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From: Commanding Officer
To: Chief, Bureau of Ships (Code 770)
Via: (1) Commander, San Francisco Naval Shipyard
(1) Chief, Bureau of Yards and Docks

Subj: Funds, for alterations to Building 364, request for

Ref: (1) NAVSHIPS 250-770, Manual for Administration of Facility Programs
(1) CO, USNRDL ltr to Chief, BuShips (Code 770) file 3-1408/3-146 over 18-6 serial 94779 of 14 Feb 1952
(1) CO, USNRDL ltr to Chief, BuShips (Code 770) file 3-1408/3-146 over 17-1 serial 94780 of 18 Feb 1952

Encl: (1) Description and Justification for NRDL Minor Construction and Improvement Project C12-52 (in quintuplicate)
(1) Detailed Estimate of Cost to accomplish Project C12-52 (in quintuplicate)
(1) NRDL Dwg. E-51-35 Scope Drawing of NRDL Facility Program, Project C12-52 (in quintuplicate)

1. Reference (b) modified by reference (c) is the integrated priority list of eighty-three (83) of the NRDL FY52 Facility Program items.

2. Five (5) copies each of enclosures (1), (2), and (3) are submitted with this request in accordance with reference (a).

3. It is requested that the Bureau of Ships allocate funds in the amount of \$4,000 for alterations and improvements to and installation of collateral in the Engineering Test Facility, Building 364.

4. The detailed estimate of cost for this proposed improvement project, No. C12-52, priority No. 5. of reference (b), accompanies this

See the file, NP/12/18(11)
part 5/5/2
with 26G/252

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request as enclosure (2). A summary of the cost estimate is as follows:

	Labor	Indirect	Material	Total
I. Construction	\$527.75		\$474.50	\$1,002.25
II. Mechanical	492.50		243.75	736.25
III. Electrical	277.00		165.00	442.00
IV. Collateral	62.50		1,148.00	1,210.50
V. AE Drawings & Specifications	80.00			80.00
Sub-Total	1,439.75		2,691.25	3,471.00
Contingencies (10%)	144.00		202.00	346.00
Total	31,583.75		32,234.25	\$3,813.00
Say				\$4,000.00

5. The proposed alterations to Building 364 are necessary in order to prevent emission of hazardous radiation from the ventilation duct, and to facilitate decontamination of the working areas within the building. The improvements are necessary to provide personnel safety measures and to provide adequate laboratory facilities for classified research and development work on reclamation measures for decontamination of materials.

6. The Laboratory has sufficient trained personnel on board to exploit the proposed alterations and improvements.

7. Building 364 (Hot Cell) with the proposed alterations and improvements is essential and will continue to be used by the Laboratory for several years, that is, until a similar facility can be provided the Laboratory in the vicinity of Building 815.

8. The Commanding Officer certifies to the following as it applies to this project:

a. Screening of Plant Improvement Projects in the Navy Department:

(1) This project is of an urgent and vital necessity in order to make full and efficient use of the Engineering Test Facility (Hot Cell).

b. Availability of Naval Personnel:

(1) No additional Naval personnel will be required incident to the proposed construction and alteration.

c. Clearance through Naval District Comandant:

(1) This project is submitted via (1) Commander, San Francisco

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Naval Shipyard, with information copies to the Commandant, Twelfth Naval District (also, Commander, San Francisco Naval Base).

d. For BuY&D's Certification:

(1) Briefly, this project consists of (a) installing coving along the base of the walls in three areas subject to radioactive contamination; (b) installing a concrete wall eighteen (18) inches thick and approximately five (5) feet high around ventilation duct for protection of personnel in the outside work area; (c) and installing an emergency personnel safety shower within the building; and (d) providing a laboratory work bench (11 $\frac{1}{2}$ ft. l. x 2 $\frac{1}{2}$ ft. s) in Area 2. (For scope of this project, see NDL Dwg. No. E-51-35 accompanying this request as enclosure (3)).

(2) Since the alterations and improvements will be to a Navy-owned building and all material is owned by the Navy or will be purchased outright, any reference to rental is not applicable.

(3) No existing facilities are available nor planned suitable for much of the research and development program as described on R&D Card NS-086-001.

(4) The project is essential to and will be complete and effective for the mission, known requirements, and planned programs.

e. The Approval of Location:

(1) The proposed alterations and improvements are to a NDL building located within the San Francisco Naval Shipyard.

f. Method of Accomplishment:

(1) It is proposed that the Laboratory prepare the working drawings (A&E Plans) and the specifications from the schematic-scope plans already prepared by the Laboratory, copies of which accompany this request as enclosure (3).

(2) It is proposed to accomplish the required alterations and improvements by Shipyard labor as indicated by enclosure (2).

(3) It is proposed that the Shipyard Public Works Officer provide and install the laboratory benches and bench tops by contract.

