

31st August, 1962.

NI/GP/62/31.

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR
SCIENCE.

GENERAL PURPOSES COMMITTEE.

EXTENSION TO BUILDING R.18 AT RUTHERFORD LABORATORY.

Note by Mr. G. E. Simmonds.

1. It will be recalled that the central engineering workshop is housed in a building of approximately 10,000 square feet (Building R.9) and that a small building (R.18) was built to accommodate various ancillary workshop needs.

This paper presents a proposal for the extension of the latter building which has been evolved after consideration of a number of alternatives to meet needs which have arisen in the development and growth of the Rutherford Laboratory including the replacement of contract by direct labour. The arrangement proposed has been designed to give some improvement to the appearance of the Laboratory when viewed from the approach to it and does not conflict with further development of this area should that be desirable later.

2. Building R.18 now houses principally an electronics and instrument workshop. The proposed extension makes provision for:

(a) A laboratory for the Industrial Chemists who are engaged on the chemical control of the water treatment plants, related corrosion problems and miscellaneous chemical work.

(b) An increase in the electronics and instrument workshop and space for an instrument loan pool store operated by this section.

(c) An electrical workshop.

(d) Lavatory, locker room and mess room facilities for the larger number of staff which will occupy this building.

3. The industrial chemists are at present occupying a part of the Parasitic Area. This must be released by April 1963 so that this area can be made ready for experiments.

4. The space at present available for the electronic and instrument workshop has proved to be inadequate to provide the service which is essential for the laboratories needs. The existing separate workshop stores attached to both the electrical and electronic workshops will be combined with the loan pool store for economy in manning.

5. The electrical workshop at present occupies the mezzanine floor in Building R.9. This building also houses the Development Workshop and the Maintenance and Laboratory Services Workshop. The space made available by transferring the Electrical Workshop to the proposed extension of Building R.18 will be used to provide facilities for special manufacturing techniques, including clean areas, special welding and furnace brazing, as an extension of the Development Workshop and also to increase the at present inadequate area available for the Maintenance and Laboratory Services Workshop.

6. There are no lavatory facilities in the existing Building R.18, and there is no covered communication to such facilities in adjacent buildings. The provision of locker and mess rooms for industrial staff in this building will enable the similar accommodation in Building R.9 to absorb the increase in mechanical workshop staff in that building.
7. In the workshop areas the area per man will be compatible with that occupied for similar work in A.E.R.E.
8. The schedule given in the Appendix provides details of the floor area to be occupied in the proposed extension, and of the re-allocation of space in Building R.9. A plan and elevation of the extended building R.18 is given at Figures 1 and 2.
9. Because of the urgency attached to providing alternative accommodation for the industrial chemists the proposal has been divided into two parts, namely Phase I which includes the laboratory for the industrial chemists and also the male lavatory and locker room, and Phase 2 which provides the remainder of the accommodation described above. The authority of the Chairman is being obtained for Phase I at an estimated cost of £9,000.
10. The S.W.O. have prepared a token estimate as follows:

	£
Building Works, Phase I and Phase II, Architect and M & E.	36,500
Roads, Paths and External Services.	5,000
Total:	41,500
Fees at 15% say:	6,200
	<u>£47,700</u>

11. Adequate provision has been made in estimates for the above expenditure.
12. The Committee are invited to:
- (a) Give approval to the above proposal and for the preparation of details and a control estimate.
 - (b) Give authority for the works to proceed subject to the control estimate not exceeding the token estimate quoted above.

Rutherford High Energy Laboratory,
Harwell, Didcot, Berks.

APPENDIX to NI/GP/62/31.

Building R.18 - Areas (approximate).

<u>Use.</u>	<u>Proposed square feet.</u>	<u>Existing square feet.</u>	
Industrial Chemists Laboratory.	915		(1)
Electronics Workshop.	3400	2500	
Electrical Workshop.	3700	3300	(2)
Electrical/Electronic/Loan Pool Stores.	920	640	(4)
Battery Room.	155		
Electrical Vehicle Shelter.	300		(3)
Male lavatory & Locker room.	420		
Mess Room.	435		
Switch Room.	35		
Corridors.	685	340	

Notes.

1. In Parasitic Area.
2. In Building R.9.
3. Replaces space now allocated to electronics workshop.
4. Includes 400 square feet in Building R.9.
5. All areas include internal partitions.

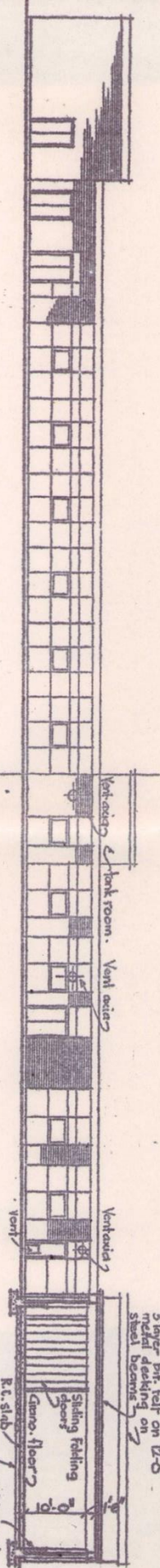
Re-allocation of space made available in Building R.9.

