



## Site Technical Query - Form

SN1809-0000/XE.FRM/0001 Rev 4 03/02/2021

TQ Number:		Project:																					
<b>CW2144960</b>	<b>-A010- 0116</b>	<b>Oyu Tolgoi Underground Project</b>																					
A. To be completed by or on behalf of the Contractor																							
Contractor/Sub-Contractor Name:	MCS International	Date Response	05/09/2022																				
Contract Title:	Booster Fan installations	Plant Area &	1833																				
Contract No.	CW2144960	Contractor TQ Number:	BF-0415-TQ-0116																				
Discipline Codes (Mandatory) <b>D1</b> (CSA) - <input type="checkbox"/> <b>D2</b> (MP) - <input checked="" type="checkbox"/> <b>D3</b> (E&I) - <input type="checkbox"/> <b>D4</b> (Other) - <input type="checkbox"/>																							
<i>Description of Technical Query (List affected drawings and specifications):</i> <b>1833 area: Exhaust guard issue</b>																							
<p>BF-0731-SRV-0014 was created, because self-closing door exhaust guard mesh was misaligned after pre-install. However, vendor supplied new exhaust guard mesh, newly arrived guard mesh has not reinforcement same as old one.</p>																							
<input type="checkbox"/> Routine		<input checked="" type="checkbox"/> Urgent	Refer Technical Query instructions																				
<i>Proposed Action (List all attachments)</i>																							
<p>Therefore, Contractor is proposing to add reinforcing bars as mentioned in BF-0731-SRV-0014. Refer to attachment 1-4.</p>																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Effect on cost (USD):</td> <td colspan="3" style="width: 75%;">YES</td> </tr> <tr> <td>Effect on schedule (Days):</td> <td colspan="3">NO</td> </tr> <tr> <td>Effect on quality:</td> <td colspan="3">NO</td> </tr> <tr> <td>Requested by (Name):</td> <td>Delgersuren N.</td> <td>Position:</td> <td>E&amp;I Project Engineer</td> </tr> <tr> <td>Signature:</td> <td></td> <td>Date: (dd/mm/yyyy)</td> <td>05/07/2022</td> </tr> </table>				Effect on cost (USD):	YES			Effect on schedule (Days):	NO			Effect on quality:	NO			Requested by (Name):	Delgersuren N.	Position:	E&I Project Engineer	Signature:		Date: (dd/mm/yyyy)	05/07/2022
Effect on cost (USD):	YES																						
Effect on schedule (Days):	NO																						
Effect on quality:	NO																						
Requested by (Name):	Delgersuren N.	Position:	E&I Project Engineer																				
Signature:		Date: (dd/mm/yyyy)	05/07/2022																				

**B. To be completed by Jacobs Field Engineer***Comments/recommendations by Engineering*

Proceed as proposal,

Changes shall be captured by redline drawing,

***Disclaimer:***

Acceptance or rejection of this TQ is only related with technical aspects.

