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FIELD CHANGE

Field Change #: (obtained and completed by DEL after form has been completed by initiator)	13720-FC-00018	**Revision:**	R00	**Date:**	27-Sep-2013

FC Title: (completed by initiator)	EC 123123 R01 FIC 04 Support Anchor Electrical Interferences Located Flanged Fitting Bolting Materials and Torque Values Required
Design EC #: (completed by initiator, only one DEC per FC)	123123 – HWMB Dewatering TMOD
Project #: (completed by initiator)	B&M Project # 48070014, RCMT Project 13720
Description of Change: (completed by initiator)	1. OPG FE has scanned the areas prior to anchor install for the pipe supports, there are numerous electrical interferences in the area where the vertical riser meets the roof. OPG FE have requested that we avoid anchoring into the entire area from where the overhang is North to the grating. Therefore, the first two HG3 style supports after our pipe meets the roof running north will not be able to be anchored to the roof. Suggest using a steel base plate welded to these supports with the use of sandbags to secure the supports that cannot be anchored. 2. The flange specified (DBOM item 4) will require the addition of a gasket, studs and nuts to the DBOM.. 3. Drawing NK38-DRAW-12320-10001, references the use of NK38-MMP-76550-06 for this gasket bolted joint ass'y however the torque tables are recommended values for B16.5 or like flanges, can these torque values be applied to this type of flange?

Reason for Change: (completed by initiator

Category	Check as Applicable	Comments
Improper Design	☐	
Missing Design Information	☐	
Field conditions different than design	☐	
Material Substitution	☐	
COMS Issue	☐	
Missing Field Installation Information	☒	
Other	☒	

NOTES: Disposition in the email sent to Ryan Thompson on Sept 30, 2013

2. Aquatech will provide gasket and required fasteners. DBOM update is not required.

3. Use of NK38-MMP-76550-06 is acceptable.

Ranko Cosovic
Sept 30, 2013.

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FIELD CHANGE

Affected Documents: (completed by initiator)	NK38-BOM-12320-10001 NK38-DRAW-12320-10001

Initiating Instructions:
All questions shall be answered by the initiator. If the question is not applicable to the change (e.g. a mechanical question for an electrical change) mark "N/A" otherwise answer "yes" or "no". Any yes answer means the proposed change is an intent deviation and cannot be performed as a field change.
If all answers are "no" or "N/A" the initiator signs as preparer and forwards to the Design Engineering Lead (DEL) to process the Field Change. The initiator also marks up and includes the affected drawings showing the desired change(s), signing as preparer.

Determination of Intent

Is the change an "intent design deviation"? (The following list of questions will assist in this determination but it is not an all inclusive list. If it is likely that the change will require an engineer to prepare it, then it is an "intent design" deviation.)	Yes ☐	No ☒	N/A ☐
1. ***Does the change alter the control logic or operator interface?*** (Changes to a EWD or control logic drawing that affects circuit operation or a change that affects the human factors of a modification by altering or moving displays are intent deviations and cannot be made as field changes.)	Yes ☐	No ☐	N/A ☒
2. ***Does the change impact cable separation?*** (Changes to cable separation distances for divisional or channelized cabling shall meet OPG set requirements to be non-intent otherwise it is an intent deviation.)	Yes ☐	No ☐	N/A ☒
3. ***Does the change impact cable tray loading?*** (If the change is within the structural and ampacity loading capacity of the cable tray, addition of cables to the tray can be considered a non-intent design deviation provided all other criteria in this checklist are met.)	Yes ☐	No ☐	N/A ☒
4. ***Does the change impact the electrical distribution analysis?*** (e.g. reduction in wiring sizes, significant cable length increases, and changes to fuse sizes, or circuit breaker settings, changes to equipment capacity, impedance, or load characteristics are intent deviations and cannot be made as Field Changes)	Yes ☐	No ☐	N/A ☒

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5. ***Does the change adversely impact environmental qualification?*** (e.g. a substitution of one EQ component for another that meets design requirements is a non-intent deviation and can be made as a Field Change but a substitution affecting EQ requirements is an intent deviation and cannot be made as a Field Change. Some examples of intent deviations which therefore, cannot be made as a Field Change include: • Addition or relocation of cable, equipment, or components to a more severe environment, • HVAC changes that could change the plant environment. • Changes impacting environmental barriers such as rooms, walls, ceiling, floor, doors, and shielding that could change the normal DBA environmental conditions for safety related equipment and components, • A change in a service condition (e.g. loading, temperature, duty cycle, voltage, radiation, flood levels, chemical conditions, etc) for equipment and components requiring environmental qualification.	Yes ☐	No ☐	N/A ☒

