN India Mr. Ajit Nair, Project Manager, Speck Mr. Suneel Kumar, Tech Lead, Speck Mr. Nishit Srivastava, BD Manager, WTI Mr. V Srinivasan, Project In-Charge, WTI Mr. Madan Panchal, Head, BD, Xinthe Mr. A K Kishore, Project Manager, Xinthe Mr. Subramanyam J, Project Manager, Xinthe

1. Points discussed, demonstrated and agreed

Sl.No	Topic	Action
1.	Issue with units of the drawing	• The units of the drawing files shall be in meters, While inserting the images, insertion units shall be taken as meters instead of default value inches • Data to be delivered in 1:1 • All corresponding sizes mentioned (like font size shall be scaled proportionately)
2.	Image path	• The path for the inserted images shall be “relative path” instead of “full paths”
3.	External references of customized tools	• External references like customized tools shall be removed before shipment
4.	Shipment	• Directory Structure should be as per the amended list as in Annexure-I • AutoCAD File as per the amended layer list supplied as Annexure-II • New Layer named POLY_TOPOBASE should contain topologically created closed polygons for all polygon features with attached database with structure as per design document (Annexure-III) • POLY_TOPOBASE layer shall be generated only in village level mosaiced data • The database shall be attached to the closed polygon features of the POLY_TOPOBASE layer • Shape file as created from POLY_TOPOBASE layer using export • Line and point features should have object data attached to the database as per design

Sl.No	Topic	Action
		document • Fonts shall be as per Annexure-IV • The delivery should contain the individual drawings for a village and the village mosaiced data as per shipment directory structure
5.	Scanning resolution	• It is requested by all the vendors that the scanning resolution to be reduced to 300dpi considering the performance in software and huge storage size requirements. Commissioner to take final decision and shall be intimated to the vendors.
6.	Sample data	• Department shall send all vendors a sample data for reference purpose • All vendors shall provide a sample data according to the decision made. After getting confirmation from the department, the same method shall be applied to all datasets
7.	Tool for parcel editing (without any extra cost)	• All vendors shall be providing a tool for parcel editing, which will automatically re-generate the POLY_TOPOBASE layer with valid topology with option to export to Shape files
8.	Bringing the data to the UTM projection (approximately) (without any extra cost)	• Method has been demonstrated to bring the data approximately to UTM projection. • The vendors are agreed to provide the village level mosaiced AutoCAD files relatively positioned approximately in UTM co-ordinates. Images are not to be brought under this. Images shall not be inserted in the mosaiced AutoCAD file. • Edge-matching in not expected • This data shall be delivered district wise during the warranty period for the respective district as per request of the department. Vendors shall supply data updated up to the delivery date

2. Annexure – I: Directory Structure for Shipment

CD Volume Naming Convention

<table>
<tr><td colspan="3">CD Volume Nomenclature</td></tr>
<tr><td rowspan="3">CD Volume label</td><td colspan="2">DDTTNNN</td></tr>
<tr><td>DD - District Code</td><td rowspan="2">The district & Tehsil short-form should be as per the standard list provided by CLR</td></tr>
<tr><td>TT - Tehsil Code</td></tr>
<tr><td>NNN - Volume label</td><td>Sequential number starting from 001 to 999</td></tr>
</table>

Directory Structure to be used

Sl.No	Folder Name	***Naming convention of the data***	***Description***
I	**TIFDDDTTT***	*IDDTTRRPPPPPVVVNN.tif*	*Sheet-wise scanned file (Raw or where Grid lines Not Available)*
		RDDTTRRPPPPPVVVNN.tif	*Sheet-wise grid corrected (rectified) file (Grid lines Available)*
II	**DWGDDDTTT***	*DDTTRRPPPPPVVVNN.dwg*	*Sheet-wise AutoCAD drawing file*
		MDDTTRRPPPPPVVV.dwg	*Mosaic of drawing file at village level*

Sl.No	Folder Name	*Naming convention of the data*	*Description*
III	**SHPDDDTTT**	*ADDTTRRPPPPPVVV*	*Polygon Shape file at village level*
		LDDTTRRPPPPPVVV	*Line Shape file at village level*
		PDDTTRRPPPPPVVV	*Point Shape file at village level*

Key for the above table

Sl.No	SYMBOL	Meaning
1.	DD	District
2.	TT	Tehsil
3.	RR	Revenue Circle
4.	PPPPP	Patwari Halka
5.	VVV	Village
6.	NN	Sheet No

