(1) A NEWSPAPER PHOTOCOPY PICTURE. (1) F=0 (PE NOV 19/80).
(2) B

TORNADO PROJECT SUMMARY SHEET (2) F=0 ONT

1. DATE AND TIME 25. MAY 1970 (1) 1730 EDT (2) 1830 EDT
2. LOCATION OR PATH (attach map) (1) TOUCHDOWN IN SEBRINGVILLE 06970-1
(2) RICHMOND HILL 06970-2
3. PATH LENGTH ☐ NOT KNOWN (2) ☑ <1 mi; ☐ 1-4mi; (1) ☑ 14 KM 5-10mi; ☐ 11-50mi; ☐ LENGTH IF>50mi
4. PATH WIDTH NOT KNOWN 5. TORNADO PART OF SQUALL LINE? ☐ YES; ☐ NO; ☑ UNKNOWN:
6. ANY UNUSUAL COLORATION? ☐ YES; ☐ NO; ☑ UNKNOWN
7. ANY UNUSUAL SOUND? ☑ YES; ☐ NO; ☐ UNKNOWN
8. IF ANSWER TO 6 OR 7 YES, ELABORATE; (2) THE WIND STARTED TO ROAR
9. LIST ANY ASSOCIATED PHENOMENA (Such as hail, vivid lightning heavy rain, no rain, etc.) HEAVY RAIN
10. TOTAL DAMAGE ESTIMATE $ (1) UNKNOWN (2) $100,000 11. TOTAL DEATHS NONE
12. TOTAL INJURED NONE 13. TOTAL HOMELESS NONE
14. LIST ALL REFERENCES BEACON HERALD, STRATFORD 26.5.1970
UNKNOWN TORONTO PAPER, 26.5.1970
MRS WILLIAM LETSA (519).393-6294.
(1) Telephone Interviews NOV 19, 1980 by P J Elms
(2) Telephone Interviews OCT 1978 by M.J. Newark
15. SUMMARIZE REMARKS PERTAINING TO (a) FUNNEL; (b) INTERESTING OR CAPRICIOUS EVENTS.

1a Funnel observed by Bernard Mieren passing over a bush, located to the NNW of his vantage point.

1(b) unroofed barns, uprooted trees, one of which fell across a tractor, felled 15 ft brick chimney of a Perth county municipal building making a large hole in the roof below.

2(a) The wind started to roar in.... across the field a white mist was coming. The crop looked like a tidal bore rolling in..... we looked speechless as a beautiful living tree about 60 feet tall, was toppled over just as you would knock over an empty plastic bottle, easily and gently... The tomato plants on the west side of the house were undamaged.

(b) Garage building lifted and thrown into a nearby industrial building. Glass blown out. Signs twisted.

