



June 21, 2018

ADDENDUM No. 1

**Request for Proposals CS-18-05
AMMONIA PLANT EXHAUST SYSTEM MODIFICATIONS
FOR THE CANOE VALLEY RECREATION CENTRE, VALEMOUNT AND THE
ROBSON VALLEY RECREATION CENTRE, MCBRIDE**

*The addendum is being issued prior to the closing of the Request for Proposals (RFP) to provide further information, make changes to, or to clarify the Request For Proposal Documents and is to be read, interpreted and coordinated with all other parts of the RFP Documents. In the case of a conflict with the balance of the documents, this Addendum shall govern. **Proponents shall attach a signed copy of this addendum to their tender submission, failure to do so may result in a non-compliant proposal.** This addendum shall form part of the Contract Documents.*

Please see the attached information provided by Mirkwood Engineering in response to questions/inquiries received from proponents who attended the mandatory site visit.

Submissions from proponents who did not attend the site visit will not be considered.

I/We hereby verify that we have considered this addendum (6 pages) in our proposal submission.

Proponent's Signature

Date

All inquiries relating to RFP CS-18-04 must be emailed to:
Lyle Lewis, Project Manager
Email: llewis@rdffg.bc.ca with cc to cpaton@rdffg.bc.ca

Owner Comment Response Form

PROJECT NAME:	Canoe Valley and Robson Valley Recreation Center	ISSUED BY:	B. Erickson
PROJECT No.:	18-1024	NO OF PAGES:	1
RESPONSE FORM No.	01	DATE:	June 20, 2018

Canoe Vally Recreation Centre - Valemount			
Received		Mirkwood Response	
1	Specs say the fan motor requires a variable drive, is it a motor that can accept a variable drive?	1	See Addendum M-01 Item 3.1
2	Section 8.1 CONTROLS (DDC) specifies that all controls shall be supplied by the base building control manufacturer and approved by the Owner – who is the base building control manufacturer?	2	See Addendum M-01 Item 3.3
3	Is the add-on to be standard galvanized?	3	Yes
4	Is VFD supplier a mechanical or controls contractor?	4	See Addendum M-01 Item 3.2
5	Specs say provide x-ray study before drilling or cutting where required by the Owner – is this necessary?	5	See Addendum M-01 Item 3.3
6	Is there vermiculite in the wall?	6	Owner to test and confirm Presence of Vermiculite.
7	With regard to the 36"x24" backdraft fan, does the fan on the gym side of the wall require a bar protection grill?	7	Backdraft Damper sits on top of duct in mechanical room unlikely to be damaged. No Grille is on the exposed arena side only.
8	Is it possible to move the 36"x24" fan to the other side of the wall?	8	There is no 36x24 Fan. 36x24 Fire damper must be mounted in the plane of the wall.
9	Can the contractor use other than a CIMCO DDC, can it be a stand-alone full DDC system?	9	See See Addendum M-01 Item 3.3.2
10	Is the grill listed in the room on the arena side of the wall or is there supposed to be 2 grilles there? One being on the ceiling and one on the wall?	10	Grilles are to be used on Arena Side of Transfer Air ducts only.

Robson Valley Recreation Centre – McBride			
Received		Mirkwood Response	
1	Does the old exhaust fan in the plant room need to be removed?	1	See Addendum M-01 Item 2.1.2
2	Where the fan is being installed in the ceiling, going through the gyproc, are the joists on 16" centres?	2	See Addendum M-01 Item 2.1.1
3	Does the Contractor have to frame out an opening in the ceiling for the exhaust fan in the plant room	3	See Addendum M-01 Item 2.1.1
4	Can we change the duct outlet size in the ammonia room to a size that will fit within the joist space?	4	See Addendum M-01 Item 2.1.1

MECHANICAL ADDENDUM

PROJECT NAME:	Canoe Valley and Robson Vally Recreation Center Ammonia Exhausts	ISSUED BY:	B. Erickson
PROJECT No.:	18-1024	NO OF PAGES:	3
ADDENDUM NO.:	01	DATE:	June 20, 2018

This Addendum shall be read in conjunction with the following drawings and specifications and shall form part of the contract documents.

1 Robson Valley Recreation Center

1.1 Drawing M-1 Partial Plans.

1.1.1 Grilles are only used on exposed face of duct in arena area. Only one Grille is required.

1.2 Drawing M-2 Schedules and Details.

1.2.1 Detail 3 M2 updated on MSK-01.

2 Canoe Valley Recreation Center

2.1 Drawing M1 Partial Plans

2.1.1 Exhaust duct proportions through joist can be adjusted to fit. Duct to maintain equal free area to dimensions shown on drawing (24x12 Area).

2.1.2 Old exhaust fan to be demolished and wall infilled and sealed.

2.2 Drawing M-2 Schedules and Details

2.2.1 Detail 1 M2 updated on MSK-01.

3 Specification

3.1 Existing Motor is non inverter type. New motor to be provided with VFD in Base Price.

3.2 Control Contractor to provide VFD's.

3.3 Section 8.1 Controls(DDC).

3.3.1 Base price to be Delta Controls by Cimco using as much as possible of existing.

3.3.2 Alternates can be submitted with cost savings.

3.4 Contractor to provide Separate cost for removal of Xray from Scope. Exact Location to be confirmed prior to construction.