3. Annexure – II Amended Layer List

Note:

Custom line types to match the symbology should have names same as the layer name (with out the preceding type POLY_, LINE_)

Text layers

S.No	Layer Name	Layer Description	Color	Size
1.	TEXT_MAPIN	All text inside village boundary except khasara / Parcel nos.	7(White)	2mm
2.	TEXT_MAPOUT	All text outside village boundary, texts showing Road direction	7(White)	4.5mm
3.	TEXT_PARCEL	Parcel / Khasara text	7(White)	1.8mm

Line Layers

S.No	Layer Name	Layer Description	Color	Line type	Size
1.	LINE_BROAD_GAUGE	Broad Gauge rail lines	7	Broad_Gauge	
2.	LINE_CANAL	Single Line Canal	4	Continuous	
3.	LINE_CARTTRACK	Double Line carttrack	232	Dashed	LT scale = 5
4.	LINE_EMBANK	Embankment	7	Continuous	
5.	LINE_FOOTPATH	Foot Path	1	Dashed	LT scale = 5

S.No	Layer Name	Layer Description	Color	Line type	Size
6.	LINE_OTHERS	Other Lines	1	Dashed2	LT scale = 5
7.	LINE_PADDY	Paddy Lines	9	ACAD_IS003W100	LT scale = 0.05 Width=0.1
8.	LINE_PIPE	For pipe lines	5	Continuous	
9.	LINE_RAIL	For railway lines.	1	Rail	LT scale = 5
10.	LINE_RILLS	Rills	5	Rills	LT scale = 0.05
11.	LINE_ROAD_KACHHA	Kacha Road lines	1	Dashed	
12.	LINE_ROAD_PAKKA	Pakka Roads (Double)	1	Dashed	
13.	LINE_TRAVERSE_STATION	Line connecting traverse station	5	Continuous	
14.	LINE_STREAM	Village boundary which passes through river	5	Dash dot	Width = 0.5 LT scale = 10
15.	LINE_VILLAGE_DIVIDE	Extension of village boundary line	7	Divide	Width = 0.5 LT scale = 10
16.	LINE_VILLAGE_BOUND	Village	7	Continuous	Width =

S.No	Layer Name	Layer Description	Color	Line type	Size
		boundary line			0.5
17.	LINE_WATER	Single line Streams	5	Continuous	

Polygon Layers

Note: All features shall be digitized as polylines. All polygon features shall be available as closed polygon in **POLY_TOPOBASE** layer

S.No	Layer Name	Layer Description	Color	Line type
1.	POLY_ABADI_PARCEL	Lines shared by Abadi parcel and land parcel	6	Continuous (W=0.4)
2.	POLY_ABADI_ROAD	Lines shared by Abadi parcel and Road	6	Continuous
3.	POLY_CANAL	Double Line Canal	4	Continuous
4.	POLY_ EMBANK	Outside & Inside boundaries Of hatch	7	Continuous
5.	POLY_FOREST	For forest area polygons	76	Continuous
6.	POLY_HATCH	For hatching hilly areas	5	Continuous
7.	POLY_OTHERS	Any other polygon Features	1	Continuous
8.	POLY_PARCEL	Parcel Lines	6	Continuous
9.	POLY_PARCEL_2	Dashed Dot Lines	6	DashedDot (W=0.2, LT

S.No	Layer Name	Layer Description	Color	Line type
				Scale=5)
10.	POLY_FOREST_BOUND_PARCEL	Forest Boundary	76	Continuous
11.	POLY_WATER_PARCEL	Common for Water and Parcel	5	Continuous
12.	POLY_ROAD_PARCEL	Common for Parcel & Road	1	Continuous
13.	POLY_RAIL	Polygon surrounding rail way lines	7	Continuous
14.	POLY_RIVER	River	5	Continuous
15.	POLY_RIVER_PARCEL	Lines shared by river and parcel	5	Continuous
16.	POLY_PIPE	Pipelines	5	Continuous
17.	POLY_ROAD	For Road Lines	1	Continuous.
18.	POLY_ROAD_RIVER	Lines shared by Road and River	1	Continuous
19.	POLY_ROAD_WATER	Lines shared by road and closed Water bodies like ponds	1	Continuous
20.	POLY_WATER	Closed water bodies line ponds, laked	5	Continuous
21.	POLY_RAIL_PARCEL	Common for Rail & Parcels	7	Continuous
22.	POLY_TOPOBASE	Topology layer containing all polygon features as closed polygons	7	Continuous

