5630

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Photo
Topographic | *Sheet No.* T - 5630
~~Hydrographic~~

State Florida

LOCALITY

Biscayne Bay
Little River

~~1935 - 36~~
Date of photos January, 1935

CHIEF OF PARTY

E. R. McCarthy

U.S. GOVERNMENT PRINTING OFFICE: 1934

5630

Applied to chart 847- June 5, 1936 H.H.C.

Applied to chart 1248. Mar. 18, 1937 g. H. S.

Form 537a
Ed. Nov. 1929

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No.

REGISTER NO. T-5630.

State Florida.

General locality Biscayne Bay.

Locality Little River

Scale 1:10,000 Date of ~~survey~~ photographs January 25, 1935.

Vessel Field Party No. 14.

Chief of party E. R. McCarthy

Surveyed by See data sheet attached to the descriptive report

Inked by " " " " " " " "

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 17, 19 33

Remarks: Compiled from aerial photographs at a scale of 1:10,200 for reproduction by the photolithographic process at a scale of 1:10,000.

Blueprint, scale 1/10,200 registered 6/1/36

DATA SHEET

SHEET REGISTER NO. T - 5630

Portion of work	Done by	Date completed
Projection by	W. J. Mignola	May 8, 1935
Projection checked by	John C. Mathisson	May 8, 1935
Control plotted by	D. L. Thompson	May 21, 1935
Control checked by	T. H. Aldrich	May 22, 1935
Radial plot developed by	John C. Mathisson	June 5, 1935
Radial plot checked by	W. J. Mignola	June 7, 1935
Street systems compiled and inked by	M. B. Gill and H. H. Niemela	March 6, 1936
High water line and symbols compiled and inked by	John C. Mathisson	January 17, 1936
Contemporary Topographic sheets checked by	M. B. Gill	May 1, 1936

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Area of sheet: 15.1 square statute miles.

Length of shoreline: 42.4 statute miles.

Length of Rivers and Canals: 9.2 statute miles.

DESCRIPTIVE REPORT

to accompany

PHOTO-TOPOGRAPHIC SHEET

REGISTER NO. T-5630

LITTLE RIVER.

FLORIDA

1935 - 36

Scale 1:10,000

E. R. McCarthy, Chief of Party.

John C. Mathisson, In charge, photo unit.

PROJECT INFORMATION:

This sheet is one of eight sheets in the photo-compilation project on the East Coast of Florida between Fort Lauderdale and Cutler. General information regarding this project may be found in the General Descriptive Report which is attached to the report for Sheet Register No. T-5629. This report covers only specific information in regard to this sheet.

DESCRIPTION OF AREA:

The area of this sheet lies in the northern section of Biscayne Bay, centering over one of the three causeways across the bay. This causeway is the 79th Street Causeway which connects Miami and Miami Beach between Little River and Normandy Isle. Most of the area covered lies within the corporate limits of Miami and Miami Beach but in addition, Miami Shores Village and parts of North Miami and Surfside are also shown. Little River is a suburban district of Miami.

There are no industries of any importance within the limits of this sheet, The entire area is given over to residential sections, golf and beach clubs, etc. The waterways in the Miami Beach area are lined with expensive homes and apartments while those across the bay in the Miami area are not so pretentious. During the past year, and at present, many new homes have been built in the northern area of Miami Beach and Surfside.

There is little or no cultivation in the area of this sheet. A few open areas exsist which are usually covered with a thich growth of palmetto and second growth pine.

It is believed that the areas adjacent to the bay on both sides were, at one time, a thick growth of mangrove. The area on the Miami Beach side has been filled into islands with the spoil from the water area of the bay. Likewise most of the area on the Miami or west side of the bay has been filled but a few areas of mangrove remain. These areas will no doubt be filled in the near future.

GENERAL INFORMATION:

The area of this sheet is covered by two flights of five lense photographs. These flights contain photographs numbers 55 to 70 secured at 1:00 P. M. on January 25, 1935 and numbers 171 to 184, secured at 12:30 P. M. on the same date. The first flight roughly parallels the ocean beach while the latter roughly parallels the high water line of the west side of the bay. An index of photographs is appended to the General Descriptive Report of the area.

The Intracoastal Waterway as it appears on this sheets was obtained from the photographs. The channel appeared very clear on the photographs. The beacons along the waterway were transferred from the graphic control sheets of the area. (Register Nos. 6297a and 6297b) The recoverable topographic stations were also transferred from these sheets and shown on the compilation.

There are three wrecked barges shown on the sheet. The large one near the north neat line is prominent. All three are above water at high tide.

