TU ELECTRIC
COMANCHE PEAK
STEAM ELECTRIC STATION

ENGINEERING REPORT

EVALUATION OF UNIT 1 AND UNIT 2 THERMO-LAG CONFIGURATIONS

ER-ME-082

REVISION 2

JUNE 10, 1994

PREPARED BY: _____

REVIEWED BY: _____

APPROVED BY: _____

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REVISION RECORD

Revision 1

A. General Description of Changes

1. Revision 0 of this report was issued when the installation of Thermo-Lag on Unit 2 commodities was approximately 93% complete. Design change documents since Revision 0 was issued, reflecting final Unit 2 Thermo-Lag configurations at the time of full power licensing, have been included within the scope of Revision 1.

2. Revision 0 of this report identified six (6) DCAs depicting six (6) field configurations for which the critical attributes were not bounded by tested configurations or evaluation could not demonstrate an equivalent level of protection to that of a tested configuration. This issue was documented via ONE Form 93-184. Subsequent to issuance of the ONE Form, two (2) other DCAs were identified which had critical attributes similar to those identified by the ONE Form. Seven (7) DCAs were revised and reworked in the field. The resulting configurations are evaluated in Attachment C of this report. Further review determined that the remaining DCA was consistent with tested configurations and was re-evaluated in Attachment B.

3. During the Unit 2 93-08 pre-fuel load inspection, the NRC staff reviewed eight (8) unique Thermo-Lag field configurations designed and constructed through the DCA process, as described in the 50-446/93-08 Inspection Report (Ref. 6.21). At the time of the inspection, evaluations documenting the acceptability of such untested configurations in accordance with NRC Generic Letter 86-10 (ref. 6.13) were not complete. Revision 0 of this engineering report was subsequently issued to provide the acceptance basis for all Unit 2 Thermo-Lag configurations installed at that time and transmitted to the NRC staff via TXX-93023 dated January 19, 1993 (Ref. 6.22). The staff's review of Revision 0 of this report was then issued as part of SSER 26 (REF. 6.23). In SSER 26, the staff concluded that the justification provided for two (2) of the configurations reviewed during the 93-08 inspection did not fully establish an adequate acceptance basis relative to configurations qualified by testing. These configurations consisted of "box design" enclosures constructed of Thermo-Lag panels whereby cable tray protective envelopes were extended beyond the cable tray boundaries to enclose air drop cables. The staff further indicated that this concern, i.e., the qualification basis for cable tray and air drop "box design" enclosures was generic to other such configurations using similar construction techniques. Finally, the staff stated that review of Revision 0 of this report was on a sample basis and other such evaluations provided for untested configurations would be subject to

future audit. In response to the NRC staff's concern regarding "box design" enclosures described above, TXX-93101 (Ref. 6.24) was issued on February 26, 1993. In this correspondence, TU Electric committed to modify all "box design" cable tray/air drop enclosures (as described above) installed on Unit 2 raceways/cables to either provide an additional layer of Thermo-Lag panel material on the assemblies or otherwise modify the existing protective envelopes to conform with configurations bounded by test. The scope of this commitment consisted of 13 configurations, which were to be reworked in accordance with the CPSES site modification program (Ref. 6.19, 6.20). All work associated with these modifications has been completed (Ref. 6.28). Therefore, Revision 1 of this report provides revised evaluations for these plant configurations.

4. TU Electric transmitted copies of ten (10) Omega Point Laboratories (OPL) fire endurance test reports to the NRC staff via Ref. 6.22. Accordingly, Revision 0 of this engineering report utilized the results of these 10 fire endurance tests (i.e., "test schemes") in the evaluations of Unit 2 Thermo-Lag configurations contained therein. However, in SSER 26 the NRC identified concerns with the results of two (2) of these test schemes (Schemes 1-2 and 9-3) relative to their use in the Unit 2 Thermo-Lag qualification basis. Scheme 9-3 was a conduit assembly which tested 1/2 inch (nominal) thickness of Thermo-Lag coverage on 1 1/2 inch and 2 inch diameter conduits, which is representative of the existing Unit 1 configuration on these conduit sizes. As described by TXX-93061 dated January 28, 1993 (Ref. 6.26), the results of this test will not be used to qualify Unit 2 Thermo-Lag configurations since the Thermo-Lag thicknesses on these conduit sizes were increased. Use of this test scheme was included in Revision 0 to justify minor areas on protected conduits in Unit 2 where the increased thicknesses of Thermo-Lag material could not be installed due to the interferences, etc. However, since the results of this test scheme have not been accepted by the NRC staff at this time, Revision 1 of this report eliminates reference to this test (see Section 6.10). Scheme 1-2 was a 36 inch wide cable tray assembly with tee section. Although the results of this test were satisfactory (i.e., acceptable cable and tray side rail temperatures were maintained and no visual cable damage occurred), this test was conducted in June 1992, prior to issuance of the October 29, 1992 NRC letter (Ref. 6.27) which provided NRC concurrence on the TU Electric fire test program methodology and acceptance criteria. The NRC staff's concern was that since the test methodology at that time specified a straight stream hose test following the fire endurance test, which does not leave the Thermo-Lag barrier material intact, it was not possible to determine if "burn-through" of the barrier occurred. In response to this concern, Ref. 6.24 was issued with a commitment to perform a confirmatory fire test on a 36 inch cable tray utilizing the methodology and acceptance criteria contained in Ref. 6.27. This test was performed on March 4, 1993 at OPL and the satisfactory results conveyed to the NRC staff via Ref. 6.25. Therefore, use of

the results of this test (Scheme 15-1) has been included in Revision 1 of this report as part of the qualification basis for Unit 2 Thermo-Lag configurations (see Section 6.10).

5. Revision 1 of this report also includes minor clarifications, corrections, etc., which existed in Revision 0.

6. No revision bars are included in Revision 1, however a description of the changes follows in Section B for traceability purposes.

B. Details of Changes

1. Added Record of Revision section to report.

2. Revised Table of Contents to reflect Revision 1 changes.

3. Revised Section 2.0 and 3.1 to reflect Design Change Notice (DCN) and Design Modification (DM) process for implementing field changes, since Design Change Authorization (DCA) process is no longer in effect.

4. Deleted Section 3.2 since installation of Thermo-Lag fire barriers is complete in Unit 2.

5. Renumbered Sections 3.3 through 3.6 to 3.2 through 3.5 and added reference to DCN design change process.

6. Revised Section 5.0 to delete description of six (6) DCAs identified in Revision 0 as requiring rework (see item 2 of "General Description of Changes").

7. Revised Section 6.0 to include additional references (6.19 through 6.28) and revised list of Omega Point Laboratories Fire Test Reports (Ref. 6.10).

8. Revised Attachment A, "Typical Design Details" as follows:

   a. DCAs 104015, Rev. 1 and 104235, Rev. 3 were issued subsequent to issuance of Rev. 0 of this engineering report (ER). Evaluations associated with the minor revisions to the typical design detail drawings have now been included in Attachment A.

9. Revised Attachment B, "Unique Configurations" as follows:

   a. As described in item A.3 above, this revision of the engineering report (ER) includes evaluation of field changes issued to modify "box design"

enclosures where the protective envelopes installed to enclose portions of cable trays and air drop cables were not considered to be direct extensions of the cable tray protective envelopes. Thirteen (13) such configurations were identified as requiring modification. Twelve (12) configurations were modified via DCNs 5727, 5742 and 5745 for provision of a second layer of Thermo-Lag 330-1 panels over the existing coverage, consistent with the design qualified by Test Scheme 10-1 for junction boxes. One (1) configuration (originally installed per DCA 103624, Rev. 2) was modified via DCN 5746 to utilize 330-660 flexi-blanket material coverage consistent with Test Scheme 11-1. All field work associated with these modifications is complete. Accordingly, the design change documents listed below and corresponding revised evaluations have been included in Attachment B:

i. DCA 103575, Rev. 0 (DCN 5727, Rev. 0)
ii. DCA 103701, Rev. 0 (DCN 5727, Rev. 0)
iii. DCA 102160, Rev. 1 (DCN 5742, Rev. 1)
iv. DCA 102932, Rev. 5 (DCN 5742, Rev. 1)
v. DCA 104124, Rev. 0 (DCN 5742, Rev. 1)
vi. DCA 102882, Rev. 0 (DCN 5745, Rev. 1)
vii. DCA 103472, Rev. 1 (DCN 5745, Rev. 1)
viii. DCA 103489, Rev. 1 (DCN 5745, Rev. 1)
ix. DCA 103680, Rev. 1 (DCN 5745, Rev. 1)
x. DCA 103884, Rev. 1 (DCN 5745, Rev. 1)
xi. DCA 101498, Rev. 1 (DCN 5746, Rev. 1)
xii. DCA 103624, Rev. 2 (DCN 5746, Rev. 1)
xiii. DCA 104217, Rev. 2 (DCN 5746, Rev. 1)

b. Evaluation of DCA 102479, Rev. 0 was included in Attachment D of Rev. 0 of this ER. Subsequent to issuance of the ER, the DCA required revision due to field conditions and final QC inspection. Resolution of the field condition required modification of the Thermo-Lag configuration such that it is more appropriately addressed as a "unique" configuration. All field work has been completed and the evaluation associated with Rev. 1 of this DCA has been included in Attachment B.

c. Evaluations for DCAs 103551, Rev. 1, 103892, Rev. 0 and 104222, Rev. 1 were included in the scope of Rev. 0 of this ER. Subsequent to issuance of the ER, these DCAs required revision due to field conditions and final QC inspections. All field work has been completed and evaluations associated with the final revisions of these DCAs have been included in Attachment B.

d. The DCAs listed below reflect field configurations which were not installed at the time Rev. 0 of this ER was issued. All field work has been completed and the evaluations associated with these configurations have now been included in Attachment B:

i. DCA 104251, Rev. 0
ii. DCA 104257, Rev. 1
iii. DCA 104265, Rev. 0

e. As described in item A.2 above, One Form 93-184 was issued based on Rev. 0 of this ER to identify specific configurations where the existing design was not adequately bounded by a tested configuration. The DCAs associated with this condition were evaluated in Attachment B in Rev. 0 of this ER. The subject DCAs were revised and reworked in the field to conform with designs which could be justified based on tested configurations. Evaluations for these DCAs have now been included in Attachment C since the field configurations are no longer "unique":

i. DCA 101320, Rev. 3
ii. DCA 103574, Rev. 1
iii. DCA 104011, Rev. 1
iv. DCA 104174, Rev. 1
v. DCA 104246, Rev. 2

f. The DCAs in Attachment B have been rearranged in numerical order in Rev. 1 of this ER to facilitate usability.

10. Revised Attachment C, "Minor Protected Commodity Deviations" as follows:

a. As described in item A.2 above, One Form 93-184 was issued based on Rev. 0 of this engineering report (ER) to identify specific configurations where the existing design was not adequately bounded by a tested configuration. The DCAs associated with this condition were evaluated in Attachment B in Rev. 0 of this ER, except DCAs 102780 and 102861 which were evaluated in Attachment C. The subject DCAs were revised and reworked in the field to conform with designs which could be justified based on tested configurations. The DCAs listed below reflect the revised configurations which are now included and evaluated in Attachment C:

i. DCA 101320, Rev. 3
ii. DCA 102780, Rev. 1
iii. DCA 102861, Rev. 1

iv. DCA 103574, Rev. 1
v. DCA 104011, Rev. 1
vi. DCA 104174, Rev. 1
vii. DCA 104246, Rev. 2

b. The DCAs listed below reflect field configurations which were not installed at the time Rev. 0 of this ER was issued. All field work has been completed and the evaluations associated with these configurations have now been included in Attachment C:

i. DCA 104017, Rev. 1
ii. DCA 104037, Rev. 1
iii. DCA 104241, Rev. 1
iv. DCA 104244, Rev. 0
v. DCA 104248, Rev. 1
vi. DCA 104250, Rev. 0
vii. DCA 104252, Rev. 0
viii. DCA 104253, Rev. 0
ix. DCA 104254, Rev. 0
x. DCA 104255, Rev. 0
xi. DCA 104258, Rev. 0
xii. DCA 104261, Rev. 0
xiii. DCA 104262, Rev. 0
xiv. DCA 104264, Rev. 0

c. Evaluations for DCA 103401, Rev. 1 and 104245, Rev. 0 were inadvertently omitted from the scope of Rev. 0 of this ER. They have been included and evaluated accordingly in Attachment C.

11. Revised Attachment D, "Protruding/Interfering Item Coverage Deviations" as follows:

a. The DCAs listed below reflect field configurations which were not installed at the time Rev. 0 of this ER was issued. All field work has been completed at the evaluations associated with these configurations have been included in Attachment D:

i. DCA 104256, Rev. 0
ii. DCA 104259, Rev. 0
iii. DCA 104263, Rev. 0

b. Evaluations for DCAs 102884, Rev. 0 and 103846, Rev. 0 were included in the scope of Rev. 0 of this ER. Subsequent to issuance of the ER, these

DCAs required revision due to field conditions and final QC inspections. All field work has been completed and the evaluations associated with Rev. 1 of these DCAs have been included in Attachment D.

c. Evaluation of DCA 102479, Rev. 0 was included in Attachment D of Rev. 0 of this ER. Subsequent to issuance of the ER, this DCA required revision due to field conditions and final QC inspection. Resolution of the field condition required modification of the Thermo-Lag configuration such that it is more appropriately addressed as a "unique" configuration. All field work has been completed and evaluation associated with Rev. 1 of this DCA has been included in Attachment B.

12. No revisions were made to Attachment E, "Structural Steel Deviations".

13. Revised Attachment F, "Affected Document Update Reports" to provide an updated listing of the design change documents posted against the Unit 2 Thermo-Lag installation specification (Ref. 6.8) and Typical Design Detail Drawings (Ref. 6.9) which are evaluated in this ER.

Revision 2

A. TU Electric, in an effort to resolve all concerns related to Thermo-Lag fire barriers at CPSES, embarked on a final phase of fire testing and plant modification.

In November 1992, DM 92-077 was originated for the purpose of upgrading all small diameter (3/4" and 1") Unit 1 essential conduit runs. This upgrade consisted of installing 1/4" thick Thermo-Lag overlays atop the existing 1/2" Thermo-Lag material and reinforcing pull boxes and radial bends with stress skin and trowel grade buildup.

In a parallel effort, additional test schemes were developed and subsequently constructed for testing at Omega Point Laboratories. The purpose of these tests was to confirm that less extensive upgrade methods could, in some instances, be incorporated into the Unit 1 Thermo-Lag barrier back fit effort. Testing was completed in August 1993. 2

From August 1993 through May 1994, several Design Modification Change Forms (DMCF) were issued against DM 92-077 to initiate field upgrades of various Unit 1 plant configurations. The DMCF issued in May 1994 provides closure to the CPSES Unit 1 and Unit 2 Thermo-Lag fire barrier installation and upgrade programs.

B. Revision 2 of this report adds the results of the Unit 1 upgrade program as indicated by revision bars. Attachments G, H, I, J, K and L are added without revision bars.

1.0 PURPOSE

The purpose of this evaluation is to provide reasonable assurance that Thermo-Lag Fire Barrier System configurations installed to protect Unit 1 and Unit 2 electrical raceways and cables will provide a 1-hour fire endurance rating (Ref. 6.1) in accordance with the CPSES design and licensing basis (Ref. 6.2, 6.3, 6.4) for assuring at least one train of equipment, components and raceways necessary to achieve safe shutdown will be free from fire damage (Ref. 6.5). 2

Additionally, where Thermo-Lag 330-1 Fire Barrier System configurations are utilized as part of a fire rated plant structural assembly, this evaluation provides reasonable assurance that these configurations will provide a fire endurance rating commensurate with that of the barrier (Ref. 6.6 and 6.35) in accordance with the CPSES design and licensing basis (Ref. 6.3, 6.4, 6.7). 2

2.0 BACKGROUND

The applicable CPSES Unit 1 Thermo-Lag installation specification (Ref. 6.29. Revs. 1 and 2) and typical detail design drawings (Ref. 6.30) provided the technical requirements for installing Thermo-Lag material on required Unit 1 commodities. For cable and raceway barrier configurations, the technical requirements such as material thickness, sealing and reinforcements of joints, etc., were originally based on TSI installation data (Ref. 6.31). Initial Unit 1 Thermo-Lag installation was completed prior to the 1990 initial Unit 1 fuel load.

In June, 1991, the NRC established a Special Review Team to review the safety significance and generic applicability of certain technical issues regarding the use of Thermo-Lag at Nuclear power plants. The NRC released to the industry a draft generic letter (Ref. 6.32) in February, 1992, which identified several concerns related to the acceptability of Thermo-Lag.

In light of the concerns raised in the draft generic letter and the status of CPSES Unit 2 construction activities (Thermo-Lag installation was to begin in the very near future), TU Electric performed an extensive review to assess its position with respect to the continued use of Thermo-Lag for CPSES Unit 2. Based on an NRC concern about the acceptance of previous Thermo-Lag tests, TU Electric performed independent full scale fire endurance testing of Thermo-Lag raceway assemblies that were representative of plant configurations and enveloped the range of installed commodity sizes. 2

Portions of a five (5) phase testing program completed at Omega Point Laboratories Ref. 6.10) resulted in modifications to the applicable Unit 2 Thermo-Lag installation specification (Ref. 6.8) and typical detail design drawings (Ref. 6.9) which provide

the technical requirements for installing Thermo-Lag material on required commodities. For cable and raceway barrier configurations, these technical requirements are based on methods used to construct test assemblies during phases one (1) through four (4) of the aforementioned 1 hour Thermo-Lag fire endurance qualification test program.

Subsequent to the completion of the Unit 2 installations, a fifth phase of fire endurance qualification testing was performed in an effort to confirm that less extensive upgrade methods could, in some instances, be incorporated into the Unit 1 Thermo-Lag barrier backfit effort. The revised Unit 1 Thermo-Lag installation specification (Ref. 6.29) and typical detail design drawings (Ref. 6.33) provide the technical requirements (based on the TU test program) for installing Thermo-Lag materials in cable and raceway barrier configurations.

For structural steel configurations associated with both Units, technical requirements are based on Underwriter's Laboratories tested designs (Ref. 6.11).

For a detailed description of the TU Electric Thermo-Lag test program including commodities and configurations tested, test results, etc., refer to ER-ME-067, "Evaluation of Thermo-Lag Fire Barrier Systems" (Ref. 6.12).

The installation requirements and construction details for applying Thermo-Lag to most plant commodities and configurations thereof such as cable trays, conduits, junction boxes, etc., are enveloped by the typical detail design drawings and installation specification. Accordingly, most of these commodity configurations and techniques for Thermo-Lag installation are qualified directly by specific tests. However, it is recognized that due to specific field conditions and limitations such as interferences, clearances between commodities, etc., creation of unique design configurations and acceptance of minor deviations from specified technical requirements (where appropriately justified) are inevitable. It is also recognized that due to the number and variation of these special instances it is not feasible to qualify all aspects of each unique configuration or minor deviations through specific fire endurance testing. In fact, in some instances limitations of industry test apparatus may preclude such testing.

Instead, the goal of a qualification test program is to qualify the critical attributes of the fire barrier system, such as material thickness, joint reinforcement techniques, interfaces between different materials, etc., for the range of commodity sizes anticipated in plant configurations. Based on the qualification of these critical attributes, specific plant conditions requiring unique configuration designs and minor deviations can be reasonably resolved. The NRC staff has recognized this concept through the provisions of Generic Letter 86-10 (Ref. 6.13) which enables licensees to evaluate field installations which vary from configurations qualified via fire

endurance tests using criteria provided therein.

In accordance with the CPSES design control program, where due to field conditions, the techniques or configurations for installing Thermo-Lag on required commodities are not bounded by the installation specification or typical details, Construction Department personnel are required to identify the condition for resolution by Engineering via initiation of a design change document. For field work implemented prior to fuel load, the applicable design change document was a Design Change Authorization (DCA) (Ref. 6.14). For field work implemented subsequent to fuel load, the applicable design change document is a Design Change Notice (DCN), controlled via the CPSES Design Modification (DM) program (Ref. 6.19, 6.20). Additionally, DCAs/DCNs are initiated to identify specific instances where obstructing commodities (piping, ductwork, raceway, etc.) serve to interfere with the protective envelope such that specified requirements cannot readily be achieved. Resolution of these specific field conditions is provided by Engineering in accordance with the governing design change process procedure. Resolution of these issues is based on methods and techniques qualified through test, experience and familiarity with the proper uses and limitations of Thermo-Lag materials gained through the qualification test program and conservative engineering practices. Accordingly, this evaluation serves to correlate Thermo-Lag configurations to the applicable qualification test ("scheme"), or portions thereof and hence provide a basis for acceptance in accordance with the provisions of NRC Generic Letter 86-10. This process will be utilized for all typical details approved for generic use via the design drawings (Ref. 6.9 & 6.33) and such unique configurations and minor deviations described above as bounded by the applicable DCAs/DCNs. | 2

3.0 METHODOLOGY

3.1 Methodology for Unit 2, completed in Revision 1 of this document dated March 25, 1993 and unchanged in this revision. | 2

3.1.1 Copies of all design drawings containing typical details (including DCAs/DCNs issued, but not yet incorporated into the drawings) were obtained from the Document Control Center. Additionally, copies of all DCAs/DCNs posted against the design drawings and the installation specification (Ref. 6.8) that identified approved deviations from specified requirements were similarly obtained. The "Affected Document Update Reports" (ADURs) provided in Attachment F provide the complete listing of all DCAs/DCNs reviewed within the scope of this report which includes all field modifications completed in support of Unit 2 full power licensing.

3.1.2 Once copies of all approved design changes to Unit 2 Thermo-Lag design documents were obtained, they were categorized into five (5) general categories based on the relative significance level of the design change implemented by the DCA/DCN. | 2

Accordingly, the "typical details" are viewed as the most significant since these configurations are generally approved for use on a generic basis. The unique design configurations are viewed as the next most significant category followed by any deviations from specified requirements associated with the actual raceway, component or cabling requiring protection. Deviations from specified coverage on items protruding from or interfering with the commodity requiring protection (such as raceway supports) were grouped as the fourth category. Lastly, any deviations to Thermo-Lag configurations on structural steel were compiled. This is based on the minor amount of structural steel requiring protection in the plant (support steel for 2-hour rated gypsum stairwell walls and on support frames for fire and tornado dampers in these walls). Also, since Thermo-Lag panels are secured to structural steel with screw fasteners, and few protruding/interfering commodities are located in these areas, these configurations are much less prone to installation deviations.

3.1.3 Next, a detailed review was performed for each "typical detail" and unique design configuration to correlate the plant configuration to a test configuration "scheme" or applicable portions thereof. Where the plant design configuration required evaluation to correlate it to a tested configuration or if a tested configuration was not applicable, the NRC staff guidance provided in Generic Letter 86-10 (restated below) was utilized as "General Criteria" to "baseline" the evaluation. Similarly, the same process was utilized to evaluate the DCAs/DCNs which identify specific configurations which deviate from specified requirements. 2

- General Criteria

  1. Continuity of the material is consistent with tested configurations.

  2. Effective thickness of the material is consistent with tested configurations.

  3. The nature and effectiveness of the support assembly (if applicable) is consistent with tested configurations.

  4. The application or end use of the material is consistent with tested configurations.

  5. The configuration was reviewed by a qualified fire protection engineer and determined to provide an equivalent level of protection.

3.1.4 Each typical design detail and all DCAs/DCNs were then compiled into a matrix format with corresponding supporting test configuration ("scheme") references. Where evaluation was utilized in the acceptance basis for a configuration, the "General Criteria" above or other criteria and justification listed under the "Basis/Notes" heading was used as described in the matrix. Complete descriptions 2

of test configurations and results are provided by ER-ME-067, (Ref. 6.12) and the associated Omega Point Laboratories Test Reports (Ref. 6.10) and are not reiterated in this report.

3.1.5 Any Thermo-Lag configuration determined by evaluation not to provide an equivalent level of protection to that of a tested configuration or for which a reasonable correlation to a tested configuration cannot be demonstrated will be identified by issuance of a ONE Form in accordance with STA-421 (Ref. 6.15). 2.

3.2 Methodology for Unit 1, originated in Revision 2 of this document is similar to the Unit 2 methodology and varies only based on programmatic changes made during the two Thermo-Lag installation phases. See Section 3.2.5 for methodology for evaluating protection of structural steel.

3.2.1 Copies of all design drawings containing typical details (including DCAs/DCNs issued, but not yet incorporated into the drawings) were obtained from the Document Control Center. Additionally, copies of all DCAs/DCNs posted against the design drawings and the installation specification (Ref. 6.29) that identified approved deviations from specified requirements were similarly obtained. The "Affected Document Update Reports" (ADURs) provided in Attachment L provide the complete listing of all DCAs/DCNs reviewed within the scope of this report which includes all field modifications completed in support of the original Unit 1 Thermo-Lag installation and the subsequent backfit effort.

3.2.2 Once copies of all approved design changes to Unit 1 Thermo-Lag design documents were obtained, they were categorized into five (5) general categories based on the relative significance level of the design change implemented by the DCA/DCN. Accordingly, the "typical details" are viewed as the most significant since these configurations are generally approved for use on a generic basis. The unique design configurations are viewed as the next most significant category followed by any deviations from specified requirements associated with the actual raceway, component or cabling requiring protection. Deviations from specified coverage on items protruding from or interfering with the commodity requiring protection (such as raceway supports) were grouped as the fourth category. Lastly, all DCN's associated with the backfit effort were compiled into a fifth category. During the Unit 1 backfit effort, a comprehensive review of all essential raceways requiring Thermo-Lag was performed. This review compared original Unit 1 Thermo-Lag installations with the revised typical details (representing tested configurations). Through the issuance of a design modification (Ref. 6.34), standard upgrades were applied and any unique configurations or deviations were identified and processed on a DCN. Since these DCN's were predominantly grouped by room/area, rather than by nonconforming condition, they are all included in a single Attachment K, arranged by DCN number for convenience. 2.

3.2.3 Next, a detailed review was performed for each "typical detail" and unique design configuration to correlate the plant configuration to a test configuration "scheme" or applicable portions thereof. Where the plant design configuration required evaluation to correlate it to a tested configuration or if a tested configuration was not applicable, the NRC staff guidance provided in Generic Letter 86-10 (restated below) was utilized as "General Criteria" to "baseline" the evaluation. Similarly, the same process was utilized to evaluate the DCAs/DCNs which identify specific configurations which deviate from specified requirements.

- General Criteria

  1. Continuity of the material is consistent with tested configurations.

  2. Effective thickness of the material is consistent with tested configurations.

  3. The nature and effectiveness of the support assembly (if applicable) is consistent with tested configurations.

  4. The application or end use of the material is consistent with tested configurations.

  5. The configuration was reviewed by a qualified fire protection engineer and determined to provide an equivalent level of protection.

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3.2.4 Each typical design detail and all DCAs/DCNs were then compiled into a matrix format with corresponding supporting test configuration ("scheme") references. Where evaluation was utilized in the acceptance basis for a configuration, the "General Criteria" above or other criteria and justification listed under the "Basis/Notes" heading was used as described in the matrix. Complete descriptions of test configurations and results are provided by ER-ME-067, (Ref. 6.12) and the associated Omega Point Laboratories Test Reports (Ref. 6.10) and are not reiterated in this report.

3.2.5 Thermo-Lag 330-1 fire barrier system configurations utilized as part of a fire rated plant structural assembly (non raceway application) will be evaluated by comparing the requirements of installation specification 2323-AS-47 (Reference 6.36) to the qualifying test, UL Design No. X-611 (Reference 6.11). The evaluation shall be based on the guidance provided in GL 86-10 and shall determine if the installed configurations have continuity of material, effective thickness of material, nature and effectiveness of support assembly and application or end use of the material which is consistent with tested configurations.

3.2.6 Any Thermo-Lag configuration determined by evaluation not to provide an equivalent level of protection to that of a tested configuration or for which a reasonable correlation to a tested configuration cannot be demonstrated will be identified by issuance of a ONE Form in accordance with STA-421 (Ref. 6.15).

4.0 EVALUATION

4.1 Unit 2

4.1.1 Refer to Attachments A through E to this report for the acceptance basis associated with each Unit 2 Thermo-Lag configuration reviewed within the scope of this evaluation as follows:

Attachment A: Unit 2 Typical Design Details

Attachment B: Unit 2 Unique Configurations

Attachment C: Unit 2 Minor Protected Commodity Deviations

Attachment D: Unit 2 Protruding/Interfering Item Coverage Deviations

Attachment E: Unit 2 Structural Steel Deviations

4.2 Unit 1

4.2.1 Refer to Attachments G through K to this report for the acceptance basis associated with each Unit 1 Thermo-Lag configuration for protected raceways reviewed within the scope of this evaluation as follows:

Attachment G: Unit 1 Typical Design Details

Attachment H: Unit 1 Unique Configurations

Attachment I: Unit 1 Minor Protected Commodity Deviations

Attachment J: Unit 1 Protruding/Interfering Item Coverage Deviations

Attachment K: Unit 1 DM 92-077 DCN's

4.2.2 The Thermo-Lag fireproofing of structural components which are part of the fire rated plant structural assembly was installed in accordance with specification 2323-AS-47 (Reference 6.36). The Thermo-Lag 330-1 material was applied to the structural steel using the basic techniques outlined in U.L. Design Number X-611

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(Reference 6.11) and TSI Technical Notes 99777 (Reference 6.38) and 11601 (Reference 6.37).

U.L. Design Number X-611 consisted of a 3 hour test of Thermo-Lag 330-1 material on an "H" column. The Thermo-Lag installation on the steel consisted of priming the steel with Thermo-Lag 351 primer then applying 330-1 with 330-71 fiberglass gauze embedded in the trowel grade. In general, the Thermo-Lag installed in the plant utilized the same installation methodology.

4.2.2.1 The differences between the installed and tested configurations are as follows:

Issue 1: The installed configurations involved only protecting the exposed portions of steel within an otherwise fire rated wall or floor assembly (typically gypsum board on metal studs or concrete).

Issue 2: The steel being protected was often a different size than the tested steel.

Issue 3: Prefabricated boards were used in addition to trowel grade to obtain material thickness.

Issue 4: At locations where door hardware and dampers extend to close proximity of the member being fireproofed, full fireproofing system thickness could not always be achieved. The fireproofing was applied to a maximum thickness the interfacing item will allow and still operate freely. The fireproofing thickness requirements under items in close proximity applies to the immediate area of interface only. This area was limited to a maximum of 5% of the surface area of the member being fireproofed.

Issue 5: Various commodities which could provide a significant heat path into the protected envelope (i.e., conduits, other steel members, etc.) were protected for at least 12 inches.

4.2.2.2 The following are the basis for as-installed configurations being consistent with tested configurations:

Issue 1: The installation of the Thermo-Lag on the steel was the same as on the tested configurations. The resulting configuration since it is installed partially in a fire rated barrier or attached to concrete would be partially shielded from fire exposure and the remainder of the structure would act as a heat sink. The continuity and thickness of material is maintained and the attachment to the steel is the same as the tested configuration.

Issue 2: The thickness of a given structural steel member significantly affects the

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required fireproofing coating thickness for a given fire exposure period. In order to allow for different types and thicknesses of steel on which Thermo-Lag is installed and differing fire rating requirements, an engineering evaluation (Reference 6.37) was performed which took fire testing data and determined the required Thermo-Lag thickness in order to achieve the tested results on other shapes and sizes of steel. These resulting thicknesses were entered into 2323-AS-47 along with thickness requirements for 2 hour rated enclosures which were derived utilizing the methodology contained in Reference 6.37. An additional safety factor was applied resulting in the utilized thickness being at least 10% greater than those derived using the engineering evaluation methodology.

Issue 3: The specification allows the use of Prefabricated Thermo-Lag 330-1 panels to be inserted in the trowel grade material to help build up to the required material thicknesses. The prefabricated panels are the exact same material as the trowel grade material, only preformed and cured. The panels are cleaned and abraded before insertion into the trowel grade material to ensure bonding between the panels and the trowel grade material. When the trowel grade material cures, the fireproofing becomes monolithic. When the prefabricated panels are used, the fiberglass cloth required by U.L. X-611 is installed in a layer of trowel grade material applied over the panels to ensure that the last 1/4 in. of the assembly contains the fiberglass reinforcement.

Issue 4: As for reduction in thickness at the fire and tornado dampers, the affected structural steel is a non-rated feature per Unit 2 Calculation 2-FP-0080, (Reference 6.16). The angle irons are of heavy construction and are lightly loaded. The small portion of the damper frame where the thickness is reduced is not large enough to cause failure of the retaining angle and thereby failure of the fire damper. The area is at a fire damper frame and therefore the reduction in fireproofing will not cause an increase in heat transmission through the fire barrier.

The reduction thickness at the door operator is limited to a small area (no more than 5% of the member being protected), the reduction in thickness is slight and the area is located at an egress path so there would be no combustibles in the immediate vicinity to directly expose the affected area. The slight reduction does not affect an area large enough to cause failure of the protected member and it is shielded from direct fire exposure so it would not cause an increase in heat transmission through the fire barrier.

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Issue 5: The specification requires that all protruding heat paths be protected for at least 12 in. (12" rule) to prevent the intrusion of a significant amount

of heat into the envelope. The basis for the 12 in. rule is the U.L. requirement to protect steel decking for a minimum of 12 in. away from a fireproofed steel to prevent heat intrusion into the steel. The steel deck presents more of a challenge than a small protruding item, because the steel deck is continuous along the top for the column and is a heat path from both sides of the column. Therefore, the 12" rule provides more than adequate heat path protection.

The resulting installation configurations have continuity of material, effective thickness of material, nature and effectiveness of support assembly and application or end use of the material which is consistent with tested configurations. The thermal and structural integrity of the installed configurations are maintained. 2

5.0 CONCLUSION

As detailed in Section 4 and Attachments A through E and G through K, all Thermo-Lag configurations evaluated within the scope of this report are either effectively bounded by the critical attributes of tested configurations or have been demonstrated by evaluation to provide an equivalent level of protection to that afforded by tested configurations. Accordingly, no ONE Forms as described in Sections 3.1.5 and 3.2.5 resulted from this review. 2 2

6.0 REFERENCES

6.1 ASTM E119-88, "Standard Methods of Fire Tests of Building Construction and Materials".

6.2 CPSES Design Basis Document DBD-ME-020, Rev. 2, "Fire Safe Shutdown Analysis".

6.3 CPSES Fire Protection Report (FPR), Rev. 6, Sec. II.

6.4 CPSES Final Safety Analysis Report (FSAR), Sec. 9.5.1.

6.5 10CFR50, Appendix R.

6.6 CPSES Unit 2 Fire Hazards Analysis (FHA) Drawings, M2-1921 through M2-1942, Rev. CP-1.

6.7 CPSES Design Basis Document DBD-ME-063, Rev. 2, "Fire Barriers". 2

6.8 Specification CPES-M-2032, Rev. 0, "Installation of Fire Barrier and Fireproofing Materials".

6.9 Drawing M2-1701, Shts. 01-15, Rev. CP-1. "Thermo-Lag Typical Details".

6.10 TU Electric Testing program, "One Hour Fire Endurance Tests of Articles Protected with the Thermo-Lag Fire Barrier System", (Test Plan) and the following test reports: | 2

a. Project No. 12340-935436, Scheme 1-2
b. Project No. 12340-94367a, Scheme 9-1
c. Project No. 12340-94367c, Scheme 10-1
d. Project No. 12340-94367d, Scheme 10-2
e. Project No. 12340-94367e, Scheme 11-1
f. Project No. 12340-94367i, Scheme 12-1
g. Project No. 12340-94367h, Scheme 12-2
h. Project No. 12340-94367l, Scheme 13-1
i. Project No. 12340-94367m, Scheme 14-1
j. Project No. 12340-95100a, Scheme 15-1
k. Project No. 12340-94367; Scheme 9-3
l. Project No. 12340-95766, Scheme 11-2
m. Project No. 12340-95767, Scheme 11-4
n. Project No. 12340-95768, Scheme 11-5
o. Project No. 12340-95769, Scheme 13-2
p. Project No. 12340-95770, Scheme 15-2 | 2

6.11 Underwriters Laboratories "Fire Resistance Directory", Designs X-003 and X-611.

6.12 CPSES Engineering Report ER-ME-067, Rev. 3, "Evaluation of Thermo-Lag Fire Barrier Systems". | 2

6.13 USNRC Generic Letter 86-10 dated April 25, 1986.

6.14 CPSES Unit 2 Procedure 2PP-5.01, "Design Change Authorizations".

6.15 CPSES Procedure STA-421, "Operations Notification and Evaluation (ONE) Form".

6.16 Calculation 2-FP-0080, Rev. 0, "Unit 2 Maximum Permissible Fire Loading/Non-Rated Feature Analysis".

6.17 CPSES Unit 1 and 2 Calculation No. ME-CA-0000-0965, Rev. 0, "Thermo-Lag Primary Protruding Member Installation Requirements".

6.18 CPSES Unit 1 and 2 Calculation No. ME-CA-0000-2062, Rev. 0, "Heat Transfer Analysis of Cable Tray Supports to Determine Thermo-Lag Requirements".

6.19 CPSES Procedure ECE 5.01-03, "Design Change Notices and Related Process Documentation".

6.20 CPSES Procedure STA-716, "Site Modification Process".

6.21 USNRC Correspondence from A.B. Beach to W.J. Cahill, Jr., dated February 23, 1993, "NRC Inspection Report 50-445/93-08; 50-446/93-08".

6.22 TU Electric Correspondence from W.J. Cahill, Jr. to USNRC logged TXX-93023 dated January 19, 1993.

6.23 NUREG-0797 Supplement No. 26, "Safety Evaluation Report related to the operation of Comanche Peak Steam Electric Station Units 1 and 2, Docket Nos. 50-445 and 50-446," issued by USNRC, February 1993.

6.24 TU Electric Correspondence from W.J. Cahill, Jr. to USNRC logged TXX-93101 dated February 26, 1993.

6.25 TU Electric Correspondence from W.J. Cahill, Jr. to USNRC logged TXX-93125 dated March 10, 1993.

6.26 TU Electric Correspondence from W.J. Cahill, Jr. to USNRC logged TXX-93061 dated January 28, 1993.

6.27 USNRC Correspondence from S.C. Black to W.J. Cahill, Jr., dated October 29, 1992, "Thermo-Lag Acceptance Methodology for Comanche Peak Steam Electric Station - Unit 2".

6.28 CPSES Minor Modification (MM) Packages and applicable Design Change Notices (DCNs):

MM 93-123, DCN 5745, REV. 1
MM 93-124, DCN 5727, REV. 0
MM 93-125, DCN 5742, REV. 1
MM 93-126, DCN 5746, REV. 1

6.29 Specification 2323-MS-38H, Rev. 4, "Cable Raceway Fire Barriers".

6.30 Drawing M1-1701, Shts. 1-7, Rev. CP-1, "Thermo-Lag Typical Details".

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6.31 TSI Technical Note 20684, Revision V, dated November 1985, "Thermo-Lag Fire Barrier System Installation Procedures Manual Power Generating Plant Applications".

6.32 NRC (Draft) Generic Letter 92-XXX, dated February 11, 1992, "Thermo-Lag Fire Barriers".

6.33 Drawing M1-1701, Shts. 1-16, (Current revs), "Thermo-Lag Typical Details".

6.34 CPSES Design Modification DM 92-077, Rev. 0, "Unit 1 Thermo-Lag Upgrade".

6.35 CPSES Unit 1 Fire Hazards Analysis (FHA) Drawings, M1-1920 through M1-1954, Rev. CP-1.

6.36 Specification 2323-AS-47, Rev. 3, "Fireproofing of Structural Steel"

6.37 TSI Technical Note 11601, "Thermo-Lag 330-1 Fireproofing Coating Thicknesses Required for 1 and 3 Hour Fire Ratings for Various Structural Steel Members used by Texas Utilities Services, Inc.", dated August 3, 1981 by Wesson and Associates, Inc.

6.38 TSI Technical Note 99777, "Material Application Guides Thermo-Lag 330-1 Subliming Coating System" 2

ATTACHMENT A

TYPICAL DESIGN DETAILS

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
1-1.1	N/A	COVERAGE OF ANGLE IRON PROTRUDING ITEM WITH 330-1 THERMO-LAG PANELS.	1-2,9-1,10-1, 10-2, 11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 80
1-1.2	N/A	COVERAGE OF ANGLE IRON PROTRUDING ITEM WITH 330-660 FLEXI-BLANKET.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 11
1-2.1	N/A	COVERAGE OF ANGLE IRON PROTRUDING ITEM WITH 330-1 THERMO-LAG PANELS. THIS DETAIL WAS TESTED.	10-1, 10-2	N/A
1-2.2	N/A	COVERAGE OF TUBE STEEL PROTRUDING ITEM WITH 330-1 THERMO-LAG PANELS. THIS WAS TESTED.	10-1, 10-2	N/A
1-3.1	103953/0	COVERAGE OF "C" CHANNEL PROTRUDING ITEM WITH 330-1 THERMO-LAG PANEL. THIS WAS TESTED.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	N/A
1-3.2	N/A	COVERAGE OF "C" CHANNEL PROTRUDING ITEM WITH 330-660 FLEXI-BLANKET.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 11
1-3.3	104121/0	THIS DETAIL SHOWS THE TIE WIRE INSTALLATION ON THE THERMO-LAG 330-1 PANELS COVERING A CABLE TRAY SUPPORT. THIS DETAIL SHOWS THE TIE WIRE BEING INSTALLED THROUGH THE BOTTOM TRAY PANELS THAT BUTT UP TO THE TRAY SUPPORT.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1,15-1	1-6, 73
1-4.1	N/A	COVERAGE OF "I" BEAM PROTRUDING ITEM WITH 330-1 THERMO-LAG PANEL.	1-2,9-1,10-1, 10-2, 11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 80
1-4.2	N/A	COVERAGE OF "I" BEAM PROTRUDING ITEM 330-660 FLEXI-BLANKET.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 11
1-5	103921/0 103476/1	HILTI BOLT/SELF TAPPING SCREW DETAIL FOR ATTACHING THERMO-LAG TO A CONCRETE STRUCTURE.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	1-6, 12
1-5.1	103921/0 103476/1	THIS IS A SQUARE WASHER DETAIL WHICH IS TO BE USED ON DETAIL 1-5 AND REQUIRES NO ADDITIONAL JUSTIFICATION.	N/A	N/A

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
1-6	102222/1	THIS DETAIL PROVIDES A METHOD OF COVERING A WEEP HOLE IN A TUBE-STEEL PROTRUDING ITEM WITH THERMO-LAG.	10-1, 10-2	1-5, 15
1-7	104015/1	THIS DETAIL SHOWS COVERAGE OF RADIAX CABLE AND ITS SUPPORT AS A PROTRUDING ITEM. THE COVERAGE INCLUDES 330-1 PANELS ON THE SUPPORT AND 330-660 FLEXI-BLANKET ON THE RADIAX.	11-1	1-5, 74
2-2	100820/0 103921/0	THIS DETAIL IS FOR FIRE STOPPING NON ESSENTIAL CONDUITS AT JUNCTION BOXES USING EITHER 330-1 OR 45B SILICONE ELASTOMER.	1-2,11-1,12-1,14-1,15-1	1-5, 17
2-3	103020/3 103634/2	THIS IS THE TESTED DETAIL FOR INSTALLING THERMO-LAG ON JUNCTION BOXES. IT ALSO GIVES AN ALTERNATIVE DESIGN TO INSTALLING BANDS ON THE OUTER LAYER.	10-1	1-5, 19
2-3.1	N/A	THIS IS A DETAIL SHOWING BANDING ON THERMO-LAG COVERAGE ON UNISTRUT WHICH SUPPORTS THE JUNCTION BOX AND PROTRUDES OUT OF THE THERMO-LAG PACKAGE.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 81
2-3.2	N/A	THIS IS A DETAIL SHOWING INSTALLATION OF THERMO-LAG ON A JUNCTION BOX SUPPORT.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 81
2-3.3	103020/3	THIS IS A DETAIL SHOWING STRESS SKIN AND TROWEL GRADE INSTALLED AT JUNCTION BOX JOINTS. THIS IS A TESTED CONFIGURATION.	10-1	1-5, 19
2-3.5	104060/0	THIS IS A DETAIL WHICH ALLOWS JUNCTION BOX 2nd LAYER "V" RIB PANEL TO BE EXTENDED TO COVER ANGLE IRON USED TO SUPPORT THE BOX.	10-1, 10-2	1-5, 40
2-3.6	104060/0	THIS DETAIL SHOWS THE INSTALLATION OF THERMO-LAG ON AN ESSENTIAL FLEXIBLE CONDUIT EXITING A JUNCTION BOX ENCLOSURE.	10-1, 10-2	1-5, 43

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
3-1 & 3-1.1	100820/0	THIS IS A DETAIL WHICH SHOWS A 330-1 THERMO-LAG BOX, FIRE STOPPED WHERE AN AIR DROP ENTERS A CABLE TRAY.	1-2, 11-1,12-1,12-2,13-1, 14-1,15-1	1-5, 20
3-1.2	N/A	THIS IS A DETAIL WHICH SHOWS A 330-1 THERMO-LAG BOX SIMILAR TO DETAILS 3-1 & 3-1.1 BUT THE AIR DROP COMES OUT OF A CONDUIT WHICH IS FIRE STOPPED INSTEAD OF AT THE 330-1 BOX AND 330-660 FLEXI-BLANKET COVERS THE AIR DROP FROM THE CONDUIT TO THE TRAY.	1-2, 11-1,12-1,12-2,13-1, 14-1,15-1	1-5, 17, 20 & 22
3-2 & 3-2.1	100820/0	THESE DETAILS SHOW THE PROTECTION OF AIR DROP CABLES WITH 330-660 FLEXI-BLANKET FROM A TRAY TO A THROUGH WALL SLEEVE (TWS). THE POINT OF ATTACHMENT AT THE TRAY IS TO THERMO-LAG 330-1 HALF ROUNDS AND DIRECTLY TO THE SLEEVES AT THE TWS.	11-1	1-5, 26
3-3	N/A	THIS DETAIL SHOWS AN AIR DROP BETWEEN CABLE TRAYS WITH A COMBINATION OF 330-1 PANELS AND 1/2 ROUNDS AT THE ATTACHMENT TO THE TRAYS AND 330-660 FLEXI-BLANKET ON THE AIR DROP CABLES BETWEEN THE TRAYS.	11-1	1-5, 20, 28
3-4 (OPTION 1)	103020/3 102933/0 100820/0	THIS IS THE STANDARD AIR DROP CONFIGURATION FOR CABLES AIR DROPPING INTO A CABLE TRAY. THIS CONFIGURATION WAS TESTED.	11-1	N/A
3-4 (OPTION 2)	103020/3 102933/0 100820/0	THIS IS THE STANDARD TESTED AIR DROP CONFIGURATION EXCEPT THAT STRESS SKIN WITH TROWEL GRADE IS UTILIZED ON TOP OF THE TRAY INSTEAD OF 330-1 PANELS.	11-1	1-5, 31
3-4.3	103020/3	THIS PROVIDES SPECIFIC DETAILS WHICH IS TO BE USED IN CONNECTION WITH THE STANDARD AIR DROP DETAIL (3-4 OPTION 1). THIS IS A TESTED CONFIGURATION.	11-1	N/A

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
3-4.4 & 3-4.5	103020/3	THESE ARE SPECIFIC DETAILS WHERE STRESS SKIN WITH TROWEL GRADE IS UTILIZED ON TOP OF THE TRAY INSTEAD OF 330-1 PANELS. THESE DETAILS ARE ENCOMPASSED BY 3-4 (OPTION 2).	11-1	1-5, 31
3-5	103020/3	THIS IS THE STANDARD DETAIL FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 THERMO-LAG 1/2 ROUNDS ON RIGID CONDUIT FOR 3" & LARGER CONDUITS. THIS IS A TESTED CONFIGURATION.	11-1	N/A
3-5.1	103020/3	THIS IS THE STANDARD DETAIL FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 THERMO-LAG 1/2 ROUNDS ON RIGID CONDUIT FOR 2" & SMALLER CONDUITS. THIS IS A TESTED CONFIGURATION.	11-1	N/A
3-5.2	103020/3 104121/0	THIS IS A STANDARD DETAIL FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 THERMO-LAG ON EITHER CONDUITS OR CABLE TRAYS. THIS IS A TESTED CONFIGURATION FOR INSTALLATION ON CONDUITS.	11-1	1-5, 34
3-5.2.a	103020/3 104121/0	THIS IS A STANDARD DETAIL FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 THERMO-LAG ON EITHER CONDUITS OR CABLE TRAYS THE SAME AS DETAIL 3-5.2 EXCEPT THAT IT DEALS WITH SITUATIONS WHERE SPACE LIMITATIONS DO NOT ALLOW OVERLAP DISTANCES OF FLEXI-BLANKET ONTO 330-1 AS INDICATED ON 3-5.2.	11-1	1-5, 34, 35
3-6	104121/0	THIS DETAIL PROVIDES INSTALLATION REQUIREMENTS FOR COVERING A SINGLE FIRE ZONE R CABLE AS A PROTRUDING ITEM FROM A THERMO-LAGGED COMMODITY.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 37
3-6.1	104121/0	THIS DETAIL PROVIDES INSTALLATION REQUIREMENTS FOR COVERING MULTIPLE FIRE ZONE R CABLES AS A PROTRUDING ITEM FROM A THERMO-LAGGED COMMODITY.	11-1	1-5, 39

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
4-1	103020/3	THIS DETAIL SHOWS STANDARD COVERAGE OF 3" AND LARGER CONDUIT WITH 330-1 HALF ROUNDS. THIS IS A TESTED CONFIGURATION.	9-1,10-1 & 10-2	N/A
4-1.1	103020/3	THIS DETAIL SHOWS STANDARD COVERAGE OF 2" AND SMALLER CONDUIT WITH 330-1 HALF ROUNDS. THIS IS A TESTED CONFIGURATION.	9-1, 10-1 & 10-2	N/A
4-2 & 4-2.1	103020/3	THESE DETAILS SHOW STANDARD COVERAGE OF CABLE BUNDLES AND FLEX CONDUIT WITH 330-660 FLEXI-BLANKET.	11-1	1-5, 45
4-3 & 4-3.1	103020/3	THESE DETAILS SHOW COVERAGE ON CONDUITS WITH 330-1 HALF ROUNDS AT CONCRETE SURFACES WHERE THE CONCRETE SURFACE PREVENTS COMPLETE COVERAGE OF THE CONDUIT WITH 330-1 THERMO-LAG IN ACCORDANCE WITH STANDARD DETAILS.	9-1, 10-1, 10-2	1-5, 46
4-4	N/A	THIS DETAIL SHOWS THE TYPICAL FIRE STOPPING OF CONDUITS.	1-2, 11-1, 12-1 & 14-1	1-5, 17
4-5	N/A	THIS DETAIL SHOWS CONDUIT PROTECTED WITH 330-1 HALF ROUNDS PENETRATING THROUGH A BLOCKOUT.	9-1, 10-1, 10-2	1-5, 50
4-6, 4-6.1, 4-7, 4-7.1	103020/3	THESE DETAILS ARE THE SAME AS DETAILS 4-1, 4-1.1, 4-3 AND 4-3.1 RESPECTIVELY FOR COVERING CONDUITS WITH 330-1 HALF ROUNDS EXCEPT THESE DETAILS USE LARGER SIZED 330-1 HALF ROUNDS WHICH HAVE BEEN MODIFIED TO COVER THE SMALLER CONDUIT.	1-2,9-1,10-1,10-2,11-1, 12-1,12-2,13-1,14-1,15-1	1-5, 46, 52
4-8	103076/1	THIS DETAIL PROVIDES COVERAGE ON FLEXIBLE CONDUITS WHERE CONDUIT SUPPORT INTERFACES WITH THE STANDARD COVERAGE ON THE FLEXIBLE CONDUIT.	11-1	1-5, 53

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
4-9	103423/0	THIS DETAIL SHOWS HOW TO COMPENSATE FOR A GAP BETWEEN THE 2 SECTIONS OF A 1/4" OVERLAY ON A 2" CONDUIT BY INSTALLING TROWEL GRADE AND STRESS GRADE IN THE GAP.	9-1, 10-1, 10-2	1-5, 54
5-1, 5-1.1 & 5-1.2	103020/3	THESE DETAILS SHOW STANDARD CONFIGURATIONS FOR COVERING CABLE TRAYS WITH 330-1 PANELS AND INSTALLING STRESS SKIN AND TROWEL GRADE AT JOINTS. THESE ARE TESTED CONFIGURATIONS.	1-2, 11-1, 12-1, 12-1, 13-1, 14-1,15-1	N/A
5-3 & 5-3.1	N/A	THESE DETAILS SHOW FIRE STOPS IN CABLE TRAY USING BOTH 330-1 AND CABLE TRAY FIRE STOPS INSTALLED PER CPES-M-1061. THE CABLE TRAY FIRE STOP INSTALLED PER CPES-M-1061 HAS BEEN TESTED.	1-2, 11-1, 12-2 & 14-1	1-5, 55
5-2	N/A	THIS DETAIL SHOWS THE INSTALLATION OF TIE WIRES TO ATTACH BOTTOM THERMO-LAG 330-1 PANELS TO THE RUNGS ON LADDER BACK TRAYS.	1-2, 11-1, 12-1, 12-2 & 13-1	1-5, 56
5-3.1, SEC. 2-2 (VAR.)	104235/3	THIS DETAIL PROVIDES A METHOD OF UPGRADING NEW AND EXISTING FIRE STOPS BY INSTALLING BAR STEEL AROUND THE END OF THE TRAY IN ORDER TO HOLD THE BOTTOM PANEL IN PLACE.	1-2, 9-1, 10-1, 10-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 57
5-4	N/A	THIS DETAIL SHOWS A CABLE TRAY PROTECTED WITH 330-1 PANELS WHICH PENETRATES THROUGH A BLOCKOUT FILLED WITH PENSEAL MATERIAL.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 59
5-5 (OPTION 2)	N/A	THIS DETAIL SHOWS THE THERMO-LAG COVERAGE ON A RACEWAY BUTTING UP TO A BLOCKOUT IN A CONCRETE STRUCTURE THEN FLARING OUT ALONG THE STRUCTURE SO THAT THE PANEL EXTENDS TO THE CONCRETE WHERE IT IS HILTI BOLTED INTO THE CONCRETE.	1-2, 9-1, 10-1, 10-2, 11-1 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 12

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
5-5 (OPTION 3)	100820/0	THIS DETAIL SHOWS THE THERMO-LAG ON A RACEWAY BUTTING UP TO THE M-BOARD ON A PENSEALED BLOCKOUT WITH A THERMO-LAG TROWEL GRADE FILLET WHERE THE THERMO-LAG MEETS THE M-BOARD.	1-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 61
5-5.1	104121/0	THIS DETAIL SHOWS A METHOD FOR INSTALLING FLEXI-BLANKET ON THE AIR DROP FROM A CABLE TRAY TO A CABLE TRAY AT A BLOCKOUT. THE FLEXI-BLANKET OVERLAPS ONTO 330-1 COVERAGE ON BOTH TRAYS, IS MECHANICALLY FASTENED INTO THE 330-1 AND IS SEALED AT THE FORM SEAL/M-BOARD WITH A TROWEL GRADE.	11-1	1-5, 77
5-5.2	104121/0	THIS SHOWS A METHOD FOR INSTALLING 330-1 PANELS ON THE AIR DROP FROM A CABLE TRAY TO A CABLE TRAY AT A BLOCKOUT. THE JOINTS ARE SCORE AND FOLD OR STITCHED AND THE REQUIREMENTS FOR STRESS SKIN AND TROWEL GRADE AT JOINTS APPLIES.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 78
5-6, 5-6A AND 5-6B	103020/3	THESE DETAILS SHOW THE SCORE AND FOLD METHOD ON RADIAL BENDS ON TRAYS AND AT THE CORNERS ON STRAIGHT TRAY RUNS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 63
5-7 AND 5-8	103020/3	THESE DETAILS SHOW CROSSBANDING AND TIE WIRE INSTALLATION FOR LONGITUDINAL JOINT STRESS SKIN BOTH AT CABLE TRAY TEES. THESE ARE TESTED CONFIGURATIONS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	N/A
5-9	103020/3	THIS DETAIL SHOWS THE INSTALLATION OF THE BOTTOM PANEL AT A CABLE TRAY TEE. IT DEMONSTRATES BUTT JOINT TIE WIRES AND TIE WIRES OVER TRAY RUNGS. ALL BUT THE TIE WIRES OVER THE RUNGS ARE TESTED CONFIGURATIONS. SINCE THE TIE WIRES OVER THE RUNGS WOULD BE AN ENHANCEMENT TO THE TESTED CONFIGURATION IT IS ALSO ACCEPTABLE.	1-2, 12-2 & 14-1	N/A

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
5-10, 5-11 & 5-14	103020/3	THESE DETAILS SHOW STANDARD CONFIGURATIONS FOR PROVIDING STRESS SKIN ON LONGITUDINAL JOINTS AT TRAY TEES, STITCHING OF BUTT JOINTS WITH TIE WIRES AND COVERAGE OF SPLICE PLATES WITH 330-1 THERMO-LAG PANEL AND STRESS SKIN AND TROWEL GRADE. THESE DETAILS ARE TESTED CONFIGURATIONS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	N/A
5-12	103020/3 104121/0	THIS DETAIL SHOWS HOW TO INSTALL 330-660 FLEXI-BLANKET OVER THE END OF A CABLE TRAY COVERED WITH 330-1 PANELS.	11-1	1-5, 34
5-13	103020/3	THIS DETAIL SHOWS THE UPGRADE UTILIZING STRESS SKIN AND TIE WIRES WHEN THE PANEL ON THE BOTTOM OF A TRAY AT A TRAY SUPPORT IS NOT SUPPORTED BY THE THERMO-LAG INSTALLED ON THE SUPPORT.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 68
5-13.1 & 5-16	103507/0 103626/0	THIS DETAIL SHOWS HOW TO INSTALL LONGITUDINAL STRESS SKIN AND TROWEL GRADE ON TRAYS WHERE AIR DROP OR PROTRUDING ITEM THERMO-LAG COVERAGE INTERFERES WITH STANDARD COVERAGE.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 71
5-15, 5-15.1 & 5-15.2	100820/0 104121/0	THESE DETAILS SHOW STANDARD BANDING FOR CABLE TRAYS. THIS IS A TESTED CONFIGURATION.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	N/A
5-17	103833/0	THIS DETAIL SHOWS THE INSTALLATION OF LONGITUDINAL STRESS SKIN ON CABLE TRAYS WHERE A GROUND CABLE PROTRUDES FROM THE SIDE OF THE TRAY.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 65
6-1 INCLUDING SECTION AA	103020/3	THIS DETAIL IS THE TESTED CONFIGURATION FOR CONDUIT LATERAL BENDS.	9-1, 10-1, 10-2	N/A
6-2, 6-3.1 INCLUDING SECTIONS 3-3, 1-1 AND 2-2, 6-3.2 INCLUDING SECTIONS 1-1 AND 2-2	103020/3	SURFACE MOUNTED SUPPORTS FOR CONDUIT ≥ 3" DIAMETER.	9-1, 10-1, 10-2	1-5, 72

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
7-1	103020/3 104121/0	FLEXI-BLANKET AT THROUGH-WALL-SLEEVE INTERFACE.	11-1, 1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 60, 62
7-2, 7-2.1	103020/3	RIGID CONDUIT TO FLEX CONDUIT.	11-1	1-6, 64
7-2.2	102759/1	THIS DETAIL SHOWS FLEXI-BLANKET INSTALLED ON A FLEX CONDUIT WHERE IT BUTTS TO A CONCRETE WALL. THE COVERAGE IS INSTALLED ON THE FLEX CONDUIT TO THE REQUIRED THICKNESS THEN ALL VOIDS ARE FILLED WITH TROWEL GRADE AND A FILLET IS PROVIDED AT THE FLEXI-BLANKET CONCRETE INTERFACE.	11-1	1-5, 45, 75
7-3 INCLUDING VIEW 3	104121/0	CONTAINMENT PENETRATION ASSEMBLIES.	11-1	1-5, 60, 62, 66
7-4 INCLUDING VIEW 4	104121/0	SUPPORT FRAME FOR CONTAINMENT PENETRATION ASSEMBLIES AND THROUGH WALL SLEEVES.	11-1	1-5, 60, 62
7-5	N/A	THERMO-LAG COVERAGE OF FIRE DETECTOR'S AS PROTRUDING ITEMS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 67
7-6	N/A	THERMO-LAG 330-1 INSTALLATION ON FLEX CONDUIT THROUGH A BLOCKOUT.	11-1	1-6, 69
7-7, 7-7.1	N/A	330-660 FLEXI-BLANKET DETAIL AT JUNCTION OF FLEX-CONDUIT AND RIGID CONDUIT 2" AND LESS WHERE DUE TO SPACE LIMITATIONS, TWO INDIVIDUAL COMPLETE BUNDLES CANNOT BE ACHIEVED.	11-1	1-6, 70
8-2, OPTION 1, INCLUDING SEC. AA	N/A	CABLE BUNDLE WRAPPING WHERE SINGLE BUNDLE SPLITS INTO 2 BUNDLES.	11-1	1-5, 51
8-2 (OPTION 2)	N/A	WRAPPING CABLE BUNDLE WHICH COMES OUT OF THE SIDE OF THE MAIN BUNDLE. THIS IS A TESTED CONFIGURATION.	11-1	N/A
8-3	101918/0	CABLE TRAY "V"-RIB PANEL TO FLAT PANEL TRANSITION.	1-2, 12-1, 12-2, 10-2, 13-1, 14-1, 15-1	1-5, 58

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
8-4 INCLUDING SECT. AA	103486/0	ESSENTIAL FLEXIBLE CONDUITS WITHIN A COMMON ENVELOPE WHICH SPLIT INTO 2 SEPARATE ENVELOPES.	11-1	1-5, 45, 51
9-1	N/A	TYPICAL THERMO-LAG COVERAGE DETAIL FOR SWAY STRUTS	9-1, 11-1, 12-1, 12-2, 13-1, 14-1, 1-2, 15-1	1-6, 47
9-2 INCLUDING SEC. 1-1 AND SEC. 2-2	103490/0	TYPICAL DETAIL FOR VERTICAL CABLE TRAY TO CONCRETE	1-2, 11-1, 12-1, 12-2, 13-1 & 14-1	1-6, 48
9-3	N/A	TYPICAL DETAIL USING FLEXI-BLANKET FOR CABLE IN TRAY WHERE AN INTERFERENCE PREVENTS STANDARD TRAY COVERAGE.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	49
9-4	100820/0	V GROOVE/SCORING THERMO-LAG FOR RACEWAY BENDS. THIS IS A TESTED CONFIGURATION.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	N/A
10-3, 10-4, 10-5, 10-6	102522/1	SHIMMING DETAILS FOR CABLE COVERAGE.	11-1,12-1,12-2,13-1,14-1, 15-1	1-6, 44
11-1	N/A	THERMO-LAG PANELS ON CABLE TRAY INTERFACE WITH M-BOARD AT PENETRATION SEAL WHERE THE CABLE TRAY GOES THROUGH THE PENETRATION.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-7
11-2, 11-2-1	103020/3	THERMO-LAG PREFAB HALF-ROUNDS WHERE CLEARANCE BETWEEN CONDUITS IS INADEQUATE TO FIT HALF ROUND ON BOTH CONDUITS - HALF ROUND ON ONE OR OTHER IS TRIMMED BACK AND SEALED BETWEEN THE TWO CONDUITS AS REQUIRED FOR JOINTS.	9-1, 10-1, 10-2	1-6, 8
11-3, 11-3.1	N/A	TYPICAL DETAIL OF BOTTOM TRAY BOARD AND SIDE RAIL BOARD INTERFACE. THIS IS A TESTED CONFIGURATION.	12-1, 12-2, 13-1, 14-1, 1-2, 15-1	N/A
11-4, 11-4.1	N/A	TYPICAL DETAIL OF BOTTOM TRAY BOARD AND SIDE RAIL BOARD INTERFACE USING SCORE AND FOLD TECHNIQUE.	12-1, 12-2, 13-1, 14-1, 1-2, 15-1	1-6, 9

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
11-5	N/A	TYPICAL LADDER TRAY BARRIER ASSEMBLY. THIS IS A TESTED CONFIGURATION EXCEPT FOR THE SCORE AND FOLD JOINT.	12-1, 12-2, 13-1, 14-1, 1-2, 15-1	1-6, 9
11-6	N/A	TRAY PROTECTION WHERE TRAY SIDE RAIL IS TOO CLOSE TO CONCRETE AND THEREFORE MUST INTERFACE AGAINST CONCRETE WALL.	12-1, 12-2, 13-1, 14-1, 1-2, 15-1	1-6, 10
11-7	N/A	TROWEL GRADE FILLET WHERE CLEARANCE WILL NOT ALLOW FOR THERMO-LAG PANEL FLARE-OUT.	12-1, 12-2, 13-1, 14-1 & 1-2	1-7, 10
11-7.1	104121/0	FLEXI-BLANKET TO M-BOARD/CONCRETE INTERFACE WITH FILLET.	11-1	1-5, 60
11-8	102957/0	THIS DETAIL SHOWS THE INSTALLATION OF STRESS SKIN AND TROWEL GRADE AT STEEL INTERFERENCES BY EXTENDING THE STRESS SKIN AND TROWEL GRADE OUT ONTO THE STEEL INTERFERENCE.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 76
12-1, 12-1.1	103063/0	RACEWAY SUPPORT TO EMBEDDED PLATE.	1-2, 9-1, 10-1, 10-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 13
12-2	103844/0	CONDUIT PENETRATING CABLE TRAY.	11-1, 1-2, 12-1,12-2,13-1, 14-1, 10-2, 15-1	1-6, 29

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
12-2.1	103844/0	THIS CONFIGURATION IS A MINOR DERIVATIVE OF DETAIL 12-2 EXCEPT THAT THE CONDUIT ENTERING THE BOX EXTENSION OF A HORIZONTAL TRAY ENVELOPE IS FLEX IN LIEU OF RIGID. THE USE OF 330-660 ENTERING A HORIZONTAL TRAY ENVELOPE HAS QUALIFIED VIA SCHEME 11-1. THE UPGRADE TECHNIQUES UTILIZED TO REINFORCE THE INTERFACE BETWEEN 330-1 PANELS AND FLEXI-BLANKET DURING THE TEST (330-660 COLLAR FLARED OUT ON THE 330-1 PANEL) IS REQUIRED BY THE DETAIL. ALL OTHER ASPECTS OF DETAIL 12-2 ARE CONSISTENT, INCLUDING REINFORCEMENT OF 330-1 PANEL JOINTS WITH QUALIFIED TECHNIQUES (STITCHING/STRESS SKIN). THE INCREASED AIR VOLUME WITHIN THE ENVELOPE BENEFITS THE THERMAL PERFORMANCE OF THE CONFIGURATION. THEREFORE, THE CONFIGURATION WILL PROVIDE AN EQUIVALENT 1-HOUR RATING.	1-2, 10-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 79
12-3	N/A	SIL-TEMP COVERAGE ON CABLES IN TRAYS COVERED WITH THERMO-LAG.	12-2	1-5, 82
13-1	N/A	TRAY CONCRETE BEAM INTERFERENCE.	1-1,12-1,12-2,13-1,14-1,15-1	1-5, 14
13-2	104121/0	CABLE TRAY TRANSITION INTO BANK OF SLEEVES WITH PROTRUDING AIR DROPS AND EXISTING CONDUIT ENTERING ENVELOPE.	1-2, 12-1,12-2,13-1,14-1, 11-1, 15-1	1-6, 16
13-3	N/A	THERMO-LAG COVERAGE FOR TYPICAL INTERFERENCES.	9-1,1-2,12-1,12-2,13-1,14-1, 15-1	1-6, 18
13-4	N/A	TYPICAL INTERFERENCE.	1-2,12-1, 12-2,13-1,14-1, 11-1, 15-1	1-6, 21
13-5	N/A	HVAC INTERFERENCE WITH CABLE TRAY.	11-1	1-5, 23
13-6	103548/0	COVERAGE DETAIL FOR A NON-ESSENTIAL TRAY FOR THE 9" RULE.	1-2,12-1,12-2,13-1,14-1, 11-1, 15-1	1-5, 24

TYPICAL DETAIL NO.	DCA NO./REV	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE A15-A25)
14-1	N/A	THERMO-LAG 5" RULE.	1-2,12-1,12-2,13-1,14-1, 11-1, 15-1	1-5, 25
14-2	N/A	TYPICAL BOX DETAIL FOR ITEMS ENTERING RACEWAY.	1-2,12-1,12-2,10-2,13-1,14-1 & 11-1	1-5, 27
14-3 INCLUDING SEC. 1-1	N/A	TYPICAL CONDUIT/PIPE AND TRAY INTERFERENCE.	1-2, 9-1,10-2,12-1,12-2, 13-1, 14-1, 11-1, 15-1	1-5, 30
14-4	104121/0	TYPICAL THROUGH WALL SLEEVE THERMO-LAG.	1-2,12-1,12-2,13-1,14-1, 11-1, 15-1	1-5, 32
15-1	N/A	TYPICAL BOX DETAIL TRAY/TRAY.	1-2,12-1,12-2,13-1,14-1, 11-1, 15-1	1-5, 33
15-2	104121/0	TYPICAL BOX DETAIL TRAY/CONDUIT.	1-2, 12-1,12-2,13-1,14-1, 11-1, 9-1, 15-1	1-5, 32
16-1	N/A	ATTACHMENT TO STRUCTURAL STEEL.	N/A	5, 36
16-2	N/A	ATTACHMENT TO STRUCTURAL STEEL.	N/A	5, 36
16-3	N/A	TUBE STEEL WELDED TO EMBEDDED PLATE.	10-1,10-2	5, 36, 38
16-4	N/A	ANGLE BRACE PLATE.	N/A	5, 36
16-5, 16-5.1	N/A	CAPS FOR HOLLOW MEMBERS.	10-1, 10-2	5, 36, 41
16-6, 16-7	N/A	TYPICAL STEEL PROTECTION DETAIL WITH CONDUIT INTERFERENCE.	9-1,1-2,11-1,12-1,12-2,13-1 & 14-1	5, 36, 42

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1.	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2.	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4.	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
5.	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6.	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATION EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).	GENERIC
7.	THE USE OF 330-1 V-GROOVE PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEMES 1-2, 12-1, 12-2, 13-1, 14-1 AND 15-1. ALL CABLE TRAY JOINTS (INCLUDING THOSE TO CONSTRUCT FLARE OUT) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. THE 330-1 TROWEL GRADE BETWEEN M-BOARD AND FLARE-OUT OR FILLET WHERE THERE IS NO FLARE OUT, PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE AGAINST THE M-BOARD. THE CONFIGURATION IS ACCEPTABLE FOR THERMAL CONSIDERATIONS SINCE THE TRAY BOX CUT AND FOAM SEAL ARE BOTH QUALIFIED FOR A MINIMUM OF 1 HOUR FIRE EXPOSURE.	
8.	WITH INTERFACE BETWEEN THE TWO CONDUITS TREATED AS A JOINT, ADEQUATE THICKNESS IS PROVIDED TO MAINTAIN EQUIVALENT PROTECTION AS QUALIFIED BY FIRE TEST 9-1. NOTE 6 WOULD APPLY.	103020/3
9.	THIS SCORE AND FOLD TECHNIQUE WOULD PROVIDE A BETTER LEVEL OF PROTECTION THAN TESTED CONFIGURATION DUE TO THE CONTINUOUS STRESS SKIN ASSISTING IN HOLDING THE JOINT TOGETHER WHILE MAINTAINING 1/2" THICKNESS. NOTE 6 WOULD APPLY. THE SCORE AND FOLD METHOD WAS TESTED ON ALL OF THE CABLE TRAY TESTS ON TRAY RADIAL BEND COVERAGE.	
10.	THE USE OF 330-1 V-GROOVE PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEMES 1-2, 12-1, 12-2, 13-1, 14-1 AND 15-1. ALL CABLE TRAY JOINTS (INCLUDING THOSE TO CONSTRUCT THE FLAREOUT) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY PREVIOUS LISTED TESTS. THE 330-1 TROWEL GRADE BETWEEN CONCRETE AND FLARE-OUT OR FILLET WHERE THERE IS NO FLAREOUT, PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE AGAINST THE CONCRETE. THE CONFIGURATION IS ACCEPTABLE FOR THERMAL CONSIDERATIONS SINCE ONE COMPLETE SIDE OF THE TRAY ENVELOPE IS EXTENDED TO THE CONCRETE WALL AND WILL NOT BE DIRECTLY EXPOSED TO A FIRE. ALSO THE CONCRETE WALL ACTS AS A HEAT SINK. THEREFORE, THIS CONFIGURATION IS EQUIVALENT OR BETTER THAN TESTED.	
11.	THE COVERAGE OF THE PROTRUDING STEEL WITH THERMO-LAG IS ACCEPTABLE BECAUSE IT IS CONSISTENT WITH THE METHODS UTILIZED TO COVER THE AIR DROPS IN TEST SCHEME 11-1. THE OVERLAPS OF THE FLEXI-BLANKET AND THE BANDING ARE IDENTICAL. ALSO TEST SCHEME 11-1 HAD FLEXI-BLANKET INSTALLED DIRECTLY ON THE ESSENTIAL CABLES WHEREAS THIS DETAIL HAS FLEXI-BLANKET INSTALLED ON A PROTRUDING ITEM NOT ON AN ESSENTIAL COMMODITY.	

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
12.	THE USE OF HILTI BOLTS/SELF TAPPING SCREWS TO PROVIDE A POSITIVE MECHANICAL ATTACHMENT TO THE CONCRETE/METAL PROVIDES JOINT STRENGTH AT THIS POINT WHICH IS CONSISTENT WITH IF NOT BETTER THAN THE THERMO-LAG JOINTS WHICH HAVE BEEN SUCCESSFULLY TESTED IN ALL OF THE TEST ASSEMBLIES. IN ADDITION, THE CONCRETE/METAL STRUCTURES WILL ACT AS A HEAT SINK WHICH WILL PROVIDE ADDITIONAL PROTECTION AGAINST HEAT BEING DRIVEN INTO THE PROTECTED ENVELOPE.	103921/0 103476/1
13.	THIS CONFIGURATION IS JUSTIFIED BY EXISTING TEST OF JUNCTION BOX WITH TUBE STEEL SUPPORTS PROTECTED FOR 9" ONLY. ALTHOUGH THE PROTRUDING ITEM IN THIS CASE IS A TUBE STEEL SUPPORT MOUNTED TO AN EMBEDDED PLATE, THE TUBE STEEL AND EMBEDDED PLATE IS COVERED FOR 9" AND PROVIDES A BETTER HEAT SINK TO REDUCE HEAT PATH TO THE RACEWAY THAN THE TESTED CONFIGURATION.	103063/0
14.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES, HAS BEEN QUALIFIED BY LISTED TEST. BY BUTTING THE PROTECTIVE ENVELOPE TO THE CONCRETE BEAM, THE BEAM WILL LIMIT EXPOSURE FROM THAT SIDE AND ACT AS A HEAT SINK. ALL CABLE TRAY JOINTS (INCLUDING THOSE THAT BOX TO THE BEAM) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS.	
15.	THIS TYPICAL DETAIL IS FOR COVERING WEEP HOLES IN TUBE STEEL WITH THERMO-LAG WHICH ARE LOCATED OUTSIDE OF THE 9"-11" THERMO-LAG PROTRUDING ITEM COVERAGE IN ORDER TO PRECLUDE HEAT FORM BEING DRIVEN INTO THE TUBE STEEL THROUGH THE HOLE. THE ADHESION OF THE PANEL TO THE STEEL USING TROWEL GRADE AND BANDS WILL COVER THE HOLE IN A MANNER CONSISTENT WITH THE TESTED CONFIGURATIONS FOR PROTRUDING ITEM COVERAGE ON STEEL.	102222/1
16.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY LISTED TEST. ALL CABLE TRAY JOINTS (INCLUDING THOSE TO BOX AROUND SLEEVE BANK) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TEST. THE BASE PLATE AND THERMO-LAG PANEL INTERFACE BEING COVERED WITH TROWEL GRADE PROVIDES A POSITIVE SEAL. PROTRUDING ITEM PROTECTION FOR AIR DROPS AND CONDUITS ARE QUALIFIED BY SCHEME 11-1. THE CONFIGURATION IS ACCEPTABLE FOR THERMAL CONSIDERATIONS SINCE THE CONCRETE AND BASE PLATE WILL ACT AS A HEAT SINK AND REDUCE THE EXPOSURE OF HEAT INTO THE PROTECTED ENVELOPE.	104121/0
17.	THE USE OF 330-1 TROWEL GRADE AS A FIRE STOP WAS TESTED IN SCHEME 11-1. THE USE OF PENETRATION SEAL FIRE STOPS HAS BEEN TESTED AND DOCUMENTED IN THE PENETRATION SEAL PROGRAM. ALSO ELASTOMER WAS TESTED AS A FIRE STOP ON TRAY CONFIGURATIONS IN SCHEMES 1-2, 12-2, AND 14-1.	100820/0 103921/0
18.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS AND HALF-ROUND PRE-SHAPED PIECES FOR CONDUITS ARE QUALIFIED BY LISTED TEST. ALL CABLE TRAY JOINTS (INCLUDING WHERE HALF-ROUND PIECES AROUND TYPICAL INTERFERENCES CREATE LONGITUDINAL JOINTS) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TEST. SINCE CRITICAL PARAMETERS OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO QUALIFIED TESTS, THIS IS AN ACCEPTABLE CONFIGURATION.	
19.	THE JUNCTION BOX INSTALLATION IS THE STANDARD CONFIGURATION WHICH WAS TESTED IN SCHEME 10-1. THE USE OF ANGLE IRON OR CLIPS MOUNTED TO THE STRUCTURE TO SERVE AS ATTACHMENT POINTS FOR THE BANDING IS AN ACCEPTABLE DEVIATION FROM THE STANDARD (TESTED) CONFIGURATION SINCE THE METHOD OF ATTACHMENT SERVES THE SAME FUNCTION IN SECURING THE OUTER PANELS.	103020/0 103634/2

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
20.	THIS DETAIL IS NOT THE STANDARD TESTED CONFIGURATION FOR AIR DROPS INTO A CABLE TRAY BUT IT UTILIZES 330-1 PANELS. IT USES TIE WIRES AT THE JOINTS AS WAS TESTED IN SCHEMES 1-2, 12-1, 12-2, AND 13-1 AND THERMO-LAG TROWEL GRADE UTILIZED AS A FIRE STOP AS TESTED IN SCHEME 11-1. THE ASSEMBLY IS BANDED TOGETHER AND BANDED TO THE TRAY. THIS CONFIGURATION PROVIDES COVERAGE WHICH IS CONSISTENT WITH THE COVERAGE PROVIDE BY THE TESTED CONFIGURATION.	100820/0
21.	CABLE TRAYS OF VARIOUS SIZES USING V-GROOVED FLAT BOARD HAVE BEEN QUALIFIED BY LISTED TESTS. ALL CABLE TRAY JOINTS ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. FOR THERMAL CONSIDERATIONS, THE CORNER OR SIDE OF THE TRAY WHERE THE INTERFERENCE IS LOCATED HAS BOTH EXTERNAL 330-660 FLEXI-BLANKET WITH TROWEL GRADE MATERIAL AND 330-1 FLAT PANELS ON THE INSIDE OF THE CABLE TRAY SIDE RAIL. THE COMBINATION OF THESE TWO PROVIDE ENHANCED PROTECTION IN THE AREA WHERE THE OUTER V-GROOVED BOARD THICKNESS IS REDUCED. IN ADDITION THE INTERFERENCES WILL PROVIDE SHIELDING AND AN ADDITIONAL HEAT SINK IN THE AREA OF CONCERN. THE COMBINATION OF THESE FEATURES ALONG WITH TIE WIRES AND BANDING AS SHOWN WILL PROVIDE EQUIVALENT OR BETTER PROTECTION OF THE ENVELOPE THAN TESTED CONFIGURATIONS.	
22.	THE BOX DESIGN ON THE TRAY IS THE SAME AS FOR DETAILS 3-1 AND 3-1.1 THE FIRE STOP IS THE SAME AS THE FIRE STOP USED FOR PROTRUDING CONDUITS ON JUNCTION BOXES. THE FLEXI-BLANKET ON THE AIR DROP IS THE SAME AS THAT TESTED IN SCHEME 11-1 EXCEPT WHERE IT OVERLAPS ONTO THE CONDUIT AND THE BOX ON THE TRAY. SINCE THIS DETAIL IS ONLY TO BE USED WHEN THE CONDUIT IS TOO CLOSE TO THE TRAY TO USE DETAIL 3-1 AND 3-1.1, THE AMOUNT OF FLEXI-BLANKET IS MINOR (4"-5") SO THE ATTACHMENT TO THE CONDUIT AND THE BOX IS ACCEPTABLE.	100820/0
23.	TWO LAYERS OF FLEXI-BLANKET IS CONSISTENT WITH QUALIFIED PROTECTION FOR LARGE AIR DROPS. IN THIS CASE THE TRAY PROVIDES MORE THERMAL MASS AND A GREATER AIR SPACE THAN AIR DROPS. IN ADDITION THE HVAC INTERFERENCE PROVIDES SOME DEGREE OF SHIELDING AND HEAT SINK TO ONE SIDE OF THE PROTECTED ENVELOPE. THIS APPLICATION IS EQUIVALENT TO FLEXI-BLANKET APPLICATIONS QUALIFIED IN SCHEME 11-1.	
24.	THIS CONFIGURATION IS JUSTIFIED BY EXISTING TEST OF CABLE TRAYS WITH SUPPORTS PROTECTED FOR 9" ONLY. ALTHOUGH THE PROTRUDING ITEM IN THIS CASE IS A TRAY SUPPORT AND A NON-ESSENTIAL TRAY, THE COVERAGE PROVIDED ONTO EXPOSED TRAY SURFACES (SIDE, PARTIAL TOP AND BOTTOM) PROVIDE ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH.	103548/0
25.	EXISTING LISTED TESTS JUSTIFY CABLE TRAYS WITH SUPPORTS PROTECTED FOR 9". IN THIS CASE PROTECTION OF THE SUPPORTS IS ONLY PROVIDED FOR 5" MINIMUM. THIS IS JUSTIFIED BY ENGINEERING CALCULATION ME-CA-0000-2062 WHICH ALLOWS USE OF THE "5 INCH RULE" WHERE CONFIGURATIONS MEET ESTABLISHED MINIMUM CRITERIA SUCH AS A MINIMUM PERCENT TRAY FILL TO ESTABLISH EQUIVALENT PROTECTION TO REDUCE HEAT PROPAGATION INTO THE PROTECTED ENVELOPE.	
26.	ALL ASPECTS OF THIS AIR DROP CONFIGURATION HAVE BEEN TESTED IN SCHEME 11-1 EXCEPT FOR THE ATTACHMENT OF THE 330-660 FLEXI-BLANKET TO THE TWS. THE INTERFACE OF THE 330-660 AROUND EMBEDDED SLEEVES HAS BEEN SECURED WITH BANDING AROUND THE EMBEDDED SLEEVES FOR MECHANICAL ATTACHMENT AND LARGE "FILLET WELD" BUILDUP OF TROWEL GRADE 330-660 MATERIAL FOR THERMAL PROTECTION. THE MATERIAL THICKNESSES AND APPLICATIONS HAVE BEEN BOUNDED BY TEST. SEE ACCEPTANCE BASIS FOR DETAIL 5-3 FOR FIRE STOP AND 7-1 FOR ATTACHMENT TO TWS.	100820/0 104121/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
27.	THE USE OF 330-1 V-GROOVED PANELS TO PROTECT VARIOUS SIZES OF CABLE TRAYS HAS BEEN QUALIFIED BY LISTED TESTS. THE USE OF 330-1 FLAT BOARD BOX CONFIGURATIONS AROUND LBD FITTINGS AND JUNCTION BOXES IS ALSO QUALIFIED BY LISTED TESTS. WITH THE USE OF JOINT REINFORCEMENT TECHNIQUES FOR THE CABLE TRAY AND BOX DETAIL AS QUALIFIED IN LISTED TESTS, THE CRITICAL ATTRIBUTES OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO TESTED CONFIGURATIONS. BOX ELEVATION IS SUCH THAT CABLES IN THE TRAY DO NOT CONTACT THE BACK OF THERMO-LAG PANEL. IN ADDITION, ITEMS SUCH AS A PIPE HANGER WOULD PROVIDE SOME DEGREE OF SHIELDING AND HEAT SINK. THEREFORE THIS DETAIL IS ACCEPTABLE.	
28.	THE COVERAGE OF THE AIR DROP CABLES WITH FLEXI-BLANKET HAS BEEN TESTED IN SCHEME 11-1. THE BOX DESIGNS AT THE TRAY INTERFACES ARE SIMILAR TO THE BOXES IN DETAILS 3-1 & 3-1.1. THE FIRE STOPPING OF THE NON-ESSENTIAL CABLE WITHIN THE BOX STRUCTURE IS CONSISTENT WITH DETAILS 3-1 & 3-1.1 AND THE OVERLAP OF THE 330-660 FLEXI-BLANKET ONTO THE CONDUIT IS CONSISTENT WITH THE TESTED CONFIGURATION. THIS CONFIGURATION PROVIDES COVERAGE WHICH IS CONSISTENT WITH THE COVERAGE PROVIDED BY TESTED CONFIGURATIONS.	
29.	THE USE OF 330-1 V-GROOVED PANELS TO PROTECT VARIOUS SIZES OF CABLE TRAYS HAS BEEN QUALIFIED BY LISTED TESTS. THE USE OF 330-1 FLAT BOARD BOX CONFIGURATIONS AROUND LBD FITTINGS AND JUNCTION BOXES IS ALSO QUALIFIED BY EXISTING TESTS. PROTECTION OF A PROTRUDING ITEM SUCH AS CONDUIT IS ALSO QUALIFIED BY EXISTING TEST. WITH THE USE OF JOINT REINFORCEMENT TECHNIQUES FOR THE CABLE TRAY AND BOX DETAIL AS QUALIFIED IN LISTED TEST, THE CRITICAL ATTRIBUTES OF THERMAL MASS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO TESTED CONFIGURATIONS. BOX DIMENSION ARE SIZED SUCH THAT CABLES DO NOT TOUCH THE BACK OF THERMO-LAG PANELS. THEREFORE THIS DETAIL IS ACCEPTABLE.	103844/0
30.	THE USE OF 330-1 FLAT BOARD BOX CONFIGURATIONS ARE QUALIFIED BY EXISTING LISTED TESTS. THE USE OF CONDUIT HALF ROUND PREFABRICATED PIECES ARE ALSO QUALIFIED BY LISTED TESTS. THE USE OF SHIMS ADDS ADDITIONAL MATERIAL AND AIR VOLUME BENEFITS INSIDE THE ENCLOSURE. WITH THE USE OF JOINT REINFORCEMENT TECHNIQUES QUALIFIED BY EXISTING TESTS, THE PROTECTION OF CONDUIT/PIPE INTERFERENCES WITH CONDUIT HALF ROUND PREFABRICATED PIECES AND FLAT BOARDS WITH SHIMS CONSTITUTE EQUIVALENT OR BETTER PROTECTION SINCE CRITICAL ATTRIBUTES OF THERMAL MASS AND STRUCTURAL INTEGRITY ARE EQUIVALENT OR BETTER THAN TESTED CONFIGURATIONS.	
31.	THIS IS THE TESTED CONFIGURATION EXCEPT THAT INSTEAD OF BUTTING 330-1 PANELS TO THE AIR DROP, STRESS SKIN WITH TROWEL GRADE BUILD UP IS INSTALLED. THIS IS THE SAME CONFIGURATION USED FOR STRESS SKIN AND TROWEL BUILD UP AT JOINTS THAT WAS TESTED IN SCHEMES 1-2, 9-1, 10-1, 10-2, 11-1, 12-1, 12-2, 13-1 AND 14-1. THIS CONFIGURATION PROVIDES COVERAGE WHICH IS CONSISTENT WITH THE COVERAGE PROVIDED BY TESTED CONFIGURATIONS.	103020/3 102933/0 100820/0
32.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES, HAS BEEN QUALIFIED BY EXISTING LISTED TESTS. ALL CABLE TRAY JOINTS (INCLUDING THOSE WHICH TRANSITION FROM THE END OF THE TRAY TO TWS) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. THE CONCRETE WALL AND THERMO-LAG PANEL INTERFACE HAVING A TROWEL GRADE FILLET PROVIDES A POSITIVE SEAL TO THE PROTECTED ENVELOPE. BANDS TO SUPPORT TRANSITION PANELS WILL ADD STRUCTURAL SUPPORT TO THE ENVELOPE. THE CONCRETE WALL WILL ACT AS A HEAT SINK TO HELP REDUCE EXPOSURE TO THE WALL/PANEL INTERFACE. SINCE CRITICAL PARAMETERS OF THERMAL AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO TESTED CONFIGURATIONS, THIS DETAIL IS ACCEPTABLE.	104121/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
33.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY TESTS AS LISTED ON THE MATRIX. ALL JOINTS ON THIS CONFIGURATION (INCLUDING THE BOX TRANSITION FROM TRAY TO TRAY) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. STRUCTURALLY, THE TRAY TO TRAY TRANSITION CREATES NO GREATER STRUCTURAL CHALLENGE THAN LARGE "T" CONFIGURATIONS ALREADY QUALIFIED. THEREFORE CRITICAL PARAMETERS OF STRUCTURAL INTEGRITY, MATERIAL THICKNESS AND THERMAL CONSIDERATIONS ARE EQUIVALENT TO QUALIFIED TESTS.	
34.	THE COVERAGE OF 330-660 FLEXI-BLANKET ONTO CONDUITS IS A TESTED CONFIGURATION. THE OVERLAP OF 330-660 ONTO CABLE TRAYS UTILIZES THE SAME INSTALLATION TECHNIQUES (STAPLING, OVERLAP DISTANCE, ETC) USED FOR CONDUITS AND JUST MODIFIES THEM TO ALLOW FOR THE CONFIGURATION DIFFERENCES BETWEEN CONDUITS AND CABLE TRAYS.	103020/3 104121/0
35.	THE COVERAGE OF 330-660 FLEXI-BLANKET ONTO CONDUITS AND CABLE TRAYS IS THE SAME EXCEPT THE OVERLAP REQUIREMENTS HAVE BEEN REDUCED TO ALLOW FOR CONGESTED AREAS WHERE SPACE DOES NOT PERMIT THE USE OF DETAIL 3-5.2. THE MINIMUM OVERLAP ALLOWED ON THIS DETAIL, ALTHOUGH NOT IDEAL, IS STILL SUFFICIENT WHEN COUPLED WITH THE STAPLING AND TROWEL GRADE BETWEEN THE FLEXI-BLANKET LAYERS TO ENSURE THAT THE CONFIGURATION WILL PROVIDE ACCEPTABLE MECHANICAL ATTACHMENT TO THE 330-1 MATERIAL WHICH MAKES THE ARRANGEMENT CONSISTENT WITH THE TESTED CONFIGURATION.	103020/3 104121/0
36.	THIS DETAIL IS SUPPORTED BY ENGINEERING EVALUATION, ER-ME-067, REV. 2 PG. 94.	
37.	THIS DETAIL HAS THE OPTION OF COVERING THE METAL JACKETED FIRE ZONE R CABLE AS A PROTRUDING ITEM PER THE 9" RULE WHICH WAS FIRE TESTED IN ALL OF THE SCHEMES OR FIRE STOPPED AS IN DETAIL 3-4 WHICH WAS FIRE TESTED IN SCHEME 11-1. THIS CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	104121/0
38.	APPLICATION OF THERMO-LAG ON TUBE STEEL AND OVER STEEL PLATE IS QUALIFIED ON SCHEME 9-1 TO ESTABLISH THE 9" RULE. THE ABILITY OF THIS CONFIGURATION TO MITIGATE HEAT PROPAGATION INTO THE PROTECTED ENVELOPE WHILE MAINTAINING STRUCTURAL INTEGRITY SUPPORTS THE APPLICATION OF THERMO-LAG TO PROTECT STRUCTURAL STEEL.	
39.	THIS DETAIL PROVIDES COVERAGE FOR FIRE ZONE R CABLES WHICH PROTRUDE FROM A THERMO-LAGGED COMMODITY WHICH IS IDENTICAL TO THE REQUIREMENTS FOR COVERING PROTRUDING CABLES IN DETAIL 3-4. THIS CONFIGURATION IS CONSISTENT WITH THE TESTED CONFIGURATION.	104121/0
40.	THE DETAIL ALLOWS THE TESTED JUNCTION BOX CONFIGURATION TO BE MODIFIED BY EXTENDING THE "V" RIB PANELS TO COVER ANGLE IRON USED TO SUPPORT THE JUNCTION BOX. THE CONFIGURATION HAS MORE ENCLOSED AIR VOLUME THAN A TYPICAL J-BOX ENVELOPE WHICH WILL RESULT IN LOWER INTERNAL TEMPERATURES. THEREFORE SINCE STRUCTURAL INTEGRITY AND THERMAL CONCERNS ARE ADDRESSED, THE CONFIGURATION IS ACCEPTABLE.	104060/0
41.	THIS TYPICAL DETAIL IS FOR COVERING THE OPEN END OF TUBE STEEL WHEN IT IS LOCATED OUTSIDE OF THE " 9 INCH RULE" TO MITIGATE HEAT FROM BEING DRIVEN INTO THE TUBE STEEL. THE STRUCTURAL INTEGRITY OF THE SCORE AND FOLD THERMO-LAG FLAT PANELS WITH TROWEL GRADE 330-1 AND S.S. BANDING IS EQUIVALENT TO THE APPLICATION OF THERMO-LAG TO MEET THE 9" RULE ON SCHEME 10-1 AND 10-2.	

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
42.	THE USE OF 330-1 FLAT PANELS WITH PARTIAL PREFABRICATED CONDUIT HALF ROUNDS AND TROWEL GRADE JOINT MAINTAINS CONSISTENCY TO THE CRITICAL ATTRIBUTE OF MATERIAL THICKNESS WITH PROTECTED STEEL FOR THE 9" RULE.	
43.	THIS DETAIL ADDRESSES COVERING FLEXIBLE CONDUIT EXITING A JUNCTION BOX WITH 330-1 THERMO-LAG HALF ROUNDS 4" TO 8" OUT FROM BOX. THIS MAKES IT POSSIBLE FOR 330-660 FLEXI-BLANKET TO BE INSTALLED ONTO THE CONDUIT IN ACCORDANCE WITH THE TESTED CONFIGURATION (SCHEME 11-1). THE INSTALLATION OF 330-1 HALF ROUNDS UP TO THE JUNCTION BOX IS IN ACCORDANCE WITH TESTED CONFIGURATIONS SCHEMES 10-1 AND 10-2. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	104060/0
44.	THE CABLE TRAY QUALIFICATION SCHEMES LISTED DID NOT USE SHIMS. HOWEVER, ADDITIONAL THERMO-LAG MATERIAL INSIDE THE ENVELOPE AND INCREASED AIR VOLUME BENEFITS THE ENCLOSURE EFFECTIVENESS. TEST METHODS OF JOINT REINFORCEMENT HAVE BEEN EFFECTIVELY IMPLEMENTED TO ENSURE INTEGRITY OF THE ENVELOPE.	102522/1
45.	330-660 FLEXI-BLANKET ON CABLE BUNDLES HAS BEEN SUCCESSFULLY FIRE TESTED IN SCHEME 11-1. FLEXI-BLANKET ON FLEX CONDUIT HAS NOT BEEN TESTED SPECIFICALLY. HOWEVER, THE FLEX CONDUIT HAS THE ADVANTAGE OF AN INSULATING CONDUIT JACKET AND A LARGER AIR VOLUME INSIDE THAN IS PRESENT IN A FLEXI-BLANKET WRAPPED CABLE BUNDLE. THIS WILL PROVIDE ADDITIONAL PROTECTION FOR THE CABLES INTEGRITY THEREFORE, THE CONFIGURATION IS ACCEPTABLE.	103020/3 103486/0
46.	THE CONDUITS ARE COVERED WITH 330-1 THERMO-LAG HALF ROUNDS TO THE EXTENT ALLOWED BY THE INTERFERING STRUCTURE THEN A FILLET OF 330-1 TROWEL GRADE IS PROVIDED AT THE JUNCTION OF THE CONDUIT HALF ROUNDS AND THE CONCRETE WALL. THE FILLET OF 330-1 WILL PROVIDE A GOOD SEAL BETWEEN THE THERMO-LAG AND CONCRETE TO MAINTAIN THE PROTECTED ENVELOPE. ALSO THE CONCRETE WILL ACT AS A HEAT SINK, REDUCE THE EXPOSED SURFACE AND ENHANCE THE INTEGRITY OF THE THERMO-LAG ENVELOPE. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	103020/3
47.	THE CRITICAL ATTRIBUTES OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO THE PROTECTION OF SUPPORTS FOR THE 9" RULE WHICH MITIGATED HEAT BEING CONDUCTED INTO THE PROTECTED ENVELOPE. IN ADDITION CONCRETE WILL PROVIDE AN ADDITIONAL HEAT SINK. THEREFORE THE CONFIGURATION IS ADEQUATE FOR PROTECTION OF SWAY STRUTS.	
48.	THIS CONFIGURATION IS JUSTIFIED BY EXISTING TESTS OF CABLE TRAYS WITH SUPPORTS PROTECTED FOR 9" ONLY. ALTHOUGH THE PROTRUDING ITEM IN THIS CASE IS A TRAY SUPPORT ATTACHED TO A BASE PLATE. THE COVERAGE PROVIDED ONTO THE BASE PLATE AND WALL PROVIDE ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH. IN ADDITION THE CONCRETE WALL ACTS AS A HEAT SINK TO HELP MITIGATE EXPOSURE OF HEAT. THE EXTENSION OF THE TRAY COVERAGE TO PROTECT THE AIR DROP FROM THE TRAY TO THE SLEEVES IS CONSISTENT WITH THE TRAY COVERAGE. ADDITIONAL STRUCTURE INTEGRITY IS PROVIDED BY TIE WIRING ALL JOINTS IN ADDITION TO REINFORCING THE JOINTS WITH STRESS SKIN.	103490/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
49.	THIS CONFIGURATION IS ONLY USED WITH FIRE STOPS IN THE END OF EACH TRAY STANDARD COVERAGE WHERE FLEXI-BLANKET BUNDLES ENTER AND THE GAP IS RESTRICTED TO SHORT DISTANCE OF ABOUT 1 FOOT. THE PROTECTION OF THE CABLES WITH FLEXI-BLANKET AND THE ELASTOMER FIRE SEALS HAVE BEEN TESTED. ALTHOUGH THE TESTED CONFIGURATION FOR THERMO-LAG EXTENDING THROUGH A FIRE STOP WAS 330-1 HALF ROUNDS, THE USE OF 330-660 FLEXI-BLANKET THROUGH THE FIRE STOP WILL PROVIDE AN ACCEPTABLE INSTALLATION WHICH IS CONSISTENT WITH THE TESTED CONFIGURATION. THE FLEXI-BLANKET BUNDLES RESTING ON THE EXPOSED CABLE TRAY, ALTHOUGH NOT SPECIFICALLY FIRE TESTED, IS NOT SIGNIFICANTLY AFFECTED BY THE EXPOSED TRAY BECAUSE THERE IS ONLY A MINOR AMOUNT OF EXPOSED TRAY AND THE FLEXI-BLANKET ONLY COMES IN CONTACT WITH ONE OR TWO EXPOSED TRAY RUNGS. THE RESULTING CONFIGURATION IS ACCEPTABLE BECAUSE IT IS BASICALLY CONSISTENT WITH TESTED CONFIGURATIONS AND WHERE IT DEVIATES FROM THESE CONFIGURATIONS THE DIFFERENCES ARE MINOR AND DO NOT SIGNIFICANTLY IMPACT THE CORRELATION TO A TESTED CONFIGURATION. THE MATERIAL CONTINUITY AND THICKNESS IS MAINTAINED.	
50.	THIS CONFIGURATION IS SIMILAR TO THE CONFIGURATION TESTED IN SCHEMES 9-1, 10-1, 10-2 AND 9-3 EXCEPT THESE TESTS HAD THE THERMO-LAG IN DIRECT CONTACT WITH THE PEN SEAL MATERIAL WHEREAS THIS DETAIL HAS A SHEET METAL SLEEVE WITH TROWEL GRADE FILLING THE GAP. THE TROWEL GRADE IN THE SPACE BETWEEN THE SLEEVE & CONDUIT AND THE SHEET METAL SLEEVES DOES NOT DETRACT FROM THE TESTED CONFIGURATION. THE TROWEL GRADE AS A FIRE STOP HAS BEEN TESTED IN SCHEME 11-1 AND THE SHEET METAL SLEEVE IS SANDWICHED BETWEEN TROWEL GRADE & PEN SEAL MATERIAL. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	
51.	LAYERS OF FLEXI-BLANKET 330-660 PROTECTING ALL BUNDLED LEGS OF THIS DETAIL ARE CONSISTENT WITH TESTED CONFIGURATIONS. IN FIRE TEST SCHEME 11-1, THE USE OF 330-660 TROWEL GRADE WITH BANDING PROVED TO BE STRUCTURALLY SOUND WITH EXCELLENT BONDING OF SEAMS THROUGHOUT THE FIRE AND HOSE STREAM TEST. THEREFORE THE USE OF 330-660 TROWEL GRADE WITH BANDING TO STRUCTURALLY HOLD THE SPLIT LEGS TO THE PRIMARY LEG AND SEAL LONGITUDINAL SEAMS IS ACCEPTABLE. THIS DETAIL IS EQUIVALENT TO TESTED CONFIGURATIONS FOR CRITICAL THERMAL AND STRUCTURAL ASPECTS AS DESCRIBED ABOVE AND IS THEREFORE ACCEPTABLE.	104121/0 103486/0
52.	THE METHOD UTILIZED TO REDUCE THE SIZE OF THE 330-1 CONDUIT HALF ROUNDS IS TO SCORE THE MATERIAL SO THAT IT WILL CONFORM TO THE SMALLER SHAPE THEN FILLING THE SCORED AREAS WITH 330-1 TROWEL GRADE. THIS IS THE SAME METHOD UTILIZED IN FITTING 330-1 PANELS TO CABLE TRAY RADIAL BENDS WHICH WAS TESTED IN SCHEMES 1-2, 11-1, 12-1, 12-2, 13-1 AND 14-1. THEREFORE THE SCORING OF THE CONDUIT HALF ROUNDS WILL NOT DETRACT FROM THE TESTED INTEGRITY OF THESE CONDUIT SECTIONS. SINCE DETAILS 4.6 AND 4-6.1 ARE THE SAME AS 4-1 AND 4-1.1 WHICH WERE TESTED IN SCHEMES 9-1, 10-1 AND 10-2 THEY ARE CONSIDERED TO BE TESTED CONFIGURATIONS. DETAILS 4-7 AND 4-7.1 ARE THE SAME AS DETAILS 4-3 AND 4-3.1 AND THEY HAVE BEEN ANALYZED IN NOTE 46.	103020/3
53.	FLEXI-BLANKET ON FLEX CONDUIT HAS NOT BEEN TESTED SPECIFICALLY. HOWEVER, THE FACT THAT THE FLEXI-BLANKET CONFIGURATION HAS BEEN TESTED IN SCHEME 11-1 AND THE FLEX CONDUIT HAS THE ADVANTAGE OF THE CONDUIT JACKET AND THE AIR VOLUME INSIDE THE CONDUIT WHICH IS NOT PRESENT IN A CABLE BUNDLE, PROVIDES ADDITIONAL PROTECTION FOR THE CABLES AND RESULT IN LOWER INTERNAL TEMPERATURES. THE REDUCTION IN THICKNESS AT THE SUPPORT IS COMPENSATED FOR BY THE ADDITION THERMO-LAG ON THE SUPPORT. THE RESULTING COMBINATION OF THERMO-LAG ON THE SUPPORT AND THE CONDUIT PLUS THE TROWEL GRADE IN ANY VOIDS AND AT THE EXTERNAL INTERFACE BETWEEN THE THERMO-LAG ON THE CONDUIT AND THE SUPPORT RESULTS IN A THERMO-LAG ENVELOPE CONSISTENT WITH A TESTED CONFIGURATION.	103076/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
54.	THIS DETAIL DEPICTS STANDARD COVERAGE FOR 2" CONDUIT EXCEPT FOR A GAP NOT EXCEEDING 1/2" WHERE THE 1/4" HALF ROUNDS MEET. TROWEL GRADE OVER STRESS SKIN IS APPLIED TO THE AREA TO ACHIEVE THE REQUIRED THICKNESS IN THE AREA. THE COMBINATION OF RESULTING CONFIGURATION PROVIDING THICKNESS AND MATERIAL CONTINUITY CONSISTENT WITH TESTED CONFIGURATIONS RESULTS IN THIS CONFIGURATION BEING ACCEPTABLE.	103423/0
55.	FIRE STOPS UTILIZING 330-1 THERMO-LAG WERE TESTED IN SCHEME 1-2. IT WAS ALSO TESTED IN SCHEME 4 AND THE FIRE STOP WAS NOT BREACHED. THIS CONFIGURATION IS ACCEPTABLE.	
56.	ALTHOUGH IT IS NOT A TESTED CONFIGURATION IT IS A DEFINITE ENHANCEMENT TO TESTED CONFIGURATIONS AND IT IS THEREFORE ACCEPTABLE. TEST SCHEMES 1-2, 11-1, 12-1, 12-2 AND 13-1 HAVE ESTABLISHED THE ENHANCEMENTS OBTAINED BY USING TIE WIRES TO "STITCH" TO EITHER PANELS AND THIS DETAIL IS CONSISTENT WITH THAT CONFIGURATION.	
57.	THIS DETAIL PROVIDES A METHOD FOR A POSITIVE MECHANICAL MEANS TO SUPPORT UNDER THE BOTTOM PANEL AT A FIRE STOP IN A CABLE TRAY. THE BAR STEEL AND ALTERED ROD USED FOR THIS PURPOSE ARE SUBSTANTIAL AND WILL WITHSTAND A DESIGN BASIS FIRE. THE BAR STEEL IS COMPARABLE TO THE EXPOSED STEEL THAT WAS TESTED IN ALL THE SCHEMES. THE ALL THREAD ROD WOULD HAVE ELONGATE TO FAIL AND THAT IS NOT A CONCERN.	104235/3
58.	THE USE OF 330-1 THERMO-LAG FLAT PANELS, SINGLE LAYER, WAS QUALIFIED ON SCHEME 10-2 FOR JUNCTION BOXES. IN THIS DETAIL, THE THERMAL EXPOSURE OF FLAT PANELS IS LESS CHALLENGING THAN THE EXPOSURE IN 10-2. REQUIRED OVERLAPS OF MATERIAL AND JOINT REINFORCEMENT TECHNIQUES ALONG WITH THE USE OF V-GROOVE 330-1 PANELS ARE QUALIFIED BY LISTED TESTS. IN ADDITION, THE REQUIREMENT FOR PRE-BANDING BELOW FLAT PANELS, NO MATTER THE TRAY SIZE, WILL PROVIDE STRUCTURAL SUPPORT AGAINST SAGGING CONSISTENT WITH THE USE OF V-GROOVED BOARD. BASED ON THE ABOVE, THIS DETAIL IS EQUIVALENT TO TESTED CONFIGURATIONS.	101918/0
59.	THIS CONFIGURATION IS SIMILAR TO TESTED CONFIGURATIONS IN SCHEMES 1-2, 11-1, 12-1, 12-2, 13-1, 14-1 AND 15-1 EXCEPT THESE TESTS HAD THE THERMO-LAG IN DIRECT CONTACT WITH THE PENSEAL MATERIAL WHEREAS THIS DETAIL HAS A SHEET METAL SLEEVE WITH TROWEL GRADE FILLING THE GAP. THE TROWEL GRADE IN THE SPACE BETWEEN THE SLEEVE AND THE TRAY COVERAGE AND THE SHEET METAL SLEEVE DOES NOT DETRACT FROM THE TESTED CONFIGURATION. THE TROWEL GRADE AS A FIRE STOP HAS BEEN TESTED IN SCHEME 11-1 AND THE SHEET METAL SLEEVE IS SANDWICHED BETWEEN TROWEL GRADE AND PENSEAL MATERIAL. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	
60.	THE USE OF 330-660 THERMO-LAG FLEXI-BLANKET ON CABLE BUNDLES OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEME 11-1. THE USE OF 330-660 TROWEL GRADE TO BOND 330-660 FLEXI-BLANKET JOINTS WAS ALSO QUALIFIED BY SCHEME 11-1. THE USE OF A 330-660 TROWEL FILLET AT THE TRANSITION BETWEEN 330-660 FLEXI-BLANKET AND M-BOARD OR CONCRETE WILL PROVIDE A POSITIVE SEAL TO THE PROTECTED ENVELOPE AT THIS TRANSITION. FOR THERMAL CONSIDERATIONS, THE CONCRETE AT THE TRANSITION WILL PROVIDE A HEAT SINK AND REDUCED HEAT EXPOSURE TO THE THERMO-LAG ENVELOPE. BASED ON THE ABOVE, THIS CONFIGURATION IS ACCEPTABLE.	103020/3 104121/0
61.	THE FILLET PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE AGAINST THE M-BOARD AND IS SEALED TO BOTH THE PENSEAL AND THE CONCRETE WITH CAULK AND STICK PINS ARE USED AS REQUIRED. THE CONFIGURATION IS ACCEPTABLE FOR THERMAL CONSIDERATIONS SINCE THE TRAY CONFIGURATION AND THE PENSEAL ARE BOTH QUALIFIED FOR A MINIMUM OF 1 HOUR FIRE EXPOSURE.	100820/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
62.	IN ADDITION TO THE DISCUSSION ON NOTE 60 FOR THE M-BOARD/CONCRETE TO FLEXI-BLANKET TRANSITION, THE FLEXI-BLANKET IS ATTACHED IN ACCORDANCE WITH DETAIL 3-5.2 TO THE RACEWAY. THIS MECHANICAL MEANS OF ATTACHMENT TO THE RACEWAY WAS TESTED IN SCHEME 11-1. FOR THE CRITICAL THERMAL AND STRUCTURAL CONSIDERATIONS, THIS ASSEMBLY IS EQUIVALENT TO TESTED CONFIGURATIONS AND THEREFORE ACCEPTABLE.	103020/3 104121/0
63.	THE SCORE AND FOLD METHOD HAS BEEN SUCCESSFULLY TESTED ON RADIAL BENDS FOR CABLE TRAYS IN TESTS 1-2, 11-1, 12-1, 12-2 13-1, 14-1 AND 15-1. THE METHOD USED TO SCORE AND FOLD ON TRAY RUNS IS THE SAME AS TRAY RADIAL BENDS PLUS THE TRAY JOINTS WILL RECEIVE STRESS SKIN AND TROWEL GRADE BUILD UP. THEREFORE THE SCORE AND FOLD METHOD FOR TRAY RUN CORNERS IS ACCEPTABLE.	103020/3
64.	THIS DETAIL WAS QUALIFIED IN SCHEME 11-1, ONLY FOR AIR DROPS. THE DIFFERENCE OF HAVING FLEX-CONDUIT AS COMPARED TO AN AIR DROP ADDS THERMAL MASS AND STRUCTURAL STABILITY TO THE ASSEMBLY AND THEREFORE IS BETTER THAN THE TESTED CONFIGURATION.	103020/3
65.	THIS IS A MINOR DEVIATION FROM NORMAL STRESS SKIN INSTALLATION ON LONGITUDINAL JOINTS AND HAS NO IMPACT ON THE ABILITY OF THE STRESS SKIN TO PERFORM IT'S INTENDED FUNCTION SINCE THE STRESS SKIN IS CUT OUT AROUND THE GROUND CABLE THEN BROUGHT BACK TOGETHER WHERE IT LAPS THE JOINT. THIS IS AN ACCEPTABLE CONFIGURATION.	103833/0
66.	PROTECTION OF PROTRUDING ITEM FROM INTERFACE IS CONSISTENT WITH THOSE TESTED IN SCHEME 11-1 AND IS THEREFORE ACCEPTABLE.	104121/0
67.	THIS CONFIGURATION IS JUSTIFIED BY EXISTING TESTS AND CABLE TRAYS WITH SUPPORTS PROTECTED FOR 9" ONLY. ALTHOUGH THE PROTRUDING ITEM IN THIS CASE IS A DETECTOR BASE AND CONDUIT, THE COVERAGE PROVIDED ONTO EXPOSED RACEWAY SURFACES PROVIDES ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH.	
68.	THIS DETAIL UTILIZES CIRCUMFERENTIAL WRAP ON STRESS SKIN WITH TROWEL GRADE FOR 330-1 PANELS ON THE BOTTOM PANELS ON A CABLE TRAY WHERE IT BUTTS TO THE TRAY SUPPORT THERMO-LAG. CIRCUMFERENTIAL WRAP ON BUTT JOINTS WITH STRESS SKIN AND TROWEL GRADE HAS BEEN TESTED IN SCHEMES 11-1, 12-1, 12-2, 13-1, 14-1 AND 15-1. IN ADDITION THE STRESS SKIN AND TROWEL GRADE HAS BEEN STAPLED TO THE VERTICAL 330-1 PANEL ON THE SUPPORT WHICH WILL FURTHER ENHANCE THE MECHANICAL ATTACHMENT OF THE STRESS SKIN.	103020/3
69.	THE USE OF 330-660 THERMO-LAG FLEXI-BLANKET ON CABLE BUNDLES OF VARIOUS SIZES AND THE MECHANICAL ATTACHMENT OF 330-660 FLEXI-BLANKET TO PRE-SHAPED CONDUIT HALF-ROUNDS ON BOTH AIR DROPS AND CONDUITS IS QUALIFIED BY TEST SCHEME 11-1. BY EMBEDDING THE HALF-ROUND MATERIAL INTO THE M-BOARD 1/2" AND SEALING WITH A 1/2" BEAD OF 330-1 TROWEL GRADE, A POSITIVE MECHANICAL CONNECTION AND SEAL IS CREATED AT THIS TRANSITION. THIS CONFIGURATION IS EQUAL TO OR BETTER THAN CONFIGURATION TESTED IN SCHEME 11-1.	

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
70.	THE USE OF 330-660 THERMO-LAG FLEXI-BLANKET ON CABLE BUNDLES OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEME 11-1. THE USE OF 330-660 TROWEL GRADE TO BOND 330-660 FLEXI-BLANKET JOINTS WAS ALSO QUALIFIED BY SCHEME 11-1. THERMALLY, THE THICKNESS AND AMOUNT OF LAYERS PROTECTING BUNDLES ARE EQUIVALENT TO OR BETTER THAN THE TESTED CONFIGURATION. STRUCTURALLY 330-660 TROWEL GRADE WITH SS BANDING HAS BEEN SHOWN TO BE EFFECTIVE TO BOND SEAMS WITH THE TWO BUNDLES SHIELDING EACH OTHER AND HAVING GREATER MASS THAN A SINGLE BUNDLE, THIS CONFIGURATION HAS BEEN DETERMINED TO BE A LESS SEVERE EXPOSURE THAN THE TESTED CONFIGURATIONS. FINALLY, CONDUITS, AS OPPOSED TO AIR DROPS USED IN THE TEST, ADD THERMAL MASS AND STRUCTURAL STABILITY TO THE CONFIGURATION. THEREFORE THIS CONFIGURATION IS ACCEPTABLE.	
71.	THIS DEVIATION AFFECTS ONLY A SMALL PORTION OF THE STRESS SKIN AND TROWEL GRADE ON THE LONGITUDINAL JOINT AND LIMITS THE AMOUNT OF DEVIATIONS IN CLOSE PROXIMITY TO EACH OTHER SO THAN OVERALL MECHANICAL INTEGRITY OF THE JOINT IS NOT COMPROMISED. THIS IS AN ACCEPTABLE CONFIGURATION.	103507/0 103626/0
72.	PROTECTION OF SURFACE MOUNTED SUPPORTS ARE CONSISTENT WITH OTHER TESTED CONFIGURATIONS (1/2" THERMO-LAG THICKNESS AND JOINTS, TIE-WIRES, ETC.). THE LEVEL OF PROTECTION IS EQUIVALENT TO TESTED CONFIGURATION.	103020/3
73.	THIS IS A TESTED CONFIGURATION WHICH WAS USED IN ALL OF THE CABLE TRAY TEST CONFIGURATIONS EXCEPT THAT THIS DETAIL HAS THE ENHANCEMENT OF INSTALLING THE TIE WIRES THROUGH THE BOTTOM PANELS ON THE CABLE TRAY COVERAGE THAT BUTTS TO THE SUPPORT. SINCE THIS IS AN ENHANCEMENT TO A TESTED CONFIGURATION, IT IS ACCEPTABLE.	104121/0
74.	THE COVERAGE ON THE RADIAX CABLE WITH FLEXI-BLANKET IS SIMILAR TO COVERAGE ON PROTRUDING CONDUIT ON SCHEME 11-1. THE AIR GAPS INSIDE THE FLEXI-BLANKET WRAP ARE FILLED WITH TROWEL GRADE. THIS CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	104015/1
75.	THE FLEX CONDUITS ARE COVERED WITH FLEXI-BLANKET TO THE EXTENT ALLOWED BY THE INTERFERING STRUCTURE THEN A FILLET OF 330-1 TROWEL GRADE IS PROVIDED AT THE JUNCTION OF THE CONDUIT HALF ROUNDS AND THE CONCRETE WALL. THE FILLET OF 330-1 WILL PROVIDE A GOOD SEAL BETWEEN THE THERMO-LAG AND THE CONCRETE TO MAINTAIN THE PROTECTED ENVELOPE. ALSO THE CONCRETE WILL ACT AS A HEAT SINK AND ENHANCE THE INTEGRITY OF THE THERMO-LAG ENVELOPE. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	102759/1
76.	THE STRESS SKIN AND TROWEL GRADE COVERAGE IS EXTENDED OUT ONTO THE STEEL THEREFORE TYING IT INTO THE STRESS SKIN ON THE JOINT. THIS PROVIDES COVERAGE WHICH WAS EQUIVALENT TO THE TESTED CONFIGURATION.	102957/0
77.	FLEXI-BLANKET WAS TESTED IN SCHEME 11-1. THE COVERAGE OF 330-660 FLEXI-BLANKET ONTO CONDUIT HALF ROUNDS IS A TESTED CONFIGURATION. THE OVERLAP OF 330-660 ONTO CABLE TRAYS UTILIZES THE SAME INSTALLATION TECHNIQUES (STAPLING, OVERLAP DISTANCE, ETC) USED FOR CONDUIT AND JUST MODIFIES THEM TO ALLOW FOR THE CONFIGURATION DIFFERENCES BETWEEN CONDUITS AND CABLE TRAYS. THE FILLET PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE. THE RESULTING CONFIGURATION IS ACCEPTABLE.	104121/0
78.	THE INSTALLATION METHODS USED ON THE DETAIL FOR THE 330-1 BOX ARE AN EXTENSION OF THE TRAY COVERAGE AND HAVE ALL BEEN TESTED (SCORE AND FOLD, STITCHING AND STRESS SKIN AND TROWEL GRADE ON JOINTS). THE FILLET PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE. THE RESULTING CONFIGURATION IS ACCEPTABLE.	104121/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
79.	THIS CONFIGURATION IS A MINOR DERIVATIVE OF DETAIL 12-2 EXCEPT THAT THE CONDUIT ENTERING THE BOX EXTENSION OF A HORIZONTAL TRAY ENVELOPE IS FLEX IN LIEU OF RIGID. THE USE OF 330-660 ENTERING A HORIZONTAL TRAY ENVELOPE HAS QUALIFIED VIA SCHEME 11-1. THE UPGRADE TECHNIQUES UTILIZED TO REINFORCE THE INTERFACE BETWEEN 330-1 PANELS AND FLEXI-BLANKET DURING THE TEST (330-660 COLLAR FLARED OUT ON THE 330-1 PANEL) IS REQUIRED BY THE DETAIL. ALL OTHER ASPECTS OF DETAIL 12-2 ARE CONSISTENT, INCLUDING REINFORCEMENT OF 330-1 PANEL JOINTS WITH QUALIFIED TECHNIQUES (STITCHING/STRESS SKIN). THE INCREASED AIR VOLUME WITHIN THE ENVELOPE BENEFITS THE THERMAL PERFORMANCE OF THE CONFIGURATION. THEREFORE, THE CONFIGURATION WILL PROVIDE AN EQUIVALENT 1-HOUR RATING.	103844/0
80.	ATHOUGH NOT EXACTLY A TESTED CONFIGURATION. THIS DETAIL HAS ALL THE SIGNIFICANT ATTRIBUTES OF A TESTED CONFIGURATION AND THE DIFFERENCES ARE INSIGNIFICANT.	
81.	THIS DETAIL PROVIDES SPECIFIC GUIDANCE FOR INSTALLING THERMO-LAG AND IS CONSISTENT WITH TESTED CONFIGURATIONS.	
82.	THIS DETAIL PROVIDES GUIDANCE ON WHEN SIL-TEMP HAS TO BE INSTALLED ON CABLES TO PROTECT THEM AGAINST POSSIBLE DAMAGE FROM THERMO-LAG PANELS. THIS IS AN ELECTRICAL CABLE DAMAGE CONCERN AND HAS NO EFFECT ON THE THERMO-LAG PROTECTIVE ENVELOPE.	