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6. ***Does the change impact the station fire protection program?*** (Refer to the Modification Outline, N-FORM-10958. Any deviation that would require a Fire Protection Impact Evaluation, N-Form-10287, to be completed or revised is an intent deviation and cannot be made as a Field Change. Some examples of intent deviations, and therefore where a Field Change would not be permitted, are those impacting: • Fire detection and alarm capability (e.g. impeding access to fire protection equipment or reducing the effectiveness of the equipment including increases in noise level that make reduce audibility of alarms and changes in lighting levels that make visible alarms difficult to see), • Fire suppression capability (e.g. impeding access to equipment and reducing effectiveness of fire suppression equipment. Reduced effectiveness could be the result of reductions in room temperature increasing chances of freezing, room volume changes, air flow changes and room drainage changes), • Fire barriers (e.g. fire doors, fire or smoke dampers in an HVAC system, penetrations in a credited fire barrier, fire stops), • Fire Scenarios (e.g. introduction of potential ignition sources such as circuits, cabling, or high temperature equipment, addition or change of combustible material, reduction of effectiveness of hazard control measures, and impairment of emergency lighting or egress routes), • Fire Safety Assessment (FSA) Capability (e.g. modifies an electrical circuit for a system or component credited in the FSA, alters hydraulic performance of any fluid system credited in the FSA, or alters an essential support function such as room or equipment cooling, lubrication, etc. for a system or component credited in the FSA).	Yes ☐	No ☐	N/A ☒
7. ***Does the change impact seismic qualification?*** Any change to the routing of seismically qualified piping or tubing is an intent deviation and a field change cannot be used. Increasing or decreasing the weight of a component in a seismically qualified system by an amount greater than allowed for by code exceptions is also an intent deviation (i.e. if calculations need to be performed to confirm the acceptability of the change it is an intent deviation). If a code exception is used to support a field change it must be referenced on the associated change paper. Other intent deviations included changes to the centre of gravity, geometry, location, or mounting method of a seismically qualified component.	Yes ☐	No ☐	N/A ☒
8. ***Is this change associated with a Special Safety System?*** (any change impacting a special safety system or a portion of a support system (such as instrument air or electrical power) that directly supports the special safety system is an intent deviation and therefore shall not be made as a Field Change).	Yes ☐	No ☒	N/A ☐

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9. ***Does the change affect a Pressure Boundary Registration Submission document?*** (Any change that requires a change to any Pressure Boundary Registration submission document (includes piping specification, classification approval, SCL, flow diagram, design report, and overpressure protection report), other than an administrative change is an intent deviation and therefore cannot be made as a Field Change.)	Yes ☐	No ☒	N/A ☐
10. ***Does the change alter the conclusions of any design calculation or design report?*** (Changes that require revision to calculations or design reports are intent deviations and cannot be made as Field Changes. Changes that are within the tolerances specified in the approved analysis can be considered non-intent deviations).	Yes ☐	No ☒	N/A ☐
11. ***Does the change involve re-routing an engineered pipe or tubing run?*** (An engineered run is one which would require a revision to a calculation if its routing is changed beyond the stated tolerances. If the number or type of support required by the design is changed this is also a design intent deviation addressed by this question and therefore cannot be performed as a Field Change).	Yes ☐	No ☒	N/A ☐
12. ***Does the change require a regulatory approval or notification?*** (Any change to design requiring a regulator (CNSC, TSSA, MoE, MoL, etc.) to approve or be notified of the change before it is made is an intent deviation and therefore cannot be made as a Field Change. A change where regulations require a third party review before it can be implemented is also a design intent deviation.)	Yes ☐	No ☒	N/A ☐
13. ***Does the proposed change require a revision to the ADL?*** (An administrative correction to the ADL to include a document that was always part of the modification but had been inadvertently left off the list or to remove a document from the list that was included in error (i.e. was never part of the modification) is a non-intent deviation. If the change to the ADL is driven by a change in the field or by a change in the design then it is an intent deviation and cannot be performed as a Field Change.)	Yes ☐	No ☒	N/A ☐

