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1.0 PURPOSE

1.1 This procedure provides the methods for verifying the Nuclear Plant Island Structure (NPIS) foundation basemat integrity through the following:

1.1.1 Measurement of the foundation basemat settlement at least once per 92 days.

1.1.2 Measurement of four (4) instrumented basemat cracks at least once per 92 days.

1.1.3 Inspection of the accessible areas of the foundation basement and selected walls for cracks at least once per 18 months.

1.2 This procedure meets the Technical Specification requirements listed in section 2.1.

NOTE

The surveillance interval for items 1.1.1 and 1.1.2 will be lengthened provided no significant changes are observed and no adverse or unexplained data has been obtained. Three consecutive, satisfactory surveillances are required to extend the interval to the next interval stated below. The intervals are (as used within the Tech. Specs):

Q - At least once per 92 days
SA - At least once per 184 days
A - 12 months
R - At least once per 18 months.

2.0 REFERENCES

2.1 Technical Specifications, 6.8.4e

2.2 Harstead Engineering Assoc. Inc., Report No. 8304-1 dated September 19, 1983; Analysis of Cracks and Water Seepage in Foundation Mat

2.3 FSAR

2.3.1 Section 2.5.4.13, Subsurface Instrumentation Program-Piezometers (Amend. No. 33)

2.3.2 Section 2.5.4.13.3, NPIS Settlement (Amend. No. 34)

2.3.3 Section 2.5.4.13.4, Post Construction NPIS Monitoring (Amend. No. 34)

2.3.4 Figure 2.5-112a, Long Term Settlement Point Locations (Amend. No. 17)

2.3.5 Figure 2.5-112, Instrument Plot Plan

2.3.6 Figure 2.5-117, Composite Foundation Mat Settlement (Amend. No. 34)

2.4 Plant Drawings

2.4.1 1564-G-489; General Excavation Plan & Sections

2.4.2 1564-G-765 S02, Fuel Handling and Reactor Aux. Bldg. FL. PL. EL. -35.0

2.4.3 1564-G-499 S01, 2 & 3, Common Foundation Structure Masonry

2.4.4 SK 1564-15.10-G-34.1, Composite Foundation Mat Settlement

2.4.5 LP&L DWG Nos. G-C-0003 thru 0006, Base Mat Crack Maps

2.4.6 HP-SM-51 thru 65, HP-SM-77; Radiation/Contamination Survey Forms for the -35 Elev.

2.4.7 LOU 5234.016, Wall Crack Maps

2.5 Plant Procedures

2.5.1 HP-1-110, Radiation Work Permits

2.5.2 UNT-5-002, Condition Identification and Work Authorization

2.6 Ebasco Procedure CP-321, Project Survey Monument Control

2.7 Letter, W3P85-0464, K.W. Cook to G.W. Knighton dated February 25, 1985

2.8 LCIWA-008724, Baseline Elevation Data

3.0 PREREQUISITES

3.1 The services of a Professional Land Surveyor shall be secured for performance of section 8.2.

3.2 Obtain a Radiation Work Permit in accordance with HP-1-110, if required.

3.3 At least one set of prints of Reference 2.4.5, Base Mat Crack Maps and Reference 2.4.6, Survey Forms are available for performing the inspection in section 8.1.

4.0 PRECAUTIONS AND LIMITATIONS

NONE

5.0 INITIAL CONDITIONS

5.1 This procedure may be performed in any operational mode as required.

5.2 The SS/CRS has authorized performance of this procedure and has signed the Task Card(s).

6.0 MATERIAL AND TEST EQUIPMENT

	M&TE Numbers
6.1 Surveying equipment necessary to run a first order survey	_____
6.2 Bausch & Lomb measuring magnifier, cat. no. 81-34-35, or other equivalent measuring device.	_____
6.3 Whittemore multi-position strain gage, or equivalent with accessories (contact points, contact seats and invar master bar).	_____
6.4 35 mm camera and film	_____
6.5 Check-it digital pyrometer model 402 or equivalent.	_____

7.0 ACCEPTANCE CRITERIA

7.1 No cracks greater than 15 mils (.015 inches) are visible in the accessible areas of the basemat surface.

7.2 The measured differential settlement of the common foundation basemat does not exceed one(1) inch.

7.3 Measured changes in the instrumented cracks are less than or equal to 15 mils (.015 inches).

7.4 No cracks greater than 15 mils are visible in the shield building and wet cooling tower exterior walls selected for inspection.

8.0 PROCEDURE

8.1 NPIS FOUNDATION BASEMAT CRACK MONITORING

8.1.1 An inspection of the floor in each room/area listed in Attachment 10.1 shall be made.

NOTE

The RAB and FHB floors on -35 ft. elevation have had an epoxy coating applied. Any cracking and/or spalling observed during performance of this section may only be paint. Therefore a determination shall be made for each observation as to whether the concrete and coating or just coating are effected. Defects in just the coating though not germane to this surveillance, may warrant further considerations from a Health Physics/ contamination standpoint. Therefore, at the inspector's option, coating defects will be recorded and forwarded to the appropriate individuals.

NOTE

If any crack is found to exceed 15 mils, contact the SS/CRS. Following notification, complete the basemat inspection.

NOTE

On the recommendation of Health Physics, a room/area may be ommitted from a given surveillance for radiological reasons.

NOTE

To obtain an accurate crack width measurement, it may be necessary to clean, buff and/or grind the concrete surface. This will be done at the discretion of Plant Engineering to facilitate the inspection.

Initial/Date

8.1.2 Inspect each room/area and:

8.1.2.1 Verify that each crack identified and mapped on Reference 2.4.5 is less than or equal to 15 mils. Record any crack that has exceeded 15 mils on Attachment 10.2. _____

Initial/Date

8.1.2.2 Record any new cracks (cracks not previously identified on the drawings of Reference 2.4.5) whose width exceeds 15 mils on Attachment 10.2 or Reference 2.4.6. _____

8.1.3 Acceptance Criterion 7.1 has/has not (circle one) been met.

Verified By: _____
Signature Date

NOTE

If the acceptance criterion has not been met; i.e., there are cracks greater than 15 mils in width, contact the SS/CRS. An engineering evaluation must then be performed to determine the effects, if any, on the structural integrity of the NPIS Common Foundation Basement.

8.1.4 Based on the engineering evaluation, the basemat has been determined operable.

Verified By: _____
Signature Date

Initial/Date

8.1.5 A copy of the engineering evaluation shall be attached to this procedure. _____

8.2 NPIS FOUNDATION BASEMAT SETTLEMENT MEASUREMENTS

NOTE
All measurements shall be taken to the nearest 0.001 ft. Loops shall close within 0.01 ft.

