

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

White Mountain National Forest, P. O. Box 638, Laconia, N. H. 03246

REPLY TO: 2720 Special Use Permits

February 6, 1970

SUBJECT: Public Service Co. of N. H. Powerline Relocation -
I-93--Russell Pond Brook to Horner Brook Section



TO: To the Record

On February 3, Russ Rogler, Ron Mitchell, Bob MacHaffie and I met with Richard Brunel, Harold Hersey and Bernard Langley of the State Highway Department. They showed us a large-scale kronaflex of their Thornton-Woodstock section of the I-93 and the powerline involved. This kronaflex indicated the three possible locations for the powerline that they had studied from which they indicated the one that the Woodstock Planning Board favored.

The original flood plain location was disapproved by the Planning Board because of encumbering developable land. A Public Service Co. possible location to the west of Route 3 was explored and a combination PSCo-Highway Department location to the east of I-93 passing through parts of National Forest land were indicated.

As a result of this meeting and the discussions, Mr. Brunel's department is to present us, within the next week or ten days, with a copy of the kronaflex he had at this meeting. Since this powerline has to be relocated at the expense of the Highway Department (basically federal money with Bureau of Public Roads backing) Brunel was looking for guidance "in principle" before they committed themselves to paying the power company's cost of relocation survey.

I indicated to Brunel that if he would provide us with a copy of this kronaflex with the three explored locations, three or four cross-sectionals across the valley so we might be able to picture the visual effect, and some information that they had from experience of under-grounding in other areas and costs, that we would seek an approval in principle process.

This line is going to be reconstructed in part as 115,000 volts and in part going through us as 69,000 volts with the indication that within a short time it would be increased to 345,000 KV and 115,000 KV.

This is in the nature of a Stage I report.

From existing knowledge of the situation and circumstances and without prejudging the case, it appears that one of the major points to be resolved is whether we appraise the situation on (1) its aesthetic and land use effect on the National Forest alone or (2) on its "overall aesthetic and land use effect on the immediate area of that section of Pemigewasset Valley--National Forest and private combined.

The aesthetics of NF land will be protected and insured with the power line off us, but with it in the valley on private it will be an aesthetic "eyesore" to I-93 and travelers. On National Forest land it may not be such an eyesore to I-93 travelers at the area of occupation but will be distantly visual, as will the Interstate itself, from points above and below the area of occupation.

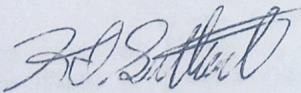
Our review and efforts to have a VIS contact point off the Interstate near Horner Brook indicate that perhaps more of a traveling view disruption of the east side could occur with our potential development because of necessary access facilities and improvement.

Removal of present powerline would attain abandonment of the existing fee ownership PSCo. line running by and through some of the better VIS contact area thus benefiting us.

Less than 20% of its total length will be on U.S. with the 80% still on private. Local people have determined through their representative that on private land they prefer to sacrifice a side hill location to a valley floor location--apparently in view of land values and aesthetic

Congressman Cleveland introduced a bill to make unused federal lands available for relocation of displaced property owners caused by Interstate construction. It was publicized widely by him in this Woodstock area which is losing some 20-30 taxable properties to the Interstate.

Our practical defense had been that according to the Grafton County R. Comprehensive Land Use Plan, in which TAP participated fully, little if any of our land was suitable for development because of soils and topography. Now we are realistically faced with recognizing the validity of our defense and the facts.



K. I. SUTHERLAND
Lands Staff Officer

KISutherland:rlt

cc: Pemi R. D.
R-9

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I-93-3(6)82
P-3801

Mr. Robert R. Tyrrel

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flood plain of the Pemigewasset River westerly of I-93 and are 3.9 and 4.0 miles in length respectively. These solutions offer two alternatives for transmission line relocation in the flood plain. The "orange" proposal requires relocation of a substation at a cost of about \$150,000.