Requisitioning Approvals:				
Prepared by: (Assessor)	Ryan Thompson		Date:	27Sep2013
	Print Name	Signature		DD-MMM-YYYY
Verified by: (Design Engineer)	C. Costache		Date:	30Sept 2013
	Print Name	Signature		DD-MMM-YYYY
Approved by: (Engineering Authority)	RK Black		Date:	01 OCT 2013
	Print Name	Signature		DD-MMM-YYYY

ONTARIO POWER GENERATION

Drawing Bill of Materials

INTERNAL USE ONLY
Document Number: NK38-BOM-12320-10001
Revision:

Title:
D20 WEST ANNEX DEWATERING PIPING DESIGN BILL OF MATERIAL

RCM #13720-BOM-00267-R01

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DNGS

Space for Change Paper Stamp (when applicable)

DND ☒ PND ☐ W ☐

Document Number NK38-BOM-12320-10001 Rev.

EC # 123123 Rev. 001

Master EC # 122797 Rev. 000

Total Number of Pages 5

THIS ENGINEERING CHANGE PAPER IS APPROVED FOR USE

Prepared by: R. Cosovic Date:

Verified by: L. Liu Date:

Approved by: R. Black Date:

Associated Drawing Number:
NK38-DRAW-12320-10001

DND **PND**

Document Number NK38-BOM-12320-10001 Rev.

EC # 13720-EC-00018 Rev. 000

Master EC # 122797 Rev. 000

Total number of Pages 6

THIS ENGINEERING CHANGE PAPER IS APPROVED FOR USE

Prepared by: R. COSOVIC Date: Sept 30, 2013

Verified by: A. Kaplunov Date: Oct. 01, 2013

Approved by: RK Black Date: 01 OCT 2013

Note: See reverse for other OPG Nuclear signatures, when required.

Drawing Bill of Materials

INTERNAL USE ONLY	
Document Number: NK38-BOM-12320-10001	
Revision:	Page: 2 of 6

Title:
D20 WEST ANNEX DEWATERING PIPING DESIGN BILL OF MATERIAL

RCM #13720-BOM-00267-R01

Revision Summary

DBOM Rev No.	EC No.	EC Type	Description (or Title) of EC	Description of DBOM Revision
	123123	DEC	D20 WEST ANNEX DEWATERING PIPING DESIGN BILL OF MATERIAL	Initial Issue
	EC 123123 R001	DEC	D20 WEST ANNEX DEWATERING PIPING DESIGN BILL OF MATERIAL	Revised to add catID Q levels where catIDs used Itm 2, 3 - Added "DR17" value Itm 6- Changed catID for equivalent non-nuclear material Itm 8 – removed old catID and changed thread length to match current standard product Itm 12 – added FAC-D catID for equivalent bolt having 15mm longer length

Drawing Bill of Materials

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Revision:	Page: 3 of 6

Title:
D20 WEST ANNEX DEWATERING PIPING DESIGN BILL OF MATERIAL

RCM #13720-BOM-00267-R01

Item No.	DBOM Rev.	Quantity	Issue Unit	Design Requirement Description	CAT ID	PassPort CAT ID Description	Notes
1		100	FT	PIPE, ., -, ., 8" IPS, PLAIN END BUTT FUSION, 40 OR 50 FT LENGTHS, POLYETHYLENE, DR17 HDPE,	478690-4	PIPE, ., -, ., 8" IPS, 40 OR 50 FT LENGTHS, POLYETHYLENE, DR17 HDPE, SCLAIRPIPE	Qty is approx. 100 ft is total length required MFR/PN: Sclairpipe / by description (or equivalent)
2		5	EA	ELBOW, PIPE, -, 8" IPS, PLAIN END BUTT FUSION, POLYETHYLENE, 90 DEGREE, MOLDED, DR17 HDPE	(1)	ELBOW, PIPE, -, 8" IPS, PLAIN END BUTT FUSION, POLYETHYLENE, 90 DEGREE, MOLDED, DR17 HDPE	MFR/PN: Sclairpipe / by description (or equivalent)
3		5	EA	ELBOW, PIPE, -, 8" IPS, PLAIN END BUTT FUSION, POLYETHYLENE, 45 DEGREE, MOLDED, DR17 HDPE	(1)	ELBOW, PIPE, -, 8" IPS, PLAIN END BUTT FUSION, POLYETHYLENE, 45 DEGREE, MOLDED, DR17 HDPE	MFR/PN: Sclairpipe / by description (or equivalent)
4		1	EA	FLANGE, PIPE, -, ASSEMBLY (STUB & D.I. RING), 8" NPS, POLYETHYLENE HDPE, DR17,	478719-4	FLANGE, PIPE, -, ASSEMBLY (STUB & D.I. RING), 8" NPS, POLYETHYLENE HDPE, DR17, FOR SCLAIRPIPE	MFR/PN: Sclairpipe / by description (or equivalent)
5		1	SF	PLATE, METAL, -, 48" X 96" X 1", CARBON STEEL, HOT ROLLED, ASTM A36	70833-3	PLATE, METAL, -, 48" X 96" X 1", CARBON STEEL, HOT ROLLED, ASTM A36	As required for HG1 support per drawing: Nk38-DRAW-12329-10001
6		1	FT	TUBE, STRUCTURAL, PRESSURE BOUNDARY, 4" X 6", 24FT LG, 3/8" WALL, CARBON STEEL, ASTM A500 GR. C, -	70029-3	TUBE, STRUCTURAL, -, 4" X 6", 0.375" THK WALL, WELDED & SEAMLESS, COLD FORMED CARBON STEEL, ASTM A500 GR C, RECTANGULAR	As required for HG1 support per drawing: Nk38-DRAW-12329-10001