ATTACHMENT B

UNIQUE CONFIGURATIONS

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
101282/1	SG	832'	2-096	2SE/16	Y	Y	ISSUE: CONSTRUCTION REQUIRES DETAILS FOR CONSTRUCTION OF REMOVABLE COVER JUNCTION BOX ASSEMBLY. RESOLUTION: UTILIZE 2 LAYERS OF FLAT PANEL MATERIAL AROUND THE J-BOX SIDES AND FOR THE LIP SUPPORTING THE SEPARATE COVER ASSEMBLY. THEN ADD A LAYER OF V-RIBBED MATERIAL. CONSTRUCT THE COVER WITH 2 LAYERS OF FLAT PANELS WITH A 4" (MIN.) OVERLAP INTO THE LIP. MAXIMUM GAP BETWEEN COVER AND LIP IS 3/32". ALL JOINTS TO BE SECURED WITH THE TIE WIRE STITCHING AND STRESS SKIN. TURNBUCKLES SHALL BE USED FOR SECURING THE COVER IN PLACE.	10-1	1-6, 8
101357/0	AB	790'	180	AA/21a	Y	Y	ISSUE: PIPE SUPPORT INTERFERES WITH THE INSTALLATION OF 330-1 PANELS ON ESSENTIAL CABLE TRAY. RESOLUTION: STOP STANDARD TRAY COVERAGE ABOUT 4" ON EITHER SIDE OF THE PIPE SUPPORT. INSTALL 330-660 FLEXI-BLANKET ON THE CABLES AND EXTEND ACROSS THE 8" SPACE AND EXTEND INTO THE TRAY COVERAGE ON BOTH ENDS. INSTALL AN ELASTOMER FIRE STOP IN THE ENDS OF THE TRAY COVERAGE. FLEXI-BLANKET SHALL EXTEND THROUGH THE FIRE STOP INTO THE TRAY COVERAGE.	11-1, 1-2, 12-1, 12-2, 13-1, 14-1	1-5, 18

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
101498/1 AS MODIFIED BY DCN 5746 REV. 1 (MINOR MODIFICATION 93-126)	EC	778'	X-115B	AA154	Y	Y	ISSUE: THE ARRANGEMENT OF ESSENTIAL CABLE TRAYS AND CONDUITS WITHIN, PRECLUDE THE INSTALLATION OF STANDARD RUN CABLE TRAY PROTECTION. RESOLUTION: INSTALL TYPICAL DETAIL 5-1 FOR STANDARD CABLE TRAY PROTECTION WHERE SPACE AND ARRANGEMENT ALLOWS. WHERE CABLES EXTEND ABOVE THE TRAY SIDES SHIM THE TOP PANEL UP PER DETAIL 10-3. WHERE CABLES AIR DROP FROM THE VERTICAL TO HORIZONTAL TRAY, ENCLOSE THE CABLES IN A THERMO-LAG BOX. ADD A SECOND LAYER TO THE BOX IN ACCORDANCE WITH THE REQUIREMENTS FOR JBs.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 49
101499/0	AB	790'	X-165	AA/21a	N	Y	ISSUE: PARALLEL CONDUITS HAVE INSUFFICIENT CLEARANCE AT LBDs TO INDIVIDUALLY PROTECT EACH COMMODITY. RESOLUTION: INSTALL BOX ENCLOSURE AROUND BOTH LBD FITTINGS.	10-1, 10-2, 9-1	1-5, 41

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
101627/2	E&C	778'-0"	X-115B	AA/154	Y	Y	ISSUE: 3 CONDUITS AND JUNCTION BOX ALL REQUIRING PROTECTION SHARE A COMMON 4" X 4" TUBE STEEL SUPPORT. CONSTRUCTION REQUESTS TO "BOX-IN" ALL COMMODITIES FOR A 5 FT. DISTANCE. RESOLUTION: BOXING IN THE CONDUITS IS NOT ACCEPTABLE. INSTALL STANDARD 330-1 CONDUIT SECTION MATERIAL OVER REQUIRED CONDUITS. SINCE SO MUCH OF THE TUBE STEEL SURFACE WILL BE COVERED WHEN THE CONDUITS ARE PROTECTED, INSTALL 330-1 PANELS ON THE SUPPORT FIRST FOR HEAT PATH (9" RULE), THEN INSTALL MATERIAL ON CONDUITS.	9-1, 10-1	60
101986/1 103034/1 104124/0 AS MODIFIED BY DCN 5742 REV. 1 (MINOR MODIFICATION 93-125)	SG	810'	2-083	2SD/9	Y	Y	ISSUE: ALL CABLE AIR DROPS FROM TWO VERTICAL CABLE TRAYS TO THROUGH WALL SLEEVES (TWS), AS WELL AS THE CABLE TRAYS, REQUIRE THERMO-LAG COVERAGE. RESOLUTION: PROTECT ALL COMMODITIES WITH A COMMON ENCLOSURE AND INSTALL 2 LAYERS WHERE CABLES AIR DROP FROM THE END OF THE TRAYS TO THE WALL SLEEVES IN ACCORDANCE WITH THE REQUIREMENTS FOR JBs.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 36
102058/0	SG	810'	2-079	2SB/8	Y	Y	ISSUE: CONDUIT AND LBD REQUIRES PROTECTIVE ENVELOPE. ADJOINING CONDUIT/LBD IS TO CLOSE TO INSTALL STANDARD DETAIL. RESOLUTION: INSTALL BOX ENCLOSURE AROUND BOTH LBD FITTINGS.	10-1, 10-2, 9-1	1-5, 41

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
102103/0	EC	792'	X-122	EA/54	Y	Y	ISSUE: CABLE AIR DROP FROM THROUGH WALL SLEEVES (TWS) TO CABLE TRAY DO NOT ALLOW THE USE OF STANDARD DETAILS. RESOLUTION: BOX THERMO-LAG "V" RIB PANELS AROUND TWS AND CABLE TRAY.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 50
102160/1 AS MODIFIED BY DCN 5742, REV. 1 (MINOR MODIFICATION 93-125)	SG	810'	2-082	2SB/8	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR ENCLOSING CABLE AIR DROPS FROM ONE HORIZONTAL TRAY TO ANOTHER HORIZONTAL TRAY. RESOLUTION: EXTEND THE TRAY ENVELOPE FROM THE TRAY ABOVE DOWN ONTO THE LOWER TRAY TO FORM A "BOX" CONFIGURATION FOR ENCLOSURE OF THE AIR DROP CABLES. ADD A SECOND LAYER OF THERMO-LAG TO THE AIR DROP UTILIZING "V"-RIBBED PANELS EXCEPT WHERE SPACE LIMITATIONS AT TUBE STEEL SUPPORTS AND AT SW PIPE MAKE IT NECESSARY TO INSTALL FLAT PANEL. INSTALL SECOND LAYER AND UPGRADE JOINTS PER JB REQUIREMENTS.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 9
102265/0	AB	832'	X-219	AA/21d	Y	Y	ISSUE: CONSTRUCTION IS UNABLE TO INSTALL THERMO-LAG ON 24" WIDE CABLE TRAY PER TYPICAL DETAILS DUE TO KELLUM GRIPS INSTALLED ON CABLES. RESOLUTION: ENCLOSE TRAY AND KELLUM GRIPS IN A COMMON ENVELOPE.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 70

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
102471/3	AB	790'	X-174 X-180	AA/21a AA/21a	N Y	Y Y	ISSUE: 18" AND 24" WIDE CABLE TRAYS RUN PARALLEL BUT ARE TOO CLOSE FOR SEPARATE ENVELOPES. RESOLUTION: CONSTRUCT COMMON TRAY ENVELOPE "PARTITIONED" BETWEEN THE TRAYS. PREBAND THE TWO TRAYS TO PREVENT TOP PANEL SAG.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 7
102479/1	AB	832'	226	AA/21d	Y	Y	ISSUE: NON-ESSENTIAL CABLES AIR DROP OUT OF THE BOTTOM OF A JB THROUGH SHORT CONDUIT STUBS (3" TO 5" LONG) PRESENTING A COVERAGE PROBLEM SINCE TYPICAL DETAILS ONLY ADDRESS RIGID AND FLEXIBLE CONDUIT COVERAGE. RESOLUTION: FIRE STOP THE CONDUIT STUBS EXTENDING INTO THE JB TO OBTAIN REQUIRED DEPTH. INSTALL 1/2" CONDUIT HALF ROUNDS ON CONDUIT STUBS THEN EXTEND JB COVERAGE ON BOTTOM DOWN USING THERMO-LAG SHIMS SO IT IS FLUSH WITH THE BOTTOM OF THE HALF ROUNDS AND SEAL BOTTOM PANELS TO THE HALF ROUNDS. COVERAGE ON THE JB IS THE STANDARD DOUBLE LAYER. SPACE INSIDE THE CONDUIT HALF ROUNDS BELOW THE FIRE STOP IS FILLED WITH TROWEL GRADE.	10-1, 10-2, 11-1, 12-2, 14-1	1-5, 65

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
102679/1	EC	778'	X-115B	AA154	Y	Y	ISSUE: CABLE TRAY T220CBD15-22 IS AN ESSENTIAL TRAY WITH SEVERAL INTERFERENCE AND PROTRUDING ITEM PROBLEMS. RESOLUTION: INSTALL FLAT PANELS IN LIEU OF V-RIB IN ORDER TO AVOID AN INTERFERENCE WITH A PROTECTED CONDUIT. INSTALL HALF ROUNDS ON THE ESSENTIAL CONDUIT, REDUCING THE MATERIAL THICKNESS WHERE IT INTERFERES WITH TRAY THERMO-LAG. AIR DROPS SHALL BE ENCLOSED IN A THERMO-LAG BOX WHEN STANDARD DETAIL FLEXI-BLANKET CANNOT BE INSTALLED. COVER PROTRUDING ITEMS PER TYPICAL DETAILS TO A DISTANCE OF 9" MINIMUM, 11" MAXIMUM.	1-2, 1-6, 9-1, 11-1, 12-1, 12-2, 13-1	48
102726/0	SG	832'	2-094	2SB/15	Y	Y	ISSUE: PROTECTED CONDUIT LBD INTERFERES WITH ESSENTIAL CONDUIT LBD THAT REQUIRED PROTECTIVE ENVELOPE. RESOLUTION: BOX-IN LBD IN ACCORDANCE WITH DETAIL 6-1 AND MODIFY DESIGN AT INTERFERENCE.	10-1, 10-2, 9-1	1-5, 42
102800/2	AB	790'	X-180	AA/21a	Y	Y	ISSUE: AIR DROP FROM TRAY TO WALL DOES NOT HAVE CONDUIT SLEEVE. RESOLUTION: BOX AIR DROP AT WALL AND FORM COMMON ENCLOSURE WITH CABLE TRAY.	1-2, 10-1, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 64

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
102882/0 AS MODIFIED BY DCN 5745 REV. 1 (MINOR MODIFICATION 93-123)	AB	810'	X-207	AA/21d	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR THERMO-LAG PROTECTION OF ESSENTIAL J-BOX JB2A-2990 AND ESSENTIAL AIR DROP CABLES WHICH EXIT CABLE TRAY BEFORE THE END OF THE RACEWAY, PRECLUDING USE OF TYPICAL DETAILS. RESOLUTION: DIRECTION IS PROVIDED FOR INSTALLING A "BOX" EXTENSION TO THE CABLE TRAY ENVELOPE, WITH 330-1 PANELS FLARED TO ENCLOSE CABLE AIR DROPS WITHOUT TOUCHING THEM. ALL JOINTS ARE TO BE MADE USING THE SCORE AND FOLD METHOD OR TIE WIRING TOGETHER AND STRESS SKIN, AND PANELS BUTTED TO THE J-BOX. ADD A SECOND LAYER TO THE "BOX" IN ACCORDANCE WITH THE REQUIREMENTS FOR JBs.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 19
102889/0	AB	790'	X-174	AA/21a	N	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR COVERING TWO ESSENTIAL CONDUIT LBD FITTINGS, BETWEEN WHICH THE GAP IS 1/4". RESOLUTION: ENCLOSE BOTH LBDs IN A COMMON THERMO-LAG 330-1 BOX CONFIGURATION. USE TYPICAL DETAIL 6-1 FOR DIMENSIONAL REQUIREMENTS AND CONSTRUCTION TECHNIQUES.	9-1, 10-1, 10-2	1-5, 41

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
102931/0	AB	790'	X-180	AA/21b	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR THERMO-LAG COVERAGE OF AN ESSENTIAL CABLE TRAY WHERE A 4" VD LINE PREVENTS FULL THICKNESS 330-1 PANEL INSTALLATION ON TOP OF THE TRAY. RESOLUTION: INSTALL 330-1 FLAT PANEL ON TOP OF TRIM, WITH THICKNESS REDUCED AS REQUIRED TO AVOID THE VD LINE. A SECOND THICKNESS OF 330-1 FLAT PANEL IS TO BE USED IN THE IMMEDIATE AREA OF THE INTERFERENCE, INSTALLED BENEATH THE REDUCED PORTION AND ATTACHED.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 54

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
102932/5 AS MODIFIED BY DCN 5742 REV. 1 (MINOR MODIFICATION 93-125) 103912/0	SG	810'	2-082	2SB/8	Y	Y	ISSUE 1: INSUFFICIENT CLEARANCE BETWEEN 30" WIDE CABLE TRAY BOTTOM AND INSULATED 2" DIA. PIPE TO INSTALL PANELS IN LOCALIZED AREA OF TRAY BOTTOM. DCA 103912 ADDRESSES AN INTERFERENCE TO THE COVERAGE ON THE 2" CH LINE DIRECTLY BELOW THE ESSENTIAL TRAY BY ANOTHER 2" CH. ISSUE 2: REQUEST DIRECTION FOR PROTECTING CABLE AIR DROPS BETWEEN VERTICAL AND HORIZONTAL 30" WIDE TRAYS WHICH BOTH REQUIRE PROTECTION. RESOLUTION 1: INTERRUPT 330-1 "V"-RIBBED PANEL COVERAGE ON TRAY BOTTOM IMMEDIATELY AT PIPING INTERFERENCE AND INSTALL 2 LAYERS OF 330-660 FLEXI-BLANKET UNDER CABLES. OVERLAP 330-1 PANEL COVERAGE ON TRAY BOTTOM BY 9"-11". WRAP PIPING WITH 330-70 CERAMIC BLANKET THEN WITH STAINLESS STEEL JACKET. FINALLY, WRAP 2 LAYERS OF 330-660 AROUND THE STAINLESS STEEL JACKET, SECURE TO THE 330-1 PANELS ON TRAY UNDERSIDE AND BUTT ADDITIONAL 330-1 PANELS UP TO THE FLEXI-BLANKET AND BAND TO TRAY. FILL GAPS WITH TROWEL GRADE. MODIFY THE COVERAGE ON THE 2" CH LINE JUST BELOW THE ESSENTIAL TRAY SO THAT PIPE INSULATION CAN BE INSTALLED ON THE 2ND CH PIPE (DCA 103912)	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	43

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
102932/5 (CONT'D)							RESOLUTION 2: INSTALL A BOX CONFIGURATION WHICH INCLUDES 2 LAYERS INSTALLED CONSISTENT WITH DOUBLE LAYER COVERAGE ON JBs. ALL JOINTS ON BOTH LAYERS ARE EITHER TIE WIRED TOGETHER OR UTILIZE THE SCORE AND FOLD METHOD THEN UPGRADED WITH STRESS SKIN. THE FIRST LAYER BOTTOM PANEL IS TIE WIRED TO THE TRAY RUNGS AND THE FIRST LAYER COVERAGE IS ATTACHED TO THE WALL WITH SELF TAPPING SCREWS.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	43
103001/0	SG	885'	2-109B	2SK17C	Y	Y	ISSUE: INSUFFICIENT CLEARANCE EXISTS BETWEEN 330-1 PRESHAPE CONDUIT SECTIONS (1/4", 1/2") AND WALL, PREVENTING PROPER INSTALLATION OF FLEXI-BLANKET OVERLAP AT RIGID CONDUIT/FLEX CONDUIT INTERFACE. RESOLUTION: INSTALL FLEXI-BLANKET WRAP WHERE POSSIBLE. BUTT FLEXI-BLANKET AGAINST WALL AND PROVIDE A TROWEL GRADE FILLET.	11-1	1-5, 28

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103013/6	SG	810'	2-082	2SB/8	Y	Y	ISSUE: CABLE AIR DROPS FROM A BANK OF EMBEDDED SLEEVES ENTER 3 HORIZONTAL CABLE TRAY SEGMENTS ABOVE 2 SW PIPING RUNS. THE CABLES THEN EXIT THESE TRAY SEGMENTS AND AIR DROP DOWN INTO A HORIZONTAL CABLE TRAY RUN BELOW THE SW PIPING. FINALLY, PROTRUDING NON-ESSENTIAL CABLES AIR DROP OUT OF THE END OF THE BOTTOM TRAY. ENGINEERING DIRECTION IS REQUIRED FOR THIS CONFIGURATION. RESOLUTION: WRAP THE CABLE AIR DROPS FROM THE EMBEDDED SLEEVES TO THE CABLE TRAY SEGMENTS WITH 330-660 FLEXI-BLANKET. INSTALL 330-1 PANELS ON THE TRAY SEGMENTS PER SPEC. REQUIREMENTS. CONSTRUCT A 12" WIDE BY 43" LONG BY 6" HIGH "CURB" VERTICAL EXTENSION OF THE PROTECTIVE ENVELOPE ON THE LOWER ELEVATION TRAY. WRAP THE AIR DROP CABLE BUNDLES BETWEEN THE UPPER ELEVATION TRAY SEGMENTS WITH 330-660 AND EMBED WITHIN THE CURB EXTENSION OF THE TRAY ENVELOPE WITH 330-660 TROWEL GRADE. WRAP THE PROTRUDING CABLES AT THE TRAY END WITH 330-660.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103046/2	SG	810'	2-082	2SB8	Y	Y	ISSUE: THE NON-ESSENTIAL AIR DROPS FROM AN ESSENTIAL TRAY CANNOT BE COVERED WITH THERMO-LAG IN ACCORDANCE WITH TYPICAL DETAILS BECAUSE THE AIR DROPS RUN PARALLEL ALONG THE TOP OF THE TRAY PREVENTING THE COMPLETE WRAPPING OF THE AIR DROP WITH 330-660 FLEXI-BLANKET BECAUSE OF THE INTERFERENCE BY THE 330-1 PANELS ON TOP OF THE TRAY. ALSO STRESS SKIN CANNOT BE INSTALLED BECAUSE THERE ARE 3 AIR DROPS TOO CLOSE TOGETHER AND TOO NEAR THE EDGE OF THE TRAY. RESOLUTION: WRAP THE CABLE BUNDLES TO THE EXTENT POSSIBLE BUTTING THE FLEXI-BLANKET TO THE 330-1 PANEL ON TOP OF THE TRAY BANDING THE BUNDLES IN PLACE AND TO THE TRAY. TROWEL GRADE BUILDUP SHALL BE INSTALLED AT THE FLEXI-BLANKET 330-1 INTERFACE. THE INSTALLATION OF STRESS SKIN AND TIE WIRES FOR THE LONGITUDINAL JOINTS SHALL BE INSTALLED TO THE EXTENT POSSIBLE. THIS AFFECTS ABOUT 2' LONG AREA ON TOP THE TRAY AND STILL MAINTAINS AT LEAST 1-1/2" OVERLAP OF THE JOINT AND A MAXIMUM TIE WIRE SPACING OF 10".	11-1	1-5, 45

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103056/1	SB	832'	2-094	2SB15	Y	Y	ISSUE: FLEX CONDUIT HAS NUMEROUS OBSTRUCTIONS WHERE IT PENETRATES THROUGH A BLOCKOUT WHICH PREVENTS THE INSTALLATION OF 330-660 FLEXI-BLANKET ONTO THE CONDUIT. RESOLUTION: A BOX WAS BUILT AROUND THE FLEX CONDUIT AT THE WALL AND EXTENDED OUT PAST THE INTERFERENCES SO THAT THERMO-LAG CAN BE INSTALLED ON THE FLEX CONDUIT. THE BOX WAS CONSTRUCTED OF 330-1 PANELS AND FILLED WITH TROWEL GRADE SO THERE IS A MINIMUM OF 3/4" OF COVERAGE ON THE 2" DIA. FLEX CONDUIT. WHERE THE FLEX CONDUITS EXIT THE BOX, CONDUIT HALF ROUNDS ARE INSTALLED, THEN A COMBINATION OF HALF ROUNDS AND FLEXI-BLANKET. THE 2" DIA. FLEX CONDUIT AT THE CONCRETE WALL IS PROVIDED WITH 3 LAYERS OF FLEXI-BLANKET TO THE EXTENT POSSIBLE, THEN BUTTED TO THE WALL WITH TROWEL GRADE IN AIR GAPS AND AT FLEXI-BLANKET TO WALL INTERFACES.	11-1, 1-2	1-6, 61
103061/1	SG	832'	2-094	2SB/15	Y	Y	ISSUE: CONSTRUCTION REQUEST INSTALLATION DETAIL FOR ADJACENT CONDUIT PRESHAPE/FLEXI-BLANKET INTERFACE WITH INADEQUATE SEPARATION. RESOLUTION: DEVELOP TYPICAL DETAILS 7-7, 7-7.1.	11-1	1-5, 40

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103184/1 103192/1 103681/1	SG	832'	2-088	2SB/144	Y	Y	ISSUE 1: DCA 103184/1. CONGESTION AT JUNCTION BOX JB2S5312G AND CONDUITS DUE TO FIRE ZONE "R" CABLES AND OTHER PROTRUDING ITEMS INTERFERES WITH PROTECTIVE ENCLOSURE INSTALLATION. (NOTE: THIS DCA WAS SUPERSEDED BY DCA 103681) ISSUE 2: DCA 103192/1. CLOSE PROXIMITY OF FIRE ZONE "R" CABLES TO CONDUIT ENTRANCE TO JUNCTION BOX JB2S5386G INTERFERES WITH PROTECTIVE ENCLOSURE INSTALLATION. (NOTE: THIS DCA WAS SUPERSEDED BY DCA 103681) ISSUE 3: CLEARANCE BETWEEN JUNCTION BOXES JB2S5312G AND JB2S5386G (SEE ISSUED 1 AND 2 ABOVE) DOES NOT ALLOW INSTALLATION OF 330-1 V-RIBBED PANELS OVER 330-1 FLAT PANEL. RESOLUTION 1, 2 & 3: FIRE STOP THE FIRE ZONE "R" CABLE AT BOTH JUNCTION BOXES. PROTECT BOTH JUNCTION BOXES WITH COMMON ENCLOSURE.	1-2, 10-1, 10-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 38

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103277/1	SG	832'	96	SE16	Y	Y	ISSUE: THE SUPPORT FRAME TO PROVIDE COVERAGE OF ESSENTIAL CABLES FROM TWO CONTAINMENT PENETRATIONS TO A JUNCTION BOX CANNOT BE INSTALLED PER TYPICAL DETAIL 7-4 DUE TO THE UNIQUE CONFIGURATION AND THE LACK OF ADEQUATE ATTACHMENT POINT AT THE JUNCTION BOX. RESOLUTION: FABRICATE TWO METAL SLEEVES WHICH ARE ATTACHED TO THE JUNCTION BOX WHICH WILL ALLOW THE SUPPORT FRAMING TO BE INSTALLED PER TYPICAL DETAIL 7-4. THEN THE THERMO-LAG CAN BE INSTALLED FOR PER TYPICAL DETAIL 7-3.	11-1	1-5, 44
103305/1	SB	832	2-094	2SB/15	Y	Y	ISSUE: AIR DROP CABLE RADIUS FROM CONDUIT TO CABLE TRAY IS TOO TIGHT TO WRAP WITH FLEXI-BLANKET. RESOLUTION: CONSTRUCT BOX ON CABLE TRAY AND CONSTRUCT TEE SECTION AT CONDUIT, THEN WRAP FLEXI-BLANKET ON CABLES IN BETWEEN.	10-1, 11-1	1-5, 62

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103406/1	SB	852'	103	2SE18	Y	Y	ISSUE: THIS IS A SITUATION WHERE THE ARRANGEMENT DOES NOT ALLOW FOR THE COVERAGE OF AN AIR DROP FROM A CONTAINMENT PENETRATION TO A CABLE TRAY IN ACCORDANCE WITH TYPICAL DETAILS. RESOLUTION: A SLEEVE IS INSTALLED IN THE END OF THE TRAY SO THAT THE SUPPORT FRAME CAN BE INSTALLED IN A MANNER CONSISTENT WITH DETAIL 7-4. AN ELASTOMER FIRE SEAL IS INSTALLED BETWEEN THE SLEEVE AND TRAY TO HOLD THE SLEEVE IN PLACE AND PROVIDE A POINT FOR ATTACHMENT. THE FRAMING IS THEN COVERED WITH FLEXI-BLANKET CONSISTENT WITH THE SPECIFICATION AND DETAIL 7-3.	11-1	1-5, 44
103408/1	AB	810'	X-207	AA/21b	Y	Y	ISSUE 1: DUE TO PROTRUDING AIR DROP FROM TRAY THE BOX FOR ESSENTIAL CONDUIT CANNOT BE INSTALLED. ISSUE 2: DUE TO PROXIMITY OF CONDUITS AND TRAY, CONSTRUCTION REQUESTS TO INSTALL DIFFERENT BOX. RESOLUTION 1 & 2: INSTALL BOX PER DETAIL 12-2.		1-5, 55

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103409/5	SG	852'	2-100F	2SK/17A	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLATION OF REMOVABLE COVER ASSEMBLY FOR PRESSURE TRANSMITTER. RESOLUTION: CONSTRUCT A STEEL FRAMEWORK AROUND THE PT AS SHOWN USING 1 1/2" X 1 1/2" X 1/4" ANGLE IRON. PROVIDE 2 LAYERS OF FLAT 330-1 PANELS AROUND THE FRAMEWORK AND SECURE WITH TIE WIRES. ALL JOINTS SHALL BE STITCHED AND REINFORCED WITH STRESS SKIN AND TROWEL GRADE BUILDUP. THE "BOX" ENCLOSURE SHALL BE FITTED WITH A DOUBLE LAYER LIP ASSEMBLY TO RECEIVE AND HOLD THE COVER ASSEMBLY IN PLACE. THE COVER SHALL ALSO BE FABRICATED WITH 2 LAYERS OF PANELS. THE MAXIMUM ALLOWABLE GAP BETWEEN COVER AND LIP SHALL BE 3/32". SECURE THE COVER WITH TURNBUCKLE ASSEMBLIES. COVER THE PROTRUDING FLEX-CONDUIT WITH FLEXI-BLANKET AND COVER THE TUBING WITH CONDUIT HALF ROUND AND FILL WITH CERAMIC FIBER.	10-1, 11-1	1-6, 11

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103472/1 AND 103489/1 BOTH AS MODIFIED BY DCN 5745 REV. 1 (MINOR MODIFICATION 93-123)	AB	810'	X-207	AA/21b	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR MULTIPLE CABLE AIR DROPS THROUGH EMBEDDED CONDUITS (SLEEVES) WHICH ENTER HORIZONTALLY STACKED CABLE TRAYS ROUTED IMMEDIATELY IN FRONT OF THE SLEEVES. RESOLUTION: CONSTRUCT THERMO-LAG 330-1 PANEL "BOX" ENCLOSURES TO ENVELOPE THE EMBEDDED SLEEVE BANK, ALL CABLE AIR DROPS AND THE PORTIONS OF THE STACKED CABLE TRAYS IMMEDIATELY IN FRONT OF THE SLEEVE BANK. ADD A SECOND LAYER OF THERMO-LAG TO THE "BOX" UTILIZING "V"-RIBBED PANELS. UPGRADE JOINTS PER TYP. J-BOX REQUIREMENTS. BUTT COVERAGE TO TUBE STEEL AND SPRINKLER PIPE INTERFERENCES SEALING OFF OPENINGS IN COVERAGE WITH TROWEL GRADE OR PANELS.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 12
103486/0	EC	778'	X-115B	AA/154	Y	Y	ISSUE: CONSTRUCTION REQUESTS TYPICAL DETAILS FOR ADJACENT FLEX CONDUITS WITH INADEQUATE SEPARATION. RESOLUTION: DEVELOP TYPICAL DETAILS 8-4.	11-1	1-5, 39

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103487/0	AB	810'	X-207	AA/21B	Y	Y	ISSUE: A VERTICAL CABLE TRAY IS INSTALLED 3" FROM THE WALL. TWO CABLE BUNDLES EXIT THE TRAY AND ENTER 2 SLEEVES EMBEDDED IN THE CEILING, REQUEST DIRECTION FOR COVERAGE. ALSO, AN INSTRUMENT LINE CROSSES UNDER THE TRAY WITH A 1/2" CLEARANCE UNDER THE TRAY SIDE RAILS. RESOLUTION: COVER THE TRAY PER TYPICAL DETAIL 13-2 SECURED TO THE WALL WITH HILTI BOLTS PER DETAIL 1-5. COVER THE INSTRUMENT LINE AND TUBE TRACK FOR 9" DISTANCE (MIN.) AS PROTRUDING ITEM. ALL JOINTS OF THE BOX CONFIGURATION AND FLARE OUT (FOR HILTI ATTACHMENT) SHALL BE REINFORCED WITH TIE WIRES (THROUGH STRESS SKIN) AND OVERLAPPED WITH EXTERNAL STRESS SKIN/TROWEL GRADE BUILDUP.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 37

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103533/0	AB	790'	X-174	AA/21a	N	Y	ISSUE 1: UPPER CABLE TRAY INTERFERES WITH INSTALLATION OF AIR DROP ENVELOPE FROM LOWER CABLE TRAY TO CONDUIT. ISSUE 2: INSTRUMENT TUBING TRAY INTERFERES WITH CONDUIT SUPPORT THERMO-LAG INSTALLATION FOR 9" RULE (i.e., < 7/16"CLEARANCE BETWEEN BOTTOM OF SUPPORT AND TOP OF INSTRUMENT TUBING TRAY - THICKNESS DEVIATION).		
							RESOLUTION 1: MODIFY UPPER CABLE TRAY PROTECTIVE ENCLOSURE BY REMOVING 8-1/2" TO 11-1/2" LENGTH OF PANEL ACROSS ENTIRE BOTTOM WIDTH OF ENCLOSURE. INSTALL PROTECTIVE ENVELOPE ON CONDUIT. SHIM SOUTHERN MOST PORTION OF CABLE TRAY ENCLOSURE ≈ 3/4" TO 1-1/4" PAST END OF CONDUIT ENCLOSURE. BOX IN AIR DROP BETWEEN UPPER AND LOWER CABLE TRAY. BOX COMMUNICATES UPPER AND LOWER CABLE TRAY VIA 8-1/2" TO 11-1/2" OPENING.	1-2, 9-1, 10-1, 10-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 25
							RESOLUTION 2: INSTALL STANDARD THERMO-LAG COVERAGE EXCEPT DOUBLE LAYER 330-1 PANELS ON BOTTOM OF SUPPORT.	9-1, 10-1, 10-2	1-5, 26

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103550/1	AB	790'	X-180	AA/21a	Y	Y	ISSUE 1: CONSTRUCTION REQUIRED DIRECTION ON THE COVERAGE OF AIR DROP WHICH INCLUDES 3 TRAYS. ISSUE 2: PIPE INTERFERES WITH PROPER INSTALLATION OF PROTECTIVE ENCLOSURE FOR CABLE TRAY. RESOLUTION 1 & 2: AIR DROPS BETWEEN ESSENTIAL TRAYS ARE WRAPPED WITH FLEXI-BLANKET, INSTALLED IN FIRE STOP MATERIAL WITHIN CABLE TRAY, WITH 330-1 PANEL CAP INSTALLED IN END OF CABLE TRAYS. CABLE TRAY PROTECTIVE ENVELOPE IN VICINITY OF PIPE INTERFERENCE IS MODIFIED BY INSTALLING 330-1 PANELS INSIDE CABLE TRAY IN ACCORDANCE WITH UPGRADE REQUIREMENTS.	11-1	1-5, 27

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103551/2	AB	790'	X-180	AA/21a	Y	Y	ISSUE: THIS DCA DEALS WITH 4 SEPARATE PROBLEMS: •PROBLEM 1 HAS A SUPPORT ROD WHICH INTERFERES WITH THE COVERAGE ON THE SIDE OF AN ESSENTIAL TRAY. • PROBLEM 2 HAS AN INSULATED PIPE WHICH INTERFERES WITH THE COVERAGE ON THE SIDE OF AN ESSENTIAL TRAY, TRAY SPLICE PLATES WHICH EXTEND ABOVE AND BELOW TRAY WHICH INTERFERES WITH TRAY COVERAGE, ESSENTIAL CABLES ABOVE THE TRAY SIDE RAILS WHERE TRAY GOES DOWN UNDER CONCRETE BEAM AND A GROUNDING CABLE WHICH INTERFERES WITH COVERAGE AND UNIT 1 FLEXI-BLANKET INTERFERES WITH TRAY COVERAGE. • PROBLEMS 3 AND 4 HAVE UNIT 1 THERMO-LAG COVERAGE ON PROTRUDING CABLE TRAY SUPPORT WHICH INTERFERES WITH THE COVERAGE ON A UNIT 2 TRAY. ALSO A 1-1/2" FW LINE INTERFERES WITH COVERAGE ON THE PROTRUDING ITEM COVERAGE ON THE TRAY SUPPORT STEEL.		

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103551/2 (CONT'D)							RESOLUTION: PROBLEM 1: BUTT TRAY COVERAGE UP TO THE ROD AND INSTALL AN ADDITIONAL PANEL ON THE SIDE OVER THE ROD. INSTALL 1/2" THICK CONDUIT HALF ROUNDS CUT DOWN TO FIT TIGHT TO THE ROD ABOVE AND BELOW THE TRAY EXTENDING 5" TO 6" PAST TRAY COVERAGE. USE STRESS SKIN TO REINFORCE HALF ROUND TO TRAY INTERFACE. FILL ALL AIR GAPS WITH TROWEL GRADE. PROBLEM 2: CUT DOWN SPLICE PLATES AND RELOCATE GROUNDING CABLE TO ALLOW FOR STANDARD TRAY COVERAGE CUT BACK INSULATION ON THE PIPE TO THE MINIMUM REQUIRED TO GIVE AS MUCH ROOM AS POSSIBLE FOR INSTALLING THERMO-LAG. COMPENSATE FOR MINOR COVERAGE REDUCTION BY INSTALLING ADDITIONAL 330-1 PANELS INSIDE THE TRAY. COVER CABLES LOCATED ABOVE THE TRAY BY EXTENDING TRAY COVERAGE USING DOUBLE THICK COVERAGE ON THE SIDES TIE WIRED TOGETHER. COMPENSATE FOR NOT BEING ABLE TO INSTALL STRESS SKIN UPGRADE IN A COUPLE OF AREAS BY TIE WIRING TOGETHER THE LONGITUDINAL JOINTS. BUTT UNIT 2 THERMO-LAG TO UNIT 1 FLEXI-BLANKET.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 66

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103551/2 (CONT'D)							PROBLEMS 3 AND 4: REMOVE THE UNIT 1 THERMO-LAG AS NECESSARY TO GET STANDARD COVERAGE ON THE UNIT 2 COMMODITY THEN REINSTALL UNIT 1 THERMO-LAG . INSTALL COVERAGE ON THE SUPPORT STEEL AS CLOSE TO THE FW LINE AS POSSIBLE REDUCING THICKNESS AS NECESSARY TO ACHIEVE AN AIR GAP. INSTALL A SECOND LAYER OF THERMO-LAG IN THIS AREA TO COMPENSATE FOR THE REDUCED THICKNESS.		
103567/1	SB	790'	2-070	2SB4	Y	Y	ISSUE: PROVIDE PROTECTION FOR CABLE AIR DROP FROM CABLE TRAY T23GSCE01 TO THE WALL PENETRATION. RESOLUTION: INSTALL 330-1 "V" RIB PANEL ON CABLE TRAY T23GSCE01 AND ON THE CABLE TRAY PROTRUDING FROM THE WALL PENETRATION AT COLUMN 9-A. WRAP THE CABLE AIR DROP IN TWO LAYERS OF 330-660 FLEXI-BLANKET PER DETAIL 5-12.	11-1	1-6, 52

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103575/0 AS MODIFIED BY DCN 5727 (MINOR MODIFICATION 93-124)	AB	832'	X-226	AA21d	Y	N	ISSUE 1: THERMO-LAG COVERAGE IS REQUIRED ON CABLES AIR DROPPING FROM CABLE TRAY T240ADA79 TO T240AF003. ISSUE 2: A NON-ESSENTIAL TRAY IS LOCATED WITHIN A 9" DISTANCE OF ESSENTIAL TRAY T-240ADA78. RESOLUTION 1: CONSTRUCT A BOX FROM TRAY T240ADA79 TO T240AF003 ENCOMPASSING THE CABLE AIR DROPS. INSTALL A FIRE STOP AT THE END OF TRAY T240AF003 TO PROVIDE A SEALED ENCLOSURE. ADD A SECOND LAYER TO THE "BOX" PER THE REQUIREMENTS FOR JBs. RESOLUTION 2: INSTALL THERMO-LAG IN ACCORDANCE WITH TYPICAL DETAIL 14-1.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 24
103582/0	AB	790'	X-180	AA/21a	Y	Y	ISSUE: TWO SPRINKLER HEADS PREVENT PROPER INSTALLATION OF BOTTOM PANEL FOR CABLE TRAY PROTECTIVE ENVELOPE. RESOLUTION: INSTALL 330-1 FLAT BOARD ON BOTTOM OF CABLE TRAY AND INSIDE CABLE TRAY. CHAMFOR BOTTOM BOARD TO ALLOW INSTALLATION OF FLAT BOARD AROUND THE SPRINKLER HEAD.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 31
103589/0	AUX	831'-6"	X-219	AA/21D	Y	Y	ISSUE: CONSTRUCTION IS UNABLE TO INSTALL THERMO-LAG ON 24" WIDE CABLE TRAY PER SPEC. DUE TO KELLUM GRIPS INSTALLED ON CABLES. RESOLUTION: ENCLOSE TRAY AREA AND KELLUM GRIPS WHICH EXTEND ABOVE SIDE RAILS.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 70

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103600/2	SB	810'	2-083	2SD/9	Y	Y	ISSUE: PROTECTIVE ENVELOPE INSTALLATION FOR VERTICAL CABLE TRAY AND AIR DROPS AT CEILING IS NOT COMPLETE DUE TO RECESSED SPARE EMBEDDED SLEEVE. RESOLUTION: FILL RECESS OF SPARE SLEEVE WITH 330-1 TROWEL GRADE FLUSH WITH BARRIER SURFACE. EXTEND THERMO-LAG OVER AIR DROP TO BARRIER. UPGRADE ALL JOINTS WITH STRESS SKIN, STAPLES AND STITCHING, FLANGE THERMO-LAG TO WALL OR CEILING USING SCORE AND FOLD METHOD AND HILTI BOLT PER DETAIL 1-5. THE BARRIER THAT IS NOT HILTI BOLTED OR MAY BE BUTTED TO THE BARRIER WITH DETAIL 11-7.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 53

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103624/2	AB	790'	X-180	AA/21a	Y	Y	ISSUE 1: ESSENTIAL CABLES AIR DROPPING FROM 3 THROUGH WALL SLEEVES (TWS) LOCATED IN A BANK OF SLEEVES CANNOT BE COVERED PER TYPICAL DETAILS DUE TO INSUFFICIENT ROOM, CABLE RIGIDITY AND THE QUICK REDUCTION IN SIZE FROM EACH OF THE TWS TO THE AIR DROP BUNDLES. RESOLUTION: REMOVE A CABLE TRAY RUNG WHERE THE AIR DROP FROM THE EXTENDED LENGTH WALL SLEEVE ENTERS THROUGH THE BOTTOM OF THE CABLE TRAY TO PROVIDE SUFFICIENT SLACK ON THE CABLES SO THAT FLEXI-BLANKET CAN BE INSTALLED ON THE AIR DROP IN ACCORDANCE WITH TYPICAL DETAILS. COVER THE EXTENDED LENGTH SLEEVE WITH 330-1 CONDUIT HALF ROUNDS. INSTALL FLEXI-BLANKET ON THE OTHER 2 ESSENTIAL AIR DROPS AND EXTEND COVERAGE INTO THE END OF THE TRAY FAR ENOUGH SO THAT A FIRE STOP CAN BE INSTALLED AROUND THE FLEXI-BLANKET WRAPPED BUNDLES IN THE TRAY. BUTT COVERAGE OF ALL 3 AIR DROPS TO THE TWS THEN ADD A FLEXI-BLANKET COLLAR WHICH COMPLETELY COVERS THE 2 SHORT TWS AND OVERLAPS 2" TO 4" ON THE 330-1 COVERAGE ON THE LONG SLEEVE AND THE FLEXI-BLANKET COVERAGE ON ALL 3 AIR DROPS.	11-1	1-5, 35

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103634/2	SG	810'	2-083	2SD/9	Y	N	ISSUE: EXISTING CONFIGURATION OF 2 LARGE ADJACENT J-BOXES DOES NOT ALLOW BANDING TO BE WRAPPED CIRCUMFERENTIALLY AROUND BOXES FOR ADDITION OF SECOND LAYER OF 330-1 PANELS. RESOLUTION: ATTACH BANDING TO STEEL ANGLE WHICH SHALL BE BOLTED TO THE WALL ABOVE AND BELOW THE J-BOXES.	10-1, 10-2, 1-2, 14-1	1-6, 13
103670/0	AB	810'	207	AA/21b	Y	Y	ISSUE: THE HVAC OVER THE ESSENTIAL TRAY WAS TOO CLOSE TO ALLOW THE INSTALLATION OF THERMO-LAG ON THE TRAY. RESOLUTION: THE HVAC WAS TRIMMED SUFFICIENTLY TO ALLOW STANDARD COVERAGE BY 330-1 PANELS ON THE TRAY WHERE THIS COULD BE DONE. AT THE HVAC SUPPORT THE TRAY WAS NOTCHED. THE RESULT WAS THAT A 4' LONG AREA REQUIRED UNIQUE COVERAGE. FLAT PANELS WERE USED IN THE AREA WITH ALL JOINTS EITHER SCORE AND FOLD OR STITCHED WITH TIE WIRE. THERE IS NOT SUFFICIENT ROOM TO INSTALL STRESS SKIN AND TROWEL GRADE ON THE LONGITUDINAL JOINTS. ALSO IN THE AREA WHERE THE TRAY IS NOTCHED THE CABLES ARE NEAR THE THERMO-LAG 330-1 PANEL COVERAGE SO A 330-660 FLEXI-BLANKET IS INSTALLED BETWEEN THE PANEL AND THE CABLES TO ENSURE THAT THERE IS SEPARATION.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1	1-5, 51

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103680/1 AS MODIFIED BY DCN 5745 REV. 1 (MINOR MODIFICATION 93-123)	AB	810'	X-207	AA/21b	Y	Y	ISSUE 1: INSUFFICIENT CLEARANCE BETWEEN WALL SLEEVES AND BOTTOM OF JUNCTION BOX PREVENTS INSTALLATION OF PROTECTIVE ENVELOPE IN ACCORDANCE WITH STANDARD DETAILS. ISSUE 2: OVER FILL OF CABLES AT END OF TRAY FROM THROUGH WALL SLEEVES (TWS) PREVENT INSTALLATION OF PROTECTIVE ENVELOPE IN ACCORDANCE WITH STANDARD DETAILS. RESOLUTION 1 & 2: PROTECT CABLE TRAY, TWS, AND JUNCTION BOXES AS COMMON ENCLOSURE. PROVIDE 2 LAYERS OF 330-1 PANELS PER THE JUNCTION BOX COVERAGE REQUIREMENTS.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 34
103701/0 AS MODIFIED BY DCN 5727 REV. 1 (MINOR MODIFICATION 93-124)	AB	832'	219	AA/21d	Y	Y	ISSUE: CABLES AIR DROPPING FROM CEILING SLEEVES TO HORIZONTAL CABLE TRAY CANNOT BE WRAPPED PER TYPICAL DETAILS DUE TO INADEQUATE CLEARANCE BETWEEN SLEEVES, AIR DROP CABLE ARRAY AND INTERFERENCE FROM A FIRE PROTECTION SPRINKLER PIPE. RESOLUTION: MOVE THE FIRE PROTECTION PIPE AND INSTALL A BOX AROUND THE AIR DROP EXTENDING FROM THE CEILING DOWN THE TRAY. ADD A SECOND LAYER TO THE BOX ACCORDANCE WITH THE REQUIREMENTS FOR JBs. HILTI-BOLT THE FIRST LAYER TO THE CEILING AND SCORE AND FOLD OR TIE WIRE TOGETHER ALL JOINTS AND REINFORCE WITH STRESS SKIN.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 69

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103740/1	AB	790'	180	AA/21a	Y	Y	ISSUE: THERE ARE 4 DIFFERENT OBSTRUCTIONS TO STANDARD COVERAGE ON AN ESSENTIAL CABLE TRAY. THERE IS AN HVAC FLANGE AND A FLANGE ON A FIRE PROTECTION PIPE WHICH EXTEND INTO THE TRAY. THERE IS AN HVAC SUPPORT TOO CLOSE TO THE TOP OF THE TRAY TO ALLOW COVERAGE AND THERE IS AN HVAC FLANGE WHICH INTERFERES WITH SPLICE PLATE COVERAGE. RESOLUTION: WHERE THE FIRE PROTECTION PIPE FLANGE EXTENDS BELOW THE TOP OF THE TRAY THE V-RIB BOARD IS CUT OUT AROUND THE FLANGE, FLAT PANEL IS INSTALLED BELOW THE V-RIB PANEL, OVERLAPPING THE V-RIB PANEL AND SHIMS ARE INSTALLED BETWEEN THE V-RIB AND FLAT PANELS IF REQUIRED TO CLEAR THE FLANGE. ALL JOINTS ARE STITCHED WITH TIE WIRE AND UPGRADED WITH STRESS SKIN AND TROWEL GRADE. PREBANDS ARE MODIFIED TO SUPPORT PANEL ARRANGEMENT. WHERE THE HVAC SUPPORT SPANS THE TRAY JUST ABOVE THE SIDE RAILS WHERE THICKNESS OF COVERAGE CANNOT BE ATTAINED, TROWEL GRADE IS APPLIED THEN 330-1 PANELS ARE INSTALLED ON THE INSIDE OF THE TRAY AND OUT IN ALL DIRECTIONS SO THE METAL TRAY IS COVERED PER THE 9" RULE. INBETWEEN THE TRAY RAILS, A 330-1 PANEL WAS INSTALLED BELOW THE TOP OF THE TRAY AND BELOW THE ANGLE IRON AND STITCHED TO THE PANEL COVERING THE	1-2, 9-1, 10-1, 10-2, 11-1, 12-1, 12-2, 13-1, 14-1	1-5, 58

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103740/1 CONT'D							TOP OF THE TRAY. WHERE THE HVAC ANGLE EXTENDS INTO THE TRAY, FLAT PANEL IS INSTALLED BELOW THE V-RIB USING THE SAME METHODOLOGY USED AT THE FIRE PROTECTION FLANGE. WHERE THE HVAC INTERFERES WITH THE SPLICE PLATE COVERAGE THE COVERAGE WAS ACHIEVED BY COVERING THE SIDE WITH FLAT PANEL NOTCHING THE PANEL AND PLACING A PANEL BLOCK INSIDE THE COVERAGE AT THE NOTCH TO MAINTAIN THICKNESS.		
103792/0	AB	852'	X-241	AA/21f	Y	Y	ISSUE: GROUND CLAMP AND GROUND CABLE INSTALLED ON RADIAL BEN OF 4" CONDUIT INTERFERES WITH STRESS SKIN/TROWEL GRADE UPGRADE. RESOLUTION: INSTALL STRESS SKIN/TROWEL GRADE BUILDUP ON RADIAL BEND TO THE EXTENT POSSIBLE. WRAP STRESS SKIN ON GROUND CABLE, FLARE OUT ON RADIAL BEND, AND STAPLE/TROWEL GRADE BUILDUP STRESS SKIN.	9-1	1-5, 33
103847/0	SG	832'	2-094	2SB15	Y	Y	ISSUE: AFTER INSTALLATION OF 330-1 FLAT BOARD ON JUNCTION BOXES, INSUFFICIENT CLEARANCE EXISTS BETWEEN JUNCTION BOXES FOR INSTALLATION OF 330-1 "V"-RIBBED PANELS. RESOLUTION: INSTALL COMMON ENVELOPE FOR BOTH JUNCTION BOXES.	10-1, 10-2	1-5, 32

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103855/1	SB	832'	96	2SE16	Y	Y	ISSUE: THERE IS AN INTERFERENCE FROM A TUBE STEEL SUPPORT WHICH PREVENTS COVERAGE OF THE AIR DROP FROM THE CONTAINMENT PENETRATION TO THE CABLE TRAY IN ACCORDANCE WITH STANDARD DETAILS 7-3 AND 7-4. RESOLUTION: PROVIDE SLEEVES AT BOTH THE CONTAINMENT PENETRATION AND AT THE CABLE TRAY SO THAT THERMO-LAG CAN BE INSTALLED IN ACCORDANCE WITH TYPICAL DETAILS 7-3 AND 7-4.	11-1	1-5, 44
103862/0	AB	810'	X-207	AA/21b	Y	Y	ISSUE: RADIAX CABLE INTERFERES WITH BOTTOM PANEL THERMO-LAG INSTALLATION ON CABLE TRAY T230ACG70, AND A COMPONENT COOLING WATER LINE INTERFERES WITHSIDE RAIL COVERAGE ON CABLE TRAY T230ACG61. RESOLUTION: INSTALL A SLOTTED PANEL ON THE BOTTOM OF TRAY T230ACG70 TO ACCOMODATE THE RADIAX CABLE. INSTALL 330-1 PANEL ON TRAY BOTTOM OF TRAY OVER SLOT TO BLOCK ANY HEAT PATH. INSTALL NOTCHED SIDE PANEL TO ACCOMODATE 6-CC2-007-152-3. INSTALL 330-1 PANELS ON INSIDE OF TRAY ON SIDE RAIL.	1-2, 9-1, 12-1, 12-2, 13-1, 14-1	1-5, 46

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103874/1	SG	810'	2-079	2SB/8	Y	N	ISSUE 1: DUE TO A TUBE STEEL SUPPORT INTERFERENCE, STANDARD JUNCTION BOX SEAM UPGRADE CANNOT BE ACCOMPLISHED. ISSUE 2: DUE TO AIR DROPS ENTERING A CABLE TRAY, STANDARD CABLE TRAY SEAM UPGRADE CANNOT BE ACCOMPLISHED. RESOLUTION 1: CUT STRESS SKIN TO FIT AROUND INTERFERING SUPPORT. INCREASE STRESS SKIN DIMENSIONS TO ACCOMPLISH BANDING. RESOLUTION 2: INSTALL FLEXI-BLANKET COLLAR AND TROWEL GRADE/STRESS SKIN BUILDUP.	9-1, 10-1, 10-2, 11-1 11-1	22 22
103884/1 AS MODIFIED BY DCN 5745/1 (MINOR MODIFICATION 93-123)	AB	810' 832'	X-207 X-226	AA/21b AA/21d	Y	N	ISSUE: JB2A-301B AND CONDUIT C-24B41951 ARE IN CLOSE PROXIMITY TO A NON-ESSENTIAL TRAY AND VARIOUS OTHER COMMODITIES. RESOLUTION: BOX IN CONDUIT AND TRAY TOGETHER AND COVER ALL OTHER PROTRUDING COMMODITIES FOR A DISTANCE OF 9". ADD A SECOND LAYER TO THE "BOX" PER THE REQUIREMENTS FOR JBs.	1-2, 9-1, 10-1, 10-2, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 23

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103892/1	AB	852'	X-241	AA/21f	Y	Y	ISSUE: INSUFFICIENT CLEARANCE EXISTS FOR THERMO-LAG INSTALLATION DUE TO HVAC DUCTS AND SUPPORTS, A TOTAL OF 13 INTERFERENCES. RESOLUTION: INTERFERENCE 1, 2, 9, 11 AND 13 REQUIRED THE INSTALLATION OF 330-1 FLAT BOARD TRIMMED TO ALLOW INSTALLATION BETWEEN THE CABLE TRAY AND HANGER AND THE HVAC DUCT. ADD AN ADDITIONAL LAYER OF 330-1 PANELS FROM THE AREA THAT THE FIRST REQUIRES MODIFYING. INTERFERENCE 3 REQUIRES THE INSTALLATION OF 330-1 V-RIB PANELS ON THE SIDE OF THE TRAY WITH A 330-1 FLAT PANEL INSTALLED TO SPAN THE SPLICE PLATE. INTERFERENCE 4 REQUIRES THE INSTALLATION OF 330-1 ON THE SIDE OF THE TRAY IN THE VICINITY OF THE HVAC HANGER. INTERFERENCE 5A REQUIRES THE PROTECTIVE ENVELOPE TO BE MODIFIED AT THE CABLE TRAY HANGER CROSS CHANNEL REQUIRING NOTCHING OF THE BOTTOM PANEL AND REQUIRES THE CABLE TRAY HANGER TO BE WRAPPED AS A PROTRUDING ITEM WHERE THE 2 X 2 ANGLE SUPPORT INTERFERES WITH THE TOP COVER OF TRAY PROTECTIVE ENVELOPE. INTERFERENCES 5B AND 7 ARE NOT PROBLEMS AND SHOULD NOT HAVE BEEN IDENTIFIED. INTERFERENCE 6 REQUIRES THE 330-1 PANEL ON THE BOTTOM OF THE TRAY TO	1-2, 12-1, 12-2	1-5, 56

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
103892/1 CONT'D							BE TRIMMED TO ALLOW FOR HVAC INTERFERENCE. WHERE THE PANEL HAS BEEN TRIMMED ADD A SECOND 330-1 FLAT PANEL TIE WIRED TO FIRST. INTERFERENCE 8 REQUIRES INSTALLATION OF 330-1 FLAT PANEL AT FP PIPE SUPPORT AND ADDING 2ND PANELS AROUND THE INTERFERENCE IF THE PANEL NEEDED TO BE TRIMMED. INTERFERENCE 10 REQUIRES COVERAGE OF THE HVAC SUPPORT AS A PROTRUDING ITEM TO THE EXTENT POSSIBLE BUTTING UP TO THE HVAC DUCT. INTERFERENCE 12 REQUIRES THE SAME MODIFICATION AS INTERFERENCE 3.		
103935/0	AB	810'	X-207	AA/21b	Y	Y	ISSUE: CABLE TRAY PROTECTIVE ENCLOSURE CANNOT BE INSTALLED PER TYPICAL DETAIL DUE TO FLEX CONDUIT INTERFERENCE. IN ADDITION, FLEXI-BLANKET AIR DROP ENCLOSURE PER DETAIL 5-12 CANNOT BE INSTALLED DUE TO INTERFERENCE. RESOLUTION: INSTALL 330-1 FLAT BOARD ON SIDE RAIL OF CABLE TRAY WHERE INTERFERENCE OCCURS. EXTEND 330-1 PANEL PROTECTIVE ENVELOPE 2" TO 4" PAST END OF CABLE TRAY TO ALLOW INSTALLATION OF AIR DROP FLEXI-BLANKET.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 30

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
104048/0	EC	778'	X-115B	AA/154	Y	Y	ISSUE: COLLAR AS REQUIRED AT AIR DROP/CABLE TRAY PROTECTIVE ENVELOPE INTERFACE CANNOT BE ISTALLED PER TYPICAL DETAILS. RESOLUTION: INSTALL STRESS SKIN/TROWEL GRADE COLLAR AT INTERFACE; WHERE STRESS SKIN CANNOT BE INSTALLED FLUSH WITH FLEXI-BLANKET INSTALL 11/16" WFT BUILDUP OF 330-660 TROWEL GRADE.	11-1	1-5, 29
104060/0	EC	778'	X-115B	AA/154	Y	Y	ISSUE: INTERFERENCE CREATED BY INSTALLATION OF THERMO-LAG ON A CONDUIT PREVENTS INSTALLATION OF 330-1 PANEL MATERIAL ON A J-BOX PER SPEC. AND TYPICAL DETAILS. RESOLUTION: UTILIZE STRESS SKIN SECURED TO 330-1 PANELS ON THE J-BOX AND TROWEL GRADE BUILDUP IN LOCALIZED AREA OF INTERFERENCE.	10-2	1-6, 17

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
104078/0	AB	810'	X-207	AA/21b	Y	Y	ISSUE 1: CONSTRUCTION REQUESTS ONE TIME DEVIATION FROM TYPICAL DETAIL 8-3 TO UTILIZE FLAT 330-1 ON BOTTOM ON 12" WIDE CABLE TRAY FOR MAXIMUM LENGTH OF 24". ISSUE 2: WHILE USING DETAIL 8-3 TO INSTALL FLAT 330-1 PANEL ON THE BOTTOM OF A SEPARATE TRAY, ONE END OF THE PANEL BUTTS AGAINST A TRAY SUPPORT. CONSTRUCTION REQUEST DIRECTION. RESOLUTION 1: INSTALL FLAT PANELS TO MAX. LENGTH OF 24" TO CLEAR 24" DIA. PIPE. RESOLUTION 2: PROVIDE ADDITIONAL PIECE OF FLAT PANEL (2" HIGH) TO BUILD UP THICKNESS AT SUPPORT AND SECURE IN PLACE THE TIE WIRE.	9-1, 10-2	1-6, 20
104087/0	AB	810'	X-207	AA/21b	Y	Y	ISSUE: DUE TO CONDUIT SUPPORT AND PIPING INTERFERENCE, THERMO-LAG ENVELOPE ON A 12" WIDE CABLE TRAY CANNOT BE CONSTRUCTED PER SPEC. AND TYPICAL DETAILS. RESOLUTION: INSTALL 330-1 FLAT PANEL PIECE ON TRAY SIDERAIL AND EXTEND COVERAGE ONTO CONDUIT SUPPORT. ALSO, EXTEND TRAY ENVELOPE TO ENCLOSE INTERFERING PIPING FOR A DISTANCE OF 4" MIN. ON BOTH SIDES OF TRAY.	13-1	1-6, 16

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
I04194/0	AB	790'	X-180	AA/21a	Y	Y	ISSUE 1: AIR DROPS FROM THROUGH WALL SLEEVES (TWS) TO CABLE TRAY REQUIRE PROTECTION. ISSUE 2: INSUFFICIENT SPACE EXIST FOR AIR DROPS INTO TRAY. CANNOT INSTALL DETAIL 3-4. ISSUE 3: PIPE WILL HAVE 0" CLEARANCE AFTER PROTECTIVE ENCLOSURE IS INSTALLED. RESOLUTION 1 & 2: BOX IN TWS WITH TRAY PROTECTIVE ENVELOPE. RESOLUTION 3: STRESS SKIN MAY NOT BE ABLE TO BE INSTALLED DUE TO PIPE INTERFERENCE.	1-2, 10-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 63

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
104204/0	AUX	790'-6"	X-180	AA/21A	Y	Y	ISSUE: NEED ENGINEERING DIRECTION FOR THERMO-LAG COVERAGE AT TRANSITION POINT BETWEEN 2 TRAYS (30" AND 24").		
							RESOLUTION: ADD AN ADDITIONAL SUPPORT MEMBER TO PROVIDE SUPPORT FOR THERMO-LAG FLAT PANEL UNDERNEATH CABLES. UTILIZE 330-1 FLAT PANELS TO PROVIDE A THERMO-LAG ENVELOPE ACROSS THE AIR GAP BETWEEN THE TWO TRAYS AND ENCLOSE CABLES. PROVIDE 330-660 FLEXI-BLANKET SHIMS ON THE BOTTOM PANEL TO PREVENT CABLES FROM CONTACTING BOTTOM PANEL BACK SIDE. INSTALL BANDING BETWEEN EACH TRAY TO THE GUIDE INSTALLED ON THE NEW SUPPORT. THESE BANDS WILL SERVE AS AN INTERNAL FRAME WORK TO SUPPORT THE SIDE PIECES OF THE ENCLOSURE.	1-2, 14-1	1-5, 59

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
104217/2 AS MODIFIED BY DCN 5761 RE. 1 (MINOR MODIFICATION 93-126)	AB	790'	X-180	AA/21a	Y	Y	ISSUE 1: DUE TO CABLE FILL, AIR DROPS BETWEEN TRAYS (PERPENDICULAR TO ONE ANOTHER) CANNOT BE PROTECTED PER STANDARD INSTALLATION DETAIL. ISSUE 2: INSUFFICIENT CLEARANCE EXISTING BETWEEN WALL AND PROTECTED CONDUIT PREVENTS PROPER INSTALLATION OF AIR DROP PROTECTIVE ENVELOPE. RESOLUTION 1: BOX IN AIR DROPS BETWEEN TRAYS AND INCLUDE AIR DROPS AS PART OF COMMON PROTECTIVE ENVELOPE AT TRAY JUNCTION. ADD A SECOND LAYER OF THERMO-LAG TO THE "BOX" UTILIZING "V"-RIBBED PANELS PER JB COVERAGE REQUIREMENTS. RESOLUTION 2: INSTALL FIRST LAYER OF FLEXI-BLANKET COMPLETELY AROUND CONDUIT PROTECTIVE ENVELOPE. REMAINING TWO LAYERS WILL BE MODIFIED TO BUTT-UP AGAINST WALL UNTIL ADEQUATE CLEARANCE EXISTS TO ALLOW FULL WRAP. ALL SEAMS, AS WELL AS THE FLEXI-BLANKET/WALL INTERFACE, SHALL HAVE A BUILDUP OF 11/16" WFT 330-660 TROWEL GRADE MATERIAL.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1 11-1	1-5, 9 1-5, 28

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
104222/3	AB	790'	X-180	AA/21a	Y	Y	ISSUE: CABLE AIR DROPS BUNDLED WITH 330-660 MAY EXCEED HEIGHT OF CABLE SIDERAILS. ALSO, A PIPE SUPPORT IS WITHIN 4" OF THE CABLE TRAY SUPPORT AND THUS CREATES A SECONDARY INTERFERENCE TO THE 9" RULE COVERAGE ON THE SUPPORT. RESOLUTION: UTILIZE SHIM BLOCKS TO RAISE AND LOWER TRAY ENVELOPE FROM SIDE RAILS. SECURE 330-660 BUNDLES TO CABLE TRAY RUNGS WITH BANDING. UTILIZE STRESS SKIN AND TROWEL GRADE TO REINFORCE WHERE THE FLEXI-BLANKET COVERED CABLES ENTER THE TRAY COVERAGE. INSTALL DOUBLE LAYER OF 330-1 FLAT PANELS ON TRAY SUPPORT FOR PROTRUDING ITEM COVERAGE.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1	1-6, 14
104226/0	EC	788'	X-115B		Y	Y	ISSUE: AIR DROP BETWEEN CONDUIT AND THROUGH WALL SLEEVE (TWS) WAS PREVIOUSLY PROTECTED AS PROTRUDING ITEM BUT IS ACTUALLY ESSENTIAL. RESOLUTION: INSTALL A SMALL 330-1 PANEL BOX AROUND A TWS AND BUILD STRESS SKIN/TROWEL GRADE COLLAR WHERE FLEXI-BLANKET WRAPPED CABLES ENTER THE BOX.	11-1	1-5, 29

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
104251/0	EC	790'	113	EA/43	Y	Y	ISSUE: A LBD ON AN ESSENTIAL CONDUIT IS DIRECTLY CONNECTED TO AN ESSENTIAL JB AND BOTH ARE DIRECTLY UNDER A CONCRETE BEAM. ALSO A CONDUIT SUPPORT IS UP AGAINST THE LBD. RESOLUTION: WRAP THE JUNCTION BOX, LBD AND CONDUIT SUPPORT IN A COMMON ENCLOSURE BUTTING UP TO THE CONCRETE BEAM. COVERAGE IS THE SAME AS THE TESTED CONFIGURATION FOR JUNCTION BOXES WITH DOUBLE PANEL ENCLOSURE AND STRESS SKIN AND TROWEL GRADE REINFORCEMENT OF JOINTS AND PENETRATING CONDUITS. BOX IS BUTTED TO CONCRETE BEAM IN ACCORDANCE WITH TYPICAL DETAILS.	9-1, 10-1, 10-2	1-5, 67

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
104257/1	AB	832'	226	AA/21d	Y	Y	ISSUE: NON-ESSENTIAL CABLES AIR DROP OUT OF THE BOTTOM OF A JB THROUGH SHORT CONDUIT STUBS (APPROXIMATELY 3" LONG) PRESENTING A COVERAGE PROBLEM SINCE TYPICAL DETAILS ONLY ADDRESS RIGID AND FLEXIBLE CONDUIT COVERAGE. RESOLUTION: FIRE STOP THE CONDUIT STUBS EXTENDING INTO THE JB TO OBTAIN REQUIRED DEPTH. INSTALL STANDARD 2 PANEL THICK COVERAGE ON THE JB. EXTEND THE COVERAGE ON THE BOTTOM DOWN PAST THE ENDS OF THE SLEEVES USING THERMO-LAG SHIMS. INSTALL TROWEL GRADE TO SEAL OPENINGS BETWEEN PANELS AND BETWEEN PANELS AND SLEEVES AND TO FILL THE END OF THE SLEEVES. ATTACH THE SECOND LAYER COVERAGE TO THE WALL WITH HILTI-BOLTS TO ALLEVIATE THE EXTRA WEIGHT ON THE JB.	10-1, 10-2, 11-1, 12-2, 14-1	1-5, 65

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES B46-B65)
104265/0	EC	778'	113	EA/43	Y	Y	ISSUE: AN ESSENTIAL CONDUIT IS TOO CLOSE TO A NON-ESSENTIAL CONDUIT AND LBD WHERE IT RUNS UNDER A CONCRETE BEAM TO ALLOW FOR STANDARD COVERAGE ON THE CONDUIT. RESOLUTION: WRAP THE ESSENTIAL CONDUIT IN A COMMON ENCLOSURE WITH THE NON-ESSENTIAL CONDUIT AND LBD. BUTT THE BOX TO THE BEAM WHERE NECESSARY. CONSTRUCT THE BOX UTILIZING STANDARD LBD COVERAGE DETAILS AND STANDARD THERMO-LAG TO CONCRETE INTERFACE DETAILS. STITCH JOINTS WITH THE TIE WIRES IN MINOR AREAS WHERE STRESS SKIN UPGRADE CANNOT BE USED.	9-1, 10-1, 10-2	1-5, 68

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1.	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2.	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3.	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4.	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
5.	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6.	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATIONS EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).	GENERIC
7.	THE EFFECTIVE WIDTH OF THE 2 TRAYS ACT AS A SINGLE 36" WIDE TRAY WHICH HAS BEEN TESTED (15-1). THE TESTED CONFIGURATION HAS STRESS SKIN AND TROWEL GRADE REINFORCEMENT OF LONGITUDINAL JOINTS AND BOTTOM BUTT JOINTS. THE INSTALLED CONFIGURATION HAS THE SAME JOINT REINFORCEMENT PLUS TIE WIRING OF BOTTOM BUTT JOINTS AND THE BOTTOM PANEL IS SECURED WITH TIE WIRES TO EVERY OTHER RUNG OF EACH TRAY. ADDITIONAL MATERIAL INSIDE THE ENVELOPE (AT THE SIDERAILS BETWEEN THE TRAYS) AIDS IN STRUCTURAL INTEGRITY AND THERMAL PROTECTION.	102471/3
8.	THE EFFECTIVENESS OF 2 LAYERS OF 330-1 PANELS ON A JUNCTION BOX HAS BEEN DEMONSTRATED VIA SCHEME 10-1. THE J-BOX IS MOUNTED TO A STRUCTURAL COLUMN WHICH REDUCES POTENTIAL EXPOSURE SURFACES AND WILL ACT AS A HEAT SINK. ALL JOINTS HAVE BEEN REINFORCED WITH QUALIFIED TECHNIQUES (STITCHING AND STRESS SKIN). ADDITIONAL TIE WIRES WERE USED TO SECURE PIECES TOGETHER FOR THE COVER ASSEMBLY. THE COVER FITS TIGHT AT NORMAL TEMPERATURES (3/32" MAX. GAP) AND DUE TO EXPANSION OF THE MATERIAL DURING SUBLIMATION AND CHAR LAYER FORMATION AT ELEVATED TEMPERATURES, WILL COMPLETELY SEAL. THE CONFIGURATION HAS MORE ENCLOSED AIR VOLUME THAN A TYPICAL J-BOX ENVELOPE WHICH WILL RESULT IN LOWER INTERNAL TEMPERATURES. THEREFORE, SINCE STRUCTURAL INTEGRITY AND THERMAL CONCERNS ARE ADDRESSED, THE CONFIGURATION IS ACCEPTABLE.	101282/1
9.	ALL JOINTS ON BOTH LAYERS ARE EITHER SCORE AND FOLD OR TIE WIRED AND THEN REINFORCED WITH STRESS SKIN. THE CABLES DO NOT CONTACT THERMO-LAG PANEL BACK SIDE SURFACES AND ARE WRAPPED WITH SILTEMP. THE LARGE ENCLOSED AIR VOLUME AND THERMAL MASS OF THE CABLES IN CONJUNCTION WITH THE DEMONSTRATED PERFORMANCE OF 2 LAYERS OF THERMO-LAG 330-1 PANELS ON JUNCTION BOXES WILL MAINTAIN SUFFICIENTLY LOW CABLE TEMPERATURES. THEREFORE, THE THERMAL AND STRUCTURAL INTEGRITY ASPECTS OF THE CONFIGURATION HAVE BEEN ADEQUATELY ADDRESSED. THE REDUCTION IN COVERAGE ON DCA 102160 AT THE 10" SW PIPE IS COMPENSATED BY THE SHADOWING EFFECT RESTRICTING DIRECT FLAME IMPINGEMENT AND THE HEAT SINK PROVIDED BY THE PIPE.	102160/0 AS MOD. BY DCN 5742/0 104217/2 AS MOD. BY DCN 5746/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
10.	THE USE OF 330-660 FLEXI-BLANKET ON CABLE AIR DROPS OF VARIOUS SIZES (FROM A SINGLE CABLE TO A LARGE 6" DIA. BUNDLE HAS BEEN QUALIFIED VIA SCHEME 11-1. THE INTERFACE BETWEEN CABLE BUNDLES ENTERING A HORIZONTAL TRAY ENVELOPE WAS ALSO QUALIFIED VIA SCHEME 11-1. ALL CABLE TRAY JOINTS (INCLUDING THOSE TO CONSTRUCT THE CURB EXTENSION) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY TEST. THE INTERFACE OF THE 330-660 AROUND EMBEDDED SLEEVES HAS BEEN SECURED WITH BANDING AROUND THE EMBEDDED SLEEVES FOR MECHANICAL ATTACHMENT AND LARGE "FILLET WELD" BUILDUP OF TROWEL GRADE 330-660 MATERIAL FOR THERMAL PROTECTION. THE MATERIAL THICKNESSES AND APPLICATIONS HAVE BEEN BOUNDED BY TEST. LARGER AIR DROP BUNDLES (> 6" DIA.) ARE LESS THERMALLY DEMANDING (DUE TO CABLE BUNDLE MASS) THAN THOSE TESTED. ADDITIONALLY THE CONCRETE WALL LIMITS POTENTIAL EXPOSURE SURFACES AND HAS HEAT SINK EFFECTS AT EMBEDDED SLEEVE INTERFACES. THEREFORE, THE STRUCTURAL INTEGRITY AND THERMAL ASPECTS OF THE CONFIGURATION HAVE BEEN ADEQUATELY ADDRESSED.	103013/6
11.	PROTECTION OF THE FLEX CONDUIT ASSOCIATED WITH THE PT HAS BEEN QUALIFIED VIA SCHEME 11-1 WHICH USED 3 LAYERS OF 330-660 FLEXI-BLANKET TO PROTECT A SINGLE CABLE AIR DROP. THIS PT CONFIGURATION IS SIMILAR TO THE REMOVABLE COVER J-BOX ENCLOSURE DESCRIBED IN NOTE 8. TWO SIGNIFICANT DIFFERENCES EXIST. ONE, IS THAT THE J-BOX IS A SYMMETRICAL COMPONENT, TWO, IS THAT THE PT ENCLOSURE HAS A PROTRUDING STAINLESS STEEL INSTRUMENT TUBE (FOR PT TEST PROPOSES). THE FIRST ASPECT WAS ADDRESSED BY CONSTRUCTING A STEEL FRAMEWORK ASSEMBLY AROUND THE PT TO ENABLE SECURE ATTACHMENT OF THE THERMO-LAG PANEL LAYERS. THE SECOND ASPECT WAS ADDRESSED BY ENCLOSING THE PROTRUDING INSTRUMENT TUBING WITH 1" DIA. PREFAB 330-1 CONDUIT SECTIONS (1/2" NOMINAL THICKNESS). THIS CREATED A THERMO-LAG "SLEEVE" WHICH WAS THEN FILLED WITH THERMO-LAG 330-70 CONFORMABLE CERAMIC BULK FIBER MATERIAL FOR A DEPTH OF 4" (MIN.). THIS ARRANGEMENT PROVIDES AN ACCEPTABLE LEVEL OF CONDUCTIVE HEAT PATH PROTECTION INTO THE ENCLOSURE. ALL OTHER THERMAL AND STRUCTURAL ATTRIBUTES OF THE DESIGN ARE ADDRESSED BY NOTE 8.	103409/5

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
12.	DUE TO THE LARGE AIR VOLUME AND ENCLOSED THERMAL MASS OF THE PROTECTED COMMODITIES (PROTRUDING PORTIONS OF THE EMBEDDED SLEEVES, CABLE BUNDLE MASS, AND THE MASS OF THE CABLE TRAYS) AND THE ADDITION OF THE SECOND LAYER OF PANELS CONSISTENT WITH JB COVERAGE TESTED IN SCHEME 10-1 THE THERMAL PROTECTION AFFORDED BY THE "BOX" DESIGN IS ADEQUATE. IN ADDITION, THE LARGEST SURFACE OF THE PROTECTIVE ENVELOPES IS ACTUALLY THE CONCRETE WALL WHICH PREVENTS EXPOSURE FROM THAT SIDE AND ACTS AS A HEAT SINK. THEREFORE, THE CRITICAL ATTRIBUTE OF THESE DESIGNS IS THE STRUCTURAL INTEGRITY OF THE "BOX". THIS HAS BEEN CONSERVATIVELY ADDRESSED VIA MECHANICALLY ATTACHING THE ENCLOSURES TO THE CONCRETE WALL WITH HILTI BOLT FASTENERS. ADDITIONALLY, SINCE THE ENCLOSURE ASSOCIATED WITH DCA 103472 INVOLVED ENVELOPMENT OF A LARGE BANK OF SLEEVES (40), THE OVERALL LENGTH OF THE ENCLOSURE IS APPROXIMATELY 5'- 6". TO COMPENSATE FOR THIS LARGE SPAN, UNISTRUT MEMBERS WERE WELDED ACROSS TWO SUPPORTS FOR THE MIDDLE TRAY IN THE STACK OF THREE TRAYS. THE UNISTRUT SPANS THE ENTIRE LENGTH OF THE SIDE OF THE ENCLOSURE FURTHEST FROM THE WALL AND IS USED TO SUPPORT THE PANELS WITH TIE WIRES. THE THERMO-LAG PANELS ARE SECURED TO THE CABLE TRAY ON THE BOTTOM OF BOTH BOX CONFIGURATIONS VIA TIE WIRES ATTACHED TO THE RUNGS OF THE CABLE TRAYS. ALL JOINTS ARE EITHER TIE WIRED OR SCORE AND FOLD, THEN REINFORCED WITH STRESS SKIN. THEREFORE, DUE TO THESE CONSERVATIVE MECHANICAL ATTACHMENT TECHNIQUES AND THE ADDITION OF THE SECOND LAYER, THE ENCLOSURES ADEQUATELY ACCOUNT FOR THE STRUCTURAL INTEGRITY LIMITATIONS OF THERMO-LAG MATERIAL AT ELEVATED TEMPERATURES. BUTTING THE SECOND LAYER COVERAGE TO THE TUBE STEEL AND SPRINKLER PIPE IS ACCEPTABLE BECAUSE THEY DO NOT PENETRATE THE FIRST LAYER COVERAGE AND THEREFORE AFFORD NO DIRECT HEAT PATH INTO THE PROTECTED ENCLOSURE. THEY ALSO PROVIDE A SHADOWING AFFECT AGAINST DIRECT FLAME IMPINGEMENT AND ACT AS A HEAT SINK TO COMPENSATE FOR THE REDUCED COVERAGE.	103472/1 AND 103489/1 AS MODIFIED BY DCN 5745/1
13.	THIS CONFIGURATION CONSISTS OF 2 LARGE ADJACENT J-BOXES. ONE MEASURES 44" HIGH X 20" WIDE X 20" DEEP. THE OTHER MEASURES 50" HIGH X 20" WIDE X 24" DEEP. BOTH ARE WALL MOUNTED. EACH HAS TWO 5" DIA. CONDUITS ENTERING FROM THE BOTTOM AND EXITING FROM THE TOP. EACH IS ENCLOSED SEPARATELY WITH 1/2" THICK 330-1 FLAT PANELS. HOWEVER, DUE TO LACK OF CLEARANCE BETWEEN THE J-BOXES WITH FLAT PANELS INSTALLED, THE SECOND LAYER (330-1 V-RIBBED PANELS) ENVELOPS BOTH BOX ENCLOSURES. THE SPECIFIC DETAILS OF THE DCA DEAL WITH INSTALLATION OF THE BANDING ON THIS OUTER LAYER OF 330-1 PANELS. THE USE OF ANGLE IRON MOUNTED TO STRUCTURE TO SERVE AS ATTACHMENT POINTS FOR THE BANDING IS AN ACCEPTABLE DEVIATION FROM THE STANDARD (TESTED) CONFIGURATION SINCE THE METHOD OF ATTACHMENT SERVES THE SAME FUNCTION IN SECURING THE OUTER PANELS. ALL JOINTS ARE EITHER SCORE AND FOLD OR TIE WIRED AND THEN REINFORCED WITH STRESS SKIN. THE CONDUIT INTERFACES WITH THE ENCLOSURE HAVE ALL BEEN REINFORCED WITH STRESS SKIN QUALIFIED BY SCHEMES 10-1 AND 10-2. THE SCALING ISSUE ASSOCIATED WITH THIS CONFIGURATION (SCHEME 10-1 QUALIFIED 2 LAYERS ON 18" X 12" X 6" J-BOXES) IS READILY JUSTIFIED DUE TO THE INCREASED THERMAL MASS OF THE BOXES AND THE FACT THAT ONE ENTIRE SURFACE OF THE "ENCLOSURE" IS THE CONCRETE WALL. THIS PREVENTS EXPOSURE ON THAT SIDE AND ACTS AS A HEAT SINK. THE USE OF A COMMON LAYER OF V-RIBBED PANELS IS ACCEPTABLE BASED ON LARGE CABLE TRAY TESTS WHICH QUALIFIED STITCHING REINFORCEMENT ON HORIZONTAL BUTT JOINTS FOR A 36" CABLE TRAY WITH TEE SECTION (SCHEME 1-2) AND STRESS SKIN REINFORCEMENT ON A 30" WIDE TRAY WITH TEE SECTION. THEREFORE, BOTH THERMAL AND STRUCTURAL ASPECTS OF THE CONFIGURATION HAVE BEEN ADEQUATELY ADDRESSED. DCA 104245 IDENTIFIED INTERFERENCES WHICH PREVENTED BAND SPACING FROM BEING OBTAINED. ADDITIONAL ANGLES AND BANDING WAS INSTALLED TO OBTAIN/MEET THE SPACING REQUIREMENTS.	103634/2 104245

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
14.	THE USE OF 330-660 FLEXI-BLANKET TO PROTECT CABLE AIR DROPS OF VARIOUS SIZES (UP TO 6" DIA. BUNDLES) HAS BEEN QUALIFIED VIA SCHEME 11-1. LARGER CABLE BUNDLES ARE ACCEPT[illegible] DUE TO INCREASED THERMAL MASS OF CABLE. SECURING THE FLEXI-BLANKET BUNDLES TO THE TRAY RUNGS (INSI[illegible] TRAY ENVELOPE) WITH BANDING PROVIDES A POSITIVE MECHANICAL ATTACHMENT. THE USE OF SHIM BLOCKS ON[illegible] TRAY ENVELOPE PROVIDES MORE THERMO-LAG MATERIAL AND ENHANCES ENCLOSURE EFFECTIVENESS (ALSO PROVIDES MORE ENCLOSED AIR VOLUME). USING STRESS SKINAND TROWEL GRADE STAPLED TO THE TRAY COVERAGE COUPLED WITH THE 330-660 FIRE STOP IS COMPARABLE TO THE TESTED CONFIGURATION WHICH UTILIZED A FLEXI-BLANKET COLLAR WHERE AIR DROPS PENETRATE THE TRAY ENVELOPE. FOR THE 9" RULE, DEVIATION IS ACCEPTABLE BASED ON THE USE OF DOUBLE LAYER 330-1 PANELS ON THE TRAY SUPPORT AND THE HEAT SINK EFFECT OF THE ADJACENT 18" DIA. PIPE.	104222/3
15.	DELETED	
16.	THIS CONFIGURATION REPRESENTS A DEVIATION FROM STANDARD CABLE TRAY PROTECTION IN THAT INTERFERENCES PREVENT INSTALLATION OF V-RIBBED 330-1 PANELS ON ONE SIDERAIL AND ON THE BOTTOM OF A RADIAL BEND FOR MINOR (< 6") DISTANCES. IN EACH CASE, THE TRAY ENVELOPE WAS EXTENDED USING 330-1 FLAT PANEL TO ENCLOSE THE INTERFERENCE FOR CONDUCTIVE HEAT PATH PROTECTION. THERMO-LAG 330-70 CONFORMABLE CERAMIC FIBER INSULATION MATERIAL IS UTILIZED TO FILL CAVITY AREAS WITHIN THE TRAY ENVELOPE EXTENSION AND HENCE CREATE A TORTUROUS PATH TO PREVENT SIGNIFICANT HEAT INTRUSION INTO THE TRAY. THIS METHOD PROVIDES AN EQUIVALENT LEVEL OF PROTECTION TO THAT PROVIDED BY 330-1 PANEL MATERIAL INSTALLED FOR A 9" DISTANCE AS QUALIFIED BY TEST. JOINTS ARE REINFORCED VIA QUALIFIED TECHNIQUES (i.e., TIE WIRING TOGETHER AND STRESS SKIN REINFORCEMENT). THEREFORE, THERMAL AND STRUCTURAL INTEGRITY CONSIDERATIONS HAVE BEEN ADEQUATELY ADDRESSED BY THIS CONFIGURATION.	104087/0
17.	THIS CONFIGURATION REPRESENTS A DEVIATION FROM STANDARD J-BOX COVERAGE DETAILS. TO COMPENSATE FOR A LOCALIZED AREA ON THE J-BOX UNDERSIDE WHERE AN INTERFERING CONDUIT (WHICH IS ALSO THERMO-LAGGED) PREVENT COMPLETE INSTALLATION OF PANELS, A STRESS SKIN AND 330-1 TROWEL GRADE BUILDUP WAS UTILIZED. THE 330-1 PREFAB MATERIAL ON THE INTERFERING CONDUIT WAS THEREFORE EFFECTIVELY INCORPORATED INTO THE PROTECTIVE ENVELOPE FOR THE J-BOX. THE THERMO-LAG INSTALLED ON THE CONDUIT IN CONJUNCTION WITH THE TROWEL GRADE BUILDUP IN THE INTERFERENCE AREA PROVIDE AN EQUIVALENT LEVEL OF PROTECTION TO THAT QUALIFIED ON J-BOXES VIA SCHEME 10-2. THE USE OF STRESS SKIN REINFORCEMENT IN THE AREA OF INTERFERENCE ENSURES THE STRUCTURAL INTEGRITY OF THE MATERIAL.	104060/0
18.	THE PROTECTION OF THE CABLES WITH FLEXI-BLANKET AND THE ELASTOMER FIRE SEALS HAVE BEEN TESTED. ALTHOUGH THE TESTED CONFIGURATION FOR THERMO-LAG EXTENDING THROUGH A FIRE STOP WAS 330-1 HALF ROUNDS, THE USE OF 330-660 FLEXI-BLANKET THROUGH THE FIRE STOP WILL PROVIDE AN ACCEPTABLE INSTALLATION WHICH IS CONSISTENT WITH THE TESTED CONFIGURATION. THE FLEXI-BLANKET BUNDLES RESTING ON THE EXPOSED CABLE TRAY, ALTHOUGH NOT SPECIFICALLY FIRE TESTED, IS NOT SIGNIFICANTLY AFFECTED BY THE EXPOSED TRAY BECAUSE THE 8" LIMIT ON THE EXPOSED PORTION MEANS THAT THERE IS ONLY A MINOR AMOUNT OF EXPOSED TRAY AND THE FLEXI-BLANKET ONLY COMES IN CONTACT WITH A SINGLE EXPOSED TRAY RUNG. THE RESULTING CONFIGURATION IS ACCEPTABLE BECAUSE IT IS BASICALLY CONSISTENT WITH TESTED CONFIGURATIONS AND WHERE IT DEVIATES FROM THESE CONFIGURATIONS THE DIFFERENCES ARE MINOR AND DO NOT SIGNIFICANTLY IMPACT THE CORRELATION TO A TESTED CONFIGURATION. THE MATERIAL CONTINUITY AND THICKNESS IS MAINTAINED.	101357/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
19.	ALL JOINTS ARE EITHER SCORE AND FOLD OR TIE WIRED THEN STRESS SKIN REINFORCED. THE CABLE TRAY (ABOVE) AND THE J-BOX (BELOW) LEND STRUCTURAL STABILITY TO THE OVERALL ENVELOPE CONSTRUCTION. THE AIR DROP CABLES DO NOT CONTACT THERMO-LAG PANEL BACK SIDE SURFACES. THE LARGE ENCLOSED AIR VOLUME AND THERMAL MASS OF THE CABLES IN CONJUNCTION WITH THE DEMONSTRATED PERFORMANCE OF 2 LAYERS OF THERMO-LAG 330-1 PANELS ON JUNCTION BOXES WILL MAINTAIN SUFFICIENTLY LOW CABLE TEMPERATURES. THEREFORE, THE THERMAL AND STRUCTURAL INTEGRITY ASPECTS OF THE CONFIGURATION HAVE BEEN ADEQUATELY ADDRESSED.	102882/0 AS MODIFIED BY DCN 5745/1
20.	DETAIL 8-3 ALLOWS USE OF A 330-1 FLAT PANEL ON CABLE TRAY BOTTOMS FOR A MAXIMUM LENGTH OF 12". THIS CONFIGURATION DEVIATES FROM THE 12" (MAX.) LENGTH DUE TO PRESENCE OF A 24" DIA. PIPE WITH INSUFFICIENT CLEARANCE FOR V-RIBBED PANEL. FLAT PANELS WERE INSTALLED AS DESCRIBED TO SPAN THE INTERFERING PIPING. THE USE OF A SINGLE LAYER OF FLAT PANELS ON 18" X 12" X 6" J-BOXES WAS QUALIFIED VIA SCHEME 10-2. ADDITIONALLY, SINGLE LAYER OF FLAT PANELS ON LARGE LATERAL BEND FITTINGS (5" DIA. CONDUIT) WAS QUALIFIED VIA SCHEME 9-1. THEREFORE, DUE TO DEMONSTRATED PERFORMANCE OF SINGLE FLAT PANEL LAYERS AND DUE TO THE SHADOWING EFFECT AGAINST DIRECT FLAME IMPINGEMENT AND THE HEAT SINK CAPABILITY AFFORDED BY THE 24" PIPE, THIS CONFIGURATION IS ACCEPTABLE. THE ADDITION OF THE SMALL PIECE OF FLAT PANEL MATERIAL TO BUILD UP THICKNESS AT A SUPPORT (NOT ASSOCIATED WITH THE TRAY ABOVE) IS AN ACCEPTABLE METHOD OF PROVIDING PROTRUDING ITEM PROTECTION FOR CONDUCTIVE HEAT PATH. REQUIRED THICKNESS IS MAINTAINED AND THE PIECE IS SECURE IN PLACE WITH TIE WIRES.	104078/0
21.	DELETED	
22.	THE LBD ENCLOSURE RESOLUTION EMPLOYS A ONE PIECE STRESS SKIN CAP DESIGN BASED ON TYPICAL DETAIL 6-1. WHERE THE CONDUIT SUPPORT INTERFERES WITH THE LBD BOX/CONDUIT REINFORCEMENT, THE APPLICATION OF STRESS SKIN WAS NOTCHED IN THE AREA OF SUPPORT BUT EXTENDED BEYOND THE SUPPORT TO ALLOW BANDING. THE AIR DROP ENTERING THE PROTECTED CABLE TRAY IS INSTALLED IN ACCORDANCE WITH TYPICAL DETAILS 3-4 OPTION 2 AND 3-4.4.	103874/1
23.	ON THE 810' ELEVATION, TWO LAYERS OF 330-1 PANELS HAVE BEEN INSTALLED ON A JUNCTION BOX AND ON THE BOX RUNNING FROM THE JB UP TO THE CEILING. THIS ARRANGEMENT HAS BEEN TESTED AND FOUND ADEQUATE VIA TEST SCHEME 10-1. THE J-BOX IS MOUNTED TO STRUCTURE WHICH REDUCES POTENTIAL EXPOSURE SURFACES AND WILL ACT AS A HEAT SINK. ALL JOINTS ARE EITHER SCORE AND FOLD OR TIE WIRED THEN REINFORCED WITH STRESS SKIN. THE ESSENTIAL CABLES ARE ENCASED IN CONDUIT AND DO NOT CONTACT THERMO-LAG PANELS. THE LARGE ENCLOSED AIR VOLUME AND THERMAL MASS OF THE 2 LAYER COVERED BOXED COMMODITIES WILL MAINTAIN SUFFICIENTLY LOW CABLE TEMPERATURES. ON THE 832' ELEVATION THE BOX DESIGN EXTENDS FROM THE PENETRATION SEAL TO A FIRE STOP IN TRAY T24BAEG24. ESSENTIAL CONDUIT C-24841951 PROJECTS FROM THE SIDE OF THE BOX. THERMO-LAG TO FIRE STOP INTERFACE WAS TESTED IN SCHEME 1-2. THE CONDUIT/BOX INTERFACE WAS UP GRADED AS PROVIDED FOR JUNCTION BOXES PER DETAIL 2-3 AND PER TEST SCHEME 10-2.	103884/1 AS MODIFIED BY DCN 5745/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
24.	ALL JOINTS ARE EITHER SCORE AND FOLD OR TIE WIRED THEN REINFORCED WITH STRESS SKIN. THE AIR DROP CABLES DO NOT CONTACT THE THERMO-LAG PANELS, AS THEY ARE PROTECTED WITH SILTEMP BLANKET. THE LARGE ENCLOSED AIR VOLUME AND THERMAL MASS OF THE CABLES IN CONJUNCTION WITH THE DEMONSTRATED PERFORMANCE OF 2 LAYERS OF THERMO-LAG 330-1 PANELS ON JUNCTION BOXES WILL MAINTAIN SUFFICIENTLY LOW CABLE TEMPERATURES. THE FIRE STOP INSTALLED IN TRAY T240AF003 WILL ADEQUATELY SEAL THE ENCLOSURE. THE EFFECTIVENESS OF THERMO-LAG AND FIRE STOP ASSEMBLIES WAS DEMONSTRATED IN SEVERAL TEST SCHEMES.	103575/0 AS MODIFIED BY DCN 5727/0
25.	THE BOXED-IN DESIGN AND CABLE TRAY SHIMS PRESENT IN DCA 103533/0 HAVE NOT SPECIFICALLY BEEN INCLUDED AS PART OF TESTED CONFIGURATION. THE CABLE TRAY SIDE RAIL SHIMS HOWEVER, ARE NO DIFFERENT THAN MULTIPLE LAYERS OF 330-1 PANELS WHICH HAS BEEN TESTED IN TEST SCHEME 10-1 (i.e., JUNCTION BOX-2 LAYERS) THE MULTIPLE LAYERS OF 330-1 PANELS PROVIDE FOR A GREATER DEPTH/QUANTITY OF MATERIAL AVAILABLE FOR SUBLIMING AND THUS LOCALIZED REDUCTION OF INSIDE TEMPERATURES WITHIN THE PROTECTIVE ENVELOPE AT THE SHIM(S) LOCATION. ALL JOINTS ARE EITHER SCORE AND FOLD OR TIE WIRED THEN STRESS SKIN REINFORCED. THESE TECHNIQUES ENSURE THE INTEGRITY OF THE JOINT DURING FIRE CONDITIONS. ALTHOUGH THE BOXED-IN DESIGN COMMUNICATES TWO SEPARATE LEVEL 2 AND LEVEL 3 CABLE TRAYS, THE BOX DOES NOT COMPROMISE THE SAFE SHUTDOWN CAPABILITY OF THE PLANT. IN CONCLUSION, THIS INSTALLATION IS IN ACCORDANCE WITH BASIS/NOTES 1-5 AND IS ACCEPTABLE AS-IS.	103533/0
26.	THE INSTALLATION DESCRIBED ON DCA 103533/0 REPRESENTS A THICKNESS DEVIATION FORM THE STANDARD REQUIREMENTS FOR PROTECTING SUPPORTS FOR ESSENTIAL RACEWAYS. ALTHOUGH THE MINIMUM THICKNESS OF 1/2" WAS NOT MAINTAINED, THE HORIZONTAL BOTTOM OF THE SUPPORT WAS COVERED WITH ≈ 1/4" THICK 330-1 PANEL. IN ADDITION, ONE ADDITIONAL LAYER OF 330-1 PANEL WAS INSTALLED TO VERTICALLY ENCLOSE THE BOTTOM 7/16" OF THE SUPPORT. EVEN THOUGH THE REQUIRED 1/2" THICKNESS IS NOT MAINTAINED, THE 1/4" THICK PANEL WILL PROVIDE A DEGREE OF PROTECTION MINIMIZING THE HEAT TRANSFER INTO THE SUPPORT. THE TORTUROUS HEAT PATH THAT THE SUPPORT ARRANGEMENT PRESENTS ALSO MINIMIZES HEAT TRANSFER INTO THE ESSENTIAL COMMODITY. THE INSTRUMENT TUBING INSTALLED BELOW THE SUPPORT WILL FUNCTION AS SHIELDING TO MINIMIZE RADIANT HEAT TRANSFER INTO THE BOTTOM OF THE SUPPORT. THE CONDUIT SUPPORT IS PHYSICALLY ATTACHED TO THE CONCRETE WALL WHICH ACTS AS A LARGE HEAT SINK. THE 1/4" THICK 330-1 PANEL, ALTHOUGH NOT SPECIFICALLY A TESTED CONFIGURATION, IS IN ACCORDANCE WITH BASIS/NOTES 1, 3, 4, AND 5, AND IS ACCEPTABLE AS-IS.	103533/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
27.	THIS CONFIGURATION CONSISTS OF TWO ESSENTIAL CABLE TRAYS PROTECTED BY 330-1 PANELS WITH ESSENTIAL CABLE AIR DROPS COMMUNICATING BETWEEN THE TWO TRAYS, PROTECTED BY 330-660 FLEXI-BLANKET WRAP. NON ESSENTIAL CABLE AIR DROPS BETWEEN ESSENTIAL CABLE TRAY AND NON ESSENTIAL CABLE TRAYS ARE ALSO PROTECTED BY FLEXI-BLANKET WHERE THE CABLE AIR DROP EXITS THE ESSENTIAL CABLE TRAY. THE TESTED CONFIGURATION WHERE THERMO-LAG GOES THROUGH A FIRE STOP INVOLVES 330-1 CODUIT HALF ROUNDS. HOWEVER, THE PERFORMANCE OF FLEXI-BLANKET IN THE FIRE TESTS IS SUFFICIENTLY SIMILAR TO THE PERFORMANCE OF THE HALF ROUNDS TO REASONABLE EXPECT THAT IT WOULD PERFORM CONSISTENT WITH THE TESTED CONFIGURATION IN A FIRE STOP. IN ADDITION AN END CAP OF 330-1 PANEL IS INSTALLED WHERE THE FLEXI-BLANKET ENTERS THE TRAY AND THE 330-1/330-660 INTERFACE IS SEALED WITH TROWEL GRADE AS ARE ALL VOIDS BETWEEN THE 330-1 TRAY COVERAGE AND THE FIRE STOP. ALTHOUGH THE AIR DROP PROTECTIVE ENVELOPE/330-1 PANEL INTERFACE DOES NOT EXACTLY REPLICATE TEST SCHEME 11-1, THE INSTALLATION MEETS THE REQUIREMENTS OF BASIS/NOTES 1-5 AND IS ACCEPTABLE AS-IS. THE ESSENTIAL CABLE TRAY PROTECTIVE ENVELOPE HAS BEEN MODIFIED TO AVOID THE PIPE INTERFERENCE (WHICH IS LOCATED ABOVE THE CABLE TRAY). THIS MODIFICATION CONSISTS OF 330-1 FLAT PANELS MOUNTED INSIDE THE CABLE TRAY (IN THE AREA OF THE INTERFERENCE) AND INSTALLED VIA TIE WIRES AND STRESS SKIN/TROWEL GRADE UPGRADE PER BOTTOM JOINT REQUIREMENTS. ALTHOUGH THE CABLE TRAY PROTECTIVE ENVELOPE DOES NOT EXACTLY REPLICATE TEST SCHEME 11-1, THE INSTALLATION MEETS THE REQUIREMENTS OF BASIS/NOTES 1-5 AND IS ACCEPTABLE AS-IS.	103550/1
28.	THE AIR DROP PROTECTIVE ENVELOPE RESEMBLES TEST SCHEME 11-1, WITH EXCEPTION OF THE FLEXI-BLANKET POINT OF ATTACHMENT AT THE CONDUIT/WALL INTERFACE. SINCE THE FLEXI-BLANKET COULD NOT BE COMPLETELY WRAPPED AROUND THE CONDUIT, THE FLEXI-BLANKET WAS WRAPPED TO THE EXTENT POSSIBLE THEN IT WAS MODIFIED BY BUTTING EDGES OF THE FLEXI-BLANKET TO THE CONCRETE WALL. THESE EDGES/SEAMS WERE THEN FILLED WITH 330-660 TROWEL GRADE MATERIAL WITH A FINAL 11/16" WFT BUILDUP AT THE OUTER LAYER/WALL INTERFACE. THE ACCEPTABILITY OF THIS INSTALLATION IS BASED ON THE FOLLOWING ATTRIBUTES: THE FLEXI-BLANKET WAS WRAPPED PER TYPICAL DETIALS TO THE EXTENT POSSIBLE THEN THE REMAINING FLEXI-BLANKET WAS BUTTED TO THE CONCRETE WALL WHICH ACTS AS A HEAT SINK AND REDUCES THE EXPOSED SURFACE OF THE PROTECTED ENVELOPE AND THEN A TROWEL GRADE FILLET IS INSTALLED AT THE WALL INTERFACE; THE INSTALLATION RESEMBLES TYPICAL DETAILS 4-3.1, AND 4-7.1.	104217/2 103001/0
29.	THE BOX DESIGN HAS BEEN PREVIOUSLY ADDRESSED BY ATTACHMENT A. THE AIR DROP/FLEXI-BLANKET CONFIGURATION PENETRATING THE BOX DESIGN RESEMBLES TEST SCHEME 11-1 WITH EXCEPTION OF THE COLLAR DESIGN. THE STRESS SKIN AND 11/16" TROWEL GRADE BUILDUP AT THE AIR DROP/BOX INTERFACE ENSURES CONTINUITY OF MATERIAL, THICKNESS OF MATERIAL, AND EQUIVALENT STRUCTURAL INTEGRITY AND IS ACCEPTABLE AS AN ALTERNATIVE TO THE STAPLING/FLARE OUT DESIGN PRESENTED IN TEST SCHEME 11-1.	1042[illegible] 1040[illegible]/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
30.	FLEXI-BLANKET AIR DROP INSTALLATION BETWEEN CABLE TRAYS AS SHOWN ON DETAIL 5-12 HAS BEEN EVALUATED SEPARATELY BY ATTACHMENT A. THE INSTALLATION OF A RELATIVELY SHORT LENGTH OF 330-1 FLAT BOARD ON THE CABLE TRAY SIDE RAIL (VERSUS 330-1 V-RIBBED BOARD) AND THE 2" TO 4" OVERLAP OF THE END OF THE CABLE TRAY IS ACCEPTABLE BASED ON THE FOLLOWING: THE FLAT BOARD PROVIDES THE SAME EQUIVALENT THICKNESS AS A 330-1 V-RIBBED PANEL; THERE IS NO DISCONTINUITY OF MATERIAL; ALL JOINTS ARE UPGRADED PER TESTED CONFIGURATIONS, AND THE INSTALLATION EXHIBITS NO IMPACT ON STRUCTURAL INTEGRITY OF THE PROTECTIVE ENCLOSURE. FURTHERMORE, 330-1 FLAT BOARD HAS BEEN SUCCESSFULLY TESTED IN TEST SCHEME 10-2 FOR JUNCTION BOX PROTECTION WHICH IS REPRESENTATIVE OF THE SMALL LENGTH OF 330-1 FLAT BOARD USED FOR THIS INSTALLATION. AUTOMATIC SUPPRESSION AND DETECTION IS PROVIDED IN THE AREA.	103935/0
31.	THIS CONFIGURATION REPRESENTS A DEVIATION FROM STANDARD CABLE TRAY PROTECTION IN THAT SPRINKLER HEAD INTERFERENCES PREVENT INSTALLATION OF THE BOTTOM PANEL FOR AN APPROXIMATE 12" LENGTH ACROSS THE CABLE TRAY. THE METHOD USED TO PROTECT THE CABLES WAS TO INSTALL 330-1 FLAT BOARD TIE WIRED TO THE CABLE TRAY RUNGS THROUGH THE AREA OF THE SPRINKLER HEAD INTERFERENCE. THE FLAT BOARD WAS CHAMFERED, AS REQUIRED, TO PROVIDE CLEARANCE AROUND THE SPRINKLER HEAD SO THAT SPRINKLER COVERAGE IS NOT IMPAIRED. 330-1 FLAT BOARD WAS ALSO INSTALLED INSIDE THE CABLE TRAY (BELOW THE CABLES), INSIDE THE SIDE RAILS AND BELOW THE TOP (OUTER) 330-1 V-RIBBED PANEL. ALL SPACE BETWEEN RUNGS WAS FILLED WITH 330-1 TROWEL GRADE MATERIAL AS WELL AS THE SPACE BETWEEN THE OUTER TOP PANEL AND INNER TOP PANEL. ALTHOUGH THIS CONFIGURATION DOES NOT REPLICATE ANY TESTED CONFIGURATIONS, THE PROTECTIVE ENCLOSURE IN THE AREA OF INTERFERENCE MAINTAINS THE MINIMUM TESTED THICKNESS, THE FIRE BARRIER MATERIAL IS CONTINUOUS, THE METHOD OF SUPPORT DOES NOT SIGNIFICANTLY DEVIATE FROM THE TESTED CONFIGURATION, AND THERE IS AN AUTOMATIC SPRINKLER HEAD RIGHT AT THE REDUCITON IN COVERAGE. THE FACT THAT THE INTERFERENCE IS A SPRINKLER HEAD PROVIDES ADDITIONAL CREDENCE AS TO THE ACCEPTABILITY OF THE DESIGN.	103582/0
32.	THE INSTALLATION OF ONE LAYER OF 330-1 FLAT BOARD ON EACH JB THEN INSTALLING AN ADDITIONAL LAYER OF 330-1 V-RIBBED PANEL OVER BOTH BOXES DOES NOT SIGNIFICATLY DIFFER FROM TESTED CONFIGURATIONS AND WILL NOT IMPACT OR DEGRADE THE OVERALL DESIGN. THIS INSTALLATION IS ACCEPTABLE.	103847/0
33.	WITH THE INSTALLATION OF STRESS SKIN ONTO THE GROUND CABLE AND GROUNDING CLAMP, THE TROWEL GRADE/STRESS SKIN UPGRADE ON THE 4" CONDUIT CLOSELY RESEMBLES TEST SCHEMES 9-1 AND 9-2. THE SMALL AREA OCCUPIED BY THE GROUNDING CLAMP/GROUND CABLE AND THE FACT THAT THE REMAINDER OF THE RADIAL BEND HAS BEEN SUCCESSFULLY UPGRADED, SUPPORT THE ACCEPTABILITY OF THIS INSTALLATION.	103792/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
34.	DUE TO THE LARGE AIR VOLUME AND ENCLOSED THERMAL MASS OF THE PROTECTED COMMODITIES (PROTRUDING PORTIONS OF THE EMBEDDED SLEEVES, CABLE BUNDLE MASS, JUNCTION BOX, AND THE MASS OF THE CABLE TRAYS) THE THERMAL PROTECTION AFFORDED BY THE 2 PANEL "BOX" DESIGN IS ADEQUATE. IN ADDITION, THE LARGEST SURFACE OF THE PROTECTIVE ENVELOPES IS ACTUALLY THE CONCRETE WALL WHICH PREVENTS EXPOSURE FROM THAT SIDE AND ACTS AS A HEAT SINK. THEREFORE, THE CRITICAL ATTRIBUTE OF THESE DESIGNS IS THE STRUCTURAL INTEGRITY OF THE "BOX". ADDITIONALLY, SINCE THE ENCLOSURE ASSOCIATED WITH DCA 103680 INVOLVED ENVELOPMENT OF MULTIPLE COMMODITIES, THE OVERALL WIDTH OF THE ENCLOSURE IS APPROXIMATELY 5'- 2". TO COMPENSATE FOR THIS LARGE SPAN, A STRUCTURAL FRAME HAS BEEN ATTACHED TO CABLE TRAY HANGERS AND LOCATED ABOVE THE TOP OF THE CABLE TRAY OF CONCERN. HOWEVER, THE OVERALL WEIGHT OF THE BOX ASSEMBLY IS SHARED BETWEEN THE JUNCTION BOX AND CABLE TRAY AS WELL AS THE MODIFIED STRUCTURAL STEEL. THE THERMO-LAG PANELS ARE SECURED TO THE CABLE TRAY ON THE BOTTOM OF THE BOX CONFIGURATIONS VIA TIE WIRES ATTACHED TO THE RUNGS OF THE CABLE TRAYS. ALL JOINTS ASSOCIATED WITH BOTH LAYERS OF THESE ENCLOSURES HAVE BEEN REINFORCED WITH QUALIFIED TECHNIQUES (TIE WIRING TOGETHER OR SCORE AND FOLD AND STRESS SKIN REINFORCEMENT). THEREFORE, DUE TO THESE CONSERVATIVE MECHANICAL ATTACHMENT TECHNIQUES AND THE 2 PANEL THICK CONSTRUCTION, THE ENCLOSURES ADEQUATELY ACCOUNT FOR THE STRUCTURAL INTEGRITY LIMITATIONS OF THERMO-LAG MATERIAL AT ELEVATED TEMPERATURES.	103680/1
35.	THE INSTALLATION OF FLEXI-BLANKET ON CABLE AIR DROPS HAS BEEN FIRE TESTED IN SCHEME 11-1. THE UNIQUE FEATURES OF THE DESIGN ARE THE FLEXI-BLANKET WRAPPED CABLES WHICH PENETRATE THROUGH THE ELASTOMER FIRE STOP IN THE END OF HE CABLE TRAY AND THE COLLAR WHICH IS INSTALLED OVER THE FLEXI-BLANKET WHERE IT BUTTS UP TO THE THROUGH WALL SLEEVES (TWS). TEST SCHEME 11-1 DID TEST THERMO-LAG INSTALLED THROUGH A FIRE STOP BUT IT WAS 330-1 CONDUIT HALF ROUNDS. THIS TEST DID SHOW THAT FLEXI-BLANKET MAINTAINED IT'S STRUCTURAL INTEGRITY IN A FIRE LIKE THE CONDUIT HALF ROUNDS AND IT IS REASONABLE TO EXPECT THAT IT WOULD ACT THE SAME AS THE HALF ROUNDS IN A FIRE STOP. THE COLLAR IS UTILIZED TO AVOID THE QUICK REDUCTION IN DIAMETER DUE TO ONLY A FEW CABLES COMING OUT OF A 4" TWS WHICH WOULD CREATE A FUNNEL SHAPED INSTALLATION WHICH IS NOT DESIRABLE. THE OVERLAP OF THE FLEXI-BLANKET HAS BEEN TESTED IN SCHEME 11-1. THE INSTALLATION MEETS THE REQUIREMENTS OF BASIS/NOTES 1-5 AND IS ACCEPTABLE.	103624/2 AS MODIFIED BY DCN 5746/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
36.	DUE TO THE LARGE AIR VOLUME AND ENCLOSED THERMAL MASS OF THE PROTECTED COMMODITIES (PROTRUDING PORTIONS OF THE EMBEDDED SLEEVES, CABLE BUNDLE MASS AND THE MASS OF THE CABLE TRAYS) THE THERMAL PROTECTION AFFORDED BY THE 2 LAYER "BOX" DESIGN IS ADEQUATE. IN ADDITION, THE LARGEST SURFACE OF THE PROTECTIVE ENVELOPES IS ACTUALLY THE CONCRETE WALL WHICH PREVENTS EXPOSURE FROM THAT SIDE AND ACTS AS A HEAT SINK. THEREFORE, THE CRITICAL ATTRIBUTE OF THESE DESIGNS IS THE STRUCTURAL INTEGRITY OF THE "BOX". THIS HAS BEEN CONSERVATIVELY ADDRESSED VIA MECHANICALLY ATTACHING THE ENCLOSURES TO THE CONCRETE WALL WITH HILTI BOLT FASTENERS AND TO EMBED PLATE VIA 1/4" SELF TAPPING SCREWS. ADDITIONALLY, SINCE THE ENCLOSURE ASSOCIATED WITH THE DCA(S) INVOLVED ENVELOPMENT OF SEVERAL SLEEVES, THE OVERALL LENGTH (TOP TO BOTTOM) OF THE ENCLOSURE IS APPROXIMATELY 7'- 6". THE THERMO-LAG PANELS ARE SECURED TO THE CABLE TRAY ON THE FRONT OF THE BOX CONFIGURATIONS VIA BANDING ATTACHED TO THE BACK OF THE CABLE TRAYS. THE BOTTOM PORTION OF THE ENCLOSURE IS SUPPORTED VIA HORIZONTAL (THROUGH BACK OF CABLE TRAYS) BANDING AND VERTICAL BANDING (AROUND CONDUITS ATTACHED TO WALL). ALL JOINTS ARE EITHER SCORE AND FOLD OR TIE WIRED THEN STRESS SKIN REINFORCED. HOWEVER, THE STRESS SKIN WAS NOT TIE WIRED TOGETHER. THEREFORE, DUE TO THESE CONSERVATIVE MECHANICAL ATTACHMENT TECHNIQUES, AND THE 2 LAYER INSTALLATION OVER THE AIR DROP, THE ENCLOSURES ADEQUATELY ACCOUNT FOR THE STRUCTURAL INTEGRITY LIMITATIONS OF THERMO-LAG MATERIAL AT ELEVATED TEMPERATURES.	101986/1 103034/1 104124/0 AS MODIFIED IN DCN 5742/1
37.	THIS CONFIGURATION IS ACTUALLY A COMBINATION OF TWO TYPICAL DETAILS (1-5 AND 13-2) WHICH ARE EVALUATED SEPARATELY IN ATTACHMENT A. THE USE OF HILTI BOLTS TO SECURE PORTIONS OF THE PROTECTIVE ENVELOPE FLARED OUT ONTO THE CONCRETE WALL PROVIDES POSITIVE MECHANICAL ATTACHMENT AND IS AN ENHANCEMENT. THE JOINT UPGRADE TESTS FOR ALL CABLE TRAYS AS WELL AS QUALIFICATION OF THE 9" CONDUCTIVE HEAT PATH PROTECTION IS BOUNDED BY THE TEST SCHEMES INDICATED. ADDITIONALLY, THE CONCRETE WALL PREVENTS EXPOSURE ON ONE OF THE TWO LARGEST SURFACES AND HAS HEAT SINK EFFECTS. THEREFORE, BASED ON THE THERMAL AND STRUCTURAL INTEGRITY ASPECTS DISCUSSED ABOVE, THIS CONFIGURATION IS ACCEPTABLE.	103487/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
38.	DCA 103184/1 AND DCA 103192/1 HAVE BEEN SUPERSEDED BY DCA 103681/1. THIS CONFIGURATION CONSISTS OF 2 ADJACENT FIRE ZONE "R" J-BOXES (JB-2S5312G AND JB-2S5384G) MOUNTED BACK TO BACK ON A COMMON 3" TUBE STEEL SUPPORT. BOTH ARE WALL MOUNTED. EACH HAS CONDUITS AND FIRE ZONE "R" CABLE EXITING FROM THE SIDE. THE SIDE EXIT FOR BOTH JUNCTION BOXES HAVE BEEN PROTECTED BY ADDING A 4" FIRE STOP CONSTRUCTED OF 330-1 FLAT PANELS AND TROWEL GRADE. THIS FIRE STOP HAS BEEN SUBSTANTIALLY REINFORCED WITH BANDS AND TIE WIRES. EACH JUNCTION BOX IS ENCLOSED SEPARATELY WITH 1/2" THICK 330-1 FLAT PANELS BANDED IN PLACE. HOWEVER, DUE TO LACK OF CLEARANCE BETWEEN THE J-BOXES (WITH FLAT PANELS INSTALLED), THE SECOND LAYER (330-1 V-RIBBED PANELS) WAS REQUIRED TO ENVELOP BOTH BOX ENCLOSURES. ALL JOINTS ARE EITHER SCORE AND FOLD OR ARE TIE WIRED, THEN REINFORCE WITH STRESS SKIN. THE CONDUIT INTERFACES WITH THE ENCLOSURE HAVE ALL BEEN REINFORCED WITH STRESS SKIN QUALIFIED BY SCHEMES 10-1 AND 10-2. THE SCALING ISSUE ASSOCIATED WITH THIS CONFIGURATION (SCHEME 10-1 QUALIFIED 2 LAYERS ON 18" X 12" X 6" J-BOXES) IS READILY JUSTIFIED DUE TO THE INCREASED THERMAL MASS OF THE BOXES. THE USE OF COMMON LAYER OF V-RIBBED PANELS IS ACCEPTABLE BASED ON LARGE CABLE TRAY TESTS WHICH QUALIFIED STITCHING REINFORCEMENT ON HORIZONTAL BUTT JOINTS FOR A 36" CABLE TRAY WITH TEE SECTION (SCHEME 1-2) AND STRESS SKIN REINFORCEMENT ON A 30" WIDE TRAY WITH TEE SECTION. THEREFORE, BOTH THERMAL AND STRUCTURAL ASPECTS OF THE CONFIGURATION HAVE BEEN ADEQUATELY ADDRESSED. THE CONDUIT SLEEVE COMMON ENCLOSURE (BOX) IS SHOWN ON DCA 103184/1, PAGE 5. THIS COMMON ENCLOSURE IS INSTALLED AROUND (5) CONDUIT SLEEVES, UP TO AND INCLUDING THE EXISTING ELASTOMER FIRE STOP IN TRAY T23GSCN80, AND INCLUDES THE ESSENTIAL CONDUIT FROM JUNCTION BOX JB2S5312G. THE COMMON ENCLOSURE FOR THE CONDUIT SLEEVES HAS BEEN REINFORCED WITH TIE WIRE STITCHING. THE ESSENTIAL CONDUIT EXITING JUNCTION BOX 2B2S5312G HAS BEEN PROTECTED WITH FLEXI-BLANKET FROM THE JUNCTION BOX TO THE CONDUIT SLEEVE COMMON ENCLOSURE. THE OVERALL LENGTH OF THIS CONDUIT IS < 2 FT. THE FLEXI-BLANKET HAS BEEN INSTALLED ON THE CONDUIT IN ACCORDANCE WITH AIR DROP REQUIREMENTS OF TEST SCHEME 11-1. GIVEN THE METHODS USED IN INSTALLATION MAINTAINING FIRE BARRIER THICKNESS, CONTINUITY AND SUPPORT, THIS INSTALLATION IS ACCEPTABLE.	103184/1 103192/1 103681/1
39.	TYPICAL DETAIL 8-4 HAS BEEN EVALUATED IN ATTACHMENT A, BASIS/NOTE NO. 51 AND IS ACCEPTABLE.	103486/0
40.	TYPICAL DETAIL 7-7 AND 7-7.1 HAS BEEN EVALUATED IN ATTACHMENT A, BASIS/NOTE NO. 70 AND IS ACCEPTABLE.	103061/1
41.	LBDs HAVE BEEN PROTECTED USING STANDARD DETAIL 6-1, EXPANDED TO ENCAPSULATE BOTH LBDs. STANDARD DETAIL 6-1 HAS BEEN EVALUATED IN ATTACHMENT A. THE BOX DESIGN USED TO PROTECT THESE LBDs CLOSELY RESEMBLE THE SAME TECHNIQUES USED TO PROVIDE PROTECTION FOR JUNCTION BOXES AS WAS TESTED IN TEST SCHEME 10-1 AND 10-2. THE BOXING OF THE TWO LBDs TOGETHER HAS BEEN TESTED IN SCHEME 10-2. IT PRESENTS A GREATER THERMAL MASS (WHEN COMPARED TO A SINGLE LBD) AND THUS RESULTS IN LOWER OVERALL INSIDE TEMPERATURE. THE RESULTING PROTECTIVE ENVELOPE MAINTAINS THE MINIMUM MATERIAL THICKNESS, THE MATERIAL IS CONTINUOUS, AND THE STRUCTURAL INTEGRITY AND END USE OF THE FIRE BARRIER IS CONSISTENT WITH THE TESTED CONFIGURATIONS. THIS INSTALLATION IS ACCEPTABLE.	102058/0 101499/0 102889/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
42.	THE PROTECTIVE ENVELOPE FOR THE ESSENTIAL CONDUIT LBD HAS BEEN INSTALLED IN ACCORDANCE WITH STANDARD DETAIL 6-1 WITH EXCEPTION OF ONE CORNER WHICH HAS BEEN MODIFIED DUE TO AN EXISTING LBD THERMO-LAG "BOX" COVERAGE. AT THE INTERFACE A SMALL PIECE OF 330-1 PANEL AND BANDS HAVE BEEN INSTALLED/ATTACHED TO THE EXISTING LBD ENVELOPE WITH A 1/4" THICKNESS OF 330-1. THE REMAINDER OF THE LBD HAS BEEN PROTECTED AS REQUIRED BY DETAIL 6-1 INCLUDING BANDING AND JOINT UPGRADES. ALTHOUGH THE INSTALLED DETAIL SLIGHTLY DEVIATED FORM THE STANDARD DETAIL/TESTED CONFIGURATION THE INSTALLATION IS ACCEPTABLE SINCE THERE IS NO DEVIATION IN MATERIAL THICKNESS, THE MATERIAL IS CONTINUOUS, AND THE SUPPORT ASSEMBLY AND END USE IS CONSISTENT WITH THE TESTED CONFIGURATIONS.	102726/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
43.	THIS DCA DEALS WITH 2 DISTINCTIVELY DIFFERENT ISSUES. THE FIRST DEALS WITH AN INTERFERING PIPE COVERED WITH FLEXI-BLANKET AND SECOND DEALS WITH A BOX DESIGN WHICH WAS UPGRADED BY ADDING A SECOND LAYER TO AIR DROP PROTECTED BY A BOX DESIGN (DCN 5742/1 OF MINOR MODIFICATION 93-125). THE FIRST ISSUE CONCERNS A 2" CH LINE WHICH INTERFERES WITH THE STANDARD COVERAGE ON THE BOTTOM OF AN ESSENTIAL CABLE TRAY AND A 2ND CH LINE WHICH INTERFERES WITH THE COVERAGE ON THE 1ST CH LINE. THE INSTALLATION OF 2 LAYERS FOR FLEXI-BLANKET ON THE INSIDE OF THE TRAY. THEN COVERING OVER THE PIPE WITH AN ADDITIONAL 2 LAYERS OF FLEXI-BLANKET WAS, AT FIRST, CONSIDERED NOT TO BE CONSISTENT WITH TESTED CONFIGURATIONS AND WAS IDENTIFIED ON ONE FORM 93-184 ALONG WITH SEVERAL OTHER CONFIGURATIONS. HOWEVER, A CLOSER LOOK AT THIS CONFIGURATION INDICATED THAT THE INSTALLATION CAN BE JUSTIFIED. UNLIKE THE OTHER CONFIGURATION ON ONE FORM 93-184, THIS INSTALLATION DOES NOT RELY ON JUST 1/2" OF FLEXI-BLANKET (2 LAYERS) INSTALLED ON THE INSIDE OF THE TRAY TO PROTECT THE ENVELOPE. IN ORDER FOR A FIRE TO BREACH THIS PROTECTED ENVELOPE IT WOULD HAVE TO GO THROUGH 2 LAYERS OF FLEXI-BLANKET OR GET PAST AN INSULATED 2" CH LINE, THEN A 2" CH LINE WRAPPED WITH 330-70 CERAMIC FIBER AND A METAL JACKET INSIDE THE OUTER LAYERS OF FLEXI-BLANKET, THEN THROUGH 2 MORE LAYERS OF FLEXI-BLANKET. IN ADDITION, TROWEL GRADE IS INSTALLED IN ALL INTERNAL VOIDS; A SECOND LAYER OF 330-1 PANELS BUTTS TO THE FLEXI-BLANKET, THE FLEXI-BLANKET IS STAPLED TO THE TRAY COVERAGE AND THE PANEL IS BANDED TO THE TRAY CONSISTENT WITH TYPICAL DETAIL AIR DROP COVERAGE TESTED IN SCHEME 11-1 AND THE 2" CH LINE INSIDE THE PROTECTED ENVELOPE IS WRAPPED WITH 330-70 CERAMIC FIBER, A METAL JACK, THEN 2 LAYERS OF FLEXI-BLANKET, AS PER PROTRUDING COVERAGE, 9" TO 11" ON EACH SIDE OF THE PROTECTED ENVELOPE. THE RESULTING CONFIGURATION, ALTHOUGH NOT SPECIFICALLY TESTED, IS SIGNIFICANTLY SIMILAR TO TESTED CONFIGURATIONS AND SUFFICIENT CONSERVATISM HAS BEEN UTILIZED WITH THE DOUBLE COVERAGE BY FLEXI-BLANKET, DOUBLE 220-1 PANELS. STAPLING AND THE HEAT SINK PROVIDED BY THE PIPE AND THE SHADOWING AFFECT SHOULD THE EXTERNAL LAYER FAIL, SO THAT THERE IS REASONABLE ASSURANCE THAT THE ASSEMBLY WILL PROTECT THE ESSENTIAL CABLE TRAY CONSISTENT WITH OTHER TESTED CONFIGURATIONS. THE SECOND ISSUE CONCERNS THE COVERING OF AN AIR DROP FROM A VERTICAL TO A HORIZONTAL TRAY WITH A 330-1 BOX. THE BOX IS INSTALLED WITH 2 LAYERS OF 330-1 PANELS CONSISTENT WITH THE TESTED CONFIGURATION FOR JBs IN SCHEME 10-1. ALL JOINTS ON BOTH LAYERS ARE EITHER SCORE AND FOLD OR TIE WIRED TOGETHER AND THEN COVERED WITH STRESS SKIN PER TESTED CONFIGURATIONS. THE FIRST LAYER IS FURTHER ENHANCED BY THE TIE WIRING THE BOTTOM PANEL TO THE TRAY RUNGS AND FLARING OUT COVERAGE AT THE WALL AND ATTACHING WITH SELF TAPPING SCREWS (METAL WALL COVERING). THE AIR DROP CABLES DO NOT CONTACT THE THERMO-LAG PANELS AND THE CABLES A PROTECTED WITH SILTEMP. THE ENCLOSED AIR VOLUME, THE THERMAL MASS OF CABLES IN CONJUNCTION WITH THE DEMONSTRATED PERFORMANCE OF 2 LAYERS OF THERMO-LAG 330-1 PANELS WILL MAINTAIN SUFFICIENTLY LOW CABLE TEMPERATURES. THEREFORE THE THERMAL AND STRUCTURAL INTEGRITY ASPECTS OF THE CONFIGURATION HAS BEEN ADEQUATELY ADDRESSED.	102932/5 103912/0 102932/5 AS MODIFIED BY DCN 5742/1
44.	ONCE THE SLEEVES HAVE BEEN INSTALLED, THE SUPPORT FRAME CAN BE INSTALLED SO THAT THERMO-LAG CAN BE INSTALLED PER TYPICAL DETAIL 7-3. THE CHANGES MADE IN THE SUPPORT FRAME DO NOT AFFECT ITS FUNCTIONALITY AND THEREFORE THE ACCEPTANCE BASIS FOR DETAILS 7-3 AND 7-4 IN ATTACHMENT A APPLY TO THIS CONFIGURATION. THIS CONFIGURATION IS ACCEPTABLE.	103277/1 103406/1 103885/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
45.	THE METHOD USED WAS WRAPPING THE AIR DROP BY COVERING IT WITH FLEXI-BLANKET PER REQUIRED THICKNESS AND BANDING AND TROWEL GRADING IT TO THE TOP OF THE 330-1 PANEL ON TOP OF THE TRAY. THIS WILL RESULT IN THE CABLES BEING COVERED WITH THE REQUIRED LAYERS OF FLEXI-BLANKET AND FIRE STOPPED. THE RESULTING CONFIGURATION CLOSELY RESEMBLES THE TESTED CONFIGURATION. THE ELIMINATION OF A MINOR AMOUNT OF STRESS SKIN ON THE LONGITUDINAL JOINT DOES NOT HAVE A SIGNIFICANT IMPACT ON THE MECHANICAL INTEGRITY OF THE JOINT.	103046/2
46.	THE EFFECTIVENESS OF THERMO-LAG 330-1 PANELS ON 24" CABLE TRAYS HAS BEEN DEMONSTRATED VIA TEST SCHEME 12-2. COMPENSATION HAS BEEN MADE FOR THE SMALL SLOT CUT IN THE THERMO-LAG BOTTOM PANEL BY INSTALLING AN ADDITIONAL LAYER OF 330-1 PANEL ON THE BOTTOM INSIDE OF THE TRAY. ALL GAPS AND VOIDS ARE FILLED WITH TROWEL GRADE TO ELIMINATE THE CHANCE OF HEAT PROPAGATION INTO THE PROTECTED SPACE. THE SLIGHT REDUCTION IN MATERIAL THICKNESS IN THE AREA OF THE CC LINE IS COMPENSATED FOR BY INSTALLING A FULL 1/2" NOMINAL PANEL INSIDE THE CABLE TRAY ABOVE, OVERLAPPING THE INSIDE AND OUTSIDE PANELS BY 9" (MIN) PROVIDES NOT ONLY 1/2" THERMO-LAG PROTECTION, BUT ALSO PROTECTS THE CABLES FROM HEAT BEING CONDUCTED ALONG THE METAL TRAY AND INTO THE PROTECTED ENVELOPE.	103862/0
47.	THE REDUCTION OF THE PANEL AT THE HVAC INTERFERENCE WILL NOT COMPROMISE THE INTEGRITY OF THE PROTRUDING ITEM COVERAGE SINCE THE REDUCTION IS ONLY 1/8" AT THE INTERFERENCE. ALTHOUGH THIS REPRESENTS A REDUCED THICKNESS FROM THE TESTED CONFIGURATION, THE REMAINING ATTRIBUTES FOR PROTRUDING ITEM PROTECTION ARE IN ACCORDANCE WITH TESTED CONFIGURATIONS. THE LOCATION WHERE THE TRAPEZE HANGER CROSSES THE ANGLE SUPPORT AMOUNTS TO 1/2" X 2" IN AREA/DIMENSIONS. EXTRA 330-1 PANELS HAVE BEEN INSTALLED TO CREATE A TORTUROUS PATH FOR HEAT AS WELL AS THE SHIELDING AFFECTS PROVIDED BY THE ANGLE/HANGER.	104246/0
48.	THE INSTALLATION OF 330-1 PANELS ON 24" WIDE CABLE TRAY IS QUALIFIED THROUGH TEST SCHEME 12-2, FLAT PANEL SUBSTITUTION FOR "V" RIB PANELS HAS BEEN DEEMED ACCEPTABLE PRE-BANDING EVERY 6". WHERE THE CABLE TRAY THERMO-LAG COVERAGE AND ESSENTIAL CONDUIT THERMO-LAG COVERAGE INTERFACE, INSTALLATION IS IN ACCORDANCE WITH TYPICAL DETAIL 14-3. ALL JOINTS AND SEAMS ASSOCIATED WITH THE CABLE TRAY COVERAGE AS WELL AS THE AIR DROP "BOX" ENCLOSURE SHALL BE UPGRADING STRESS SKIN AND TROWEL GRADE AND/OR REINFORCED WITH TESTED METHODS (TIE WIRE STITCHING). ALL PROTRUDING ITEMS ARE PROTECTED FOR A DISTANCE OF 9" AS PER TESTED CONFIGURATIONS, WITH THE EXCEPTION OF THE HVAC SUPPORTS. THESE SUPPORTS ARE COVERED FOR THEIR FULL LENGTH FROM THE ESSENTIAL TRAY TO THE HVAC INSULATION (APPROX. 7-1/2" OF COVERAGE). THIS HAS BEEN DEEMED ACCEPTABLE BASED ON THE LARGE SURFACE AREA (HEAT SINK) OF THE INSULATED HVAC DUCT. INTERFERING ITEMS WHICH INHIBIT THE INSTALLATION OF STRESS SKIN ON CABLE TRAY T220CBD22 ARE RESOLVED THROUGH DETAIL 5-16.	102679/1
49.	THE MAJORITY OF THERMO-LAG INSTALLED PER THIS DCA IS QUALIFIED BY STANDARD TEST SCHEMES INVOLVING CABLE TRAY COVERAGE. IN SEVERAL AREAS THE STANDARD CABLE TRAY TOP PANEL HAS BEEN RAISED BY THE USE OF THERMO-LAG SHIMS AND 2 LAYER COVERAGE OF THE AIR DROP INCREASES THE INTERNAL VOLUME, LOWERING INTERNAL TEMPERATURES. JOINTS AND SEAMS ASSOCIATED WITH BOTH LAYERS OF THE "BOX" DESIGNS ARE EITHER SCORE AND FOLD OR TIE WIRED THEN REINFORCED WITH STRESS SKIN. THEREFORE DUE TO THESE CONSERVATIVE MECHANICAL ATTACHMENT TECHNIQUES AND THE 2 LAYER COVERAGE OVER THE AIR DROP, THE ENCLOSURE ADEQUATELY ACCOUNT FOR THE STRUCTURAL INTEGRITY LIMITATIONS OF THERMO-LAG AT ELEVATED TEMPERATURES.	101498/1 AS MODIFIED BY DCN 5746/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
50.	THIS DESIGN IS SIMILAR TO TYPICAL DETAILS 9-2 AND 13-2 WHICH HAVE BEEN ANALYZED IN ATTACHMENT A. THE BOX DESIGN FOR THE CABLE AIR DROPS FROM THE TWS TO THE CABLE TRAY HAS BEEN CONSTRUCTED BY PRE-BANDING THE BOX AT THE WALL AND AT 12" CENTERS BACK TO THE POINT WHERE THE TOP PANEL IS FLUSH WITH THE TRAY. THE 330-1 PANELS BUTT TO THE WALL, FLARE OUT, AND ARE MECHANICALLY ATTACHED TO THE WALL WITH HILTI KWIK-BOLTS. ALL JOINTS HAVE BEEN UPGRADED WITH STRESS SKIN, STAPLES, AND TROWEL GRADE. ALTHOUGH THE INSTALLATION DOES NOT MEET A TESTED CONFIGURATION, IT DOES RESEMBLE TEST SCHEME 14-1 WHICH TESTED A 30" CABLE TRAY PROTECTIVE ENCLOSURE. THE INSTALLATION IS CONTINUOUS, MATERIAL THICKNESS IS MAINTAINED, STRUCTURAL INTEGRITY AND END USE IS CONSISTENT WITH TEST SCHEME 14-1 AND IS THEREFORE ACCEPTABLE.	102103/0
51.	FOR ALL BUT A 4' LONG AREA, THE THERMO-LAG ON THE TRAY IS INSTALLED IN ACCORDANCE WITH TESTED CONFIGURATIONS. IN THE 4' AREA AROUND THE HVAC SUPPORT WHERE FLAT PANELS WERE INSTALLED, ALL JOINTS WERE STITCHED AND LONGITUDINAL STRESS SKIN WAS NOT COMPLETE. THE USE OF 330-1 THERMO-LAG FLAT PANELS WAS QUALIFIED IN SCHEME 10-2 FOR JUNCTION BOXES. PREBAND SPACING WAS REDUCED AND ALL JOINTS ARE BANDED TO COMPENSATE FOR THE FLAT PANELS. THE USE OF STITCHING IN LIEU OF STRESS SKIN ON JOINTS WAS TESTED IN SCHEME 1-2. THE USE OF THE FLEXI-BLANKET BETWEEN THE 330-1 PANEL AND THE CABLES KEEPS THE CABLES AWAY FROM THE PROJECTED ENVELOPE. THE RESULTING CONFIGURATION IS ACCEPTABLE.	103670/0
52.	330-660 FLEXI-BLANKET MATERIAL WAS INSTALLED ON CABLE AIR DROPS BETWEEN 330-1 MATERIAL. THE LARGEST CABLE BUNDLE TESTED WAS 3" Ø FROM A CEILING PENETRATION TO 3" CONDUIT SECTIONS PROTRUDING A THERMO-LAG PROTECTED CABLE TRAY. THE FIELD INSTALLED CONFIGURATION IS COMPRISED OF FLEXI-BLANKET MATERIAL WRAPPED AROUND THE CABLE TRAY THERMO-LAG PANELS. TO COMPENSATE FOR THE INCREASED SIZE OF THE CABLE BUNDLE AND AREA OF OVERLAP, FLEXI-BLANKET MATERIAL WAS PREBUTTERED AND ATTACHED WITH 1" LONG STAPLES ANCHORED INTO THE 330-1 MATERIAL EVERY 3" (APPROX.).	103567/1
53.	STANDARD DETAILS 9-2, 1-5 AND 11-7 HAVE BEEN EVALUATED IN ATTACHMENT A. FILLING THE RECESS OF THE SPARE SLEEVES PROVIDES A FLUSH SURFACE FOR INSTALLATION OF PANEL AT THE CEILING. THE FLANGE DETAILS HAVE BEEN ENHANCED BY THE ADDITION OF A 2" WIDE 330-1 FLAT BOARD TO SECURE TIE WIRE TO STRESS SKIN. THERE IS A DEVIATION HOWEVER, REGARDING THE 5" OVERLAP OF THE LONGITUDINAL JOINTS. THIS IS ACCEPTABLE SINCE AT LEAST 4" CAN BE ACHIEVED, AND THE FACT THAT ALL STAPLING REQUIREMENTS HAVE BEEN ADHERED TO. THE FACT THAT THE MATERIAL IS CONTINUOUS, MATERIAL THICKNESS IS MAINTAINED, STRUCTURAL INTEGRITY AND END USE IS CONSISTENT WITH TESTED DETAILS, MAKES THIS INSTALLATION ACCEPTABLE.	103600/2
54.	THIS CONFIGURATION DEVIATES FROM TESTED CABLE TRAY PROTECTION SCHEMES BECAUSE TWO LAYERS OF 330-1 FLAT PANEL ARE USED TO PROVIDE ADDITIONAL MATERIAL IN THE AREA OF THE INTERFERENCE (WHERE TOP PANEL THICKNESS IS REDUCED). PANEL ATTACHMENT AND JOINT REINFORCEMENT METHODS USED AT THE DEVIATION (330-1 TROWEL GRADE PREBUTTERING AND FILLETS, STRESS SKIN APPLICATION, STAPLING, THROUGH-PANEL TIE WIRING, STITCHING OF LONGITUDINAL JOINTS AND PRE-BANDING BENEATH PANELS) IN CONJUNCTION WITH THE USE OF TYPICAL DETAIL 8-3 FOR THE V-RIB TO FLAT PANEL TRANSITION PROVIDE THE ENVELOPE WITH STRUCTURAL INTEGRITY EQUIVALENT TO THAT OF THE TESTED DESIGNS. THE USE OF A SECOND FULL THICKNESS 330-1 FLAT PANEL PROVIDES THE REQUIRED THERMAL IMPROVEMENT TO THE DESIGN.	102931/0
55.	STANDARD DETAIL 12-2 HAS BEEN EVALUATED IN ATTACHMENT A. THESE INSTALLATIONS ARE ACCEPTABLE.	103408/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
56.	INTERFERENCE 1: THE REDUCTION IN THICKNESS OF THE 330-1 PANEL AT THE INTERFERENCE IS ACCEPTABLE BASED ON THE AMOUNT OF 330-1 PANEL INSTALLED AT THE DEVIATION AND THE ADDITIONAL 330-1 PANELS ADDED AROUND THE AREA OF DEVIATION. THIS DOUBLING OF THE PANELS WILL PROVIDE NOT ONLY TWICE THE MATERIAL TO THERMALLY SUBLIME, IT ALSO PROVIDES A MORE TORTUROUS PATH THAT ANY HEAT TRANSFER INTO THE ENVELOPE. INTERFERENCE 2: SEE INTERFERENCE 1. INTERFERENCE 3: THE DEVIATION TO SPLICE PLATE COVERAGE IS ACCEPTABLE BASED ON THE JOINTS WHERE THE 330-1 FLAT PANEL WILL BUTT TO THE 330-1 V-RIB PANELS. THE JOINTS ARE TIE WIRED TOGETHER WHICH IS A TESTED SECURING METHOD, TROWEL GRADE MATERIAL WILL FILL ALL AIR GAPS BEHIND THE 330-1 FLAT PANEL AND MOST OF THE SPLICE PLATE COVER WHICH WILL RECEIVE STRESS SKIN UPGRADE (SEE NEXT DEVIATION). THE OTHER DEVIATION CONCERNS THE INABILITY TO ACHIEVE STRESS SKIN UPGRADE AT THE HVAC HANGER. THIS IS ACCEPTABLE BASED ON THE MINOR LENGTH OF THE DEVIATION WHICH WILL HAVE A NEGLIGIBLE, THEREFORE ACCEPTABLE, AFFECT ON THE JOINT STRENGTH OF THE SPLICE PLATE COVER. INTERFERENCE 4: THE INABILITY TO INSTALL THE STRESS SKIN UPGRADE ON THE LONGITUDINAL JOINTS IS ACCEPTABLE DUE TO THE MINOR LENGTH OF THE DEVIATION WHICH WILL HAVE A NEGLIGIBLE, THEREFORE ACCEPTABLE, AFFECT ON THE JOINT STRENGTH. INTERFERENCE 5A: THE INABILITY TO INSTALL THE STRESS SKIN UPGRADE ON THE LONGITUDINAL JOINTS IS ACCEPTABLE DUE TO THE TIE WIRING OF THE TOP, SIDE, AND BOTTOM PANELS TOGETHER WITH APPROVED SECURING MECHANICS (TIE WIRES EVERY 3" ± 1/2"). ALSO, THE COVERAGE FOR THE CHANNEL AS A PROTRUDING ITEM, ALTHOUGH NOT TO THE TYPICAL DETAILS, WILL PROVIDE A SECURE ONE-HOUR BARRIER AROUND THE PROTRUDING ITEM. INTERFERENCE 5B: ALL DETAILS OF THIS DESIGN CONFORM TO THE DESIGN DETAILS AND ARE THEREFORE ACCEPTABLE. INTERFERENCE 6: SEE INTERFERENCE 1. INTERFERENCE 7: SEE INTERFERENCE 5B. INTERFERENCE 8: SEE INTERFERENCE 1. INTERFERENCE 9: SEE INTERFERENCE 1.	103892/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
56. CONT'D	INTERFERENCE 10: THE DEVIATION CONCERNS THE INABILITY TO INSTALL COMPLETE 330-1 PANEL COVERAGE ON THE TRAY DUE TO THE HVAC SUPPORT INTERFERENCE. THIS IS ACCEPTABLE DUE TO THE FACT THAT THE HVAC HANGER HAS A 1/16" TO 1/32" GAP BETWEEN IT AND THE TRAY RAIL SIDE THEREBY MAKING THIS AN INTERFERENCE. THE COVERAGE OF THE HVAC HANGER AS A PROTRUDING ITEM TO THE EXTENT POSSIBLE BUTTING UP TO THE HVAC DUCT WILL ENSURE THE REQUIRED AMOUNT OF FIRE BARRIER EXISTS ALONG THIS POSSIBLE HEAT PATH TO KEEP THE CABLES FUNCTIONING IN THE EVENT OF A FIRE. INTERFERENCE 11: SEE INTERFERENCE 1. INTERFERENCE 12: SEE INTERFERENCE 1 AND 3. INTERFERENCE 13: SEE INTERFERENCE 1.	
57.	DELETED	
58.	WHILE NONE OF THESE UNIQUE CONFIGURATIONS HAVE BEEN FIRE TESTED, THE METHODS USED TO ATTACH THE PANELS TOGETHER BY OVERLAPPING THEM AND TIE WIRING THEM TOGETHER THEN APPLYING STRESS SKIN AND TROWEL GRADE ARE TESTED CONCEPTS. WHERE THESE METHODS ARE USED TO MAINTAIN MATERIAL CONTINUITY AND MATERIAL THICKNESS IS MAINTAINED, THEN THESE CONFIGURATIONS ARE ACCEPTABLE. WHERE MATERIAL THICKNESS CANNOT BE MAINTAINED AT THE SIDE RAILS THIS IS COMPENSATED FOR BY EXTENDING COVERAGE OUT ALONG THE TRAY IN ACCORDANCE WITH THE 9" RULE. THIS WILL CREATE A TORTUROUS PATH FOR FIRE TO ENTER THE PROTECTED ENVELOPE. THE COVERAGE OF PROTRUDING ITEMS PER THE 9" RULE HAS BEEN FIRE TESTED IN ALL OF THE TESTED CONFIGURATIONS. THE COMBINED EFFECT OF ALL OF THE ABOVE RESULTS IN THE CONFIGURATIONS BEING ACCEPTABLE.	103740/1
59.	THIS IS A UNIQUE CONFIGURATION IN WHICH A 3 FT. LONG THERMO-LAG FLAT PANEL ENCLOSURE BRIDGES TWO TRAYS SEGMENTS WITH AIR DROP CABLES ENCLOSED WITHIN THE ENVELOPE. THE STRUCTURAL INTEGRITY OF THE ENCLOSURE HAS BEEN ADDRESSED BY THE ADDITION OF A SUPPORT MID-SPAN BETWEEN THE TRAY SEGMENTS. THE NEW SUPPORT HAS STEEL PLATE GUIDES WELDED ON WHICH SERVE AS ATTACHMENT POINTS FOR BANDING WHICH EXTENDS TO EACH TRAY SEGMENT. THE BANDS FORM A FRAMEWORK FOR PANEL PIECES INSTALLED ON THE ENCLOSURE SIDES. THE FLEXI-BLANKET INSTALLED ON THE INSIDE OF THE BOTTOM PANEL PREVENT CABLES CONTACTING THE BACKSIDE SURFACE AND ALSO PROVIDE ADDITIONAL THERMAL PROTECTION. ALL JOINTS ARE REINFORCED BY QUALIFIED METHODS. REQUIRED MATERIAL THICKNESS IS MAINTAINED ALBEIT WITH FLAT PANELS. THEREFORE THE THERMAL AND STRUCTURAL INTEGRITY ASPECTS HAVE BEEN ADEQUATELY ADDRESSED AND THE CONFIGURATION PROVIDES AN EQUIVALENT 1-HOUR RATING.	104204/0
60.	THIS CONFIGURATION REPRESENTS A MINOR DEVIATION TO SPEC. REQUIREMENTS ONLY IN AS MUCH AS THE SUPPORT WAS SPECIFIED FOR COVERAGE PRIOR TO INSTALLED ON THE CONDUITS FIRST. ALL CRITICAL ATTRIBUTES HAVE BEEN MAINTAINED FOR PROTECTION OF THE CONDUITS, THICKNESS, CONTINUITY, ETC. THEREFORE THIS CONFIGURATION WILL PROVIDE THE REQUIRED 1-HOUR RATING.	101627/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
61.	THIS CONFIGURATION IS UNIQUE IN THAT A 330-1 BOX CONFIGURATION IS CONSTRUCTED TO PROVIDE COVERAGE FOR A MINOR PORTION OF A 2" DIA. FLEX CONDUIT AT A FOAM BLOCKOUT. WHERE THE FLEX CONDUIT ENTERS THE BOX, 330-1 CONDUIT SECTIONS ARE INSTALLED WITH STRESS SKIN AND TROWEL GRADE BUILD UP. THE BOX IS FILLED WITH 330-1 TROWEL GRADE AND ALL JOINTS REINFORCED WITH TECHNIQUES QUALIFIED BY SCHEME 9-1 FOR LBD ENCLOSURES. THE INTERFACE WITH THE FOAM BLOCKOUT IS PROVIDED WITH M-BOARD FOR ADEQUATE MATERIAL SEPARATION (FOAM AND 330-1 TROWEL GRADE) AND TO PROVIDE THERMAL PROTECTION. THE MINOR AREA OF THE OUTER 2" DIAM. FLEX CONDUIT WHERE 3 COMPLETE LAYERS OF 330-660 FLEXI-BLANKET CANNOT BE INSTALLED IS ACCEPTABLE SINCE IT BUTTS DIRECTLY TO THE CONCRETE SURFACE WHICH SHIELDS IT AND ACTS AS A HEAT SINK. THE AREA OF INCOMPLETE 3 LAYERS IS VERY MINOR AND EFFECTIVELY ESTABLISHES A TORTUROUS PATH. THE DESIGN PROVIDES FOR ADEQUATE MATERIAL THICKNESS (330-1 TROWEL GRADE AND CONDUIT SECTIONS) FOR THE FLEX CONDUIT AT THE BLOCKOUT PLUS EFFECTS OF FOAM SEAL AND M-BOARD MATERIAL AND PROVIDES FOR STRUCTURAL INTEGRITY OF THE BOX CONFIGURATION (STITCHING AND STRESS SKIN). THE EFFECTIVE MATERIAL THICKNESS (330-660) FOR THE FLEX CONDUIT AT THE WALL IS ADEQUATE TO PROVIDE AN EQUIVALENT 1-HOUR RATING.	103056/1
62.	THE BOXED-IN DESIGN AND CABLE TRAY SHIMS PRESENT IN DCA 103305/0 HAVE NOT SPECIFICALLY BEEN INCLUDED AS PART OF TESTED CONFIGURATION. THE BOXED IN DESIGN UTILIZES STANDARD DETAIL 12-2 WHICH HAS BEEN EVALUATED IN ATTACHMENT A. THE CABLE TRAY SIDE RAIL SHIMS HOWEVER, ARE NO DIFFERENT THAN MULTIPLE LAYERS OF 330-1 PANELS WHICH HAS BEEN TESTED IN TEST SCHEME 10-1 (i.e., JUNCTION BOX-2 LAYERS) THE MULTIPLE LAYERS OF 330-1 PANELS PROVIDE FOR A GREATER DEPTH/QUANTITY OF MATERIAL AVAILABLE FOR SUBLIMING AND THUS LOCALIZED REDUCTION OF INSIDE TEMPERATURES WITHIN THE PROTECTIVE ENVELOPE AT THE SHIM(S) LOCATION. THE BOXED-IN DESIGN HAS BEEN INSTALLED UTILIZING TESTED UPGRADE JOINTING METHODS AS WELL AS THE SCORE AND FOLD TECHNIQUE. THE SCORE AND FOLD TECHNIQUE ENSURES THAT THE STRESS SKIN (INSIDE) REMAINS CONTINUOUS AT CRITICAL JOINT LOCATIONS, AND IN CONJUNCTION WITH UPGRADED JOINT METHODS ENSURES INTEGRITY OF THE JOINT DURING FIRE CONDITIONS. THE OVERALL WIDTH OF THE BOX REPRESENTS NO GREATER UNSUPPORTED AREA THAN WOULD NORMALLY BE ENCOUNTERED IN A STANDARD TESTED 36" CABLE TRAY PROTECTIVE ENCLOSURE INSTALLATION. THE CABLE AIR DROP PROTECTIVE ENVELOPE IS A UNIQUE DESIGN IN THAT AT THE CONDUIT A TEE SECTION WAS FABRICATED FROM PRESHAPED CONDUIT SECTIONS WITH THE OPEN END OF THE TEE SECTION COVERED BY A 330-1 FLAT BOARD. ALL JOINTS WERE UPGRADE WITH STRESS SKIN AND STITCHING. THE REMAINDER OF AIR DROP IS PROTECTED BY FLEXI-BLANKET UP TO THE BOX AT THE CABLE TRAY. ALTHOUGH THIS CONFIGURATION IS NOT TESTED IT DOES RESEMBLE TEST SCHEME 11-1. THE FACT THAT THE MATERIAL THICKNESS IS MAINTAINED, THE FIRE BARRIER IS CONTINUOUS, STRUCTURAL INTEGRITY AND END USE IS CONSISTENT WITH THE TESTED CONFIGURATION, THE INSTALLATION IS ACCEPTABLE. IN CONCLUSION, THIS INSTALLATION IS IN ACCORDANCE WITH BASIS/NOTES 1-5 AND IS ACCEPTABLE AS-IS.	103305/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
63.	THE BOXED-IN DESIGN AND CABLE TRAY SHIMS PRESENT IN DCA 104194/0 HAVE NOT SPECIFICALLY BEEN INCLUDED AS PART OF TESTED CONFIGURATION BUT IS SIMILAR TO TYPICAL DETAILS 9-2 AND 13-2 WHICH HAVE BEEN EVALUATED IN ATTACHMENT A. THE CABLE TRAY SIDE RAIL SHIMS HOWEVER, ARE NO DIFFERENT THAN MULTIPLE LAYERS OF 330-1 PANELS WHICH HAS BEEN TESTED IN TEST SCHEME 10-1 (i.e., JUNCTION BOX-2 LAYERS) THE MULTIPLE LAYERS OF 330-1 PANELS PROVIDE FOR A GREATER DEPTH/QUANTITY OF MATERIAL AVAILABLE FOR SUBLIMING AND THUS LOCALIZED REDUCTION OF INSIDE TEMPERATURES WITHIN THE PROTECTIVE ENVELOPE AT THE SHIM(S) LOCATION. THE BOXED-IN DESIGN HAS BEEN INSTALLED UTILIZING TESTED UPGRADE JOINTING METHODS AS WELL AS THE SCORE AND FOLD TECHNIQUE. THE SCORE AND FOLD TECHNIQUE ENSURES THAT THE STRESS SKIN (INSIDE) REMAINS CONTINUOUS AT CRITICAL JOINT LOCATIONS, AND IN CONJUNCTION WITH UPGRADED JOINT METHODS ENSURES INTEGRITY OF THE JOINT DURING FIRE CONDITIONS. THE OVERALL WIDTH OF THE BOX REPRESENTS NO GREATER UNSUPPORTED AREA THAN WOULD NORMALLY BE ENCOUNTERED IN A STANDARD TESTED 36" CABLE TRAY PROTECTIVE ENCLOSURE INSTALLATION. ONE DEVIATION WAS IDENTIFIED WHERE TIE WIRES WERE DELETED ON THE STRESS SKIN UPGRADE AT JOINTS. ALL JOINTS WERE STITCHED WHERE THE PANELS INTERFACE. TROWEL GRADE AND STRESS SKIN WERE APPLIED OVER THESE JOINTS WITH THE STRESS SKIN AND STAPLES. THIS DESIGN PROVIDES AN EQUIVALENT LEVEL OF PROTECTION TO THE TESTED CONFIGURATION. ANOTHER DEVIATION OCCURS AT THE SPLICE PLATE COVER. THE DESIGN USED HEREIN UTILIZED A 330-1 FLAT PANEL TO FIT BETWEEN 330-1 V-RIB PANELS ON THE SIDE RAILS. THE FLAT PANEL WAS STITCHED TOP AND BOTTOM, ENSURING THE INTEGRITY OF THE FIRE BARRIER. IN CONCLUSION, THIS INSTALLATION IS IN ACCORDANCE WITH BASIS/NOTES 1-5 AND IS ACCEPTABLE AS-IS.	104194/0
64.	THE BOXED-IN DESIGN AND CABLE TRAY SHIMS PRESENT IN DCA 102800/0 HAVE NOT SPECIFICALLY BEEN INCLUDED AS PART OF TESTED CONFIGURATION. THE BOXED-IN DESIGN HAS BEEN INSTALLED UTILIZING TESTED UPGRADE JOINING METHODS AS WELL AS THE SCORE AND FOLD TECHNIQUE. THE SCORE AND FOLD TECHNIQUE ENSURES THAT THE STRESS SKIN (INSIDE) REMAINS CONTINUOUS AT CRITICAL JOINT LOCATIONS, AND IN CONJUNCTION WITH UPGRADED JOINT METHODS ENSURES INTEGRITY OF THE JOINT DURING FIRE CONDITIONS. THE OVERALL WIDTH OF THE BOX REPRESENTS NO GREATER UNSUPPORTED AREA THAN WOULD NORMALLY BE ENCOUNTERED IN A STANDARD TESTED 36" CABLE TRAY PROTECTIVE ENCLOSURE INSTALLATION. POSITIVE MECHANICAL ATTACHMENT IS PROVIDED AT THE WALL BY USE 330-1 PANEL FLANGE AND HILTI BOLT ARRANGEMENT AND "STICK-PINNED" THROUGH THE SILICONE FOAM PENETRATION SEAL. IN CONCLUSION, THIS INSTALLATION IS IN ACCORDANCE WITH BASIS/NOTES 1-5 AND IS ACCEPTABLE AS-IS.	102800/2
65.	THE RESULTING BOX CONFIGURATION IS THE SAME AS THE STANDARD DETAIL COVERAGE (DETAIL 2-3) EXCEPT THE BOTTOM OF THE BOX COVERAGE IS SHIMMED DOWN AND THE CABLES AIR DROPPING OUT OF THE BOTTOM OF THE JB ARE FIRE STOPPED. THE BASIC CONFIGURATION AND THE USE OF FIRE STOPS HAVE BEEN FIRE TESTED. SHIMMING HAS BEEN FIRE TESTED ON "C" CHANNEL SUPPORTS FOR TRAYS AND ALTHOUGH THIS APPLICATION IS SOMEWHAT DIFFERENT, THE CONCEPT OF USING THE SHIM TO PROVIDE ADDITIONAL STRUCTURAL BACKING FOR THE PRIMARY COVERAGE IS THE SAME. THE ADDITIONAL THERMO-LAG MATERIAL INSIDE THE ENVELOPE AND INCREASED AIR VOLUME BENEFITS THE ENCLOSURE EFFECTIVENESS.	102479/1 104257/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
66.	THE SUPPORT ROD IN PROBLEM 1 IS AN INTERFERING ITEM WHICH DOES NOT REPRESENT A DIRECT HEAT PATH TO THE ESSENTIAL COMMODITY. PROTECTING THE ROD AT THE PROTECTED ENVELOPE AND EXTENDING THE PROTECTION 5" TO 6" FROM THE PROTECTED ENVELOPE COMPENSATES FOR THE INTERFERENCE TO THE STANDARD TRAY COVERAGE. IN PROBLEM 2, RAISING THE TRAY COVERAGE TO ENCOMPASS THE CABLES LOCATED ABOVE THE TRAY IS ESSENTIALLY SHIMMING THE TRAY COVERAGE. THE SECOND PANEL ON THE SIDES PROVIDES ADDITIONAL STRUCTURAL INTEGRITY. THE ADDITIONAL MATERIAL INSIDE THE ENVELOPE AND INCREASED AIR VOLUME BENEFITS THE ENCLOSURE EFFECTIVENESS. THE EXTRA PANELS INSIDE THE TRAY AT THE INSULATED PIPE INTERFERENCE COMPENSATES FOR THE REDUCED THICKNESS. BUTTING THE TRAY COVERAGE TO THE UNIT 1 FLEXI-BLANKET PROVIDES A CONTINUOUS PROTECTED ENVELOPE. IN PROBLEM 3, THE RESULTING CONFIGURATION INVOLVING UNIT 1 AND UNIT 2 COVERAGE IS STANDARD TESTED COVERAGE. THE REMOVAL AND REINSTALLATION OF UNIT 1 THERMO-LAG IS ONLY TO ALLOW FOR PROPER COVERAGE OF THE UNIT 2 COMMODITY. THE FW PIPE IS AN INTERFERENCE TO THE PROTRUDING SUPPORT STEEL COVERAGE AND DOES NOT REPRESENT A DIRECT HEAT PATH TO THE PROTECTED COMMODITY. THE ADDITIONAL THERMO-LAG AT THE INTERFERENCE COMPENSATES FOR THE REDUCED COVERAGE.	103551/2
67.	THIS DESIGN TAKES THE CONSERVATIVE APPROACH OF COVERING ALL COMMODITIES PER THE MORE STRINGENT REQUIREMENTS OF A JUNCTION BOX. ATTACHMENT TO THE BEAM IS PER TYPICAL DETAILS BY BUTTING TO THE BEAM AND APPLYING A TROWEL GRADE FILLET AT THE INTERFACE. THE INCREASED INTERNAL AIR VOLUME AND ADDED THERMAL MASS OF THE LBD AND THE CONDUIT SUPPORT WILL BENEFIT THE ENCLOSURE EFFECTIVENESS. FINALLY THE CONCRETE BEAM LIMITS POTENTIAL EXPOSURE SURFACES AND WILL ACT AS A HEAT SINK.	104251/0
68.	WRAPPING THE ESSENTIAL CONDUIT IN A COMMON ENCLOSURE WITH THE NON-ESSENTIAL CONDUIT AND LBD IN ACCORDANCE WITH COVERAGE FOR LBDs IS CONSISTENT WITH TEST SCHEME 10-2 WHERE 2 LBDs WERE COVERED IN A COMMON ENCLOSURE. BUTTING THE COVERAGE UP TO THE CONCRETE BEAM WILL ENHANCE THE COVERAGE BY LIMITING THE SURFACE AREA SUBJECT TO FIRE EXPOSURE AND THE CONCRETE WILL ACT AS A HEAT SINK.	104265/0
69.	DUE TO THE LARGE AIR VOLUME AND ENCLOSED THERMAL MASS OF THE PROTECTED COMMODITIES (PROTRUDING PORTIONS OF THE EMBEDDED SLEEVES, CABLE BUNDLE MASS AND THE MASS OF THE CABLE TRAY) THE THERMAL PROTECTION AFFORDED BY THE 2 LAYER "B" DESIGN IS ADEQUATE IN ADDITION A SIGNIFICANT PORTION OF THE PROTECTIVE ENVELOPE IS THE CONCRETE CEILING WHICH PREVENTS FIRE EXPOSURE FROM THAT SIDE AND ACTS AS A HEAT SINK. THE STRUCTURAL INTEGRITY OF THE BOX IS MAINTAINED PROVIDING 2 LAYERS OF COVERAGE ON THE BOX, REINFORCING ALL JOINTS ON BOTH LAYERS WITH THE SCORE AND FOLD METHOD OR BY TIE WIRING THE JOINTS TOGETHER AND ADDING STRESS SKIN AND BY ATTACHING THE COVERAGE TO THE CEILING UTILIZING HILTI-BOLTS. THEREFORE, DUE TO THESE CONSERVATIVE MECHANICAL ATTACHMENT TECHNIQUES AND THE 2 LAYER INSTALLATION, THE ENCLOSURES ADEQUATELY ACCOUNT FOR THE STRUCTURAL INTEGRITY LIMITATIONS OF THERMO-LAG MATERIAL AT ELEVATED TEMPERATURES.	103701/0 AS MODIFIED BY DCN 5727/0
70.	THE BOXES AROUND THE KELLUM GRIPS ARE SIMILAR TO TYPICAL DETAILS 12-2 AND 12-2.1. THE JOINTS AROUND THE 2" TUBE STEEL WHICH SUPPORTS THE KELLUM GRIPS ARE SCORE AND FOLD WITH STRESS SKIN REINFORCEMENT. THE ACCEPTANCE CRITERIA FOR DETAILS 12-2 AND 12-2.1 IN ATTACHMENT A APPLY TO THIS CONFIGURATION.	103589/0 102265/0

