

1. FACE OF 29 SEWAGE TREATMENT PLANT

26 6710

CONCURRENCE 6710

25. DISPOSITION CONCURRENCE
 NEWWORK REPAIR REPAIR
 DATE 11/20/77
 PROJECT ENGINEER
 DATE 11-17-77
 PROJECT FIELD QC ENGINEER
 DATE 11-30-77

12. REPORTED BY
 13. VALIDATED BY
 15. REPLACEMENT PART NO.
 16. REPLACEMENT SERIAL NO.
 17. SOURCE

7. PROJECT NO.
 8. ITEM LOCATION
 9. STARTUP SYSTEM NO.
 10. QC FIELD INSPECTION PLAN NO.
 11. ASME CODE ITEM
 YES NO
 ROUTE TO FIELD ENGINEERING

18. DESIGN CHANGE REQUIRED
 19. IS DESIGN CHANGE REQUIRED
 20. FOR FIELD RECOMMENDATION,
 21. FIELD DISPOSITION RESULTS
 22. Eng. Disp.
 23. ENGINEERING DISPOSITION RESULTS

26. REJECTED MATERIAL DISPOSITION
 27. ACCEPTANCE
 AUTHORIZED INSPECTOR
 DATE

20. FOR FIELD RECOMMENDATION,
 SEE SHEET 25

21. FIELD DISPOSITION RESULTS

22. Eng. Disp.
 23. ENGINEERING DISPOSITION RESULTS

24. IS DESIGN CHANGE REQUIRED
 25. FOR FIELD RECOMMENDATION,
 26. REJECTED MATERIAL DISPOSITION
 27. ACCEPTANCE
 AUTHORIZED INSPECTOR
 DATE

28. AND 29

29. ENGINEERING DISPOSITION, SEE SHEETS 27
 28 AND 29

30. FOR FIELD RECOMMENDATION,
 SEE SHEET 25

31. FIELD DISPOSITION RESULTS

32. Eng. Disp.

33. ENGINEERING DISPOSITION RESULTS

34. IS DESIGN CHANGE REQUIRED
 35. FOR FIELD RECOMMENDATION,
 36. REJECTED MATERIAL DISPOSITION
 37. ACCEPTANCE
 AUTHORIZED INSPECTOR
 DATE

NONCONFORMANCE REPORT

CONTRACTOR/LOCATION
 Timernick, Pa.
 ROUTING INSTRUCTIONS

NONCONFORMING CONDITION: Re-inspection of various beam attachment welds which are inaccessible due to concrete and late obstructions in QGT Inspection Plan Nos C-543-W-1-5, C-41A-116-W-1-8, C-197-W-1-6 & C-197-W-1-4. Re-inspect now documented on QGT Nos. 4 type: C-63-30, C-63-31, C-63-32 & C-41A-493. The following inaccessibilities where noted as per QGT No. 4 type: C-63-30 - Rod waste. Elev 191' beam 127311 Right hand end, near side to beam 118B2 could only inspect 12" of fillet weld, beam 127311 Right hand end, far side to beam 127311 could only inspect 13" of fillet weld. Q-61 C-41A-493 - Rod waste Elev 191' beam 127377 Right hand end, near side to column 103CL could only see

AS NOTED IN BLOCK 19 ABOVE, THE VARIOUS WELDS WERE INACCESSIBLE TO COMPLETE INSPECTION ACTIVITIES. THE FIELD RECOMMENDS THAT THESE WELDS BE EVALUATED TO DETERMINE THEIR ACCEPTABILITY FOR USE.

15 (See pg 3 cont. sheet) [Signature] 8-31-77

20. FOR FIELD RECOMMENDATION,
 SEE SHEET 25

22. Eng. Disp.
 23. ENGINEERING DISPOSITION RESULTS

24. IS DESIGN CHANGE REQUIRED
 25. FOR FIELD RECOMMENDATION,
 26. REJECTED MATERIAL DISPOSITION
 27. ACCEPTANCE
 AUTHORIZED INSPECTOR
 DATE

28. AND 29

29. ENGINEERING DISPOSITION, SEE SHEETS 27
 28 AND 29

30. FOR FIELD RECOMMENDATION,
 SEE SHEET 25



Block 19

CONTINUED

NONCONFORMANCE REPORT (CONT'D)

PAGE 3 OF 3

29 ENCL

14. HCR NO. 2711

14, 15

It is indicated by the attached Drill Inspection Report page 14, 15 and 16 of 24 pages & referred in Block 19 of the QC-61-1 Control No. C-954-6 is submitted for Project Engineering evaluation. Please find listed below an indication of the defects, their description, the cause of hardening, the metal pullout only on the top of the hole, the severity is recorded, any other related to the immediate area are of low magnitude. This work was done by Scott J. Miller Area in support of Specification 8031-C-69 OSP housing support on bed plate fabrication. The drill increments that have surface finish in excess of 100 microns are of low magnitude. It is recommended that the work be reworked.

(ATTACHED AT THE END OF THIS REPORT) DR 8:31:17

FIGURE 1 EXTENT OF DISCONTINUITIES REPORTED

- ITEM A - BASE METAL PULLOUT $\frac{1}{16}$ " DEEP (PAINTED SURFACE)
- ITEM B - BASE METAL PULLOUT $\frac{1}{16}$ " DEEP (PAINTED SURFACE)
- ITEM C - BOLT HOLE AS REF. ON C-954
- ITEM D - ARC STRIKE $\frac{3}{4}$ " LONG
- ITEM E - ARC STRIKE $\frac{1}{2}$ " LONG
- ITEM F - BOLT HOLE AS REF. ON C-954
- ITEM G - ARC STRIKE $\frac{1}{2}$ " LONG
- ITEM H - UNDERCUT $\frac{1}{8}$ " DEEP
- ITEM I - ARC STRIKE $1\frac{1}{2}$ " LONG
- ITEM J - ROSE METAL PULLOUT $\frac{1}{16}$ " DEEP
- ITEM K - BOLT HOLE AS REF. ON C-954
- ITEM L - BASE METAL PULLOUT $\frac{1}{16}$ " DEEP
- ITEM M - UNDERCUT $\frac{1}{16}$ " DEEP

NONCONFORMANCE REPORT (CONT'D)

