CHAPTER FIVE

DATA COLLECTION AND PROCESSING

5.1 Description of thestudy area of the project:

The study area was selected at Al Shaikh Al Imam which belongs to Al Gitina locality, White Nile state. The study area extended over approximately (550000 m²), and suroundded by the White Nile in the west direction an by the village of Al Shaikh Al Imam from east side and from the north an south side surondded by farms. Figure (5.1) shows the surrounded location of the study area.

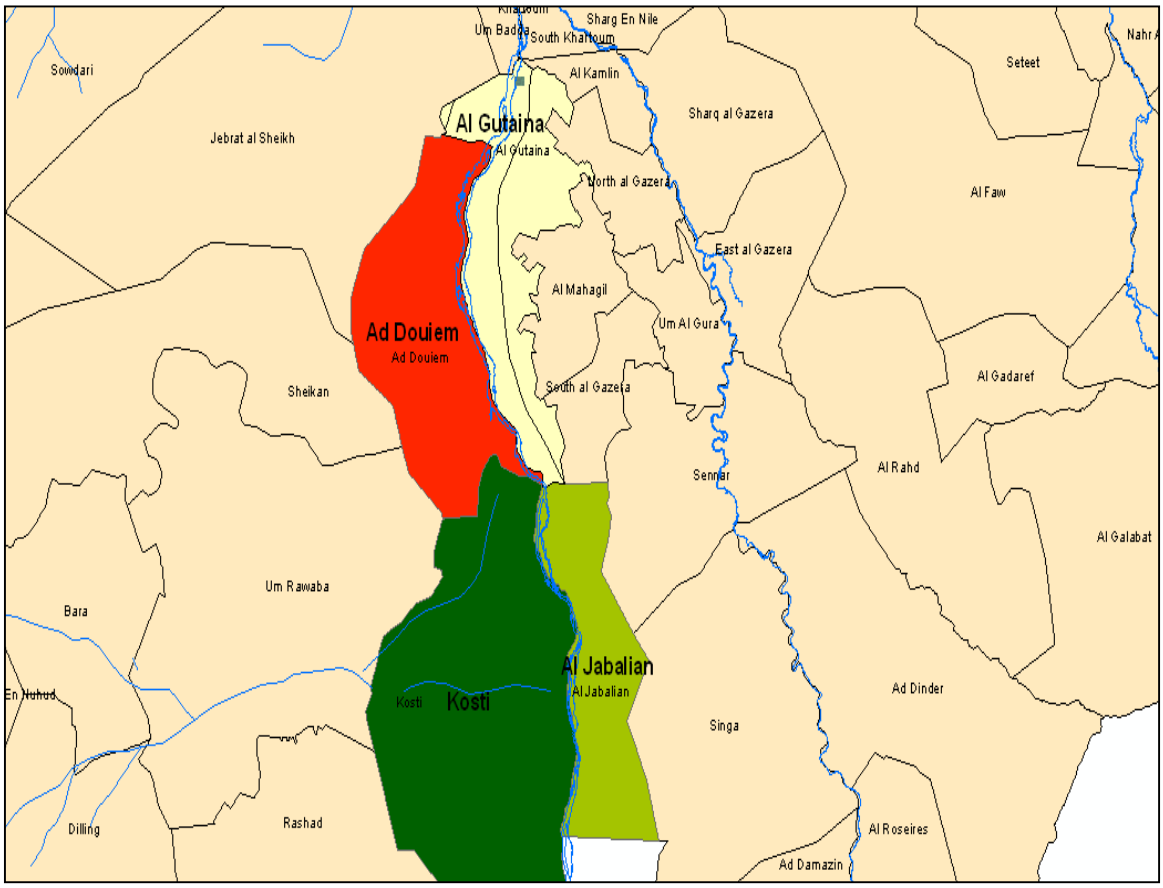


Figure (5.1) location of the study area

Afield tour was done to collect primary information about the area. Some studies and tests were done in field .e.g., coordinates for control points,contours, soil, vegetation, flood, services.Another data was collected e .g, design sheets, flood.

5.2 Field observations:

A number of observations and tests were done in the field:

5.2.1 Coordinates for control points:

A six control points, defined in Datum-WGS-1984, projection Transverse-Mercator andmeasured by metric units, distributed over the site (selected, five for general use and one for flood), figure (5.2) shows the distribution of these points, and the observed coordinate were listed in table (5.1) blew.

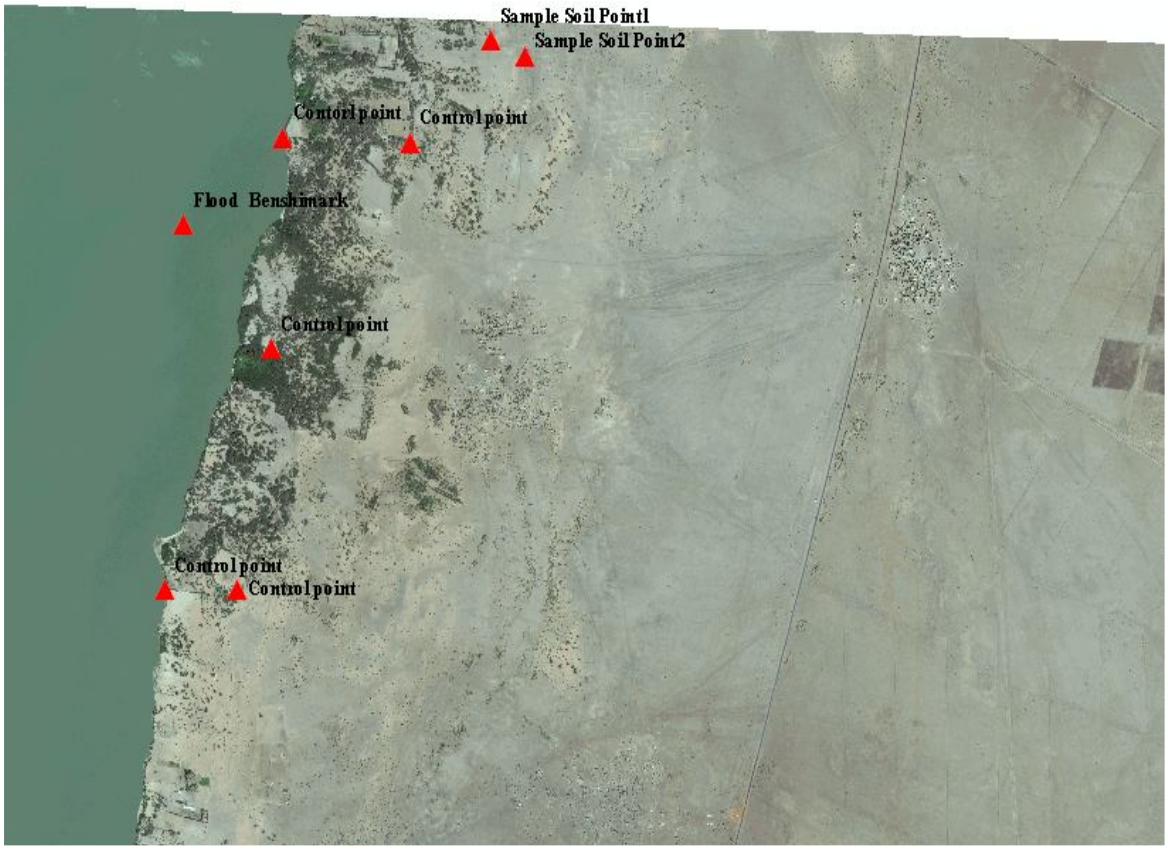


Figure (5.2)location of thecoordinate points

Point No	East	North	Remarks
0	443775	1675633	Control point
1	443205	1675655	Control point
2	443149	1674830	Control point
3	443003	1673890	Control point
4	442673	1673893	Control point
5	442760	1675313	Flood benchmark
6	444287	1675967	Sample soil point(2)
7	444137	1676030	Sample soil point(1)

Table (5.1)coordinatepoints

5.2.2 Contours:

A spot heights were collected every (200m) and a contour map was prepared .figure (5.3) show the contour map .

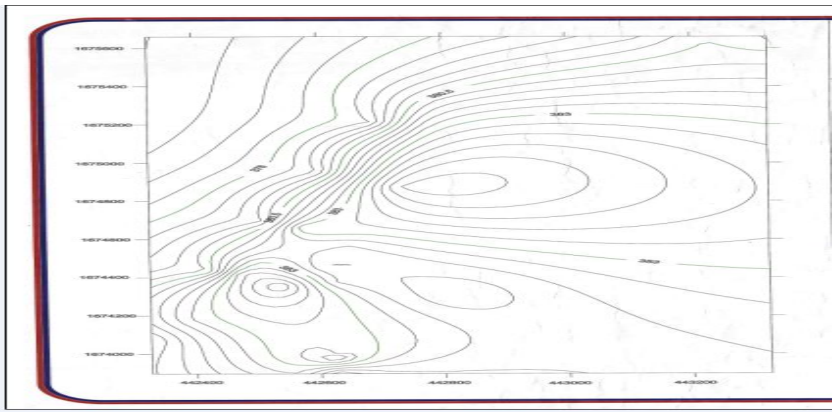


Figure (5.3) contour map of the study area

5.2.3Soil in the study area:

Two samples of soil was takingfrom the study area,tests were done in laboratory for analysis of the samples,the test results of (point (1) and point (2)) are shown in Appendix A.

5.2.4 Vegetation in the study area:

A data for vegetation and green cover were collected. Information about this is as follows:

- **Scientific Name: Acacia (Forest) Hayne** .

Figure (5.4)Acacia (Forest) Hayne Tree

- English name: Umbrella, KaramojaIsraellaBool.
- Arabic name: سمر - سيال
- Uses:

Fire wood aellouk - ornamental- sand dune - fixation - fodder - coal - shadow - protective packages - wood - pesticide –agro forestry - fruits - drugs - fences - gum.

Is tree forklift. This tree usually rises to- about 10 m inlength but may reach up to 20 m in good locations. And spread all overAfrica. And the Horn of Africa. To north Africa and the west ofthe Arabianpeninsula. Is one of the most important grazing andSemi desert .

Fodder trees in many destinations in dry and semi desert. Dependent on groundwater and produce useful fodder for the duration of the drought. Solid wood produces the first types ofcoal and fuel. You can also use large tree in the columns of thelocal stables and facilities. The trees are valid in sand dune stabilization works. It's also has many therapeutic benefits, such as the treatment of malaria, tumors, arthritis and skin disorders .

- **Tree Requirements:**

Rain: 100-800mm. You need less than that reached the groundwater. highly resistant to drought after penetration at the site.

Soil: bear all most types of soil and prefers alkaline soil neither immersion

Height: from the surface of the sea -1000 low of earth trees. And .

Temperature: zero-45 degrees. Bear very temperature on high - sensitivity to forest. Due to the lateral roots spread is not suitablefor agricultural purposes forests.

- **Scientific name: ProspisIuliflora (Swartz) DC .**

Figure (5.5)ProspisIuliflora (Swartz) DC Tree

- English name: mesquite, algoroba .
- Arabic name: المسكيت
- Uses:

fire wood aellouk - ornamental- sand dune fixation - fodder - coal - shadow - protective packages - wood - agro forestry - fruits - drugs - fences .

Tree or evergreen shrub and sometimes hurt to 12-15m in length by location. Where is rooted in north America and the northern regions of south America. Introduced into the tropics where adapted which is uncommon in Sudan .

The most important uses in the coast is to install the dunes. For the tree roots to 35 m deep and has lateral roots. Not suitable for agricultural purposes forests because the plants don't grow underneath or near them. Considered one of the best trees planted forests for fuel, thanks to the high density of the wood, making it strong slow combustion heat a little smoke. Wood is used also in the columns of stables and throats of windows and height carpentry also serve the larger size than in rail blocks, industry. The leaves and fruits of the animals feed .

- **Tree requirements :**
- Rain: 150-700 mm Irrigation 1S used that rain was less than that .
- Soil: Prefers light sand soil. Bears the rocky soil and boor salt as long as the long roots to grow unimpeded .
- Height: From the surface of the sea - 1500 m .
- Temperatures: Bear high temperatures. Not tolerate forest .

- **Scientific name :LeguminosaeSubfamCeasalPinioideae** .

Figure (5.6)LeguminosaeSubfamCeasalPinioideae Tree

- English name: Apple Ring Asacia, Goa,Winter thorn .
- Arabic name: الحراز
- Uses:

Fire wood aellouk - ornamental - sand dune - fixation - fodder - coal - shadow - protective packages - wood - pesticide –agro forestry - fruits - drugs - fences - tanning material .

Tree of height is 25 meters and is widespread in tropical Africa and the Middle East, Syria, Lebanon and Yemen. Grow normallyGao on the banks of the rivers as they reach deep roots of groundwater .

Gao its benefits famous in agricultural leaves forests that falls during the rainy season rich in ozone and contribute effectively to increase soil fertility which benefits crops. These benefits may not find the change they deserve in many parts of northern Sudan .

This may be attributed to the low prevalence of trees Gao low quality wood exposed to insects but none the less used in Carpentry cheap door man, windows, furniture and interior works including that soft and flexible benefits in the boat industry .Wretched firewood for this is not possible grown for this purpose. Securities and good fodder and fruits have many the rapeutic benefits.

- **Tree requirements:**
- Rain: 300-1500 mm. It is easy to adapt and tree grows best in the rain more than 600 mm .
- Soil: bear all varieties of soils including saline soils. Require indry areas close to groundwater within the reach of the roots before growth begins .
- Height: sea of _ 2700 m. There is also Gao in depressions beneath the surface of the sea.
- Temperature: 6 _ 40 degrees Celsius.

5.2.5 Flood:

Preliminary information about the flood in the area were observed and collected, as the Nile flooding covers a distance (350 meters) from the water level of the Nile in the real flood season. The reduce level (R.L) of White Nile expected at 15 August, and minimum at 30 April.

5.2.6 Services:

There are no services in the study area because the area is a forestry area .However; at the nearby villages there are water and electricity services.

5.2.7 Designsheets:

Proposed, design sheet, for the project were obtained (design(1), design(2)) , these designs are shown in Appendix B.

5.3 Distant data:

A satellite image covering the study area and around (satelliteQuick Bird panchromatic, (0.4m)),figure (5.7) .

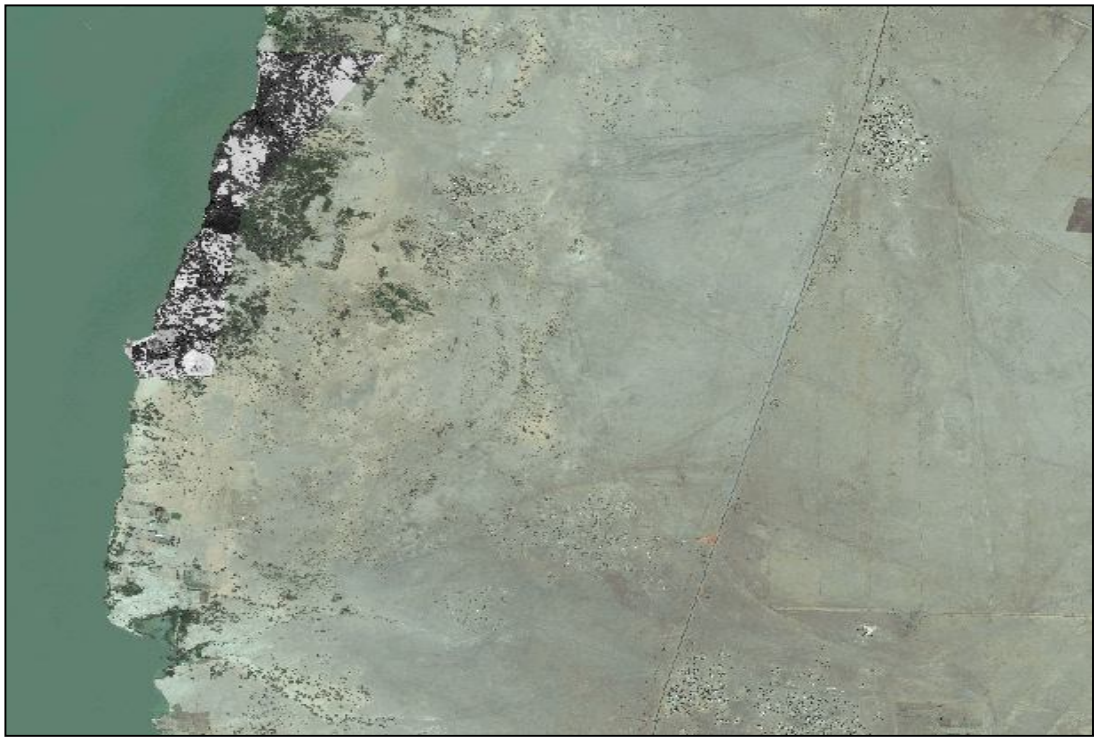


Figure (5.7) satellite images of the study area

5.4 Data Processing:

This image was imported to (ARDAS IMAGINE 8.5) program and controlled, subsetted and classified.