S.No	Layer Name	Layer Description	Color	Line type
		with attributes		

Point Layers

S.No	Block Name	Layers	PIN	Color
1.	ABADI	SYM_ABADI	0101	16
2.	ABADI-1	SYM_ABADI	0102	16
3.	AIRPORT	SYM_INFRASTRUCTURE	0201	1
4.	INDUSTRY	SYM_INFRASTRUCTURE	0202	1
5.	BRIDGE	SYM_INFRASTRUCTURE	0203	1
6.	BRIDGE-1	SYM_INFRASTRUCTURE	0204	1
7.	BAZARPETH	SYM_AMMENITY	0301	174
8.	COLLAGE	SYM_AMMENITY	0302	174
9.	FGUESTHOUSE	SYM_AMMENITY	0304	174
10.	GUESTHOUSE	SYM_AMMENITY	0305	174
11.	HOSPITAL	SYM_AMMENITY	0306	174
12.	HOTEL	SYM_AMMENITY	0307	174
13.	IGUESTHOUSE	SYM_AMMENITY	0308	174
14.	MARRIAGEHALL	SYM_AMMENITY	0309	174
15.	OFFICE	SYM_AMMENITY	0310	174
16.	PETROLPUMP	SYM_AMMENITY	0311	174
17.	POSTOFFICE	SYM_AMMENITY	0312	174
18.	POLICESTATION	SYM_AMMENITY	0313	174
19.	SCHOOL	SYM_AMMENITY	0314	174
20.	TANK_OVERHEAD	SYM_AMMENITY	0315	174
21.	TELEPHONEOFFICE	SYM_AMMENITY	0316	174

S.No	Block Name	Layers	PIN	Color
22.	THEATRE	SYM_AMMENITY	0317	174
23.	BUILDING	SYM_CONSTRUCTION	0401	7
24.	COMPOUND	SYM_CONSTRUCTION	0402	7
25.	WASAHATH	SYM_CONSTRUCTION	0403	7
26.	CHATTAN	SYM_THEME	0501	84
27.	GRASS	SYM_THEME	0502	84
28.	HILL	SYM_THEME	0503	84
29.	CHURCH	SYM_WORSHIP	0601	7
30.	GURUDWARA	SYM_WORSHIP	0602	7
31.	MOSQUE	SYM_WORSHIP	0603	7
32.	TEMPLE	SYM_WORSHIP	0604	7
33.	FB_S_STONECIR	SYM_STONE	0701	14
34.	FB_STONECIR	SYM_STONE	0702	14
35.	FB_STONESQ	SYM_STONE	0703	14
36.	STONESQ	SYM_STONE	0704	14
37.	TRI	SYM_STONE	0705	14
38.	STONE_CIRCLE	SYM_STONE	0706	14
39.	STONE_OTHERS	SYM_STONE	0707	14
40.	HISTORICALPLACE	SYM_TOURISM	0801	7
41.	MONUMENT	SYM_TOURISM	0802	7
42.	STATION_TETRA	SYM_TRAVERSE_POINT	0901	5
43.	STATION_TRI	SYM_TRAVERSE_POINT	0902	5
44.	ITS (Internal Traverse Station)	SYM_TRAVERSE_POINT	0903	5
45.	TS(Traverse Station)	SYM_TRAVERSE_POINT	0904	5
46.	KABRISTAN	SYM_SAMSHAN	1001	10
47.	SAMSHAN	SYM_SAMSHAN	1002	10

S.No	Block Name	Layers	PIN	Color
48.	POLE_ELECTRIC	SYM_COMMUNICATION	1101	7
49.	POLE_TELE	SYM_COMMUNICATION	1102	7
50.	ARROW_RIVER	SYM_ARROW	1201	7
51.	ARROW_TEXT	SYM_ARROW	1202	7
52.	TREE_SINDHI	SYM_TREE	1301	7
53.	TREE_COCONUT	SYM_TREE	1302	7
54.	TREE_OTHERTREE	SYM_TREE	1303	7
55.	TREE_MANGO	SYM_TREE	1304	7
56.	TREE_B_SINGLE	SYM_TREE	1305	7
57.	TREE_B_UPVAN	SYM_TREE	1306	7
58.	TREE_IMLI	SYM_TREE	1307	7
59.	TREE_PADIT	SYM_TREE	1308	7
60.	TREE_S_JUNGLE	SYM_TREE	1309	7
61.	TREE_S_SINGLE	SYM_TREE	1310	7
62.	TREE_S_UPVAN	SYM_TREE	1311	7
63.	TREE_TAD	SYM_TREE	1312	7
64.	TREE_VAN	SYM_TREE	1313	7
65.	TREE_OTHER	SYM_TREE	1314	7
66.	WELL_BORE	SYM_WELL	1401	162
67.	WELL_DIESEL	SYM_WELL	1402	162
68.	WELL_DISUSED	SYM_WELL	1403	162
69.	WELL_ELECTRIC	SYM_WELL	1404	162
70.	WELL_KACHHA	SYM_WELL	1405	162
71.	WELL_MOT	SYM_WELL	1406	162
72.	WELL_OPEN	SYM_WELL	1407	162
73.	WELL_TUBE	SYM_WELL	1408	162