(Block 19 Cont.)
~~XXXXXXXXXXXX~~ Bl. 1-31-77

TABLE 2 EXTENT OF DISCONTINUITIES REPORTED

- ITEM A - BASE METAL PULLOUT $\frac{3}{32}$ " DEEP
- ITEM B - WELD DEPOSIT VISIBLE
- ITEM C - BASE METAL PULLOUT $\frac{3}{16}$ " DEEP
- ITEM D - BOLT HOLE
- ITEM E - ARC STRIKE $\frac{1}{4}$ " LONG
- ITEM F - ARC STRIKE 2" LONG
- ITEM G - ARC STRIKE
- ITEM H - ARC STRIKE
- ITEM I - BOLT HOLE
- ITEM J - BOLT HOLE
- ITEM K - BASE METAL PULLOUT $\frac{3}{16}$ " DEEP
- ITEM L - POROSITY INDICATION $\frac{1}{16}$ " DIA.
- ITEM M - ARC STRIKE 1" LONG
- ITEM N - BASE METAL PULLOUT $\frac{1}{32}$ " DEEP
- ITEM O - BOLT HOLE
- ITEM P - WELD START $\frac{1}{8}$ " FROM BOTTOM OF SEAM

Responsible by 1-31-77
by 8/29/77
Report to Des. Engineer

[Signature]
L. H. Hall
R. L. Lanley 4-1-77



FIELD INSPECTION REPORT RECORD COPY

3. RECORD CONTROL

CONTROL NO. 16790

FILE NO. _____

1. PROJECT NO. 8031

2. DATE 7/4/77

PAGE 2 OF 2

4. ITEM INSPECTED Re-inspection of work in question in Quality Control inspection plan C-543-W-1-5. Hinges to beams fillet welds, beam 127B11 Right hand end, For side to beam 11822, only could inspect 13" of weld remainder in concrete. Beam 127B11 Right hand end, For side to beam 11822, only could inspect 17" of weld remainder in concrete.

167-1990

5. LOCATION Haduxisto Elev. 191'

6. TYPE OF INSPECTION Visual & dimensional

7. STANDARD / CODE / PROCEDURE / DRAWING / SPECIFICATION AAS D1.1-72, D1-73, R2-74
C-1-543/3
SCT Inspection Plan C-543-W-1-5
C-1-63/2 Add 1-3 FA2

8. INSPECTION EQUIPMENT USED Fillet weld gage, wire brush

9. RESULTS OF INSPECTION: SATISFACTORY ^{7/4/77} UNSATISFACTORY

10. ACTION TAKEN IF UNSATISFACTORY 167-2710

NOTE - FOR INSPECTIONS PREVIOUSLY ACCOMPLISHED - ALSO SEE D.C.G.1.1 C-63-17 dated - 11-2-76
ALSO SEE REPORT # C-63-22 dated 4-5-77
Goodman 7-23-77

ve Bishop ^{7/4/77}
11. ENGINEER Carl N. Tuley

THESE SHIMS ARE TO BE USED
IN ALIGNING STRUCTURE
(USE AS REQUIRED)

F101SM2 AT { 112C1, 112C2
114C2, 112C2 }
F101SM3 AT { 121C2, 108C2
109C2, 126C2 }
F101SM4 AT 103C2
F101SM5 AT 103C2, 110C1
F101SM6 AT 103C1, 106C2
F101SM7 AT 109C2

RECORD COPY

TYPICAL BEAMS TO COL. WEBS
(BOLTED CONNECTION)

Control No. C-410-493 # C.63-30

BECHTEL DESIGN C-543-0

DETAILS ON THIS DRAWING SHOW
THE FINAL AS-BUILT STRUCTURAL
STEEL, CERTIFIED TO BE CORRECT
FOR MICROFILMING BY THE OWNER

LIAERICK GENERATING STATION
UNIT 1 & 2 CONTRACT E038
PHILADELPHIA ELECTRIC COMPANY
RADWASTE BUILDING

41A-116-4



American Bridge
Division of United States Steel Corporation

FABRICATION ASSIGNED TO EIMIRA
DRAWING MADE BY AMBRIDGE
MADE BY RJP DATE 11-15-73 CHECKED BY LJK DATE 1-24-74
DESIGNED BY A.H.R.