8.2.1 Starting at the Master Benchmark (see Attachment 10.4), determine the elevation of supplementary benchmarks SBM-1, 2 & 3 and record the data on Attachment 10.5. (Optional at Surveyor's Discretion) _____

NOTE
The additional basemat monitoring points shown on Attachment 10.4, Sht. 2, are non-mandatory; but they are highly desired for evaluation purposes. The optional basemat monitoring points shown on Attachment 10.4, Sht. 3, may be done at the discretion of plant engineering. Data will be recorded on Attachment 10.5, Sht. 3.

8.2.2 Using the Master Benchmark and/or SBM-1, 2 or 3, determine the elevation of the settlement points shown on Attachment 10.4, shts. 1 and 2. Record the elevations on Attachment 10.5, shts. 1 & 2. _____

Initial/Date

NOTE
A copy of all field notes generated by the surveying crew shall be attached to this procedure.

8.2.4 Using the data on Attachment 10.5, sht. 1, calculate the Common Foundation Basemat Differential Settlement on Attachment 10.7. _____

8.2.5 Compare the calculated differential of Attachment 10.7 with the corresponding baseline differential on Attachment 10.6. Record the difference, if any, on Attachment 10.8 _____

8.2.6 Verify each value on Attachment 10.8 is less than or equal to one(1) inch (.083 ft.). _____

8.2.7 Acceptance Criterion 7.2 has/has not (circle one) been met.

Verified By: _____
Signature Date

Initial/Date

NOTE

If the difference between any calculated and baseline value exceeds one(1) inch (.083 ft.), contact the SS/CRS. An engineering evaluation must then be performed to determine the effects, if any, on the structural integrity of the NPIS Common Foundation Basemat.

8.2.8 Based on the engineering evaluation, the basemat has been determined operable.

Verified By: _____

Signature Date

8.2.9 A copy of the engineering evaluation shall be attached to this procedure.

_____

8.3 Crack Width Monitoring

NOTE

Four (4) basemat (2 in the East Cooling Tower Area and 2 in the West Cooling Tower Area) have been instrumented for monitoring changes in crack width. Brass inserts are installed on each side of the selected cracks at a known distance (See Attachment 10.9). This distance is checked periodically for change using a multi-position (Whittemore type) strain gage.

Initial/Date

8.3.1 Obtain the following equipment to make the required measurements:

1. Multi-position strain gage

2. Ivar master bar

3. Contact points

4. Contact seats

5. Contact pyrometer _____

8.3.2 Remove the brass insert protective cover plate from each crack. _____

8.3.3 Using the strain gage, measure the distance between each set of brass inserts (See Attachment 10.9). _____

8.3.4 Record the data on Attachment 10.10. _____

8.3.5 After the measurements have been taken, replace the protective cover plates. _____

8.3.6 Compare the present measurements to the baseline data on Attachment 10.10. _____

Initial/Date

NOTE

If the difference between measured and baseline data exceeds 15 mils, consider performing an evaluation taking into account thermal effects due to the differences in concrete temperature at which the baseline and measured data were obtained.

8.3.7 Verify that the difference between the baseline and measured distance is less than or equal to 15 mils (.015 inches). _____

8.3.8 Acceptance Criteria 7.3 has/has not (CIRCLE ONE) has been met.
Verified by _____
SIGNATURE DATE

8.3.9 If any measurements exceeds 15 mils, notify the SS/CRS. If not already being done, concurrently perform sections 8.1 and 8.2. _____

NOTE

An engineering evaluation may be required depending on the results of Section 8.1 and 8.2.

8.3.10 Based on the information obtained from the completion and evaluation of sections 8.1 & 8.2, the basemat has been determined operable.

_____
SIGNATURE DATE

Initial/Date

8.4 WALL INSPECTION

NOTE

During a prelicense meeting the NRC, NRC Consultant Brookhaven Labs, Ebasco and LP&L discussed and agreed there was no correlation between existing wall and basemat cracks. However, the NRC requested periodic inspection of the wall cracks. In compliance with this request, LP&L has selected sections of the shield building and Wet Cooling Tower Exterior Walls in proximity to the basemat to be periodically inspected. Existing cracks in these selected areas were mapped and these sketeches (reference 2.4.7) will be used as baseline data.

NOTE

A photographic survey of the walls is not mandatory, but is desired.

8.4.1 An inspection/photographic survey of each wall identified in Attachment 10.11 shall be made. The inspection/photographic survey area shall be limited to a height of 8' -0 off the basement. _____

8.4.2 Verify that each crack identified and mapped on Reference 2.4.7 is less than or equal to 15 mil. _____

Initial/Date

8.4.3 Record any new cracks (cracks not previously identified on the drawings of Reference 2.4.7), whose width exceeds 15 mils, on Attachment 10.2. _____

NOTE
If the Acceptance Criteria has not been met, notify the SS/CRS.

8.4.4 Acceptance Criterion 7.4 has/has not (CIRCLE ONE) been met.
Verified By: _____
SIGNATURE DATE

NOTE
If the acceptance criteria has not been met, a determination will be made as to whether the wall cracks in excess of 15 mils resulted from basemat movement/ deterioration or some other anomaly.

8.4.5 If the acceptance criteria in sections 8.1, 8.2 and 8.3 has been met, the wall cracking can be attributed to a source other than the basemat. The crack information shall therefore be forwarded to ENS for evaluation and/or corrective action. No further action under this surveillance will be required. _____

Initial/Date

8.4.6 If the acceptance criteria in sections 8.1, 8.2 or 8.3 were not met, there may be a correlation between that and the wall cracking. This shall be addressed in the engineering evaluation. _____

8.5 DATA DISPOSITION

8.5.1 A copy of this procedure, observations, photographs, and measurements obtained has been submitted to ENS, for evaluation and inclusion in the 18-month special report. _____