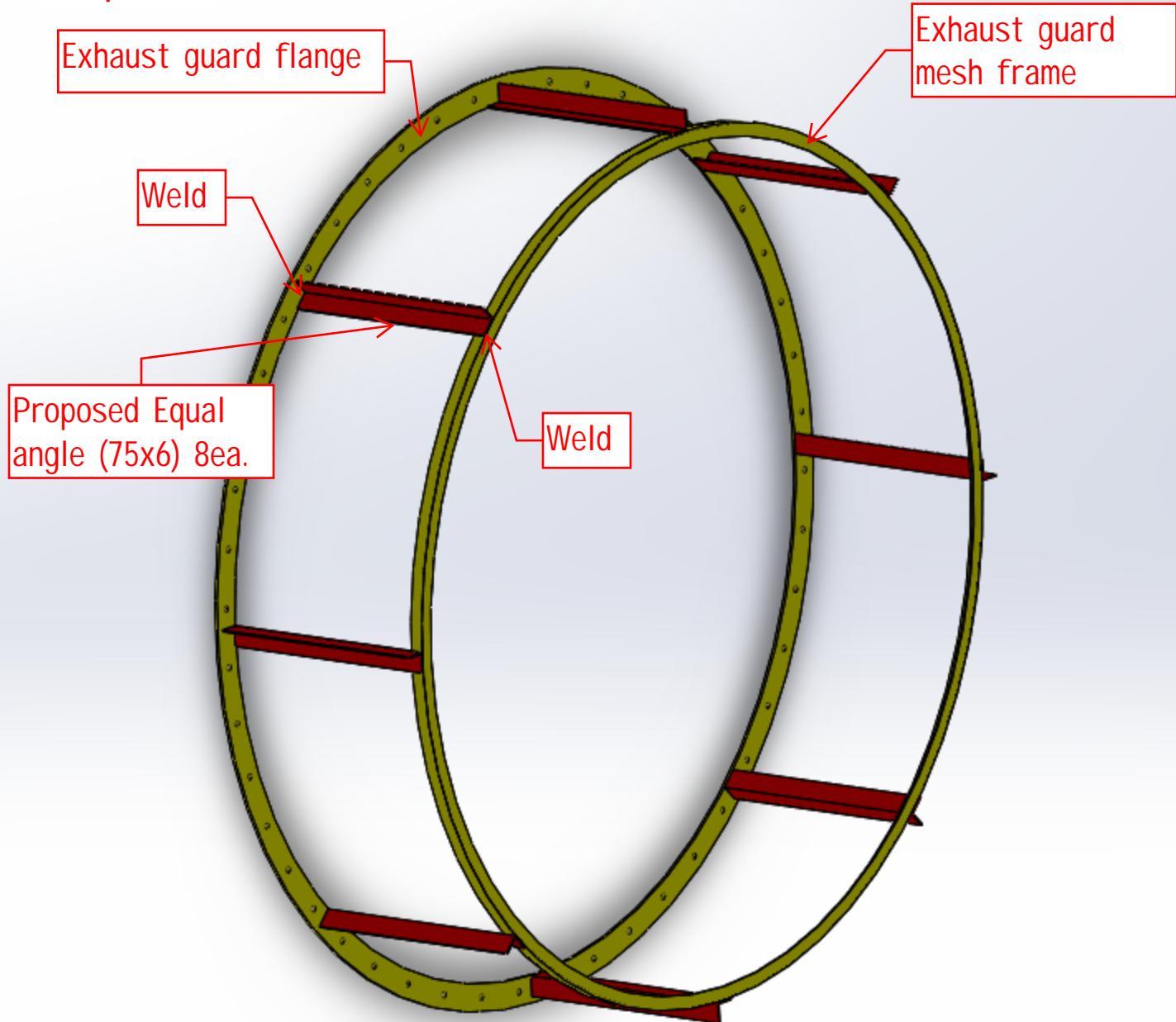
If Cost or Schedule Impact are associated with this TQ, it must be discussed separately with Jacobs Contract team.