Drawing Bill of Materials

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Title:
D20 WEST ANNEX DEWATERING PIPING DESIGN BILL OF MATERIAL

RCM #13720-BOM-00267-R01

Item No.	DBOM Rev.	Quantity	Issue Unit	Design Requirement Description	CAT ID	PassPort CAT ID Description	Notes
7		1	MR	ANGLE, STRUCTURAL, -, 4" X 6" X 5/16" (100 MM X 150 MM X 8 MM), STEEL, HOT ROLLED, CSA G40.21M, GR 300W	72218-1	ANGLE, STRUCTURAL, -, 4" X 6" X 5/16" (100 MM X 150 MM X 8 MM), STEEL, HOT ROLLED, CSA G40.21M, GR 300W	As required for HG1 support per drawing: Nk38-DRAW-12329-10001
8		1	EA	U BOLT, 8" PIPE, 5/8" ROD DIA, C/W 4 NUTS A-307, PRIMER COATED CARBON STEEL, 3-3/4" THREAD LENGTH, G40.21, GR 300W	(1)	BOLT, U, -, 8" PIPE, 5/8" ROD DIA, C/W 4 NUTS A-307, PRIMER COATED CARBON STEEL, 3-3/4" THREAD LENGTH, G40.21, GR 300W	As required for HG1 support per drawing: Nk38-DRAW-12329-10001 Make/Model: Anvil Fig 137 galvanized finish (or equivalent) (ref P-597187-1 or equiv)
9		15	EA	OFFSET PIPE CLAMP, 8", CARBON STEEL, GALVANIZED, ANVIL FIG 103	(1)	OFFSET PIPE CLAMP, 8", CARBON STEEL, GALVANIZED, ANVIL FIG 103	As required for HG2 and HG3 type support per drawing: Nk38-DRAW-12329-10001 Make/Model: Anvil Fig 103, galvanized finish (or equivalent)

Drawing Bill of Materials

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Title:
D20 WEST ANNEX DEWATERING PIPING DESIGN BILL OF MATERIAL