ATTACHMENT C

MINOR PROTECTED COMMODITY DEVIATIONS

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
101320/3	EC	778	X-113	EA/43	Y	Y	ISSUE: 4" DIA. DRAIN PIPING INTERFERES WITH STANDARD MATERIAL INSTALLATION ON A 2"DIA. CONDUIT AND A JUNCTION BOX.		
							RESOLUTION: INSTALL MATERIAL TO MAXIMUM THICKNESS ALLOWED BY THE INTERFERENCES ON THE CONDUIT AND J-BOX TO ALLOW 1/8" CLEARANCE. INCREASE THERMO-LAG THICKNESS ON THE PROTECTED COMMODITIES IN IMMEDIATE AREA OF INTERFERING PIPING (AFTER ALLOWING FOR 1/8" CLEARANCE).	9-1, 10-2, 11-1	1-6, 7, 34
102330/1	AB	852	X-241	AA/21f	Y	Y	ISSUE 1: TL ON TRAY INTERFERES WITH TL INSTALLATION ON CONDUIT.		
							ISSUE 2: CONSTRUCTION CANNOT INSTALL STRESS SKIN OVER RADIAL BEND DUE TO INTERFERENCE.		
							RESOLUTION 1: INSTALL PREFORMED CONDUIT SECTIONS AGAINST TOP TL PANEL OF TRAY AND SEAL.	9-1	1-6, 9
							RESOLUTION 2: COVER EXPOSED PORTION OF RADIAL BEND WITH STRESS SKIN AND STAPLE.	9-1	1-6, 9
102478/1	AB	810	X-207	AA/21b	Y	Y	ISSUE: EXISTING TL ON TRAY INTERFERES WITH INSTALLATION OF TL ON ANOTHER TRAY.		
							RESOLUTION: COVER SPLICE PLATE ON SIDE RAIL WITH FLAT BOARD BUTT JOINED TO V-RIB BOARD. STRESS SKIN UPGRADE IS OMITTED IN AREA OF INTERFERENCE.	1-2,12-1, 12-2	1-6, 9, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
102725/0	SG	832	2-094	2SB/15	Y	Y	ISSUE: PIPE INTERFERES WITH 2 (≤ 2" DIA) RIGID CONDUITS SUCH THAT COMPLETE COVERAGE WITH 1/4" OVERLAYS IS NOT POSSIBLE. RESOLUTION: 1/2" THICK MATERIAL, STRESS SKIN AND 330-660 FOR 180: PROVIDE 1/2" THICK 330-1 CONDUIT MATERIAL W/1/4" OVERLAY FOR 180° AND 1/2" THICK 330-1 CONDUIT MATERIAL WITH 1/4" OVERLAY AND STRESS SKIN BUTTED TO PIPE.	9-1, 11-1	1-6, 7, 15
102758/0	SG	832	2-094	2SB/15	Y	Y	ISSUE: FULL COVERAGE ON CONDUIT SUPPORT (PROTRUDING ITEM) CANNOT BE ACHIEVED DUE TO INTERFERENCE WITH DUCT. RESOLUTION: SEAL TL PANELS ON SUPPORT TO SIDE OF DUCT WITH TROWEL GRADE 330-660. GAP BETWEEN SUPPORT END PLATE AND DUCT IS FILLED WITH TROWEL GRADE 330-660 PRIOR TO COMPLETING THE SEALING OF THE PANELS.	9-1, 10-1	1-6, 13
102780/1	EC	778	X-113	EA/43	Y	Y	ISSUE: FLOOR DRAIN PIPE INTERFERES WITH INSTALLATION OF TL ON 4" DIA. CONDUIT. RESOLUTION: REDUCE THE THICKNESS OF MATERIAL ON THE CONDUIT TO PERMIT A 1/8" AIR GAP. INSTALL EXTRA 1/2" THICK CONDUIT SECTIONS IMMEDIATELY ADJACENT TO THE INTERFERENCE FOR A MIN. DISTANCE OF 4" FROM THE INTERFERING PIPE.	9-1, 11-1	1-6, 7

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
102837/0	SG	832	2-094	2SB/15	Y	Y	ISSUE 1: PIPE INTERFERES WITH 4 (≤ 2" DIA) RIGID CONDUITS SUCH THAT COMPLETE COVERAGE WITH 1/4" OVERLAYS IS NOT POSSIBLE. ISSUE 2: CABLE TRAY AND SUPPORT INTERFERE WITH CONDUIT ENVELOPE. RESOLUTION 1: 1/2" THICK MATERIAL, STRESS SKIN AND 330-660 FOR 180: PROVIDE 1/2" THICK 330-1 CONDUIT MATERIAL W/1/4" OVERLAY FOR 180° AND 1/2" THICK 330-1 CONDUIT MATERIAL WITH 1/4" OVERLAY AND STRESS SKIN BUTTED TO PIPE. RESOLUTION 2: EXTEND ENVELOPE ONTO SUPPORT VIA 330-1 TROWEL GRADE.	9-1, 11-1 9-1	1-6, 7, 15 1-6, 7, 15

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
102858/0	AB	790	X-174	AA/21a	N	Y	ISSUE: INTERFERENCE BETWEEN TWO LBD'S. RESOLUTION: REMOVE ONE EAR FROM LBD. SPLICE 2 PIECES OF FLAT PANEL TOGETHER TO REST ON SIDE OF LBD AND REMAINING EAR. INSTALL STRESS SKIN UPGRADE WHERE POSSIBLE.	9-1	1-6, 9, 16
102861/1	AB	790	X-174	AA/21a	N	Y	ISSUE: PIPE INTERFERES WITH INSTALLATION OF TL ON CONDUIT. RESOLUTION: REDUCE THE THICKNESS OF MATERIAL ON THE CONDUIT TO PERMIT A 1/8" AIR GAP. INSTALL EXTRA 1/2" THICK CONDUIT SECTIONS IMMEDIATELY ADJACENT TO THE INTERFERING PIPE FOR A MIN. DISTANCE OF 4".	9-1, 11-1	1-6, 7
102863/1	SG	852	2-103	2SE/18	Y	Y	ISSUE: FLOOR CURB INTERFERES WITH TL ON CONDUIT AND CONDUIT UNION. RESOLUTION: TRIM OVERSIZED CONDUIT SECTION TO FIT BETWEEN CONDUIT FITTING AND CURB PLATE. INSTALL 1/4" OVERLAY ON CONDUIT WHERE POSSIBLE. APPLY 1/2" TROWEL GRADE WHERE PREFORMED SECTIONS TOUCH OUTSIDE OF CURB WHERE TL TOUCHES ON INSIDE.	9-1, 11-1	1-6, 7, 17
103007/1	SG	852	2-100B	2SK/17a	Y	Y	ISSUE: GAS LINE (N_2) INTERFERES WITH TL INSTALLATION ON CONDUIT. RESOLUTION: APPLY 330-1 MATERIAL LEAVING GAP FOR STRESS SKIN BUILD UP. ADD EXTRA TROWEL GRADE MATERIAL IN THE AREA AROUND THE DEVIATION.	9-1, 11-1	1-6, 9, 18

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103037/0	AB	790	X-180	AA/21a	Y	Y	ISSUE: TL ON SUPPORT INTERFERES WITH STRESS SKIN UPGRADE. RESOLUTION: OMIT STRESS SKIN ON THE SIDE RAIL OF TRAY NEXT TO THE INTERFERING TL ON TUBE STEEL.	12-2	1-6, 9
103050/0	SG	832	2-094	2SB/15	Y	Y	ISSUE: PIPE INTERFERES WITH INSTALLATION OF TL ON CONDUIT (1-1/2"). RESOLUTION: INSTALL 1/2" CONDUIT SECTIONS TRIMMING TO FIT BETWEEN CONDUIT AND PIPE. INSTALL 1/4" OVERLAP SECTION AND BUTT AGAINST PIPE AND ADD TROWEL GRADE.	9-1, 11-1	1-6, 7, 18
103076/1	SG	873	2-109B	2SK/17c	Y	Y	ISSUE 1: NEED DETAILS FOR CONDUIT MOUNTED ON TUBE STEEL. ISSUE 2: FULL THICKNESS CANNOT BE INSTALLED ON SMALL AREA OF SUPPORT, BETWEEN BACK OF SUPPORT AND WALL, DUE TO INTERFERENCE WITH GRATING SUPPORT. RESOLUTION 1: TYPICAL DETAILS PROVIDED (4-8). RESOLUTION 2: INSTALL REDUCED THICKNESS TL PANEL ON BACK OF SUPPORT AT INTERFERENCE. INSTALL DOUBLE LAYERS ON EACH SIDE OF SUPPORT TO WALL AT INTERFERENCE TO PROTECT THE REDUCED THICKNESS SECTION FROM ANY EXTERNAL FIRE EXPOSURE.	9-1, 11-1 11-1	1-6, 19 1-6, 19

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103157/0	SG	873	2-109B	2SK/17c	Y	Y	ISSUE: INSTRUMENT TUBING INTERFERES WITH 1/4" OVERLAY ON CONDUIT. RESOLUTION: FIT 1/4" OVERLAY AROUND THE CONDUIT EXCEPT AT THE TUBING INTERFERENCE. SEAL 1/4" OVERLAY TO WALL ON EACH SIDE OF TUBING WITH TROWEL GRADE.	9-1	1-6, 20
103158/0	SG	873	2-109B	2SK/17c	Y	Y	ISSUE 1&3: INSTRUMENT TUBING INTERFERES WITH 1/4" OVERLAY ON CONDUIT. ISSUE 2: UNISTRUT INTERFERES WITH 1/4" OVERLAY ON CONDUIT. ISSUE 4: PIPE INTERFERES WITH 1/4" OVERLAY ON CONDUIT. RESOLUTION 1&3: FIT 1/4" OVERLAY AROUND THE CONDUIT EXCEPT AT THE TUBING INTERFERENCE. SEAL 1/4" OVERLAY TO WALL ON EACH SIDE OF TUBING WITH TROWEL GRADE.	9-1	1-6, 18, 20, 21
							RESOLUTION 2: FIT 1/4" OVERLAY UP TO EDGE OF INTERFERING UNISTRUT. SEAL UNISTRUT TO OVERLAY WITH 1/2" OF TROWEL GRADE OUT FROM CONDUIT AND ON EACH SIDE OF UNISTRUT.	9-1, 10-1	1-6, 18, 20, 21
							RESOLUTION 4: TRIM 1/4" OVERLAY SECTIONS TO CLEAR INTERFERING PIPE. APPLY TROWEL GRADE BUILD UP AROUND DEVIATION AREA.	9-1, 10-1	1-6, 18, 20, 21

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103375/0	SG	810	2-082	2SB/8	Y	Y	ISSUE: THE WIRE AND STRESS SKIN REQUIREMENTS CANNOT BE MET. RESOLUTION: FIT STRESS SKIN AND TIE WIRES AROUND AIR DROP INTO TRAY. OMIT STRESS SKIN AT INTERFERENCE BETWEEN HORIZONTAL AND VERTICAL TRAYS.	12-1, 14-1, 15-1	1-5, 9
103401/1	EC	778	X-115B	AA/154	Y	Y	ISSUE: 6" DIA. PIPING IN CLOSE PROXIMITY TO CABLE TRAY REQUIRING THERMO-LAG PROTECTION PREVENTS INSTALLATION OF V-RIBBED PANELS PER SPECIFICATION REQUIREMENTS AT MINOR LOCALIZED AREAS AROUND PIPE FLANGES AND SUPPORTS. RESOLUTION: IN LOCALIZED AREAS (ONLY) WHERE INTERFERENCES EXIST, INSTALL 330-1 FLAT PANELS ON BOTTOM SURFACE OF TRAY ENVELOPE. UTILIZE M2-1701 TYPICAL DETAIL 8-3. SECURE INTERFACE (TRANSITION) BETWEEN V-RIBBED AND FLAT PANELS WITH STRESS SKIN (STAPLED IN PLACE) AND TROWEL GRADE BUILDUP.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 11

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103414/1	SG	810	2-082	2SB/8	Y	Y	ISSUE 1: STRESS SKIN CANNOT BE INSTALLED PER REQUIREMENTS. ISSUE 2: STITCHING CANNOT BE INSTALLED PER REQUIREMENTS. ISSUE 3: STRESS SKIN CANNOT BE INSTALLED PER REQUIREMENTS. RESOLUTION 1: INSTALL STRESS SKIN PER SPECIFIC DIRECTIONS. MINIMAL DEVIATION FROM SPECIFICATION REQUIREMENTS. RESOLUTION 2: INSTALL STRESS SKIN, STAPLES AND TIE WIRES AS DIRECTED, OMIT STITCHING. RESOLUTION 3: OMIT MINOR AMOUNTS OF LONGITUDINAL STRESS SKIN ON ONE SIDE OF TRAY.	12-1, 14-1, 15-1 12-1, 14-1, 15-1 12-1, 14-1, 15-1	1-6, 9 1-6, 9 1-6, 9
103574/1	AB	790	X-180	AA/21a	Y	Y	ISSUE: CABLE TRAY SUPPORT COMMODITIES (ROD HANGERS AT SIDERAILS AND TUBE STEEL AT TRAY UNDERSIDES) INTERFERE WITH STANDARD ENVELOPE INSTALLATION ON OUTSIDES OF SEVERAL CABLE TRAYS. RESOLUTION: WHERE INTERFERENCES EXIST, INSTALL 2 LAYERS OF 330-660 INSIDE TRAY (UNDER CABLES). INSTALL FLAT PANEL MATERIAL INSIDE TRAY RAILS. BUTT V-RIB OR FLAT PANEL STOCK UP TO INTERFERENCES ON OUTSIDE OF TRAYS AND THEN INCREASE MATERIAL THICKNESS ON OUTSIDES OF TRAYS BY BUTTING UP AS CLOSE AS POSSIBLE WITH ADDITIONAL LAYER OF PANELS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 14

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103599/0	AB	873	X-245	AA/38	N	Y	ISSUE: CANNOT INSTALL FULL THICKNESS OF THERMO-LAG ON PROTRUDING CONDUIT SUPPORT AT INTERFERENCE WITH INSTRUMENT TRACK. RESOLUTION: INSTALL REDUCED THICKNESS PANEL AT INTERFERENCE. ADD SECOND LAYER OF PANEL AROUND INTERFERENCE AND SEAL TO FIRST LAYER.	9-1, 11-1	1-6, 31
103602/0	AB	790	X-180	AA/21a	Y	Y	ISSUE 1: THREADED ROD INTERFERES WITH TL ON TRAY. ISSUE 2: STRUCTURAL STEEL AND GROUND CABLE INTERFERES WITH TL ON TRAY. RESOLUTION 1: INSTALL FLAT BOARD ON SIDE OF TRAY AND FIT BETWEEN ROD AND TRAY. MAKE SMALL DEVIATION FROM STRESS SKIN REQUIREMENTS. RESOLUTION 2: GROUND CABLE INTERFERENCE WAS REMOVED. INSTALL FLAT BOARD ON BOTTOM OF TRAY, NOTCHING IF NECESSARY, TO FIT BETWEEN STEEL ANGLE AND TRAY. COVER THE ANGLE WITH 1/2" FLAT BOARD AND TROWEL GRADE & BAND IN PLACE. MOVE GROUND CABLE.	11-1 11-1	1-6, 9, 22 1-6, 9, 22
103609/0	SG	810	2-082	2SB/8	Y	Y	ISSUE: CONDUIT INTERFERES WITH STRESS SKIN UPGRADE ON LONGITUDINAL JOINT OF BOX OUT. RESOLUTION: STRESS SKIN UP TO BOTH SIDES OF THE INTERFERENCES.	9-1, 10-1	1-6, 9

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103631/0	GEN.	GEN.	GEN.	GEN.	VARI ES	Y	ISSUE: TO ALLOW FOR FIELD CONDITIONS, CONSTRUCTION REQUESTS OPTIONS FOR GENERIC MODIFICATIONS IN TIE WIRE DETAILS USED TO HELP SECURE STRESS SKIN OVER CABLE TRAY LONGITUDINAL JOINTS. RESOLUTION: OF THE 3 PROPOSED OPTIONS, A AND B ARE ACCEPTABLE FOR GENERIC USE. OPTION C IS ACCEPTABLE FOR USE ONLY WHERE PREVIOUSLY INSTALLED.	1-2, 12-1, 12-2, 13-1, 14-1, 11-1, 15-1	1-5, 9, 9a
103633/0	SG	790	2-071	2SB/4	Y	Y	ISSUE: UNABLE TO INSTALL STRESS SKIN UPGRADE ON TRAY PER REQUIREMENTS DUE TO INTERFERENCES. RESOLUTION: INSTALL STRESS SKIN UPGRADES FOR LONGITUDINAL JOINTS AS CLOSE AS POSSIBLE TO INTERFERENCES. USE EXTRA STAPLING AS DIRECTED.	11-1, 12-2	1-6, 9
103636/0	SG	832	2-096	2SE/16	Y	Y	ISSUE: TUBE STEEL INTERFERES WITH INSTALLATION OF 1/4" TL OVERLAY ON CONDUIT. RESOLUTION: BUTT 1/4" TL OVERLAY TO TUBE STEEL AND SEAL WITH TROWEL GRADE. COVER THE SIDES OF THE SUPPORT TOUCHING THE TL ON THE CONDUIT FOR 2" ABOVE AND BELOW THE CONDUIT.	9-1	1-6, 23
103650/0	SG	832	2-094	2SB/15	Y	Y	ISSUE: CONDUIT PROTECTED WITH FLEXI-BLANKET INTERFERES WITH INSTALLING FLEXI-BLANKET ON ANOTHER CONDUIT. RESOLUTION: BUTT EACH LAYER OF FLEXI-BLANKET UP AGAINST THE EXISTING FLEXI-BLANKET ON THE FIRST CONDUIT. SEAL EACH LAYER WITH TROWEL GRADE.	11-1	1-6, 24

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103706/1	EC	778	X-115B	AA/154	Y	Y	ISSUE: NUMEROUS INTERFERENCES WITH SECOND LAYER UPGRADE ON JB. RESOLUTION: REINFORCE ALL JOINTS AND SEAMS ON FIRST LAYER AS IF THEY WERE SECOND LAYER.	10-2	1-6, 8
103718/1	SG	873	2-109B	2SK/17c	Y	Y	ISSUE 1: INTERFERENCE BETWEEN JB AND LBD WHICH BOTH REQUIRE TL PROTECTION. ISSUE 2: INSTRUMENT TUBING INTERFERES WITH 1/4" OVERLAY ON CONDUIT. ISSUE 3: PIPE INTERFERES WITH 1/4" OVERLAY ON CONDUIT. ISSUE 4: CANNOT INSTALL JOINT UPGRADE PER REQUIREMENTS. RESOLUTION 1&4: INSTALL TL ON JB. BUTT TL FOR LBD AGAINST JB AND JOIN USING STRESS SKIN UPGRADE REQUIREMENTS AND SPECIFIC DIRECTIONS GIVEN. RESOLUTION 2: FIT 1/4" OVERLAY AROUND THE CONDUIT EXCEPT AT THE TUBING INTERFERENCE. SEAL 1/4" OVERLAY TO WALL ON EACH SIDE OF TUBING WITH TROWEL GRADE. RESOLUTION 3: TRIM 1/4" OVERLAY SECTION TO CLEAR INTERFERING PIPE. APPLY TROWEL GRADE BUILD UP AROUND DEVIATION AREA.	9-1, 10-1 9-1, 10-1 9-1, 10-1	1-6, 9, 18, 20 1-6, 9, 18, 20 1-6, 9, 18, 20
103721/1	SG	832	2-094	2SB/15	Y	Y	ISSUE: DUE TO BEND RADIUS, CANNOT INSTALL FLEXI-BLANKET ON FLEX CONDUIT. RESOLUTION: INSTALL PREFORMED CONDUIT SECTION MITERED TO FIT THE BEND.	9-1, 11-1	1-6, 12

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103730/0	SG	832	2-094	2SB/15	Y	Y	ISSUE: FLEXI-BLANKET CANNOT BE INSTALLED ON 2 FLEX CONDUITS DUE TO PROXIMITY. RESOLUTION: INSTALL PREFORMED CONDUIT SECTIONS, MITERED AS NECESSARY, TO FIT.	9-1, 11-1	1-6, 12
103741/0	SG	852	2-103	2SE/18	Y	Y	ISSUE: CANNOT INSTALL 1/4" OVERLAY ON 2" CONDUIT DUE TO INTERFERENCE WITH SUPPORT. RESOLUTION: BUTT 1/4" OVERLAY UP TO SUPPORT AND APPLY TROWEL GRADE TO JOINT. ADD FLAT PLATE ON SUPPORT AROUND INTERFERENCE.	9-1, 11-1	1-6, 7
103770/0	AB	852	X-241	AA/21f	Y	Y	ISSUE: CANNOT INSTALL 1/4" OVERLAY ON 2" CONDUIT DUE TO INTERFERENCE WITH DUCT. RESOLUTION: TRIM THE 1/4" OVERLAY TO FIT IN BETWEEN THE CONDUIT AND DUCT. ADD TROWEL GRADE INSIDE 1/4" SECTION PRIOR TO INSTALLATION.	9-1, 11-1	1-6, 7
103780/0	AB	852	X-241	AA/21f	Y	Y	ISSUE: CONDUIT AND CABLE INTERFERE WITH STRESS SKIN UPGRADE ON TWO CONDUITS WITH RADIAL BENDS. RESOLUTION: INSTALL STRESS SKIN UPGRADE EXCEPT AT THE POINTS OF INTERFERENCE.	9-1, 11-1	1-5, 9
103782/0	SG	832	2-096	2SE/16	Y	Y	ISSUE: PHYSICAL ARRANGEMENT INTERFERES WITH TRANSITION OF FLEXI-BLANKET TO RIGID CONDUIT SECTION. RESOLUTION: OVERLAP FLEXI-BLANKET 6" ONTO RIGID CONDUIT TO ALLOW BETTER DISTRIBUTION OF LOAD ON THE JOINT.	9-1, 11-1	1-6, 16

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103816/0	SG	810	2-083	2SD/9	Y	Y	ISSUE: STRESS SKIN CANNOT BE INSTALLED PER UPGRADE REQUIREMENTS DUE TO INTERFERENCES. RESOLUTION: INSTALL STRESS SKIN WHERE THERE ARE NO INTERFERENCES FIRST, THEN INSTALL AT INTERFERENCE STAPLING TO ADJACENT COUPLING. ADD TIE WIRE TO ONE SPECIFIC STRESS SKIN INTERFERENCE.	9-1, 10-1, 10-2	1-6, 9
103864/0	SG	810	2-079	2SB/8	Y	Y	ISSUE: CANNOT INSTALL 1/4" OVERLAY ON CONDUIT DUE TO INTERFERENCE WITH SUPPORT. RESOLUTION: BUTT 1/4" TL OVERLAY TO EACH SIDE OF THE STEEL ANGLE. COVER THE ANGLE (BOTH LEGS) FOR THE WIDTH OF THE CONDUIT WITH FLAT BOARD SEALED TO THE CONDUIT SECTION WITH TROWEL GRADE.	9-1, 10-1	1-6, 25
103947/0	AB	810	X-208	AA/21c	N	Y	ISSUE: PREFORMED CONDUIT SECTIONS WERE INSTALLED ON 2 FLEX CONDUITS. RESOLUTION: ACCEPTABLE.	9-1, 11-1	1-5, 12
103959/0	EC	778	X-115B	AA/154	Y	Y	ISSUE: CANNOT INSTALL 3rd LAYER OF FLEXI-BLANKET ON CONDUIT AT JUNCTION WITH MOTOR HOUSING. RESOLUTION: INSTALL 3rd LAYER AROUND CONDUIT AND BUTT EACH EDGE TO THE SIDE OF THE MOTOR HOUSING AND SEAL.	11-1	1-6, 26

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
103988/0	AB	X-810	207	AA/21b	Y	Y	ISSUE: STRESS SKIN UPGRADE CANNOT BE INSTALLED ON CONDUIT BEND DUE TO INTERFERENCE WITH PIPE. RESOLUTION: INSTALL UPGRADE ON EACH SIDE OF INTERFERENCE LEAVING CLEARANCE FOR PIPE.	9-1, 10-1	1-6, 9
103991/0	EC	778	X-115B	AA/154	Y	Y	ISSUE: CANNOT INSTALL 3rd LAYER OF FLEXI-BLANKET ON CONDUIT AT JUNCTION WITH MOTOR HOUSING. RESOLUTION: INSTALL 3rd LAYER AROUND CONDUIT AND BUTT EACH EDGE TO THE SIDE OF THE MOTOR HOUSING AND SEAL.	11-1	1-6, 26
104011/1	AB	810	X-207	AA/21b	Y	Y	ISSUE: INSUFFICIENT CLEARANCE BETWEEN 12" WIDE CABLE TRAY REQUIRING THERMO-LAG COVERAGE AND ADJACENT (NON-ESSENTIAL) CONDUIT SUPPORTS TO PERMIT INSTALLATION OF V-RIBBED PANELS OVER SIDERAILS. RESOLUTION: AT LOCALIZED AREA OF INTERFERENCE, CREATE PROTECTIVE ENVELOPE INSIDE THE TRAY USING 2 LAYERS OF 330-660 FLEXI-BLANKET UNDER THE CABLES AND 330-1 FLAT PANELS INSIDE OF TRAY SIDERAILS. INSTALL V-RIBBED PANELS ON TOP OF THE ENVELOPE.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 14
104013/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: CANNOT INSTALL SECOND LAYER OF TL ON CORNER OF JB DUE TO INTERFERENCE. RESOLUTION: UPGRADE FIRST LAYER JOINTS IN AREA OF DEVIATION AND THEN INSTALL SECOND LAYER OF BOARD AROUND INTERFERENCE.	10-1, 10-2	1-6, 8

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104017/1	AB	790	X-174	AA/21a	N	Y	ISSUE: CANNOT INSTALL 1/4" OVERLAY ON 1-1/2" CONDUIT DUE TO INTERFERENCE WITH PIPE SUPPORT. RESOLUTION: COVER THE ESSENTIAL CONDUIT WITH 1/2" THICK MATERIAL, THEN INSTALL THE 1/4" OVERLAY MATERIAL TO THE EXTENT POSSIBLE WHICH WILL LEAVE A 3" WIDE SPACE WITHOUT OVERLAY COVERAGE. COMPENSATE AT THE SUPPORT INTERFERENCE BY COVERING THE PIPE SUPPORT WITH 1/2" THICK MATERIAL AND EXTEND COVERAGE OUT IN BOTH DIRECTIONS FROM THE ESSENTIAL CONDUIT.	9-1, 11-1	1-6, 32
104026/1	EC	778	X-115B	AA/154	Y	Y	ISSUE: CANNOT INSTALL SECOND LAYER OF TL ON JB DUE TO INTERFERENCE. RESOLUTION: INSTALL SECOND LAYER OF TL AROUND INTERFERING CONDUIT.	10-1, 10-2	1-6, 8
104027/0	EC	778	X-115B	AA/154	Y	Y	ISSUE: TL ON RIGID CONDUIT INTERFERES WITH THIRD LAYER OF FLEXI-BLANKET ON FLEX CONDUIT. RESOLUTION: INSTALL THIRD LAYER OF FLEXI-BLANKET AROUND FLEX CONDUIT AND RIGID CONDUIT.	9-1, 11-1	1-6, 16
104037/1	AB	832	X-226	AA/21d	Y	Y	ISSUE: ROD HANGERS FOR MISC. COMMODITIES INTERFERE WITH THERMO-LAG COVERAGE ON PROTECTED CABLE TRAYS. RESOLUTION: COVER ROD HANGERS AS PROTRUDING ITEMS PER SPECIFICATION. USE 330-1 FLAT PANELS AND 330-660 FLEXI-BLANKET TO EXTEND TRAY AND ASSOCIATED TRAY SUPPORT ENVELOPE TO INCLUDE PROTRUDING ROD HANGERS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 30

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104047/0	EC	778	115B	AA/154	Y	Y	ISSUE: FLEXI-BLANKET COLLAR ON AIR DROP CANNOT BE INSTALLED PER TYPICAL DETAILS BECAUSE IT ENTERS TRAY AT SHARP ANGLE. RESOLUTION: INSTALL FLEXI-BLANKET IN TWO PIECES AS SHOWN. BAND AROUND TRAY. STAPLE FLEXI-BLANKET AND STRESS SKIN PER REQUIREMENTS.	11-1	1-5, 16
104057/0	EC	778	X-113	EA/43	Y	Y	ISSUE: CANNOT APPLY 1/4" OVERLAY ON 2" CONDUIT DUE TO INTERFERENCE WITH SUPPORT. RESOLUTION: TRIM 1/4" OVERLAY TO CLEAR SUPPORT.	9-1, 11-1	1-6, 7
104075/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: CONDUIT INTERFERES WITH INSTALLATION OF SECOND LAYER OF BOARD ON ONE SIDE OF JB. RESOLUTION: UPGRADE THE JOINTS OF THE FIRST LAYER OF TL ON THE JB. OMIT THE SECOND LAYER OF TL ON THE SIDE WITH THE INTERFERENCE.	10-1, 10-2	1-6, 8
104107/0	AB	832	X-226	AA/21d	Y	Y	ISSUE: CANNOT INSTALL THIRD LAYER OF FLEXI-BLANKET ON FLEX CONDUIT AT INTERFERENCE WITH METAL SHIELD AND CONDUIT. RESOLUTION: INSTALL THIRD LAYER OF FLEXI-BLANKET AROUND CONDUIT BUTTING AGAINST SHIELD AND CONDUIT. INSTALL FOURTH LAYER OF FLEXI-BLANKET AT THE INTERFERENCES SEALED TO THE THIRD LAYER WITH TROWEL GRADE.	11-1	1-6, 27

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104115/0	AB	832	X-226	AA/21d	Y	Y	ISSUE: CANNOT INSTALL 1/4" OVERLAY ON 2" CONDUIT AT INTERFERENCE WITH SUPPORTS. RESOLUTION: INSTALL 1/4" OVERLAY BUTTED UP AGAINST EITHER SIDE OF EACH SUPPORT ANGLE. ADD AN EXTRA LAYER OF 1/4" OVERLAY ON TOP OF AND SEALED TO EXISTING OVERLAY ON BOTH SIDES OF THE SUPPORTS.	9-1, 11-1	1-6, 7
104151/0	AB	790	X-180	AA/21a	Y	Y	ISSUE: DUE TO PROXIMITY TO CEILING, INSTALLATION OF STRESS SKIN UPGRADES ON LONGITUDINAL JOINTS ARE NOT FEASIBLE. RESOLUTION: THE WIRE LONGITUDINAL JOINTS IN LIEU OF STRESS SKIN. STAPLE THE CIRCUMFIRENTIAL BUTT JOINT STRESS SKIN ON THE TRAY BOTTOM AND AT LEAST ONE SIDE.	12-1, 14-1, 15-1	1-5, 9
104152/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: PHYSICAL ARRANGEMENT POSES PROBLEM WITH INSTALLATION OF SECOND LAYER OF PANEL ON JB. RESOLUTION: APPLY SINGLE LAYER OF TL ON SIDE OF JB. SHIM INTERNALLY TO ACHIEVE A STABLE CONFIGURATION. APPLY STRESS SKIN AND BANDING PER REQUIREMENTS.	10-1, 10-2	1-5, 8

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104174/1	AB	790	X-180	AA/21a	Y	Y	ISSUE: DUE TO MULTIPLE INTERFERENCES, THE THERMO-LAG ENVELOPE ON A 30" WIDE CABLE TRAY CANNOT BE CONSTRUCTED PER SPEC. AND TYPICAL DETAILS. RESOLUTION: CONSTRUCT ENVELOPE USING 2 LAYERS OF 330-660 FLEXI-BLANKET UNDER CABLES AND 330-1 FLAT PANELS INSIDE OF TRAY SIDERAILS FOR MINOR DISTANCE TO CLEAR INTERFERENCE. OVERLAP FLEXI-BLANKET AND FLAT PANELS FOR DISTANCE OF 9"-11" WITH V-RIBBED PANELS ON OUTSIDE OF TRAY.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 14
104180/0	SG	810	2-082	2SB/8	Y	Y	ISSUE: FLEXI-BLANKET COLLARS ON THREE AIR DROPS CANNOT BE INSTALLED PER TYPICAL DETAILS BECAUSE OF PHYSICAL CONSIDERATIONS. RESOLUTION: INSTALL FLEXI-BLANKET IN PIECES AND SECURE AS DIRECTED. INSTALL STRESS SKIN AND STAPLE AS DIRECTED.	11-1	1-5, 16
104186/0	SG	832	2-096	2SE/16	Y	Y	ISSUE: INSTRUMENT LINE PROTRUDES THROUGH AIR DROP INTERFERING WITH 4"-5" FLEXI-BLANKET COLLAR. RESOLUTION: CUT OUT COLLAR AND FIT AROUND INSTRUMENT LINE. SEAL WITH TROWEL GRADE 330-660. INSTRUMENT LINE IS ALREADY COVERED AS A PROTRUDING LINE.	11-1	1-5, 16
104197/0	AB	790	X-180	AA/21a	Y	Y	ISSUE: PIPE INTERFERES WITH INSTALLATION OF TL ON TRAY AT SPLICE PLATE. RESOLUTION: COVER SPLICE PLATE ON SIDE RAIL WITH FLAT BOARD BUTT JOINED TO V-RIB BOARD. INSTALL JOINTS PER REQUIREMENTS.	11-1, 12-2, 13-1	1-5, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104205/0	AB	873	X-245	AA/38	N	Y	ISSUE: CANNOT INSTALL 1/4" OVERLAY ON CONDUIT AT INTERFERENCE WITH BASEPLATE. RESOLUTION: INSTALL 1/4" OVERLAY AND TRIM TO CLEAR BASEPLATE. ADD TRIM TO CLEAR BASEPLATE. ADD AN ADDITIONAL 1/4" OVERLAY BUTTED UP TO THE INTERFERENCE. SEAL WITH TROWEL GRADE.	10-1, 10-2	1-6, 8
104211/0	SG	810	2-083	2SD/9	Y	Y	ISSUE: THIRD LAYER OF FLEXI-BLANKET HAS INTERFERENCE WITH GROUND CABLE. RESOLUTION: GROUND CABLE IS ALREADY COVERED WITH TL. CUT OUT FLEXI-BLANKET AND BUTT TO GROUND CABLE TL. APPLY 330-660 TROWEL GRADE AROUND JOINT.	9-1, 11-1	1-5, 16
104223/0	SG	832	2-094	2SB/15	Y	Y	ISSUE: FLEXI-BLANKET COLLAR CANNOT BE INSTALLED ON AIR DROP PER TYPICAL DETAILS BECAUSE OF PHYSICAL CONSIDERATIONS. RESOLUTION: INSTALL FLEXI-BLANKET IN TWO OVERLAPPING PIECES AS DIRECTED. BAND AND SECURE JOINTS PER REQUIREMENTS.	11-1	1-5, 16
104234/0	AB	790	X-173	AA/21a	N	Y	ISSUE: CONDUIT INTERFERES WITH INSTALLATION OF SECOND LAYER OF BOARD ON JB. RESOLUTION: OMIT COVERAGE OF SECOND PANEL IN AREA ADJACENT TO INTERFERENCE. SEAL EDGE OF SECOND LAYER.	10-1, 10-2	1-6, 8
104237/0	EC	792	X-122	EA/54	Y	Y	ISSUE: JB INTERFERES WITH INSTALLATION OF 1/4" OVERLAY ON 2" CONDUIT. RESOLUTION: BUTT 1/4" OVERLAY UP TO SIDES OF JB.	9-1, 11-1	1-5, 7

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104238/0	AB	790	X-174	AA/21a	N	Y	ISSUE: JB INTERFERES WITH INSTALLATION OF 1/4" OVERLAY ON 1-1/2" CONDUIT. RESOLUTION: BUTT 1/4" OVERLAY UP TO SIDES OF JB.	9-1, 11-1	1-6, 7
104239/0	AB	790	X-172	AA/21a	N	Y	ISSUE: PIPE INTERFERES WITH BOX OUT INSTALLATION ON CONDUIT LBD. RESOLUTION: NOTCH ONE SIDE PANEL TO CLEAR EARS ON LBD. INSTALL A SECOND PANEL OVER THE NOTCHES AND BEVELED AT THE INTERFERING PIPE. STITCH JOINTS ON 3" CENTERS WHERE STRESS SKIN CANNOT BE INSTALLED AT THE INTERFERENCE.	9-1, 10-1	1-6, 9, 16
104241/1	AB	790	X-174	AA/21a	N	Y	ISSUE: MULTIPLE INTERFERENCES EXIST WITH SECOND LAYER OF TL ON JB. CEILING AND SMOKE DETECTOR INTERFERENCE WITH STRESS SKIN ON LBD. RESOLUTION: OMIT COVERAGE OF SECOND PANEL ON JB. COMPENSATE FOR INABILITY TO STAPLE STRESS SKIN JOINT REINFORCEMENT ON LBD DUE TO CLOSE PROXIMITY OF CEILING BY EXTENDING STRESS SKIN DOWN THE SIDES OF THE LBD. CUT THE STRESS SKIN AT SMOKE DETECTOR INTERFERENCE AND OVERLAP A SECOND STRESS SKIN PIECE OVER THE CUT.	10-1, 10-2	1-6, 8, 33

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104242/0	EC	778	X-113	EA/43	Y	Y	ISSUE 1: PIPE INTERFERES WITH TL ON TWO CONDUITS. ISSUE 2; PIPE INTERFERES WITH TL ON SUPPORT (PROTRUDING). RESOLUTION 1: INSTALL 1/2" PREFORMED, TRIMMED AS NECESSARY, TO CLEAR INTERFERENCE. IF 1/2" SECTION IS TRIMMED, INSTALL SECOND SECTION OVER FIRST AND SEAL IN THE AREA OF THE INTERFERENCE. RESOLUTION 2: INSTALL 1/2" FLAT BOARD ON THE SUPPORT, TRIMMED AS NECESSARY AT THE INTERFERENCE, TO CLEAR THE PIPE. INSTALL SECOND PANEL SEALED TO FIRST IN THE AREA OF THE INTERFERENCE.	9-1 1-2, 11-1, 12-1	1-6, 29 1-6, 29
104243/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: SUPPORT INTERFERES WITH 1/4" OVERLAY ON 2" CONDUIT. RESOLUTION: TRIM THE 1/4" OVERLAY SECTIONS TO CLEAR THE INTERFERENCES AND SEAL TO FIRST LAYER.	9-1, 11-1	1-6, 7

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104244/1	EC	778	X-113	EA/43	Y	Y	ISSUE: INSUFFICIENT CLEARANCE BETWEEN 3" DIA. PIPING (W/INSULATION) AND ESSENTIAL 2" DIA. CONDUIT PREVENTS COMPLETE INSTALLATION OF 1/4" THICK OVERLAYS AT A RADIAL BEND. RESOLUTION: REDUCE THICKNESS OF INSULATION ON PIPE. INSTALL 1/2" THICK 330-1 CONDUIT MATERIAL AND REQUIRED STRESS SKIN/TROWEL GRADE REINFORCEMENT AT RADIAL BEND. BUTT THE 1/4" THICK OVERLAYS AS TIGHT AS POSSIBLE TO AREA OF INTERFERENCE.	9-1, 11-1	1-6, 7
104245/0	AB	822	X-208	AA/21c	N	Y	ISSUE: JUNCTION BOX MOUNTED ON CONCRETE WALL REQUIRES 2ND LAYER OF THERMO-LAG PANELS. HOWEVER, THERMO-LAG MATERIAL INSTALLED ON 2 CONDUITS ENTERING THE J-BOX AND ITS LOCATION AGAINST STRUCTURE PREVENT INSTALLATION OF BANDING ON SECOND PANEL LAYER PER SPEC REQUIREMENTS. RESOLUTION: ATTACH STEEL ANGLE IRON TO CONCRETE WALL ADJACENT TO J-BOX WITH HILTI BOLTS. SECURE BANDING FOR 2ND PANEL LAYER TO THE ANGLE IRON. 2" MAX. DISTANCE FROM LAST BAND TO EDGE OF J-BOX ENCLOSURE PER SPECIFICATION MAY BE EXCEEDED FOR THIS CONFIGURATION.	10-1, 10-2	1-6, 35

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104246/2	AB	790	X-180	AA/21a	Y	Y	ISSUE 1&2: HVAC HANGER INTERFERES WITH PROTECTIVE ENVELOPE INSTALLATION ON CABLE TRAY AND COVERAGE OF PROTRUDING ITEM. ISSUE 3: TRAPEZE HANGER INTERFERES WITH COVERAGE OF HANGER SUPPORT. RESOLUTION 1: CONSTRUCT ENVELOPE USING 2 LAYERS OF 330-660 FLEXI-BLANKET UNDER CABLES AND 330-1 FLAT PANELS INSIDE OF TRAY SIDERAILS FOR MINOR DISTANCE TO CLEAR INTERFERENCE. OVERLAP FLEXI-BLANKET AND FLAT PANELS FOR DISTANCE OF 9"-11" WITH V-RIBBED PANELS ON OUTSIDE OF TRAY. RESOLUTION 2: TRIM FLAT BOARD AT HANGER/SPLICE PLATE INTERFERENCE. RESOLUTION 3: COVER BOTTOM OF TRAY AND DIAGONAL TRAY SUPPORT UP TO INTERFERENCE, ADD 1 EXTRA FLAT PANEL THAT IS 3" WIDE AND RUN THE WIDTH OF INTERFERENCE. DO NOT SEAL PANELS TO TRAPEZE SUPPORT.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1 SAME AS ABOVE SAME AS ABOVE	1-6, 14 1-6, 36 1-6, 36

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104248/1	AB	852	X-241	AA/21f	Y	Y	ISSUE 1: CONSTRUCTION IS UNABLE TO USE STANDARD 330-660 FLEXI-BLANKET DETAILS TO WRAP CABLE AIR DROPS BETWEEN 2 TRAYS DUE TO BENDS IN CABLES AND SHORT DISTANCE BETWEEN TRAYS. ISSUE 2: 330-660 FLEXI-BLANKET COLLAR AROUND WRAPPED CABLE BUNDLES CANNOT BE INSTALLED PER TYPICAL DETAILS. ISSUE 3: INSUFFICIENT CLEARANCE EXISTS BETWEEN HVAC DUCT AND CABLE TRAY HANGER FOR STANDARD 9" PROTRUDING ITEM COVERAGE ON THE SUPPORT.		
							RESOLUTION 1: INCREASE SIZE OF 330-1 PANEL ENVELOPES ON TRAYS WITH SHIMS TO ENABLE 330-660 CABLE BUNDLES TO BE INCLUDED WITHIN THE TRAY ENVELOPES. INSTALL 330-660 TROWEL GRADE FIRE STOPS IN EACH TRAY AND EXTEND PANEL COVERAGE OUT TO ENDS OF TRAYS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 37
							RESOLUTION 2: INSTALL A COLLAR CONSTRUCTED OF 330-69 STRESS SKIN AROUND THE FLEXI-BLANKET BUNDLES. FLARE THE STRESS SKIN OUT ONTO THE 330-1 PANELS ON THE TRAY AND STAPLE IN PLACE, THEN USE 330-660 TROWEL GRADE BUILDUP ON THE STRESS SKIN.	11-1	1-6, 37
							RESOLUTION 3: USE 330-1 FLAT PANEL STOCK SHAVED TO FIT BETWEEN DUCT AND TRAY HANGER. ADD 2ND FLAT PANEL LAYER BUTTED TO INTERFERENCE AND TIE WIRED TO FIRST LAYER. EXTEND 2ND LAYER COVERAGE OUT 2" MIN. DISTANCE IN ALL DIRECTIONS TO COMPENSATE FOR MINOR AREA OF REDUCED THICKNESS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 37

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104250/0	AB	790	X-180	AA/21a	Y	Y	ISSUE: CIRCUMFERENTIAL WRAP OF STRESS SKIN AROUND COMPLETE TRAY ENVELOPE AT BUTT JOINTS CANNOT BE INSTALLED DUE TO MULTIPLE WRAPPED AIR DROPS ENTERING TRAY IN AREA OF BUTT JOINTS.		
							RESOLUTION: INSTALL STRESS SKIN TO WRAP CIRCUMFERENCE OF TRAY ENVELOPE TO EXTENT PRACTICABLE, SECURE WITH ADDITIONAL STAPLES AND APPLY TROWEL GRADE BUILDUP.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 38
104252/0	AB	832	X-219	AA/21d	Y	Y	ISSUE 1: EXISTING THERMO-LAG COVERAGE ON UNIT 1 CABLE TRAY INTERFERES WITH COVERAGE ON SIDERAIL OF ADJACENT UNIT 2 TRAY AT SPLICE PLATE. ISSUE 2: CONSTRUCTION IS UNABLE TO INSTALL 330-660 FLEXI-BLANKET COLLAR TO REINFORCE INTERFACE WHERE COVERED AIR DROP BUNDLES ENTER CABLE TRAY ENVELOPE.		
							RESOLUTION 1: UTILIZE 330-1 FLAT PANEL STOCK SHIMMED OUT TO SPAN ACROSS SPLICE PLATE BOLTS. TIE WIRE FLAT PANEL PIECE TO STANDARD V-RIB PANELS INSTALLED ON TRAY SIDE RAILS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 39
							RESOLUTION 2: UTILIZE 330-69 STRESS SKIN SECURED TO 330-660 MATERIAL ON AIR DROPS AND TO 330-1 PANELS ON CABLE TRAY WITH STAPLES IN LIEU OF 330-660 COLLAR. ADD 330-660 TROWEL GRADE BUILDUP ON THE STRESS SKIN.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 39

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104253/0	EC	778	X-113	EA/43	Y	Y	ISSUE: TWO (2) INSTANCES EXIST WHERE THE OUTER (V-RIB) PANEL COVERAGE ON J-BOXES CANNOT BE INSTALLED PER TYPICAL DETAILS DUE TO INSUFFICIENT CLEARANCES. RESOLUTION: INSTALL OUTER LAYER OF V-RIB PANELS ON THE J-BOXES TO EXTENT PRACTICABLE. FLAT PANEL STOCK MAY BE SUBSTITUTED IN IMMEDIATE AREA OF INTERFERENCE ON J-BOX JB2A-066B AND V-RIBS MAY BE FLATTENED SLIGHTLY TO ENABLE FIT ON JB2A-065W. IN BOTH CASES EXTEND THE 2ND LAYER PANEL COVERAGE TO CONCRETE STRUCTURE AND SECURE USING DETAIL 11-6 OR 11-7. REINFORCEMENT OF ALL SEAMS AND JOINTS SHALL BE IN ACCORDANCE WITH DETAIL 2-3.	10-1, 10-2	1-6, 40
104254/0	AB	873	X-245	AA/38	N	Y	ISSUE: DUE TO BEND RADIUS OF 1" DIA. FLEX CONDUIT AND PROXIMITY TO ADJACENT RIGID CONDUIT (COVERED WITH 330-1 PREFORMED MATERIAL SECTIONS) COMPLETE 3RD LAYER WRAP OF 330-660 FLEXI-BLANKET ON THE FLEX CONDUIT CANNOT BE INSTALLED. RESOLUTION: NOTCH THE 3RD LAYER OF FLEXI-BLANKET MATERIAL IN AREA OF INTERFERENCE AND FILL GAP WITH 330-660 TROWEL GRADE. AT BEND RADIUS, 3RD LAYER MAY CONSIST OF 2 SEPARATE PIECES OF 330-660 AS LONG AS 2"-4" OVERLAP BETWEEN PIECES IS MAINTAINED.	11-1	1-6, 41

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104255/0	AB	790	X-180	AA/21a	Y	Y	ISSUE: DUE TO INSUFFICIENT CLEARANCES BETWEEN 5 SEPARATE AIR DROP CABLE BUNDLES (WRAPPED WITH 330-660 FLEXI-BLANKET) WHICH ENTER COMMON CABLE TRAY ENVELOPE, 330-660 COLLAR ASSEMBLY CANNOT BE INSTALLED PER TYPICAL DETAIL 3-4 ON ONE BUNDLE. RESOLUTION: BUTT THE 330-660 MATERIAL FOR THE COLLAR ON THE SUBJECT AIR DROP BUNDLE UP TO THE COLLAR ASSEMBLY OF THE ADJACENT AIR DROP BUNDLE. INSTALL 330-660 TROWEL GRADE MATERIAL WHERE AIR DROP BUNDLES MEET ON BOTH SIDES.	11-1	1-6, 42

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104258/0	AB	822	X-208	AA/21c	N	Y	ISSUE: A FLEX CONDUIT ENTERING A FOAM SEAL BLOCKOUT REQUIRES THERMO-LAG PROTECTION. THIS FLEX CONDUIT IS INSTALLED IN CLOSE PROXIMITY TO AN ADJACENT RIGID CONDUIT THAT IS PROTECTED WITH 330-1 PREFORMED CONDUIT SECTION MATERIAL. DUE TO INSUFFICIENT CLEARANCE FOR INSTALLATION OF 330-660 FLEXI-BLANKET WRAP ON THE FLEX CONDUIT, CONSTRUCTION REQUESTS USE OF 330-1 CONDUIT SECTION MATERIAL ON THE FLEX FOR AN APPROXIMATE 10" DISTANCE. RESOLUTION: INSTALL 330-1 PREFORMED CONDUIT SECTION MATERIAL ON THE FLEX FOR A 10" DISTANCE. THE REMAINDER OF THE FLEX CONDUIT SHALL BE PROTECTED WITH 330-660 PER STANDARD REQUIREMENTS. SEAL THE 330-1 MATERIAL TO THE M-BOARD DAMMING MATERIAL AT THE BLOCKOUT WITH A FILLET WELD OF 330-1 TROWEL GRADE. WHERE THE 330-1 COVERAGE ON THE ADJACENT CONDUITS INTERFACE, WRAP WITH STRESS SKIN AND BUILD UP WITH 330-1 TROWEL GRADE.	9-1, 10-1, 10-2, 11-1	1-6, 43
104261/0	AB	832	X-226	AA/21d	Y	Y	ISSUE: TWO (2) ADJACENT PROTECTED CABLE AIR DROP BUNDLES ENTER A CABLE TRAY PROTECTIVE ENVELOPE IN TOO CLOSE PROXIMITY TO ENABLE INSTALLATION OF THE 330-660 COLLAR AROUND EACH BUNDLE SEPARATELY. RESOLUTION: INSTALL A SINGLE 330-660 COLLAR ASSEMBLY AROUND BOTH PROTECTED CABLE BUNDLES. FILL ANY VOID AREAS WITH 330-660 TROWEL GRADE MATERIAL.	11-1	1-6, 42

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES C31 - C40)
104262/0	AB	852	X-241	AA/21f	Y	Y	ISSUE: DUE TO PROXIMITY OF A 8 X 8 ANGLE IRON SUPPORT IMMEDIATELY ADJACENT TO THE SIDE RAIL AREA OF A 36" WIDE CABLE TRAY AND ONLY 1/2" CLEARANCE FROM THE TRAY TOP PANEL AND CONCRETE CEILING, STRESS SKIN CANNOT BE OVERLAPPED ONTO THE TOP PANEL SURFACE FOR A DISTANCE OF APPROXIMATELY 30".		
							RESOLUTION: SECURE THE STRESS SKIN TO BOTH SIDES OF THE TRAY ENVELOPE AND ALSO ALL THE WAY ACROSS THE BOTTOM OF THE TRAY WITH STAPLES AND BUILD UP WITH TROWEL GRADE MATERIAL FOR THE 30" DISTANCE.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 44
104264/0	AB	790	X-174	AA/21a	N	Y	ISSUE: AN AIR DROP CABLE BUNDLE ENTERING THE TOP OF THE CABLE TRAY PROTECTIVE ENVELOPE WAS ORIGINALLY PROTECTED WITH 330-660 WRAPS AND FIRE STOPPED WITH 330-660 TROWEL GRADE AS PROTRUDING (NON-ESSENTIAL) CABLES BUT REQUIRES PROTECTION AS ESSENTIAL CABLES UP TO THE 330-1 COVERAGE ON A 2" DIA. CONDUIT.		
							RESOLUTION: INSTALL 3 WRAPS OF 330-660 AROUND THE EXISTING (FIRE STOPPED) BUNDLE AT THE TRAY INTERFACE. CONTINUE THE 3 LAYER WRAP AND SECURE ON THE 2" DIA. CONDUIT PER TYPICAL DETAILS.	11-1	1-6, 45

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1.	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2.	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3.	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4.	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
5.	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6.	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATIONS EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, MOUNTED TO STRUCTURE, TORTUROUS PATH, ETC.).	GENERIC
7.	THE EFFECTIVENESS OF 1/2" THICK THERMO-LAG 330-1 PREFABRICATED SECTIONS ON 3" DIA. AND LARGER CONDUIT AND 1/2" THICK MATERIAL IN CONJUNCTION WITH 1/4" THICK "OVERLAY" SECTIONS ON 3/4"-2" DIA. CONDUITS HAS BEEN QUALIFIED VIA TEST SCHEMES 9-1, 10-1, 10-2 AND 11-1. MINOR LOCALIZED AREAS WHERE EITHER THE 1/4" THICK OVERLAYS AND/OR THE 1/2" THICK "BASE" MATERIAL CANNOT BE INSTALLED TO FULL THICKNESSES REQUIRED BY THE SPECIFICATION DUE TO THE PRESENCE OF INTERFERENCES (WHICH ARE NOT PART OF THE PROTECTIVE ENVELOPE) ARE ACCEPTABLE BASED ON THE FOLLOWING: THE OVERALL MASS OF THERMO-LAG MATERIAL INSTALLED IMMEDIATELY ADJACENT TO THE INTERFERENCE IS TYPICALLY INCREASED, RESULTING IN MORE MASS IN THE AREA SURROUNDING THE REDUCED COVERAGE. ADDITIONALLY, THE INTERFERING COMMODITY (PIPE, SUPPORT, CONDUIT, ETC.) ITSELF ACTS TO SHIELD THE AREA OF REDUCED MATERIAL COVERAGE, I.E., CREATES A TORTUROUS PATH FOR HEAT TO ATTACK THE PROTECTED COMMODITY. FINALLY, THE INTERFERING COMMODITY WILL ACT AS A HEAT SINK.	101320/3 102780/1 103741/0 103770/0 104057/0 104115/0 104237/0 104238/0 102863/1 103050/0 102725/0 102837/0 104243/0 104244/0
8.	TEST SCHEME 10-2 DEMONSTRATED THE EFFECTIVENESS OF A SINGLE LAYER OF 1/2" TL FLAT BOARD ON JUNCTION BOXES AND IS CREDITED WHERE INTERFERENCES PRECLUDE THE INSTALLATION OF THE SECOND LAYER. THIS DEVIATION FROM SPECIFICATION REQUIREMENTS STILL PROVIDES AN INSTALLATION IN ACCORDANCE WITH A TESTED CONFIGURATION.	103706/1 104013/0 104026/1 104075/0 104152/0 104234/0 104241/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
9.	DUE TO THE SPECIFIC PLANT CONFIGURATION, DEVIATION(S) FROM STRESS SKIN, TIE WIRING, STAPLING OR OTHER JOINT ENHANCEMENT REQUIREMENTS ARE REQUIRED. THESE DEVIATION(S) ARE A SMALL PART OF THE MECHANICAL JOINING ON THIS INSTALLATION AND INDIVIDUAL LOCAL DEVIATION(S). THEY DO NOT COMPROMISE THE MECHANICAL INTEGRITY OF THE JOINT(S) AS A WHOLE OR THE EFFECTIVENESS OF THE FIRE BARRIER.	102330/1 102478/1 102858/0 103007/1 103037/0 103375/0 103414/1 103602/0 103609/0 103626/0 103633/0 103718/1 103816/0 103988/0 104151/0
9a.	THE CABLE TRAY QUALIFICATION TESTS LISTED USES STRESS SKIN OVERLAP ON LONGITUDINAL JOINTS. THE STRESS SKIN WAS SECURED TO THE 330-1 PANELS WITH STAPLES AND TIE WIRES. ALL 3 OPTIONS SHOWN ALSO USE BOTH METHODS, HOWEVER THE DETAILS FOR TIE WIRE INSTALLATION VARY SLIGHTLY FOR TESTED CONFIGURATIONS. OPTIONS A AND B ARE EQUIVALENT TO THE TESTED METHOD AND ARE ACCEPTABLE FOR GENERIC USE. OPTION C DOES NOT PROVIDE THE SAME DEGREE OF TIGHTNESS AS OPTIONS A AND B, AND SHALL NOT BE USED GENERICALLY. OPTION C METHOD IS ACCEPTABLE WHERE INSTALLED SINCE STRESS SKIN IS STAPLED AND TROWEL GRADE APPLIED OVER BOTH STRESS SKIN AND STAPLES. THE TIE WIRES SAG DURING TEST AND ALTHOUGH NOT TESTED WITHOUT, THEIR INHERENT EFFECTIVENESS IN SECURING STRESS SKIN ON LONGITUDINAL JOINTS IS DEFINITELY SECONDARY TO THAT OF THE STAPLES COVERED WITH 330-1 TROWEL GRADE.	103631/0
10.	THE ALTERNATIVE CONFIGURATION FOR COVERAGE OF THE TRAY SPLICE PLATE WITH FLAT BOARD PROVIDES THE SAME THICKNESS OF MATERIAL. METHODS OF JOINT REINFORCEMENT HAVE BEEN TESTED AND EFFECTIVELY IMPLEMENTED TO ENSURE INTEGRITY OF THE ENVELOPE.	102478/1 104197/0
11.	THE IDENTIFIED CABLE TRAY TEST SCHEMES QUALIFIED PROTECTIVE ENVELOPES FOR THE FULL RANGE OF UNIT 2 CABLE TRAY SIZES (12"-36" WIDE TRAYS) CONSTRUCTED OF 1/2" THICK (NOMINAL) 330-1 V-RIBBED PANELS. THIS CONFIGURATION HAS 4 MINOR AREAS IN A 5 FT. HORIZONTAL TRAY RUN (EACH < 6" LONG) WHERE FLAT PANEL MATERIAL WAS INSTALLED. THE MATERIAL THICKNESS IS MAINTAINED CONSISTENT WITH TESTED CONFIGURATIONS AND REINFORCEMENT TECHNIQUES USED AT THE TRANSITION BETWEEN V-RIBBED AND FLAT PANEL STOCK (STRESS SKIN AND TROWEL GRADE BUILDUP) IS CONSISTENT WITH TESTED CONFIGURATIONS. ADDITIONALLY THE INTERFERENCES THEMSELVES SERVE TO SHIELD THE LOCALIZED AREAS WITH FLAT PANEL STOCK INSTALLED, AND CREATE A TORTUROUS PATH FOR HEAT ENTRY INTO THE ENVELOPE. THEREFORE, THIS DEVIATION IS ACCEPTABLE. THE USE OF FLAT PANEL STOCK AT LOCALIZED AREAS ON THE UNDERSIDES OF CABLE TRAY PROTECTIVE ENVELOPES IS CONSISTENT WITH M2-1701 TYPICAL DETAIL 8-3 (SEE ATTACHMENT A FOR TECHNICAL JUSTIFICATION FOR THIS DETAIL).	103401/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
12.	THE USE OF MITERED PREFORMED CONDUIT SECTIONS FOR COVERAGE OF FLEX CONDUIT IS NOT A TESTED CONFIGURATION. HOWEVER, SINCE THE CRITICAL PARAMETERS OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO TESTED CONFIGURATIONS, THE INSTALLATION IS ACCEPTABLE.	103721/1 103730/0 103947/0
13.	THE CONFIGURATION, AS INSTALLED, DOES NOT ACHIEVE THE FULL REQUIRED MATERIAL THICKNESS AT THE END OF THE CONDUIT SUPPORT. THE PRIMARY RACEWAY ENVELOPE IS NOT AFFECTED. THE SEALING OF THE SUPPORT TO THE INTERFERING DUCT PROTECTS THE END OF THE SUPPORT FROM DIRECT EXPOSURE TO FIRE AND PROVIDES A TORTUROUS PATH FOR CONDUCTIVE HEAT TRANSFER.	102758/0
14.	THE TEST SCHEMES LISTED QUALIFIED CABLE TRAY PROTECTIVE ENVELOPES WITH 1/2" (NOMINAL) THICKNESS V-RIB PANEL MATERIAL INSTALLED AROUND EXTERIOR SURFACES OF CABLE TRAYS. THE COVERAGE DEVIATIONS PER THESE DCAs IDENTIFY SPECIFIC LOCATIONS AROUND CABLE TRAY PERIMETER SURFACES WHERE STANDARD (EXTERIOR) V-RIB PANEL COVERAGE CAN'T BE INSTALLED DUE TO INTERFERENCES (ROD HANGERS, ETC.) AT TRAY SIDERAILS AND SUPPORT MEMBERS ON TRAY UNDERSIDES. IN AREAS WHERE THESE INTERFERENCES EXIST, 2 LAYERS OF 330-660 FLEXI-BLANKET (QUALIFIED VIA SCHEME 11-1) ARE INSTALLED INSIDE THE TRAYS (UNDER THE CABLES) AND FLAT PANEL STOCK IS INSTALLED INSIDE TRAY SIDERAILS. PANELS INSTALLED ON TRAY TOP SURFACES ARE PER TESTED CONFIGURATIONS. MATERIAL COVERAGE OUTSIDE THE TRAYS IS ACHIEVED BY BUTTING UP V-RIB PANEL STOCK AS CLOSE TO THE INTERFERING ITEM AS POSSIBLE. ADDITIONAL FLAT PANEL STOCK IS THEN ADDED IN THE IMMEDIATE AREA OF THE INTERFERING ITEM TO FURTHER INCREASE MATERIAL THICKNESS ON THE OUTSIDE SURFACES OF THE TRAYS. EFFECTIVE MATERIAL THICKNESSES, CONSISTENT WITH TESTED CONFIGURATIONS ARE THEREFORE PROVIDED. THE INCREASED MATERIAL MASS INSTALLED OUTSIDE THE TRAYS IMMEDIATELY ADJACENT TO INTERFERING ITEMS ENHANCES SUBLIMATION AND CHAR LAYER FORMATION TO EFFECTIVELY COOL THE LOCALIZED AREAS WHERE MATERIAL WAS INSTALLED ON THE INTERIOR TRAY SURFACES. FINALLY, THE INTERFERING ITEMS THEMSELVES AND NEIGHBORING ENHANCED THERMO-LAG THICKNESSES SERVE AS A TORTUROUS PATH FOR HEAT ENTRY INTO THE ENVELOPE. THEREFORE, THESE CONFIGURATIONS PROVIDE AN EQUIVALENT LEVEL OF PROTECTION TO TESTED CONFIGURATIONS AND THE LOCALIZED AREAS OF DEVIATED COVERAGE ARE ACCEPTABLE.	103574/1 104011/1 104174/1 104246/2
15.	FOR THE 1" DIA. CONDUIT, THE MINOR AREA OF REDUCED COVERAGE (< 3" LONG ON ONE SIDE ONLY) AND SHIELDING EFFECTS OF THE PIPE AND CONDUIT BELOW ARE CREDITED. SCHEME 11-1 DEMONSTRATED THE EFFECTIVE USE OF 330-660 FLEXI-BLANKET OVER 330-1 CONDUIT SECTIONS. EXTENSION OF CONDUIT ENVELOPE VIA TROWEL GRADE BUILDUP PROVIDES ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH.	102725/0 102837/0
16.	THE CRITICAL PARAMETERS FOR THIS INSTALLATION ARE MATERIAL THICKNESS AND STRUCTURAL INTEGRITY. THE INSTALLATION USES MATERIAL THICKNESS AND STRUCTURAL DETAILS EQUIVALENT TO TESTED CONFIGURATIONS.	102858/0 103782/0 104027/0 104047/0 104180/0 104186/0 104211/0 104223/0 104239/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
17.	THE CONFIGURATION, AS INSTALLED, DOES NOT ACHIEVE THE FULL MATERIAL THICKNESS WHERE THE CONDUIT FITTING INTERFERES WITH THE CURB. BUTTING THE TL AGAINST THE CURB AND COVERING THE BACK SIDE OF THE CURB PROTECTS THE SMALL AREA OF THIN TL FROM DIRECT EXPOSURE TO THE FIRE AND PROVIDES A TORTUROUS PATH FOR CONVECTIVE HEAT TRANSFER. ADDITIONALLY THE CONFIGURATION IS LOCATED RIGHT ABOVE A SEALED FLOOR PENETRATION PRECLUDING FIRE APPROACHING FROM BELOW OR THE SIDES.	102863/1
18.	THE CONFIGURATION, AS INSTALLED, DOES NOT ACHIEVE THE FULL MATERIAL THICKNESS IN A SMALL AREA AROUND THE PIPE INTERFERENCE. THE PIPE PROTECTS THE DEVIATION AREA FROM DIRECT EXPOSURE TO THE FIRE. THE EXTRA TROWEL GRADE MATERIAL PROVIDES EXTRA PROTECTIVE MATERIAL IN THE AREA AROUND THE DEVIATION AND A TORTUROUS PATH FOR HEAT TRANSFER.	103007/1 103050/0 103718/0
19.	THE CONFIGURATION DOES NOT GET THE FULL THICKNESS OF TL ON A SMALL AREA ON THE BACK SIDE OF A CONDUIT SUPPORT AWAY FROM THE CONDUIT. THE TL IS INSTALLED BETWEEN THE SUPPORT AND THE WALL. DOUBLE LAYERS OF THE TL ARE INSTALLED ON EACH SIDE OF THE SUPPORT AND BUTTED TO THE WALL. THERE IS NO FIRE EXPOSURE TO THE BACK SIDE OF THE SUPPORT AND THE DOUBLE LAYERS ON THE SIDES PROVIDE EXTRA RESISTANCE TO CONDUCTION IN THROUGH THE SIDES.	103076/1
20.	THE SUBJECT CONDUIT IS RUN PARALLEL TO THE WALL. THE INSTRUMENT TUBING IS ALSO RUN PARALLEL TO THE WALL CROSSING THE CONDUIT BETWEEN THE CONDUIT AND THE WALL. SEALING BETWEEN THE WALL AND THE CONDUITS ON EITHER SIDE OF THE TUBING PROVIDES EXTRA MATERIAL AROUND THE SMALL AREA OF DEVIATION PROTECTS THE DEVIATION FROM DIRECT FIRE IMPINGEMENT AND PROVIDES A TORTUROUS PATH FOR HEAT TRANSFER.	103157/0 103158/0 103718/1
21.	PROVIDING TROWEL GRADE TO SEAL AROUND THE UNISTRUT PROTECTS THE DEVIATION FROM DIRECT FIRE EFFECTS AND PROVIDES EXTRA RESISTANCE TO HEAT TRANSFER.	103158/0
22.	THIS INSTALLATION POTENTIALLY FAILS TO ACHIEVE FULL MATERIAL THICKNESS BETWEEN THE STEEL ANGLE AND THE TRAY BOTTOM. THE ANGLE SHIELDS THE POTENTIAL DEVIATION FROM ANY DIRECT FIRE EXPOSURE AND THE PANELS OVER THE ANGLE PROVIDE EXTRA RESISTANCE TO HEAT TRANSFER ALONG WITH ENSURING A VERY TORTUROUS PATH TO THE AREA OF THE DEVIATION.	103602/0
23.	THIS CONFIGURATION, AS INSTALLED, FAILS TO ACHIEVE THE REQUIRED 1/4" OVERLAY BETWEEN THE CONDUIT AND THE TUBE STEEL. BUTTING THE OVERLAY AGAINST THE TUBE STEEL AND SEALING WITH TROWEL GRADE PROTECTS THE AREA FROM ANY DIRECT EXPOSURE TO A FIRE. INSTALLING FLAT BOARD ON THREE SIDES PROVIDES EXTRA MATERIAL FOR HEAT TRANSFER RESISTANCE AND ADDS EXTRA PROTECTION AROUND THE DEVIATION FROM ANY TYPE OF EXPOSURE.	103636/0
24.	THE CRITICAL PARAMETERS IN THIS CONFIGURATION ARE MATERIAL THICKNESS AND STRUCTURAL INTEGRITY. THE INSTALLED CONFIGURATION HAS MATERIAL THICKNESS AND STRUCTURAL INTEGRITY EQUIVALENT TO TESTED CONFIGURATIONS. NOT INSTALLING FULL LAYER(S) OF TL AT THE INTERFERENCE IS ACCEPTABLE BECAUSE THE INTERFERENCE IS THE REQUIRED THICKNESS OF TL.	103650/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
25.	THIS CONFIGURATION, AS INSTALLED, FAILS TO ACHIEVE THE REQUIRED 1/4" OVERLAY BETWEEN THE CONDUIT AND STRUCTURAL STEEL SUPPORT. BUTTING THE OVERLAY AGAINST BOTH SIDES OF THE LEG OF THE ANGLE AND SEALING WITH TROWEL GRADE PROTECTS THE SMALL AREA OF DEVIATION FROM ANY DIRECT EXPOSURE TO FIRE. INSTALLING FLAT BOARD ON BOTH LEGS OF THE ANGLE PROVIDES EXTRA MATERIAL FOR HEAT TRANSFER RESISTANCE AND EXTRA PROTECTION AROUND THE DEVIATION.	103864/0
26.	LOCALIZED OMISSION OF THIRD LAYER OF FLEXI-BLANKET NEXT TO THE MOTOR HOUSING IS ACCEPTABLE BECAUSE THE CONDUIT TERMINATES AT THE MOTOR. THE TL IS APPLIED TO SUPPORT OPERABILITY OF THE MOTOR AND A FIRE AT THE POINT OF INTERFERENCE WOULD RENDER THE MOTOR INOPERABLE AND THE TL UNNECESSARY.	103959/0 103991/0
27.	THIS CONFIGURATION AS INSTALLED COULD NOT ACHIEVE THE THIRD FULL LAYER OF FLEXI-BLANKET AT INTERFERENCES WITH A STEEL SHIELD AND A CONDUIT. THE THIRD LAYER WAS INSTALLED BUTTED UP AGAINST THE INTERFERENCES A FOURTH LAYER WAS INSTALLED SEALED TO THE THIRD AND AROUND THE AREA OF THE DEVIATION TO PROTECT THE DEVIATION FROM DIRECT EXPOSURE TO THE FIRE AND TO PROVIDE EXTRA MATERIAL FOR INCREASED RESISTANCE TO HEAT TRANSFER.	104107/0
28.	THIS CONFIGURATION, AS INSTALLED, FAILS TO ACHIEVE THE REQUIRED 1/4" OVERLAY ON THE CONDUIT AT THE BASEPLATE. BUTTING THE OVERLAY AGAINST THE STEEL AND ADDING EXTRA MATERIAL AT THE INTERFERENCE PROTECTS THE AREA FORM ANY DIRECT EXPOSURE TO FIRE. IT ALSO PROVIDES EXTRA MATERIAL FOR HEAT TRANSFER RESISTANCE TO PROVIDE MORE PROTECTION AT THE DEVIATION.	104205/0
29.	THIS CONFIGURATION, AS INSTALLED, FAILS TO ACHIEVE THE REQUIRED THICKNESS AT THE INTERFERENCES. ADDING EXTRA MATERIAL AT THE INTERFERENCE PROTECTS THE AREA FORM ANY DIRECT EXPOSURE TO FIRE. IT ALSO PROVIDES EXTRA MATERIAL FOR HEAT TRANSFER RESISTANCE TO PROVIDE MORE PROTECTION AT THE DEVIATION.	104242/0
30.	THE IDENTIFIED TEST SCHEMES QUALIFIED CABLE TRAY PROTECTIVE ENVELOPES WITH PROTRUDING ITEMS SUCH AS SUPPORTS OR UNISTRUT MEMBERS. REQUIRED MATERIAL THICKNESSES AND CONTINUITY OF THE TRAY ENVELOPES ARE MAINTAINED AND CONSISTENT WITH TESTED CONFIGURATIONS. EFFECTS OF POTENTIAL MOVEMENTS OF THE PROTRUDING ITEMS ARE ADEQUATELY ADDRESSED IN THE DESIGN.	104037/1
31.	THE CONFIGURATION, AS INSTALLED, DOES NOT ACHIEVE THE FULL REQUIRED MATERIAL THICKNESS ON A PROTRUDING ITEM AT AN INTERFERENCE. THE PRIMARY RACEWAY ENVELOPE IS NOT AFFECTED. THE EXTRA LAYER OF PANEL PROTECTS THE INTERFERENCE FROM DIRECT EXPOSURE TO A FIRE AND PROVIDES EXTRA MATERIAL FOR RESISTANCE TO HEAT TRANSFER.	103599/0
32.	THE PIPE SUPPORT ONLY INTERFERES WITH THE INSTALLATION OF THERMO-LAG ON THE ESSENTIAL CONDUIT BUT DOES NOT PRESENT A DIRECT HEAT PATH INTO THE ESSENTIAL COMMODITY. IT DOES NOT NEED TO BE COVERED AS A PROTRUDING ITEM. COVERING THE PIPE SUPPORT WITH 1/2" THICK THERMO-LAG AT THE INTERFERENCE AND EXTENDING COVERAGE OUT APPROXIMATELY 3" IN ONE DIRECTION AND 6" IN THE OTHER MORE THAN COMPENSATES FOR THE 3" WIDE 1/4" OVERLAY OMISSION.	104017/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
33.	THERE ARE MULTIPLE INTERFERENCES AROUND THE JB DUE TO CONDUITS AND SUPPORTS. ALSO THE JB IS UP AGAINST THE CEILING AND A BEAM WHICH RESTRICTS ACCESSIBILITY. THE INSTALLATION OF A SECOND LAYER OF THERMO-LAG ON THE JB WOULD HAVE RESULTED IN MULTIPLE GAPS WHERE THE 2ND LAYER COULD NOT HAVE BEEN INSTALLED MAKING THE 2ND LAYER INEFFECTIVE. THE TEST AS EXPLAINED IN NOTE 8, THE HEAT SINK AFFORDED BY THE CONCRETE CEILING AND BEAM AND THE COMPLETE UPGRADE OF THE JOINTS AND PENETRATIONS MAKE THE INSTALLATION ACCEPTABLE. THE COMPENSATION PROVIDED FOR THE MINOR PROBLEMS WITH APPLYING STRESS SKIN ON LBD JOINTS BY EXTENDING STRESS SKIN WHICH CANNOT BE STAPLED ON TOP OF THE LBD, DOWN ONTO THE SIDES WHERE IT CAN BE STAPLED AND BY REINFORCING THE CUT STRESS SKIN AT THE SMOKE DETECTOR WITH A 2ND PIECE ON STRESS SKIN RESULTS IN AN ACCEPTABLE INSTALLATION WHICH IS CONSISTENT WITH THE TESTED CONFIGURATIONS.	104241/1
34.	AS DESCRIBED BY NOTE 8, TEST SCHEME 10-2 DEMONSTRATED THE EFFECTIVENESS OF A SINGLE LAYER OF THERMO-LAG 330-1 FLAT PANELS ON JUNCTION BOXES, WITH JOINTS BETWEEN THE PANEL PIECES REINFORCED WITH STRESS SKIN (STAPLED IN PLACE) AND 330-1 TROWEL GRADE MATERIAL BUILDUP. CONDUIT ENTRANCES INTO THE JUNCTION BOX/PROTECTIVE ENVELOPE ARE REINFORCED IN A SIMILAR MANNER. IN SOME INSTANCES, DUE TO INTERFERING COMMODITIES SUCH AS CONDUITS OR PIPING WHICH ARE NOT PART OF THE PROTECTIVE ENVELOPE, A LOCALIZED AREA BETWEEN THE JUNCTION BOX AND THE INTERFERING COMMODITY DOES NOT HAVE SUFFICIENT CLEARANCE TO ALLOW THE FULL THICKNESS OF A SINGLE PANEL TO BE INSTALLED ON THE JUNCTION BOX. THIS CONDITION IS ACCEPTABLE SINCE THE MATERIAL THICKNESS ON THE JUNCTION BOX IS INCREASED IMMEDIATELY ADJACENT TO THE INTERFERENCE BY THE ADDITION OF A SECOND LAYER OF THERMO-LAG PANEL. THEREFORE SUFFICIENT THERMO-LAG MATERIAL MASS IS PROVIDED TO REACT WITH HEAT AT THE AREA OF REDUCED COVERAGE SUCH THAT SUBLIMATION AND CHAR LAYER FORMATION WILL OCCUR TO PREVENT EXCESSIVE HEAT ENTRY INTO THE JUNCTION BOX. ADDITIONALLY, THE INTERFERING COMMODITY ITSELF WILL SERVE TO SHIELD THE IMMEDIATE AREA OF REDUCED COVERAGE AND ALSO SERVES AS A HEAT SINK TO PREVENT CONDUCTIVE HEAT TRANSFER INTO THE ENCLOSURE.	101320/3
35.	THIS CONFIGURATION DEVIATES FROM SPECIFIED BANDING DETAILS ON THE 2ND PANEL LAYER ASSOCIATED WITH A JUNCTION BOX. THE MAXIMUM DISTANCE TYPICALLY ALLOWED FROM THE LAST BAND TO THE EDGE OF AN ENCLOSURE IS 2". THE INSTALLED CONFIGURATION RESULTS IN THE LAST BAND BEING 3"-4" FROM THE EDGE. THIS CONFIGURATION IS ACCEPTABLE SINCE THE BANDING ON THE 2ND PANEL LAYER IS SECURED TO STRUCTURE WITH ANGLE IRON. THE RESULTING BANDING CONFIGURATION WILL NOT IMPACT THE FIRE RESISTIVE PROPERTIES OF THE ENCLOSURE. THE MATERIAL THICKNESS (I.E., 2 PANEL LAYERS) IS CONSISTENT WITH A TESTED CONFIGURATION AND THE BANDING TECHNIQUES PROVIDED ARE ADEQUATE TO SECURE THE MATERIAL IN PLACE.	104245/0
36.	THE REDUCTION OF THE PANEL AT THE HVAC INTERFERENCE WILL NOT COMPROMISE THE INTEGRITY OF THE PROTRUDING ITEM COVERAGE SINCE THE REDUCTION IS ONLY 1/8" AT THE INTERFERENCE. ALTHOUGH THIS REPRESENTS A REDUCED THICKNESS FROM THE TESTED CONFIGURATION, THE REMAINING ATTRIBUTES FOR PROTRUDING ITEM PROTECTION ARE IN ACCORDANCE WITH TESTED CONFIGURATIONS. THE LOCATION WHERE THE TRAPEZE HANGER CROSSES THE ANGLE SUPPORT AMOUNTS TO 1/2" X 2" IN AREA/DIMENSIONS. EXTRA 330-1 PANELS HAVE BEEN INSTALLED TO CREATE A TORTUROUS PATH FOR HEAT AS WELL AS THE SHIELDING AFFECTS PROVIDED BY THE ANGLE/HANGER.	104246/2

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
37.	ISSUE 1: TEST SCHEME 11-1 QUALIFIED THE CONFIGURATION OF INCREASING THE SIZE OF THE CABLE TRAY PROTECTIVE ENVELOPE AT THE POINT WHERE CABLE BUNDLES WRAPPED WITH 330-660 FLEXI-BLANKET ENTERS THE END OF A CABLE TRAY. ALTHOUGH THE TRAY TEST WAS FOR A 24" WIDE TRAY AND THE DCA CONFIGURATION IS FOR A 36" WIDE TRAY, THE CONSTRUCTION TECHNIQUES ARE THE SAME. THEREFORE, THIS CONFIGURATION IS CONSISTENT WITH THAT QUALIFIED BY TEST AND IS ACCEPTABLE. ISSUE 2: TEST SCHEME 11-1 QUALIFIED THE USE OF A "COLLAR" PIECE OF 330-660 FLEXI-BLANKET TO REINFORCE THE INTERFACE REGION WHERE CABLE BUNDLES WRAPPED WITH 330-660 FLEXI-BLANKET ENTER THE CABLE TRAY ENVELOPE CONSTRUCTED OF 330-1 TROWEL GRADE BUILDUP TO REINFORCE THE INTERFACE REGION. SINCE 330-69 STRESS SKIN IS ACTUALLY STEEL MESH WHICH HAS BEEN SECURED TO THE PANELS ON THE TRAY AND TO THE FLEXI-BLANKET WRAP ON THE AIR DROP WITH STAPLES, IT MAKES FOR A STRONGER "COLLAR" THAN FLEXI-BLANKET WHICH HAS AN INTEGRAL FIBERGLASS GAUZE. THE 330-1 TROWEL GRADE BUILDUP PROVIDES ADEQUATE THERMAL PROTECTION AT THE INTERFACE. THEREFORE THIS CONFIGURATION IS EQUIVALENT TO THAT QUALIFIED BY TEST. NO ADVERSE EFFECT FROM REDUCED FLEXIBILITY AT THE INTERFACE REGION RESULTS FROM THIS DESIGN. ISSUE 3: THE REDUCTION IN 330-1 PANEL THICKNESS ON THE CABLE TRAY HANGER IS ACCEPTABLE SINCE THE COMMODITY IS A TRAY HANGER MEMBER (NOT THE RACEWAY ENVELOPE) WHICH IS COVERED FOR CONDUCTIVE HEAT PATH PROTECTION ONLY. THE REDUCED COVERAGE AREA IS VERY LOCALIZED AND THE ADDITIONAL LAYER OF PANEL IMMEDIATELY ADJACENT THE INTERFERENCE PROVIDES SUFFICIENT MATERIAL MASS TO REACT WITH HEAT WHICH COULD ENTER THE ENVELOPE AT THE INTERFERENCE. FINALLY, THE INTERFERING ITEM IS THE TOP SURFACE OF A HVAC DUCT WHICH WILL SHIELD THE AREA OF REDUCED COVERAGE. THEREFORE, THIS DEVIATION WILL HAVE NO EFFECT ON THE ABILITY OF THE CABLE TRAY ENVELOPE TO PERFORM IT'S FUNCTION.	104248/1
38.	THE IDENTIFIED CABLE TRAY TEST SCHEMES QUALIFIED PROTECTIVE ENVELOPES FOR THE FULL RANGE OF UNIT 2 CABLE TRAY SIZES. THE TECHNIQUES UTILIZED FOR CABLE TRAY ENVELOPE JOINT REINFORCEMENT GENERALLY CONSISTED OF BOTH "STITCHING" OF BUTT JOINTS ON BOTTOM AND VERTICAL ENVELOPE SURFACES WITH TIE WIRES AND LAPPING THE BUTT JOINTS BY 5" (EACH SIDE) WITH A CIRCUMFERENTIAL WRAP OF STRESS SKIN (STAPLED IN PLACE) AND TROWEL GRADE BUILDUP. THESE UPGRADE TECHNIQUES ARE INTENDED TO PRECLUDE JOINT FAILURE (UNDER FIRE CONDITIONS) UNDER ITS OWN WEIGHT AND/OR ESCAPING GASEOUS PRESSURE INDUCED BY HEAT UP OF THE MATERIAL. MINOR LOCALIZED AREAS WHERE BOTH TECHNIQUES ARE NOT INSTALLED HAVE NO EFFECT OF THE ABILITY OF THE TRAY ENVELOPE TO MAINTAIN ITS STRUCTURAL INTEGRITY. STITCHING TECHNIQUES ONLY ON BOTTOM BUTT JOINTS ON A 36" CABLE TRAY (WITH TEE SECTION) WERE QUALIFIED VIA SCHEME 1-2 AND STRESS SKIN TECHNIQUES ONLY ON 30" AND 36" CABLE TRAYS WERE QUALIFIED VIA SCHEMES 14-1 AND 15-1. THEREFORE THE SUBJECT CONFIGURATION IS CONSISTENT WITH THOSE QUALIFIED BY TEST AND ONLY RESULTS IN A REDUCED LEVEL OF CONSERVATISM TO THAT REQUIRED BY THE SPECIFICATION.	104250/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
39.	ISSUE 1: THE IDENTIFIED CABLE TRAY TEST SCHEMES QUALIFIED PROTECTIVE ENVELOPES FOR THE FULL RANGE OF UNIT 2 CABLE TRAY SIZES USING 330-1 V-RIBBED PANELS. THE LOCALIZED USE OF 330-1 FLAT PANEL STOCK ON CABLE TRAYS SUCH AS AT SPLICE PLATES WHERE INTERFERENCES EXIST IS ACCEPTABLE SINCE EFFECTIVE MATERIAL THICKNESS AND CONTINUITY OF COVERAGE IS MAINTAINED. USE OF TIE WIRES TO SECURE SUCH "FILL" PIECES TO THE STANDARD V-RIBBED PANELS PROVIDES ADEQUATE STRUCTURAL INTEGRITY BASED ON TESTED CONFIGURATIONS. ISSUE 2: TEST SCHEME 11-1 QUALIFIED THE USE OF A 330-660 FLEXI-BLANKET COLLAR AROUND PROTECTED CABLE BUNDLES ENTERING A CABLE TRAY ENVELOPE TO REINFORCE THE TRANSITION REGION. USE OF STRESS SKIN WITH 330-660 TROWEL GRADE BUILDUP SERVES THE SAME FUNCTION BUT CAN BE MORE READILY FORMED AROUND ENTERING CABLE BUNDLES. THE STRESS SKIN IS ADEQUATELY SECURED TO THE CABLE TRAY PANEL SURFACE AND FLEXI-BLANKET ON THE AIR DROPS WITH STAPLES. THE TROWEL GRADE MATERIAL BUILDUP PROVIDES ADEQUATE THERMAL PROTECTION. THEREFORE, SUBSTITUTION OF STRESS SKIN AND TROWEL GRADE OF THE 330-660 COLLAR IS EQUIVALENT TO THE TESTED CONFIGURATION.	104252/0
40.	THIS DCA IDENTIFIES 2 J-BOXES WHERE MINOR VARIATIONS IN THE 2ND LAYER OF 330-1 PANEL COVERAGE WAS REQUIRED DUE TO CLEARANCE LIMITATIONS. THE STANDARD REQUIREMENT PER THE INSTALLATION SPECIFICATION AND TYPICAL DETAILS IS FOR THE 1ST PANEL LAYER OF J-BOXES TO CONSIST OF FLAT PANELS AND THE OUTER (2ND) LAYER TO CONSIST OF V-RIB PANELS. THIS DCA ALLOWS THE USE OF FLAT PANEL STOCK IN A LOCALIZED AREA ON ONE J-BOX AROUND A TUBE STEEL INTERFERENCE AND ALLOWS THE V-RIBS TO BE FLATTENED IN A LOCALIZED AREA ON THE OTHER J-BOX TO ENABLE FIT OF THE 2ND LAYER. IN BOTH CASES THE 2ND PANEL LAYER COVERAGE WAS EXTENDED TO STRUCTURE AND SECURED USING TYPICAL DETAILS 11-6 OR 11-7 WHICH WERE EVALUATED IN ATTACHMENT A TO THIS ENGINEERING REPORT. TEST SCHEME 10-1 QUALIFIED THE DOUBLE LAYER PANEL CONFIGURATION DESCRIBED ABOVE (INCLUDING JOINT REINFORCEMENT WITH STRESS SKIN AND TROWEL GRADE BUILDUP) ON J-BOXES. TEST SCHEME 10-2 QUALIFIED A SINGLE LAYER OF FLAT PANEL STOCK (WITH JOINT REINFORCEMENT) ON J-BOXES. THEREFORE THE CONFIGURATIONS DESCRIBED BY THIS DCA ARE CONSISTENT WITH THE MORE CONSERVATIVE DESIGN IN THAT EFFECTIVE MATERIAL THICKNESSES ARE MAINTAINED. ADDITIONALLY, FLATTENING OF V-RIBS ON PANELS IS TYPICALLY UTILIZED FOR CABLE TRAY ENVELOPES WHERE THE TOP PANEL JOINS THE SIDE RAIL PIECES. BASED ON THE ABOVE, THESE J-BOX CONFIGURATIONS ARE FULLY BOUNDED BY TESTED CONFIGURATIONS.	104253/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
41.	TEST SCHEME 11-1 QUALIFIED THE USE OF 3 LAYERS OF 330-660 FLEXI-BLANKET ON AIR DROP CABLES AND FLEX CONDUITS 2" DIA. AND SMALLER. THE TESTED CONFIGURATION USED COMPLETE WRAPS ON EACH LAYER WITH 2"-4" OVERLAP SEALED WITH 330-660 TROWEL GRADE MATERIAL. THIS CONFIGURATION INVOLVES 2 LOCALIZED AREAS ON A 1" DIA. FLEX CONDUIT WHERE MODIFICATION OF STANDARD INSTALLATION OF THE 3RD 330-660 LAYER WAS REQUIRED DUE TO AN INTERFERENCE AND A SHARP BEND RADIUS. THE SHARP RADIUS AREA WAS PROTECTED BY USING 2 PIECES OF 330-660 MATERIAL TO COMPRISE THE 3RD LAYER. THE OVERLAP ON THE TWO PIECES WAS MAINTAINED CONSISTENT WITH THE TESTED CONFIGURATION AND TROWEL GRADE MATERIAL WAS USED TO ADHERE THE SEPARATE PIECES TOGETHER. THEREFORE, THIS PORTION OF THE CONFIGURATION IS ADEQUATELY BOUNDED BY TEST. THE INTERFERENCE AREA WAS ADDRESSED BY PERMITTING THE 3RD LAYER TO BE NOTCHED IN THE IMMEDIATE AREA OF THE INTERFERENCE TO ENABLE THE WRAP TO BE COMPLETED AROUND THE FLEX CONDUIT. THIS AREA OF REDUCED COVERAGE IS ACCEPTABLE SINCE THE INTERFERING COMMODITY IS THERMO-LAG 330-1 MATERIAL INSTALLED OVER A ADJACENT RIGID CONDUIT. THE AREA OF REDUCED COVERAGE WAS FILLED WITH 330-660 TROWEL GRADE MATERIAL TO ENSURE CONTINUITY OF PROTECTION IN THE GAP BETWEEN THE RIGID AND FLEX CONDUITS. SINCE EFFECTIVE THICKNESS OF MATERIAL IS MAINTAINED BY THE TROWEL GRADE AND THE INTERFERING ITEM WILL NOT ACT AS A CONDUCTIVE HEAT SOURCE, THE CONFIGURATION PROVIDES AN EQUIVALENT LEVEL OF PROTECTION AS THE QUALIFYING TEST SCHEME.	104254/0
42.	TEST SCHEME 11-1 QUALIFIED THE USE OF A 330-660 FLEXI-BLANKET COLLAR ASSEMBLY TO REINFORCE THE REGION WHERE PROTECTED CABLE AIR DROPS ENTER THE 330-1 PANEL PROTECTIVE ENVELOPE ON A CABLE TRAY. THE SUBJECT CONDITION INVOLVES CONFIGURING THE COLLAR ASSEMBLY TO ENVELOPE 2 ADJACENT ENTERING CABLE BUNDLES AT THE TRAY INTERFACE. THE DETAIL USED TO CONSTRUCT THE COMMON COLLAR ASSEMBLY INVOLVES BUTTING THE COVERAGE FOR ONE BUNDLE UP TO THAT OF AN ADJACENT BUNDLE. THE EFFECTIVE MATERIAL THICKNESS IS MAINTAINED AND THE INTERFACE BETWEEN THE SEPARATE COLLAR PIECES IS COMPLETELY FILLED WITH 330-660 TROWEL GRADE MATERIAL. THEREFORE, THE CONFIGURATION PROVIDES AN EQUIVALENT LEVEL OF PROTECTION AND IS BASED ON TECHNIQUES QUALIFIED BY TEST.	104255/0 104261/0
43.	THE TEST SCHEMES LISTED HAVE QUALIFIED USE OF 330-1 PREFORMED CONDUIT SECTION MATERIAL ON RIGID CONDUITS AND 330-660 FLEXI-BLANKET MATERIAL ON VARIOUS SIZES OF CABLE AIR DROPS. THE SUBJECT CONFIGURATION UTILIZES 330-1 MATERIAL SECTIONS FOR A 10" DISTANCE ON A FLEXIBLE CONDUIT. ALTHOUGH 330-1 MATERIAL HAS NOT BEEN TESTED ON FLEX CONDUITS OR CABLE AIR DROPS (I.E., NOT RUN INSIDE RIGID CONDUIT), THE EFFECTIVE MATERIAL THICKNESS, INSTALLATION TECHNIQUES AND CONTINUITY OF COVERAGE OF THE 330-1 MATERIAL INSTALLED ON THE FLEX CONDUIT AT THE BLOCKOUT HAS BEEN EFFECTIVELY BUILT UP AND SEALED WITH 330-1 TROWEL GRADE MATERIAL. ADDITIONALLY, WHERE THE 330-1 MATERIAL INSTALLED ON THE FLEX CONDUIT INTERFACES WITH THE 330-1 MATERIAL ON THE ADJACENT RIGID CONDUIT, THE STRESS SKIN AND TROWEL GRADE BUILDUP PROVIDES ADDITIONAL THICKNESS FOR THERMAL PROTECTION OF THE FLEX. SINCE THE DISTANCE WHERE 330-1 CONDUIT MATERIAL WAS INSTALLED ON THE FLEX CONDUIT IS ONLY 10" LONG AND THIS PORTION OF THE FLEX IS IMMEDIATELY AT THE POINT WHERE IT ENTERS A BLOCKOUT, NO SIGNIFICANT REDUCTION IN OVERALL FLEXIBILITY RESULTS. THE PORTION OF THE FLEX CONDUIT PROTECTED WITH STANDARD 330-660 MATERIAL IS OVER 30" LONG. THEREFORE, THIS CONFIGURATION PROVIDES AN EQUIVALENT LEVEL OF PROTECTION TO THAT QUALIFIED BY TEST.	104258/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
44.	THE 30" LENGTH OF TRAY RUN WHERE STANDARD STRESS SKIN REINFORCEMENT IS MINOR IN RELATION TO THE ENTIRE TRAY RUN. THE USE OF TROWEL GRADE MATERIAL AT ALL AREAS PROVIDES THERMAL PROTECTION CONSISTENT WITH TESTED CABLE TRAY CONFIGURATIONS. THE STRUCTURAL INTEGRITY OF THE ENVELOPE IS ASSURED BY THE USE OF TIE WIRES SECURING THE BOTTOM PANELS TO EVERY OTHER TRAY RUNG. THIS IS A MORE CONSERVATIVE APPROACH THAN THE TECHNIQUES USED IN QUALIFICATION TESTS. SINCE ONLY 1/2" CLEARANCE BETWEEN THE TOP OF THE TRAY ENVELOPE AND THE CONCRETE CEILING EXISTS, A CONSIDERABLE SHIELDING EFFECT WILL OCCUR ON THE TOP PANEL SURFACE. THEREFORE, THIS CONFIGURATION PROVIDES A LEVEL OF PROTECTION WHICH IS BOUNDED BY TRAY TESTS WHICH USED LESS CONSERVATIVE JOINT UPGRADE TECHNIQUES.	104262/0
45.	THIS CONFIGURATION IS ACTUALLY MORE CONSERVATIVE THAN THE PROTECTED CABLE AIR DROP BUNDLE/CABLE TRAY ENVELOPE INTERFACE DESIGN QUALIFIED VIA TEST SCHEME 11-1. THE ENTERING CABLE BUNDLE IS WRAPPED IN 2 LAYERS OF 330-660 WITH A FIRE STOP INSTALLED INSIDE THE BUNDLE USING 330-660 TROWEL GRADE. ADDITIONALLY, 3 LAYERS OF 330-660 FLEXI-BLANKET ARE THEN INSTALLED AROUND THE BUNDLE FROM THE POINT WHERE THE BUNDLES ENTER THE TRAY ENVELOPE BACK TO THE 2" DIA. CONDUIT WHERE THE AIR DROP ORIGINATES. SUFFICIENT BANDING IS INSTALLED AT THE TRAY ENVELOPE INTERFACE TO ENSURE THE INTEGRITY OF THE AIR DROP ASSEMBLY. AMPACITY DERATING ISSUES ARE NOT A CONCERN DUE TO THE SHORT (4"-5") DISTANCE WHERE INCREASED MATERIAL THICKNESS IS INSTALLED. THEREFORE, THE RESULTING AIR DROP CONFIGURATION HAS BEEN BOUNDED BY TEST.	104264/0

ATTACHMENT D

PROTRUDING/INTERFERING ITEM COVERAGE DEVIATIONS

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
101397/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLING THERMO-LAG ON ESSENTIAL TRAY STRUCTURAL STEEL SUPPORT IN THE AREA OF AN INTERFERING 2" TUBE STEEL SUPPORT. RESOLUTION: INSTALL THERMO-LAG ON THE CABLE TRAY SUPPORT FOR A DISTANCE OF 9" FROM THE PRIMARY ENVELOPE. WHERE THE 2" TUBE STEEL SUPPORT INTERFERES WITH THERMO-LAG INSTALLATION, EXTEND THE PROTECTION ONTO THE PIPE SUPPORT TO A TOTAL DISTANCE OF 9" FROM THE CABLE TRAY. OMIT THERMO-LAG PROTECTION OF THE INSIDE FACE OF THE PIPE SUPPORT TUBE STEEL.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 7
102221/1	EC	778	X-115B	AA/154	Y	Y	ISSUE: NON-ESSENTIAL TRAY SHARES SUPPORT WITH ESSENTIAL CABLE TRAY, BOTH ITEMS REQUIRED 9" RULE THERMO-LAG PROTECTION AS PROTRUDING ITEMS (MULTIPLE LOCATIONS, SAME TRAY RUN). SPACING BETWEEN SPLICE PLATE BOLTS AND A BEND IN ONE TRAY REPRESENT ADDITIONAL INSTALLATION PROBLEMS. CONSTRUCTION REQUESTS DIRECTION. RESOLUTION: COVER PROTRUDING TRAY AND SUPPORT USING DCA DIRECTIONS (TYPICAL DETAIL 13-6). COMPLETELY COVER WALL SUPPORT WITH THERMO-LAG 330-1 PANEL, AND USE A COMMON ENCLOSURE FOR SPLICE PLATE BOLTS WHERE SPACE PROHIBITS STANDARD INSTALLATION.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 17, 34

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
102231/0	EC	778	X-113	EA/43	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLING THERMO-LAG ON A NON-ESSENTIAL CABLE TRAY WHICH SHARES A SUPPORT WITH A PROTECTED TRAY. THE NON-ESSENTIAL TRAY IS WITHIN THE 9" DISTANCE FOR CONDUCTIVE HEAT PATH PROTECTION. RESOLUTION: PROTECT THE PROTRUDING TRAY USING M2-1701 DETAIL 13-6. ENCLOSE TRAY SPLICE PLATES AND BOLTING FOR BOTH IN A COMMON 330-1 BOX TO SIMPLIFY INSTALLATION.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 17
102266/0	AB	790	X-174	AA/21a	N	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLING THERMO-LAG ON A STRUCTURAL STEEL SUPPORT FOR AN ESSENTIAL TRAY. THE SUPPORT IS ALSO USED AS A PIPE SUPPORT AND THE UNPROTECTED LINE IS WITHIN THE 9" DISTANCE FOR CONDUCTIVE HEAT PATH PROTECTION. RESOLUTION: INSTALL THERMO-LAG ON THE STRUCTURAL TUBE STEEL SUPPORT FOR A DISTANCE OF 9" FROM THE ESSENTIAL TRAY EXCEPT WHERE INTERFERED WITH BY THE UNPROTECTED LINE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 8

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
102312/0	AB	790	X-174	AA/21a	N	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLING THERMO-LAG ON A NON-ESSENTIAL CABLE TRAY AND SUPPORTS WHICH ARE SHARED WITH A PROTECTED TRAY. THE NON-ESSENTIAL TRAY IS WITHIN THE 9" DISTANCE FOR CONDUCTIVE HEAT PATH PROTECTION. RESOLUTION: WRAP ADJACENT TRAY AND SHARED SUPPORT MEMBERS WITH THERMO-LAG 330-1 PANEL AT THE REQUIRED LOCATIONS PER M2-1701, DETAIL 13-6. NOTE: THE PANEL ATTACHMENT DIRECTIONS INCLUDED IN THIS DCA ARE NOW PART OF THE TYPICAL DETAIL ITSELF.	N/A	SEE ATTACHMENT A FOR ACCEPTANCE BASIS FOR DETAIL 13-6
102524/0	EC	790	X-122	EA/54	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR THERMO-LAG COVERAGE OF SUPPORT STEEL AND CABLE TRAY WHICH INTERFERE WITH THERMO-LAG COVERAGE OF A 2"ϕ ESSENTIAL CONDUIT. RESOLUTION:COVER SUPPORT STEEL AND ADJACENT TRAYS AS PROTRUDING ITEMS PER THE 9" RULE, USING DCA DIRECTIONS FOR ATTACHMENT OF PANEL TO TRAYS.	9-1, 10-1	1-5, 9
102525/0	EC	778	X-115B	AA/154	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR COVERING INTERFERING CABLE TRAY AS A PROTRUSION INTO AN ESSENTIAL CONDUIT PROTECTIVE THERMO-LAG ENVELOPE PER THE 9" RULE. RESOLUTION: DIRECTIONS ARE PROVIDED FOR ATTACHMENT OF FLAT PANEL TO CABLE TRAY USING TIE WIRING AND DRILLED HOLES.	9-1, 10-1	1-5, 18

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
102750/0	SG	790	2-071	2SB/4	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION TO COVER C4 CHANNEL STEEL SUPPORT MEMBER WHICH INTERFERES WITH INSTALLATION OF THERMO-LAG 330-1 PANEL TO TOP OF ESSENTIAL CABLE TRAY. RESOLUTION: INSTALL SANDED/TRIMMED 330-1 FLAT PANEL ON TOP OF TRAY PER M2-1701 TYPICAL DETAIL 8-3 (DCA 101918) AN THE AREA OF C4 CHANNEL INTERFERENCE. COVER ENTIRE C4 CHANNEL WITH 330-1 FLAT PANEL EXCEPT WHERE IT INTERFACES WITH THE NON-ESSENTIAL TRAY IT SUPPORTS. APPLY 330-1 TROWEL GRADE FILLET AT LOCATIONS WHERE C4 CHANNEL THERMO-LAG PANELS INTERFACE WITH PANELS COVERING THE TOP OF THE ESSENTIAL TRAY.	11-1, 12-1, 12-2, 13-1, 14-1,15-1	1-6, 19
102789/1	AB	790	X-180	AA/21a	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLING THERMO-LAG ON ESSENTIAL TRAY STRUCTURAL STEEL SUPPORT IN THE AREA OF AN INTERFERING 12"ϕ CONDENSATE PIPE (2 LOCATIONS). RESOLUTION: INSTALL THERMO-LAG ON THE CABLE TRAY SUPPORT FOR A DISTANCE OF 9" FROM THE PRIMARY ENVELOPE. WHERE THE 12"ϕ PIPE INTERFERES WITH THERMO-LAG INSTALLATION, TRIM 330-1 PANEL AROUND PIPE TO ALLOW 1/8" AIR GAP BETWEEN PIPE AND THERMO-LAG. ADD A SECOND THICKNESS OF 330-1 PANEL AT AREA OF THE INTERFERENCE, EXTENDING 9" IN BOTH DIRECTIONS ALONG THE SUPPORT.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
102821/1	SG	821	2-082	2SB/8	Y	Y	ISSUE 1: SERVICE WATER LINE INTERFERES WITH THERMO-LAG 330-1 INSTALLATION AT SPLICE PLATE AREA OF AN ESSENTIAL CABLE TRAY. ISSUE 2: TWO CHILL WATER LINES INTERFERE WITH STRESS SKIN INSTALLATION ON AN ESSENTIAL CABLE TRAY DUE TO ZERO CLEARANCE. ISSUE 3: NON-ESSENTIAL AIR DROP BETWEEN ADJACENT NON-ESSENTIAL CABLE TRAYS INTERFERES WITH THERMO-LAG 330-1 INSTALLATION ON AN ESSENTIAL CABLE TRAY. RESOLUTION 1: TRIM SPLICE PLATE SCREWS FLUSH WITH NUTS TO ALLOW FLAT PANEL INSTALLATION. TRANSFER FROM FLAT BOARD TO "V" RIB BOARD PER M2-1701 TYPICAL DETAIL 8-3 CRITERIA (FROM DCA 101918).	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 28

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
102821/1 CONT'D							RESOLUTION 2: REMOVE EXISTING THERMO-LAG FROM TRAY IN THE AREA OF THE 2 PIPES. ADD INSULATION TO PIPES. CONSTRUCT 330-1 PANEL BOXES AROUND PIPES, ATTACHED TO THE PRIMARY TRAY ENVELOPE. USE 2 LAYERS 330-660 FLEXI-BLANKET TO WRAP EACH PIPE ABOVE AND BELOW THE LEVEL OF THE TRAY, USING 330-1 TROWEL GRADE, STRESS SKIN, AND STAPLES TO ATTACH AND REINFORCE CONFIGURATION.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 29
							RESOLUTION 3: USE FLAT PANEL 330-1 AT THE AREA OF AIR DROP INTERFERENCE, INSTALLING PER M2-1701 TYPICAL DETAIL 8-3. 22" MAXIMUM FLAT PANEL WIDTH WILL BE USED, DEVIATING FROM 12" MAXIMUM ALLOWED BY THE DETAIL.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 28, 30
102859/0	EC	790'	X-115B	AA/154	Y	Y	ISSUE: I&C TUBING AND TRAY INTERFERE WITH THERMO-LAG COVERAGE OF ESSENTIAL CONDUIT. OPEN-ENDED TUBE STEEL SUPPORT MEMBER AND ADJACENT NON-ESSENTIAL CONDUIT ARE SECONDARY INTERFERENCES. CONSTRUCTION REQUEST DIRECTION.		
							RESOLUTION: COVER ALL PRIMARY AND SECONDARY INTERFERENCES PER THE 9" RULE AS PROTRUDING ITEMS. COVER TUBE STEEL WITH THERMO-LAG CAPS PER DETAIL 16-5.	9-1, 10-1	1-6, 37

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
102884/1	AB	831	X-226	AA/21d	Y	Y	ISSUE: ANGLE IRON AND CONCRETE WALL INTERFERE WITH INSTALLATION OF THERMO-LAG ON ESSENTIAL CABLE TRAY AND ITS SUPPORT. RESOLUTION: WRAP THE ANGLE WITH THE ESSENTIAL TRAY AND THE TRAY HANGER WHERE IT INTERFERES WITH 1/2" THICKNESS INSTALLATION, AND COVER THE ANGLE AS A PROTRUDING ITEM BEYOND THE TRAY IN BOTH DIRECTIONS, BUTTING PANELS TO ADJACENT WALL.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 20
103002/0	SG	892	2-109B	2SK/17c	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR COVERAGE OF EMBEDDED SPARE CAPPED CONDUIT SLEEVE, WHICH IS LOCATED WITHIN THE THERMO-LAG ENVELOPE REQUIRED FOR A WALL MOUNTED STEEL SUPPORT ON WHICH JUNCTION BOX JB2S-1114Y IS MOUNTED. RESOLUTION: COVER THE END OF THE SPARE SLEEVE WITH THERMO-LAG 330-1 TROWEL GRADE MATERIAL, FILLING THE 1/8" DEEP RECESS UNTIL IT IS FLUSH WITH THE WALL SURFACE. COVER SUPPORT STEEL WITH THERMO-LAG.	10-1, 10-2	1-6, 11

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103081/1	SG	810	2-082	2SB/8	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR PROTECTION OF FIRE ZONE R FLEX CONDUITS WHICH PROTRUDE FROM ESSENTIAL J-BOX JB2S-53830. DIRECTION IS ALSO NEEDED FOR COVERAGE OF AN ESSENTIAL CONDUIT WHERE SPACE IS LIMITED, AND FOR FASTENING 330-1 PANEL TO STEEL LINER WALLS. RESOLUTION: WRAP 2 FIRE ZONE R CABLES AS PROTRUDING ITEMS IN A COMMON THERMO-LAG 330-660 ENCLOSURE/FIRE STOP PER TYPICAL DETAIL 3-3A METHODS. INSTALL COVERAGE ON THE ESSENTIAL CONDUIT USING DETAIL 3-3A, BUTTING 330-1 PRESHAPED SECTIONS TO J-BOX AND ADDING 330-660 FLEXI-BLANKET WITH THE REQUIRED OVERLAP. INSTALL 330-1 PANEL TO STEEL LINER WALL USING SELF-TAPPING METAL SCREWS FOR 9" RULE PROTECTION TO THE EXTENT POSSIBLE. ADD 330-70 CERAMIC BLANK IN THE GAP BETWEEN THE J-BOX AND THE STEEL LINER.	10-1, 10-2	1-5, 36

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103088/0	SG	832	2-094	2SB/15	Y	Y	ISSUE 1: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLING THERMO-LAG ON ESSENTIAL CONDUIT TUBE STEEL SUPPORT IN THE AREA OF AN INTERFERING 1 1/4"ϕ PIPE. ISSUE 2: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLING THERMO-LAG ON ESSENTIAL CONDUIT TUBE STEEL SUPPORT IN THE AREA OF AN INTERFERING 1 5/8"ϕ PIPE RESTRAINT		
							RESOLUTION 1: INSTALL THERMO-LAG ON CONDUIT SUPPORT FOR A DISTANCE OF 9" FROM THE PRIMARY ENVELOPE. ON THE SIDE OF THE TUBE STEEL WHERE THE 1/4" DIA. PIPE INTERFERES WITH INSTALLATION, INSTALL 330-1 PANEL TO THE EXTENT POSSIBLE, AND ADD A SECOND 330-1 PANEL. TRIM THE PANELS TO ALLOW AN AIR GAP AT THE 1 1/4" DIA. PIPE. NOTCH PANEL ON THE OPPOSITE SIDE OF THE SUPPORT AS NECESSARY TO FIT FLUSH TO TUBE STEEL.	9-1, 10-1	1-6, 12
							RESOLUTION 2: INSTALL THERMO-LAG ON CONDUIT SUPPORT FOR A DISTANCE OF 9" FROM THE PRIMARY ENVELOPE. INSTALL 2nd LAYER OF 330-1 PANEL ON THE TUBE STEEL AT THE PIPE RESTRAINT INTERFERENCE, EXTENDING 9" FROM THE INTERFERENCE. TRIM PANELS AT THE PIPE RESTRAINT TO MAINTAIN AN AIR GAP. INSTALL THERMO-LAG ON ADJACENT CONDUIT C23K31182 WHERE IT INTERFERES WITH THERMO-LAG INSTALLATION ON THE TUBE STEEL SUPPORT.	9-1, 10-1	1-6, 12

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103143/0	SG	832	2-094	2SB/15	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR COVERING ESSENTIAL CONDUIT TUBE STEEL SUPPORT IN THE AREA OF A 2" DIA. FP PIPE. RESOLUTION: INSTALL THERMO-LAG 330-1 PANEL ON THE TUBE STEEL SUPPORT TO THE EXTENT POSSIBLE. ADD A SECOND THICKNESS OF 330-1 PANEL TO THE TWO SIDES OF THE SUPPORT ADJACENT TO THE INTERFERING PIPE. TRIM 330-1 PANELS AT THE AREA OF THE INTERFERENCE TO MAINTAIN AN AIR GAP.	9-1, 10-1	1-6, 12

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103476/1	SG	810	2-082	2SB/8	Y	Y	ISSUE 1: CONSTRUCTION REQUESTS DIRECTION ON THERMO-LAG 330-1 "V" RIB PANEL ORIENTATION FOR OUTER LAYER COVERAGE FOR J-BOX JB2S-53830. ISSUE 2A: CONSTRUCTION REQUESTS DIRECTION ON INSTALLING 1/4" THERMO-LAG OVERLAY ON 2" DIA. CONDUIT WHERE DIAMETER OF THE FIRST LAYER OF 330-1 IS OVERLY LARGE. ISSUE 2B: CONSTRUCTION REQUESTS DIRECTION ON THERMO-LAG COVERAGE OF STEEL LINER WALL, WHICH PROTRUDES CONDUIT OVERLAY PROTECTION. ISSUE 3: CONSTRUCTION REQUESTS DIRECTION ON 1/4" THERMO-LAG 330-1 OVERLAY INSTALLATION WHERE BARRIER IS AN INTERFERENCE.		
							RESOLUTION 1: NO DIRECTIONAL ORIENTATION REQUIREMENT APPLIES FOR J-BOX OUTER LAYER COVERAGE. ENSURE AT LEAST 2 RIBS ON EACH PANEL ARE IN CONTACT WITH THE PROTECTION SURFACE.	10-1, 10-2	1-6, 13
							RESOLUTION 2A: INSTALL OVERLAY PER DCA 103423 DIRECTION (M2-1701 TYPICAL DETAIL 4-9).	9-1, 10-1, 10-2	SEE ATT. A FOR ACCEPT. BASIS OF DET. 4-9
							RESOLUTION 2B: INSTALL 330-1 PANEL TO STEEL LINER WALL TO PROTECT CONDUIT SUPPORT TO SATISFY THE 9" RULE. USE SCREW TYPE FASTENERS IN LIEU OF HILTI BOLTS.	9-1, 10-1	1-5, 33

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103476/1 CONT'D							RESOLUTION 3: INSTALL 1/4 THICK CONDUIT OVERLAYS ON ESSENTIAL CONDUIT TO THE EXTENT POSSIBLE. WHERE BARRIER INTERFERES WITH OVERLAY INSTALLATION, BUTT COVERAGE TO BARRIER AND ADD 330-1 TROWEL GRADE FILLET PER PROVIDED DIRECTIONS.	9-1	1-5, 27
103484/1	AB	810	X-207	AA/21b	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLING THERMO-LAG 330-1 ON ESSENTIAL CABLE TRAY WHERE C6 CHANNELS INTERFERE WITH COVERAGE ON TOP OF THE TRAY. RESOLUTION: COVER C6 CHANNELS AND CABLE TRAY ABOVE CHANNELS AS PROTRUDING ITEMS PER THE 9" RULE. DIRECTIONS ARE PROVIDED FOR ENCLOSING ALL THREE CHANNELS IN A COMMON THERMO-LAG BOX BETWEEN THE TWO CABLE TRAYS.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 32
103488/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR THERMO-LAG INSTALLATION ON ESSENTIAL CABLE TRAY WHERE 7/8" PIPE SUPPORT ROD INTERFERES WITH STANDARD INSTALLATION. RESOLUTION: INSTALL 330-1 PANEL ON TRAY UP TO THE AREA OF INTERFERENCE. WRAP SUPPORT ROD WITH 2 LAYERS 330-660 FLEXI-BLANKET PER THE 9" RULE. CONSTRUCT FLAT PANEL BOX AROUND SUPPORT ROD, ATTACH TO TRAY. FILL BOX WITH 330-70 CERAMIC INSULATOR. SEAL BOX WITH THERMO-LAG 330-660 BULK GRADE AT TOP AND BOTTOM	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 21

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103508/0	SG	810	2-082	2SB/8	Y	Y	ISSUE 1: ADJACENT NON-ESSENTIAL CABLE TRAY AND SHARED SUPPORT PROTRUDE ESSENTIAL CABLE TRAY THERMO-LAG ENVELOPE (4 LOCATIONS). ISSUE 2: 2" DIA. PIPE STRUT AND 6" TUBE STEEL MEMBER INTERFERE WITH 9" RULE PROTECTION OF STRUCTURAL STEEL SUPPORT FOR ESSENTIAL CABLE TRAY. ISSUE 3: ADJACENT PIPE SUPPORT MEMBER INTERFERES WITH 9" RULE PROTECTION OF 2" x 4" TUBE STEEL SUPPORT FOR ESSENTIAL CABLE TRAY.		
							RESOLUTION 1: WRAP ADJACENT TRAY AND PROTRUDING STEEL SUPPORT WITH THERMO-LAG 330-1 PANEL AT EACH OF 4 LOCATIONS PER M2-1701, DETAIL 13-6.	N/A	SEE ATT. A FOR ACCEPTANCE BASIS FOR DETAIL 13-6.
							RESOLUTION 2: WRAP STRUCTURAL STEEL SUPPORT WITH 330-1 PANEL, NOTCHING PANEL AROUND 2" DIA. PIPE STRUT TO MAINTAIN AIR GAP. ADD A 2nd LAYER 330-1 PANEL IN THE VICINITY OF PIPE STRUT INTERFERENCE AND 6" TUBE STEEL INTERFERENCE, MAINTAINING AN AIR GAP AT BOTH INTERFERENCES.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 10
							RESOLUTION 3: WRAP CABLE TRAY SUPPORT WITH 330-1 PANEL, USING REDUCED THICKNESS PANELS WHERE THE ADJACENT PIPE SUPPORT MEMBER INTERFERES. ADD A 2nd LAYER 330-1 PANEL TO THE HORIZONTAL MEMBER OF THE TRAY SUPPORT WEST OF THE PRIMARY TRAY ENVELOPE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103597/0	AB	810	X-207	AA/21a	Y	Y	ISSUE 1: CONSTRUCTION REQUESTS DIRECTION FOR COVERING A NON-ESSENTIAL CABLE TRAY AS A PROTRUSION INTO AN ESSENTIAL TRAY THERMO-LAG PROTECTIVE ENVELOPE. ISSUE 2: A PIPE SUPPORT MEMBER INTERFERES WITH PROTECTION OF AN ESSENTIAL CABLE TRAY. ISSUE 3: A 2" Ø PIPE INTERFERES WITH PROTECTION OF AN ESSENTIAL CABLE TRAY.		
							RESOLUTION 1: COVER THE NON-ESSENTIAL TRAY AS A PROTRUDING ITEM PER THE 9" RULE IN ACCORDANCE WITH TYPICAL DETAIL 13-6 (DEVELOPED BY DCA 103548).	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 38
							RESOLUTION 2: COVER THE SUPPORT INTERFERENCE PER THE 9" RULE TO THE EXTENT POSSIBLE, AS DIRECTED IN THE DISPOSITION OF DCA 102266.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 8
							RESOLUTION 3: INSTALL A 6" WIDE 330-1 FLAT PANEL SECTION TO THE BOTTOM OF THE TRAY, PERFORMING ANY MINIMAL SANDING REQUIRED TO MAINTAIN AN AIR GAP CLEARANCE AT THE PIPE (THE EXISTING GAP IS 5/8"). USE TYPICAL DETAIL 8-3 FOR TRANSITION FROM "V" RIB TO FLAT PANEL.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 39

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103613/0	AB	790	X-180	AA/21a	Y	Y	ISSUE: ADJACENT PIPE SUPPORT MEMBER INTERFERES WITH 9" RULE PROTECTION OF STRUCTURAL STEEL SUPPORT FOR ESSENTIAL CABLE TRAY. RESOLUTION: INSTALL THERMO-LAG 330-1 PANEL ON CABLE TRAY SUPPORT TO THE EXTENT POSSIBLE WITHOUT INSTALLING PANEL ON THE INTERFERENCE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 14
103799/0	SG	832	2-094	2SB/15	Y	Y	ISSUE 1: CONSTRUCTION REQUESTS DIRECTION FOR COVERING CEILING LINER AS A PROTRUSION WHERE IT INTERFERES WITH 1/4" OVERLAY ON 2" DIA. CONDUIT. ISSUE 2: CONSTRUCTION REQUESTS DIRECTION FOR COVERING 3" X 3" TUBE STEEL SUPPORT AND CEILING LINER WHERE LIMITED ACCESS PREVENTS USE OF FASTENERS. RESOLUTION 1: DIRECTIONS ARE PROVIDED FOR FASTENER SPACING AND PANEL INSTALLATION TO ACHIEVE 9" RULE PROTECTION. RESOLUTION 2: INSTALL 2 LAYERS OF 330-1 PANEL ON TUBE STEEL SUPPORT EXTENDING FROM 2 CONDUITS UP TO THE STEEL PLATE, WHICH IS TO BE COVERED WITH 330-1 PANEL (1 LAYER) USING INDICATED SCREW SPACING.	9-1, 11-1 9-1, 10-1	1-5, 43 1-5, 43

