

The Light company

Houston Lighting & Power P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

August 22, 1980
ST-HL-AE-515
SFN: V-0530

Mr. W. C. Seidle, Chief
Reactor Construction and
Engineering Support Branch
Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76102

Dear Mr. Seidle:

South Texas Project
Units 1&2
Docket Nos. STN 50-498, STN 50-499
Additional Information on the
Safety Injection System Piping
Deficiency

On May 30, 1980, pursuant to 10CFR50.55(e), Houston Lighting & Power Company submitted to your office a final report on the "Safety Injection System Piping Deficiency." On July 17, 1980, HL&P received a request for additional information concerning clarification of penetration details as shown on Figure 1 of the subject final report. Specifically, the clarification was to address disposition of the seal weld between the process pipe and the emergency sump lines. In response to your request for additional information on the subject deficiency, please find attached the following information.

Figure 1 depicts the general layout of the Safety Injection System (SIS) piping with the expansion joints and pipe restraints located. This figure is similar to Figure 1 of our final report.

Conceptual detail "A" presents an expanded view of the expansion joint (bellows) inside the sump along with the containment penetration detail and location of the process pipe restraint. Note that the process pipe and pipe-to-flange ring welds are ASME Code Class II. All other components including the guard pipe are designed in accordance with Class MC except for the restraint which is Class NF. The containment liner is the boundary against the release of radioactivity.

Conceptual detail "B" is a sketch of the anchoring of the SIS process pipe outside the containment building.

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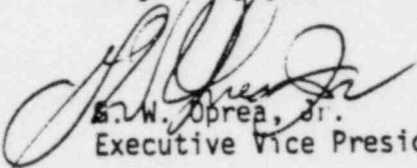
The SIS process pipe and its guard pipe have been modeled and analyzed using the computer program "Superpipe," version 11-15-79. The model separates the pipe into two separate runs as follows:

- (1) Refueling Water Storage Tank (RWST) to new pipe restraint including the recirculation valve and,
- (2) Pipe restraint to flange end inside emergency sump.

The recirculation valve end loads have been calculated to be well within allowable stresses.

Should further assistance be required, please contact Mr. L. R. Jacobi at (713) 481-7217.