WORKSHEET

IDTO 0697001

(1) ORIGIN x 1748500

y 4803300

(2) LIFT-OFF x_1 1750230

y_1 4807600

(3) $(x_1 - x)$ = 12800

(4) $(y - y_1)$ = 4300

(5) Standard Error S_x 200 C

(6) Standard Error S_y 30 C

(7) DAMAGE LENGTH

$$L = [(x_1 - x)^2 + (y - y_1)^2]^{1/2}$$

(3)+(4) $\boxed{\rightarrow r,\theta}$ = 13503 m

(8) $\alpha = \tan^{-1} \dfrac{|y - y_1|}{|x - x_1|}$

$\boxed{x \leftrightarrow y}$ = 19°

(9) Standard Error $S_L = (S_x^2 + S_y^2)^{1/2}$

(5)+(6) $\boxed{\rightarrow r,\theta}$ = 202 m C

(10) $\beta = \dfrac{\tan^{-1} S_L}{L}$

(7)+(9) $\boxed{\rightarrow r,\theta}$

$\boxed{x \leftrightarrow y}$ = 1°

NE Quad $\phi = 90 - \alpha$

NW Quad $\phi = 270 + \alpha$

SW quad $\phi = 270 - \alpha$

SE quad $\phi = 90 + \alpha$

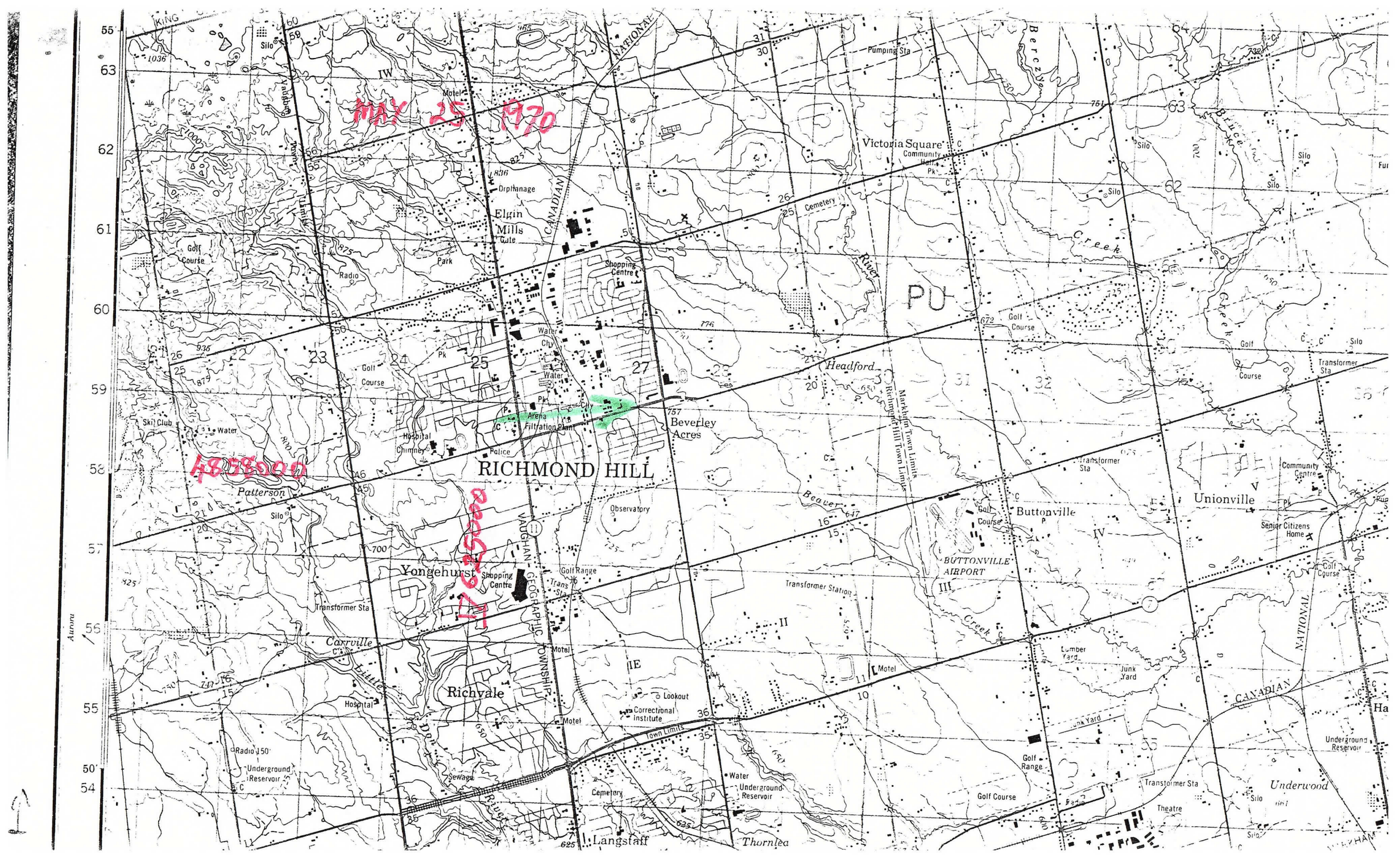
(11) ϕ = 251°


GEORGIAN BAY ISLANDS NAT'L PARK
PARK SEASON
early May • late Oct.
NO FOOD OR LODGING
PARK OPEN ALL YEAR
MAIN SEASON
early April • late Oct.
NO FOOD OR LODGING
LAKE HURON
580 FT ABOVE SEA LEVEL
LAKE ERIE