S.No	Block Name	Layers	PIN	Color
74.	WELL_STEP	SYM_WELL	1409	162
75.	WELL_PAKKA	SYM_WELL	1410	162
76.	CROP	SYM_CROP	1501	1
77.	PADDY	SYM_OTHERS	2001	1

Other Layers

S.No	Layer Name	Layer Description	Color	Line type
1.	OFF	Elements for completing the polygons., which need to be switched off (visibility) for printing purpose	1	Continuous
2.	SYM_LOGO	Logo	1	
3.	LEGEND	Legend	1	Continuous
4.	IMAGE	Layer for inserting scanned image	114	Continuous
5.	JOIN_LINE	Joining lines between sheets	40	Dashed2 (LT Scale=5)
6.	GRID	Grid lines	8	Continuous

4. Annexure – III: Database Structure to be linked to the closed polygons in POLY_TOPOBASE layer

S.No	Field/Item Name	Field/Item Width	Field/Item description
1.	CCODE91	18, 18, C	1991 Census code as it is
2.	CCODE01	18, 18, C	2001 Census code as it is
3.	BHUCODE	15, 15, C	DDTTRRPPPPPVVV
4.	KID	100, 100, C	Khasara number as displayed in source map. If the Khasra is missing, update values Zn, where n is the counting numbers starting from 1 unique within a village (Z1, Z2, Z3…)
5.	PAR_ERR	1, 1, C	Comments about parcel no. character ex. Duplicate , Continued , Missing etc.
6.	PAR_TYPE	2, 2, C	Information of the parcel types (As per the codes specified)

Key

Sr.No	Abbreviation	Description
1.	SS	STATE CODE
2.	DD	DISTRICT CODE
3.	TT	TAHSIL CODE
4.	RR	RI CIRCLE CODE
5.	PPPPP	PATWARI HALKA CODE
6.	VVV	VILLAGE CODE

Description of PARCEL TYPE codes in the polygon features table ADDTTRRPPPPPVVV

S. No.	CODE (in PAR_TYPE field)	DESCRIPTION
1.	GA	GRAM ABADI
2.	AB	ABADI
3.	RI	RIVER
4.	RO	ROAD
5.	WB	WATER BODY
6.	PL	PIPE LINE
7.	IS	RIVER ISLAND
8.	CA	CANAL
9.	RL	RAILWAY
10.	TB	TANK BUND
11.	MA	MINING AREA
12.	GR	GRASS AREA
13.	HI	HILLY AREA
14.	SK	SMASHAN, KABRISTHAN
15.	FO	FOREST
16.	TO	ORCHARDS
17.	SC	SCRUB
18.	PA	PARCEL

NOTE:

This is the description of khasra for which a khasra id (parcel no) has already been given. Example,. if the khasra is a water body, having a parcel no 45 in KID, then the code in the PAR_TYPE should be given WB. By default all polygons are parcels 'PA', unless otherwise defined in either of the classes given in the above table**.**

Description of ERROR codes in the polygon features table ADDTTRRPPPPPVVV

S. No.	TEXT TO BE INSERT/LAYERS	DESCRIPTION	CODE (in PAR_ERR field)
1.	TEXT_PARCEL	ZERO LABEL (0) / NO LABEL	O
2.	TEXT_PARCEL	DUPLICATE	U
3.	1 part of 1, 2 part of 1	CONTINUED PARCEL. (Single parcel with multiple non-contiguous parts)	P

A Tehsil wise list shall be provided by vendors describing the errors found

5. Object data to be provided for each layer

Table Name for features forming closed polygon features: TDDTTRRPPPPPVVV

Table Name for features forming line features: LDDTTRRPPPPPVVV

Table Name for features forming point features: PDDTTRRPPPPPVVV

Please note that table ADDTTRRPPPPPVVV shall be attached to the POLY_TOPOBASE layer