F		
E		
D		
C		
B	4132/14	U
A	322-79	G

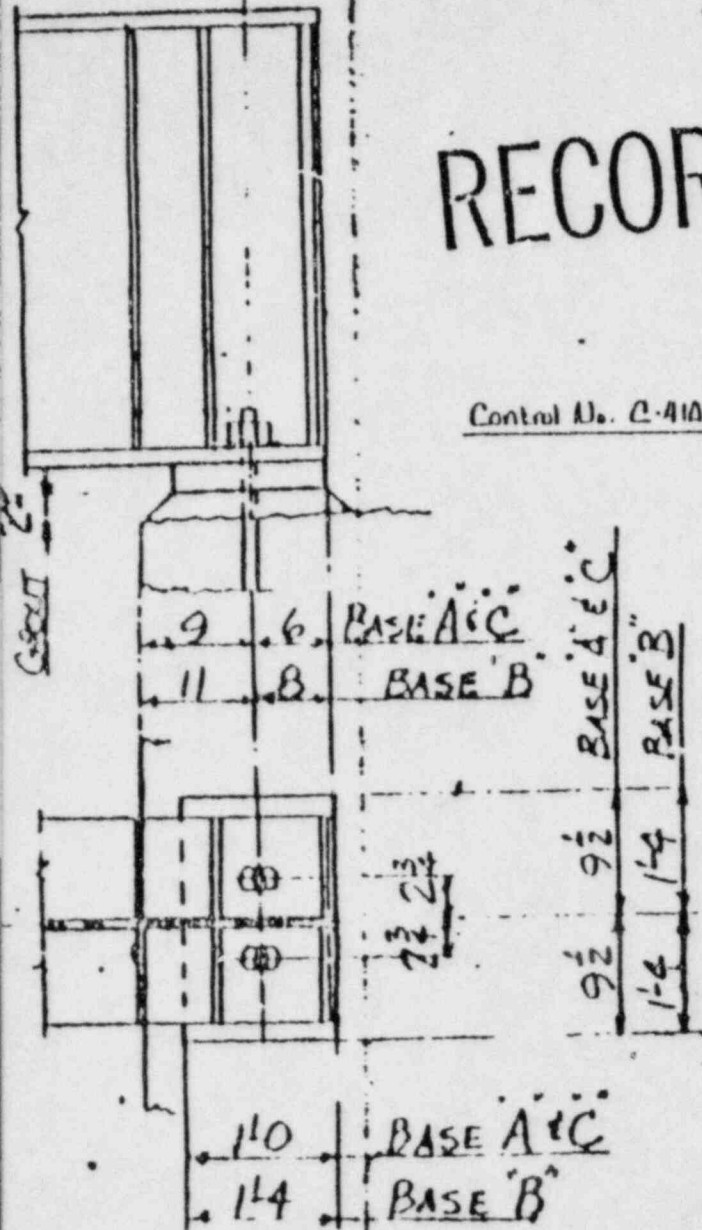
ORDER NO

16944

ORDER NO

E3

BASE A B C WALL BEARING BEAMS



NCR 7210 C 2
 16807

No	DATE	REVISIONS	BY	CHK
5	3-2-73	MINOR REVISIONS AS NOTED RESULTING FROM VENDOR		
4	7-11-70	ADDED SECT A.S. & INST. NOTE 4, INSERT REVISIONS BEAMS AS NOTED ISS. 20		
3	3-11-72	GEN REV. 4 ISSUED FOR		
2	11-17-71	REV FRAMING AS IN REISSUE FOR FABRICATION		
1	7-23-71	MINOR REV. RECORD CHANGES ISSUED FOR FABRICATION	JPL	FB
A	6-30-70	ISSUED FOR MILL ORDER	JPL	FB
A	3-24-70	ISSUED FOR BIDS	(S)A	FB

Control No. 0.63-314C-63-32

SCALE AS NOTED DESIGNED C.W. TST DRAWING BARDOUR

RECORD COPY BECHTEL
 SAN FRANCISCO

LIMERICK GENERATING STATION UNITS
 PHILADELPHIA ELECTRIC COMPANY

REACTOR BUILDING UNIT
 STRUCTURAL STEEL
 FRAMING PLAN ELEV. 217

JOB No.

DRAWING No.

8031

REF: C-1974

BECHTEL DWG

8031-045-815

Bechtel Corp.
 2859

E2

7/1/73



FIELD INSPECTION REPORT

RECORD COPY

3. RECORD CONTROL

CONTROL NO. 163 3.2

FILE NO. _____

1. PROJECT NO. 8031 2. DATE 7/77 PAGE 2 OF 4

4. ITEM INSPECTED Re-inspection of welds in question in Quality Control inspection plan C-197-W-1-6. Areas to beam and gages + contacts. Fillet welds, beams W10x21-2 and beam W10x14-6. On beam W10x14-6 with angle to beam & angle to embedment inaccessible due to concrete. None of weld visible

0'-5 1/2"
Ch 1-31-77

100-1480

5. LOCATION Reactor Unit #1 Elev. 217'

6. TYPE OF INSPECTION Visual & Dimensional

7. STANDARD / CODE / PROCEDURE / DRAWING / SPECIFICATION AWS-D11-72, P1-73, P7-74
DCT Inspection Plan C-197-W-1-6 C-197-W-1-3 AWS
Dwg C-197/16

8. INSPECTION EQUIPMENT USED Fillet weld gage, wire brush

9. RESULTS OF INSPECTION: SATISFACTORY UNSATISFACTORY

10. ACTION TAKEN IF UNSATISFACTORY 100-7710

NOTE: FOR INSPECTIONS PREVIOUSLY ACCOMPLISHED -
ALSO SEE OLG-1-1 REPORT # 603-16 DATED 11-1-76. 3/10/77
ALSO SEE REPORT # C-03-22 DATED 4-5-77 7-28-

Printed on
Form of 1-68
Change - 1-68

Carl H. Tusting 7/14/77 11. ENGINEER

Control No. C-63-31 & C-63-32

File No. 1

RECORD COPY

5	3-2-73	MINOR REVISIONS AS RESULTING FROM	
4	7-18-72	ADDED SECT. 1.1 NOTE 4, ADJUSTED PLAN 2.1	
3	3-11-72	GEN REV. ISSUED	
2	11-17-71	REV. FRAMING PLAN KEY PLAN	
1	7-23-71	MINOR REV. RECORDING ISSUED FOR FABRICATION	1/1
A	6-30-71	ISSUED FOR MILL ORDER	1/1
A	3-24-71	ISSUED FOR BIDS	1/1
No.	DATE	REVISIONS	BY

SCALE AS NOTED DEFINED C.W. 1ST DRAWN

BECHTEL
SAN FRANCISCO

LIMERICK GENERATING STATION U.
PHILADELPHIA ELECTRIC COMPANY

REACTOR BUILDING
STRUCTURAL STEEL
FRAMING PLAN ELEV.

JOB No.

DRAWING

8031

REC-1

BECHTEL DWG

VALLEY
STEEL CO.

TEL. CORP.

9 E2

179 REV. 12

APR 27 1973



FIELD INSPECTION REPORT

3. RECORD CONTROL
 CONTROL NO C-41A-493
 FILE NO. _____

1. PROJECT NO. 9031 2. DATE 7/6/77 PAGE 1 OF 2

4. ITEM INSPECTED Re-inspection of welds in question in Quality Control inspection plan C-41A-116-W-1-1. Angles to columns fillet welds beam 179B8 left hand end along side to column 10302 beam 179B8 right hand end along side to column 10501 beam 179B1 right hand end along far side to column 10502 beam 12727 right hand end along side to column 10301 - 13" only remainder in concrete beam 134B7 left hand end along far side to column 10301 - 9" only on both sides remainder in concrete beam 119B11 right hand end along far side to column 10412 - 14 1/2" only on along side remainder in concrete, (cont)

5. LOCATION Roadway Elev 191'

6. TYPE OF INSPECTION Visual & dimensional

7. STANDARD / CODE / PROCEDURE / DRAWING / SPECIFICATION AASHTO M 11-72, R1-73, R2-74
DOT Inspection Plan C-41A-116-W-1-1 C-41A/5 R.H. 1-4
Dist. C-543/7

8. INSPECTION EQUIPMENT USED Fillet weld gage & wire brush

9. RESULTS OF INSPECTION: SATISFACTORY UNSATISFACTORY

10. ACTION TAKEN IF UNSATISFACTORY NCR-2710

NOTE: FOR INSPECTIONS PREVIOUSLY ACCOMPLISHED - ALL SET DCG-1-1 REPORT # C-63-16 dated 11-1-76 7-28
 ALSO SEE REPORT # C-63-22 dated 4-5-77

Distribution
 2 - QC Files
 2 - Original

7/11/77
11. ENGINEER Carl N. Turley



CONTINUATION SHEET
RECORD COPY

3. RECORD CONTROL
CONTROL NO. C-01A-116
FILE NO. _____

1. PROJECT NO. 8031 2. DATE 7/6/77 4. PAGE 2 OF 2

LOCK CONT'D 4
5. FORM NO. CC-01-1
7. REPORT NAME Re-inspection of welds in Quality Control Plan C-01A-116

8. and room 129B^{1/2} right hand end, same as side to column 124C2.