9.0 SETPOINTS

NONE

10.0 ATTACHMENTS

10.1 Room/Area Inspection List

10.2 Area/Room/Wall Inspection Data Sheets

10.3 NPIS Foundation Basemat Monitoring Point Baseline Data

10.4 Settlement Point Locations

10.5 Elevation Measurements

10.6 Basement Edge to Shield Building Baseline Differential Calculation

10.7 Basement Edge to Shield Building Differential Calculation Sheet

10.8 Differential Settlement Results Sheet

10.9 General Arrangement of Instrumented Cracks

10.10 Crack Width Monitoring Data Sheet

10.11 Wall Inspection List

10.12 Wall Identification and Location

ROOM/AREA INSPECTION LIST

ROOM/AREA#	ROOM/AREA NAME	REPORTABLE FINDINGS YES - NO (circle one)	INSPECTION COMPLETED INITIAL/DATE
B1	Corridor	Y - N	_____
B5	Pump Area	Y - N	_____
B6	Gas Decay Tank B	Y - N	_____
B7	Gas Decay Tank AB	Y - N	_____
B8	Gas Decay Tank A	Y - N	_____
B9	Waste Gas Comp. A	Y - N	_____
B10	Waste Gas Comp. B	Y - N	_____
B11	Gas Surge Tank	Y - N	_____
B12	Eq. Drain & Sump Pumps	Y - N	_____
B15	SI Pump Rm. A	Y - N	_____
B16	SI Pump Rm. B	Y - N	_____
B17	Corridor	Y - N	_____
B20	S/D Cooling Hx B	Y - N	_____
B22	Waste Tank Rm. B	Y - N	_____
B23	Waste Pump Rm. A	Y - N	_____
B24	Waste Tank Rm. A	Y - N	_____
B25	Waste Pump Rm. B	Y - N	_____
B26	Laundry Tank Rm.	Y - N	_____
B31	Waste Cond. Tanks	Y - N	_____
B32	Waste Cond. Pumps	Y - N	_____
B39	Holdup Pump A	Y - N	_____
B40	Holdup Pump B	Y - N	_____
B41	Holdup Recirc Pump	Y - N	_____
B45	BA Condensate Tanks	Y - N	_____
B48	S/D Cooling Heat HX A	Y - N	_____
B49	Turb. Driven Aux. F.W. Pump	Y - N	_____
B49A	Aux. F.W. Pump A	Y - N	_____
B49B	Aux. F.W. Pump B	Y - N	_____
B50	Diesel Stor. Tk. A	Y - N	_____

ROOM/AREA INSPECTION LIST

ROOM/AREA#	ROOM/AREA NAME	REPORTABLE FINDINGS YES - NO (circle one)	INSPECTION COMPLETED INITIAL/DATE
B51	Sanitary Eq.	Y - N	_____
B52	Diesel Stor. Tk. B	Y - N	_____
B53	Vault Area	Y - N	_____
B56	East Vault Area	Y - N	_____
B57	West Vault Area	Y - N	_____
B58	FHB Sub Basement	Y - N	_____
B59	Cooling Tower Area A	Y - N	_____
B59A	Cooling Tower Area B	Y - N	_____
B60	Wet Cooling Tower A	Y - N	_____
B60A	Wet Cooling Tower B	Y - N	_____

NOTE: Rooms B13, B46 and B47 have been omitted because of expected high radiation conditions.

COMMENTS: _____

_____

_____

_____

_____

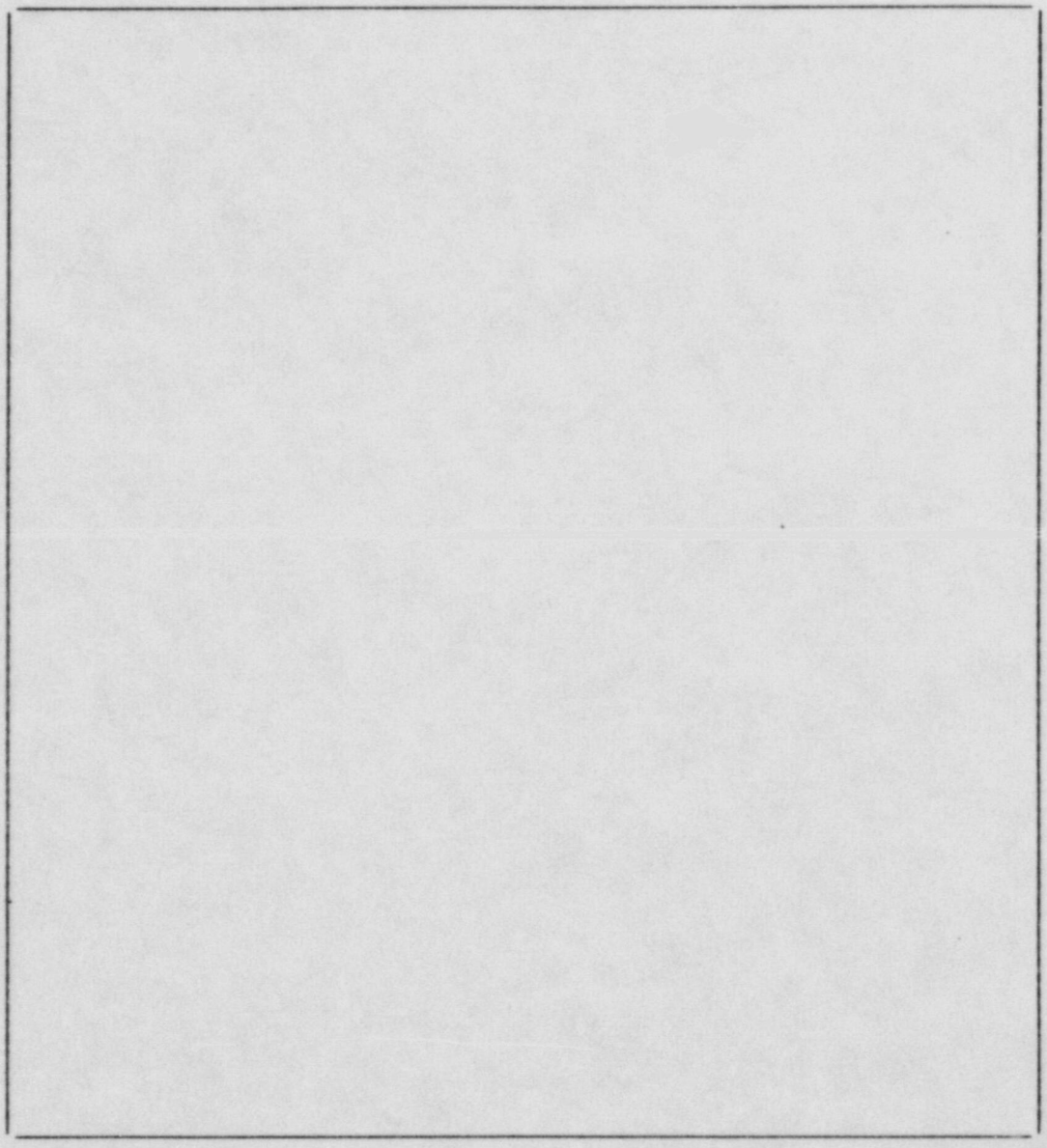
_____

_____

AREA/ROOM/WALL INSPECTION DATA SHEET

AREA/ROOM/WALL NUMBER _____ DATE INSPECTED _____

INSPECTION PERFORMED BY _____



NOTE: Locate walls, doors, stairs, equipment, column lines on sketch for orientation purposes.