573 FT ABOVE SEA LEVEL
CENTRAL STANDARD TIME | EASTERN STANDARD TIME
CANADA
UNITED STATES
FERRY STEAMER (SUMMER ONLY)
SUDBURY
Copper Cliff
Creighton Mine
Espanola
Sturgeon Falls
Parry Sound
Little Current
Manitoulin I
Blind River
Thessalon
Tobermory
Wiarton
OWEN SOUND
Collingwood
BARRIE
Penetanguishene
Midland
Kincardine
Goderich
Clinton
Exeter
Mitchell
Sebringville
STRATFORD
WATERLOO
KITCHENER
GUELPH
GALT
BRANTFORD
WOODSTOCK
LONDON
ST THOMAS
Tillsonburg
Simcoe
Port Dover
SARNIA
PORT HURON
DETROIT
WINDSOR
CHATHAM
Leamington
Amherstburg
PONTIAC
FLINT
MONROE
Harbor Beach
Bad Axe
Sandusky
Lapeer
ERIE
North East
Conneaut
PORT ARTHUR
FT WILLIAM
TIMMINS
KIRKLAND LAKE
SAULT STE MARIE
SUDBURY
NORTH BAY
MARQUETTE
ESCANABA
Wawa
Hearst
Kapuskasing
Cochrane
Tip Top Mtn El 2120
Highest Point in Ontario
Isle Royale Nat Pk (Mich)
ONT
MICH
OHIO
N
2
3
4
5
6
83°00'
82°00'
81°00'
80°00'
656047-5

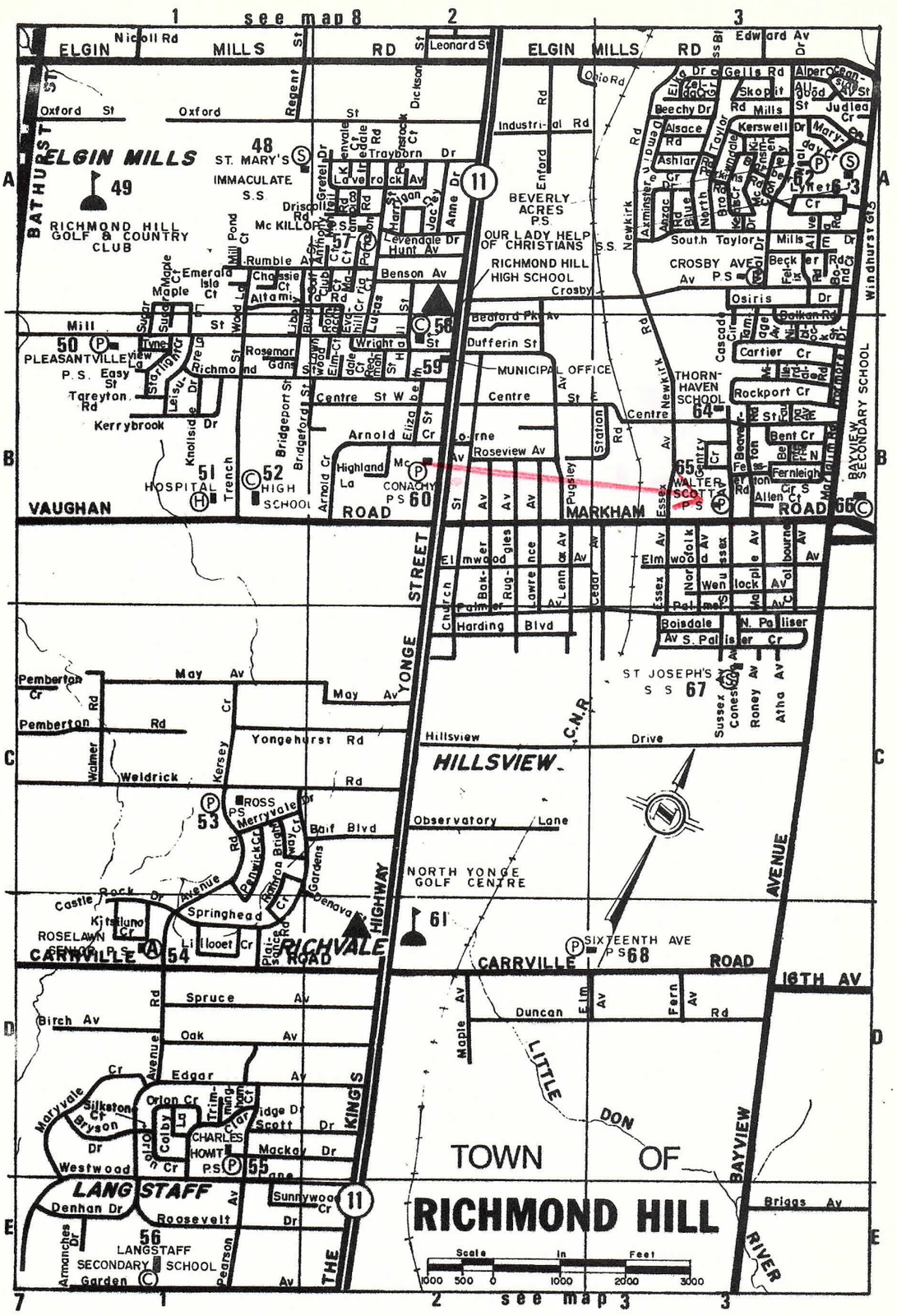
Phone conversation with Mrs William Leasa. (519) 393-6294, regarding the tornado of May 25 1970.