Very truly yours,


E. W. Oprea, Jr.
Executive Vice President

MEP/pjb
Attachment

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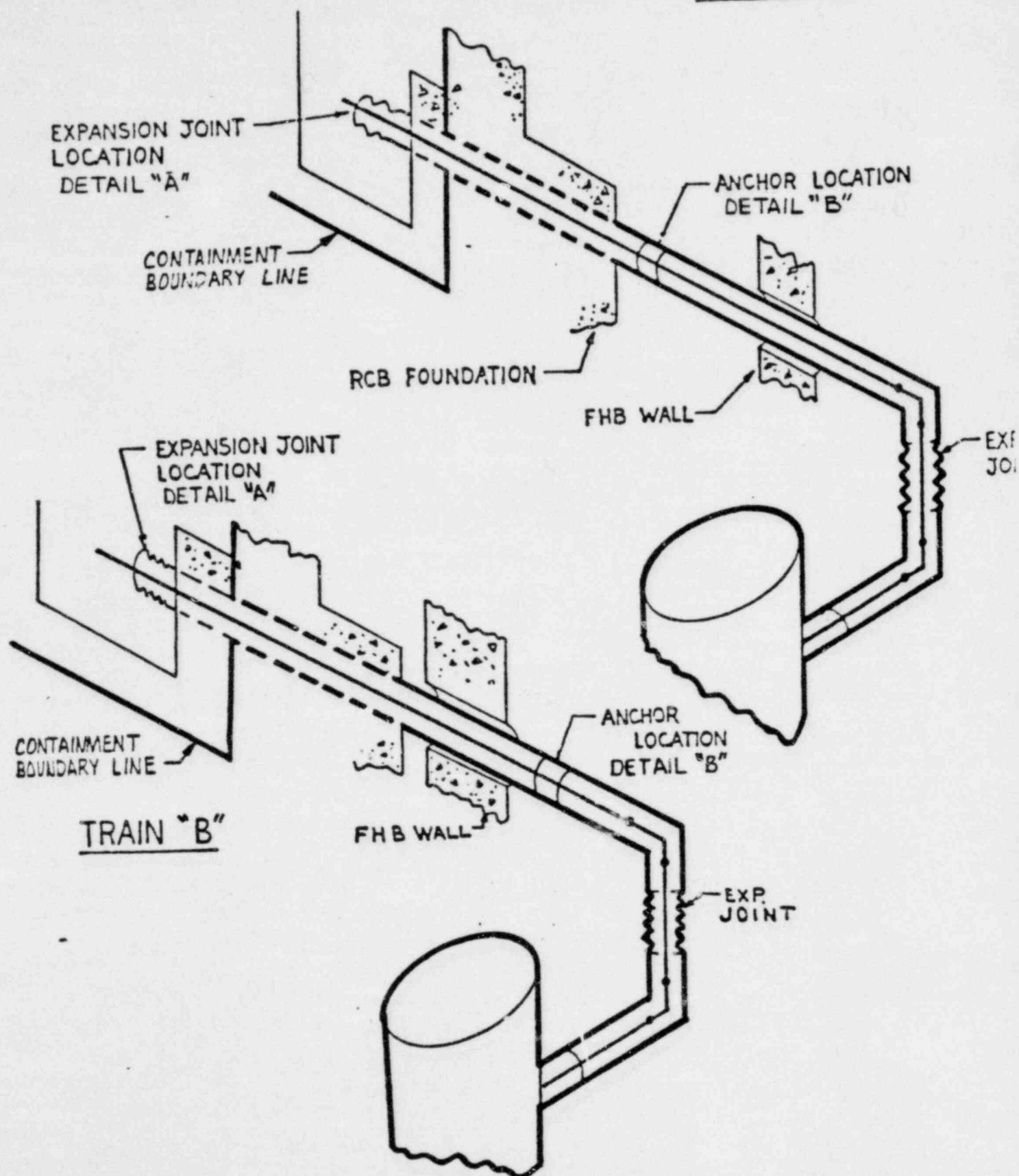
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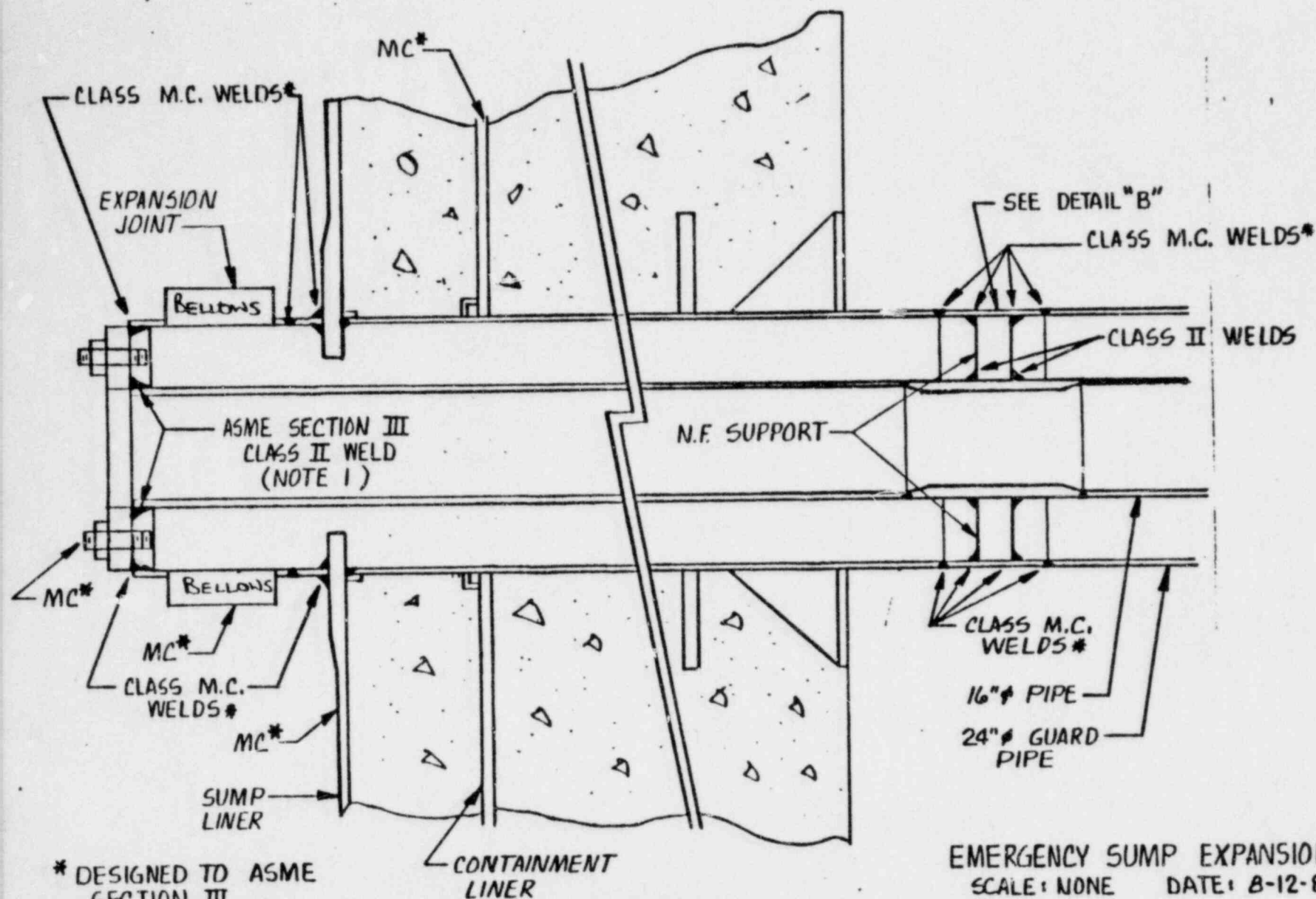
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TRAINS "A" & "C"



