

DmB

PRINCIPAL STAFF	
<input checked="" type="checkbox"/> RA	<input checked="" type="checkbox"/> DPRP
<input type="checkbox"/> D/RA	<input type="checkbox"/> DE
<input type="checkbox"/> A/RA	<input type="checkbox"/> DRMSP
<input type="checkbox"/> RC	<input type="checkbox"/> DRMA
<input type="checkbox"/> PAO	<input type="checkbox"/> SCS
<input type="checkbox"/> SGA	<input type="checkbox"/> W.
<input type="checkbox"/> ENF	<input type="checkbox"/> File

orig 3

DOCUMENTATION TRANSMITTAL

To: Stone & Webster - CIO
PO Box 1963
Midland, MI 48640

Transmittal No: CIO- 0041
Date: May 12, 1984

Attention: Ken Butler

The documentation listed below is provided herewith, X was previously provided on 5-8-84 ; as requested by Ken Butler .

Documentation Description: Nonconformance Reports - C-00960 & C-02005-HV

CIO has X has not been placed on routine transmittal for the described documentation.

Janne Kinne
Signature

- CC RJCook, NRC Site (w/a, unless voluminous)
- JJHarrison, NRC Region III (w/a, unless voluminous)
- DDJohnson, SMO (w/o)
- JGKepler, NRC Region III (w/a, unless voluminous)
- BHPeck, SMO (w/o)
- NIRichel, SMO (w/o)
- RAWells, MPQAD (w/o)
- CMThompson - File 24.2 (w/a, unless voluminous)

MI0384-0001A-QL06

8406050314 840512
PDR ADOCK 05000329
S PDR

IEO1
MAY 30 1984

1/1

NONCONFORMANCE REPORT

ORIGINAL

17 DATE ISSUED 12-19-83	18 REY BT 1-20-84
19 PAGE 1 OF 3-5 16 354-3-84	514-16-83 3-2-84 3-7-84 513 4-11

ITEM LOCATION VARIOUS: PERTAINS TO ALL SAFETY RELATED INSTALLATIONS UTILIZING GROUTED ANCHOR BOLTS.

ITEM DRAWING/PART NO. VARIOUS	3 ITEM PART NAME GROUTED ANCHOR BOLTS	4 ITEM SERIAL NO. NIA
----------------------------------	--	--------------------------

ITEM DESCRIPTION SAFETY RELATED INSTALLATIONS USING GROUTED ANCHOR BOLTS

ITEM STARTUP SYSTEM NO. VARIOUS ITS00	7 REFERENCE DOCUMENT POLI C-1.10 rev 14 SPEC 722D-C-306 rev. 11	8 ASSE A.N.I. REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
---	---	---

INSPECTION RECORD NO. N/A	LOG NO. N/A	REV NO. N/A	10 RESPONSIBLE ORGANIZATION PROJECT ENGINEERING BOP-QA-MWC
------------------------------	----------------	----------------	---

NONCONFORMANCE DISCOVERED DURING:

<input checked="" type="checkbox"/> POST INSPECT	<input type="checkbox"/> TURNOVER	<input type="checkbox"/> POST TURNOVER	<input type="checkbox"/> DESIGN	<input type="checkbox"/> RECEIVING	<input checked="" type="checkbox"/> CONST	<input type="checkbox"/> RELEASE FOR INSPECT
			<input type="checkbox"/> PRE-OP TEST	<input type="checkbox"/> FINAL TURNOVER	<input type="checkbox"/> OVERINSPECT	

REQUIREMENT) SPECIFICATION 722D-C-306 REV 11, PARAGRAPH 6.5 REQUIRES: "MINIMUM EMBEDMENT SHALL BE AS SPECIFIED IN APPENDIX B UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER." POLI C-1.10 REQUIRES: ACT 2.1.A.2 - HOLES BE DRILLED TO CORRECT DEPTH AND DIAMETER TO PROVIDE REQUIRED EMBEDMENT DEPTH. ACTIVITY 2.1.C - ANCHOR BOLTS ARE THE CORRECT SIZE AND TYPE...

CONTINUED...

NONCONFORMANCE 1) FAILURE OF POLI C-1.10 TO REQUIRE QUALITY CONTROL TO VERIFY THAT MINIMUM EMBEDMENT HAS BEEN MET AND MAINTAINED THROUGH INSTALLATION, RENDERS THE QUALITY OF SAFETY RELATED GROUTED ANCHOR BOLTS INDETERMINATE.