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103809/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR COVERING 3 FIRE ZONE R CABLES WHICH PROTRUDE ESSENTIAL J-BOX JB2A-5363. RESOLUTION: INSTALL 330-1 CONDUIT SECTIONS ON FIRE ZONE R CABLES, EXTEND 4" MIN TO 5" MAX FROM J-BOX THERMO-LAG COVERAGE AND FILL WITH 330-1 TROWEL GRADE TO FORM A FIRE STOP. ENCLOSE TWO OF THE CABLES IN A COMMON ENVELOPE.	10-1, 10-2	1-5, 35
103846/1	AB	852	241	AA/21f	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR THERMO-LAG COVERAGE OF ESSENTIAL CABLE TRAY SUPPORT STEEL WHERE ADJACENT HVAC DUCT FLANGE INTERFERES WITH FULL PANEL THICKNESS INSTALLATION PER 9" RULE (3 LOCATIONS). RESOLUTION: COVER SUPPORT STEEL WITH FULL THICKNESS 330-1 TO THE EXTENT POSSIBLE PER THE 9" RULE. WHERE INTERFERENCES NECESSITATE REDUCED PANEL THICKNESS, ADD A 2nd LAYER OF PANEL TO THE SUPPORT STEEL IN THE VICINITY OF THE INTERFERENCE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 31

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103917/0	AB	790	X-180	AA/21a	Y	Y	ISSUE 1: 4" DIA. PIPE IS WITHIN 1/8" OF A CABLE TRAY SUPPORT FOR AN ESSENTIAL TRAY, INTERFERING WITH 9" RULE PROTECTION OF THE SUPPORT. ISSUE 2: 4" DIA. PIPE IS WITHIN APPROXIMATELY 1/16" OF A CABLE TRAY SUPPORT FOR AN ESSENTIAL TRAY, INTERFERING WITH 9" RULE PROTECTION OF THE SUPPORT.		
							RESOLUTION 1: INSTALL THERMO-LAG 330-1 PANEL ON THE CABLE TRAY SUPPORT TO THE EXTENT POSSIBLE, TRIMMING PANEL AT THE LOCATION OF THE INTERFERENCE AS NECESSARY TO MAINTAIN AN AIR GAP. ADD A 2nd LAYER OF 330-1 PANEL TO THE TOP AND SIDE SURFACES OF THE TRAY SUPPORT, ALSO TRIMMING THESE PANELS TO ACHIEVE A MINIMAL AIR GAP AT THE LOCATION OF THE PIPE INTERFERENCE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 10
							RESOLUTION 2: INSTALL THERMO-LAG 330-1 PANEL ON THE CABLE TRAY SUPPORT TO THE EXTENT POSSIBLE, TRIMMING PANEL AT THE LOCATION OF THE INTERFERENCE AS NECESSARY TO MAINTAIN AN AIR GAP. ADD A SECOND LAYER OF 330-1 PANEL TO THE TOP SURFACE OF THE TRAY SUPPORT ON BOTH SIDES OF THE INTERFERING PIPE, ALSO TRIMMING THESE PANELS TO ACHIEVE A MINIMAL AIR GAP AT THE PIPE INTERFERENCE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
103924/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: HVAC DUCT IS WITHIN 3/8" OF A CABLE TRAY SUPPORT FOR AN ESSENTIAL TRAY, INTERFERING WITH 9" RULE PROTECTION OF THE SUPPORT. RESOLUTION: INSTALL MODIFIED 9" RULE THERMO-LAG PROTECTION AT THE AREA OF THE DUCT FLANGE INTERFERENCE, USING A REDUCED THICKNESS 330-1 PANEL AND MAINTAINING A MINIMAL AIR GAP. INSTALL 3 THICKNESSES 330-1 PANEL TO THE TRAY SUPPORT MEMBER ON BOTH SIDES OF THE REDUCED PANEL. USE 330-1 TROWEL GRADE AND TIE WIRE OR BANDING TO HOLD THE PANELS IN PLACE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 10
104001/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: ADJACENT UNISTRUT SUPPORT MEMBER IS WITHIN 1/4" OF A "C" CHANNEL CABLE TRAY SUPPORT MEMBER FOR AN ESSENTIAL TRAY, INTERFERING WITH 9" RULE PROTECTION OF THE SUPPORT. RESOLUTION: INSTALL 9" RULE PROTECTION TO "C" CHANNEL USING 330-1 PANEL, TRIMMING PANEL AS NECESSARY TO AVOID THE INTERFERING SUPPORT MEMBER. INSTALL A 2nd LAYER OF 330-1 PANEL INSIDE THE "C" CHANNEL AND TIE WIRE TO THE TRIMMED PANEL TO PROVIDE ADDITIONAL MATERIAL THICKNESS AT THE AREA OF THE INTERFERENCE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
104079/1	AB	810	X-207	AA/21b	Y	Y	ISSUE: 2 CONDUITS INTERFERE PARTIALLY WITH INSTALLATION OF 2nd LAYER OF 330-1 PANEL ON J-BOX. ALSO, ANGLE IRON SUPPORT INTERFERES PARTIALLY WITH 1st LAYER OF 330-1 PANEL ON J-BOX. RESOLUTION: INSTALL 2nd LAYER 330-1 PANEL TO THE EXTENT POSSIBLE AROUND CONDUIT INTERFERENCES. COMPLETELY COVER ANGLE IRON SUPPORT WITH 330-1 FLAT PANEL AND 330-1 TROWEL GRADE MATERIAL, TRIMMING A 1/2" THICK 330-1 PANEL TO FIT SNUGLY BETWEEN THE ANGLE IRON AND THE J-BOX.	10-2	1-5, 24
104114/0	AB	804	X-180	AA/21a	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLATION OF THERMO-LAG ON 1 1/2" ESSENTIAL CONDUIT AT A RADIAL BEND, AND ON A PROTRUDING SUPPORT BRACE WHICH IS WITHIN 1/2" OF AN ADJACENT CABLE TRAY. RESOLUTION: INSTALL RADIAL BEND 1/2" SECTIONS AND 1/4" OVERLAY SECTIONS, INCLUDING STRESS SKIN UPGRADE. WRAP PROTRUDING SUPPORT PER THE 9" RULE TO THE EXTENT POSSIBLE, ADDING A SECOND LAYER OF 330-1 PANEL AROUND THE SUPPORT BRACE ALONG THE LENGTH OF ANY PANELS WHERE THICKNESS IS REDUCED.	9-1, 10-1	1-6, 12

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
104117/0	AB	790	X-180	AA/21a	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION ON INSTALLING 330-660 AND STRESS SKIN UPGRADE ON PROTRUDING AIR DROP BUNDLES IN CONGESTED AREA. RESOLUTION: INSTALL 330-660 COLLAR AND STRESS SKIN AND TROWEL GRADE BUILDUP AS A COMMON ENCLOSURE AROUND 3 ADJACENT AIR DROP BUNDLES. INSTALL COLLAR AND STRESS SKIN AND TROWEL GRADE BUILDUP AS A SINGLE AIR DROP ENCLOSING ON THE NORTH MOST BUNDLE.	11-1	1-5, 25
104173/0	SG	810	2-082	2SB/8	Y	Y	ISSUE 1: ENGINEERING DIRECTION REQUESTED WHERE PROTRUDING CABLE AIR DROPS REQUIRE 330-660 "COLLAR" BACKFIT. ISSUE 2: ENGINEERING DIRECTION REQUESTED WHERE PROTRUDING CABLE AIR DROPS REQUIRE 330-660 "COLLAR" BACKFIT. CONSTRUCTION REQUESTS PERMISSION TO USE A COMMON BUNDLE FOR TWO ADJACENT AIR DROPS. RESOLUTION 1: WRAP AIR DROP BUNDLES PER M2-1701 DETAIL 3-4 WHERE POSSIBLE. USE 2 PIECE COLLAR VARIATION WHERE FIELD CONDITIONS PROHIBIT USE OF STANDARD DETAIL. RESOLUTION 2: ENCLOSE AIR DROPS 2 & 3 IN A COMMON BUNDLE. USE DETAIL 3-4 FOR OTHER BUNDLE, OR 2 PIECE VARIATION WHERE FIELD CONDITIONS PROHIBIT USE OF STANDARD DETAIL.	11-1 11-1	1-5, 25 1-5, 25

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
104189/0	SG	832	2-094	2SB/15	Y	Y	ISSUE: ESSENTIAL CABLE TRAYS HAVE OPEN-END 4" X 6" TUBE STEEL SUPPORT MEMBERS WHICH REQUIRE THERMO-LAG CAPS, BUT LIMITED SPACE MAKES INSTALLATION IMPRACTICABLE. CONSTRUCTION REQUESTS DIRECTION. RESOLUTION: COVER THE BOTTOM END OF THE TUBE STEEL MEMBERS PER M2-1701, DETAIL 16-5. LEAVE THE TOP OPENINGS WITHOUT COVERS.	N/A	26
104206/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: SUPPORT BASE PLATE IS WITHIN 3/8" OF 2" DIA. CONDUIT WHICH IS BEING PROTECTED PER THE 9" RULE AS AN INTERFERENCE TO ESSENTIAL CABLE TRAY THERMO-LAG PROTECTION. RESOLUTION: INSTALL THERMO-LAG 330-1 PANEL ON THE 2" DIA. CONDUIT TO THE EXTENT POSSIBLE PER THE 9" RULE. WHERE SUPPORT PLATE PREVENTS COMPLETE CIRCUMFERENTIAL WRAP, BUTT CONDUIT HALF-ROUNDS UP TO THE PLATE AND INSTALL A 330-1 TROWEL GRADE FILLET (11/16" WET FILM THICKNESS) AT THE THERMO-LAG/BASEPLATE INTERFACE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 15

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
104221/0	AB	790	X-180	AA/21a	Y	Y	ISSUE 1: CONSTRUCTION REQUESTS DIRECTION FOR INSTALLATION ON HVAC DUCT AND ASSOCIATED SUPPORT, WHICH INTERFERE WITH ESSENTIAL CABLE TRAY PROTECTION. ISSUE 2: CONSTRUCTION REQUESTS DIRECTION FOR COVERAGE OF PIPE SUPPORT BASE PLATE WHICH IS A SECONDARY INTERFERENCE TO COVERAGE OF AN ESSENTIAL CABLE TRAY SUPPORT.		
							RESOLUTION 1: INSTALL THERMO-LAG 330-1 PANEL ON HVAC SUPPORT MEMBERS VERTICALLY PER THE 9" RULE AND HORIZONTALLY OUT TO THE HVAC DUCT INSULATION.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 22
							RESOLUTION 2: APPLY 330-1 TROWEL GRADE BETWEEN BASE PLATE AND CABLE TRAY SUPPORT. INSTALL 330-1 PANEL TO TRAY SUPPORT, BUTTING UP TO BASE PLATE AND ADDING 330-1 TROWEL GRADE FILLET AT PANEL/BASEPLATE INTERFACE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 23
104224/0	AB	790	X-174	AA/21a	N	Y	ISSUE: 4" DIA. PIPE IS WITHIN 7/16" OF A CABLE TRAY SUPPORT MEMBER FOR AN ESSENTIAL TRAY, INTERFERING WITH 9" RULE PROTECTION OF THE SUPPORT.		
							RESOLUTION: INSTALL THERMO-LAG 330-1 PANEL ON THE CABLE TRAY SUPPORT TO THE EXTENT POSSIBLE, TRIMMING PANEL AT THE LOCATION OF THE INTERFERENCE AS NECESSARY TO MAINTAIN AN AIR GAP. COVER THE SUPPORT WITH A SECOND LAYER OF 330-1 PANEL NEAR THE INTERFERENCE, ALSO TRIMMING THE PANELS TO ACHIEVE A MINIMAL AIR GAP.	11-12, 12-1, 12-2, 13-1, 14-1, 15-1	1-6, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
104227/0	AB	810	X-207	AA/21b	Y	Y	ISSUE: ADJACENT PIPE SUPPORT IS WITHIN 1/2" OF A CABLE TRAY SUPPORT MEMBER FOR AN ESSENTIAL TRAY, INTERFERING WITH 9" RULE PROTECTION OF THE SUPPORT. RESOLUTION: INSTALL THERMO-LAG 330-1 PANEL ON THE CABLE TRAY SUPPORT "C" - CHANNEL MEMBER TO THE EXTENT POSSIBLE. AT THE AREA OF THE PIPE SUPPORT INTERFERENCE INSTALL 330-1 AROUND THE OUTSIDE SURFACES OF THE CHANNEL. FILL THE INSIDE AREA OF THE CHANNEL WITH A BUILDUP OF 330-1 PANELS PRE-BUTTERED WITH 330-1 TROWEL GRADE. THERMO-LAG IS OMITTED FROM THE END OF THE "C" CHANNEL LEGS AT THE PIPE SUPPORT INTERFERENCE.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 16
104256/0	AB	790	X-180	AA/21a	Y	Y	ISSUE: HANGER FOR ESSENTIAL CABLE TRAY CANNOT BE COVERED PER TYPICAL DETAILS DUE TO INTERFERENCE FROM UNIT 1 ESSENTIAL CABLES WRAPPED IN FLEXI-BLANKET. RESOLUTION: INSTALL PROTRUDING ITEM COVERAGE ON THE CABLE TRAY HANGER IN ACCORDANCE WITH TYPICAL DETAILS BUTTING COVERAGE TO THE FLEXI-BLANKET WRAPPED UNIT 1 CABLES. INSTALL A TROWEL GRADE FILLET ALL AROUND THE INTERFACING AREA.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1	1-5, 42

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGE D26-D31)
104259/0	AB	832	X-226	AA/21d	Y	Y	ISSUE: SPLICE PLATE ON UNISTRUT CONDUIT SUPPORT INTERFERES WITH SEALING THE PROTRUDING MEMBER AT THE 9" DISTANCE. RESOLUTION: WHERE SPLICE PLATE ENDS INSTALL A 1" MIN. DEPTH OF 330-1 TROWEL GRADE TO TOP AND BOTTOM UNISTRUT MEMBERS.	9-1, 10-1, 10-2	1-6, 40
104263/0	AB	790	X-174	AA/21a	N	Y	ISSUE: AIR DROP CABLES FROM PROTECTED TRAY REQUIRE 330-660 FLEXI-BLANKET COLLAR PER M2-1701 DETAILS. A 1 1/2" DIA. PIPE AND "C" CHANNEL INTERFERE WITH INSTALLATION OF THE COLLAR. RESOLUTION: BUTT COLLAR UP TO "C" CHANNEL AND NOTCH COLLAR MATERIAL AROUND PIPE. SECURE TO TRAY ENVELOPE WITH STAPLES AND STRESS SKIN. FILL VOIDS WITH 330-1 TROWEL GRADE MATERIAL.	11-1	1-6, 41

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1.	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2.	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3.	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4.	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
5.	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6.	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATIONS EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).	GENERIC
7.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION USES A REDUCED THICKNESS OF THERMO-LAG WHERE THE TUBE STEEL INTERFERES. THE PRIMARY (CABLE TRAY) ENVELOPE IS NOT AFFECTED. ADDITIONALLY, THERMO-LAG IS PROVIDED ON THE SECONDARY INTERFERENCE, INSTALLED TO COMPENSATE THE TRAY SUPPORT REDUCED THICKNESS.	101397/0
8.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION USED REDUCED COVERAGE OF THE STEEL SUPPORT WHERE THE PIPING LINE PASSES THROUGH. THE PRIMARY (CABLE TRAY) ENVELOP IS NOT AFFECTED. ADDITIONALLY, DUE TO THE TIGHT SPACES INVOLVED BETWEEN TO INSIDE FACES TO THE TUBE STEEL AND THE INTERFERING PIPE, A "TORTUROUS PATH" FOR HEAT TRANSFER IS ESTABLISHED.	102266/0 103597/0
9.	THE CONDUIT QUALIFICATION TESTS LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. ALTHOUGH THE "PROTRUDING" ITEMS INCLUDE NON-ESSENTIAL CABLE TRAYS, THE COVERAGE ON EXPOSED TRAY SURFACES PROVIDES ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH. METHODS OF PANEL ATTACHMENT TO TRAYS ARE JUSTIFIED IN ATTACHMENT A ACCEPTANCE BASIS FOR M2-1701 DETAIL 13-6.	102524/0
10.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION USES A REDUCED THICKNESS OF THERMO-LAG AT THE AREA OF INTERFERENCES(S) ON PROTRUDING ITEM COVERAGE. THE PRIMARY (CABLE TRAY) ENVELOPE IS NOT AFFECTED. ADDITIONALLY, DUE TO THE EXTRA THICKNESS OF 330-11 PANEL IN THE VICINITY OF THE INTERFERENCE(S) AND THE MINIMAL AIR GAP BETWEEN THE THERMO-LAG AND INTERFERENCE(S), A "TORTUROUS PATH" FOR HEAT TRANSFER IS ESTABLISHED WHICH WILL COMPENSATE FOR THE REDUCED THICKNESS AT THE INTERFERENCE.	102789/1 103508/0 103917/0 103924/0 104001/0 104224/0
11.	J-BOX TESTED CONFIGURATIONS RECEIVED HEAT EXPOSURE FROM ALL SIDES. THE WALL MOUNTED CONFIGURATION REDUCES POTENTIAL EXPOSURE SURFACES AND WILL ACT AS A HEAT SINK. COVERING THE ADJACENT EMBEDDED CONDUIT WILL FURTHER ENSURE THAT THERE IS NO CONDUCTIVE HEAT PATH INTO THE J-BOX ENVELOPE.	103002/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
12.	THE CONDUIT QUALIFICATION TESTS LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. THIS FIELD CONFIGURATION USES A REDUCED THICKNESS OF THERMO-LAG AT THE AREA OF INTERFERENCES. THE PRIMARY (CONDUIT) ENVELOPE IS NOT AFFECTED. ADDITIONALLY, DUE TO THE EXTRA THICKNESS OF 330-1 PANEL IN THE VICINITY OF INTERFERENCES AND THE MINIMAL AIR GAP BETWEEN THE THERMO-LAG AND INTERFERENCES, A "TORTUROUS PATH" FOR HEAT TRANSFER IS ESTABLISHED.	103088/0 104114/0 103143/0
13.	TEST SCHEME 10-2 QUALIFIED THERMO-LAG PROTECTION ON J-BOXES (18" X 12" X 6") USING A SINGLE LAYER OF 330-1 PANEL. THE ADDITIONAL PROTECTION PROVIDED THE OUTER LAYER OF 330-1 IN THIS CONFIGURATION IS AN ENHANCEMENT TO THE TESTED CONFIGURATION. TEST SCHEME 10-1 QUALIFIED 2 LAYERS ON J-BOXES. SINCE THE 2ND LAYER "V"-RIBS ARE IN CONTACT WITH THE 1ST LAYER PANELS THER IS NO ADVATAGE GAINED FROM RIB ORIENTATION.	103476/1
14.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION USES REDUCED COVERAGE OF THE STEEL SUPPORT AT THE INTERFERENCE. THE PRIMARY (CABLE TRAY) ENVELOPE IS NOT AFFECTED. ADDITIONALLY, DUE TO THE HEAT SHIELDING EFFECT OF THE INTERFERING MEMBER AT THE LOCATION OF REDUCED 330-1 PANEL THICKNESS, A "TORTUROUS PATH" FOR HEAT TRANSFER IS ESTABLISHED.	103613/0
15.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION INVOLVES PROTECTION OF AN INTERFERING ITEM (FOR 9" DISTANCE FROM THE PROTECTIVE ENCLOSURE) AS A PROTRUDING ITEM, EXCEPT AT THE LOCATION OF A SECONDARY INTERFERENCE. THIS IS ACCEPTABLE BECAUSE THE SECONDARY INTERFERENCE IS A WALL MOUNTED STEEL SUPPORT BASE PLATE. THE WALL AND PLATE TOGETHER HAVE HEAT SINK CAPABILITIES, AND WILL EFFECTIVELY INHIBIT CONDUCTIVE HEAT PATH INTO THE PRIMARY ENVELOPE.	104206/0
16.	THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE ALL PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. THIS FIELD CONFIGURATION OMITS COVERAGE ON THE EXTREME END OF THE TRAY SUPPORT AT 2 LOCATIONS APPROXIMATELY 1-1/2" IN LENGTH, BUT UTILIZES MULTIPLE MATERIAL THICKNESSES FOR THE ADJACENT SUPPORT SURFACES. THE PRIMARY (CABLE TRAY) ENVELOPE OS NOT AFFECTED.	104227/0
17.	REFERENCE ATTACHMENT A OF THIS REPORT FOR TYPICAL DETAIL 13-6 ACCEPTANCE BASIS. ALTHOUGH IT REPRESENTS A SLIGHT DEVIATION FROM THE TYPICAL DETAIL, ENCLOSING ADJACENT TRAY SPLICE PLATES AND BOLTING IN COMMON THERMO-LAG BOXES IS ACCEPTABLE BECAUSE IT USES MATERIAL THICKNESS, ATTACHMENT METHODS, AND JOINT INTEGRITY COMMENSURATE WITH TESTED CONFIGURATIONS.	102231/0 102221/1
18.	THE CONDUIT QUALIFICATION TESTS LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. ALTHOUGH THE "PROTRUDING" ITEM IN THIS CASE IS A NON-ESSENTIAL TRAY, THE COVERAGE ON EXPOSED TRAY SURFACES PROVIDES ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH.	102525/0
19.	REFERENCE APPENDIX A OF THIS REPORT FOR TYPICAL DETAIL 8-3 ACCEPTANCE BASIS. THE LISTED TEST SCHEMES QUALIFIED 1/2" THICKNESS OF THERMO-LAG 330-1 ON CABLE TRAYS. THIS FIELD CONFIGURATION USED A SLIGHTLY REDUCED THICKNESS OF THERMO-LAG AT THE AREA OF THE INTERFERENCE. ADDITION OF 330-1 FLAT PANEL ON THE INTERFERING TRAY SUPPORT IN THE AREA OF THE DEVIATION PROVIDES ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH.	102750/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
20.	SINCE THE ANGLE IRON IS AN INTERFERENCE WHICH DOES NOT REPRESENT A DIRECT HEAT PATH TO THE ESSENTIAL CABLE TRAY, PROTECTING IT AS A PROTRUDING ITEM IS CONSERVATIVE. THEREFORE, THE RESULTING CONFIGURATION CAN BE DIRECTLY CORRELATED TO THE TESTED CONFIGURATIONS WHERE STEEL IS PROTECTED AS A PROTRUDING ITEM.	102884/1
21.	REDUCED THICKNESS OF THE PRIMARY TRAY ENVELOPE AT THE INTERFERENCE IS ACCEPTABLE DUE TO COVERAGE OF THE SUPPORT ROD AS A PROTRUDING ITEM. THE BOX CONFIGURATION MAINTAINS MATERIAL THICKNESS AND JOINT INTEGRITY (USING STRESS SKIN, STITCHING AND 330-1 TROWEL GRADE) COMMENSURATE WITH TESTED TRAY CONFIGURATIONS. THE FLEXI-BLANKET PIPE WRAPS MAINTAIN REQUIRED OVERLAP AND BAND SPACING COMMENSURATE WITH THE TESTED FLEXI-BLANKET TEST SCHEME (11-1).	103488/0
22.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION USES REDUCED COVERAGE OF THE STEEL SUPPORT WHERE THE HVAC DUCT INTERFERES WITH COMPLETE 9" RULE PROTECTION. THE DEVIATION FROM COMPLETE 9" RULE PROTECTION IS ACCEPTABLE DUE TO THE HEAT SINK CAPABILITIES OF THE LARGE INSULATED HVAC DUCT. THE PRIMARY (CABLE TRAY) ENVELOPE IS NOT AFFECTED.	104221/0
23.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION USES A REDUCED THICKNESS OF THERMO-LAG WHERE THE SUPPORT PLATE INTERFERES. THE PRIMARY (CABLE TRAY) ENVELOPE IS NOT AFFECTED. ADDITIONALLY, THERMO-LAG IS BUTTED AND ATTACHED TO THE SECONDARY INTERFERENCE, WHICH PROVIDES HEAT SINK CAPABILITIES.	104221/0
24.	TEST SCHEME 10-2 QUALIFIED THERMO-LAG PROTECTION ON J-BOXES (18" X 12" X 6") USING A SINGLE LAYER OF 330-1 PANEL. THIS FIELD CONFIGURATION USES 2 LAYERS 330-1 EXCEPT AT THE CONDUIT INTERFERENCES, WHERE ONE FULL PANEL THICKNESS EXISTS, AND AT THE ANGLE IRON SUPPORT. THIS CONFIGURATION IS ACCEPTABLE BECAUSE THE ENTIRE ANGLE IRON PIECE IS PROTECTED BY 1 LAYER OF 330-1 PANEL, EXCEPT WHERE IT INTERFACES WITH THE WALL. THE WALL ACTS AS A HEAT SINK AND PROVIDES NO HEAT PATH INTO THE ENVELOPE.	104079/1
25.	REFERENCE ATTACHMENT A OF THIS REPORT FOR TYPICAL DETAIL 3-4, 3-4.4 AND 3-4.5 ACCEPTANCE BASIS. THESE FIELD CONFIGURATIONS REPRESENT ACCEPTABLE DEVIATIONS FROM THE TYPICAL DETAILS BECAUSE THE REQUIRED AMOUNT OF 330-660 FLEXI-BLANKET IS MAINTAINED, ALL GAPS ARE FILLED WITH 330-660 BULK MATERIAL, AND ATTACHMENT AND REINFORCEMENT METHODS ARE COMMENSURATE WITH THE TESTED CONFIGURATION. UTILIZING 2 PIECE COLLARS INSTEAD OF SINGLE PIECE COLLARS IS ACCEPTABLE BECAUSE MINIMUM OVERLAP REQUIREMENTS ARE MAINTAINED.	104173/0 104117/0
26.	REFERENCE ATTACHMENT A OF THIS REPORT FOR TYPICAL DETAIL 16-5 ACCEPTANCE BASIS. IT IS ACCEPTABLE TO OMIT END CAPS AT THE TOPS OF THE TUBE STEEL MEMBERS BECAUSE THE OPEN ENDS ARE FLUSH WITH A CONCRETE BEAM ON ONE SIDE, 5" FROM A LARGE HVAC DUCT ON THE OPPOSITE SIDE, AND 12" FROM THE CONCRETE CEILING ABOVE. THESE SURFACES WILL ALL ACT AS HEAT SINKS AND ALSO TO BLOCK THE HEAT PATH INTO THE OPEN END. ADDITIONALLY, THE TOP ENDS OF THE MEMBERS ARE APPROXIMATELY 7' ABOVE THE ESSENTIAL TRAY LOCATIONS.	104189/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
27.	THE EFFECTIVENESS OF 1/4" THICK OVERLAY SECTIONS OVER STANDARD 1/2" THICK MATERIAL ON 3/4" - 2" DIA. CONDUITS HAS BEEN QUALIFIED VIA SCHEME 9-1. MINOR LOCALIZED AREAS WHERE COMPLETE COVERAGE OF 1/4" OVERLAYS CANNOT BE MAINTAINED ARE ACCEPTABLE BASED ON THE OVERALL MASS OF MATERIAL INSTALLED UP TO THE INTERFERENCE, THE SHIELDING/HEAT SINK EFFECTS OF THE INTERFERENCE ITSELF, CREATING A TORTUROUS PATH FOR HEAT ENTRY AND THE TROWEL GRADE FILLET AT THE WALL INTERFACE.	103476/1
28.	REFERENCE ATTACHMENT A OF THIS REPORT FOR TYPICAL DETAIL 8-3 ACCEPTANCE BASIS.	102821/1
29.	THE ENCLOSURE USED ON THE CHILLED WATER PIPES EFFECTIVELY PROTECTS THEM AS PROTRUDING ITEMS TO THE PRIMARY TRAY ENVELOPE. THE BOX CONFIGURATION MAINTAINS MATERIAL THICKNESS AND JOINT INTEGRITY (USING STRESS SKIN, STITCHING AND 330-1 TROWEL GRADE) COMMENSURATE WITH TESTED TRAY CONFIGURATIONS. THE FLEXI-BLANKET PIPE WRAPS MAINTAIN REQUIRED OVERLAP, AND BAND SPACING COMMENSURATE WITH THE TESTED FLEXI-BLANKET SCHEME (11-1).	102821/1
30.	IT IS ACCEPTABLE TO USE A 22" MAXIMUM WIDTH FLAT PANEL, BECAUSE ALL OTHER ATTRIBUTES OF THE TYPICAL DETAIL WILL BE MAINTAINED, INCLUDING MATERIAL OVERLAY, BANDING REQUIREMENTS, AND STRESS SKIN AND TROWEL GRADE REINFORCEMENT OF JOINTS.	102821/1
31.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PREFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION USES A REDUCED THICKNESS OF THERMO-LAG AT THE AREA OF INTERFERENCES(S). THE PRIMARY (CABLE TRAY) ENVELOPE IS NOT AFFECTED. ADDITIONALLY, DUE TO THE EXTRA THICKNESS OF 330-1 PANEL IN THE VICINITY OF THE INTERFERENCE(S) AND THE MINIMAL AIR GAP BETWEEN THE THERMO-LAG AND THE INTERFERENCE(S), A "TORTUROUS PATH" FOR HEAT TRANSFER IS ESTABLISHED.	103846/0
32.	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION USES A REDUCED THICKNESS OF THERMO-LAG ON TOP OF THE ESSENTIAL TRAY, BUT COVERS THE INTERFERING C6 CHANNELS AND THE ABOVE NON-ESSENTIAL TRAY AS PROTRUDING ITEMS. THE THERMO-LAG 330-1 BOX USED TO ENCLOSE THE CHANNELS MAINTAINS MATERIAL THICKNESS AND JOINT INTEGRITY COMMENSURATE WITH TESTED CABLE TRAY CONFIGURATIONS, AND THE C6 CHANNELS PROVIDE OVERALL STABILITY TO THE STRUCTURE.	103484/1
33.	REFERENCE DETAIL 1-5 IN ATTACHMENT A OF THIS REPORT FOR ACCEPTANCE BASIS. THE CONDUIT QUALIFICATION TESTS LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. IN THIS CONFIGURATION, THE ONLY DEVIATION IS FROM THE TESTED METHOD OF PANEL ATTACHMENT (SELF-TAPPING SCREWS IN LIEU OF HILTI KWIK-BOLTS), AND IS CONSIDERED INSIGNIFICANT IN TERMS OF ATTACHMENT ADEQUACY.	103476/1
34.	COVERAGE OF THE ENTIRE WALL SUPPORT IS MORE CONSERVATIVE THAN 9" RULE PROTECTION. OTHER MINOR DEVIATIONS FROM DETAIL 13-6 ATTACHMENT METHODS ARE NOT CONSIDERED SIGNIFICANT TO CONFIGURATION STABILITY OR FIRE ENDURANCE.	102221/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
35.	THE FIRE STOPS PROVIDED ON THE ZONE R CABLES ARE ACCEPTABLE FOR USE ON ITEMS PROTRUDING FROM THERMO-LAGGED J-BOXES, BASED ON TYPICAL DETAIL 3-4 (SEE ATTACHMENT A OF THIS REPORT FOR ACCEPTANCE BASIS). COMBINING TWO OF THE CABLES IN A COMMON ENVELOPE IS ACCEPTABLE BECAUSE REQUIRED MATERIAL THICKNESS IS MAINTAINED, AND REINFORCEMENT IS PROVIDED USING 330-1 TROWEL GRADE, STAINLESS STEEL BANDING AND STRESS SKIN.	103809/0
36.	WRAPPING OF NON-ESSENTIAL CABLES AND ESSENTIAL CONDUIT PER DETAIL 3-3A METHODS IS ACCEPTABLE BECAUSE THE DEVIATION (WRAPPING 2 CABLES IN A COMMON BUNDLE) IS MINOR IN NATURE. THE USE OF SELF-TAPPING METAL SCREWS FOR 330-1 PANEL ATTACHMENT TO THE STEEL LINER WALL IS PER TYPICAL DETAIL 1-5. REFERENCE ATTACHMENT A OF THIS REPORT FOR TYPICAL DETAIL ACCEPTANCE BASIS. THE MINOR DEVIATION FROM THE 9" RULE COVERAGE OF THE STEEL LINER PLATING IS CONSIDERED INSIGNIFICANT BECAUSE OF THE ADDITION OF 330-70 BLANKET AND THE FACT THAT THE ACTUAL CONDUCTIVE HEAT PATH TO THE J-BOX FROM THE ADJACENT SUPPORT IS APPROXIMATELY 11".	103081/1
37.	THE CONDUIT QUALIFICATION TESTS LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE FROM THE PROTECTIVE ENVELOPE. COVERING ALL PRIMARY AND SECONDARY INTERFERENCES AS PROTRUDING ITEMS RESULTS IN A CONFIGURATION EXPECTED TO PERFORM AT LEAST AS WELL AS THE TESTED DESIGN, BECAUSE THERE IS NO DIRECT CONDUCTIVE HEAT PATH INTO THE PROTECTIVE ENVELOPE AND OVERALL MATERIAL THICKNESS IS MAINTAINED. REFERENCE ATTACHMENT A OF THIS REPORT FOR ACCEPTANCE BASIS OF DETAIL 16-5.	102859/0
38.	REFERENCE ATTACHMENT A OF THIS REPORT FOR THE TYPICAL DETAIL 13-6 ACCEPTANCE BASIS. THE LISTED TEST SCHEMES ALL QUALIFIED 9" RULE PROTECTION OF PROTRUDING SUPPORT STEEL.	103597/0
39.	REFERENCE ATTACHMENT A OF THIS REPORT FOR THE TYPICAL DETAIL 8-3 ACCEPTANCE BASIS. THE THERMAL PROTECTION PROVIDED BY THIS DESIGN IS EXPECTED TO BE EQUIVALENT TO THAT OF THE LISTED TEST SCHEMES, BECAUSE THE BOTTOM PANEL THICKNESS REDUCTION, IF REQUIRED, WILL BE MINIMAL AND WILL BE 5/8" WHICH IS IN EXCESS OF THE 1/2" NOMINAL THICKNESS.	103597/0
40.	USE OF TROWEL GRADE MATERIAL TO SEAL OFF THE UNISTRUT SUPPORT MEMBERS WHERE THE SPLICE PLATE ENDS ACTS AS A FIRE STOP TO PREVENT ANY DIRECT HEAT PATH FROM EXPOSED SUPPORT STEEL TO THE PROTECTED CONDUIT.	104259/0
41.	THE AIR DROP CABLES ARE NON-ESSENTIAL. PROVISION OF THE 330-660 FLEXI-BLANKET COLLAR PER M2-1701 TYPICAL DETAILS IS TO ENSURE ADEQUATE MATERIAL IS PROVIDED TO SEAL THE CABLE TRAY ENVELOPE AT THE PROTRUDING CABLE INTERFACE. THE INTENT OF THE COLLAR FUNCTION IS SATISFIED BY THE TECHNIQUE UTILIZED. SECURING THE PARTIAL COLLAR AROUND THE PROTRUDING CABLES WITH STAPLES, STRESS SKIN AND TROWEL GRADE MATERIAL EFFECTIVELY REINFORCES THE INTERFACE CONSISTENT WITH THE QUALIFIED VIA SCHEME 11-1.	104263/0
42.	THE COVERAGE PROVIDED EXCEPT AT THE INTERFERENCE IS IN ACCORDANE WITH THE TESTED CONFIGURATIONS. THE REDUCTION IN TYPICAL COVERAGE AT THE FLEXI-BLANKET WRAPPED CABLES DOES NOT COMPROMISE THE EFFECTIVE THICKNESS ON THE SUPPORT COVERAGE. THE FLEXI-BLANKET ENVELOPE WITH A TROWEL GRADE FILLET AT THE INTERFACE WITH THE 330-1 MATERIAL COMPENSATES FOR THE DEVIATION FROM THE TYPICAL DETAILS.	104256/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
43.	THE CONDUIT QUALIFICATION TESTS WERE PERFORMED WITH SUPPORTS/PROTRUDING ITEM COVERAGE EXTENDING OUT 9" FROM THE PROTECTED ENVELOPE. EXTENDING COVERAGE OUT ONTO A METAL CEILING LINER/METAL BASE PLATE IS CONSISTENT WITH THE TESTED CONFIGURATION. IN ADDITION THE WALL WILL ACT AS A HEAT SINK AND REDUCE THE EXPOSED SURFACES. USING SELF TAPPING SCREWS AND MUDDING THE PANELS TO THE METAL WITH TROWEL GRADE WHERE SCREW SPACING CRITERIA IS EXCEEDED WILL PROVIDE ADEQUATE ATTACHMENT FOR THE PANELS. DOUBLING THE THERMO-LAG COVERAGE ON THE TUBE STEEL WILL ADD TO THE CONSERVATISM OF THE PROTRUDING ITEM COVERAGE AND WILL PROVIDE ADDITIONAL MATERIAL TO INTUMESCE AND FURTHER PROTECT THE ENVELOPE ON THE ESSENTIAL COMMODITY	103799/0

ATTACHMENT E

STRUCTURAL STEEL DEVIATIONS

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES E9-E11)
101434/0	SG	831'-6"	2-096 2-096B	2SE/16 2SM/157	Y N	Y N	ISSUE 1: THERMO-LAG INSTALLATION DETAILS AT THE SECURITY BARRIERS DEVIATE FROM SPEC CPES-M-2032 BY NOT BEING SECURED AT THE CENTERLINE OF THE COMPONENT. RESOLUTION: THE DESIGN PROVIDES FOR ADDITIONAL SCREWS TO BE INSTALLED ON EITHER SIDE OF THE SECURITY BARS ASSURING THAT THE THERMO-LAG WILL REMAIN IN PLACE. ISSUE 2: INSTALLATION DETAILS DEVIATE FROM SCREW SPACING CRITERIA FOR THE FIRST LAYER OF THERMO-LAG PANELS. RESOLUTION: THE DEVIATION IS CONSERVATIVE IN THAT SCREW SPACING IS REDUCED FROM 4" TO 3" FROM THE EDGE OF THE PANELS AND THOSE PLACED AT THE CENTER OF THE THERMO-LAG PANELS IN LIEU OF THE CENTERLINE OF THE COMMODITY. ISSUE 3: THERMO-LAG INSTALLATION METHODS DO NOT PROVIDE FOR INSTALLING THERMO-LAG AT SECURITY BARRIER ATTACHMENT LOCATIONS NEXT TO FLOOR. RESOLUTION: PROVIDE INSTALLATION DETAILS WHERE INTERFERENCES ARE CLOSE TO FLOOR, THIS DETAIL IS IN ACCORDANCE WITH THE DESIGN REQUIREMENTS OF THE SPECIFICATION AND ONLY CLARIFIES EXISTING REQUIREMENTS.	UL X-611 AND X-003 UL X-611 AND X-003 UL X-611 AND X-003	1-5, 7, 8 1-5, 7, 8 1-5, 7, 8

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES E9-E11)
101435/0	SG	831'-6"	2-096 2-096B	2SE/16 2SM/157	Y N	Y N	ISSUE: INTERFERENCE PREVENTS INSTALLING THERMO-LAG IN ACCORDANCE WITH SPECIFICATION ON A TUBE STEEL COLUMN FOR A DISTANCE OF 14 FT. AS FOLLOWS: A - BOTTOM PANEL OF FIRST LAYER HAS NO SCREWS DRILLED INTO THE COLUMN. B - BOTTOM PANEL OF THE SECOND LAYER DOES NOT MEET THE MINIMUM SPACING REQUIREMENT FROM THE TOP EDGE. RESOLUTION: A - THE FIRST LAYER WILL BE PREBUTTERED WITH TROWEL GRADE TO ADHERE IT TO THE STRUCTURAL STEEL WITH THE PIECE SCORED AND FOLDED AROUND THE TUBE STEEL. THE SECOND LAYER WILL HAVE A SCREW THROUGH IT ANCHORING WITH BOTH SIDES OF THE PANEL AND IS PREBUTTERED TO THE FIRST LAYER. B - THE BOARD THAT COVERS THE REST OF THE SOUTH SIDE OF THE SECOND LAYER IS AFFIXED TO THE STEEL MEMBER BY THE PANEL (SCORE AND FOLD METHOD) ON THE WEST SIDE. THE 9" HIGH PIECE IS PREBUTTERED AND SECURED IN PLACE WITH ONE SCREW.	UL X-611 AND X-003	1-5, 7, 9

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES E9-E11)
101707/0	SG	831'-6"	2-096 2-096B	2SE/16 2SM/157	Y N	Y N	ISSUE: DUE TO OBSTRUCTION, THERMO-LAG COVERAGE ON THE ANGLE PLATE BEHIND THE TUBE STEEL INSIDE THE STAIRWELL IS REDUCED. RESOLUTION: COVER ANGLE CLIP UP TO THE TUBE STEEL, SHAVE A PIECE OF THERMO-LAG PANEL TO FIT BETWEEN THE TUBE STEEL AND THE ANGLE. THE STAIRWELL SUPPORT BELOW THE GRATING, WHICH IS NOT ATTACHED TO THE PROTECTED TUBE STEEL MEMBER DOES NOT REQUIRE THERMO-LAG PROTECTION.	UL X-611 AND X-003	1-6, 7, 10
101708/0	SG	831'-6"	2-094 2-096A	2SB/15 2S0/3	Y N	Y Y	ISSUE: THE PIPE PROTRUDING THROUGH THE STAIRWELL PROTECTIVE ENVELOPE REQUIRES THERMO-LAG FOR HEAT PATH. RESOLUTION: THE PIPING IS ENCAPSULATED IN THERMO-LAG TO MEET THE 2 HOUR REQUIREMENTS OF THE SPEC. THE DCA ONLY PROVIDES INSTALLATION DETAILS REQUIRED TO MEET THE SPEC. THEREFORE, THIS IS NOT A DEVIATION FROM DESIGN.	UL X-611 AND X-003	1-6, 7, 10

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES E9-E11)
101884/0	SG	790'-6"	2-070 2-074A	2SB/4 2SO/3	Y N	Y Y	ISSUE: REDUCTION OF THERMO-LAG THICKNESS ON THE STRUCTURAL STEEL AROUND FIRE & TORNADO DAMPERS TO ALLOW FOR THE DAMPER BLADES UNOBSTRUCTED FUNCTION. RESOLUTION: WHERE TWO FULL LAYERS OF THERMO-LAG WOULD OBSTRUCT THE DAMPER LEVER MECHANISM, A SINGLE LAYER IS INSTALLED WITH JOINTS AND SEAMS FILLED WITH 330-1 TROWEL GRADE. WHERE SINGLE THICKNESS OF THERMO-LAG PANELS CREATE AN INTERFERENCE, TOP COAT AND MATERIAL IS REMOVED BY SANDING AND GRINDING AND THE TOP COAT REAPPLIED.	N/A	1-6, 11
101885/0	SG	810'-6"	2-082 2-085B	2SB/8 2SO/3	Y N	Y Y			
101886/0	SG	831'-6"	2-094 2-096A	2SB/15 2SO/3	Y N	Y Y			
101887/0	SG	810'-6"	2-083 2-085C	2SD/9 2SM/157	Y N	Y N			
101888/0	SG	831'-6"	2-096 2-096B	2SE/16 2SM/157	Y N	Y N			
101891/0	SG	851'-6"	2-103 2-105B	2SE/18 2SM/157	Y N	Y N			
102300/0	GEN	GEN	GEN	GEN	N/A	N/A	ISSUE: STRUCTURAL STEEL CEILING AND WALL PLATES WITH ANCHORS PREVENT INSTALLATION OF SECOND LAYER SCREW PLACEMENT. RESOLUTION: PRIOR TO SECOND LAYER INSTALLATION ON ANCHOR BOLTS, THE BACK OF THE PLATES ARE TO BE PREBUTTERED. DETAILS FOR SCREW PLACEMENTS ARE APPROVED IN THIS DCA.	UL X-611 AND X-003	1-6, 7, 12

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES E9-E11)
102465/0	SG	852'-6"	2-103 2-105B	2SE/18 2SM/157	Y N	Y N	ISSUE: INSUFFICIENT ROOM INSIDE STAIRWELL, PREVENTS FASTENING THE SECOND LAYER OF THERMO-LAG TO THE STRUCTURAL STEEL AND APPLICATION OF TOP COAT TO ALL THE JOINTS AND SEAMS. RESOLUTION: FIRST LAYER WAS PREBUTTERED, FOLDED AROUND THE DAMPER STEEL FRAMING AND FASTENED TO THE STRUCTURAL STEEL WITH SCREWS. THE SECOND LAYER IS INSTALLED IN TWO PIECES WITH THE FIRST PIECE BEING PREBUTTERED AND CLAMPED, CUT AND FOLDED AROUND THE DAMPER FRAME. FOAM SEAL MATERIAL WAS INSTALLED BETWEEN THE WALL AND THE SECOND PIECE TO MOLD THE PIECE IN PLACE.	UL X-611 AND X-003	1-6, 7, 13
102886/0	SG	821'-6"	2-096 2-096B	2SE/16 2SM/157	Y N	Y N	ISSUE 1: THERMO-LAG COVERAGE OF SECURITY BAR OVERLAPS THE COVER PLATE OF THE MAGNETIC DOOR SWITCH BOX WHICH REQUIRES PERIODIC MAINTENANCE AND ADJUSTMENTS RESOLUTION 1: THERMO-LAG IS SHAVED BY 1/4" FOR A DISTANCE OF 1-1/2" TO ALLOW FREE ACCESS TO THE BOX. ISSUE 2: AN HVAC DUCT PREVENTS INSTALLATION OF THE SECOND LAYER OF THERMO-LAG ON A SECURITY BAR TO SATISFY THE 4" RULE. RESOLUTION 2: INSTALL THE SECOND LAYER OF THERMO-LAG NOTCHED OUT BUT NOT CONNECTED TO THE HVAC DUCT.	UL X-611 AND X-003 UL X-611 AND X-003	1-6, 7, 14 1-6, 7, 14

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES E9-E11)
102915/0	SG	790'-6"	2-070 2-074A	2SB/4 2SO/3	Y N	Y Y	ISSUE: MISSING INSTALLATION DETAILS FOR THERMO-LAG ON DOOR FRAME, FIRE DAMPER/TORNADO DAMPER, AND STRUCTURAL STEEL USING TYPICAL DETAILS. RESOLUTION: PREBUTTER THE BACK OF ALL PANELS WITH THERMO-LAG 330-1 TROWEL GRADE. TROWEL GRADE IS PLACED IN ALL CUT OUTS FOR BOLT PROTRUSIONS FLUSH WITH TOP OF THERMO-LAG PANELS AFTER PANEL INSTALLATION.	UL X-611 AND X-003	1-6, 7, 15
103131/1	SG	810'-0"	2-082 2-085B	2SB/8 2SO/3	Y N	Y Y	ISSUE: DUE TO THE CONFIGURATION AND INTERFERENCE OF THE DOOR FRAME WITH THE ADJOINING DAMPER FRAME, THE CONVENTIONAL SELF TAPPING SCREWS CANNOT BE USED TO ATTACH THE THERMO-LAG (3 ITEMS). RESOLUTION: DETAILS HAVE BEEN PROVIDED TO INSTALL THERMO-LAG 330-1 FLAT PANELS PREBUTTERING THE BACK OF THE PANELS. SILICONE FOAM SEAL IS EXTENDED TO BUTT TO THE THERMO-LAG PANELS TO SECURE THEM TO THE STRUCTURAL STEEL.	UL X-611 AND X-003	1-6, 7, 16
103189/2	SG	831'-6"	2-096 2-096A	2SE/16 2SO/3	Y N	Y Y	ISSUE: DUE TO INTERFERENCE, INSTALLATION OF THERMO-LAG FOR THE FIRE DAMPER FRAMING REQUIRES ADDITIONAL DETAILING. RESOLUTION: INSTALL THERMO-LAG PANELS WITH ANCHOR BOLTS INSTEAD OF SELF TAPPING SCREWS, NOTCH PANELS AS REQUIRED, FILL VOID WITH CERAMIC INSULATOR 330-70 AND LEAVE ROOM FOR TORNADO DAMPER LEVER MOVEMENT.		1-6, 7, 11, 17

DCA NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES E9-E11)
104185/0	SG	831'-6"	2-096 2-082	2SE/16 2SB/8	Y Y	Y Y	ISSUE: SHIMS ON STEEL ANGLES SUPPORTING HATCH COVER REQUIRE PROTECTION FOR HEAT PATH. RESOLUTION: ATTACH 2 LAYERS OF PANEL MATERIAL ON SHIM BOTTOM SURFACES ONLY USING THE WIRES AND BANDING.	UL X-003	1-6, 18

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1.	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2.	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3.	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4.	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
5.	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6.	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATIONS EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).	GENERIC
7.	EVALUATION OF STRUCTURAL STEEL THERMO-LAG CONFIGURATIONS HAS BEEN PROVIDED VIA ER-ME-067, APPENDIX D. THE EVALUATION PROVIDED THEREIN COMPARES THE PLANT CONFIGURATIONS WITH UL DESIGNS X-611 AND X-003.	GENERIC
8.	THE SCREW FASTENER SPACING USED IS WITHIN THE SPACING DISTANCE USED ON THE COLUMN IN UL X-003 AND THE EMBEDMENT IS SUFFICIENT TO ENSURE STRUCTURAL INTEGRITY OF THE THERMO-LAG PANELS AND THEREFORE THE STRUCTURAL STEEL.	101434/0
9.	THE PANELS ARE PREBUTTERED WITH TROWEL GRADE MATERIAL AND SCORE AND FOLDED SO THAT THE STRESS SKIN IS INTACT. UL X-611 USES TOWEL APPLIED THERMO-LAG 330-1 (ONLY) FOR ADHERENCE TO THE COLUMN. PREBUTTERING THE BOARDS TO THE STEEL AND THE SECOND LAYER TO THE FIRST LAYER GLUES THE ASSEMBLY TOGETHER. FOLDING THE BOARD WITH THE STRESS SKIN AT THE CORNER REINFORCES THE JOINT AND ADDS STRUCTURAL INTEGRITY TO THE THERMO-LAG. THE SCREWS ONLY ADD TO THE STRUCTURAL INTEGRITY OF THE MATERIAL. THE MINIMUM THICKNESS IS MAINTAINED. THEREFORE SINCE THE THERMAL INTEGRITY (THICKNESS) IS MAINTAINED AND THE STRUCTURAL INTEGRITY IS EQUAL IF NOT GREATER THAN THAT TESTED IN UL X-611 THE STEEL IS ADEQUATELY PROTECTED.	101435/0
10.	THE TUBE STEEL COLUMN WHICH IS THE COMMODITY PROTECTED IS ADEQUATELY PROTECTED IN ACCORDANCE WITH CPES-M-2032. PROTRUDING ITEMS ONLY REQUIRE PROTECTION FOR HEAT PATH. THE THERMO-LAG PROTECTS PROTRUSION SUCH THAT THERE IS NO AREA WHERE A FIRE COULD HAVE FLAME IMPINGEMENT SUCH TO EFFECT THE BARRIER. THE 4" RULE FOR STRUCTURAL STEEL IS BASED ON A 3 HOUR FIRE RATING AND THE PROTECTED ITEM COMPLETELY WITHIN THE FURNACE. THE TUBE STEEL IS EMBEDDED IN THE WALL SO THAT ONLY ONE SIDE IS EXPOSED WHICH INCREASES THE STEEL'S ABILITY TO ACCEPT HEAT FROM A PROTRUDING ITEM. THE FIRE RATING OF THE BARRIER IS FOR ONLY 2 HOURS AND NOT 3. BASED ON THE CONFIGURATION AND THE BASIS OF THE DESIGN REQUIREMENTS. THIS CONFIGURATION IS ADEQUATE TO PROVIDE AN EQUIVALENT 2 HOUR RATING TO THE STRUCTURAL STEEL.	101707/0 101708/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
11.	THE STRUCTURAL STEEL IS THE ANGLE IRON USED TO RETAIN THE FIRE DAMPER/TORNADO DAMPER ASSEMBLY. THIS ARRANGEMENT IS A NON-RATED FEATURE (NRF-012) PER CALCULATION 2-FP-0080, REV. 0. THE ANGLE IRONS ARE OF HEAVY CONSTRUCTION AND ARE LIGHTLY LOADED. THE SMALL PORTION OF THE DAMPER FRAME THAT IS UNPROTECTED IS NOT LARGE ENOUGH TO CAUSE FAILURE OF THE RETAINING ANGLE AND THEREBY FAILURE OF THE FIRE DAMPER. THERE IS NO TEMPERATURE TEST REQUIREMENT FOR A FIRE DAMPER AND THEREFORE THE REDUCTION IN FIREPROOFING WILL NOT CAUSE AN INCREASE IN HEAT TRANSMISSION THROUGH THE FIRE BARRIER. BASED ON THE DESIGN OF THE DAMPER INSTALLATION AND THE SMALL REDUCTION IN FIREPROOFING, THE DESIGN IS ADEQUATE TO PROVIDE A 2 HOUR EQUIVALENT FIRE RATING.	101884/0 101885/0 101886/0 101887/0 101888/0 101891/0
12.	THIS IS A SMALL AREA AND AT LEAST ONE SCREW IS INSTALLED TO FASTEN THE SECOND LAYER TO THE STRUCTURAL MEMBER. THE SECOND LAYER IS PREBUTTERED WITH TROWEL GRADE MATERIAL WHICH WILL BOND THE SECOND LAYER TO THE FIRST LAYER. THESE ARE SMALL AREAS AND THE THERMO-LAG CARRIES NO SIGNIFICANT LOAD. THE TROWEL GRADE MATERIAL ALONG WITH THE SCREW WILL HOLD THE THERMO-LAG IN PLACE. SINCE MATERIAL THICKNESS IS MAINTAINED AND THE STRUCTURAL INTEGRITY OF THE FIREPROOFING WILL BE MAINTAINED, THE STRUCTURAL STEEL WILL PROVIDE AN EQUIVALENT 2 HOUR RATING.	102300/0
13.	THE THERMO-LAG IS BEING USED TO PROTECT THE STEEL FRAME OF THE FIRE DAMPER. THE REQUIRED THICKNESS OF THERMO-LAG IS INSTALLED. THE FOAM SEAL MATERIAL WHICH IS SANDWICHED BETWEEN THE THERMO-LAG AND THE WALL NOT ONLY PROVIDES SUPPORT OF THE THERMO-LAG BUT PREVENTS THE THERMO-LAG FROM BEING DIRECTLY EXPOSED TO A FIRE. SINCE THE THERMO-LAG THICKNESS IS MAINTAINED AND THE THERMO-LAG WILL REMAIN IN PLACE, THE DESIGN PROVIDES AN EQUIVALENT 2 HOUR FIRE RATING.	102465/0
14.	IN BOTH ISSUE 1 AND 2 OF DCA 102886/0 THE THERMO-LAG IS BEING INSTALLED ON A PROTRUDING ITEM USING THE 4" RULE. THICKNESS AND DISTANCE IS BASED ON A 3 HOUR FIRE TEST. THIS FIRE BARRIER IS ONLY A 2 HOUR FIRE BARRIER. THERE IS ONLY A SMALL AMOUNT OF THERMO-LAG WHICH IS NOT INSTALLED AND THE INTERFERING ITEM SHIELDS THE LOCATIONS WHERE THE THERMO-LAG COVERAGE IS REDUCED. THEREFORE, THE HEAT PATH COVERAGE IS SUFFICIENT TO PREVENT ANY SIGNIFICANT INCREASE OF HEAT INTO THE STRUCTURAL STEEL. THE DESIGN PROVIDES AN EQUIVALENT 2 HOUR FIRE RATING.	102886/0
15.	THE THERMO-LAG IS BEING USED TO PROTECT THE FIRE DAMPER FRAME AND DOOR FRAME. THE ARRANGEMENT DOES NOT ALLOW FOR SCREW SPACING REQUIREMENTS TO BE MAINTAINED. THE THERMO-LAG IS PREBUTTERED TO BOND THE THERMO-LAG TO THE FRAMES AND THE LAYERS TOGETHER. IN ORDER TO WORK AROUND BOLT INTERFERENCE, THREE LAYERS OF THERMO-LAG WAS INSTALLED IN MOST CASES. THE DISTANCES WITHOUT PHYSICAL RESTRAINTS ARE SMALL. BASED ON THE CONFIGURATION OF THE INSTALLATION ALONG WITH THE THERMO-LAG PREBUTTERING, THERMO-LAG THICKNESS AND STRUCTURAL INTEGRITY WILL BE MAINTAINED. THE DESIGN PROVIDES AND EQUIVALENT 2 HOUR FIRE RATING.	102915/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
16.	THE THERMO-LAG THICKNESS IS MAINTAINED IN ALL CASES. IN ITEM 1, THE FIRST LAYER IS BONDED TO THE FRAME USING TROWEL GRADE 330-1 AND THEN THE SECOND LAYER IS PREBUTTERED TO THE FIRST LAYER. THE PENETRATION SEAL IS EXTENDED TO REINFORCE (JAMMED IN PLACE) THE THERMO-LAG PANELS AND PROVIDES SOME PROTECTION TO THE THERMO-LAG. IN ITEM 2, ONLY TROWEL GRADE MATERIAL IS USED. SINCE THE DISTANCE IS ONLY 3/4" OF AN INCH AND X-611 USES ONLY TROWEL GRADE MATERIAL TO PROTECT A COMPLETE STEEL COLUMN. THE SMALL AMOUNT OF THERMO-LAG TROWEL GRADE WILL REMAIN IN PLACE. IN ITEM 3, THE FIRST LAYER IS BONDED TO THE DAMPER FRAMES USING TROWEL GRADE MATERIAL AND SCREWED TO THE TUBE STEEL. THE SCORE AND FOLD METHOD WAS USED SO THAT THE STRESS SKIN IS CONTINUOUS. THE FOLDS ADD STRUCTURAL STRENGTH TO THE INSTALLATION. THE SECOND LAYER IS PREBUTTERED TO THE FIRST LAYER AND SCREWED TO THE TUBE STEEL. THE SCORE AND FOLD METHOD WAS ALSO USED ON THIS LAYER. THE VOID SPACE BETWEEN THE TUBE STEEL AND FRAME (@ 1-1/2") IS FILLED WITH THERMO-LAG PREBUTTERED PANELS. THEREFORE IN ALL CASES STRUCTURAL INTEGRITY IS MAINTAINED. SINCE THERMO-LAG THICKNESS AND STRUCTURAL INTEGRITY IS MAINTAINED, THE DESIGN PROVIDES AN EQUIVALENT 2 HOUR FIRE RATING.	103131/1
17.	ANCHOR BOLTS EMBEDDED IN THE CONCRETE PROVIDE THE SAME STRUCTURAL ATTACHMENT AS SELF TAPPING SCREWS. THE SPACING OF THE ANCHOR BOLTS EXCEEDS THE SCREW SPACING REQUIRED BY 3" FOR A SPACING OF 9". IN UL X-003, THE FREE SPAN ON THE COLUMN IS GREATER THAN 9". THEREFORE THE 9" SPACING IS ACCEPTABLE. THE VOID SPACE IS FILLED WITH CERAMIC INSULATOR 330-70 WHICH IS A NON-COMBUSTIBLE MATERIAL AND PROVIDES AN ADDITIONAL THERMAL BARRIER FOR THE STEEL. SINCE THE THERMO-LAG THICKNESS AND STRUCTURAL INTEGRITY IS MAINTAINED, THE DESIGN PROVIDES AN EQUIVALENT 2 HOUR FIRE RATING.	103189/2
18.	THE STRUCTURAL STEEL SUPPORTING THE HATCH COVER IS A NON-RATED FEATURE WHICH, BASED ON CALCULATION 2-FP-0080, REV. 0 (NRF-011) DOES NOT REQUIRE THERMO-LAG PROTECTION. THEREFORE, PROVISION OF THERMO-LAG ON BOTH THE SUPPORT ANGLE AND SHIM IS AUGMENTARY ONLY.	104185/0

ATTACHMENT F
AFFECTED DOCUMENT UPDATE REPORTS

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: CPES-M-2032 SHEET: REV: 0 P.O.:
MAINT LVL: S2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT	ATT./NOT
~~DCA 095794 000 SNI R S~~							
~~DCA 095794 001 SNI R S~~							
~~DCA 095794 002 SNI R S~~							
~~DCA 095794 003 SNI R S~~							
~~DCA 095794 004 SNI R S~~							
~~DCA 095794 005 SNI R S~~							
~~DCA 095794 006 SNI R S~~							
~~DCA 095794 007 SNI R S~~							
DCA	095794	008		GR	A	——	SPEC DCA
DCA	099501	000	NI	R	A	——	NO DEV.
~~DCA 100560 000 SNI R S~~							
~~DCA 100560 001 SNI R S~~							
DCA	101182	000	NI	R	A	——	RES
~~DCA 101282 000 SNI R S~~							
DCA	101282	001	NI	R	A	B	
~~DCA 101920 000 SNI R S~~							
~~DCA 101920 001 SNI R S~~							
~~DCA 101920 002 SNI R S~~							
DCA	101397	000	NI	R	A	D	
DCA	101399	000	NI	R	A	——	NO DEV.
DCA	101434	000	NI	R	A	E	
DCA	101435	000	NI	R	A	E	
~~DCA 101498 000 SNI R S~~							
DCA	101498	001	NI	R	A	B	
~~DCA 101627 000 SNI R S~~							
~~DCA 101627 001 SNI R S~~							
DCA	101707	000	NI	R	A	E	
DCA	101708	000	NI	R	A	E	
DCA	101884	000	NI	R	A	E	
DCA	101885	000	NI	R	A	E	
DCA	101886	000	NI	R	A	E	
DCA	101887	000	NI	R	A	E	
DCA	101888	000	NI	R	A	E	
DCA	101891	000	NI	R	A	E	
~~DCA 101986 000 SNI R S~~							
~~DCA 102077 000 SNI R S~~							
DCA	102077	001	NI	R	A	——	RES
DCA	102078	000	NI	R	A	——	RES
DCA	102103	000	NI	R	A	B	
~~DCA 102160 000 SNI R S~~							

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: CPES-M-2022 SHEET: REV: 0 P.O.:
MAINT LVL: S2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT	ATT./NO
DCA 102160	001	NI	R	A		B	
~~DCA 102222~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
DCA 102222	001	NI	R	A		A	
DCA 102266	000	NI	R	A		D	
DCA 102300	000	NI	R	A		E	
~~DCA 102330~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
DCA 102330	001	NI	R	A		C	
~~DCA 102385~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
DCA 102385	001	NI	R	A		—	RES
DCA 102465	000	NI	R	A		E	
DCA 102478	001	NI	R	A		C	
DCA 102533	000	NI	R	A		—	RES
DCA 102563	000	NI	R	A		—	RES
~~DCA 102679~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
DCA 102679	001	NI	R	A		B	
DCA 102709	000	NI	R	A		—	NO DEV
DCA 102728	000	NI	R	A		—	RES
DCA 102758	000	NI	R	A		C	
~~DCA 102786~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
~~DCA 102789~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
DCA 102789	001	NI	R	A		D	
DCA 102800	002	NI	R	A		B	
DCA 102837	000	NI	R	A		C	
DCA 102858	000	NI	R	A		C	
~~DCA 102861~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
DCA 102863	001	NI	R	A		C	
~~DCA 102884~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
DCA 102886	000	NI	R	A		E	
DCA 102915	000	NI	R	A		E	
~~DCA 102932~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
~~DCA 102932~~	~~001~~	~~SNI~~	~~D~~	~~S~~			
~~DCA 102932~~	~~002~~	~~SNI~~	~~D~~	~~S~~			
~~DCA 102932~~	~~003~~	~~SNI~~	~~D~~	~~S~~			
~~DCA 102932~~	~~004~~	~~SNI~~	~~D~~	~~S~~			
DCA 102932	005	NI	R	A		B	
DCA 102957	000	NI	R	A		A	
~~DCA 103007~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
DCA 103007	001	NI	R	A		C	
~~DCA 103013~~	~~000~~	~~SNI~~	~~D~~	~~S~~			
~~DCA 103015~~	~~001~~	~~SNI~~	~~D~~	~~S~~			

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: CPES-M-2032 SHEET: REV: 0 P.O.:
MAINT LVL: S2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT / NOT
~~DCA 103013 002 SNI G S~~						
~~DCA 103013 003 SNI D S~~						
~~DCA 103013 004 SNI D S~~						
~~DCA 103013 005 SNI D S~~						
DCA 103013 006 NI R A						B
~~DCA 103034 000 SNI D S~~						
DCA 103037 000 NI R A						C
~~DCA 103046 001 SNI D S~~						
DCA 103046 002 NI R A						B
DCA 103050 000 NI R A						C
~~DCA 103056 000 SNI D S~~						
DCA 103056 001 NI R A						B
DCA 103076 001 NI R A						C
DCA 103081 001 NI R A						D
DCA 103088 000 NI R A						D
~~DCA 103090 000 SNI D S~~						
~~DCA 103090 001 VNI D V~~						
~~DCA 103131 000 SNI D S~~						
DCA 103131 001 NI R A						E
DCA 103143 000 NI R A						D
DCA 103157 000 NI R A						C
DCA 103158 000 NI R A						C
DCA 103159 000 NI R A						—
DCA 103161 000 NI R A						— RES
~~DCA 103169 000 SNI D S~~						RES
~~DCA 103109 001 SNI D S~~						
DCA 103189 002 NI R A						E
DCA 103305 001 NI R A						B
DCA 103375 000 NI R A						C
~~DCA 103401 000 SNI D S~~						
~~DCA 103409 000 SNI D S~~						
~~DCA 103409 001 SNI D S~~						
~~DCA 103409 002 SNI D S~~						
~~DCA 103409 003 SNI D S~~						
~~DCA 103409 004 SNI D S~~						
DCA 103409 005 NI R A						B
~~DCA 103414 000 SNI D S~~						
DCA 103414 001 NI R A						C
DCA 103423 000 NI R A						A
~~DCA 103476 000 SNI D S~~						

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: CPES-M-2032 SHEET: REV: 0 P.O.:
MAINT LVL: S2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT /NOTE
DCA 103476	001	NI	R	A		D
DCA 103488	000	NI	R	A		D
DCA 103507	000	NI	R	A		A
DCA 103508	000	NI	R	A		D
DCA 103533	000	NI	R	A		B
~~DCA 103550 000 SNI D S~~						
DCA 103550	001	NI	R	A		B
~~DCA 103551 000 SNI D S~~						
~~DCA 103551 001 SNI D S~~						
DCA 103559	000	NI	R	A		A
~~DCA 103567 000 SNI D S~~						
DCA 103567	001	NI	R	A		B
~~DCA 103574 000 SNI D S~~						
DCA 103574	001	NI	R	A		C
DCA 103582	000	NI	R	A		B
DCA 103599	000	NI	R	A		E
DCA 103600	002	NI	R	A		B
DCA 103602	000	NI	R	A		C
DCA 103609	000	NI	R	A		E
DCA 103613	000	NI	R	A		D
DCA 103631	000	NI	R	A		C
DCA 103633	000	NI	R	A		C
~~DCA 103634 000 SNI D S~~						
~~DCA 103634 001 SNI D S~~						
DCA 103634	002	NI	R	A		B
DCA 103636	000	NI	R	A		C
DCA 103650	000	NI	R	A		C
DCA 103680	001	NI	R	A		B
DCA 103701	000	NI	R	A		B
~~DCA 103706 000 SNI D S~~						
DCA 103706	001	NI	R	A		C
~~DCA 103710 000 SNI D S~~						
DCA 103718	001	NI	R	A		C
~~DCA 103721 000 SNI D S~~						
DCA 103721	001	NI	R	A		C
DCA 103730	000	NI	R	A		C
~~DCA 103740 000 SNI D S~~						
DCA 103740	001	NI	R	A		B
DCA 103741	000	NI	R	A		C
DCA 103770	000	NI	R	A		C

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: CPES-M-2022 SHEET: REV: 0 P.O.:
MAINT LVL: S2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOT
DCA 103780	000	NI	R	A		C
DCA 103792	000	NI	R	A		B
DCA 103799	000	NI	R	A		D
DCA 103816	000	NI	R	A		C
DCA 103824	000	NI	R	A		C NO DE
~~DCA 103846~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103846	001	NI	R	A		D
DCA 103864	000	NI	R	A		C
DCA 103873	000	NI	R	A		C RES
~~DCA 103884~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103884	001	NI	R	A		B
~~DCA 103892~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103892	001	NI	R	A		B
DCA 103912	000	NI	R	A		B
DCA 103917	000	NI	R	A		D
DCA 103924	000	NI	R	A		D
DCA 103947	000	NI	R	A		C
DCA 103959	000	NI	R	A		C
DCA 103988	000	NI	R	A		C
DCA 103991	000	NI	R	A		C
~~DCA 104011~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104011	001	NI	R	A		C
DCA 104013	000	NI	R	A		C
~~DCA 104017~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104017	001	NI	R	A		C
~~DCA 104026~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104026	001	NI	R	A		C
DCA 104027	000	NI	R	A		C
~~DCA 104037~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104037	001	NI	R	A		C
DCA 104057	000	NI	R	A		C
DCA 104060	000	NI	R	A		B
DCA 104075	000	NI	R	A		C
~~DCA 104079~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104079	001	NI	R	A		D
DCA 104087	000	NI	R	A		B
DCA 104096	000	NI	R	A		B RES
DCA 104107	000	NI	R	A		C
DCA 104114	000	NI	R	A		D
DCA 104115	000	NI	R	A		C

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: CPES-M-2032 SHEET: REV: 0 P.O.:
MAINT LVL: S2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/ NOTE
DCA 104124	000	NI	R	A		B
DCA 104151	000	NI	R	A		C
DCA 104152	000	NI	R	A		C
~~DCA 104174~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104174	001	NI	R	A		C
DCA 104188	000	NI	R	A		C
DCA 104194	000	NI	R	A		B NO DE
DCA 104205	000	NI	R	A		C
DCA 104206	000	NI	R	A		C
DCA 104211	000	NI	R	A		D
~~DCA 104217~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 104217~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
DCA 104217	002	NI	R	A		B
~~DCA 104222~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 104222~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 104222~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA 104222	003	NI	R	A		B
DCA 104224	000	NI	R	A		D
DCA 104227	000	NI	R	A		C
DCA 104234	000	NI	R	A		A
DCA 104235	003	NI	R	A		C
DCA 104237	000	NI	R	A		C
DCA 104238	000	NI	R	A		C
DCA 104239	000	NI	R	A		C
DCA 104240	000	NI	R	A		C
~~DCA 104241~~	~~000~~	~~SNI~~	~~D~~	~~S~~		NOT T-L
DCA 104241	001	NI	R	A		C
DCA 104242	000	NI	R	A		C
DCA 104243	000	NI	R	A		C
DCA 104244	000	NI	R	A		C
~~DCA 104246~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104250	000	NI	R	A		C
DCA 104252	000	NI	R	A		C
DCA 104254	000	NI	R	A		C
DCA 104255	000	NI	R	A		C
DCA 104260	000	NI	R	A		C
DCA 104262	000	NI	R	A		C NO DEV
DCN 005727	000	NI	MR	A	MM-93-0124	B
~~DCN 005742~~	~~000~~	~~SNI~~	~~D~~	~~S~~	~~MM-93-0125~~	
TUE 92-05683	000	NI	D	A		— NO DEV

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: CPES-M-2022 SHEET: REV: 0 P.O.:
MAINT LVL: S2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT / NOTE
TUE 92-05877	000	NI	D	A		— NO DEV
TUE 92-06315	000	NI	D	A		— NO DEV
TUE 92-06560	000	NI	D	A		— NO DEV
TUE 92-06572	000	NI	D	A		— RES
~~TUE 92-06590 001 SNI D S~~						
TUE 92-06590	002	NI	D	A		— NO DEV
~~TUE 92-06613 001 SNI D S~~						
TUE 92-06613	002	NI	D	A		— NO DEV
TUE 92-07065	000	NI	D	A		— NO DEV

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 001 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER		REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT. / NOTE
DCA	101358	000		P	A		A
DCA	101524	000		GR	A		A
~~DCA~~	~~102220~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	102220	001		R	A		A
DCA	102265	000	NI	P	A		B
DCA	102466	000	NI	R	A		NO DE
DCA	102470	000	NI	P	A		NO DE
DCA	102750	000	NI	R	A		D
DCA	102758	000	NI	R	A		C
~~DCA~~	~~102789~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	102789	001	NI	R	A		D
DCA	102837	000	NI	R	A		C
DCA	102859	000	NI	P	A		D
DCA	102884	001	NI	R	A		D
DCA	102886	000	NI	R	A		E
DCA	102894	000	NI	R	A		NO DE
DCA	102915	000	NI	R	A		E
~~DCA~~	~~103007~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA~~	~~103024~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	103034	001	NI	R	A		B
~~DCA~~	~~103476~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	103476	001		R	A		D
DCA	103559	000	NI	R	A		A
DCA	103735	000	NI	R	A		A
DCA	103921	000		R	A		D
DCA	103924	000	NI	R	A		A
~~DCA~~	~~103952~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	103953	000		R	A		D
DCA	104001	000	NI	R	A		A
~~DCA~~	~~104015~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	104015	001		R	A		D
DCA	104079	001	NI	R	A		A
DCA	104121	000		R	A		D
DCA	104185	000	NI	R	A		E
DCA	104189	000	NI	R	A		D
DCA	104221	000	NI	R	A		D
~~DCA~~	~~104222~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA~~	~~104222~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA~~	~~104222~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA	104222	003	NI	R	A		B

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 001 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT / NO
DCA 104227	000	NI	R	A		D
DCA 104256	000	NI	R	A		D
DCA 104259	000	NI	R	A		D

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 002 REV: CP1 P.O.:
MAINT LVL: C2

DES	CHNG-NUMBER	REV	DCCS	RELS	D-ST	MODIFCTN#	REPORT ATT / NOTE
DCA	100820	000		P	A		A
DCA	101320	003	NI	R	A		C
DCA	101627	002	NI	P	A		B
DCA	102385	001	NI	R	A		RES
~~DCA~~	~~102479~~	~~000~~	~~SNI~~	~~P~~	~~S~~		
DCA	102479	001	NI	R	A		B
DCA	103002	000	NI	R	A		D
~~DCA~~	~~103020~~	~~001~~	~~SNI~~	~~P~~	~~S~~		
~~DCA~~	~~103020~~	~~002~~	~~SNI~~	~~P~~	~~S~~		
DCA	103020	003		R	A		A
~~DCA~~	~~103634~~	~~000~~	~~SNI~~	~~P~~	~~S~~		
~~DCA~~	~~103634~~	~~001~~	~~SNI~~	~~P~~	~~S~~		
DCA	103634	002		R	A		A,B
~~DCA~~	~~103681~~	~~000~~	~~SNI~~	~~P~~	~~S~~		
~~DCA~~	~~103706~~	~~000~~	~~SNI~~	~~P~~	~~S~~		
DCA	103847	000	NI	R	A		B
~~DCA~~	~~103884~~	~~000~~	~~SNI~~	~~P~~	~~S~~		
DCA	103884	001	NI	R	A		B
DCA	103921	000		R	A		A
DCA	104013	000	NI	R	A		C
~~DCA~~	~~104026~~	~~000~~	~~SNI~~	~~P~~	~~S~~		
DCA	104026	001	NI	R	A		C
DCA	104060	000		P	A		B
DCA	104079	001	NI	R	A		D
DCA	104241	001		P	A		C
DCA	104245	000	NI	R	A		C
DCA	104251	000	NI	R	A		B
DCA	104253	000	NI	R	A		C
~~DCA~~	~~104257~~	~~000~~	~~SNI~~	~~P~~	~~S~~		
DCA	104257	001	NI	R	A		B
DCN	005742	001	NI	MR	A	MM-93-0125	B
~~DCN~~	~~005745~~	~~000~~	~~SNI~~	~~P~~	~~S~~	~~MM-93-0123~~	
DCN	005745	001	NI	MR	A	MM-93-0123	B
~~DCN~~	~~005746~~	~~000~~	~~SNI~~	~~P~~	~~S~~	~~MM-93-0126~~	
DCN	005746	001	NI	MR	A	MM-93-0126	B

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 003 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT / NOT
DCA 100920	000		R	A		A
DCA 102479	001	NI	R	A		B
~~DCA 102678~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 102679	001	NI	R	A		B
~~DCA 103020~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA 103020	003		R	A		A
DCA 103489	001	NI	R	A		B
~~DCA 103550~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103550	001	NI	R	A		B
DCA 103681	001	NI	R	A		B
DCA 103809	000	NI	R	A		D
DCA 104047	000	NI	R	A		C
DCA 104048	000	NI	R	A		B
DCA 104121	000		R	A		A
~~DCA 104257~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104257	001	NI	R	A		B
DCA 104261	000	NI	R	A		C
DCA 104264	000	NI	R	A		C

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 003A REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOT
DCA 100820	000		R	A		A
DCA 103020	003		R	A		A
DCA 103081	001	NI	R	A		D

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 0038 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT./NOTE
DCA 100820	000		P	A		A
~~DCA 102760~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 102932~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 102932~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 102932~~	~~003~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 102932~~	~~004~~	~~SNI~~	~~D~~	~~S~~		
DCA 102932	005	NI	R	A		B
DCA 102933	000		R	A		A
~~DCA 103020~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103046~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103184~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103184~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103184~~	~~002~~	~~UNI~~	~~D~~	~~U~~		
~~DCA 103192~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103192~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103192~~	~~002~~	~~UNI~~	~~D~~	~~U~~		
~~DCA 103305~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103305	001	NI	P	A		B
DCA 103472	001	NI	R	A		B
~~DCA 103855~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103855	001	NI	R	A		B
DCA 103860	000	NI	R	A		B NO DEV
DCA 103912	000	NI	R	A		B
~~DCA 104037~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104037	001	NI	R	A		C
DCA 104045	000		R	A		A
DCA 104117	000	NI	R	A		D
DCA 104173	000	NI	R	A		D
DCA 104180	000	NI	R	A		C
DCA 104186	000	NI	R	A		C
DCA 104223	000	NI	R	A		C
DCA 104226	000	NI	R	A		B
~~DCA 104248~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 104248	001	NI	R	A		C
DCA 104255	000	NI	R	A		C
DCA 104263	000	NI	R	A		D
~~TUE 92 05953~~	~~000~~	~~SNI~~	~~D~~	~~S~~		

PREPARED BY: _____ __/__/__

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APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 004 REV: CF1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOT
DCA 101320	003	NI	R	A		C
DCA 101775	000		R	A		A
~~DCA 102280~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 102300	001	NI	R	A		C
DCA 102725	000	NI	R	A		C
DCA 102780	001	NI	R	A		C
~~DCA 102861~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 102861	001	NI	R	A		C
~~DCA 102868~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 102933	000		R	A		A
DCA 103001	000	NI	R	A		B
~~DCA 103020~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA 103020	003		R	A		A
~~DCA 103076~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103076	001		R	A		C
~~DCA 103098~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103098~~	~~001~~	~~UNI~~	~~D~~	~~U~~		
DCA 103423	000		R	A		A
DCA 103864	000	NI	R	A		C
DCA 103947	000	NI	R	A		C
~~DCA 103958~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103958~~	~~001~~	~~UNI~~	~~D~~	~~U~~		
DCA 104027	000	NI	R	A		C
~~DCA 104217~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
DCA 104217	002	NI	R	A		B
DCA 104254	000	NI	R	A		C
DCA 104265	000	NI	R	A		B

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

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FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 004A REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT /NOTE
DCA 101775	000		R	A		A
~~DCA 103020~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA 103020	003		R	A		A

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 005 REV: CF1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT / NOT
DCA 100561	000	NI	P	A		A (ENVELOPED
DCA 100820	000		R	A		A
DCA 101357	000	NI	R	A		B
DCA 101466	001	NI	R	A		B
~~DCA 102232 000 SNI D S~~						
~~DCA 102232 001 UNI D U~~						
~~DCA 102471 000 SNI D S~~						
~~DCA 102471 001 SNI D S~~						
~~DCA 102471 002 SNI D S~~						
DCA 102471 003	NI	R	A			B
~~DCA 102478 000 SNI D S~~						
DCA 102478 001	NI	R	A			C
DCA 102821 001	NI	R	A			D
~~DCA 102883 000 SNI D S~~						
~~DCA 102883 001 UNI D U~~						
~~DCA 103020 001 SNI D S~~						
~~DCA 103020 002 SNI D S~~						
DCA 103020 003		R	A			A
~~DCA 103472 000 SNI D S~~						
DCA 103472 001	NI	R	A			B
~~DCA 103484 000 SNI D S~~						
DCA 103484 001	NI	R	A			D
DCA 103488 000	NI	R	A			D
~~DCA 103550 000 SNI D S~~						
DCA 103550 001	NI	R	A			B
DCA 103551 002		R	A			B
DCA 103559 000	NI	R	A			A
~~DCA 103574 000 SNI D S~~						
DCA 103574 001	NI	R	A			C
DCA 103575 000	NI	R	A			B
DCA 103582 000	NI	R	A			B
DCA 103589 000	NI	R	A			B
DCA 103597 000	NI	R	A			D
~~DCA 103624 000 SNI D S~~						
DCA 103626 000		R	A			A
DCA 103670 000	NI	R	A			B
~~DCA 103680 000 SNI D S~~						
DCA 103680 001	NI	R	A			B
DCA 103701 000	NI	R	A			B
~~DCA 103740 000 SNI D S~~						

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 005 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG	NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NO
DCA	103740	001	NI	R	A		B
DCA	103833	000		R	A		A
DCA	103935	000	NI	R	A		B
~~DCA~~	~~103962~~	~~001~~	~~UNI~~	~~D~~	~~U~~		
~~DCA~~	~~104011~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	104011	001	NI	R	A		C
~~DCA~~	~~104037~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	104037	001	NI	R	A		C
DCA	104087	000	NI	R	A		B
DCA	104121	000		R	A		A
DCA	104197	000	NI	R	A		C
DCA	104204	000	NI	R	A		B
~~DCA~~	~~104222~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA~~	~~104222~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA~~	~~104222~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA	104222	003	NI	R	A		B
~~DCA~~	~~104235~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA~~	~~104235~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA~~	~~104235~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA	104235	003		R	A		A
~~DCA~~	~~104246~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
DCA	104246	002	NI	R	A		C
~~DCA~~	~~104248~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA	104248	001	NI	R	A		C
DCA	104249	000	NI	R	A		— NO DE
DCA	104252	000	NI	R	A		C
DCA	104260	000	NI	R	A		— NO DE
TUE	92-05971	000	NI	D	A		— NO DE

PREPARED BY: _____ __/__/__

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FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 005A REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOTE
DCA 100820	000		R	A		A
~~DCA 103020~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA 103020	003		R	A		A
DCA 103507	000		R	A		A
DCA 104121	000		R	A		A

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 006 REV: CF1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOT
DCA 101499	000	NI	R	A		B
DCA 102058	000	NI	R	A		B
DCA 102726	000	NI	R	A		B
DCA 102858	000	NI	R	A		C
DCA 102889	000	NI	R	A		B
~~DCA 103020 000 SNI D S~~						
~~DCA 103020 001 SNI D S~~						
~~DCA 103020 002 SNI D S~~						
DCA 103020	003		R	A		A
DCA 103507	000		R	A		A
~~DCA 103874 000 SNI D S~~						
DCA 103874	001	NI	R	A		B
DCA 104241	001		R	A		C

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 007 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NO
DCA 102729	000		R			A
~~DCA 102759 000 SNI D S~~						
DCA 102759	001		R	A		A
~~DGA 102800 000 SNI D S~~						
~~DGA 102800 001 SNI D S~~						
~~DGA 102860 000 SNI D S~~						
DCA 102933	000		R	A		A
~~DGA 103020 001 SNI D S~~						
~~DGA 103020 002 SNI D S~~						
DCA 103020	003		R	A		A
~~DGA 103061 000 SNI D S~~						
DCA 103061	001		R	A		B
~~DGA 103091 000 SNI D S~~						
~~DGA 103277 000 SNI D S~~						
DCA 103277	001	NI	R	A		B
~~DGA 103406 000 SNI D S~~						
DCA 103406	001	NI	R	A		B
~~DGA 103721 000 SNI D S~~						
DCA 103721	001	NI	R	A		C
DCA 103730	000	NI	R	A		C
DCA 103782	000	NI	R	A		C
~~DGA 103855 000 SNI D S~~						
DCA 103855	001	NI	R	A		B
DCA 103929	000	NI	R	A		A
DCA 104121	000		R	A		NODE

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 008 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOT
DCA 100820	000		R	A		A
DCA 101918	000		R	A		A
DCA 102933	000		R	A		A
~~DCA 103401~~	~~000~~	~~GNI~~	~~D~~	~~C~~		
DCA 103401	001	NI	R	A		C
DCA 103486	000		R	A		B
~~DCA 103624~~	~~001~~	~~GNI~~	~~D~~	~~C~~		
DCA 103624	002	NI	R	A		B
DCA 104078	000	NI	R	A		B

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 009 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/ NOT
DCA 100820	000		R	A		A
DCA 103490	000		R	A		A
~~DCA 103600~~	~~000~~	~~SNI~~	~~R~~	~~S~~		
~~DCA 103600~~	~~001~~	~~SNI~~	~~R~~	~~S~~		
DCA 103600	002	NI	R	A		B

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 010 REV: CF1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT / NOT
~~DCA 102622 000 SNI U S~~						
DCA 102522 001 R A						A
~~DCA 103305 000 SNI U S~~						
DCA 103305 001 NI R A						B
~~DCA 104222 000 SNI U S~~						
~~DCA 104222 001 SNI D S~~						
~~DCA 104222 002 SNI U S~~						
DCA 104222 003 NI R A						B
DCA 104233 000 NI R A						NODE

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 011 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT / NOT
DCA 101625	000		GR	A		A
DCA 101775	000		R	A		A
DCA 102931	000	NI	R	A		B
DCA 102957	000		R	A		A
~~DCA 103020~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~001~~	~~SNI~~	~~D~~	~~S~~		
~~DCA 103020~~	~~002~~	~~SNI~~	~~D~~	~~S~~		
DCA 103020	003		R	A		A
DCA 103487	000	NI	R	A		B
DCA 104121	000		R	A		A
DCA 104251	000	NI	R	A		B
DCA 104258	000	NI	R	A		C

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REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 012 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOTE
DCA 103063	000		P	A		A
~~DCA 103065~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103305	001	MI	P	A		B
~~DCA 103408~~	~~000~~	~~SNI~~	~~D~~	~~S~~		
DCA 103408	001	MI	R	A		B
DCA 103844	000		R	A		A

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 013 REV: CF1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOTE
~~DCA 102221 000 SNI D C~~						
DCA	102221	001	NI	R	A	D
DCA	102231	000	NI	R	A	D
DCA	102312	000	NI	R	A	D
DCA	102524	000	NI	R	A	D
DCA	102525	000	NI	R	A	D
~~DCA 102679 000 SNI D S~~						
DCA	102679	001	NI	R	A	B
~~DCA 102786 000 SNI D C~~						
DCA	102788	001	NI	R	A	A
DCA	102882	000	NI	R	A	B
DCA	102933	000		R	A	A
DCA	103487	000	NI	R	A	B
~~DCA 103540 000 SNI D C~~						
DCA	103546	001		R	A	A
DCA	103862	000	NI	R	A	B
DCA	104121	000		R	A	A
DCA	104124	000	NI	R	A	B

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 014 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOTE
~~DCA 103472~~	~~000~~	~~SNI~~	~~R~~	~~C~~		
DCA 103472	001	NI	R	A		B
~~DCA 103489~~	~~000~~	~~SNI~~	~~R~~	~~C~~		
DCA 103489	001	NI	R	A		B

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

FIELD DESIGN CHANGE & REVIEW STATUS LOG
AFFECTED DOCUMENT UPDATE REPORT

DWG: M2-1701 SHEET: 015 REV: CP1 P.O.:
MAINT LVL: C2

DES-CHNG-NUMBER	REV	DOCS	RELS	D-ST	MODIFCTN#	REPORT ATT/NOTE
DCA 102608	000		R	A		A
~~DCA 103624~~	~~001~~	~~GNI~~	~~D~~	~~C~~		
DCA 103624	002	NI	R	A		B
DCA 103644	000		GR	A		A
DCA 104121	000		R	A		A
DCA 104226	000	NI	R	A		B

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

ATTACHMENT G

TYPICAL UNIT 1 DESIGN DETAILS

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
1-1.1	SH. 1/B-2	COVERAGE OF ANGLE IRON PROTRUDING ITEM WITH 330-1 THERMO-LAG PANELS.	9-1, 9-3, 10-1, 10-2, 11-1,11-2,11-4,11-5,13-2, 14-1,15-1	1-5, 80
1-1.2	SH. 1/C-2	COVERAGE OF ANGLE IRON PROTRUDING ITEM WITH 330-660 FLEXI-BLANKET.	9-1,9-3,10-1,10-2,11-1, 14-1,15-1	1-5, 11
1-2.1	SH. 1/B-4	COVERAGE OF ANGLE IRON PROTRUDING ITEM WITH 330-1 THERMO-LAG PANELS. THIS DETAIL WAS TESTED.	10-1, 10-2	N/A
1-2.2	SH. 1/C-4	COVERAGE OF TUBE STEEL PROTRUDING ITEM WITH 330-1 THERMO-LAG PANELS. THIS WAS TESTED.	10-1, 10-2	N/A
1-3.1	SH. 1/B-6	COVERAGE OF "C" CHANNEL PROTRUDING ITEM WITH 330-1 THERMO-LAG PANEL. THIS WAS TESTED.	9-1,9-3,10-1,10-2,11-1, 14-1,15-1,11-2,11-4,11-5	N/A
1-3.2	SH. 1/C-6	COVERAGE OF "C" CHANNEL PROTRUDING ITEM WITH 330-660 FLEXI-BLANKET.	9-1,9-3,10-1,10-2,11-1, 14-1,15-1,11-2,11-4,11-5	1-5, 11
1-3.3	SH. 1/E-6	THIS DETAIL SHOWS THE TIE WIRE INSTALLATION ON THE THERMO-LAG 330-1 PANELS COVERING A CABLE TRAY SUPPORT. THIS DETAIL SHOWS THE TIE WIRE BEING INSTALLED THROUGH THE BOTTOM TRAY PANELS THAT BUTT UP TO THE TRAY SUPPORT.	11-1, 14-1,15-1,11-2, 11-4,11-5	1-6, 73
1-4.1	SH. 1/E-2	COVERAGE OF "I" BEAM PROTRUDING ITEM WITH 330-1 THERMO-LAG PANEL.	9-1,9-3,10-1, 10-2, 11-1, 14-1,15-1,11-2,11-4,11-5	1-5, 80
1-4.2	SH. 1/E-4	COVERAGE OF "I" BEAM PROTRUDING ITEM 330-660 FLEXI-BLANKET.	9-1,9-3,10-1,10-2,11-1, 14-1,15-1,11-2,11-4,11-5	1-5, 11
1-5	SH. 1A/A-1	HILTI BOLT/SELF TAPPING SCREW DETAIL FOR ATTACHING THERMO-LAG TO A CONCRETE STRUCTURE.	9-1,9-3,10-1,10-2,11-1,11-4 14-1,15-1	1-6, 12
1-5.1	SH. 1A/C-1	THIS IS A SQUARE WASHER DETAIL WHICH IS TO BE USED ON DETAIL 1-5 AND REQUIRES NO ADDITIONAL JUSTIFICATION.	N/A	N/A

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
1-6	SH. 1A/E-2	THIS DETAIL PROVIDES A METHOD OF COVERING A WEEP HOLE IN A TUBE-STEEL PROTRUDING ITEM WITH THERMO-LAG.	10-1, 10-2	1-5, 15
1-7	SH. 1A/B-4	THIS DETAIL SHOWS COVERAGE OF RADIAX CABLE AND ITS SUPPORT AS A PROTRUDING ITEM. THE COVERAGE INCLUDES 330-1 PANELS ON THE SUPPORT AND 330-660 FLEXI-BLANKET ON THE RADIAX.	11-1, 11-2	1-5, 74
1-8	SH. 1A/E-4	THIS DETAIL PROVIDES FOR THE INSTALLATION OF CERAMIC TAPE (BANDING). THIS WAS TESTED.	11-5	N/A
2-1	SH. 2/B-1	REMOVABLE COVER, EVALUATED ON A CASE BY CASE BASIS	N/A	N/A
2-2	SH. 2A/B-1	THIS DETAIL IS FOR FIRE STOPPING NON ESSENTIAL CONDUITS AT JUNCTION BOXES USING EITHER 330-1 OR 45B SILICONE ELASTOMER.	4,11-1,11-2,,14-1,15-1	1-5, 17
2-3	SH. 2/B-3	THIS IS THE TESTED DETAIL FOR INSTALLING THERMO-LAG ON JUNCTION BOXES.	10-1, 10-2	1-5, 19
2-3.1	SH. 2/D-2	THIS IS A DETAIL SHOWING BANDING ON THERMO-LAG COVERAGE ON UNISTRUT WHICH SUPPORTS THE JUNCTION BOX AND PROTRUDES OUT OF THE THERMO-LAG PACKAGE.	9-1,9-3,10-1,10-2,11-1, 14-1,15-1	1-5, 81
2-3.2	SH. 2/F-3	THIS IS A DETAIL SHOWING INSTALLATION OF THERMO-LAG ON A JUNCTION BOX SUPPORT.	9-1,9-3,10-1,10-2,11-1, 14-1,15-1	1-5, 81
2-3.3	SH. 2/D-3	THIS IS A DETAIL SHOWING STRESS SKIN AND TROWEL GRADE INSTALLED AT JUNCTION BOX JOINTS. THIS IS A TESTED CONFIGURATION.	10-1	1-5, 19
2-3.5	SH. 2A/E-1	THIS DETAIL USED DURING UNIT 2 INSTALLATION.	10-1, 10-2	1-5, 40
2-3.6	SH. 2A/B-4	THIS DETAIL SHOWS THE INSTALLATION OF THERMO-LAG ON AN ESSENTIAL FLEXIBLE CONDUIT EXITING A JUNCTION BOX ENCLOSURE.	10-1, 10-2	1-5, 43

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
2-3.7	SH. 2A/E-4	THIS DETAIL SHOWS PROPER T-LAG ARRANGEMENT ON A FLEX-CONDUIT EXITING/ ENTERING A JUNCTION BOX.	10-1, 10-2	1-5, 83
3-1	SH. 3/A-1	THIS DETAIL SHOWS NON-ESSENTIAL PROTRUDING CABLE COVERAGE. THE AIRDROP CONFIGURATION WAS TESTED.	11-1, 14-1, 15-1, 11-2	1-5, 17
3-2 & 3-2.1	SH. 3/D-1	THESE DETAILS SHOW THE PROTECTION OF AIR DROP CABLES WITH 330-660 FLEXI-BLANKET FROM A TRAY TO A THROUGH WALL SLEEVE (TWS). THE POINT OF ATTACHMENT AT THE TRAY IS TO THERMO-LAG 330-1 HALF ROUNDS AND DIRECTLY TO THE SLEEVES AT THE TWS.	11-1	1-5, 26
3-3	SH. 3/B-3	THIS DETAIL SHOWS AN AIR DROP BETWEEN CABLE TRAYS WITH A COMBINATION OF 330-1 PANELS AND 1/2 ROUNDS AT THE ATTACHMENT TO THE TRAYS AND 330-660 FLEXI-BLANKET ON THE AIR DROP CABLES BETWEEN THE TRAYS.	11-1	1-5, 28
3-4 (OPTION 1)	SH. 3A/B-1	THIS IS THE STANDARD AIR DROP CONFIGURATION FOR UNIT 1 CABLES AIR DROPPING INTO/OUT OF A CABLE TRAY USING STAINLESS STEEL MESH REINFORCEMENT.	11-2	1-5
3-4 (OPTION 2)	SH. 3A/E-1	THIS IS THE STANDARD AIR DROP CONFIGURATION FOR UNIT 1 CABLES AIR DROPPING INTO/OUT OF A CABLE TRAY USING STAINLESS STEEL MESH REINFORCEMENT.	11-2	1-5
3-4A (OPTION 1)	SH. 3B/B-1	THIS IS A TESTED AIR DROP CONFIGURATION.	11-1	1-5
3-4A (OPTION 2)	SH. 3B/E-1	THIS IS A MODIFIED AIR DROP CONFIGURATION USED FOR UNIT 2 CABLES AIR DROPPING INTO/OUT OF A CABLE TRAY USING STRESS SKIN AND TROWEL GRADE IN LIEU OF PANELS (ACCEPTABLE FOR UNIT 1 USE).	11-1	1-5, 31
3-4A.3	SH. 3C/E-1	THIS PROVIDES SPECIFIC DETAILS TO BE USED IN CONJUNCTION WITH THE STANDARD AIR DROP DETAIL 3-4A OPTION 1.	11-1	N/A

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
3-4A.4 & 3-4A.5	SH. 3C/B-1	THESE ARE SPECIFIC DETAILS USED IN CONJUNCTION WITH THE MODIFIED AIR DROP DETAIL 3-4A (OPTION 2)	11-1	1-5, 31
3-5	SH. 3D/B-1	THIS IS THE STANDARD DETAIL FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 THERMO-LAG HALF ROUNDS ON RIGID CONDUIT GREATER THAN OR EQUAL TO 1 1/2" DIA. THIS IS A TESTED CONFIGURATION.	11-1, 11-2	N/A
3-5.1	SH. 3D/E-1	THIS IS THE STANDARD DETAIL FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 THERMO-LAG HALF ROUNDS ON RIGID CONDUIT LESS THAN 1 1/2" DIAMETER. THIS IS A TESTED CONFIGURATION.	11-1	N/A
3-5.2	SH. 3D/D-4	THIS IS A STANDARD DETAIL FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 THERMO-LAG PANELS OR HALF ROUNDS WHERE SPACE LIMITATIONS DO NOT ALLOW STANDARD OVERLAP.	11-1	1-5, 34, 35
3-5A	SH. 3E/B-1	THIS IS THE STANDARD DETAIL USED IN UNIT 2 FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 THERMO-LAG HALF ROUNDS ON RIGID CONDUIT GREATER THAN OR EQUAL TO 3" DIAMETER AND IS THE PREFERRED METHOD OVER 3-5 FOR NEW CONSTRUCTION GREATER THAN OR EQUAL TO 1 1/2" DIAMETER.	11-1, 11-2	1-5, 34
3-5A.1	SH. 3E/B-5	THIS IS THE STANDARD DETAIL USED IN UNIT 2 FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 HALF ROUNDS ON RIGID CONDUIT LESS THAN 3" DIAMETER AND IS THE PREFERRED METHOD OVER 3-5.1 FOR NEW CONSTRUCTION LESS THAN 1 1/2" DIAMETER. THIS IS A TESTED CONFIGURATION.	11-1, 11-2	1-5

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
3-5A.2	SH. 3E/E-1	THIS VIEW PROVIDES A GREATER LEVEL OF DETAIL FOR STAPLE AND OVERLAP REQUIREMENTS TO SUPPLEMENT TYPICAL DETAIL 3-5A. THIS IS A TESTED CONFIGURATION.	11-1, 11-2	1-5
3-5A.2.a	SH. 3E/E-3	THIS IS THE STANDARD DETAIL USED IN UNIT 2 FOR OVERLAPPING 330-660 FLEXI-BLANKET ONTO 330-1 PANELS OR HALF ROUNDS WHERE SPACE LIMITATIONS DO NOT ALLOW STANDARD OVERLAP AND IS THE PREFERRED METHOD OVER 3-5A.2 FOR NEW CONSTRUCTION IN EITHER UNIT.	11-1, 11-2	1-5, 34, 35
3-6	SH. 3F/B-1	THIS DETAIL PROVIDES INSTALLATION REQUIREMENTS FOR COVERING A SINGLE FIRE ZONE R CABLE AS A PROTRUDING ITEM FROM A THERMO-LAGGED COMMODITY.	9-1,10-1,10-2,11-1,11-2, 14-1,15-1	1-5, 37
3-6.1	SH. 3F/B-3	THIS DETAIL PROVIDES INSTALLATION REQUIREMENTS FOR COVERING MULTIPLE FIRE ZONE R CABLES AS A PROTRUDING ITEM FROM A THERMO-LAGGED COMMODITY.	11-1, 11-2	1-5, 39
4-1	SH. 4/B-1	THIS DETAIL SHOWS STANDARD COVERAGE OF 1 1/2" AND LARGER CONDUIT WITH 330-1 HALF ROUNDS. THIS IS A TESTED CONFIGURATION.	9-1,9-3,10-1,10-2,13-2, 11-1,11-2	N/A
4-1.1	SH. 4/B-3	THIS DETAIL SHOWS STANDARD COVERAGE OF CONDUITS LESS THAN 1 1/2" WITH 330-1 HALF ROUNDS. THIS IS A TESTED CONFIGURATION.	9-1,9-3,10-1,10-2,11-1	N/A
4-2 & 4-2.1	SH. 4/D-1	THESE DETAILS SHOW STANDARD COVERAGE OF CABLE BUNDLES AND FLEX CONDUIT WITH 330-660 FLEXI-BLANKET.	11-1	1-5, 45
4-3 & 4-3.1	SH. 4/B-5	THESE DETAILS SHOW COVERAGE ON CONDUITS WITH 330-1 HALF ROUNDS AT CONCRETE SURFACES WHERE THE CONCRETE SURFACE PREVENTS COMPLETE COVERAGE OF THE CONDUIT WITH 330-1 THERMO-LAG IN ACCORDANCE WITH STANDARD DETAILS.	9-1, 9-3, 10-1, 10-2	1-5, 46

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
4-4	SH. 4A/A-1	THIS DETAIL SHOWS THE TYPICAL FIRE STOPPING OF CONDUITS.	11-1, 11-2 & 14-1	1-5, 17
4-5	SH. 4A/B-3	THIS DETAIL SHOWS CONDUIT PROTECTED WITH 330-1 HALF ROUNDS PENETRATING THROUGH A BLOCKOUT. THIS IS A TESTED CONFIGURATION.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	N/A
4-6, 4-6.1, 4-7, 4-7.1	SH. 4/D-1	THESE DETAILS ARE THE SAME AS DETAILS 4-1, 4-1.1, 4-3 AND 4-3.1 RESPECTIVELY FOR COVERING CONDUITS WITH 330-1 HALF ROUNDS EXCEPT THESE DETAILS USE LARGER SIZED 330-1 HALF ROUNDS WHICH HAVE BEEN MODIFIED TO COVER THE SMALLER CONDUIT.	9-1,9-3,10-1,10-2,11-1, 11-2,13-2,14-1,15-1	1-5, 46, 52
4-8	SH. 4B/D-4	THIS DETAIL PROVIDES COVERAGE ON FLEXIBLE CONDUITS WHERE CONDUIT SUPPORT INTERFACES WITH THE STANDARD COVERAGE ON THE FLEXIBLE CONDUIT.	11-1, 11-2	1-5, 53
4-9	SH. 4B/D-4	THIS DETAIL SHOWS HOW TO COMPENSATE FOR A GAP BETWEEN THE 2 SECTIONS OF A 1/4" OVERLAY ON A 2" CONDUIT BY INSTALLING TROWEL GRADE AND STRESS GRADE IN THE GAP.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-5, 54
5-1, 5-1.1	SH. 5/B-1	THESE DETAILS SHOW STANDARD CONFIGURATIONS FOR COVERING CABLE TRAYS WITH 330-1 PANELS AND INSTALLING STRESS SKIN AND TROWEL GRADE REINFORCEMENT. THESE ARE TESTED CONFIGURATIONS.	11-1, 11-2, 11-5, 13-2, 14-1, 15-1	N/A
5-1A,5-1A.1 & 5-1A.2	SH. 5/D-1	THESE DETAILS SHOW STANDARD CONFIGURATIONS USED IN UNIT 2 FOR COVERING CABLE TRAYS WITH 330-1 PANELS. DETAILS 5-1 & 5-1.1 ARE PREFERRED FOR NEW CONSTRUCTION.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	N/A
5-2	SH. 5/D-5	THIS DETAIL SHOWS THE INSTALLATION OF TIE WIRES TO ATTACH BOTTOM THERMO-LAG 330-1 PANELS TO THE RUNGS ON LADDER BACK TRAYS.	11-1	1-5, 56

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
5-3 & 5-3.1	SH. 5A/B-2	THESE DETAILS SHOW FIRE STOPS IN CABLE TRAY USING BOTH 330-1 AND CABLE TRAY FIRE STOPS INSTALLED PER CPES-M-1061. THE CABLE TRAY FIRE STOP INSTALLED PER CPES-M-1061 HAS BEEN TESTED.	11-1, 11-2 & 14-1	1-5, 55
5-3.1, SEC. 2-2 (VAR.)	SH. 5A/C-4	THIS DETAIL PROVIDES A METHOD OF UPGRADING NEW AND EXISTING FIRE STOPS BY INSTALLING BAR STEEL AROUND THE END OF THE TRAY IN ORDER TO HOLD THE BOTTOM PANEL IN PLACE.	9-1, 10-1, 10-2, 11-1, 14-1, 15-1	1-5, 57
5-4	SH. 5B/B-1	THIS DETAIL SHOWS A CABLE TRAY PROTECTED WITH 330-1 PANELS WHICH PENETRATES THROUGH A BLOCKOUT FILLED WITH PENSEAL MATERIAL. THIS IS A TESTED CONFIGURATION.	11-1, 14-1, 15-1	1-5, 59
5-5 (OPTION II)	SH. 5B/D-1	THIS DETAIL SHOWS THE THERMO-LAG COVERAGE ON A RACEWAY BUTTING UP TO A BLOCKOUT IN A CONCRETE STRUCTURE THEN FLARING OUT ALONG THE STRUCTURE SO THAT THE PANEL EXTENDS TO THE CONCRETE WHERE IT IS HILTI BOLTED INTO THE CONCRETE.	9-1, 10-1, 10-2, 11-1, 11-4, 14-1, 15-1	1-6, 12
5-5 (OPTION III)	SH. 5B/F-1	THIS DETAIL SHOWS THE THERMO-LAG ON A RACEWAY BUTTING UP TO THE M-BOARD ON A PENSEALED BLOCKOUT WITH A THERMO-LAG TROWEL GRADE FILLET WHERE THE THERMO-LAG MEETS THE M-BOARD.	14-1, 15-1	1-6, o1
5-5.1	SH. 5B/B-4	THIS DETAIL SHOWS A METHOD FOR INSTALLING FLEXI-BLANKET ON THE AIR DROP FROM A CABLE TRAY TO A CABLE TRAY AT A BLOCKOUT. THE FLEXI-BLANKET OVERLAPS ONTO 330-1 COVERAGE ON BOTH TRAYS, IS MECHANICALLY FASTENED INTO THE 330-1 AND IS SEALED AT THE FORM SEAL/M-BOARD WITH A TROWEL GRADE.	11-1, 11-2	1-5, 77

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
5-5.2	SH. 5B/F-4	THIS SHOWS A METHOD FOR INSTALLING 330-1 PANELS ON THE AIR DROP FROM A CABLE TRAY TO A CABLE TRAY AT A BLOCKOUT. THE JOINTS ARE SCORE AND FOLD OR STITCHED AND THE REQUIREMENTS FOR STRESS SKIN AND TROWEL GRADE AT JOINTS APPLIES.	11-1, 14-1, 15-1	1-5, 78
5-6, 5-6A	SH. 5C/B-1	THESE DETAILS SHOW THE SCORE AND FOLD METHOD ON RADIAL BENDS ON TRAYS.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 63
5-7 AND 5-8	SH. 5C/F-1	THESE DETAILS SHOW CROSSBANDING AND TIE WIRE INSTALLATION FOR LONGITUDINAL JOINT STRESS SKIN BOTH AT CABLE TRAY TEES. THESE ARE TESTED CONFIGURATIONS.	11-1, 11-5, 14-1, 15-1	N/A
5-8A	SH. 5C/E-3	THIS DETAIL SHOWS TIE WIRE INSTALLATION USED ON UNIT 2. DETAIL 5-8 IS PREFERRED FOR NEW CONSTRUCTION. THIS IS A TESTED CONFIGURATION.	11-1, 11-2, 14-1, 15-1	N/A
5-9	SH. 5C/B-5	THIS DETAIL SHOWS BOTTOM PANEL INSTALLATION STITCHED TO TRAY RUNGS.	11-5, 14-1	1-5, 56
5-9A	SH. 5C/E-5	THIS DETAIL SHOWS THE INSTALLATION OF THE BOTTOM PANEL AT A CABLE TRAY TEE. IT DEMONSTRATES BUTT JOINT TIE WIRES AS WAS USED IN UNIT 2. DETAIL 5-9 IS PREFERRED FOR NEW CONSTRUCTION. THIS IS A TESTED CONFIGURATION.	14-1	N/A
5-10	SH. 5D/B-1	THIS DETAIL SHOWS STRESS SKIN UPGRADE TIE WIRE ATTACHMENT WHICH WAS USED IN UNIT 2 INSTALLATIONS. THIS IS A TESTED CONFIGURATION.	11-1, 11-5, 14-1, 15-1	N/A
5-11	SH. 5D/B-4	THIS DETAIL SHOWS STITCHING REQUIREMENTS FOR BOTTOM BUTT JOINT USED IN UNIT 2 INSTALLATIONS. THIS IS A TESTED CONFIGURATION.	11-1, 14-1, 15-1	N/A

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
5-12	SH. 5D/E-1	THIS DETAIL SHOWS HOW TO INSTALL 330-660 FLEXI-BLANKET OVER THE END OF A CABLE TRAY COVERED WITH 330-1 PANELS.	11-1, 11-2	1-5, 34
5-12.1, 5-12.2, 5-12.3 & 5-12.4	SH. 5E/B-1	THESE DETAILS SHOW THERMO-LAG TO M-BOARD AND FOAM SEAL INTERFACE.	11-1, 11-2, 14-1, 15-1, 11-4 & 11-5	1-5, 84
5-13	SH. 5E/F-1	THIS DETAIL SHOWS THE UPGRADE UTILIZING STRESS SKIN AND TIE WIRES WHEN THE PANEL ON THE BOTTOM OF A TRAY AT A TRAY SUPPORT IS NOT SUPPORTED BY THE THERMO-LAG INSTALLED ON THE SUPPORT.	11-1, 14-1, 15-1	1-5, 68
5-13.1	SH. 5E/F-3	THIS DETAIL PRESENTS AN ALTERNATE TO 5-13 USING T-LAG STRIPS SCREWED OR STAPLED INTO THE SUPPORT COVERAGE.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 85
5-13.2	SH. 5E/F-4	THIS DETAIL IS A MODIFIED 5-13.1 INSTALLED AVOIDING AN INTERFERENCE.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 86
5-14	SH. 5F/B-1	THIS DETAIL SHOWS A SPLICE PLATE COVER REINFORCEMENT. THIS IS A TESTED CONFIGURATION.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	N/A
5-15, 5-15.1 & 5-15.2	SH. 5F/E-1	THESE DETAILS SHOW STANDARD BANDING FOR CABLE TRAYS. THIS IS A TESTED CONFIGURATION.	11-1, 14-1, 15-1	N/A
5-16	SH. 5G/B-1	THIS DETAIL SHOWS HOW TO INSTALL LONGITUDINAL STRESS SKIN AND TROWEL GRADE ON TRAYS WHERE A PROTRUDING ITEM INTERFERES WITH STANDARD REINFORCEMENT.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 71
5-17	SH. 5G/E-1	THIS DETAIL SHOWS THE INSTALLATION OF LONGITUDINAL STRESS SKIN ON CABLE TRAYS WHERE A GROUND CABLE PROTRUDES FROM THE SIDE OF THE TRAY.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 65
5-18 & 5-18.1	SH. 5G/A-4	THESE DETAILS SHOW HOW TO REINFORCE GROUND CABLE COVERAGE INTERFERENCE WHERE IT EXITS A 330-1 OR 330-660 ENVELOPE. THE UPGRADE IS A TESTED CONFIGURATION.	11-2	N/A

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
5-19	SH. 5G/F-4	THIS DETAIL SHOWS HOW TO INSTALL LONGITUDINAL STRESS SKIN AND TROWEL GRADE ON TRAYS WHERE AIR DROPS INTERFERE WITH STANDARD REINFORCEMENT.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 71
6-1	SH. 6/B-1	THIS DETAIL IS THE TESTED CONFIGURATION FOR CONDUIT LATERAL BENDS.	9-1, 9-3, 10-1, 10-2	N/A
6-2, 6-3.1 & 6-3.2	SH. 6/B-4	SURFACE MOUNTED SUPPORTS FOR CONDUIT ≥ 3" DIAMETER.	9-1, 10-1, 10-2	1-5, 72
7-0	SH. 7/A-1	THIS DETAIL CONSISTS OF CHARTS TO ENSURE THAT THE PROPER STAPLE LENGTH IS INSTALLED.	11-1, 11-2	1-5, 62 & 87
7-1	SH. 7/C-1	FLEXI-BLANKET AT THROUGH-WALL-SLEEVE INTERFACE.	11-1, 1-2, 14-1, 15-1	1-5, 60, 62, 87
7-2, 7-2.1 & 7-2.2	SH. 7/F-1	RIGID CONDUIT TO FLEX CONDUIT.	11-1, 11-2	1-5, 45, 64, 75, & 87
7-3	SH. 7/D-3	CONTAINMENT PENETRATION ASSEMBLIES.	11-1, 11-2	1-5, 60, 62, 66
7-4	SH. 7/F-3	SUPPORT FRAME FOR CONTAINMENT PENETRATION ASSEMBLIES AND THROUGH WALL SLEEVES.	11-1, 11-2	1-5, 60, 62
7-5	SH. 7A/A-1	THERMO-LAG COVERAGE OF FIRE DETECTOR'S AS PROTRUDING ITEMS.	1-2, 11-1, 11-2, 11-4, 11-5, 14-1, 15-1	1-5, 67
7-6	SH. 7A/C-1	THERMO-LAG 330-1 INSTALLATION ON FLEX CONDUIT THROUGH A BLOCKOUT.	11-1, 11-2, 13-2	1-6, 69
7-7, 7-7.1	SH. 7A/E-1	330-660 FLEXI-BLANKET DETAIL AT JUNCTION OF FLEX-CONDUIT AND RIGID CONDUIT LESS THAN 1 1/2" WHERE, DUE TO SPACE LIMITATIONS, INDIVIDUAL COMPLETE BUNDLES CANNOT BE ACHIEVED.	11-1, 11-2	1-6, 70

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
7-8	SH. 7A/E-4	THIS DETAIL SHOWS FLEXI-BLANKET INSTALLED ON A FLEX CONDUIT WHERE IT BUTTS TO A CONCRETE WALL. THE COVERAGE IS INSTALLED ON THE FLEX CONDUIT TO THE REQUIRED THICKNESS THEN ALL VOIDS ARE FILLED WITH TROWEL GRADE AND A FILLET IS PROVIDED AT THE FLEXI-BLANKET/CONCRETE INTERFACE.	11-1, 11-2	1-5, 88
8-2 (OPTION 1)	SH. 8/A-1	CABLE BUNDLE WRAPPING WHERE SINGLE BUNDLE SPLITS INTO 2 BUNDLES.	11-1, 11-2, 15-2	1-5, 51
8-2 (OPTION 2)	SH. 8/D-1	WRAPPING CABLE BUNDLE WHICH COMES OUT OF THE SIDE OF THE MAIN BUNDLE. THIS IS A TESTED CONFIGURATION.	11-1, 11-2, 15-2	N/A
8-3	SH. 8/F-1	CABLE TRAY "V"-RIB PANEL TO FLAT PANEL TRANSITION.	11-2, 11-4, 11-5, 10-2, 13-2, 14-1, 15-1	1-5, 58
8-4	SH. 8/C-5	ESSENTIAL FLEXIBLE CONDUITS WITHIN A COMMON ENVELOPE WHICH SPLIT INTO 2 SEPARATE ENVELOPES.	11-1, 11-2, 15-2	1-5, 45, 51
9-1	SH. 9/A-1	TYPICAL THERMO-LAG COVERAGE DETAIL FOR SWAY STRUTS	9-1, 11-1, 14-1, 1-2, 15-1	1-6, 47
9-2	SH. 9/D-1	TYPICAL DETAIL FOR VERTICAL CABLE TRAY TO CONCRETE	11-1, 11-2, 11-4, 11-5, 13-2, 14-1	1-6, 48
9-3	SH. 9/F-1	TYPICAL DETAIL USING FLEXI-BLANKET FOR CABLE IN TRAY WHERE AN INTERFERENCE PREVENTS STANDARD TRAY COVERAGE.	11-1, 14-1, 15-1, 15-2, 11-2, 11-4, 11-5, 13-2	1-5, 49
10-3, 10-4, 10-5, & 10-6	SH. 10/D-1	SHIMMING DETAILS FOR CABLE COVERAGE.	11-1,11-2,11-4,11-5,13-2,14-1,15-1	1-6, 44
11-1	SH. 11/A-1	THERMO-LAG PANELS ON CABLE TRAY INTERFACE WITH M-BOARD AT PENETRATION SEAL WHERE THE CABLE TRAY GOES THROUGH THE PENETRATION.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-7

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
11-2, 11-2.1	SH. 11/A-4	THERMO-LAG PREFAB HALF-ROUNDS WHERE CLEARANCE BETWEEN CONDUITS IS INADEQUATE TO FIT HALF ROUND ON BOTH CONDUITS - HALF ROUND ON ONE OR OTHER IS TRIMMED BACK AND SEALED BETWEEN THE TWO CONDUITS AS REQUIRED FOR JOINTS.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 13-2	1-6, 8
11-3, 11-3.1	SH. 11/C-1	TYPICAL DETAIL OF BOTTOM TRAY BOARD AND SIDE RAIL BOARD INTERFACE. THIS IS A TESTED CONFIGURATION.	11-2, 11-4, 11-5, 13-2, 14-1, 15-1	N/A
11-4, 11-4.1	SH. 11/C-4	TYPICAL DETAIL OF BOTTOM TRAY BOARD AND SIDE RAIL BOARD INTERFACE USING SCORE AND FOLD TECHNIQUE.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-6, 9
11-5	SH. 11/D-1	TYPICAL LADDER TRAY BARRIER ASSEMBLY. THIS IS A TESTED CONFIGURATION EXCEPT FOR THE SCORE AND FOLD JOINT.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-6, 9
11-6	SH. 11/D-4	TRAY PROTECTION WHERE TRAY SIDE RAIL IS TOO CLOSE TO CONCRETF AND THEREFORE MUST INTERFACE AGAINST CONCRETE WALL.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-6, 10
11-7	SH. 11/D-6	TROWEL GRADE FILLET WHERE CLEARANCE WILL NOT ALLOW FOR THERMO-LAG PANEL FLARE-OUT.	14-1, 11-2, 11-4, 11-5, 13-2	1-7, 10
11-7.1	SH. 11/F-5	FLEXI-BLANKET TO M-BOARD/CONCRETE INTERFACE WITH FILLET.	11-1, 11-2	1-5, 60
11-8	SH. 11/F-1	THIS DETAIL SHOWS THE INSTALLATION OF STRESS SKIN AND TROWEL GRADE AT STEEL INTERFERENCES BY EXTENDING THE STRESS SKIN AND TROWEL GRADE OUT ONTO THE STEEL INTERFERENCE.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 76
12-1, 12-1.1	SH. 12/C-1	RACEWAY SUPPORT TO EMBEDDED PLATE.	9-1, 10-1, 10-2, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-6, 13
12-2	SH. 12/B-4	CONDUIT PENETRATING CABLE TRAY.	11-1, 14-1, 10-2, 15-1, 11-2, 11-4, 11-5, 13-2	1-6, 29

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
12-2.1	SH. 12/D-4	THIS CONFIGURATION IS A MINOR DERIVATIVE OF DETAIL 12-2 EXCEPT THAT THE CONDUIT ENTERING THE BOX EXTENSION OF A HORIZONTAL TRAY ENVELOPE IS FLEX IN LIEU OF RIGID. THE USE OF 330-660 ENTERING A HORIZONTAL TRAY ENVELOPE HAS QUALIFIED VIA SCHEME 11-1. THE UPGRADE TECHNIQUES UTILIZED TO REINFORCE THE INTERFACE BETWEEN 330-1 PANELS AND FLEXI-BLANKET DURING THE TEST (330-660 COLLAR FLARED OUT ON THE 330-1 PANEL) IS REQUIRED BY THE DETAIL. ALL OTHER ASPECTS OF DETAIL 12-2 ARE CONSISTENT, INCLUDING REINFORCEMENT OF 330-1 PANEL JOINTS WITH QUALIFIED TECHNIQUES (STITCHING/STRESS SKIN). THE INCREASED AIR VOLUME WITHIN THE ENVELOPE BENEFITS THE THERMAL PERFORMANCE OF THE CONFIGURATION. THEREFORE, THE CONFIGURATION WILL PROVIDE AN EQUIVALENT 1-HOUR RATING.	10-2, 11-1, 14-1 15-1, 11-2, 11-4, 11-5, 1	1-5, 79
12-3	SH. 12/F-4	SIL-TEMP COVERAGE ON CABLES IN TRAYS COVERED WITH THERMO-LAG.	14-1	1-5, 82
13-1	SH. 13/A-1	TRAY CONCRETE BEAM INTERFERENCE.	11-2,11-4,11-5,13-2,14-1, 15-1	1-5, 14
13-2	SH. 13/D-1	CABLE TRAY TRANSITION INTO BANK OF SLEEVES WITH PROTRUDING AIR DROPS AND EXISTING CONDUIT ENTERING ENVELOPE.	14-1, 11-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-6, 16
13-3	SH. 13/F-1	THERMO-LAG COVERAGE FOR TYPICAL INTERFERENCES.	9-1,14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-6, 18
13-4	SH. 13/B-2	TYPICAL INTERFERENCE.	14-1, 11-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-6, 21
13-5	SH. 13/B-5	HVAC INTERFERENCE WITH CABLE TRAY.	11-1, 11-2	1-5, 23
13-6	SH. 13/E-4	COVERAGE DETAIL FOR A NON-ESSENTIAL TRAY FOR THE 9" RULE.	14-1, 11-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 24

TYPICAL DETAIL NO.	DRAWINGS/ LOCATION	DESCRIPTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES G16-G26)
14-1	SH. 14/A-1	THERMO-LAG 5" RULE.	14-1, 11-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 25
14-2	SH. 14/A-3	TYPICAL BOX DETAIL FOR ITEMS ENTERING RACEWAY.	10-2, 14-1, 11-1, 11-2, 11-4, 11-5,13-2	1-5, 27
14-3	SH. 14/D-1	TYPICAL CONDUIT/PIPE AND TRAY INTERFERENCE.	9-1, 10-2, 14-1, 11-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 30
14-4	SH. 14/F-1	TYPICAL THROUGH WALL SLEEVE THERMO-LAG.	14-1, 11-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 32
14-5	SH. 14/C-4	THIS DETAIL DEPICTS A TYPICAL BOX ARRANGEMENT ENCOMPASSING MULTIPLE STACKED CABLE TRAYS FLARED AND ANCHORED TO CONCRETE STRUCTURE. THIS IS A TESTED CONFIGURATION.	11-4	N/A
15-1	SH. 15/B-1	TYPICAL BOX DETAIL TRAY/TRAY.	11-2, 11-4, 11-5, 13-2 14-1, 11-1, 15-1	1-5, 33
15-2	SH. 15/B-4	TYPICAL BOX DETAIL TRAY/CONDUIT.	14-1, 11-1, 9-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 32
15-3	SH. 15/E-1	THIS DETAIL CONSISTS OF A CHART USED FOR GUIDANCE IN BUNDLING CABLES FOR AMPACITY CONCERNS AND IS NOT A THERMO-LAG CONSTRUCTION DETAIL.	N/A	N/A
16-1	SH. 16/A-1	ATTACHMENT TO STRUCTURAL STEEL.	N/A	5, 36 (UNIT 2 ONLY)
16-2	SH. 16/C-1	ATTACHMENT TO STRUCTURAL STEEL.	N/A	5, 36 (UNIT 2 ONLY)
16-3	SH. 16/F-1	TUBE STEEL WELDED TO EMBEDDED PLATE.	10-1,10-2	5, 36, 38 (UNIT 2 ONLY)
16-4	SH. 16/D-4	ANGLE BRACE PLATE.	N/A	5, 36 (UNIT 2 ONLY)
16-5, 16-5.1	SH. 16/D-4	CAPS FOR HOLLOW MEMBERS.	10-1, 10-2	5, 36, 41 (UNIT 2 ONLY)
16-6, 16-7	SH. 16/F-4	TYPICAL STEEL PROTECTION DETAIL WITH CONDUIT INTERFERENCE.	9-1,1-2,11-1,11-2,11-4,11-5, 12-1,12-2,13-1,13-2 & 14-1	5, 36, 42 (UNIT 2 ONLY)

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1.	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2.	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4.	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
5.	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6.	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATION EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).	GENERIC
7.	THE USE OF 330-1 V-GROOVE PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEMES 11-1, 11-2, 11-4, 11-5, 13-2, 14-1 AND 15-1. ALL CABLE TRAY JOINTS (INCLUDING THOSE TO CONSTRUCT FLARE OUT) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. THE 330-1 TROWEL GRADE BETWEEN M-BOARD AND FLARE-OUT OR FILLET WHERE THERE IS NO FLARE OUT, PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE AGAINST THE M-BOARD. THE CONFIGURATION IS ACCEPTABLE FOR THERMAL CONSIDERATIONS SINCE THE TRAY BOX CUT AND FOAM SEAL ARE BOTH QUALIFIED FOR A MINIMUM OF 1 HOUR FIRE EXPOSURE.	
8.	WITH INTERFACE BETWEEN THE TWO CONDUITS TREATED AS A JOINT, ADEQUATE THICKNESS IS PROVIDED TO MAINTAIN EQUIVALENT PROTECTION AS QUALIFIED BY FIRE TESTS 9-1, 9-3, 10-1, 10-2, 11-1 AND 11.2. NOTE 6 WOULD APPLY.	103020/3
9.	THIS SCORE AND FOLD TECHNIQUE WOULD PROVIDE A BETTER LEVEL OF PROTECTION THAN TESTED CONFIGURATION DUE TO THE CONTINUOUS STRESS SKIN ASSISTING IN HOLDING THE JOINT TOGETHER WHILE MAINTAINING 1/2" THICKNESS. NOTE 6 WOULD APPLY. THE SCORE AND FOLD METHOD WAS TESTED ON ALL OF THE CABLE TRAY TESTS ON TRAY RADIAL BEND COVERAGE.	
10.	THE USE OF 330-1 V-GROOVE PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEMES 1-2, 11-1, 11-2, 11-4, 11-5 13-2, 14-1 AND 15-1. ALL CABLE TRAY JOINTS (INCLUDING THOSE TO CONSTRUCT THE FLAREOUT) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY PREVIOUS LISTED TESTS. THE 330-1 TROWEL GRADE BETWEEN CONCRETE AND FLARE-OUT OR FILLET WHERE THERE IS NO FLAREOUT, PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE AGAINST THE CONCRETE. THE CONFIGURATION IS ACCEPTABLE FOR THERMAL CONSIDERATIONS SINCE ONE COMPLETE SIDE OF THE TRAY ENVELOPE IS EXTENDED TO THE CONCRETE WALL AND WILL NOT BE DIRECTLY EXPOSED TO A FIRE. ALSO THE CONCRETE WALL ACTS AS A HEAT SINK. THEREFORE, THIS CONFIGURATION IS EQUIVALENT OR BETTER THAN TESTED.	
11.	THE COVERAGE OF THE PROTRUDING STEEL WITH THERMO-LAG IS ACCEPTABLE BECAUSE IT IS CONSISTENT WITH THE METHODS UTILIZED TO COVER THE AIR DROPS IN TEST SCHEMES 11-1 AND 11-2. THE OVERLAPS OF THE FLEXI-BLANKET AND THE BANDING ARE IDENTICAL. ALSO TEST SCHEMES 11-1 AND 11-2 HAD FLEXI-BLANKET INSTALLED DIRECTLY ON THE ESSENTIAL CABLES WHEREAS THIS DETAIL HAS FLEXI-BLANKET INSTALLED ON A PROTRUDING ITEM NOT ON AN ESSENTIAL COMMODITY.	

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
12.	THE USE OF HILTI BOLTS/SELF TAPPING SCREWS TO PROVIDE A POSITIVE MECHANICAL ATTACHMENT TO THE CONCRETE/METAL PROVIDES JOINT STRENGTH AT THIS POINT WHICH IS CONSISTENT WITH IF NOT BETTER THAN THE THERMO-LAG JOINTS WHICH HAVE BEEN SUCCESSFULLY TESTED IN ALL OF THE TEST ASSEMBLIES. HILTI BOLTS WERE SPECIFICALLY TESTED IN TEST SCHEME 11-4. THE SELF TAPPING SCREWS WOULD BE EXPECTED TO PROVIDE THE SAME MECHANICAL ATTACHMENT PROVIDED BY THE HILTI BOLTS. IN ADDITION, THE CONCRETE/METAL STRUCTURES WILL ACT AS A HEAT SINK WHICH WILL PROVIDE ADDITIONAL PROTECTION AGAINST HEAT BEING DRIVEN INTO THE PROTECTED ENVELOPE.	103921/0 103476/1
13.	THIS CONFIGURATION IS JUSTIFIED BY EXISTING TEST OF JUNCTION BOX WITH TUBE STEEL SUPPORTS PROTECTED FOR 9" ONLY. ALTHOUGH THE PROTRUDING ITEM IN THIS CASE IS A TUBE STEEL SUPPORT MOUNTED TO AN EMBEDDED PLATE, THE TUBE STEEL AND EMBEDDED PLATE IS COVERED FOR 9" AND PROVIDES A BETTER HEAT SINK TO REDUCE HEAT PATH TO THE RACEWAY THAN THE TESTED CONFIGURATION.	103063/0
14.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES, HAS BEEN QUALIFIED BY LISTED TEST. BY BUTTING THE PROTECTIVE ENVELOPE TO THE CONCRETE BEAM, THE BEAM WILL LIMIT EXPOSURE FROM THAT SIDE AND ACT AS A HEAT SINK. ALL CABLE TRAY JOINTS (INCLUDING THOSE THAT BOX TO THE BEAM) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS.	
15.	THIS TYPICAL DETAIL IS FOR COVERING WEEP HOLES IN TUBE STEEL WITH THERMO-LAG WHICH ARE LOCATED OUTSIDE OF THE 9"-11" THERMO-LAG PROTRUDING ITEM COVERAGE IN ORDER TO PRECLUDE HEAT FROM BEING DRIVEN INTO THE TUBE STEEL THROUGH THE HOLE. THE ADHESION OF THE PANEL TO THE STEEL USING TROWEL GRADE AND BANDS WILL COVER THE HOLE IN A MANNER CONSISTENT WITH THE TESTED CONFIGURATIONS FOR PROTRUDING ITEM COVERAGE ON STEEL.	102222/1
16.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY LISTED TEST. ALL CABLE TRAY JOINTS (INCLUDING THOSE TO BOX AROUND SLEEVE BANK) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TEST. THE BASE PLATE AND THERMO-LAG PANEL INTERFACE BEING COVERED WITH TROWEL GRADE PROVIDES A POSITIVE SEAL. PROTRUDING ITEM PROTECTION FOR AIR DROPS AND CONDUITS ARE QUALIFIED BY SCHEME 11-1. THE CONFIGURATION IS ACCEPTABLE FOR THERMAL CONSIDERATIONS SINCE THE CONCRETE AND BASE PLATE WILL ACT AS A HEAT SINK AND REDUCE THE EXPOSURE OF HEAT INTO THE PROTECTED ENVELOPE.	104121/0
17.	THE USE OF 330-1 TROWEL GRADE AS A FIRE STOP WAS TESTED IN SCHEMES 4, 11-1 and 11-2. THE USE OF PENETRATION SEAL FIRE STOPS HAS BEEN TESTED AND DOCUMENTED IN THE PENETRATION SEAL PROGRAM. ALSO ELASTOMER WAS TESTED AS A FIRE STOP ON TRAY CONFIGURATIONS IN SCHEMES 11-1, 11-2, 12-2 AND 14-1.	100820/0 103921/0
18.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS AND HALF-ROUND PRE-SHAPED PIECES FOR CONDUITS ARE QUALIFIED BY LISTED TEST. ALL CABLE TRAY JOINTS (INCLUDING WHERE HALF-ROUND PIECES AROUND TYPICAL INTERFERENCES CREATE LONGITUDINAL JOINTS) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TEST. SINCE CRITICAL PARAMETERS OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO QUALIFIED TESTS, THIS IS AN ACCEPTABLE CONFIGURATION.	