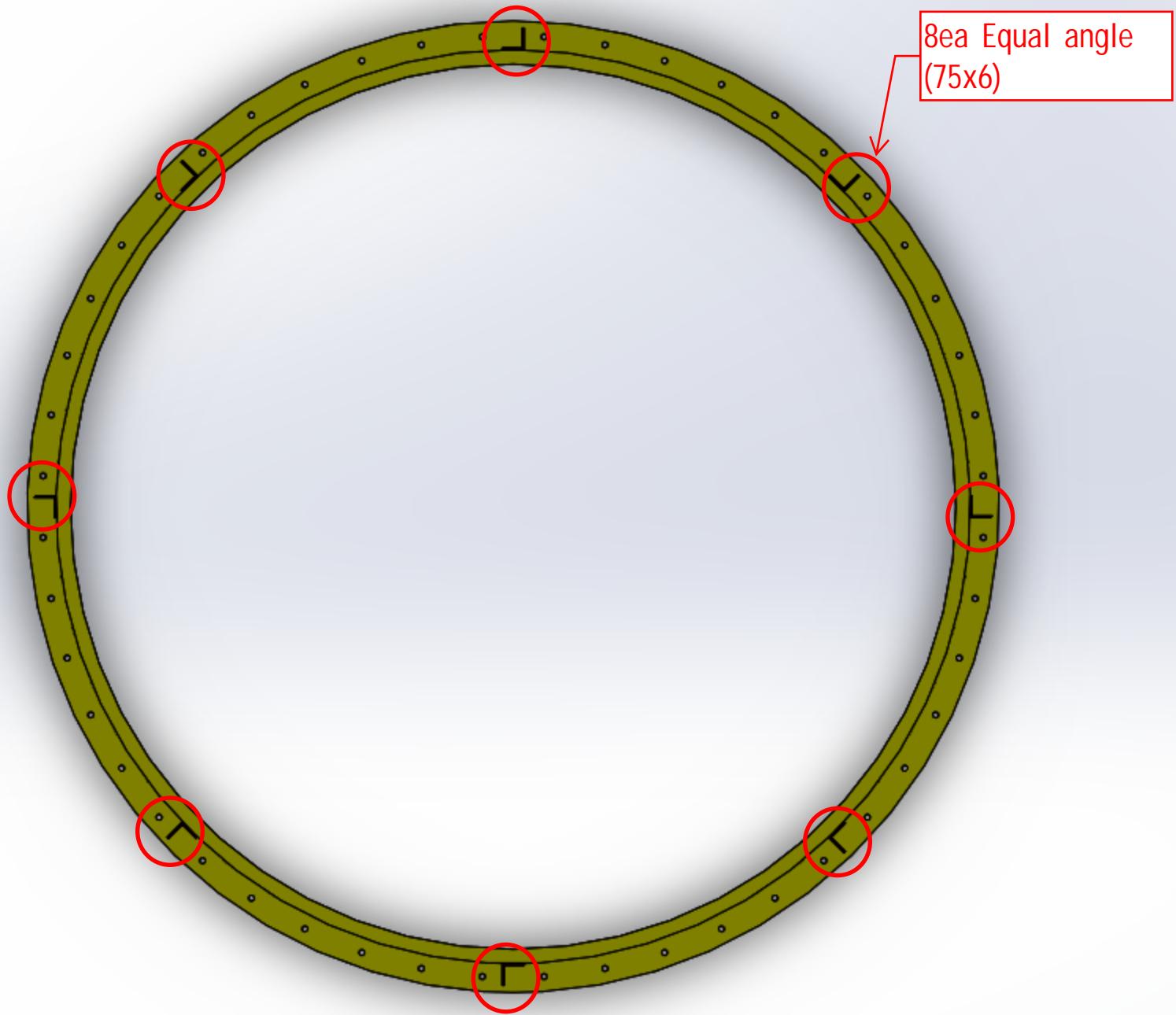
C. Engineering Decision		D. Information		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Accept with comments	Reject	<b>Design Change</b> Distribute to: Design Author DA	<b>Cost Impact</b> Distribute to: Contracts, Proj. Controls & Construction Manager	<b>Schedule Impact</b> Distribute to: Proj. Controls & Construction Manager

REVIEWER		APPROVER		CONSTRUCTION MANAGER	
Field Engineer OR Lead Engineer		Lead Engineer OR Chief of Engineering		(If <b>Cost</b> and/or <b>Schedule</b> Impact)	
Date: (dd/mm/yyyy)		Date: (dd/mm/yyyy)		Date: (dd/mm/yyyy)	

# Proposal

Attachment 1







**MCS** international

**Worley**  
energy | chemicals | resources

## Defect and Recommendation Sheet

SRV No:

Non Compliant assessment QA/QC SECTION							WORLEY ENGINEERING SECTION	
Seq. No	Photo No.	Items Descriptions (not complying)	Site Specification and clause	Required Action	3 Week Look Ahead Schedule Impac	Supplied by	Action required	NOTE
<b>Tag number to be fill in here</b>								
1	Photo #1	<b>Rods weld of closing door exhaust guard broken</b>	Drawing: 1690-55-L4-1528	<b>Need to painting after welded of all guard rods</b>	Yes	Howden	To be rectified.	Purpose of the protect misalignment after installation (same as issue#3), preferred to install additional reinforcing bars between guard flanges. Please refer to sketch on the photo#1 and final detail to be verified by Worley ENG.
2	Photo #2	<b>Access platform door hinge is broken</b>	Drawing: 1690-15-S1-1505	<b>Need to painting after welded of door hinge</b>	Yes	Howden	To be rectified.	Door hinges shall be replaced by new hinges if those hinge shafts are broken/damaged.
3	Photo #3	<b>When pre-installed the guard on it misaligned due to no support as per its vendor design</b>	Drawing: 1690-55-L4-1528	<b>Provide additional support and notify vendor</b>	Yes	Howden	To be rectified.	Preferred to install additional reinforcing bars between guard flanges. Please refer to sketch on the photo#3 and final detail to be verified by Worley ENG.
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
to be continue insert new rows if needed.								

