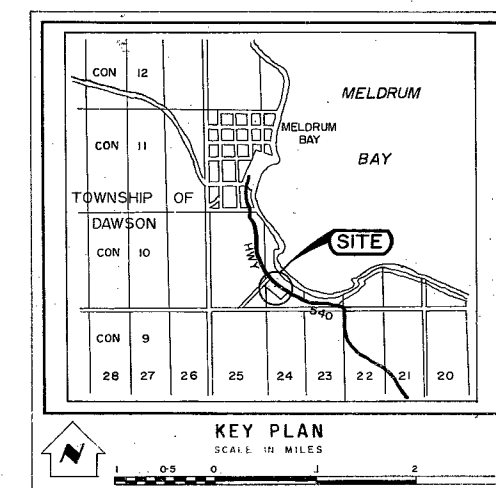
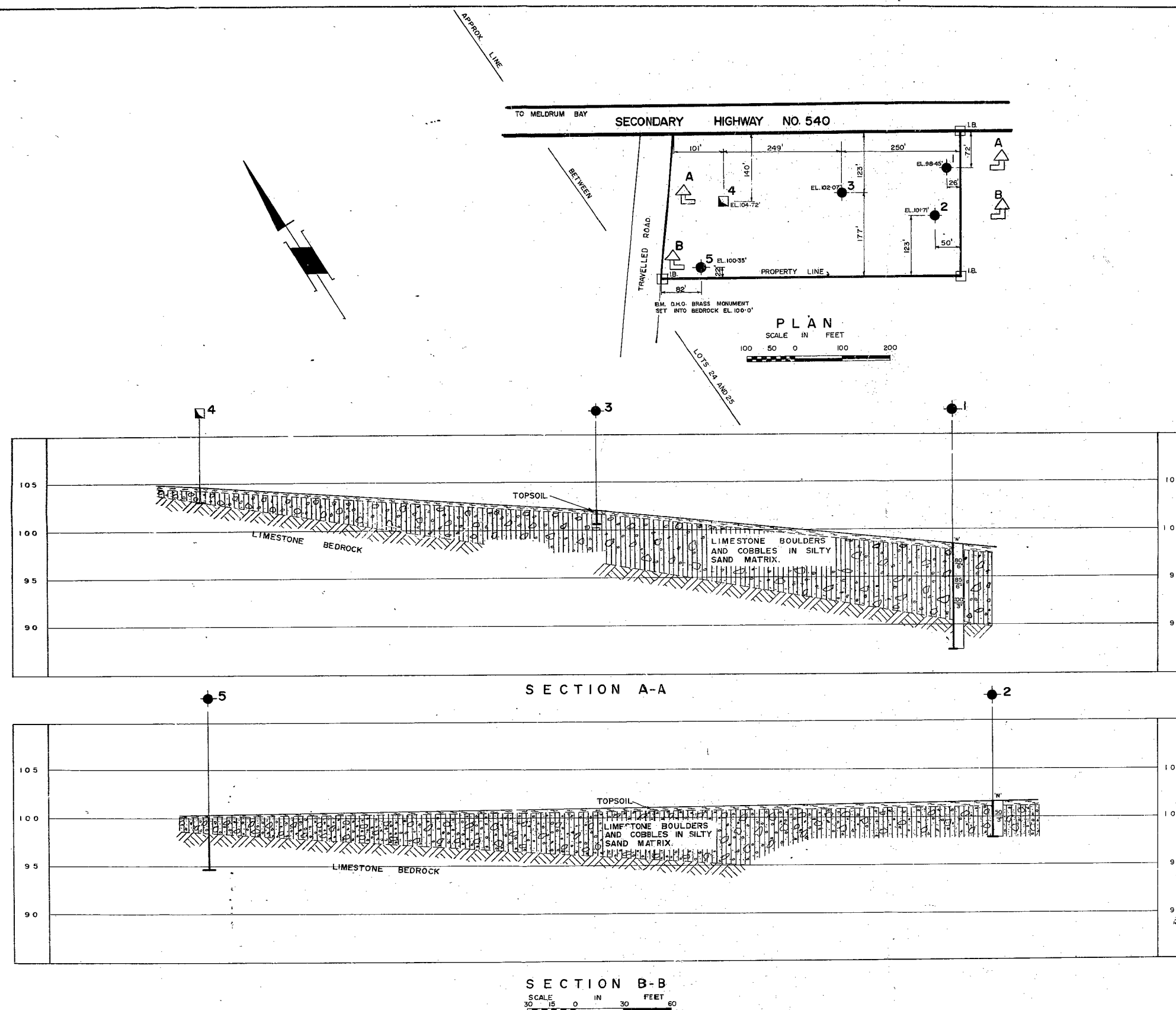


#64-F-207C
HWY #540
PATROL YARD
DAWSON TWP.