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
19.	THE JUNCTION BOX INSTALLATION IS THE STANDARD CONFIGURATION WHICH WAS TESTED IN SCHEME 10-1. THE USE OF ANGLE IRON OR CLIPS MOUNTED TO THE STRUCTURE TO SERVE AS ATTACHMENT POINTS FOR THE BANDING IS AN ACCEPTABLE DEVIATION FROM THE STANDARD (TESTED) CONFIGURATION SINCE THE METHOD OF ATTACHMENT SERVES THE SAME FUNCTION IN SECURING THE OUTER PANELS.	103020/0 103634/2
20.	LEFT BLANK	
21.	CABLE TRAYS OF VARIOUS SIZES USING V-GROOVED FLAT BOARD HAVE BEEN QUALIFIED BY LISTED TESTS. ALL CABLE TRAY JOINTS ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. FOR THERMAL CONSIDERATIONS, THE CORNER OR SIDE OF THE TRAY WHERE THE INTERFERENCE IS LOCATED HAS BOTH EXTERNAL 330-660 FLEXI-BLANKET WITH TROWEL GRADE MATERIAL AND 330-1 FLAT PANELS ON THE INSIDE OF THE CABLE TRAY SIDE RAIL. THE COMBINATION OF THESE TWO PROVIDE ENHANCED PROTECTION IN THE AREA WHERE THE OUTER V-GROOVED BOARD THICKNESS IS REDUCED. IN ADDITION THE INTERFERENCES WILL PROVIDE SHIELDING AND AN ADDITIONAL HEAT SINK IN THE AREA OF CONCERN. THE COMBINATION OF THESE FEATURES ALONG WITH TIE WIRES AND BANDING AS SHOWN WILL PROVIDE EQUIVALENT OR BETTER PROTECTION OF THE ENVELOPE THAN TESTED CONFIGURATIONS.	
22.	LEFT BLANK	
23.	TWO LAYERS OF FLEXI-BLANKET IS CONSISTENT WITH QUALIFIED PROTECTION FOR LARGE AIR DROPS. IN THIS CASE THE TRAY PROVIDES MORE THERMAL MASS AND A GREATER AIR SPACE THAN AIR DROPS. IN ADDITION THE HVAC INTERFERENCE PROVIDES SOME DEGREE OF SHIELDING AND HEAT SINK TO ONE SIDE OF THE PROTECTED ENVELOPE. THIS APPLICATION IS EQUIVALENT TO FLEXI-BLANKET APPLICATIONS QUALIFIED IN SCHEMES 11-1 AND 11-2.	
24.	THIS CONFIGURATION IS JUSTIFIED BY EXISTING TEST OF CABLE TRAYS WITH SUPPORTS PROTECTED FOR 9" ONLY. ALTHOUGH THE PROTRUDING ITEM IN THIS CASE IS A TRAY SUPPORT AND A NON-ESSENTIAL TRAY, THE COVERAGE PROVIDED ONTO EXPOSED TRAY SURFACES (SIDE, PARTIAL TOP AND BOTTOM) PROVIDE ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH.	103548/0
25.	EXISTING LISTED TESTS JUSTIFY CABLE TRAYS WITH SUPPORTS PROTECTED FOR 9". IN THIS CASE PROTECTION OF THE SUPPORTS IS ONLY PROVIDED FOR 5" MINIMUM. THIS IS JUSTIFIED BY ENGINEERING CALCULATION ME-CA-0000-2062 WHICH ALLOWS USE OF THE "5 INCH RULE" WHERE CONFIGURATIONS MEET ESTABLISHED MINIMUM CRITERIA SUCH AS A MINIMUM PERCENT TRAY FILL TO ESTABLISH EQUIVALENT PROTECTION TO REDUCE HEAT PROPAGATION INTO THE PROTECTED ENVELOPE.	
26.	ALL ASPECTS OF THIS AIR DROP CONFIGURATION HAVE BEEN TESTED IN SCHEMES 11-1 AND 11-2 EXCEPT FOR THE ATTACHMENT OF THE 330-660 FLEXI-BLANKET TO THE TWS. THE INTERFACE OF THE 330-660 AROUND EMBEDDED SLEEVES HAS BEEN SECURED WITH BANDING AROUND THE EMBEDDED SLEEVES FOR MECHANICAL ATTACHMENT AND LARGE "FILLET WELD" BUILDUP OF TROWEL GRADE 330-660 MATERIAL FOR THERMAL PROTECTION. THE MATERIAL THICKNESSES AND APPLICATIONS HAVE BEEN BOUNDED BY TEST. SEE ACCEPTANCE BASIS FOR DETAIL 5-3 FOR FIRE STOP AND 7-1 FOR ATTACHMENT TO TWS.	100820/0 104121/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
27.	THE USE OF 330-1 V-GROOVED PANELS TO PROTECT VARIOUS SIZES OF CABLE TRAYS HAS BEEN QUALIFIED BY LISTED TESTS. THE USE OF 330-1 FLAT BOARD BOX CONFIGURATIONS AROUND LBD FITTINGS AND JUNCTION BOXES IS ALSO QUALIFIED BY LISTED TESTS. WITH THE USE OF JOINT REINFORCEMENT TECHNIQUES FOR THE CABLE TRAY AND BOX DETAIL AS QUALIFIED IN LISTED TESTS, THE CRITICAL ATTRIBUTES OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO TESTED CONFIGURATIONS. BOX ELEVATION IS SUCH THAT CABLES IN THE TRAY DO NOT CONTACT THE BACK OF THERMO-LAG PANEL. IN ADDITION, ITEMS SUCH AS A PIPE HANGER WOULD PROVIDE SOME DEGREE OF SHIELDING AND HEAT SINK. THEREFORE THIS DETAIL IS ACCEPTABLE.	
28.	THE COVERAGE OF THE AIR DROP CABLES WITH FLEXI-BLANKET HAS BEEN TESTED IN SCHEMES 11-1 AND 11-2. THE BOX DESIGNS AT THE TRAY INTERFACES ARE UPGRADED WITH STRESS SKIN AND TROWEL GRADE. THE FIRE STOPPING OF THE NON-ESSENTIAL CABLE WITHIN THE BOX STRUCTURE IS CONSISTENT WITH TESTED CONFIGURATIONS AND THE OVERLAP OF THE 330-660 FLEXI-BLANKET ONTO THE CONDUIT IS CONSISTENT WITH THE TESTED CONFIGURATION. THIS CONFIGURATION PROVIDES COVERAGE WHICH IS CONSISTENT WITH THE COVERAGE PROVIDED BY TESTED CONFIGURATIONS.	
29.	THE USE OF 330-1 V-GROOVED PANELS TO PROTECT VARIOUS SIZES OF CABLE TRAYS HAS BEEN QUALIFIED BY LISTED TESTS. THE USE OF 330-1 FLAT BOARD BOX CONFIGURATIONS AROUND LBD FITTINGS AND JUNCTION BOXES IS ALSO QUALIFIED BY EXISTING TESTS. PROTECTION OF A PROTRUDING ITEM SUCH AS CONDUIT IS ALSO QUALIFIED BY EXISTING TEST. WITH THE USE OF JOINT REINFORCEMENT TECHNIQUES FOR THE CABLE TRAY AND BOX DETAIL AS QUALIFIED IN LISTED TEST, THE CRITICAL ATTRIBUTES OF THERMAL MASS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO TESTED CONFIGURATIONS. BOX DIMENSION ARE SIZED SUCH THAT CABLES DO NOT TOUCH THE BACK OF THERMO-LAG PANELS. THEREFORE THIS DETAIL IS ACCEPTABLE.	103844/0
30.	THE USE OF 330-1 FLAT BOARD BOX CONFIGURATIONS ARE QUALIFIED BY EXISTING LISTED TESTS. THE USE OF CONDUIT HALF ROUND PREFABRICATED PIECES ARE ALSO QUALIFIED BY LISTED TESTS. THE USE OF SHIMS ADDS ADDITIONAL MATERIAL AND AIR VOLUME BENEFITS INSIDE THE ENCLOSURE. WITH THE USE OF JOINT REINFORCEMENT TECHNIQUES QUALIFIED BY EXISTING TESTS, THE PROTECTION OF CONDUIT/PIPE INTERFERENCES WITH CONDUIT HALF ROUND PREFABRICATED PIECES AND FLAT BOARDS WITH SHIMS CONSTITUTE EQUIVALENT OR BETTER PROTECTION SINCE CRITICAL ATTRIBUTES OF THERMAL MASS AND STRUCTURAL INTEGRITY ARE EQUIVALENT OR BETTER THAN TESTED CONFIGURATIONS.	
31.	THIS IS THE TESTED CONFIGURATION EXCEPT THAT INSTEAD OF BUTTING 330-1 PANELS TO THE AIR DROP, STRESS SKIN WITH TROWEL GRADE BUILD UP IS INSTALLED. THIS IS THE SAME CONFIGURATION USED FOR STRESS SKIN AND TROWEL BUILD UP AT JOINTS THAT WAS TESTED IN SCHEMES 9-1, 10-1, 10-2, 11-1 AND 14-1. THIS CONFIGURATION PROVIDES COVERAGE WHICH IS CONSISTENT WITH THE COVERAGE PROVIDED BY TESTED CONFIGURATIONS.	103020/3 102933/0 100820/0
32.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES, HAS BEEN QUALIFIED BY EXISTING LISTED TESTS. ALL CABLE TRAY JOINTS (INCLUDING THOSE WHICH TRANSITION FROM THE END OF THE TRAY TO TWS) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. THE CONCRETE WALL AND THERMO-LAG PANEL INTERFACE HAVING A TROWEL GRADE FILLET PROVIDES A POSITIVE SEAL TO THE PROTECTED ENVELOPE. BANDS TO SUPPORT TRANSITION PANELS WILL ADD STRUCTURAL SUPPORT TO THE ENVELOPE. THE CONCRETE WALL WILL ACT AS A HEAT SINK TO HELP REDUCE EXPOSURE TO THE WALL/PANEL INTERFACE. SINCE CRITICAL PARAMETERS OF THERMAL AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO TESTED CONFIGURATIONS, THIS DETAIL IS ACCEPTABLE.	104121/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
33.	THE USE OF 330-1 V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY TESTS AS LISTED ON THE MATRIX. ALL JOINTS ON THIS CONFIGURATION (INCLUDING THE BOX TRANSITION FROM TRAY TO TRAY) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. STRUCTURALLY, THE TRAY TO TRAY TRANSITION CREATES NO GREATER STRUCTURAL CHALLENGE THAN LARGE "T" CONFIGURATIONS ALREADY QUALIFIED. THEREFORE CRITICAL PARAMETERS OF STRUCTURAL INTEGRITY, MATERIAL THICKNESS AND THERMAL CONSIDERATIONS ARE EQUIVALENT TO QUALIFIED TESTS.	
34.	THE COVERAGE OF 330-660 FLEXI-BLANKET ONTO CONDUITS IS A TESTED CONFIGURATION. THE OVERLAP OF 330-660 ONTO CABLE TRAYS UTILIZES THE SAME INSTALLATION TECHNIQUES (STAPLING, OVERLAP DISTANCE, ETC) USED FOR CONDUITS AND JUST MODIFIES THEM TO ALLOW FOR THE CONFIGURATION DIFFERENCES BETWEEN CONDUITS AND CABLE TRAYS.	103020/3 104121/0
35.	THE COVERAGE OF 330-660 FLEXI-BLANKET ONTO CONDUITS AND CABLE TRAYS IS THE SAME EXCEPT THE OVERLAP REQUIREMENTS HAVE BEEN REDUCED TO ALLOW FOR CONGESTED AREAS WHERE SPACE DOES NOT PERMIT THE USE OF DETAIL 3-5.2. THE MINIMUM OVERLAP ALLOWED ON THIS DETAIL, ALTHOUGH NOT IDEAL, IS STILL SUFFICIENT WHEN COUPLED WITH THE STAPLING AND TROWEL GRADE BETWEEN THE FLEXI-BLANKET LAYERS TO ENSURE THAT THE CONFIGURATION WILL PROVIDE ACCEPTABLE MECHANICAL ATTACHMENT TO THE 330-1 MATERIAL WHICH MAKES THE ARRANGEMENT CONSISTENT WITH THE TESTED CONFIGURATION.	103020/3 104121/0
36.	THIS DETAIL IS SUPPORTED BY ENGINEERING EVALUATION, ER-ME-067.	
37.	THIS DETAIL HAS THE OPTION OF COVERING THE METAL JACKETED FIRE ZONE R CABLE AS A PROTRUDING ITEM PER THE 9" RULE WHICH WAS FIRE TESTED IN ALL OF THE SCHEMES OR FIRE STOPPED AS IN DETAIL 3-4 WHICH WAS FIRE TESTED IN SCHEMES 11-1 AND 11-2. THIS CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	104121/0
38.	APPLICATION OF THERMO-LAG ON TUBE STEEL AND OVER STEEL PLATE IS QUALIFIED ON SCHEME 9-1 TO ESTABLISH THE 9" RULE. THE ABILITY OF THIS CONFIGURATION TO MITIGATE HEAT PROPAGATION INTO THE PROTECTED ENVELOPE WHILE MAINTAINING STRUCTURAL INTEGRITY SUPPORTS THE APPLICATION OF THERMO-LAG TO PROTECT STRUCTURAL STEEL.	
39.	THIS DETAIL PROVIDES COVERAGE FOR FIRE ZONE R CABLES WHICH PROTRUDE FROM A THERMO-LAGGED COMMODITY WHICH IS IDENTICAL TO THE REQUIREMENTS FOR COVERING PROTRUDING CABLES IN DETAIL 3-4. THIS CONFIGURATION IS CONSISTENT WITH THE TESTED CONFIGURATION.	104121/0
40.	THE DETAIL ALLOWS THE TESTED JUNCTION BOX CONFIGURATION TO BE MODIFIED BY EXTENDING THE "V" RIB PANELS TO COVER ANGLE IRON USED TO SUPPORT THE JUNCTION BOX. THE CONFIGURATION HAS MORE ENCLOSED AIR VOLUME THAN A TYPICAL J BOX ENVELOPE WHICH WILL RESULT IN LOWER INTERNAL TEMPERATURES. THEREFORE SINCE STRUCTURAL INTEGRITY AND THERMAL CONCERNS ARE ADDRESSED, THE CONFIGURATION IS ACCEPTABLE.	104060/0
41.	THIS TYPICAL DETAIL IS FOR COVERING THE OPEN END OF TUBE STEEL WHEN IT IS LOCATED OUTSIDE OF THE " 9 INCH RULE" TO MITIGATE HEAT FROM BEING DRIVEN INTO THE TUBE STEEL. THE STRUCTURAL INTEGRITY OF THE SCORE AND FOLD THERMO-LAG FLAT PANELS WITH TROWEL GRADE 330-1 AND S.S. BANDING IS EQUIVALENT TO THE APPLICATION OF THERMO-LAG TO MEET THE 9" RULE ON SCHEME 10-1 AND 10-2.	

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
42.	THE USE OF 330-1 FLAT PANELS WITH PARTIAL PREFABRICATED CONDUIT HALF ROUNDS AND TROWEL GRADE JOINT MAINTAINS CONSISTENCY TO THE CRITICAL ATTRIBUTE OF MATERIAL THICKNESS WITH PROTECTED STEEL FOR THE 9" RULE.	
43.	THIS DETAIL ADDRESSES COVERING FLEXIBLE CONDUIT EXITING A JUNCTION BOX WITH 330-1 THERMO-LAG HALF ROUNDS 4" TO 8" OUT FROM BOX. THIS MAKES IT POSSIBLE FOR 330-660 FLEXI-BLANKET TO BE INSTALLED ONTO THE CONDUIT IN ACCORDANCE WITH THE TESTED CONFIGURATION (SCHEMES 11-1 AND 11-2). THE INSTALLATION OF 330-1 HALF ROUNDS UP TO THE JUNCTION BOX IS IN ACCORDANCE WITH TESTED CONFIGURATIONS SCHEMES 10-1 AND 10-2. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	104060/0
44.	THE CABLE TRAY QUALIFICATION SCHEMES LISTED DID NOT USE SHIMS. HOWEVER, ADDITIONAL THERMO-LAG MATERIAL INSIDE THE ENVELOPE AND INCREASED AIR VOLUME BENEFITS THE ENCLOSURE EFFECTIVENESS. TEST METHODS OF JOINT REINFORCEMENT HAVE BEEN EFFECTIVELY IMPLEMENTED TO ENSURE INTEGRITY OF THE ENVELOPE.	102522/1
45.	330-660 FLEXI-BLANKET ON CABLE BUNDLES HAS BEEN SUCCESSFULLY FIRE TESTED IN SCHEMES 11-1 AND 11-2. FLEXI-BLANKET ON FLEX CONDUIT HAS NOT BEEN TESTED SPECIFICALLY. HOWEVER, THE FLEX CONDUIT HAS THE ADVANTAGE OF AN INSULATING CONDUIT JACKET AND A LARGER AIR VOLUME INSIDE THAN IS PRESENT IN A FLEXI-BLANKET WRAPPED CABLE BUNDLE. THIS WILL PROVIDE ADDITIONAL PROTECTION FOR THE CABLES INTEGRITY THEREFORE, THE CONFIGURATION IS ACCEPTABLE.	103020/3 103486/0
46.	THE CONDUITS ARE COVERED WITH 330-1 THERMO-LAG HALF ROUNDS TO THE EXTENT ALLOWED BY THE INTERFERING STRUCTURE THEN A FILLET OF 330-1 TROWEL GRADE IS PROVIDED AT THE JUNCTION OF THE CONDUIT HALF ROUNDS AND THE CONCRETE WALL. THE FILLET OF 330-1 WILL PROVIDE A GOOD SEAL BETWEEN THE THERMO-LAG AND CONCRETE TO MAINTAIN THE PROTECTED ENVELOPE. ALSO THE CONCRETE WILL ACT AS A HEAT SINK, REDUCE THE EXPOSED SURFACE AND ENHANCE THE INTEGRITY OF THE THERMO-LAG ENVELOPE. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	103020/3
47.	THE CRITICAL ATTRIBUTES OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO THE PROTECTION OF SUPPORTS FOR THE 9" RULE WHICH MITIGATED HEAT BEING CONDUCTED INTO THE PROTECTED ENVELOPE. IN ADDITION CONCRETE WILL PROVIDE AN ADDITIONAL HEAT SINK. THEREFORE THE CONFIGURATION IS ADEQUATE FOR PROTECTION OF SWAY STRUTS.	
48.	THIS CONFIGURATION IS JUSTIFIED BY EXISTING TESTS OF CABLE TRAYS WITH SUPPORTS PROTECTED FOR 9" ONLY. ALTHOUGH THE PROTRUDING ITEM IN THIS CASE IS A TRAY SUPPORT ATTACHED TO A BASE PLATE. THE COVERAGE PROVIDED ONTO THE BASE PLATE AND WALL PROVIDE ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH. IN ADDITION THE CONCRETE WALL ACTS AS A HEAT SINK TO HELP MITIGATE EXPOSURE OF HEAT. THE EXTENSION OF THE TRAY COVERAGE TO PROTECT THE AIR DROP FROM THE TRAY TO THE SLEEVES IS CONSISTENT WITH THE TRAY COVERAGE. ADDITIONAL STRUCTURE INTEGRITY IS PROVIDED BY TIE WIRING ALL JOINTS IN ADDITION TO REINFORCING THE JOINTS WITH STRESS SKIN.	103490/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
49.	THIS CONFIGURATION IS ONLY USED WITH FIRE STOPS IN THE END OF EACH TRAY STANDARD COVERAGE WHERE FLEXI-BLANKET BUNDLES ENTER AND THE GAP IS RESTRICTED TO SHORT DISTANCE OF ABOUT 1 FOOT. THE PROTECTION OF THE CABLES WITH FLEXI-BLANKET AND THE ELASTOMER FIRE SEALS HAVE BEEN TESTED. ALTHOUGH THE TESTED CONFIGURATION FOR THERMO-LAG EXTENDING THROUGH A FIRE STOP WAS 330-1 HALF ROUNDS, THE USE OF 330-660 FLEXI-BLANKET THROUGH THE FIRE STOP WILL PROVIDE AN ACCEPTABLE INSTALLATION WHICH IS CONSISTENT WITH THE TESTED CONFIGURATION. THE FI EXI-BLANKET BUNDLES RESTING ON THE EXPOSED CABLE TRAY WAS, IN SCHEME 15-2, SPECIFICALLY FIRE TESTED, AND IS NOT SIGNIFICANTLY AFFECTED BY THE EXPOSED TRAY. THE RESULTING CONFIGURATION IS ACCEPTABLE BECAUSE IT IS BASICALLY CONSISTENT WITH TESTED CONFIGURATIONS AND WHERE IT DEVIATES FROM THESE CONFIGURATIONS THE DIFFERENCES ARE MINOR AND DO NOT SIGNIFICANTLY IMPACT THE CORRELATION TO A TESTED CONFIGURATION. THE MATERIAL CONTINUITY AND THICKNESS IS MAINTAINED.	
50.	LEFT BLANK	
51.	LAYERS OF FLEXI-BLANKET 330-660 PROTECTING ALL BUNDLED LEGS OF THIS DETAIL ARE CONSISTENT WITH TESTED CONFIGURATIONS. IN FIRE TEST SCHEMES 11-1 AND 11-2, THE USE OF 330-660 TROWEL GRADE WITH BANDING PROVED TO BE STRUCTURALLY SOUND WITH EXCELLENT BONDING OF SEAMS THROUGHOUT THE FIRE AND HOSE STREAM TEST. THEREFORE THE USE OF 330-660 TROWEL GRADE WITH BANDING TO STRUCTURALLY HOLD THE SPLIT LEGS TO THE PRIMARY LEG AND SEAL LONGITUDINAL SEAMS IS ACCEPTABLE. THIS DETAIL IS EQUIVALENT TO TESTED CONFIGURATIONS FOR CRITICAL THERMAL AND STRUCTURAL ASPECTS AS DESCRIBED ABOVE AND IS THEREFORE ACCEPTABLE.	104121/0 103486/0
52.	THE METHOD UTILIZED TO REDUCE THE SIZE OF THE 330-1 CONDUIT HALF ROUNDS IS TO SCORE THE MATERIAL SO THAT IT WILL CONFORM TO THE SMALLER SHAPE THEN FILLING THE SCORED AREAS WITH 330-1 TROWEL GRADE. THIS IS THE SAME METHOD UTILIZED IN FITTING 330-1 PANELS TO CABLE TRAY RADIAL BENDS WHICH WAS TESTED IN SCHEMES 11-1, 11-2, 11-4, 11-5, 13-2 AND 14-1. THEREFORE THE SCORING OF THE CONDUIT HALF ROUNDS WILL NOT DETRACT FROM THE TESTED INTEGRITY OF THESE CONDUIT SECTIONS. SINCE DETAILS 4.6 AND 4-6.1 ARE THE SAME AS 4-1 AND 4-1.1 WHICH WERE TESTED IN SCHEMES 9-1, 9-3, 10-1, 10-2, 11-1 AND 11-2 THEY ARE CONSIDERED TO BE TESTED CONFIGURATIONS. DETAILS 4-7 AND 4-7.1 ARE THE SAME AS DETAILS 4-3 AND 4-3.1 AND THEY HAVE BEEN ANALYZED IN NOTE 46.	103020/3
53.	FLEXI-BLANKET ON FLEX CONDUIT HAS NOT BEEN TESTED SPECIFICALLY. HOWEVER, THE FACT THAT THE FLEXI-BLANKET CONFIGURATION HAS BEEN TESTED IN SCHEMES 11-1 AND 11-2 AND THE FLEX CONDUIT HAS THE ADVANTAGE OF THE CONDUIT JACKET AND THE AIR VOLUME INSIDE THE CONDUIT WHICH IS NOT PRESENT IN A CABLE BUNDLE, PROVIDES ADDITIONAL PROTECTION FOR THE CABLES AND RESULT IN LOWER INTERNAL TEMPERATURES. THE REDUCTION IN THICKNESS AT THE SUPPORT IS COMPENSATED FOR BY THE ADDITION THERMO-LAG ON THE SUPPORT. THE RESULTING COMBINATION OF THERMO-LAG ON THE SUPPORT AND THE CONDUIT PLUS THE TROWEL GRADE IN ANY VOIDS AND AT THE EXTERNAL INTERFACE BETWEEN THE THERMO-LAG ON THE CONDUIT AND THE SUPPORT RESULTS IN A THERMO-LAG ENVELOPE CONSISTENT WITH A TESTED CONFIGURATION.	103076/1
54.	THIS DETAIL DEPICTS STANDARD COVERAGE FOR 2" CONDUIT EXCEPT FOR A GAP NOT EXCEEDING 1/2" WHERE THE 1/4" HALF ROUNDS MEET. TROWEL GRADE OVER STRESS SKIN IS APPLIED TO THE AREA TO ACHIEVE THE REQUIRED THICKNESS IN THE AREA. THE COMBINATION OF RESULTING CONFIGURATION PROVIDING THICKNESS AND MATERIAL CONTINUITY CONSISTENT WITH TESTED CONFIGURATIONS RESULTS IN THIS CONFIGURATION BEING ACCEPTABLE.	103423/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
55.	THE ACCEPTABILITY OF THERMO-LAG AS A FIRE STOP WAS TESTED IN SCHEME 4 AND THE FIRE STOP WAS NOT BREACHED. FIRE STOPS IN THERMO-LAG COVERED TRAYS WERE TESTED IN SCHEMES 11-1, 11-2 AND 14-1. THIS CONFIGURATION IS ACCEPTABLE.	
56.	ALTHOUGH IT IS NOT A TESTED CONFIGURATION IT IS A DEFINITE ENHANCEMENT TO TESTED CONFIGURATIONS AND IT IS THEREFORE ACCEPTABLE. TEST SCHEMES 11-1, 12-1, 12-2 AND 13-1 HAVE ESTABLISHED THE ENHANCEMENTS OBTAINED BY USING TIE WIRES TO "STITCH" TO EITHER PANELS AND THIS DETAIL IS CONSISTENT WITH THAT CONFIGURATION.	
57.	THIS DETAIL PROVIDES A METHOD FOR A POSITIVE MECHANICAL MEANS TO SUPPORT UNDER THE BOTTOM PANEL AT A FIRE STOP IN A CABLE TRAY. THE BAR STEEL AND ALTERED ROD USED FOR THIS PURPOSE ARE SUBSTANTIAL AND WILL WITHSTAND A DESIGN BASIS FIRE. THE BAR STEEL IS COMPARABLE TO THE EXPOSED STEEL THAT WAS TESTED IN ALL THE SCHEMES. THE ALL THREAD ROD WOULD HAVE ELONGATE TO FAIL AND THAT IS NOT A CONCERN.	104235/3
58.	THE USE OF 330-1 THERMO-LAG FLAT PANELS, SINGLE LAYER, WAS QUALIFIED ON SCHEME 10-2 FOR JUNCTION BOXES. IN THIS DETAIL, THE THERMAL EXPOSURE OF FLAT PANELS IS LESS CHALLENGING THAN THE EXPOSURE IN 10-2. REQUIRED OVERLAPS OF MATERIAL AND JOINT REINFORCEMENT TECHNIQUES ALONG WITH THE USE OF V-GROOVE 330-1 PANELS ARE QUALIFIED BY LISTED TESTS. IN ADDITION, THE REQUIREMENT FOR PRE-BANDING BELOW FLAT PANELS, NO MATTER THE TRAY SIZE, WILL PROVIDE STRUCTURAL SUPPORT AGAINST SAGGING CONSISTENT WITH THE USE OF V-GROOVED BOARD. BASED ON THE ABOVE, THIS DETAIL IS EQUIVALENT TO TESTED CONFIGURATIONS.	101918/0
59.	THIS CONFIGURATION IS SIMILAR TO TESTED CONFIGURATIONS IN SCHEMES 11-1, 11-2, 13-2, 14-1 AND 15-1. THE TROWEL GRADE AS A FIRE STOP HAS BEEN TESTED IN SCHEMES 4, 11-1 AND 11-2 AND THE SHEET METAL SLEEVE IS SANDWICHED BETWEEN TROWEL GRADE AND PENSEAL MATERIAL. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	
60.	THE USE OF 330-660 THERMO-LAG FLEXI-BLANKET ON CABLE BUNDLES OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEMES 11-1 AND 11-2. THE USE OF 330-660 TROWEL GRADE TO BOND 330-660 FLEXI-BLANKET JOINTS WAS ALSO QUALIFIED BY SCHEMES 11-1 AND 11-2. THE USE OF A 330-660 TROWEL FILLET AT THE TRANSITION BETWEEN 330-660 FLEXI-BLANKET AND M-BOARD OR CONCRETE WILL PROVIDE A POSITIVE SEAL TO THE PROTECTED ENVELOPE AT THIS TRANSITION. FOR THERMAL CONSIDERATIONS, THE CONCRETE AT THE TRANSITION WILL PROVIDE A HEAT SINK AND REDUCED HEAT EXPOSURE TO THE THERMO-LAG ENVELOPE. BASED ON THE ABOVE, THIS CONFIGURATION IS ACCEPTABLE.	103020/3 104121/0
61.	THE FILLET PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE AGAINST THE M-BOARD AND IS SEALED TO BOTH THE PENSEAL AND THE CONCRETE WITH CAULK AND STICK PINS ARE USED AS REQUIRED. THE CONFIGURATION IS ACCEPTABLE FOR THERMAL CONSIDERATIONS SINCE THE TRAY CONFIGURATION AND THE PENSEAL ARE BOTH QUALIFIED FOR A MINIMUM OF 1 HOUR FIRE EXPOSURE.	100820/0
62.	IN ADDITION TO THE DISCUSSION ON NOTE 60 FOR THE M-BOARD/CONCRETE TO FLEXI-BLANKET TRANSITION, THE FLEXI-BLANKET IS ATTACHED IN ACCORDANCE WITH DETAIL 3-5.2 TO THE RACEWAY. THIS MECHANICAL MEANS OF ATTACHMENT TO THE RACEWAY WAS TESTED IN SCHEMES 11-1 AND 11-2. FOR THE CRITICAL THERMAL AND STRUCTURAL CONSIDERATIONS, THIS ASSEMBLY IS EQUIVALENT TO TESTED CONFIGURATIONS AND THEREFORE ACCEPTABLE.	103020/3 104121/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
63.	THE SCORE AND FOLD METHOD HAS BEEN SUCCESSFULLY TESTED ON RADIAL BENDS FOR CABLE TRAYS IN TESTS 11-1, 11-2, 11-4, 11-5, 14-1 AND 15-1. THE METHOD USED TO SCORE AND FOLD ON TRAY RUNS IS THE SAME AS TRAY RADIAL BENDS PLUS THE TRAY JOINTS WILL RECEIVE STRESS SKIN AND TROWEL GRADE BUILD UP. THEREFORE THE SCORE AND FOLD METHOD FOR TRAY RUN CORNERS IS ACCEPTABLE.	103020/3
64.	THIS DETAIL WAS QUALIFIED IN SCHEMES 11-1 AND 11-2, ONLY FOR AIR DROPS. THE DIFFERENCE OF HAVING FLEX-CONDUIT AS COMPARED TO AN AIR DROP ADDS THERMAL MASS AND STRUCTURAL STABILITY TO THE ASSEMBLY AND THEREFORE IS BETTER THAN THE TESTED CONFIGURATION.	103020/3
65.	THIS IS A MINOR DEVIATION FROM NORMAL STRESS SKIN INSTALLATION ON LONGITUDINAL JOINTS AND HAS NO IMPACT ON THE ABILITY OF THE STRESS SKIN TO PERFORM IT'S INTENDED FUNCTION SINCE THE STRESS SKIN IS CUT OUT AROUND THE GROUND CABLE THEN BROUGHT BACK TOGETHER WHERE IT LAPS THE JOINT. THIS IS AN ACCEPTABLE CONFIGURATION.	103833/0
66.	PROTECTION OF PROTRUDING ITEM FROM INTERFACE IS CONSISTENT WITH THOSE TESTED IN SCHEMES 11-1 AND 11-2 AND IS THEREFORE ACCEPTABLE.	104121/0
67.	THIS CONFIGURATION IS JUSTIFIED BY EXISTING TESTS AND CABLE TRAYS WITH SUPPORTS PROTECTED FOR 9" ONLY. ALTHOUGH THE PROTRUDING ITEM IN THIS CASE IS A DETECTOR BASE AND CONDUIT, THE COVERAGE PROVIDED ONTO EXPOSED RACEWAY SURFACES PROVIDES ADEQUATE PROTECTION FOR CONDUCTIVE HEAT PATH.	
68.	THIS DETAIL UTILIZES CIRCUMFERENTIAL WRAP ON STRESS SKIN WITH TROWEL GRADE FOR 330-1 PANELS ON THE BOTTOM PANELS ON A CABLE TRAY WHERE IT BUTTS TO THE TRAY SUPPORT THERMO-LAG. CIRCUMFERENTIAL WRAP ON BUTT JOINTS WITH STRESS SKIN AND TROWEL GRADE HAS BEEN TESTED IN SCHEMES 11-1, 11-2, 14-1 AND 15-1. IN ADDITION THE STRESS SKIN AND TROWEL GRADE HAS BEEN STAPLED TO THE VERTICAL 330-1 PANEL ON THE SUPPORT WHICH WILL FURTHER ENHANCE THE MECHANICAL ATTACHMENT OF THE STRESS SKIN.	103020/3
69.	THE USE OF 330-660 THERMO-LAG FLEXI-BLANKET ON CABLE BUNDLES OF VARIOUS SIZES AND THE MECHANICAL ATTACHMENT OF 330-660 FLEXI-BLANKET TO PRE-SHAPED CONDUIT HALF-ROUNDS ON BOTH AIR DROPS AND CONDUITS IS QUALIFIED BY TEST SCHEME 11-1. BY EMBEDDING THE HALF-ROUND MATERIAL INTO THE M-BOARD 1/2" AND SEALING WITH A 1/2" BEAD OF 330-1 TROWEL GRADE, A POSITIVE MECHANICAL CONNECTION AND SEAL IS CREATED AT THIS TRANSITION. THIS CONFIGURATION IS EQUAL TO OR BETTER THAN CONFIGURATION TESTED IN SCHEMES 11-1 AND 11-2.	
70.	THE USE OF 330-660 THERMO-LAG FLEXI-BLANKET ON CABLE BUNDLES OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEMES 11-1 AND 11-2. THE USE OF 330-660 TROWEL GRADE TO BOND 330-660 FLEXI-BLANKET JOINTS WAS ALSO QUALIFIED BY SCHEMES 11-1 AND 11-2. THERMALLY, THE THICKNESS AND AMOUNT OF LAYERS PROTECTING BUNDLES ARE EQUIVALENT TO OR BETTER THAN THE TESTED CONFIGURATION. STRUCTURALLY 330-660 TROWEL GRADE WITH SS BANDING HAS BEEN SHOWN TO BE EFFECTIVE TO BOND SEAMS WITH THE TWO BUNDLES SHIELDING EACH OTHER AND HAVING GREATER MASS THAN A SINGLE BUNDLE. THIS CONFIGURATION HAS BEEN DETERMINED TO BE A LESS SEVERE EXPOSURE THAN THE TESTED CONFIGURATIONS. FINALLY, CONDUITS, AS OPPOSED TO AIR DROPS USED IN THE TEST, ADD THERMAL MASS AND STRUCTURAL STABILITY TO THE CONFIGURATION. THEREFORE THIS CONFIGURATION IS ACCEPTABLE.	

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
71.	THIS DEVIATION AFFECTS ONLY A SMALL PORTION OF THE STRESS SKIN AND TROWEL GRADE ON THE LONGITUDINAL JOINT AND LIMITS THE AMOUNT OF DEVIATIONS IN CLOSE PROXIMITY TO EACH OTHER SO THAT OVERALL MECHANICAL INTEGRITY OF THE JOINT IS NOT COMPROMISED. THIS IS AN ACCEPTABLE CONFIGURATION.	103507/0 103626/0
72.	PROTECTION OF SURFACE MOUNTED SUPPORTS ARE CONSISTENT WITH OTHER TESTED CONFIGURATIONS (1/2" THERMO-LAG THICKNESS AND JOINTS, TIE-WIRES, ETC.). THE LEVEL OF PROTECTION IS EQUIVALENT TO TESTED CONFIGURATION.	103020/3
73.	THIS IS A TESTED CONFIGURATION WHICH WAS USED IN ALL OF THE CABLE TRAY TEST CONFIGURATIONS EXCEPT THAT THIS DETAIL HAS THE ENHANCEMENT OF INSTALLING THE TIE WIRES THROUGH THE BOTTOM PANELS ON THE CABLE TRAY COVERAGE THAT BUTTS TO THE SUPPORT. SINCE THIS IS AN ENHANCEMENT TO A TESTED CONFIGURATION, IT IS ACCEPTABLE.	104121/0
74.	THE COVERAGE ON THE RADIAX CABLE WITH FLEXI-BLANKET IS SIMILAR TO COVERAGE ON PROTRUDING CONDUIT ON SCHEMES 11-1 AND 11-2. THE AIR GAPS INSIDE THE FLEXI-BLANKET WRAP ARE FILLED WITH TROWEL GRADE. THIS CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	104015/1
75.	THE FLEX CONDUITS ARE COVERED WITH FLEXI-BLANKET TO THE EXTENT ALLOWED BY THE INTERFERING STRUCTURE THEN A FILLET OF 330-1 TROWEL GRADE IS PROVIDED AT THE JUNCTION OF THE CONDUIT HALF ROUNDS AND THE CONCRETE WALL. THE FILLET OF 330-1 WILL PROVIDE A GOOD SEAL BETWEEN THE THERMO-LAG AND THE CONCRETE TO MAINTAIN THE PROTECTED ENVELOPE. ALSO THE CONCRETE WILL ACT AS A HEAT SINK AND ENHANCE THE INTEGRITY OF THE THERMO-LAG ENVELOPE. THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	102759/1
76.	THE STRESS SKIN AND TROWEL GRADE COVERAGE IS EXTENDED OUT ONTO THE STEEL THEREFORE TYING IT INTO THE STRESS SKIN ON THE JOINT. THIS PROVIDES COVERAGE WHICH WAS EQUIVALENT TO THE TESTED CONFIGURATION.	102957/0
77.	FLEXI-BLANKET WAS TESTED IN SCHEMES 11-1 AND 11-2. THE COVERAGE OF 330-660 FLEXI-BLANKET ONTO CONDUIT HALF ROUNDS IS A TESTED CONFIGURATION. THE OVERLAP OF 330-660 ONTO CABLE TRAYS UTILIZES THE SAME INSTALLATION TECHNIQUES (STAPLING, OVERLAP DISTANCE, ETC) USED FOR CONDUIT AND JUST MODIFIES THEM TO ALLOW FOR THE CONFIGURATION DIFFERENCES BETWEEN CONDUITS AND CABLE TRAYS. THE FILLET PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE. THE RESULTING CONFIGURATION IS ACCEPTABLE.	104121/0
78.	THE INSTALLATION METHODS USED ON THE DETAIL FOR THE 330-1 BOX ARE AN EXTENSION OF THE TRAY COVERAGE AND HAVE ALL BEEN TESTED (SCORE AND FOLD, STITCHING AND STRESS SKIN AND TROWEL GRADE ON JOINTS). THE FILLET PROVIDES A POSITIVE SEAL FOR THE TRAY ENVELOPE. THE RESULTING CONFIGURATION IS ACCEPTABLE.	104121/0
79.	THIS CONFIGURATION IS A MINOR DERIVATIVE OF DETAIL 12-2 EXCEPT THAT THE CONDUIT ENTERING THE BOX EXTENSION OF A HORIZONTAL TRAY ENVELOPE IS FLEX IN LIEU OF RIGID. THE USE OF 330-660 ENTERING A HORIZONTAL TRAY ENVELOPE HAS QUALIFIED VIA SCHEMES 11-1 AND 11-2. THE UPGRADE TECHNIQUES UTILIZED TO REINFORCE THE INTERFACE BETWEEN 330-1 PANELS AND FLEXI-BLANKET DURING THE TEST (330-660 COLLAR FLARED OUT ON THE 330-1 PANEL) IS REQUIRED BY THE DETAIL. ALL OTHER ASPECTS OF DETAIL 12-2 ARE CONSISTENT, INCLUDING REINFORCEMENT OF 330-1 PANEL JOINTS WITH QUALIFIED TECHNIQUES (STITCHING/STRESS SKIN). THE INCREASED AIR VOLUME WITHIN THE ENVELOPE BENEFITS THE THERMAL PERFORMANCE OF THE CONFIGURATION. THEREFORE, THE CONFIGURATION WILL PROVIDE AN EQUIVALENT 1-HOUR RATING.	103844/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
80.	ALTHOUGH NOT EXACTLY A TESTED CONFIGURATION. THIS DETAIL HAS ALL THE SIGNIFICANT ATTRIBUTES OF A TESTED CONFIGURATION AND THE DIFFERENCES ARE INSIGNIFICANT.	
81.	THIS DETAIL PROVIDES SPECIFIC GUIDANCE FOR INSTALLING THERMO-LAG AND IS CONSISTENT WITH TESTED CONFIGURATIONS.	
82.	THIS DETAIL PROVIDES GUIDANCE ON WHEN SIL-TEMP HAS TO BE INSTALLED ON CABLES TO PROTECT THEM AGAINST POSSIBLE DAMAGE FROM THERMO-LAG PANELS. THIS IS AN ELECTRICAL CABLE DAMAGE CONCERN AND HAS NO EFFECT ON THE THERMO-LAG PROTECTIVE ENVELOPE.	
83.	THIS DETAIL PROVIDES GUIDANCE FOR INSTALLING FLEXI-BLANKET ON A FLEX CONDUIT UP TO A JUNCTION BOX. IT REQUIRES THE JB TO BE PROTECTED WITH 330-1 PANELS AND FOR THE 330-660/330-1 INTERFACE TO BE REINFORCED.	
84.	JOINT AND SEAM UPGRADES ARE REQUIRED UP THE AREA OF THE WALL PENETRATION. WHERE THE ESSENTIAL RACEWAYS TRAVERSE THE SEISMIC GAP USE OF THESE DETAILS WILL MINIMIZE THE IMPACT OF THE THERMAL AND SEISMIC DISPLACEMENTS. THESE DETAILS WILL ALLOW MINOR BUILDING/CABLE TRAY MOVEMENT WHILE MAINTAINING THE INTEGRITY OF THE PROTECTIVE ENVELOPE.	
85.	THE IDENTIFIED TEST SCHEMES SUPPORT THE USE OF CABLE TRAY THERMO-LAG COVERAGE AGAINST TRAY SUPPORT THERMO-LAG. SCHEME 11-5 SPECIFICALLY UTILIZES THERMO-LAG STRIPS AS SHOWN IN THIS DETAIL.	
86.	THIS DETAIL IS A MODIFIED VERSION OF 5-13.1. REDUCING THE LENGTH OF THE THERMO-LAG STRIPS IS JUSTIFIED SINCE THE INTERFERING SUPPORT KICKER, ITSELF, PROVIDES THE BOTTOM PANEL SUPPORT WHERE THE THERMO-LAG STRIPS ARE OMITTED.	
87.	TEST SCHEMES 11-1 & 11-2 USED STAPLES TO ATTACH 330-660 FLEXI-BLANKET TO 330-1 PANELS. PROPER LENGTH STAPLES ARE USED TO ENSURE FIRM MECHANICAL ATTACHMENT.	
88.	THIS DETAIL IS EQUIVALENT TO DETAILS 4-7 & 4-7.1 IN ITS THERMAL PROTECTION, USING 330-660 FLEXI-BLANKET IN PLACE OF 330-1 HALF ROUNDS.	

ATTACHMENT H

UNIQUE CONFIGURATIONS/DEVIATIONS

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
81380/0	SG	790'	1-063	SA1c	N	Y	ISSUE: CABLES AIR DROPPING FROM WALL SLEEVES TO CABLE TRAY CANNOT BE COVERED PER TYPICAL DETAIL. RESOLUTION: A THERMO-LAG "BOX" DESIGN WAS ERECTED TO ENCLOSE THE THROUGH WALL SLEEVE (TWS), AIR DROPS AND CABLE TRAY. THE FRONT PANEL AT THE TRAY RAIL WAS RAISED UP TO ACCOMMODATE THE AIR DROPPING CABLES. THE TOP OF THE BOX WAS ANGLED FROM THE WALL TO THE FRONT OF THE TRAY AND THE SIDE AND FRONT PANELS WERE IN COMPRESSION. ADDITIONAL UPGRADES WERE PROVIDED BY DCN 6830. THE BOX JOINTS AND BOTTOM BUTT JOINTS ON THE TRAY WERE UPGRADED WITH STRESS SKIN, TROWEL GRADE AND STAPLES. THE FIRE STOP WAS UPGRADED PER TYPICAL DETAIL 5-3.1 AND A "PICTURE FRAME" WAS INSTALLED AT THE WALL INTERFACE PER TYPICAL DETAIL 14-5.	11-1, 11-2, 11-4, 14-1	1-5, 8

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
83340/1	SG	831'	1-088	SB144	Y	Y	ISSUE: 2 UNISTRUT SUPPORTS AND 1" COPPER LINE INTERFERE WITH THE COVERAGE ON AN ESSENTIAL CONDUIT. RESOLUTION: THE 1" COPPER LINE (INTERFERENCE), UNISTRUT SUPPORT AND THE ESSENTIAL CONDUIT ARE ALL ENCLOSED IN A COMMON ENCLOSURE WHICH IS BUTTED TO A CONCRETE WALL. THE 1" PIPE IS COVERED AS A PROTRUDING ITEM WHERE IT ENTERS THE ENCLOSURE. THE TOP, BOTTOM AND SIDES OF THE ENCLOSURE ARE INSTALLED AGAINST THE UNISTRUT AND BUTTED TO THE CONCRETE. THE FRONT PIECE IS UNDER COMPRESSION ON ALL 4 SIDES. THERE IS A MINOR TRANSITION IN COVERAGE BETWEEN THE SUPPORTS WHICH IS ACCOMPLISHED WITH SCORE AND FOLD JOINTS. DCN 6984 UPGRADED ALL OF THE JOINTS AND THE CONDUIT AND PIPING ENTERING WITH STRESS SKIN, TROWEL GRADE & STAPLES.	9-1, 9-3, 10-1, 10-2, 11-4, 11-5, 13-2	1-5, 9
83342/3 (ISSUE 1)	SG	810'	1-083	SD9	N	Y	ISSUE: CONGESTION MAKES IT DIFFICULT TO COVER COUPLING ON ESSENTIAL CONDUITS INDIVIDUALLY. RESOLUTION: THE BOX ENCLOSURES CONSTRUCTED BY THIS DCA WERE REVIEWED IN DCN 6909 AND THIS DCA NO LONGER APPLIES.	N/A	N/A

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
83342/3 (ISSUE 2)	SG	810'	1-083	SD9	N	Y	ISSUE: CONGESTION MAKES IT DIFFICULT TO COVER ESSENTIAL JUNCTION BOXES INDIVIDUALLY. RESOLUTION: JUNCTION BOXES JB1S607G, JB1S606G, JB1S605G, JB1S604G, PULL BOX AND CONDUIT C13G04189, C11G01745 & C11G04179 WERE ALL ENCLOSED IN 1 LARGE BOX ENCLOSURE. ENCLOSURE EXTENDS FROM FLOOR TO TOP OF JUNCTION BOXES AND BUTTS TO THE WALL. INTERIOR SUPPORT IS PRIMARILY FROM THERMO-LAG BEING INSTALLED DIRECTLY AGAINST THE JUNCTION BOXES. A THERMO-LAG PANEL WAS PLACED ON THE FLOOR BETWEEN THE FRONT PANEL AND THE CONDUITS TO PROVIDE SUPPORT FOR BOTTOM OF THE ENCLOSURE. RESULTING ENCLOSURE IS 69" X 62" X 12". THE UNIT 1 UPGRADE PROGRAM (DM 92-077) ADDED STRESS SKIN, TROWEL GRADE AND STAPLES TO ALL JOINTS AND TO CONDUITS LEAVING THE BOXED ENCLOSURE.	10-1, 10-2	1-6, 7
83342/3 (ISSUE 3)	SG	810'	1-083	SD9	N	Y	ISSUE: ONLY STATES THAT ALL OTHER COVERAGES TO BE IN ACCORDANCE WITH CURRENT DESIGN. RESOLUTION: THIS ISSUE WAS TO INSTALL ANYTHING NOT ADDRESSED BY THIS DCA IN ACCORDANCE WITH THE SPECIFICATION AND TYPICAL DETAILS.	N/A	N/A

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
83342/3 (ISSUE 4)	SG	810'	1-083	SD9	N	Y	ISSUE: CHANGES TO TYPICAL DETAIL 2-3 AND 2-3.1 WERE REQUESTED TO FACILITATE BANDING OF MULTIPLE JUNCTION BOX ENCLOSURES. RESOLUTION: THIS ISSUE WAS TO CHANGE BANDING REQUIREMENTS CONTAINED CN TYPICAL DETAIL 2-3 AND TO INCORPORATE THE CHANGE INTO DWG. M1-1701, SH. 2.	N/A	N/A
83356/0 (ISSUE 1)	SG	810'	1-083	SD9	N	Y	ISSUE: 2 LBDs ARE TOO CLOSE TOGETHER TO BE WRAPPED INDIVIDUALLY. RESOLUTION: THE LBDs ARE WRAPPED TOGETHER IN A COMMON ENVELOPE. ENCLOSURE HAS BEEN UPGRADED PER TYPICAL DETAILS.	10-1, 10-2, 9-1	15, 10, 40
83356/0 (ISSUE 2)	SG	810'	1-083	SD9	N	Y	ISSUE: FIELD REQUESTS ENCLOSING NON ESSENTIAL CONDUIT WITH ESSENTIAL CONDUIT. RESOLUTION: NONESSENTIAL CONDUIT WAS WRAPPED AS NORMAL PROTRUDING ITEM SO NO CHANGE IS REQUIRED.	N/A	N/A
83356/0 (ISSUE 3)	SG	810'	1-083	SD9	N	Y	ISSUE: HVAC INTERFERES WITH COVERAGE ON ESSENTIAL LBD. RESOLUTION: THE LBD WAS TRIMMED SO THAT COVERAGE COULD BE PROVIDED PER TYPICAL DETAILS. NO CHANGE REQUIRED.	N/A	N/A

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
83356/0 (ISSUE 4)	SG	810'	1-083	SD9	N	Y	ISSUE: CABLE TRAY SUPPORT INTERFERES WITH COVERAGE ON ESSENTIAL LBD. RESOLUTION: NO CHANGE WAS REQUIRED FOR THIS ISSUE.	N/A	N/A
84682/0	SG	810'	1-082	SB8	Y	Y	ISSUE: TWO LBDs ARE TOO CLOSE TOGETHER TO BE WRAPPED INDIVIDUALLY. BOTH ARE ESSENTIAL. RESOLUTION: INSTALL BOX ENCLOSURE AROUND BOTH LBDs.	10-1, 10-2, 9-1	1-5, 10
84866/0	SG	790'	1-064	SB4	Y	Y	ISSUE: NONESSENTIAL LBD AND HVAC DUCT INTERFERE WITH COVERAGE ON ESSENTIAL LBD. RESOLUTION: INSTALL BOX ENCLOSURE AROUND BOTH LBDs. LBD COVER WAS TRIMMED SO THERE IS ENOUGH ROOM BETWEEN THE LBD AND THE HVAC TO COVER PER TYPICAL DETAIL.	10-1, 10-2, 9-1, 9-3	1-5, 10

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
86194/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: AN INSULATED 4" CHILL WATER LINE INTERFERES WITH COVERAGE ON AN ESSENTIAL CABLE TRAY. RESOLUTION: 330-660 FLEXI-BLANKET IS INSTALLED BETWEEN THE PIPE AND THE TRAY SIDE TO THE EXTENT POSSIBLE. TROWEL GRADE IS INSTALLED IN ANY VOIDS THEN PANELS CONTOURED TO THE SHAPE OF THE PIPE WERE INSTALLED BETWEEN THE 330-660 AND THE TRAY TO THE EXTENT POSSIBLE. 330-1 PANELS WERE ALSO INSTALLED INSIDE THE TRAY AND EXTENDED 9" TO 11" TO EACH SIDE OF THE PIPE.	1-2, 12-1, 12-2, 13-1, 14-1, 11-1, 15-1, 11-5	1-6, 11
86764/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: AN INSULATED 6" CHILLED WATER LINE INTERFERES WITH COVERAGE ON AN ESSENTIAL CABLE TRAY. RESOLUTION: 330-660 FLEXI-BLANKET IS INSTALLED BETWEEN THE PIPE AND THE TRAY SIDE TO THE EXTENT POSSIBLE. TROWEL GRADE IS INSTALLED IN ANY VOIDS THEN PANELS CONTOURED TO THE SHAPE OF THE PIPE WERE INSTALLED BETWEEN THE 330-660 AND THE TRAY TO THE EXTENT POSSIBLE. 330-1 PANELS WERE ALSO INSTALLED INSIDE THE TRAY AND EXTENDED 9" TO 11" TO EACH SIDE OF THE PIPE.	11-1, 11-5, 14-1, 15-1	1-6, 11

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
89513/0	SG	810'	1-082	SB8	Y	Y	ISSUE: CABLES IN ESSENTIAL 24" TRAY ARE ABOVE THE RAILS AND TOUCHING A CONCRETE BEAM RUNNING OVER THE TOP OF THE TRAY. RESOLUTION: THE TRAY COVERAGE IS EXTENDED UP TO THE CONCRETE BEAM. THIS IS ACCOMPLISHED BY EXTENDING THE SIDE RAIL AND TOP TRAY PANELS, BUTTING THEM TO THE BEAM AND SEALING WITH TROWEL GRADE. THE COVERAGE IS BANDED TO THE TRAY UTILIZING 330-660 OVER THE CABLES TO PROTECT THEM FROM THE BANDING. DCN 6983 UPGRADED THE TRAY JOINTS WITH STRESS SKIN, TROWEL GRADE AND STAPLES.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 13
89750/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: CABLES AIR DROPPING FROM TWS TO CABLE TRAY CANNOT BE COVERED PER TYPICAL DETAILS. RESOLUTION: THERMO-LAG PRESHAPED SECTIONS WERE INSTALLED AROUND THE CABLES INSIDE THE WALL SLEEVES (9" TO 11") INTO THE WALL AND EXTENDING APPROXIMATELY 3" PAST THE END OF THE SLEEVE. 330-660 WAS THEN INSTALLED ON THE AIR DROP CABLES OVERLAPPING THE PRESHAPED SECTIONS AT THE WALL SLEEVES AND EXTENDING TO THE CABLE TRAY.	N/A	14

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
89751/1	EC	778'	X-115A	AA153	Y	Y	ISSUE: CABLES AIR DROPPING FROM 4 TWS TO A CABLE TRAY CANNOT BE WRAPPED PER TYPICAL DETAIL. RESOLUTION: THE 4 WALL SLEEVES AND THE CABLE TRAY WERE COVERED WITH 330-660 IN A COMMON ENVELOPE. AN ADDITIONAL STRIP OF 330-660 WAS INSTALLED OVER THE GROUND CABLE LUG NUT AT THE WALL SLEEVES. DCN 6987 UPGRADED THE INSTALLATION BY STAPLING THE OVERLAP ON THE TRAY TO THE TRAY COVERAGE.	11-1, 11-2, 14-1, 15-1	1-5, 15

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
89855/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: SUPPORTS INTERFERE WITH COVERAGE ON ESSENTIAL CABLE TRAY. RESOLUTION: A BOX ERECTED SIMILAR TO TYPICAL DETAIL 14-1 TO ACCOMMODATE THE PIPE HANGERS WHERE THEY PENETRATE THE PLANE OF THE TOP OF THE TRAY. DIFFERENCES BETWEEN THIS INSTALLATION AND THE TYPICAL DETAIL IS THAT THIS BOX SITS IN THE SPACE BETWEEN THE TRAY EXTENSION PIECES AND THE CABLE TRAY FLANGES AND IS SUPPORTED BY THESE FLANGES. THERE IS NO LIP ON THE TOP OF THE BOX AND THE COVERAGE ON THE TRAY TOP OVERLAPS THE TOP OF THE BOX AND IS SEALED TO THE BOX WITH TROWEL GRADE. THE BOTTOM OF THE BOX IS COVERED WITH 330-660 TO PROTECT THE CABLES FROM THE STRESS SKIN. TIE WIRES ARE USED TO ATTACH THE BOTTOM TO THE SIDES OF THE BOX.	10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 12

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
89857/1	AB	810'	X-207	AA21b	Y	Y	ISSUE: A 10" INSULATED PIPE INTERFERES WITH COVERAGE ON A 4" ESSENTIAL CONDUIT. RESOLUTION: THERMO-LAG COVERAGE ON THE CONDUIT IS BUTTED TO THE PIPE AND ALL VOIDS ARE FILLED WITH TROWEL GRADE SEALING THE COVERAGE TO THE PIPE. 330-70 CERAMIC BLANKET IS THEN INSTALLED ON THE PIPE, BUTTING UP TO THE CONDUITS THEN COVERED WITH A STAINLESS STEEL JACKET. A FILLET OF TROWEL GRADE IS PLACED AROUND THE THERMO-LAG/STEEL JACKET INTERFACE. 330-70 IS INSTALLED A MINIMUM OF 18" EACH DIRECTION FROM THE CONDUIT.	9-1, 9-2	1-5, 42
89858/1	SG	810'	1-082	SB8	Y	Y	ISSUE: A 10" INSULATED SERVICE WATER PIPE INTERFERES WITH COVERAGE ON AN ESSENTIAL CABLE TRAY. RESOLUTION: 330-660 FLEXI-BLANKET IS INSTALLED BETWEEN THE PIPE AND THE TRAY SIDE TO THE EXTENT POSSIBLE. TROWEL GRADE IS INSTALLED IN ANY VOIDS THEN PANELS CONTOURED TO THE SHAPE OF THE PIPE ARE INSTALLED BETWEEN THE 330-660 AND THE TRAY TO THE EXTENT POSSIBLE. 330-1 PANELS WERE ALSO INSTALLED INSIDE THE TRAY AND EXTENDED 9" TO 11" TO EACH SIDE OF THE PIPE INTERFERENCE.	14-1, 11-1, 15-1, 11-5	1-6, 11

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
89993/3	AB	852'	X-241	AA21f	Y	Y	ISSUE: A 2" FIRE PROTECTION PIPE AND A FIRE DAMPER INTERFERE WITH COVERAGE ON AN ESSENTIAL CABLE TRAY. RESOLUTION: THE INTERFERENCE FROM THE FIRE DAMPER IS NOT A PROBLEM. THE FIRE PROTECTION PIPE IS WRAPPED WITH THE TRAY WHERE IT INTERFERES, THEN WRAPPED AS A PROTRUDING ITEM WHEN IT LEAVES THE TRAY COVERAGE. THE TRAY COVERAGE EXTENDS TO THE FLOOR PENETRATION AND BUTTS TO THE M-BOARD PER TYPICAL DETAILS. DCN 6996 ADDED SIDE PANELS OVER THE EXISTING TRAY COVERAGE AND BUTTED TO THE WALL WITH A TROWEL GRADE FILLET. LONGITUDINAL JOINTS WERE UPGRADED WITH STRESS SKIN, TROWEL GRADE AND STAPLES.	11-1, 11-2, 13-2, 14-1, 15-1	1-6, 16

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
91235/1	AB	810'	X-207	AA21b	Y	Y	ISSUE: CABLES IN ESSENTIAL CABLE TRAY ARE ABOVE THE SIDE RAILS IN SEVERAL LOCATIONS DUE TO TRAY CONFIGURATION AND AIR DROPS INTO TRAY AND TRAY CANNOT BE COVERED PER TYPICAL DETAILS. RESOLUTION: CABLE TRAY IS COVERED STARTING WHERE CABLES AIR DROP INTO TRAY AT NODE 33. A FIRE STOP IS INSTALLED IN THE TRAY BETWEEN NODES 33 & 34. TRAY COVERAGE IS SHIMMED WHERE NECESSARY TO ACCOMMODATE CABLES OUTSIDE THE TRAY. COVERAGE AT NODE 32 IS SHIMMED TO INCLUDE THE END OF NONESSENTIAL TRAY T14KADC35 AND ITS AIR DROPS. A FIRE STOP WAS INSTALLED IN THIS TRAY JUST OUTSIDE THE ESSENTIAL TRAY PROTECTED ENVELOPE. AIR DROPS FROM ESSENTIAL CONDUITS INTO TRAY AT NODE 37 ARE COVERED PER TYPICAL DETAILS. DCN 6993 UPGRADED TRAY JOINTS AND AIR DROPS INCLUDING TRAY AND CONDUIT INTERFACES PER TYPICAL DETAILS AND INSTALLED BAR CLAMPS AT FIRE STOPS.	11-1, 11-2, 13-2, 14-1, 15-1	1-5, 29

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
91416/0	AB	852'	X-241	AA21f	Y	Y	ISSUE: ESSENTIAL CABLE TRAY STOPS IN A BLOCKOUT THEN CABLES AIR DROP TO 2 TRAYS. CONFIGURATION CANNOT BE COVERED PER TYPICAL DETAILS. ALSO ANOTHER ESSENTIAL TRAY PASSES THROUGH THE SAME BLOCKOUT. RESOLUTION: THE ONE BLOCKOUT WAS COMPLETELY REWORKED BY DCN 6996 AND SUPERSEDES THE DESIGN IN THIS DCA. THE OTHER BLOCKOUT AREA IS ENCLOSED BY PLACING A 330-1 PANEL ACROSS THE FACE OF THE BLOCKOUT, FLUSH WITH THE WALL AND SEALING IT WITH TROWEL GRADE. THE ESSENTIAL TRAY AND ANY OTHER CONDUCTIVE ITEMS PENETRATING THE ENCLOSURES ARE COVERED AT LEAST 2" INTO THE BLOCKOUT. NONESSENTIAL ITEMS ARE ALSO COVERED AT LEAST 2" OUTSIDE OF THE ENCLOSURE (TOTAL OF 4") PROVIDED THERE IS NO DIRECT CONDUCTIVE PATH TO THE ESSENTIAL TRAY. THE ANGLE IRON FRAMING FOR THE BLOCKOUT WHICH IS EMBEDDED IN THE CONCRETE AT THE WALL FACE IS COVERED AS A PROTRUDING ITEM FROM ITS POINT OF CONTACT WITH ESSENTIAL TRAY.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 44

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
91882/0 92684/0	SG	790'	1-063	SA1c	N	Y	ISSUE: A NONESSENTIAL TRAY INTERFERES WITH COVERAGE ON AN ESSENTIAL VERTICAL CABLE TRAY. RESOLUTION: THE CABLES IN THE ESSENTIAL CABLE TRAY WERE WRAPPED INTO TWO 9" DIAMETER 330-660 BUNDLES IN THE AREA OF THE INTERFERENCE (8'). THESE BUNDLES EXTEND OUTSIDE THE TRAY RAILS SO THE NORMAL TRAY COVERAGE HAS TO BE SHIMMED 3" TO 4" TO ACCOMMODATE THESE BUNDLES. DCN 6830 UPGRADES THE BUNDLE/TRAY INTERFACE BY INSTALLING A REINFORCEMENT COLLAR OF FLEXIBLE MESH, TROWEL GRADE AND STAPLES. THE TRAY COVERAGE HAD THE LONGITUDINAL JOINTS REINFORCED WITH STRESS SKIN, TROWEL GRADE AND STAPLES.	11-1, 11-2, 15-2	1-5, 17

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92200/0	AB	852'	X-241	AA21f	Y	Y	ISSUE: ESSENTIAL CABLE TRAY CANNOT BE COVERED AT WALL BLOCKOUT PER TYPICAL DETAILS. RESOLUTION: THE BLOCKOUT IS ENCLOSED BY PUTTING A 330-1 PANEL ACROSS THE FACE OF THE BLOCKOUT CREATING AN ENCLOSURE RECESSED INSIDE THE WALL. THE PANELS ARE SEALED TO THE BLOCKOUT WITH TROWEL GRADE AND ALSO BANDED TO AN ANGLE IRON AND A THERMO-LAG COVERED SUPPORT WHICH RUN ACROSS THE FACE OF THE BLOCKOUT. THE ESSENTIAL TRAY IS COVERED A MINIMUM OF 2" INTO THIS ENCLOSURE.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 44
92205/1	EC	778'	X-115A	AA153	Y	Y	ISSUE: CABLES AIR DROPPING FROM A CONDUIT OVER THE SIDE RAIL OF A CABLE TRAY CANNOT BE COVERED PER TYPICAL DETAIL. RESOLUTION: THE TRAY COVERAGE IS SHIMMED AT THE AIR DROP CREATING A 4" HIGH BY 18" LONG BOX EXTENDING FULL TRAY WIDTH WHICH ALLOWS ROOM FOR THE AIR DROP TO ENTER THROUGH THE SIDE OF THE TRAY COVERAGE. DCN 6987 HAS UPGRADED THE JOINTS ON THE TRAY AND THE AIR DROP INTERFACE WITH THE TRAY WITH STRESS SKIN OR MESH, TROWEL GRADE AND STAPLES PER TYPICAL DETAILS. THE OVERLAP OF THE FLEXI-BLANKET ONTO CONDUIT HAS BEEN UPGRADED WITH STAPLES.	11-1, 11-2, 11-4, 11-5, 14-1, 15-1	1-5, 30

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92295/0	SG	831'	1-088	SB144	Y	Y	ISSUE: THREE ESSENTIAL, VERTICAL CABLE TRAYS RUNNING ALONG A WALL CANNOT BE COVERED DUE TO INTERFERENCES FROM THE WALL AND BASE PLATES ATTACHED TO THE WALL. RESOLUTION: THE BASE PLATES WERE COVERED WITH THERMO-LAG THEN THE FRONT AND BACK TRAY PANELS WERE EXTENDED OVER AND BUTTED TO THE CONCRETE WALL. DCN 6984 UPGRADED THE COVERAGE BY INSTALLING STRESS SKIN, TROWEL GRADE AND STAPLES TO THE TRAY JOINTS PER TYPICAL DETAILS AND BY INSTALLING A 2" WIDE PANEL WHERE THE PANELS BUTTED THE WALL AND HILTI BOLTING IT TO THE WALL.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 31
92383/0	SG	832'	1-096	SE16	N	Y	ISSUE: TWO ESSENTIAL VERTICAL TRAYS PASSING THROUGH A BLOCKOUT IN THE FLOOR SIDE BY SIDE ARE TOO CLOSE TOGETHER TO BE WRAPPED SEPARATELY. RESOLUTION: THE TWO TRAYS ARE WRAPPED TOGETHER AT THE PENETRATION. THE COVERAGE IS PROVIDED BY WRAPPING 1 TRAY AS REQUIRED THEN BUTTING THE COVERAGE ON THE 2ND TRAY TO THE FIRST. ANY GAPS BETWEEN THE TRAYS IS FILLED WITH TROWEL GRADE.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 14-1, 15-1, 15-2	1-5, 32

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92535/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: CABLES AIR DROPPING INTO CABLE TRAY HAVE CREATED ON OVERFILL CONDITION WHICH INTERFERES WITH CABLE TRAY COVERAGE ON THESE NONESSENTIAL AIR DROPS AND CABLE TRAY. RESOLUTION: THE TRAY COVERAGE HAS BEEN SHIMMED TO ACCOMMODATE THE FLEX-BLANKET WRAPPED AIR DROPS.	N/A	33
92541/0 (ISSUE 1)	AB	831'	X-226	AA21d	Y	Y	ISSUE: A COVERAGE DETAIL IS NEEDED FOR CABLES AIR DROPPING FROM A VERTICAL CABLE TRAY TO FLOOR SLEEVES. RESOLUTION: THE AIR DROPS AND CONDUITS ARE COVERED BY EXTENDING THE 330-1 PANELS FROM THE TRAY TO THE FLOOR. COVERAGE ALSO BUTTS TO THE WALL. DCN 6995 UPGRADES THE JOINTS WITH STRESS SKIN, TROWEL GRADE AND STAPLES.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 34

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92541/0 (ISSUE 2)	AB	831'	X-226	AA21d	Y	Y	ISSUE: A NONESSENTIAL CABLE TRAY IS WITHIN 9" OF AN ESSENTIAL TRAY AT SHARED SUPPORTS IN 2 PLACES. RESOLUTION: COVERAGE EXTENDS OUT ONTO THE NONESSENTIAL TRAY WHERE ONLY 4" SEPARATION EXISTS AS NECESSARY TO OBTAIN THE 9" OF COVERAGE. TWO FIRE STOPS ARE PROVIDED IN THE TRAY, 1 ABOVE AND 1 BELOW THE SUPPORT WHERE THE PROTRUDING ITEM COVERAGE ENDS. COVERAGE EXTENDS OUT 5" ON THE CABLE TRAY HANGER WHERE SEPARATION IS 5 1/4".	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 34
92545/1	SG	852'	1-103	SE18	N	Y	ISSUE: A FIRE PROTECTION PIPE INTERFERES WITH THE COVERAGE ON AN ESSENTIAL CABLE TRAY. RESOLUTION: THE 4" FIRE PROTECTION LINE IS WRAPPED WITH THE ESSENTIAL TRAY WHERE IT INTERFERES WITH SPLICE PLATE AND GROUND CABLE COVERAGE THEN OUT 9" IN BOTH DIRECTIONS AS A PROTRUDING ITEM. COVERAGE ON THE TRAY IS INSTALLED TO THE EXTENT POSSIBLE USING FLAT PANELS AND TROWEL GRADE THEN PRESHAPED CONDUIT SECTIONS ARE INSTALLED ON THE SPRINKLER PIPE BUTTING UP TO THE TRAY COVERAGE.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 35

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92555/0	AB	831'	X-226	AA21d	Y	Y	ISSUE: CABLES COMING OUR OF THE BOTTOM OF AN ESSENTIAL JUNCTION BOX IN 4 CONDUITS AND THEN AIR DROPPING TO 2 CABLE TRAYS CANNOT BE COVERED PER TYPICAL DETAILS DUE TO CONGESTION. RESOLUTION: THE CONDUITS COMING OUT OF THE BOTTOM OF THE TRAY ARE ENCLOSED IN A BOX. THE CABLES AIR DROPPING TO THE TRAYS ARE COVERED WITH FLEXI-BLANKET. DCN 6995 UPGRADES THE BOX AND AIR DROP INTERFACES WITH STRESS SKIN/MESH, TROWEL GRADE AND STAPLES. THE BOX COVERAGE IS EXTENDED TO THE WALL FLARED OUT 2" AND HILTI BOLTED TO THE WALL.	11-1, 11-2, 13-2, 14-1, 15-1	1-5, 36

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92556/1	AB	831'	X-226	AA21d	Y	Y	ISSUE: CABLES COME OUT OF THE BOTTOM OF AN ESSENTIAL JUNCTION BOX IN 4 CONDUITS THEN AIR DROP TO 2 CABLE TRAYS CANNOT BE COVERED PER TYPICAL DETAIL DUE TO CONGESTION AND OVERFILL IN TRAYS. ALSO AFFECTED ARE AIR DROPS FROM CONDUITS AND ANOTHER TRAY. RESOLUTION: THE CONDUITS AND AIR DROPS COMING OUT OF THE BOTTOM OF THE JUNCTION BOX ARE BOXED TO THE CABLE TRAY COVERAGE. THE TRAY COVERAGE IS ALSO EXTENDED TO COVER THE END OF ONE OF THE CONDUITS AIR DROPPING INTO THE TRAY. THE REMAINING AIR DROPS WERE COVERED WITH FLEXI-BLANKET PER TYPICAL DETAILS. DCN 6995 UPGRADES THE ENCLOSURES WITH STRESS SKIN/MESH, TROWEL GRADE AND STAPLES ON JOINTS AND AIR DROPS PER TYPICAL DETAILS. ALSO "PICTURE FRAME" UPGRADE WAS PROVIDED ON THE BOXED CONDUITS AND AIR DROPS. A NONESSENTIAL TRAY IS ALSO A PROTRUDING ITEM AND IT WAS COVERED FOR 9" UTILIZING FIRE STOPS IN THE TRAY.	10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1,5 37

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92566/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: CABLES AIR DROPPING FROM MULTIPLE TWS TO A CABLE TRAY CANNOT BE WRAPPED PER TYPICAL DETAILS. RESOLUTION: CABLE TRAY COVERAGE WAS SHIMMED TO ACCOMMODATE AIR DROPS.	N/A	33
92580/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: A 4" PIPE INTERFERES WITH COVERAGE ON 2 SEPARATE CABLE TRAYS. RESOLUTION: 330-660 FLEXI-BLANKET IS INSTALLED BETWEEN THE PIPE AND THE TRAY SIDE TO THE EXTENT POSSIBLE, TROWEL GRADE IS INSTALLED IN ANY VOIDS THEN PANELS CONTOURED TO THE SHAPE OF THE PIPE WHERE INSTALLED BETWEEN THE 330-660 AND THE TRAY TO THE EXTENT POSSIBLE. 330-1 PANELS WERE ALSO INSTALLED INSIDE THE TRAY AND EXTENDED 9" TO 11" TO EACH SIDE OF THE PIPE.	14-1, 11-1, 11-2, 11-5	1-5, 11

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92585/2	EC	778'	X-115A	AA153	Y	Y	ISSUE: OVERFILL OF CABLE TRAYS INTERFERES WITH COVERAGE ON THE TRAYS. RESOLUTION: A BOX WAS CONSTRUCTED WHICH ENCLOSED THE 2 HORIZONTAL STACKED TRAYS AND THE BOTTOM OF THE 2 VERTICAL TRAYS. BOX IS INSTALLED AGAINST TRAYS AND SUPPORTS AND BUTTED TO THE WALL. A FIRE STOP IS PROVIDED IN THE TOP HORIZONTAL TRAY JUST OUTSIDE OF THE ENVELOPE. A SECOND BOX IS INSTALLED AT THE TOP OF ONE OF THE VERTICAL TRAYS WHERE CABLES AIR DROP THROUGH SLEEVES IN THE CEILING. THIS BOX IS HILTI BOLTED TO THE WALL AND CEILING. BOTH BOX ENCLOSURES HAVE THE JOINTS UPGRADED WITH STRESS SKIN, TROWEL GRADE AND STAPLES.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 38
92586/0 (ISSUE 1)	EC	778'	X-115A	AA153	Y	Y	ISSUE: TUBE STEEL SUPPORT INTERFERES WITH COVERAGE ON AIR DROP FROM A CONDUIT TO A CABLE TRAY. RESOLUTION: 1 LAYER OF FLEXI-BLANKET WAS INSTALLED ON THE AIR DROP AND THE SECOND LAYER WAS BUTTED TO THE THERMO-LAG COVERAGE ON THE SUPPORT. ALL VOID SPACES WERE FILLED WITH TROWEL GRADE.	N/A	33

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92586/0 (ISSUE 2)	EC	778'	X-115A	AA153	Y	Y	ISSUE: AIR DROPS CANNOT BE COVERED PER TYPICAL DETAILS DUE TO CONGESTION. RESOLUTION: THIS WAS NOT A PROBLEM. AIR DROPS WERE COVERED PER TYPICAL DETAILS.	N/A	N/A

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92588/2	SG	813'	1-082	SB8	Y	Y	ISSUE: LARGE COMPLEX AIR DROPS FROM TWS TO CABLE TRAYS AND FROM CABLE TRAYS TO CABLE TRAYS CANNOT BE COVERED PER TYPICAL DETAILS DUE TO CONGESTION. RESOLUTION: THE CABLE AIR DROPS WERE WRAPPED IN FLEX-BLANKET. THE INTERFACES WITH CABLE TRAY COVERAGE IS ACCOMPLISHED IN SEVERAL WAYS. IN ONE CASE THE FLEXI-BLANKET OVERLAPS ONTO THE TRAY COVERAGE. IN ANOTHER THE FLEXI-BLANKET BUNDLE GOES INTO THE TRAY 9" TO 11", IN ANOTHER THE BUNDLE ENTERS THE END OF THE TRAY AND IS COVERED WITH A FLEXI-BLANKET COLLAR WHICH OVERLAPS THE TRAY AND THE FLEXI-BLANKET AND IN ONE OTHER THE FLEXI-BLANKET OVERLAPS ON CONDUIT PRESHAPED SECTIONS EXITING FROM 2 LBDs WHICH ARE WRAPPED TOGETHER IN A SINGLE ENVELOPE. CABLE TRAYS WHERE BUNDLES ENTER TRAY COVERAGE ARE SHIMMED AS NECESSARY TO ACCOMMODATE THE BUNDLE. DCN 6983 UPGRADED THE THERMO-LAG COVERAGE BY REINFORCING THE TRAY JOINTS AND FLEXI-BLANKET BUNDLE/TRAY INTERFACE WITH STRESS SKIN/MESH, TROWEL GRADE AND STAPLES.	11-1, 11-2, 13-2, 14-1, 15-1	1-5, 39

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92705/0	SG	831'	1-094	SB15	Y	Y	ISSUE: SEVERAL PROTRUDING ITEMS INTERFERE WITH THE COVERAGE ON AN ESSENTIAL 12" CABLE TRAY PASSING THROUGH A BLOCKOUT AND PENETRATION SEAL. RESOLUTION: THE CABLES ARE BOXED IN A 7" WIDE BY 3" HIGH STAINLESS STEEL BOX THAT SITS INSIDE THE TRAY. A FIRE STOP IS INSTALLED IN THIS BOX. THE THERMO-LAG WAS INSTALLED OVER THE BOX. THE THERMO-LAG IS COVERED WITH STAINLESS STEEL THEN THE BLOCKOUT IS SEALED. THE COVERAGE ON BOTH SIDES OF THE BLOCKOUT IS EXTENDED 9" TO 11" INTO THE STANDARD TRAY COVERAGE AND SEALED WITH 330-1 PANEL AND TROWEL GRADE.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1, 15-2	1-5, 41
92744/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: 4 CONDUITS LOCATED ABOVE A CABLE TRAY INTERFERE WITH COVERAGE ON THE TRAYS. RESOLUTION: TRAY COVERAGE IS EXTENDED TO THE CEILING AND TO THE WALL FLARED OUT AND HILTI BOLTED TO THE STRUCTURE. TRAY COVERAGE WAS SHIMMED OUT SO TRAY SUPPORT COULD BE COVERED. DCN 6987 UPGRADED ALL TRAY JOINTS WITH STRESS SKIN, TROWEL GRADE AND STAPLED.	11-4, 14-1, 15-1	1-6, 18

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92768/2	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSTALLATION DETAILS ARE NEEDED FOR COVERING CABLES WHERE THEY AIR DROP ACROSS THE SEISMIC GAP BETWEEN AUXILIARY AND UNIT 1 SAFEGUARDS BUILDINGS. RESOLUTION: THIS DCA ADDRESSED 4 INSTANCES WHERE THERE ARE AIR DROPS ACROSS A SEISMIC GAP INSIDE THE AUX. BUILDING. 1 CASE WAS MISTAKENLY ADDRESSED SINCE COVERAGE WAS NOT REQUIRED IN THE AUX. BLDG. AND 2 INSTANCES WERE REWORKED IN DCN 6995 WHICH SUPERSEDES THIS DCA. THE 1 REMAINING INSTANCE INVOLVED TRAY T14BAEG18. COVERAGE IS PROVIDED BY WRAPPING 330-660 FLEXI-BLANKET AROUND THE AIR DROPPING CABLES, OVERLAPPING ONTO TRAY COVERAGE AT BOTH ENDS. OVERLAP COVERAGE WAS PER TYPICAL DETAILS THEN UPGRADED WITH STAPLES PER DCN 6995.	11-1, 11-2, 11-4, 11-5, 14-1, 15-1	1-5, 19

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92772/1	AB	810'	X-207	AA21b	Y	Y	ISSUE: 2 VERTICAL TRAYS AND A JUNCTION BOX LOCATED ALONG A WALL CANNOT BE COVERED INDIVIDUALLY DUE TO CONGESTION AND INTERFERENCES. RESOLUTION: JUNCTION BOX & TRAYS ARE COVERED IN A SINGLE ENVELOPE. ENCLOSURE INVOLVES MAINLY THE JUNCTION BOX AND A 24" TRAY SIDE BY SIDE WITH ONLY A MINOR AMOUNT OF COVERAGE ON THE OTHER TRAY. DCN 6993 UPGRADED THE JOINTS WITH STRESS SKIN, TROWEL GRADE AND STAPLES.	9-1, 9-3, 10-1, 10-2, 11-4	1-5, 51
92791/1	AB	790'	X-179 X-180	AA21a	Y	Y	ISSUE: A PIPE SUPPORT FOR A 3" PIPE INTERFERES WITH COVERAGE ON AN ESSENTIAL JUNCTION BOX. RESOLUTION: THE PIPE SUPPORT IS COVERED AS A PROTRUDING ITEM PER TYPICAL DETAILS. THE PIPE IS ALSO WITHIN 9" OF THE JUNCTION BOX SO IT IS COVERED WITH 330-70 CERAMIC BLANKET OUT 9" TO 11" FROM THE SUPPORT, JACKETED WITH STAINLESS STEEL, THEN SEALED TO THE THERMO-LAG ON THE SUPPORT WITH A TROWEL GRADE FILLET.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 43

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92841/1	AB	810'	X-207	AA21b	Y	Y	ISSUE: STIFFENER FOR HVAC DUCT INTERFERES WITH COVERAGE ON AN ESSENTIAL CABLE TRAY. RESOLUTION: 330-660 COVERAGE IS PROVIDED ON THE TRAY IN THE AREA OF THE STIFFENER INTERFERENCES. FLEXI-BLANKET OVERLAPS THE 330-1 TRAY COVERAGE PER TYPICAL DETAILS ON BOTH SIDES. DCN 6993 UPGRADED COVERAGE BY STAPLING FLEXI-BLANKET TO 330-1 COVERAGE AT OVERLAPS.	11-1, 11-2	1-5, 21
92860/O	SG	810'	1-082	SB8	Y	Y	ISSUE: CABLES AIR DROPPING BETWEEN 3 STACKED CABLE TRAYS INTERFERE WITH STANDARD COVERAGE ON THESE 3 TRAYS. RESOLUTION: ALL THREE TRAYS ARE BOXED TOGETHER. THE TOP AND BOTTOM TRAYS ARE FIRE STOPPED WHERE THEY LEAVE THE ENCLOSURE (BOTH NONESSENTIAL). BOX BUTTS TO M-BOARD AT PENETRATION IN NORTH WALL. ALL JOINTS WERE UPGRADED WITH STRESS SKIN, TROWEL GRADE AND STAPLES AND BAR CLAMPS (2) ARE INSTALLED AT THE NORTH AND SOUTH END OF THE BOX TO HOLD THE BOTTOM PANEL IN PLACE.	10-1, 10-1, 11-1, 11-2, 11-4, 11-5, 14-1, 15-1	1-5, 22

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
92971/0	SG	810'	1-082	SB8	Y	Y	ISSUE: 3 STACKED HORIZONTAL CABLE TRAYS AND 1 VERTICAL CABLE TRAY CANNOT BE COVERED PER TYPICAL DETAILS DUE TO INTERFERENCES AND CABLES AIR DROPPING BETWEEN TRAYS. RESOLUTION: THE VERTICAL TRAY RUN ADJACENT TO THE HORIZONTAL TRAYS AND AIR DROPS INTO THEM. TWO BOXES ARE INVOLVED, ONE INCLUDES THE TOP HORIZONTAL TRAY AND THE VERTICAL TRAY. THE OTHER INVOLVES THE MIDDLE AND BOTTOM HORIZONTAL TRAYS AND THE VERTICAL TRAY. THE BOX COVERAGE CONTOURS TO THE ENCLOSED TRAYS EXCEPT FOR THE TOP PANEL ON THE TOP BOX AND THE SIDE PANEL BETWEEN THE VERTICAL TRAY AND THE BOTTOM OF THE BOTTOM TRAY WHICH ARE ANGLED TO ACCOMMODATE THE AIR DROPS. AIR DROPS TO THE MIDDLE TRAY ARE ENCLOSED IN FLEXI-BLANKET. THERE IS A FIRE STOP AT THE NORTH END OF THE MIDDLE TRAY AND CABLES AIR DROPPING OUT OF THE SOUTH END OF THE TOP TRAY ARE COVERED IN FLEXI-BLANKET. DCN 6983 UPGRADED ALL JOINTS WITH STRESS SKIN, TROWEL GRADE AND STAPLES AND ALL AIR DROP TRAY INTERFACES WITH MESH, TROWEL GRADE AND STAPLES. THE FIRE STOP WAS REINFORCED WITH A BAR CLAMP.	10-1, 10-1, 11-1, 11-2, 11-4, 11-5, 14-1, 15-1	1-5, 23

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
93041/0	SG	790'	1-070	SB4	Y	Y	ISSUE: A CABLE TRAY AND AN AIR DROP INTO THE TRAY CANNOT BE COVERED PER TYPICAL DETAILS DUE TO CABLE OVERFILL AT A TEE SECTION ON THE TRAY. RESOLUTION: THE AIR DROP BETWEEN THE TRAYS IS WRAPPED IN FLEXI-BLANKET AND OVERLAPPED ON THE TRAY COVERAGE AT ONE END. THE OTHER END ENTERS TRAY COVERAGE AT A TEE SECTION. COVERAGE ON THE TRAY HAS TO BE SHIMMED DUE TO CABLE OVERFILL. ALL JOINTS ARE REINFORCED AND THE TEE SECTION SHIMS ARE TIE WIRED TO THE SIDE PANELS. THE AIR DROP IS REINFORCED AT BOTH ENDS PER TESTED CONFIGURATIONS.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 24
93059/0	AB	831'	X-226	AA21d	Y	Y	ISSUE: AN ESSENTIAL CONDUIT CANNOT BE COVERED PER TYPICAL DETAILS DUE TO INTERFERENCE FROM ANOTHER CONDUIT AND BUTTING TO M-BOARD. RESOLUTION: THE 2 AIR DROPS ARE COVERED TOGETHER AT THE CABLE TRAY UNTIL THERE IS ADEQUATE SEPARATION TO WRAP THEM INDIVIDUALLY, BUTTING COVERAGE TO THE M-BOARD AT THE WALL PENETRATION. DCN 6995 UPGRADED THE AIR DROP TRAY INTERFACE WITH MESH, TROWEL GRADE AND STAPLES.	11-1, 11-2	1-5, 25

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
93117/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: A JUNCTION BOX DIRECTLY ABOVE THE SLEEVES AND THE ARRANGEMENT OF THE AIR DROP CABLES INTERFERE WITH COVERAGE ON CABLES AIR DROPPING FROM THRU WALL SLEEVES TO A 24" CABLE TRAY. RESOLUTION: COVERAGE IS PROVIDED FOR THE CABLES AIR DROPPING FROM THE WALL SLEEVES TO THE TRAY BY EXTENDING COVERAGE FROM THE JUNCTION BOX ABOVE AND THE CABLE TRAY TO ENVELOPE THE WALL SLEEVES. THE COVERAGE ON TOP OF THE TRAY IS ANGLED UP SLIGHTLY (1 1/4" UP) TO ACCOMMODATE AIR DROPPING CABLES. THE COVERAGE IS BUTTED TO THE WALL WITH A TROWEL GRADE FILLET. COVERAGE ON THE TOP AND SIDES OF THE JUNCTION BOX IS PER TYPICAL DETAIL AND THE TOP OF THE TRAY COVERAGE IS ONLY RAISED UP SLIGHTLY (1 1/4"). THE ACTUAL BOXED IN AREA BETWEEN THE TRAY AND THE JUNCTION BOX IS ONLY 19" HIGH BY 10" WIDE BY 4'-0" LONG.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 26

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
93137/0	AB	852'	X-241	AA21f	Y	Y	ISSUE: TWO CONDUITS INTERFERE WITH COVERAGE ON AN ESSENTIAL CABLE TRAY. RESOLUTION: NORMAL TRAY COVERAGE WAS PROVIDED EXCEPT IN THE AREA OF THE INTERFERENCE. THE TRAY TOP COVERAGE WAS NOTCHED IN THIS AREA AND A PIECE OF PANEL WAS ATTACHED TO THE UNDERSIDE OF THE PANEL ON TOP OF THE TRAY USING TROWEL GRADE AND TIE WIRES. THE CONDUITS WERE COVERED AS PROTRUDING ITEMS AND TROWEL GRADE WAS USED TO COVER THE EXPOSED TRAY LIP. TRAY JOINTS WERE UPGRADED BY DCN 6996 PER TYPICAL DETAILS.	11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 27

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
93169/1	AB	790'	X-180	AA21a	Y	Y	ISSUE: CABLES AIR DROPPING FROM A CONDUIT, RUN ALONG THE SIDE OF AN ESSENTIAL TRAY THEN INTO ANOTHER ESSENTIAL TRAY CANNOT BE COVERED PER TYPICAL DETAILS. RESOLUTION: THE AIR DROP IS COVERED WITH FLEXI-BLANKET WHERE IT PASSES BETWEEN THE ESSENTIAL TRAY AND THE WALL AND THEN IT IS BOXED TO THE TRAY COVFRAGE BY EXTENDING THE TOP AND BOTTOM OF THE TRAY COVERAGE TO THE WALL AND INSTALLING SIDE PANELS UNDER COMPRESSION. DCN 6992 REINFORCED THE AIR DROP WHERE IT ENTERED AND LEFT THE ENCLOSURE AND REINFORCED THE TRAY JOINTS PER TYPICAL DETAILS.	11-1, 11-2, 13-2, 14-1, 15-1	1-5, 28
DCN 4805, R1	AUX SB	810' 810'	X-207 2-082	AA216 2SB8	Y Y	Y Y	ISSUE: INSTALLED STRUCTURAL STEEL THERMO-LAG INTERFERES WITH FUSIBLE LINK INSTALLATION. RESOLUTION: REMOVE T-LAG AS NECESSARY TO INSTALL THERMAL LINK ASSEMBLY.	UL X-611	1-5, 45
DCN 7380, R4 CWAR 309, 375	SB SB AB AB AB AB	810' 832' 790' 810' 832' 852'	1-082 1-094 X-180 X-207 X-226 X-241	SB4 SB8 AA21a AA21b AA21d AA21f	Y Y Y Y Y Y	Y Y Y Y Y Y	ISSUE: NON-ESSENTIAL CABLE AIR DROP PROTECTION IS LESS THAN 4" MIN. REQUIRED. RESOLUTION: INSTALL ADDITIONAL 330-660 MATERIAL, SUCH THAT THE MIN. THICKNESS & LENGTH OF PROTECTION IS MET.	11-1, 11-2	1-5, 52

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
7437, R4 ITEM 1 ONE FORM DCN AGAINST DM 92-077 SCOPE (BASIC DESIGN)	AB AB AB SG SG SG SG SG SG	790' 810' 832' 790' 790' 810' 810' 832' 832'	X-180 X-207 X-226 1-070 2-070 1-082 2-082 1-094 1-094	AA21a AA21b AA21d SB4 2SB4 SB8 2SB8 SB15 2SB15	Y Y Y Y Y Y Y Y Y	Y Y Y Y Y Y Y Y Y	ISSUE: THERMO-LAG BARRIER HAS SEPARATED FROM M-BOARD INTERFACE AT CORRIDOR WALLS. RESOLUTION: REVISE DESIGN, PROVIDE NEW INSTALLATION DETAILS. BACKFIT BOTH UNIT 1 & 2 CONFIGURATIONS.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 46
7437, R4 ITEM 2 CWAR 323, 324, 358, 398, 366, 372, 406, 412	AB AB AB AB AB AB AB	810' 810' 831' 831' 831' 831' 810'	X-207 X-207 X-226 X-226 X-226 X-226 X-207	AA21b AA21b AA21d AA21d AA21d AA21d AA21b	Y Y Y Y Y Y Y	Y Y Y Y Y Y Y	ISSUE: INSUFFICIENT SPACE TO PROVIDE THE MINIMUM ALLOWED COLLAR DIMENSION PER DETAILS 5-12.4 RESOLUTION: ALLOW REDUCED DIMENSION IN COLLAR WIDTH.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 46, 47
7437, R4 ITEM 3 CWAR 315	AB (11)	810'	X-207	AA21b	Y	Y	ISSUE: GAP BETWEEN TRAY ENVELOPE & M-BOARD IS GREATER THAN ALLOWED PER DETAIL 5-12.4 RESOLUTION: REDUCE GAP BY INSTALLING ADDITIONAL LAYER OF 330-1 ACROSS THE TOP OF TRAY.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 47, 48, 49
7437, R4 ITEM 4 CWAR 362	AB (11)	831'	X-226	AA21d	Y	Y	ISSUE: T-LAG ENVELOPE IS CONTINUOUS THROUGH THE FOAM BARRIER. RESOLUTION: NO UPGRADE REQUIRED.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 49, 51
7437, R4 ITEM 5 CWAR 429	AB	831'	X-226	AA21d	Y	Y	ISSUE: WHAT T-LAG MATERIAL MAY PENETRATE FOAM SEAL MATERIAL. RESOLUTION: EITHER 330-1 OR 330-660.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 46

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES H37-H45)
7437, R4 ITEM 6 PAGE 68	AB (11)	810'	X-207	AA21b	Y	Y	ISSUE: LONG JOINT REINFORCEMENT WAS NOT INSTALLED AS REQUIRED ON TRAY. RESOLUTION: "USE AS IS" MAJORITY OF UNREINFORCED JOINT IS COVERED W/330-660.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 51
7437, R4 ITEM 7 CWAR 451, 454	AB AB	810' 831'	X-207 X-226	AA21b AA21d	Y Y	Y Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
DCN 7437, R4 ITEM 8 CWAR 384	N/A	N/A	N/A	N/A	N/A	N/A	ISSUE: COLLAR DETAIL CANNOT BE INSTALLED WITH CURRENT INSTALLATION CONTROLS. RESOLUTION: PROVIDE MORE COMPREHENSIVE INSTRUCTIONS FOR STICK PINS AND COLLAR INSTALLATION. (GENERIC)	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 46
7437, R4 ITEM 9 CWAR 412	AB (U2)	810'	X-207	AA21b	Y	Y	ISSUE: COLLAR FASTENER TYPE TO BE USED AT T-LAG & GYPSUM BOARD INTERFACE. RESOLUTION: 1) AT T-LAG INTERFACE USE 1 1/4" #12 WOOD SCREW. 2) AT GYPSUM BOARD INTERFACE USE MOLY BOLT.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 46, 50

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTED WITH TESTED CONFIGURATIONS.	GENERIC
5	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATIONS EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).	GENERIC
7	SINGLE JUNCTION BOXES IN AN ENCLOSURE WITH A SINGLE LAYER OF THERMO-LAG PANELS WAS TESTED IN SCHEME 10-2. 2 LBDs IN A SINGLE ENCLOSURE WAS ALSO TESTED IN SCHEME 10-2. THE LARGE AIR VOLUME AND THE MULTIPLE ENCLOSED COMMODITIES RESULTS IN A GREATER THERMAL MASS (WHEN COMPARED TO A SINGLE JB OR LBD) AND THUS RESULTS IN LOWER OVERALL INSIDE TEMPERATURES. THE BACK AND BOTTOM OF THE BOX ARE THE CONCRETE WALL AND FLOOR RESPECTIVELY WHICH PREVENTS EXPOSURE TO FIRE ON THESE SIDES AND ALSO ACTS AS A HEAT SINK. STRUCTURE INTEGRITY IS MAINTAINED BY INSTALLING THE PANELS AGAINST THE JUNCTION AND PULL BOXES AND ON THE FLOOR. ALSO A PANEL HAS BEEN PLACED ON THE FLOOR BETWEEN THE FRONT PANEL AND THE CONDUITS GOING THROUGH THE FLOOR TO PROVIDE ADDITIONAL SUPPORT FOR THE FRONT PANEL. PANELS ARE BANDED OR TIE WIRED TO THE JUNCTION AND PULL BOXES AND THE INTERNAL CONDUITS. ALL ENCLOSURE JOINTS AND ALL CONDUITS LEAVING THE ENCLOSURE ARE REINFORCED WITH STRESS SKIN, TROWEL GRADE AND STAPLES. THIS INSTALLATION IS ACCEPTABLE.	83342/3
8	THE INSTALLED CONFIGURATION INCLUDING THE REINFORCEMENT OF THE JOINTS, THE UPGRADE OF THE FIRE STOP AND THE WALL RESULT IN A DESIGN WHICH DEMONSTRATES A CONTINUITY OF MATERIAL, EFFECTIVE MATERIAL THICKNESS AND APPLICATION WHICH IS CONSISTENT WITH TEST SCHEME 11-4. THE CONCRETE WALL PREVENTS EXPOSURE TO FIRE ON THAT SIDE AND IT ACTS AS A HEAT SINK. THE ENCLOSURE PROVIDES BOTH STRUCTURAL AND THERMAL INTEGRITY AND IS THEREFORE ACCEPTABLE.	81380/0
9	THE BOX ENCLOSURE AND THE CONCRETE WALL PROVIDE THERMAL INTEGRITY WHICH IS CONSISTENT WITH BOXED ON LBDs, JBs AND THE BOX ENCLOSURE TESTED IN SCHEMES 9-1, 9-3, 10-1, AND 10-2. THE UPGRADED JOINTS, THE INSTALLATION AGAINST THE UNISTRUT, THE FRONT PANEL IN COMPRESSION AND THE REINFORCEMENT OF CONDUITS AND PIPES WHERE THEY ENTER THE ENCLOSURE ALSO PROVIDES A STRUCTURAL INTEGRITY COMPARABLE TO THESE TESTED CONFIGURATIONS. THE INSTALLATION IS ACCEPTABLE.	83340/1

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
10	THE ORIGINAL INSTALLATION PLUS THE UPGRADE RESULTS IN THE LBDs BEING PROTECTED USING STANDARD DETAIL 6-1, EXPANDED TO ENCAPSULATE BOTH LBDs. STANDARD DETAIL 6-1 HAS BEEN EVALUATED IN ATTACHMENT G. THE BOX DESIGN USED TO PROTECT THESE LBDs CLOSELY RESEMBLE THE SAME TECHNIQUES USED TO PROVIDE PROTECTION FOR JUNCTION BOXES AS WAS TESTED IN TEST SCHEME 10-1 AND 10-2. THE BOXING OF THE TWO LBDs TOGETHER HAS BEEN TESTED IN SCHEME 10-2. IT PRESENTS A GREATER THERMAL MASS (WHEN COMPARED TO A SINGLE LBD) AND THUS RESULTS IN LOWER OVERALL INSIDE TEMPERATURE. THE RESULTING PROTECTIVE ENVELOPE MAINTAINS THE MINIMUM MATERIAL THICKNESS, THE MATERIAL IS CONTINUOUS, AND THE STRUCTURAL INTEGRITY AND END USE OF THE FIRE BARRIER IS CONSISTENT WITH THE TESTED CONFIGURATIONS. THIS INSTALLATION IS ACCEPTABLE.	83356/0 84682/0 84866/0
11	THE RESULTING CONFIGURATION IS SIMILAR TO TYPICAL DETAIL 13-4. CABLE TRAYS OF VARIOUS SIZES USING V-GROOVED FLAT BOARD HAVE BEEN QUALIFIED BY LISTED TESTS. ALL CABLE TRAY JOINTS ARE REINFORCED WITH TECHNIQUES QUALIFIED BY LISTED TESTS. FOR THERMAL CONSIDERATIONS, THE CORNER OR SIDE OF THE TRAY WHERE THE INTERFERENCE IS LOCATED HAS BOTH EXTERNAL 330-660 FLEXI-BLANKET WITH TROWEL GRADE MATERIAL AND 330-1 FLAT PANELS INSTALLED AS CLOSE TO THE PIPE AS POSSIBLE. THE MINOR GAP IN EXTERNAL COVERAGE IS COMPENSATED BY THE 330-1 PANELS INSTALLED ON THE INSIDE OF THE CABLE TRAY SIDE RAIL. THE COMBINATION OF THESE TWO PROVIDE ENHANCED PROTECTION IN THIS AREA. IN ADDITION THE INTERFERENCE WILL PROVIDE SHIELDING AND AN ADDITIONAL HEAT SINK IN THE AREA OF CONCERN. THE COMBINATION OF THESE FEATURES ALONG WITH TIE WIRES AND BANDING WILL PROVIDE EQUIVALENT OR BETTER PROTECTION OF THE ENVELOPE THAN TESTED CONFIGURATIONS.	86194/0 86764/0 89858/0 92580/0
12	THE TRAY COVERAGE EXCEPT AT THE INTERFERENCE IS INSTALLED AND UPGRADED PER TESTED CONFIGURATIONS. THE THERMAL INTEGRITY IS MAINTAINED AT THE INTERFERENCE BY MAINTAINING MATERIAL THICKNESS AND BY MAINTAINING MATERIAL CONTINUITY BY "STITCHING" THE BOTTOM OF THE BOX TO THE SIDES AND OVERLAPPING THE TOP OF THE TRAY OVER THE BOX AND SEALING THE TROWEL GRADE. THE INTERFERING PIPE AND HANGER WILL SHIELD THIS AREA AND ACT AS A HEAT SINK. STRUCTURAL INTEGRITY IS MAINTAINED BY THE METHOD OF ATTACHING THE BOX TO THE TRAY COVERAGE, THE SMALL SIZE OF THE BOX AND THE FACT THAT THE BOX IS RECESSED INTO THE TRAY AND SHIELDED BY THE 4" PIPE AND THE TRAY COVERAGE ITSELF.	89855/0
13	THIS IS JUST AN EXTENSION (3" TO 4") OF THE STANDARD TRAY COVERAGE TO THE CONCRETE BEAM. THE THERMAL AND STRUCTURAL INTEGRITY OF THE ENCLOSURE IS MAINTAINED BY BANDING THE ENCLOSURE TO THE TRAY, UPGRADING THE JOINTS WITH STRESS SKIN, TROWEL GRADE AND STAPLES WHICH IN ESSENCE ADDS AN ADDITIONAL THICKNESS OF COVERAGE TO THE SIDES OF THE ENCLOSURE IN ADDITION TO REINFORCING THE JOINTS. THE CONCRETE BEAM ON TOP AND THE CLOSE PROXIMITY OF THE CONCRETE WALL ON THE SOUTH SIDE SHIELDS THE ENCLOSURE AND ACTS AS HEAT SINKS. THERE IS CONTINUITY OF MATERIAL AND THE THICKNESS IS MAINTAINED AND IN MANY CASES ENHANCED AND THE SUPPORT STRUCTURE FOR THE ENCLOSURE IS CONSISTENT WITH TESTED CONFIGURATIONS.	89513/0
14	THE CABLES BEING COVERED BY THIS DCA ARE NONESSENTIAL. THE THERMO-LAG ENCLOSURE ONLY HAS TO COVER THESE CABLES AND DOES NOT HAVE TO PROVIDE A FIRE RATED BARRIER FOR THE ENCLOSED CABLES SINCE THEY ARE NOT REQUIRED FOR SAFE SHUTDOWN. THE COVERAGE PROVIDED BY THIS DCA ACCOMPLISHES THE OBJECTIVE AND IS THEREFORE ACCEPTABLE.	89750/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
15	THIS INSTALLATION IS PER TYPICAL DETAILS 3-5, 7-1 AND 5-12. THE COVERAGE OF 330-660 FLEXI-BLANKET ONTO CONDUITS IS A TESTED CONFIGURATION. THE OVERLAP OF 330-660 ONTO CABLE TRAYS UTILIZES THE SAME INSTALLATION TECHNIQUES (STAPLING, OVERLAP DISTANCE, ETC.) USED FOR CONDUITS AND JUST MODIFIES THEM TO ALLOW FOR THE CONFIGURATION DIFFERENCES BETWEEN CONDUITS AND CABLE TRAYS. THE USE OF 330-660 THERMO-LAG FLEXI-BLANKET ON CABLE BUNDLES OF VARIOUS SIZES HAS BEEN QUALIFIED BY SCHEMES 11-1 AND 11-2. THE USE OF 330-660 TROWEL GRADE TO BOND 330-660 FLEXI-BLANKET JOINTS WAS ALSO QUALIFIED BY SCHEME 11-1 AND 11-2. THE USE OF 330-660 TROWEL FILLET AT THE TRANSITION BETWEEN 330-660 FLEXI-BLANKET AND CONCRETE WILL PROVIDE A POSITIVE SEAL TO THE PROTECTED ENVELOPE AT THIS TRANSITION. FOR THERMAL CONSIDERATIONS, THE CONCRETE AT THE TRANSITION WILL PROVIDE A HEAT SINK AND REDUCED HEAT EXPOSURE TO THE THERMO-LAG ENVELOPE. IN ADDITION THE FLEXI-BLANKET IS ATTACHED IN ACCORDANCE WITH DETAIL 3-5 TO THE RACEWAY. THIS MECHANICAL MEANS OF ATTACHMENT TO THE RACEWAY WAS TESTED IN SCHEME 11-1 AND 11-2. FOR THE CRITICAL THERMAL AND STRUCTURAL CONSIDERATIONS, THIS ASSEMBLY IS EQUIVALENT TO TESTED CONFIGURATIONS AND THEREFORE ACCEPTABLE.	89751/0
16	THE TRAY COVERAGE IS PER TYPICAL DETAILS EXCEPT THAT THE LONGITUDINAL JOINTS NEXT TO THE WALL HAVE BEEN ELIMINATED BY THE ADDITION OF SIDE PANELS INSTALLED OVER THE EXISTING PANELS AND BUTTED TO THE WALL WITH A TROWEL GRADE FILLET AT THE WALL. THE JOINTS ARE REINFORCED AND THE WALL INTERFACE ARE PER TYPICAL DETAILS. THE SPRINKLER PIPE IS COVERED SIMILAR TO ANY OTHER PROTRUDING ITEM. THE RESULTING CONFIGURATION IS PER TESTED CONFIGURATIONS AND MAINTAINS BOTH THERMAL AND STRUCTURAL INTEGRITY OF THE ENVELOPE. THE CONCRETE WALL SHIELDS THE ENCLOSURE AND ACTS AS A HEAT SINK.	89993/3
17	THE ARRANGEMENT OF FLEXI-BLANKET WRAPPED CABLES IN AN EXPOSED CABLE TRAY WAS TESTED IN SCHEME 15-2. HOWEVER, SINCE THE ARRANGEMENT INVOLVES 2 LARGE BUNDLES (9" DIAMETER) CONTAINING MULTIPLE CABLES INSTEAD OF A SINGLE CABLE (CONSIDERABLE MORE THERMAL MASS), VERTICAL ORIENTATION INSTEAD OF HORIZONTAL AND THE REINFORCEMENT OF THE BUNDLES WHERE THEY ENTER THE 330-1 TRAY COVERAGE WITH A STEEL MESH, TROWEL GRADE AND STAPLE COLLAR (BOTH ENDS), THIS CONFIGURATION MORE CLOSELY RESEMBLES TEST SCHEMES 11-1 AND 11-2. ALSO THE CLOSE PROXIMITY OF THE BACK OF THE TRAY TO THE CONCRETE WALL WOULD SHIELD THE BUNDLES AND ACT AS A HEAT SINK.	91882/0 92684/0
18	THIS CONFIGURATION IS ACTUALLY A COMBINATION OF TWO TYPICAL DETAILS (1-5 AND 13-2) WHICH ARE EVALUATED SEPARATELY IN ATTACHMENT A. THE USE OF HILTI BOLTS TO SECURE PORTIONS OF THE PROTECTIVE ENVELOPE FLARED OUT ONTO THE CONCRETE WALL PROVIDES POSITIVE MECHANICAL ATTACHMENT AND IS AN ENHANCEMENT. THE JOINT UPGRADE TESTS FOR ALL CABLE TRAYS AS WELL AS QUALIFICATION OF THE 9" CONDUCTIVE HEAT PATH PROTECTION IS BOUNDED BY THE TEST SCHEMES INDICATED. ADDITIONALLY, THE CONCRETE WALL PREVENTS EXPOSURE ON ONE OF THE TWO LARGEST SURFACES AND HAS HEAT SINK EFFECTS. THEREFORE, BASED ON THE THERMAL AND STRUCTURAL INTEGRITY ASPECTS DISCUSSED ABOVE, THIS CONFIGURATION IS ACCEPTABLE.	92744/0
19	THE COVERAGE OF 330-660 FLEXI-BLANKET ONTO CONDUITS IS A TESTED CONFIGURATION. THE OVERLAP OF 330-660 ONTO CABLE TRAY COVERAGE UTILIZES THE SAME INSTALLATION TECHNIQUES (STAPLING, OVERLAP DISTANCE, ETC.) USED FOR CONDUITS AND JUST MODIFIES THEM TO ALLOW FOR CONFIGURATION DIFFERENCES BETWEEN CONDUITS AND CABLE TRAYS. CABLE TRAY COVERAGE WAS UPGRADED AT THE LONGITUDINAL JOINTS PER TYPICAL DETAILS. THE RESULTING CONFIGURATION PROVIDES BOTH STRUCTURAL AND THERMAL INTEGRITY AND IS THEREFORE ACCEPTABLE.	92768/2

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
20	THE BOX COVERS A WALL MOUNTED JUNCTION BOX AND A VERTICAL TRAY ADJACENT TO IT. THE SECOND TRAY HAS ONLY A MINOR AMOUNT OF COVERAGE IN THE BOX. SINGLE JUNCTION BOXES IN AN ENCLOSURE WITH A SINGLE LAYER OF THERMO-LAG PANELS WAS TESTED IN SCHEME 10-2. 2 LBDs IN A SINGLE ENCLOSURE WAS ALSO TESTED IN SCHEME 10-2. THE LARGE AIR VOLUME AND THE MULTIPLE ENCLOSURE COMMODITIES RESULTS IN A GREATER THERMAL MASS (WHEN COMPARED TO A SINGLE JB OR LBD) AND THUS RESULTS IN LOWER OVERALL TEMPERATURES. THE BACK OF THE BOX IS THE CONCRETE WALL WHICH PREVENTS EXPOSURE TO FIRE ON THIS SIDE AND ALSO ACTS AS A HEAT SINK. STRUCTURE INTEGRITY IS MAINTAINED BY INSTALLING THE PANELS AGAINST THE JUNCTION AND CABLE TRAY. PANELS ARE BANDED OR TIE WIRED TO THE JUNCTION AND CABLE TRAY. ALL ENCLOSURE JOINTS AND ALL CONDUITS LEAVING THE ENCLOSURE ARE REINFORCED WITH STRESS SKIN, TROWEL GRADE AND STAPLES. THIS INSTALLATION IS ACCEPTABLE.	92772/1
21	THE COVERAGE OF 330-660 FLEXI-BLANKET ON AIR DROPS AND OVERLAPPING ONTO 330-1 CONDUIT COVERAGE IS A TESTED CONFIGURATION. THE OVERLAP ONTO CABLE TRAY COVERAGE AND THE COVERAGE ON THE TRAY UTILIZES THE SAME INSTALLATION TECHNIQUES (STAPLING, OVERLAP DISTANCE, ETC.) USED FOR CONDUITS AND AIR DROPS AND JUST MODIFIES THEM TO ALLOW FOR CONFIGURATION DIFFERENCES. THE CABLE TRAY WILL AFFORD GREATER AIR VOLUME AND GREATER THERMAL MASS THAN AN AIR DROP CABLE AND THUS RESULT IN LOWER INTERNAL TEMPERATURES. THE COVERAGE IS OVERLAPPED AT THE SIDE RAILS WHICH PROVIDES GREATER MATERIAL THICKNESS IN THIS AREA. STRUCTURAL INTEGRITY OF THE WRAPPED TRAY WOULD ALSO BE GREATER THAN THE AIR DROP CABLES. THE RESULTING CONFIGURATION IS ACCEPTABLE.	92841/1
22	THIS BOX CONFIGURATION CONFORMS TO THE CONTOUR OF THE ENCLOSED TRAYS WHICH PROVIDES SUPPORT. ALL JOINTS ARE REINFORCED PER TESTED CONFIGURATION. IN ADDITION BAP CLAMPS ARE USED AT BOTH ENDS OF THE ENCLOSURE TO KEEP THE BOTTOM AND SIDE PANELS FROM SAGGING. THE INTERFACE WITH THE M-BOARD PROVIDES A POSITIVE SEAL AND THE WALL REDUCES THE EXPOSURE TO A FIRE. THE RESULTING ENCLOSURE IS CONSISTENT WITH TESTED CONFIGURATIONS BOTH STRUCTURALLY AND THERMALLY.	92860/0
23	THIS INVOLVES 2 SEPARATE BOX ENCLOSURES WITH CABLE AIR DROPS. BOTH THE BOXES AND THE AIR DROPS ARE COVERED CONSISTENT WITH TESTED CONFIGURATIONS. THE BOXES CONTOUR TO THE PROTECTED TRAYS WITH A FEW MINOR EXCEPTIONS TO ACCOMMODATE AIR DROPS AND PROVIDES A GOOD SUPPORT STRUCTURE FOR THE BOXES. BOTH THERMAL AND STRUCTURAL INTEGRITY ARE MAINTAINED.	92971/0
24	THE SHIMMING OF THE TEE TO ACCOMMODATE THE TRAY OVERFILL MAINTAINS STRUCTURAL INTEGRITY WITH SHIMS INSTALLED FROM THE TOP OF THE TRAY SIDE RAILS TO THE TOP OF THE TRAY COVERAGE AND TIE WIRED TO THE SIDE PANELS. THE INCREASED AIR VOLUME ENHANCES THE THERMAL INTEGRITY. THE AIR DROPS ARE REINFORCED AT BOTH ENDS CONSISTENT WITH TESTED CONFIGURATIONS. ALTHOUGH THE TESTED CONFIGURATION FOR OVERLAP OF FLEXI-BLANKET ON 330-1 INVOLVED CONDUIT COVERAGE, THE INSTALLATION TECHNIQUES ARE THE SAME ONLY MODIFIED TO ACCOMMODATE THE TRAY CONFIGURATION.	93041/0
25	THE UPGRADE OF THE INTERFACE AT THE CABLE TRAY WHERE THE AIR DROPS ARE WRAPPED TOGETHER IS CONSISTENT WITH TESTED CONFIGURATIONS. THE REINFORCEMENT COVERS THE CABLES WHERE THEY ARE WRAPPED TOGETHER, THEN INDIVIDUALLY WHERE THEY ARE COVERED SEPARATELY. THE FLEXI-BLANKET BUTTING TO THE M-BOARD WITH TROWEL GRADE FILLET PROVIDES A GOOD POSITIVE SEAL. THE THERMAL AND STRUCTURAL INTEGRITY HAS BEEN MAINTAINED.	93059/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
26	THE BOX ENCLOSURE IS ONLY AN EXTENSION OF THE TESTED CONFIGURATION ON JUNCTION BOXES AND CABLE TRAYS. THE BOXED AREA IS SANDWICHED BETWEEN THE JUNCTION BOX, CABLE TRAY AND CONCRETE WALL. THIS WILL SHIELD THIS AREA AND THE CONCRETE WALL WILL ACT AS A HEAT SINK. THE ADDITIONAL MASS AND AIR VOLUME WILL ENHANCE THE THERMAL INTEGRITY OF THE ENCLOSURE. THE CONCRETE WALL INTERFACE PROVIDES A POSITIVE SEAL AND ALL JOINTS ARE REINFORCED CONSISTENT WITH TESTED CONFIGURATIONS. STRUCTURAL INTEGRITY IS MAINTAINED INSIDE THE ENCLOSURE BY INSTALLING AGAINST THE JUNCTION BOX AND TRAY WITH UNSUPPORTED SECTIONS EASILY BOUNDED BY TESTED CONFIGURATIONS.	93117/0
27	THE MODIFIED COVERAGE ON TOP OF THE TRAY AND THE COVERAGE OF THE INTERFERING CONDUITS AS A PROTRUDING ITEM RESULTS IN A PROTECTED ENVELOP WHICH IS CONSISTENT WITH TESTED CONFIGURATIONS. THE CONTINUITY OF MATERIAL IS MAINTAINED IN THE RECESSED AREA WITH TIE WIRES AND TROWEL GRADE AND THE TROWEL GRADE BUILDUP IS CONFINED TO THE TOP OF THE TRAY BOUNDED BY THE COVERAGE ON THE TRAY AND THE COVERAGE ON THE CONDUITS. TRAY JOINTS ARE UPGRADED CONSISTENT WITH TESTED CONFIGURATIONS. THE RESULTING CONFIGURATION MAINTAINS BOTH STRUCTURAL AND THERMAL INTEGRITY OF THE ENVELOPE.	93137/0
28	THE RESULTING ENCLOSURE IS A MINOR EXTENSION OF THE TRAY COVERAGE. THE WALL INTERFACE PROVIDES A POSITIVE SEAL AND THE UPGRADES AT THE AIR DROPS ENTRY AND EXIT FROM THE TRAY COVERAGE ARE CONSISTENT WITH TESTED CONFIGURATIONS. THE CONCRETE WALL WILL SHIELD THIS ENCLOSURE AND ACT AS A HEAT SINK. THE REMAINDER OF THE TRAY COVERAGE IS INSTALLED CONSISTENT WITH TESTED CONFIGURATIONS. BOTH THERMAL AND STRUCTURAL INTEGRITY ARE MAINTAINED WITH THIS INSTALLATION.	93169/1
29	THE RESULTING ENCLOSURE IS CONSISTENT WITH TESTED CONFIGURATIONS. THE SHIMMING PROVIDES ADDITIONAL THERMO-LAG MATERIAL INSIDE THE ENVELOPE AND THE INCREASED AIR VOLUME ENHANCES THE THERMAL INTEGRITY. THE SHIMMING ALSO MAINTAINS THE STRUCTURAL INTEGRITY. THE CABLE TRAY JOINT, AIRDROP AND FIRE STOP UPGRADED ARE CONSISTENT WITH TESTED CONFIGURATIONS.	91235/1
30	THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS. THE TRAY COVERAGE IS SHIMMED WITH THERMO-LAG. THE ADDITIONAL THERMO-LAG ON THE INSIDE OF THE TRAY COVERAGE PLUS THE INCREASED AIR VOLUME ENHANCES THE THERMAL INTEGRITY. THE SHIMMING ALSO MAINTAINS STRUCTURAL INTEGRITY OF THE SIDE PANELS. THE UPGRADE AT THE TRAY JOINTS AND THE AIR DROP ARE CONSISTENT WITH TESTED CONFIGURATIONS.	92205/1
31	THE CABLE TRAY COVERAGE WITH THE UPGRADES PROVIDES A PROTECTED ENVELOPE WHICH IS CONSISTENT WITH THE TESTED CONFIGURATIONS. THE 2" WIDE PANEL, HILTI BOLTED TO THE WALL AT THE TRAY COVERAGE INTERFACE ENHANCES THE ATTACHMENT TO THE CONCRETE AND ALSO SERVES AS AN ANCHOR POINT FOR THE STRESS SKIN ON THE TRAY JOINTS. THE CONCRETE WALL ELIMINATES FIRE EXPOSURE TO ONE SIDE OF THE TRAY AND WILL ACT AS A HEAT SINK. THE THERMAL AND STRUCTURAL INTEGRITY HAVE BEEN MAINTAINED.	92295/0
32	THIS DCA APPLIES TO THE PORTION OF THE CABLE TRAY COVERAGE WHICH IS INTERNAL TO THE PENETRATION SEAL. THE COVERAGE OF THE TWO TRAYS IN A COMMON ENVELOPE PROVIDES ACCEPTABLE COVERAGE ESPECIALLY SINCE THERE IS NO FIRE EXPOSURE TO THE TRAY. THE ABILITY OF THE PENETRATION SEAL TO PERFORM ITS FUNCTION IS NOT IMPAIRED BECAUSE THE 2 TRAYS WRAPPED TOGETHER IS CONSISTENT WITH THE COVERAGE ON A SINGLE TRAY PASSING THROUGH THE PENETRATION AND HAS BEEN TESTED ON ALL OF THE CONFIGURATIONS.	92383/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
33	THE CABLE TRAY AND AIR DROPS ARE NOT ESSENTIAL AND ARE BEING COVERED WITH THERM-LAG ONLY TO REDUCE EXPOSED COMBUSTIBLES IN THE ROOM. THERE IS NO REQUIREMENT FOR THIS ENCLOSURE TO PROVIDE A FIRE RATED BARRIER. THE ENCLOSURE ACCOMPLISHES THIS OBJECTIVE BY COMPLETELY COVERING THE CABLES.	92535/0 92566/0 92586/0
34	THE USE OF V-GROOVED PANELS ON CABLE TRAYS OF VARIOUS SIZES HAS BEEN QUALIFIED BY NUMEROUS TESTS. ALL CABLE TRAY JOINTS (INCLUDING THOSE ON THE BOX AROUND THE AIR DROPS AND CONDUITS) ARE REINFORCED WITH TECHNIQUES QUALIFIED BY FIRE TESTS. THE THERMO-LAG TO CONCRETE FLOOR AND WALL PROVIDES A POSITIVE SEAL AND THE CONCRETE WALL AND FLOOR WILL REDUCE THE EXPOSED SURFACE OF THE COVERAGE AND ACT AS A HEAT SINK. THE COVERAGE OUT ONTO THE NONESSENTIAL TRAY WHICH RESULTS IN PROTECTION OF THE PROTRUDING ITEM FOR AT LEAST 9" ALONG THE CONDUCTIVE PATH IS CONSISTENT WITH PROTRUDING ITEM COVERAGE IN ALL OF THE TESTING. THE PROTECTION OF THE OTHER SUPPORT FOR ONLY 5" IS JUSTIFIED BY ENGINEERING CALCULATION ME-CA-0000-2062 WHICH ALLOWS USE OF THE "5 INCH RULE" WHEN CONFIGURATIONS MEET ESTABLISHED MINIMUM CRITERIA SUCH AS A MINIMUM PERCENT TRAY FILL TO ESTABLISH EQUIVALENT PROTECTION TO REDUCE HEAT PROPAGATION INTO THE PROTECTED ENVELOPE.	92541/0
35	THE RESULTING CONFIGURATION IS ONLY A MINOR DEVIATION TO STANDARD TRAY COVERAGE. MATERIAL THICKNESS AND CONTINUITY ARE MAINTAINED AND THE INSTALLATION IS ENHANCED DUE TO THE HEAT SINK PROVIDED BY THE PIPE. STRUCTURAL INTEGRITY IS NOT AFFECTED. DCN 6912 UPGRADES THE AREA WITH STRESS SKIN, TROWEL GRADE AND STAPLES SINCE IT IS LOCATED ON THE SIDE RAIL PROTECTION AT A LONGITUDINAL JOINT.	92545/1
36	THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS. THE UPGRADES ON THE BOX, AIR DROP AND TRAYS ARE PER TESTED CONFIGURATIONS. THE BOX AROUND THE CONDUIT IS JUST AN EXTENSION OF THE JUNCTION BOX COVERAGE WHICH RESULTS IN GREATER AIR VOLUME WHICH ENHANCES THE THERMAL INTEGRITY. THE ORIGINAL INSTALLATION AND THE UPGRADES MAINTAIN THE STRUCTURAL INTEGRITY OF THE ENCLOSURE.	92555/0
37	THE RESULTING CONFIGURATION WITH UPGRADES PROVIDED IS CONSISTENT WITH TESTED CONFIGURATIONS. JOINTS AND AIR DROPS ARE REINFORCED AND WALL INTERFACES PROVIDE A POSITIVE SEAL. THE CONCRETE WALL LIMITS THE EXPOSED AREA OF THE ENCLOSURES AND ACTS AS A HEAT SINK. THE CONTINUITY OF MATERIAL, MATERIAL THICKNESS AND END USE OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS. THE UPGRADES ON THE ENCLOSURES AND THE INSTALLATION OVER THE JUNCTION BOX, CONDUITS AND CABLE TRAYS WITH MINOR EXTENSIONS TO COVER AIR DROPS PROVIDES STRUCTURAL INTEGRITY TO THE ENCLOSURES. THE ADDITIONAL AIR VOLUME WILL ALSO ENHANCE THE THERMAL INTEGRITY.	92556/1
38	THE BOX ENCLOSURES AS UPGRADED ARE CONSISTENT WITH TESTED CONFIGURATIONS. THE CONTINUITY OF MATERIAL, MATEPIAL THICKNESS AND END USE ARE CONSISTENT WITH TESTED CONFIGURATIONS. THE INSTALLATION OVER THE TRAYS AND TRAYS SUPPORTS AND THE WALL AND CEILING PROVIDES GOOD SUPPORT STRUCTURE FOR THE ENCLOSURE. THERE IS A POSITIVE SEAL AT THE WALL AND CEILING AND THE CONCRETE LIMITS THE EXPOSED SURFACES AND ACTS AS A HEAT SINK. THE THERMAL AND STRUCTURAL INTEGRITY OF THE ENCLOSURE IS MAINTAINED.	92585/2

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
39	THE COVERAGE OF THESE AIR DROPS AND THE UPGRADES PERFORMED AT THE 330/1-330-660 INTERFACES RESULTS IN A CONFIGURATION WHICH IS CONSISTENT WITH TESTED CONFIGURATIONS. BECAUSE OF THE COMPLEX NATURE AND SIZE OF THESE AIR DROPS SPECIAL CARE WAS TAKEN TO ENSURE THAT THE AIR DROPS WERE PROPERLY COVERED. ADDITIONAL TROWEL GRADE WAS APPLIED TO EACH LAYER OF THE FLEXI-BLANKET AND ADDITIONAL REINFORCEMENTS WERE PROVIDED AT TRAY AND CONDUIT INTERFACES TO ENSURE THAT THERE WAS CONTINUITY OF COVERAGE AND THAT PROPER MATERIAL THICKNESS WAS MAINTAINED IN ORDER TO MAINTAIN STRUCTURAL INTEGRITY. THIS, COUPLED WITH THE ADDITIONAL MASS, ALSO MAINTAINED THE THERMAL INTEGRITY OF THE ENVELOPE.	92588/2
40	THE COVERAGE PROVIDED FOR ISSUES 2, 3, & 4 WERE PER TYPICAL DETAILS SO NO JUSTIFICATION IS REQUIRED.	83356/0
41	THE RESULTING CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS. THE STAINLESS STEEL BOX WILL PROVIDE STRUCTURAL STABILITY SIMILAR TO A CABLE TRAY AND THIS ENCLOSURE SITS IN THE CABLE TRAY SO THE TRAY AND THE SEAL IN THE BLOCKOUT WILL KEEP THE ENCLOSURE RIGID. THE COVERAGE EXTENDS 9" TO 11" INTO THE STANDARD TRAY COVERAGE SO THE TRAY IS BEING TREATED AS A PROTRUDING ITEM. THE JOINTS ARE PER TESTED CONFIGURATIONS AND BEING LOCATED AT A CONCRETE WALL WILL HAVE A SHIELDING EFFECT AND THE WALL WILL ACT AS A HEAT SINK. BOTH THERMAL AND STRUCTURAL INTEGRITY IS MAINTAINED.	92705/0
42	THERE IS A MINOR REDUCTION IN COVERAGE AT THE POINT WHERE THE 4" CONDUIT AND 10" PIPE CROSS. THERE IS NO CONTACT BETWEEN THE PIPE AND THE CONDUIT. THERMO-LAG COVERAGE ON THE CONDUIT IS BUTTED TO THE PIPE AND ALL VOIDS ARE FILLED WITH TROWEL GRADE SEALING THE COVERAGE TO THE PIPE AND MINIMIZING THE DEVIATION. THE 330-70 INSULATION WITH THE STAINLESS STEEL JACKET INSTALLED ON THE PIPE AND BUTTED TO THE CONDUIT COVERAGE WHILE NOT A FIRE RATED MATERIAL, IS A NON COMBUSTIBLE CERAMIC MATERIAL WHICH WILL WITHSTAND CONTINUOUS TEMPERATURES OF 2300°F SO IT WILL STAY INTACT IN A FIRE. THE INSULATED PIPE WILL PROVIDE AN EXCELLENT SHIELD AND THE INSULATING PROPERTIES OF THE 330-70 BLANKET AND THE HEAT SINK OF THE 10" PIPE WILL PROTECT THE CONDUIT. THE THERMAL AND STRUCTURAL INTEGRITY OF THE COVERAGE IS MAINTAINED.	89857/1
43	SINCE THIS SUPPORT IS AN INTERFERENCE TO THE COVERAGE ON THE JUNCTION BOX, THERE IS NO DIRECT CONTACT WITH THE BOX AND, AT MOST, THERE WOULD BE ONLY A SINGLE POINT CONTACT BETWEEN THE PIPE AND SUPPORT, THERE IS NOT A GOOD CONTINUOUS CONDUCTIVE PATH BETWEEN THE PIPE AND THE JUNCTION BOX. ALSO THE 330-70 INSULATION ON THE PIPE, WHILE NOT A FIRE RATED MATERIAL, IS A NONCOMBUSTIBLE, CERAMIC MATERIAL WHICH WILL WITHSTAND CONTINUOUS TEMPERATURES OF 2300°F AND WILL STAY INTACT IN A FIRE. THE INSULATED PIPE WILL SHIELD THE SUPPORT AND THE INSULATING PROPERTIES OF THE BLANKET AND THE HEAT SINK OF THE PIPE WILL LIMIT THE HEAT TRANSMITTED TO THE SUPPORT. THE THERMAL AND STRUCTURAL INTEGRITY OF THE COVERAGE IS MAINTAINED.	92791/1
44	THE ENCLOSED ENVELOPE IS RECESSED INTO THE WALL WITH CONCRETE FOR SIDES AND A PENETRATION SEAL IN BACK LEAVING THERMO-LAG COVERAGE ONLY ON ONE SIDE. THIS ENCLOSURE IS SUBSTANTIALLY SHIELDED FROM ANY FIRE EXPOSURE AND THE CONCRETE WILL ACT AS A HEAT SINK. PENETRATING ITEMS INTO THE ENCLOSURE IN DIRECT CONTACT WITH THE ESSENTIAL COMMODITY ARE COVERED 9" TO 11" AS A PROTRUDING ITEM. OTHER NON-ESSENTIAL ITEMS ARE NOT COVERED AS PROTRUDING ITEMS BUT THERE IS NO DIRECT CONTACT WITH THE ESSENTIAL ITEM AND THEY ARE SUFFICIENTLY REMOTE FROM THE ESSENTIAL ITEM SO AS NOT TO REPRESENT A SIGNIFICANT HEAT PATH. THE ENCLOSURE MAINTAINS THE THERMAL AND STRUCTURAL INTEGRITY OF THE ENVELOPE.	91416/0 92200/0

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
45	THERE IS A CONVOLUTED HEAT PATH FROM THE LOCALIZED THINNED SPOT, THROUGH THE CONDUIT (WHICH SERVES AS A LONG HEAT SINK TO DRAW AWAY FROM THE THINNED AREA), THROUGH THE REMAINING THERMO-LAG THICKNESS, AND EITHER THROUGH THE GROUT OR THROUGH ADDITIONAL THERMO-LAG BEFORE REACHING THE BEAM. WITH THE RELATIVE MASSIVE SIZE OF THE BEAM, ITS HEAT CAPACITY AND ABILITY TO CONDUCT HEAT AWAY FROM THE LOCAL AREA, AND THE CONVOLUTION FACTORS DISCUSSED, THE ADDED HEAT TO THE BEAM UNDER FIRE CONDITIONS, DUE TO THE PARTIALLY THINNED AREA, IS NEGLIGIBLE. THE AMOUNT OF THERMO-LAG REMOVED FROM THE DOOR FRAME HEADER IS NEGLIGIBLE. THE FIRE RATING OF THE DOOR ASSEMBLY DOES NOT RELY UPON THE THERMO-LAG OVERLAPPING THE UPPER PART OF THE DOOR FRAME HEADER AND THE APPLIED GROUT PROVIDES ADEQUATE INSULATION OF THE BEAM FROM THE DOOR FRAME. THEREFORE, THE FIRE RATING OF THE DOOR ASSEMBLY IS NOT AFFECTED BY THE PARTIAL REMOVAL OF THERMO-LAG IN THIS AREA. THEREFORE, THE REMOVAL OF THE DESCRIBED THERMO-LAG IS ACCEPTABLE.	DCN 4805/1
46	THE DESIGN CHANGE PROVIDED MEETS THE BASIC REQUIREMENTS OF THE THERMO-LAG PROTECTION. A MINIMUM 1/2" THICKNESS OF THERMO-LAG MATERIAL IS PROVIDED FOR A 1 HOUR FIRE BARRIER. JOINT AND SEAM UPGRADES ARE REQUIRED TO BE INSTALLED UP TO THE AREA OF THE WALL PENETRATION. THE THERMO-LAG COLLAR ARRANGEMENT AND THE ARRANGEMENT OF THERMO-LAG EMBEDDED INTO M-BOARD BOTH MINIMIZE THE IMPACT OF THERMAL AND SEISMIC DISPLACEMENTS. THESE DETAILS WILL ALLOW MINOR BUILDING/CABLE TRAY (OR CONDUIT) MOVEMENT WHILE MAINTAINING THE INTEGRITY OF THE PROTECTIVE ENVELOPE. THEREFORE, THIS CHANGE IS ACCEPTABLE.	DCN 7437/4
47	DUE TO AN EXISTING COMMODITY PENETRATING THE M-BOARD, A DEVIATION FROM THE MINIMUM DIMENSION IS REQUIRED AND AUTHORIZED WHERE ALLOWABLE. SINCE ALL OTHER ATTRIBUTES (INCLUDING THE PENETRATING ITEM) REMAIN UNCHANGED, THE ARRANGEMENT OF THERMO-LAG EMBEDDED INTO M-BOARD PROVIDES NO REDUCTION IN PROTECTION AND MINIMIZES THE IMPACT OF THERMAL AND SEISMIC DISPLACEMENTS.	DCN 7437/4
48	DOUBLING THE THERMO-LAG TOP PANEL DOES NOT VIOLATE THE INTENDED SCOPE OF THE TYPICAL DETAIL AND DOES NOT REPRESENT A DEVIATION. CONVERSELY, IT DOUBLES THE AMOUNT OF THERMO-LAG NECESSARY TO ACHIEVE A ONE HOUR BARRIER.	DCN 7437/4
49	THE PURPOSE OF THE LONGITUDINAL JOINT UPGRADE IS TO PROVIDE A PHYSICAL MEANS (IN ADDITION TO BANDING) OF HOLDING THE THERMO-LAG TOP, BOTTOM AND SIDE PANELS TOGETHER DURING A FIRE SCENARIO. FIRE TESTING OF TYPICAL THERMO-LAG PROTECTED CABLE TRAYS, IDENTIFIED THAT ON LONGITUDINAL TRAY RUNS WHERE THE JOINTS WERE NOT REINFORCED, THE BANDS WOULD HEAT UP AND EXPAND AND THE PANELS WOULD PULL AWAY FROM ONE ANOTHER. FURTHER TESTING RESULTED IN AN UPGRADE TECHNIQUE CONSISTING OF APPLYING THERMO-LAG TROWEL GRADE MATERIAL ONTO THE PANELS, FASTENING STRESS SKIN OVER THE THERMO-LAG ONTO THE PANELS AND COVERING THE STRESS SKIN IN MORE TROWEL GRADE. THIS METHOD OF UPGRADE WAS SUCCESSFULLY TESTED (NOTE: DURING TESTING A 6" OMISSION OF STRESS SKIN WAS INCLUDED DUE TO A HANGER OBSTRUCTION). IN THE IDENTIFIED FIELD CONDITION, THE SOUTH END OF THE THREE TRAYS, WHILE NOT REINFORCED WITH STRESS SKIN, ARE WRAPPED WITH 2 LAYERS OF FLEXI-BLANKET (IN ITSELF A ONE HOUR FIRE BARRIER). THE NORTH END OF THE TRAYS ARE BOUNDED BY THERMO-LAG COLLARS, ANCHORED TO THE WALL AND BY 10 INCHES OF FOAM PENETRATION SEAL MATERIAL. THE ONLY EXPOSED PORTION OF NON-REINFORCED LONGITUDINAL JOINT IS THREE INCHES (MAXIMUM) WHICH WHEN COMPARED TO THE TESTED CONFIGURATION IS NEGLIGIBLE.	DCN 7437/4