TRAIN "B"

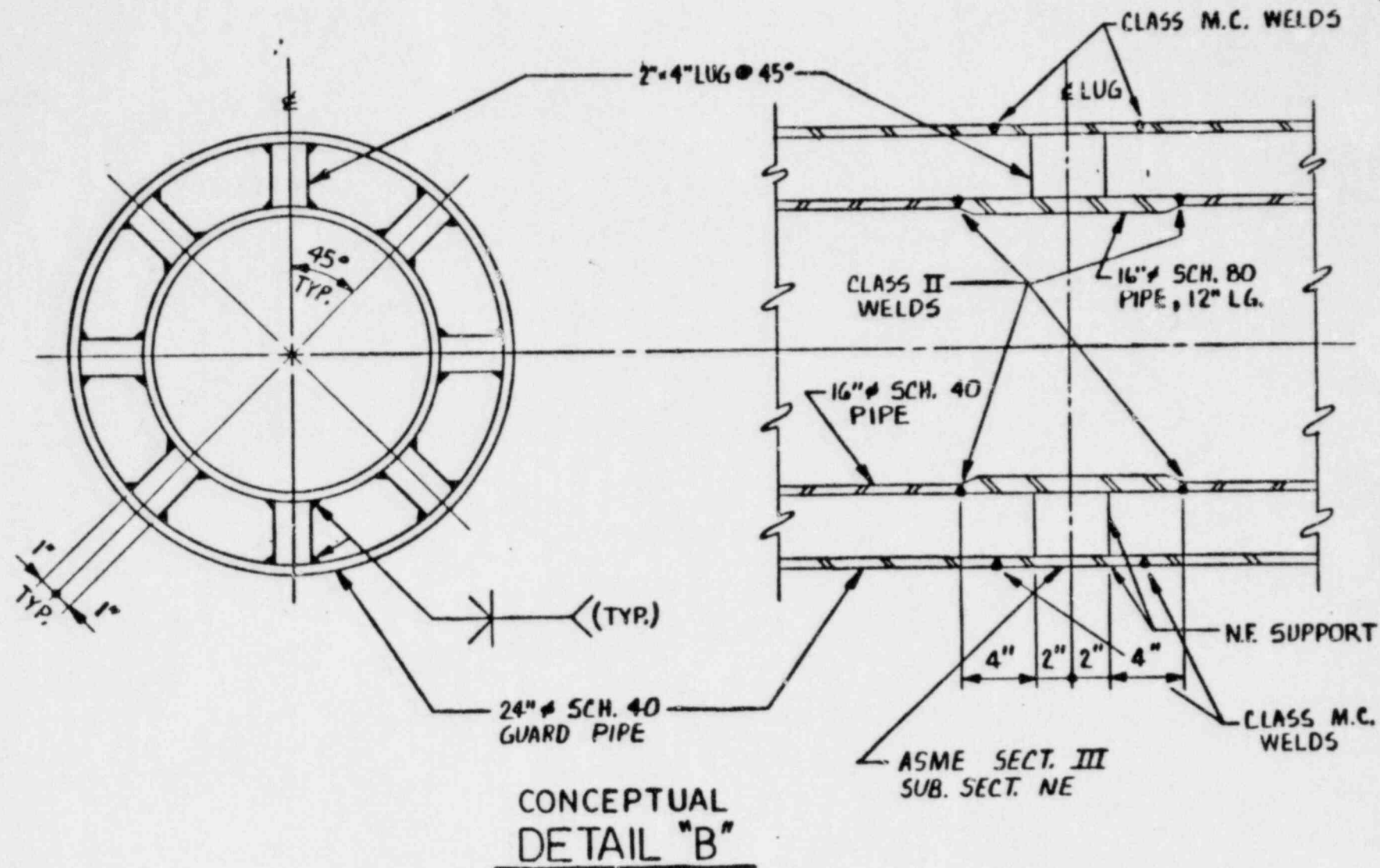
FIGURE - 1



* DESIGNED TO ASME
SECTION III
SUB-SECTION NE
NOTE 1: 16" PIPE TO FLANGE
RING WELDS ARE ASME CLASS II

CONCEPTUAL
DETAIL "A"

EMERGENCY SUMP EXPANSION JOINT
SCALE: NONE DATE: 8-12-80



EMERGENCY SUMP PENETRATION SLEEVE
 CALCULATION NO. 2C099RC1368
 SCALE: NONE DATE 8-12-80