AREA/ROOM/WALL NO. ______________

REMARKS

Signature Date

NPIS FOUNDATION MONITORING POINT

BASELINE DATA

TECH. SPEC. MONITORING POINTS	ELEVATION (Ft.)
A (SP-C5)	25.385
B (SP-C6)	22.269
SE (SP-M1)	20.953
NE (SP-M2)	20.969
NW (SP-M3)	20.961
SW (SP-M4)	23.922
E1 (SP-M5)	21.387
E2 (SP-M6)	20.987
W1 (SP-M7)	24.306
W2 (SP-M8)	24.294

OPTIONAL MONITORING POINTS	
SP-C1	-30.548
SP-C2	24.963
SP-C3	24.954
SP-C4	24.965
SP-M9	-35.286
SP-M10	-35.440
SP-M11 (No Longer Used)	
SP-M11A	(LATER)
SP-M12	-35.293
SP-M13	-35.288
SP-A	-35.420
SP-B	-35.369
SP-C	-35.502
SP-D	-35.606
SP-E	-35.464
SP-F	-35.438

NPIS FOUNDATION MONITORING POINT

BASELINE DATA

ADDITIONAL MONITORING POINTS	ELEVATION
SP-E1	(LATER)
SP-E2	(LATER)
SP-E3	(LATER)
SP-E4	(LATER)
SP-E5	(LATER)
SP-E6	(LATER)
SP-E7	(LATER)
SP-E8	(LATER)
SP-E9	(LATER)
SP-E10	(LATER)
SP-E11	(LATER)
SP-W1	(LATER)
SP-W2	(LATER)
SP-W3	(LATER)
SP-W4	(LATER)
SP-W5	(LATER)
SP-W6	(LATER)
SP-W7	(LATER)
SP-W8	(LATER)
SP-W9	(LATER)

MONITORING POINTS LOCATIONS

(TECH. SPEC. MONITORING POINTS)

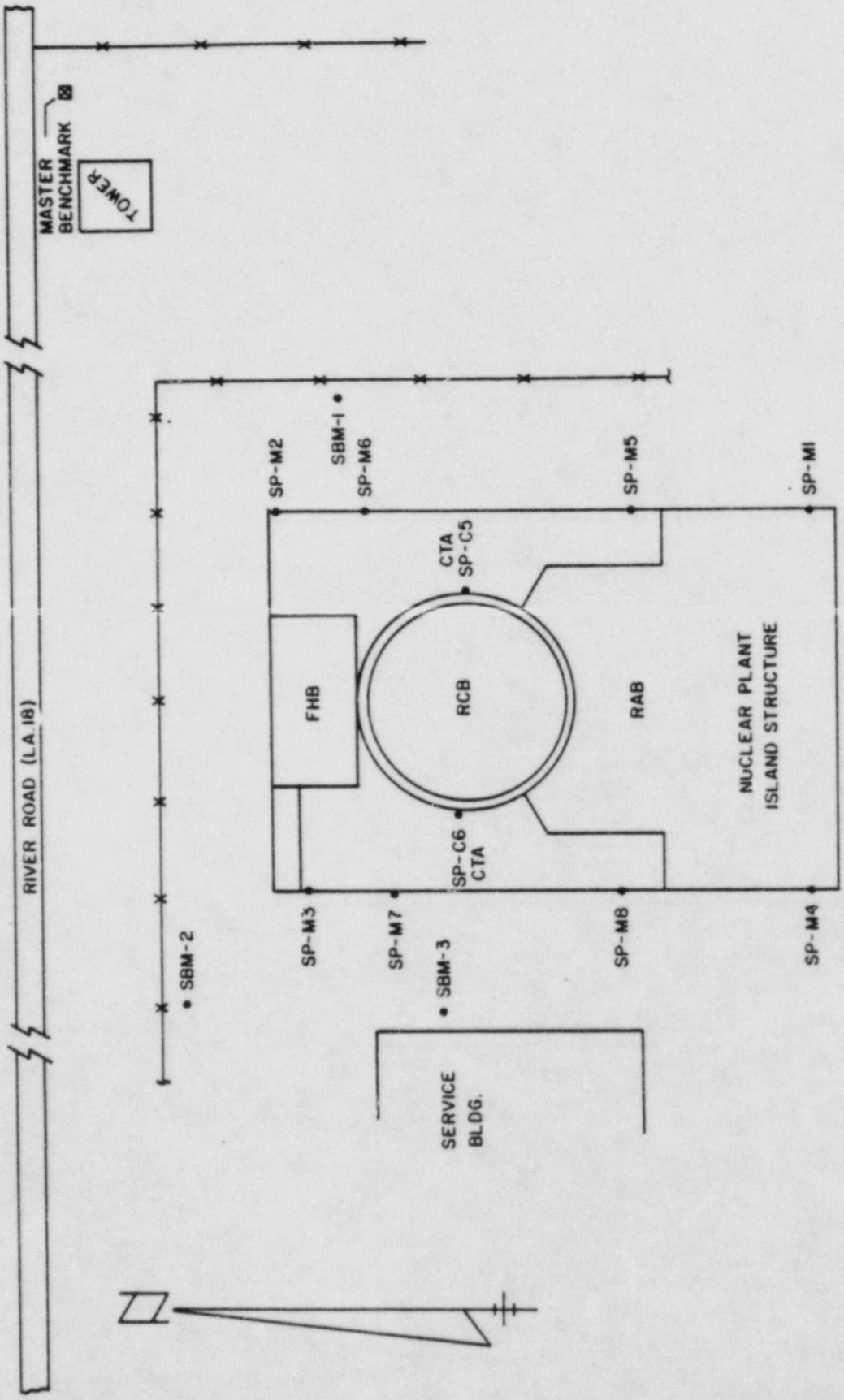
MONITORING POINT LOCATIONS

(ADDITIONAL MONITORING POINTS)