Contractor Quality reviewed by:

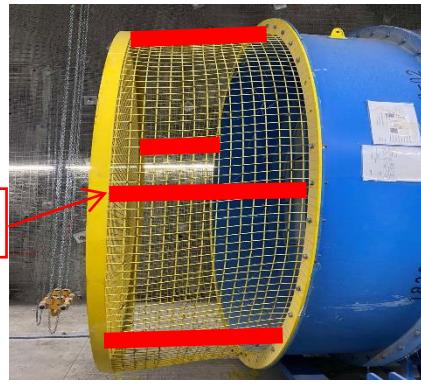
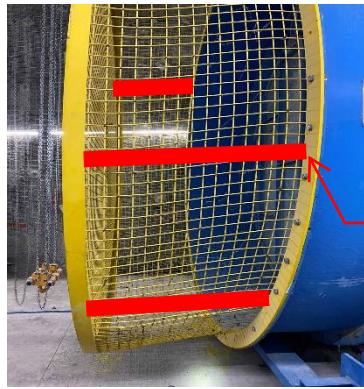
Name:  
Signature:  
Date:

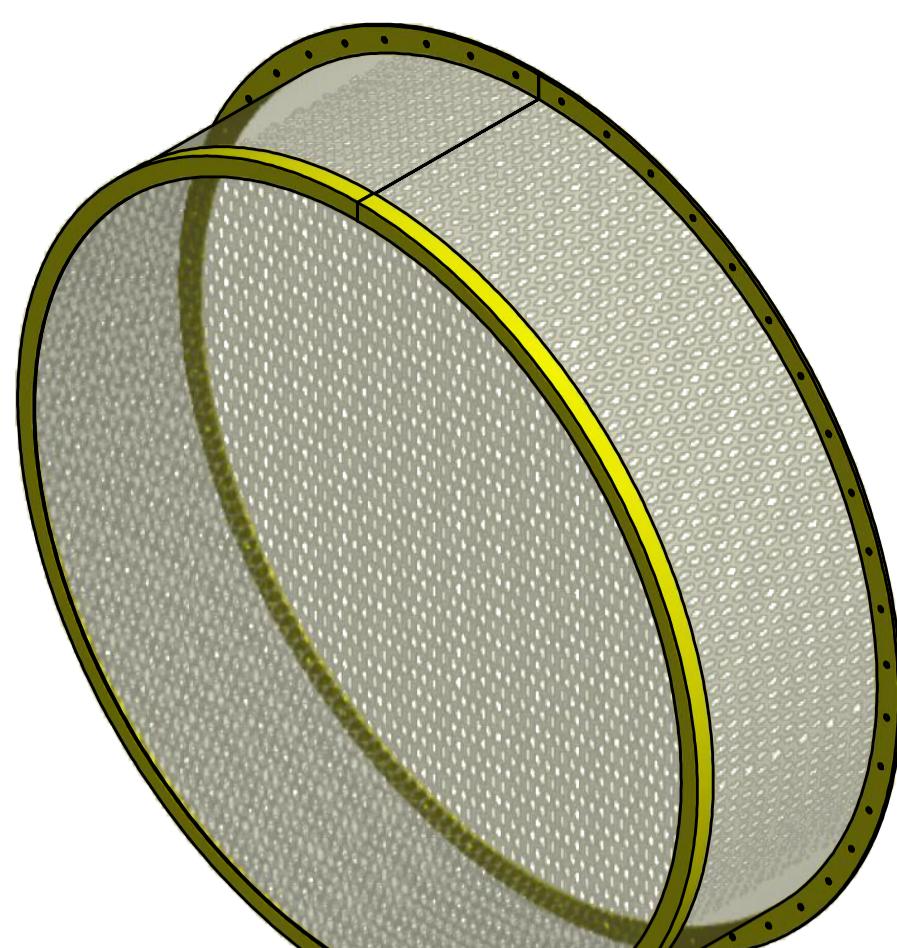
EPCM Quality reviewed by:

Name:  
Signature:  
Date:

EPCM Engineering reviewed by:

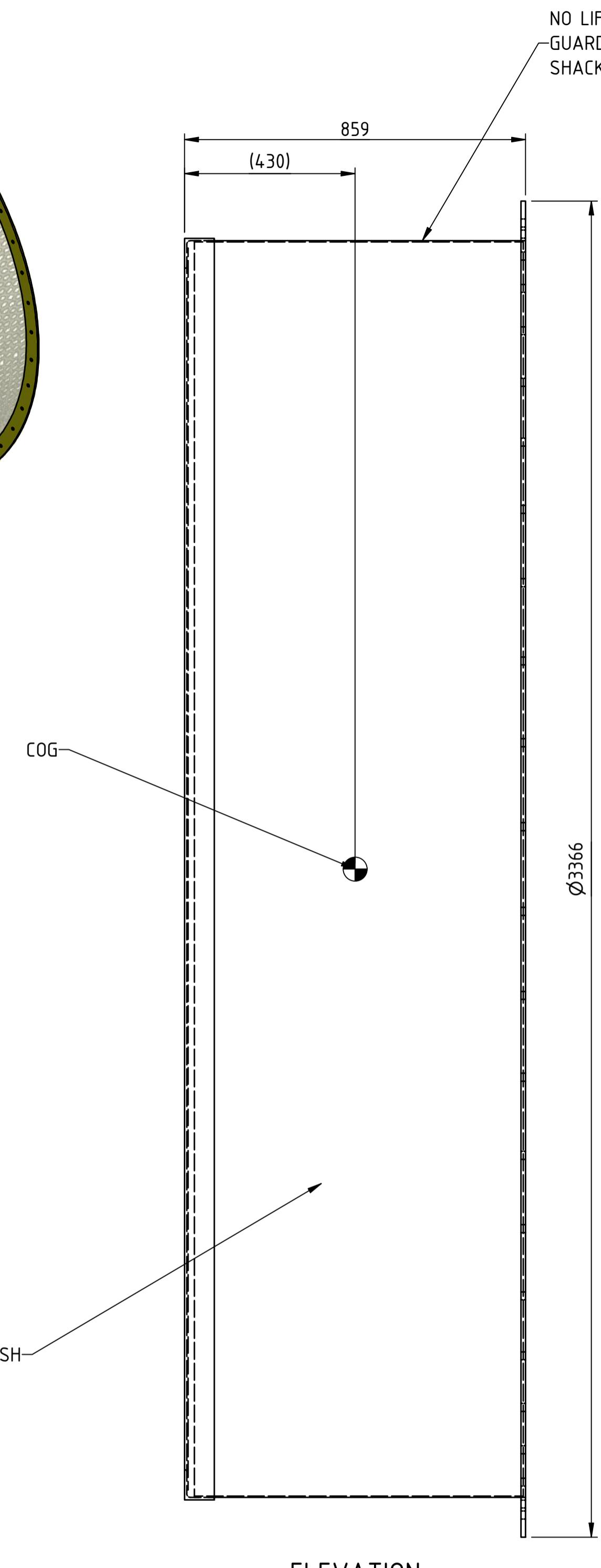
  
Boldbaatar.M  
2022.03.27  
16:44:58 +08'00'

**Defect and Recommendation Sheet Photo Appendix****Photo #1****Rods weld of closing door exhaust guard broken****Photo #2****Access platform door hinge is broken****Photo #3****When pre-installed the guard on it misaligned due to no support as per its vendor design**