Additional area sq.ft.

To Maintenance and Laboratory Services Workshop.	1300
Development Workshop.	1650
Design Group Experimental Area.	350
Corridors.	400
	<u>3700</u>

SOUTH ELEVATION

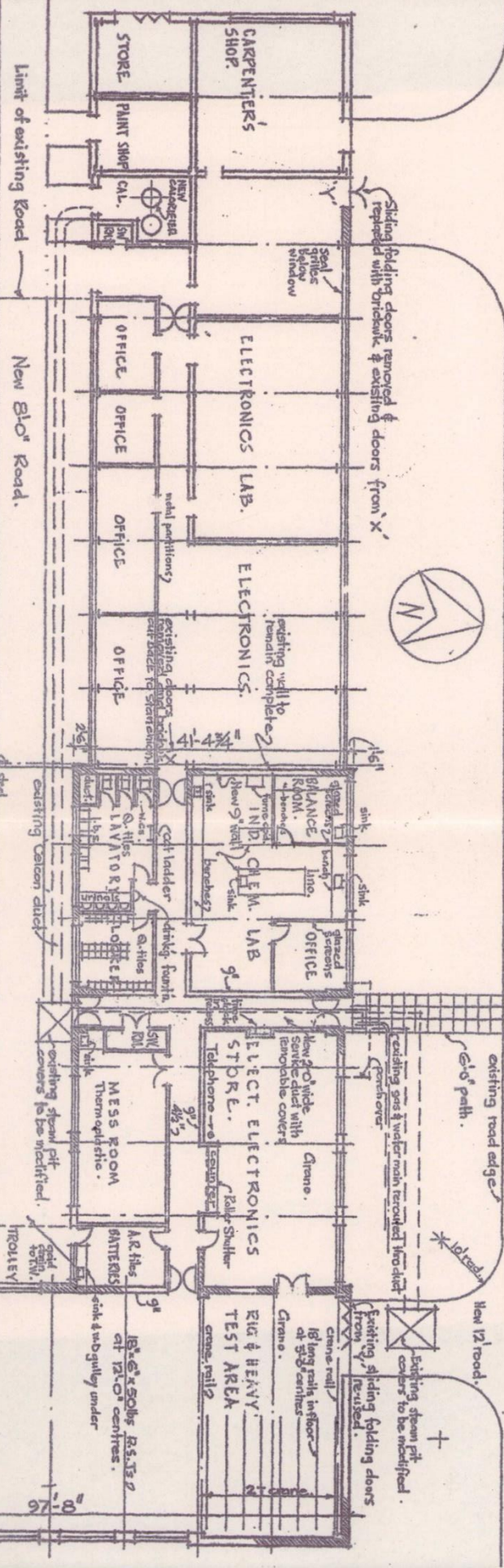
SECTION



3 layer bit. felt on 12'-0" metal decking on steel beams

Sliding Folding doors

R.C. slab hardcore 15 1/2 brickwork



Sliding folding doors removed & replaced with brickwork & existing doors from 'X'



existing road edge

New 12' road.

Existing steam pit covers to be modified. Existing sliding folding doors from revised.

CARPENTERS SHOP

ELECTRONICS LAB.

ELECTRONICS

IND. CHEM. LAB

ELECT. ELECTRONICS STORE.

RIG & HEAVY TEST AREA

STORE PAINT SHOP CAL.

OFFICE

OFFICE

OFFICE

OFFICE

OFFICE

LAVATORY

MESS ROOM

BATTERIES

AR files

18' x 20' x 25' at 12' x 10' centres.

18' x 20' x 25' at 12' x 10' centres.

18' x 20' x 25' at 12' x 10' centres.

18' x 20' x 25' at 12' x 10' centres.

18' x 20' x 25' at 12' x 10' centres.

Limit of existing Building R.18

New 8'-0" Road.

Limit of existing Road

53'-10"

30'-0"

SHED

41'-4 3/4"