Codes of Polygon features (in Object Table TDDTTRRPPPPPVVV)

S.No	LAYERS	SYM1	SYM2*
1.	POLY_CANAL	03	
2.	POLY_EMBANK	04	
3.	POLY_FOREST	05	
4.	POLY_PIPE	06	
5.	POLY_RAIL	07	
6.	POLY_ROAD	08	
7.	POLY_WATER	09	
8.	POLY_PARCEL	11	
9.	POLY_PARCEL_2	12	
10.	LINE_ARBITRARY	13	
11.	POLY_OTHERS	14	
12.	POLY_FOREST_BOUND_PARCEL	05	11
13.	POLY_WATER_PARCEL	09	11
14.	POLY_ROAD_PARCEL	08	11
15.	POLY_RAIL_PARCEL	07	11
16.	POLY_ROAD_RIVER	08	23
17.	POLY_ABADI_PARCEL	10	11

S.No	LAYERS	SYM1	SYM2*
18.	POLY_ABADI_ROAD	10	08
19.	POLY_HATCH	22	
20.	POLY_RIVER	23	
21.	POLY_RIVER_PARCEL	23	11
22.	POLY_ROAD_WATER	08	09

S.No	Field/Item Name	Field/Item Width	Field/Item description
1.	SYM1	2, 2, C	Primary Symbol
2.	SYM2	2, 2, C	Secondary Symbol

NOTE :

'SYM2' Item will carry the information of the line associated with any other basic line/poly layers (examples . are given from 15 through 17, 21 and 22). Additional combination of any two basic layers should be represented as shown in the example keeping the non-parcel layers as the dominant layers in SYM1. Thus in the POLY_RAIL_PARCEL common line, the rail is the dominant layer and the parcel is the secondary layer; this will have '07' code in 'SYM1' and '11' in 'SYM2'.

Codes of Line features (LDDTTRRPPPPPVVV)

S.No	LAYERS	LIN-CODE
1.	LINE_ROAD_PAKKA	0101
2.	LINE_ROAD_KACHHA	0102
3.	LINE_CARTTRACK	0103
4.	LINE_FOOTPATH	0104
5.	LINE_RAIL(Narrow and others)	0201
6.	LINE_BROAD_GAUGE	0202
7.	LINE_RILLS	0301
8.	LINE_WATER	0302
9.	LINE_CANAL	0303

S.No	LAYERS	LIN-CODE
10.	LINE_PIPE	0304
11.	LINE_STREAM	0305
12.	LINE_VILLAGE_BOUND	0401
13.	LINE_VILLAGE_DIVIDE	0402
14.	LINE_TRAVERSE_STATION	0501
15.	LINE_PADDY	0601
16.	LINE_EMBANK	0701
17.	LINE_OTHERS	1000

SS.No	Field/Item Name	Field/Item Width	Field/Item description
1	LIN-CODE	4, 4, C	Details of line eg. Roads, canal etc.

Codes of point features (PDDTTRRPPPPPVVV)

S.No.	CAD BLOCKNAME	LAYER	PIN-CODE
1.	ABADI	SYM_ABADI	0101
2.	ABADI-1	SYM_ABADI	0102
3.	AIRPORT	SYM_INFRASTRUCTURE	0201
4.	INDUSTRY	SYM_INFRASTRUCTURE	0202
5.	BRIDGE	SYM_INFRASTRUCTURE	0203
6.	BRIDGE-1	SYM_INFRASTRUCTURE	0204
7.	BAZARPETH	SYM_AMMENITY	0301
8.	COLLEGE	SYM_AMMENITY	0302
9.	FGUESTHOUSE	SYM_AMMENITY	0304
10.	GUESTHOUSE	SYM_AMMENITY	0305
11.	HOSPITAL	SYM_AMMENITY	0306
12.	HOTEL	SYM_AMMENITY	0307