NICE-1980

Distribution:
White - QC Files
Canary - Originator

re B. L. G. 7/12/77
9. ENGINEER Carl H. Tucker

THESE SHIMS ARE TO BE USED
IN ALIGNING STRUCTURE
(USE AS REQUIRED)

- F101SM2 AT { 112C1, 113C1, 114C2, 115C2 } PG. 13
- F101SM3 AT { 121C2, 108C2, 104C2, 126C2 }
- F101SM4 AT 103C2
- F101SM5 AT 103C2, 110C1
- F101SM6 AT 103C1, 106C2
- F101SM7 AT 109C2

RECORD COPY

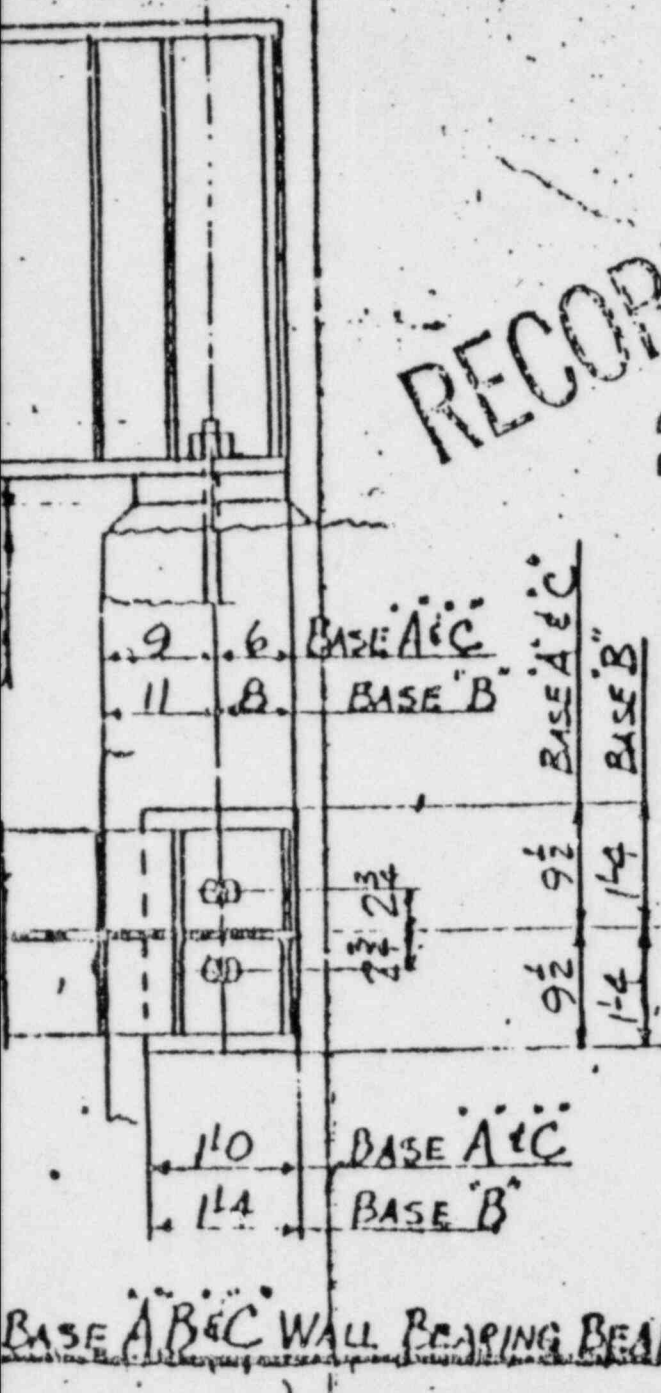
TYPICAL BEAMS TO COL. WEBS.

Control. No. C-41A-493 & C-163-30
File No. _____
(BOLTED CONNECTION)

BECHTEL DESIGN C-542-3

DETAILS ON THIS DRAWING SHOW
THE FINAL AS-BUILT STRUCTURAL
STEEL, CERTIFIED TO BE CORRECT
FOR MICROFILMING BY THE OWNER

EMERICK GENERATING STATION
UNIT 1 & 2 CONTRACT
PHILADELPHIA ELECTRIC COMPANY
RAGWASTE BUILDING



W. J. Peterson

41A-116-4

USS American Bridge
Division of United States Steel Corporation

FABRICATION ASSIGNED TO ELMIRA
DRAWING MADE BY AMBRIDGE
MADE BY RJM DATE 11-15-73 CHECKED BY LJN DATE 1-24-74
IN CHARGE OF G.H.R.

F		
E		
D		
C		
B	4/23/74	D
A	3-12-74	C

REVISIONS

ORDER NO. **K5944**
SHEET NO. **E3**



FIELD INSPECTION REPORT

3. RECORD CONTROL
 CONTROL NO. C954-6
 FILE NO. _____

1. PROJECT NO. 8031 2. DATE 7/21/77 PAGE 1 OF 3

4. ITEM INSPECTED Re-inspection of welds in question in Quality Control inspection
Plan C-954-11-1-3
CNT 7-21-77

5. LOCATION Reactor Containment Unit #2 Elev. 253'

6. TYPE OF INSPECTION Visual & dimensional

7. STANDARD / CODE / PROCEDURE / DRAWING / SPECIFICATION AWIS D11-72, 21-73, R2-74
WIR C-954-11-1-3 C63/2 Add. 1-3 FAZ
Dwg. C-954-11-1-3

8. INSPECTION EQUIPMENT USED Depth gauge, ruler

9. RESULTS OF INSPECTION: SATISFACTORY UNSATISFACTORY

10. ACTION TAKEN IF UNSATISFACTORY _____

NOTE:
 1st OF INSPECTIONS PREVIOUSLY ACCOMPLISHED - ALSO SEE
 OCGI-1 REPORT NOS. C63-21 DATED 1-17-77 AND
 C-63-22 DATED 4-5-77. MAX DIER 7-28-77.