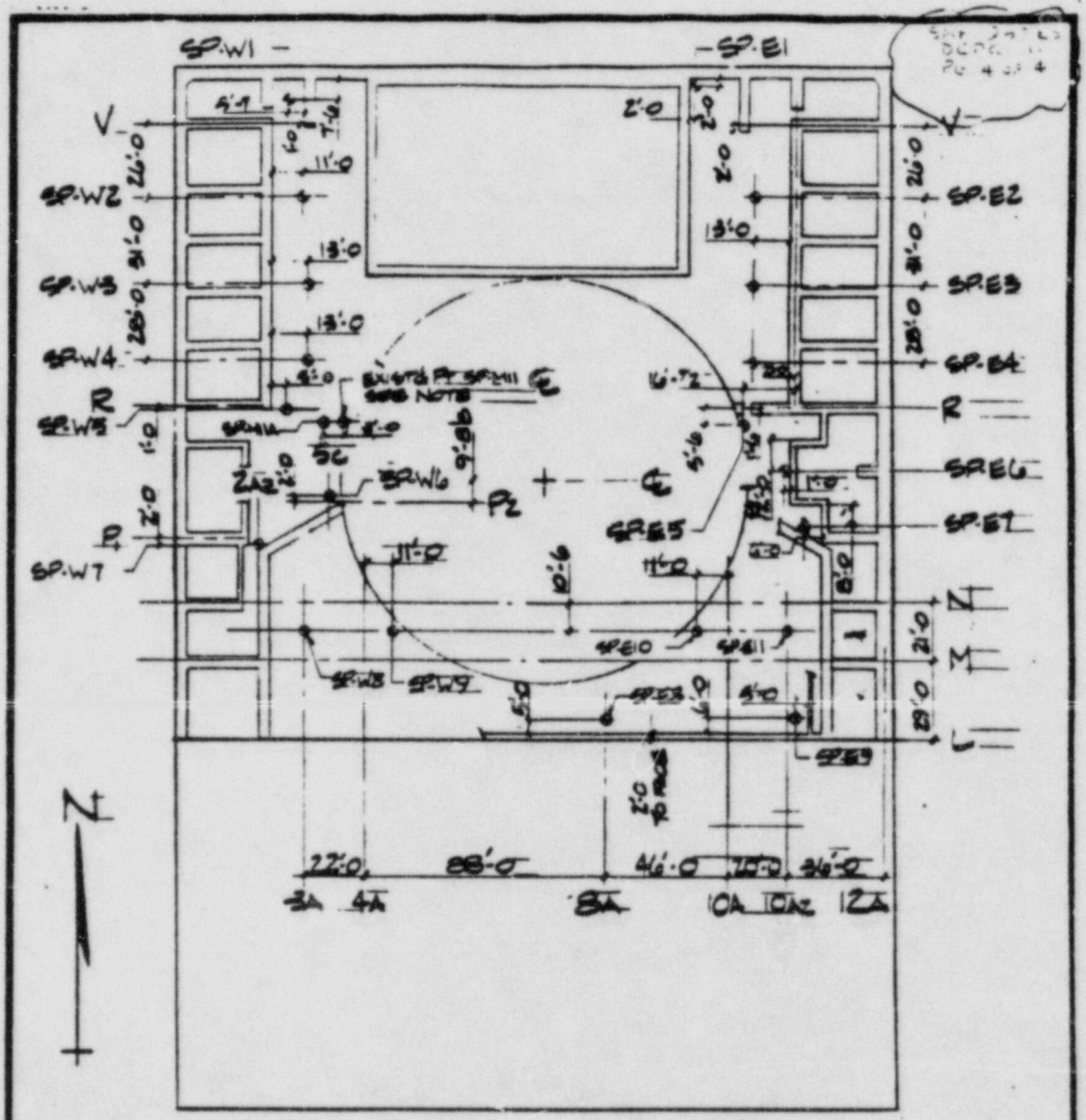
MONITORING POINT LOCATIONS

(OPTIONAL MONITORING POINTS)

MONITORING POINT LOCATIONS
(TECH. SPEC. MONITORING POINTS)



MONITORING POINT LOCATIONS
(ADDITIONAL MONITORING POINTS)



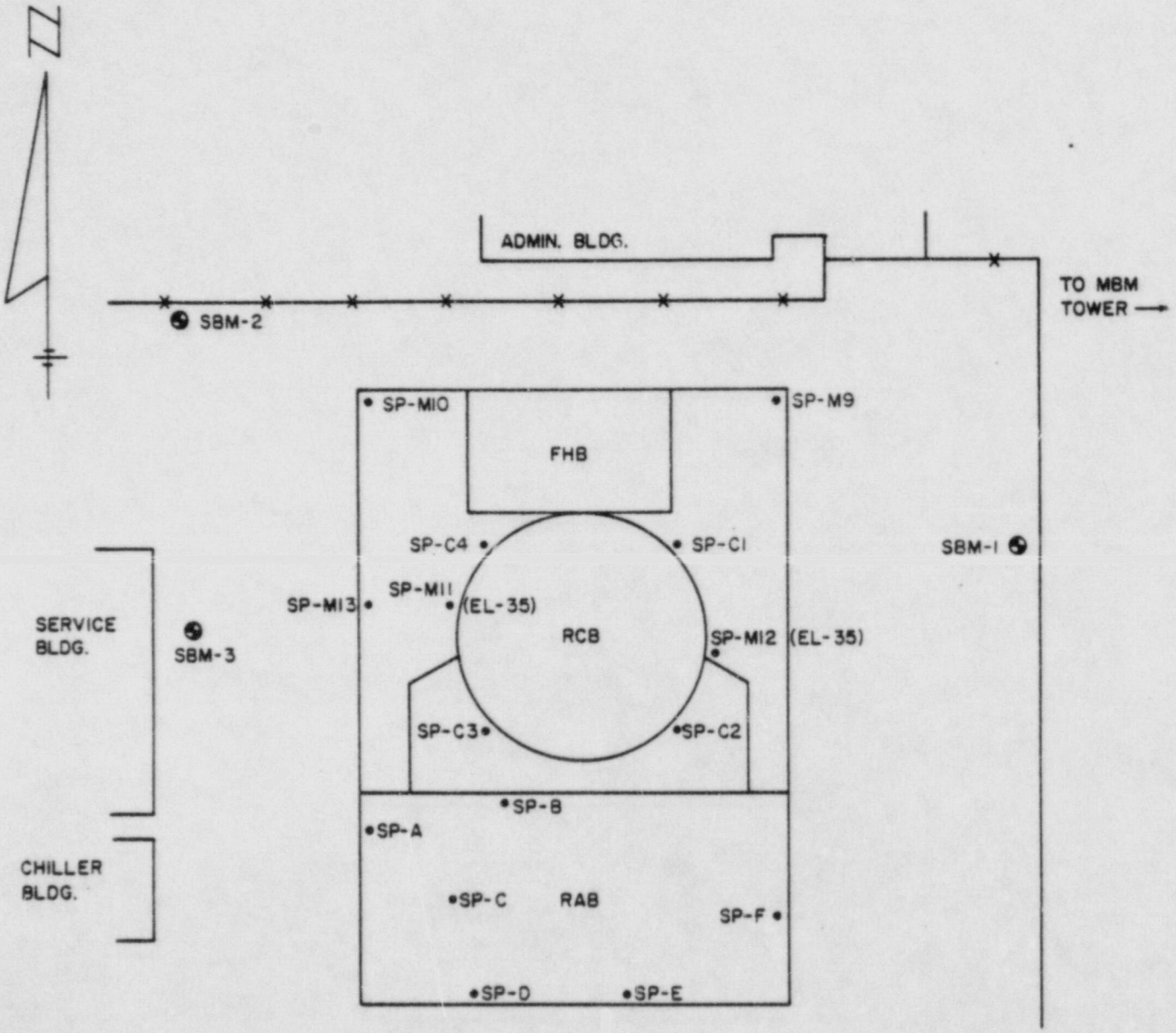
NOTES
1. EXISTG PT SP.M11 SHALL REQUIRE AN ADDITIONAL PT. SP.M11A LOCATED 3'-0 WEST OF SP.M11 ALONG SAME NORTH-SOUTH LINE