RCM #13720-BOM-00267-R01

Item No.	DBOM Rev.	Quantity	Issue Unit	Design Requirement Description	CAT ID	PassPort CAT ID Description	Notes
10	EC120123 R01 ADD 13720-FC-00018	~~30~~ 26	EA	HILTI HSL-3 M10 CARBON STEEL SLEEVE ANCHOR COMPLETE WITH NUT AND WASHER.	620742-1	ANCHOR, STUD, -, HEAVY DUTY SLEEVE ANCHOR, M10/20 DIA, 115 MM LG, 70 MM EFFECTIVE EMBED, CARBON STEEL,ISO 898 PART 1,CLASS 8.8, HSL-3G	Torque Installation: 35Nm. Minimum Hole Depth: 90 mm. Drill Bit: 15 mm. Install as per manufacturer's guide.
11		5	EA	FULL COUPLING, 8" IPS, ELECTROFUSION FITTING FOR POLYETHYLENE DPE,SCLAIRPIPE, ASTM F1055 IPS & CTS	(1)	FULL COUPLING, 8" IPS, ELECTROFUSION FITTING FOR POLYETHYLENE DPE,SCLAIRPIPE, ASTM F1055 IPS & CTS	Use if required during the pipng assembly Not shown on dwg.
12		4	EA	HILTI HSL-3 M10 CARBON STEEL SLEEVE ANCHOR COMPLETE WITH NUT AND WASHER. M10/40 DIA, 130 MM LG, 85 MM EFFECTIVE EMBED	620689-1	ANCHOR, BOLT, -, M10/40, CARBON STEEL, ISO 898 PART 1,CLASS 8.8, 130 MM LONG, 70 MM EFFECTIVE EMBEDMENT DEPTH, HEAVY DUTY SLEEVE, HSL-3	Torque Installation: 50Nm. Minimum Hole Depth: 90 mm. Drill Bit: 15 mm. Install as per manufacturer's guide
13		1	BG	GROUT, ., NON-SHRINK CEMENTITIOUS, 25KG MOISTURE PROOF BAG, CONCRETE GREY COLOUR, SIKA GROUT 212 (9- MTH S/LFROM MNFG. DATE)	478477-4	GROUT, ., NON-SHRINK CEMENTITIOUS, 25KG MOISTURE PROOF BAG, CONCRETE GREY COLOUR, SIKA GROUT 212 (9- MTH S/LFROM MNFG. DATE)	To grout anchor holes after piping disssasembly and anchor removal.

Filed: 2021-06-28
EB-2020-0290
Exhibit L
D2-02-AMPCO-079
Attachment 95
Page 10 of 15

Drawing Bill of Materials

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Title:
D20 WEST ANNEX DEWATERING PIPING DESIGN BILL OF MATERIAL