The name on the street systems are not shown on the name sheet. This area, except Surfside, is covered by city maps previously transmitted. A map of the area of Surfside is being transmitted with the sheet.

The bridge over Arch Creek on the road paralleling the railroad is a natural bridge and is so shown on the name sheet.

The area being a thickly settled residential district only the buildings adjacent to the water area have been shown. In this area all of the exsisting buildings have been charted.

An error was noted in the scaled position of Beacon 45 in the descriptive report for Sheet Field Letter EE.(Register No. 6297b) The plotting distance for the longitude is shown as 636 meters but the correct distance is 336 meters.

The data as to span and clearance of the various bridges shown on this sheet was obtained from the graphic control sheet of the area. (Register Nos. 6297a and 6297b)

All topographic detail appearing on this compilation was obtained from the photographs. The detail shown on the contemporary graphic control sheets was used to check the delineation. Differences are discussed under Comparison With Previous Surveys.

All of the first order bench mark within the limits of this sheet have been located by radial intersection and shown. Three bench marks on ~~Indian Creek Golf Club Island~~ were transferred from the graphic control sheet of the area. ~~—~~at 25° 52.5 / 80° 08.5'

A majority of the high water line in the waterways and the bay were at one time, or are at present, lined with wooden or concrete bulkheads. The wooden bulkheads on the west side of the bay and in the Miami Beach area in the vicinity of Normany Isle and northward have largely deteriorated and allowed water action ~~the~~ to wash away part of the fill. In such places the old bulkhead has been shown by a broken line on the compilation.

CONTROL:

A discussion of the control used in the compilation of this project is contained in the General Descriptive Report of the area.

There is appended to this report a list of the triangulation stations used in the compilation. All of these stations were identified on the photographs. The list shows the plotting distances used for the scale of the compilation, 1:10,200.

INTERPRETATION OF PHOTOGRAPHS:

No difficulty was experienced in the interpretation of the photographs after a visit to the field. As a whole, the photographs were clear and adequate for charting purposes.

The very definite high water line in most of the bay area, occasioned by the presence of wood and concrete bulkheads, made this feature easy to delineate. However, difficulty was experienced in obtaining the correct location of the high water line along the sand beach of the ocean high water line. In order to obtain this detail, off-set distances from well defined objects to the high water line were measured about every half mile and the high water line obtained from the photographs with the aid of these definite points.

COMPILATION METHODS:

The usual radial line method was used in the compilation of this sheet.

Due to the two flights of photographs over-lapping in the water area, the usual difficulty in obtaining common points was not encountered. The two flights were used to run separate radial plots, however, common points were used along the causeway and on some of the spoil areas. The agreement between points on the spoil areas was not satisfactory because the areas appeared white on the photographs and definite points were difficult to pick. The locations obtain from the western flight were used to delineate these features.

INFORMATION FROM OTHER SOURCES:

All of the topographic information appaaring on this sheet, except the locations of the beacons and the three bench marks ~~on Indian Creek Golf Club Island,~~ at 25° 52.5'/80° 08.5' was obtain from the photographs.

The city map of Miami, Miami Beach and Surfside were used to obtain the street names.

The U. S. Engineer's were consulted in regards to the names of certain geographic features.

The span and clearance of the bridges shown on the sheet were obtained from the contemporary graphic control sheet of the area, Sheet Register No. 6297a and 6297b.

COMPARISON WITH CONTEMPORARY SURVEYS:

Contemporary surveys covering the area of this sheet are shown on graphic control sheets Register Nos. 6297a and 6297b. These sheets only show a slight amount of topography but the compilation has been compared with that shown.

(1) Errors in delineation was noted in the east one of the two channels east of Biscayne Point and ~~the~~ northeast of the bridge leading to Normandy Isle. These errors are small but attention is called to them in this report as a matter of record. The delineation as shown on the compilation has been verified. These differences are short and range from 0.2 to 1.0 mm.

(2) The check on the delineation of the spoil banks between the two surveys shows very good agreement. The former survey shows several banks connected where they have been shown together on the compilation. The compilation is believed to be correct. At the Bird Key Islands T-6297a shows an island where a clump of mangrove trees in the water is shown on this compilation.

(3) The graphic control sheet shows a bulge in the south shoreline of Little River just west of Topographic Signal ERT. The delineation as shown on the compilation has been verified.

The graphic control sheet carries the following note in regard to triangulation station Point, 1918: "Point, 1928 Recovered in 1934 in an unstable condition. Not sure of position". The position used in the compilation of this sheet is from the triangulation of J. Bowie executed during 1934 which was not available, apparently, when the topographic survey was made.