Distribution
 White - OC Files
 Canary - Original

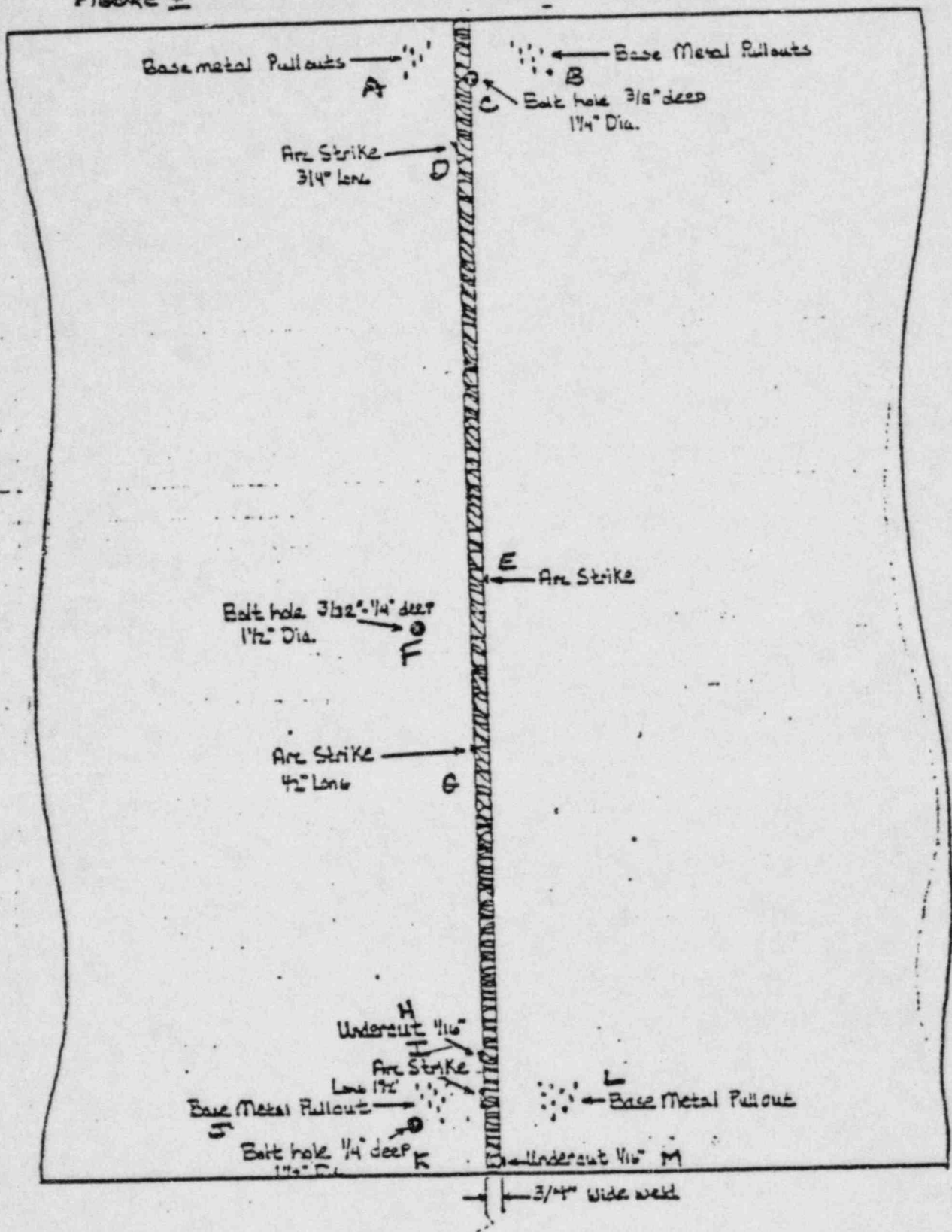
MAX DIER

11. ENGINEER Carl H. Tuley

7-28-77

FIGURE 7

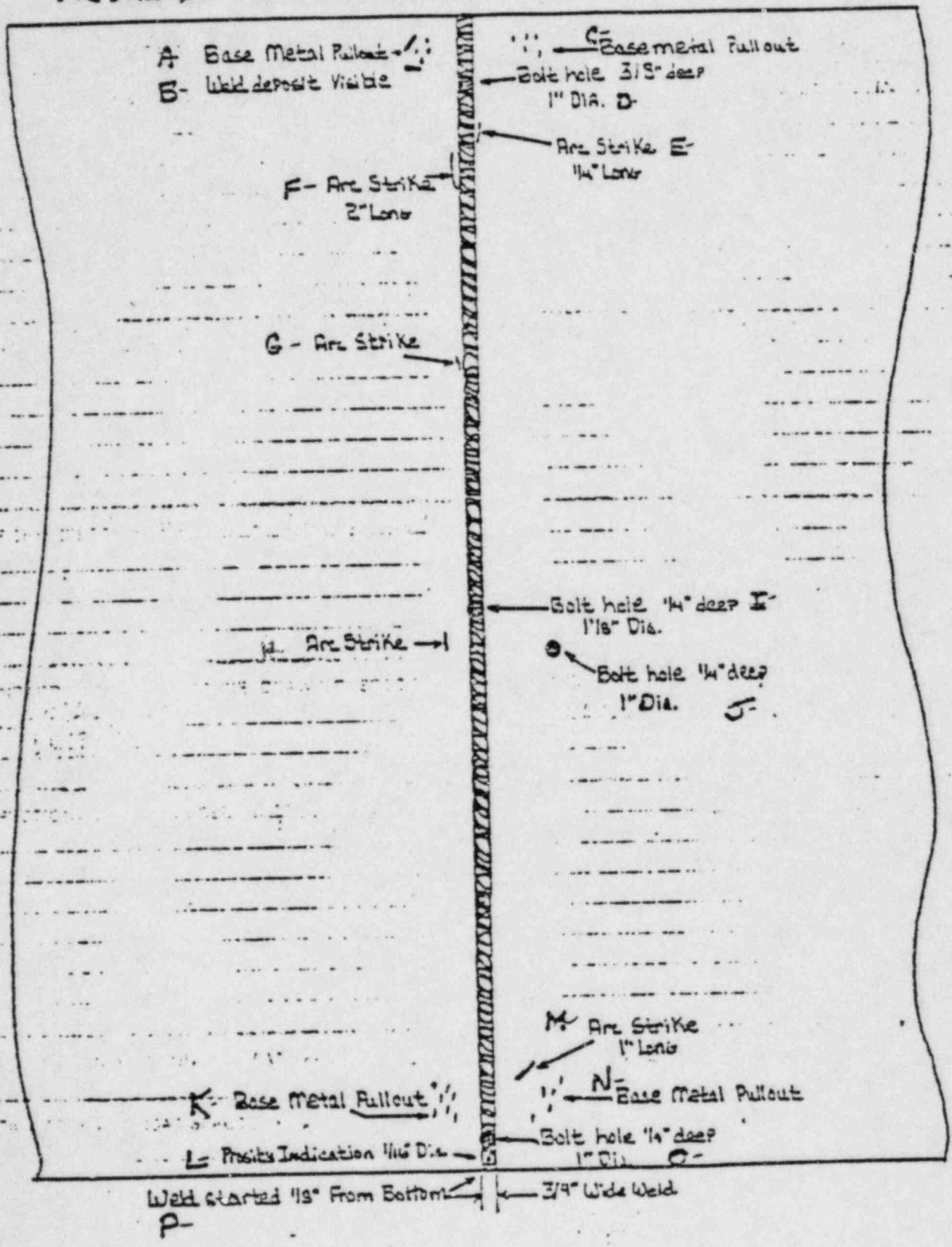
Undercut Washout at top of weld



3/32" = 1"

ENGR'S
Company

FIGURE 2



3/32" = 1"

Handwritten scribble or signature at the bottom right corner.