Using the coordinates of control pointsthe image was correctedby using the command geometric correction, figure (5.8).

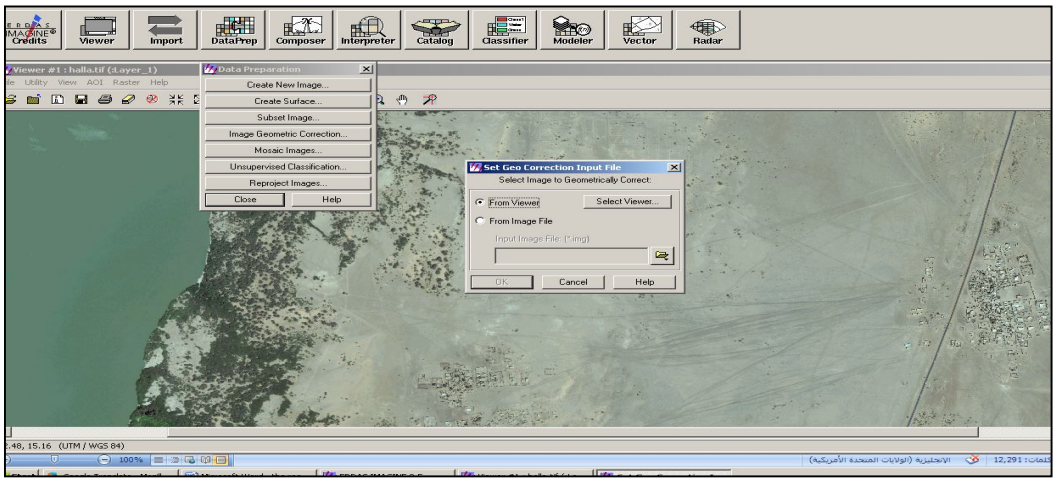


Figure (5.8)step of image geometric correction

Using the command subsetted in the same program, the image was cutted and result in the selected image of the study area, figure (5.9) .

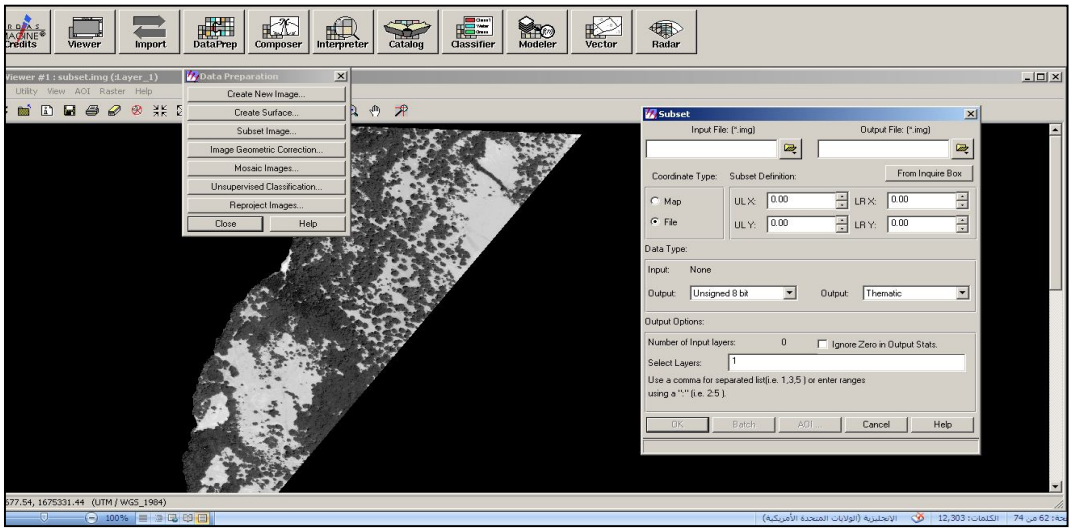


Figure (5.9) step of subset image

The image was classified using (ARDAS IMAGINE 8.5)program by applying the command unsupervised classifications, twelve classes were obtained, figure (5.10).

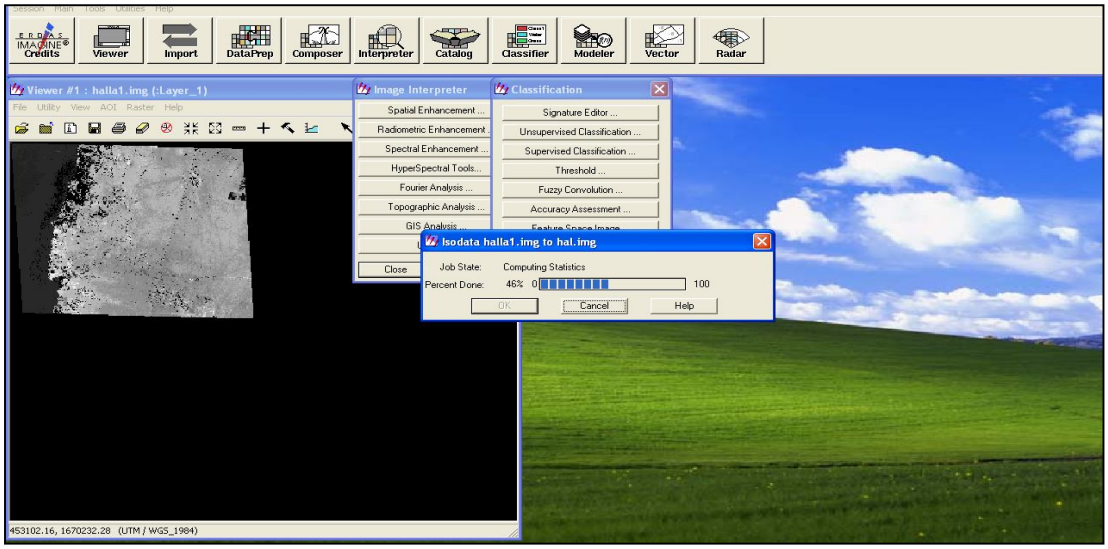


Figure (5.10) step of image classification

AutoCAD file was transferred to a shape filein (Arc catalog) program and by using command export, figure (5.11).

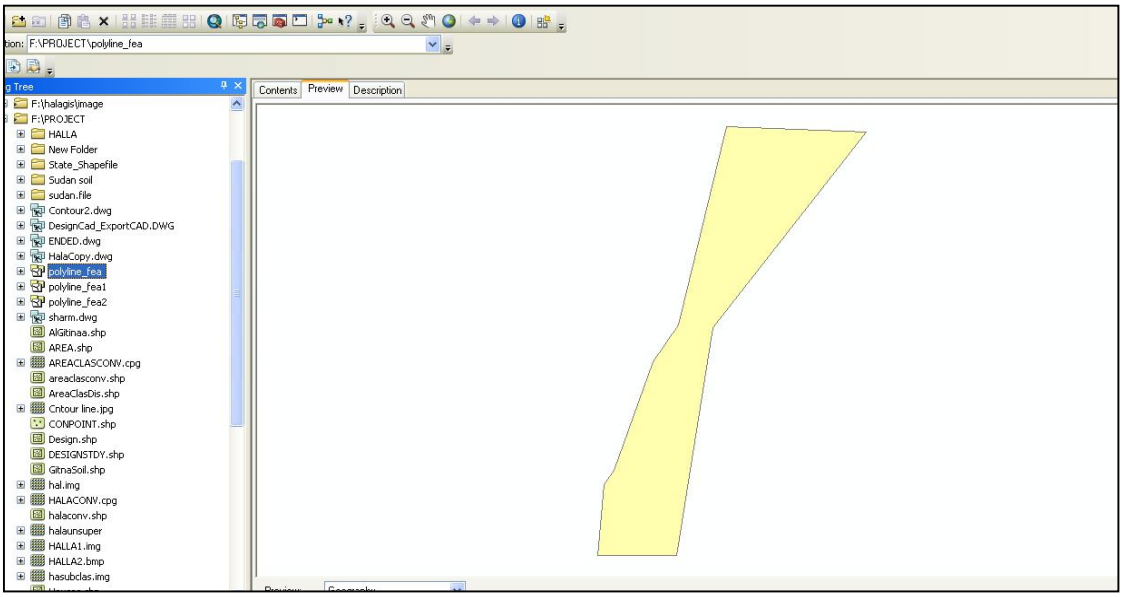


Figure (5.11) step export AutoCAD file to the shape file

A design drawings were imported to the same program and convertedit to a shape file byusing command export, figure (5.12) and figure (5.13).

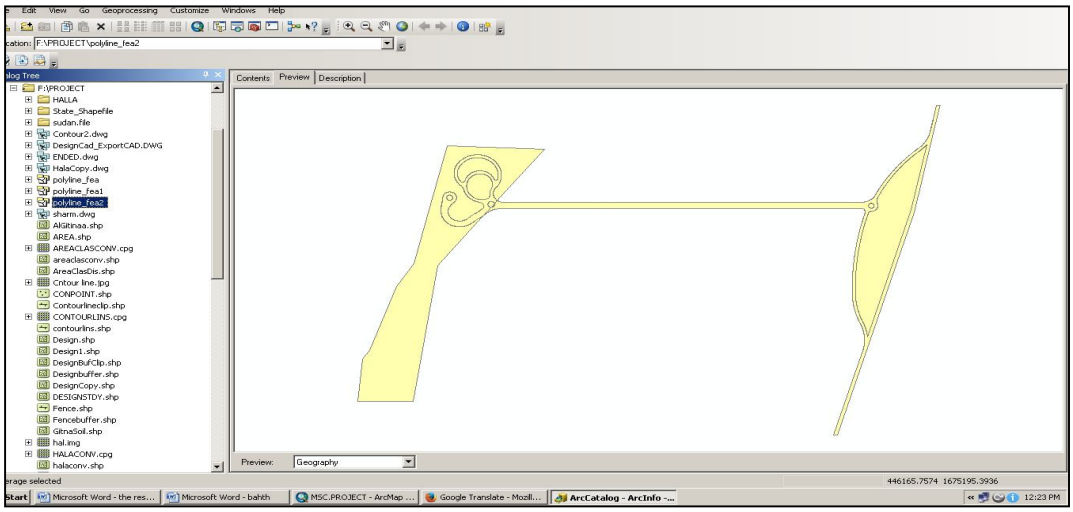


Figure (5.12)step of export the design (1) to shape File

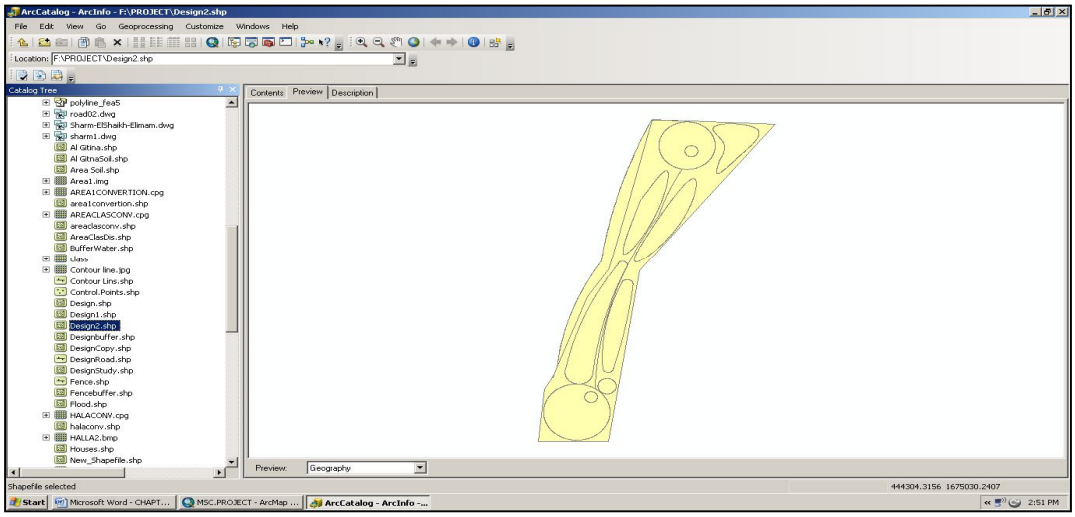


Figure (5.13) step of export the design (2) to shape file

The satellite image and the classes wasimported in the program (Arc Map 10),figure (5.14).

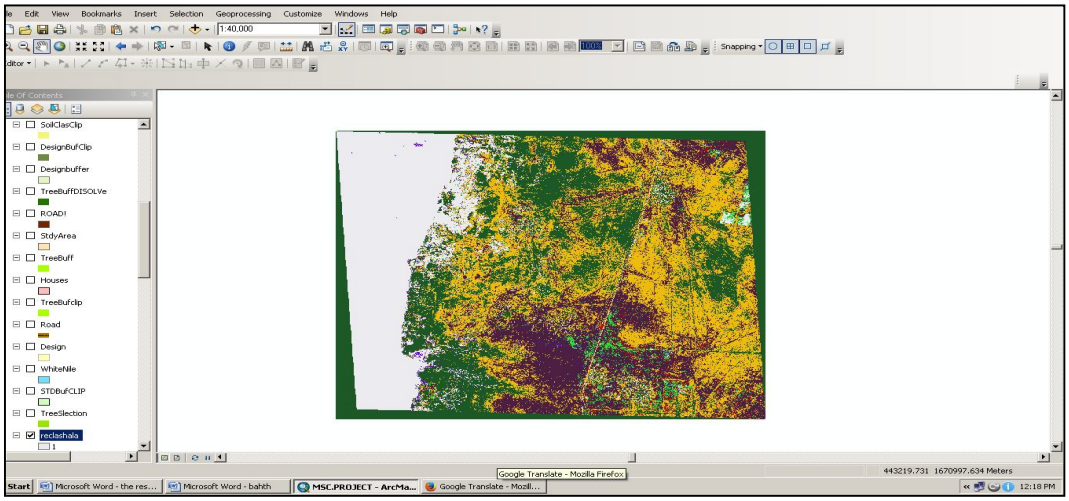


Figure (5.14) step ofprocess of image class

By applying the commands reclassify and subsetthe imagewas cutted and subsettedin the (Arc Map 10) program eight classes were obtained, figure (5.15).

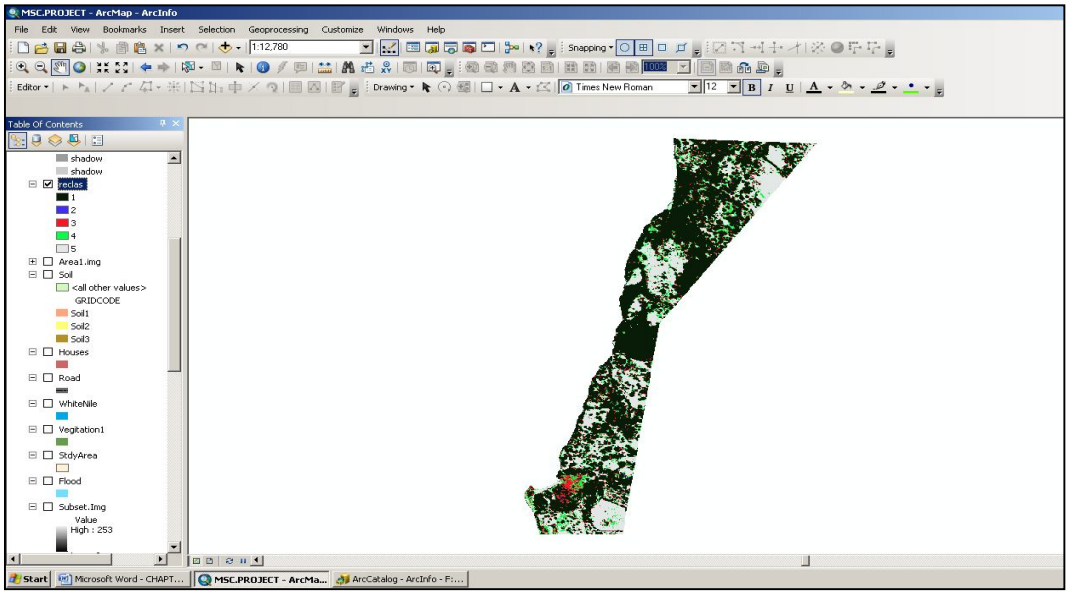


Figure (5.15) step ofreclassify and subset

After importing the image in the (Arc Map), many layers, were obtained for the study area, such as water, road, and the study area, as well as villages and others by the editor command, figure (5.16).