The privately maintained beacons on the edge of the dredged area on the east side of the bay were transferred from the graphic control sheet and shown on the compilation.

COMPARISON WITH PREVIOUS SURVEYS:

The area of this sheet is covered by previous air photo compilations made during 1928. The sheets covering the area are Register Nos., 4528 and 4529.

An error is noted in the plotting of several triangulation stations on the 1928 compilation. The stations are plotted about ten meters north of the positions that they assume on the present compilation. The error in the 1928 triangulation is believed responsible for this condition.

As a whole, the street systems check very well between the two surveys. A few additional streets are noted and some streets that were shown on the 1928 survey do not appear on this compilation. In addition several rock pits not shown on the older compilation are charted on the new one.

~~An error is~~ Differences are noted in the delineation of the high water line in the following localities:

1 Near the south neat line on the west side of the bay.

2 The shoreline on the west side of the bay to the north and south of the 79th Street Causeway.

3 The south part of Normandy Isle.

4 The delineation of Little River between the Biscayne Blvd. bridge and N. E. 2nd Ave., bridge.

5 The delineation of Biscayne Point.

Two and three are believed due to improvements made in the area since the original compilation while one, four and five are believed due to faulty compilation in the former survey.

The improvement of the Intracoastal Waterway in the area of the sheet has caused spoil bank to be deposited in the bay area. These were, of course, placed after the photographs for the original compilation were taken.

The delineation of the high water line shows fair agreement between the two sheets. A series of groins along the ocean beach which appear on just north of the south neat line on the 1928 survey were not charted ~~of~~ the present compilation. These groins have caused the beach to fill in since they have been constructed and are not visible on the ground at the present time.

It is noted that a tower is shown on the beach at Surfside Park on the old compilation. There is no tower in the locality at the present time and this object should not be shown on future edition of the published chart as a landmark.

LANDMARKS:

Landmarks for Charts for the area of this sheet were submitted on Sept., 17, 1935. A duplicate copy of this list is attached to the descriptive report for Sheet Register No., T-5629.

CONFLICTING NAMES:

Miami Shores appears on the present edition of the published chart where the town of North Miami is now located. Miami Shores is a defunct city and is no longer in exsistance. Miami Shores Village is located about two miles south of North Miami but it has no connection with the former settlement of Miami Shores. (Above Names have not been approved for this area except North Miami).

The large island at the east end of the 79th Street Causeway is called Normandy Beach on the present chart of the area. The name in local use is Normandy Isle and the name used by the real estate people of the locality is Isle of Normandy. It is recommended that Normandy Isle be used on future editions of the published chart.

Atlantic Heights, appearing on the beach east of Normandy Isle, is one of several small real estate sub-divisions in this area. It is believed that this name should not be given the prominence it now has on future editions of published charts. Surfside, to the north, should replace this for prominence.

BENCHMARKS:

All of the first order benchmarks along the Florida East Coast Railway have been located by radial intersection and are shown on the compilation. Benchmarks are shown with a circle. This symbol is the only one which is not standard on this compilation.

RECOMMENDATION FOR FURTHER SURVEYS:

It is believed that this compilation covers the area adequately and that further surveys are not needed at the present time. It is also believed that the desired accuracy has been maintained in the compilation of this sheet. The accuracy of location is estimated to be from 0.3 to 0.5 mm for intersected points and from 0.3 to 0.8 mm for points between intersections. Lacc. 5/28/36.

John C. Mathisson.
John C. Mathisson,
Jr. H. & G. E.,
U. S. Coast and Geodetic Survey.

May 1, 1936.

