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Resident Engineer
 U. S. Atomic Energy Commission
 APO 187 (HOB), c/o Postmaster
 San Francisco, California

3 December 1953

SUBJECT: Various design matters

Dear Sir:

The various design matters called to our attention in your RAN-1725 have been reviewed by our Engineering Division as follows:

Station 2300 - P-274K

- a. The wall in question which separates room No. 1 from the chimney is intended to be monolithic with adjoining walls and should be reinforced similar to detail 1 of Drawing 6402-DL-30. It is also intended that the vertical wall steel should extend into the slab of the second floor; however, this is not of structural significance since the second floor is designed to span between side walls. These details were not clearly delineated on the drawings and required further interpretation from our engineering Design Division.
- b. The 1" premolded joint filler between the wall in question and the floor slab of room No. 1 is to prevent transmission of any great amount of vertical load from the footing into the wall. It is not shown nor is it intended that this type of joint occur at any other point.
- c. The requirement for providing a 3" diameter lap of #305 reinforcing bars is a conservative lap value chosen because of the severe type of loading that the structure will be subjected to. Lap lengths vary for this type of reinforcement from a minimum of 12" to a maximum of 36" depending.
- d. The structure of the conduit rebars in reinforced concrete is normally negligible and the effective diameter of the concrete plus all reinforcement is the effective diameter of the wall.

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
RELEASER NUMBER (CROSS REFERENCE NUMBER(S))	
CLASSIFICATION CHANGED TO:	
CHANGING NO. JOE CLASSIFIED INFO	
COORDINATE WITH:	
CLASSIFICATION CANCELLED	
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SINGLE REVIEW AUTHORED BY: *A. J. S. 2/21/17 23*
 REVIEWER (ADD):
 NAME: *Z. Z. Z.*
 DATE: *2/21/17*

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12/11/1961 Pacific Ocean Division

President, Am. Inst.

December 1961

Limonite Concrete, Stations 141, 144, 242 & 261

- a. The original criteria submitted by the users for Station 141 indicated limonite concrete projecting into the coral concrete foundation. As the projection was not dimensioned, the latter was referred to the J-6 Division at Los Alamos for a minimum acceptable dimension since we were aware of the design and construction problems involved. A minimum value of 4'-0" was established by J-6 as the depth that the limonite concrete should project into the foundation and our plan were based on this requirement.

These questions on engineering design illustrate some of the difficulties that are encountered in correlating, designing and detailing the criteria received for Scientific Stations. We appreciate your calling these details to our attention because we recognize the importance of the drawings portraying the functional and designed requirements in sufficient detail to insure that the construction is in accordance with the criteria and good engineering practice.

Very truly yours,

John C. Evans, P.E.

J. C. Evans, Manager
Construction-Operations Division

cc:

WD: SWH:nr

CC: Field Manager, J-6
Project Manager
a. Project Engineer, J-6
b. of Operations
Eng. C/S
Central File

1. To be prepared by [unclear] for review by [unclear] and [unclear].
2. To be reviewed by [unclear] and [unclear] and [unclear].
3. To be approved by [unclear] and [unclear].
4. To be forwarded to [unclear] and [unclear].

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FBI - LOS ANGELES