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
50	WHILE THE TYPICAL DETAIL DESIGNATES STICK PIN FASTENERS, OTHER SUBSTANTIAL FASTENING METHODS ARE EMPLOYED IN OTHER THERMO-LAG ARRANGEMENTS INCLUDING HILTI BOLTS, MOLY BOLTS, WOOD SCREWS, ETC. THESE ARE ALL ACCEPTED METHODS OF INSTALLATION AND MAY BE USED WHERE CONDITIONS WARRANT.	DCN 7437/4
51	THERMO-LAG ARRANGEMENTS ARE IN ACCORDANCE WITH TYPICAL DETAILS. NO DEVIATIONS OR UNIQUE CONFIGURATIONS ARE IDENTIFIED THEREFORE THIS INSTALLATION IS ACCEPTABLE.	DCN 7437/4
52	THIS INSTALLATION MAINTAINS THE MINIMUM MATERIAL THICKNESS AND COVERAGE REQUIREMENTS. ADHESION OF THE 330-660 BUILD-UP TO THE EXISTING AIR DROP PROTECTION IS ACCOMPLISHED BY PRE-BUTTERING THE 330-660 PANELS WITH TROWEL GRADE AND SPLICING EXISTING AND NEW WRAPS OF THERMO-LAG 330-660 TOGETHER WITH ADDITIONAL LAYERS OF THERMO-LAG 330-660. AS A RESULT, THE STRUCTURAL INTEGRITY OF THE INSTALLATION IS MAINTAINED, THEREBY ALLOWING THE MATERIAL TO FUNCTION AS INTENDED. THE INSTALLATION OF THE THERMO-LAG MATERIALS AS DESIGNED HEREIN IS THEREFORE CONSIDERED ACCEPTABLE. CWAR 309 & 375: IN THIS DESIGN CHANGE THE FUNCTION OF THE THIRD LAYER OF 330-660 IS SIMPLY TO HOLD THE FIRE BARRIER REPAIR MATERIAL IN PLACE. FLARING THE THIRD LAYER OF 330-660 OUT ONTO THE INTERFERING ITEM AT THE POINT OF ZERO CLEARANCE DOES AFFECT THE PERFORMANCE OF THE THIRD LAYER OF MATERIAL IN ITS STATED CAPACITY. THE RESTORATION OF THE FIRE BARRIER ITSELF IS ACCOMPLISHED IN ACCORDANCE WITH DESIGN REQUIREMENTS.	DCN 7380/4

ATTACHMENT I

MINOR PROTECTED COMMODITY DEVIATIONS

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
84868/0	SG	810'	1-082	SB8	Y	Y	ISSUE: ESSENTIAL CABLE TRAY HAS INTERFERENCES FROM FIRE PROTECTION PIPE, ANGLE IRON AND NONESSENTIAL CONDUIT. RESOLUTION: 1) WHERE A FIRE PROTECTION PIPE IS A INTERFERENCE AT THE CABLE TRAY SIDE RAIL USE 330-1 FLAT PANEL IN THIS AREA TO PROTECT THE CABLE. 2) WHERE A HANGER ANGLE IS A INTERFERENCE AT THE CABLE TRAY SIDE RAIL, PROTECT THE HANGER ANGLE AS A PROTRUDING ITEM. 3) WHERE A CONDUIT IS AN INTERFERENCE TO THE INSTALLATION OF PROTRUDING ITEM PROTECTION, INSTALL PROTRUDING ITEM PROTECTION TO THE EXTENT NECESSARY TO ACHIEVE 9"-11" PROTECTION FROM THE ESSENTIAL.	14-1, 15-1, 11-2, 11-4, 11-5	1-5.7 1-5,8 1-5,9
84871/1	SG	831'	1-094	AA21d	Y	Y	ISSUE: FIRE PROTECTION PIPE INTERFERES WITH COVERAGE ON ESSENTIAL CABLE TRAY AT FLOOR PENETRATION. RESOLUTION: COVER THE PENETRATION WITH 330-1 PANEL USING APPROVED FASTENERS. PROTECT THE FIRE PROTECTION PIPE AS A PROTRUDING ITEM.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 10

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
85011/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: A WELDED LIFTING ATTACHMENT INTERFERES WITH COVERAGE ON A RACEWAY. RESOLUTION: REDUCE MATERIAL THICKNESS AT TERMINATION OF PROTECTION AS REQUIRED TO CLEAR WELDED LIFTING EYELET OF CABINET. SEAL AREA WITH TROWEL GRADE MATERIAL.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 14-1, 15-1, 11-4, 11-5, 13-2	4, 5, 11
85079/1	AB	810'	X-207	AA21b	Y	Y	ISSUE: HVAC AND CONCRETE BEAM INTERFERE WITH COVERAGE ON AN ESSENTIAL 12" TRAY. RESOLUTION: 2 LAYERS OF 330-660 HAS BEEN INSTALLED IN THE TRAY BETWEEN THE CABLES AND THE TRAY (BOTTOM AND SIDES) AND EXTENDS 9" TO 11" IN EACH DIRECTION FROM THE HARD CONTACT WITH THE HVAC DUCT. A FLAT PANEL WAS INSTALLED ON THE TOP OF THE TRAY AND BUTTED TO THE CONCRETE THEN SEALED TO THE CONCRETE WITH TROWEL GRADE.	13-2	1-5, 12
86095/0	SG	831'	1-088	SB144	Y	Y	ISSUE: ANGLE IRON INTERFERES WITH COVERAGE ON ESSENTIAL JUNCTION BOX. RESOLUTION: PROVIDE CONSTRUCTION WITH DIRECTION FOR PLACEMENT OF 330-1 PANELS IN ORDER TO ACHIEVE ACCEPTABLE PROTECTION OF THE JUNCTION BOX.	9-1, 9-3, 10-1, 10-2	1-5, 13

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES 117-119)
87918/0	EC	790'	X-125	EA157	Y	Y	ISSUE: AIR DROP CANNOT BE WRAPPED PER TYPICAL DETAILS. RESOLUTION: BOX THE AIR DROP BETWEEN THE TWO CABLE TRAYS (FROM TRAY TO TRAY) WITH 330-1 PANELS. SECURE ENCLOSURE TO EACH TRAY AND FIRESTOP.	11-1, 11-2	1-5, 14
88584/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: RESTRAINT BLOCK INTERFERES WITH COVERAGE ON A CABLE TRAY AND PROTRUDING ITEM COVERAGE ON CABLE TRAY SUPPORT CANNOT BE ACHIEVED DUE TO INTERFERENCE FROM ANOTHER SUPPORT. RESOLUTION: INCORPORATE BOTH THE CABLE TRAY SUPPORT AND THE INSTRUMENT TRAY INTO A COMMON PROTRUDING ITEM PROTECTION ENVELOPE.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15
88660/1 (ISSUE 1)	SG	810'	1-082	SB8	Y	Y	ISSUE: 2" STAINLESS STEEL PIPE INTERFERES WITH COVERAGE ON ESSENTIAL CABLE TRAYS. RESOLUTION: INSTALL 330-1 PRESHAPED CONDUIT HALF ROUND ALONG TRAY SIDE RAIL IN LIEU OF 330-1 PANEL WHERE PIPE IS AN INTERFERENCE. THIS INSTALLATION IS CONSISTENT WITH TYPICAL DETAIL 13-3.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 16, 17

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
88660/1 (ISSUE 2)	SG	810'	1-082	SB8	Y	Y	ISSUE: NON-ESSENTIAL TRAY SHARES SUPPORTS WITH ESSENTIAL TRAY. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION FOR 5" MINIMUM FROM THE PROTECTED RACEWAY.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 16, 17
90227/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: NON-ESSENTIAL CONDUIT INTERFERES WITH COVERAGE ON BOTTOM OF ESSENTIAL CABLE TRAY THEN CABLES IN CONDUIT AIR DROP TO ANOTHER ESSENTIAL CABLE TRAY. RESOLUTION: UTILIZE A SECTION OF 330-1 PRESHAPED CONDUIT PROTECTION TO MAINTAIN THE CABLE TRAY ENVELOPE AT AN AREA OF INTERFERENCE WITH A CONDUIT.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 24
91146/1	SG	810'	1-082	SB8	Y	Y	ISSUE: THIS DCA ADDRESSES 10 SEPARATE INTERFERENCES TO COVERAGE ON ESSENTIAL CABLE TRAY (8) AND ON A CABLE TRAY SUPPORT (2). RESOLUTION: 1) THE SUBJECT TRAY NODE NO LONGER REQUIRES THERMO-LAG PROTECTION. 2,3 & 6) REMOVE A PORTION OF CABLE TRAY SIDE RAIL. INSTALL PROTECTION ON ESSENTIAL CABLE TRAY. 4) PROTECT INTERFERING ITEM PER PROTRUDING ITEM REQUIREMENTS. 5) PROTECT INTERFERING ITEM.	14-1, 15-1, 11-2, 11-4, 11-5 N/A	 N/A 1-5, 9, 24

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
91631/1 (ISSUE 1)	SG	852'	1-100	SK17a	Y	Y	ISSUE: VERTICAL TRAY GOING THROUGH BLOCKOUT IN FLOOR IS TOO CLOSE TO BE COVERED PER TYPICAL DETAILS. RESOLUTION: PROTECT THE ESSENTIAL CABLE TRAY BY BUTTING THE 330-1 PANELS TO THE CONCRETE WALLS THROUGH THE BLOCKOUT AREA.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 16, 24
91631/1 (ISSUE 2)	SG	852'	1-100	SK17a	Y	Y	ISSUE: THE ANGLE IRON ON 2 SUPPORTS INTERFERE WITH TRAY COVERAGE. RESOLUTION: TRIM THE INTERFERING ANGLE SUPPORTS. THEN INSTALL ESSENTIAL CABLE TRAY PROTECTION.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 16, 24
91823/1	SG	790'	1-063	SB1c	N	Y	ISSUE: VERTICAL CABLE TRAY CANNOT BE COVERED PER TYPICAL DETAIL WHERE IS PASSES THROUGH A BLOCKOUT DUE TO BEING TOO CLOSE TO SIDE OF BLOCKOUT. RESOLUTION: PROTECT THE ESSENTIAL CABLE TRAY BY BUTTING THE 330-1 PANELS TO THE CONCRETE WALL THROUGH THE BLOCKOUT AREA.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 16
91985/0 (ISSUE 1)	SG	831'	1-088	SB144	Y	Y	ISSUE: TWO ESSENTIAL CONDUITS ARE TOO CLOSE TOGETHER TO BE WRAPPED INDIVIDUALLY. RESOLUTION: PROTECT BOTH ESSENTIAL CONDUITS IN A COMMON ENVELOPE, UNTIL THERE IS SUFFICIENT SPACE TO PROTECT EACH CONDUIT SEPARATELY.	9-1, 9-3, 10-1, 10-2	1-5, 20, 28

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
91985/0 (ISSUE 2)	SG	831'	1-088	SB144	Y	Y	ISSUE: A PIPE SUPPORT IS TOO CLOSE TO AN ESSENTIAL CONDUIT TO ALLOW COVERAGE WITH PRESHAPED SECTIONS. RESOLUTION: UTILIZE 330-1 FLAT PANEL TO PROTECT CONDUIT AT AREA OF PIPE SUPPORT INTERFERENCE.	9-1, 9-3, 10-1, 10-2	1-5, 20, 28
92134/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: ESSENTIAL CONDUIT PASSING THROUGH PENETRATION SEAL IN GYPSUM WALL CANNOT BE COVERED WITH STAINLESS STEEL PER TYPICAL DETAIL DUE TO BEND IN CONDUIT. RESOLUTION: INSTALL STAINLESS STEEL ISOLATER IN MULTIPLE STRIPS THROUGH THE RADIUS IN THE CONDUIT.	9-1, 9-3, 10-1, 10-2	N/A
92206/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: ARRANGEMENT OF CABLE AIR DROP INTO AN ESSENTIAL TRAY WHERE IT PASSES THROUGH A PENETRATION SEAL INTERFERES WITH INSTALLATION OF STAINLESS STEEL USED TO ISOLATE BISCO SEAL MATERIAL AND THERMO-LAG. RESOLUTION: CUT/NOTCH THE STAINLESS STEEL AS IT EXITS THE PENETRATION SEAL MATERIAL.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	N/A

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
92214/1	SG	810'	1-077N	SA142	N	Y	ISSUE: NON-ESSENTIAL CABLES AIR DROPPING OVER THE SIDE RAIL OF AN ESSENTIAL TRAY AND KELLEM GRIPS INTERFERE WITH COVERAGE ON ESSENTIAL TRAY. RESOLUTION: SHIM THE ESSENTIAL CABLE TRAY ENVELOPE, AS REQUIRED, TO ALLOW NON-ESSENTIAL CABLE AIR DROP (FLEXI-BLANKET) PROTECTION TO PENETRATE THE CABLE TRAY ENVELOPE. UTILIZE 330-1 FLAT PANEL ON BOTTOM OF TRAY, AS REQUIRED, TO CLEAR SUPPORT INTERFERENCES.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 24
92294/0	AB	831'	X-226	AA21d	Y	Y	ISSUE: THE STRUCTURAL STEEL FRAMEWORK FOR A BLOCKOUT IN THE FLOOR INTERFERES WITH THE COVERAGE ON THE BACK SIDE OF 4 VERTICAL TRAYS PASSING THROUGH THE BLOCKOUT. RESOLUTION: PROTECT THE BOTTOM OF THE 4 ESSENTIAL CABLE TRAYS USING 330-1 FLAT PANEL THROUGH THE AREA OF INTERFERENCE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 7

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
92462/0	AB	831'	X-226	AA21d	Y	Y	ISSUE: CABLES AIR DROPPING FROM A BANK OF TWS TO TWO CABLE TRAYS NEED TO BE WRAPPED IN SEVERAL SEPARATE BUNDLES DUE TO AMPACITY CONCERNS. CLOSE SPACING OF SLEEVES AND ARRANGEMENT OF CABLES INTERFERE WITH COVERAGE. RESOLUTION: PROTECTION OF ADJACENT CONDUIT STUB OUTS MAY BE ACCOMPLISHED BY TRIMMING THE 330-660 MATERIAL WHERE WRAPS OF ONE CONDUIT INTERFACE WITH A PREVIOUSLY WRAPPED CONDUIT. INTERFACE JOINTS ARE SEALED WITH TROWEL GRADE MATERIAL.	11-1, 11-2	1-5, 20
92536/0	AB	831'	X-226	AA21d	Y	Y	ISSUE: GRATING SUPPORT STEEL INTERFERES WITH COVERAGE ON ESSENTIAL CONDUIT PASSING THROUGH THE GRATING. RESOLUTION: GRATING SUPPORT STEEL IS NOTCHED SO THAT STANDARD COVERAGE CAN BE PROVIDED ON THE CONDUIT.	9-1, 9-3, 10-1, 10-2	N/A
92537/0	AB	831'	X-226	AA21d	Y	Y	ISSUE: A HVAC DUCT INTERFERES WITH COVERAGE ON THE TOP OF AN ESSENTIAL CABLE TRAY. RESOLUTION: PROTECT THE ESSENTIAL TRAY USING 330-1 FLAT PANEL IN THE AREA OF INTERFERENCE WITH THE HVAC DUCT.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 7

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
92564/1	EC	778'	X-115A	AA153	Y	Y	ISSUE: 3 FLEXIBLE CONDUITS ARE TOO CLOSE TOGETHER WHERE THEY ENTER THE TOP OF AN ELECTRICAL BOX TO BE WRAPPED INDIVIDUALLY. RESOLUTION: PROTECT EACH ESSENTIAL FLEX CONDUIT SEPARATELY UNTIL INSUFFICIENT SPACE EXISTS. THEN PROTECT THE CONDUITS IN A COMMON ENVELOPE.	11-1, 11-2	1-5, 20
92605/0	SG	831'	1-088	SB144	Y	Y	ISSUE: BANDING CANNOT BE INSTALLED ON CABLE TRAY COVERAGE BUTTING TO A CONCRETE WALL PER TYPICAL DETAILS. RESOLUTION: ROUTE BAND FASTENERS THROUGH THE 330-1 PANEL AND AROUND THE ESSENTIAL RACEWAY. SLOTS MADE IN THE PANELS FOR BANDING ARE FILLED WITH TROWEL GRADE MATERIAL.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 18
92611/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: CABLES AIR DROPPING FROM 2 VERTICAL CABLE TRAYS TO FLOOR SLEEVES CANNOT BE COVERED PER TYPICAL DETAILS DUE TO CONGESTION. RESOLUTION: PROVIDE 2 LAYERS OF 330-660 PROTECTION TO THE CABLE AIR DROPS. FLEXI-BLANKET IS CUT TO FIT THE ADJACENT FLEXI-BLANKET PROTECTION AT CONDUIT PROTECTION. THEREBY ALLOWING REQUIRED PROTECTION AND MAINTAINING PROTECTIVE ENVELOPE THICKNESS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 19

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
92615/0	EC	778'	X-115A	AA153	Y	Y	ISSUE: TWO CONDUITS ARE TOO CLOSE TOGETHER TO BE WRAPPED SEPARATELY FOR A 9" DISTANCE. RESOLUTION: PROTECT BOTH FLEX CONDUIT IN A COMMON ENVELOPE UNTIL THERE IS SUFFICIENT SPACE TO PROTECT EACH SEPARATELY.	9-1, 9-3, 10-1, 10-2	1-5, 20
92642/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: CABLE TRAY AT A WALL PENETRATION IS A SECONDARY STEEL MEMBER FOR STRUCTURAL STEEL PROTECTION AT THE WALL AND ALSO CONTAINS CABLES WHICH REQUIRE COVERAGE. RESOLUTION: PROTECT THE CABLE TRAY FOR 12" MIN. WITH THERMO-LAG MATERIAL PER STRUCTURAL STEEL PROTECTION REQUIREMENTS. TIE THE NORMAL CABLE TRAY PROTECTION INTO THAT APPLIED FOR STRUCTURAL STEEL PER APPROVED METHODS.	14-1, 15-1, 11-2, 11-4, 11-5	1-6, 21
92644/1	EC	778'	X-115A	AA153	Y	Y	ISSUE: REQUEST TO DELETE FIRE STOP ON CONDUITS RUNNING ENTIRELY IN ROOM AND NOT PENETRATING ANY FIRE WALLS (I.E., EQUIPMENT TO EQUIPMENT, INSTRUMENT TO INSTRUMENT, ETC.). RESOLUTION: DELETE CONDUIT FIRE STOP INSTALLATION FOR PROTECTED CONDUIT ROUTED BETWEEN EQUIPMENT WITHIN THE ROOM.	9-1, 9-3, 10-1, 10-2	1-5, 22

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
92731/0	AB	810'	X-209	AA21a	Y	Y	ISSUE: TWO CONDUIT UNIONS ARE TOO CLOSE TOGETHER TO BE WRAPPED INDIVIDUALLY. RESOLUTION: PROTECT BOTH ESSENTIAL CONDUIT IN A COMMON ENVELOPE, BY PROTECTING ONE FIRST AND THEN BUTTING THE SECOND'S COVERAGE TO THE FIRST'S FOR THE LENGTH OF THE OCCURRENCE. MATERIAL THICKNESS IS TO BE MAINTAINED.	9-1, 9-3, 10-1, 10-2	1-5, 20
92831/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: CONDUIT SUPPORT INTERFERES WITH THE 3" OVERLAP REQUIRED FOR 330-660 OVER 330-1 CONDUIT SECTIONS. RESOLUTION: INSTALL 330-660 MATERIAL OVERLAPPING 1/2" MINIMUM ONTO THE 330-1 CONDUIT PROTECTION.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-5, 23
92838/0	SG	810'	1-082	SB8	Y	Y	ISSUE: BANDING REQUIREMENTS CANNOT BE MET DUE TO INTERFERENCE TO CABLE TRAY COVERAGE FROM A SUPPORT DIAGONAL BRACE. RESOLUTION: INSTALL WEDGE OF 330-1 MATERIAL SUCH THAT WHEN INSTALLED, BANDING WILL SECURE THE 330-1 PANELS OF THE TRAY ENVELOPE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 18

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
92839/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: AN ESSENTIAL CONDUIT AND AN ESSENTIAL LBD ARE TOO CLOSE TOGETHER TO BE WRAPPED INDIVIDUALLY. RESOLUTION: PROTECT BOTH RIGID CONDUIT RACEWAYS IN A COMMON 330-1 ENVELOPE UNTIL THERE IS SUFFICIENT SPACE TO PROTECT THEM SEPARATELY.	9-1, 9-3, 10-1, 10-2	1-5, 20
92875/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: A 1" PIPE INTERFERES WITH COVERAGE ON A CABLE TRAY. RESOLUTION: MOVE THE CLAMP ASSOCIATED WITH THE CABLE TRAY GROUND CABLE. INSTALL 330-1 FLAT PANEL ALONG THE SIDE RAIL BETWEEN THE TRAY AND PIPE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 7
92905/1	SG	810'	1-082	SB8	Y	Y	ISSUE: 10" AND 2" PIPES INTERFERE WITH THE COVERAGE ON A CABLE TRAY. RESOLUTION: 1) WHERE THE 10" PIPE PRESENTS AN INTERFERENCE, PROTECT THE ESSENTIAL TRAY USING 330-1 FLAT PANEL FOR 12" MAX. BETWEEN THE PIPE AND TRAY. 2) WHERE THE 2" PIPE PRESENTS AN INTERFERENCE, REMOVE A SECTION OF TRAY SIDE RAIL EXTENSION, IN ORDER TO PROVIDE CLEARANCE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 7, 24

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
92934/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: CABLE TRAY WITH SIDE RAIL EXTENDERS IS FILLED TO THE TOP SO THAT CLEARANCE BETWEEN CABLES AND STRESS SKIN CANNOT BE MAINTAINED. RESOLUTION: INSTALL SILTEMP BLANKET TO ISOLATE THE CONTAINED CABLES FROM THE STRESS SKIN OF THE 330-1 PANELS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 24
93005/0	SG	810'	1-082	SB8	Y	Y	ISSUE: A CONCRETE WALL INTERFERES WITH THE INSTALLATION OF 330-660 ON AN AIR DROP WHERE IT OVERLAPS ONTO CONDUIT COVERAGE. RESOLUTION: INSTALL THE FIRST LAYER OF 330-660 WITH A REDUCED OVERLAP OF THE 330-1 CONDUIT SECTIONS AND ABUTTING THE CONCRETE. INSTALL SECOND LAYER WITH NO OVERLAP. INSTALL ADDITIONAL LAYER OF 330-1 CONDUIT SECTIONS OVERLAPPING THE SECOND 330-660 LAYER.	11-1, 11-2	1-5, 25
93006/0	SG	810'	1-082	SB8	Y	Y	ISSUE: CABLE TRAY WITH SIDE RAIL EXTENSIONS HAS CABLES FILLED TO THE TOP SO THAT TOP PANEL ON COVERAGE WILL COME IN CONTACT WITH THE CABLES. RESOLUTION: INSTALL SILTEMP BLANKET TO ISOLATE THE CONTAINED CABLES FROM THE STRESS SKIN OF THE 330-1 PANELS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 24

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES 117-119)
93010/0	AB AB	831' 810'	X-226 X-207	AA21d AA21b	Y Y	Y Y	ISSUE: STEEL FRAME AT BLOCKOUT IN FLOOR INTERFERES WITH COVERAGE ON ESSENTIAL CABLE TRAY. RESOLUTION: PROTECT THE ESSENTIAL CABLE TRAY USING 330-1 FLAT PANEL THROUGH THE FLOOR BLOCKOUT AREA.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 7
93093/0 (ISSUE 1)	AB	831'	X-226	AA21d	Y	Y	ISSUE: A NON-ESSENTIAL CABLE TRAY RUNS PARALLEL TO AN ESSENTIAL CABLE TRAY AND IS WITHIN 9" AT SEVERAL SHARED SUPPORTS. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION 5" MINIMUM FROM THE PROTECTED RACEWAY.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 16, 17
93093/0 (ISSUE 2)	AB	831'	X-226	AA21d	Y	Y	ISSUE: CABLE TRAY CANNOT BE PROTECTED PER TYPICAL DETAILS WHERE AIR DROPS ENTER FROM CEILING. RESOLUTION: EXTEND CABLE TRAY ENVELOPE TO THE CONCRETE WALL AND BOX LAST 16" UP TO CEILING, THEREBY ENCLOSING AIR DROPS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 16, 17
93096/0 (ISSUE 1)	SG	810'	1-082	SB8	Y	Y	ISSUE: ARRANGEMENT OF AIR DROP BETWEEN 2 STACKED TRAYS AND A SWAY STRUT INTERFERES WITH THERMO-LAG COVERAGE ON THE TRAYS AND THE AIR DROP. RESOLUTION: BOX THE TWO CABLE TRAYS TOGETHER AT THE AIR DROP.	14-1, 15-1, 11-2, 11-4, 11-5, 11-1	1-5, 7, 26, 27

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES I17-I19)
93096/0 (ISSUE 2)	SG	810'	1-082	SB8	Y	Y	ISSUE: 2" PIPE SPOOL FLANGE INTERFERES WITH THERMO-LAG COVERAGE OF CABLE TRAY. RESOLUTION: PROTECT THE CABLE TRAY USING 330-1 FLAT PANEL BETWEEN THE TRAY AND PIPE SPOOL FLANGE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 7, 26, 27
93096/0 (ISSUE 3)	SG	810'	1-082	SB8	Y	Y	ISSUE: CONSTRUCTION REQUESTS DIRECTION IN PROTECTING TRAY SUPPORTS PARTIALLY EMBEDDED IN PENETRATION SEAL. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION ON EXPOSED SURFACES OF TRAY SUPPORTS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 7, 26, 27
93148/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: CONCRETE WALL INTERFERES WITH BOTH PREBAND AND BANDING OF 24" CABLE TRAY COVERAGE. RESOLUTION: INSTALL A BASE PREBAND ALONG THE WALL SECTION WITHOUT CLEARANCE. UTILIZE THE BASE PREBAND TO HALTER THE REQUIRED REMAINING BAND FASTENERS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 18
93240/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: INTERFERENCES ALONG A 3' SECTION OF THE BOTTOM OF AN 18" TRAY DO NOT ALLOW THE TRAY TO BE COVERED PER TYPICAL DETAILS. RESOLUTION: PROTECT THE ESSENTIAL CABLE TRAY USING 330-1 FLAT PANEL IN THE AREA OF INTERFERENCE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 7

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
5	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATIONS EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).	GENERIC
7	TEST SCHEME 10-2 DEMONSTRATED THE EFFECTIVENESS OF A SINGLE LAYER OF 1/2" 330-1 FLAT PANEL ON JUNCTION BOXES AND IS CREDITED WHERE INTERFERENCES PRECLUDE THE INSTALLATION OF 330-1 V-RIB PANEL. REFERENCE APPENDIX G OF THIS REPORT FOR TYPICAL DETAIL 8-3 ACCEPTANCE BASIS.	84868/0 93096/0 92875/0 93240/0 92905/1 92294/0 93010/0 92537/0
8	THIS INSTALLATION FAILS TO ACHIEVE FULL MATERIAL THICKNESS BETWEEN THE HANGER ANGLE AND THE TRAY SIDE RAIL. PROTECTION OF THE HANGER ANGLE AS PER PROTRUDING ITEM REQUIREMENTS MAINTAINS MATERIAL CONTINUITY ALONG WITH SHIELDING THE DEVIATION FROM DIRECT FIRE EXPOSURE.	84868/0
9	THE CONFIGURATION, AS INSTALLED, ACHIEVES THE FULL REQUIRED MATERIAL PROTECTION OF THE PROTRUDING ITEM AT IN INTERFERENCE. THE PRIMARY ENVELOPE IS NOT AFFECTED.	84868/0 91146/1
10	TEST SCHEME 11-4 DEMONSTRATES THE EFFECTIVENESS OF A CABLE TRAY AT A BOX ENCLOSURE. THE PENETRATION OPENING IN THIS CONFIGURATION IS CLOSED UTILIZED 330-1 PANEL MATERIAL, LEAVING THE AREA OF INTERFERENCE INSIDE THE ENCLOSED PENETRATION. THE PRIMARY ENVELOPE IS NO LONGER AFFECTED BY THE F.P. PIPE AND THE FIRE PROTECTION PIPE IS PROTECTED AS A PROTRUDING ITEM OF THE ENCLOSED PENETRATION/PRIMARY ENVELOPE.	84871/1
11	THE CONFIGURATION, AS INSTALLED, FAILS TO ACHIEVE FULL MATERIAL THICKNESS AT THE INTERFERENCE. THE MATERIAL THICKNESS DEVIATION IS AT THE TERMINATION OF REQUIRED PROTECTION. THE PROTECTED RACEWAY TERMINATES INTO A NON-PROTECTED CABINET. THIS REDUCTION IN MATERIAL THICKNESS DOES NOT COMPROMISE THE INTEGRITY OF THE ENVELOPE.	85011/0

12	THE TEST SCHEMES LISTED QUALIFIED CABLE TRAY PROTECTIVE ENVELOPES WITH 1/2" (NOMINAL) V-RIB PANELS INSTALLED AROUND EXTERIOR SURFACES OF CABLE TRAY. THE COVERAGE DEVIATIONS PER THIS DCA IDENTIFY SPECIFIC LOCATIONS WHERE STANDARD V-RIB PANEL COVERAGE CANNOT BE INSTALLED DUE TO INTERFERENCES (HVAC DUCT, CONCRETE BEAM). AT THE BOTTOM OF THE TRAY SIDE RAIL WHERE THE HVAC DUCT PRESENTS AN INTERFERENCE, 2 LAYERS OF 330-660 FLEXI-BLANKET (QUALIFIED VIA SCHEMES 11-1 AND 11-2) ARE INSTALLED INSIDE THE TRAY (AROUND THE CABLES). MATERIAL COVERAGE ON THE TRAY SIDE AND BOTTOM IS ACHIEVED BY BUTTING V-RIB PANELS AS CLOSE TO THE INTERFERING ITEM AS POSSIBLE AND SEALING THE AREA WITH A TROWEL GRADE BUILDUP. EFFECTIVE MATERIAL THICKNESS, CONSISTENT WITH TESTED CONFIGURATIONS IS THEREFORE PROVIDED. THE MATERIAL MASS INSTALLED OUTSIDE THE TRAY IMMEDIATELY ADJACENT TO THE INTERFERING ITEM PROVIDE FOR SUBLIMATION AND CHAR LAYER FORMATION TO EFFECTIVELY COOL THE LOCALIZED AREA WHERE MATERIAL IS INSTALLED INSIDE THE TRAY. FINALLY, THE INTERFERING HVAC DUCT SERVES AS TORTUOUS PATH FOR HEAT ENTRY INTO THE ENVELOPE. THE TRANSITION FROM V-RIB TO FLAT PANEL (ENVELOPE TOP PANEL) FOR CONSTRUCTABILITY IS ACCEPTABLE. REFER TO APPENDIX G OF THIS REPORT FOR TYPICAL DETAIL 8-3 ACCEPTANCE BASIS. THEREFORE, THIS CONFIGURATION PROVIDES AN EQUIVALENT LEVEL OF PROTECTION TO TESTED CONFIGURATIONS AND THE LOCALIZED AREAS OF DEVIATED PROTECTION ARE ACCEPTABLE.	85079/1
13	THE CONFIGURATION, AS INSTALLED, IS QUALIFIED BY TEST SCHEME 10-2. REFERENCE APPENDIX G OF THIS REPORT FOR TYPICAL DETAIL 2-3 ACCEPTANCE BASIS.	86095/0
14	TEST SCHEME 11-4 DEMONSTRATES THE EFFECTIVENESS OF A BOX ENCLOSURE OF 330-1 PANEL SPANNING BETWEEN ATTACHMENT POINTS UNSUPPORTED BY AN INTERNAL STRUCTURE. THE CONFIGURATION, AS INSTALLED, IS SMALLER THAN THE TESTED ENCLOSURE, REINFORCED INTERNALLY BY A FIRE STOP AND INSTALLED IN A VERTICAL ORIENTATION. THE METHOD OF ATTACHMENT TO THE TRAYS IS EQUIVALENT TO TESTED CONFIGURATIONS.	87918/0
15	THE CONFIGURATION OF PROTRUDING ITEM PROTECTION, AS INSTALLED, IS CONSISTENT WITH AND QUALIFIED BY THE LISTED CABLE TRAY TEST SCHEMES.	88584/0
16	TEST SCHEME 11-4 QUALIFIES THE INSTALLATION OF 330-1 PREFAB. MATERIAL WHICH IS NOT IN COMPLETE CONTACT WITH THE RACEWAY, THEREBY FORMING AN EXTENDED ENCLOSURE.	88660/1 93093/0 91631/1 91823/1
17	REFERENCE APPENDIX G OF THIS REPORT FOR TYPICAL DETAIL 14-1 ACCEPTANCE BASIS.	88660/1 93093/0
18	THE TEST SCHEMES LISTED QUALIFIED CABLE TRAY PROTECTIVE ENVELOPES UTILIZING STAINLESS STEEL BANDING AS A FASTENING DEVICE.	92605/0 92838/0 93148/0
19	THE TEST SCHEMES LISTED QUALIFIED CABLE AIR DROPS WITHIN A 330-660 FLEXI-BLANKET ENVELOPE ROUTED BETWEEN CONDUIT AND CABLE TRAY. THE CRITICAL PARAMETERS FOR THIS CONFIGURATION ARE MATERIAL THICKNESS AND STRUCTURAL INTEGRITY. THE INSTALLATION USES MATERIAL THICKNESS AND MATERIAL FASTENING METHODS CONSISTENT WITH TESTED CONFIGURATIONS.	92611/0

20	THE WRAPPING MORE THAN ONE CONDUIT IN A COMMON ENVELOPE IS NOT A TESTED CONFIGURATION. HOWEVER, SINCE THE CRITICAL PARAMETERS OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE EQUIVALENT TO TESTED CONFIGURATIONS, THE INSTALLATION IS ACCEPTABLE.	92615/0 92462/0 92731/0 92564/1 92839/0 91985/0
21	THE TEST SCHEMES LISTED QUALIFIED CABLE TRAYS PROTECTED WITH 1/2" (NOMINAL" THICK 330-1 V-RIBBED PANELS. THIS CONFIGURATION HAS A MINOR AREA OF 12" MIN. LENGTH THAT IS PROTECTED WITH AN INCREASED (1"-2") MATERIAL THICKNESS IN ACCORDANCE WITH THE THERMO-LAG FIRE PROTECTION REQUIREMENTS OF STRUCTURAL STEEL. THE PROTECTION PROVIDED AT THE WALL PENETRATION EXCEEDS NORMAL CABLE TRAY PROTECTIVE ENVELOPE THICKNESS REQUIREMENTS.	92642/0
22	THE CONDUIT TEST SCHEMES LISTED QUALIFIED PROTECTIVE ENVELOPES CONSTRUCTED OF 330-1 AND/OR 330-660 MATERIAL. THE DELETION OF INTERNAL CONDUIT FIRE STOPS FOR PROTECTED CONDUIT ROUTED BETWEEN EQUIPMENT WITHIN THE SAME ROOM WILL NOT AFFECT THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPES.	92644/1
23	THE CABLE AIR DROP FROM CONDUIT TEST SCHEMES LISTED QUALIFIED PROTECTIVE ENVELOPES CONSTRUCTED OF 330-660 AND 330-1 MATERIAL. THIS DEVIATION IN THE OVERLAP OF 330-660 MATERIAL ONTO THE 330-1 CONDUIT SECTIONS STILL PROVIDES SUFFICIENT OVERLAP TO INSTALL ALL THE FASTENER DEVICES UTILIZED IN THE TESTED CONFIGURATIONS. SINCE THE INSTALLED CONFIGURATION MAINTAINS THE CRITICAL ATTRIBUTES OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY, THE INSTALLATION IS ACCEPTABLE.	92831/0
24	THE CABLE TRAY TEST SCHEMES LISTED QUALIFY THE PROTECTIVE ENVELOPE.	91146/1 92905/1 91631/1 92934/0 92214/1 93006/0 90227/0
25	THE CABLE AIR DROP TEST SCHEMES LISTED QUALIFY A 330-660 PROTECTIVE ENVELOPE PENETRATING A 330-1 PANEL TYPE PROTECTIVE ENVELOPE. THE DEVIATION IN MATERIAL OVERLAP IS MADE LESS SIGNIFICANT BY THE ADDITION OF ADDITIONAL PREFORMED 330-1 CONDUIT SECTIONS. THE FINAL CONFIGURATION OF THE AIR DROP IS LIKENED TO AN AIR DROP INTO A 330-1 ENVELOPE. SINCE, THE CRITICAL PARAMETERS OF MATERIAL THICKNESS AND STRUCTURAL INTEGRITY ARE MAINTAINED, THE INSTALLATION IS ACCEPTABLE.	93005/0
26	THE CABLE TRAY TEST SCHEME 11-4 QUALIFIES A PROTECTIVE ENVELOPE OF 330-1 PANEL MATERIAL WHICH ENCLOSES MORE THAN ONE CABLE TRAY. THIS INSTALLATION IS CONSISTENT WITH THE TESTED CONFIGURATION.	93096/0
27	THE PROTRUDING ITEM PROTECTION'S ATTACHMENT IS CONSISTENT WITH METHODS UTILIZED IN STRUCTURAL STEEL PROTECTION.	93096/0
28	THE CONDUIT TEST SCHEMES LISTED QUALIFIED 330-1 PREFAB. MATERIAL AS A PROTECTIVE ENVELOPE. THE USE OF A MINOR LENGTH OF FLAT PANEL IS A MINOR DEVIATION AND WILL NOT AFFECT THE ACCEPTABILITY OF THE INSTALLATION.	91985/0

ATTACHMENT J

PROTRUDING/INTERFERING ITEMS
COVERAGE DEVIATIONS

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
81340/0	AB	810'	X-209	AA21c	N	Y	ISSUE: TWO 3/8" Ø STAINLESS STEEL INSTRUMENT TUBES ARE WITHIN 8" OF THE PROTECTED COMMODITY AND CANNOT BE COVERED DUE TO INSULATION ON THE TUBING. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION ON THE CONDUIT SUPPORT PER TYPICAL DETAILS AND ON THE INSTRUMENT TUBE SUPPORT UP TO THE INSULATION.	9-1, 9-3, 10-1, 10-2	1-5, 22
81377/0	SG	790'	1-067	SB2c	N	Y	ISSUE: TWO EMERGENCY LIGHTS ARE REQUIRED TO BE COVERED AS PROTRUDING ITEMS DUE TO THE 9" RULE. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION ONTO THE LIGHTING UNITS TO THE END OF THE LAMP STEM. NOTE: THE SUBJECT RACEWAY T130SCC31 NO LONGER REQUIRES THERMO-LAG PROTECTION PER M1-1700. REF. DCA 87535	N/A	N/A
86804/0	SG	831'	1-094	SB15	Y	Y	ISSUE: A SMOKE DETECTOR ATTACHED TO A THERMO-LAG COVERED CABLE TRAY SUPPORT DOES NOT ALLOW COVERAGE PER THE 9" RULE. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION AND EXTEND TO THE EXPOSED SURFACE OF THE C.I. BOX. EXCLUDING THE CONDUIT FIRESTOP, THIS INSTALLATION IS CONSISTENT WITH TYPICAL DETAIL 7-5.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 8

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
84863/0	SG	831'	1-094	SB15	Y	Y	ISSUE: ANGLE IRON AND ALL THREAD ROD INTERFERE WITH COVERAGE ON ESSENTIAL CONDUIT AND CANNOT BE COVERED PER TYPICAL DETAIL DUE TO MOVEMENT OF THE ALL THREAD ROD. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION ON ROD HANGER AND SUPPORT. FILL AREA BETWEEN ESSENTIAL CONDUIT PROTECTION AND PROTRUDING ITEM PROTECTION WITH 330-660 TROWEL GRADE MATERIAL. PROTRUDING ITEM PROTECTION IS CONSISTENT WITH TYPICAL DETAIL 9-1.	9-1, 9-3, 10-1, 10-2	1-5, 7
86805/0	SG	790'	1-070	SB4	Y	Y	ISSUE: A SMOKE DETECTOR ATTACHED TO A THERMO-LAG COVERED CABLE TRAY SUPPORT DOES NOT ALLOW COVERAGE PER THE 9" RULE. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION AND EXTEND TO THE EXPOSED SURFACE OF THE C.I. BOX. EXCLUDING THE CONDUIT FIRESTOP, THIS INSTALLATION IS CONSISTENT WITH TYPICAL DETAIL 7-5.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 8
88553/0	SG	810'	1-082	SB8	Y	Y	ISSUE: 2" INSULATED PIPE INTERFERES WITH COVERAGE ON ESSENTIAL CONDUIT SUPPORT. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION FROM THE PROTECTED RACEWAY ENVELOPE 8 1/2" MINIMUM - 11" MAXIMUM.	9-1, 9-3, 10-1, 10-2	1-5, 9

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
89927/3	AB AB EC	810' 832' 778'	X-207 X-241 X-113	AA21b AA21f EA43	Y Y Y	Y Y Y	ISSUE: THE TYPICAL DETAILS FOR COVERING NON ESSENTIAL AIR DROPS NEED TO BE MODIFIED IN ORDER TO ALLEVIATE WEIGHT ON THE ESSENTIAL COMMODITY. RESOLUTION: INSTALL PROTECTION ON THE SPECIFIED PROTRUDING ITEM AIR DROPS FROM THEIR RESPECTIVE CONDUIT SLEEVE TO THE CABLE TRAY. INSTALLATION METHOD IS TO BE LIKE ESSENTIAL AIR DROP. ALL CONDUIT SLEEVES TO BE FIRE STOPPED. THE INSTALLATION METHODS UTILIZED ARE CONSISTENT WITH TYPICAL DETAILS 3-4 AND 7-1.	11-1, 11-2	1-6, 10
91906/0	EC	854'	X-150A	EA74	N	Y	ISSUE: AN ESSENTIAL CABLE TRAY SHARES 6 SUPPORTS WITH A NON ESSENTIAL CABLE TRAY AND THEY ARE SEPARATED LESS THAN 9". RESOLUTION: PROTRUDING ITEM PROTECTION IS REDUCED TO 5" MIN. FROM THE ESSENTIAL RACEWAY. THESE INSTALLATIONS ARE CONSISTENT WITH TYPICAL DETAIL 14-1.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 13

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
92007/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: AN INSTRUMENT LINE INTERFERES WITH COVERAGE ON A SUPPORT FOR AN ESSENTIAL CABLE TRAY. RESOLUTION: ENCLOSE THE INSTRUMENT TUBE & ITS TRAY WITH 330-1 PANELS AS PART OF THE PROTRUDING ITEM PROTECTION.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 18
92168/1	AB	852'	X-241	AA21f	Y	Y	ISSUE: INSTRUMENT TUBING AND SUPPORT INTERFERE WITH COVERAGE ON THE SUPPORT ON AN ESSENTIAL TRAY. RESOLUTION: MODIFY INSTRUMENT TUBE SUPPORT SUCH THAT ADEQUATE CLEARANCE EXISTS TO INSTALL ESSENTIAL (CABLE TRAY) ENVELOPE. INSTALL PROTRUDING ITEM PROTECTION ON BOTH THE TRAY & TUBE SUPPORTS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 19
92515/0	SG	831'	1-096	SE16	N	Y	ISSUE: NONESSENTIAL CONDUITS RUNNING FROM ESSENTIAL JUNCTION BOX TO CONTAINMENT PENETRATION CANNOT BE COVERED AS PROTRUDING ITEM PER TYPICAL DETAILS. RESOLUTION: EXTEND PROTRUDING ITEM PROTECTION FROM THE JUNCTION BOX PROTECTIVE ENVELOPE TO THE ELECTRICAL MODULE SLEEVE. PROTRUDING ITEM PROTECTION IS MEASURED FROM PROTECTED ANGLE IRON ON JUNCTION BOX.	9-1, 9-3, 10-1, 10-2	1-5, 11

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
92596/0	EC	778'	X-113	EA43	Y	Y	ISSUE: 2" CC LINE INTERFERES WITH COVERAGE ON A PIPE SUPPORT COVERED AS A PROTRUDING ITEM. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION ON THE SUPPORT HANGER. BOX THE LOWER SECTION OF THE HANGER AT THE PIPE, PROVIDING AN UNSEALED JOINT AROUND THE PIPE.	9-1, 9-3, 10-1, 10-2	1-5, 21
92610/0	AB	852'	X-241	AA21f	Y	Y	ISSUE: A NON-ESSENTIAL CABLE TRAY RUNS PARALLEL TO AND SHARES SUPPORTS WITH AN ESSENTIAL TRAY. THE NONESSENTIAL TRAY FALLS WITHIN THE 9" RULE AT THE SHARED SUPPORTS. RESOLUTION: PROTRUDING ITEM PROTECTION IS REDUCED TO 5" MIN. FROM THE ESSENTIAL TRAY ENVELOPE. THIS INSTALLATION IS CONSISTENT WITH TYPICAL DETAIL 14-1. MINOR USE OF 330-1 FLAT PANEL ALONG THE ESSENTIAL TRAY SIDE RAIL PROVIDES NECESSARY SPACE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 12

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
92613/0	SG	790'	1-070	SB4	Y	Y	ISSUE: ESSENTIAL AND NON-ESSENTIAL CABLE TRAYS RUN PARALLEL AND SHARE SUPPORTS. THE NON-ESSENTIAL TRAY FALLS WITHIN THE 9" RULE AT THE SHARED SUPPORTS. RESOLUTION: PROTRUDING ITEM PROTECTION IS REDUCED TO 5" MIN. FROM THE ESSENTIAL TRAY ENVELOPE. THIS INSTALLATION IS CONSISTENT WITH TYPICAL DETAIL 14-1. MINOR USE OF 330-1 FLAT PANEL ALONG THE ESSENTIAL TRAY SIDE RAIL PROVIDES NECESSARY SPACE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 12
92665/2	AB	831'	X-226	AA21d	Y	Y	ISSUE: NON-ESSENTIAL CABLE TRAY RUNS PARALLEL TO ESSENTIAL TRAY AND SHARES SUPPORTS. THE NON-ESSENTIAL TRAY FALLS WITHIN 9" RULE AT SHARED SUPPORTS. RESOLUTION: PROTRUDING ITEM PROTECTION IS REDUCED TO 5" MIN. FROM THE ESSENTIAL TRAY. THIS INSTALLATION IS CONSISTENT WITH TYPICAL DETAIL 14-1.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 13
92720/0	SG	831'	1-096	SE16	N	Y	ISSUE: CANNOT COVER GROUND CABLE FOR CABLE TRAY PER 9" RULE. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION FROM THE PROTECTED RACEWAY 9" MINIMUM ALONG THE CONDUCTIVE HEAT PATH.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 14

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
92868/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: A NON-ESSENTIAL TRAY RUNS PARALLEL TO AN ESSENTIAL TRAY AND IS LESS THAN 9" APART AT A SUPPORT. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION FROM THE PROTECTED RACEWAY 9" MINIMUM ALONG THE CONDUCTIVE HEAT PATH.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 14
92876/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: SUPPORTS FOR 2 STACKED CABLE TRAYS ARE ATTACHED TO AN EMBED PLATE WHICH IS LESS THAN 9" FROM THE PROTECTED TRAY. NEED DETAIL TO COVER EMBED PLATE. RESOLUTION: PROTRUDING ITEM PROTECTION SHALL BE EXTENDED OUT FROM THE SUPPORT MEMBER ONTO THE EMBED PLATE IN ALL DIRECTIONS FOR A SUFFICIENT DISTANCE TO ACHIEVE 9" MINIMUM PROTECTION. THIS INSTALLATION IS CONSISTENT WITH TYPICAL DETAIL 12-1.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
92917/0	AB	852'	X-241	AA21f	Y	Y	ISSUE: A NON-ESSENTIAL CABLE TRAY RUN PARALLEL TO AN ESSENTIAL TRAY AND WITHIN 9" AT A COMMON SUPPORT. RESOLUTION: PROTRUDING ITEM PROTECTION IS REDUCED TO 5" MIN. FROM THE ESSENTIAL TRAY ENVELOPE. THIS INSTALLATION IS CONSISTENT WITH TYPICAL DETAIL 14-1. APPLICATION OF T-LAG MATERIAL ENCOMPASSING THE NONESSENTIAL TRAY SIDE RAIL PROVIDES INCREASED LEVEL CONDUCTIVE HEAT PROTECTION.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 13
92935/0	EC	854'	X-150A	EA74	N	Y	ISSUE: A NON-ESSENTIAL CONDUIT IS WITHIN 9" OF AN ESSENTIAL CABLE TRAY DUE TO A SHARED GROUND CABLE. RESOLUTION: SEAL THE OPEN END OF THE CONDUIT WITH 1/2" MIN. DFT 330-1 MATERIAL AND INSTALL PROTRUDING ITEM PROTECTION ON BOTH THE GROUND CABLE AND NON-ESSENTIAL CONDUIT.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 16

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
92977/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: A NON-ESSENTIAL CABLE TRAY RUNS PARALLEL TO AN ESSENTIAL CABLE TRAY AND WITHIN 9" AT SEVERAL SHARED SUPPORTS. RESOLUTION: 1) PROTRUDING ITEM PROTECTION IS REDUCED TO 6" MIN. FROM THE ESSENTIAL RACEWAY ALONG THREE SUPPORT MEMBERS. THESE INSTALLATIONS ARE COMPARABLE TO TYPICAL DETAIL 14-1. 2) PROTRUDING ITEM PROTECTION IS INSTALLED PER THE 9"-11" CRITERIA FROM THE ESSENTIAL TRAY ENVELOPE ALONG TWO SUPPORT MEMBERS. THESE INSTALLATIONS ARE COMPARABLE TO TYPICAL DETAIL 13-6.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 13 1-5, 17
93008/0	AB	790'	X-180	AA21a	Y	Y	ISSUE: THERMO-LAG COVERAGE ON PROTRUDING SUPPORT CANNOT BE ACHIEVED FOR THE ENTIRE 9" FROM THE PROTECTED ENVELOPE. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION FOR 9" MIN. AS MEASURED FROM THE PROTECTED RACEWAY ALONG THE CONDUCTIVE HEAT PATH.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 14
93025/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: A NON-ESSENTIAL CABLE TRAY IS WITHIN 9" OF AN ESSENTIAL CABLE TRAY ON A SHARED SUPPORT. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION FOR 9" MIN. AS MEASURED FROM THE PROTECTED RACEWAY ALONG THE CONDUCTIVE HEAT PATH.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 14

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
93108/0	SG	810'	1-082	SB8	Y	Y	ISSUE: NON-ESSENTIAL CONDUIT AIR DROPPING INTO ESSENTIAL TRAY CANNOT BE COVERED PER TYPICAL DETAIL. RESOLUTION: THE NON-ESSENTIAL CONDUIT IS FIRE STOPPED AND PROTECTED AS A PROTRUDING ITEM. SINCE THE CONDUIT RESTS ON THE TRAY FLANGE, THE PROTRUDING ITEM PROTECTION IS BLENDED INTO THE TRAY ENVELOPE. THE CABLE AIR DROP IS ENCLOSED IN A 330-1 CONDUIT HALF ROUND EXTENDING OVER THE CABLE AND CAPPED AT THE END. ALL INTERFACE JOINTS ARE REINFORCED WITH STRESS SKIN. THIS INSTALLATION IS SIMILAR TO TYPICAL DETAIL 3-1.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20
93193/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: A NON-ESSENTIAL CABLE TRAY RUNS PARALLEL WITH AN ESSENTIAL TRAY AND IS WITHIN 9" AT SEVERAL SHARED SUPPORTS. RESOLUTION: INSTALL PROTRUDING ITEM PROTECTION FROM THE PROTECTED RACEWAY 9" MINIMUM ALONG THE CONDUCTIVE HEAT PATH.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 14

DCA/DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES J13-J15)
88583/0	AB	810'	X-207	AA21b	Y	Y	ISSUE: INSTRUMENT TRAY INTERFERES WITH COVERAGE ON 2 ESSENTIAL CABLE TRAYS. RESOLUTION: INSTRUMENT TRAY IS WRAPPED AS A PROTRUDING ITEM PER TYPICAL DETAILS. INSTRUMENT TRAY IS ENCLOSED IN A BOX WHICH BUTTS TO THE CONCRETE WALL WITH A TROWEL GRADE FILLET AT THE INTERFACE.	9-1, 9-2, 10-1, 10-2, 11-1, 11-2, 11-4, 11-5, 13-2, 14-1, 15-1	1-5, 23

NOTE	ACCEPTANCE BASIS/NOTES	DCA/REV
1	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
2	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
3	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.	GENERIC
4	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTED WITH TESTED CONFIGURATIONS.	GENERIC
5	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.	GENERIC
6	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATIONS EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).	GENERIC
7	REFERENCE ATTACHMENT G OF THIS REPORT FOR TYPICAL DETAIL 9-1 ACCEPTANCE BASIS. THIS FIELD CONFIGURATION PROTECTS AN INTERFERENCE TO ESSENTIAL (CONDUIT) ENVELOPE INSTALLATION. THE AREA BETWEEN THE TWO INSTALLATIONS IS FILLED WITH ACCEPTABLE FIRE BARRIER MATERIAL. THE REQUIRED MATERIAL THICKNESS FOR THE ESSENTIAL (CONDUIT) ENVELOPE IS PROVIDED BY THIS FIELD CONFIGURATION. THE ESSENTIAL (CONDUIT) ENVELOPE IS INSTALLED PER THE TYPICAL DETAILS UP TO THE INTERFERENCE, WHERE IT IS CUT TO FIT AROUND THE PROTRUDING ITEM PROTECTION.	84863/0
8	REFERENCE ATTACHMENT G OF THIS REPORT FOR TYPICAL DETAIL 7-5 ACCEPTANCE BASIS. THIS FIELD CONFIGURATION DOES NOT INCORPORATE A FIRESTOP WITHIN THE DETECTOR CONDUIT. THIS DEVIATION IS ACCEPTABLE AS THERE IS NO DIRECT CONDUCTIVE PATH TO THE ESSENTIAL (CABLE TRAY) ENVELOPE. THE ESSENTIAL (CABLE TRAY) ENVELOPE IS NOT AFFECTED.	86804/0 86805/0
9	THE CONDUIT QUALIFICATION TESTS WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. THIS FIELD CONFIGURATION PROVIDES FOR 8 1/2" MINIMUM COVERAGE FROM THE OUTSIDE OF THE ENVELOPE. BASED ON THE MINIMUM MATERIAL THICKNESS OF 1/2", THERE IS SUFFICIENT BASIS TO CONCLUDE THAT 9" MINIMUM OF PROTRUDING ITEM PROTECTION IS INSTALLED AS MEASURED FROM THE ESSENTIAL (CONDUIT) RACEWAY. THEREFORE, THIS CONFIGURATION MEETS THE PROVISION OF THE INSTALLATION SPECIFICATION. THE PRIMARY (CONDUIT) ENVELOPE IS NOT AFFECTED.	88553/0
10	THE CABLE TRAY QUALIFICATION TESTS WERE PERFORMED WITH ESSENTIAL AIR DROPS PROTECTED FROM A CONDUIT TO A TRAY. THESE FIELD CONFIGURATIONS OF NON-ESSENTIAL AIR DROPS UTILIZE ESSENTIAL AIR DROP PROTECTION WITH A CONDUIT FIRE STOP TO MAINTAIN ENVELOPE INTEGRITY. REFERENCE APPENDIX G OF THIS REPORT FOR TYPICAL DETAILS 3-4 AND 7-1 ACCEPTANCE BASIS. THE ESSENTIAL (CABLE TRAY) ENVELOPE INTEGRITY IS MAINTAINED.	89927/3
11	THE JUNCTION BOX QUALIFICATION TESTS WERE PERFORMED WITH PROTRUDING ITEMS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. THIS FIELD CONFIGURATION IS CONSISTENT WITH TESTED CONFIGURATIONS.	92515/0

12	REFERENCE APPENDIX G OF THIS REPORT FOR TYPICAL DETAIL 14-1 ACCEPTANCE BASIS. ALTHOUGH IT REPRESENTS A SLIGHT DEVIATION FROM THE TYPICAL DETAIL, INSTALLING MINOR LENGTHS OF FLAT PANEL ALONG THE TRAY SIDE RAIL IS ACCEPTABLE BECAUSE IT WILL NOT DECREASE THE STRUCTURAL INTEGRITY OR INCREASE THE THERMAL CHARACTERISTICS OF THE ENVELOPE.	92610/0 92613/0
13	REFERENCE APPENDIX G OF THIS REPORT FOR TYPICAL DETAIL 14-1 ACCEPTANCE BASIS.	92665/2 92917/0 92977/0 91906/0
14	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH PROTRUDING ITEMS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION PROVIDES THE REQUIRED 9" MIN. OF PROTRUDING ITEM PROTECTION IN ACCORDANCE WITH PROVISIONS OF THE INSTALLATION SPECIFICATION. THE PRIMARY (CABLE TRAY) ENVELOPE IS NOT AFFECTED.	92720/0 92868/0 93008/0 93025/0 93193/0
15	REFERENCE APPENDIX G OF THIS REPORT FOR TYPICAL DETAIL 12-1 ACCEPTANCE BASIS.	92876/0
16	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THE CONDUIT IS NOT PART OF THE ESSENTIAL (CABLE TRAY) ENVELOPE. BUT, MERELY PART OF THE CONDUCTIVE HEAT PATH ASSOCIATED WITH THE GROUND CABLE. THE INSTALLATION IS COMPARABLE TO CAPPING A HOLLOW MEMBER PER TYPICAL DETAIL 16-5. THE ESSENTIAL (CABLE TRAY) ENVELOPE IS NOT AFFECTED.	92935/0
17	REFERENCE APPENDIX G OF THIS REPORT FOR TYPICAL DETAIL 13-6 ACCEPTANCE BASIS.	92977/0
18	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURES. THIS FIELD CONFIGURATION ENCLOSES THE INSTRUMENT LINE AND ITS PROTECTIVE TRAY. WHERE IT INTERFERES WITH PROTRUDING ITEM COVERAGE OF THE SUPPORT MEMBER WITHIN THE PROTRUDING ITEM PROTECTION. THIS INSTALLATION IS CONSISTENT WITH THE PROTECTION OF PROTRUDING ITEMS. THE ESSENTIAL (CABLE TRAY) ENVELOPE IS NOT AFFECTED.	92007/0
19	EACH OF THE CABLE TRAY QUALIFICATION SCHEMES LISTED WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENCLOSURE. THIS FIELD CONFIGURATION SUCCESSFULLY MODIFIES A TUBING SUPPORT TO ALLOW FOR ACCEPTABLE INSTALLATION OF THE ESSENTIAL (CABLE TRAY) ENVELOPE AND PROTRUDING ITEM PROTECTION.	92168/1
20	THE AIR DROP CONFIGURATION AS INSTALLED PROVIDES PROTRUDING ITEM PROTECTION CONSISTENT WITH THE CABLE TRAY QUALIFICATION SCHEMES IN WHICH PROTRUDING SUPPORTS ARE PROTECTED FOR 9" DISTANCE (ONLY) FROM THE ESSENTIAL ENCLOSURE.	93108/0

21	THE CONDUIT QUALIFICATION TESTS WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. THE FIELD CONFIGURATION PROVIDES A TORTUOUS PATH FOR HEAT TRANSFER BETWEEN THE PIPE AND THE SUPPORT. THE PIPE ITSELF PROVIDES A SIGNIFICANT LEVEL OF SHIELDING AND HEAT SINK CAPABILITY. THIS DEVIATION PROVIDES ADEQUATE PROTECTION ALONG THE CONDUCTIVE HEAT PATH. THE PRIMARY (CONDUIT) ENVELOPE IS NOT AFFECTED.	92596/0
22	THE CONDUIT QUALIFICATION TESTS WERE PERFORMED WITH SUPPORTS PROTECTED FOR 9" DISTANCE (ONLY) FROM THE PROTECTIVE ENVELOPE. THIS FIELD CONFIGURATION PROVIDES A REDUCED LENGTH OF PROTECTION. THE INSTRUMENT LINES ARE COVERED WITH THERMAL INSULATION IN THE AREA OF REDUCED PROTECTION. THIS DEVIATION PROVIDES ADEQUATE PROTECTION ALONG THE CONDUCTIVE HEAT PATH. THE PRIMARY (CONDUIT) ENVELOPE IS NOT AFFECTED.	81340/0
23	THE RESULTING CONFIGURATION IS CONSISTENT WITH THE PROTRUDING ITEM COVERAGE ON SUPPORTS WHICH WAS PRESENT IN ALL OF THE TESTS EXCEPT THE COVERAGE IS BUTTED TO A CONCRETE WALL. THE ATTACHMENT TO THE WALL PROVIDES A POSITIVE SEAL AND THE WALL REDUCES THE EXPOSURE TO THE ENCLOSURES AND ACTS AS A HEAT SINK.	88583/0

ATTACHMENT K

DM 92-077, DCN's

UNIQUE CONFIGURATIONS/DEVIATIONS

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM Q	SG	832'	1-088	SB144	Y	Y	ISSUE: A WALL MOUNTED SUPPORT INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/2" THICK OVERLAY SECTIONS (INSTEAD OF 1/4") TO THE EXTENT POSSIBLE. CUT THE CONDUIT SECTIONS AS NECESSARY AND FILL SPACES WITH 330-1 TROWEL GRADE TO ACHIEVE THE SMALLEST GAP POSSIBLE.	9-1 11-1	1-5, 7
4871, R2 ITEM R	SG	832'	1-088	SB144	Y	Y	ISSUE: TWO SUPPORTS INTERFERE WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/4" THICK OVERLAY SECTIONS TO THE EXTENT POSSIBLE. COVER BOTH SUPPORTS WITH A 1/2" THICKNESS OF THERMO-LAG PER THE 9" RULE.	9-1 11-1	1-5, 8
4871, R2 ITEM S	SG	832'	1-088	SB144	Y	Y	ISSUE: THREE ITEMS, 2 CONDUITS AND 1 SUPPORT, INTERFERE WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: COVER BOTH CONDUITS WITH A 1/2" THICKNESS OF THERMO-LAG PER THE 9" RULE. COMPLETELY COVER SUPPORT WITH A 1/2" THICKNESS OF THERMO-LAG INCLUDING THE BASE PLATE.	9-1 11-1	1-5, 8

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM T	SG	832'	1-088	SB144	Y	Y	ISSUE: EXISTING THERMO-LAG ON A SUPPORT PREVENTS PROPER APPLICATION OF STRESS SKIN UPGRADE AT A CONDUIT/LBD BOX INTERFACE. RESOLUTION: PERFORM TROWEL GRADE AND STRESS SKIN UPGRADES TO THE GREATEST EXTENT POSSIBLE. ENSURE A COMPLETE CIRCUMFERENTIAL STRESS SKIN WRAP WITH THE REQUIRED MINIMUM 2" OVERLAP WHERE THE CONDUIT ENTERS THE LBD BOX.	9-1 9-3 10-1 10-2	1-5, 9
4871, R2 ITEM U	SG	832'	1-088	SB144	Y	Y	ISSUE: A CONDUIT INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: NO CHANGE REQUIRED. ACTUAL FIELD CONDITIONS ALLOWED INSTALLATION OF 1/4" THICK OVERLAY UPGRADES.	9-1 11-1	1-5, 20
4871, R2 ITEM V	SG	832'	1-088	SB144	Y	Y	ISSUE: AN HVAC SUPPORT WHICH IS PROTECTED WITH 1/2" THICKNESS OF THERMO-LAG INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: REMOVE THE THERMO-LAG FROM THE SUPPORT AS NECESSARY TO INSTALL 1/4" THICK OVERLAY SECTIONS. REWORK THE THERMO-LAG ON THE SUPPORT AS NECESSARY TO REPLACE THE MATERIAL REMOVED.	9-1 11-1	1-5, 12

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM W	EC	778'	X-115A	AA153	Y	Y	ISSUE: EXISTING THERMO-LAG ON A CONDULET LBD's ARE CONNECTED TOGETHER. ENGINEERING DIRECTION IS NEEDED FOR PERFORMING STRESS SKIN AND TROWEL GRADE JOINT UPGRADES. RESOLUTION: UPGRADE THE ENCLOSURE USING A COMPLETE CIRCUMFERENTIAL STRESS SKIN WRAP AROUND BOTH CONDULET FITTINGS AND THE ASSOCIATED THERMO-LAG.	9-1 9-3 10-1 10-2	1-5, 10
4871, R2 ITEM X	EC	778'	X-115A	AA153	Y	Y	ISSUE: AN EXISTING CONDULET FITTING IS BOXED WITH OVERSIZED CONDUIT SECTIONS. ENGINEERING DIRECTION IS NEEDED FOR PERFORMING STRESS SKIN AND TROWEL GRADE JOINT UPGRADES. RESOLUTION: INSTALL STRESS SKIN AND TROWEL GRADE UPGRADES AT BOTH ENDS OF THE ENCLOSURE.	9-1 9-3 10-1 10-2	1-5, 10
4871, R2 ITEM Y	SG	852'	1-100A	SK17a	Y	Y	ISSUE: A UNISTRUT SUPPORT MEMBER INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/2" THICK OVERLAY SECTIONS (INSTEAD OF 1/4") TO THE EXTENT POSSIBLE. CUT THE CONDUIT SECTIONS AS NECESSARY AND FILL SPACES WITH 330-1 TROWELABLE GRADE TO ACHIEVE THE SMALLEST GAP POSSIBLE.	9-1 11-1	1-5, 7

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM Z	SG	852'	1-100B	SK17a	Y	Y	ISSUE: A LARGE BOLT FROM AN EMBEDDED CEILING SUPPORT INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK OVERLAY UPGRADE. RESOLUTION: INSTALL 1/2" THICK MITERED OVERLAY SECTIONS (INSTEAD OF 1/4") IN THE AREA OF THE INTERFACE. CUT THE CONDUIT SECTIONS TO FIT AS CLOSE AS POSSIBLE TO THE INTERFERENCE. FILL ANY GAPS AT THE INTERFERENCE WITH 330-1 TROWELABLE GRADE.	9-1 11-1	1-5, 7
4871, R2 ITEM AA	SG	852'	1-100B	SK17a	Y	Y	ISSUE: 1/4" INSTRUMENT TUBING HAS BEEN DEFLECTED BY THE INSTALLATION OF THE 1/4" THICK OVERLAY UPGRADE. RESOLUTION: REMOVE PORTIONS OF THE 1/4" OVERLAY AND INSTALL 1/2" THICK OVERLAY SECTIONS (INSTEAD OF 1/4") IN THE AREA OF THE INTERFACE. CUT THE CONDUIT SECTIONS TO FIT AS CLOSE AS POSSIBLE TO THE INTERFERENCE. FILL ANY GAPS AT THE INTERFERENCE WITH 330-1 TROWELABLE GRADE.	9-1 11-1	1-5, 7

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM AB	EC	778'	X-115A	AA153	Y	Y	ISSUE: A BOLT FROM A WALL MOUNTED SUPPORT INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK OVERLAY UPGRADE. RESOLUTION: INSTALL 1/4" THICK OVERLAY UPGRADES TO THE EXTENT POSSIBLE IN THE AREA OF THE INTERFACE. CUT THE CONDUIT SECTIONS TO FIT AS CLOSE AS POSSIBLE TO THE INTERFERENCE. FILL ANY GAPS AT THE INTERFERENCE WITH 330-1 TROWELABLE GRADE.	9-1 11-1	1-5, 11
4871, R2 ITEM AC	SG	880'	1-109B	SK117c	Y	Y	ISSUE: A SAFETY VALVE VENT PREVENTS PROPER INSTALLATION OF THE 1/4" THICK OVERLAY UPGRADE. RESOLUTION: INSTALL 1/2" THICK OVERLAY SECTIONS (INSTEAD OF 1/4") IN THE AREA OF THE INTERFACE. CUT THE CONDUIT SECTIONS TO FIT AS CLOSE AS POSSIBLE TO THE INTERFERENCE. FILL ANY GAPS AT THE INTERFERENCE WITH 330-1 TROWELABLE GRADE.	9-1 11-1	1-5, 7
4871, R2 ITEM A	EC	778'	X-115A	AA153	Y	Y	ISSUE: THREE 1/4" INSTRUMENT TUBING DRAIN LINES PREVENT PROPER INSTALLATION OF THE 1/4" THICK OVERLAY UPGRADE. RESOLUTION: THE THREE DRAIN LINES SHALL BE CUT TO PROVIDE ADEQUATE CLEARANCE FOR COMPLETE INSTALLATION OF THE 1/4" THICK CONDUIT OVERLAYS.	9-1 11-1	1-5, 20

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IMAGE EVALUATION
TEST TARGET (MT-3)

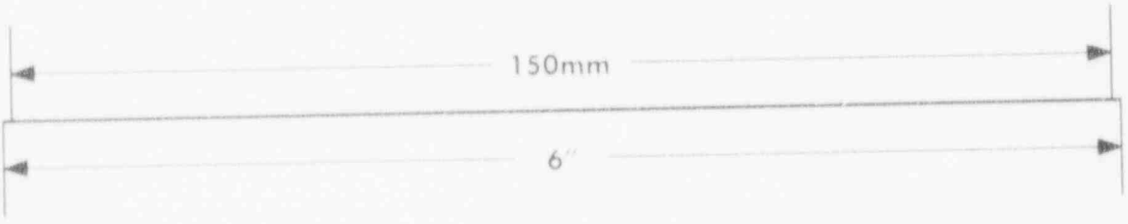

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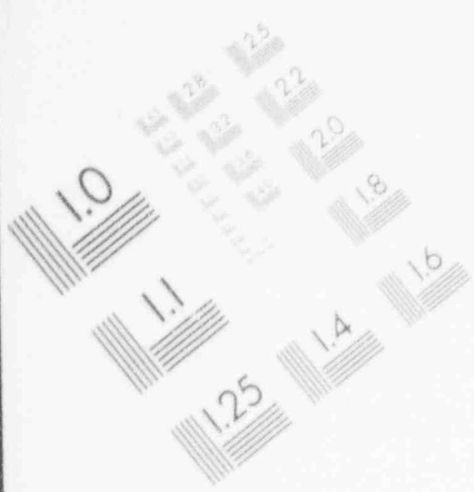
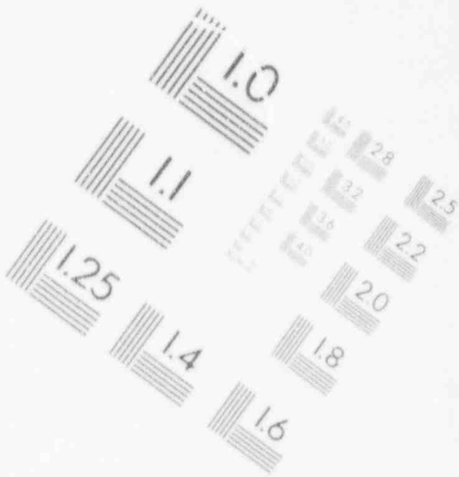
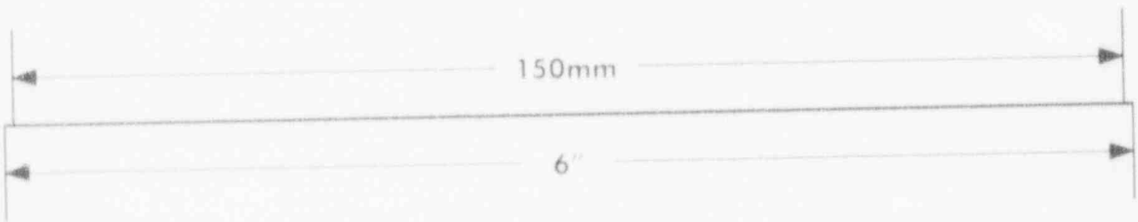
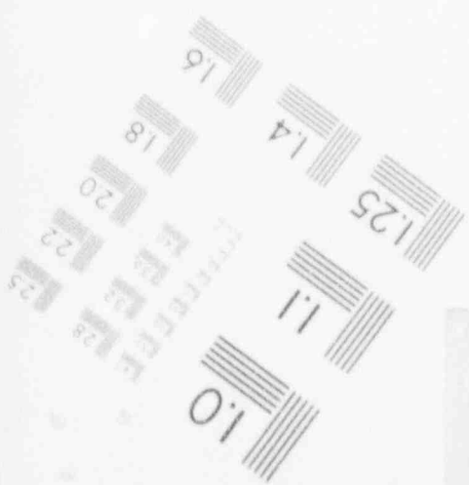
IMAGE EVALUATION TEST TARGET (MT-3)









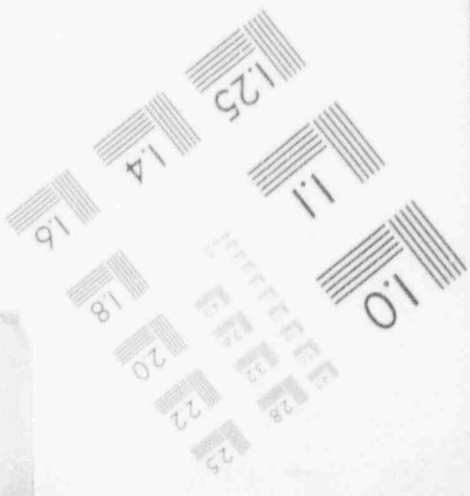


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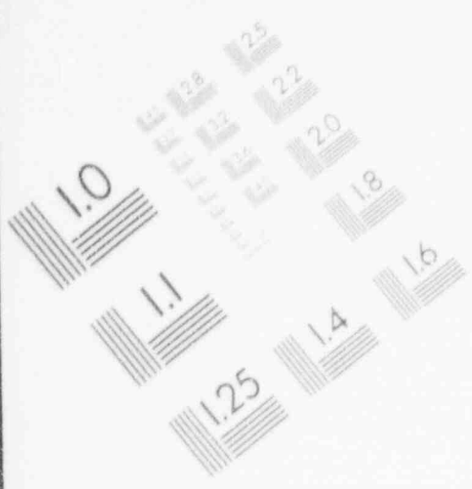
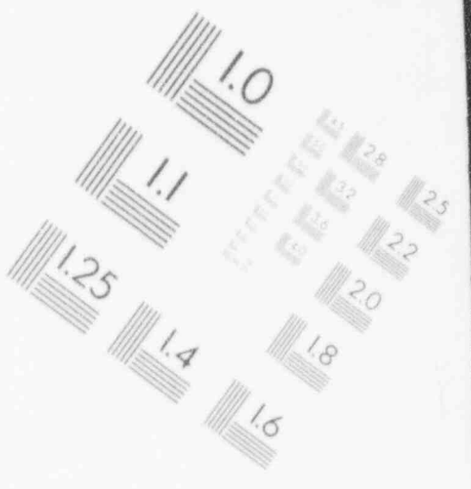
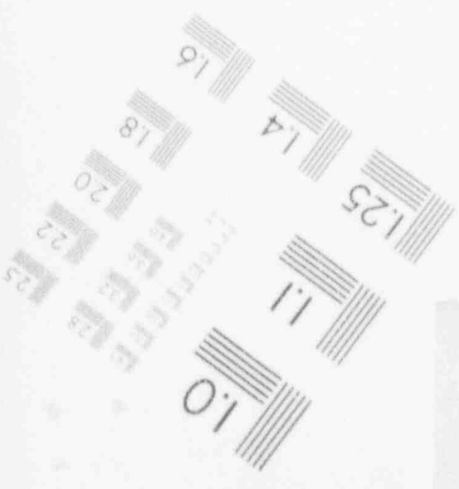
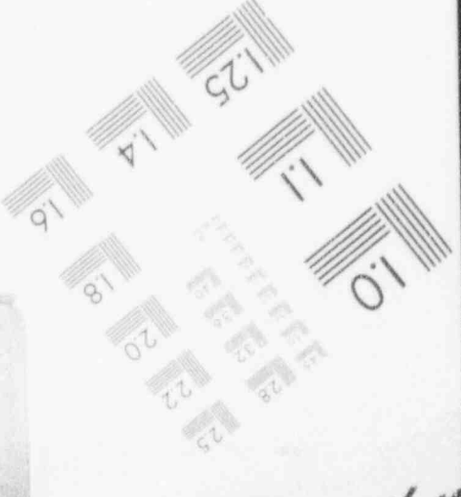
IMAGE EVALUATION
TEST TARGET (MT-3)



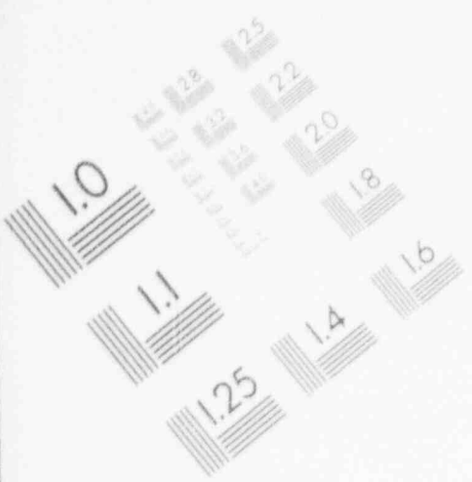


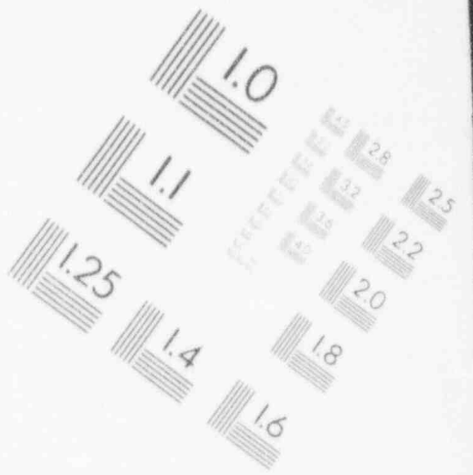


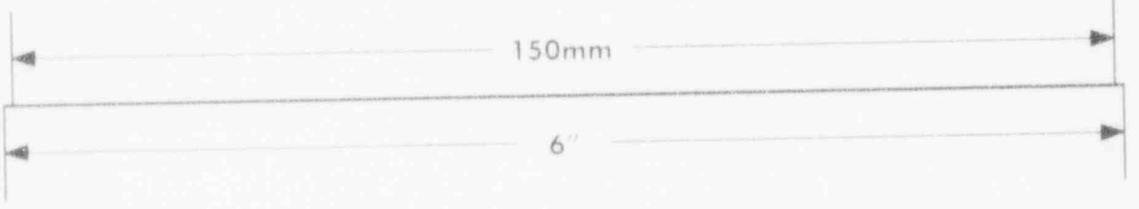


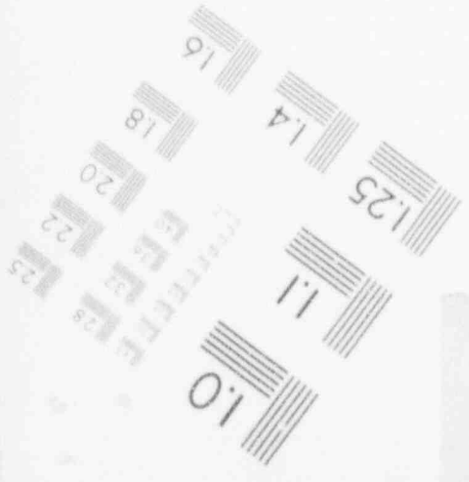
1

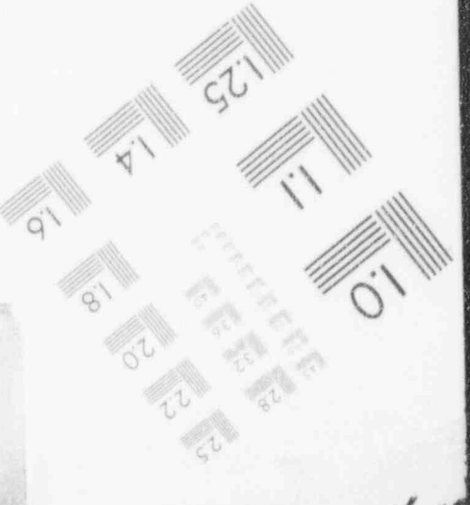
IMAGE EVALUATION
TEST TARGET (MT-3)











DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM B	EC	778'	X-115A	AA153	Y	Y	ISSUE: THE LOWER SURFACE OF THE CHILLER INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK OVERLAY UPGRADE. ADDITIONALLY, CONDENSATION ONTO THE THERMO-LAG SURFACE DEGRADED THE CONDUIT PROTECTION. RESOLUTION: REMOVE THE WETTED THERMO-LAG FROM THE CONDUIT AND SUPPORTS. INSTALL 1/2" THICK THERMO-LAG ON THE SUPPORTS AND 1/2" HALF ROUNDS ON THE CONDUIT. INSTALL 1/4" OVERLAY UPGRADES ON THE CONDUIT. PROTECT THE SUPPORTS AND CONDUIT FROM FUTURE WATER IMPINGEMENT.	9-1 11-1	1-5, 13
4871, R2 ITEM C	EC	778'	X-115A	AA153	Y	Y	ISSUE: EXISTING THERMO-LAG ON A SUPPORT PREVENTS PROPER APPLICATION OF 1/4" OVERLAY UPGRADES. RESOLUTION: REMOVE THE EXISTING 330-1 CONDUIT SECTIONS FROM THE CONDUIT AND PANELS FROM THE SUPPORT. REINSTALL 1/2" PANELS ON THE SUPPORT AND CONDUIT SECTIONS ON THE CONDUIT, THEN INSTALL 1/4" OVERLAYS. FINISH THE INSTALLATION WITH A 1/2" TROWEL GRADE FILLET AT THE INTERFACE.	9-1 11-1	1-5, 12

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM D	EC	778'	X-115A	AA153	Y	Y	ISSUE: A 3" X 3" T.S. SUPPORT IS INTERFERING WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/4" THICK OVERLAY SECTIONS TO THE EXTENT POSSIBLE. COVER THE SUPPORT WITH A 1/2" THICKNESS OF THERMO-LAG PER THE 9" RULE. ADD A 1/2" TROWEL GRADE FILLET AT THE INTERFACE.	9-1 11-1	1-5, 8
4871, R2 ITEM E	EC	778'	X-115A	AA153	Y	Y	ISSUE: A 3" X 3" T.S. SUPPORT IS INTERFERING WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/4" THICK OVERLAY SECTIONS TO THE EXTENT POSSIBLE. COVER THE SUPPORT WITH A 1/2" THICKNESS OF THERMO-LAG PER THE 9" RULE. ADD A 1/2" TROWEL GRADE FILLET AT THE INTERFACE.	9-1 11-1	1-5, 8
4871, R2 ITEM F	EC	778'	X-115A	AA153	Y	Y	ISSUE: A SUPPORT WALL PLATE IS INTERFERING WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/4" THICK OVERLAY SECTIONS TO THE EXTENT POSSIBLE. COVER THE SUPPORT WALL PLATE WITH A 1/2" THICKNESS OF THERMO-LAG PER THE 9" RULE. ADD A 1/2" TROWEL GRADE FILLET AT THE INTERFACE.	9-1 11-1	1-5, 8

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM G	EC	778'	X-115A	AA153	Y	Y	ISSUE: A NON-ESSENTIAL FLEX CONDUIT INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/2" THICK OVERLAY SECTIONS (INSTEAD OF 1/4") TO THE EXTENT POSSIBLE ON THE ESSENTIAL CONDUIT. CUT THE CONDUIT SECTIONS AS NECESSARY AND FILL SPACES WITH 330-1 TROWELABLE GRADE TO ACHIEVE THE SMALLEST GAP POSSIBLE.	9-1 11-1	1-5, 7
4871, R2 ITEM H	EC	778'	X-115A	AA153	Y	Y	ISSUE: EXISTING THERMO-LAG ON A SUPPORT PREVENTS PROPER APPLICATION OF 1/4" OVERLAY UPGRADES. RESOLUTION: REMOVE THE EXISTING 330-1 CONDUIT SECTIONS FROM THE CONDUIT AND PANELS FROM THE SUPPORT. REINSTALL 1/2" PANELS ON THE SUPPORT AND CONDUIT SECTIONS ON THE CONDUIT, THEN INSTALL 1/4" OVERLAYS. FINISH THE INSTALLATION WITH A 1/2" TROWEL GRADE FILLET AT THE INTERFACE.	9-1 11-1	1-5, 12
4871, R2 ITEM I	EC	778'	X-115A	AA153	Y	Y	ISSUE: STEEL WEBBING ON A FLOOR SUPPORT IS INTERFERING WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/4" THICK OVERLAY SECTIONS TO THE EXTENT POSSIBLE. FILL ANY GAPS AT THE INTERFERENCE WITH TROWEL GRADE.	9-1 11-1	1-5, 13

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM J	SG	852'	1-100B	SK17a	Y	Y	ISSUE: A FLANGED GRATING SUPPORT BEAM (IN TWO PLACES) INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/2" THICK OVERLAY SECTIONS (INSTEAD OF 1/4") TO THE EXTENT POSSIBLE ON THE ESSENTIAL CONDUIT. CUT THE CONDUIT SECTIONS AS NECESSARY AND FILL SPACES WITH 330-1 TROWELABLE GRADE TO ACHIEVE THE SMALLEST GAP POSSIBLE.	9-1 11-1	1-5, 7
4871, R2 ITEM K	SG	852'	1-100B	SK17a	Y	Y	ISSUE: A 1/4" INSTRUMENT TUBE AND UNISTRUT SUPPORT INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/2" THICK OVERLAY SECTIONS (INSTEAD OF 1/4") TO THE EXTENT POSSIBLE ON THE ESSENTIAL CONDUIT. CUT THE CONDUIT SECTIONS AS NECESSARY AND FILL SPACES WITH 330-1 TROWELABLE GRADE TO ACHIEVE THE SMALLEST GAP POSSIBLE.	9-1 11-1	1-5, 7
4871, R2 ITEM L	SG	852'	1-100A	SK17a	Y	Y	ISSUE: A PRESSURE GAGE PREVENTS PROPER INSTALLATION OF THE 1/4" THICK OVERLAY UPGRADE. RESOLUTION: REMOVE THE PRESSURE GAGE AND REPLACE IT WITH A STREET ELBOW AND A NEW BOTTOM MOUNT GAGE. COMPLETE THE INSTALLATION OF THE 1/4" THICK CONDUIT OVERLAYS.	9-1 11-1	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM M	SG	852'	1-100A	SK17a	Y	Y	ISSUE: A NON-ESSENTIAL CONDUIT INTERFERES WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: NO CHANGE REQUIRED. ACTUAL FIELD CONDITIONS ALLOWED INSTALLATION OF 1/4" THICK OVERLAY UPGRADES.	9-1 11-1	1-5, 20
4871, R2 ITEM N	SG	852'	1-100A	SK17a	Y	Y	ISSUE: A 2" X 2" ANGLE IRON PIPE SUPPORT IS INTERFERING WITH THE INSTALLATION OF THE 1/4" THICK UPGRADE OVERLAY. RESOLUTION: INSTALL 1/2" THICK OVERLAY SECTIONS (INSTEAD OF 1/4") TO THE EXTENT POSSIBLE ON THE ESSENTIAL CONDUIT. CUT THE CONDUIT SECTIONS AS NECESSARY AND FILL SPACES WITH 330-1 TROWELABLE GRADE TO ACHIEVE THE SMALLEST GAP POSSIBLE.	9-1 11-1	1-5, 7
4871, R2 ITEM O	SG	880'	1-109B	SK17a	Y	Y	ISSUE: A UNISTRUT SUPPORT IS INTERFERING WITH THE INSTALLATION OF THE REQUIRED STRESS SKIN AND 1/4" OVERLAY SECTION UPGRADE. RESOLUTION: INSTALL 1/4" THICK OVERLAY SECTIONS AROUND THE RADIAL BEND CUTTING TO FIT AS CLOSE AS POSSIBLE. FILL ANY GAPS AT THE INTERFERENCE WITH TROWEL GRADE.	9-1 11-1	1-5, 13

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
4871, R2 ITEM P	AB	790'	1-175	AA21a	Y	Y	ISSUE: EXISTING SUPPORT COVERAGE THERMO-LAG (IN 4 PLACES) PREVENTS PROPER APPLICATION OF 1/4" OVERLAY UPGRADES. RESOLUTION: REMOVE THE EXISTING 330-1 CONDUIT SECTIONS FROM EACH OF THE LOCATIONS. INSTALL 1/4" OVERLAYS ON THE CONDUIT, THEN REINSTALL 1/2" PANELS ON THE SUPPORTS. FINISH THE INSTALLATION WITH A 1/2" TROWEL GRADE FILLET AT THE INTERFACE.	9-1 11-1	1-5, 12
6829, R1	AB	852'	X-241	AA21f	Y	Y	ISSUE: REMOVAL OF UNNECESSARY FIRE STOP MATERIAL COULD CAUSE CABLE DAMAGE. RESOLUTION: ABANDON FIRE STOPS IN PLACE - NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6830, R2 ITEM 1	SG	790'	1-063	SA1c	N	Y	ISSUE: A BOX INSTALLATION INTERFERES WITH THE CIRCUMFERENTIAL WRAP UPGRADES. RESOLUTION: INSTALL STRESS SKIN ON BUTT JOINT & FLAIR OUT ONTO THE WALL. INSTALL A FLAT PANEL (PORTION OF BOX FRAME) OVER THE STRESS SKIN.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 15

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6830, R2 ITEM 2	SG	790'	1-063	SA1c	N	Y	ISSUE: CABLES IN EXPOSED TRAY WITH TWO LAYERS OF 330-660 FLEXI-BLANKET. RESOLUTION: UPGRADE THE TRAY FLEXI-BLANKET WITH MESH, FILL BETWEEN BUNDLES AND ALL VOIDS WITH TROWEL GRADE MATERIAL.	11-1 11-2 15-2	1-5, 16
6830, R2 ITEM 3	SG	790'	1-063	SA1c	N	Y	ISSUE: AN ANGLE SUPPORT AT THE BOTTOM OF A FIRE STOP PREVENTS NORMAL INSTALLATION OF THE CLAMP ASSEMBLY. RESOLUTION: CONSTRUCT THE BOTTOM CLAMP BAR IN A "U" SHAPE PATTERN TO FIT AROUND THE ANGLE SUPPORT.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 14
6830, R2 ITEM 4 CWAR 56	SG	790'	1-063	SA1c	N	Y	ISSUE: COMMODITY CLEARANCE ISSUE. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6830, R2 ITEM 5 CWAR 137	SG	790'	1-063	SA1c	N	Y	ISSUE: A SMALL AREA OF DAMAGE OCCURRED UPON REMOVAL OF A CHAMFER STRIP. RESOLUTION: REWORK THE DAMAGED AREA - NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6831, R4 ITEM 1, PG 8	GEN.						ISSUE: ZERO CLEARANCE BETWEEN CONDUIT RACEWAY BOX ENCLOSURES. RESOLUTION: WHERE BOTH COMMODITIES ARE PROTECTED WITH THERMO-LAG MATERIAL, THE REQUIRED JOINT UPGRADE MAY BE ACCOMPLISHED BY INSTALLING STRESS SKIN ON BOTH COMMODITIES AS A CONTINUOUS PIECE.	9-1 9-3 10-1 10-2	1-5, 17
6831, R4 ITEM 2, PG 9	SB	880'	1-109B	SK17c	Y	Y	ISSUE: INSUFFICIENT CLEARANCE BETWEEN TWO JUNCTION BOX ENCLOSURES. RESOLUTION: INSTALL CERAMIC FIBER BACK DAM BETWEEN THE BOXES, BUILD UP TROWEL GRADE MATERIAL, AND INSTALL THE REQUIRED JOINT UPGRADE BY INSTALLING STRESS SKIN ON BOTH COMMODITIES AS A CONTINUOUS PIECE.	9-1 9-3 10-1 10-2	1-5, 17
6831, R4 ITEM 3, PG 10	SB	779'	X-115A	AA153	Y	Y	ISSUE: INSUFFICIENT CLEARANCE BETWEEN A JUNCTION BOX AND CONCRETE BEAM. RESOLUTION: INSTALL CERAMIC FIBER BACK DAM BETWEEN THE BOX AND THE BEAM, BUILD UP TROWEL GRADE MATERIAL, AND INSTALL THE REQUIRED UPGRADE BY INSTALLING STRESS SKIN ON THE BOX AND FLARING IT OUT ONTO THE BEAM, THEN HILTI BOLTING IT INTO PLACE UNDER TWO LAYERS OF FLAT PANELS.	10-1 10-2	1-5, 18

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6831, R4 ITEM 4, PG 11	SB	832'	1-096	SE16	N	Y	ISSUE: REMOVABLE THERMO-LAG COVER FASTENING DEVICE. RESOLUTION: REINFORCE THE BOX COVERS LONGITUDINAL JOINTS. FOR COVER FASTENING DEVICE, SEE CWAR 399 LATER.	10-1 10-2	1-5, 19
6831, R4 ITEM 5, PG 12	EC	779'	X-113	EA43	Y	Y	ISSUE: TWO THERMO-LAGGED JUNCTION BOXES ARE NOT IDENTIFIED AS REQUIRING UPGRADE. RESOLUTION: REINFORCE THE JUNCTION BOXES.	10-1 10-2	1-5, 20
6831, R4 ITEM 6, PG 12	SB	832'	1-088	SB144	Y	Y	ISSUE: THERMO-LAGGED JUNCTION BOXES ARE NOT IDENTIFIED AS REQUIRING 350-5000-10 TOPCOAT. RESOLUTION: APPLY 350-5000-10 TOPCOAT TO ALL THERMO-LAGGED JUNCTION BOXES.	13-2	1-5, 20
6831, R4 ITEM 7 CWAR 1	AB	810'	X-207	AA21b	Y	Y	ISSUE: THERE IS INSUFFICIENT CLEARANCE BETWEEN A 330-660 AIRDROP AND A 330-1 PROTRUDING GROUND CABLE TO INSTALL THE REQUIRED UPGRADE. RESOLUTION: UPGRADE USING WIRE MESH TO ENCAPSULATE BOTH ITEMS.	11-2	1-5, 21

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6831, R4 ITEM 8, CWAR 2	SG	852'	1-100F	SK17a	Y	Y	ISSUE: 2 FLEX CONDUITS ARE SO CLOSE TOGETHER THAT THE REQUIRED 330-660 UPGRADE CANNOT BE INSTALLED. RESOLUTION: UPGRADE BOTH AIR DROP AND FLEX BY ENCAPSULATING BOTH, UTILIZING WIRE MESH AND 330-660 TROWEL GRADE.	11-2	1-5, 21
6831, R4 ITEM 9, CWAR 3 (ITEM 1)	SG	852'	1-100B	SK17a	Y	Y	ISSUE: INSUFFICIENT CLEARANCE BETWEEN CONDUIT, HANGER, PROTRUDING ITEM, AND CEILING. RESOLUTION: TRIM STRESS SKIN OR WIRE MESH ON THE RADIAL BENDS AND EXTEND OUT ONTO PROTRUDING ITEM. WHERE CEILING INTERFERES, BUTT THE MESH OR STRESS SKIN AND FILLET WHERE ACCESSIBLE	9-1 9-3 10-1 10-2 11-1 11-2	1-5, 11
6831, R4 ITEM 9, CWAR 3 (ITEM 2)	SG	852'	1-100B	SK17a	Y	Y	ISSUE: INSUFFICIENT CLEARANCE AT JUNCTION BOX AND SERVICE AIR PIPE. RESOLUTION: TRIM A MINOR AMOUNT OF THE EXISTING TROWEL GRADE TO ACHIEVE A SMOOTH SURFACE CONTOUR FOR THE INSTALLATION OF THE UPGRADE.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6831, R4 ITEM 10, CWAR 4	SG	852'	1-100F	SK17a	Y	Y	ISSUE: INSUFFICIENT CLEARANCE WITH PULL BOX, PROTRUDING ITEM T-LAG, CONDUIT HANGER AND CEILING. RESOLUTION: OMIT STRESS SKIN AT PULL BOX, INSTALL STRESS SKIN AS FAR AS POSSIBLE AND EXTEND ONTO THE JB PANEL AND OMIT STRESS SKIN BETWEEN THE CEILING AND PROTRUDING ITEM.	9-1 9-3 10-1 10-2 11-1 11-2	1-5, 22
6831, R4 ITEM 11, CWAR 66	SG	852'	1-100B	SK17a	Y	Y	ISSUE: LACK OF ADEQUATE CLEARANCE BETWEEN JB UPGRADE AND INSTRUMENT TUBING. RESOLUTION: REMOVE SUFFICIENT AMOUNTS OF THERMO-LAG FILLET TO ALLOW AIR GAP. COMMODITY CLEARANCE DEVIATION ONLY.	N/A	N/A
6831, R4 ITEM 12 CWAR 60 61, 62, 67 69, 70, 71 75, 117, 118, 153, 107, 114, 184, 336	 EC SG SG SG SG EC AB	 778' 852' 852' 852' 852' 778' 810'	 X-115A 1-088 1-094 1-100B 1-100F X-113 X-207	 AA153 SB144 SB15 SK17a SK17a EA43 AA21b	 Y Y Y Y Y Y Y	 Y Y Y Y Y Y Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6831, R4 ITEM 13, CWAR 138	EC	778'	X-115A	AA153	Y	Y	ISSUE: 12" MAX. HILTI BOLT SPACING CANNOT BE MAINTAINED. RESOLUTION: EXTEND HILTI SPACING REQUIREMENTS BY 1".	11-4	1-5, 23

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6831, R4 ITEM 14, CWAR 47 (ITEM 1)	AB	832'	X-226	AA21d	Y	Y	ISSUE: INTERFERENCES CAUSE THE NEED TO DELETE STRESS SKIN AND A PORTION OF THE PICTURE FRAME. RESOLUTION: DELETE INSTALLATION OF THE PICTURE FRAME ALONG THE NORTH SIDE OF THE ENCLOSURE. UPGRADE SPLICE BLOCKS W/STRESS SKIN & AT INTERFERING TRAY, DELETE STRESS SKIN & OMIT STAPLES.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 24, 25
6831, R4 ITEM 14, CWAR 47 (ITEM 2)	AB	832'	X-226	AA21d	Y	Y	ISSUE: OUT OF SCOPE ITEM REQUIRING REINFORCEMENT & UPGRADE TO ENSURE ESSENTIAL ENVELOPE INTEGRITY. RESOLUTION: CONTINUE THE REQUIRED TRAY UPGRADE OUT ONTO THE NON-ESSENTIAL TRAY & INSTALL A FIRE STOP & CLAMP BAR.		
6831, R4 ITEM 15, CWAR 281	AB	810'	X-207	AA21b	Y	Y	ISSUE: THERE IS NO DETAIL FOR UPGRADE OF FLEX CONDUIT TO/FROM AN ENCLOSURE. RESOLUTION: APPLY A LAYER OF TROWEL GRADE MATERIAL APPROXIMATELY 3/16" THICK, 2" ONTO THE PANELS & 2" ONTO THE FLEXI-BLANKET. COVER WITH MESH ONTO BOTH SURFACES. SECURE WITH STAPLES AND COVER WITH 1/16" TROWEL GRADE. FINISH WITH A TROWEL GRADE FILLET ALL AROUND THE INTERFACE.	11-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K12?)
6831, R4 ITEM 16, CWAR 399 (ITEM 1)	SG	832'	1-096	SE16	N	Y	ISSUE: FLEX CONDUIT & JB COVER FRAME INTERFERES WITH FLEXI-BLANKET INSTALLATION AND MESH UPGRADE. RESOLUTION: USE DETAIL 2-3.6 PUTTING 330-1 CONDUIT SECTIONS IN PLACE OF FLEXI-BLANKET AND UPGRADE WITH WIRE MESH.	10-1, 10-2	1-5, 19, 26
6831, R4 ITEM 16, CWAR 399 (ITEM 2)	SG	832'	1-096	SE16	N	Y	ISSUE: INADEQUATE THERMO-LAG JB COVER AND RESTRAINT DESIGN. RESOLUTION: REWORK OR REBUILD COVER AND FABRICATE A T-LAG JB COVER RESTRAINT BAR.		
6832, R1 ITEM 1, CWAR 21	SG	810'	1-077A	SA142	N	Y	ISSUE: SPACE CONSTRAINTS INHIBIT LONGITUDINAL JOINT UPGRADE INSTALLATION. RESOLUTION: APPLY TROWEL GRADE MATERIAL TO STRESS SKIN PRIOR TO INSTALLATION ON THE TRAY, SECURE USING STAPLES OR WIRES. WHERE PHYSICAL OBSTRUCTIONS PERSIST, LAP STRESS SKIN ONTO TRAY AND OBSTRUCTION.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 27
6832, R1 ITEM 2, CWAR 255	SG	810'	1-077A	SA142	N	Y	ISSUE: REVISED DESIGN SPECIFICATION. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6832, R1 ITEM 3, CWAR 319 (ITEM 1)	SG	810'	1-077A	SA142	N	Y	ISSUE: LONGITUDINAL JOINT REINFORCEMENT CANNOT BE INSTALLED. RESOLUTION: REMOVE MINOR PROTRUDING ITEM COVERAGE & INSTALL 2 BANDS MINIMUM AROUND AN ADDITIONAL 330-1 PANEL.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 28
6832, R1 ITEM 3, CWAR 319 (ITEM 2)	SG	810'	1-077A	SA142	N	Y	ISSUE: UNIQUE AIR DROP CONFIGURATION IMPEDES THE STANDARD 304 MESH AIR DROP REINFORCEMENT. RESOLUTION: 304 MESH SHOULD BE INSTALLED IN TWO PIECES.		
6832, R1 ITEM 4, CWAR 400	SG	810'	1-077A	SA142	N	Y	ISSUE: COMMODITY CLEARANCE DEVIATION. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6833, R0	AB	810'	X-203	AA216	Y	Y	ISSUE: CONDUIT UPGRADE RESOLUTION: NO UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6909, R1 ITEM 1, CWAR 19	SG	810'	1-083	SD9	N	Y	ISSUE: INSUFFICIENT CLEARANCE EXISTS TO INSTALL THE REQUIRED STRESS SKIN REINFORCEMENT. RESOLUTION: OMIT MINOR AMOUNTS OF STRESS SKIN.	9-1, 9-3, 10-1, 10-2	1-5, 29

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6909, R1 ITEM 2, CWAR 20	SG	810'	1-083	SD9	N	Y	ISSUE: INSUFFICIENT CLEARANCE EXISTS TO INSTALL THE REQUIRED STRESS SKIN REINFORCEMENT. RESOLUTION: INSTALL 2 PIECE STRESS SKIN, OMIT TIE WIRES & STAPLE AS NECESSARY.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-5, 30
6909, R1 ITEM 3, CWAR 23	SG	810'	1-083	SD9	N	Y	ISSUE: INSUFFICIENT CLEARANCE EXISTS TO INSTALL STRESS SKIN REINFORCEMENT. RESOLUTION: OMIT STRESS SKIN AT INACCESSIBLE AREAS, AND FILL THESE AREAS WITH TROWEL GRADE.	9-1, 9-3, 10-1, 10-2	1-5, 31
6909, R1 ITEM 4, CWAR 28	SG	810'	1-083	SD9	N	Y	ISSUE: CLEARANCE BETWEEN ESSENTIAL AND NON-ESSENTIAL CONDUITS EXITING THE BOX ENCLOSURES AND CLEARANCE BETWEEN THE CONDUITS AND THE WALL IS INSUFFICIENT FOR INSTALLATION OF STRESS SKIN UPGRADE. RESOLUTION: REMOVE EXISTING THERMO-LAG AS NECESSARY, REINSTALL PREFORMED PIECES ON CONDUITS. INSTALL PANELS ON BOX & STITCH JOINTS. INSTALL PICTURE FRAME USING HILTI BOLTS. INSTALL STRESS SKIN REINFORCEMENT.	9-1, 9-3, 10-1, 10-3, 14-1, 15-1, 11-2	1-5, 32

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6909, R1 ITEM 5, CWAR 36	SG	810'	1-083	SD9	N	Y	ISSUE: REINFORCEMENT UPGRADES FOR THE STATED TRAYS CANNOT BE INSTALLED DUE TO LIMITED WORK SPACE & PROTRUDING ITEM INTERFERENCE. RESOLUTION: REMOVE EXISTING T-LAG MATERIAL FROM THE TRAYS, SHIM THE TRAYS AS NECESSARY, REINSTALL THERMO-LAG MATERIAL USING BANDS & STITCH ALL JOINTS. ATTACH A PICTURE FRAME USING HILTI BOLTS AND/OR STICK PINS.	1-2, 11-1, 12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-4, 13-2	1-5, 33
6909, R1 ITEM 6, CWAR 50, 51, 149, 155	SG	810'	1-083	SD9	N	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6909, R1 ITEM 7, CWAR 111	SG	810'	1-083	SD9	N	Y	ISSUE: PROTRUDING ITEM COVERAGE INTERFERENCE. RESOLUTION: COVERAGE AS FAR AS POSSIBLE PER DETAIL 14-1.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 20
6910, R2 ITEM 1, CWAR 27	SG	832'	1-096	SE16	N	Y	ISSUE: THE USE OF 1 1/2" STAPLES DURING THE UPGRADE COULD CAUSE DAMAGE TO THE INTERNAL CABLES. RESOLUTION: USE 7/8" STAPLES COMPLETELY AROUND THE FLEXI-BLANKET UPGRADE.	11-1, 11-2	1-5, 34

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6910, R2 ITEM 2, CWAR 29	SG	832'	1-096	SE16	N	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL STRESS SKIN/MESH ONTO THE JB. RESOLUTION: EXTEND THE STRESS SKIN AS FAR AS PHYSICALLY POSSIBLE AND ABUT TO THE CONTAINMENT WALL, FILLET WITH 330-660 AT THE WALL.	9-1, 9-3, 10-1, 10-2	1-5, 15
6910, R2 ITEM 3, CWAR 30	SG	832'	1-096	SE16	N	Y	ISSUE: THERMO-LAG INSTALLATION NOT ACCESSIBLE FOR JOINT REINFORCEMENT. RESOLUTION: REMOVE THE THERMO-LAG 330-660 FLEXI-BLANKET, INSTALL PANELS & STITCH JOINTS. REINFORCE JOINTS WITH STRESS SKIN, REINSTALL FLEXI-BLANKET AND STAPLE INTO PLACE.	1-2, 11-1, 12-1, 12-1, 13-1, 14-1, 15-1, 11-2, 11-4	1-5, 35
6910, R2 ITEM 4, CWAR 31	SG	832'	1-096	SE16	N	Y	ISSUE: THERMO-LAG INSTALLATION NOT ACCESSIBLE FOR JOINT REINFORCEMENT. RESOLUTION: REMOVE THE THERMO-LAG 330-660 FLEXI-BLANKET, INSTALL PANELS & STITCH JOINTS. REINFORCE JOINTS WITH STRESS SKIN, REINSTALL FLEXI-BLANKET AND STAPLE INTO PLACE.	1-2, 11-1, 12-1, 12-1, 13-1, 14-1, 15-1, 11-2, 11-4	1-5, 35
6910, R2 ITEM 5, CWAR 39	SG	832'	1-096	SE16	N	Y	ISSUE: THERMO-LAG PLATE COVER PROHIBITS INSTALLATION OF 2" T-LAG SUPPORT UPGRADE. RESOLUTION: ABUT THE T-LAG SUPPORT UPGRADE PIECE TO THE THERMO-LAG PLATE COVER.	11-2, 11-4, 11-5, 13-2	1-5, 36

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6910, R2 ITEM 6, CWAR 82	SG	832'	1-096	SE16	N	Y	ISSUE: STRESS SKIN REINFORCEMENT CANNOT BE INSTALLED. RESOLUTION: COVER THE 330-660 PROTRUDING ITEM UTILIZING STAINLESS STEEL MESH. STAPLE AS NECESSARY TO ENSURE A SNUG FIT, THEN FILLET.	11-1, 11-2	1-5, 21
6910, R2 ITEM 7, CWAR 101	SG	832'	1-096	SE16	N	Y	ISSUE: PROTRUDING ITEM STRESS SKIN REINFORCEMENT UPGRADE IS INSUFFICIENT. RESOLUTION: REMOVE PREVIOUSLY INSTALLED UPGRADE, INSTALL 4" TO 5" STRESS SKIN OR MESH. STAPLE INTO PLACE. WHERE 4" CANNOT BE ACHIEVED, ABUT TO THE WALL AND FILLET.	11-1, 11-2	1-5, 21, 15
6910, R2 ITEM 8, CWAR 113, 446	SG	832'	1-096	SE16	N	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6910, R2 ITEM 9, CWAR 342	SG	832'	1-096	SE16	N	Y	ISSUE: A 3" CONDUIT RESTRICTS THE INSTALLATION OF THE SPLICE PLATE OVERLAY AND INTERFERES WITH LONGITUDINAL REINFORCEMENT. RESOLUTION: SPLICE PLATE OVERLAY AND LONGITUDINAL TRAY. REINFORCEMENT MAY BE TRIMMED/CUT AND INSTALLED IN 2 PIECES. FILLET THE ENTIRE LENGTH OF INTERFACE.	11-2, 11-4, 11-5, 13-2	1-5, 37

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6911, R2 ITEM 1	SG	852'	1-100F	SK17a	Y	Y	ISSUE: A NEW DESIGN IS REQUIRED FOR THE EXISTING ENCLOSURE WITH REMOVABLE COVER. RESOLUTION: REWORK AND/OR REBUILD REMOVABLE COVER AND BOX BY ADDING A 330-1 FLAT PANEL FABRICATING A BOX FRAME JAM AREA. FABRICATE AND INSTALL A THERMO-LAG COVER RESTRAINT BAR. INSTALL SECOND 330-1 LAYER ATTACHING TO EXISTING PANELS WITH TIE WIRE STITCHING.	10-1 10-1	1-5, 19
6911, R2 ITEM 2, CWAR 3	SG	852'	1-100B	SK17a	Y	Y	ISSUE: INTERFERENCES. RESOLUTION: DUPLICATED WITH DCN 6831, REV. 4, CWAR 3	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-5, 11
6911, R2 ITEM 3, CWAR 14	SG	852'	1-100F	SK17a	Y	Y	ISSUE: AN ALTERNATE METHOD OF ACHIEVING THE REQUIRED ENCLOSURE DEPTH IS NEEDED. RESOLUTION: ADD APPROX. 4" PANEL EXTENSION ONTO THE IDENTIFIED BOX TO ALLOW THE REMOVABLE COVER TO FIT TIGHTLY.	10-1, 10-2	1-5, 19

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6911, R2 ITEM 4, CWAR 17	SG	852'	1-100F	SK17a	Y	Y	ISSUE: DUE TO INTERFERENCE AND LIMITED WORKING SPACE THE REQUIRED 2" MINIMUM JOINT REINFORCEMENT AT A SPLICE PLATE CANNOT BE COMPLETED. RESOLUTION: TRIM SPLICE PLATE TO FIT SNUG BETWEEN WALL & AIR DROP. INSTALL STRESS SKIN & TIE WIRE & STAPLE INTO PLACE. FILLET SIDES & BOTTOM, LAPPING ONTO THE AIR DROP.	11-1, 11-2	1-5, 15
6911, R2 ITEM 5, CWAR 24	SG	852'	1-100B	SK17a	Y	Y	ISSUE: INSUFFICIENT CLEARANCE EXISTS BETWEEN A RADIAL BEND, A SUPPORT HANGER & A CONDUIT TO INSTALL THE REQUIRED RADIAL BEND REINFORCEMENT. RESOLUTION: INSTALL STRESS SKIN UP TO THE INTERFERENCE. OMIT STRESS SKIN AT INACCESSIBLE AREAS. TIE WIRE & STAPLE TO ASSURE A SNUG FIT.	13-2	1-5, 13
6911, R2 ITEM 6 CWAR 46, 49, 48	SG SG	852' 852'	1-100B 1-100F	SK17a SK17a	Y Y	Y Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6911, R2 ITEM 7, CWAR 421	SG	852'	1-100F	SK17a	Y	Y	ISSUE: (ITEMS 1,2&3) MODIFICATIONS ARE REQUIRED TO THE EXISTING ENCLOSURE WITH REMOVABLE COVER. RESOLUTION: REWORK AND/OR REBUILD REMOVABLE COVER BY ADDING A 330-1 FLAT PANEL FABRICATING A BOX FRAME JAM AREA. FABRICATE AND INSTALL A THERMO-LAG COVER RESTRAINT BAR. INSTALL SECOND 330-1 LAYER ATTACHING TO EXISTING PANELS WITH TIE WIRE STITCHING.	10-1, 10-2	1-5, 19
6912, R1 ITEM 2, CWAR 9	SG	852'	1-103	SE18	N	Y	ISSUE: 1 1/2" LONG STAPLES COULD PENETRATE INTO CABLES IN TRAY. RESOLUTION: COVER AREA WITH MESH AND TROWEL GRADE AND STAPLE USING 7/8" STAPLES.	11-1, 11-2	1-5, 38
6912, R1 ITEM 1	SG	852'	1-103	SE18	N	Y	ISSUE: TRAY JOINT STRESS SKIN OBSTRUCTION. RESOLUTION: CONTINUE THE JOINT UPGRADE ONTO THE OBSTRUCTING ITEM.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 15
6913, R1 ITEM 1	SG	880'	1-108B	SK17c	Y	Y	ISSUE: SPECIAL TOP COAT IS REQUIRED ON ALL THERMO-LAG IN ROOM 108B. RESOLUTION: APPLY THERMO-LAG 350-5000-10 TOPCOAT TO ALL EXPOSED THERMO-LAG IN ROOM 108B.	13-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6913, R1 ITEM 2, CWAR 5	SG	880'	1-108B	SK17c	Y	Y	ISSUE: THERE IS ONLY 0" TO 1/2" BETWEEN 2 ENCLOSURES. RESOLUTION: INSTALL CERAMIC FIBER AS A BACK DAM BETWEEN THE ENCLOSURES, COVER THE GAP WITH TROWEL GRADE AND INSTALL STRESS SKIN REINFORCEMENT ACROSS BOTH ITEMS AS A CONTINUOUS PIECE.	9-1, 9-3, 10-1, 10-2	1-5, 10
6914, R1 ITEM 1, CWAR 6	SG	880'	1-109B	SK17c	Y	Y	ISSUE: THERE IS ONLY 0" TO 1/2" BETWEEN 2 ENCLOSURES. RESOLUTION: INSTALL CERAMIC FIBER AS A BACK DAM BETWEEN THE ENCLOSURES, COVER THE GAP WITH TROWEL GRADE AND INSTALL STRESS SKIN REINFORCEMENT ACROSS BOTH ITEMS AS A CONTINUOUS PIECE.	9-1, 9-3, 10-1, 10-2	1-5, 10
6915, R2 ITEM 1, CWAR 10	EC	778'	X-113	EA43	Y	Y	ISSUE: INSUFFICIENT CLEARANCE BETWEEN TWO JUNCTION BOX ENCLOSURES. RESOLUTION: INSTALL CERAMIC FIBER BACK DAM BETWEEN THE BOXES, BUILD UP TROWEL GRADE MATERIAL AND INSTALL THE REQUIRED JOINT UPGRADE BY INSTALLING STRESS SKIN ON BOTH COMMODITIES AS A CONTINUOUS PIECE.	9-1, 9-3, 10-1, 10-3	1-5, 10

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6915, R2 ITEM 2, CWAR 11	EC	778'	X-113	EA43	Y	Y	ISSUE: INSUFFICIENT CLEARANCE BETWEEN TWO JUNCTION BOX ENCLOSURES. RESOLUTION: INSTALL CERAMIC FIBER BACK DAM BETWEEN THE BOXES, BUILD UP TROWEL GRADE MATERIAL AND INSTALL THE REQUIRED JOINT UPGRADE BY INSTALLING STRESS SKIN ON BOTH COMMODITIES AS A CONTINUOUS PIECE.	9-1, 9-3, 10-1, 10-2	1-5, 10
6915, R2 ITEM 3, CWAR 16 (ITEM 1)	EC	778'	X-113	EA43	Y	Y	ISSUE: A PIPE INTERFERES WITH LONGITUDINAL STRESS SKIN UPGRADE. RESOLUTION: OMIT THE STRESS SKIN UPGRADE & INSTALL CERAMIC BANDING ON BOTH SIDES OF INTERFERENCE.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 39
6914, R2 ITEM 3, CWAR 16 (ITEM 2)	EC	778'	X-113	EA43	Y	Y	ISSUE: CABLE BUNDLES INTERFERE WITH FLEX-MESH UPGRADE. RESOLUTION: REMOVE THE EXISTING 330-1 THERMO-LAG COVERAGE. REMOVE THE FLEXI-BLANKET COVERAGE. REINSTALL AND UPGRADE PER TYPICAL DETAILS.		
6914, R2 ITEM 3, CWAR 16 (ITEM 3)	EC	778'	X-113	EA43	Y	Y	ISSUE: ALL-THREAD RODS INTERFERE WITH TRAY SPLICE PLATE UPGRADES. RESOLUTION: WHERE OBSTRUCTION EXISTS, RUN THE STRESS SKIN UPGRADE UP TO THE INTERFERING ITEM.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6914, R2 ITEM 3, CWAR 16 (ITEM 4)	EC	778'	X-113	EA43	Y	Y	ISSUE: TRAYS RUN TOO CLOSE TOGETHER TO RECEIVE INDIVIDUAL STRESS SKIN UPGRADE. RESOLUTION. INSTALL STRESS SKIN ACROSS BOTH TRAYS.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 39
6914, R2 ITEM 3, CWAR 16 (ITEM 5)	EC	778'	X-113	EA43	Y	Y	ISSUE: UPGRADE OF 330-660 COVERAGE CANNOT BE ACHIEVED DUE TO LIMITED SPACE. RESOLUTION: REMOVE THE 330-1 COVERAGE ON THE TRAY, REMOVE THE 330-660 COVERAGE AND BOX THE ESSENTIAL ITEMS TO THE WALL PER TYP. DETAILS.		
6915, R2 ITEM 4, CWAR 22	EC	778'	X-113	EA43	Y	Y	ISSUE: INSUFFICIENT CLEARANCE EXISTS TO INSTALL TIE WIRE FASTENERS 2" MAX. FROM THE END OF THE RADIAL BEND. RESOLUTION: STAPLE AS NECESSARY TO ACHIEVE A SNUG FIT AND FILLET WITH 330-1.	9-1, 9-3, 13-2	1-5, 30
6915, R2 ITEM 5, CWAR 25	EC	778'	X-113	EA43	Y	Y	ISSUE: RADIAL BEND WHICH REQUIRES UPGRADE IS ENCAPSULATED IN THERMO-LAG. RESOLUTION: STAPLE AND TIE WIRE STRESS SKIN IN PLACE AS NECESSARY TO ASSURE SNUG FIT. STRESS SKIN SHALL EXTEND ONTO PROTRUDING ITEMS 2" MIN.	9-1, 9-3, 13-2	1-5, 15, 30

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6915, R2 ITEM 6, CWAR 26	EC	778'	X-113	EA43	Y	Y	ISSUE: A DUCT INTERFERES WITH STRESS SKIN INSTALLATION. RESOLUTION: PRE-FORM AND PRE-BUTTER THE STRESS SKIN PRIOR TO INSTALLATION AND USE TIE WIRE TO SECURE IN PLACE.	9-1, 9-3, 10-1, 10-2	1-5, 30, 40
6915, R2 ITEM 7, CWAR 32	EC	778'	X-113	EA43	Y	Y	ISSUE: STRESS SKIN CAUSED A LIMITED SPACE CONDITION. RESOLUTION: INSTALL STRESS SKIN AS FAR AS PHYSICALLY POSSIBLE.	9-1, 9-3, 10-1, 10-2	1-5, 41
6915, R2 ITEM 8 CWAR 52, 53, 124, 125, 159, 160, 162, 163, 136	EC	778'	X-113	EA43	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6915, R2 ITEM 9, CWAR 100	EC	778'	X-113	EA43	Y	Y	ISSUE: LIMITED SPACE PREVENTS STANDARD THERMO-LAG INSTALLATION. RESOLUTION: WRAP THE AREA USING DETAILS 7-1 & 8-2, AND WHERE GROUND WIRE EXITS, WRAP IT WITH 2 LAYERS 330-660.	11-1, 11-2	1-5, 42
6915, R2 ITEM 10, CWAR 123	EC	778'	X-113	EA43	Y	Y	ISSUE: 330-1 MATERIAL IS BUTTED TO FLEXI-BLANKET BUNDLES, REINFORCEMENT AT THE INTERFACE IS REQUIRED. RESOLUTION: REINFORCE BY WRAPPING STAINLESS STEEL WIRE MESH AROUND BOTH ITEMS AND APPLY TROWEL GRADE.	11-2	1-5, 21

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6915, R2 ITEM 11 CWAR 145	EC	778'	X-113	EA43	Y	Y	ISSUE: DELETE SIL-TEMP WRAPS ON AIRDROPS. RESOLUTION: DELETE SIL-TEMP WRAPS ON AIRDROPS.	11-1, 11-2	1-5, 20
6915, R2 ITEM 12, CWAR 15	EC	778'	X-113	EA43	Y	Y	ISSUE: STANDARD TIE WIRE SPACING CANNOT BE USED. RESOLUTION: INSTALL TIE WIRE WHERE POSSIBLE THEN STAPLE TO ACHIEVE A SNUG FIT.	11-1, 11-2, 13-2	1-5, 30
6915, R2 ITEM 13, CWAR 13	EC	778'	X-113	EA43	Y	Y	ISSUE: TRANSFER RESPONSIBILITY OF ITEMS BETWEEN ROOMS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6916, R1 ITEM 1	EC	854'	X-150A	EA74	N	Y	ISSUE: THERE IS A 1 1/2" INTERFERENCE BETWEEN A HVAC DUCT AND THE RADIAL BEND UPGRADE. RESOLUTION: UTILIZE SS-304 FLEXI-MESH TO REINFORCE THE CONDUIT RADIAL BEND. THE SS-304 FLEXI-MESH MAY BE TRIMMED AS REQUIRED AROUND THE AREA OF INTERFERENCE. UTILIZE STAPLES AND TIE WIRE TO SECURE THE FLEXI-MESH AROUND THE TRIMMED AREA TO PROVIDE A SNUG FIT.	11-1, 11-2	1-5, 11

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6916, R1 ITEM 2, CWAR 33	EC	854'	X-150A	EA74	N	Y	ISSUE: PROTRUDING ITEM COVERAGE HAS CAUSED LIMITED ACCESS PROHIBITING THE INSTALLATION OF STRESS SKIN. RESOLUTION: INSTALL STRESS SKIN AS FAR AS POSSIBLE, STAPLE OR TIE WIRE AS NECESSARY TO ACHIEVE A SNUG FIT.	9-1, 9-3, 10-1, 10-2, 13-2	1-5, 43
6916, R1 ITEM 3, CWAR 35	EC	854'	X-150A	EA74	N	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL STRESS SKIN/MESH ON THE COMPLETED RADIAL BEND. RESOLUTION: EXTEND THE STRESS SKIN OUT ONTO THE PROTRUDING ITEM AND STAPLE/TIE WIRE TO ASSURE A SNUG FIT, APPLY A FILLET OF 330-1 TROWEL GRADE.	9-1, 13-2	1-5, 44
6916, R1 ITEM 4, CWAR 37	EC	854'	X-150A	EA74	N	Y	ISSUE: ADD 4 RADIAL BENDS TO THE UPGRADE SCOPE. RESOLUTION: NO UNIQUE THERMO-LAG CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6916, R1 ITEM 5, CWAR 41	EC	854'	X-150A	EA74	N	Y	ISSUE: 5" STEEL MESH AIR DROP COVERAGE CANNOT BE MET, ALSO A GROUND CABLE CANNOT BE COVERED PER TYPICAL DETAIL. RESOLUTION: REMOVE THE THERMO-LAG MATERIAL FROM THE GROUND CABLE, AIR DROP AND TRAY. REWORK THE GROUND WIRE AND REINSTALL THE THERMO-LAG PER TYPICAL DETAILS.	11-1, 11-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6916, R1 ITEM 6, CWAR 42 (ITEM 1)	EC	854'	X-150A	EA74	N	Y	ISSUE: A PULLBOX UPGRADE COVERAGE CANNOT BE MET DUE TO 0" GAP BETWEEN CONDUIT SECTION AND WALL. RESOLUTION: WRAP THE STRESS SKIN AS FAR AS POSSIBLE, SECURE W/TIE WIRE & STAPLES TO ACHIEVE A SNUG FIT. ADD A TROWEL GRADE FILLET.	9-1, 9-3, 10-1, 10-1	1-5, 44
6916, R1 ITEM 6, CWAR 42 (ITEM 2)	EC	854'	X-150A	EA74	N	Y	ISSUE: RADIAL BEND COVERAGE HAS 0" GAP BETWEEN RADIAL BEND & WALL. RESOLUTION: BUTT THE STEEL MESH/STRESS SKIN UP TO THE T-LAG SUPPORT COVERAGE. LAP OUT ONTO THE FLAT PANELS AND STAPLE TO ACHIEVE A SNUG FIT.		
6916, R1 ITEM 6, CWAR 42 (ITEM 3)	EC	854'	X-150A	EA74	N	Y	ISSUE: 1/2" OVERLAP OF STRESS SKIN/MESH ONTO RADIAL BEND STRAIGHT CONDUIT CANNOT BE INSTALLED. RESOLUTION: BUTT THE RADIAL BEND UPGRADE TO THE FLEXI-BLANKET BUNDLE ADDING A TROWEL GRADE FILLET AT THE INTERFACE.		
6916, R1 ITEM 9, CWAR 84	EC	854'	X-150A	EA74	N	Y	ISSUE: DETAIL 3-5.1 DOES NOT CALL OUT WHAT SIZE STAPLES TO USE IN THIRD LAYER FLEXI-BLANKET. RESOLUTION: USE 1/8" STAPLES.	11-1, 11-2	1-5, 34

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6916, R1 ITEM 10, CWAR 115, 116	EC	854'	X-150A	EA74	N	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6916, R1 ITEM 11, CWAR 191	EC	854'	X-150A	EA74	N	Y	ISSUE: A CABLE TRAY TERMINATES WITH A FLAT THERMO-LAG PANEL AT THE END OF THE TRAY. RESOLUTION: CONFIGURATION DOES NOT REQUIRE SPECIAL UPGRADE.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 20, 91
6937, R0 ITEM 1	GENERIC						ISSUE: A METHOD OF DETERMINING AIR DROP BUNDLE DIAMETER IS REQUIRED TO DETERMINE UPGRADE REQUIREMENTS. RESOLUTION: NO UNIQUE CONFIGURATION OR DEVIATION.	N/A	N/A
6980, R1 ITEM 1	SG	790'	1-070	SB4	Y	Y	ISSUE: AT SEVERAL LOCATIONS AIR DROP INTERFERENCES OBSTRUCT TYPICAL DETAIL INSTALLATION. RESOLUTION: INSTALL MESH TO THE GREATEST EXTENT POSSIBLE. ENSURE PROPER OVERLAPS, AND SECURE WITH TROWEL GRADE AND STAPLES.	11-1, 11-2	1-5, 50
6980, R1 ITEM 2, CWAR 239 (ITEM 1)	SG	790'	1-070	SB4	Y	Y	ISSUE: STAPLE DUE TO INSUFFICIENT SPACE FOR APPLICATION RESOLUTION: ELIMINATE STAPLING ALONG THE WALL DUE TO 2" CLEARANCE.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 14-1, 15-1, 11-4, 11-5, 13-2	1-5, 9, 15, 36, 45

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6980, R1 ITEM 2, CWAR 239 (ITEM 2)	SG	790'	1-070	SB4	Y	Y	ISSUE: INTERFERENCE TO INSTALL SUPPORT UPGRADE RESOLUTION: INSTALL AN 8" THERMO-LAG STRIP BETWEEN THE INSTRUMENT TUBING COVERAGE AND THE END OF THE TRAY.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 14-1, 15-1, 11-4, 11-5, 13-2	1-5, 9, 15, 36, 45
6980, R1 ITEM 2, CWAR 239 (ITEM 3)	SG	790'	1-070	SB4	Y	Y	ISSUE: ADDITIONAL PANEL SUPPORT RESOLUTION: CIRCUMFERENTIALLY WRAP THE OVERLAP AREA TO PROVIDE ADDITIONAL SUPPORT.		
6980, R1 ITEM 2, CWAR 239 (ITEM 4)	SG	790'	1-070	SB4	Y	Y	ISSUE: UPGRADE REQUIREMENTS TO PREVIOUSLY INSTALLED BOXOUT CONFIGURATIONS RESOLUTION: STRESS SKIN ALL JOINTS AND SEAMS ON BOX OUTS.		
6980, R1 ITEM 2, CWAR 239 (ITEM 5&6)	SG	790'	1-070	SB4	Y	Y	ISSUE: LONGITUDINAL STRESS SKIN DEVIATIONS RESOLUTION: ABUT LONGITUDINAL STRESS SKIN TO EACH SIDE OF THE SUPPORTS AND INSTALL A FILLET, TERMINATE STRESS SKIN EACH SIDE OF STRUT. RUN STRESS SKIN ONTO THE SUPPORT, TERMINATE UPGRADE EACH SIDE OF KICKER.		
6980, R1 ITEM 2, CWAR 239 (ITEM 7)	SG	790'	1-070	SB4	Y	Y	ISSUE: AIR DROP MODIFICATION RESOLUTION: EXTEND TRAY COVERAGE 1" BEYOND TRAY		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6980, R1 ITEM 2, CWAR 239 (ITEM 8)	SG	790'	1-070	SB4	Y	Y	ISSUE: TEE SECTION ENHANCEMENTS ON EXTENDED SIDE RAILS RESOLUTION: STITCH SHIMS FOR SUPPORT OF SIDE PANELS	9-1, 9-3, 10-1, 10-2, 11-1, 11-2. 14-1, 15-1, 11-4, 11-5, 13-2	1-5, 9, 15, 36, 45
6980, R1 ITEM 2, CWAR 239 (ITEM 9)	SG	790'	1-070	SB4	Y	Y	ISSUE: CIRCUMFERENTIAL BUTT JOINT DEVIATION RESOLUTION: CIRCUMFERENTIALLY WRAP THE BUTT JOINT ON THE BOTTOM OF THE TRAY BY TRIMMING AND ABUTTING THE WRAP TO THE SUPPORT COVERAGE THEN INSTALL SUPPORT UPGRADE.		
6980, R1 ITEM 2, CWAR 239 (ITEM 10)	SG	790'	1-070	SB4	Y	Y	ISSUE: VERTICAL RISE REINFORCEMENT DIRECTIVE RESOLUTION: STITCH PANELS TOGETHER		
6980, R1 ITEM 2, CWAR 239 (ITEM 11)	SG	790'	1-070	SB4	Y	Y	ISSUE: TEE SECTION MODIFICATION DUE TO CABLE EXITING TRAY AT AIRDROP RESOLUTION: INCREASE THE HEIGHT OF THE TOP PANEL BY 2", STITCH ALL PANELS TOGETHER		
6980, R1 ITEM 3, CWAR 240	SG	790'	1-070	SB4	Y	Y	ISSUE: IN TWO PLACES AIR DROPS CREATE STRESS SKIN DEVIATIONS. RESOLUTION: INSTALL LONGITUDINAL STRESS SKIN TRIMMING AROUND AIR DROPS AND STAPLE TO ACHIEVE A SNUG FIT. INSTALL 304 MESH TO ENCAPSULATE THE BOX.	11-1, 11-2	1-5, 21

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6980, R1 ITEM 4, CWAR 246 (ITEM 1)	SG	790'	1-070	SB4	Y	Y	ISSUE: LBD BOX ENCLOSURE CANNOT BE UPGRADED DUE TO CLOSE JB. RESOLUTION: INSTALL LBD STRESS SKIN AND CAP, FASTEN WITH TIE WIRE.	9-1, 9-3, 10-1, 10-2	1-5, 21, 22
6980, R1 ITEM 4, CWAR 246 (ITEM 2)	SG	790'	1-070	SB4	Y	Y	ISSUE: CONDUIT/LBD SUPPORT PREVENTS JOINT FROM BEING UPGRADED. RESOLUTION: ABUT THE STRESS SKIN TO THE SUPPORT AND FILL GAP WITH TROWEL GRADE, TIE WIRES MAY BE USED IN LIEU OF STAPLES.		
6980, R1 ITEM 4, CWAR 246 (ITEM 3)	SG	790'	1-070	SB4	Y	Y	ISSUE: CONDUIT PROTRUDES INTO THE LBD COVERAGE. RESOLUTION: CONDUIT SUPPORT SHALL BE COVERED AS A PROTRUDING ITEM.		
6980, R1 ITEM 4, CWAR 246 (ITEM 4)	SG	790'	1-070	SB4	Y	Y	ISSUE: UNPROTECTED BASE PLATE PREVENTS JOINT UPGRADE. RESOLUTION: COVER BASEPLATE AS A PROTRUDING ITEM.		
6980, R1 ITEM 4, CWAR 246 (ITEM 5)	SG	790'	1-070	SB4	Y	Y	ISSUE: LIMITED SPACE BETWEEN LBD & WALL PREVENTS STRESS SKIN STAPLE INSTALLATION. RESOLUTION: UTILIZE TIE WIRES IN LIEU OF STAPLES		
6980, R1 ITEM 4, CWAR 246 (ITEM 6)	SG	790'	1-070	SB4	Y	Y	ISSUE: OBSTRUCTIONS INTERFERE WITH LBD UPGRADE. RESOLUTION: THE STRESS SKIN UPGRADE SHALL BE OMITTED.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6980, R1 ITEM 5, CWAR 252	SG	790'	1-070	SB4	Y	Y	ISSUE: CIRCUMFERENTIAL BUTT JOINTS OCCUPY THE SAME SPACE AS THE SUPPORT STEEL UPGRADE. RESOLUTION: INSTALL 330-1 STRIPS ON THE SUPPORTS.	11-2, 11-4, 11-5, 13-2	1-5, 46
6980, R1 ITEM 6 CWAR 260 (ITEM 1)	SG	790'	1-070	SB4	Y	Y	ISSUE: CABLES EXIT THE TRAY ABOVE THE SIDE RAILS RESOLUTION: INCREASE SIDE RAIL HEIGHT ABOVE TRAY EXTENSIONS BY 3 1/2" - STITCH ALL PANELS.	11-1, 12-1, 12-2, 13-1, 11-2, 11-4	1-5, 47
6980, R1 ITEM 6 CWAR 260 (ITEM 2)	SG	790'	1-070	SB4	Y	Y	ISSUE: LARGE TRANSITION IN A SHORT AREA CAUSING FLEX-BLANKET INSTALLATION PROBLEMS. RESOLUTION: ATTACH ADDITIONAL FLAT PANEL TO TRAY.		
6980, R1 ITEM 6 CWAR 260 (ITEM 3)	SG	790'	1-070	SB4	Y	Y	ISSUE: INSTALL PER DCN 7437. RESOLUTION: INCREASE SIDE RAIL HEIGHT ABOVE TRAY EXTENSIONS BY 3 1/2" - STITCH ALL PANELS.		
6980, R1 ITEM 6 CWAR 260 (ITEM 4)	SG	790'	1-070	SB4	Y	Y	ISSUE: ADDRESS STAPLE REQUIREMENT PROBLEMS. RESOLUTION: INSTALL STAPLES PER TYPICAL DETAILS.		
6980, R1 ITEM 7 CWAR 268	SG	790'	1-070	SB4	Y	Y	ISSUE: SUPPORT STEEL UPGRADE. RESOLUTION: INSTALL 2 FLAT PANELS (ONE ATOP THE OTHER ON THE SUPPORT)	11-2, 11-4, 11-5, 13-2	1-5, 48