[illegible]

- NOTE -

The boundaries between soil strata have been established only at Bore Hole locations. Between Bore Holes the boundaries are assumed from geological evidence and may be subject to considerable error.

[illegible]

DEPARTMENT OF HIGHWAYS - ONTARIO MATERIALS & RESEARCH DIVISION - FOUNDATION SECTION			
<h2 style="margin: 0;">PROPOSED MAINTENANCE YARD</h2>			
KING'S HIGHWAY NO. <u>540</u>	DIST. NO. <u>SUBBUR</u>		
CO. _____			
TWP. <u>DAWSON</u>	LOT <u>24</u> CON. <u>10</u>		
BOREHOLE LOCATION PLAN & SOIL STRATIGRAPHY			
SUBM'D. D.S.I.	CHECKED L.R.	W.P. NO.	M & R. DRAWING NO.
DRAWN L.K.	CHECKED	JOB NO.	BRIDGE DRAWING NO.
DATE AUGUST 1964		SITE NO.	
APPROVED _____			CONT. NO.

TOWNSHIP OF DAWSON

LOT 24, CONCESSION 10

APPROX. O.S.M. TO McDONALD'S
S.A. STATION IN MELDRUM BAY

SECONDARY HIGHWAY 540

600'

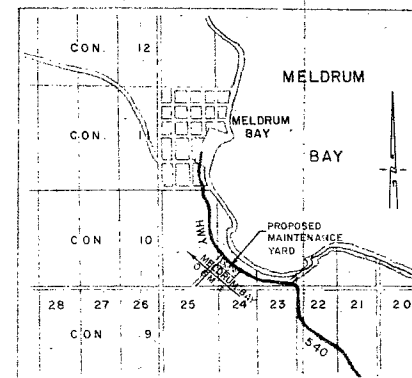
300'

90°

TRAVELLED ROAD

LOTS 24 AND 25

NORTHERN REGION
C.H.O. REGISTERED OWNERSHIP
SIGNED: *[Signature]*
DATE: *May 22/64*



APPROVED

REGIONAL SERVICES MANAGER
DATE: *21 May 64*

PROPERTY REQUEST PLAN

64 / 3567

LOT 24, CONCESSION 10

TOWNSHIP OF DAWSON

HWY. 540

SUDBURY DISTRICT

PURPOSE - PROPOSED MAINTENANCE YARD

RECOMMENDED -

DISTRICT ENGINEER
[Signature] *May 25/64*

FOR REGIONAL INSPECTOR OF SPECIAL SERVICES
[Signature] *21 May 64*

REGIONAL PROPERTY SUPERVISOR
[Signature] *5/27/64*

SOIL INVESTIGATION FOR PROPOSED
PATROL YARD, HIGHWAY #540
TWP. OF DAWSON, DISTRICT NO. 17
SUDBURY, ONTARIO.

DOMINION SOIL INVESTIGATION LIMITED

77 CROCKFORD BOULEVARD

SCARBOROUGH, ONTARIO

TELEPHONE 421-2567

BRANCH
3 QUEENS AVENUE
LONDON, ONTARIO
TELEPHONE GE. 3-3881



FOUNDATION ENGINEERS

P.O. BOX 933
SAULT STE. MARIE
ONTARIO
TELEPHONE AL. 4-2615

Scarborough, Ontario,
August 31st, 1964.

OUR REF: 4-8-14

DEPARTMENT OF HIGHWAYS, ONTARIO,
MATERIALS AND TESTING DIVISION,
DOWNSVIEW, ONTARIO.

ATTENTION: MR. A. RUTKA, P.ENG.,
MATERIALS & TESTING ENGINEER

RE: SOIL INVESTIGATION FOR PROPOSED
PATROL YARD, HIGHWAY 540, TOWNSHIP
OF DAWSON, DISTRICT NO. 17,
SUDBURY, ONTARIO.

R E P O R T

Gentlemen:

The soil investigation was completed on the above site in accordance with your authorization of August 12th, 1964. This report contains our findings and recommendations.