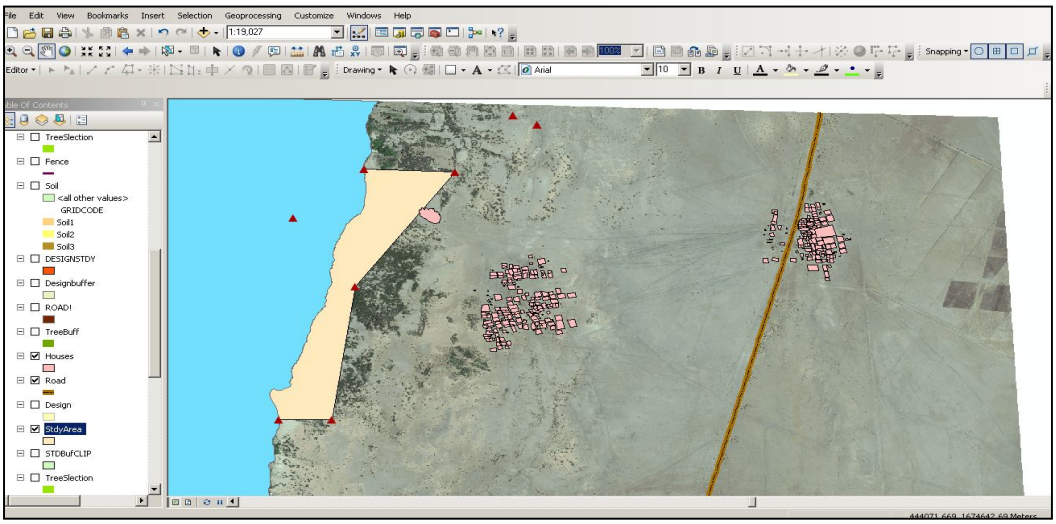


Figure (5.16) step thelayers of the image

A design was added, as well as shape file and then thestudy area were Identified, figure (5.17).

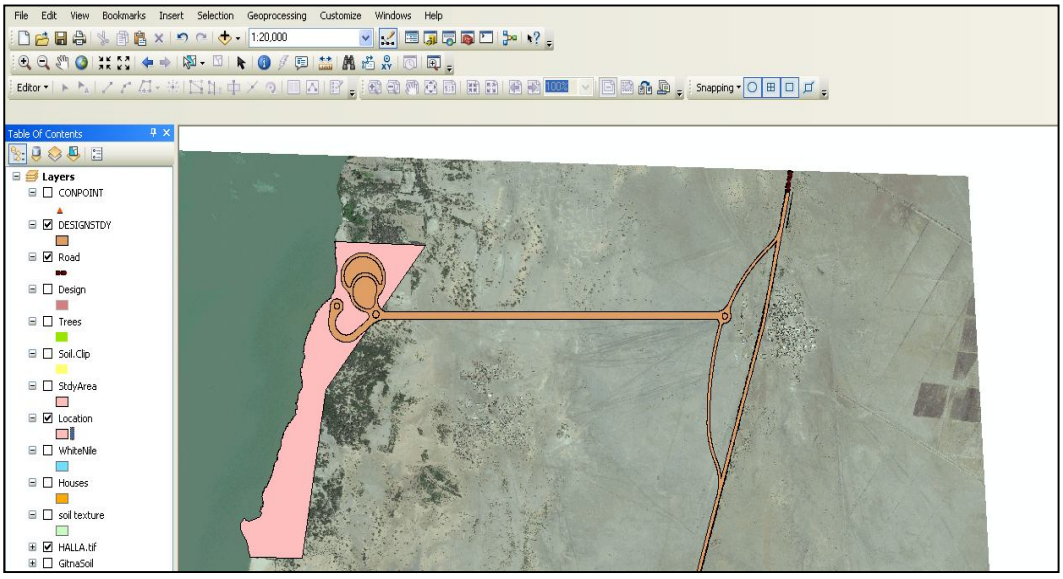


Figure (5.17)stepdesign of the study area

Using the clip command, the proposed road was cutted from the designsheet (1) and broughtto the proposal road layer, figure (5.18).

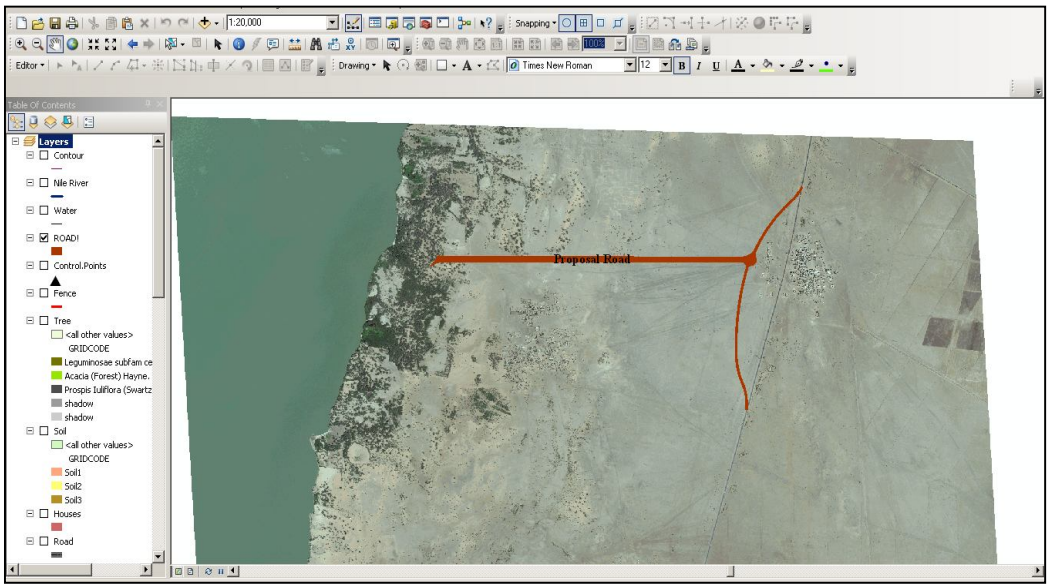


Figure (5.18)step of the proposal road layer

Using the command conversion raster to polygon from Tool Box the image was converted to a polygon, figure (5.19).

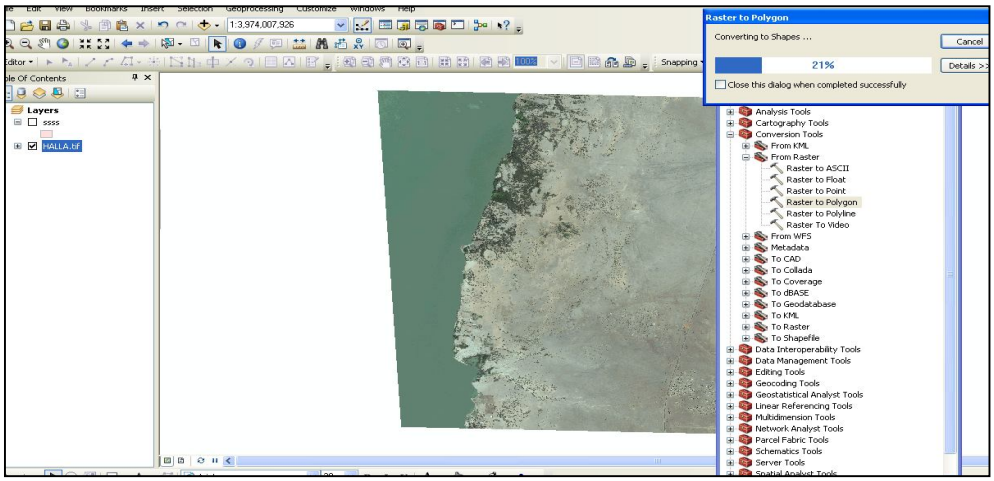


Figure (5.19) step of convertingimage to polygon

Using the command selection byattribute,the trees and soil layers were selected and placed in a new layer,figure(5.20).

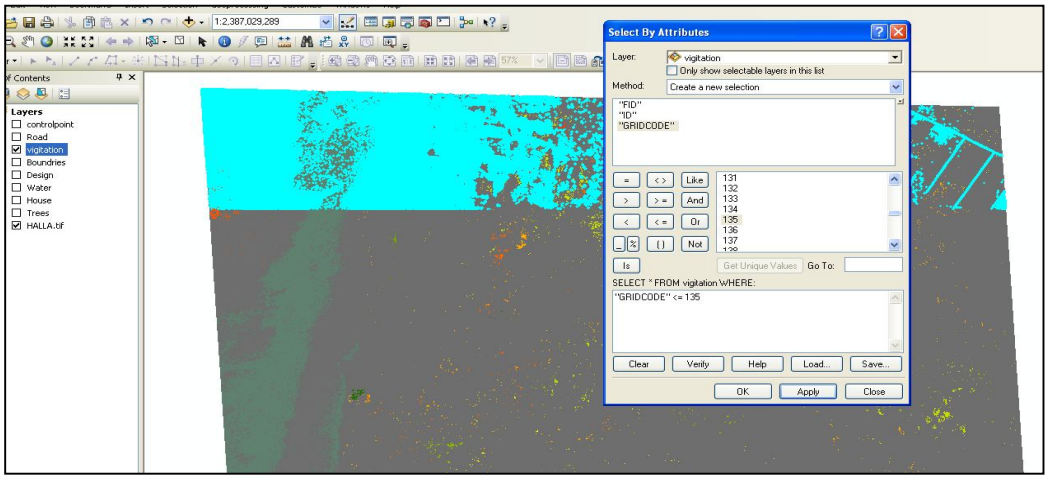


Figure (5.20)step selection by attribute of soil layer

Using the selection by polygon and dissolve commands converted imagewas simplified and choosing the specific areas ofa layer of vegetation's so as to reducing the volume file containing the large amount of data, figure(5.21) and figure(5.22).

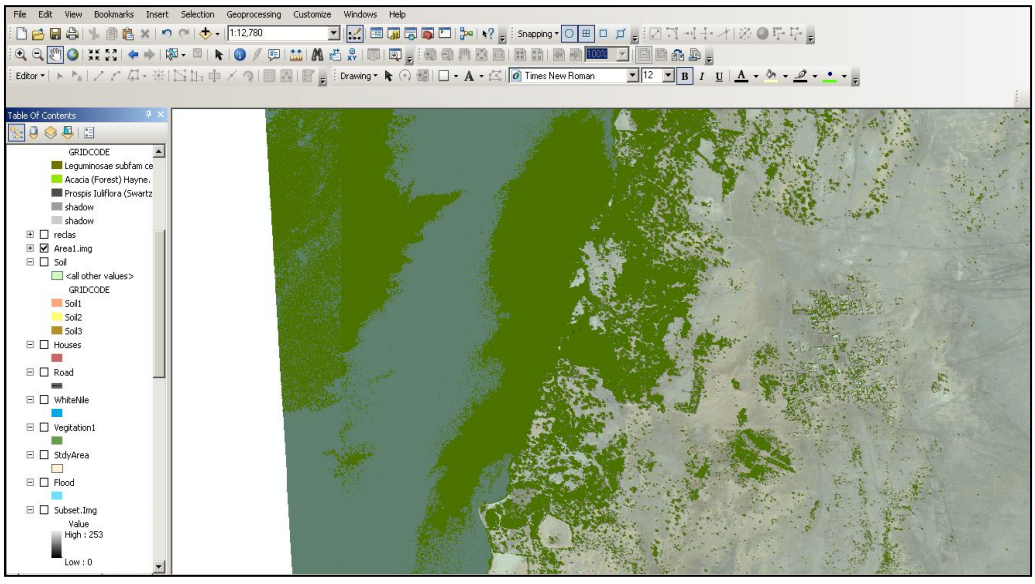


Figure (5.21)step of the vegetationslayer selected

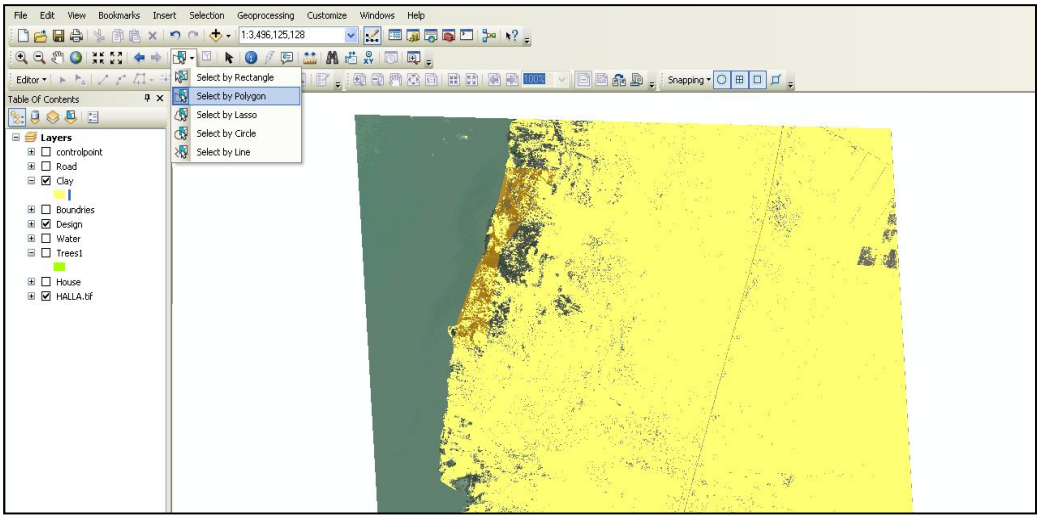


Figure (5.22)step of the soil layerselected

The classified study area image wascuttedfrom the (ARDAS IMAGINE 8.5) programand then added in (Arc Map) program, figure (5.23).

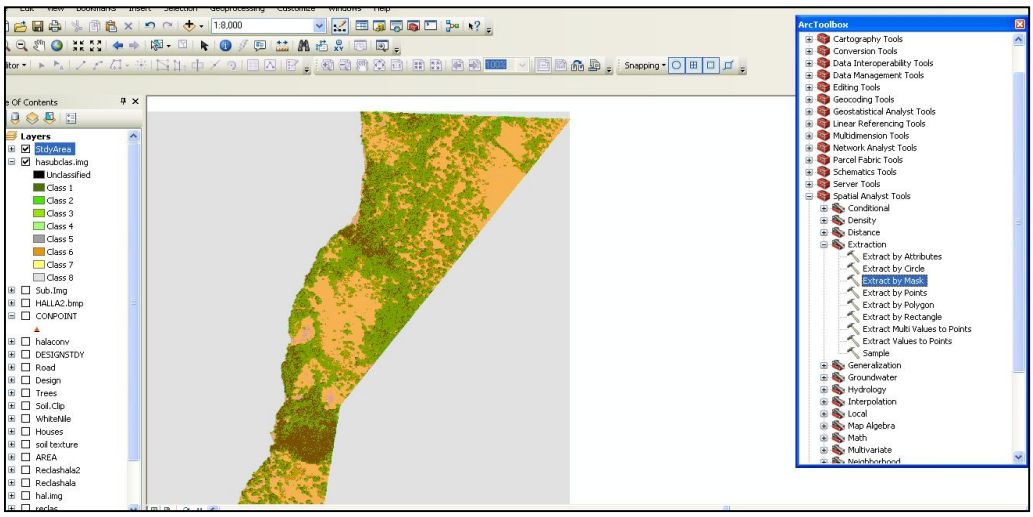


Figure (5.23) step classified image of study area

The classifiedfive layersof vegetationand three layers of soil were obtained, figure (5.24) and figure (5.25).