LOUISIANA POWER & LIGHT COMPANY	
WATERFORD S.E.S UNIT NO. 3	
1983-1165 MW INSTALLATION	
ADDITIONAL EMBEDMENT MONITORING POINTS	
EBASCO SERVICES INC. - FIELD	
SCALE 1" = 50	RELEASED - [illegible]
DATE: 8/7/85	
DIV. CIVIL	FIELD SKETCH
DR. MP	FIGURE 1
CH. [illegible]	

NO.	DATE	REVISION	BY	CH.	RELEASED

PE 5-033 REVISION 1 — 27 — ATTACHMENT 10 4 (2 of 5)

MONITORING POINT LOCATIONS
(OPTIONAL MONITORING POINTS) ~~LOCATIONS~~



MONITORING POINT LOCATIONS

POINT	COORDINATES	
SP-C1	N4304.50	W3770.50
SP-C2	N4195.50	W3770.50
SP-C3	N4195.50	W3879.50
SP-C4	N4304.50	23879.50
SP-M1	N4029.00	W3699.00
SP-M2	N4391.00	W3699.00
SP-M3	N4377.00	W3959.00
SP-M4	N4029.00	W3959.00
SP-M5	N4179.00	W3699.00
SP-M6	N4313.50	W3699.00
SP-M7	N4288.00	W3959.00
SP-M8	N4179.00	W3959.00
SP-M9	N4395.50	W3703.00
SP-M10	N4396.00	W3955.00
SP-M11 (No Longer Use)	N	W3900.00
SP-M11A	N(LATER)	W(LATER)
SP-M12	N4240.00	W3747.00
SP-M13	N4271.00	W3955.00
SP-A	N4132.25	W3953.17
SP-[illegible]	N4151.50	W3870.50
SP-C	N4088.17	W3902.00
SP-D	N4033.00	W3891.00
SP-E	N4027.50	W3799.75
SP-F	N4079.50	W3707.33
SP-C5	N4240.00	W374[illegible].00
SP-C6	N4270.00	W390[illegible].00

MONITORING POINT LOCATIONS

POINT	COORDINATES	
SP-E1	N(LATER)	W(LATER)
SP-E2	N(LATER)	W(LATER)
SP-E3	N(LATER)	W(LATER)
SP-E4	N(LATER)	W(LATER)
SP-E5	N(LATER)	W(LATER)
SP-E6	N(LATER)	W(LATER)
SP-E7	N(LATER)	W(LATER)
SP-E8	N(LATER)	W(LATER)
SP-E9	N(LATER)	W(LATER)
SP-E10	N(LATER)	W(LATER)
SP-E11	N(LATER)	W(LATER)
SP-W1	N(LATER)	W(LATER)
SP-W2	N(LATER)	W(LATER)
SP-W3	N(LATER)	W(LATER)
SP-W4	N(LATER)	W(LATER)
SP-W5	N(LATER)	W(LATER)
SP-W6	N(LATER)	W(LATER)
SP-W7	N(LATER)	W(LATER)
SP-W8	N(LATER)	W(LATER)
SP-W9	N(LATER)	W(LATER)

ELEVATION MEASUREMENTS

(TECH. SPEC. BASEMAT MONITORING POINTS)

Master Benchmark El. +15.875 ft.

Monitoring Point	Elevation
1. SBM-1 (Optional)	
2. SBM-2 (Optional)	
3. SBM-3 (Optional)	
4. A (SP-C5)	
5. B (SP-C6)	
6. SE (SP-M1)	
7. NE (SP-M2)	
8. NW (SP-M3)	
9. SW (SP-M4)	
10. E1 (SP-M5)	
11. E2 (SP-M6)	
12. W1 (SP-M7)	
13. W2 (SP-M8)	

Type Instrument Used _____

Instrument Serial No. _____

Elevations Determined by: _____

Signature Date

ELEVATION MEASUREMENTS

(ADDITIONAL BASEMAT MONITORING POINTS)

MONITORING POINT	ELEVATION
1. SP-E1	
2. SP-E2	
3. SP-E3	
4. SP-E4	
5. SP-E5	
6. SP-E6	
7. SP-E7	
8. SP-E8	
9. SP-E1	
10. SP-E10	
11. SP-E11	
12. SP-W1	
13. SP-W2	
14. SP-W3	
15. SP-W4	
16. SP-W5	
17. SP-W6	
18. SP-W7	
19. SP-W8	
20. SP-W9	

Type Instrument Used _____

Instrument Serial No. _____

Elevations Determined by: _____

Signature Date

ELEVATION MEASUREMENTS

(OPTIONAL BASEMAT MONITORING POINTS)

Monitoring Point	Elevation (ft.)
SP-C1	_____
SP-C2	_____
SP-C3	_____
SP-C4	_____
SP-M9	_____
SP-M10	_____
SP-M11 (No Longer Used)	(In Accessible)
SP-M11A	_____
SP-M12	_____
SP-M13	_____
SP-A	_____
SP-B	_____
SP-C	_____
SP-D	_____
SP-E	_____
SP-F	_____

Type Instrument Used _____

Instrument Serial No. _____

Elevations Determined by: _____

Signature Date

BASEMAT EDGE TO SHIELD BUILDING

BASELINE DIFFERENTIAL CALCULATION

Monitoring Points		Baseline Elevations		Resultant
A(SP-C5) - SE(SP-M1)	=	25.385 - 20.953	=	4.432 ft.
A(SP-C5) - NE(SP-M2)	=	25.385 - 20.969	=	4.416 ft.
B(SP-C6) - NW(SP-M3)	=	22.269 - 20.961	=	1.308 ft.
B(SP-C6) - SW(SP-M4)	=	22.269 - 23.922	=	1.653 ft.
A(SP-C5) - E1(SP-M5)	=	25.385 - 21.387	=	3.998 ft.
A(SP-C5) - E2(SP-M6)	=	25.385 - 20.987	=	4.398 ft.
B(SP-C6) - W1(SP-M7)	=	22.269 - 24.306	=	2.037 ft.
B(SP-C6) - W2(SP-M8)	=	22.269 - 24.294	=	2.025 ft.