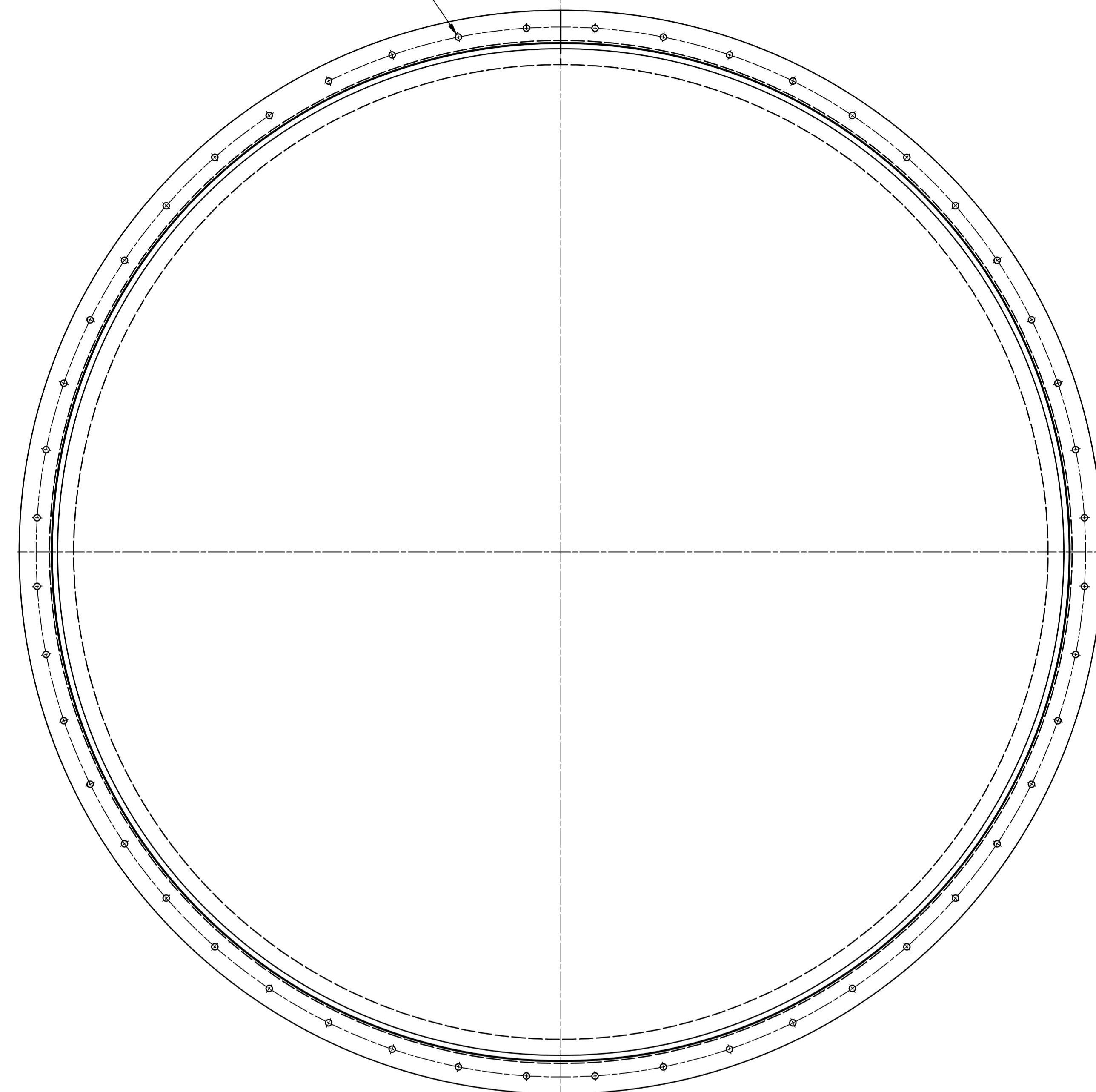
3D VIEW  
SCALE: NOT TO SCALE

NOT TO SCALE



ELEVATION  
SCALE 1:10

SCALE 1:1



VIEW ON INLET  
SCALE 1:10

## NOTES:

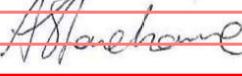
- 1. FOR STANDARD NOTES, REFER TO DRAWING 1690-55-L4-1519 / L000916-9999