Of Woodstock's 58.2 square miles of land area, about 72% or 41.9 square miles is reported to be in the White Mountain National Forest. Significant acreage is in State ownership for the Foy Forest and U. S. Route 3. In addition, the construction of I-93 will involve the taking of lands in excess of one square mile. A substantial percentage of the lands remaining in private ownership are not developable due to steep mountainous topography and the flood plain conditions that exist.

In recognition of these facts, the Department initially began negotiating with the Public Service Company to relocate their lines along the "floor" of the Pemigewasset River Valley and, insofar as possible, within the flood plain on lands not now suitable for development. From an aesthetic viewpoint, this solution was most desirable. Though realizing the potential maintenance problems involved, the utility agreed to this proposal. This relocation is depicted upon the attached 200 scale cronaflex plan with a blue color designation.

The citizens and officials of the Town of Woodstock became very concerned upon receipt of this information and requested studies to be made with the relocated lines being positioned on the hillside easterly of I-93. This request was triggered by the following facts:

- a) A dam on the East Branch of the Pemigewasset River is currently being studied by the Corps of Engineers which would reduce the height and frequency of flooding of the valley downstream.
- b) The recent installation of plants in Lincoln for treatment of municipal sewage and industrial wastes of the Franconia Paper Corporation coupled with the pollution control now underway in Woodstock which will result in the Pemigewasset River becoming desirable recreational water.
- c) The economic advantages that the Town would enjoy by the culmination of (a) and (b) above.

The Department in compliance with the Town's request and with the cooperation of the Public Service Company made several studies in addition to those shown on the plan. Those shown were selected as being reasonable alternate solutions. In addition, the Department investigated line burial and found the

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costs to be excessive. (About one million dollars per mile for 115 KV burial). Due to increased demands for power, it appears that within a ten year period the combined existing 115 KV and 69 KV lines will be boosted to 345 KV and 115 KV and the existing 69 KV line feeding northerly to Lincoln from the sub-station will be increased to a 115 KV line.

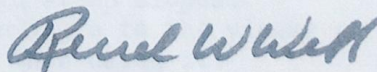
It should be noted that technological advances have not yet been made to permit burial of a 345 KV line and, therefore, costs incurred for initial burial may be lost by ultimate reconversion to aerial. It was further observed that costs for future alterations and improvements will be borne by the consumer. In view of these facts, consideration for line burial was abandoned.

At a meeting in Woodstock on January 28, 1970, the several proposals were presented to the Conservation Commission, Chamber of Commerce, Planning Board and Selectmen of Woodstock. It was the unanimous and vigorous expression of this group that the transmission lines be relocated along the hillside easterly of I-93 as shown by the green designation on the cronaflex plans. You will note that this proposal falls within the boundaries of the National Forest at three different locations for distances of about 1200, 300 and 1800 feet.

The Department has taken the position that time and engineering costs associated with a detailed design on a project of this magnitude prior to approval in concept is unwarranted and represents imprudent expenditure of the taxpayers money. In view of the latter and of the facts presented in this letter, the Department requests Forest Service approval in concept for the crossing of their lands by the transmission lines of the Public Service Company in the approximate location depicted by the green boundary lines on the cronaflex plan. Cross sections along the route are attached to show the relationship of the relocated transmission lines to the highway facility and surrounding landscape.

Inasmuch as design is essentially complete and advertising for bids imminent on two projects within this section, your expeditious handling of this matter will be appreciated.

Very truly yours,



R. W. Webb
Deputy Commissioner
and Chief Engineer

Att: 200 Scale Cronaflex Plan.
Cross Sections A, B, C, D, E, & F.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Pemigewasset R. D.

REPLY TO: 2720 Special Use Permits

March 5, 1970

SUBJECT: Public Service Company of N. H. Powerline Relocation -
I-93--Russell Pond Brook to Horner Brook Section

TO: Forest Supervisor, White Mountain National Forest



Reference your memo of 2/20/70.