(4) It is planned to commence this alteration and improvement project immediately after funds are authorized and available.

(5) It is estimated that at least three (3) months, if not four (4) months, will be required for the preparation of the working (A&E) drawings and the specifications and completion of this project due to the time

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required for the delivery of materials, particularly, steel laboratory benches.

9. Considering the estimated time required for completion of this project, it is requested that a separate Project Order be issued which will carry over beyond 30 June 1952 for the accomplishment of the proposed alterations and improvements to Building 364.

10. This project is high on the order of importance list of the NRDL Facility Program. Since early accomplishment of this proposal is required to complete tests for the Armed Forces now underway at this station, it is requested that this matter be given prompt consideration by the various addressees. An advance copy of this request is being sent directly to the Bureau of Ships and the Bureau of Yards and Docks in order to expedite consideration.

J. L. BJD
Director

Distribution:

Com SFNS (1 cy w/encls)
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ESTIMATE FOR SPECIAL ALLOTMENT
Appropriation: Ships and Facilities, Navy
NavDocks 167 Rev.3-47

U.S. Naval Radiological Defense Laboratory
PLACE: San Francisco 24, California

Date: 10 March 1952

ORDER OF IMPORTANCE: NUMBER: Category A
Purpose

PROJECT NUMBER: C12-52

Description and Justification for Alterations and Improvements to Building 364.

TOTAL ESTIMATED COST \$4,000.00
FUNDS REQUESTED NOW: AMOUNT \$4,000.00

I. Description:

1. The scope of this project is shown in enclosure (3). Briefly, the project consists of:

(a) Scraping out the right-angle corner joints between the deck and the bulkheads in three areas in the Engineering Test Facility readily subject to radioactive contamination. Coving will then be installed and painted in order to make the areas easier to decontaminate.

(b) Installing a concrete wall eighteen (18) inches thick and approximately five (5) feet high around the ventilation duct at the rear of the building for protection of personnel in the outside work area from high energy radiations.

(c) Installing an emergency safety shower within the building.

(d) Providing and installing a laboratory work bench with steel cabinets below. The bench top will be approximately 11 $\frac{1}{2}$ -ft. long and 2 $\frac{1}{2}$ -ft. wide and made of laminated thermosetting plastic (such as Textolite, Formica, or Panelyte) with a coved blacksplash about 6-inches high. Below the bench top will be four (4) standard metal laboratory drawer and cupboard units. The laboratory bench will have available such standard utilities as hot and cold water, vacuum compressed air, gas, and electrical convenience outlets.

2. The estimate of cost to accomplish the above proposed alterations and improvements is detailed on enclosure (2).

ESTIMATE FOR SPECIAL ALLOTMENT

Appropriation: Ships and Facilities, Navy
NavDocks 167 Rev3-47

U.S. Naval Radiological Defense Laboratory PLACE: San Francisco 24, California	Date: 10 March 1952
ORDER OF IMPORTANCE: NUMBER: Category A Purpose	PROJECT NUMBER: C12-52
Description and Justification for Alterations and Improvements to Building 364	

TOTAL ESTIMATED COST \$4,000.00
FUNDS REQUESTED NOW: AMOUNT \$4,000.00

II. Justification:

1. The proposed alterations and improvements to the Engineering Test Facility, Building 364, are urgently required in order to continue operation on classified research and development work in connection with development of procedures and reclamation measures for decontamination of materials as described on RDB Card NS-086-001.
2. The proposed alterations and improvements are necessary to facilitate decontamination of the working areas, to prevent the emission of hazardous radiation from the ventilation duct, to provide personnel safety measures within the building and facilities for work of a radiochemical nature as well as storage facilities for equipment and apparatus.

Enclosure (1) Page 2 of 2

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PROJECT MANAGER _____

BUREAU ACTION _____

ESTIMATE FOR SPECIAL ALLOTMENT
Appropriation: Ships and Facilities, Navy
NavDocks 167 Rev.3-47

U.S. Naval Radiological Defense Laboratory
PLACE: San Francisco 24, California

DATE: 10 March 1952

ORDER OF IMPORTANCE: NUMBER: Category A

PROJECT NUMBER: C12-52

Purpose

Alterations and Improvements to Building 364

TOTAL ESTIMATED COST \$4,000.00

FUNDS REQUESTED NOW: AMOUNT \$4,000.00

Description of Project and comment, including statement of degree of urgency and necessity:

Detailed Estimate of Cost for alterations and improvements to Building 364:

I. Construction of Coving (Magnesite):

Item	Quantity	Description	To be Accomplished	Unit Cost		Estimated Cost		
			by	Labor	Material	Labor	Material	Total
1.	3 cy	Excavation & fill	X71	\$ 30.00	\$	\$ 90.00	\$	\$ 90.00
2.	185 SF	Wall-forms, studs & sheeting	X71	75.00	1.10	138.75	203.50	342.25
3.	10 cy	Concrete w/ $\frac{1}{2}$ " turds	X71	5.00	15.00	50.00	150.00	200.00
4.	135 LF	3" radius coving	X71	1.40	.60	189.00	81.00	270.00
5.	400 SF	Painting	X71	.15	.10	60.00	40.00	100.00
		Sub-total				527.75	474.50	1002.25

II. Mechanical:

6.	220 LF	Pipe & fittings $\frac{1}{2}$ IPS	X07	1.25	.55	262.50	115.50	378.00
7.	1 ea	2" packless vacuum valves	X07		45.00		45.00	45.00
8.	65 LF	2" pipe (vacuum line)	X07	2.50	.90	162.50	58.50	221.00
9.	45 LF	$\frac{1}{2}$ " pipe (vacuum line)	X07	1.50	.55	67.50	26.75	92.25
		Sub-total				492.50	243.75	736.25

III. Electrical:

10.	100 LF	Conduit & fillings 3/4"	X07	1.75	.40	175.00	40.00	215.00
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ESTIMATE FOR SPECIAL ALLOTMENT
Appropriation: Ships and Facilities, Navy
NavDocks 167 Rev.3-47

U.S.Naval Radiological Defense Laboratory
PLACE: San Francisco 24, California

DATE: 10 March 1952

ORDER OF IMPORTANCE: NUMBER: Category A
Purpose

PROJECT NUMBER: C12-52

Alterations and Improvements to Building 364

TOTAL ESTIMATED COST \$4,000.00

FUNDS REQUESTED NOW: AMOUNT \$4,000.00

Description of Project and comment, including statement of degree of urgency and necessity:

III. Electrical: (Cont'd)

Item	Quantity	Description	To be Accomplished	Unit Cost		Estimated Cost		Total
			by	Labor	Material	Labor	Material	
11.	1 lot	Boxes & etc.	X07	17.00	10.00	17.00	10.00	27.0
12.	8 ea	Convenience outlets	X07	5.00	5.00	40.00	40.00	80.0
13.	1500 LF	Wire No. 6T-TW	X07	.03	.05	45.00	75.00	120.0
		Sub-total				277.00	165.00	442.0

IV. Collaterial:

14.	1 lot	Sink, stainless steel; trap; faucet and pedal valves, etc., (Contract)		155.00		129.00	129.0
15.	1 ea	Bench, steel, Kewaunee #34 painted & installed (Contract)		136.00		136.00	136.0
16.	1 ea	Bench, steel, Kewaunee #31 painted & installed (Contract)		170.50		170.50	170.5
17.	1 ea	Bench, steel, Kewaunee #16 painted & installed (Contract)		141.00		141.00	141.0
18.	1 ea	Bench, steel, Kewaunee #53 painted & installed (Contract)		211.00		211.00	211.0
19.	50 SF	Laboratory Bench top, coved panelyte (installed) (Contract)		3.75		187.50	187.5

ESTIMATE FOR SPECIAL ALLOTMENT
Appropriation: Ships and Facilities, Navy
NavDocks 167 Rev. 3-47

U.S. Naval Radiological Defense Laboratory
PLACE: San Francisco 24, California

DATE: 10 March 1952

ORDER OF IMPORTANCE: NUMBER: Category A
Purpose

PROJECT NUMBER: C12-52

Alterations and Improvements to Building 364

TOTAL ESTIMATED COST \$4,000.00

FUNDS REQUESTED NOW: AMOUNT \$4,000.00

Description of Project and comment, including statement of degree of urgency and necessity:

IV. Collateral: (Cont'd)

Item	Quantity	Description	To Be Accomplished by	Unit Cost		Estimated Cost		Total
				Labor	Material	Labor	Material	
20.	1 ea	Shower, emergency	X07	42.50	65.00	42.50	65.00	107.
21.	4 ea	Fittings, Kewaunee #324	X07	2.00	6.00	8.00	24.00	32.
22.	6 ea	Fittings, Kewaunee #342	X07	2.00	4.00	12.00	24.00	36.
		Sub-total				62.50	1148.00	1210.

V. A&E Drawings & Specifications:

23.	4 M/D	Preparation of Working Drawings and Specifications	NRDL	20.00	80.00	80.00	\$0.
		Sub-total			80.00		80.

Summary of Cost Estimate:

I.	Construction	Labor	Indirect	Material	Total
		527.75		474.50	1002.
II.	Mechanical	492.50		243.75	736
III.	Electrical	277.00		165.00	442
IV.	Collateral	62.50		1148.00	1210.
V.	A&E Drawings & Specifications	80.00			80.
	Sub-total	1439.75		2031.25	3471.
Contingencies (10%)		144.00		203.00	347
Total		\$1583.75		\$2234.25	\$3818
Say					\$4000.

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