14 NCR ORIGINATED BY (PERSON) <i>John M. Gonzio</i>	12-19-83 DATE
15 NCR ORIGINATED BY (DISCIPLINE) MPCAD-QI-MECH	

CONTINUED...

NUMBER OF HOLD TAGS (IF APPLIED) NONE	21 LOCATION OF HOLD TAGS N/A
--	---------------------------------

POTENTIAL SO.55(e) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	24 ACTION ITEM NO. S04072	26 ITEM PRIORITY CODE NO. 2	28 NCR REVIEWED BY: <i>Chandler</i> 1-20-84 <i>Sum</i>
---	------------------------------	--------------------------------	--

REPORTED TO MPCA MANAGER DATE 12/20/83	25 DISCIPLINE: C	27 TREND CODE K-9	DATE: 2/7/84 12/20/83
---	---------------------	----------------------	-----------------------------

CONTINUED ON REVERSE

30 PROCESS CORRECTIVE ACTION

YES NO QAR NO. _____

31 RECOMMENDED DISPOSITION

REWORK SCRAP/REJECT REPAIR USE AS IS

32 CONDITIONAL RELEASE

YES NO

31A ADDITIONAL INFORMATION

See the following pages for additional information, proposed disposition.

33 DISTRIBUTION FOR ACTION

34 DISPOSITION CONCURRENCE

PROJECT FIELD ENGINEER	DATE	MPQAD CONCURRENCE	DATE	PFQCE (ASME)	DATE
				PQAE (ASME)	DATE
LEAD DESIGN ORG	DATE	CP Co SMO (for turned over systems)	DATE	A.N.I. (ASME)	DATE

35 DISPOSITION ACTION TAKEN

36 METHOD OF DISPOSITION ACTION VERIFICATION

RESULT OF DISPOSITION ACTION VERIFICATION
 ACCEPTABLE UNACCEPTABLE

IF UNACCEPTABLE, REFERENCE SUPERCEDING NCR NUMBER _____

37 NCR CLOSED BY

MPQAD DATE
A.N.I. (ASME) DATE

NONCONFORMANCE REPORT

CONTINUED

ORIGINAL

LOCK 12 CONTINUED...

SPEC 7220-C-306 IP 6.6 REQUIRES " A NUT SHALL BE THREADED ONTO ONE END OF EACH ANCHOR BOLT. LOOSENING OF THE NUT SHALL BE PREVENTED BY TACK WELDING OR BY SPOILING OF THREADS. WHEN A-193 OR SA-193 BOLTS ARE USED, ONLY SPOILING OF THREADS IS ALLOWED.

John 12/19/83

LOCK 13 CONTINUED

PQCI C-1.10 HAS NO REQUIREMENT FOR VERIFYING THE APPLICATION OF THE NUT TO THE ANCHOR.

PQCI C-1.10 HAS NO REQUIREMENT FOR VERIFYING THE PROPER LOCKING OF THE NUT TO THE ANCHOR.

PQCI C-1.10 HAS NO REQUIREMENT ENSURING THAT A-193, SA-193 OR OTHER ACCEPTABLE HIGH STRENGTH BOLTS HAVE NOT BEEN TACK WELDED.

FAILURE TO PROCEDURALLY REQUIRE VERIFICATION OF THE ABOVE ATTRIBUTES RENDERS THE QUALITY OF SAFETY RELATED GROUTED ANCHOR BOLTS INDETERMINATE

John 12/19/83

NCR #C-00960 REV 0

March 20, 1984

Block 31A: ADDITIONAL INFORMATION:

The disposition provided on NCR #C-00960 is primarily based on the "contention" that Activity 2.1.A.2 of PQCI C-1.10, Revision 14 references the appropriate specification, and section in Column 5 and inspection activity code "I(M)" in Column 6. Activity 2.1.A.2 requires inspecting the hole for correct depth and diameter therefore, objective evidence does not exist indicating that inspectors verified the embedment depth in addition to measuring the depth of the drilled hole.

Based on the above Project Engineering must accept and envision the worst case and specifically address the following with complete justification:

1. Would an anchor bolt be acceptable without a nut attached (considering the nut was never attached or vibrated off, etc)?
2. Would an anchor bolt be acceptable with a nut:
 - a. not locked to the bolt?
 - b. A-193, SA-193 material tackwelded?