1	1	SELF CLOSING DOOR DISCHARGE GUARD	L000916-1051	1690-55-L4-1528	Q235B	202 kg
ITEM	QTY	DESCRIPTION	HOWDEN PART	DRAWING NUMBER	MATERIAL	MASS



# OYU TOLGOI LLC ОЮУ ТОЛГОЙ ХХК

Disclaimer: Drawings, plans, models, designs or any other information displayed, contained in, made available or disclosed in or attached to this document (or its part or attachment) is owned by Oyu Tolgoi LLC and may be a proprietary of Oyu Tolgoi LLC and hence they are subject to strict protection under applicable laws. Copying, reproduction or distribution of this document (or its part or attachment) without the written consent or permission of Oyu Tolgoi LLC shall be strictly prohibited. Any violation (actual or attempted) of the above restrictions and prohibitions shall be subject legal liabilities and Oyu Tolgoi LLC reserves its rights and entitlements to all available legal remedies. Энэхүү баримт дэвсээр ал төмөрчин зураг, төмөрчийн засвар, дэвсэн болон дүүцд албандаа мэдээллийн Оyu Tolgoi ХХК Өмчийн дөхөөд Оyu Tolgoi ХХК-ийн Өмч мөн. Иймээс дэгээр мэдээлэл нь эзжих Оyu Tolgoi ХХК-ийн домоод хэрэгжинэд зориулаадсан дөхөөд Оyu Tolgoi ХХК-ийн дэвсэн эзбээр мэдээллийн албандаа хэлдээрээ хүргүүлж, хүннан олшигуулж эхийн дэгээр мэдээлэлд нэмэрх аливаа дүгэц дэвсээдээ шийхүүс хамгийн хориглуулна. Эдгээр нөхцлийн (доодотоо эзрчилж эхүүг эзричихийг оролдсан) албандаа эзрчилж хүүлийн хувьнуудаас хүлээндээс дөхөөд боломжийн дүх хүчлийн эрх зүйн араа хэмжээ авах эрхээ Оyu Tolgoi ХХК хадгална.

<b>JACOBS</b>	Contractor/Supplier/Vendor Technical Document and Drawing Review for SN1809A0 - OT Underground Project		
	1	Reviewed with No Comments. (Construction/Fabrication may Proceed)	
	2	Reviewed with Minor Comments. Revise and resubmit "Final Version" incorporating comments. (Construction/Fabrication may proceed thereafter)	
	3	Rejected with Major Comments. Correct and resubmit "For Review" incorporating comments. (DO NOT PROCEED with Construction or Fabrication)	
	4	Not Reviewed - Received For Information Only. No further submission is required.	
	5	Received Certified/Equipment Package Vendor Document. Received As Built - Contractor Document.	
	6	Cancelled.	
YES	NO	Submit Certified Document.	
Responsible Engineer		Name  Signature  Date	 <small>Digital signature by Andrew Stonehouse DN: cn=Andrew Stonehouse, c=AU, o=Worley, ou=Energy, Chemicals and Resources, email=andrew.stonehouse@worley.com Date: 2020.07.30 11:53:55 +10'00'</small>
Equipment Tag No.			
Client Document No.		1690-55-L4-1528	
Jacobs Document No. and Revision		CW2100223-1690-B005-0087_R4	
<p>AUTHORISATION TO PROCEED DOES NOT RELIEVE THE VENDOR/CONTRACTOR OF ANY RESPONSIBILITY, OBLIGATION OR LIABILITY UNDER THE PURCHASE ORDER/CONTRACT. NO RESPONSIBILITY IS ASSUMED BY JACOBS FOR CORRECTNESS OF DIMENSIONS OR DETAILS. SHOP DRAWINGS ARE ACCEPTED AS FOR INFORMATION ONLY (NOT REVIEWED).</p> <p>VENDOR/CONTRACTOR IS FULLY RESPONSIBLE FOR SHOP DRAWINGS.</p>			

L000916-1050  
S NO: CW2100223-1690-B005-0087

**OLGOI UNDERGROUND PROJECT**  
-

**LOSING DOOR EXHAUST GUARD  
ASSEMBLY**

1690-55-L4-1526 0

# Replaced Exhaust mesh guard