The proposed location of electric power transmission lines east of I-93 will have more of an adverse effect on the view of I-93 travelers than it will on our resources since the right-of-way is mostly on private land. The impact on our resources is very similar to the impact of I-93. For the time being, I feel that the I-93 impact report is adequate for the present situation. I have no recommendations against the location except as stated below.

Enclosed is a recent article from the Plymouth Record which discusses the situation in some detail. The article states that relocation east of I-93 depends on Forest Service approval. This is true as far as National Forest lands are concerned. It is not true for the large amount of land which is privately owned. In my opinion, the public will believe that not only is approval for location of the entire line dependent upon us but also the public will hold us responsible for any adverse effects upon the scenery. I believe we must use our influence to obtain a location that will have the least possible adverse effect on the scenery. First, because we should be and are genuinely concerned about the view in the valley (example Russell Crag TV Antenna). Secondly, because we do not want to be criticized by the public for an unsightly location.

We have studied the relocation and have several recommendations. These recommendations are based on the following principles:

1. Keep transmission lines off high steep slopes.
2. Locate transmission lines at an angle to the viewer so he is looking across the line rather than along it.
3. Keep clearing widths as narrow as possible.
4. Try to locate as many uses as possible in the utility corridor.

The first major problem is in the vicinity of Russell Crag. The relocation parallels the Tripoli Road for about 800 feet and then takes off upward in a northerly direction across the steep western ridge of Russell Crag. It then descends towards Russell Pond Brook. This location is similar to the present location of the right-of-way on Barron Mountain about a mile to the south. This section of line on Barron Mountain is definitely an eyesore.

The location of the line as it descends in a northerly direction from Russell Crag will be in full view of southbound travelers. It will probably be visible to northbound travelers on the south side of Russell Crag. To overcome this, I recommend a route that stays close to the interstate on relatively low ground. Naturally, this line should be screened by trees between it and the interstate; zig-zagging the line in and out of Russell Pond Brook hollow so that travelers will be looking across it will also help. Finally, a combination of tall towers capable of holding many lines (see enclosed illustrations) and a narrower right-of-way should also lessen the impact.

The location north of the transformer station is also a problem but not as serious because of the smaller line. The problem is a long descending tangent that will be visible to the southbound traveler. There is also the problem of dual parallel rights-of-way because of the proposed access road. The access road is also partly located on a grade that is too steep (over 12%). To conserve space, provide for a better access road location, and screen the right-of-way from southbound travelers, I recommend the following:

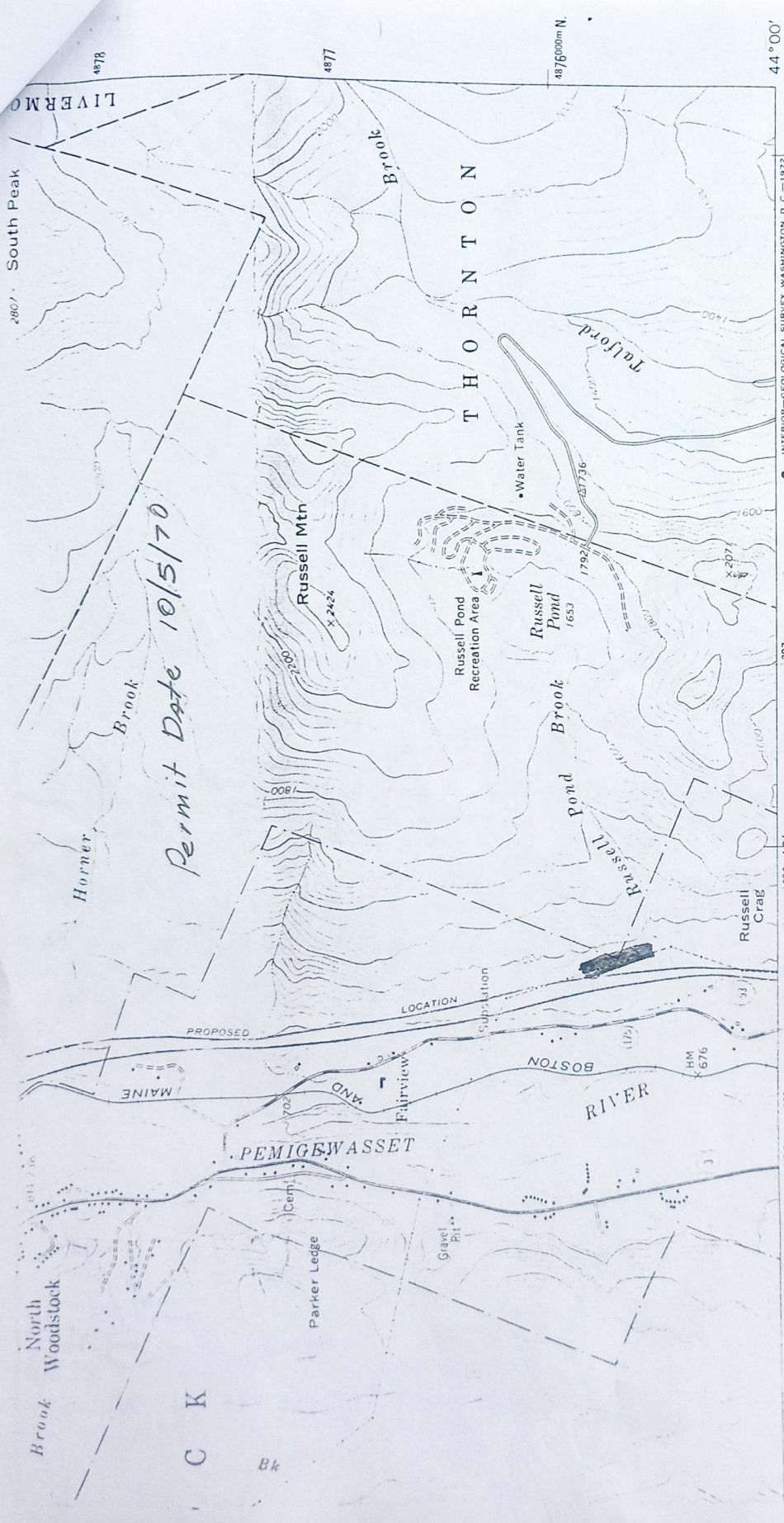
The access road and power line should be located on the same right-of-way. The right-of-way should curve away from the interstate highway beginning about station 40. of the access road. The right-of-way should then follow a semi-circular route to the proposed underpass at about station 1943 of the northbound lane. From this point, the powerline should parallel the interstate (with adequate screening) until it ties into the original location of the Lincoln transmission line.

The proposed location is shown on the cronaflex by a strip of masking tape. We are returning the cronaflex and cross-sections under separate cover.

Paul R. Natale

PAUL R. NATALE
District Ranger

Enclosures

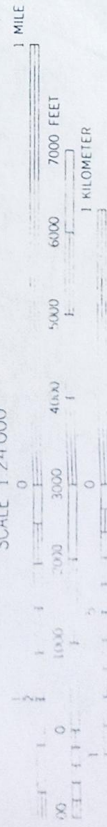


Permit Date 10/5/70

PLYM.