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6980, R1 ITEM 8 CWAR 284	SG	790'	1-070	SB4	Y	Y	ISSUE: ALLOW LONGER STAPLES TO BE INSTALLED AT THE 330-1, 330-660 INTERFACE. RESOLUTION: USE 1 1/2" STAPLES.	11-1, 11-2	1-5, 34
6980, 41 ITEM 9 CWAR 329, 330, 331, 332, 394	SG	790'	1-070	SB4	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6981, R1 ITEM 1	SG	790'	1-071	SB4	Y	Y	ISSUE: INSUFFICIENT CLEARANCE FOR THIRD LAYER FLEXI-BLANKET. RESOLUTION: REMOVE EXISTING MATERIAL AND REINSTALL PER TYPICAL DETAILS.	11-1, 11-2	1-5, 20
6981, R1 ITEM 2, CWAR 267 (ITEM 1)	SG	790'	1-071	SB4	Y	Y	ISSUE: ALLOW 330-660 TO BE USED AS PROTRUDING ITEM COVERAGE ON GROUND CABLE. RESOLUTION: INSTALL 2 LAYERS OF 330-660 AROUND GROUND CABLE.	11-1, 11-2	1-5, 49
6981, R1 ITEM 2, CWAR 267 (ITEM 2)	SG	790'	1-071	SB4	Y	Y	ISSUE: PROVIDE DIRECTION ON THE NUMBER OF 330-660 LAYERS TO INSTALL ON A TRANSITION COLLAR. RESOLUTION: INSTALL 2 LAYERS OF 330-660 FLEXI-BLANKET OVER THE TRANSITION AREA.		
6981, R1 ITEM 3 CWAR 395, 396, 397	SG	179'	1-071	SB4	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6982, R1 ITEM 1	SG	810'	1-079	SB8	Y	Y	ISSUE: CONDUIT AIRDROP INTERFERENCE. RESOLUTION: INSTALL FLEXI-MESH TO THE GREATEST EXTENT POSSIBLE. INSTALL TROWEL GRADE AND USE APPROVED FASTENERS TO ACHIEVE A SNUG FIT.	11-1, 11-2	1-5, 50
6982, R1 ITEM 2	SG	810'	1-079	SB8	Y	Y	ISSUE: CONDUIT AIRDROP INTERFERENCE. RESOLUTION: INSTALL FLEXI-MESH TO THE GREATEST EXTENT POSSIBLE. INSTALL TROWEL GRADE AND USE APPROVED FASTENERS TO ACHIEVE A SNUG FIT.	11-1, 11-2	1-5, 50
6982, R1 ITEM 3, CWAR 139	SG	810'	1-079	SB8	Y	Y	ISSUE: DOES PROTRUDING ITEM PROTECTION ON CONDUIT SUPPORT REQUIRE JOINT REINFORCEMENT. RESOLUTION: INSTALLED THERMO-LAG ON SUPPORTS DOES NOT REQUIRE REINFORCEMENT.	9-1, 9-3, 10-1, 10-2	1-5, 20
6982, R1 ITEM 4, CWAR 202	SG	810'	1-079	SB8	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6983, R1 ITEM 1	SG	810'	1-082	SB8	Y	Y	ISSUE: CONDUIT AIR DROP INTERFERENCE. RESOLUTION: TRIM FLEXI-MESH AT INTERFERENCE & COMPLETE JOINT UPGRADE PER TYPICAL DETAILS.	11-1, 11-2	1-5, 50

DCN NO./REV	BLDG	ELEV	ROOM	AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6983, R1 ITEM 2	SG	810'	1-082	SB8	Y	Y	ISSUE: 2 AIRDROPS CLOSE TOGETHER. RESOLUTION: UPGRADE THE SMALLER AIR DROPS AS REQUIRED, AT THE INTERFACE, INSTALL FLEXI-MESH AS A SADDLE ENCOMPASSING BOTH AIR DROPS.	11-1, 11-2	1-5, 20
6983, R1 ITEM 3	SG	810'	1-082	SB8	Y	Y	ISSUE: AIR DROPS CLOSE TOGETHER. RESOLUTION: REINFORCE BOTH AIR DROPS TOGETHER UNTIL THERE IS SPACE TO SEPARATE THEM. FILL VOIDS WITH TROWEL GRADE.	11-1, 11-2	1-5, 101
6983, R1 ITEM 4, CWAR 90	SG	810'	1-082	SB8	Y	Y	ISSUE: AN IDENTIFIED CONDUIT REQUIRES UPGRADE AND IS NOT IN THE DM SCOPE. RESOLUTION: ADD CONDUIT TO SCOPE.	9-1, 9-3, 10-1, 10-2	1-5, 20
6983, R1 ITEM 5, CWAR 91	SG	810'	1-082	SB8	Y	Y	ISSUE: IDENTIFIED TRAY REQUIRES UPGRADE & IS NOT IN DM SCOPE. RESOLUTION: ADD TRAY TO SCOPE.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 20
6983, R1 ITEM 6, CWAR 135 (ITEM 1)	SG	810'	1-082	SB8	Y	Y	ISSUE: 330-660 MATERIAL THICKNESS EXCEEDS 1", WILL NOT ALLOW ADEQUATE STAPLE PENETRATION RESOLUTION: COVER 330-660 MATERIAL WITH MESH AND STAPLE INTO PLACE.	11-1, 11-2	1-5, 34
6983, R1 ITEM 6, CWAR 135 (ITEM 2)	SG	810'	1-082	SB8	Y	Y	ISSUE: CANNOT INSTALL LONGITUDINAL STRESS SKIN DUE TO 0" CLEARANCE. RESOLUTION: OMIT 12" REINFORCEMENT AT INTERFERENCE.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6983, R1 ITEM 7 CWAR 146	SG	810'	1-082	SB8	Y	Y	ISSUE: JOINT REINFORCEMENT CANNOT BE INSTALLED. RESOLUTION: UTILIZE TYPICAL DETAIL 3-4.	11-1, 11-2	1-5, 20
6983, R1 ITEM 8 CWAR 166	SG	810'	1-082	SB8	Y	Y	ISSUE: PICTURE FRAME DETAIL CANNOT BE INSTALLED DUE TO INTERFERENCE, HILTI VIOLATION. RESOLUTION: UTILIZE STRESS SKIN AND STAPLES IN LIEU OF PICTURE FRAME.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 51
6983, R1 ITEM 9 CWAR 166, 190	SG	810'	1-082	SB8	Y	Y	ISSUE: UNIQUE CONFIGURATION OF AIR DROP AT CONDUIT TIE IN, UPGRADE CANNOT BE INSTALLED. RESOLUTION: REMOVE SUFFICIENT 330-1 TO ALLOW RESPOSITIONING OF GROUND CABLE, REMOVE 330-560 TO ALLOW REPOSITIONING OF AIR DROP, REINSTALL PER TYPICAL DETAILS.	11-1, 11-2	1-5, 20, 35
6983, R1 ITEM 10 CWAR 189	SG	810'	1-082	SB8	Y	Y	ISSUE: CONFIGURATION DOES NOT ALLOW INSTALLATION OF SUPPORT STEEL UPGRADE. RESOLUTION: INSTALL STRESS SKIN REINFORCEMENT AT JOINTS, SECURED VIA TIE WIRE LACING.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 52

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6983, 41 ITEM 11 CWAR 192	SG	810'	1-082	SB8	Y	Y	ISSUE: 3" CONDUIT RESTRICTS THE INSTALLATION OF THE SPLICE PLATE OVERLAY REINFORCEMENT. RESOLUTION: REINFORCEMENT MAY BE TRIMMED, CUT & INSTALLED IN TWO PIECES, ABUT TO THE CONDUIT, FILLET ENTIRE LENGTH OF INTERFACE.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 37
6983, R1 ITEM 12 CWAR 193	SG	810'	1-082	SB8	Y	Y	ISSUE: LIMITED SPACE DOES NOT ALLOW INSTALLATION OF BUTT JOINT CIRCUMFERENTIAL WRAP UPGRADE. RESOLUTION: TRIM OR CUT THE JOINT REINFORCEMENT AND INSTALL CIRCUMFERENTIAL STRESS SKIN, MAY BE OVERLAPPED & INSTALLED IN TWO PIECES.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 53
6983, R1 ITEM 13 CWAR 203	SG	810'	1-082	SB8	Y	Y	ISSUE: (ITEM 1) CONFIGURATION OF AIR DROP - UPGRADE CANNOT BE INSTALLED. (ITEM 2) INSTALLATION OF STRESS SKIN REINFORCEMENT PROHIBITS INSTALLATION OF PROTRUDING ITEM PROTECTION. RESOLUTION: REMOVE 330-1 CONDUIT SECTIONS, REPOSITION GROUND CABLES, INSTALL NEW HALF ROUNDS & SECURE WITH TIE WIRE.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6983, R1 ITEM 14 CWAR 204	SG	810'	1-082	SB8	Y	Y	ISSUE: TRAY SUPPORT INTERFERES WITH 3RD LAYER OF 330-660 FLEXI-BLANKET. RESOLUTION: TRIM & NOTCH THE FLEXI-BLANKET MATERIAL TO FIT SNUG TO THE SUPPORT, FILL VOIDS WITH TROWEL GRADE & REINFORCE WITH SS MESH. SECURE W/TIE WIRES AND STAPLES & FINISH WITH FILLET.	11-1, 11-2	1-5, 54
6983, R1 ITEM 15 CWAR 207 (ITEM 1)	SG	810'	1-082	SB8	Y	Y	ISSUE: BOX ENCLOSURE DOES NOT ALLOW STD FIRE STOP CLAMP BAR. RESOLUTION: FABRICATE & INSTALL 2 SPECIAL CLAMP BARS.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 55
6983, R1 ITEM 15 CWAR 207 (ITEM 2)	SG	810'	1-082	SB8	Y	Y	ISSUE: 1" PIPE INTERFERES WITH BUTT JOINT REINFORCEMENT. RESOLUTION: TRIM THE STRESS SKIN TO FIT AROUND THE INTERFERENCE.		
6983, R1 ITEM 16 CWAR 210 (ITEM 1)	SG	810'	1-082	SB8	Y	Y	ISSUE: BOX/TRAY REQUIRES ENGINEERING DIRECTION. RESOLUTION: INSTALL PER TYPICAL BOX DETAIL.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 56
6983, R1 ITEM 16 CWAR 210 (ITEM 2)	SG	810'	1-082	SB8	Y	Y	ISSUE: SWAY STRUT INTERFERES WITH JOINT REINFORCEMENT. RESOLUTION: REINFORCEMENT MAY BE TRIMMED/CUT TO FIT SNUG. CIRCUMFERENTIAL WRAP MAY OVERLAP AND BE INSTALLED IN 2 PIECES.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6983, R1 ITEM 17 CWAR 212	SG	810'	1-082	SB8	Y	Y	ISSUE: AIR DROP CONFIGURATION DOES NOT ALLOW TIE WIRE INSTALLATION. RESOLUTION: INSTALL STAINLESS STEEL MESH REINFORCEMENT OVER AIR DROP, USE TROWEL GRADE & STAPLE TO ENSURE A SNUG FIT.	11-1, 11-2	1-5, 50
6983, R1 ITEM 18 CWAR 214	SG	810'	1-082	SB8	Y	Y	ISSUE: CONFIGURATION WRAP DOES NOT ALLOW FOR THE REQUIRED UPGRADE. RESOLUTION: WRAP BOTH COMMODITIES TOGETHER IN 330-660, FILL VOID WITH TROWEL GRADE & REINFORCE JOINTS PER TYPICAL DETAIL.	11-1, 11-2	1-5, 57, 101
6983, R1 ITEM 19 CWAR 218	SG	810'	1-082	SB8	Y	Y	ISSUE: CONDUIT PB INTERFERES WITH THE INSTALLATION OF LONGITUDINAL JOINT REINFORCEMENT. RESOLUTION: STRESS SKIN TO BE TRIMMED/CUT & INSTALLED IN 2 PIECES. FILLET THE ENTIRE LENGTH OF INTERFERENCE.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 43
6983, R1 ITEM 20 CWAR 221	SG	810'	1-082	SB8	Y	Y	ISSUE: MULTIPLE LONGITUDINAL JOINT UPGRADE INTERFERENCES. RESOLUTION: FILL VOIDS WITH 330-1 TROWEL GRADE, INSTALL STRESS SKIN & WIRE MESH AND SECURE WITH STAPLES, OMIT THE JOINT REINFORCEMENT IN THE INACCESSIBLE AREA.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 58

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6983, R1 ITEM 21 CWAR 222	SG	810'	1-082	SB8	Y	Y	ISSUE: CONDUIT INTERFERES WITH LONGITUDINAL JOINT REINFORCEMENT & CONCRETE BEAM CAUSES LIMITED SPACE. RESOLUTION: TRIM & OMIT STRESS SKIN, INSTALL ALTERNATE STRESS SKIN WITH TIE WIRES & INSTALL CERAMIC BANDING.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 59
6983, R1 ITEM 22 CWAR 224	SG	810'	1-082	SB8	Y	Y	ISSUE: INTERFERENCE WITH SPLICE PLATE JOINT REINFORCEMENT. RESOLUTION: REINFORCEMENT MAY BE TRIMMED/CUT AND INSTALLED IN 2 PIECES, SECURE WITH TIE WIRES.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 37
6983, R1 ITEM 23 CWAR 225, 244	SG	810'	1-082	SB8	Y	Y	ISSUE: AIRDROP REQUIRES SPECIAL ENG. DIRECTION DUE TO SIZE & CONFIGURATION. RESOLUTION: SECURE ALL 330-660 MATERIALS TO 330-1 MATERIALS WITH STAPLES. INSTALL STEEL MESH & SECURE WITH TIE WIRES & STAPLES. SECURE PICTURE FRAME AS TIGHT AS POSSIBLE WITH APPROVED FASTENERS.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 30, 60
6983, R1 ITEM 24 CWAR 227	SG	810'	1-082	SB8	Y	Y	ISSUE: PIPE & STRUT INTERFERES WITH LONGITUDINAL JOINT REINFORCEMENT. RESOLUTION: TRIM/CUT REINFORCEMENT TO SUIT INTERFERENCE. SECURE WITH STAPLES. INSTALL CERAMIC BANDS.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 61

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6983, R1 ITEM 25 CWAR 231 (ITEM 1)	SG	810'	1-082	SB8	Y	Y	ISSUE: SEVERAL INTERFERENCES WITH LONGITUDINAL JOINT REINFORCEMENTS. RESOLUTION: OMIT THE LONGITUDINAL STRESS SKIN & INSTALL CERAMIC BANDS.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 61
6983, R1 ITEM 25 CWAR 231 (ITEM 2)	SG	810'	1-082	SB8	Y	Y	ISSUE: TRAY END PANEL INSTALLED WITH NO FIRE STOP. RESOLUTION: INSTALL STRESS SKIN REINFORCEMENT PER TYPICAL DETAILS.		
6983, R1 ITEM 26 CWAR 232	SG	810'	1-082	SB8	Y	Y	ISSUE: AIR DROP DOES NOT ALLOW STANDARD UPGRADE. RESOLUTION: INSTALL STAINLESS STEEL MESH & SECURE W/STAPLES. FINISH WITH A TROWEL GRADE FILLET.	11-1, 11-2	1-5, 62
6983, R1 ITEM 27 CWAR 241	SG	810'	1-082	SB8	Y	Y	ISSUE: EXISTING CONFIGURATION HAS VISIBLE CRACKS. RESOLUTION: COVER W/STRESS SKIN, SECURE W/STAPLES & INSTALL FILLET.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 21
6983, R1 ITEM 28 CWAR 242	SG	810'	1-082	SB8	Y	Y	ISSUE: OBSTRUCTIONS DO NOT ALLOW STANDARD STRUCTURAL SUPPORT UPGRADE. RESOLUTION: INSTALL 330-1 STRIP & SECURE WITH APPROVED SCREWS. COVER W/STRESS SKIN & SECURE W/STAPLES.	11-2, 11-4, 11-5, 13-2	1-5, 63

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6983, R1 ITEM 29 CWAR 243, 278, 413, 414, 417, 418, 419, 420	SG	810'	1-082	SB8	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6983, R1 ITEM 30 CWAR 245	SG	810'	1-082	SB8	Y	Y	ISSUE: INSTALLATION REQUIRES SPECIAL ENGINEERING DIRECTION. RESOLUTION: COPE & TRIM 330-660 FLEX-BLANKET TO FIT OBSTRUCTIONS, FILL VOIDS W/TROWEL GRADE. SECURE WITH STAPLES.	11-1, 11-2	1-5, 64
6983, R1 ITEM 31 CWAR 251	SG	810'	1-082	SB8	Y	Y	ISSUE: JOINT REINFORCEMENT CAN NOT BE INSTALLED DUE TO SERVICE WATER INTERFERENCE. RESOLUTION: CUT, TRIM & INSTALL STRESS SKIN TO ABUT THE PIPE. SECURE WITH STAPLES.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 43
6984, R1 ITEM 1	SG	832'	1-088	SB144	Y	Y	ISSUE: ROOM 1-088 POSSESSES A HARSH ENVIRONMENT WHICH COULD DAMAGE THERMO-LAG MATERIALS. RESOLUTION: APPLY 350-5000-10 TOP COAT TO ALL EXPOSED THERMO-LAG IN ROOM 1-088.	13-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6984, R1 ITEM 2	SG	832'	1-088	SB144	Y	Y	ISSUE: ONLY 3/8" CLEARANCE IS PROVIDED FOR 1/4" THICK THERMO-LAG INSTALLATION. RESOLUTION: INSTALL THE 3RD LAYER OF 330-660 FLEXI-BLANKET WITH THE OVERLAP POSITIONED 90° TO 180° FROM THE AREA OF MINIMAL CLEARANCE BETWEEN THE TWO COMMODITIES. THE POSITION OF THE 2ND LAYER OVERLAP SEAM SHALL NOT DICTATE THE PLACEMENT OF THE 3RD LAYER OVERLAP, SO AS TO ALLOW INSTALLATION OF THE 3RD LAYER.	9-1, 9-3, 10-1, 10-2	1-5, 65

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6984, R1 ITEM 3	SG	832'	1-088	SB144	Y	Y	ISSUE: WHERE CABLES TRAYS RUN ADJACENT TO THE 8-S WALL. THE THERMO-LAG 330-1 COVERAGE INTERMITTENTLY ABUTS THE CONCRETE WALL AND WALL MOUNTED CABLE TRAY HANGER BASE PLATES PROTECTED WITH THERMO-LAG 330-1 MATERIAL. RESOLUTION: WHERE THE CABLE TRAY COVERAGE IS IN CONTACT WITH THE CONCRETE WALL: REMOVE THE EXISTING 330-1 FILLET MATERIAL AND INSTALL 330-1 FLAT PANEL IN STRIP FORM WITH 330-69 STRESS SKIN REINFORCEMENT FOR THE LENGTH OF THE CONDITION. WHERE THE CABLE TRAY COVERAGE IS IN CONTACT WITH THE CABLE TRAY HANGER PLATE COVERAGE: INSTALL 330-69 STRESS SKIN ON THE CABLE TRAY COVERAGE FOR CABLE TRAY LONGITUDINAL JOINTS AND OUT ONTO THE HANGER PLATE COVERAGE. THE STRESS SKIN REINFORCEMENT SHOULD BE INSTALLED ONTO THE HANGER PLATE COVERAGE TO THE EDGE OF THE HANGER PLATE COVERAGE, BUT NOT TO EXCEED 5".	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 66

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6984, R1 ITEM 4, CWAR 87	SG	832'	1-088	SB144	Y	Y	ISSUE: THE 3RD LAYER OF 330-660 FLEXI-BLANKET CANNOT BE INSTALLED PER TYPICAL DETAIL. RESOLUTION: INSTALL THE 3RD LAYER OVERLAPPING THE HALF ROUNDS 1" TO 2" AND STAPLE INTO PLACE.	11-1, 11-2	1-5, 67
6984, R1 ITEM 5, CWAR 89	SG	832'	1-088	SB144	Y	Y	ISSUE: THE 3RD LAYER OF 330-660 FLEXI-BLANKET CANNOT BE INSTALLED PER TYPICAL DETAIL. RESOLUTION: OVERLAP THE 3RD LAYER ONTO THE BOX ENCLOSURE 3" AND STAPLE INTO PLACE.	11-1, 11-2	1-5, 67
6984, R1 ITEM 6 CWAR 106	SG	832'	1-088	SB144	Y	Y	ISSUE: WHERE 2 CONDUITS MEET STANDARD JOINT REINFORCEMENT CANNOT BE INSTALLED. RESOLUTION: REINFORCE BOTH TOGETHER FILL VOIDS WITH TROWEL GRADE. SECURE REINFORCEMENT USING STAPLES TO ENSURE A SNUG FIT.	13-2	1-5, 21
6984, R1 ITEM 7 CWAR 112	SG	832'	1-088	SB144	Y	Y	ISSUE: 3RD LAYER OF 330-660 FLEXI-BLANKET CANNOT BE INSTALLED PER TYPICAL DETAILS. RESOLUTION: CONSTRUCT A BOX TO RECEIVE ONE END OF THE FLEXI-BLANKET BUNDLE. UPGRADE WITH STITCHING & STRESS SKIN.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1, 11-2	1-5, 68

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6984, R1 ITEM 8 CWAR 126	SG	832'	1-088	SB144	Y	Y	ISSUE: 3RD LAYER OF 330-660 FLEXI-BLANKET CANNOT BE INSTALLED PER TYPICAL DETAILS. RESOLUTION: CONSTRUCT A BOX TO RECEIVE ONE END OF THE FLEXI-BLANKET BUNDLE. UPGRADE WITH STITCHING & STRESS SKIN.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1, 11-2	1-5, 68
6984, R1 ITEM 9 CWAR 127	SG	832'	1-088	SB144	Y	Y	ISSUE: CANNOT INSTALL CIRCUMFERENTIAL STRESS SKIN AT INTERFERENCE. RESOLUTION: INSTALL MODIFIED CIRCUMFERENTIAL STRESS SKIN & SECURE W/STAPLES.	13-1, 14-1, 11-2, 11-4, 11-5, 13-2	1-5, 69
6984, R1 ITEM 10 CWAR 151	SG	832'	1-088	SB144	Y	Y	ISSUE: CANNOT INSTALL CIRCUMFERENTIAL STRESS SKIN AT INTERFERENCE. RESOLUTION: INSTALL MODIFIED CIRCUMFERENTIAL STRESS SKIN & SECURE W/STAPLES.	13-1, 14-1, 11-2, 11-4, 11-5, 13-2	1-5, 69
6984, R1 ITEM 11 CWAR 154, 211, 403	SG	832'	1-088	SB144	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6984, R1 ITEM 12 CWAR 158 (ITEM 1)	SG	832'	1-088	SB144	Y	Y	ISSUE: CANNOT INSTALL CIRCUMFERENTIAL WRAP AT INTERFERENCE. RESOLUTION: INSTALL MODIFIED CIRCUMFERENTIAL WRAP & SECURE WITH STAPLES AND TIE WIRES.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 70

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6984, R1 ITEM 12 CWAR 158 (ITEM 2)	SG	832'	1-088	SB144	Y	Y	ISSUE: CANNOT INSTALL LONGITUDINAL JOINT REINFORCEMENT. RESOLUTION: OMIT JOINT REINFORCEMENT.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 70
6984, R1 ITEM 13 CWAR 172 (ITEM 1)	SG	832'	1-088	SB144	Y	Y	ISSUE: TRAY INTERFERES WITH PROTRUDING ITEM PROTECTION. RESOLUTION: CUT BACK THE CABLE TRAY.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 71
6984, R1 ITEM 13 CWAR 172 (ITEM 2)	SG	832'	1-088	SB144	Y	Y	ISSUE: INSTALL FIRE STOPS AND TRAY SUPPORT UPGRADE. RESOLUTION: INSTALL TRAY SUPPORT UPGRADE AND THERMO-LAG FIRE STOP.		
6984, R1 ITEM 13 CWAR 172 (ITEM 3)	SG	832'	1-088	SB144	Y	Y	ISSUE: LIMITED SPACE AND INTERFERENCE FOR THE BUTT JOINT REPAIR. RESOLUTION: INSTALL FLAT PANEL FULL WIDTH OF TRAY.		
6984, R1 ITEM 13 CWAR 172 (ITEM 4)	SG	832'	1-088	SB144	Y	Y	ISSUE: SHIM BOARDS ARE REQUIRED. RESOLUTION: INSTALL SHIM BOARD.		
6984, R1 ITEM 13 CWAR 172 (ITEM 5)	SG	832'	1-088	SB144	Y	Y	ISSUE: CANNOT ACHIEVE HILTI INSTALLATION RESOLUTION: ENSURE ALL VOIDS & GAPS ARE FILLED WITH TROWEL GRADE.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6984, R1 ITEM 14 CWAR 199	SG	832'	1-088	SB144	Y	Y	ISSUE: REINFORCEMENT ON TRAY PROHIBITS STRESS SKIN REINFORCEMENT ON PROTRUDING ITEM. RESOLUTION: INSTALL MESH REINFORCEMENT & SECURE WITH STAPLES.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 21
6984, R1 ITEM 15 CWAR 88	SG	832'	1-088	SB144	Y	Y	ISSUE: THE RADIAL BEND REQUIRING UPGRADE IS PARTIALLY ENCAPSULATED IN PROTRUDING ITEM. RESOLUTION: INSTALL STRESS SKIN & STAPLE INTO PROTRUDING ITEM. COVERAGE & TIE WIRE IN PLACE. ABUT STRESS SKIN TO THE WALL & FILLET. STAPLE TO ENSURE A SNUG FIT.	9-1, 9-3, 10-1, 10-2	1-5, 15, 44
6985, R1 ITEM 1, CWAR 150	SG	852'	1-094	SB15	Y	Y	ISSUE: TYPO. ON ORIGINAL DOCUMENT. RESOLUTION: CORRECT TYPO.	N/A	N/A
6985, R1 ITEM 2 CWAR 177	SG	852'	1-094	SB15	Y	Y	ISSUE: ORIGINAL DOCUMENT REQUIRES REMOVAL OF STRESS SKIN, REMOVAL NOT REQUIRED. RESOLUTION: UPGRADE PER TYPICAL DETAILS.	11-1, 11-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6985, R1 ITEM 3 CWAR 238	SG	852'	1-094	SB15	Y	Y	ISSUE: UNIQUE CONFIGURATION REQUIRES NON STANDARD UPGRADE. RESOLUTION: REMOVE SUFFICIENT AMOUNTS OF THERMO-LAG MATERIALS AND REINSTALL IN ACCORDANCE WITH TYPICAL DETAILS. REINFORCE ENTIRE ASSEMBLY WITH STAINLESS STEEL MESH, TROWEL GRADE & SECURE WITH STAPLES.	11-1, 11-2	1-5, 72
6985, R1 ITEM 4 CWAR 249, 250, 347, 349, 354	SG	852'	1-094	SB15	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6986, R1 ITEM 1 CWAR 256	SG	832'	1-095	SB15	Y	Y	ISSUE: STAPLE LENGTH CONCERN. RESOLUTION: INSTALL 7/8" STAPLES.	11-1, 11-2	1-5, 34
6987, R1 ITEM 1	EC	778'	X-115A	AA153	Y	Y	DELETED	N/A	N/A
6987, R1 ITEM 2	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCE WITH 3RD LAYER 330-660 FLEXI-BLANKET WRAP. RESOLUTION: NOTCH AROUND OBSTRUCTING PIPE FLANGE, THEN ADD ADDITIONAL COLLAR AROUND THAT.	11-1, 11-2	1-5, 7
6987, R1 ITEM 3	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCE WITH 3RD LAYER 330-660 FLEXI-BLANKET. RESOLUTION: NOTCH PIPE INSULATION, THEN INSTALL THERMO-LAG	11-1, 11-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 4	EC	778'	X-115A	AA153	Y	Y	ISSUE: TWO CONDUITS TOO CLOSE TOGETHER TO INSTALL INDIVIDUAL FLEXI-BLANKET WRAPS. RESOLUTION: WRAP BOTH CONDUITS TOGETHER, FILL VOIDS WITH TROWEL GRADE.	11-1, 11-2	1-5, 20
6987, R1 ITEM 5	EC	778'	X-115A	AA153	Y	Y	ISSUE: PROTRUDING ITEM COVERAGE INTERFERES WITH 3RD LAYER COVERAGE ON ESSENTIAL AIR DROP. RESOLUTION: REMOVE PROTRUDING ITEM COVERAGE, INSTALL 3RD LAYER, REINSTALL PROTRUDING ITEM COVERAGE FILL VOIDS WITH TROWEL GRADE.	11-1, 11-2	1-5, 73
6987, R1 ITEM 6	EC	778'	X-115A	AA153	Y	Y	ISSUE: 2 RADIAL BEND UPGRADES INTERFERE WITH ONE ANOTHER. RESOLUTION: UTILIZE WIRE MESH AND TRIM IT TO BUTT TIGHT WHERE THE INTERFERENCE EXISTS.	9-1, 9-3, 13-2	1-5, 44
6987, R1 ITEM 7	EC	778'	X-115A	AA153	Y	Y	ISSUE: CONCRETE BEAM INTERFERES WITH LONGITUDINAL JOINT UPGRADE. RESOLUTION: INSTALL STRESS SKIN WHERE POSSIBLE THEN BUTT TO THE CONCRETE BEAM & INSTALL A FILLET.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 13

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 8	EC	778'	X-115A	AA153	Y	Y	ISSUE: A CONDUIT/TRAY INTERFACE IS OBSTRUCTED BY A CONCRETE WALL. RESOLUTION: CUT FLEXI-MESH TO FIT THE ACCESSIBLE AREA, LAP ONTO THE TRAY AND BUTT TO THE WALL & INSTALL A FILLET.	11-1, 11-2	1-5, 13, 50
6987, R1 ITEM 9	EC	778'	X-115A	AA153	Y	Y	DELETED	N/A	N/A
6987, R1 ITEM 10	EC	778'	X-115A	AA153	Y	Y	ISSUE: SUFFICIENT CLEARANCE IS NOT AVAILABLE FOR AIR DROP UPGRADE. RESOLUTION: INSTALL TROWEL GRADE, MESH & SECURE WITH TIE WIRES AND STAPLES TO THE EXTENT THE INTERFERENCE WILL ALLOW.	11-1, 11-2	1-5, 50
6987, R1 ITEM 11	EC	778'	X-115A	AA153	Y	Y	ISSUE: 2 PARALLEL TRAYS DO NOT ALLOW TYPICAL JOINT UPGRADES. RESOLUTION: INSTALL JOINT UPGRADES ON OUTSIDE OF TRAYS, INSTALL UPGRADES ON INSIDES WHERE POSSIBLE, STAPLING TOP AND BOTTOM. INSTALL CERAMIC BANDING FOR ADDED SUPPORT.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 61
6987, R1 ITEM 12	EC	778'	X-115A	AA153	Y	Y	ISSUE: IN SEVERAL LOCATIONS, TWO CONDUITS ARE TOO CLOSE TO EACH OTHER TO INSTALL INDIVIDUAL REINFORCEMENT. RESOLUTION: REINFORCE BOTH CONDUITS TOGETHER UNTIL THERE IS SUFFICIENT SPACE TO INSTALL INDIVIDUALLY.	11-1, 11-2	1-5, 20, 101

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 13 CWAR 13	EC	778'	X-115A	AA153	Y	Y	ISSUE: CONDUIT/TRAY NOT IDENTIFIED FOR UPGRADE. RESOLUTION: UPGRADE COMMODITY PER TYPICAL DETAILS.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 20
6987, R1 ITEM 14 CWAR 85, 86	EC	778'	X-115A	AA153	Y	Y	ISSUE: EQUIPMENT IS NOT PROTECTED WITH THERMO-LAG. RESOLUTION: TERMINATE THERMO-LAG & INSTALL A TROWEL GRADE FILLET.	11-1, 11-2	1-5, 74
6987, R1 ITEM 15 CWAR 93, 94	EC	778'	X-115A	AA153	Y	Y	ISSUE: CONCRETE INTERFERES WITH MESH UPGRADE. RESOLUTION: EXTEND MESH PAST BEAM, STAPLE & FILLET	11-1, 11-2	1-5, 74
6987, R1 ITEM 16 CWAR 96	EC	778'	X-115A	AA153	Y	Y	ISSUE: CANNOT MEET TIE WIRE PLACEMENT ON MESH UPGRADE. RESOLUTION: INSTALL MESH AS FAR AS POSSIBLE, TRIM TO FIT, FILLET & FASTEN WITH STAPLES & TIE WIRES.	9-1, 9-3, 13-2	1-5, 30
6987, R1 ITEM 17 CWAR 97	EC	778'	X-115A	AA153	Y	Y	ISSUE: RADIAL BEND IS PARTIALLY ENCAPSULATED IN THERMO-LAG. RESOLUTION: INSTALL MESH AS FAR AS POSSIBLE, SECURE WITH STAPLES & TIE WIRES.	9-1, 9-3, 13-2	1-5, 44
6987, R1 ITEM 18 CWAR 99	EC	778'	X-115A	AA153	Y	Y	ISSUE: FLEXI-BLANKET HAS BUTT JOINT SEPARATION. RESOLUTION: FILL THE SEPARATED AREA WITH TROWEL GRADE & INSTALL A FILLET.	11-1, 11-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 19 CWAR 102	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCE WITH RADIAL BEND UPGRADE & GROUND CLAMP UPGRADE. RESOLUTION: INSTALL MESH UP TO THE INTERFERENCE, FASTEN WITH TIE WIRES & STAPLE AS REQUIRED TO ACHIEVE SNUG FIT. WRAP THE GROUND CABLE INTERFACE WITH MESH, STAPLE & TIE WIRE.	9-1, 9-3, 11-1, 11-2, 13-2	1-5, 44, 74
6987, R1 ITEM 20 CWAR 104	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCE WITH RADIAL BEND UPGRADE. RESOLUTION: REMOVE TROWEL GRADE FROM THE INTERFERENCE & INSTALL A FILLET, EXTEND MESH AROUND THE PROTRUDING ITEM & SECURE WITH TIE WIRES & STAPLE TO ACHIEVE A SNUG FIT.	9-1, 9-3, 13-2	1-5, 44
6987, R1 ITEM 21 CWAR 108	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCE WITH STRESS SKIN UPGRADE. RESOLUTION: OVERLAP STRESS SKIN ONTO THE INTERFERING ITEM & SECURE WITH STAPLES.	9-1, 9-3, 10-1, 10-2	1-5, 9, 10
6987, R1 ITEM 22 CWAR 119	EC	778'	X-115A	AA153	Y	Y	ISSUE: NEED ENGINEERING APPROVAL FOR INSTALLATION OF DETAIL 5-13.1 RESOLUTION: USE DETAIL 5-13.1	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 75

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 23 CWAR 120, 121	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCE WITH STRESS SKIN UPGRADE. RESOLUTION: INSTALL WIRE MESH & STRESS SKIN ONTO THE OBSTRUCTION, SECURE WITH STAPLES.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 13-2	1-5, 9, 10, 44
6987, R1 ITEM 24 CWAR 122	EC	778'	X-115A	AA153	Y	Y	ISSUE: NEED ENGINEERING APPROVAL FOR INSTALLATION OF DETAIL 7-5. RESOLUTION: UTILIZE DETAIL 8-2.	9-1, 9-3, 10-1, 10-2, 13-2	1-5, 20
6987, R1 ITEM 25 CWAR 131	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCES WITH STANDARD LONGITUDINAL STRESS SKIN INSTALLATION. RESOLUTION: ABUT THE STRESS SKIN TO THE OBSTRUCTION & INSTALL A TROWEL GRADE FILLET.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 76
6987, R1 ITEM 26 CWAR 133	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCE WITH STRESS SKIN UPGRADE. RESOLUTION: LAP STRESS SKIN ONTO THE OBSTRUCTION & FASTEN PER TYPICAL DETAILS.	9-1, 9-3, 10-1, 10-2	1-5, 15
6987, R1 ITEM 27 CWAR 141	EC	778'	X-115A	AA153	Y	Y	ISSUE: STAPLE REQUIREMENTS AT 330-660/330-1 INTERFACE. RESOLUTION: INSTALL ADDITIONAL HALF ROUNDS OVER THE EXISTING. FILL VOIDS WITH TROWEL GRADE & 7/8" STAPLES THROUGH FLEXI-BLANKET.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-6

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 28 CWAR 144	EC	778'	X-115A	AA153	Y	Y	ISSUE: INTERFERENCES WITH STANDARD FLEXI-BLANKET INSTALLATION. RESOLUTION: REWORK THE 330-660 PROTECTION, FILL VOIDS WITH TROWEL GRADE & FILLET THE INTERFACE.	11-1, 11-2	1-5, 73, 74
6987, R1 ITEM 29 CWAR 148	EC	778'	X-115A	AA153	Y	Y	ISSUE: 1/4" SST TUBE INTERFERENCE. RESOLUTION: TRIM THE FLEXI-BLANKET TO CLEAR THE INTERFERENCE & ADD AN ADDITIONAL LAYER.	11-1, 11-2	1-5, 7
6987, R1 ITEM 30 CWAR 161	EC	778'	X-115A	AA153	Y	Y	ISSUE: CANNOT INSTALL STRESS SKIN DUE TO INTERFERENCES. RESOLUTION: ABUT THE STRESS SKIN TO THE INSULATED PIPE & APPLY A FILLET AT THE INTERFACE.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 76
6987, R1 ITEM 31 CWAR 165 (ITEM 1)	EC	778'	X-115A	AA153	Y	Y	ISSUE: INSTALLATION PROBLEMS REINFORCEMENT PANEL. RESOLUTION: CUT THE REINFORCEMENT PANEL TO COVER THE TRAY SUPPORT	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 37, 50, 77
6987, R1 ITEM 31 CWAR 165 (ITEM 2)	EC	778'	X-115A	AA153	Y	Y	ISSUE: INSTALLATION PROBLEMS WIRE MESH RESOLUTION: WRAP THE WIRE MESH AROUND THE 330-660 COVERAGE ONTO THE PROTRUDING ITEM.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 31 CWAR 165 (ITEM 3)	EC	778'	X-115A	AA153	Y	Y	ISSUE: INSTALLATION PROBLEMS STRESS SKIN. RESOLUTION: REINFORCE THE SPLICE PLATE WITH 2 PIECES OF STRESS SKIN.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 37, 50, 77
6987, R1 ITEM 31 CWAR 165 (ITEMS 4&5)	EC	778'	X-115A	AA153	Y	Y	ISSUE: INSTALLATION PROBLEMS REINFORCEMENT PANEL. RESOLUTION: TRIM STRESS SKIN & ABUT TO THE WALL & INSTALL A FILLET, SECURE WITH TIE WIRES.		
6987, R1 ITEM 32 CWAR 167	EC	778'	X-115A	AA153	Y	Y	ISSUE: BOX FRAME CANNOT BE INSTALLED PER TYPICAL DETAIL. RESOLUTION: REINSTALL BOX ENCLOSURE. PRE-CAULK WITH TROWEL GRADE & INSTALL STRESS SKIN.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 78
6987, R1 ITEM 33 CWAR 173, 174, 179, 180, 181, 182, 183, 196, 272, 273, 274, 289, 291, 292, 293, 294, 295, 314, 315, 266, 401, 402, 407, 437, 438, 439, 436, 440, 393	EC	778'	X-115A	AA153	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6987, R1 ITEM 34 CWAR 175	EC	778'	X-115A	AA153	Y	Y	ISSUE: STRESS SKIN CANNOT BE INSTALLED ON THE AIR DROP. RESOLUTION: INSTALL MESH (NOTCH AS NECESSARY)	11-1, 11-2	1-5, 50

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 35 CWAR 176, 188, 310	EC	778'	X-115A	AA153	Y	Y	ISSUE: GROUND CABLE COVERAGE. RESOLUTION: REINFORCE WITH SST MESH, TIE WIRE & STAPLE TO ACHIEVE SNUG FIT.	11-1, 11-2	1-5, 50
6987, R1 ITEM 36 CWAR 185	EC	778'	X-115A	AA153	Y	Y	ISSUE: BOX ENCLOSURE EXCEEDS 14" X 30" X 12". RESOLUTION: UPGRADE BOX PER TYPICAL DETAILS.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 79
6987, R1 ITEM 37 CWAR 187	EC	778'	X-115A	AA153	Y	Y	ISSUE: CABLE TRAY AT TRAY SUPPORT UPGRADE. RESOLUTION: INSTALL MESH IN ONE CONTINUOUS PIECE ACROSS THE BACK OF THE TRAY AND ONTO THE SUPPORT. STAPLE TO ACHIEVE A SNUG FIT.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 80
6987, R1 ITEM 38 CWAR 197	EC	778'	X-115A	AA153	Y	Y	ISSUE: INSTRUMENT TUBE RACK INTERFERENCE. RESOLUTION: INSTALL MESH UP TO THE RACK & INSTALL A FILLET ON BOTH SIDES. USE STAPLES & TIE WIRES TO ACHIEVE A SNUG FIT.	9-1, 9-3, 13-2	1-5, 44
6987, R1 ITEM 39 CWAR 198	EC	778'	X-115A	AA153	Y	Y	ISSUE: SEVERAL TRAYS TERMINATE PROTECTION WITH A THERMO-LAG PANEL IN LIEU OF A FIRE STOP. RESOLUTION: USE SST MESH TO ENCAPSULATE THE END OF THE TRAY, OR BOX TO STRUCTURE.	1-2, 12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 81

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 40 CWAR 200	EC	778'	X-115A	AA153	Y	Y	ISSUE: MULTIPLE CABLE BUNDLES ENTER A TRAY. RESOLUTION: ENCAPSULATE BUNDLES IN A SINGLE WRAP OF MESH, FILL ALL VOIDS WITH TROWEL GRADE & FASTEN PER TYPICAL DETAILS.	11-1, 11-2	1-5, 20, 101
6987, R1 ITEM 41 CWAR 208	EC	778'	X-115A	AA153	Y	Y	ISSUE: STAPLE UPGRADE CANNOT BE ACHIEVED. RESOLUTION: USE TIE WIRES IN PLACE OF STAPLES.	11-1, 11-2	1-5, 30
6987, R1 ITEM 42 CWAR 217	EC	778'	X-115A	AA153	Y	Y	ISSUE: STRESS SKIN CANNOT BE INSTALLED DUE TO INTERFERENCE. RESOLUTION: TRIM THE STRESS SKIN AROUND THE INTERFERENCE, FASTEN PER TYPICAL DETAILS AND INSTALL A TROWEL GRADE FILLET.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 15
6987, R1 ITEM 43 CWAR 222	EC	778'	X-115A	AA153	Y	Y	ISSUE: TIE WIRE SPACING CANNOT BE MET. RESOLUTION: INSTALL WIRES 1/2" TO 1" FROM EDGE OF OVERLAP.	11-2, 11-4, 11-5	1-5, 20
6987, R1 ITEM 44 CWAR 235	EC	778'	X-115A	AA153	Y	Y	ISSUE: DIRECTION FOR INSTALLING 3RD LAYER FLEXI-BLANKET IS REQUIRED. RESOLUTION: REMOVE SUFFICIENT FLEXI-BLANKET MATERIAL TO ALLOWING BANDING, REINSTALL THE REQUIRED BLANKETS AND SEAL WITH A TROWEL GRADE FILLET.	11-1, 11-2	1-5, 35

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 45 CWAR 236	EC	778'	X-115A	AA153	Y	Y	ISSUE: THERMO-LAG CANNOT BE INSTALLED PER TYPICAL DETAIL. RESOLUTION: INSTALL PER TYPICAL DETAIL 8.4	11-1, 11-2	1-5, 20
6987, R1 ITEM 46 CWAR 248	EC	778'	X-115A	AA153	Y	Y	ISSUE: IDENTIFIED RACEWAYS HAD 7/8" STAPLES INSTALLED WHERE 1 1/2" STAPLES WERE REQUIRED. RESOLUTION: BACKFIT USING 1 1/2" STAPLES.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-5, 34
6987, R1 ITEM 47 CWAR 254	EC	778'	X-115A	AA153	Y	Y	ISSUE: STANDARD INSTALLATION CANNOT BE INSTALLED DUE TO INTERFERING ITEM. RESOLUTION: WRAP THE ESSENTIAL RACEWAYS WITH 2 LAYERS OF FLEXI-BLANKET & FILL ANY GAPS WITH TROWEL GRADE.	11-1, 11-2	1-5, 20
6987, R1 ITEM 48 CWAR 262 & PG. 252	EC	778'	X-115A	AA153	Y	Y	ISSUE: DETAIL 3-5.2 REQUIRES ENGINEERING APPROVAL. RESOLUTION: DETAIL 3-5.2 APPROVED.	11-1, 11-2	1-5, 82
6987, R1 ITEM 49 CWAR 269	EC	778	X-115A	AA153	Y	Y	ISSUE: CONGESTION EXISTS IN THE AREA OF FLEXI-BLANKET REQUIREMENT. RESOLUTION: WRAP THE ESSENTIAL RACEWAY IN FLEXI-BLANKET THEN WRAP THE OTHER 5 ITEMS IN THE SECOND FLEXI-BLANKET LAYER. FILL ALL GAPS WITH TROWEL GRADE.	11-1, 11-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6987, R1 ITEM 50 CWAR 275	EC	778'	X-115A	AA153	Y	Y	ISSUE: FLEXI-BLANKET BUNDLE IS ONLY 4 1/8" DIAMETER, WHICH SIZE STAPLES ARE TO BE USED. RESOLUTION: USE 7/8" STAPLES.	11-1, 11-2	1-5, 34
6987, R1 ITEM 5i CWAR 360	EC	778'	X-115A	AA153	Y	Y	ISSUE: EXPOSED GROUND CABLES WERE ADDED TO ROOM X-115A. RESOLUTION: INSTALL THERMO-LAG FLEXI-BLANKET ON CABLE.	11-1, 11-2	1-5, 20
6988, R1 ITEM 1 AUGMENTED INSTRUCTIONS (ITEM 1)	EC	792'	X-125	EA57	Y	Y	ISSUE. INSUFFICIENT CLEARANCE TO REINFORCE 330-660 AIRDROPS AT TRAYS DUE TO INTERFERING ITEMS. RESOLUTION: TRIM REINFORCING MESH AS REQUIRED. FLARE MESH OUT ONTO COMMODITIES IN UPGRADE AREA.	11-1, 11-2, 11-4, 11-5	1-5, 20, 50, 85
6988, R1 ITEM 1 AUGMENTED INSTRUCTIONS (ITEM 2)	EC	792'	X-125	EA57	Y	Y	ISSUE: FIRE STOP CLAMP CANNOT BE INSTALLED DUE TO INSUFFICIENT SPACE. RESOLUTION: INSTALL 2 CABLE TRAY SUPPORT UPGRADES ON EACH SIDE OF THE LAST TRAY SUPPORT.		
6988, R1 ITEM 2 CWAR 369 (ITEM 1)	EC	792'	X-125	EA57	Y	Y	ISSUE: INSTALLATION OF TRAY CIRCUMFERENTIAL STRESS SKIN AT TRAY BOXOUT CONFIGURATION. RESOLUTION: OVERLAP CIRCUMFERENTIAL TRAY STRESS SKIN ONTO BOX OUT STRESS SKIN & SECURE BOTH.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-6, 8, 15, 38, 101

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6988, R1 ITEM 2 CWAR 369 (ITEM 2)	EC	792'	X-125	EA57	Y	Y	ISSUE: SIL-TEMP CABLE WRAP THAT INTERFERES WITH 3RD 330-660 LAYER INSTALLATION. RESOLUTION: REMOVE INTERFERING SIL-TEMP WRAP, THEN INSTALL 3RD FLEXI-BLANKET LAYER.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-6, 8, 15, 38, 101
6988, R1 ITEM 2 CWAR 369 (ITEM 3)	EC	792'	X-125	EA57	Y	Y	ISSUE: EXISTING 330-660 INTERFERES WITH 3RD LAYER INSTALLATION. RESOLUTION: WRAP BOTH CABLE BUNDLES IN COMMON 3RD LAYER, UNTIL BUNDLE REQUIRING 3RD LAYER CAN BE WRAPPED ALONE.		
6988, R1 ITEM 2 CWAR 369 (ITEM 4)	EC	792'	X-125	EA57	Y	Y	ISSUE: NON-ESSENTIAL CABLES INTERFERE WITH 3RD LAYER 330-660 INSTALLATION. RESOLUTION: WRAP NON-ESSENTIAL CABLES AS PROTRUDING ITEMS. THE FLEX-MESH UPGRADE WILL NOT USE STAPLES.		
6988, R1 ITEM 2 CWAR 369 (ITEM 5)	EC	792'	X-125	EA57	Y	Y	ISSUE: CABLE BUNDLE 3RD LAYER WRAP THAT BUTTS TO EXISTING 330-1 COVERAGE OF A TWS SLEEVE. RESOLUTION: REINFORCE THE MATERIAL INTERFACE WITH FLEX-MESH "SS-304"		
6988, R1 ITEM 2 CWAR 369 (ITEM 6)	EC	792'	X-125	EA57	Y	Y	ISSUE: REINFORCING THE 330-1/330-660 MATERIAL INTERFACE AT TRAY ENDS. RESOLUTION: REINFORCE MATERIAL INTERFACE WITH SS-304 MESH.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6988, R1 ITEM 2 CWAR 369 (ITEM 7)	EC	792'	X-125	EA57	Y	Y	ISSUE: PROTRUDING CABLE AIR DROP IS ONLY 3" LONG. RESOLUTION: EXTEND PROTRUDING ITEM WRAP OUT AROUND ESSENTIAL BUNDLE TO ACHIEVE 4"-5" REQUIRED & FIRE STOP.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-6, 8, 15, 38, 101
6988, R1 ITEM 3 CWAR 457, 458, 459	EC	792'	X-125	EA57	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6989, R1 ITEM 1 AUGMENTED INSTRUCTIONS	AB	790'	X-174	AA21a	N	Y	ISSUE: 330-660 BUNDLES TOO CLOSE TO INSTALL JOINT REINFORCEMENT. RESOLUTION: REINFORCE BUNDLES COLLECTIVELY AT TRAY INTERFACE.	11-1, 11-2	1-5, 20, 101
6989, R1 ITEM 2 AUGMENTED INSTRUCTIONS	AB	790'	X-174	AA21a	N	Y	ISSUE: PROTRUDING ITEM COVERAGE IS INTERFERING WITH 330-660 BUNDLE TO TRAY UPGRADE & 330-660 BUNDLES TOO CLOSE TO INSTALL JOINT REINFORCEMENT. RESOLUTION: TRIM SS-304 MESH AROUND INTERFERENCES, REINFORCE BUNDLES COLLECTIVELY AT TRAY INTERFACE.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20, 21
6989, R1 ITEM 3 CWAR 276 (ITEM 1)	AB	790'	X-174	AA21a	N	Y	ISSUE: 3RD LAYER CANNOT BE INSTALLED COMPLETELY IN EXPOSED TRAY DUE TO THERMO-LAG FIRESTOPS. RESOLUTION: TEMPORARILY REMOVE FIRE STOP.	11-2, 11-4, 11-5, 15-2	1-5, 86

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6989, R1 ITEM 3 CWAR 276 (ITEM 2)	AB	790'	X-174	AA21a	N	Y	ISSUE: 3RD 330-660 LAYER IN EXPOSED TRAY CANNOT BE INSTALLED DUE TO INTERFERING PIPES. RESOLUTION: TRANSITION TO 330-1 PROTECTION IN AREA OF INTERFERENCES.	11-2, 11-4, 11-5, 15-2	1-5, 86
6989, R1 ITEM 3 CWAR 276 (ITEM 3)	AB	790'	X-174	AA21a	N	Y	ISSUE: INSUFFICIENT CLEARANCE TO INSTALL 330-1 V-RIB PANELS. RESOLUTION: FLATTEN V-RIB's AS REQUIRED. ALL JOINTS ARE REINFORCED WITH STITCHES OR V-GROOVE AND FOLDED.		
6989, R1 ITEM 3 CWAR 276 (ITEM 4)	AB	790'	X-174	AA21a	N	Y	ISSUE: INSUFFICIENT CLEARANCE FOR CABLE TRAY TOP PANEL. RESOLUTION: UTILIZE UNIT 2 ENVELOPE TO PROVIDE TOP PANEL OF UNIT 1 ESSENTIAL TRAY. REINFORCE INTERFACE JOINTS WITH STRESS SKIN.		
6989, R1 ITEM 4 CWAR 307 (ITEM 1)	AB	790'	X-174	AA21a	N	Y	ISSUE: INTERFERENCES TO MESH REQUIREMENTS. TRAY COVERAGE TERMINATING WITH A 330-1 PANEL, WITH MULTIPLE 330-660 BUNDLES. RESOLUTION: INSTALL A FIRESTOP.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 87
6989, R1 ITEM 4 CWAR 307 (ITEM 2)	AB	790'	X-174	AA21a	N	Y	ISSUE: THE VERTICAL SECTION OF A RAISED TOP PANEL IS NOT "SCORE & FOLDED" OR STITCHED TOGETHER. RESOLUTION: STITCH TOP PANEL & VERTICAL SECTION TOGETHER.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6989, R1 ITEM 4 CWAR 307 (ITEM 3)	AB	790'	X-174	AA21a	N	Y	ISSUE: INSUFFICIENT CLEARANCE TO INSTALL 3RD 330-660 LAYER. BAND SPACING CANNOT BE MAINTAINED DUE TO BUNDLE ANGLE OF ENTRY INTO CABLE TRAY. RESOLUTION: WRAP TWO BUNDLES TOGETHER, ABUT ANOTHER BUNDLE AND USE ITS MATERIAL. FLARE 3RD 330-660 LAYER OUT ONTO TRAY'S 330-1 AND SECURE IT.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 87
6989, R1 ITEM 4 CWAR 307 (ITEM 4)	AB	790'	X-174	AA21a	N	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL SS-304 MESH BETWEEN CABLE BUNDLES AT TRAY INTERFACE. RESOLUTION: TRIM 330-69 STRESS SKIN AROUND AIR DROP BUNDLES, THEN REINFORCE AIR DROP BUNDLES COLLECTIVELY.		
6989, R1 ITEM 4 CWAR 307 (ITEM 5)	AB	790'	X-174	AA21a	N	Y	ISSUE: THE TOP PANEL OF A SHIMMED UP SECTION OF TRAY IS DAMAGED. RESOLUTION: REWORK THE 330-1 MATERIAL AND ADD 330-1 STIFFENERS UNDER THE TOP PANEL.		
6989, R1 ITEM 4 CWAR 307 (ITEM 6)	AB	790'	X-174	AA21a	N	Y	ISSUE: LONGITUDINAL JOINT REINFORCEMENT DEVIATION DUE TO ADJACENT AIR DROPS. RESOLUTION: ABUT THE 330-69 STRESS SKIN LONG. JOINT REINFORCEMENT UP TO AIR DROP. OMIT FINAL 330-1 TROWEL GRADE AS 330-660 TROWEL GRADE FROM AIR DROP UPGRADE WILL COVER STRESS SKIN.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6989, R1 ITEM 4 CWAR 307 (ITEM 7)	AB	790'	X-174	AA21a	N	Y	ISSUE: BOTTOM PANEL BUTT JOINT CANNOT BE INSTALLED PER M1-1701 DUE TO A SUPPORT MEMBER'S COVERAGE. RESOLUTION: CUT THE STRESS SKIN AROUND THE SUPPORT MEMBER 330-1 COVERAGE.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 87
6989, R1 ITEM 5 CWAR 279	AB	790'	X-174	AA21a	N	Y	ISSUE: BAND SPACING REQUIREMENT CANNOT BE MET ON 3RD 330-660 LAYER, AT THE TRAY. RESOLUTION: FLARE THE 330-660 3RD LAYER MATERIAL OUT ONTO THE TRAY'S 330-1 PANEL AND SECURE.	11-1, 11-2	1-5, 88
6898, R1 ITEM 6 CWAR 381 (ITEM 1)	AB	790'	X-174	AA21a	N	Y	ISSUE: SS-304 UPGRADE OF AIR DROP BUNDLES TO TRAYS CANNOT BE INSTALLED DUE TO LACK OF SPACE. RESOLUTION: EXTEND THE 330-1 TRAY ENVELOPES TO THE CEILING (BOX CONFIGURATION) ENCAPSULATING THE AIR DROPS.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 88, 89
6898, R1 ITEM 6 CWAR 381 (ITEM 2)	AB	790'	X-174	AA21a	N	Y	ISSUE: CABLE TRAY 330-1 COVERAGE TERMINATES WITH A 330-1 PANEL. RESOLUTION: REINFORCE AFFECTED PANEL JOINTS WITH STRESS SKIN.		
6898, R1 ITEM 6 CWAR 381 (ITEM 3)	AB	790'	X-174	AA21a	N	Y	ISSUE: BAND SPACING REQUIREMENTS CANNOT BE MET ON 3RD 330-660 LAYER AT THE TRAY. RESOLUTION: FLARE THE 330-660 3RD LAYER MATERIAL OUT ONTO THE TRAY'S 330-1 PANEL AND SECURE IT.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6989, R1 ITEM 7 CWAR 426	AB	790'	X-174	AA21a	N	Y	ISSUE: CABLE TRAY SUPPORT STEEL UPGRADE CANNOT BE INSTALLED. RESOLUTION: BUILDUP 330-1 (FLAT) PANELS BETWEEN WALL & TRAY PANEL, THEN SECURE IT.	11-2, 11-4, 11-5	1-5, 90
6989, R1 ITEM 8 CWAR 467, 468, 469, 470	AB	790'	X-174	AA21s	N	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6990, R1 ITEM 1, CWAR 43	AB	790'	X-175	AA21a	Y	Y	ISSUE: CONDUIT NOT IDENTIFIED FOR UPGRADE. RESOLUTION: UPGRADE PER TYPICAL DETAILS.	11-1, 11-2	1-5, 20
6990, R1 ITEM 2, CWAR 156	AB	790'	X-175	AA21a	Y	Y	ISSUE: CONGESTION & OBSTRUCTION PROHIBIT FLEX-BLANKET INSTALLATION. RESOLUTION: REMOVE EXISTING THERMO-LAG TO FACILITATE CONSTRUCTION OF A THERMO-LAG BOX.	12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 83
6990, R1 ITEM 3 CWAR 164	AB	790'	X-175	AA21a	Y	Y	ISSUE: GROUND CABLE COVERAGE REINFORCEMENT. RESOLUTION: REINFORCE USING DETAIL 3-4.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6990, R1 ITEM 4 CWAR 265	AB	790'	X-175	AA21a	Y	Y	ISSUE: 2 FLEXI-BLANKET AIR DROP UPGRADES CANNOT BE INSTALLED DUE TO LIMITED SPACE. RESOLUTION: ENCAPSULATE BOTH AIR DROPS INTO 1 BOX CONFIGURATION.	12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 84
6990, R1 ITEM 5 CWAR 288	AB	790'	X-175	AA21a	Y	N	ISSUE: 1 1/2" LONG STAPLES ARE REQUIRED. RESOLUTION: INSTALL PER DETAIL 3-5.2.	11-1, 11-2	1-5, 82
6990, R1 ITEM 6 CWAR 377	AB	790'	X-175	AA21a	Y	Y	ISSUE: TROWEL GRADE FILLET COVERS ACCESS BOLTS. RESOLUTION: OMIT THE TROWEL GRADE FILLET NEAR THE BOLTS.	11-1, 11-2	1-5, 74
6990, R1 ITEM 7 CWAR 383	AB	790'	X-175	AA21a	Y	Y	ISSUE: 330-660 OVERLAP EQUALS 1 1/2". RESOLUTION: INSTALL THE REQUIRED 1 1/2" STAPLES.	11-1, 11-2	1-5, 34
6990, R1 ITEM 8 CWAR 453, 461, 462, 463, 464, 465, 186	AB	790'	X-175	AA21a	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6991, R1 ITEM 1 CWAR 178	AB	790'	X-179	AA21a	Y	Y	ISSUE: CONDUIT NOT IDENTIFIED FOR UPDATE. RESOLUTION: UPDATE COMMODITY PER TYPICAL DETAILS.	9-1, 9-3, 13-2	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6991, R1 ITEM 2 CWAR 205	AB	790'	X-179	AA21a	Y	Y	ISSUE: FLEX BUNDLE ENTERING A BOX REQUIRES UPGRADE. RESOLUTION: INSTALL A 2 PIECE MECHANICAL UPGRADE.	11-1, 11-2	1-5, 21, 50
6991, R1 ITEM 3 CWAR 450, 452, 456	AB	790'	X-179	AA21a	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6992, R1 ITEM 1	AB	790'	X-180	AA21a	Y	Y	ISSUE: INSULATED PIPE INTERFERES WITH 3RD LAYER FLEXI-BLANKET WRAP. RESOLUTION: TRIM THE INSULATION FROM THE PIPE, THEN INSTALL THERMO-LAG	11-1, 11-2	1-5, 20
6992, R1 ITEM 2	AB	790	X-180	AA21a	Y	Y	ISSUE: FLEXI-BLANKET UPGRADES. RESOLUTION: THESE ISSUES WERE SUPERSEDED BY SUBSEQUENT CWARs. NO CHANGE REQUIRED	N/A	N/A
6992, R1 ITEM 3	AB	790'	X-180	AA21a	Y	Y	ISSUE: INSUFFICIENT CLEARANCE TO INSTALL INDIVIDUAL UPGRADES. RESOLUTION: UPGRADE THE 2 AIR DROPS IN A COMMON FLEXI-MESH BUNDLE.	11-1, 11-2	1-5, 21
6992, R1 ITEM 4 CWAR 55	AB	790'	X-180	AA21a	Y	Y	ISSUE: EXISTING BOX WAS INSTALLED WITH NO SUPPORT AT THE WALL. RESOLUTION: UPGRADE PER DETAIL 12-2.	9-1, 9-3, 10-1, 10-2, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6992, R1 ITEM 5 CWAR 81	AB	790'	X-180	AA21a	Y	Y	ISSUE: CONDUIT NOT IDENTIFIED FOR UPGRADE. RESOLUTION: UPGRADE PER TYPICAL DETAILS.	9-1, 9-3, 10-1, 10-2	1-5, 20
6992, R1 ITEM 6 CWAR 128	AB	790'	X-180	AA21a	Y	Y	ISSUE: RADIAL BEND UPGRADE CANNOT BE ACHIEVED DUE TO INTERFERENCE WITH CONCRETE WALL. ALSO, 3RD LAYER FLEXI-BLANKET IS OBSTRUCTED. RESOLUTION: WRAP WITH MESH TO THE WALL & STAPLE. INSTALL A TROWEL GRADE FILLET. REMOVE FLEXI-BLANKET, REPOSITION CABLES & REINSTALL FLEXI-BLANKET.	9-1, 9-3, 13-2	1-5, 44, 35
6992, R1 ITEM 7 CWAR 130 (ITEM 1)	AB	790'	X-180	AA21a	Y	Y	ISSUE: 0" CLEARANCE BETWEEN WALL & RADIAL BEND. RESOLUTION: ABUT MESH TO CONCRETE, STAPLE & INSTALL TROWEL GRADE FILLET.	9-1, 9-3, 10-1, 10-2, 13-2	1-5, 44, 15
6992, R1 ITEM 7 CWAR 130 (ITEM 2)	AB	790'	X-180	AA21a	Y	Y	ISSUE: A PROTRUDING ITEM BOXED TO AN LBD. RESOLUTION: INSTALL STRESS SKIN ON BOX SEAMS PER TYPICAL UPGRADE.		
6992, R1 ITEM 7 CWAR 130 (ITEM 3)	AB	790'	X-180	AA21a	Y	Y	ISSUE: RADIAL BEND ABUTS A BEAM. RESOLUTION: ABUT MESH TO CONCRETE, STAPLE & INSTALL TROWEL GRADE FILLET.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6992, R1 ITEM 7 CWAR 130 (ITEM 4&5)	AB	790'	X-180	AA21a	Y	Y	ISSUE: LBD INTERFERENCE W/BEAM. RESOLUTION: INSTALL PREBUTTERED STRESS SKIN, TIE WIRE & STAPLE TO ACHIEVE A SNUG FIT, APPLY A TROWEL GRADE FILLET AT THE BEAM INTERFACE.	9-1, 9-3, 10-1, 10-2, 13-2	1-5, 44, 15
6992, R1 ITEM 7 CWAR 130 (ITEM 6)	AB	790'	X-180	AA21a	Y	Y	ISSUE: CONDUIT RUNS THROUGH BOX. RESOLUTION: UPGRADE ALL JOINTS & SEAMS, ABUT STRESS SKIN TO CONCRETE & STAPLE. ADD A TROWEL GRADE FILLET AT INTERFACE.		
6992, R1 ITEM 7 CWAR 130 (ITEM 7)	AB	790'	X-180	AA21a	Y	Y	ISSUE: HANGER & BOX INTERFACES WITH RADIAL BEND UPGRADE. RESOLUTION: EXTEND THE MESH ONTO THE PROTRUDING ITEM AND STAPLE TO ACHIEVE A SNUG FIT. FINISH WITH A TROWEL GRADE FILLET.		
6992, R1 ITEM 5 CWAR 132	AB	790'	X-180	AA21a	Y	Y	ISSUE: GROUND CABLE REINFORCEMENT REQUIREMENTS RESOLUTION: REINFORCE USING DETAIL 3-4.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2, 13-2	1-5, 20
6992, R1 ITEM 6 CWAR 168	AB	790'	X-180	AA21a	Y	Y	ISSUE: VARIOUS OBSTRUCTIONS INTERFERE WITH UPGRADE INSTALLATION. RESOLUTION: TYPICAL ALTERNATE UPGRADE METHODS INCLUDE BUTTING STRESS SKIN TO THE OBSTRUCTION AND APPLYING A TROWEL GRADE FILLET TO THE INTERFACE AREA.	14-1, 11-1, 15-1, 11-2, 11-4, 11-5	1-5, 43, 72, 91

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6992, R1 ITEM 7 CWAR 215	AB	790'	X-180	AA21a	Y	Y	ISSUE: A TRAY RUNG PREVENTS THE 3RD LAYER OF FLEXI-BLANKET FROM BEING INSTALLED AND BANDING CRITERIA CANNOT BE MET. RESOLUTION: CUT & REMOVE THE TRAY RUNG. STAPLE FLEXI-BLANKET COLLAR TO THE 330-1 PANEL THEN APPLY A MESH & TROWEL GRADE COLLAR OVER.	11-1, 11-2, 15-2	1-5, 72
6992, R1 ITEM 8 CWAR 216	AB	790'	X-180	AA21a	Y	Y	ISSUE: EXPLORATORY INVESTIGATION. RESOLUTION: N/A	N/A	N/A
6992, R1 ITEM 9 CWAR 226	AB	790'	X-180	AA21a	Y	Y	ISSUE: 2" EXTENSION SPLICE PLATE UPGRADE CANNOT BE INSTALLED. RESOLUTION: TERMINATE THE STRESS SKIN AT THE TOP OF THE HANGER.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2	1-5, 92
6992, R1 ITEM 10 CWAR 230	AB	790'	X-180	AA21a	Y	Y	ISSUE: BECAUSE OF THE EXISTING ARRANGEMENT, STANDARD UPGRADES, (INCLUDING FLEXI-BLANKET 3RD LAYER, LONGITUDINAL STRESS SKIN, SUPPORT UPGRADE & CLAMP BARS) CANNOT BE INSTALLED. RESOLUTION: REMOVE THE EXISTING THERMO-LAG AND REBUILD THE AREA USING PROPER UPGRADE TECHNIQUES.	14-1, 15-1, 11-2, 11-4, 11-5, 13-2, 15-2	1-5, 11, 43, 36, 93

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6992, R1 ITEM 11 CWAR 233	AB	790'	X-180	AA21a	Y	Y	ISSUE: MODIFICATION TO A BOX CONFIGURATION & GROUND CABLE COVERAGE. RESOLUTION: REINSTALL A BOX IN ACCORDANCE WITH TYPICAL DETAILS & GROUND CABLE UPGRADE PER DETAIL 3-4.	11-1, 12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 94
6992, R1 ITEM 12 CWAR 276	AB	790'	X-180	AA21a	Y	Y	ISSUE: VARIOUS INTERFERENCES INHIBIT THE INSTALLATION OF 3RD LAYER OF FLEXI-BLANKET. RESOLUTION: REMOVE FLEXI-BLANKET & INSTALL 330-1 COVERAGE.	11-2, 11-4, 11-5, 15-2	1-5, 86
6992, R1 ITEM 13 CWAR 339	AB	790'	X-180	AA21a	Y	Y	ISSUE: VARIOUS INTERFERENCES WITH 3RD LAYER FLEXI-BLANKET INSTALLATIONS. RESOLUTION: INSTALL 3RD LAYER FLEX-BLANKET, & ABUT TO OBSTRUCTION AS TIGHT AS POSSIBLE, INSTALL PROTRUDING ITEM COVERAGE ON OBSTRUCTIONS.	11-2, 11-4, 11-5, 15-2	1-4, 95
6992, R1 ITEM 14 CWAR 346	AB	790'	X-180	AA21a	Y	Y	ISSUE: 3RD LAYER FLEX-BLANKET WILL OBSTRUCT TRAY COVER REPLACEMENT. RESOLUTION: TERMINATE FLEXI-BLANKET COVERAGE 2" SHORT.	15-2	1-5, 96

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6992, R1 ITEM 15 CWAR 348	AB	790'	X-180	AA21a	Y	Y	ISSUE: SUPPORT ROD OBSTRUCTS THE 3RD LAYER FLEXI-BLANKET. RESOLUTION: TERMINATE THE 3RD LAYER COVERAGE TO AVOID OBSTRUCTION.	11-1, 11-2	1-5, 97
6992, R1 ITEM 16 CWAR 357, 405	AB	790'	X-180	AA21a	Y	Y	ISSUE: VARIOUS OBSTRUCTIONS INTERFERE WITH LONGITUDINAL AND SPLICE PLATE STRESS SKIN UPGRADES. RESOLUTION: TYPICAL ALTERNATE UPGRADE METHODS INCLUDE CIRCUMFERENTIAL STRESS SKIN WRAP, CERAMIC BANDING, EXTENDING STRESS SKIN ONTO OBSTRUCTING ITEMS & INSTALLING 330-1 PANELS FOR SUPPORT.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 98
6992, R1 ITEM 17 CWAR 370	AB	790'	X-180	AA21a	Y	Y	ISSUE: 3RD LAYER FLEXI-BLANKET CANNOT BE INSTALLED DUE TO 0" CLEARANCE WITH A HANGER. RESOLUTION: ABUT 3RD LAYER TO HANGER & INSTALL PROTRUDING ITEM COVERAGE ON THE HANGER.	11-1, 11-2, 15-2	1-5, 95
6992, R1 ITEM 18 CWAR 371	AB	790'	X-180	AA21a	Y	Y	ISSUE: LIMITED ACCESS NECESSITATES MODIFIED BOX DESIGN. RESOLUTION: REMOVE AND REBUILD THE BOX USING TYPICAL DETAIL TECHNIQUES.	12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 99

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6992, R1 ITEM 19 CWAR 378	AB	790'	X-180	AA21a	Y	Y	ISSUE: FLEXI-BLANKET BUNDLE EXITS 330-1 TRAY END PANEL. RESOLUTION: REMOVE TOP PANEL, INSTALL FIRE STOP, REPLACE TOP PANEL.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20
6992, R1 ITEM 20 CWAR 390	AB	790'	X-180	AA21a	Y	Y	ISSUE: 2 HVAC SUPPORTS OBSTRUCT THERMO-LAG INSTALLATION. RESOLUTION: BOX THE SUPPORTS AS PROTRUDING ITEMS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 11, 100
6992, R1 ITEM 21 CWAR 426	AB	790'	X-180	AA21a	Y	Y	ISSUE: OBSTRUCTIONS & CONGESTION PREVENTS COMPLETE SPLICE PLATE UPGRADE AND TOPCOAT APPLICATION. RESOLUTION: EXTEND THE STRESS SKIN AS FAR AS PRACTICAL AND TERMINATE. INSTALL TOP COAT WHERE POSSIBLE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 92
6992, R1 ITEM 22 CWAR 472, 473, 474, 475, 478, 480, 482,. 483, 484, 485	AB	790'	X-180	AA21a	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6993, R1 ITEM 1	AB	810'	X-207	AA21b	Y	Y	ISSUE: TUBE STEEL SUPPORT INTERFERES WITH MESH UPGRADE. RESOLUTION: TRIM THE MESH TO FIT AROUND THE SUPPORT ONTO THE TRAY & AIR DROP.	11-1, 11-2	1-5, 50

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6993, R1 ITEM 2	AB	810'	X-207	AA21b	Y	Y	ISSUE: GROUND CABLE COVERAGE INTERFERES WITH MESH UPGRADE. RESOLUTION: TRIM THE MESH TO FIT AROUND THE GROUND CABLE ONTO THE JUNCTION BOX AND AIR DROP.	11-1, 11-2	1-5, 50
6993, R1 ITEM 3	AB	810'	X-207	AA21b	Y	Y	ISSUE: FREE SWING CONDUIT SUPPORT INTERFERES WITH LONGITUDINAL STRESS SKIN UPGRADE. RESOLUTION: OMIT STRESS SKIN REINFORCEMENT AT INTERFERENCE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 43
6993, R1 ITEM 4	AB	810'	X-207	AA21b	Y	Y	DELETED	N/A	N/A
6993, R1 ITEM 5	AB	810'	X-207	AA21b	Y	Y	DELETED	N/A	N/A
6993, R1 ITEM 6	AB	810'	X-207	AA21b	Y	Y	ISSUE: AIR DROPS ARE TOO CLOSE TOGETHER TO ALLOW INDEPENDENT UPGRADE. RESOLUTION: UPGRADE BOTH AIR DROPS TOGETHER.	11-1, 11-2	1-5, 101
6993, R1 ITEM 7	AB	810'	X-207	AA21b	Y	Y	ISSUE: CONDUIT INTERFERES WITH SPLICE PLATE UPGRADE. RESOLUTION: TRIM STRESS SKIN AS REQUIRED TO ACHIEVE THE GREATEST COVERAGE POSSIBLE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 92

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6993, R1 ITEM 8 CWAR 54	AB	810'	X-207	AA21b	Y	Y	ISSUE: PROTRUDING ITEM INTERFERES WITH RADIAL BEND UPGRADE. RESOLUTION: INSTALL TIE WIRES, STAPLE STRESS SKIN ONTO PROTRUDING ITEMS & FILLET THE INTERFACE.	9-1, 9-3, 13-2	1-5, 30, 44
6993, R1 ITEM 9 CWAR 83	AB	810'	X-207	AA21b	Y	Y	ISSUE: CONDUIT NOT IDENTIFIED FOR UPGRADE. RESOLUTION: UPGRADE PER TYPICAL DETAILS.	9-1, 9-3, 10-1, 10-2, 13-2	1-5, 20
6993, R1 ITEM 10 CWAR 91	AB	810'	X-207	AA21b	Y	Y	ISSUE: TRAY IS NOT LOCATED IN ROOM X-207. RESOLUTION: DELETE THE TRAY FROM THE SCOPE.	N/A	N/A
6993, R1 ITEM 11 CWAR 258	AB	810'	X-207	AA21b	Y	Y	ISSUE: STRESS SKIN UPGRADE CANNOT BE INSTALLED IN AIR DROP. RESOLUTION: INSTALL MESH & ABUT TO THE CONCRETE WALL. INSTALL A TROWEL GRADE FILLET AT THE INTERFACE.	11-1, 11-2	1-5, 50
6993, R1 ITEM 12 CWAR 261	AB	810'	X-207	AA21b	Y	Y	ISSUE: 2 LBDs: BUTT TOGETHER OBSTRUCTING UPGRADE & A RADIAL BEND UPGRADE IS OBSTRUCTED. RESOLUTION: WRAP BOTH LBDs TOGETHER IN A SINGLE STRESS SKIN UPGRADE. INSTALL MESH IN LIEU OF STRESS SKIN ON RADIAL BEND UPGRADE.	9-1, 9-3, 10-1, 10-2, 13-2	1-5, 21, 10

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6993, R1 ITEM 13 CWAR 296	AB	810'	X-207	AA21b	Y	Y	ISSUE: CIRCUMFERENTIAL STRESS SKIN CANNOT BE INSTALLED. RESOLUTION: OVERLAP THE STRESS SKIN & FASTEN THE TWO ENDS TOGETHER.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 102
6993, R1 ITEM 14 CWAR 297, 298, 299, 327, 333, 334, 335, 340, 352, 409, 410, 415, 416, 422, 424, 428, 433, 447, 448, 455, 460, 326, 355, 476, 477, 486, 481, 479	AB	810'	X-207	AA21b	Y	Y	DROPS TOGETHER.ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6993, R1 ITEM 15 CWAR 302, 303, 304, 308	AB	810'	X-207	AA21b	Y	Y	ISSUE: BOX ENCLOSURE EXCEEDS 14" X 30" X 12" RESOLUTION: BUILD BOX USING TYPICAL DETAILS & UPGRADE JOINTS & SEAMS	1-2, 12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 103
6993, R1 ITEM 16 CWAR 306, 341	AB	810'	X-207	AA21b	Y	Y	ISSUE: LEACHING WAS DISCOVERED ON THERMO-LAG. RESOLUTION: CLEAN THE AREA AND INSTALL MOISTURE RESISTANT TOPCOAT.	9-1, 9-3, 10-1, 10-2, 13-2	1-5, 35
6993, R1 ITEM 17 CWAR 311	AB	810'	X-207	AA21b	Y	Y	ISSUE: THICKNESS OF FLEXI-BLANKET IS NOT ADEQUATE FOR 1 1/2" LONG STAPLES. RESOLUTION: INSTALL 1 1/4" STAPLES.	11-1, 11-2	1-5, 34

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6993, R1 ITEM 18 CWAR 313	AB	810'	X-207	AA21b	Y	Y	ISSUE: 3 RELATED AREAS, STRESS SKIN COULD NOT BE COMPLETELY INSTALLED. RESOLUTION: OMIT 13" OF LONGITUDINAL STRESS SKIN, TRIM THE CIRCUMFERENTIAL STRESS SKIN TO ABUT THE SUPPORT, INSTALL 2" SUPPORT REINFORCEMENT AND OMIT LONGITUDINAL STRESS SKIN WHERE TRAY SUPPORT PROHIBITS INSTALLATION.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15, 43, 104
6993, R1 ITEM 19 CWAR 316	AB	810'	X-207	AA21b	Y	Y	ISSUE: SUPPORT STEEL UPGRADE CANNOT BE INSTALLED. RESOLUTION: INSTALL PER NEW TYPICAL DETAIL.	11-2, 11-4, 11-5	1-5, 36
6993, R1 ITEM 20 CWAR 320	AB	810'	X-207	AA21b	Y	Y	ISSUE: POSSIBLE FLEXI-BLANKET/PANEL OVERLAP VIOLATION. RESOLUTION: REMOVE FLEXI-BLANKET AND CONDUIT SECTIONS & BUILD A BOX AS DESCRIBED.	12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 68
6993, R1 ITEM 21 CWAR 328	AB	810'	X-207	AA21b	Y	Y	ISSUE: STRESS SKIN UPGRADE CANNOT BE INSTALLED ON THE BACK SIDE OF TRAYS. RESOLUTION: INSTALL SUPPLEMENTAL UPGRADES & BOX THE TRAYS TO THE WALL & ALLOW ALTERNATE UPGRADES.	11-2, 11-4, 11-5, 13-2	1-5, 105

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6993, R1 ITEM 22 CWAR 337, 338	AB	810'	X-207	AA21b	Y	Y	ISSUE: LONGITUDINAL STRESS SKIN CANNOT BE INSTALLED. RESOLUTION: EXTEND THE STRESS SKIN ONTO THE COVERED PROTRUDING ITEM.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15
6993, R1 ITEM 23 CWAR 350	AB	810'	X-207	AA21b	Y	Y	ISSUE: LONGITUDINAL STRESS SKIN CANNOT BE INSTALLED. RESOLUTION: TRIM STRESS SKIN TO ABUT TO THE CHILL WATER LINES.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15
6993, R1 ITEM 24 CWAR 359	AB	810'	X-207	AA21b	Y	Y	ISSUE: VARIOUS INSTANCES OF STRESS SKIN DEVIATIONS BECAUSE OF PROXIMITY TO WALL, PLANT CONFIGURATION, INACCESSIBILITY & LIMITED SPACE, ETC.) RESOLUTION: USE ALTERNATE UPGRADE METHODS (I.E., LAP STRESS SKIN ONTO PROTRUDING ITEM COVERAGE, OMIT STRESS SKIN & INSTALL CERAMIC BANDING, ETC.)	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 106
6993, R1 ITEM 25 CWAR 364, 367	AB	810'	X-207	AA21b	Y	Y	ISSUE: CANNOT INSTALL FLEXI-BLANKET TRANSITION. RESOLUTION: INSTALL AN EXTRA 330-1 PANEL TO SMOOTH TRANSITION.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-6, 107
6993, R1 ITEM 26 CWAR 365	AB	810'	X-207	AA21b	Y	Y	ISSUE: 2 FIRE STOPS ARE REQUIRED. RESOLUTION: INSTALL FIRE STOPS PER TYPICAL DETAILS.	4, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 108

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6993, R1 ITEM 27 CWAR 373	AB	810'	X-207	AA21b	Y	Y	ISSUE: STAPLES CANNOT BE INSTALLED THROUGH METAL CLIP. RESOLUTION: OMIT STAPLES IN THIS AREA.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 109
6993, R1 ITEM 28 CWAR 374	AB	810'	X-207	AA21b	Y	Y	ISSUE: STAPLE LENGTH REQUIREMENTS. RESOLUTION: MEASURE FLEXI-BLANKET THICKNESS & INSTALL STAPLES 1/4" TO 3/8" LONGER.	11-1, 11-2	1-5, 34
6993, R1 ITEM 29 CWAR 386	AB	810'	X-207	AA21b	Y	Y	ISSUE: ELASTOMER FIRE STOP IS REQUIRED. RESOLUTION: INSTALL ELASTOMER FIRE STOP PER TYPICAL DETAILS.	4, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20
6993, R1 ITEM 30 CWAR 389	AB	810'	X-207	AA21b	Y	Y	ISSUE: FLEXI-BLANKET WRAP INTERFERES WITH STANDARD SUPPORT UPGRADE. RESOLUTION: INSTALL A DOUBLE THICK TRAY SUPPORT UPGRADE UNDER FLEXI-BLANKET.	11-2, 11-4, 11-5	1-5, 48
6993, R1 ITEM 31 CWAR 408	AB	810'	X-207	AA21b	Y	Y	ISSUE: PREBANDING CANNOT BE ACHIEVED ON A TRAY. RESOLUTION: THE BUTT JOINT SHOULD BE STITCHED WITH TIE WIRES.	1-2, 12-1, 12-1, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 110
6993, R1 ITEM 32 CWAR 425	AB	810'	X-207	AA21b	Y	Y	ISSUE: FLEXI-BLANKET OBSTRUCTS THE SUPPORT UPGRADE INSTALLATION. RESOLUTION: INSTALL 2 FLAT PANELS (SUPPORT UPGRADE) AGAINST THE FLEXI-BLANKET.	11-2, 11-4, 11-5	1-5, 48

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6993, R1 ITEM 33 CWAR 432	AB	810'	X-207	AA21b	Y	Y	ISSUE: 2 PROTRUDING ITEMS PREVENT SUPPORT STEEL UPGRADE INSTALLATION. RESOLUTION: INSTALL FLAT PANEL SUPPORT UPGRADES BETWEEN THE PROTRUDING ITEMS.	11-2, 11-4, 11-5	1-5, 36
6993, R1 ITEM 34 CWAR 435	AB	810'	X-207	AA21b	Y	Y	ISSUE: STRESS SKIN CANNOT BE INSTALLED ON LBD. RESOLUTION: INSTALL CERAMIC BAND IN ITS PLACE.	9-1, 9-3, 10-1, 10-2	1-5, 61
6993, R1 ITEM 35 CWAR 442	AB	810'	X-207	AA21b	Y	Y	ISSUE: CLAMP BAR CANNOT BE INSTALLED DUE TO FIELD CONDITIONS. RESOLUTION: INSTALL MODIFIED CLAMP BAR.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 14
6993, R1 ITEM 36 CWAR 487	AB	810'	X-207	AA21b	Y	Y	ISSUE: TYPICAL SUPPORT STEEL UPGRADE CANNOT BE INSTALLED. RESOLUTION: INSTALL 3 CERAMIC BANDS IN ITS PLACE.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 111
6993, R1 ITEM 37 CWAR 361	AB	810'	X-207	AA21b	Y	Y	ISSUE: STRUCTURAL STEEL INTERFERENCE. RESOLUTION: TRIM THE UNI-STRUT MATERIAL AND INSTALL THERMO-LAG.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20
6993, R1 ITEM 38	AB	810'	X-207	AA21b	Y	Y	ISSUE: A CABLE TRAY END IS PROTECTED WITH A CAP INSTEAD OF A FIRE STOP. RESOLUTION: UPGRADE THE END OF THE TRAY WITH STRESS SKIN, MESH, TROWEL GRADE AND STAPLES.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 91

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6994, R1 CWAR 285, 286, 287	AB	822'	X-209	AA11c	N	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6995, R1 AUGMENTED INSTRUCTIONS ITEM 1	AB	831'	X-226	AA21d	Y	Y	ISSUE: CONDUIT INTERFERES WITH STRESS SKIN REINFORCEMENT OF CABLE TRAY. RESOLUTION: TRIM STRESS SKIN AROUND INTERFERENCE AND COMPLETE INSTALLATION.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 11, 43
6995, R1 AUGMENTED INSTRUCTIONS ITEM 2	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL STRESS SKIN, NORMALLY. RESOLUTION: PRE-MUD STRESS SKIN, (BEFORE INSTALLATION). (PER SPEC & DWG.)	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 40
6995, R1 AUGMENTED INSTRUCTIONS ITEM 3	AB	831'	X-226	AA21d	Y	Y	ISSUE: MULTIPLE AIR DROP BUNDLES TO A TRAY ARE TOO CLOSE TOGETHER TO INSTALL JOINT UPGRADE INDIVIDUALLY. RESOLUTION: REINFORCE THE AIR DROP BUNDLES COLLECTIVELY AT THE TRAY.	11-1, 11-2	1-5, 101
6995, R1 AUGMENTED INSTRUCTIONS ITEM 4	AB	831'	X-226	AA21d	Y	Y	ISSUE: MULTIPLE AIR DROP BUNDLES TO A TRAY ARE TOO CLOSE TOGETHER TO INSTALL JOINT UPGRADE INDIVIDUALLY. RESOLUTION: REINFORCE THE AIR DROP BUNDLES COLLECTIVELY AT THE TRAY.	11-1, 11-2	1-5, 101

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 ITEM 5 CWAR 7 (ITEM 1)	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE BETWEEN WALL & BOXED AIR DROP TO INSTALL COMPLETE SUPPORT STRIP ALONG THE BOTTOM OF THE ENCLOSURE. RESOLUTION: UTILIZE TROWEL GRADE BUILDUP BETWEEN TRAY & AIR DROP ENCLOSURE'S BOTTOM PANEL IN CONJUNCTION WITH INSTALLED SUPPORT STRIPS.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 35, 112
6995, R1 ITEM 5 CWAR 7 (ITEM 2)	AB	831'	X-226	AA21d	Y	Y	ISSUE: TROWEL GRADE FILLET PROHIBITS BOX ENCLOSURE SUPPORT STRIP INSTALLATION. RESOLUTION: REMOVE FILLET, INSTALL ENCLOSURE SUPPORT STRIP.		
6995, R1 ITEM 6 CWAR 8 (ITEM 1)	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE BETWEEN AIR DROP ENCLOSURE (330-1) & THE TRAY TO INSTALL SS-304 MESH ON 330-660/330-1 JOINTS. RESOLUTION: REINFORCE EXPOSED PORTION OF 330-660 BUNDLE. UTILIZE TROWEL GRADE BUILDUP & STRESS SKIN TO ENCLOSE AIR DROP BUNDLE, WHERE IT'S UNDER THE BOX ENCLOSURE. UTILIZE 330-1 PANEL TO SEAL THE TRAY & BOX TO THE WALL.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 113

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 ITEM 6 CWAR 8 (ITEM 2)	AB	831'	X-226	AA21d	Y	Y	ISSUE: LONGITUDINAL JOINT REINFORCEMENT CANNOT BE INSTALLED BETWEEN BOX & TRAY AT AIR DROP BUNDLE OR AT PROTECTED TRAY SUPPORT. RESOLUTION: OMIT STRESS SKIN AT LOCATION OF INTERFERENCES. 9" & 10" RESPECTIVELY.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 113
6995, R1 ITEM 7 CWAR 47 (ITEM 1)	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT WALL AREA TO INSTALL BOX ENCLOSURE SUPPORT STRIP (NORTH SIDE OF BOX ONLY). RESOLUTION: OMIT SUPPORT STRIP ON NORTH SIDE OF BOX & TAKE CREDIT FOR PROTECTED SUPPORT MEMBERS & PROTRUDING ITEMS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15, 114
6995, R1 ITEM 7 CWAR 47 (ITEM 2)	AB	831'	X-226	AA21d	Y	Y	ISSUE: SPLICE BLOCK REINFORCEMENT REQUIREMENT - JUNCTION BOX. RESOLUTION: REINFORCE JOINTS ASSOCIATED WITH 330-1 SPLICE BLOCKS (PANELS) WITH STRESS SKIN 2" MIN.		
6995, R1 ITEM 7 CWAR 47 (ITEM 3)	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL STRESS SKIN AS REQUIRED ON BOX ENCLOSURE. RESOLUTION: OMIT 4" OF STRESS SKIN ON NORTH SIDE VERT. JOINT. OMIT STAPLES FOR 4" ON SOUTH SIDE VERT. JOINT.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 ITEM 7 CWAR 47 (ITEM 4)	AB	831'	X-226	AA21d	Y	Y	ISSUE: CABLE TRAY SUPPORT INTERFERES WITH STRESS SKIN REINFORCEMENT OF LONGITUDINAL JOINT OF BOX. RESOLUTION: INSTALL 330-1 PANEL TO SUPPORT MEMBER. THEN REINFORCE JOINT OF BOX.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15, 114
6995, R1 ITEM 7 CWAR 47 (ITEM 5)	AB	831'	X-226	AA21d	Y	Y	ISSUE: PROTRUDING ITEM PROTECTION OF A CABLE TRAY IS INCORPORATED INTO THE ESSENTIAL TRAY ENVELOPE. RESOLUTION: REINFORCE THE NON-ESSENTIAL TRAY'S JOINTS AND INSTALL FIRESTOP CLAMPS.		
6995, R1 ITEM 8 CWAR 103 (ITEM 1)	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE BETWEEN 330-660 AIR DROP BUNDLES TO REINFORCE THEM INDIVIDUALLY. RESOLUTION: REINFORCE THE AIR DROP BUNDLES COLLECTIVELY AT THE TRAY.	11-1, 14-1, 15-1, 11-2, 14-1, 11-5	1-5, 15, 101
6995, R1 ITEM 8 CWAR 103 (ITEM 2)	AB	831'	X-226	AA21d	Y	Y	ISSUE: CONDUIT INTERFERES WITH CABLE TRAY LONGITUDINAL JOINT REINFORCEMENT. RESOLUTION: INSTALL JOINT REINFORCEMENT PER M1-1701, FILLET WITH TROWEL GRADE WHERE REQUIRED.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 ITEM 9 CWAR 157	AB	831'	X-226	AA21d	Y	Y	ISSUE: DETAILED DIRECTION FOR THE REINFORCEMENT OF JOINTS ASSOCIATED WITH A BOXED EXTENSION OF A TRAY, AND A BOXED SUPPORT MEMBER. RESOLUTION: ALL TRAYS/BOX JOINTS ARE REINFORCED WITH STRESS SKIN. ALL BOX/CONDUIT AIR DROP JOINTS ARE REINFORCED WITH STRESS SKIN OR/OR MESH. ALL JOINTS ASSOCIATED WITH THE BOXED SUPPORT MEMBER ARE REINFORCED WITH STRESS SKIN. THE TRAY/SUPPORT STEEL INTERFACE IS REINFORCED USING 330-1, STRESS SKIN & FASTENERS.	14-1, 15-1, 11-4, 11-5	1-5, 115
6995, R1 ITEM 10 CWAR 171	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE EXISTS BETWEEN A JUNCTION BOX & PROTRUDING ITEM TO ALLOW UPGRADE OF THE JB's JOINT. RESOLUTION: FILL GAP WITH TROWEL GRADE, THEN INSTALL STRESS SKIN ACROSS BOTH COMMODITIES.	9-1, 9-3, 10-1, 10-2	1-5, 116
6995, R1 ITEM 11 CWAR 201	AB	831'	X-226	AA21d	Y	Y	ISSUE: RACEWAY REQUIRES UPGRADE WITHIN RM. 226 RESOLUTION: ADD RACEWAY C13014543 TO THE SCOPE OF DCN 6995.	9-1, 9-3, 13-2	1-5, 20
6995, R1 ITEM 12 CWAR 217	AB	831'	X-226	AA21d	Y	Y	ISSUE: ENGINEER IS REQUESTED TO EVALUATE ACCEPTABILITY OF INSTALLED T-LAG. RESOLUTION: UPGRADE INSTALLED T-LAG PER APPLICABLE DOCUMENTS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 ITEM 13 CWAR 253, 277	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL REQUIRED TRAY JOINT UPGRADES. RESOLUTION: INSTALL ADDITIONAL PANELS ABUTTING THE WALL. FILL THE GAP BETWEEN THE TRAYS WITH TROWEL GRADE AND INSTALL STRESS SKIN. BUTT JOINTS OF 30" WIDE TRAY ARE REINFORCED PRIOR TO ADDITIONAL PANELS BEING ADDED. ALL EXPOSED JOINTS ARE REINFORCED WITH STRESS SKIN.	41-1, 15-1, 11-2, 11-4, 11-5	-5, 30, 61, 117
6995, R1 ITEM 14 CWAR 259	AB	831'	X-226	AA21d	Y	Y	ISSUE: REWORK OF T-LAG ENVELOPE WHERE INSPECTION HOLES WERE MADE. RESOLUTION: REWORK 330-1 PANELS WHERE INSPECTION HOLE WERE MADE AND UNPROTECTED CONDUIT WAS REMOVED, TO RESTORE ENVELOPE CONTINUITY.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20
6995, R1 ITEM 15 CWAR 263	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL REQUIRED UPGRADES. RESOLUTION: INSTALL ADDITIONAL SIDE PANELS AND ABUT TO WALL. FILL GAP BETWEEN COMMODITIES WITH TROWEL GRADE AND INSTALL STRESS SKIN.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 118, 119

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 ITEM 16 CWAR 264	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL UPGRADE WITHIN DESIGN PARAMETERS. RESOLUTION: INSTALL LARGER REINFORCEMENT PANEL AND ADJUST HILTI PLACEMENT.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 120
6995, R1 ITEM 17 CWAR 270	AB	831'	X-226	AA21d	Y	Y	ISSUE: AIR DROP BUNDLE's ANGLE OF ENTRY INTO THE TRAY PREVENTS UPGRADE TIE WIRE INSTALLATION. RESOLUTION: OMIT TIE WIRES AND REINFORCE WITH MESH & STAPLES.	11-1, 11-2	1-5, 72, 88
6995, R1 ITEM 18 CWAR 279	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL REQUIRED TRAY UPGRADE. RESOLUTION: FILL GAP BETWEEN COMMODITIES WITH TROWEL GRADE AND THEN INSTALL STRESS SKIN AND/OR MESH.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 120
6995, R1 ITEM 19 CWAR 280	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO: 1) INSTALL LONGITUDINAL JOINT UPGRADE. 2) INSTALL BOX ENCLOSURE REINFORCEMENT STRIP. RESOLUTION: 1) REMOVE PART OF ADJACENT TRAY, THEN UPGRADE JOINTS. 2) OMIT PART OF ENCLOSURE PICTURE FRAME UPGRADE AND INSTALL EXTRA STRESS SKIN REINFORCEMENT.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 121

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 ITEM 20 CWAR 282	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO 1) INSTALL CABLE TRAY SUPPORT STEEL UPGRADE PER DESIGN. 2) REINFORCE ALL JOINTS OF A PROTRUDING ITEM ENCLOSURE W/ STRESS SKIN. RESOLUTION: 1) INSTALL SUPPORT STEEL UPGRADE 330-1 STRIP PANEL, THEN SECURE WITH TROWEL GRADE & TIE WIRE OR BANDING. 2) TAKE CREDIT FOR SUPPORT STEEL UPGRADE PROVIDING REINFORCEMENT TO PROTRUDING ITEM ENCLOSURE JOINTS BETWEEN TRAY & WALL.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 122
6995, R1 ITEM 21 CWAR 283	AB	831'	X-226	AA21d	Y	Y	ISSUE: ENGINEER TO EVALUATE TRAY ENVELOPE WHICH CONTINUES TO FLOOR SLAB & ENVELOPES CONDUIT STUB UPS. RESOLUTION: INSTALLED ENVELOPE IS SAT., UPGRADE ENVELOPE JOINTS PER DWG.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20
6995, R1 ITEM 22 CWAR 318	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL TRAY JOINT UPGRADE. RESOLUTION: UTILIZE 330-1 FLAT PANELS COMPRESSED IN LOCALIZED AREA TO SECURE STRESS SKIN TO TRAY SIDE PANELS.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 123

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 ITEM 23 CWAR 321	AB	831'	X-226	AA21d	Y	Y	ISSUE: 1) ID PLATE PENETRATES ENVELOPE AT THE WALL. 2) MAX. HILTI SPACING CANNOT BE MAINTAINED. RESOLUTION: 1) INCREASE ENVELOPE THICKNESS BY ADDING ANOTHER 330-1 PANEL STRIP TO THE PICTURE FRAME UPGRADE. 2) ALLOW GREATER HILTI SPACING.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 120
6995, R1 ITEM 24 CWAR 322	AB	831'	X-226	AA21d	Y	Y	ISSUE: FIRE STOP IS REQUIRED AT END OF TRAYS. RESOLUTION: INSTALL FIRE STOPS AT THE END OF 330-1 PROTECTION.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20
6995, R1 ITEM 25 CWAR 328	AB	831'	X-226	AA21d	Y	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL TRAY JOINT UPGRADES. RESOLUTION: UTILIZE 330-1 FLAT PANELS COMPRESSED IN LOCALIZED AREA TO SECURE STRESS SKIN TO THE TRAY SIDE PANELS. EXTEND THE BOX ENCLOSURE PORTION OF THE ENVELOPE UP TO A POINT TO WHERE UPGRADE OF JOINTS CAN BE ACCOMPLISHED	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 105
6995, R1 ITEM 26 CWAR 366	AB	831'	X-226	AA21d	Y	Y	ISSUE: FIRE STOP iS REQUIRED AT END OF TRAYS. RESOLUTION: INSTALL FIRE STOPS AT THE END OF 330-1 PROTECTION.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6995, R1 CWAR 376, 387, 388, 423, 434, 471	AB	831'	X-226	AA21d	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
6996, R1 ITEM 1 CWAR 271 (ITEM 1)	AB	832'	X-241	AA21f	Y	Y	ISSUE: CANNOT INSTALL STRUCTURAL SUPPORT DETAIL. RESOLUTION: INSTALL STRESS SKIN REINFORCEMENT ALONG THE ANGULAR BRACE & SECURE WITH STAPLES.	11-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15, 124
6996, R1 ITEM 1 CWAR 271 (ITEM 2)	AB	832'	X-241	AA21f	Y	Y	ISSUE: AIR DROP LONGITUDINAL STRESS SKIN DEVIATION. RESOLUTION: INSTALL MESH CIRCUMFERENTIALLY & EXTEND ONTO TRAY.		
6996, R1 ITEM 1 CWAR 271 (ITEM 3)	AB	832'	X-241	AA21f	Y	Y	ISSUE: GROUND CABLE INTERFERENCE WITH AIR DROP REINFORCEMENT. RESOLUTION: INSTALL MESH AROUND GROUND CABLE & SADDLE THE AIR DROP. FILL GAPS WITH TROWEL GRADE.		
6996, R1 ITEM 2 CWAR 290	AB	832'	X-241	AA21f	Y	Y	ISSUE: CANNOT INSTALL STD. LONGITUDINAL TRAY UPGRADE. RESOLUTION: TRIM CUT LONGITUDINAL JOINT REINFORCEMENT TO FIT. SECURE WITH STAPLES.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 125

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6996, R1 ITEM 3 CWAR 312 (ITEM 1)	AB	832'	X-241	AA21f	Y	Y	ISSUE: SEISMIC SUPPORT INTERFERES WITH CIRCUMFERENTIAL REINFORCEMENT. RESOLUTION: CUT/TRIM OR NOTCH THE STRESS SKIN AROUND THE SUPPORT.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 15, 43, 102
6996, R1 ITEM 3 CWAR 312 (ITEM 2)	AB	832'	X-241	AA21f	Y	Y	ISSUE: AIR DROP INTERFERES WITH CIRCUMFERENTIAL REINFORCEMENT. RESOLUTION: CUT/TRIM STRESS SKIN & SECURE USING STITCHING & STAPLES.		
6996, R1 ITEM 3 CWAR 312 (ITEM 3)	AB	832'	X-241	AA21f	Y	Y	ISSUE: PROTRUDING ITEM & AIR DROP INTERFERE WITH BOTTOM PANEL BUTT JOINT. RESOLUTION: CUT & TRIM THE STRESS SKIN TO FIT THE INTERFERENCE. FILL ALL VOIDS WITH TROWEL GRADE.		
6996, R1 ITEM 4 CWAR 317 (ITEM 1)	AB	832'	X-241	AA21f	Y	Y	ISSUE: CANNOT INSTALL TIE WIRE DUE TO AIRDROP. RESOLUTION: INSTALL SS MESH, SECURE WITH STAPLES.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 30, 15, 38
6996, R1 ITEM 4 CWAR 317 (ITEM 2)	AB	832'	X-241	AA21f	Y	Y	ISSUE: INDETERMINATE JOINT CONFIGURATION. RESOLUTION: INSTALL STRESS SKIN REINFORCEMENT FROM PROTRUDING ITEM TO TRAY.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6996, R1 ITEM 4 CWAR 317 (ITEM 3)	AB	832'	X-241	AA21f	Y	Y	ISSUE: CANNOT INSTALL LONGITUDINAL JOINT REINFORCEMENT. RESOLUTION: TRIM/CUT THE STRESS SKIN, INSTALL MESH REINFORCEMENT TO LAP THE STRESS SKIN ONTO THE TRAY PROTECTION.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 30, 15, 38
6996, R1 ITEM 5 CWAR 325	AB	832'	X-241	AA21f	Y	Y	ISSUE: GROUND PROTECTION AND AIRDROPS INTERFERE WITH CIRCUMFERENTIAL REINFORCEMENT. RESOLUTION: TRIM/CUT OUT AROUND THE INTERFERENCE, FOLD THE STRESS SKIN BACK & SECURE VIA STITCHING & STAPLES.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 30, 38, 102
6996, R1 ITEM 6 CWAR 343 (ITEM 1)	AB	832'	X-241	AA21f	Y	Y	ISSUE: JOINT REINFORCEMENT CANNOT BE INSTALLED DUE TO CONGESTION. RESOLUTION: INSTALL A NEW SIDE PANEL OVER EXISTING PROTECTION.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 118, 43
6996, R1 ITEM 6 CWAR 343 (ITEM 2)	AB	832'	X-241	AA21f	Y	Y	ISSUE: CANNOT INSTALL LONGITUDINAL STRESS SKIN BECAUSE OF CONFIGURATION. RESOLUTION: OMIT THE LONGITUDINAL REINFORCEMENT.		
6996, R1 ITEM 6 CWAR 343 (ITEM 3)	AB	832'	X-241	AA21f	Y	Y	ISSUE: BOX ENCLOSURE 4" X 14" X 36" RESOLUTION: NO ADDITIONAL UPGRADE REQUIRED.		

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
6996, R1 ITEM 7 CWAR 344	AB	832'	X-241	AA21f	Y	Y	ISSUE: JOINT REINFORCEMENT CANNOT BE INSTALLED. RESOLUTION: REMOVE THERMO-LAG MATERIAL & REINSTALL USING TIE WIRE STITCHING.	12-1, 12-2, 13-1, 14-1, 15-1, 11-2, 11-4, 11-5	1-5, 35
6996, R1 ITEM 8 CWAR 382, 466	AB	832'	X-241	AA21f	Y	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
7077, R0	GENERIC						ISSUE: GENERICALLY ALL 30" WIDE CABLE TRAYS REQUIRE BUTT JOINT REINFORCEMENT. RESOLUTION: ENSURE ALL 30" WIDE TRAYS HAVE BEEN REINFORCED.	14-1, 15-1, 11-2, 11-4, 11-5	1-5, 20
7078, R0	SB	852'	1-100B	SK17a	Y	Y	ISSUE: WATER CONTACT WITH THERMO-LAG MATERIAL. RESOLUTION: N/A - NO THERMO-LAG DEVIATIONS.	N/A	N/A
7444, R1 ITEM 1 CWAR 391 (ITEM 1)	SG	831'	1-096	SE16	N	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL BOTH 330-1 & 330-660 AROUND FLEX CONDUIT. RESOLUTION: INSTALL 330-660 FIRST UP TO RIGID/FLEX, THEN INSTALL OVER SIZE 330-1 CONDUIT SECTIONS TO OVERLAP MATERIAL INTERFACE.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-5, 38, 126

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
7444, R1 ITEM 1 CWAR 391 (ITEM 2)	SG	831'	1-096	SE16	N	Y	ISSUE: FLEX CONDUIT TO JUNCTION BOX CONFIGURATION PREVENTS INSTALLATION PER DETAIL DWG. RESOLUTION: INSTALL 330-660 ON FLEX TO GROUND CLAMP AT JB. SHIM JB 330-1 ENVELOPE ENOUGH TO ALLOW 330-660 PROTECTION TO PENETRATE THE PRESCRIBED DISTANCE.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-5, 38, 126
7444, R1 ITEM 2 CWAR 399 (ITEM 1)	SG	831'	1-096	SE16	N	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL 330-660 ON FLEX ATTACHED TO PROTECTED JB. RESOLUTION: USE DETAIL 2-3.6, SECURE EACH LAYER WITH BANDS & 9/16" STAPLES. REINFORCE MATERIAL OVERLAP WITH MESH.	9-1, 9-3, 10-1, 10-2, 11-1, 11-2	1-5, 26, 30, 38
7444, R1 ITEM 2 CWAR 399 (ITEM 2)	SG	831'	1-096	SE16	N	Y	ISSUE: ENCLOSURES WITH REMOVABLE COVERS SHOULD PROVIDE 2 LAYERS OF PROTECTION. REMOVABLE COVER SHOULD BE ADEQUATELY SECURED. RESOLUTION: EXPOSED ENCLOSURE SURFACES ARE PROVIDED WITH 2 LAYERS OF 330-1 MATERIAL. A HEAVY DUTY RESTRAINT BAR IS PROVIDED TO SECURE THE ENCLOSURE COVER.		
7444, R1 ITEM 3 CWAR 411	SG	831'	1-096	SE16	N	Y	ISSUE: INSUFFICIENT SPACE TO INSTALL BOTH 330-1 AND 330-660 AROUND CONDUIT AIR DROP TO TRAY. RESOLUTION: INSTALL 330-660 FIRST, THEN INSTALL OVERSIZED 330-1 CONDUIT SECTIONS TO OVERLAP MATERIAL INTERFACE.	11-1, 11-2	1-5, 30, 38

DCN NO./REV	BLDG	ELEV	ROOM	FIRE AREA/ FIRE ZONE	SUPP. (Y/N)	DET. (Y/N)	DESCRIPTION/ISSUE OF CONCERN/RESOLUTION	SUPPORT TEST SCHEMES	BASIS/NOTES (PAGES K104-K125)
7444, R1 ITEM 4 CWAR 431, 443, 444, 445	SG	831'	1-096	SE16	N	Y	ISSUE: COMMODITY CLEARANCE DEVIATIONS. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
7472, R0	SG	832'	1-096	SE16	N	Y	ISSUE: CONDUIT REROUTE. RESOLUTIN: NO THERMO-LAG UNIQUE CONFIGURATION OR DEVIATIONS.	N/A	N/A
7761	N/A	N/A	N/A	N/A	N/A	N/A	ISSUE: GENERIC INFORMATION. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A
7506	AB	790'	X-180	AA21a	Y	Y	ISSUE: CABLE MAINTAINED SPACING. RESOLUTION: NO THERMO-LAG UNIQUE CONFIGURATIONS OR DEVIATIONS.	N/A	N/A

NOTE	ACCEPTANCE BASIS/NOTES
1	CONTINUITY OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.
2	EFFECTIVE THICKNESS OF THE MATERIAL IS CONSISTENT WITH TESTED CONFIGURATIONS.
3	THE NATURE AND EFFECTIVENESS OF THE SUPPORT ASSEMBLY (IF APPLICABLE) IS CONSISTENT WITH TESTED CONFIGURATIONS.
4	THE APPLICATION OR END USE OF THE MATERIAL IS CONSISTED WITH TESTED CONFIGURATIONS.
5	THE CONFIGURATION WAS REVIEWED BY A QUALIFIED FIRE PROTECTION ENGINEER AND DETERMINED TO PROVIDE AN EQUIVALENT LEVEL OF PROTECTION.
6	SPECIFIC AND UNIQUE DIFFERENCES FROM TESTED CONFIGURATIONS EXIST FOR THE PLANT CONFIGURATION WHICH WOULD ENHANCE THE EFFECTIVENESS OF THE PROTECTIVE ENVELOPE (E.G., SPACIAL ORIENTATION, SURFACES NOT DIRECTLY EXPOSED TO A POTENTIAL FIRE DUE TO SHIELDING EFFECTS, TORTUROUS PATH, ETC.).
7	THE INSTALLATION OF AN ADDITIONAL 1/4" THICKNESS OF THERMO-LAG IN THE AREA OF THE INTERFERENCE RESULTS IN A GREATER AMOUNT OF MATERIAL TO THERMALLY INTUMESCE UPON EXPOSURE TO FIRE, THUS BLOCKING ANY HEAT PATH INTO THE PROTECTIVE ENVELOPE. THE INTERFERING ITEM ITSELF ACTS TO BLOCK ANY HEAT PATH INTO THE PROTECTIVE ENVELOPE. THE AREA OF THE INTERFERENCE IS SMALL ALONG THE LENGTH OF THE CONDUIT RUN.
8	COVERING THE INTERFERENCE AS PROTRUDING ITEMS RESULTS IN A CONFIGURATION WHICH HAS EVEN GREATER FIRE RESISTANCE THAN IF THE INTERFERING ITEMS PROTRUDED INTO THE THERMO-LAG ENVELOPE.
9	THERE IS SUFFICIENT CLEARANCE AT THE INTERFERING ITEM TO ACHIEVE A COMPLETE STRESS SKIN WRAP. LAPPING THE STRESS SKIN ONTO THE INTERFERING ITEM ON BOTH SIDES OF THE RACEWAY PROVIDES ADEQUATE STRENGTH TO THE UPGRADE AT THE AREA OF THE INTERFERENCE.
10	THE UPGRADE METHOD PRESCRIBED COMPLETELY SURROUNDS THE COMMON CONDULET ENCLOSURE AND PROVIDES SUFFICIENT STRESS SKIN OVERLAP AT THE END JOINTS OF THE CONFIGURATION. IT PROVIDES THE STABILITY NECESSARY AT THE CRITICAL END JOINTS, COMMENSURATE WITH THE TESTED CONDULET "BOX" UPGRADE.
11	THE INTERFERING ITEM, BECAUSE IT DOES NOT PROTRUDE INTO THE PROTECTIVE ENVELOPE, ACTS TO BLOCK ANY HEAT PATH INTO THE PROTECTIVE ENVELOPE. THE AREA OF THE INTERFERENCE IS SMALL ALONG THE LENGTH OF THE CONDUIT/CABLE TRAY RUN.
12	REMOVAL OF THERMO-LAG FROM THE PROTECTED COMMODITY WILL ALLOW INSTALLATION OF 1/4" OVERLAY UPGRADES. REMOVAL OF MATERIAL FROM THE SUPPORT IS ACCEPTABLE BECAUSE THE ITEM IS NONESSENTIAL (IT IS PROTECTED AS A PROTRUSION) AND THE AREA OF DIMINISHED MATERIAL THICKNESS IS OCCUPIED BY THE THERMO-LAG ON THE ESSENTIAL RACEWAY.
13	THE INTERFERING ITEM ITSELF, BECAUSE IT DOES NOT PROTRUDE INTO THE PROTECTIVE ENVELOPE, ACTS TO BLOCK ANY HEAT PATH INTO THE PROTECTIVE ENVELOPE. ADDITIONALLY, BECAUSE OF ITS LARGE MASS, IT ACTS AS A HEAT SINK. THE THERMO-LAG IS INSTALLED AS CLOSE AS POSSIBLE TO THE INTERFERENCE, RESULTS IN A TORTUOUS PATH FOR HEAT INTO THE ENVELOPE. THE AREA OF THE INTERFERENCE IS SMALL ALONG THE LENGTH OF THE RACEWAY.

14	THE TESTED CONFIGURATIONS UTILIZED SCREWS TO HOLD BOTTOM PANELS FIRM TO THE INTERNAL FIRE STOP, STANDARD CLAMP BARS PROVIDE THE SAME SUPPORT. THIS DESIGN CHANGE PROVIDES FOR THE REQUIRED SUPPORT OF THE THERMO-LAG BARRIER ENVELOPE AT THE FIRESTOP. WHERE THE CLAMP IS NOT IN CONTACT WITH THE THERMO-LAG ENVELOPE, THE ENVELOPE IS SUPPORTED BY THE 330-1 STRIP REINFORCEMENT INSTALLED ON THE SUPPORT MEMBER.
15	INSTALLING THE LONGITUDINAL OR CIRCUMFERENTIAL STRESS SKIN TO THE GREATEST EXTENT POSSIBLE, THEN LAPPING ADDITIONAL MATERIAL ONTO THE OBSTRUCTION (WALL, SUPPORT, ETC.) OR INSTALLING A TROWEL GRADE FILLET WILL PROVIDE JOINT REINFORCEMENT COMMENSURATE WITH THE TESTED CONFIGURATION. ADDITIONALLY, THE OBSTRUCTION ITSELF ACTS AS A HEAT SINK AND SHIELD AGAINST FLAME IMPINGEMENT.
16	THE AREA TO WHICH THE COLLAR CANNOT BE APPLIED IS NOT DELETERIOUS TO THE COLLAR INSTALLATION. TRAY SIDE RAILS AND RUNGS WILL PROVIDE A MARGIN OF SUPPORT AND SHIELDING EFFECT FROM FLAME IMPINGEMENT. DCA-91822, R/0 REQUIRES A 9" MINIMUM PENETRATION OF THE 330-660 FLEXI-BLANKET BUNDLES INTO THE 330-1 TRAY ENVELOPES. THESE ATTRIBUTES PROVIDE THE NECESSARY ASSURANCE THAT THE JOINT INTERFACE WILL REMAIN IN TACT DURING A POSSIBLE FIRE EXPOSURE.
17	LBDs HAVE BEEN PROTECTED USING STANDARD DETAIL 6-1, EXPANDED TO ENCAPSULATE BOTH LBDs. STANDARD DETAIL 6-1 HAS BEEN EVALUATED IN ATTACHMENT A. THE BOX DESIGN USED TO PROTECT THESE LBDs CLOSELY RESEMBLE THE SAME TECHNIQUES USED TO PROVIDE PROTECTION FOR JUNCTION BOXES AS WAS TESTED IN TEST SCHEME 10-1 AND 10-2. THE BOXING OF THE TWO LBDs TOGETHER HAS BEEN TESTED IN SCHEME 10-2. IT PRESENTS A GREATER THERMAL MASS (WHEN COMPARED TO A SINGLE LBD) AND THUS RESULTS IN LOWER OVERALL INSIDE TEMPERATURE. THE RESULTING PROTECTIVE ENVELOPE MAINTAINS THE MINIMUM MATERIAL THICKNESS, THE MATERIAL IS CONTINUOUS, AND THE STRUCTURAL INTEGRITY AND END USE OF THE FIRE BARRIER IS CONSISTENT WITH THE TESTED CONFIGURATIONS. THIS INSTALLATION IS ACCEPTABLE.
18	INSTALLING STRESS SKIN UPGRADES ON ALL EXPOSED JOINTS AND SEAMS, THEN LAPPING ADDITIONAL MATERIAL ONTO THE CONCRETE AND ANCHORING 2 LAYERS OF 330-1 FLAT PANELS ONTO THE OVERLAP AREA WILL PROVIDE SUFFICIENT REINFORCEMENT FOR THE IDENTIFIED JUNCTION BOX. ADDITIONALLY, THE CONCRETE ACTS AS A HEAT SINK.
19	THE EFFECTIVENESS OF 2 LAYERS OF 330-1 PANELS ON A JUNCTION BOX HAS BEEN DEMONSTRATED VIA SCHEME 10-1. THE J-BOX IS MOUNTED TO A STRUCTURAL COLUMN WHICH REDUCES POTENTIAL EXPOSURE SURFACES AND WILL ACT AS A HEAT SINK. ALL JOINTS HAVE BEEN REINFORCED WITH QUALIFIED TECHNIQUES (STITCHING AND STRESS SKIN). ADDITIONAL TIE WIRES WERE USED TO SECURE PIECES TOGETHER FOR THE COVER ASSEMBLY. THE COVER FITS TIGHT AT NORMAL TEMPERATURES (3/32" MAX. GAP) AND DUE TO EXPANSION OF THE MATERIAL DURING SUBLIMATION AND CHAR LAYER FORMATION AT ELEVATED TEMPERATURES, WILL COMPLETELY SEAL. THE CONFIGURATION HAS MORE ENCLOSED AIR VOLUME THAN A TYPICAL J-BOX ENVELOPE WHICH WILL RESULT IN LOWER INTERNAL TEMPERATURES. THEREFORE, SINCE STRUCTURAL INTEGRITY AND THERMAL CONCERNS ARE ADDRESSED, THE CONFIGURATION IS ACCEPTABLE.
20	THERMO-LAG ARRANGEMENTS ARE IN ACCORDANCE WITH TYPICAL DETAILS. NO DEVIATIONS OR UNIQUE CONFIGURATIONS ARE IDENTIFIED THEREFORE THIS INSTALLATION IS ACCEPTABLE.
21	WHERE STRUCTURAL UPGRADES ARE REQUIRED & CONGESTION OR OBSTRUCTING ITEMS INHIBIT THE INSTALLATION OF STRESS SKIN, AN ACCEPTABLE ALTERNATE IS TO USE STAINLESS STEEL MESH AND TROWEL GRADE. THE MESH IS MORE PLIABLE AND EASIER TO MANIPULATE THAN THE STRESS SKIN BUT ONCE INSTALLED WITH TIE WIRES AND STAPLES AND COVERED WITH TROWEL GRADE, IT PROVIDES AN EQUIVALENT LEVEL OF SUPPORT AND FIRE RESISTANCE.

22	THE SMALL AMOUNTS OF OMITTED STRESS SKIN ARE ACCEPTABLE SINCE THE OMISSION IS MINOR IN LENGTH, AND THE JOINT IS SUPPORTED BELOW BY PROTRUDING ITEM COVERAGE. IN ADDITION, THE INTERFACE OF THE JUNCTION BOX ENCLOSURE IS NOT A JOINT TO THE INTERIOR OF THE ENCLOSURE AND DOES NOT REQUIRE REINFORCEMENT. THE JOINT AT THE JUNCTION BOX ENCLOSURE AND EMBEDDED PLATE PROTECTION IS SUPPORTED ALONG ITS ENTIRE LENGTH BY THE PROTRUDING ITEM ENCLOSURE, BELOW THE JOINT IN QUESTION. ADDITIONALLY, THIS JOINT IS SHIELDED FROM DIRECT FLAME IMPINGEMENT BY THE PROTRUDING ITEM ENCLOSURE.
23	THE INCREASE IN HILTI BOLT SPACING FROM 12" MAX. CENTER TO CENTER, TO 13" MAX. CENTER TO CENTER IS ISOLATED TO ONE LOCATION ON THE THERMO-LAG ENCLOSURE. THE TOTAL WEIGHT OF THE THERMO-LAG STRUCTURE AFFECTED BY THIS CHANGE IS LESS THAN 60% OF THE ALLOWABLE TENSION WEIGHT, AND LESS THAN 35% OF THE ALLOWABLE SHEAR LOAD PER 1/4" HILTI BOLT. THE ADDITIONAL LOAD IMPARTED ON INDIVIDUAL BOLTS AS A RESULT OF THIS CHANGE IS NEGLIGIBLE AND WILL NOT ADVERSELY AFFECT THE STRUCTURAL INTEGRITY OF THE THERMO-LAG ENCLOSURE AS DESIGNED. THIS CHANGE HAS NO IMPACT ON THE THERMAL PROPERTIES OF THE ENCLOSURE. THEREFORE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
24	THE NORTH SIDE PANEL OF BOX ENCLOSURE ABUTS PROTRUDING ITEM COVERAGE ON SUPPORT STEEL FOR MOST OF THE LENGTH OF THE PANEL (APPROX. 1" LEFT EXPOSED AND WITHOUT REINFORCEMENT). THE RELATIONSHIP BETWEEN THE PANEL AND THE PROTRUDING ITEM COVERAGE IS SUCH THAT THE PROTRUDING ITEM COVERAGE PERFORMS ESSENTIALLY THE SAME FUNCTION AS THE DETAIL 14-5 BOX FRAME SECTION OMITTED, IN THAT IT PROVIDES STRUCTURAL SUPPORT TO THE PROTECTIVE ENVELOPE. THE TOTAL AREA OF OMISSION IS MINOR IN LENGTH. THE 4" (APPROX.) STRESS SKIN OMISSION AT THE INTERFERING CABLE TRAY IS NOT UNLIKE THE 6" OMISSION ALLOWED BY M1-1701, DETAIL 5-16. INSTALLATION OF 330-1 PANELS TO SUPPORTS NEXT TO THE BOX ENCLOSURE PROVIDES REINFORCEMENT OF THE FRONT PANEL AND A BASE FOR THE INSTALLATION OF STRESS SKIN UPGRADE. THIS CHANGE IS THEREFORE ACCEPTABLE.
25	REINFORCING JOINTS BETWEEN ESSENTIAL RACEWAY ENCLOSURES AND NONESSENTIAL PROTRUDING ITEM COVERAGE PROVIDES FOR THE REINFORCEMENT OF THE ENCLOSURE AT THE ESSENTIAL ENVELOPE/PROTRUDING ITEM INTERFACE. WHERE THERMO-LAG COVERAGE TERMINATES ON PROTRUDING ITEM CABLE TRAY, MODIFIED FIRE STOP CLAMP BARS ARE REQUIRED. COVERAGE ON THE PROTRUDING ITEM CABLE TRAY IS BOXED TO AN ADJACENT CONCRETE WALL, PRECLUDING THE INSTALLATION OF THE CLAMP BARS AS PER TYPICAL DETAILS. CLAMP BARS ARE FABRICATED FROM 3/8" FLAT STOCK. BOLTING THE MODIFIED CLAMP BAR TO THE TRAY SIDE RAILS AS DELINEATED HEREIN PROVIDES PROTECTION FROM ENVELOPE FAILURE AT THE FIRE STOP AS INTENDED BY THE ORIGINAL DESIGN, SHOULD IT BE SUBJECTED TO A DESIGN BASIS FIRE. THEREFORE, THIS DESIGN CHANGE IS CONSIDERED ACCEPTABLE.
26	THE ENCLOSURES' REMOVABLE THERMO-LAG COVER IS ALSO INCREASED TO TWO LAYERS AND CONSTRUCTED SUCH THAT A SUFFICIENTLY TORTUOUS PATH IS PROVIDED TO THE ENCLOSURES' INTERIOR. THE REMOVAL COVERS' RESTRAINT SYSTEM IS DESIGNED WITH SIGNIFICANT INTEGRITY SO THAT IT WILL HOLD THE COVER FIRMLY IN PLACE AND WILL WITHSTAND FREQUENT REMOVAL AND REINSTALLATIONS, AND WITHSTAND THE RIGORS OF A POSTULATED DESIGN BASIS FIRE.

27	THE LONGITUDINAL JOINT REINFORCEMENT ARE NOT BEING INSTALLED EXACTLY PER SPECIFICATION REQUIREMENTS. HOWEVER, IT DOES MEET THE INTENT OF THE FIRE TESTED CONFIGURATION. ALL JOINT AREAS WILL RECEIVE THE INITIAL 3/16" APPLICATION OF 330-1 TROWEL GRADE. ALL JOINT AREAS WILL RECEIVE 330-69 STRESS SKIN APPLICATION WHICH IS SECURED WITH STAPLES AND/OR TIE WIRES. ALL JOINTS AREAS WILL RECEIVE A SKIM COAT OF 330-1 TROWEL GRADE EITHER PRIOR TO STRESS SKIN APPLICATION OR POST APPLICATION (NORMAL). THIS DESIGN ALLOWS THE OMISSION OF 350 TOPCOAT FROM AREAS THAT ARE NOT PHYSICALLY ACCESSIBLE. THE OMISSION OF TOPCOAT FROM THESE AREAS IS NOT CRITICAL. THE FUNCTION OF THE TOPCOAT IS TO PROTECT THE THERMO-LAG FROM SPILLS OR LEAKS THAT MIGHT OCCUR. THERE IS NO SIGN THAT ANY COMMODITY MAY HAVE ALLOWED MATERIAL TO SPILL ONTO THIS RACEWAY. ADDITIONALLY, THE THERMO-LAG ENVELOPE INSTALLED ON THE CABLE TRAY PRIOR TO THE LONGITUDINAL JOINT REINFORCEMENT IS SEALED WITH 350 TOPCOAT. NO ADVERSE AFFECTS WILL OCCUR DUE TO THE OMISSION OF TOPCOAT FROM THESE AREAS.
28	ADDITIONAL PANELS AND TROWEL GRADE MATERIAL WERE INSTALLED TO EFFECTIVELY BLOCK ANY DIRECT FLAME IMPINGEMENT AT THE AREA. THE ADDITIONAL PANELS ARE ENTIRELY PRE-BUTTERED WITH 303-1 TROWEL GRADE AND SECURED WITH SS BANDING AND HILTI BOLTS. ADDITIONALLY, THE ENTIRE AREA BETWEEN THE TRAY AND THE WALL IS FILLED WITH 330-1 TROWEL GRADE MATERIAL TO ENSURE A COMPLETELY SEALED AREA. THE TRAY SIDE WHICH IS NOT SUPPORTED FROM THE WALL HAS THE TYPICAL LONGITUDINAL JOINT UPGRADE. WHERE THE TOP PANEL HAS BEEN SHIMMED TO ACCOMMODATE AN AIR DROP BUNDLE, ALL JOINTS ON THE ENTIRE RAISED PORTION ARE REINFORCED WITH STRESS SKIN, TROWEL GRADE, AND STAPLES AS WOULD LONGITUDINAL JOINTS. THE ABOVE INSTALLATION WILL PROVIDE THE SAME, IF NOT GREATER, LEVEL OF REINFORCEMENT AS A TYPICAL LONGITUDINAL STRESS SKIN INSTALLATION. THE NONCONFORMING ITEM ADDRESSED IS COMPLETELY REPAIRED BY THE ADDITION OF TROWEL GRADE ALONG WITH PANELS.
29	INDIVIDUALLY THE AREAS WHERE REINFORCING MATERIAL HAS BEEN OMITTED ARE MINOR IN LENGTH AND WILL NOT DIMINISH THE STRUCTURAL INTEGRITY OF THE ASSEMBLY. THE OMISSION OF STRESS SKIN WHERE THE END PANEL OF LBD ENCLOSURES IS IN CONTACT WITH AN HVAC DUCT FOR THE ENTIRE SURFACE AREA OF THE PANEL IS ACCEPTABLE BASED ON THE FOLLOWING: 1) THE END PANEL IS INSTALLED "IN COMPRESSION" 2) THE PANEL IS IN COMPLETE SURFACE TO SURFACE CONTACT WITH THE HVAC DUCT. THEREBY CREATING A TORTUOUS PATH FOR FLAME IMPINGEMENT. 3) THE LBD ENCLOSURE IS REINFORCED CIRCUMFERENTIALLY AND LONGITUDINALLY UP TO THE HVAC DUCT. THE OMISSION OF 330-1 TROWEL GRADE FILLET AT THE HVAC IS ACCEPTABLE BECAUSE THE TWO COMMODITIES UTILIZE SEPARATE SUPPORT SYSTEMS AND ANY DIFFERENTIAL MOVEMENTS WOULD INDUCE MATERIAL FATIGUE.
30	THE INSTALLATION OF STRESS SKIN MATERIAL PER THIS CHANGE UTILIZES APPROVED STAPLE FASTENERS TO SECURE THE REINFORCING MATERIAL IN PLACE. USE OF STAPLE FASTENERS SOLELY TO SECURE REINFORCING MATERIAL IS ACCEPTABLE FOR OTHER REINFORCEMENT CONFIGURATIONS, SUCH AS ON CABLE TRAYS. THEREFORE, IN THIS CONFIGURATION, THE TIE WIRE MAY BE CONSIDERED A SECONDARY/ADDITIONAL FASTENER AND ITS OMISSION WILL NOT DIMINISH THE REINFORCED JOINTS' ABILITY TO PERFORM ITS DESIGN FUNCTION. THE SAME IS TRUE WHEN TIE WIRES ARE INSTALLED AND STAPLES ARE OMITTED.

31	THE OMISSION OF STRESS SKIN REINFORCEMENT ON THE CORNER OF AN LBD IS ACCEPTABLE PROVIDED THE AREA IS MINOR AND AN ALTERNATE METHOD OF REINFORCEMENT IS PROVIDED. IN THIS CASE THE ENTIRE AREA OF STRESS SKIN OMISSION (APPROX. 1" X 5") WAS FILLED WITH TROWEL GRADE MATERIAL TO ENSURE A COMPLETE SEAL.
32	ALL ASPECTS OF THIS UPGRADE ARE IN COMPLIANCE WITH THE TYPICAL DETAILS WITH THE EXCEPTION OF MINOR STRESS SKIN DEVIATIONS. THE PROTECTIVE ENVELOPE AS DESIGNED AND CONSTRUCTED, IN CONJUNCTION WITH THE CLOSE PROXIMITY OF THE CONDUITS TO EACH OTHER AND THE CONCRETE BARRIER, PRECLUDES THE LIKELIHOOD THAT THE AREAS IN QUESTION WOULD SUFFER DIRECT FLAME IMPINGEMENT DURING A DESIGN BASIS FIRE IN THE ROOM.
33	ALL ASPECTS OF THIS INSTALLATION MEET OR EXCEED THE REQUIREMENTS OF THE TYPICAL DETAILS (TRAY SHIMS, JOINT & SEAM STITCHING, HILTI BOLTS, ETC.) WITH THE EXCEPTION OF THE 1/4" SCREWS USED AS FASTENING DEVICES. FASTENING THE THERM-LAG PANELS TO THE SUPPORT STEEL WITH 1/4" SCREWS PROVIDES ADEQUATE ATTACHMENT INTEGRITY. THE UTILIZATION OF THE AFOREMENTIONED FASTENERS EXCEEDS THE REQUIREMENTS OF 2323-MS-38H IN COMPARABLE CONFIGURATIONS, AND IS THEREFORE CONSIDERED ACCEPTABLE.
34	THE PURPOSE OF INSTALLING STAPLES THROUGH FLEXI-BLANKET MATERIAL (OR STRESS SKIN & TROWEL GRADE, OR MESH & TROWEL GRADE) INTO 330-1 MATERIAL (PANELS OR HALF ROUNDS) IS TO HOLD THE MATERIAL IN PLACE, THEREFORE THE PROPER LENGTH VARIES WITH THE MATERIAL THICKNESS.
35	REMOVAL AND REINSTALLATION OF THERMO-LAG MATERIALS, COMPLETE WITH REQUIRED UPGRADES (I.E., JOINT STITCHING, STRESS SKIN REINFORCEMENT, ETC.) IS ACCEPTABLE.
36	REDUCTION OF THERMO-LAG STRIP SUPPORT STEEL UPGRADE AT INTERFERENCES IS ACCEPTABLE SINCE THE INTERFERENCE ITSELF HELPS TO SUPPORT THE BOTTOM PANEL.
37	THE STANDARD SPLICE PLATE STRESS SKIN WAS CUT IN 2 FORM FITTING PIECES AND INSTALLED SEPARATELY TO ACHIEVE THE GREATEST LEVEL OF REINFORCEMENT. IN ADDITION, THE INTERFERING ITEM ITSELF PERFORMS ESSENTIALLY THE SAME FUNCTION AS THE STRESS SKIN REINFORCEMENT IN THAT IT PROVIDES STRUCTURAL SUPPORT TO THE SPLICE PLATE COVER.
38	COMPENSATING FOR THE INABILITY TO STAPLE THE INTERFACE BETWEEN 330-660 AND 330-1 WITH 1 1/2" STAPLES BY USING 7/8" STAPLES AND MESH AND TROWEL GRADE WILL RESULT IN AN EQUIVALENT UPGRADE. THE USE OF STRESS SKIN/MESH AND TROWEL GRADE TO UPGRADE THE INTERFACE BETWEEN 330-660 AND 330-1 IS A TESTED CONFIGURATION.