BASEMAT EDGE TO SHIELD BUILDING
DIFFERENTIAL CALCULATION SHEET

Monitoring Points	Elevations From Attachment 10.5		Resultant
A-SE	_____	– _____ =	_____
A-NE	_____	– _____ =	_____
B-NW	_____	– _____ =	_____
B-SW	_____	– _____ =	_____
A-E1	_____	– _____ =	_____
A-E2	_____	– _____ =	_____
B-W1	_____	– _____ =	_____
B-W2	_____	– _____ =	_____

DIFFERENTIAL SETTLEMENT RESULTS SHEET

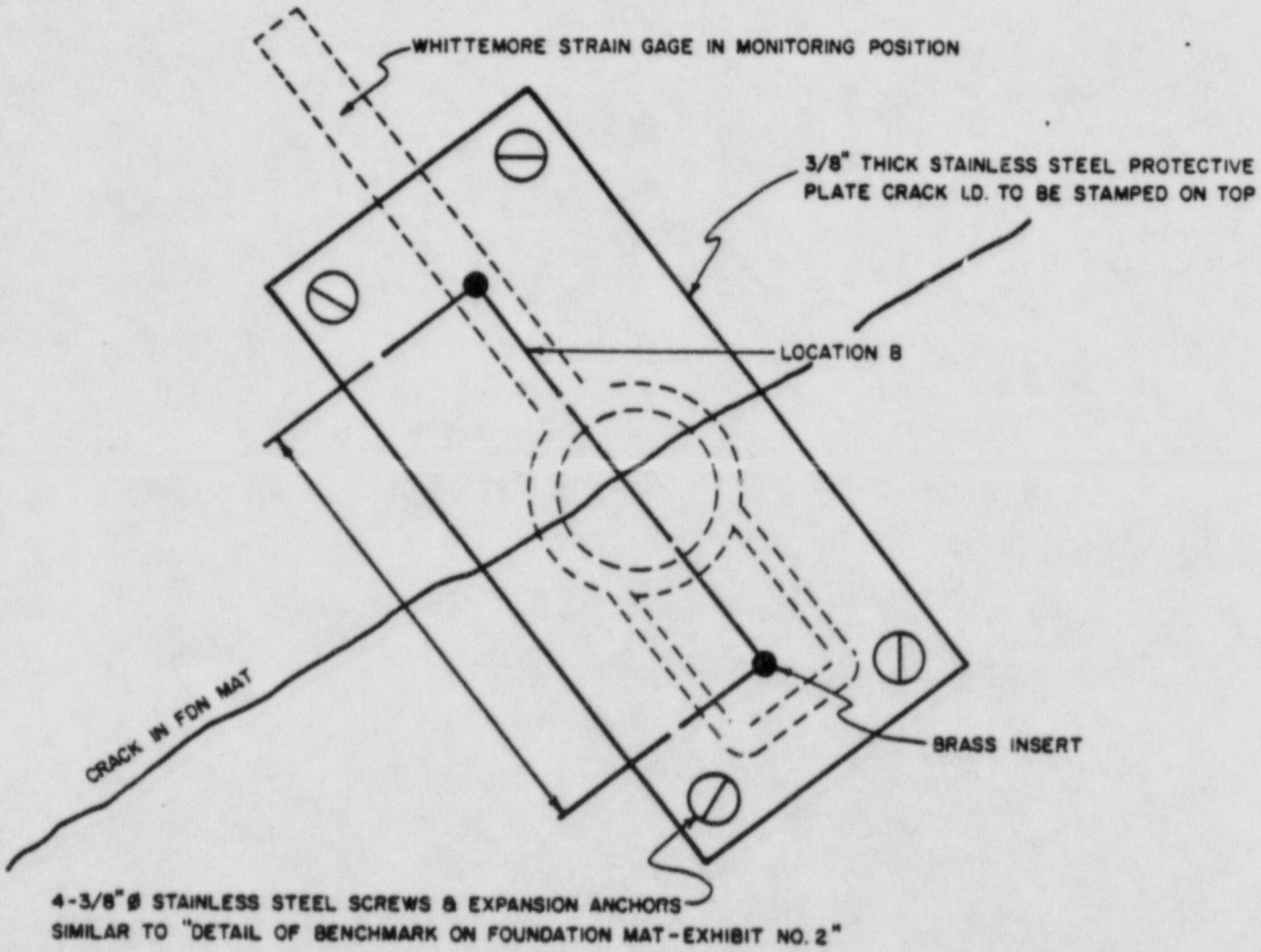
Monitoring Points	Difference Between The Baseline (Attach. 10.6) and Calculated (Attach. 10.7) Resultants
A-SE	
A-NE	
B-NW	
B-SW	
A-E1	
A-E2	
B-W1	
B-W2	

Note: One (1) inch = .083 ft.

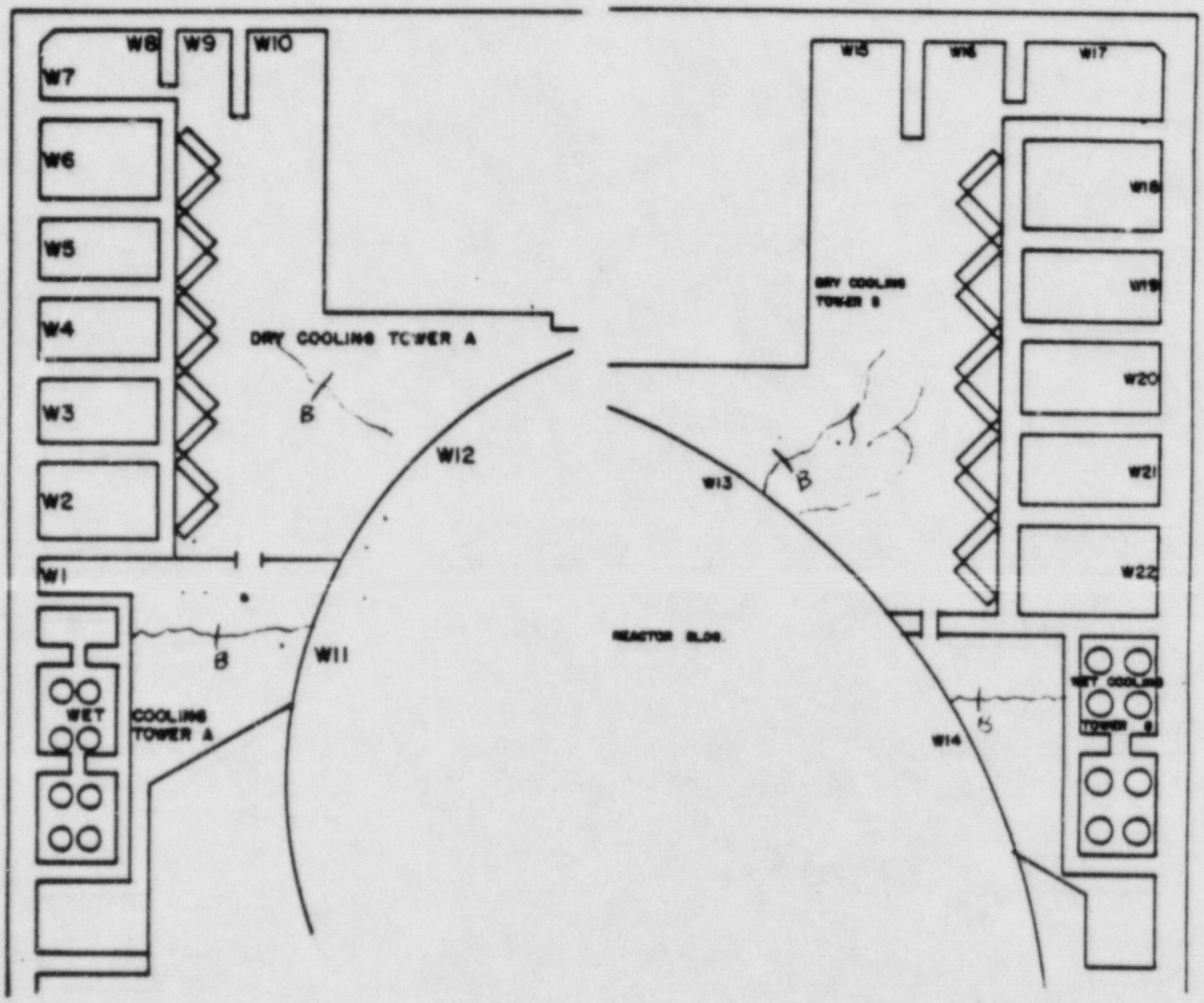
GENERAL ARRANGEMENT
OF INSTRUMENTED CRACKS