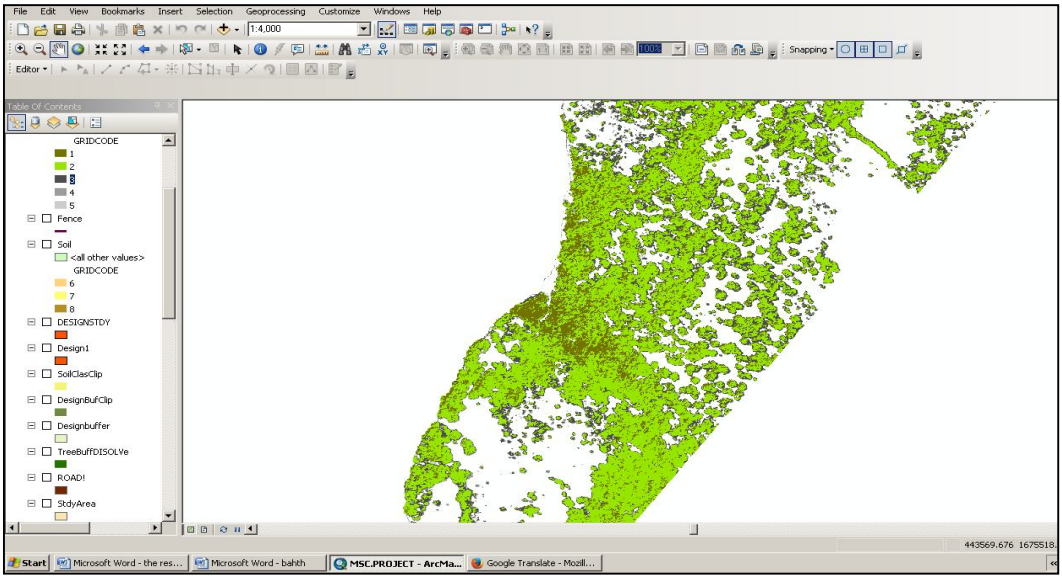


Figure (5.24)step of trees layer

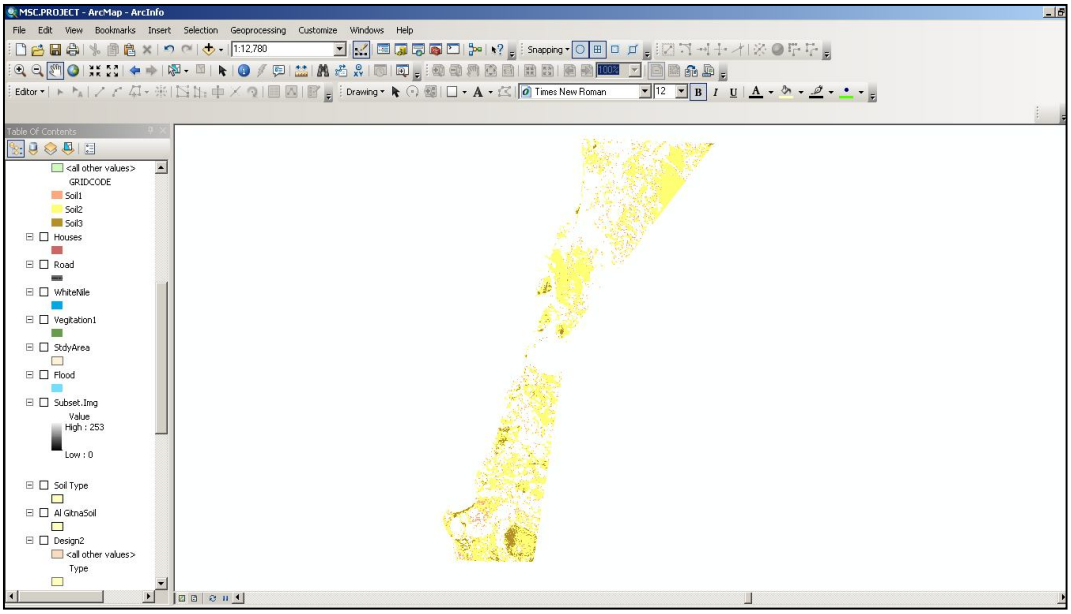


Figure (5.25)step of soil layer

Also by using a clip command, the study area soil layer was selected fromthesoil of the general province layer, figure (5.26).

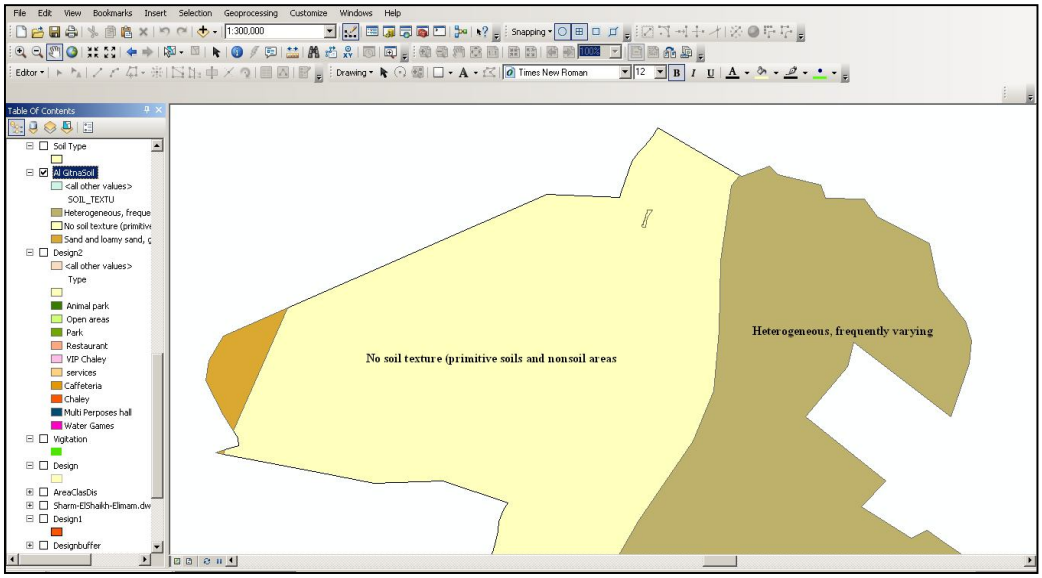


Figure (5.26)step of type soil layer

By using conversion from raster to contour command the image of study area wasconverted to a contour map with vertical interval (20meters), figure (5.27).

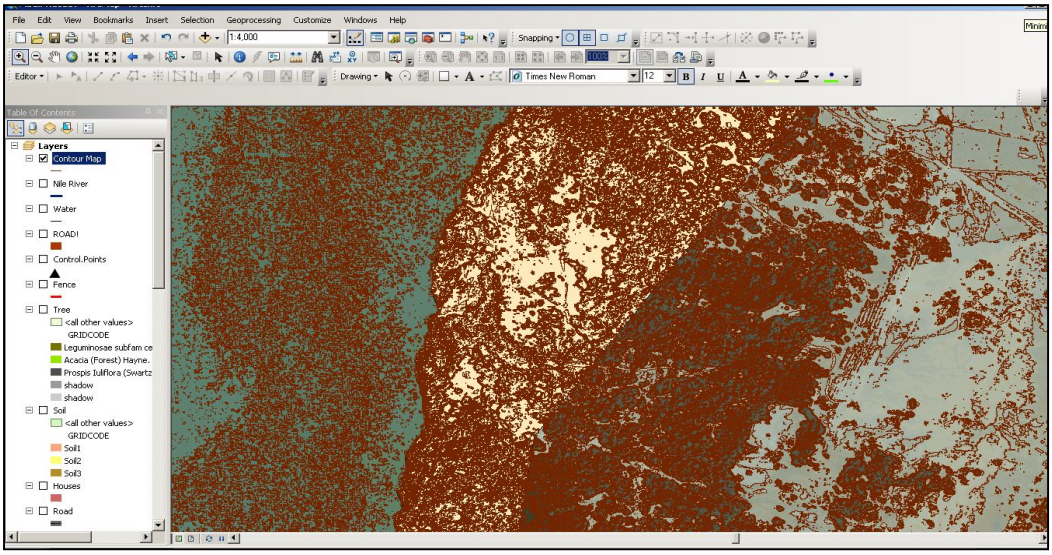


Figure (5.27)step contour map fromimage

Attribute tables was completed for each layer and the area, buffer, floods were then calculated.

By using buffer command, a 20m buffer around the outer boundaries of the study area was created and then the affected green cover was calculated, figure (5.28).

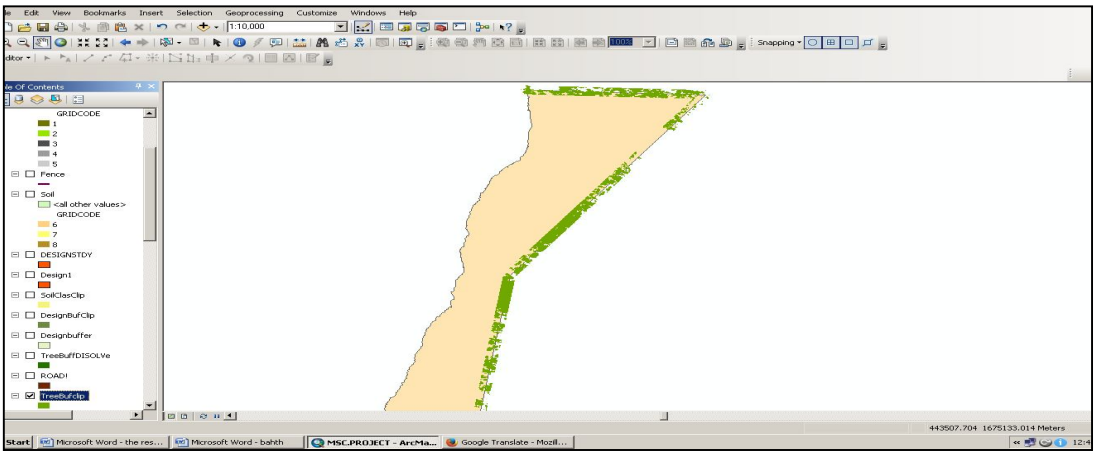


Figure (5.28)step of the fence buffer

Another buffer around the design inside the study area was selected, figure (5.29)

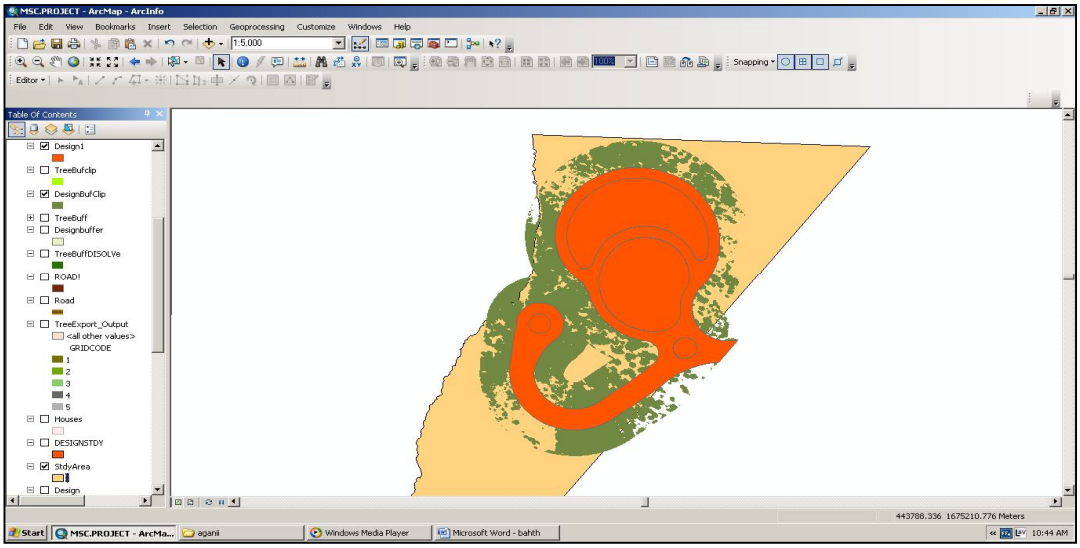


Figure (5.29)design (1)buffer

The impact of the flood on the study area was obtained by buffer command for the water, figure (5.30).

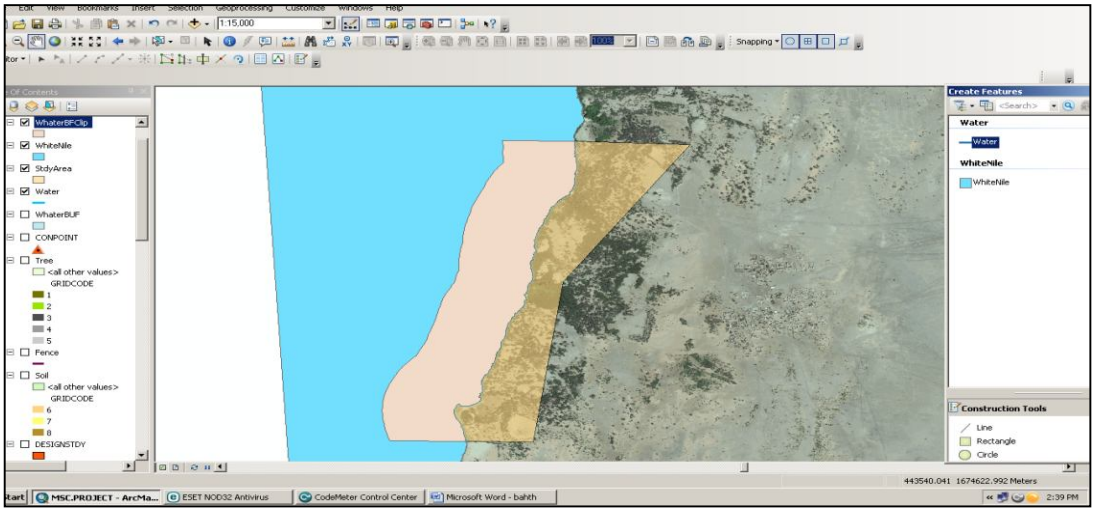


Figure (5.30)step of the flood buffer

The design was imported and some proposed displaying forms was suggested, figure (5.31).

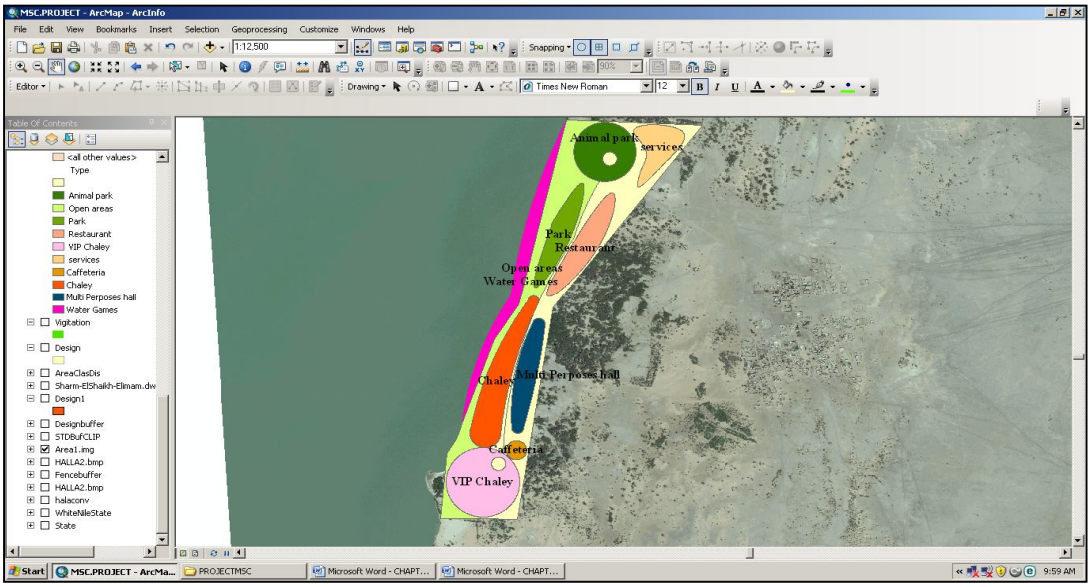


Figure (5.31) step of the proposed design2

Finally a general map produced, and the following nine theme maps were also produced:

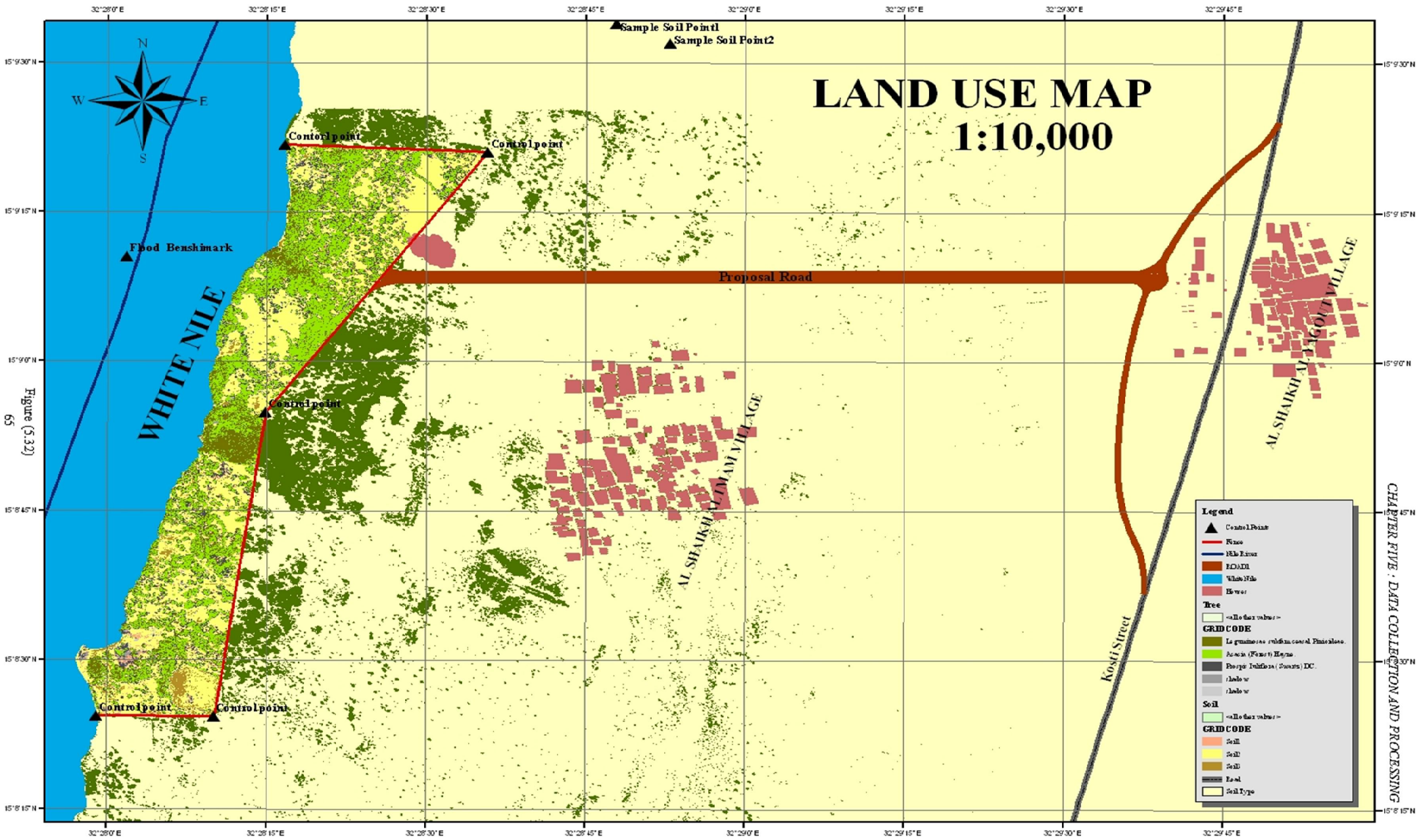

LAND USE MAP
1:10,000
Sample Soil Point1
Sample Soil Point2
Control point
Control point
Control point
Control point
Control point
Flood Benshimark
Proposal Road
WHITE NILE
AL SHAIKH ALTOGALI VILLAGE
AL SHAIKH ALTOGALI VILLAGE
Kosti Street
N
S
W
E
32°28'0"E
32°28'15"E
32°28'30"E
32°28'45"E
32°29'0"E
32°29'15"E
32°29'30"E
32°29'45"E
15°9'30"N
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
15°8'15"N
Legend
Control Point
Nile
Nile River
ROAD1
WhiteNile
River
Tree
<all other values>
GRIDCODE
Leguminosae-Mimosoideae-Prosopis
Acacia (Forest) Hayne
Prosopis Juliflora (Swartz) DC.
<all other values>
Soil
<all other values>
GRIDCODE
Soil1
Soil2
Soil3
Road
Soil Type

Figure (5.32)

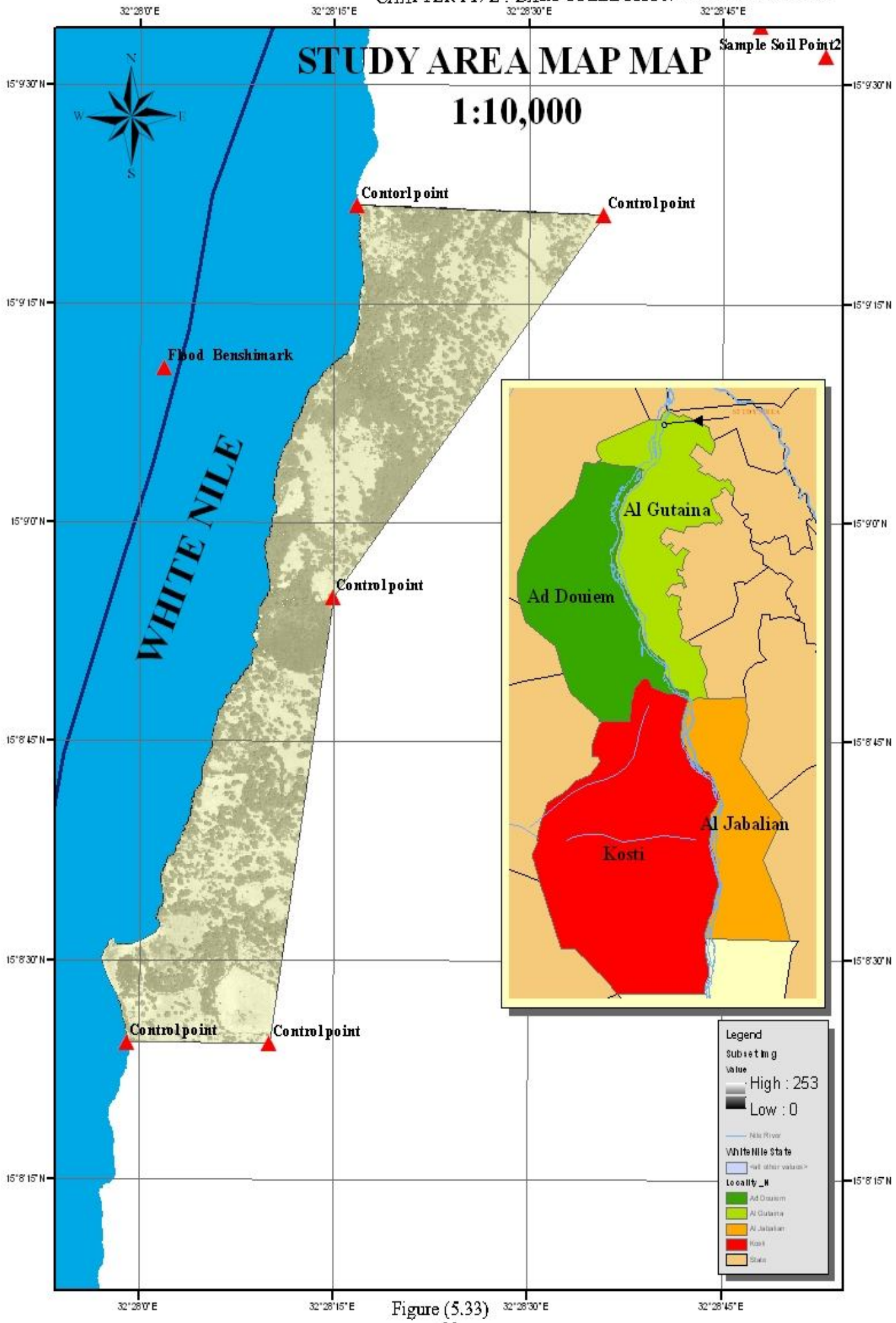

STUDY AREA MAP MAP
1:10,000
Sample Soil Point2
Contorl point
Control point
Flood Benshimark
WHITE NILE
Control point
Control point
Control point
Al Gutaina
Ad Douiem
Al Jabalian
Kosti
Legend
Subsetting
Value
High : 253
Low : 0
Nile River
WhiteNile State
Locality_N
Ad Douiem
Al Gutaina
Al Jabalian
Kosti
State
32°28'0"E
32°28'15"E
32°28'30"E
32°28'45"E
15°9'30"N
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
15°8'15"N

Figure (5.33)

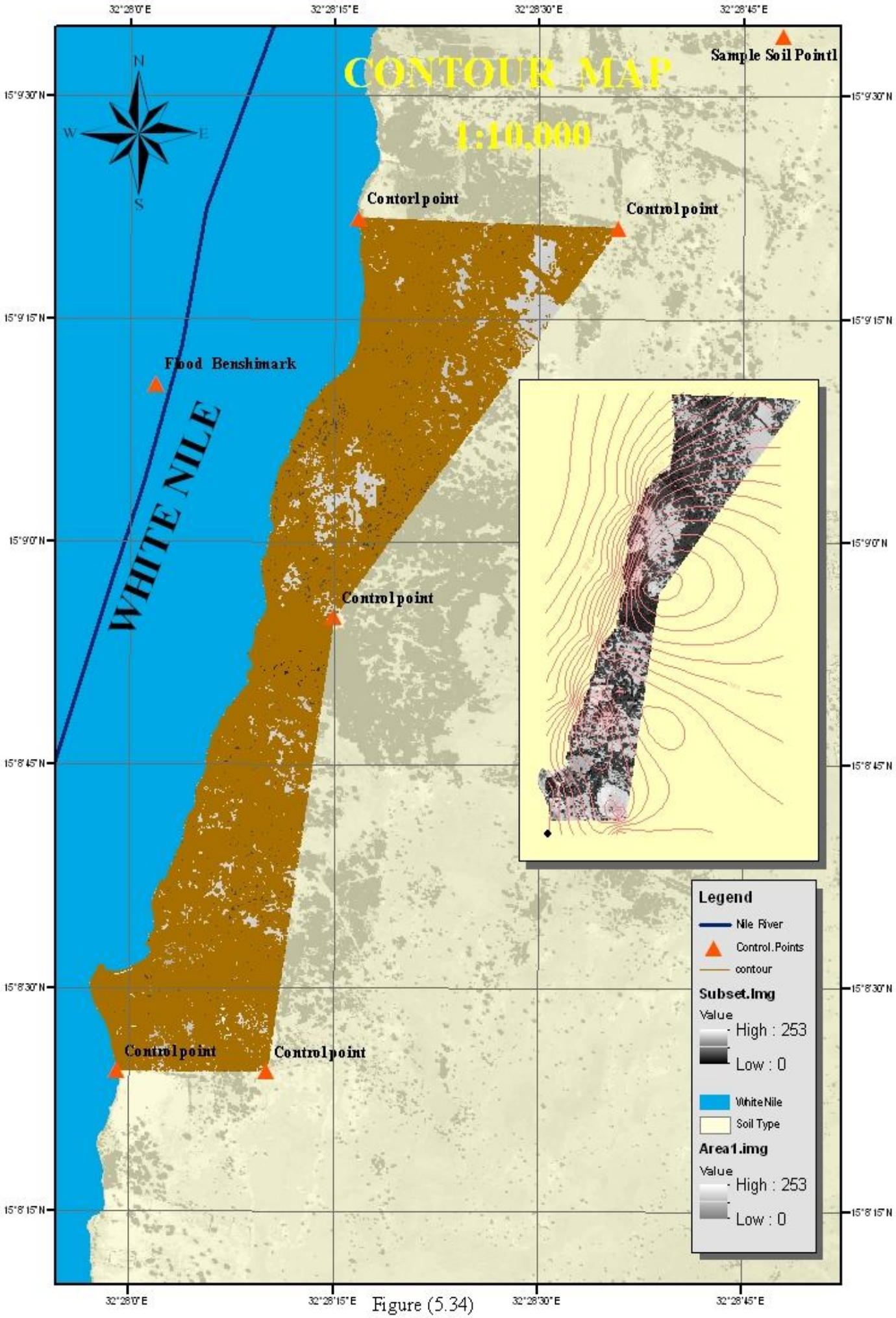

CONTOUR MAP
1:10,000
Sample Soil Pointl
Contorl point
Control point
Flood Benshimark
WHITE NILE
Control point
Control point
Control point
32°28'0"E
32°28'15"E
32°28'30"E
32°28'45"E
15°9'30"N
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
15°8'15"N
N
S
W
E
Legend
Nile River
Control. Points
contour
Subset.Img
Value
High : 253
Low : 0
White Nile
Soil Type
Area1.img
Value
High : 253
Low : 0

Figure (5.34)

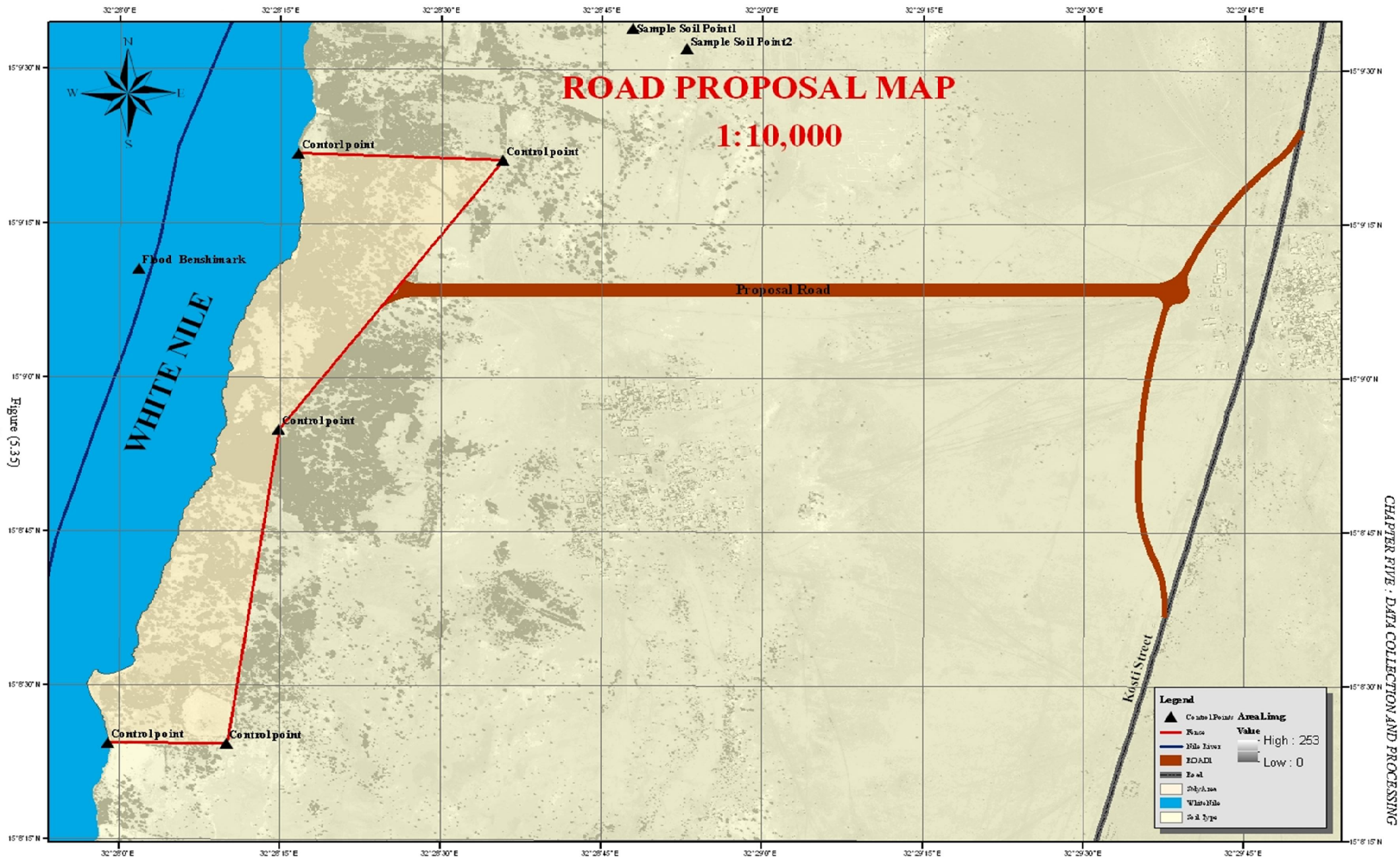

ROAD PROPOSAL MAP
1:10,000
Sample Soil Point1
Sample Soil Point2
Contorlpoint
Controlpoint
Flood Benshimark
WHITE NILE
Proposal Road
Controlpoint
Controlpoint
Controlpoint
Kosti Street
Legend
Value
High : 253
Low : 0
32°28'0"E
32°28'15"E
32°28'30"E
32°28'45"E
32°29'0"E
32°29'15"E
32°29'30"E
32°29'45"E
15°9'30"N
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
15°8'15"N