The subsoil conditions are very favourable at the site. Below a shallow topsoil, a stratum of silty sand with embedded limestone boulders and cobbles was encountered. The density of the deposit is probably quite high although all penetration resistances were influenced by the large-sized rock fragments. Finally, non-porous limestone bedrock of good quality underlies the site. The depth to the bedrock varies between two and eight feet. No ground water was encountered in the boreholes or in the test pit.

It is recommended that structures should be supported on spread footings placed below a depth of five feet to provide adequate frost protection. The allowable bearing pressure is 6,000 pounds per square foot with a factor of safety much greater than three. No settlements are expected to occur.

Sand and salt piles can be placed on the ground surface without any danger of instability.

According to local enquiries that we have made, there are no domestic wells within a one-half mile radius; therefore, contamination by salt is of no concern.

The field work was carried out between August 18th and 20th, 1964 under the supervision of Mr. I.P.Lieszkowszky, P.Eng., this report was prepared by Mr. L. S. Rolko, P.Eng.

LSR/oed



Yours very truly,

DOMINION SOIL INVESTIGATION LIMITED

A handwritten signature in cursive script that reads "L. S. Rolko".

L. S. ROLKO, P.ENG. A.M. ASCE.

DEPARTMENT OF HIGHWAYS ONTARIO

MEMORANDUM

P. O. Box 810, North Bay, Ontario

To: Mr. A. Rutka,
Materials and Research Engineer,
DOWNSVIEW, Ontario.

FROM: R. H. Moran

DATE: June 26, 1964

OUR FILE REF.

IN REPLY TO

SUBJECT:

Proposed Patrol Yard,
Lot 24, Concession 10,
Township of Dawson,
Highway 540, Sudbury District.

Attached are Property Request Plan 64-3567 and Purchase Order No. 149923.

Please arrange to have soils tests made on the above property to ascertain if suitable for future erection of a standard D.H.C. patrol garage.

RH:/mrr

R. H. Moran
REGIONAL INSPECTOR SPECIAL SERVICES.

Special Service

Hwy. 401 & Escoe St.,
Downsview, Ontario.

Materials and Testing Division

August 12, 1964

Dominion Soil Investigation, Ltd.,
77 Crookford Blvd.,
Scarborough, Ontario.

" MANITOULIN "

MELDRUM BAY.

Attention: Mr. A. Bonea

Re: Patrol Yard, Hwy. 540, Twp. of Dawson,
District No. 17, Sudbury.

Dear Sir:

Please consider this your authority to carry out a foundation investigation at the above site. Plans and profiles were provided to your representative on August 12, 1964.

It is understood that a qualified Soils Engineer will be in charge of the field work at all times.

Eleven (11) copies of the completed foundation report, with one additional copy of each subsoil profile, should be submitted to the Foundation Section prior to September 15, 1964. Previous requirements as to preliminary borehole information and laboratory testing program, should be followed.

Because the drawings accompanying the foundation reports, showing the location of borings, the inferred subsoil conditions, etc., are to become contract drawings, you are requested to prepare them in accordance with the D.M.C. standards. To enable you to do this, we are supplying you with sample drawings with all the necessary explanations, together with linen sheets for your drawings. You are also requested to provide the D.M.C. with Cronaflex copies of the drawings.

Charges for the work performed will be in accordance with your schedule of rates, dated July 6, 1964, and invoice to be addressed to the attention of the undersigned.

Very truly,

Yours very truly,

cc: Messrs. J. McCombie
T. A. Sharpe
H. Hearthur
E. R. Saint
W. D. Smith (2)

Mrs. E. Tate
Foundations Office
Gen. Files (2)✓

A. Lutka
A. Lutka,
MATERIALS & TESTING ENGINEER

D O M I N I O N S O I L I N V E S T I G A T I O N L I M I T E D

77 CROCKFORD BOULEVARD - SCARBOROUGH ONTARIO CANADA - TELEPHONE 421-2567

BRANCH
QUEENS AVENUE
LONDON, ONTARIO
TELEPHONE GE. 3-3251



FOUNDATION ENGINEERS

ASSOCIATED COMPANY
SOIL TESTING AND ENGINEERING LTD.
34 BRENTFORD ROAD,
KINGSTON 3, JAMAICA, WEST INDIES
TELEPHONE: 68989

September 2nd, 1964.

OUR REF: 4-8-14

Department of Highways, Ontario,
Materials and Testing Division,
Downsview, Ontario.

Att'n: Mr. A. Rutka, P.Eng.,
Materials and Testing Engineer.

Re: Soil Investigation for Proposed Patrol Yard,
 Highway #540, Township of Dawson, District
 No. 17, Sudbury, Ontario.