FIELD INSPECTION REPORT

CONTROL NO. C-63-22
FILE NO IPC-16-63-17

1. PROJECT NO. 2031 2. DATE 4-5-77 PAGE 1 OF 78

ITEM INSPECTED Inspection of installed structural steel beams & columns to determine its accessibility for inspection.

See attached sheets for flow numbers.

5. LOCATION

<u>Control Room</u>	<u>Elev. 269', 229', 217'</u>
<u>Radiation</u>	<u>Elev. 190'-180', 191'</u>
<u>Unit #1</u>	<u>Elev. 217', 201', 200'</u>
<u>Unit #2</u>	<u>Elev. 253', 220', 217', 201', 264', 203'</u>

6. TYPE OF INSPECTION Visual

7. STANDARD / CODE / PROCEDURE / DRAWING / SPECIFICATION C-63 Rev 2 Add. 1 - EA-2

8. INSPECTION EQUIPMENT USED VISUAL

9. RESULTS OF INSPECTION: SATISFACTORY UNSATISFACTORY

10. ACTION TAKEN IF UNSATISFACTORY _____

NOTE: FOR PREVIOUS INSPECTIONS OR RE-INSPECTIONS ACCOMPLISHED, AS APPLICABLE, SEE ATTACHED LIST FOR WELDING INSPECTION PLAN AND DCGI-1 REPORT NUMBER. Machine 7-28-77

K. Hill 4-5-77
11. ENGINEER Carl H. Turley

Illustration
None - GC Files
Caption - Originator

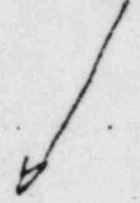
Results: A = acc., C. Cont. 63-22
Cere

201-W-1-9 Elev. 253
2133 to Cl. 114C1
232B2 to Cl. 116C1
206B2 to Cl. 116C1
233B2 to Cl. 111C1

Area 18

Unit #2

A



C-192-W-1-8 Elev. 220' Area 13, 14, 17, 18 Unit #2

109C2 A
111C1 A
112C1 A
112C2 A
114C1 A
115C2 A
116C1 A

C-198-W-1-12 Elev. 217' Area 17+18 Unit #2

4C184L A
4C184R A

C-197-W-1-10 Elev. 217' Area 16 Unit #1

W21x68-6 (3636-9) A

C-195-W-1-17 Elev. 201 Area 17+18 Unit #2

CBx11.5-2 A
CBx11.5-2 A
CBx14x43-3 (3634x39) A
CB-X11.5-2 A

W 48-2910 ps 18
29
E. J. Johnson

Results: A=Cell, C=Concrete
Redwaste

SHT 3 of 78
3/20
7-28

543-W-1-5 Elev. 190'-108' Area 20/22
127B11 + 118B2

A

RECORD COPY

54 ³⁰⁰² ₇₋₂₈₋₇₇
945-W-1-3 Elev. 257'-241'

Unit #2 CED Housing

Concrete

7-198-W-1-4 Elev. 217' Area 14' Unit #2

(J.H.)

7-197-W-1-11 Elev. 217' Area 11' Unit #1

2044 to Col. 1A24

A

7-197-W-1-8A Elev. 217' Area 15' Unit #1

2A43 to Col. 1B34

A

7-197-W-1-5 Elev. 217' Area 11/15' Unit #1

(W.A.O.)

(L.M.)

7-195-W-1-11 Elev. 201' Area 15' Unit #1

1C16 to Col. 1B34

A

7-195-W-1-6 Elev. 201' Area 11' Unit #1

Beam
W27x145.6 to Col.

A

7-194-W-1-1B Elev. 201' Area 13' Unit #2

1B3B

A

7-194-W-1-17 Elev. 201' Area 16' Unit #1

to print

1C16 to Col. 1D34

A

1679
11-11-77

Results: A=Acc, C=Concrete

194-W-1-16 Elev. 201 Area 11 Unit #1
 W 44-6 (3636-16) to Col. Acc.
 1A29 to Col. Acc.

RECORD 0026

199-W-1-17 Elev. 217' Area 14 Unit #2 L.H.

194-W-1-5 Elev. 201' Area 16 Unit #1 no print

193-W-1-10 Elev. 201' Area 11+12 Unit #1
 1A36 to Col. Acc.
 1A29 to Col. Acc.
 413 to Col. Acc.
 (3636-16) to Col. Acc.

19 Elev. 217' Area 12+16 Unit #1 J.H.

4 Elev. 269' Area 8 Cont'd Room
 36 Acc. 363 N.S. Acc.
 37 Acc. 363 N.S. Acc.
 32 S. Acc. 462 N.S. Acc.
 31 N.S. Acc. 364 N.S. Acc.
 32 N.S. Acc. 362 N.S. Acc.
 34 N.S. Acc. 362 N.S. Acc.
 31 N.S. Acc. 462 S. Acc.
 33 N.S. Acc. 461 N. Acc.
 35 N.S. Acc. 464 N. Acc.
 35 N.S. Acc. 861 N. Acc.

ENGR
COMMUT

Results: A=acc, C=concrete SHC 5 of =

Results A=acc, C=concrete

Beam #

Area Elev.