Figure (5.35)

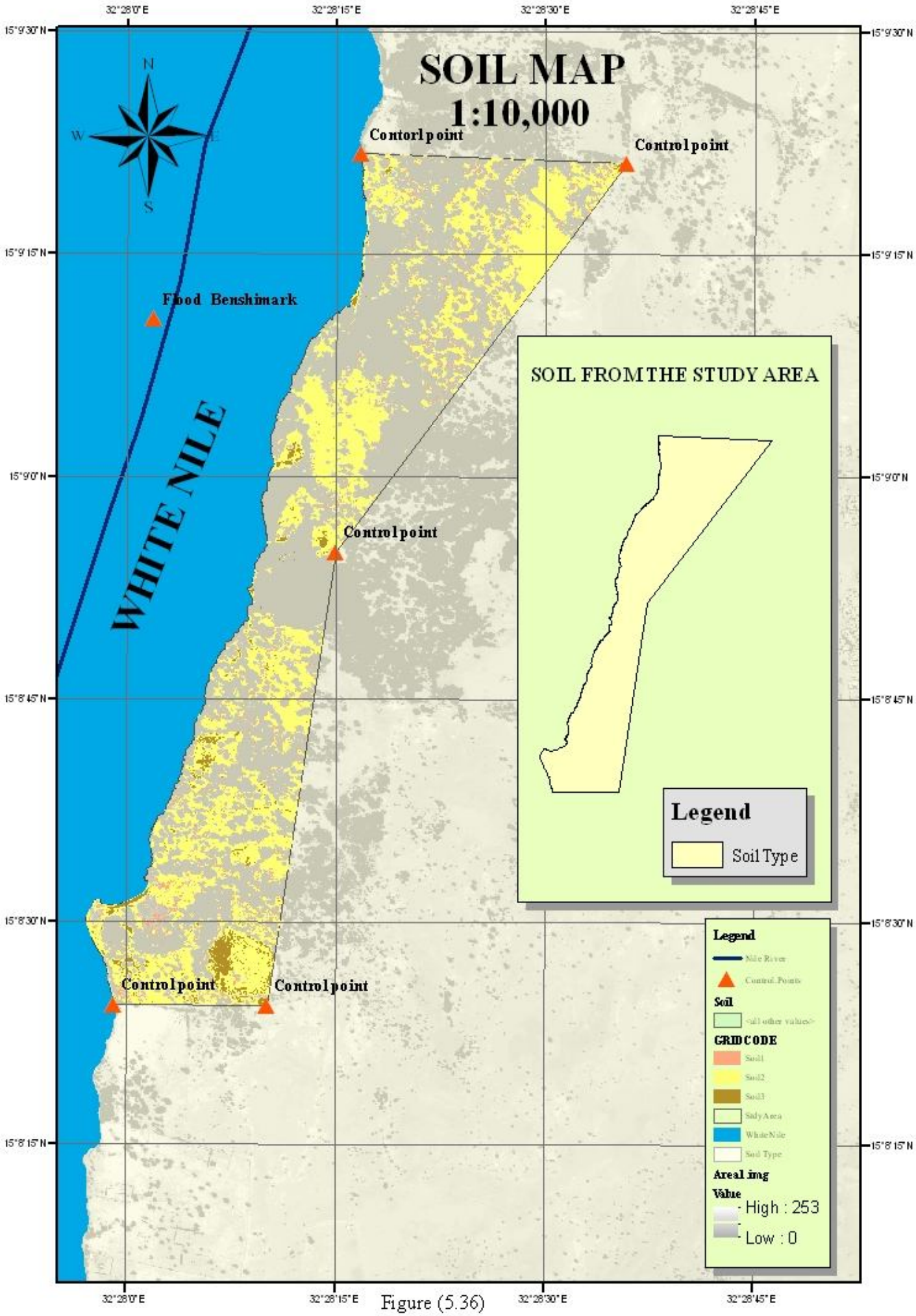

SOIL MAP
1:10,000
Contorl point
Control point
Flood Benshimark
WHITE NILE
Control point
Control point
Control point
SOIL FROM THE STUDY AREA
Legend
Soil Type
Legend
Nile River
Control Points
Soil
GRIDCODE
Soil1
Soil2
Soil3
Salty Area
WhiteNile
Soil Type
Areal img
Value
High : 253
Low : 0
32°28'0"E
32°28'15"E
32°28'30"E
32°28'45"E
15°9'30"N
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
15°8'15"N
N
S
W

Figure (5.36)

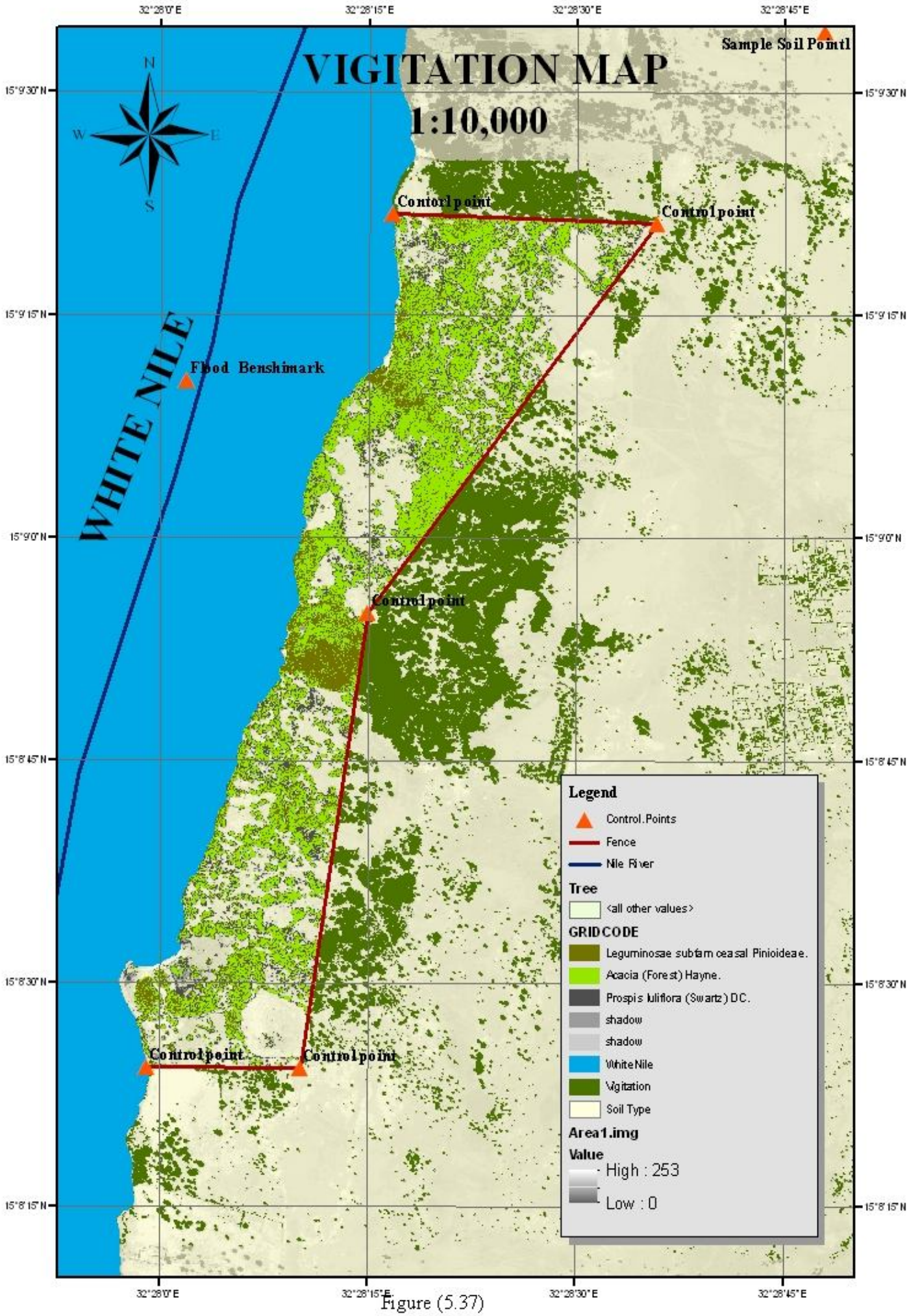

VIGITATION MAP
1:10,000
Sample Soil Pointl
Contorlpoint
Controlpoint
Flood Benshimark
WHITE NILE
Controlpoint
Controlpoint
Controlpoint
32°28'0"E
32°28'15"E
32°28'30"E
32°28'45"E
15°9'30"N
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
15°8'15"N
Legend
Control.Points
Fence
Nile River
Tree
<all other values>
GRIDCODE
Leguminosae subfam ceasal Pinioideae.
Acacia (Forest) Hayne.
Prospis luliflora (Swartz) DC.
shadow
shadow
WhiteNile
Vgitation
Soil Type
Area1.img
Value
High : 253
Low : 0

Figure (5.37)

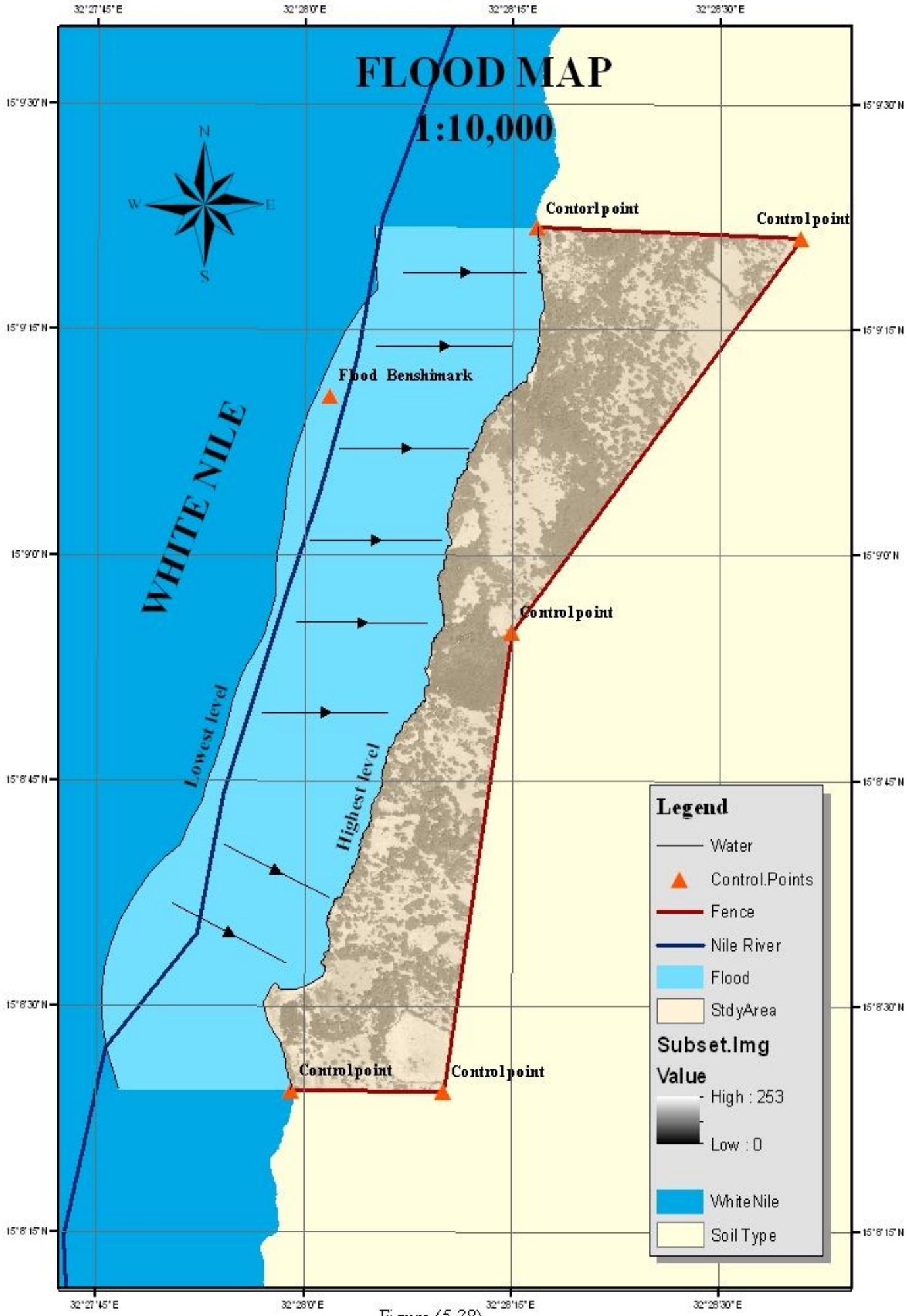

FLOOD MAP
1:10,000
32°27'45"E
32°28'0"E
32°28'15"E
32°28'30"E
15°9'30"N
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
15°8'15"N
N
S
W
E
Contorlpoint
Controlpoint
Flood Benshimark
WHITE NILE
Lowest level
Highest level
Controlpoint
Controlpoint
Controlpoint
Legend
Water
Control.Points
Fence
Nile River
Flood
StdyArea
Subset.Img
Value
High : 253
Low : 0
WhiteNile
Soil Type

Figure (5.38)

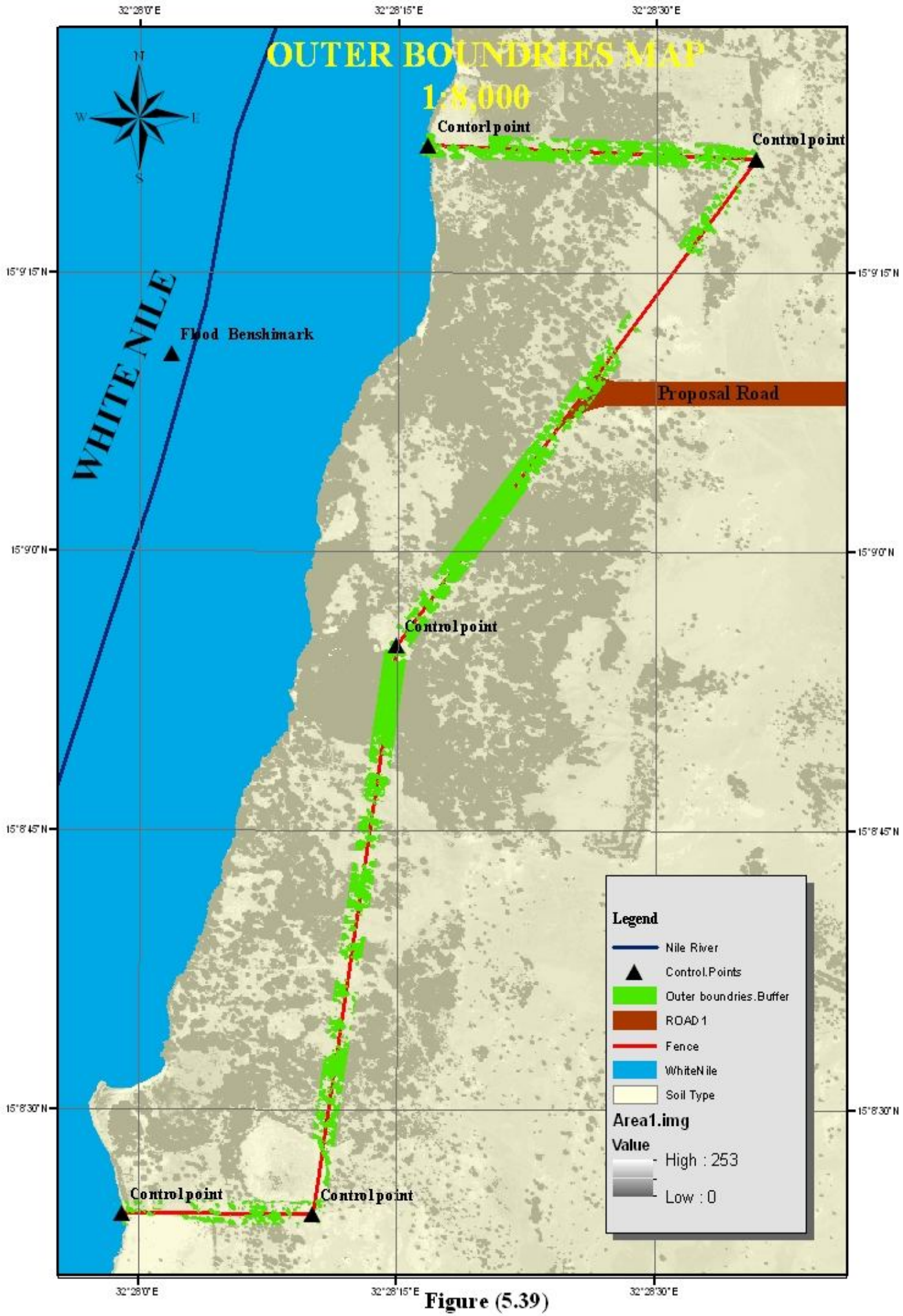

OUTER BOUNDRIES MAP
1:8,000
Contorlpoint
Controlpoint
WHITE NILE
Flood Benshimark
Proposal Road
Controlpoint
Controlpoint
Controlpoint
32°28'0"E
32°28'15"E
32°28'30"E
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
Legend
Nile River
Control.Points
Outer boundries.Buffer
ROAD1
Fence
WhiteNile
Soil Type
Area1.img
Value
High : 253
Low : 0