S.No.	CAD BLOCKNAME	LAYER	PIN-CODE
13.	IGUESTHOUSE	SYM_AMMENITY	0308
14.	MARRIAGEHALL	SYM_AMMENITY	0309
15.	OFFICE	SYM_AMMENITY	0310
16.	PETROLPUMP	SYM_AMMENITY	0311
17.	POSTOFFICE	SYM_AMMENITY	0312
18.	POLICESTATION	SYM_AMMENITY	0313
19.	SCHOOL	SYM_AMMENITY	0314
20.	TANK_OVERHEAD	SYM_AMMENITY	0315
21.	TELEPHONEOFFICE	SYM_AMMENITY	0316
22.	THEATRE	SYM_AMMENITY	0317
23.	BUILDING	SYM_CONSTRUCTION	0401
24.	COMPOUND	SYM_CONSTRUCTION	0402
25.	WASAHATH	SYM_CONSTRUCTION	0403
26.	CHATTAN	SYM_THEME	0501
27.	GRASS	SYM_THEME	0502
28.	HILL	SYM_THEME	0503
29.	CHURCH	SYM_WORSHIP	0601
30.	GURUDWARA	SYM_WORSHIP	0602
31.	MOSQUE	SYM_WORSHIP	0603
32.	TEMPLE	SYM_WORSHIP	0604
33.	FB_S_STONECIR	SYM_STONE	0701
34.	FB_STONECIR	SYM_STONE	0702
35.	FB_STONESQ	SYM_STONE	0703
36.	STONESQ	SYM_STONE	0704
37.	TRI	SYM_STONE	0705
38.	STONE_CIRCLE	SYM_STONE	0706

S.No.	CAD BLOCKNAME	LAYER	PIN-CODE
39.	STONE_TEMPLE	SYM_STONE	0707
40.	HISTORICALPLACE	SYM_TOURISM	0801
41.	MONUMENT	SYM_TOURISM	0802
42.	STATION_TETRA	SYM_TRAVERSE_POINT	0901
43.	STATION_TRI	SYM_TRAVERSE_POINT	0902
44.	ITS(Internal Traverse Station)	SYM_TRAVERSE_POINT	0903
45.	TS(Traverse Station)	SYM_TRAVERSE_POINT	0904
46.	KABRISTAN	SYM_SAMSHAN	1001
47.	SAMSHAN	SYM_SAMSHAN	1002
48.	POLE_ELECTRIC	SYM_COMMUNICATION	1101
49.	POLE_TELE	SYM_COMMUNICATION	1102
50.	ARROW_RIVER	SYM_ARROW	1201
51.	ARROW_TEXT	SYM_ARROW	1202
52.	TREE_SINDHI	SYM_TREE	1301
53.	TREE_COCONUT	SYM_TREE	1302
54.	TREE_OTHERTREE	SYM_TREE	1303
55.	TREE_MANGO	SYM_TREE	1304
56.	TREE_B_SINGLE	SYM_TREE	1305
57.	TREE_B_UPVAN	SYM_TREE	1306
58.	TREE_IMLI	SYM_TREE	1307
59.	TREE_PADIT	SYM_TREE	1308
60.	TREE_S_JUNGLE	SYM_TREE	1309
61.	TREE_S_SINGLE	SYM_TREE	1310
62.	TREE_S_UPVAN	SYM_TREE	1311
63.	TREE_TAD	SYM_TREE	1312
64.	TREE_VAN	SYM_TREE	1313

S.No.	CAD BLOCKNAME	LAYER	PIN-CODE
65.	TREE_OTHER	SYM_TREE	1314
66.	WELL_BORE	SYM_WELL	1401
67.	WELL_DIESEL	SYM_WELL	1402
68.	WELL_DISUSED	SYM_WELL	1403
69.	WELL_ELECTRIC	SYM_WELL	1404
70.	WELL_KACHHA	SYM_WELL	1405
71.	WELL_MOT	SYM_WELL	1406
72.	WELL_OPEN	SYM_WELL	1407
73.	WELL_TUBE	SYM_WELL	1408
74.	WELL_STEP	SYM_WELL	1409
75.	WELL_PAKKA	SYM_WELL	1410
76.	CROP	SYM_CROP	1501
77.	PADDY	SYM_OTHERS	2001

6. Annexure – IV: Font and Text Styles

Text Styles

S.No	Style Name	Font	Height	Remarks
1.	TEXT_MAPIN	DVB-TTSurekhEN	2mm	Hindi Text
2.	TEXT_MAPOUT	DVB-TTSurekhEN	4.5mm	Hindi Text
3.	TEXT_PARCEL	DVB-TTSurekh	1.8mm	Hindi Text
4.	TEXT_LEGEND	DVB-TTSurekhEN	As per raster	Hindi Text
5.	TEXT_TS	Times New Roman	2.5mm	General Purpose English text

Note:

Please note that the fonts used in the sample cad file supplied along with this document are wrong. All vendors are requested to use the correct font as per the list above