59 LHE

8 289'

A

52 LHE

C-478-W-1-1

58 LHE

PHOTO COPY

583 LHE

1210 LHE + RHE

123 LHE + RHE

131 LHE

134 LHE

134 LHE + RHE

134 LHE

132 LHE

138 LHE

138 LHE

131 LHE

133 LHE

133 LHE

1310 LHE

189 L

17/19 217'

C-198413

A

189 R

189 R

189 R

189 L

189 R

ENCS
Component
12/25

Results: A=DOC, C=concrete

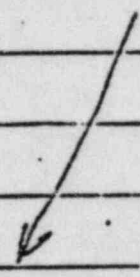
C-63-22

w-1
77-6 Elev. 217' Area 16 Unit #1
2A5B A

RECORD COPY

w-1
97-4 Elev. 217' Area 15 Unit #1
2C6B A
A
W8K17-2

w-1
C204-9-2 Elev. 203' Area 13 Unit #2
138B7 A
14663
136B4
138B2
96



2-41A-116-W-1-1 Radwaste 20/22 191' all Au.
104C2 106C1 105C2 105C1 103C1 103C2
129B11 117B1 136B8 117B2 118B2 118B5
117B1 136B8 116B2

465-W-1-3 Elev. 217' Area 8 Control Room No print
Weld Beam diffuser - manual

WCL 2710 ps 22 of 24
(24)

Results: A=acc, C=Concrete C-63-22

34000
1-20

C-201-W-1-7 Elev. 253' Area 17 Unit #2

(all)

A

35B3

231B3

231B2

222B6

222B5

222B4

232B5

232B9

230B4 to Col. 113C1

230B2 to Col. 115C1

228B5 to Col. 114C2

C-01-W-1-10 Elev. 253' Area 17 Unit #2

232B5 to Col. 112C2

A

C-200-W-1-1 Elev. 238' Area 11 Unit #1

234B9

A

C-198-W-1-14 Elev. 217' Area 13 Unit #2

W27x102-7 3634-22

A

W33x118-7

C-201-W-1-5 Elev. 253' Area 14 Unit #2

239B4 to Col. 115C2

A

238B1 to Col. 109C1

233B1 to Col. 109C2

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Eng's Document

(41)



CONTINUATION SHEET.

3. RECORD CONTROL
CONTROL NO. C63-2
FILE NO. _____

1. PROJECT NO. 8031 2. DATE 7-28-77 4. PAGE 8 OF 8

5. BLOCK CONT'D 10 6. FORM NO. CC-61-1 7. REPORT NAME ATTACHMENT SHEET TO C-63-22 FOR
RE INSPECTION OF INSTALLED STRUCTURAL STEEL

8. WELDING INSP. PLAN.	
C-201-W-1-9	C-63-8 (10-27-76)
C-192-W-1-8	C-63-7 (10-28-76) C-63-8 (10-27-76)
C-198-W-1-12	C-63-9 (10-28-76)
C-197-W-1-10	C-63-10 (10-28-76)
C-195-W-1-17	C-63-9 (10-28-76)
C-543-W-1-5	C-63-30 (7-5) C-63-17 (11-2-76)
C-954-W-1-3	C-63-21 (10-17-76) C-954-6 (7-21-77)
C-198-W-1-4	C-63-8 (10-27-76) C-63-7 (10-26-76)
C-197-W-1-11	C-63-10 (10-28-76)
C-197-W-1-8A	C-63-10 (10-28-76)
C-197-W-1-5	NO OTHER DCGI-1'S GENERATED
C-195-W-1-11	C-63-11 (10-29-76)
C-195W-1-6	C-63-13 (7-5-77) C-63-27 (7-5-77)
C-194-W-1-18	C-63-11 (10-29-76)
C-194-W-1-17	C-63-11 (10-29-76)
C-194-W-1-16	C-63-11 (10-29-76)
C-198-W-1-17	NO OTHER DCGI-1'S GENERATED
C-194-W-1-5	C-63-13 (7-5-77) C-63-26 (7-5-77)
C-193-W-1-10	C-63-13 (10-29) C-63-24 (7-5-77)
C-192-W-1-4	NO OTHER DCGI-1'S GENERATED.
C-473-W-1-3	C-63-20 (1-17-77)
C-478-W-1-1	C-63-20 (1-17-77)
C-198-W-1-13	C-63-9 (10-28-76)
C-197-W-1-6	C-63-16 (11-1-76) C-63-32 (7-5-77)
C-197-W-1-4	C-63-16 (11-1-76) C-63-31 (7-5-77)
C-204-W-1-2	C-63-28 (7-1-77) C-63-12 (11-1-76)
C-41A-116-W-1-1	C-63-16 (11-1-76) C-41A-493 (7-6-77)
C-465-W-1-3	C-63-18 (11-8-76)
C-201-W-1-7	C-63-8 (10-28-76) C-63-7 (10-26-76)
C-201-W-1-10	C-63-14 (11-2-76) C-63-8 (10-27-76) C-63-7 (10-26-76)
C-200-W-1-1	C-63-19 (11-1-76) C-63-25 (7-5-77)
C-198-W-1-14	C-63-15 (11-1-76)
C-201-W-1-5	C-63-17 (11-1-76) C-63-29 (7-1-77)

DATES IN PARENTHESIS REF
DATE INSPECTION WAS PERFORMED

Distribution:
White - QC Files
Canary - Originator

9. ENGINEER J. A. Driscoll 7-28-77

(CONTINUED) ROUTE TO PROJECT ENGINEERING FOR EVALUATION

THIS NCR IS WRITTEN IN RESPONSE TO P.E. Co. AUDIT FINDING # N-093. THE CORRECTIVE ACTION INCLUDED RE-INSPECTION OF A NUMBER OF WELDS, HOWEVER SOME OF THESE WERE FOUND TO BE PERMANENTLY INACCESSIBLE, FOR VARIOUS REASONS, AND ARE DOCUMENTED IN THIS NCR.

ITEM 1: RADWASTE BLDG. STR. STEEL ELEV. 191'-0 (Dwg C-543 AND VENDOR PRINT 8031-C41A-116-4, K5944 E3)

13 CLIP ANGLE CONNECTION WELDS WERE INSPECTED, 7 WERE FULLY ACCEPTIBLE, 6 HAD THE UPPER PART OF THE ANGLE EMBEDDED IN SLAB CONCRETE (WITH THE LOWER PORTION ACCEPTIBLE) THE SIX LOCATIONS ARE DESCRIBED ON SHEETS 5 AND 11 OF THIS NCR.

ITEM 2: REACTOR BLDG. UNIT 1 STR. STEEL ELEV 217'-0 (Dwg C197 AND V.P. 8031-C-46-85-11)

W21 X 68 LOCATED 7'-0" So. of E AT 21.5 LINE, CLIP ANGLE ATTACHMENT TO 2B/C609 EMBED, SOUTH SIDE HAD UPPER PART EMBEDDED IN SLAB CONCRETE. (BEAM # 2C56, RIGHT END, NEAR SIDE) VISIBLE 5 1/2" WAS FULLY ACCEPTIBLE. SEE SHT 9 OF THIS NCR.