A neighbours boy, Bernard Mienen, saw the funnel of the tornado over a bush just to the southwest of William Leasa's farm. It seemed to be "skipping". This fact is apparent from the intermittent damage along the 14 Km track.

Mrs Leasa said trees were snapped off, but some of them were rotten.


RICHMOND HILL
Yongehurst
Richvale
Langstaff
Thornlea
Elgin Mills
Victoria Square
Community Hall
Headford
Beverley Acres
Buttonville
Unionville
Underwood
Patterson
Carrville
Observatory
Arena
Filtration Plant
Shopping Centre
Golf Course
Golf Range
Hospital
Police
Cemetery
Orphanage
Pumping Sta
Transformer Sta
Transformer Station
Community Centre
Senior Citizens Home
Lumber Yard
Junk Yard
Theatre
Underground Reservoir
Correctional Institute
Lookout
Sewage
Water
Motel
Skil Club
Radio
Park
Pk
Cem
Silo
BUTTONVILLE AIRPORT
Markham Town Limits
Richmond Hill Town Limits
Town Limits
VAUGHAN - GEOGRAPHIC TOWNSHIP
CANADIAN NATIONAL
Berczy
Bruce
Creek
River
Aurora
KING
MAY 25 '70
458000
4576000
PU
IW
IE
II
III
IV
V