If Project Engineering cannot provide adequate justification for the above points, then a more detailed investigation will be needed to assure compliance with specification requirements (ie documenting proposed disposition, identification of the areas in question and provide a sample loading plan).

~~HMM~~ Mues
~~APAES~~
3/20/84

Block 31A: PROPOSED DISPOSITION

To substantiate the adequacy and completeness of PQCI C-1.10, activities related to the inspection of grouted anchor bolts, the following steps have been taken:

1. A survey was performed by LAQTS Teams on April 10, 1984, to locate and identify grouted anchor bolts without installations. This survey has identified 133 grouted anchor bolts from which 24 bolts will be randomly selected for destructive testing.

The test shall consist of a preliminary survey for detection of the embedded items (rebars) surrounding the anchor bolt and depending on locations either the entire anchor will be cored out, or the affected area will be chipped to inspect and verify the nonconforming items listed on NCR C-00960. A checklist has been prepared for this purpose to be used by the cognizant QC Engineer witnessing the test.

2. An interview was held with previous QC Engineers involved with the implementation of PQCI C-1.10 from as early as 1976 to the present. All QC Engineers were consistent in their execution of PQCI C-1.10 activities, reference criteria and compliance of Spec 7220-C-306 requirements concerning the installation of the grouted anchor bolts. The interview results are attached as part of the disposition to NCR C-00960.
3. The result of destructive testing and the interviews conducted with past QC Engineers will provide satisfactory resolution of NCR C-00960. Therefore, a "use-as-is" disposition is proposed conditional upon satisfactory completion of destructive testing.

Henry Paul Nunes
~~APAES~~
Civil Structural

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed Timothy J. Celvett TG 4/11/84
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 1980 TO 1983
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS ALL QCE'S WERE FULLY AWARE OF THE NECESSITY TO VERIFY "ALL"
APPLICABLE ATTRIBUTES OF THE LISTED INSPECTION CRITERIA IN BLOCK 5
OF THE PQCI. THIS WAS THE HEART OF THE QC PROGRAM.

continued

Interview Conducted By: Sam Bakhiani PAE CIVIL DATE 4/11/84

Presently, PQCI'S HAVE ^{ARE} ~~been~~ intended to LIST inspection criteria
in Block 4 with for word from Spec's etc. This was ^{to 4/1/84} done previous
to 1983. ALL TRAINING THAT WAS CONDUCTED STRESSED THE NEED
TO MEASURED EMBEDMENT LENGTHS OF THE BOLTS AND OTHER REQUIREMENTS
LISTED IN BLOCK 5 OF PQCI.

CONCERNING THE NCR, SECTION 6.5 OF SPEC C 306 IS LISTED IN BLOCK 5
OF PQCI WHICH SPECIFICALLY ADDRESSES MINIMUM EMBEDMENT OF
THE BOLTS, THEREFORE WAS INSPECTED BY ALL QCE'S IMPLEMENTING
C-1.10 PQCI.

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed GLEN Y. YEISLEY (PALISADES X 265 RA)
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 2/76 TO 6/80
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS Glen indicated that for locking the bottom nut to the anchor bolt; the threads were spoiled regardless of strength of the bolts.

Interview Conducted By: Sam Bahitiani PAE CIVIL DATE 4/11/84

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed Rodney Bennett
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM Aug 95 TO Nov. 83
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO UNKNOWN

REMARKS * ^{spec.} if The drawings called for the nut to be tack welded they were if they did not require it they weren't. I inspected ^{the} requirements.

Interview Conducted By: Sam Bahktiani PAE civil DATE 4/11/84

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed EMILY WALKER Egw 4/10/84
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 10/82 TO 4/84
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS 3.1-3.4 INSPECTION OF GROUTED ANCHOR BOLTS IN-
CLUDED SPEC. REQUIREMENTS EFFECTIVE AT THE TIME
OF THE INSPECTION.
3.4. THERE WAS AN AGREEMENT BETWEEN CONSTRUCTION
AND G.C. THAT ALL ANCHOR BOLTS WOULD HAVE SPOILED
THREADS VERSUS TACK-WELDING.
Interview Conducted By: Sam Baktiani PAE CIVIL DATE 4/10/84

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed MICHAEL STARK MS 4/10/84
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 6/80 TO PRESENT
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS _____