Field inspection at various times up to completion of the compilation

TABLE OF TRIANGULATION CONTROL

STATION	Corr. to N.A. 1927	POSITION (North American Datum)			PLOTTING DISTANCES	
Cupola, Surf Club, 1934		Lat.	25° 52'	1171.3 (674.9)	1148.3 (661.7)	
		Long.	80° 07'	485.2 (1185.2)	475.7 (1162.0)	
Club, 1934		Lat.	25° 52'	975.5 (870.8)	956.4 (853.7)	
		Long.	80° 08'	841.0 (829.4)	824.5 (813.1)	
Point, 1918	-20.4	Lat.	25° 52'	427.8 (1418.6)	419.4 (1390.8)	
	-11.0	Long.	80° 09'	1581.4 (89.1)	1550.4 (87.4)	
Note (North Twin Tower Deauville), 1928		Lat.	25° 51'	85.1 (1761.1)	83.4 (1726.6)	
		Long.	80° 07'	340.8 (1329.9)	334.1 (1303.8)	
Soto (South Twin Tower Deauville), 1928		Lat.	25° 50'	1845.3 (1.0)	1809.1 (1.0)	
		Long.	80° 07'	338.2 (1332.5)	331.6 (1306.4)	
Little River Water tank 1934 Water Tank, Little River, 1934	-20.8	Lat.	25° 50'	1627.7 (218.5)	1595.8 (214.2)	
	-13	Long.	80° 11'	837.4 (833.4)	821.0 (817.1)	
Causeway, 1934		Lat.	25° 50'	1613.0 (233.2)	1581.4 (228.6)	
		Long.	80° 10'	638.4 (1032.4)	625.9 (1012.2)	
Deau, 1934	-20.4	Lat.	25° 50'	1286.4 (560.6)	1261.2 (549.6)	
	-11.0	Long.	80° 07'	375.9 (1295.1)	368.5 (1269.7)	
Gulf Stream Apt's, 1934		Lat.	25° 50'	1101.3 (744.9)	1079.7 (730.3)	
		Long.	80° 07'	397.5 (1273.5)	389.7 (1248.5)	
Cross, St. Francis Hospital, 1934		Lat.	25° 50'	1077.6 (768.6)	1056.5 (753.5)	
		Long.	80° 07'	704.7 (966.3)	690.9 (947.3)	
Tower, Square, 1934		Lat.	25° 49'	1105.0 (741.2)	1083.3 (726.7)	
		Long.	80° 08'	35.1 (1635.9)	34.4 (1603.8)	

	Remarks	Decisions
1		
2		
3	(town)	
4	(river)	
5		
6		
7		
8	too cumbersome, and no authority can be found; no local map says "La Gorce Golf Club"	no proper name; ignore the area as "golf course"
9		
10		
11		
12	called "Isle of Normandy" in some local maps	Normandy Isle
13		
14	no hard and fast rule about the Fr. fem. article; but as already printed as two words, continued so	La Gorce
15		
16		
17		
18		
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22		
23		
24		
25		
26		
27		

M 234

GEOGRAPHIC NAMES

Survey No. T-5630-

Name on Survey	A On Chart No. 1247	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps 1247 1583	F P. O. Guide or Map	G Rand McNally Atlas	H T-5630 U.S. Light List	K 1516	
~~North Miami~~										1
~~Miami Shores~~										2
Little River	*				✓					3
Little River.	*				✓					4
Miami	*			—	—					5
Biscayne Bay.	*			—	—					6
Bird Key.	*				—					7
~~Indian Creek Golf Club Island~~										8
Indian Creek	*			—	—					9
Surfside				—				*		10
Biscayne Point	*			—	—					11
Normandy Isle				✓				*		12
Miami Beach.				—						13
LaGorce Island	*			—	—					14
Allison Island	*			—						15
Biscayne Waterway				—	*					16
Biscayne Canal.	*			—	—					17
Intracoastal Waterway									*	18
Little River Canal	*			—	—					19
Biscayne Point	*			—	—					20
North Miami				✓		✓		*		21
										22
										23
										24
										25
										26
										27

Names underlined in red approved by [illegible] on 7/25/36

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+ along the north and east side of the island at 25°-57.5', 80°-07.6' T-6297b shows piling and no shoreline. This piling is not shown on T-5630 as it coincides with the M.H.W.L. apparently forming a bulkhead.

REVIEW OF AIR PHOTO COMPILATION T 5630 (1935)
Scale 1:10,000

On account of the demand for the completion of this compilation at the earliest time the verification and review of this compilation were made in this office before the photographs of this area were received. This compilation has been carefully compiled and no large differences were noted in the comparison with the contempoary graphic control surveys which cover this area.

Comparison with Graphic Control Surveys

T 6297a, T 6297b (Dec. 1934, Jan. 1935), 1:10,000 (Photos taken January 25, 1935.)

See page 4 of the preceding descriptive report T 5630 for comparison between T 6297a, T 6297b and this compilation and the list of differences.

The following details have been transferred from T 6297a, T 6297b to this compilation in this office by L. A. McGann; checked by R. M. Berry, May 27, 1936.
R.M.Berry

(1) All U.S.E. stations (recoverable) within common area.