ROAD CLASSIFICATION

- Primary highway, hard surface
- Light-duty road, hard or improved surface
- Secondary highway, hard surface
- Unimproved road
- Interstate Route
- U. S. Route
- State Route



LINCOLN, N. H.
 SW/4 FRANCONIA 15' QUADRANGLE
 N4400—W7137.5/7.5
 1967
 AMS 6672 II SW—SERIES V812



QUADRANGLE LOCATION
GOODMAN'S
 14 PLEASANT STREET
 MANCHESTER, N. H. 03101

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
 FOR DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



Mt Pemigewasset
2654 Indian Head

Hardwood Ridge

Whale
3610

3304 Big Coolidge
Mtn

Lincoln
(B.M. 808)

North Woodstock
(B.M. 811)

Russell Mtn
2445

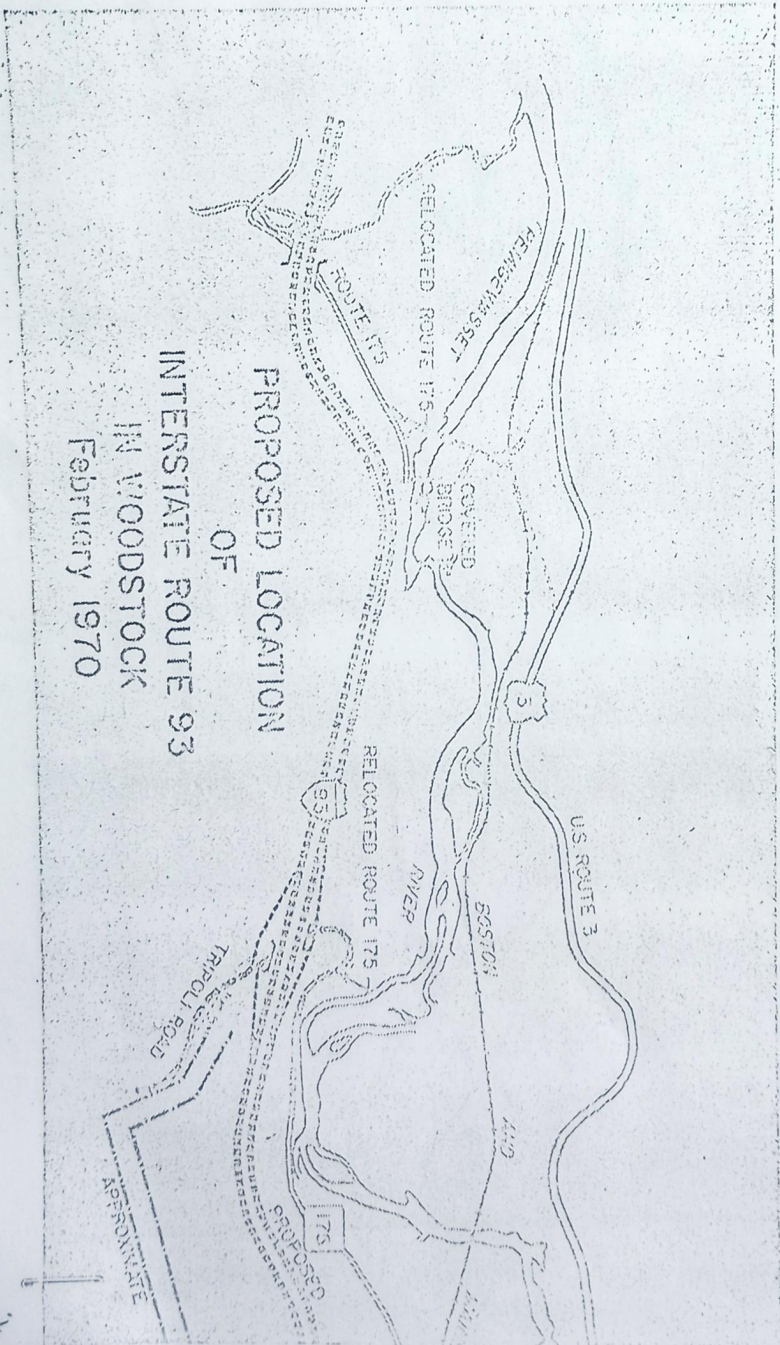
Mr Gilley

Barron
Mtn
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WOODSTOCK

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PROPOSED LOCATION
OF
INTERSTATE ROUTE 93
IN WOODSTOCK
February 1970