10-25 000 DUNKIRK
100 000 and over LONDON
Scale: 5 10 20 30 miles
SEE CONTENTS PAGE FOR SYMBOL LEGEND
NORTH BAY
PEMBROKE
ALGONQUIN PROVINCIAL PARK
Lake Nipissing
Lake Temagami
Lake Timiskaming
Lake Abitibi
Lake Nipigon
Lake Superior
Lake Huron
Georgian Bay
Lake Simcoe
Lake Ontario
247 FT ABOVE SEA LEVEL
Lake Erie
Lake Michigan
Lake Champlain
Lake George
Lake Memphremagog
Lake Winnipeg
Lake of the Woods
Lake Manitoba
Lake Winnipegosis
Lake Athabasca
Great Slave Lake
Great Bear Lake
Lake Athabasca
Lake Claire
Lake Mistassini
Lake Nipissing
Lake Temiskaming
Lake Abitibi
Lake Nipigon
Lake Superior
Lake Huron
Georgian Bay
Lake Simcoe
Lake Ontario
Lake Erie
Lake Michigan
Lake Champlain
Lake George
Lake Memphremagog
Lake Winnipeg
Lake of the Woods
Lake Manitoba
Lake Winnipegosis
Lake Athabasca
Great Slave Lake
Great Bear Lake
OTTAWA
HULL
KINGSTON
BELLEVILLE
TRENTON
PETERBOROUGH
LINDSAY
OSHAWA
TORONTO
MIMICO
NEW TORONTO
LONG BRANCH
Port Credit
Lakeview
Clarkson
Oakville
Burlington
Hamilton
St Catharines
Niagara Falls
Welland
Port Colborne
Fort Erie
Buffalo
Rochester
Syracuse
Utica
Albany
Schenectady
Troy
Saratoga
Plattsburgh
Burlington
Montpelier
Barre
Rutland
Bennington
Brattleboro
Keene
Concord
Manchester
Nashua
Portsmouth
Boston
Worcester
Springfield
Hartford
New Haven
Bridgeport
Stamford
New York
Newark
Trenton
Philadelphia
Wilmington
Baltimore
Washington
Richmond
Norfolk
Raleigh
Charleston
Columbia
Atlanta
Birmingham
Montgomery
Mobile
New Orleans
Jackson
Memphis
Nashville
Louisville
Cincinnati
Indianapolis
Chicago
Milwaukee
Madison
Minneapolis
St Paul
Duluth
Fargo
Bismarck
Billings
Helena
Butte
Missoula
Spokane
Seattle
Portland
San Francisco
Los Angeles
San Diego
Phoenix
Albuquerque
Santa Fe
Denver
Cheyenne
Omaha
Kansas City
St Louis
Oklahoma City
Dallas
Houston
San Antonio
El Paso
Salt Lake City
Boise
Reno
Las Vegas
Sacramento
Fresno
Bakersfield
Tucson
Flagstaff
Grand Canyon
Yellowstone
Glacier
Rocky Mountains
Appalachian Mountains
Adirondack Mountains
Green Mountains
White Mountains
Catskill Mountains
Poconos
Alleghenies
Blue Ridge
Great Smoky Mountains
Ozarks
Black Hills
Badlands
Grand Tetons
Sierra Nevada
Cascade Range
Coast Range
Mojave Desert
Death Valley
Great Salt Lake
Great Basin
Colorado River
Columbia River
Snake River
Missouri River
Mississippi River
Ohio River
Tennessee River
Arkansas River
Rio Grande
Gulf of Mexico
Gulf of California
Pacific Ocean
Atlantic Ocean
Hudson Bay
James Bay
Baffin Island
Ellesmere Island
Greenland
Iceland
Alaska
Yukon Territory
Northwest Territories
Nunavut
Labrador
Newfoundland
Nova Scotia
New Brunswick
Prince Edward Island
Quebec
Ontario
Manitoba
Saskatchewan
Alberta
British Columbia
ST. LAWRENCE ISLANDS NAT'L PARKS (THOUSAND ISLANDS) MAIN SEASON early June - late Oct.
MASSENA TOLL BR. CAR & PASS $1.00
CORNWALL TOLL BR.
OGDENSBURG
BROCKVILLE
PRESCOTT
WATERTOWN
ALEXANDRIA BAY
GANANOQUE
SMITHS FALLS
PERTH
ALMONTE
CARLETON PLACE
RENFREW
PEMBROKE
HUNTSVILLE
BRACEBRIDGE
GRAVENHURST
ORILLIA
BARRIE
COBOURG
PORT HOPE
NEWCASTLE
BOWMANVILLE
AJAX
PICKERING
MARKHAM
RICHMOND HILL
VAUGHAN
BRAMPTON
MISSISSAUGA
OAKVILLE
MILTON
GEORGETOWN
ACTON
GUELPH
KITCHENER
WATERLOO
CAMBRIDGE
BRANTFORD
PARIS
WOODSTOCK
INGERSOLL
TILLSONBURG
SIMCOE
DELHI
TURKEY POINT
PORT DOVER
PORT ROWAN
LONG POINT
PORT STANLEY
ST THOMAS
AYLMER
LEAMINGTON
WINDSOR
TECUMSEH
LASALLE
AMHERSTBURG
KINGSVILLE
WHEATLEY
CHATHAM
DRESDEN
WALLACEBURG
SARNIA
PETROLIA
OIL SPRINGS
FORT ERIE
PORT COLBORNE
WELLAND
NIAGARA FALLS
ST CATHARINES
GRIMSBY
HAMILTON
DUNDAS
ANCASTER
BRANTFORD
PARIS
WOODSTOCK
INGERSOLL
TILLSONBURG
SIMCOE
DELHI
TURKEY POINT
PORT DOVER
PORT ROWAN
LONG POINT
PORT STANLEY
ST THOMAS
AYLMER
LEAMINGTON
WINDSOR
TECUMSEH
LASALLE
AMHERSTBURG
KINGSVILLE
WHEATLEY
CHATHAM
DRESDEN
WALLACEBURG
SARNIA
PETROLIA
OIL SPRINGS
FORT ERIE
PORT COLBORNE
WELLAND
NIAGARA FALLS
ST CATHARINES
GRIMSBY
HAMILTON
DUNDAS
ANCASTER