(2) Undescribed recoverable topographic stations

Water Tower	25°	50.2'	80°	10.8'
Flagpole	25	50.4	80	10.5
Tower	25	49.2	80	08.2
Stack	25	49.4	80	07.9
Monument	25	51.3	80	07.7
Green Tower	25	52.2	80	07.2
Flagpole	25	49.5	80	08.4
Tower	25	50.3	80	07.4
Flagpole	25	50.8	80	07.5
Tallest Tower	25	52.6	80	07.8

BM "1" and BM "2" at the western end of 79th St. Causeway

(3) Piles located at 25° 49.5', 80° 07.5'.
* See opposite page

All details on T 6297a, T 6297b within this area are now shown on the compilation except

(1) Non-recoverable plane table positions and the magnetic declinations,
(2) Undescribed recoverable plane table stations except those mentioned under paragraph (2) above. Due to the density of recoverable stations in this area all of these stations have not been transferred.

All described stations are filed under the survey numbers T 6297a and T 6297b.

Comparison with Previous Topographic Surveys

T 1049 (1867), 1:20,000 - The survey T 1049 covers the coast of Florida and Biscayne Bay from latitude 25° 45' to 25° 53'. The changes of topography have been large over the common area where T 1049 is superseded by this compilation.

T 3375 (1913), 1:20,000 - Survey T 3375 covers the outer coastline only from lat. 25° 40' to lat. 25° 50'. T 3375 is superseded by this compilation over the common area.

T 3758 (1919), 1:20,000 - The survey T 3758 covers Biscayne Bay and the coast of Florida from latitude 25° 42' to lat. 25° 56' except the area covered by Miami and Miami Beach. The most prominent changes are those resulting from the rapid growth and development of this area since the time of survey T 3758. Changes have been very large over the entire common area. T 3758 is superseded by this compilation over this area.

T 4528, T 4529 (1927), 1:20,000 - Air photo compilations. See pages 4 and 5 of descriptive report, T 5630, for a detailed comparison of this compilation with T 4528 and T 4529. There have been no large changes here since 1927.

The tower shown on T 4528 at 25° 51.4', 80° 07.2' is no longer in existence. This compilation is detailed and adequate to supersede those portions of T 4528 and T 4529 which it covers.

Comparison with New Hydrographic Surveys

H 5779 (1935), 1:10,000 - There are no conflicts between hydrography and this compilation.

Comparison with Charts Nos. 583, 1248, 3260

The beacons in the Intracoastal Waterway through Biscayne Bay have been moved since the last edition of charts 583, 1248 and 3260.

The list of landmarks for this compilation is contained in chart letter 443 (1935). The landmark TOWER shown on charts 583 and 1248 at 25° 51.4', 80° 07.2' is no longer in existence.

The delineation of Normandy Isle is incorrectly shown on the present editions of the charts.

The correct name of the railroad which traverses the compilation is Florida East Coast Railway (F.E.C.Ry.). This is shown as F.E.C.R.R. on the charts.

May 29, 1936.

Leonard A. McGann

Frank G. Erskine

REVIEW OF AIR PHOTO COMPILATION NO. T-5630

Chief of Party: E. R. McCarthy Compiled by: See data sheet.

Project: Fort Lauderdale to Cutler, Fla. Instructions dated: Nov., 17, 1933

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)

2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)

3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)
Graphic control surveys T-6297a, T-6297b (1935) 1/10,000 cover this area.

4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)
None transmitted. Various blueprints of Miami and vicinity are filed in the library however.

5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.

6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)
High water line on sand beach was obtained by means of off-set distances to the high water line from well defined objects off-sets measured about every ½ mile along beach.
Faun.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs." M-87

8. The representation of low water lines, ~~reefs, coral reefs and~~ rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)

9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)
Described stations are filed under survey numbers T-6297a, T-6297b.

10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)
See Chart letter 443 (1935.) for landmarks and aids to navigation.

11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)

12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)

13. The geographic datum of the compilation is North American and the reference station is correctly noted.

14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) OK.

15. The drafting is satisfactory and particular attention has been given the following:

    1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.

    2. The degrees and minutes of Latitude and Longitude are correctly marked.

3. All station points are exactly marked by fine black dots.

4. Closely spaced lines are drawn sharp and clear for printing.

5. Topographic symbols for similar features are of uniform weight.

6. All drawing has been retouched where partially rubbed off.

7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time.

17. Remarks:

18. Examined and approved;

E. R. McCarthy
E. R. McCarthy
Chief of Party

19. Remarks after review in office:

Reviewed in office by: Leonard A. McNamee May 29, 1936
Frank G. Erskine

Examained and approved:

C. K. Green.
Chief, Section of Field Records

Fred. L. Peacock
Chief, Section of Field Work

L. O. Colbert
Chief, Division of Charts

Chief, Division of Hydrography and Topography.