Dear Sirs:

Enclosed please find eleven (11) copies of the completed foundation report on the above site, one additional copy of the sub-soil profile, with a cronaflex copy made therefrom.

The soil and rock samples will be retained for a period of three months and thereafter disposed of unless otherwise instructed.

We thank you for having given us this opportunity to be of service and trust that when you have need of such services in the future, you will call upon us again.

Yours very truly,

DOMINION SOIL INVESTIGATION LIMITED,

K. H. King, P.Eng.,
CHIEF ENGINEER.

KHK/oed

ENCLS.

Mr. C. S. Mease,
Manager,
Special Services Section,
Admin. Bldg.

Foundation Section,
Materials and Testing Div.,
Room 107, Lab. Bldg.

September 4, 1964

FOUNDATION INVESTIGATION REPORT BY:
Dominion Soil Investigation Limited,
Proposed Patrol Yard, Hwy. 540, Twp.
of Dawson, District No. 17, Sudbury.

Attached, we are sending you the above-mentioned report submitted by Dominion Soil Investigation Limited.

We have reviewed the report and have found the factual information well presented. We are also in agreement with the conclusions and recommendations contained therein.

We believe the information provided by the Consultant will be adequate for your future design work. However, should additional information be required, please do not hesitate to contact our office.

MYL/MdeF
Attach.

cc: Messrs. C. S. Mease (4)
E. J. Orr
H. D. McMillan
T. A. Sharpe
L. H. Saint
G. Watt

Foundations Office
Gen. File


A. G. Sternac,
PRINCIPAL FOUNDATIONS ENGINEER

MEMORANDUM

Mr. T.A. Sharpe
District Engineer
Sudbury, Ontario

FROM: Materials & Testing
North Bay, Ontario

DATE: Sept. 11, 1964

OUR FILE REF

IN REPLY TO

SUBJECT:

Meldrum Bay Patrol Yard Hwy. #540

The site for the proposed Meldrum Bay Patrol Yard was investigated with hand boring equipment on Sept. 2, 1964. We are enclosing a sketch of the site and a log of the boreholes.

The depth of hole achieved was severely limited by the extreme stoniness of the material and the type of equipment used for the investigation.

Holes were placed on a grid system designed to indicate soils types and conditions over the entire site.

The site is at present covered with mixed bush consisting in the main of birch, cedar and spruce. The subsoils are very stoney with almost no fine aggregate at all encountered. Stones consist of flat, limestone pieces ranging from 1" to 3" in diameter. Bedrock was encountered in the vicinity of boreholes 4, 6 and 7. The depth to bedrock at the drilled well was reported by the Patrol Supervisor as approximately seven feet. An examination of the drilled hole in the south-west corner indicated approximately one foot of loose flat limestone to limestone bedrock. From three to six inches of black sandy topsoil was found.

RECOMMENDATION

Six inches of sand cushion and six inches of G.B.C. Class "A" will be required in areas of stoney material and over rock. If clay is encountered towards the south-west corner, six inches of G.B.C. Class "A" and twelve inches of sand cushion will be required.

M.J. Ramsden
for: E.R. Saint
Regional Materials Engineer

MJR/ef
c.c. C.S. Moase (4)
R. Moran
E.J. Orr
H.D. McMillan

N.D. Smith
Foundations Office ✓
File (2)

Proposed Patrol Yard 0.6 Mi. South of Mel drum Bay on Hwy. #540

Log of Hand Auger Borings

T. H. # 1	0-6" 6"-18" 18"	Blk. V.F. Sa. Lo. Tops. Flat Limestone Cobbles N.F.P. Cobbles
T. H. # 2	0-4" 4"-10" 10"	Blk. Sa. Lo. Tops. Flat Limestone Cobbles N.F.P. Cobbles
T. H. # 3	0-3" 3"-10" 10"	Blk. Sa. Lo. Tops. Flat Limestone Cobbles N.F.P. Cobbles
T. H. # 4	0-3" 3"	Blk. Sa. Lo. Tops. N.F.P. Flat Limestone Cobbles
T. H. # 5	0-4" 4"-12" 12"	Blk. Sa. Lo. Tops. Flat Pieces Limestone (Loose) N.F.P. Cobbles
T. H. # 6	0-3" 3"	Blk. Sa. Lo. Tops. Limestone Bedrock
T. H. # 7	0-3" 3"-12" 12"	Blk. Sa. Lo. Tops. Br. Sa. Cl. Lo. Till Bedrock

N.B.

Patrol supervisor reports approximately seven feet of flat limestone cobbles to limestone bedrock at site of drilled well.