see map 8
ELGIN MILLS RD
Nicoll Rd
Leonard St
Edward Av
Oxford St
Regent St
Dickson St
BATHURST ST
ELGIN MILLS
48 ST. MARY'S IMMACULATE S.S
49
RICHMOND HILL GOLF & COUNTRY CLUB
Industrial Rd
BEVERLY ACRES PS
OUR LADY HELP OF CHRISTIANS S.S.
RICHMOND HILL HIGH SCHOOL
Crosby
CROSBY AVE PS
Ohio Rd
Gells Rd
Skopit Rd
Mills
Kerswell Dr
Ashlar Cr
Axminster Rd
Newkirk Rd
South Taylor Mills
Osiris Dr
Cartier Cr
Rockport Cr
Bent Cr
Fernleigh Cr S
Allen Cr
Windhurst Gts
BAYVIEW SECONDARY SCHOOL
Mill St
50 PLEASANTVILLE P.S.
Easy St
Tareyton Rd
Kerrybrook Dr
Rosemar Gdns
Richmond St
Wright Cr
Beaford Pk Av
Dufferin St
MUNICIPAL OFFICE
Centre St W
Centre St E
THORNHAVEN SCHOOL
64
Arnold Cr
Roseview Av
Highland La
McConachy PS 60
51 HOSPITAL
52 HIGH SCHOOL
VAUGHAN ROAD
MARKHAM ROAD
65 WALTER SCOTT PS
66
YONGE STREET
Elmwood Av
Harding Blvd
Palmer Av
Norfolk Av
Essex Av
Wenlock Av
Boisdale Av
N. Palliser
S. Palliser Cr
ST JOSEPH'S S S 67
Pemberton Cr
Pemberton Rd
May Av
Yongehurst Rd
Hillsview Drive
C.N.R.
HILLSVIEW
Weldrick Rd
53 ROSS PS
Merryvale Dr
Bair Blvd
Observatory Lane
NORTH YONGE GOLF CENTRE
HIGHWAY 7
Castle Rock Dr
Springhead Cr
Kitsilano Cr
Lillooet Cr
ROSELAWN CRESCENT PS
54
RICHVALE
CARRVILLE ROAD
61
SIXTEENTH AVE PS 68
16TH AV
Spruce Av
Birch Av
Oak Av
Edgar Av
Duncan Av
Elm Av
Fern Av
Maple Av
LITTLE DON
Silkstone Cr
Bryson Dr
Orion Cr
Colby Cr
CHARLES H. MACKAY PS 55
Westwood Cr
LANGSTAFF
Denhan Dr
Roosevelt Dr
Sunnywood Cr
56 LANGSTAFF SECONDARY SCHOOL
Garden
Armanches Dr
Pearson Av
THE KINGS
TOWN OF RICHMOND HILL
BAYVIEW AVENUE
Briggs Av
RIVER
Scale in Feet
1000 500 0 1000 2000 3000
see map 3


Scale
1000 500 0
HUMBER
69
TEMPERANCEVILLE
Lowther Av
Madison Av
Laurier Av
Portage Av
Prince Arthur
Puccini Dr
King
Toscanini Rd
see map 11
TOWNSHIP OF KING
STREET
see map 1
TOWN OF VAUGHAN
BATHURST
ELGIN

WORKSHEET

IDTO 0697002

① ORIGIN x 1762540.00
y 485850

② LIFT-OFF x_1 1762690.00
y_1 485900.00

③ $(x_1 - x)$ = 1500

④ $(y - y_1)$ = 150

⑤ Standard Error S_x C 500

⑥ Standard Error S_y C 500

⑦ DAMAGE LENGTH

$$L = [(x_1 - x)^2 + (y - y_1)^2]^{1/2}$$

③+④ $\boxed{\rightarrow r,\theta}$ = 1507 m

⑧ $\alpha = \tan^{-1} \dfrac{|y - y_1|}{|x - x_1|}$

$\boxed{x \leftrightarrow y}$ = 6°

⑨ Standard Error $S_L = (S_x^2 + S_y^2)^{1/2}$

⑤+⑥ $\boxed{\rightarrow r,\theta}$ = 707 m C

⑩ $\beta = \dfrac{\tan^{-1} S_L}{L}$

⑦+⑨ $\boxed{\rightarrow r,\theta}$
$\boxed{x \leftrightarrow y}$ = 25°

NE Quad $\phi = 90 - \alpha$
NW Quad $\phi = 270 + \alpha$
SW quad $\phi = 270 - \alpha$