Interview Conducted By: Samu Bakhtiani PAE CIVIL

DATE 4/10/84

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed KENNETH LOWTHER KLC 4/10/84
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 9/83 TO 4/84
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS

Interview Conducted By: Sam Bahjani PAE CIVIL DATE 4/10/84

GRouted ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

SR 4/10/84

1. QCE interviewed JEFF KO BY TELEPHONE X 3472 AND ARBOR
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 2/82 TO 12/82
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS _____

Interview Conducted By: Sam Bakhtari GAE CIVIL DATE 4/10/84

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed C.M. PAVLEDES (Paul) 4/10/84
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM JAN-1979 TO MAY-1984
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO NO RECOLLECTION

REMARKS _____

Interview Conducted By: Sam Bahitiani PAE CIVIL DATE 4/10/84

GRouted ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed LEONID B. BERESTOVETSKY LB 4.10.84
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 5:21 TO 12:20
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS _____

Interview Conducted By: Sam Bahkhar P&E DATE 4/11/84

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed STEWART KIRKER 4/13/84
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 10/76 TO 10/83
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
- 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS THE INTENT OF THE WORDING & THE QCE TRAINING
GIVEN WAS TO ASSURE THAT THESE ITEMS WERE
VERIFIED UNLESS SUPERCEDED BY DESIGN DWGS.

Interview Conducted By: Sam Bakhtiani DATE 4/13/84

GROUTED ANCHOR BOLTS/DOWELS PAST
INSPECTION PROCESS INTERVIEW
PQCI C-1.10 REV 0-14

1. QCE interviewed Steve Gelnett sq 4/13/84
2. Time QCE involved with PQCI C-1.10 Inspection Process: FROM 9/76 TO 3/81
3. The following questionnaire is based on the above QCE's observance of the PQCI C-1.10 Inspection Process and his/her best recollection:
 - 3.1 - Were the holes measured for diameter and depth? YES NO
 - 3.2 - For the grouted anchor bolt assemblies was the bottom nut attached and locked to the bolt? YES NO
 - 3.3 - Was the embedment depth measured from the top of the bottom nut to the surface of concrete for anchor bolts and from the bottom of the hole to concrete surface for grouted dowels? YES NO
 - 3.4 - Were there any instances of high strength bolts, A-193, SA-193 being tackwelded to bottom nut? YES NO

REMARKS ① Activity descriptions on the IR were always an abbreviated version of the QCI, Inspection Criteria listed in the QCI spelled out the items to be verified and their unique acceptance criteria.

Interview Conducted By: Sam Bahhtari PAE CIVIL DATE 4/13/84

The IR's were not intended to stand on their own. They must be used, reviewed in conjunction with the QCI and governing specifications (design criteria). The above listed attributes were always verified by QCE's, because ~~that~~ they were in the inspection criteria specified in the governing specification.

② A review of certification/training files, for QCE's performing these verifications, would substantiate that these attributes were required to be verified prior to grouting.

NONCONFORMANCE REPORT

ORIGINAL

16 NCR NO.

C-02005-HV

17 DATE ISSUED

3-26-84

18 REV

0

19

PAGE 1 OF 4

1 ITEM LOCATION

AUX #2 ELEV. 649'-1 1/2", 2'-10 1/2" S OF B 25'-8" W OF 6.9

2 ITEM DRAWING/PART NO.

2-604-16-11 A

3 ITEM PART NAME

2-604-16-11, 2 1/2" ZHCC-65-H11

4 ITEM SERIAL NO.

N/A

5 ITEM DESCRIPTION

LARGE BORE U-BOLT SUPPORT

6 ITEM STARTUP SYSTEM NO.

ZBGA

7 REFERENCE DOCUMENT

PQCI P2.30 A

8 ASME A.3.1. REQUIRED

YES NO

9 INSPECTION RECORD NO.

P230-2604-16-11

LOG NO.

345526

REV NO.

5

10 RESPONSIBLE ORGANIZATION

CONST.