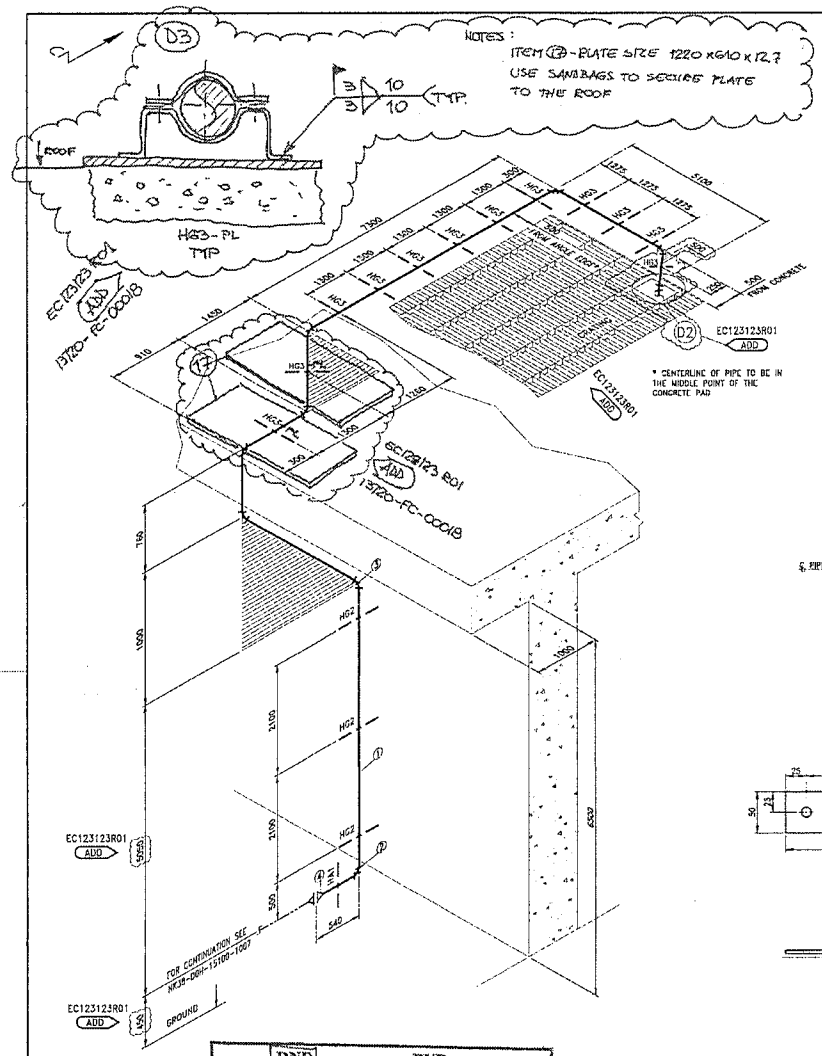
RCM #13720-BOM-00267-R01

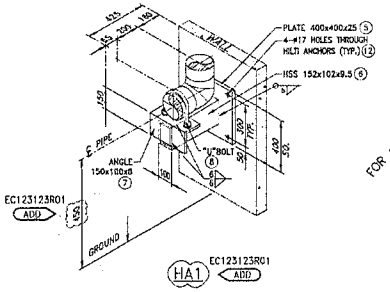
Item No.	DBOM Rev.	Quantity	Issue Unit	Design Requirement Description	CAT ID	PassPort CAT ID Description	Notes
14		29	EA	COUPLING, 8" GRUVLOK FOR HDPE PIPE, ANVIL FIG 7305 HDPE COUPLING WITH EPDM OR NITRILE GASKET	(1)		This is an alternative to electrofusion 8" IPS coupling itrem #11 Not shown on dwg.
15		8	TB	LUBRICANT, O RING, SOFT GREASE, 150 GR TUBE, NOVAGARD SILICONE, VERSILUBE G351 OFF-WHITE-TAN GREASE	640316-4	LUBRICANT, O RING, SOFT GREASE, 150 GR TUBE, NOVAGARD SILICONE, VERSILUBE G351 OFF-WHITE-TAN GREASE	To be used for gruvlok coupling gasket if required. Not shown on dwg
16			FT	BAR, FLAT, -, 1/8" X 1-1/4", STEEL, COLD ROLLED, ASTM A108, GRADE C1018	71544-3	BAR, FLAT, -, 1/8" X 1-1/4", STEEL, COLD ROLLED, ASTM A108, GRADE C1018	Required to skirt the grating at the penetration in total length of approx 750mm
17		1	SF	PLATE, 48" X 96" X 1/2", CARBON STEEL, CSA G40.21, GR 44W	70454-1	PLATE, METAL, -, 48" X 96" X 1/2", CARBON STEEL, 20.42 LBS/SQ FT, CSA G40.21, GR 44W	Required to secure pipe clamp at 2 locations where anchoring should be avoided due to electrical interferences.

Note1: Fac-D cat ID not available for specified materrials, and new item cat IDs are not required per N-PROC-MP-0076

EC123123R01 (ADD) 13720-FCL-00018

NOTES:
ITEM 13 - PLATE SIZE 1220 x 610 x 12.7
USE SANDBAGS TO SECURE PLATE TO THE ROOF





NOTES:

1. INSTALLATION, FABRICATION AND WELDING IN ACCORDANCE WITH OPG N-STM-01110-10002.
2. WELDING SHALL BE IN ACCORDANCE WITH OPG WELDING PROCEDURE N-STW-04800-10000 OR EQUIVALENT APPROVED WELDING PROCEDURE.
3. DIMENSIONS TO BE FIELD VERIFIED.
4. INSTALLATION, FABRICATION AND SUPPORTS TO SUIT FIELD CONDITIONS.
5. GASKET BOLTED JOINT ASSEMBLIES FOLLOW NK38-MMP-75550-06. EC123123R01 ADD
6. NDE OF SUPPORT WELDS SHALL BE VISUAL IN ACCORDANCE WITH CSA W59-08.
7. THE CODE EFFECTIVE DATE FOR THE MODIFICATION IS CSA N285.0-08/N285.5 SERIES-08 UPDATE 2 CSA W59-09 UPDATE 1.
8. HDPE PIPING CONNECTION: BUTT HEAT FUSION.
9. USE FULL ELECTROFUSION COUPLING IF REQUIRED DURING PIPING ASSEMBLY (ITEM (11) ON BOM). USE MECHANICAL COUPLING (ITEM (14) ON BOM) GRUVLOK FIG.7305 AS ALTERNATIVE TO ELECTROFUSION COUPLING (ITEM (11) ON BOM). LUBRICANT ITEM (15) IS REQUIRED FOR COUPLING GASKET. EC123123R01 ADD
10. HEAT TRACING AND ADEQUATE INSULATION TO BE INSTALLED ON ENTIRE PIPING LENGTH.
11. FABRICATE PIPE SUPPORT HG2 AND HG3 AS PER DETAIL "D1" IF CATALOG ITEM IS NOT AVAILABLE. EC123123R01 ADD
12. NO PULLOUT TEST REQUIRED FOR ANCHORAGE.
13. ENLARGE THE EXISTING GRATING PENETRATION TO ACCOMMODATE FOR 8" PIPE (SEE DETAIL "D2").