Figure (5.39)

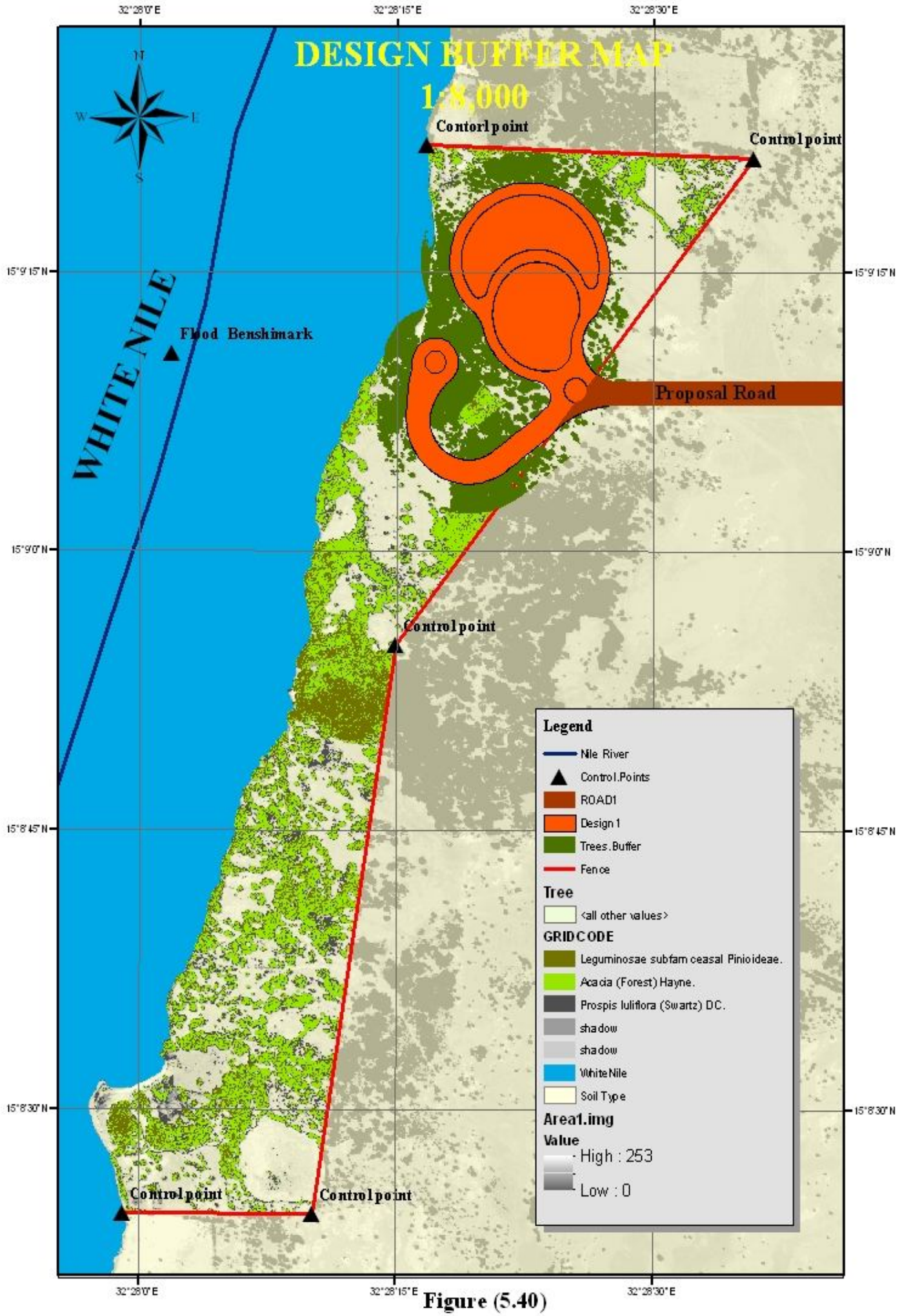

DESIGN BUFFER MAP
1:8,000
Contorlpoint
Controlpoint
WHITE NILE
Flood Benshimark
Proposal Road
Controlpoint
Controlpoint
Controlpoint
32°28'0"E
32°28'15"E
32°28'30"E
15°9'15"N
15°9'0"N
15°8'45"N
15°8'30"N
Legend
Nile River
Control.Points
ROAD1
Design 1
Trees.Buffer
Fence
Tree
<all other values>
GRIDCODE
Leguminosae subfam ceasal Pinioideae.
Acacia (Forest) Hayne.
Prospis luliflora (Swartz) DC.
shadow
shadow
WhiteNile
Soil Type
Area1.img
Value
High : 253
Low : 0

Figure (5.40)

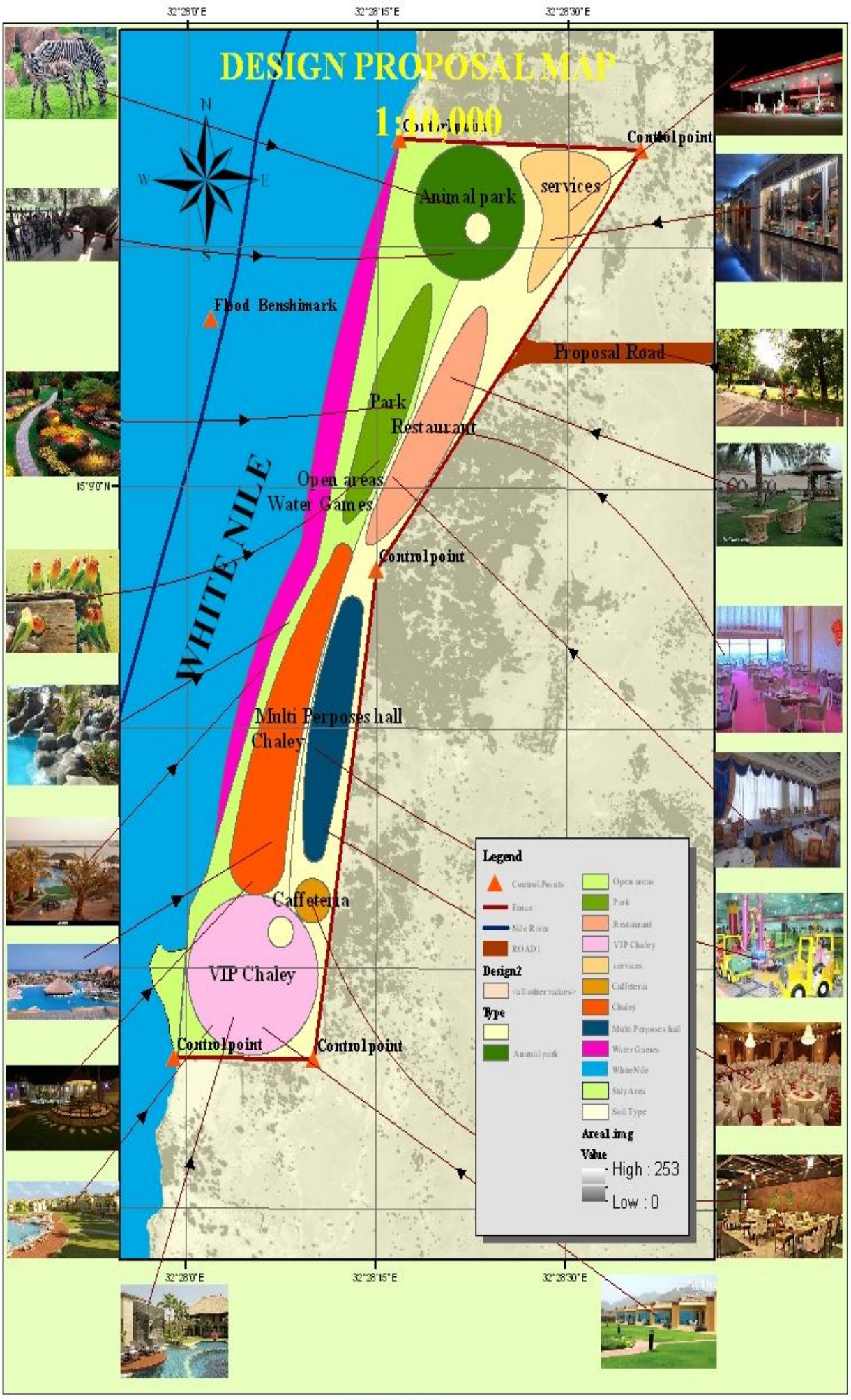

DESIGN PROPOSAL MAP
1:10,000
32°28'0"E
32°28'15"E
32°28'30"E
15°9'0"N
N
W
E
S
Controlpoint
Controlpoint
Animal park
services
Flood Benshimark
Proposal Road
Park
Restaurant
Open areas
Water Games
WHITE NILE
Controlpoint
Multi Perposes hall
Chaley
Caffeteria
VIP Chaley
Controlpoint
Controlpoint
Legend
Control Points
Fence
Nile River
ROAD1
Design2
Type
Animal park
Open areas
Park
Restaurant
VIP Chaley
services
Caffeteria
Chaley
Multi Perposes hall
Water Games
White Nile
Soil Area
Soil Type
Areal img
Value
High : 253
Low : 0

Figure (5.41)

And the following attribute tables were obtained:

Table

Control.Points

FID	Shape *	Id	East	North	Name
0	Point	0	443775	1675633	Control point
1	Point	0	443205	1675655	Contorl point
2	Point	0	443149	1674830	Control point
3	Point	0	443003	1673890	Control point
4	Point	0	442673	1673893	Control point
5	Point	0	442760	1675313	Flood Benshimark
6	Point	0	444287	1675967	Sample Soil Point2
7	Point	0	444137	1676030	Sample Soil Point1

1 (0 out of 8 Selected)

Control.Points

Table (5.42) control point

Table

Road

FID	Shape *	Id	Length	Name
0	Polyline	0	4614	Kosti Street

1 (0 out of 1 Selected)

Tree Soil Road

Table

ROAD1

FID	Shape *	AREA	PERIMETER	POLYLIINE_F	POLYLIINE_1	Name
0	Polygon	45794.019676	118912.28027	8	0	Proposal Road
1	Polygon	888.495654	888.495654	201	0	

1 (0 out of 2 Selected)

ROAD1

Table (5.43) roads

Table

Soil

FID	Shape *	GRIDCODE	Area	Type
0	Polygon	6	19439	Soil1
1	Polygon	7	189808	Soil2
2	Polygon	8	12269	Soil3

1

(0 out of 3 Selected)

Tree Soil

Table (5.44)soil

Table

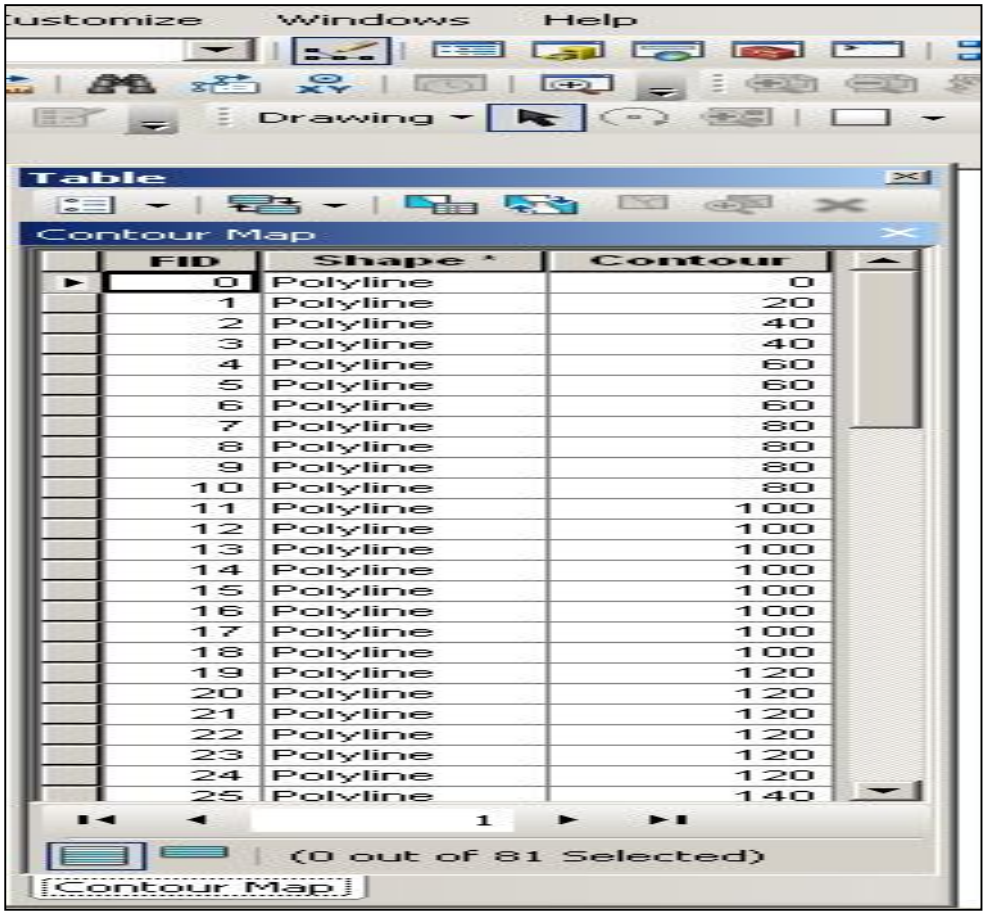
Tree

FID	Shape *	GRIDCODE	Area	Type
0	Polygon	1	64020	Leguminosae subfam ceasal Pinioideae.
1	Polygon	2	179952	Acacia (Forest) Hayne.
2	Polygon	3	66164	Prospis luliflora (Swartz) DC.
3	Polygon	4	17138	shadow
4	Polygon	5	2506	Shadow

1 (0 out of 5 Selected)

Tree

Table (5.45) vegetation


ustomize
Windows
Help
Drawing
Table
Contour Map
FID
Shape *
Contour
0 Polyline 0
1 Polyline 20
2 Polyline 40
3 Polyline 40
4 Polyline 60
5 Polyline 60
6 Polyline 60
7 Polyline 80
8 Polyline 80
9 Polyline 80
10 Polyline 80
11 Polyline 100
12 Polyline 100
13 Polyline 100
14 Polyline 100
15 Polyline 100
16 Polyline 100
17 Polyline 100
18 Polyline 100
19 Polyline 120
20 Polyline 120
21 Polyline 120
22 Polyline 120
23 Polyline 120
24 Polyline 120
25 Polyline 140
1
(0 out of 81 Selected)
Contour Map