BCPCO G3.9

11 NONCONFORMANCE DISCOVERED DURING:

POST INSPECT

TURNOVER

POST TURNOVER

DESIGN

RECEIVING

CONST

RELEASE FOR INSPECT

PRE-OP TEST

FINAL TURNOVER

OVERINSPECT

12 REQUIREMENT

- (1) PQCI P2.30 A 3.4.3 C (B-27, UT-ASME-NF 5.1) POROSITY WITH MAJOR DIMENSIONS OF 1/16" OR LESS ARE ACCEPTABLE,
- (2) PQCI P2.30 A 3.9.1 (DWG.) VERIFY SIZE, MATERIAL TYPE AND QUANTITY OF ALL BOLTING MATERIAL

SEE CONTINUATION SHEET

13 NONCONFORMANCE

- (1) ITEM 2-3 WELD NORTH EAST CORNER HAS POROSITY > 1/16"
- (2) ~~MATERIAL TYPE INDETERMINATE BECAUSE OF NO HEAT LOG AVAILABLE FOR GRINNELL MATERIAL. U-BOLT M-79 QM 3-28-84~~
- (2) MATERIAL TYPE INDETERMINATE DUE TO NO METHOD OF TRACING CODES ON BOLTING MATERIAL TO A MATERIAL SPEC. AND GRADE. CODE ON U-BOLT IS H-1715 M-79 QM 3-28-84
- SEE CONTINUATION SHEET

14 NCR ORIGINATED BY (PERSON)

Q. Munton M-79 3-26-84
DATE

15 NCR ORIGINATED BY (DISCIPLINE)

MPBAP/QC MECH

20 NUMBER OF HOLD TAGS (IF APPLIED)

1

21 LOCATION OF HOLD TAGS

ON SUPPORT

22 POTENTIAL SG.SB(e)

YES NO

24 ACTION ITEM NO.

S05665

25 ITEM PRIORITY CODE NO.

5

26 NCR REVIEWED BY:

M. A. ...

27 REPORTED TO MPQA MANAGER

DATE NA

28 DISCIPLINE:

M, C

29 TREND CODE

DNT

DATE:

3/29/84

29 CAUSE

30 PROCESS CORRECTIVE ACTION

YES NO QCR NO. _____

31 RECOMMENDED DISPOSITION

REWORK SCRAP/REJECT REPAIR USE AS IS

32 CONDITIONAL RELEASE

YES NO

31A ADDITIONAL INFORMATION

33 DISTRIBUTION FOR ACTION

34 DISPOSITION CONCURRENCE

PROJECT FIELD ENGINEER DATE

MPQAB CONCURRENCE DATE

PPQAE (ASME) DATE

PQAE (ASME) DATE

LEAD DESIGN ORG DATE

CP Co SMO (for turned over systems) DATE

A.N.I. (ASME) DATE

35 DISPOSITION ACTION TAKEN

36 METHOD OF DISPOSITION ACTION VERIFICATION

RESULT OF DISPOSITION ACTION VERIFICATION

ACCEPTABLE UNACCEPTABLE

IF UNACCEPTABLE, REFERENCE
SUPERSEDING RCR NUMBER _____

37 RCR CLOSED BY

MPQAB DATE

A.N.I. (ASME) DATE

ORIGINAL

NONCONFORMANCE REPORT
CONTINUATION SHEET

NCR NO.

C-02005-HV

DATE ISSUED

3-26-84

REV

0

PAGE 3 OF 4

CONTINUED FROM PAGE 1

12 - REQUIREMENT

- 3) PCI P.2.30 B.3.10.1 (M-326 5.16.1) VERIFY THE SUPPORT MEMBERS ARE FREE FROM DAMAGE SUCH AS SURFACE DEPRESSIONS OR IMPERFECTIONS SHALL BE FREE OF CRACKS AND SHALL NOT IN FRINGE VAN THE MIN. MAT'L THICK. (B) $\frac{1}{16}$ " - THICK $\frac{3}{4}$ " - 2"
- 4) PCI P.2.30 B.3.12.15 (C-305 4.8) VERIFY THE MAXIMUM THREAD ENGAGEMENT LENGTH OF THE EXPANSION ANCHOR IS AT LEAST $\frac{1}{2}$ " SHORTER THAN THE MANUFACTURER'S SPECIFIED THREAD LENGTH TO ENSURE THAT THE NUT IS NOT BOTTOMED OUT.
- 5) PCI P.2.30 B.3.18.3 - U.T. REPORTS