REFERENCES:

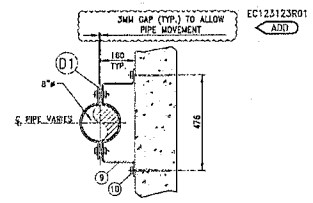
BILL OF MATERIAL	NK38-BOM-12320-10001
REFERENCE DRAWINGS	NK38-DGW-27151-5017
	NK38-DGW-27151-7006
	NK38-DGW-15100-1007

ANCHORAGE NOTES:

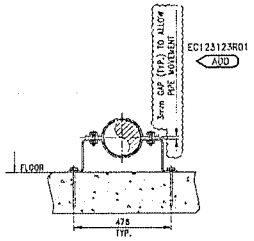
1. ALL ANCHORS SHALL BE HILTI M10. EC123123R01 ADD
2. TORQUE INSTALLATION: 35Nm FOR HSL 3G, 80Nm FOR HSC 3.
3. MINIMUM HOLE DEPTH: 90mm.
4. DRILL BIT: 15mm.
5. MIN. DIAMETER IN PLATE: 17mm.
6. EFFECTIVE EMBEDMENT DEPTH: 70mm
7. CONCRETE ANCHORS TO BE INSTALLED AS PER MANUFACTURING (HILTI) INSTRUCTIONS.

DISSASEMBLY NOTES AT TMOD COMPLETION:

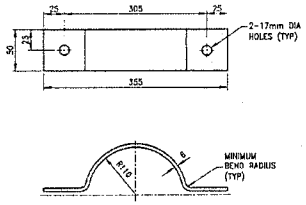
1. ANCHORS TO BE REMOVED AS PER MANUFACTURER INSTRUCTIONS.
2. ANCHOR HOLES SHALL BE GROUTED USING SIKA 212 (13).



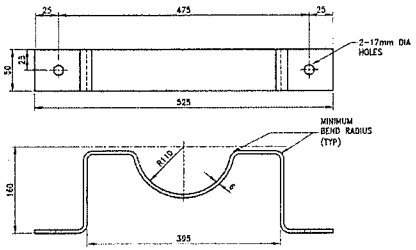
HG2
TYP.



HG3
TYP.

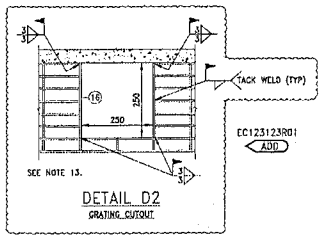


TOP PLATE



BACK PLATE

DETAIL D1



DETAIL D2
GRATING CUTOUT

DND	PND
Document Number: NK38-DRAW-12320-10001	Rev.
EC # 13720-FC-00018	Rev. 000
Master EC # 122797	Rev. 000
Total number of Pages 1	

THIS ENGINEERING CHANGE PAPER IS APPROVED FOR USE

Prepared by: R. Cosovic — Date: Oct 01, 2013
Verified by: A. Kaplunov — Date: Oct. 01, 2013
Approved by: RK Black — Date: 01 Oct 2013

DND ☒ PND ☐
Document Number: NK38-DRAW-12320-10001 Rev.
EC # 123123 Rev. 001
Master EC # 122797 Rev. 000
Total Number of Pages 1
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Prepared by: R. Cosovic Date:
Verified by: L. Liu Date:
Approved by: R. Black Date:

EC123123R01 ADD

EC123123R01

DRAWING REVISED TO ADD DETAILS 'D1', 'D2' NOTES 11, 12 AND 13; HA1 WAS HG1, REROUTED PIPING, REVISED NOTES 5, 9 AND HG3 AS PER EC123123R01.