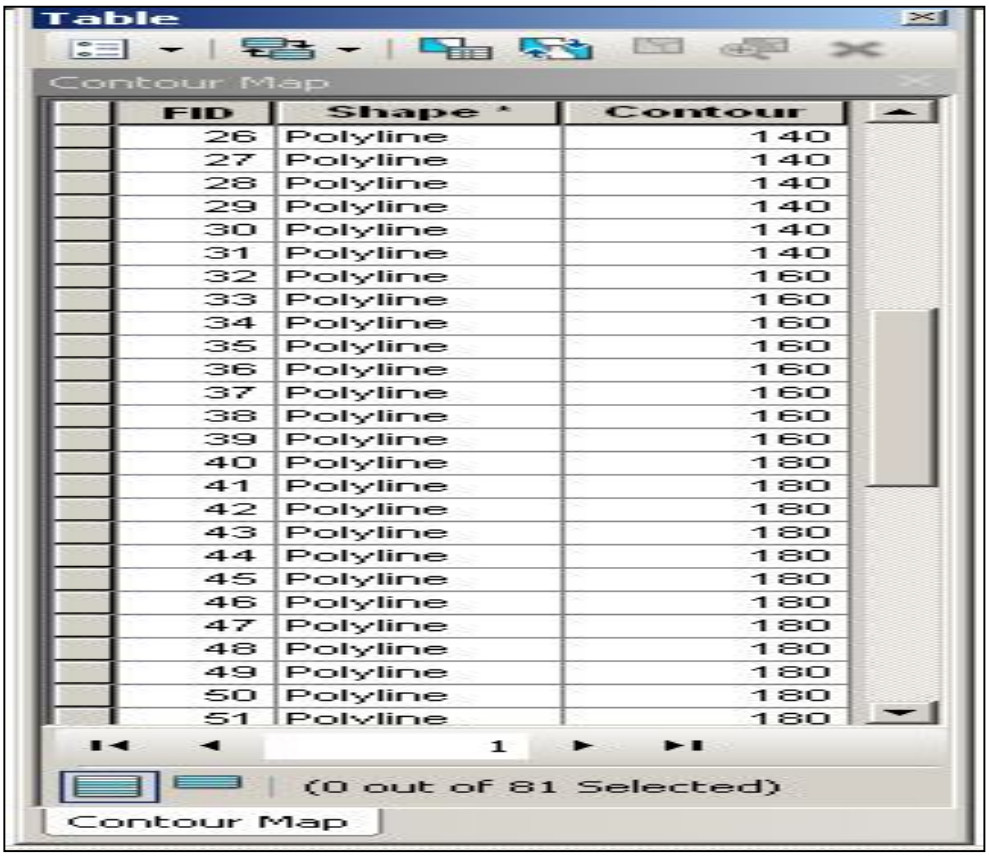


Table
Contour Map
FID
Shape *
Contour
26 Polyline 140
27 Polyline 140
28 Polyline 140
29 Polyline 140
30 Polyline 140
31 Polyline 140
32 Polyline 160
33 Polyline 160
34 Polyline 160
35 Polyline 160
36 Polyline 160
37 Polyline 160
38 Polyline 160
39 Polyline 160
40 Polyline 180
41 Polyline 180
42 Polyline 180
43 Polyline 180
44 Polyline 180
45 Polyline 180
46 Polyline 180
47 Polyline 180
48 Polyline 180
49 Polyline 180
50 Polyline 180
51 Polyline 180
1
(0 out of 81 Selected)
Contour Map

Table

Contour Map

FID	Shape *	Contour
51	Polyline	180
52	Polyline	180
53	Polyline	180
54	Polyline	180
55	Polyline	180
56	Polyline	180
57	Polyline	200
58	Polyline	200
59	Polyline	200
60	Polyline	200
61	Polyline	200
62	Polyline	200
63	Polyline	200
64	Polyline	200
65	Polyline	200
66	Polyline	200
67	Polyline	200
68	Polyline	200
69	Polyline	200
70	Polyline	200
71	Polyline	200
72	Polyline	200
73	Polyline	200
74	Polyline	200
75	Polyline	200
76	Polyline	220
77	Polyline	220
78	Polyline	220
79	Polyline	240
80	Polyline	240

1

(0 out of 81 Selected)

Table (5.46) the contour line

Table

Flood

FID	Shape *	Id	Length	Name	Date
0	Polyline	0	2242	Highest level	8/30/2014
1	Polyline	0	1919	Lowest level	4/15/2014

1

(0 out of 2 Selected)

Flood

Table (5.47)flood

Table

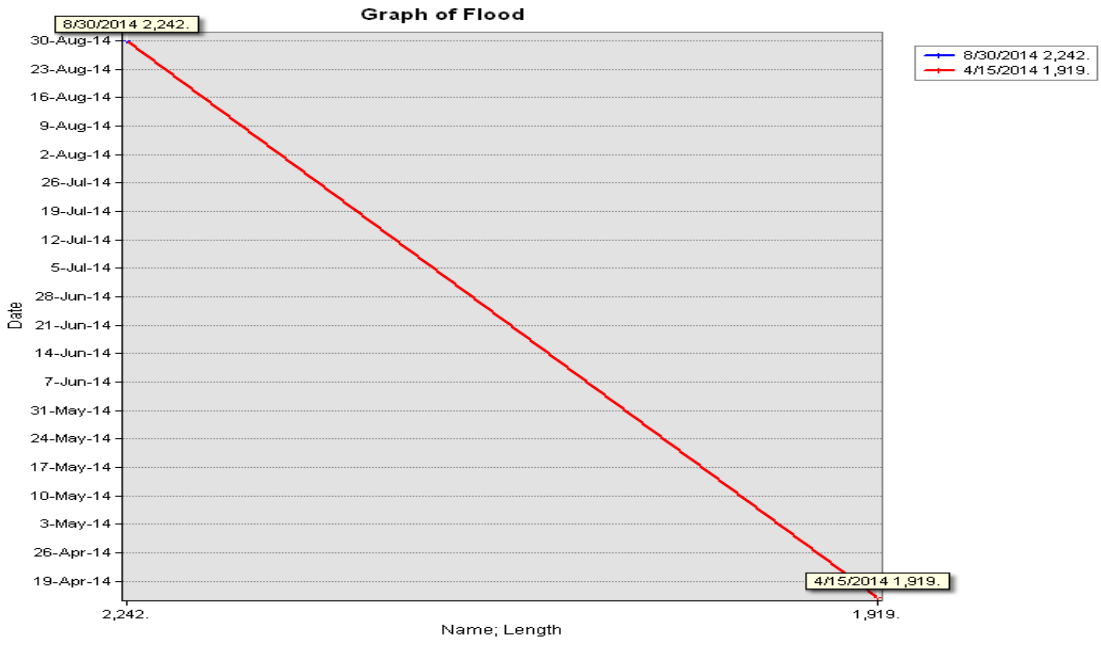
Design2

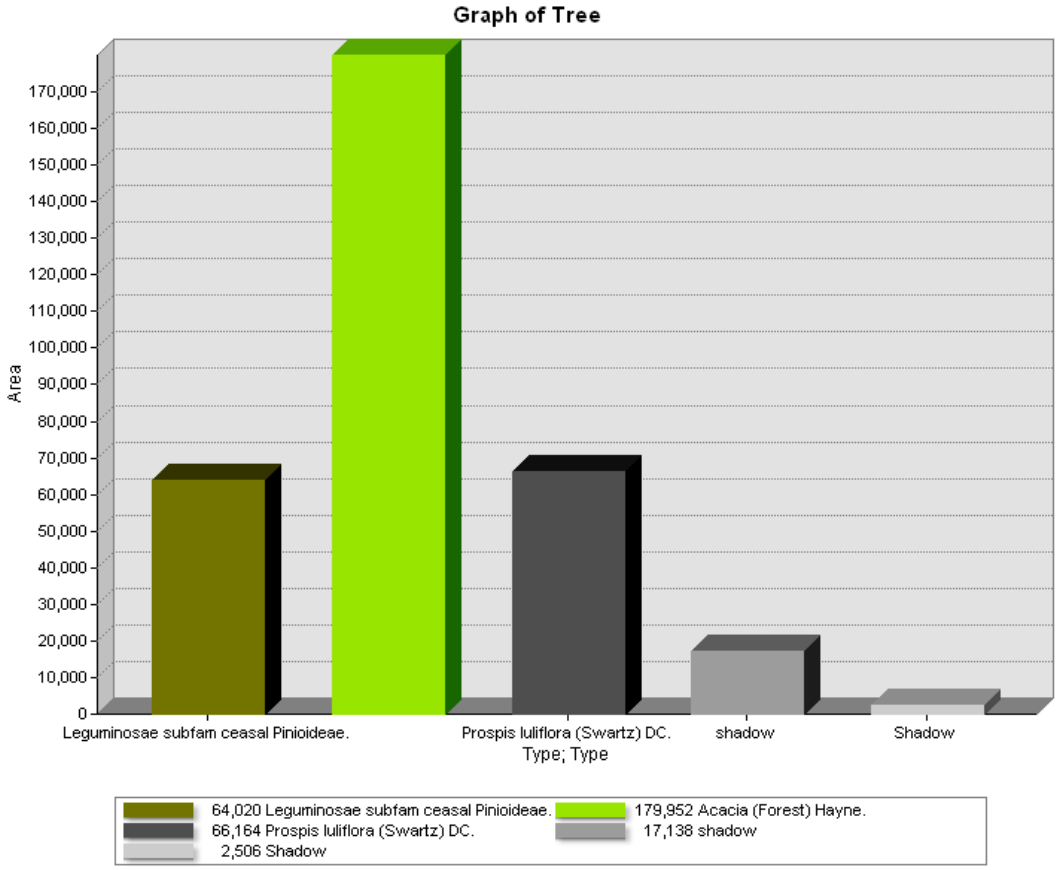
FID	Shape *	AREA	PERIMETER	POLYLINE_F	POLYLINE_1	Type
0	Polygon	76.190105	1138.80417	2	0	
1	Polygon	47.287137	360.317795	3	0	
2	Polygon	56928.969726	2865.414633	4	0	Water Games
3	Polygon	102265.084279	5534.403282	5	0	Open areas
4	Polygon	105048.138079	7916.3474	6	0	
5	Polygon	50265.063429	1005.305464	7	0	Animal park
6	Polygon	31021.433618	812.280002	8	0	services
7	Polygon	308.682596	2017.175191	9	0	
8	Polygon	2827.307941	188.493468	10	0	
9	Polygon	33882.991035	1037.662013	11	0	Park
10	Polygon	40673.401203	1111.433498	12	0	Restaurant
11	Polygon	64059.829748	1523.860374	13	0	Chaley
12	Polygon	8.298333	43.248535	14	0	
13	Polygon	6938.103866	1440.759814	15	0	
14	Polygon	38138.603958	1099.44418	16	0	Multi Perposes hall
15	Polygon	0.11245	9.024352	17	0	
16	Polygon	25.149646	187.991407	18	0	
17	Polygon	0.046356	4.819116	19	0	
18	Polygon	11.145792	101.977735	20	0	
19	Polygon	0.412151	18.128749	21	0	
20	Polygon	56.415745	447.657319	22	0	
21	Polygon	4.619712	70.360778	23	0	
22	Polygon	2.744578	54.311257	24	0	
23	Polygon	7.0975	144.611896	25	0	
24	Polygon	5654.6894	266.570886	26	0	Caffeteria
25	Polygon	71384.076151	1154.193213	27	0	VIP Chaley
26	Polygon	0.196579	9.48363	28	0	
27	Polygon	98.380379	580.959733	29	0	
28	Polygon	2827.307921	188.493468	30	0	
29	Polygon	7.924907	333.245413	31	0	

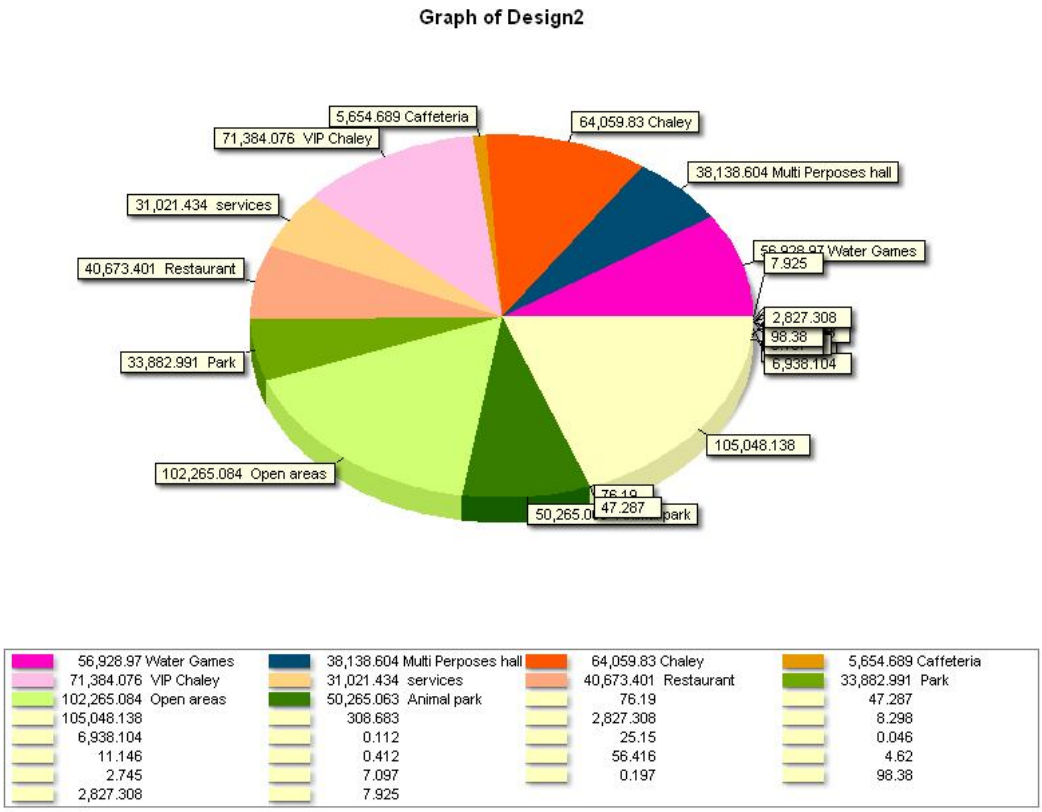
1 (0 out of 30 Selected)

Table (5.48) proposed design no.(2)

A graphs answers the different quires was obtained:




Graph of Tree
Area
170,000
160,000
150,000
140,000
130,000
120,000
110,000
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Leguminosae subfam ceasal Pinioideae.
Prospis luliflora (Swartz) DC.
shadow
Shadow
Type; Type
64,020 Leguminosae subfam ceasal Pinioideae.
179,952 Acacia (Forest) Hayne.
66,164 Prospis luliflora (Swartz) DC.
17,138 shadow
2,506 Shadow


Graph of Design2
5,654.689 Caffeteria
64,059.83 Chaley
71,384.076 VIP Chaley
38,138.604 Multi Perposes hall
31,021.434 services
40,673.401 Restaurant
7.925
2,827.308
98.38
6,938.104
33,882.991 Park
105,048.138
102,265.084 Open areas
47.287
56,928.97 Water Games
38,138.604 Multi Perposes hall
64,059.83 Chaley
5,654.689 Caffeteria
71,384.076 VIP Chaley
31,021.434 services
40,673.401 Restaurant
33,882.991 Park
102,265.084 Open areas
50,265.063 Animal park
76.19
47.287
105,048.138
308.683
2,827.308
8.298
6,938.104
0.112
25.15
0.046
11.146
0.412
56.416
4.62
2.745
7.097
0.197
98.38
2,827.308
7.925

All this can be displayed in the form of databases, maps and charts, and can be displayed digital maps form, and a report can be prepared for every information on hand..

Tree

Type	Area
Leguminosae subfam ceasal Pinioideae.	64020
Acacia (Forest) Hayne.	179952
Prospis Iuliflora (Swartz) DC.	66164
shadow	17138
Shadow	2506

Design2

Type	AREA
	76.190105
	47.287137
Water Games	56928.969726
Open areas	102265.084279
	105048.138079
Animal park	50265.063429
services	31021.433618
	308.682596
	2827.307941
Park	33882.991035
Restaurant	40673.401203
Chaley	64059.829748
	8.298333
	6938.103866
Mfulti Perposes hall	38138.603958
	0.11245
	25.149646
	0.046356
	11.145792
	0.412151
	56.415745
	4.619712
	2.744578
	7.0975
Caffeteria	5654.6894
VIP Chaley	71384.076151
	0.196579
	98.380379
	2827.307921
	7.924907