39	THE INSTALLATION OF CERAMIC BANDING IN THE AREA WHERE STRESS SKIN IS OMITTED PROVIDES THE REQUIRED REINFORCEMENT OF THE LONGITUDINAL JOINT AND IS SUPPORTED BY SUCCESSFUL FIRE TEST RESULTS. THE STRESS SKIN IS OMITTED FOR ONLY 4" - 6" AND THIS COMPLIES WITH DETAIL 5-16. THE INSTALLATION OF STRESS SKIN ACROSS BOTH TRAYS PROVIDES ADDITIONAL STRENGTH AT THE INTERIOR SIDE PANEL INTERFACE AND PREVENT THE LONGITUDINAL JOINTS FROM POSSIBLE SEPARATION. THE FINAL CONFIGURATION OF THIS ENVELOPE IS SIMILAR, IF NOT STRONGER, THAT THE TESTED "BOX" DESIGN. - THE TOP PANEL OF THE BOX AT THE AIR DROP IS ATTACHED TO A CONCRETE LEDGE WITH 1/4" HILTI BOLTS SPACED 9" ON CENTERS MAX. - THE INTERIOR SIDE RAIL PANELS CONTINUE PAST THE TRAYS TOWARDS THE WALL TO HELP SUPPORT THE TOP PANEL. - THE BOTTOM PANEL OF THE BOX AT THE AIR DROP AREA IS ATTACHED TO THE EMBEDDED CONDUIT SLEEVES WITH TIE WIRES. THERE IS ALSO A "PICTURE FRAME" OF 330-1 THERMO-LAG PANELS ATTACHED TO THE WALL WITH HILTI BOLTS BUTTED UP TIGHT TO THE BOTTOM PANEL. - AT ALL LOCATIONS WHERE THE TOP AND BOTTOM PANELS BUTT TO THE CONCRETE COLUMN OR WALL, A "PICTURE FRAME" DETAIL (REF. DETAIL 14-5) IS INSTALLED TO SUPPORT AND SEAL THE CONCRETE/PANEL INTERFACE. - WHERE TWO PANELS ARE USED FOR THE TOP OF THE BOX, A 330-1 SUPPORT PANEL IS INSTALLED OVER THE BUTT JOINT AND BOTH TOP PANELS ARE STITCHED TO THIS SUPPORT PANEL. STRESS SKIN UPGRADE OF THE SUPPORT PANEL/TOP PANEL INTERFACE IS ALSO INSTALLED. - WHERE SINGLE TRAY COVERAGE BLENDS TO DUAL COVERAGE, PRE-BANDS ARE INSTALLED EVERY 6". ADDITIONALLY, THE BOTTOM PANELS ARE SECURED TO THE LADDER BACK TRAYS WITH TIE WIRES ON EVERY OTHER RUNG. - WHERE THE DUAL TRAY COVERAGE BOX IS SHIMMED TO ACCOMMODATE CABLE LAY, 330-1 SPACER PANELS ARE INSTALLED AND SECURED TO THE INTERIOR AND EXTERIOR SIDE RAIL PANELS WITH TIE WIRES. THE SPACER PANEL ORIENTATION PROVIDES STRENGTH TO PREVENT TOP PANEL SAG. - ALL EXTERIOR JOINTS ARE STITCHED TOGETHER WITH TIE WIRES, 5 INCH MAXIMUM SPACING, AND 2 STITCHES PER JOINT. ALL EXTERIOR JOINTS HAVE RECEIVED LONGITUDINAL STRESS SKIN UPGRADE.
40	PRE-BUTTING OR COATING OF THE STRESS SKIN WITH TROWEL GRADE MATERIAL PRIOR TO INSTALLATION IS AN APPROVED PROCESS WHEN LIMITED WORKING SPACE PRECLUDES NORMAL INSTALLATION PROCESSES. THERE IS REASONABLE ASSURANCE THAT DURING THE INSTALLATION PROCESS, THE STRESS SKIN WILL BE ENCAPSULATED IN TROWEL GRADE MATERIAL. IF HOWEVER, ANY STRESS SKIN IS EXPOSED, THE REDUCED CLEARANCE "AIR GAP" BETWEEN THE OBSTRUCTING ITEMS AND THE BOTTOM OF THE PULL BOX ENCLOSURE WILL PREVENT THE STRESS SKIN FROM SEEING FLAME IMPINGEMENT DUE TO SHIELDING PROVIDED BY THE HVAC DUCT.
41	THE LENGTH OF THE AREA IN QUESTION IS MINOR AND THE ENCLOSURE PANELS AT THE JOINT ARE IN CONTACT WITH ADJACENT PROTRUDING ITEM PROTECTION AFTER THE VERTICAL JOINT WAS REINFORCED.
42	THE RESOLUTION PROVIDED BY THIS DISPOSITION WILL PERMIT THERMO-LAG 330-660 FLEXI-BLANKET MATERIALS ON THE THRU WALL CONDUITS (TWC). WHERE A FULL 2 LAYERS ARE NOT ACHIEVABLE, THE FLEXI-BLANKET IS BUTTED TO THE WALL PER TYPICAL DETAILS. IN LIMITED SPACE AREAS A 330-660 FLEXI-BLANKET "COLLAR" IS USED TO PROVIDE FULL COVERAGE OF THE COMMODITIES. ALL INSTALLATIONS UTILIZE APPROVED TYPICAL DETAILS AND, WHERE ONE DOESN'T EXIST, EXTRA MATERIAL IS USED TO ENSURE FULL COMMODITY COVERAGE AND A SEALED ENVELOPE.
43	THE SMALL AMOUNT OF OMITTED STRESS SKIN IS ACCEPTABLE SINCE THE OMISSION IS MINOR IN LENGTH AND THE SHIELDED BETWEEN THE PROTECTED ITEM & THE INTERFERING ITEM.

44	INSTALLING STRESS SKIN (OR WIRE MESH) UPGRADES TO THE GREATEST EXTENT POSSIBLE, THEN APPLYING ADDITIONAL STRESS SKIN AND TROWEL GRADE ONTO THE INTERFERING ITEM AND SECURING WITH APPROVED FASTENERS OR BUTTING TO THE INTERFERENCE & PROVIDING T-LAG FILLET WILL PROVIDE A SUFFICIENT REINFORCEMENT FOR THE RADIAL BEND. ADDITIONALLY, THE INTERFERING ITEM ITSELF (WALL, SUPPORT, ETC.) ACTS AS A HEAT SINK.
45	STAPLES HAVE BEEN INSTALLED AROUND 90% OF THE PERIMETER OF THE CABLE TRAY AND THE FLEXI-BLANKET IS SECURELY ATTACHED. THE OMISSION OF STAPLES ON THE SHORT SIDE OF THE TRAY WILL NOT ADVERSELY AFFECT THE THERMO-LAG ENVELOPE. DUE TO THE TRAY HAVING DIFFERENT HEIGHT SIDE RAILS FOR THE CABLE FILL, IT IS NECESSARY TO OVERLAP THREE TOP PANELS. THIS WILL NOT AFFECT THE ENVELOPE AS THE SIDE PANELS ARE CUT TO FIT TIGHT AND THE LONGITUDINAL JOINT UPGRADE IS INSTALLED AS REQUIRED PLUS, EACH OVERLAP PANEL JOINT HAS A CERAMIC BAND INSTALLED AROUND IT. THE EXTENSION OF TRAY COVERAGE WAS MADE TO PROVIDE A SOUND ATTACHING POINT FOR THE 330-660 FLEXI-BLANKET MATERIAL. ADDITIONAL SHIMS ARE INSTALLED FOR STABILITY ON TOP OF THE SIDE RAIL EXTENSIONS EVEN WITH THE SIDE PANELS AND STITCHED TO THE SIDE PANELS. THIS BETTER SECURES THE SIDE PANELS TO THE TRAY SIDES AND GIVES THE TOP PANEL MORE SURFACE AREA ON WHICH TO REST. THE BOTTOM JOINT HAS STRESS SKIN, TROWEL GRADE AND STAPLES WHICH IS BUTTED TO THE TRAY SUPPORT COVERAGE. ALL JOINTS OF THE RAISED PANELS HAVE BEEN STITCHED WITH TIE WIRES IN ADDITION TO THE APPLICATION OF STRESS SKIN, TROWEL GRADE AND STAPLE UPGRADE.
46	DELETION OF THE CIRCUMFERENTIAL STRESS SKIN ON THE TEE SECTION BOTTOM BUTT JOINT IS ACCEPTABLE DUE TO THE INSTALLATION OF THE 330-1 STRIPS, WHICH WILL ENSURE THAT THE BOTTOM PANEL WILL NOT SAG OR PULL APART DURING A POSTULATED FIRE EVENT.
47	STAPLES HAVE BEEN INSTALLED AROUND 90% OF THE PERIMETER OF THE CABLE TRAY AND THE FLEXI-BLANKET IS SECURELY ATTACHED. THE OMISSION OF STAPLES ON THE SHORT SIDE OF THE TRAY WILL NOT ADVERSELY AFFECT THE THERM-LAG ENVELOPE. RAISING THE TRAY SIDE RAILS AND STITCHING THE PANELS TOGETHER IS CONSISTENT WITH A TESTED "BOX" CONFIGURATION. ALL OTHER ATTRIBUTES ARE IN ACCORDANCE WITH APPROVED DESIGNS.
48	THE USE OF THERMO-LAG STRIPS ATTACHED TO SUPPORT STEEL COVERAGE IS INTENDED TO HOLD THE TRAY BOTTOM PANEL IN PLACE AND KEEP IT FROM SAGGING. WHERE FLEXI-BLANKET IS WRAPPED ONTO THE TRAY BOTTOM PANEL, IT PROVIDES THE SAME LEVEL OF SUPPORT TO INSTALL THE THERMO-LAG STRIPS AGAINST THE FLEXI-BLANKET.
49	THE INSTALLATION OF TWO LAYERS OF THERMO-LAG 330-660 FLEXI-BLANKET ON THE GROUND CABLE IS CONSISTENT WITH THE REQUIRED COVERAGE ON ESSENTIAL COMMODITIES, PROTRUDING ITEMS DO NOT REQUIRE THE THIRD LAYER UPGRADE. THE INTERFACE BETWEEN THE ESSENTIAL ITEM COVERAGE AND THE PROTRUDING ITEM COVERAGE IS CONSISTENT WITH THE METHODS UTILIZED ON CABLE TRAYS AND CONDUITS. ADDITIONALLY, THE INTERFACE IS REINFORCED WIT 330-660 TROWEL GRADE AND SS-304 MESH TO PROVIDE EXTRA STRENGTH SHOULD THE GROUND CABLE BE MOVED, BUMPED, ETC. DURING ROUTINE MAINTENANCE. THE USE OF TWO LAYERS OF THERMO-LAG 330-660 FLEXI-BLANKET FOR THE COLLAR IS CONSISTENT WITH THE REQUIREMENTS OF SPECIFICATION 2323-MS-38H, R/4. WHERE ALL REFERENCED COMMODITIES MEET, THE COLLAR IS UTILIZED TO SEAL AND REINFORCE THE JOINTS AT THE INTERFACE. THIS WILL PROVIDE A FULL TWO LAYERS OF MATERIAL AT THIS LOCATION TO OBTAIN THE REQUIRED 1 HOUR FIRE RATING.

50	INSTALLING STRESS SKIN (OR WIRE MESH) UPGRADES TO THE GREATEST EXTENT POSSIBLE, THEN LAPPING ADDITIONAL STRESS SKIN AND TROWEL GRADE ONTO THE INTERFERING ITEM AND SECURING WITH APPROVED FASTENERS OR BUTTING TO THE INTERFERENCE AND PROVIDING A TROWEL GRADE FILLET WILL PROVIDE SUFFICIENT REINFORCEMENT FOR THE AIR DROP. ADDITIONALLY, THE INTERFERING ITEM ITSELF (WALL, SUPPORT, ETC.) ACTS AS A HEAT SINK AND FLAME IMPINGEMENT SHIELD.
51	THIS JOINT IS IN CLOSE PROXIMITY TO A CONCRETE WALL. THEREFORE, STRESS SKIN IS INSTALLED 2" MINIMUM ONTO THE 303-1 SIDE PANEL. THIS INSTALLATION IS SUFFICIENT TO PROVIDE ADEQUATE REINFORCEMENT OF THE SUBJECT JOINT AND ALLOWS THE INSTALLER TO SECURE THE STRESS SKIN WITH APPROVED FASTENERS. THIS CHANGE ALSO EXTENDS THE TRAY ENVELOPE 3"-4" AND INTERFACES WITH THE CONCRETE BEAM. THIS EXTENSION IS MINOR IN SIZE. DUE TO THE TRAYS' CLOSE PROXIMITY TO THE WALL, PROTRUDING ITEM PROTECTION AND INSUFFICIENT FREE CONCRETE SURFACE AREA, THE REQUIRED 330-1 PANEL TO CONCRETE INTERFACE REINFORCEMENT IS NOT ACHIEVABLE. THEREFORE, ADDITIONAL STRESS SKIN IS UTILIZED AT ALL JOINTS AND ACROSS THE TOP PANELS IN ORDER TO INCREASE THE INTEGRITY OF THE PANEL TO CONCRETE INTERFACE. THESE JOINTS ARE ALSO PROVIDED A LEVEL OF SHIELDING BY THE CLOSE CONFINES/LIMITED ACCESSIBILITY TO THE TOP OF THE TRAY. THE CONCRETE BEAM ITSELF WILL LEND ITSELF TO THE DISSIPATION OF ANY HEAT RECEIVED AT THE SUBJECT AREAS DURING A FIRE SCENARIO.
52	THE INSTALLATION OF A "NON-STANDARD" CABLE TRAY SUPPORT UPGRADE IS NECESSARY ON THIS COMMODITY DUE TO THE ORIENTATION OF THE RACEWAY AND NEIGHBORING AIR DROPS. THE UPGRADE INSTALLED UTILIZES 330-1 TROWEL GRADE, 330-69 STRESS SKIN, AND TIE WIRES AND EXTENDS THE FULL WIDTH OF THE TRAY. IT IS THEN SECURED TO THE LONGITUDINAL JOINT REINFORCING STRESS SKIN WITH TIE WIRES. THIS APPLICATION IS SIMILAR TO APPROVED DETAIL 5-13, WITH THE EXCEPTION OF THE STRESS SKIN EXTENDING CIRCUMFERENTIALLY AROUND THE CABLE TRAY. DUE TO THE VERTICAL ORIENTATION OF THIS TRAY, THERE WILL NOT BE AS MUCH FORCE EXERTED ON THE TRAY BOTTOM PANEL AS WOULD BE ON A HORIZONTAL ORIENTATION. THIS, COUPLED WITH THE ABOVE INSTALLATION, WILL PROVIDE THE NECESSARY REINFORCEMENT OF THE TRAY/HANGER INTERFACE JOINT.
53	THE INSTALLATION OF THE CIRCUMFERENTIAL STRESS SKIN APPLICATION ON THE "TEE SECTION" BUTT JOINTS IS TIED INTO THE LONGITUDINAL JOINT STRESS SKIN. THE AREA WHERE THE 330-1 TROWEL GRADE WAS OMITTED UNDER THE FIRE PROTECTION PIPE IS MINOR (≈ 10"L X 2"W). GIVEN THAT THE FIRE PROTECTION PIPE IS SO CLOSE TO THE AREA OF UPGRADE, AND THAT THE TROWEL GRADE IS ONLY OMITTED ON THE TOP PANEL OF THE TRAY, IT IS HIGHLY UNLIKELY THAT THIS AREA WILL SEE ANY DIRECT FLAME IMPINGEMENT. THE FIRE STOP CLAMP BAR ASSEMBLY WAS INSTALLED PRIOR TO THE 330-1 TROWEL REACHING FULL CURE. THIS WAS NECESSARY IN ORDER TO GET THE BAR INTO THE AREA. THIS WILL NOT IMPACT THE FIRE BARRIER BECAUSE THE CLAMP BAR ASSEMBLY HAS BEEN BENT TO ACCOMMODATE LOCAL INTERFERENCES AND WILL ASSIST IN REINFORCING THE LONGITUDINAL JOINTS ALONG WITH THE LONGITUDINAL STRESS SKIN. ANY DISTORTION OF THE TROWEL GRADE CAUSED BY THE CLAMP BAR IS INSIGNIFICANT. TOP COAT HAS THEN BEEN APPLIED UP TO THE CLAMP BAR ASSEMBLY. BASED ON THE ABOVE, THESE MINOR DEVIATIONS WILL NOT IMPACT THE ABILITY OF THE THERMO-LAG ENVELOPE TO PERFORM AS REQUIRED. THEREFORE, THE INSTALLATION INSTRUCTIONS PROVIDED BY THIS DCN ARE ACCEPTABLE.
54	CREDIT IS TAKEN FOR THE 330-1 MATERIAL PROTECTING THE TRAY AND THE TRAY SUPPORT TO PROVIDE THE REQUIRED MATERIAL THICKNESS FOR THE CABLE AIR DROP AT THE AREAS OF OMITTED FLEXI-BLANKET. THE APPLICATION OF TROWEL GRADE MATERIAL ADEQUATELY SEALS THE INTERFACE AND THE SS-304 MESH ADEQUATELY REINFORCES THE INTERFACE AREAS. THE RESULTANT CONFIGURATION PROVIDES SUFFICIENT MATERIAL THICKNESS THAT THE THERMO-LAG FIRE BARRIER WILL PERFORM ITS DESIGN FUNCTION.

55	THE TESTED CONFIGURATIONS UTILIZED SCREWS TO HOLD BOTTOM PANELS FIRM TO THE INTERNAL FIRE STOP, STANDARD CLAMP BARS PROVIDE THE SAME SUPPORT. THE FIRE STOP CLAMP BAR ASSEMBLY DESIGNED FOR THIS CONFIGURATION WILL PERFORM AS WELL AS THE SCREWED ASSEMBLY. THE DIFFERENCES IN THIS DESIGN ARE: 1) THE CLAMP BAR SANDWICHES THREE CABLE TRAYS AND 2) THE BOTTOM BAR IS FORMED IN A U SHAPE. THE INTENT OF THE CLAMP BAR IS TO PREVENT THE BOTTOM PANEL ON THE TRAY FROM SAGGING AND BREACHING THE ENVELOPE. SINCE THIS CLAMP BAR FULLY SPANS THE BOTTOM PANEL ON THE FIRESTOPPED TRAY, ITS FUNCTION IS MAINTAINED AND IS ACCEPTABLE. THE CONFIGURATION OF THIS CABLE TRAY ENCLOSURE IS UNIQUE. THREE TRAYS (2 X 24" AND 1 X 30") ARE STACKED ONE ABOVE THE OTHER. THE UPGRADE PROVIDED BY THIS DCN UTILIZES A 10" WIDE CIRCUMFERENTIAL WRAP OF STRESS SKIN, TROWEL GRADE, AND STAPLES WHERE THE THREE TRAYS PASS THROUGH THE 8-S WALL. ALL LONGITUDINAL AND BUTT JOINTS HAVE BEEN REINFORCED USING STRESS SKIN, TROWEL GRADE, AND STAPLES AND THE FIRESTOP ON THE TRAY IS REINFORCED WITH A CLAMP AS REQUIRED. ADDITIONALLY, A SECOND CLAMP BAR IS INSTALLED ≈ 11" FROM THE 8-S WALL TO PROVIDE REINFORCEMENT FOR THE SIDE PANELS.
56	THIS CHANGE PROVIDES INSTALLATION GUIDANCE FOR THE REINFORCEMENT OF JOINTS ASSOCIATED WITH THERMO-LAG 330-1 PANELS. THE SUBJECT ENCLOSURE CONFIGURATION PROTECTS TRAY SECTIONS AT A LARGE CABLE AIR DROP BETWEEN THE TWO TRAYS. THE USE OF 2" OF STRESS SKIN REINFORCEMENT AT A PANEL JOINT PER THIS CHANGE IS MINOR, AS THE AFFECTED JOINT IS REINFORCED ALONG ITS FULL LENGTH. THE BALANCE OF THE ENVELOPE IS REINFORCED IN ACCORDANCE WITH REQUIREMENTS OF THE TYPICAL DETAILS. THE ENCLOSURE REVIEWED HEREIN, IS COMPARABLE IN SIZE TO A FIRE TESTED MULTI-TRAY CONFIGURATION AND THEREFORE ACCEPTABLE AS INSTALLED.
57	THE DIRECTION PROVIDED BY THIS DESIGN CHANGE ALLOWS CONSTRUCTION TO EFFECTIVELY REPAIR 330-660 FLEXI-BLANKET MATERIAL INSTALLED ON NONESSENTIAL AIR DROPS ENTERING A CABLE TRAY. THE DISPOSITION OF A ONE FORM CALLED FOR THE THIRD LAYER OF 330-660 FLEXI-BLANKET TO BE INSTALLED AROUND ONLY ONE AIR DROP. SINCE THERE IS NOT ENOUGH ROOM BETWEEN THE AIR DROPS TO ACCOMPLISH THE DISPOSITION, WRAPPING THE THIRD LAYER OF 330-660 FLEXI-BLANKET AROUND BOTH AIR DROPS WILL RESOLVE THE CONDITION DESCRIBED ON THE ONE FORM. THE ENCLOSURE OF MULTIPLE AIR DROPS IN A COMMON ENVELOPE OF 330-660 FLEXI-BLANKET IS PERMITTED BY TYPICAL DETAIL DRAWINGS.
58	FILLING THE VOID BETWEEN PROTRUDING CONDUIT AND TRAY WILL PROVIDE EXTRA THERMO-LAG MATERIAL TO HELP PROTECT THE BACK SIDE LONGITUDINAL JOINT. THE LONGITUDINAL STRESS SKIN IS THEN EXTENDED OVER AND AROUND THE CONDUIT AND ABUTTED TO THE WALL. THE CONDUIT, WHICH IS COVERED AS A PROTRUDING ITEM, EFFECTIVELY BLOCKS THE BACK SIDE JOINT FROM ANY DIRECT FLAME. HOWEVER, THE GROUND WIRE IS ENCAPSULATED IN SS 304 MESH WHICH EXTENDS OUT ONTO THE TRAY SIDE AND BACK PANEL. THE GROUND WIRE PROTECTION EFFECTIVELY BLOCKS THE BACK SIDE JOINT FROM ANY DIRECT FLAME. THE AREA AFFECTED BY THE FIRE PROTECTION PIPE HANGER BASE IS ADEQUATELY UPGRADED TO PROVIDE THE NECESSARY LEVEL OF PROTECTION. THE HANGER INTERFERES WITH THE INSTALLATION OF LONGITUDINAL JOINT STRESS SKIN FOR AN AREA ≈ 2" DEEP X 28" WIDE. THE REST OF THE TRAY IS UPGRADED AS REQUIRED UP TO THIS POINT.
59	WHERE THE BEAM INTERFERES WITH THE INSTALLATION OF STAPLES, THE STRESS SKIN HAS BEEN SECURED TOGETHER WITH CIRCUMFERENTIAL TIE WIRES. THESE WILL WORK AS WELL AS THE STAPLES IN SECURING THE STRESS SKIN TO THE TROWEL GRADE MATERIAL. IN ADDITION, CERAMIC BANDING IS INSTALLED (4 AREAS) TO PROVIDE EXTRA SUPPORT. THE TOPCOAT CANNOT BE FULLY APPLIED BETWEEN THE BEAM AND THE TRAY. TOPCOAT DOES NOT PROVIDE ANY OF THE FIRE RATED CHARACTERISTICS OF THERMO-LAG ONLY PROTECTION FROM ENVIRONMENTAL CONDITIONS.

60	THIS DESIGN HAS TWO CONDUIT LBDs WRAPPED IN A COMMON ENVELOPE. THIS ENCLOSURE REQUIRES JOINT UPGRADE WITH STRESS SKIN, TROWEL GRADE, AND STAPLES. HOWEVER, ON THE BOTTOM SIDE OF THIS ENCLOSURE, A PIPE INTERFERES WITH THE STRESS SKIN APPLICATION FOR ≈ 6". SINCE THE DISTANCE IS MINOR WHEN COMPARED TO THE OVERALL ENCLOSURE LENGTH (35"), AND THE JOINT IS SHIELDED BY THE 10" SERVICE WATER PIPE, THE OMISSION OF STRESS SKIN FOR 6" WILL NOT ADVERSELY AFFECT THE PERFORMANCE OF THIS THERMO-LAG ENCLOSURE. THE MINIMUM REQUIREMENT OF FOUR 1 1/2" LONG STAPLES FOR EACH CONDUIT UPGRADE WILL PROVIDE THE REQUIRED REINFORCEMENT OF THE 330-660/330-1 INTERFACE. THE TRAY COVERAGE BUTTS TO A CONCRETE SURFACE AND IS SECURED TO A BANK OF THROUGH WALL SLEEVES (TWSs). THE BOTTOM PANEL ON THE TRAY ANGLES DOWNWARD TOWARD THE WALL TO ENCOMPASS ESSENTIAL CABLES. THIS CONFIGURATION REQUIRES THAT THE LONGITUDINAL STRESS SKIN APPLICATION BE MODIFIED AT THIS AREA TO ACCOMMODATE THE ANGLED PANEL. THIS IS ACCOMPLISHED BY USING TWO PIECES OF STRESS SKIN WHICH EXTEND FROM A POINT OF 5" FROM THE JOINT ON THE SIDE PANEL, TRAVEL ACROSS THE TOP/BOTTOM PANEL, AND TERMINATE 5" FROM THE JOINT ON THE OPPOSITE SIDE PANEL.
61	WHEN THE OBSTACLES AND/OR ADJACENT ESSENTIAL COMMODITY INTERFERES WITH THE STRESS SKIN UPGRADE, STRESS SKIN IS INSTALLED TO THE GREATEST EXTENT POSSIBLE. PROVIDE AN EXTRA MEASURE OF SUPPORT BY INSTALLING CERAMIC BAND CIRCUMFERENTIALLY.
62	THE UNIQUE AIR DROP CONFIGURATION FROM CONDUIT TO CABLE TRAY REQUIRES A DIFFERENT METHOD OF REINFORCEMENT. ALL JOINTS HAVE BEEN REINFORCED WITH SS 304 MESH, TROWEL GRADE AND STAPLES. THE MESH EXTENDS TO ALL REQUIRED AREAS FOR THE DISTANCE OF 5" AND IS SECURED WITH STAPLES AND TIE WIRES. THE ENCOMPASSING OF THE GROUND WIRE PROTECTION INTO THE AIR DROP UPGRADE WILL NOT ADVERSELY AFFECT THE ESSENTIAL COMMODITIES, BUT WILL PROVIDE ADDITIONAL REINFORCEMENT TO THE COVERED GROUND CABLE. THIS INSTALLATION IS NO DIFFERENT THAN INCLUDING TWO AIR DROPS, CLOSE TOGETHER, INTO THE SAME MESH UPGRADE. THEREFORE, THIS INCLUSION IS ACCEPTABLE.
63	THE SUPPORT DESIGN ON THIS CABLE TRAY IS UNIQUE. AN ADDITIONAL ANGLE IRON BRACE RUNS FROM THE WALL TO THE MAIN TRAY SUPPORT AT ≈ 45°. THIS SUPPORT PIECE IS NOT BOXED LIKE MOST SUPPORTS, IT IS PROTECTED RETAINING ITS SHAPE. THE ADDITIONAL SUPPORT PANEL MUST BE ATTACHED TO EXISTING THERMO-LAG PANEL ON THE SUPPORT. IN THIS CASE, THE SUPPORT PANEL WILL BE SECURED TO THE PIECE COVERING THE ANGLE END. THIS WILL PROVIDE AS MUCH SUPPORT AS A TYPICAL PROTECTED HANGER BECAUSE THE ANGEL PROTECTION IS SECURED WITH TIE WIRES AND BANDS. ADDITIONALLY, AN END CAP HAS BEEN INSTALLED ON THE INSIDE OF THE ANGLE ALONG WITH STRESS SKIN REINFORCEMENT. THIS WILL PROVIDE ADDITIONAL RIGIDITY AND STRENGTH TO THIS UNIQUE HANGER INSTALLATION.
64	WHERE THE THIRD LAYER OF 330-660 MATERIAL MAKES CONTACT WITH THE CABLE TRAY'S 330-1 TOP PANEL AT AN ANGLE, THE USE OF STAPLE FASTENERS PROVIDE MECHANICAL ATTACHMENT OF THE FLEXI-BLANKET TO THE 330-1 PANEL IN THE AREA WHERE BANDING IS NOT ACHIEVED. THIS, IN CONJUNCTION WITH THE REQUIRED SS-304 MESH REINFORCEMENT OF THE 330-660/330-1 MATERIAL JOINT INTERFACE, WILL ADEQUATELY SECURE THE THIRD LAYER OF FLEXI-BLANKET.
65	SEAM OVERLAP POSITION IS NOT A CRITICAL ATTRIBUTE TO THE FLEXI-BLANKET BARRIER. ALL SEAMS HAVE A SUBSTANTIAL OVERLAP AND ARE PRE-BUTTERED AND BANDED TO ENSURE THAT THEY STAY SEALED. THEREFORE THIS MINOR DEVIATION FROM THE TYPICAL DETAIL IS ACCEPTABLE.
66	THERMO-LAG PANEL "PICTURE-FRAME" AND THE APPLICATION OF 330-69 STRESS SKIN ONTO ADJACENT THERMO-LAG 330-1 PANEL SURFACES IN ORDER TO REINFORCE THE JOINT INTEGRITY OF THE THERMO-LAG FIRE BARRIER MATERIAL ENVELOPES IS ACCEPTABLE.

67	IN ORDER TO COMPENSATE FOR THE REDUCED FLEXI-BLANKET OVERLAP, STAPLES SHALL BE INSTALLED. THE INSTALLATION OF 9/16" STAPLES IS NOT REQUIRED PER CURRENT DESIGN AND THEREFORE ONLY OFFERS AN ADDITIONAL LEVEL OF MATERIAL FASTENING. THE STAINLESS STEEL BANDING REQUIRED AT THE TERMINATION OF 330-660 MATERIAL SATISFIES THE CURRENT FASTENING REQUIREMENTS FOR THIRD LAYER INSTALLATIONS.
68	STITCHING TOGETHER THERMO-LAG PANELS IN A "BOX" CONFIGURATION TO RECEIVE OR REPLACE A FLEXI-BLANKET AIR DROP IS AN ACCEPTABLE DEVIATION. THE CONSTRUCTION METHODS EMPLOYED TO BUILD THIS ARRANGEMENT ARE ALL BASED ON TYPICAL DETAILS.
69	WHERE A BUTT JOINT IS NOT REINFORCED, THE 330-1 PANEL IS IN COMPLETE SURFACE CONTACT WITH A CONCRETE WALL. THE ACCESSIBLE JOINT AREA IS REINFORCED IN ACCORDANCE WITH TYPICAL DETAILS UP TO THE CONCRETE WALL. WHERE THE REINFORCEMENT BUTTS TO THE WALL IT IS EITHER SECURED UTILIZING TYPICAL "PICTURE FRAME" DETAIL OR SECURED TO PROTRUDING ITEM PROTECTION.
70	BUTT JOINT REINFORCEMENT CANNOT BE INSTALLED CIRCUMFERENTIALLY BECAUSE FRONT AND BACK 330-1 PANELS ARE INSTALLED TO THE CONCRETE WALL. INSTALLING THE BUTT JOINT STRESS SKIN REINFORCEMENT UP TO THE WALL AND TERMINATING AT THE 330-1/CONCRETE INTERFACE PROVIDES FOR THE REINFORCEMENT OF THE EXPOSED BUTT JOINT AREA. REINFORCEMENT OF THE LONGITUDINAL INTERFACE BETWEEN CONCRETE AND THERMO-LAG 330-1 BY ADDING A BOX FRAME ADDS ADDITIONAL SUPPORT AND STRUCTURAL INTEGRITY TO THE BUTT JOINT REINFORCEMENT BY SUPPORTING THE PANELS ADJACENT TO THE AREA WHERE THE BUTT JOINT REINFORCEMENT TERMINATES AND ELIMINATES THE NEED FOR LONGITUDINAL JOINT REINFORCEMENT IN THE AREA.
71	THE REMOVAL OF THE TRAY SEGMENT IS REQUIRED TO FACILITATE THE PROPER INSTALLATION OF THE PROTRUDING ITEM COVERAGE. THIS ACTIVITY PERMITS THE PROPER INSTALLATION OF THERMO-LAG MATERIALS, BUT DOES NOT DIRECTLY OR INDIRECTLY AFFECT THE THERMO-LAG ENVELOPE. ITEM II: THE CABLE TRAY SUPPORT UPGRADE PANEL IS INSTALLED AS REQUIRED. THE UNPROTECTED CABLE TRAY IS CLOSE ENOUGH TO THE PROTECTED CABLE TRAY SO THAT THE SUPPORT UPGRADE PANEL WILL TOUCH IT. THIS DOES NOT AFFECT THE FUNCTION OF THE SUPPORT UPGRADE PANEL AND IS THEREFORE, ACCEPTABLE. THE REDESIGN OF THIS COVERAGE REQUIRED AN ADDITIONAL FIRE STOP TO PRECLUDE THE INSTALLATION OF APPROXIMATELY 5 SQUARE FEET OF TRAY COVERAGE AND 3 CABLE AIR DROPS. THIS PROVIDES A CLOSED ENVELOPE ON THE PROTRUDING ITEM CABLE TRAY. ADDITIONAL PANELS WERE INSTALLED ON THE SUPPORT TO BLOCK OFF THE SMALL GAP ON THE BOTTOM PANEL/SUPPORT INTERFACE. THIS METHOD OF REPAIRING THE INTERFACE AREA IS ACCEPTABLE BECAUSE THE TWO PANELS INSTALLED ON THE SUPPORT PROVIDE A THICKNESS GREATER THAN THE TYPICAL INSTALLATION PRACTICES. THE CIRCUITOUS NATURE OF THIS DESIGN CREATES A TORTUROUS PATH FOR FLAME PROPAGATION WHICH WILL PREVENT UNTIMELY DEGRADATION OF THE AREA.
72	THE USE OF ALTERNATE TYPES OF APPROVED FASTENING DEVICES DOES NOT DIMINISH THE INTEGRITY OF THE FIRE BARRIER ENVELOPE. WHERE THE THIRD LAYER OF 330-660 MATERIAL MAKES CONTACT WITH THE CABLE TRAY'S 330-1 TOP PANEL, AT AN ANGLE, THE USE OF STAPLE FASTENERS PROVIDE MECHANICAL ATTACHMENT OF THE FLEXI-BLANKET TO THE 330-1 PANEL IN THE AREA WHERE BANDING IS NOT ACHIEVED. THIS, IN CONJUNCTION WITH THE REQUIRED SS 304 MESH REINFORCEMENT OF THE 330-660/330-1 MATERIAL JOINT INTERFACE WILL ADEQUATELY SECURE THE THIRD LAYER OF FLEXI-BLANKET.

73	REMOVAL OF THERMO-LAG FROM THE PROTECTED COMMODITY WILL ALLOW INSTALLATION OF THIRD LAYER FLEXI-BLANKET UPGRADES. REMOVAL OF MATERIAL FROM THE IDENTIFIED CABLE IS ACCEPTABLE BECAUSE THE ITEM IS NONESSENTIAL (IT IS PROTECTED AS A PROTRUSION) AND THE AREA OF DIMINISHED MATERIAL THICKNESS IS OCCUPIED BY THE THERMO-LAG ON THE ESSENTIAL RACEWAY.
74	THERMO-LAG IS INTENDED FOR THE PROTECTION OF ESSENTIAL RACEWAYS UP TO EQUIPMENT COMPONENTS. THE IDENTIFIED EQUIPMENT DO NOT REQUIRE PROTECTION. THEREFORE, IT IS ACCEPTABLE/OPTIONAL TO FILLET THE TERMINATION OF THERMO-LAG PROTECTION AT THE EQUIPMENT AS NO OTHER WORK IS REQUIRED.
75	THIS DETAIL IS USED FOR MEETING THE REINFORCEMENT REQUIREMENTS OF CABLE TRAY THERMO-LAG 330-1 ENVELOPES WITH CABLE AIR DROPS EXITING ALONG LONGITUDINAL JOINT AREAS. THE REQUIRED REINFORCEMENT OF THE CABLE AIR DROP AT THE INTERFACE JOINT WITH THE TRAY PROVIDES ADEQUATE REINFORCEMENT OF THE TRAY ENVELOPE. REINFORCEMENT IS PROVIDED BY AIR DROP REINFORCEMENT EXTENDING OVER THE TRAY PANELS 5" MINIMUM IN ALL DIRECTIONS FROM THE AIR DROP.
76	THIS CHANGE PROVIDES FOR THE OMISSION OF STRESS SKIN REINFORCEMENT ALONG THE CABLE TRAY LONGITUDINAL JOINT AT A PIPE INTERFERENCE. THE TOTAL LENGTH OF LONGITUDINAL JOINT LEFT WITHOUT REINFORCEMENT IS LESS THAN THAT DEEMED ACCEPTABLE PER TYPICAL DETAIL 5-19 IN WHICH BREAKS IN THE CONTINUITY OF THE REINFORCEMENT ARE ACCEPTABLE. ADDITIONALLY, THE LONGITUDINAL JOINT AT THE PIPE INTERFERENCE IS EFFECTIVELY SHIELDED FROM FLAME IMPINGEMENT BY THE INSULATION JACKETING AND THERMO-LAG TROWEL GRADE FILLET AT THE POINT OF INTERFERENCE. IN CONCLUSION, THE LENGTH OF STRESS SKIN OMITTED BY THIS DESIGN CHANGE IS MINOR AND WILL NOT APPRECIABLY IMPACT THE ABILITY OF THE JOINT TO FUNCTION AS DESIGNED. THEREFORE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
77	INSTALLATION OF THE REINFORCING PANEL PER THIS CHANGE EFFECTIVELY PLACES THE REINFORCEMENT PANEL IN COMPRESSION BETWEEN THE TRAY SUPPORT AND THE PROTECTED CONDUIT, AND IN CONJUNCTION WITH SPECIFIED MEANS OF ATTACHMENT, PROVIDES FOR THE SECURE ATTACHMENT OF THE REINFORCEMENT TO THE SUPPORT. THE RESULTING CONFIGURATION WILL SUPPORT THE BOTTOM TRAY PANEL AS INTENDED. WHERE REINFORCING STRIP CANNOT BE INSTALLED ON CABLE TRAY SUPPORT DUE TO PROXIMITY OF CONCRETE WALL, REINFORCING THE JOINT WITH CIRCUMFERENTIALLY WRAPPED STRESS SKIN IS CONSISTENT WITH THE CURRENT DESIGN REQUIREMENTS. TERMINATING THE STRESS SKIN AT THE CONCRETE WALL UTILIZES THE MAXIMUM AVAILABLE THERMO-LAG MATERIAL FOR SECURING THE STRESS SKIN, BOUNDING THE REINFORCING MATERIAL BETWEEN THE CABLE TRAY COVERAGE AND THE CONCRETE WALL. THEREFORE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
78	THE LENGTH OF BOX FRAME MATERIAL AFFECTED BY THIS CHANGE IS APPROXIMATELY 2", WHICH DOES NOT ALLOW FOR THE USE OF HILTI KWIK BOLT FASTENERS. PRE-BUTTERING THE REPLACEMENT PIECE OF 330-1 AND SECURING TO ADJACENT BOX FRAME BY OVERLAPPING STRESS SKIN AS DIRECTED BY THIS CHANGE PROVIDES FOR CONTINUITY OF THE BOX FRAME, WHILE PROTECTING THE ESSENTIAL 330-1 PANEL/CONCRETE WALL INTERFACE FROM DIRECT FLAME IMPINGEMENT. THE "SCORE AND FOLD" METHOD WAS EMPLOYED TO CREATE THE FLANGE, THEREBY MAINTAINING STRESS SKIN CONTINUITY AT THE JOINT BETWEEN THE FLANGE AND THE ESSENTIAL PANEL. THE ENVELOPE PANELS ARE THEREFORE SECURELY ATTACHED TO ADJACENT CONCRETE SURFACES. UPGRADING THE PANEL JOINTS AS PER THIS DESIGN CHANGE INCREASES THE STRUCTURAL INTEGRITY OF THE ENCLOSURE, AND IS CONSISTENT WITH CURRENT DESIGN REQUIREMENTS. BASED ON THE ABOVE, THIS DESIGN CHANGE IS ACCEPTABLE.

79	THE THERMO-LAG COVERAGE AT THE INTERSECTION OF CABLE TRAYS HAS BEEN REVIEWED TO DETERMINE THE EXTENT OF UPGRADE REQUIRED TO PROVIDE A FUNCTIONAL PROTECTIVE ENVELOPE. THIS ENCLOSURE IS ATYPICAL IN THAT THERE ARE NO PANELS SPANNING FROM THE RACEWAYS TO AN ADJACENT BARRIER. ALL THERMO-LAG 330-1 PANELS ASSOCIATED WITH THIS ENCLOSURE ARE SUPPORTED BY/ATTACHED TO THE ENCLOSED RACEWAYS AND RACEWAY SUPPORTS. THERE ARE NO UNSUPPORTED PANELS IN THIS CONFIGURATION. THE FUNCTIONALITY OF THE ENCLOSURE THEN, IS CONTINGENT ON THE PERFORMANCE OF THE PANEL JOINTS. REINFORCING ALL JOINTS WITH STRESS SKIN 5" MIN. IS CONSISTENT WITH THE CURRENT DESIGN REQUIREMENTS, AND WILL MAINTAIN JOINT INTEGRITY DURING A DESIGN BASIS FIRE. THEREFORE, THIS DESIGN CHANGE IS ACCEPTABLE.
80	THE DISTANCE BETWEEN THE CABLE TRAY PROTECTION AND THE SUPPORT PROTECTION ON THE TOP SIDE OF THE SUPPORT, IS NOT ADEQUATE FOR TYPICAL INSTALLATION OF CIRCUMFERENTIAL REINFORCEMENT AT THE SUPPORT. PACKING THE AREA BETWEEN THE CABLE TRAY AND SUPPORT WITH 330-1 TROWEL GRADE PROVIDES SUPPORT TO THE TRAY BACK PANEL IN ESSENTIALLY THE SAME MANNER AS INSTALLING A 330-1 PREFAB PANEL. APPLICATION OF THE STRESS SKIN CIRCUMFERENTIALLY WHERE 330-1 TROWEL GRADE SUPPORT TERMINATES ADDS TO THE STRUCTURAL STABILITY OF THE REINFORCEMENT. THEREFORE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
81	THE UPGRADE DIRECTION FOR CABLE TRAY T12OCBD15 PROVIDES FOR A COMPLETELY SEALED ENVELOPE. THE END OF THE TRAY IS COVERED WITH A TYPICAL 330-1 THERMO-LAG PANEL REINFORCED WITH SS-304 MESH APPLIED JUST LIKE THE LONGITUDINAL JOINT STRESS SKIN UPGRADE. THIS INSTALLATION IS SIMILAR TO THAT OF ANY CABLE TRAY TOP PANEL OF THERMO-LAG ONLY STRONGER (GIVEN ITS ORIENTATION). SINCE LONGITUDINAL JOINT UPGRADES EFFECTIVELY REINFORCE THE LARGER TOP AND BOTTOM PANELS ON CABLE TRAYS, THIS INSTALLATION/UPGRADE WILL EFFECTIVELY REINFORCE THE END PANEL AND PROVIDE THE REQUIRED 1 HOUR FIRE RATED BARRIER. CABLE TRAYS T12OCBD22 AND T13OCCA65 WERE TRANSITIONED FROM INDIVIDUAL THERMO-LAG COVERAGE TO DUAL TRAY COVERAGE AT THE WALL. THE BOTTOM PANEL, WHICH SPANS BOTH TRAYS, IS SECURED TO THE TRAY RUNGS WITH TIE WIRES. WHERE THE BOTTOM PANEL BUTTS TO THE WALL, IT IS SECURED TO THE THROUGH WALL SLEEVES (TWS) WITH TIE WIRES AND FURTHER SUPPORTED BY THE INSTALLATION OF HILTI BOLTS (PICTURE FRAME). THE TOP PANEL ON THE TRAYS EXTEND TOWARD THE CONCRETE BEAM ABOVE, ANOTHER 330-1 PANEL IS TIE WIRED TO THE TRAY PANEL AND SECURED TO THE BEAM WITH HILTI BOLTS. THE EXTERIOR SIDE PANEL ON TRAY T12OCBD22 IS SECURED TO THE WALL WITH HILTI BOLTS. THE EXTERIOR SIDE PANEL ON TRAY T13OCCA65 EXTENDS TO THE WALL AND IS SECURED TO THE TWS's WITH TIE WIRES IN ADDITION TO THE HILTI BOLT PICTURE FRAME. ALL JOINTS AND SEAMS ON THIS "BOX" CONFIGURATION ARE STITCHED TOGETHER WITH TIE WIRES ALONG WITH LONGITUDINAL STRESS SKIN REINFORCEMENT.
82	TYPICAL DETAIL 3-5.2 (LIMITED SPACE DETAIL) IS AVAILABLE FOR USE WHEN THE PROXIMITY OF AN INTERFERING ITEM PREVENTS THE INSTALLATION OF THE SPECIFIED 2" TO 4" 330-660 OVERLAP ONTO 330-1. THE INSTALLATIONS AFFECTED BY THIS DESIGN CHANGE MEET THE CONDITIONS OF LIMITED SPACE APPLICATIONS AND CONFORM TO THE REQUIREMENTS SET FORTH IN DETAIL 3-5.2 THEREFORE, THIS CHANGE IS ACCEPTABLE.

83	REPLACING THE THERMO-LAG COVERAGE ON ALL OF THE AFFECTED RACEWAYS LOCATED BETWEEN THE TWO CABLE TRAY SUPPORTS AS PER THIS DESIGN CHANGE PROVIDES AN ENCLOSURE THAT CAN BE COMPLETELY REINFORCED. ALL BOX ENCLOSURE PANELS ARE STITCHED TO ADJACENT PANELS WITH STAINLESS STEEL TIE WIRE IN ACCORDANCE WITH THE STITCHING REQUIREMENTS FOR 36" CABLE TRAYS. THE STITCHING IS ADDED TO THE TYPICAL STRESS SKIN JOINT UPGRADE TO AID TYPICAL FASTENING METHODS IN MAINTAINING PANEL JOINT INTEGRITY. WHERE PANELS ABUT THE CONCRETE BEAM, PANELS ARE STITCHED TO THE BOX FRAME TO PREVENT PANEL SEPARATION FROM THE BOX FRAME, ENSURING PANEL PERFORMANCE AT THE CONCRETE SURFACE MEETS DESIGN REQUIREMENTS. THE SIDE PANELS ARE FASTENED (SCREWS OR TIE WIRES) TO ADJACENT SUPPORT STEEL, WHILE THE BOTTOM PANEL IS FASTENED TO THE CABLE TRAYS WITH TIE WIRE AND SUPPORTED AT THE CABLE TRAY SUPPORTS WITH THERMO-LAG FLAT PANEL SUPPORT STRIPS, SIMILAR TO THOSE REQUIRED FOR CABLE TRAYS. FASTENING THE PANELS TO THE CABLE TRAYS AND CABLE TRAY SUPPORTS AS DELINEATED ABOVE WILL PREVENT THE WEIGHT OF THE PANELS FROM CONTRIBUTING TO POTENTIAL STRESS ON THE PANEL JOINTS.
84	THE CONFIGURATION OF THE ENVELOPED RACEWAYS HAS A CONCRETE BEAM ≈ 17" ABOVE THE TRAYS. THE SIDE PANELS OF THE "BOX" EXTEND UP AND ARE SEALED TO THE BEAM. A PICTURE FRAME IS INSTALLED AROUND THE PANELS SEALED TO THE BEAM. THE COVERAGE ON THE TRAYS IS THEN EXTENDED TO THE WALL TO ENCLOSE ALL ESSENTIAL THROUGH WALL SLEEVES (TWS). THIS DISTANCE FROM THE TRAYS TO THE WALL IS ≈ 11". A HILTI BOLTED PICTURE FRAME IS ALSO INSTALLED AROUND THE TWS ENCLOSURE. ALL JOINTS ON THE BOX WHICH EXTENDS TO THE BEAM ARE STITCHED TOGETHER ALONG WITH STRESS SKIN REINFORCEMENT. WHERE THE CONDUIT PENETRATES THROUGH THE TOP PANEL, THE INTERFACE IS UPGRADED WITH STRESS SKIN/MESH, TROWEL GRADE AND STAPLES. ALL GROUND CABLES ARE COVERED AND REINFORCED AS REQUIRED. ALL REMAINING UPGRADES ARE INSTALLED AS REQUIRED.
85	THE TRAY SEGMENT EXTENDS PAST THE LAST HANGER ≈ 4". BY INSTALLING A DOUBLE FLAT PANEL REINFORCEMENT EACH SIDE OF THE SUPPORT, TIGHT AGAINST THE BOTTOM OF THE TRAY, WILL PREVENT THE BOTTOM PANEL FROM SAGGING IF EXPOSED TO FIRE. TESTED CABLE TRAY CONFIGURATIONS UTILIZED THE 2" WIDE STRIPS ON EACH SIDE OF A TRAY SUPPORT TO PREVENT BOTTOM PANEL SAG WITH SUCCESS. THIS PLANT CONFIGURATION IS NO DIFFERENT AND WILL, THEREFORE, PREVENT THE ENVELOPE FROM OPENING.
86	THE SECTION OF RACEWAY IDENTIFIED IN THIS CHANGE WAS ORIGINALLY PROTECTED WITH 2 LAYERS OF 330-660 FLEXI-BLANKET. THE REQUIRED UPGRADE WAS TO ADD A THIRD LAYER, HOWEVER, OBSTRUCTIONS PROHIBITED THIS. IN LIEU OF PROVIDING FLEXI-BLANKET UPGRADE, THE FLEXI-BLANKET WAS REMOVED FROM THE MAJOR PORTION OF THIS RACEWAY AND STANDARD 330-1 CABLE TRAY PROTECTION WAS SUBSTITUTED. ALL REQUIRED CABLE TRAY REINFORCEMENT UPGRADES WERE EMPLOYED TO ENSURE ADEQUATE INSTALLATION. FIRE STOPS WERE INSTALLED AT 330-1/330-660 TRANSITION POINTS.

87	THE DIRECTION PER THIS CHANGE TRANSITIONS THE THERMO-LAG ENVELOPE FROM 330-1 TO 330-660 COVERAGE, WHERE MULTIPLE 330-660 AIR DROP BUNDLES EXIT THE END OF A CABLE TRAY BY ENCAPSULATING THE 330-660 BUNDLES IN THE 330-1 FIRESTOP. THE DEVIATION IN OVERLAP REQUIREMENTS AT BUTT JOINTS BETWEEN 330-660 LAYERS IS ACCEPTABLE AS THE AREA OF THIS DEVIATION IS ENCAPSULATED WITHIN THE FIRESTOP. THE DESIGN PROVIDED HEREIN ASSURES THE ADEQUACY OF THE THERMO-LAG ENVELOPE AT THE SUBJECT MATERIAL TRANSITION POINT. THE DIRECTION TO INSTALL TIE WIRE STITCHING IS AN ADDITIONAL ATTRIBUTE, WHICH INCREASES THE INTEGRITY OF THE JOINT, ABOVE THE REQUIRED STRESS SKIN REINFORCEMENT. THE INSTALLATION ACHIEVES THE REQUIRED MATERIAL THICKNESS AROUND THE SUBJECT CABLE AIR DROP IN AN ACCEPTABLE CONFIGURATION. OMISSION OF THE BAND REQUIRED 1 1/2" FROM THE TERMINATION OF 330-660 COVERAGE IS OFFSET BY FLARING THE 330-660 MATERIAL OUT ONTO THE TRAY'S 330-1 PANELS. THE THIRD LAYER OF 330-660 IS SECURED USING 9/16" STAPLE FASTENERS AND THEN THE MATERIAL INTERFACE IS REINFORCED. OMIT THE SKIM COAT OF 330-1 TROWEL GRADE IN A CONGESTED AREA WHERE MULTIPLE LAYERS OF REINFORCING MATERIAL ARE INSTALLED. THE LONGITUDINAL JOINTS' 330-69 STRESS SKIN IS COMPLETELY COVERED IN 330-660 TROWEL GRADE MATERIAL. THIS DEVIATION IS ISOLATED TO THE AREA WHICH IS REINFORCED WITH EITHER 330-69, SS-304 OR BOTH. THE INTEGRITY OF THE JOINTS INVOLVES IS ASSURED. THIS DCN PROVIDES DIRECTION TO INSTALL STRIPS OF 330-1 FLAT PANEL INSIDE THE TRAY ENVELOPE. THIS CHANGE PROVIDES ADDITIONAL SUPPORT ACROSS THE TRAY TOP PANEL IN THE AREA OF EXTENDED TRAY COVERAGE. THE LONGITUDINAL JOINTS ARE REINFORCED BY THE 5" MINIMUM EXTENSION OF THE AIR DROPS' SS-304 REINFORCING MATERIAL OUT FROM THE BASE OF THE AIR DROP AND ACROSS THE LONGITUDINAL JOINT.
88	THE THIRD LAYER IS ADEQUATELY FASTENED THROUGH THE USE OF STAPLES AROUND THE PERIMETER OF THE 330-660 INSTALLATION. THIS METHOD OF SECURING 330-660 MATERIAL IS COMPARABLE TO THAT USED WHEN INSTALLING A 330-660 COLLAR AS PER DETAIL 3-4A. THE INSTALLED THIRD LAYER EFFECTIVELY OVERLAPS THE PREVIOUS 330-660/330-1 MATERIAL INTERFACE JOINT. THE INSTALLATION OF SS-304 FLEXI-MESH ADEQUATELY REINFORCES THE 330-660/330-1 MATERIAL INTERFACE. THEREFORE THE REQUIREMENT FOR MATERIAL THICKNESS HAS BEEN SATISFIED AND THERE IS REASONABLE ASSURANCE THAT THE 330-660 MATERIAL IS ADEQUATELY SECURED, SUCH THAT, THE FINAL ASSEMBLY WILL PERFORM ITS DESIGN FUNCTION. THEREFORE, THIS CHANGE SHALL BE CONSIDERED ACCEPTABLE.
89	IN LIEU OF THE SS 304 MESH UPGRADES AT THE END OF TRAYS, BOTH TRAYS ARE BOXED TO THE CEILING. NEW 330-1 FLAT BOARD SIDE PANELS ARE INSTALLED FROM THE FIRST TRAY SUPPORT DOWN FROM THE CEILING AND EXTEND TO THE CEILING. THE NEWLY INSTALLED PANELS ARE MUDDED TO THE EXISTING SIDE PANELS WITH 330-1 TROWEL GRADE. THE TOP PANELS OF BOTH TRAYS HAVE BEEN TIE WIRED TO EACH THRU FLOOR CONDUIT. ALL CONCRETE ATTACHMENTS HAVE BEN REINFORCED WITH A HILTI BOLTED "PICTURE FRAME" ARRANGEMENT. THE UPGRADE DIRECTION FOR CABLE TRAY T120ABA40 PROVIDES A COMPLETELY SEALED ENVELOPE. THE END OF THE TRAY IS COVERED WITH A TYPICAL 330-1 THERMO-LAG PANEL REINFORCED WITH SS-304 MESH APPLIED JUST LIKE THE LONGITUDINAL JOINT STRESS SKIN UPGRADE. THIS INSTALLATION IS SIMILAR TO THAT OF ANY CABLE TRAY TOP PANEL OF THERMO-LAG ONLY STRONGER (GIVEN ITS ORIENTATION). SINCE LONGITUDINAL JOINT UPGRADE EFFECTIVELY REINFORCE THE LARGER TOP AND BOTTOM PANELS ON CABLE TRAYS, THIS INSTALLATION/UPGRADE WILL EFFECTIVELY REINFORCE THE END PANEL AND PROVIDE THE REQUIRED 1 HOUR FIRE RATED BARRIER.
90	WHERE THE TYPICAL TRAY SUPPORT UPGRADE CANNOT BE INSTALLED, THE INSTALLATION OF MULTIPLE PANELS, BUILT UP FROM THE WALL TO THE TRAY, WILL NOT ALLOW ANY SAGGING OR EXPANSION OF THE BOTTOM TRAY PANEL DURING A FIRE SCENARIO.

91	THE UPGRADE DIRECTION FOR THE CABLE TRAY PROVIDES FOR A COMPLETELY SEALED ENVELOPE. THE END OF THE TRAY IS COVERED WITH A TYPICAL 330-1 THERMO-LAG PANEL REINFORCED WITH SS-304 MESH APPLIED JUST LIKE THE LONGITUDINAL STRESS SKIN UPGRADE. THIS INSTALLATION IS SIMILAR TO THAT OF ANY CABLE TRAY TOP PANEL OF THERMO-LAG ONLY STRONGER (GIVEN ITS ORIENTATION). SINCE LONGITUDINAL JOINT UPGRADES EFFECTIVELY REINFORCE THE LARGER TOP AND BOTTOM PANELS ON CABLE TRAYS, THIS INSTALLATION/UPGRADE WILL EFFECTIVELY REINFORCE THE END PANEL AND PROVIDE THE REQUIRED 1 HOUR FIRE RATED BARRIER.
92	THE LENGTH OF OMITTED STRESS SKIN APPROXIMATELY 4" IS MINOR. THE INTERFACE JOINT BETWEEN THE SPLICE PLATE AND HANGER PROTECTION IS SEALED WITH 330-1 TROWEL GRADE MATERIAL DURING INSTALLATION OF THE STRESS SKIN. THE AFFECTED JOINT AREA IS SUPPORTED AND PROVIDED A LEVEL OF SHIELDING BY THE OBSTRUCTING ITEM. BASED ON THE ABOVE, THIS CHANGE SHALL BE CONSIDERED ACCEPTABLE.
93	THE REMOVAL OF THE EXISTING FIRE STOPS ALLOWS THE FLEXI-BLANKET BUNDLES TO BE LIFTED OFF THE TRAY AND ALLOWED THE THIRD LAYER UPGRADE. THE REMOVAL AND REINSTALLATION OF CABLE TRAY PROTECTION (PANELS) ALLOWED FOR THE MAJORITY OF LONGITUDINAL STRESS SKIN UPGRADES. ADDITIONALLY, THE NEW FIRE STOPS WERE TO BE POURED WITH FIRE STOP CLAMP BARS IN PLACE OR BOTTOM PANELS PRE STITCHED TO THE TRAY RAILS TO ALLEVIATE POST INSTALLATION CONCERNS.
94	THE EXISTING DESIGN OF THESE TRAYS UTILIZED A PANEL AT THE TRAY ENDS WITH FLEXI-BLANKET BUNDLES EXISTING THROUGH THE PANEL. THE TIGHT NATURE OF THE AREA REQUIRED A REWORK OF THE THERMO-LAG AT THE TRAY END TO ALLOW THE PROPER UPGRADE OF THE JOINTS BY REPOSITIONING THE BUNDLES AND INCREASING THE HEIGHT OF THE COVERAGE. THE COVERAGE ON THE TRAY ENDS WAS INCREASED IN HEIGHT ≈ 5" ON THE LAST FOOT OF TRAY. THIS ALLOWED THE USE OF A LARGER END PANEL TO ACCOMMODATE THE MESH UPGRADE. ALL JOINTS ON THE "BOX" PORTION OF TRAY COVERAGE HAVE BEEN REINFORCED WITH TIE WIRE STITCHING PLUS STRESS SKIN UPGRADE. WHERE THE FLEXI-BLANKET BUNDLES EXIT THE END OF THE TRAYS, THE 330-660/330-1 INTERFACE AREA HAS BEEN REINFORCED WITH SS 304 MESH AND TROWEL GRADE. STRESS SKIN WAS INSTALLED PRIOR TO THE TROWEL GRADE BEING APPLIED DUE TO THE CLOSE PROXIMITY OF THE WALL TO THE END OF THE TRAYS. TROWEL GRADE WAS APPLIED AND WORKED INTO THE STRESS SKIN AFTER THE STRESS SKIN WAS STAPLED DOWN. THIS DOES NOT COMPROMISE THE INTEGRITY OF THE ENVELOPE DUE TO THE PANELS BEING STITCHED TOGETHER WITH TIE WIRES IN ADDITION TO THE TYPICAL BANDING. BASED ON THE ABOVE, THIS DESIGN CHANGE SHALL BE CONSIDERED ACCEPTABLE.
95	WHERE OBSTRUCTIONS (HANGERS, TRAY SIDE RAILS, ETC.) INTERFERE WITH THIRD LAYER FLEXI-BLANKET COVERAGE, THE THIRD LAYER IS NOTCHED AND ADDITIONAL THERMO-LAG 330-1 PANELS ARE INSTALLED ON THE INTERFERING ITEM TO INCREASE THE PROTECTION AND PROVIDE A TORTUROUS FIRE PROPAGATION PATH. ADDITIONALLY, THE CABLE BUNDLES WITHIN THE FLEXI-BLANKET WRAPS ARE EACH GREATER THAN 1 1/2" DIAMETER WHICH NORMALLY WOULD NOT REQUIRE A THIRD LAYER OF FLEXI-BLANKET MATERIAL. THEREFORE, BECAUSE OF THE INTERNAL MASS OF THE CABLES AND THE ADDED THERMO-LAG MATERIAL, THESE MINOR DEVIATIONS ARE ACCEPTABLE.

96	THIS CHANGE PROVIDES INSTRUCTIONS FOR TRUNCATING THERMO-LAG THIRD LAYER COVERAGE PRIOR TO TERMINATION OF EXISTING FIRST AND SECOND LAYER COVERAGE AT THE INTERFERING CABLE TRAY COVER. IN THE AREA OF CONCERN, THE THIRD LAYER OF THERMO-LAG 330-660 COVERAGE IS OMITTED AND NO ADDITIONAL EFFORT IS NECESSARY. UPON FURTHER INSPECTION OF THE UNUSUAL INSTALLATION, (THERMO-LAG TERMINATING ABRUPTLY IN THE MIDDLE OF A ROOM), IT WAS DETERMINED THAT THERMO-LAG IS NOT REQUIRED ON THIS CABLE (AO100002). AN ADJACENT CABLE (EO100001) IN THE SAME TRAY REQUIRES THERMO-LAG COVERAGE. IT IS PRESUMED THAT THE ORIGINAL INSTALLATION INSTRUCTIONS CALLED FOR COVERAGE OF THE ENTIRE TRAY, BUT WHEN THE FLEXI-BLANKET ARRANGEMENT WAS EMPLOYED, THE NON-ESSENTIAL CABLE IDENTIFIED IN THIS CHANGE WAS ALSO COVERED. THEREFORE, BECAUSE THE THERMO-LAG IS NOT ACTUALLY REQUIRED, THIS IS NOT A DEVIATION AND A MINIMUM REDUCTION IN COVERAGE IS IRRELEVANT.
97	THE CABLE BUNDLES WITHIN THE FLEXI-BLANKET AIR DROP IS GREATER THAN 1 1/2" DIAMETER WHICH DOES NOT REQUIRE A THIRD LAYER OF FLEXI-BLANKET MATERIAL. THEREFORE, BECAUSE OF THE AIR DROP ARRANGEMENT AND THE INTERNAL MASS OF THE CABLES, THIS IS NOT A DEVIATION.
98	THIS CHANGE PROVIDES INSTRUCTION FOR ALTERNATE LONGITUDINAL JOINT AND SPLICE PLATE SEAM REINFORCEMENT APPLICATION AND AUTHORIZES STRESS SKIN OMISSIONS WHERE ALLOWABLE. IN EACH OF THE IDENTIFIED AREAS OF CONCERN AN ALTERNATE MEANS OF JOINT REINFORCEMENT IS EMPLOYED (I.E., CIRCUMFERENTIAL WRAP ON BOTH SIDES OF THE OBSTRUCTION, STRESS SKIN INSTALLED ONTO THE TRAY TOP AND BOTTOM PANELS THEN LAPPED ONTO THE SUPPORT MEMBER OR BASE PLATES AS REQUIRED, THE SIDE PANEL GAPS FILLED WITH TROWEL GRADE AND HELD IN COMPRESSION BY ADJACENT COMMODITIES) WHICH PROVIDES AN EQUIVALENT LEVEL OF PROTECTION. THE STRESS SKIN IS DESIGNED TO BE MECHANICALLY ATTACHED (STAPLED OR TIE WIRED) TO THE PANELS AS REQUIRED IN THE SPECIFICATION. THIS METHOD OF STRESS SKIN REINFORCEMENT ALONG WITH FILLING ALL VOIDS WITH THERMO-LAG MATERIAL, ELIMINATES ANY POTENTIAL HEAT PATH TO THE JOINT.
99	THIS CHANGE PROVIDES INSTRUCTIONS FOR REINFORCING THE JOINTS ON THE IDENTIFIED BOX CONFIGURATION. IN ADDITION TO THE STANDARD STRESS SKIN THAT IS REQUIRED OF ALL BOX CONFIGURATIONS, THE ONE IDENTIFIED HEREIN, WAS DISMANTLED AND REINSTALLED USING STAINLESS STEEL TIE WIRE STITCHING TO PROVIDE ADDED STRUCTURAL INTEGRITY TO THE ASSEMBLY. THE ARRANGEMENT IS FURTHER ENHANCED BY THE INSTALLATION OF A "PICTURE FRAME" WHICH PROVIDES SUPPORT AND ADHERENCE TO THE WALL. ADDITIONALLY, THIS CHANGE PROVIDES INSTRUCTION FOR ALTERNATE TRAY SUPPORT STEEL UPGRADES. WHERE THE TYPICAL SUPPORT STEEL UPGRADES COULD NOT BE INSTALLED DUE TO LIMITED SPACE AND CONGESTION, CERAMIC BANDS WERE INSTALLED WHICH WILL ADEQUATELY SUPPORT THE CABLE TRAY BOTTOM PANEL.
100	THE INTERFERING ITEMS WERE COVERED WITH STANDARD TYPICAL DETAILS OR BY "BOXING IN" THE ITEM. WHERE A BOX IS CONSTRUCTED TO ENCAPSULATE THE INTERFERING ITEM, STRESS SKIN REINFORCEMENT AND/OR STAINLESS STEEL TIE WIRE STITCHING WERE EMPLOYED TO ENSURE MECHANICAL INTEGRITY.
101	SINCE THERE IS NOT ENOUGH ROOM BETWEEN THE AIR DROPS TO ACCOMPLISH INDIVIDUAL UPGRADES, WRAPPING THE THIRD LAYER OF 330-660 FLEXI-BLANKET AROUND BOTH AIR DROPS WILL RESOLVE THE CONDITION DESCRIBED. THE ENCLOSURE OF MULTIPLE AIR DROPS IN COMMON ENVELOPE OF 330-660 FLEXI-BLANKET IS PERMITTED BY TYPICAL DETAIL DRAWINGS.
102	THERMO-LAG 330-69 STRESS SKIN MATERIAL MAY BE INSTALLED IN MULTIPLE PIECES IN ORDER TO ACHIEVE THE DESIRED SIZE AND SHAPE. WHERE A CIRCUMFERENTIAL WRAP IS REQUIRED, STRESS SKIN IS TIED TOGETHER WITH STAINLESS STEEL TIE WIRES. ALL WIRES AND STRESS SKIN ARE COVERED WITH TROWEL GRADE.

103	THE BOTTOM BOX PANEL IS STITCHED TO THE BOTTOM CABLE TRAY, AND ALL BOX ENCLOSURE PANELS ARE STITCHED TO ADJACENT PANELS WITH STAINLESS STEEL TIE WIRE IN ACCORDANCE WITH THE STITCHING REQUIREMENTS FOR 36" CABLE TRAYS. THE STITCHING IS ADDED TO THE TYPICAL STRESS SKIN JOINT UPGRADE TO AID TYPICAL FASTENING METHODS IN MAINTAINING PANEL JOINT INTEGRITY. WHERE THE BOX FRAME PANEL IS LESS THAN THE SPECIFIED 2" MINIMUM THE PANEL IS IN COMPRESSION BETWEEN THE BOX ENCLOSURE AND AN ADJACENT BASE PLATE. DEVIATIONS GREATER THAN THE SPECIFIED 4" MAXIMUM PROVIDE GREATER HILTI EDGE DISTANCE, WHICH IS A MORE CONSERVATIVE INSTALLATION THAN THAT SPECIFIED. MINOR DEVIATIONS IN HILTI BOLT SPACING WILL NOT IMPACT THE STRUCTURAL INTEGRITY OF THE ENCLOSURE BECAUSE THE ACTUAL LOAD CARRYING CAPACITY OF THE HILTI BOLTS EMPLOYED IS SIGNIFICANTLY GREATER THAN THAT APPLIED. THE RESULTING CONFIGURATION IS A BOX THAT IS COMPLETELY REINFORCED. THEREFORE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
104	THE BOTTOM PANEL JOINT IS LOCATED 3" FROM A CABLE TRAY SUPPORT, NECESSITATING A DEVIATION FROM THE REQUIREMENT TO EXTEND THE STRESS SKIN 5" MIN. BEYOND THE PANEL JOINT. THE BOTTOM PANEL LENGTH ON THE SHORT SIDE (SIDE OF THE CABLE TRAY SUPPORT) OF THE BUTT JOINT IS 3" IN LENGTH (PANEL TERMINATES AT THE SUPPORT). EXTENDING THE STRESS SKIN TO THE SUPPORT EFFECTIVELY REINFORCES THE WHOLE PANEL, AND INSTALLATION OF THE 2" REINFORCING STRIP AT THE SUPPORT SUPPORTS THE PANEL AT THE SUPPORT. THE PANEL IS THEREFORE COMPLETELY REINFORCED AND SUPPORTED. BASED ON THE ABOVE THIS CHANGE IS CONSIDERED ACCEPTABLE.
105	AN ALTERNATE MEANS OF REINFORCEMENT IS EMPLOYED ON THE VERTICAL LONGITUDINAL CABLE TRAY JOINTS (I.E., STRESS SKIN LAPPED ONTO THE TRAY TOP PANEL, THEN THE SIDE PANEL HELD IN COMPRESSION BY ADJACENT CONCRETE BEAMS) WHICH PROVIDES AN EQUIVALENT LEVEL OF PROTECTION. THE STRESS SKIN PROTECTING THE FRONT LONGITUDINAL JOINT IS DESIGNED TO BE MECHANICALLY ATTACHED (STAPLED) TO THE FRONT PANEL AND SIDE PANEL AS REQUIRED. THE REAR LONGITUDINAL JOINT REINFORCEMENT IS ACHIEVED BY COMPRESSING THE SIDE PANELS AGAINST THE ADJACENT CONCRETE BEAM AND FILLING ALL VOIDS WITH THERMO-LAG MATERIAL, THUS ELIMINATING ANY POTENTIAL HEAT PATH TO THE JOINT. AN ALTERNATE MEANS OF PROTECTION IS EMPLOYED AT THE TOP OF THE "BOX" (I.E. INSTALLING A SECONDARY ENVELOPE - WITH JOINT REINFORCEMENT - ABOVE THE EXISTING BOX) WHICH PROVIDES A REDUNDANT FIRE BARRIER IN LIEU OF LONGITUDINAL JOINT REINFORCEMENT. THE PRIMARY PURPOSE OF LONGITUDINAL JOINT REINFORCEMENT IS TO ENSURE THAT THE THERMO-LAG 330-1 PANELS DO NOT PULL APART WHEN HEATED DURING A FIRE SITUATION. INSTALLING THE SECONDARY ENVELOPE WILL REQUIRE THAT A POSTULATED FIRE BURN THROUGH A ONE HOUR BARRIER BEFORE IT CAN ATTACK THE ORIGINAL BOX CONFIGURATION.
106	WHERE THE BUTT JOINT IS LOCATED AT A HANGER, AND THE STRESS SKIN AND/OR TIE WIRES CANNOT BE CIRCUMFERENTIALLY WRAPPED AROUND THE TRAY, EXTENDING THE STRESS SKIN ONTO THE HANGER AND SECURING IT WITH STAPLES WILL REINFORCE THE BUTT JOINT AS REQUIRED. THE ADDITIONAL SIDE PANELS, WHICH ARE BEING INSTALLED DUE TO LONGITUDINAL STRESS SKIN INTERFERENCES, ARE INSTALLED AFTER THE BUTT JOINT REINFORCEMENT AND WILL HELP SECURE THE BUTT JOINT STRESS SKIN. THE NEW SIDE PANELS ARE CUT TO FIT THE CONFIGURATION OF THE TRAY AND ARE BUTTED TO THE WALL AND SEALED. THEY ARE COMPLETELY PREBUTTERED WITH 330-1 TROWEL GRADE AND BANDED IN PLACE WITH STAINLESS STEEL BANDS AND CERAMIC BANDING. THE LONGITUDINAL JOINT ON THE OUTWARD FACE IS THEN REINFORCED WITH STRESS SKIN. THE ORIGINAL LONGITUDINAL JOINT ON THE BACK SIDE OF THE TRAYS IS NOW PROTECTED DUE TO THE ADDITIONAL SIDE PANEL BLOCKING ANY FLAME IMPINGEMENT. THE LONGITUDINAL JOINT UPGRADE IS TRIMMED AROUND THE AIR DROP BUNDLES. THE REINFORCEMENT OF THE AIR DROP BUNDLES IS THEN TIED INTO THE LONGITUDINAL STRESS SKIN BY OVERLAPPING IT WITH THE MESH AND SECURING IT WITH TIE WIRES.
107	INSTALLING A DOUBLE LAYER OF 330-1 THERMO-LAG PANEL IN ORDER TO SMOOTH THE TRANSITION FROM 330-1 TO 330-660 FLEXI-BLANKET INCREASES THE LEVEL OF PROTECTION AND ALLOWS AN EASIER INSTALLATION.

108	THE FRONT AND BOTTOM PANELS WERE REMOVED, THERMO-LAG FIRE STOPS INSTALLED, AND NEW PANELS CUT AND INSTALLED. THE REINSTALLED PANELS WERE STITCHED TOGETHER ALONG WITH THE REQUIRED LONGITUDINAL STRESS SKIN AND BUTT JOINT STRESS SKIN AT THE NEW FRONT END PANEL. THE AREA AROUND THE TRAY ENDS IS REINFORCED WITH STRESS SKIN UPGRADE AS WELL AS THE GROUND CABLE COVERAGE REINFORCEMENT.
109	DEVIATING FROM STAPLE SPACING REQUIREMENTS AT THIS LOCATION IS NECESSITATED BY THE POSITIONING OF A STAINLESS STEEL SHEET METAL CLIP UNDER THE FLEXI-BLANKET MATERIAL. STAPLE SPACING REQUIREMENTS HAVE BEEN MAINTAINED FOR THE REST OF THE DISTANCE AROUND THE PERIMETER OF THE ENVELOPE. THE INCREASED DISTANCE BETWEEN STAPLES REPRESENTS A MINOR DEVIATION WITH RESPECT TO THE TOTAL REINFORCEMENT, AND WILL HAVE NO IMPACT ON THE PERFORMANCE OF THE UPGRADE IN THE EVENT OF A DESIGN BASIS FIRE. THEREFORE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
110	MOVING THE TOP PANEL END PRE-BAND FROM THE 6" MAXIMUM DISTANCE ALLOWED TO 9" MAXIMUM FROM THE PANEL END DOES NOT APPRECIABLY WEAKEN THE TOP PANEL JOINT IN QUESTION. HOWEVER, TO COMPENSATE FOR THE POTENTIAL MINOR LOSS OF STRUCTURAL RIGIDITY AT THE TOP PANEL BUTT JOINT, THE PANELS SHALL BE STITCHED TOGETHER IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED HEREIN. PANELS WILL, AS A RESULT, DERIVE ADDED SUPPORT FROM ITS NEIGHBORING PANEL, COMPENSATING FOR ANY LOSS OF SUPPORT RESULTING FROM MOVING THE BAND. BASED ON THE ABOVE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
111	THE ORIENTATION OF THE TRAY IS VERTICAL WHICH DOES NOT ALLOW AS MUCH LOADING FROM THE BOTTOM PANEL AT THE SUPPORT AREA AS WOULD A HORIZONTAL TRAY CONFIGURATION. THE CERAMIC BANDS (3) WILL REINFORCE THE BOTTOM TRAY PANEL SO AS TO SECURE THE INTERFACE JOINT. THE SUBJECT TRAY HAS LONGITUDINAL JOINT REINFORCEMENT INSTALLED, THUS HELPING TO REINFORCE THE BOTTOM PANEL/HANGER PANEL INTERFACE JOINT. BASED ON THE ABOVE, THIS DESIGN CHANGE WILL PROVIDE THE REQUIRED REINFORCEMENT TO ENSURE THE INTEGRITY OF THE ENVELOPE.
112	THE BOTTOM JOINT IS REINFORCED WITH A HILTI BOLTED PICTURE FRAME UP TO THE VERTICAL TRAY SECTION. THE ENTIRE BOTTOM PANEL OF THE AIR DROP ENCLOSURE IS PROVIDED WITH A LEVEL OF SUPPORT BY A LARGE DIAMETER, SHORT LENGTH CABLE AIR DROP IN THE MIDDLE OF THE PANEL. THREE LONGITUDINAL JOINTS OF THE BOTTOM PANEL ARE SUPPORTED AND REINFORCED WITH 330-1 TROWEL GRADE BUILDUP AND STRESS SKIN ALONG THE TOP PANEL SURFACE OF THE HORIZONTAL TRAY. THE VERTICAL TRAY PHYSICALLY SHIELDS THE 9" SECTION, WHICH IS SEALED TO THE WALL WITH A 330-1 TROWEL GRADE FILLET PER THE INITIAL THERMO-LAG INSTALLATION. THEREFORE, THERE IS REASONABLE ASSURANCE THAT THE OMISSION OF THE PICTURE FRAME PER THIS CHANGE WILL NOT SIGNIFICANTLY DIMINISH THE ENCLOSURE'S INTEGRITY AND THAT THE THERMO-LAG ENVELOPE WILL PERFORM ITS DESIGN FUNCTION.

113	THE SPACE BETWEEN THE CABLE TRAYS AND THE BOX ENCLOSURE, ALONG THE NORTH AND EAST SIDES, WHICH WOULD EXPOSE THE MATERIAL INTERFACE TO FLAME IMPINGEMENT DURING A FIRE SCENARIO IS FILLED IN ACCORDANCE WITH THIS DCN. THEREBY, CREATING A CONTINUOUS SURFACE, OF THE REQUIRED MATERIAL THICKNESS, ONTO WHICH REINFORCING MATERIAL MAY BE INSTALLED. THIS CHANGE EFFECTIVELY EXTENDS THE BOX ENCLOSURE TO THE CABLE TRAYS AND PROTECTS THE 330-1/330-660 MATERIAL INTERFACE JOINT AT THE AIR DROP. THE SPACE BETWEEN THE VERTICAL TRAY AND THE BOX ENCLOSURE, ALONG THE WEST SIDE, IS NOT FILLED DUE TO LIMITED ACCESSIBILITY. BASED ON THE CHANGES PROVIDED HEREIN TO ELIMINATE THE UNREINFORCED JOINT AREAS EXPOSURE AND THE CLOSE PROXIMITY OF THIS INSTALLATION TO A CONCRETE BARRIER, A SUFFICIENTLY TORTUROUS PATH EXISTS, SUCH THAT THE AIR DROPS MATERIAL INTERFACE WITH THE CABLE TRAYS 330-1 ENVELOPE WILL NOT SEE DIRECT FLAME IMPINGEMENT DURING A DESIGN BASIS FIRE SCENARIO. THE OMISSION OF APPROXIMATELY 10" OF STRESS SKIN REINFORCEMENT ON THE VERTICAL TRAY AT THE HANGER IS MINOR IN LENGTH AND LOCATED SUCH THAT THERE EXISTS A TORTUROUS PATH AGAINST FLAME IMPINGEMENT. THE OMISSION OF APPROXIMATELY 9" OF STRESS SKIN REINFORCEMENT OF THE VERTICAL TRAY WHERE A BOX ENCLOSURE INTERFERES WITH THE REQUIRED JOINT REINFORCEMENT IS MINOR IN LENGTH AND ADEQUATELY SUPPORTED BY ADJACENT REINFORCED JOINTS. THEREFORE, NO FURTHER EVALUATION IS REQUIRED. BASED ON THE ABOVE THIS CHANGE SHALL BE CONSIDERED ACCEPTABLE.
114	THE NORTH SIDE PANEL OF BOX ENCLOSURE ABUTS PROTRUDING ITEM COVERAGE ON SUPPORT STEEL FOR MOST OF THE LENGTH OF THE PANEL (APPROX. 1" LEFT EXPOSED AND WITHOUT REINFORCEMENT). THE RELATIONSHIP BETWEEN SIDE PANEL AND THE PROTRUDING ITEM COVERAGE IS SUCH THAT THE PROTRUDING ITEM COVERAGE PERFORMS ESSENTIALLY THE SAME FUNCTION AS THE FRAME SECTION OMITTED, IN THAT IT PROVIDES STRUCTURAL SUPPORT TO THE PROTECTIVE ENVELOPE. THE OMISSION OF STRESS SKIN REINFORCEMENT IN AREAS ADJACENT TO THE INTERFERING CABLE TRAY DOES NOT ADVERSELY AFFECT THE PERFORMANCE OF THE THERMO-LAG ENCLOSURE BECAUSE THE TOTAL AREA OF OMISSION IS MINOR IN LENGTH (4" APPROX.) INSTALLATION OF 330-1 PANELS TO SUPPORT NEXT TO THE BOX ENCLOSURE PROVIDES REINFORCEMENT OF THE FRONT PANEL AND A BASE FOR THE INSTALLATION OF STRESS SKIN UPGRADE. WHERE THERMO-LAG COVERAGE TERMINATES ON PROTRUDING ITEM CABLE TRAY, MODIFIED FIRE STOP CLAMP BARS ARE REQUIRED. COVERAGE ON THE PROTRUDING ITEM CABLE TRAY IS BOXED TO AN ADJACENT CONCRETE WALL, PRECLUDING THE INSTALLATION OF THE CLAMP BARS AS PER TYPICAL DETAILS. CLAMP BARS ARE FABRICATED FROM 3/8" FLAT STOCK. BOLTING THE MODIFIED CLAMP BAR TO THE TRAY PROVIDES PROTECTION FROM ENVELOPE FAILURE AT THE FIRE STOP AS INTENDED BY THE ORIGINAL DESIGN, SHOULD IT BE SUBJECTED TO A DESIGN BASIS FIRE. THEREFORE, THIS DESIGN CHANGE IS CONSIDERED ACCEPTABLE.
115	THE CABLE TRAY CONFIGURATION DELINEATED ON THIS DCN UTILIZES A SHIMMED TOP PANEL FOR ≈ 3' TO ALLOW AIR DROP CABLES FROM THE CONDUIT TO ENTER THE TRAY. IN ADDITION TO THE REQUIRED LONGITUDINAL JOINT REINFORCEMENT FOR THE TRAY, THE SHIMMED AREA JOINTS HAVE ALL BEEN REINFORCED WITH THE LONGITUDINAL JOINT TYPE OF UPGRADE. THE AREA WHERE THE CONDUIT ENTERS THE SHIMMED AREA IS REINFORCED WITH SS 304 MESH, TROWEL GRADE AND STAPLES. SINCE THE AREA BETWEEN THE WALL AND THE TRAY, AT THE TRAY SUPPORT, IS NOT VERY ACCESSIBLE TO LONGITUDINAL JOINT UPGRADE, AN EXTRA PANEL PIECE IS INSTALLED TOP AND BOTTOM ON THE SUPPORT TO PROTECT THE INTERFACE JOINT OF THE TRAY/SUPPORT COVERAGE. THIS IS SECURED WITH TROWEL GRADE APPLIED TO THE STRESS SKIN SIDE OF THE PANEL, BANDING IN PLACE, REINFORCING THE ACCESSIBLE JOINTS WITH STRESS SKIN, TROWEL GRADE AND STAPLES, AND PLACING AN EXTRA LARGE FILLET OF TROWEL GRADE AT ALL INTERFACES.

116	FILLING THE GAP BETWEEN THE JUNCTION BOX AND THE PROTRUDING ITEM COVERAGE WITH TROWEL GRADE MATERIAL IN SUFFICIENT QUANTITY AS TO ENSURE 1/2" MINIMUM MATERIAL THICKNESS AT CURE PROTECTS THE INACCESSIBLE JOINT IN THE JUNCTION BOX ENCLOSURE FROM FIRE IMPINGEMENT BY ESTABLISHING A 1 HOUR FIRE BARRIER AT THE GAP OPENING. THE APPLICATION OF STRESS SKIN OVER THIS AREA (ONTO BOTH COMMODITIES) PROVIDES SUFFICIENT REINFORCEMENT TO THE AREA. THE RESULTING CONFIGURATION IS THEREFORE, ACCEPTABLE.
117	THE INSTALLATION OF ADDITIONAL THERMO-LAG SIDE PANELS PROVIDE FOR THE PROTECTION OF THE LONGITUDINAL JOINTS. EACH PANEL IS COMPLETELY PRE-BUTTERED WITH 330-1 TROWEL GRADE ON THE STRESS SKIN SIDE AND BANDED IN PLACE. 330-69 STRESS SKIN IS THEN INSTALLED OVER THE LONGITUDINAL JOINTS AND EXTENDED TO THE WALL, THUS PROVIDING A MORE THAN ADEQUATE LONGITUDINAL JOINT REINFORCEMENT. THE USE OF 330-70 CERAMIC FIBER AND 330-1 TROWEL GRADE AT THE AREA WHERE A TRAY PREVENTS AN ADDITIONAL PANEL FROM BEING INSTALLED WILL PROVIDE THE REQUIRED PROTECTION OF THIS SMALL AREA OF THE LONGITUDINAL JOINT DUE TO ITS BEING HELD IN PLACE BY THE CERAMIC BAND AND STRESS SKIN REINFORCEMENT. REPLACEMENT OF EXISTING SPLICE PLATE COVERS WITH THE ADDITIONAL SIDE PANELS PROVIDES THE SAME LEVEL OF PROTECTION AS WAS ORIGINALLY INSTALLED. THE ADDITIONAL SIDE PANELS INSTALLED ON THE TRAYS ARE FINISHED OFF BY INSTALLED A MODIFIED PICTURE FRAME AT THE HORIZONTAL RUN OF THE TRAY EXTENDING AND SECURED TO THE WALL WITH HILTI BOLTS. WHERE THE ORIGINAL SIDE PANELS ABUT TO A PROTECTED SUPPORT, THE LONGITUDINAL JOINT REINFORCEMENT IS INSTALLED AND LAPPED ONTO THE SUPPORT. THIS WILL PROVIDE THE REQUIRED REINFORCEMENT OF THE LONGITUDINAL JOINT AT THESE AREAS.
118	THE INSTALLATION OF A SECOND LAYER OF THERMO-LAG 330-1, BUTTED TO THE CONCRETE WALL, SHIELDS THE INACCESSIBLE LONGITUDINAL JOINT FROM DIRECT FLAME IMPINGEMENT AND POSSIBLE JOINT DEGRADATION. THE SECOND LAYER OF THERMO-LAG 330-1 EFFECTIVELY PERFORMS A SECOND ONE HOUR FIRE BARRIER BETWEEN THE SUBJECT JOINT AND POTENTIAL FLAME SOURCES.
119	LAPPING THE STRESS SKIN REINFORCEMENT ONTO THE INTERFERING ITEMS IN ACCORDANCE WITH THE REQUIREMENTS OF DCN-6943, R/3, IS AN ACCEPTABLE MEANS OF REINFORCING THE LONGITUDINAL JOINT IN QUESTION. PACKING THE AREA BETWEEN THE INTERFERENCE AND SUBJECT CABLE TRAY PROVIDES CONTINUITY IN THE SURFACE RECEIVING STRESS SKIN, WHILE PROVIDING ADDITIONAL PROTECTION TO THE JOINT FROM FLAME IMPINGEMENT. BASED ON THE ABOVE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
120	THE DEVIATIONS IN FRAME WIDTH AND/OR THICKNESS AND HILTI BOLT PLACEMENT ARE MINOR AND ARE MORE CONSERVATIVE (I.E., LARGER FRAME & GREATER HILTI EDGE DISTANCE) THAN THE TOLERANCE PROVIDED BY THE CURRENT DESIGN.
121	THE WEST PANEL OF THE BOX ENCLOSURE (APPROX. 4.5" X 33") IS MOUNTED IN COMPRESSION BETWEEN THE ESSENTIAL CABLE TRAY ENVELOPE AND THE CONCRETE CEILING. THE DISTANCE BETWEEN THE TRAY AND CEILING IS APPROXIMATELY 4.5". REINFORCEMENT OF THE WEST PANEL OF THE ENCLOSURE IS ACCOMPLISHED BY INSTALLING STRESS SKIN AT ALL THERMO-LAG-TO-THERMO-LAG PANEL JOINTS AND THE INSTALLATION OF A THERMO-LAG TROWEL GRADE FILLET AT THE 330-1 PANEL/CEILING INTERFACE. THIS REINFORCEMENT IN CONJUNCTION WITH THE SHORT DISTANCE THIS PANEL SPANS BETWEEN THE CABLE TRAY AND CEILING, AND THE SUPPORT PROVIDED TO THE PANEL BY INSTALLING IT IN COMPRESSION COMPENSATES FOR THE OMISSION OF THE BOX FRAME IN THIS LOCATION.

122	THE ORIENTATION OF THE TRAY IS VERTICAL WHICH DOES NOT ALLOW AS MUCH LOADING FROM THE BOTTOM PANEL AT THE SUPPORT AREA AS WOULD A HORIZONTAL TRAY CONFIGURATION. THE REINFORCING PANELS ARE SECURED TO THE SUPPORT COVERAGE USING 330-1 TROWEL GRADE AND BANDING. THE LOCATION OF THIS ARRANGEMENT IS AGAINST THE CONCRETE STRUCTURE WHICH PROVIDES SHIELDING OF DIRECT FLAME IMPINGEMENT AND THERMAL MASS. BASED ON THE ABOVE, THIS DESIGN CHANGE WILL PROVIDE THE REQUIRED REINFORCEMENT TO ENSURE THE INTEGRITY OF THE ENVELOPE.
123	AN ALTERNATE MEANS OF REINFORCEMENT IS EMPLOYED ON THE VERTICAL LONGITUDINAL CABLE TRAY JOINTS (I.E., STRESS SKIN LAPPED ONTO THE TRAY TOP PANEL, THEN THE SIDE PANEL HELD IN COMPRESSION BY ADJACENT CONCRETE BEAMS) WHICH PROVIDES AN EQUIVALENT LEVEL OF PROTECTION. THE STRESS SKIN PROTECTED THE FRONT LONGITUDINAL JOINT IS DESIGNED TO BE MECHANICALLY ATTACHED (STAPLED) TO THE FRONT PANEL AND SIDE PANEL AS REQUIRED. THE REAR LONGITUDINAL JOINT REINFORCEMENT IS ACHIEVED BY COMPRESSING THE SIDE PANELS AGAINST THE ADJACENT CONCRETE BEAM AND FILLING ALL VOIDS WITH THERMO-LAG MATERIAL, THUS ELIMINATING ANY POTENTIAL HEAT PATH TO THE JOINT.
124	LAPPING THE STRESS SKIN REINFORCEMENT ONTO THE CABLE TRAY TOP PANEL IN CONJUNCTION WITH AN INCREASE IN STRESS SKIN WIDTH ACROSS THE PANEL AND SUPPORT, PROVIDES SUFFICIENT AREA TO SECURELY ATTACH THE STRESS SKIN TO THE CABLE TRAY ENVELOPE. THE RESULTING CONFIGURATION PROVIDES THE INTENDED REINFORCEMENT OF THE BUTT JOINT AT THE SUPPORT STEEL. CONTINUITY OF THE LONGITUDINAL REINFORCEMENT IS ACHIEVED BY EXTENDING THE SS-304 WIRE MESH UPGRADE AT THE TWO CONDUITS OUT ONTO THE CABLE TRAY COVERAGE, OVERLAPPING THE LONGITUDINAL STRESS SKIN. BASED ON THE ABOVE, THIS CHANGE IS CONSIDERED ACCEPTABLE.
125	THE DEVIATIONS IN LONGITUDINAL STRESS SKIN ARE LOCATED ON THE TOP OF THE SUBJECT CABLE TRAY, AND ALL EXPOSED LONGITUDINAL JOINTS ARE REINFORCED WITH STRESS SKIN IN ACCORDANCE WITH CURRENT DESIGN REQUIREMENTS. THE RESULTING CONFIGURATION IS SUCH THAT ALL LONGITUDINAL JOINTS ARE EITHER REINFORCED/UPGRADED, OR EFFECTIVELY SHIELDED FROM DIRECT FLAME IMPINGEMENT BY OTHER PROTECTED COMMODITIES. THEREFORE, THIS DESIGN CHANGE SHALL BE CONSIDERED ACCEPTABLE.
126	WHEN THE 330-660 FLEXI-BLANKET IS INSTALLED ON THE FLEX CONDUIT UP TO THE FLEX RETAINER NUT AND SECURED WITH BANDS, AN ADEQUATE THERMAL BARRIER IS ACHIEVED. THE INSTALLATION OF 330-1 CONDUIT HALF ROUNDS OVER THE FLEXI-BLANKET AT THE RETAINER NUT LOCATION PROVIDES AN ADDITIONAL LEVEL OF PROTECTION. INCREASING THE DIMENSIONS OF THE THERMO-LAG "BOX" ENCLOSURE ENCAPSULATING THE JUNCTION BOX CREATES A LARGER OVERLAP ONTO THE CONDUIT SECTIONS AND RESULTS IN A BENEFICIAL INCREASE IN THE INTERNAL AIR VOLUME OF THE BOX ENCLOSURE.

ATTACHMENT L
AFFECTED DOCUMENT UPDATE REPORTS

DMSPDR100.R01
DATE : 05/23/94
PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
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DATE : 05/23/94
PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT-UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
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DCA	089752	000	APP	D	NI				RES

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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
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PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT	NOTE
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~~DCA~~	~~092841~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092876	000	APP	D	NI			J	
DCA	092935	000	APP	D	NI			J	
DCA	092971	000	APP	D	NI			H	

DMSPDR100.R01
DATE : 05/23/94
PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT-UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	092977	000	APP	D	NI			J	
DCA	092988	001	APP	D	NI				SUPERS
DCA	093005	000	APP	D	NI			I	
DCA	093025	000	APP	D	NI			J	
DCA	093093	000	APP	D	NI			I	
~~DCA~~	~~093169~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	093169	001	APP	D	NI			H	
DCA	093240	000	APP	D	NI			I	
DCA	099501	000	APP	D	NI				
DCA	101182	000	APP	D	NI				
DCA	101282	001	APP	D	NI				
DCA	101397	000	APP	D	NI				
DCA	101399	000	APP	D	NI				
DCA	101434	000	APP	D	NI				
DCA	101435	000	APP	D	NI				
DCA	101498	001	APP	D	NI				
DCA	101707	000	APP	D	NI				
DCA	101708	000	APP	D	NI				
DCA	101884	000	APP	D	NI				
DCA	101885	000	APP	D	NI				
DCA	101886	000	APP	D	NI				
DCA	101887	000	APP	D	NI				
DCA	101888	000	APP	D	NI				
DCA	101891	000	APP	D	NI				
DCA	102077	001	APP	D	NI				
DCA	102078	000	APP	D	NI				
DCA	102103	000	APP	D	NI				
DCA	102160	001	APP	D	NI				
DCA	102222	001	APP	I	NI				
DCA	102266	000	APP	D	NI				
DCA	102300	000	APP	D	NI				
DCA	102330	001	APP	D	NI				
DCA	102385	001	APP	D	NI				
DCA	102465	000	APP	D	NI				
DCA	102478	001	APP	D	NI				
DCA	102533	000	APP	D	NI				
DCA	102563	000	APP	D	NI				
DCA	102679	001	APP	D	NI				
DCA	102709	000	APP	I	NI				
DCA	102728	000	APP	D	NI				
DCA	102758	000	APP	D	NI				
DCA	102789	001	APP	D	NI				
DCA	102800	002	APP	D	NI				
DCA	102837	000	APP	D	NI				
DCA	102858	000	APP	D	NI				

SEE ATTACHMENT A

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PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	102863	001	APP	D	NI				
DCA	102886	000	APP	D	NI				
DCA	102915	000	APP	D	NI				
DCA	102932	005	APP	D	NI				
DCA	102957	000	APP	D	NI				
DCA	103007	001	APP	D	NI				
DCA	103013	006	APP	D	NI				
DCA	103037	000	APP	D	NI				
DCA	103046	002	APP	D	NI				
DCA	103050	000	APP	D	NI				
DCA	103056	001	APP	D	NI				
DCA	103076	001	APP	D	NI				
DCA	103081	001	APP	D	NI				
DCA	103088	000	APP	D	NI				
DCA	103131	001	APP	D	NI				
DCA	103143	000	APP	D	NI				
DCA	103157	000	APP	D	NI				
DCA	103158	000	APP	D	NI				
DCA	103159	000	APP	D	NI				
DCA	103161	000	APP	D	NI				
DCA	103189	002	APP	D	NI				
DCA	103305	001	APP	D	NI				
DCA	103375	000	APP	D	NI				
DCA	103409	005	APP	D	NI				
DCA	103414	001	APP	D	NI				
DCA	103423	000	APP	D	NI				
DCA	103476	001	APP	D	NI				
DCA	103488	000	APP	D	NI				
DCA	103507	000	APP	I	NI				
DCA	103508	000	APP	D	NI				
DCA	103533	000	APP	D	NI				
DCA	103550	001	APP	D	NI				
DCA	103559	000	APP	D	NI				
DCA	103567	001	APP	D	NI				
DCA	103574	001	APP	D	NI				
DCA	103582	000	APP	D	NI				
DCA	103599	000	APP	D	NI				
DCA	103600	002	APP	D	NI				
DCA	103602	000	APP	D	NI				
DCA	103609	000	APP	D	NI				
DCA	103613	000	APP	D	NI				
DCA	103631	000	APP	I	NI				
DCA	103633	000	APP	D	NI				
DCA	103634	002	APP	D	NI				
DCA	103636	000	APP	D	NI				

SEE ATTACHMENT A

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DATE : 05/23/94
PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT-UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	STATUS REV	DOC	REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	103650	000	APP	D	NI				
DCA	103680	001	APP	D	NI				
DCA	103701	000	APP	D	NI				
DCA	103706	001	APP	D	NI				
DCA	103718	001	APP	D	NI				
DCA	103721	001	APP	D	NI				
DCA	103730	000	APP	D	NI				
DCA	103740	001	APP	D	NI				
DCA	103741	000	APP	D	NI				
DCA	103770	000	APP	D	NI				
DCA	103780	000	APP	D	NI				
DCA	103792	000	APP	D	NI				
DCA	103799	000	APP	D	NI				
DCA	103816	000	APP	D	NI				
DCA	103824	000	APP	D	NI				
DCA	103846	001	APP	D	NI				
DCA	103864	000	APP	D	NI				
DCA	103873	000	APP	D	NI				
DCA	103884	001	APP	D	NI				
DCA	103892	001	APP	D	NI				
DCA	103912	000	APP	D	NI				
DCA	103917	000	APP	D	NI				
DCA	103924	000	APP	D	NI				
DCA	103947	000	APP	D	NI				
DCA	103959	000	APP	D	NI				
DCA	103988	000	APP	D	NI				
DCA	103991	000	APP	D	NI				
DCA	104011	001	APP	D	NI				
DCA	104013	000	APP	D	NI				
DCA	104017	001	APP	D	NI				
DCA	104026	001	APP	D	NI				
DCA	104027	000	APP	D	NI				
DCA	104037	001	APP	D	NI				
DCA	104057	000	APP	D	NI				
DCA	104060	000	APP	D	NI				
DCA	104073	000	APP	D	NI				
DCA	104079	001	APP	D	NI				
DCA	104087	000	APP	D	NI				
DCA	104096	000	APP	D	NI				
DCA	104107	000	APP	D	NI				
DCA	104114	000	APP	D	NI				
DCA	104115	000	APP	D	NI				
DCA	104124	000	APP	D	NI				
DCA	104131	000	APP	D	NI				
DCA	104132	000	APP	D	NI				

SEE ATTACHMENT A

DATE : 05/23/94
PLANT : CPS

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY DCD TYPE, NUMBER, REVISION

PUR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

DCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	104174	001	APP	D	NI				
DCA	104188	000	APP	D	NI				
DCA	104194	000	APP	D	NI				
DCA	104205	000	APP	D	NI				
DCA	104206	000	APP	D	NI				
DCA	104211	000	APP	D	NI				
DCA	104217	002	APP	D	NI				
DCA	104222	003	APP	D	NI				
DCA	104224	000	APP	D	NI				
DCA	104227	000	APP	D	NI				
DCA	104234	000	APP	D	NI				
DCA	104235	003	APP	D	NI				
DCA	104237	000	APP	D	NI				
DCA	104238	000	APP	D	NI				
DCA	104239	000	APP	D	NI				
DCA	104240	000	APP	D	NI				
DCA	104241	001	APP	I	NI				
DCA	104242	000	APP	D	NI				
DCA	104243	000	APP	D	NI				
DCA	104244	000	APP	D	NI				
DCA	104250	000	APP	D	NI				
DCA	104252	000	APP	D	NI				
DCA	104254	000	APP	D	NI				
DCA	104255	000	APP	D	NI				
DCA	104260	000	APP	D	NI				
DCA	104262	000	APP	D	NI				
DCN	000687	000	APP	D	NI	DM	90-0057	———	SUPERS.
~~DCN~~	~~001243~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCN	001243	001	APP	D	03			———	NO DEV.
DCN	003581	000	APP	D	NI			———	RES
DCN	004305	001	APP	A	NI	MM	92-0263	H	
~~DCN~~	~~004871~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	004871	002	APP	MR	4	DM	92-0077	K	
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	NI	MM	92-0439	———	NO DEV
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440	———	NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DNE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437	———	NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438	———	NO DEV.

SEE ATTACHMENT A

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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCN	005727	000	APP	A	NI	MM	93-0124		ATT. A
DCN	006047	000	APP	D	NI				NO DEV
DCN	006105	000	APP	MR	NI	ONE	92-1520		NO DEV.
DCN	006133	000	APP	D	NI				NO DEV.
~~DCN~~	~~006830~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006830~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006830	002	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006831~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006831~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006831~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006831~~	~~003~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006831	004	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006832~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006832	001	APP	MR	NI	DM	92-0077	K	
DCN	006833	000	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006909~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006909	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006910~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006910~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006910	002	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006911~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006911~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006911	002	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006912~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006912	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006913~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006913	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006914~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006914	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006915~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006915~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006915	002	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006916~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006916	001	APP	MR	NI	DM	92-0077	K	
DCN	006937	000	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006980~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006980	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006981~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006981	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006982~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006982	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006983~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006983	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006984~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006984	001	APP	MR	NI	DM	92-0077	K	

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DATE : 05/23/94
PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
~~DCN~~	~~006985~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006985	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006986~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006986	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006987~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006987	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006988~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006988	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006989~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006989	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006990~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006990	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006991~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006991	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006992~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006992	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006993~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006993	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006994~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006994	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006995~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006995	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~006996~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006996	001	APP	MR	NI	DM	92-0077	K	
DCN	007077	000	APP	MR	NI	DM	92-0077	K	
DCN	007078	000	APP	MR	NI	DM	92-0077	K	
DCN	007437	004	APP	MR	NI	ONE	93-2046	H	
~~DCN~~	~~007444~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	007444	001	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~007649~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCN	007649	001	APP	A	Y				NO DEV.
NCR	88-03772	000	APP	D	NI				NO DEV.
NCR	88-10413	000	APP	D	NI				NO DEV
NCR	88-12990	001	APP	I	NI				RES
NCR	89-03584	001	APP	D	NI				NO DEV
NCR	89-03680	000	APP	D	NI				NO DEV
NCR	89-05610	000	APP	D	NI				NO DEV
NCR	89-05613	000	APP	D	NI				NO DEV
NCR	89-07840	003	APP	D	NI				RES
NCR	89-08569	000	APP	D	NI				NO DEV
NCR	89-08602	000	APP	D	NI				NO DEV
NCR	89-08867	000	APP	D	NI				NO DEV
NCR	89-10940	000	APP	D	NI				NO DEV
NCR	89-10957	000	APP	D	NI				RES
~~NCR~~	~~89-11534~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				

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PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT-UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : TSMS NUMBER : 2323-MS-038H
SHEET : REV : 4

MAINTENANCE LEVEL : S2 PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
NCR	89-11534	002	APP	D	NI				NO DEV.
~~NCR~~	~~89-11507~~	~~000~~	~~REV~~	~~C~~	~~SNI~~				
NCR	89-11587	001	APP	D	NI				NO DEV.
~~NCR~~	~~89-11600~~	~~000~~	~~REV~~	~~C~~	~~SNI~~				
NCR	89-11600	001	APP	D	NI				NO DEV.
NCR	89-11786	000	APP	D	NI				NO DEV.
NCR	90-00502	000	APP	D	NI				NA
TUE	92-05683	000	APP	D	NI				
TUE	92-05877	000	APP	D	NI				
TUE	92-06315	000	APP	D	NI				
TUE	92-06560	000	APP	D	NI				
TUE	92-06572	000	APP	D	NI				
TUE	92-06590	002	APP	D	NI				
TUE	92-06613	002	APP	D	NI				
TUE	92-07065	000	APP	D	NI				

SEE ATTACHMENT A

TOTAL ALL DESIGN CHANGE DOCUMENTS : 420

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

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DATE: 1994-05-23
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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : A REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

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DATE: 1994-05-23
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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : A1 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

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DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : B REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : C REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 01 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : D REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP3C2.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : E REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : E1 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 001 REV: CP4

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	REL	INCORP STATUS	DESIGN MOD TYPE	NUMBER	REPORT ATT.	NOTE
DCA	083656	000	APP	D	CP2			G	
DCA	084863	000	APP	D	RNI			J	
DCA	084868	000	APP	D	RNI			I	
~~DCA~~	~~086183~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~086183~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	086183	003	APP	D	CP2			G	
DCA	088660	001	APP	D	RNI			I	
DCA	091146	001	APP	D	RNI			H	
DCA	091416	000	APP	D	RNI			H	
DCA	092007	000	APP	D	RNI			J	
~~DCA~~	~~092160~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092168	001	APP	D	RNI			J	
DCA	092200	000	APP	D	RNI			H	
~~DCA~~	~~092265~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092205	001	APP	D	RNI			H	
~~DCA~~	~~092317~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092317	001	APP	D	RNI			G	
~~DCA~~	~~092585~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~092585~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092585	002	APP	D	RNI			H	
~~DCA~~	~~092665~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~092665~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092665	002	APP	D	RNI			J	
~~DCA~~	~~092683~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092732	000	APP	D	RNI			G	
DCA	092771	000	APP	D	CP2			G	
DCA	092876	000	APP	D	RNI			J	
DCA	093008	000	APP	D	RNI			J	
~~DCA~~	~~093164~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	102265	000	APP	D	NI				
DCA	102466	000	APP	D	NI				
DCA	102470	000	APP	D	NI				
DCA	102750	000	APP	D	NI				
DCA	102758	000	APP	D	NI				
DCA	102789	001	APP	D	NI				
DCA	102837	000	APP	D	NI				
DCA	102859	000	APP	D	NI				
DCA	102884	001	APP	D	NI				
DCA	102886	000	APP	D	NI				
DCA	102894	000	APP	I	NI				
DCA	102915	000	APP	D	NI				
DCA	103034	001	APP	D	NI				
DCA	103559	000	APP	D	NI				
DCA	103735	000	APP	D	NI				
DCA	103924	000	APP	D	NI				
DCA	104001	000	APP	D	NI				

SEE ATTACHMENT A

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 001 REV: CP4

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	104079	001	APP	D	NI				
DCA	104185	000	APP	D	NI				
DCA	104189	000	APP	D	NI				
DCA	104221	000	APP	D	NI				
DCA	104222	003	APP	D	NI				
DCA	104227	000	APP	D	NI				
DCA	104256	000	APP	D	NI				
DCA	104259	000	APP	D	NI				
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439		NO DEV
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440		NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DNE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437		NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438		NO DEV.
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP4	DM	92-0077	G	
DCN	007761	000	APP	MR	RNI	DM	92-0077	K	
DCN	007915	000	APP	A	NI				

SEE ATTACHMENT A

TOTAL ALL DESIGN CHANGE DOCUMENTS : 72

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 001A REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS RFL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

DMSPDR100.R01
DATE : 05/23/94
PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER : M1-1701
SHEET : 002 REV : CP4

MAINTENANCE LEVEL : NA PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
~~DCA~~	~~083342~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~083342~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~083342~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
DCA	083342	003	APP	D	CP2			H	
DCA	083656	000	APP	D	CP2			G	
~~DCA~~	~~084505~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
DCA	084505	004	APP	D	CP2			G	
DCA	084682	000	APP	D	RNI			H	
DCA	084866	000	APP	D	RNI			H	
DCA	086095	000	APP	D	RNI			I	
~~DCA~~	~~086183~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	086183	003	APP	D	CP2			G	
~~DCA~~	~~087040~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	087040	001	APP	D	CP2			G	
DCA	092555	000	APP	D	RNI			H	
DCA	092771	000	APP	D	CP2			G	
DCA	092839	000	APP	D	RNI			I	
DCA	101320	003	APP	D	NI				
DCA	101627	002	APP	D	NI				
DCA	102385	001	APP	D	NI				
DCA	102479	001	APP	D	NI				
DCA	103002	000	APP	D	NI				
DCA	103847	000	APP	D	NI				
DCA	103884	001	APP	D	NI				
DCA	104013	000	APP	D	NI				
DCA	104026	001	APP	D	NI				
DCA	104079	001	APP	D	NI				
DCA	104245	000	APP	D	NI				
DCA	104251	000	APP	D	NI				
DCA	104253	000	APP	D	NI				
DCA	104257	001	APP	D	NI				
DCN	000687	000	APP	D	RNI	DM	90-0057		NO DEV.
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439		NO DEV.
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440		NO DEV
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DNE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437		NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		

SEE ATTACHMENT A

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 002 REV: CP4

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCN	005742	001	APP	A	NI	MM	93-0125	———	ATT. A
DCN	005745	001	APP	A	NI	MM	93-0123	———	ATT. A
DCN	005746	001	APP	D	NI	MM	93-0126	———	ATT A
~~DCN~~	~~006949~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006949~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP4	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 53

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 002A REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 003 REV: CP3

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCCRP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
~~DCA~~	~~086183~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~086183~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
DCA	086183	003	APP	D	CP2			G	
DCA	087918	000	APP	D	RNI			I	
~~DCA~~	~~091235~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	091235	001	APP	D	NA			H	
~~DCA~~	~~092214~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092214	001	APP	D	RNI			I	
~~DCA~~	~~092588~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092588	002	APP	D	RNI			H	
DCA	092612	000	APP	D	RNI				SUPERS.
DCA	092730	000	APP	D	RNI				SUPERS.
DCA	092771	000	APP	D	CP2			G	
DCA	093108	000	APP	D	RNI			J	
DCA	102479	001	APP	D	NI				
DCA	102679	001	APP	D	NI				
DCA	103489	001	APP	D	NI				
DCA	103550	001	APP	D	NI				
DCA	103681	001	APP	D	NI				
DCA	103809	000	APP	D	NI				
DCA	104047	000	APP	D	NI				
DCA	104048	000	APP	D	NI				
DCA	104257	001	APP	D	NI				
DCA	104261	000	APP	D	NI				
DCA	104264	000	APP	D	NI				
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~B~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439		NO DEV.
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~B~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~B~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440		NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~B~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~B~~	~~SNI~~	~~ONE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~B~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437		NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~B~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~B~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438		NO DEV.
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~B~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~B~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~B~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP3	DM	92-0077	G	
~~DCN~~	~~007380~~	~~000~~	~~REV~~	~~B~~	~~SNI~~	~~ONE~~	~~93-2461~~		
~~DCN~~	~~007380~~	~~001~~	~~REV~~	~~B~~	~~SNI~~	~~ONE~~	~~93-2461~~		
~~DCN~~	~~007380~~	~~002~~	~~REV~~	~~B~~	~~SNI~~	~~ONE~~	~~94-0186~~		
~~DCN~~	~~007380~~	~~003~~	~~REV~~	~~B~~	~~SNI~~	~~ONE~~	~~94-0311~~		
DCN	007380	004	APP	MR	NI	ONE	94-0311		

SEE ATTACHMENT A

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 003 REV: CP3

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	CCD NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE

TOTAL ALL DESIGN CHANGE DOCUMENTS : 46

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 003A REV: CP2

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCA	086183	003	APP	D	CP1			G	
DCA	091235	001	APP	D	CP1			G	
DCA	092771	000	APP	D	CP1			G	
DCA	103081	001	APP	D	RNI			——	Att A
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~CNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439	——	NO DEV.
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~CNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~CNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440	——	NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~CNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~CNI~~	~~DWE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~CNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437	——	NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~CNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~CNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438	——	NO DEV.
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~CNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~CNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~CNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP2	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 20

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 003B REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS RFL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	102932	005	APP	D	NI				
DCA	103305	001	APP	D	NI				
DCA	103472	001	APP	D	NI				
DCA	103855	001	APP	D	NI				
DCA	103860	000	APP	D	NI				
DCA	103912	000	APP	D	NI				
DCA	104037	001	APP	D	NI				
DCA	104117	000	APP	D	NI				
DCA	104173	000	APP	D	NI				
DCA	104180	000	APP	D	NI				
DCA	104186	000	APP	D	NI				
DCA	104223	000	APP	D	NI				
DCA	104226	000	APP	D	NI				
DCA	104248	001	APP	D	NI				
DCA	104255	000	APP	D	NI				
DCA	104263	000	APP	D	NI				
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

SEE ATTACHMENT A

TOTAL ALL DESIGN CHANGE DOCUMENTS : 17

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 003C REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 0030 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 003E REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
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CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 003F REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 004 REV: CP3

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
~~DCA~~	~~079272~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~003~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~004~~	~~REV~~	~~D~~	~~SNI~~				
DCA	079272	006	APP	D	NA			G	
~~DCA~~	~~081259~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~081259~~	~~001~~	~~VOI~~	~~D~~	~~VNI~~				
DCA	083656	000	APP	D	CP2			G	
~~DCA~~	~~084505~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~003~~	~~REV~~	~~D~~	~~SNI~~				
DCA	084505	004	APP	D	NA			G	
~~DCA~~	~~086103~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~087040~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	087040	001	APP	D	CP2			G	
DCA	091026	000	APP	D	CP2			G	
DCA	091985	000	APP	D	RNI			I	
DCA	092134	000	APP	D	RNI			I	
DCA	092260	000	APP	D	NA			G	
DCA	092515	000	APP	D	RNI			H	
DCA	092536	000	APP	D	RNI			I	
~~DCA~~	~~092556~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092556	001	APP	D	RNI			H	
~~DCA~~	~~092564~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092564	001	APP	D	RNI			I	
DCA	092584	000	APP	D	RNI			G	
~~DCA~~	~~092586~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~092586~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092586	002	APP	D	RNI			H	
DCA	092731	000	APP	D	RNI			I	
DCA	092771	000	APP	D	CP2			G	
DCA	093059	000	APP	D	RNI			H	
DCA	101320	003	APP	D	NI				
DCA	102330	001	APP	D	NI				
DCA	102725	000	APP	D	NI				
DCA	102780	001	APP	D	NI				
DCA	102861	001	APP	D	NI				
DCA	103001	000	APP	D	NI				
DCA	103864	000	APP	D	NI				
DCA	103947	000	APP	D	NI				
DCA	104027	000	APP	D	NI				
DCA	104217	002	APP	D	NI				
DCA	104254	000	APP	D	NI				
DCA	104265	000	APP	D	NI				

SEE ATTACHMENT A

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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 004 REV: CP3

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
~~DCN~~	~~004871~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	004871	002	APP	MR	RNI	DM	92-0077	K	
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439	——	NO DEV.
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440	——	NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DME~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437	——	NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438	——	NO DEV.
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP3	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 64

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

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DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMSER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 004A REV: CP2

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	079272	006	APP	D	CP1			G	
DCA	084505	004	APP	D	CP1			G	
DCA	087040	001	APP	D	CP1			G	
DCA	091026	000	APP	D	CP1			G	
DCA	092260	000	APP	D	CP1			G	
DCA	092771	000	APP	D	CP1			G	
~~DCN~~	~~004871~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	004871	002	APP	MR	RNI	DM	92-0077	K	
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	NI	MM	92-0439	——	NO DEV.
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440	——	NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437	——	NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438	——	NO DEV.
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP2	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 24

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DBMEC NUMBER: M1-1701
SHEET : 004B REV: CP2

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
~~DCN~~	~~004871~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	004871	002	APP	MR	RNI	DM	92-0077	K	
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	NI	MM	92-0439	——	NO DEV
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440	——	NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DME~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437	——	NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438	——	NO DEV.
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP2	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 18

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

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DATE: 1994-05-23
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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 005 REV: CP4

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
~~DCA~~	~~079272~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~003~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~004~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~079272~~	~~005~~	~~REV~~	~~D~~	~~SNI~~				
DCA	079272	006	APP	D	CP2			G	
~~DCA~~	~~081631~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~084505~~	~~003~~	~~REV~~	~~D~~	~~SNI~~				
DCA	084505	004	APP	D	CP2			G	
~~DCA~~	~~084871~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	084871	001	APP	D	RNI			I	
~~DCA~~	~~085079~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	085079	001	APP	D	RNI			I	
DCA	087594	000	APP	D	RNI			G	
DCA	088583	000	APP	D	RNI			I	
~~DCA~~	~~088584~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	088584	001	APP	D	RNI			I	
DCA	089513	000	APP	D	RNI			H	
DCA	089855	000	APP	D	RNI			H	
~~DCA~~	~~089856~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~089856~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~089856~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
DCA	089856	003	APP	D	RNI			———	SUPERS.
DCA	089858	001	APP	D	RNI			H	
~~DCA~~	~~089860~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	089860	002	APP	D	RNI			G	
~~DCA~~	~~089993~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~089993~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
DCA	089993	003	APP	D	RNI			H	
DCA	090222	000	APP	D	RNI			G	
DCA	090227	000	APP	D	RNI			I	
~~DCA~~	~~091295~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	091235	001	APP	D	RNI			H	
~~DCA~~	~~091631~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	091631	001	APP	D	RNI			I	
~~DCA~~	~~091737~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	091737	001	APP	D	RNI			———	SUPERS
DCA	091738	000	APP	D	RNI			———	SUPERS
DCA	091822	000	APP	D	RNI			H	
~~DCA~~	~~091823~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	091823	001	APP	D	RNI			I	
~~DCA~~	~~092167~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				

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DATE: 1994-05-23
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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 005 REV: CP4

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
~~DCA~~	~~092167~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092167	002	APP	D	RNI			G	
DCA	092204	000	APP	D	RNI				SUPERS.
DCA	092206	000	APP	D	RNI			I	
~~DCA~~	~~092207~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				SUPERS.
DCA	092207	001	APP	D	RNI				
DCA	092294	000	APP	D	RNI			I	
DCA	092295	000	APP	D	RNI			I	
DCA	092383	000	APP	D	RNI			I	
DCA	092535	000	APP	D	RNI			H	
DCA	092537	000	APP	D	RNI			I	
~~DCA~~	~~092545~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092545	001	APP	D	RNI			H	
DCA	092555	000	APP	D	RNI			H	
DCA	092566	000	APP	D	RNI			H	
DCA	092583	000	APP	D	RNI				SUPERS.
~~DCA~~	~~092585~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092585	002	APP	D	RNI			H	
~~DCA~~	~~092600~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092642	000	APP	D	RNI			I	
~~DCA~~	~~092683~~	~~001~~	~~VOI~~	~~D~~	~~VNI~~				
DCA	092684	000	APP	D	RNI			H	
DCA	092705	000	APP	D	RNI			H	
DCA	092720	000	APP	D	RNI			J	
DCA	092730	000	APP	D	RNI				SUPERS
DCA	092734	000	APP	D	RNI			G	
DCA	092741	000	APP	D	RNI				SUPERS
DCA	092744	000	APP	D	RNI			H	
~~DCA~~	~~092745~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~092745~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~092745~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~092745~~	~~003~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092745	004	APP	D	RNI				SUPERS.
~~DCA~~	~~092755~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~092755~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092755	002	APP	D	RNI				SUPERS
DCA	092768	002	APP	D	RNI			H	
DCA	092771	000	APP	D	CP2			G	
~~DCA~~	~~092772~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092772	001	APP	D	RNI			H	
~~DCA~~	~~092813~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092813	001	APP	D	RNI				SUPERS.
DCA	092830	000	APP	D	RNI			I	
DCA	092841	001	APP	D	RNI			H	
DCA	092860	000	APP	D	RNI			H	
DCA	092868	000	APP	D	RNI			J	

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ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 005 REV: CP4

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	092869	000	APP	D	RNI			———	NO DEV.
DCA	092875	000	APP	D	RNI			I	
DCA	092905	001	APP	D	RNI			H	
DCA	092917	000	APP	D	RNI			J	
DCA	092934	000	APP	D	RNI			I	
DCA	092971	000	APP	D	RNI			H	
~~DCA~~	~~092980~~	~~000~~	~~REV~~	~~D~~	~~RNI~~				
DCA	093006	000	APP	D	RNI			H	
DCA	093010	000	APP	D	RNI			I	
DCA	093041	000	APP	D	RNI			H	
DCA	093074	000	APP	D	RNI			I	
~~DCA~~	~~093104~~	~~000~~	~~REV~~	~~D~~	~~RNI~~				
DCA	093117	000	APP	D	RNI			H	
DCA	093130	000	APP	D	RNI			———	SUPERS
DCA	093137	000	APP	D	RNI			H	
~~DCA~~	~~093169~~	~~000~~	~~REV~~	~~D~~	~~RNI~~				
DCA	093169	001	APP	D	RNI			H	
DCA	093193	000	APP	D	RNI			J	
DCA	093240	000	APP	D	RNI			I	
DCA	100561	000	APP	D	NI				
DCA	101357	000	APP	D	NI				
DCA	101956	001	APP	D	NI				
DCA	102471	003	APP	D	NI				
DCA	102478	001	APP	D	NI				
DCA	102821	001	APP	D	NI				
DCA	103472	001	APP	D	NI				
DCA	103484	001	APP	D	NI				
DCA	103498	000	APP	D	NI				
DCA	103550	001	APP	D	NI				
DCA	103551	002	APP	1	NI				
DCA	103559	000	APP	D	NI				
DCA	103574	001	APP	D	NI				
DCA	103575	000	APP	D	NI				
DCA	103582	000	APP	D	NI				
DCA	103589	000	APP	D	NI				
DCA	103597	000	APP	D	NI				
DCA	103670	000	APP	D	NI				
DCA	103680	001	APP	D	NI				
DCA	103701	000	APP	D	NI				
DCA	103740	001	APP	D	NI				
DCA	103935	000	APP	D	NI				
DCA	104011	001	APP	D	NI				
DCA	104037	001	APP	D	NI				
DCA	104087	000	APP	D	NI				
DCA	104197	000	APP	D	NI				
DCA	104204	000	APP	D	NI				

SEE ATTACHMENT A

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DSMEC NUMBER: M1-1701
SHEET : 005 REV: CP4

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	104222	003	APP	D	NI				SEE ATTACHMENT A
DCA	104246	002	APP	D	NI				
DCA	104248	001	APP	D	NI				
DCA	104249	000	APP	D	NI				
DCA	104252	000	APP	D	NI				
DCA	104260	000	APP	D	NI				
~~DCN~~	~~004871~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	004871	002	APP	MR	RNI	DM	92-0077	K	
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439		NO DEV.
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440		NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437		NO DEV.
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438		NO DEV.
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP4	DM	92-0077	G	
DCN	007077	000	APP	MR	NI	DM	92-0077	K	
~~DCN~~	~~007437~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~93-2046~~		
~~DCN~~	~~007437~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~93-2046~~		
~~DCN~~	~~007437~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~93-2046~~		
~~DCN~~	~~007437~~	~~003~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~93-2046~~		
DCN	007437	004	APP	MR	RNI	ONE	93-2046	H	
TUE	92-05971	000	APP	D	NI				ATT. A

TOTAL ALL DESIGN CHANGE DOCUMENTS : 169

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DOMEC NUMBER: M1-1701
SHEET : 0054 REV: CP3

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCA	079272	006	APP	D	CP1			G	
DCA	084505	004	APP	D	CP1			G	
DCA	092771	000	APP	D	CP1			G	
~~DCN~~	~~005260~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439		NO DEV.
~~DCN~~	~~005295~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440		NO DEV
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437		NO DEV
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438		NO DEV.
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP3	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 19

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 0058 REV: CP2

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439	———	NO DEV
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440	———	NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DNE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437	———	NO DEV.
~~DCN~~	~~005232~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005232~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005232	002	APP	D	NI	MM	92-0438	———	NO DEV
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP2	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 16

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

DMSPDR100.R01
DATE : 05/23/94
PLANT: CPS

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER : M1-1701
SHEET : 005C REV : CP1

MAINTENANCE LEVEL : NA PURCHASE ORDER NO :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ __/__/__

REVIEWED BY: _____ __/__/__

APPROVED BY: _____ __/__/__

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DOMEC NUMBER: M1-1701
SHEET : 005D REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 0056 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 005F REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 0059 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP3C2.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DBMEC NUMBER: M1-1701
SHEET : 006 REV: CP4

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
~~DCA~~	~~081259~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~081259~~	~~001~~	~~VOI~~	~~D~~	~~VNI~~				
DCA	083340	001	APP	D	RNI			H	
DCA	083356	000	APP	D	RNI			H	
~~DCA~~	~~085683~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	085683	001	APP	D	CP2			G	
DCA	088553	000	APP	D	RNI			J	
DCA	091738	000	APP	D	RNI				SUPERS.
DCA	092771	000	APP	D	CP2			G	
DCA	101499	000	APP	D	NI				SEE ATTACHMENT A
DCA	102058	000	APP	D	NI				
DCA	102726	000	APP	D	NI				
DCA	102858	000	APP	D	NI				
DCA	102889	000	APP	D	NI				
DCA	103874	001	APP	D	NI				
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439		NO DEV.
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440		NO DEV
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437		NO DEV
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438		NO DEV
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP4	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 31

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRPS02.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DSMEC NUMBER: M1-1701
SHEET : 007 REV: CP3

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCA	081380	000	APP	D	RNI			H	
~~DCA~~	~~001691~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~001691~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~001691~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
DCA	081631	003	APP	D	CP2			G	
DCA	086802	001	APP	1	CP2			G	
DCA	089750	000	APP	D	RNI			H	
~~DCA~~	~~089751~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
DCA	089751	001	APP	D	RNI			H	
~~DCA~~	~~089927~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~089927~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~089927~~	~~002~~	~~REV~~	~~D~~	~~SNI~~				
DCA	089927	003	APP	D	RNI			J	
~~DCA~~	~~092212~~	~~000~~	~~REV~~	~~D~~	~~SNI~~				
~~DCA~~	~~092212~~	~~001~~	~~REV~~	~~D~~	~~SNI~~				
DCA	092212	002	APP	D	CP2			G	
DCA	092213	000	APP	D	CP2			G	
DCA	092451	000	APP	D	CP2			G	
DCA	092462	000	APP	D	RNI			I	
DCA	092605	000	APP	D	RNI			I	
DCA	092611	000	APP	D	RNI			I	
DCA	092615	000	APP	D	RNI			I	
DCA	092634	000	APP	D	RNI				SUPERS
DCA	092771	000	APP	D	CP2			G	
DCA	092969	000	APP	D	RNI				SUPERS
DCA	093104	001	APP	D	CP2			G	
DCA	093130	000	APP	D	RNI				SUPERS
DCA	093148	000	APP	D	RNI			I	
DCA	103277	001	APP	D	NI				
DCA	103406	001	APP	D	NI				
DCA	103721	001	APP	D	NI				
DCA	103730	000	APP	D	NI				
DCA	103782	000	APP	D	NI				
DCA	103855	001	APP	D	NI				
DCA	103929	000	APP	D	NI				
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439		NO DEV
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440		NO DEV.
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437		NO DEV
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		

SEE ATTACHMENT A

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT-UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 007 REV: CP3

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCN	005332	002	APP	D	NI	MM	92-0438	———	NO DEV
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~ENI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~ENI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP3	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 51

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
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ATTACHMENT L

AFFECTED DOCUMENT-UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMSER: M1-1701
SHEET : 007A REV: CP2

MAINTENANCE LEVEL : NA FO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DCC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	031631	003	APP	D	CP1			———	SUPERS
DCA	086602	001	APP	I	CP1			G	
DCA	092212	002	APP	D	CP1			G	
DCA	092213	000	APP	D	CP1			G	
DCA	092451	000	APP	D	CP1			G	
DCA	092771	000	APP	D	CP1			G	
~~DCN~~	~~005262~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0439~~		
DCN	005262	001	APP	A	RNI	MM	92-0439	———	NO DEV.
~~DCN~~	~~005299~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
~~DCN~~	~~005299~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0440~~		
DCN	005299	002	APP	MR	NI	MM	92-0440	———	NO DEV
~~DCN~~	~~005303~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~ONE~~	~~92-0437~~		
~~DCN~~	~~005303~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0437~~		
DCN	005303	003	APP	MR	NI	MM	92-0437	———	NO DEV
~~DCN~~	~~005332~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
~~DCN~~	~~005332~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~MM~~	~~92-0438~~		
DCN	005332	002	APP	D	NI	MM	92-0438	———	NO DEV
~~DCN~~	~~006943~~	~~000~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~001~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
~~DCN~~	~~006943~~	~~002~~	~~REV~~	~~D~~	~~SNI~~	~~DM~~	~~92-0077~~		
DCN	006943	003	APP	A	CP2	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 22

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 003 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCA	103401	001	APP	D	NI			———	ATT A
DCA	103624	002	APP	D	NI			———	ATT A
DCA	104078	000	APP	D	NI			———	ATT A
DCN	006913	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 4

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 009 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	103600	002	APP	D	NI			———	ATT. A
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 2

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP3C2.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMEER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 010 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	103895	001	APP	D	NI			———	ATT A
DCA	104222	003	APP	D	NI			———	ATT A
DCA	104233	000	APP	D	NI			———	ATT A
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 4

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CFSES

ATTACHMENT L

AFFECTED DOCUMENT-UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 011 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	102931	000	APP	D	NI				
DCA	103497	000	APP	D	NI				
DCA	104121	000	APP	I	NI				
DCA	104251	000	APP	D	NI				
DCA	104258	000	APP	D	NI				
DCN	006913	003	APP	A	CP1	DM	92-0077	G	

SEE ATTACHMENT A

TOTAL ALL DESIGN CHANGE DOCUMENTS : 6

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 012 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCA	103305	001	APP	D	NI				ATT. A
DCA	103408	001	APP	D	NI				ATT. A
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 3

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 013 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	102221	001	APP	D	NI				
DCA	102231	000	APP	D	NI				
DCA	102312	000	APP	D	NI				
DCA	102524	000	APP	D	NI				
DCA	102525	000	APP	D	NI				
DCA	102679	001	APP	D	NI				
DCA	102788	001	APP	D	NI				
DCA	102882	000	APP	D	NI				
DCA	103487	000	APP	D	NI				
DCA	103862	000	APP	D	NI				
DCA	104124	000	APP	D	NI				
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

SEE ATTACHMENT A

TOTAL ALL DESIGN CHANGE DOCUMENTS : 12

PREPARED BY: _____ ____/____/____

REVIEWED BY: _____ ____/____/____

APPROVED BY: _____ ____/____/____

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 014 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	MOD NUMBER	REPORT ATT.	NOTE
DCA	103472	001	APP	D	NI			———	ATT. A
DCA	103499	001	APP	D	NI			———	ATT. A
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 3

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 015 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC	STATUS REL	INCORP STATUS	DESIGN MOD TYPE	DESIGN MOD NUMBER	REPORT ATT.	NOTE
DCA	103624	002	APP	D	NI			———	ATT. A
DCA	104226	000	APP	D	NI			———	ATT. A
DCN	006943	003	APP	A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 3

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___

NRMRP302.R01
DATE: 1994-05-23
CPSES

ATTACHMENT L

AFFECTED DOCUMENT UPDATE REPORT - ALL DESIGN CHANGE LOG
ORDERED BY CCD TYPE, NUMBER, REVISION

PDR TYPE : DDMEC NUMBER: M1-1701
SHEET : 016 REV: CP1

MAINTENANCE LEVEL : NA PO NUMBER :

CCD TYPE	NUMBER	REV	STATUS DOC REL	INCORP STATUS	DESIGN MOD TYPE	NUMBER	REPORT ATT.	NOTE
DCN	006943	003	APP A	CP1	DM	92-0077	G	

TOTAL ALL DESIGN CHANGE DOCUMENTS : 1

PREPARED BY: _____ ___/___/___

REVIEWED BY: _____ ___/___/___

APPROVED BY: _____ ___/___/___