SE quad $\phi = 90 + \alpha$

⑪ ϕ = 264°

MAY
25 1970

TORONTO STAR ?
OR TELEGRAM ?

MAY

Losses In Monday's Thunderstorm Could Reach As High As $100,000

What appears to have been a powerful whirlwind in a heavy thunderstorm Monday night demolished a garage, peeled the roof from an industrial building, smashed windows and toppled signs. Total damage could reach close to $100,000.

The damage was mostly along Markham Road from Sussex Avenue to Yonge Street.

A Tareyton Road resident reports seeing the storm approaching about 6:30 pm.

Weather experts at Downsview airport report two heavy storms Monday night, one at 4.44 pm and one at 8 pm. The heavy winds were not felt at all at Downsview. The weathermen say the areas of wind in thunderstorms move in cells and are quite often widely scattered, with very strong gusts. They said there were no reports of hurricanes Monday, but local residents were of the opinion that the damage could only have been caused by a "twister".

The worst damage occurred when the storm lifted the Scott's Ambulance Service garage on Markham Road up to roof level. The ambulance inside was left untouched, except for some exterior damage estimated at about $400.

Robert Scott said two men tried to hold the garage down in the midst of the storm. But when a nearby billboard toppled with a terrific bang, the men ran for shelter in the office. The ambulance looked just like it had been mauled by some huge animal. It looked like the pieces of the garage were whirled around the ambulance, twisting the hood, knocking off a light, and scratching the vehicle all over, Mr. Scott said.

Floating at roof level, the ambulance garage caught the edge of the roof of an industrial building at 301 Markham Road. The roof covering was peeled off, leaving only the bare steel deck. Then the rain poured in. The building is owned by John Griffin Construction Ltd., Bathurst Street.

At press time John Griffin said there was no estimate of damage available as yet from the insurance adjusters. The heaviest loss would be in the building's contents. He said a quick early estimate of the loss, including ambulance garage, roof, and building contents, would be something like $50,000.

The building was occupied by Mayfair Manufacturing Co. Ltd. and Texas Instruments Supply Company.

At Mayfair 2,000 dresses and 15,000 yards of fabric were watersoaked, along with all the machines and other contents. Twenty-five women employees were expected to be out of work most of this week.

At Texas Instruments there was an as yet undetermined amount of damage to components in storage there.

Glass was blown out of apartment windows on Markham Road. Glass panels were blown out of a door at the Richmond Hill Odeon Theatre and at the office of "The Liberal", both on Yonge Street.

The Tareyton Road resident told "The Liberal" she was taking out the garbage and checking her tomato plants at 6.30 pm.

"The sky was black and there were deep rumblings. But it was calm, and there was no wind. A jet plane passed over. It could be seen once in a while. It seemed to be running home before the storm broke," she said.

"I came into the house, and my son said, 'Mom, come look at the rain over the field and down on Vaughan Road.' I went and looked. The wind had started to roar in. There were leaves and papers flying around madly, high in the air. Across the field a white mist was coming. The crop looked like a tidal bore rolling in."

"Suddenly a gust of water came. The rain had not arrived, but the wind was blowing it ahead. As Percy Saltzman was being introduced on the TV, the rain started. My son said, 'Look at the dead tree.'

"I glanced at it. Th[illegible] were branches flying around wildly, like toothpicks flung up in the air. We looked at the same time, I guess, speechless as a beautiful living tree about 60 feet tall, was toppled over just as you would knock over an empty plastic bottle. . . easily and gently.

"Fifteen minutes later, when the storm had gone, we walked over the field to the fallen tree. The hole it left is about six feet deep. One of the dead branches that had been flying around, was about 10 feet long. But the tomato plants on the west side of the house were undamaged," she said.