EC123123

DRAWING PRODUCED AS PER EC123123

rev no	date	particulars	Drawn	Checked	Approved Drafting	Approved Engineering
0						

DARLINGTON GS 0

TMOD
DEWATERING
PIPING DETAIL

ONTARIOPOWER GENERATION

Plant Design
Mechanical Design

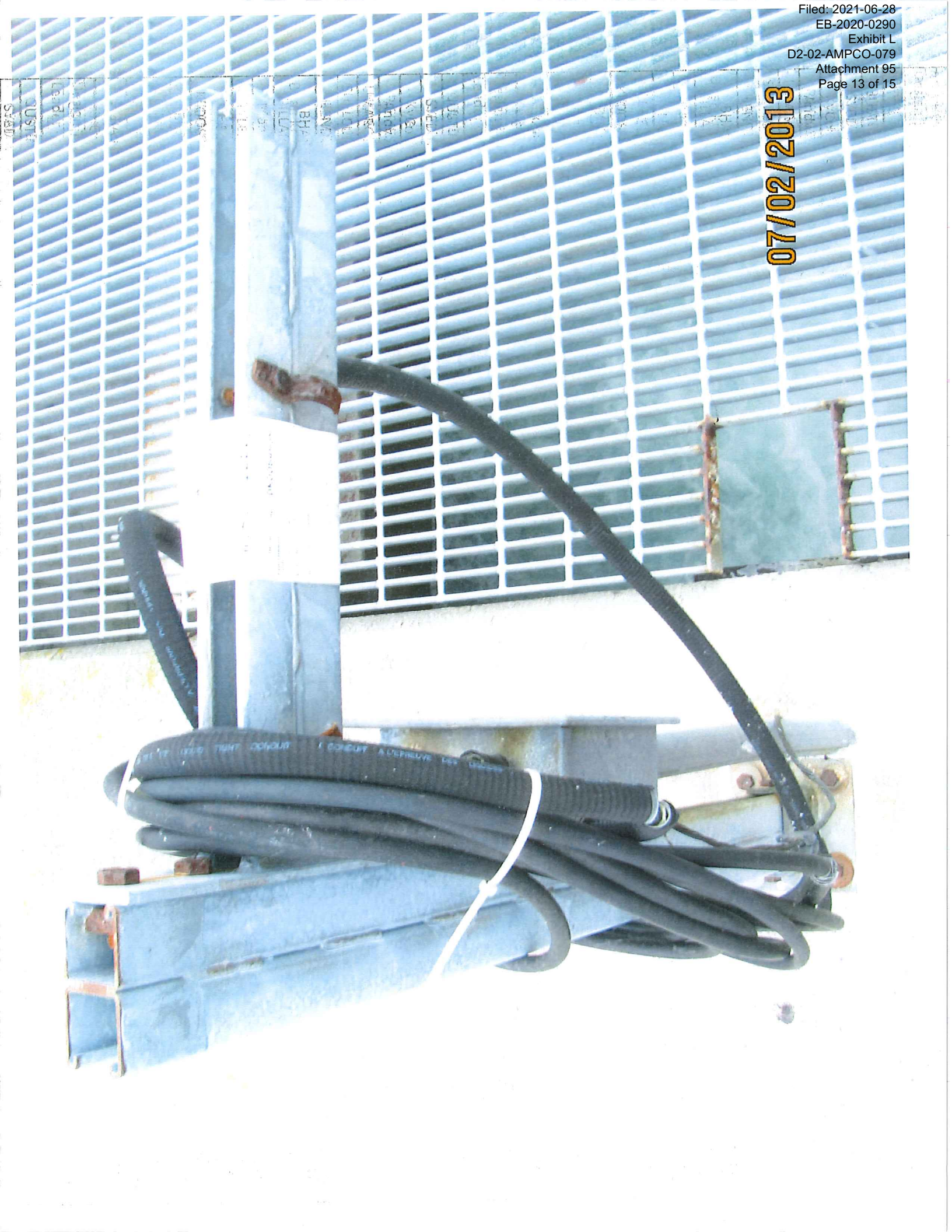
DD drawn by:	Eng designed by:	For original signature see revision 000.
DD checked by:	Eng verified by:	
date of issue	Eng approved by:	
scale: N.T.S.	sub type ISO	dwg size A1

dwg no NK38-DRAW-12320-10001

0	DRAWING REVISED AS PER EC123123R01	
rev no	date	particulars

RCM Technologies Canada Corp.
TITLE: TMOD DEWATERING PIPING DETAIL
RCMT DRAWING NO. 13720-DRAW-01109

A1 (594 x 841)


07/02/2013

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