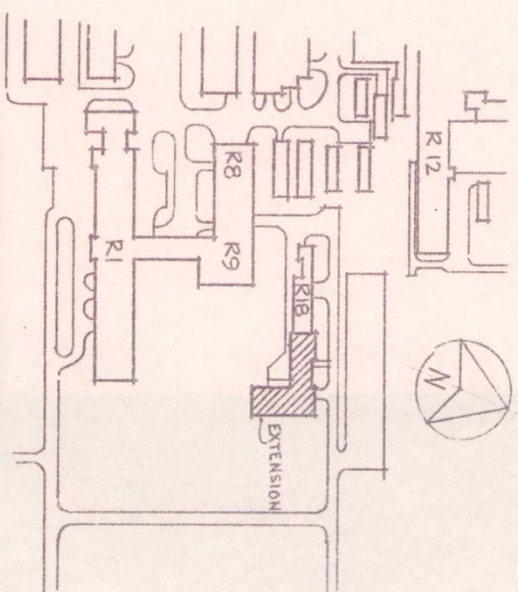
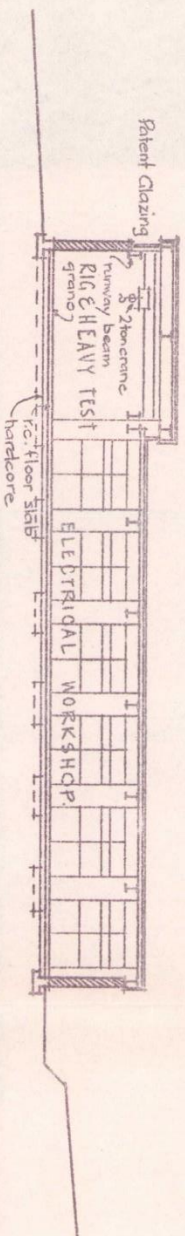
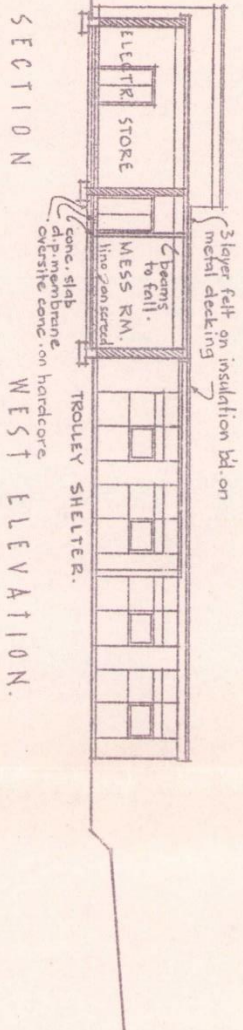
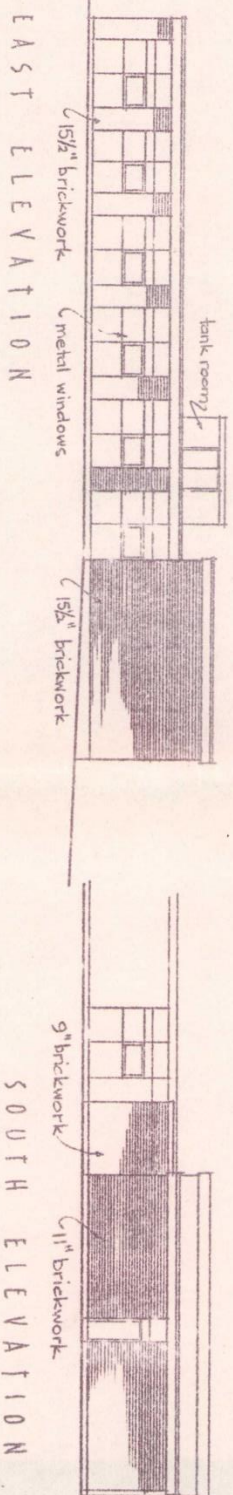
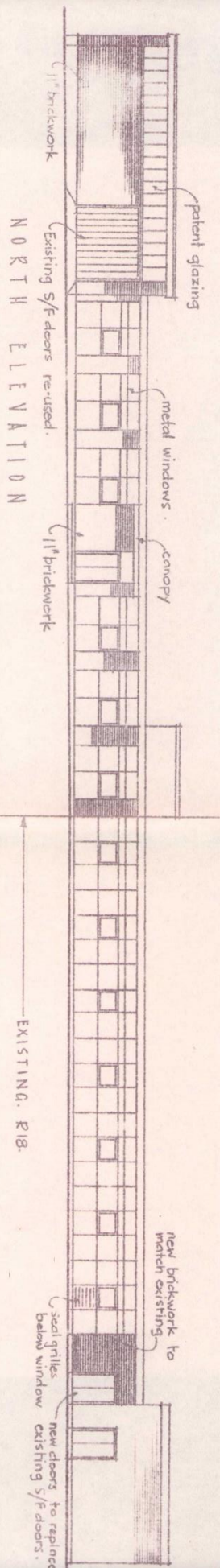
ELECTRICAL WORKSHOP

PROPOSED EXTENSION TO BUILDING R.18. N.I.R.N.S.

SCALE: 1/16" to 1'-0"

DRAWN: B.V.W. S.W.O. TADLEY. 30-8-62.

ARCH. REF: 1116c



SECTION ON N-S LINE

LOCATION PLAN 1/1250 TH.

PROPOSED EXTENSION TO R18. N.I.R.N.S. ELEVATIONS & SECTIONS.

SCALE: 1/16" to 1'-0". DRAWN: B.V.W. S.W.O. TADLEY . 30.8.62.

ARCH. REF: 1115.