ITEM 3: REACTOR BLDG UNIT 1 STR STEEL ELEV 217'-0 (Dwg C197 AND V.P. 8031-C46-85-11)

DIAGONAL BEAM AT 15.5 AND F (Bm # 2A43, LEFT END), W21 X 68 HAS A DOUBLE PLATE CONNECTION, DETAIL 4/C 193.

(CONT'D)

(CONT'D)

THE INNER FULL PENETRATION WELD CAN NOT BE INSPECTED DUE TO THE SECOND PLATE ALREADY WELDED. PRESENCE OF BACKING BAR IS VERIFIED. SEE SH 7, THIS NCR.

ITEM 4: CONTROL ROOM STR. STEEL ELEV 217'-0 (DWGS C463 AND C465)

MONORAIL BEAM STIFFENERS (DETAIL 2 / C465) ARE EMBEDDED IN SLAB CONCRETE FOR ALL EXCEPT THE BOTTOM 2". PRESENCE OF ALL STIFFENERS IS VERIFIED, BUT NO WELD INSPECTION COULD BE PERFORMED. SEE SH 17, THIS NCR.

ITEM 5: RPV PEDESTAL UNIT 2 CRD HOUSING SUPPORT EMBED PLATE (DWG C954)

AT SPICE LOCATIONS (90° AND 270°), EMBED PLATE HAS A NUMBER OF DEFICIENCIES DESCRIBED ON SHEETS 3, 4, 14, 15, AND 16 OF THIS NCR. NO BACKING BAR WAS USED FOR THE SPICE WELDS (AS DETERMINED FROM THE TOP OF THE PEDESTAL CONSTR. J-1) AND THE BACK SIDE OF THE PLATE IS INACCESSIBLE FOR INSPECTION.

ll

Jy album 9-1-77
D. Y. Chaudhary 9-1-77

BLOCK 22. ENGINEERING DISPOSITION

- (1) RADWASTE BLDG. STR. STEEL, ELEV. 191'-0"
BEAMS 127B7, 127B11, 137B2 AND 119B11.
USE AS IS

RATIONALE: PER ENGINEERING ANALYSIS, FILE 41-P,
SHEET NOS. 131 TO 136, VISIBLE WELD IS CAPABLE
OF SUPPORTING DESIGN LOAD.

A.K. Gardner
10.7.77

- (2) REACTOR BLDG. STRUCT. STEEL, ELEV. 217'-0" (DWGS. C-197, C-127 (CONC. SLAB & V.P. C-46-133-4) USE AS IS - RATIONALE: BEAM B1, W21x68-6 WAS DESIGNED TO SUPPORT THE CONSTRUCTION & SERVICE LOADS; THE SLAB WAS DESIGNED TO SUPPORT THE SERVICE LOADS SPANNING IN THE N-S DIRECTION. ASSUMING THAT THE CLIP ANGE CONNECTION FAILS BECAUSE OF INSUFFICIENT OR FAULTY WELDS, THE SLAB CAN (& WILL) SPAN IN THE E-W DIRECTION AS PER CALC'S, PAGES 78-3 TO 78-5, FILE #22.4L. THE ACCEPTABLE & INSPECTED FILLET WELDS AS DESCRIBED IN ITEM 2 OF BLOCK 19 ABOVE HAVE ADEQUATE STRUCTURAL CARRYING CAPACITY TO SUPPORT ITSELF (W21x68) PLUS ALL PIPING LOADS, CABLE TRAY SUPPORTS ETC. ATTACHED TO IT.

- (3) REACTOR BUILDING, STRUCTURAL STEEL, ELEV. 217'-0" (DWGS. C-197, C-126 & V.P. C-46-182-7). BEAM B19 W21x68-4, SPAN 38.2' DESIGNED FOR CONSTRUCTION LOADS (CASE I) AND DESIGNED TO SPAN 19.1' FOR SERVICE LOADS (CASE II). SEE CALCULATION PAGES 53 TO 60, FILE #22.3L.

CONT'D NEXT PAGE

(3) CONT'D. USE AS IS - RATIONALE: THE VISIBLE & ACCEPTABLE FULL PENETRATION WELDS OF THE OUTER PLATE ($4\frac{5}{16} \times \frac{3}{8} \times 1'-3\frac{1}{2}"$ LONG) OF DETAIL 4/C-193 HAS ADEQUATE SHEAR CAPACITY TO SUPPORT THE REQUIRED DESIGN LOADS, SEE CALCULATION, PAGE 60, FILE # 22.3L

4) CONTROL ROOM, AREA B STRUCTURAL STEEL, ELEV. 217'-0" (DWGS. C-463 and C-465). STIFFENER PLATES ON BEAMS SUPPORTING MONORAIL BEAM S18 x 54.7 WITH CAP. 15 TONS.

USE AS IS - RATIONALE: THE CARRYING CAPACITY OF BEAMS W36 x 300, W30 x 210 & W30 x 116 WITHOUT STIFFENER PLATES SURPASSES THE ACTUAL LOADS CAUSED BY THE 15 TON MONORAIL. SEE CALCULATIONS, PAGE 419 FILE #. 22.3L

5) RPV PEDESTAL, UNIT 2, CRD HOUSING SUPPORT EMBED PLATE (DWG. C-954 & G.E. DWG. 761 & 724 SHTS 1 & 2)

USE AS IS - RATIONALE:

(9) DEFICIENCIES DESCRIBED ON SHEETS 3, 4, 14, 15 & 16. BASED ON ENGINEERING EVALUATIONS, THESE KINDS

CONTINUED ~~---~~

ORIGINATOR (

(5) CONT'D. OF IMPERFECTIONS WILL NOT AFFECT THE STRUCTURAL INTEGRITY OF THE 3/4" THICK PLATES.

(b) BACKING BAR NOT USED FOR SPLICE WELDS
 SPLICE WELDS WERE NOT DESIGNED & NOT REQUIRE FOR STRUCTURAL SUPPORTS. SPLICE WELDS WERE PROVIDED AT LOCATIONS 90° & 270° TO FORM A CONTINUOUS BACKING FOR CONCRETE POUR.

C. Chin / G.L.R. / S.S. / A.H. / B.W. 11/17 *A. M. Appleford for R. Elias 11-17-77*

BLOCK 25 CONT'D

DISPOSITION CONCURRENCE				
REWORK	REJECT	REPAIR	USE AS IS	DOC.
PROJECT FIELD ENGINEER				DATE
PROJECT ENGINEER				DATE
PROJECT FIELD OFFICER				DATE
AUTHORIZED INSPECTOR				DATE

ORIGINATOR