13 NONCONFORMANCE

- 3) SOUTH EAST ANCHOR BOLT HAS $2 \frac{1}{16}$ " GOUGE MARK.
- 4) BOLTS ~~APPEARED~~ TO HAVE BEEN CUT ^{OR GRINDED M 79 20 8-27-84} BEYOND THE CHAMFERED ENDS, MAKING THIS ACTIVITY INDETERMINATE.
- 5) U.T. REPORT NUMBERS 11842 AND 130582 HAVE DIFFERENT THICKNESS RECORDED ON THE TWO REPORTS. UT REPORT # 130582 CALLS FOR SOUTH WEST ANCHOR BOLT TO BE $6 \frac{3}{4}$ " LONG. ATTACH. 7 PAGE 1 DOES NOT IDENTIFY ANY $\frac{1}{2}$ " ANCHOR BOLTS TO BE THAT LENGTH.

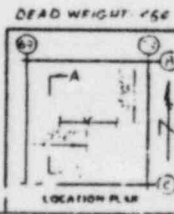
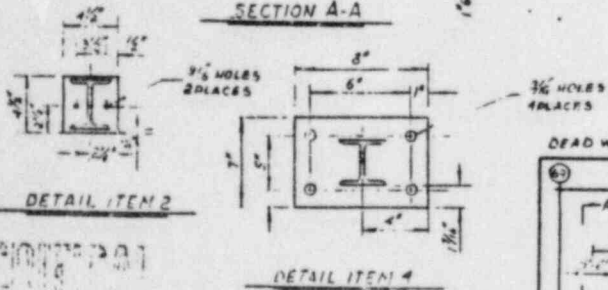
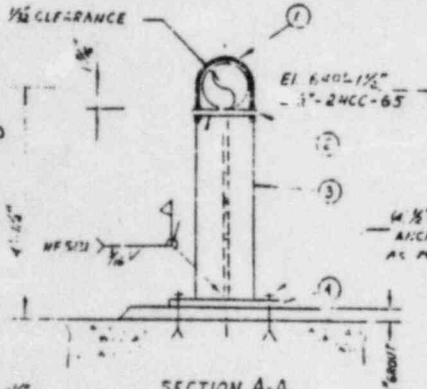
ORIGINAL

PG 4 OF 4

CONTROLLED
2 3 1983
QUALITY CONTROL
BECHTEL JOB 7220

WORKPRINT
VERIFICATION DATE 2/16/83
RECIPIENT ORGANIZATION *CEY*

NOTE: FIELD TRIM INSULATION: 1/2" SIDE OF STEEL.



ITEM NO.	MATERIALS & OPERATIONS	QUAN.	SHIP.	PER	L	CRS	PRIM	SEC	ASC.
PIPE SUPPORT CONSISTS OF									
1	1/4" x 2 1/2" FIG. 137N U BOLT WITH HEX NUTS 6 LBS	1				X			
2	3/8" x 4 1/2" SA 30 PLATE 0L 4 1/2 LG TW = 2 LB	1				X			
3	MIP-13 1/4-25 3 HOLES LG TW = 55#	1				X			
4	3/8" x 7 1/2 SA 30 PLATE 0L 6 LG TW = 59#	1				X			
HALF SET ASSEMBLY SKETCH & PARTS LIST BUNDLE & TAG									
3/8" - 24CC-55-M-H									
CONTROLLED									
FABRICATE IN ACCORDANCE WITH SPECIFICATION 7220-M-366									

ITEM NO.	FOR MATERIALS AND OPERATIONS SEE NO.	SHEET	OF
CONDITIONS	Fa	Fy	Fz
DESIGN			
NORMAL & UPSET	-	-47	-
EMERGENCY			
FAULTED	-	-48	-
THIRD PARTY INSPECTION	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	
CODE CLASS	ASME B31.3		
REF. DRAW. NO NUMBERS		JOB NO. 7220	
PIPE: M-36-2000 ELECT.			
STEEL: C-60000 HVAC.			

MOVEMENT (IN)	X = 0.01	Y = 0	Z = 0.005						
REF. ISO NO.	1M-CO4-G17FFV H								
DATA POINT									
PIPE MATL.									
INSULATION									
AREA NO.									
REV. DATE	REV. TIME	BY	CHKD.	APPD.	DATE	CUSTOMER CONSUMERS POWER CO	ORDER OR CONT. NO. P.O. 7220-M105 AC		
						JOB NAME MIDLAND-142 HGR PIP.	MARK NO. 17-004-16-11		
						NO. 17-004-16-11			
						SHEET 1 OF 1	REV 0		