Summary:

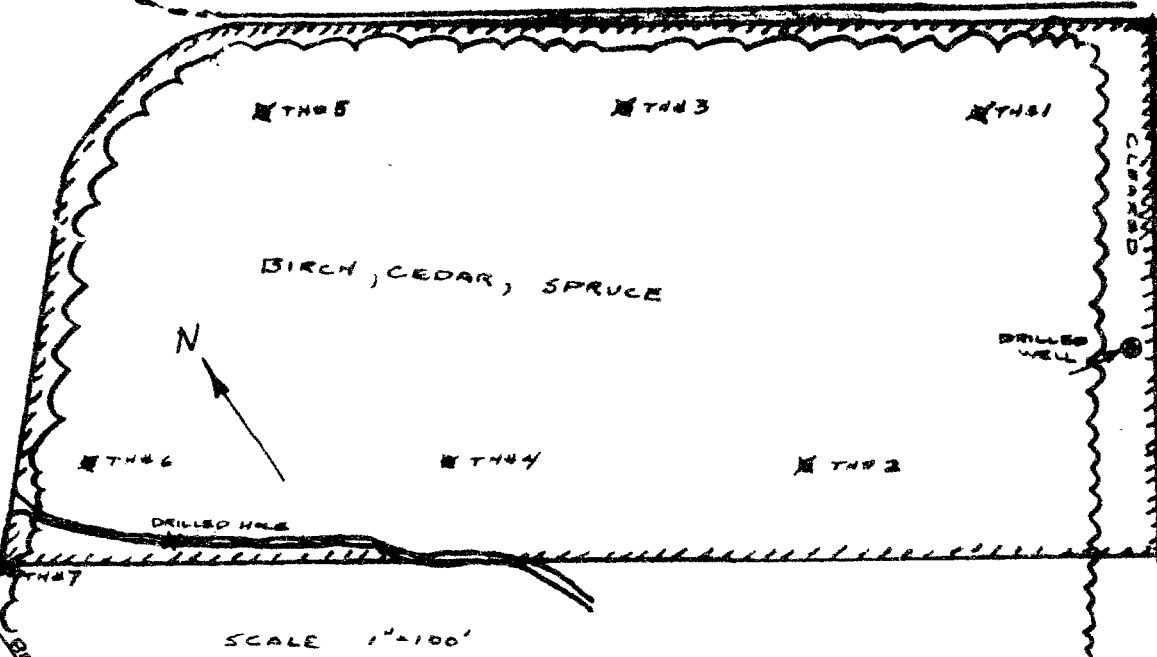
This area appears to be covered to depth of up to seven feet with a very stoney layer containing little or no fine materials. Most pieces are flat in nature and range from one inch in diameter to eight inches in diameter. Bedrock is fairly close to the surface, ranging from a probable maximum depth of seven feet to a minimum depth of less than twelve inches.

ROAD TO MELDRUM BAY

SEC HWY 540

ACRES/INVESTMENT LINE

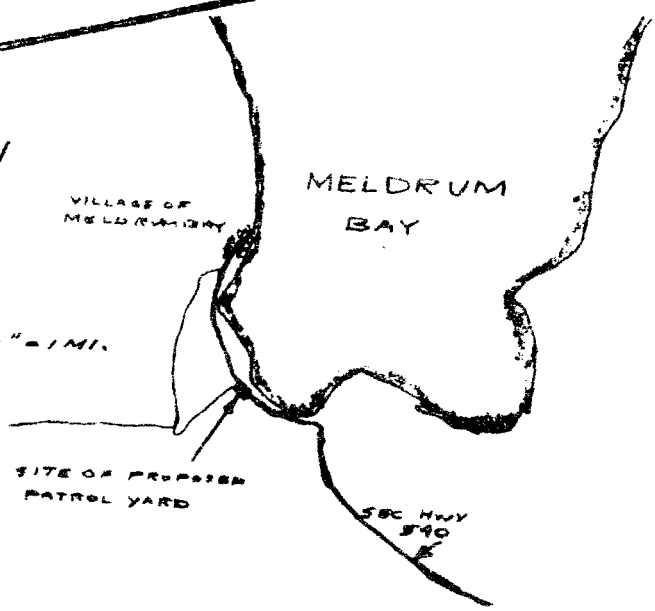
GRAN. RD.



SCALE 1"=100'

KEY MAP

N
SCALE 1"=1 MI.



SITE OF PROPOSED
PATROL YARD

SEC HWY
540