GENERAL ARRANGEMENT
OF INSTRUMENT CRACKS
(LOCATIONS)

GENERAL ARRANGEMENT
OF INSTRUMENTED CRACKS



GENERAL ARRANGEMENT OF INSTRUMENTED CRACKS (LOCATIONS)



CRACK WIDTH MONITORING DATA SHEET

(1) BASELINE (REF.) DATA

CRACK	DISTANCE BETWEEN BRASS BRASS INSERTS (INCHES)	AMBIENT TEMP	CONCRETE TEMP
(LATER)	(LATER)	(LATER)	(LATER)
(LATER)	(LATER)	(LATER)	(LATER)
(LATER)	(LATER)	(LATER)	(LATER)
(LATER)	(LATER)	(LATER)	(LATER)

(2) MEASURED DATA

CRACK	DISTANCE BETWEEN BRASS BRASS INSERTS (INCHES	AMBIENT TEMP	CONCRETE TEMP
(LATER)			
(LATER)			
(LATER)			
(LATER)			

(3) COMPARISON OF MEASURED DATA TO BASELINE DATA

CRACK	DIFFERENCE (2) - (1)	$\leq$ 15 mils ACCEPT	> 15 mils REJECT
(LATER)			
(LATER)			
(LATER)			
(LATER)			

COMMENTS: _____

_____

_____

_____

_____

_____

TYPE INSTRUMENT USED: _____

M&TE NO. _____

MEASUREMENTS DETERMINED BY: _____

SIGNATURE DATE

WALL INSPECTION LIST

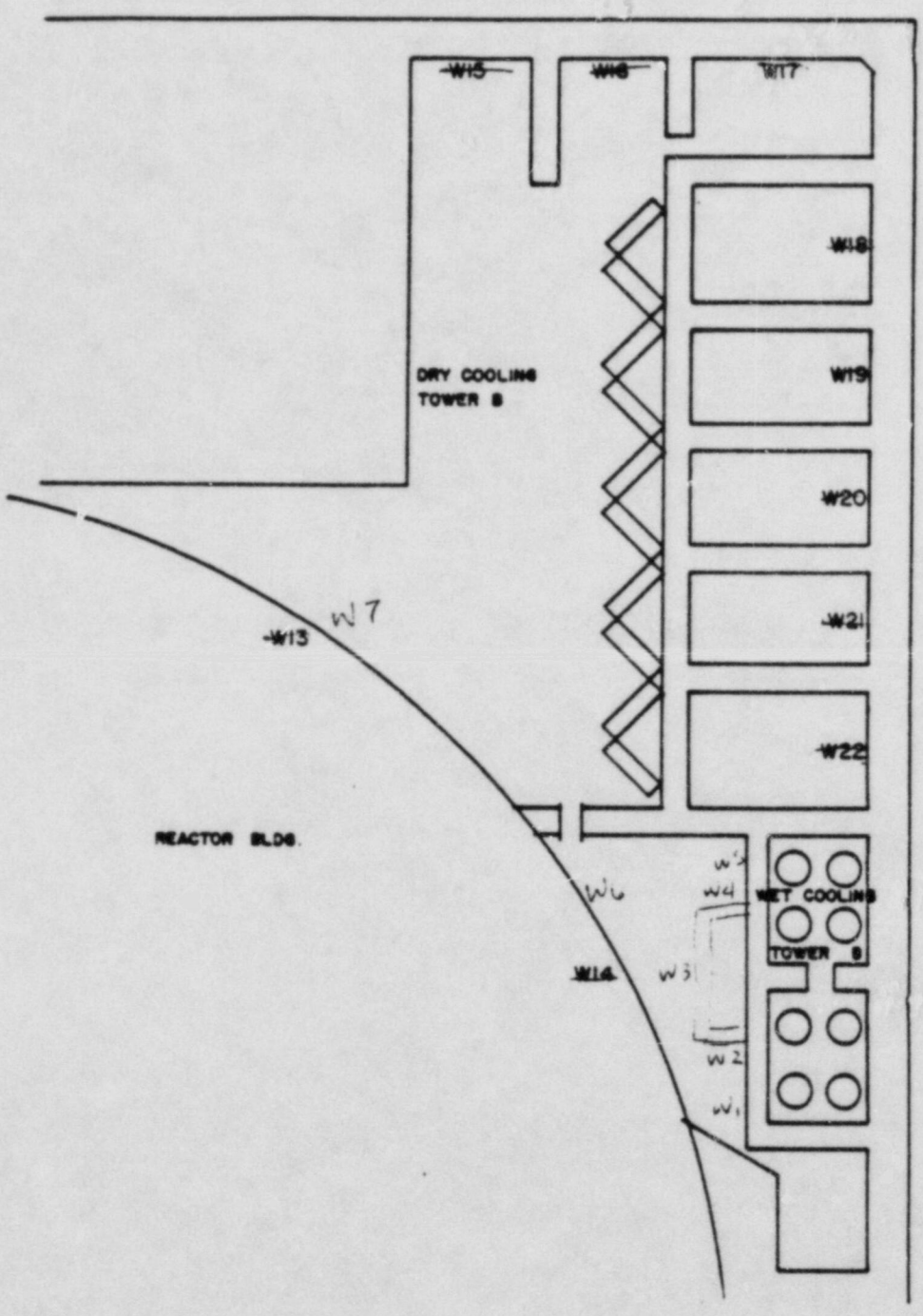
WALL #	INSPECTION COMPLETED INITIAL/DATE	PHOTOGRAPHIC SURVEY COMPLETED INITIAL/DATE
W1		
W2		
W3		
W4		
W5		
W6		
W7		
W8		
W9		
W10		
W11		
W12		
W13		
W14		

COMMENTS _____

WALL IDENTIFICATION & LOCATION

WALL IDENTIFICATION & LOCATION

WALL IDENTIFICATION & LOCATION



WALL IDENTIFICATION & LOCATION