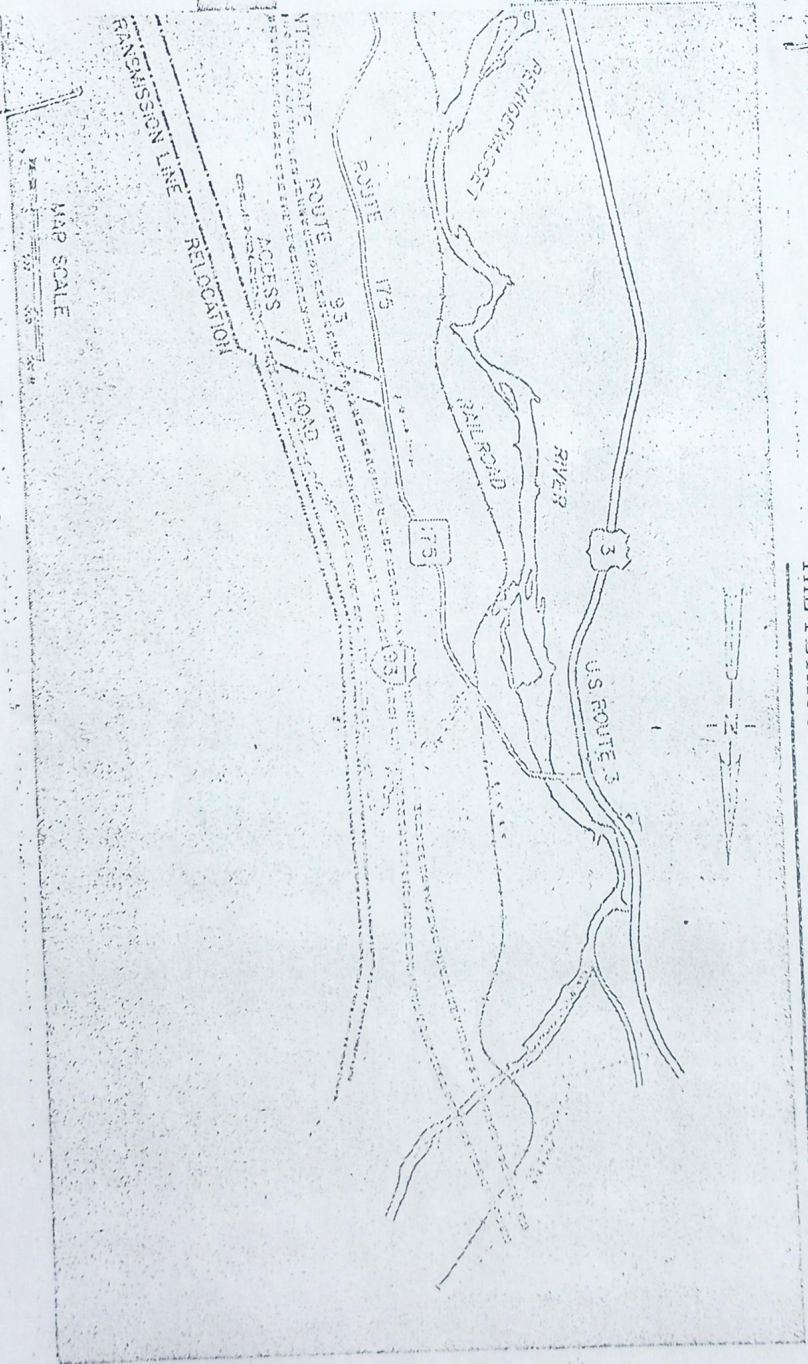


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THE PLYMOUTH RECORD, PLYMOUTH, N. H., FEB. 19, 1970 B1