3.5 Ductwork section Added to specification. See Attached.

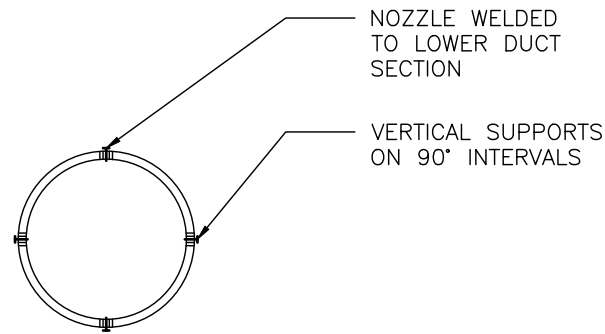
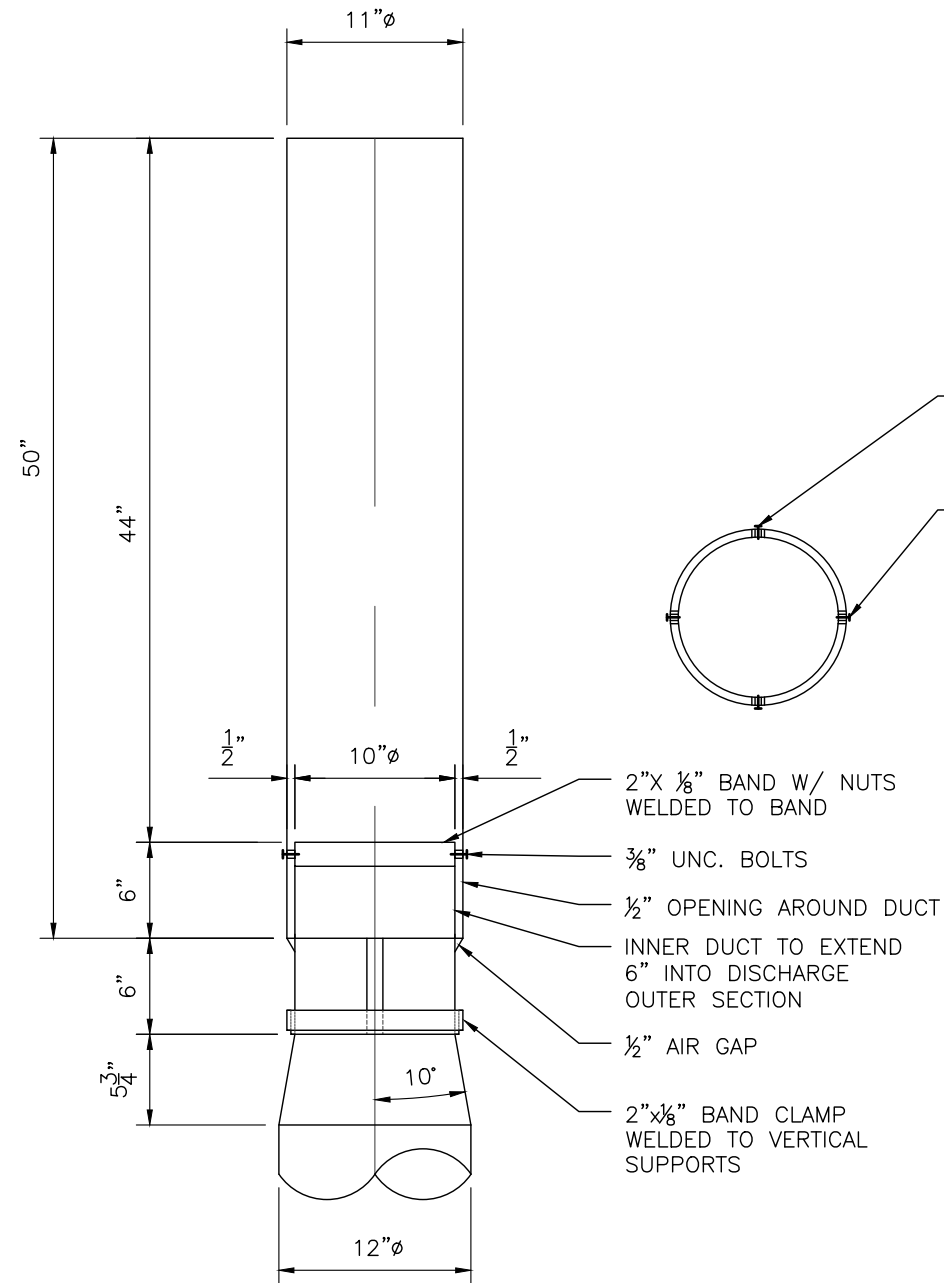
Mirkwood Engineering



Per. Bradley Erickson Gradtech.

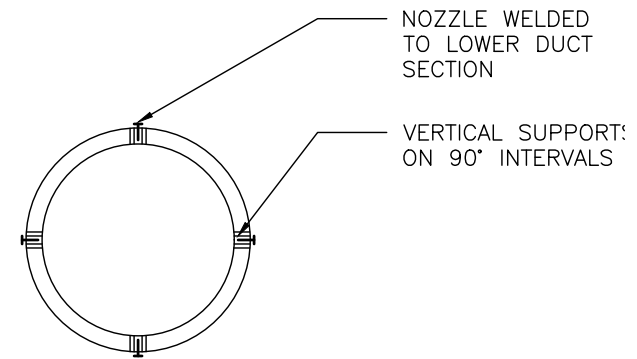
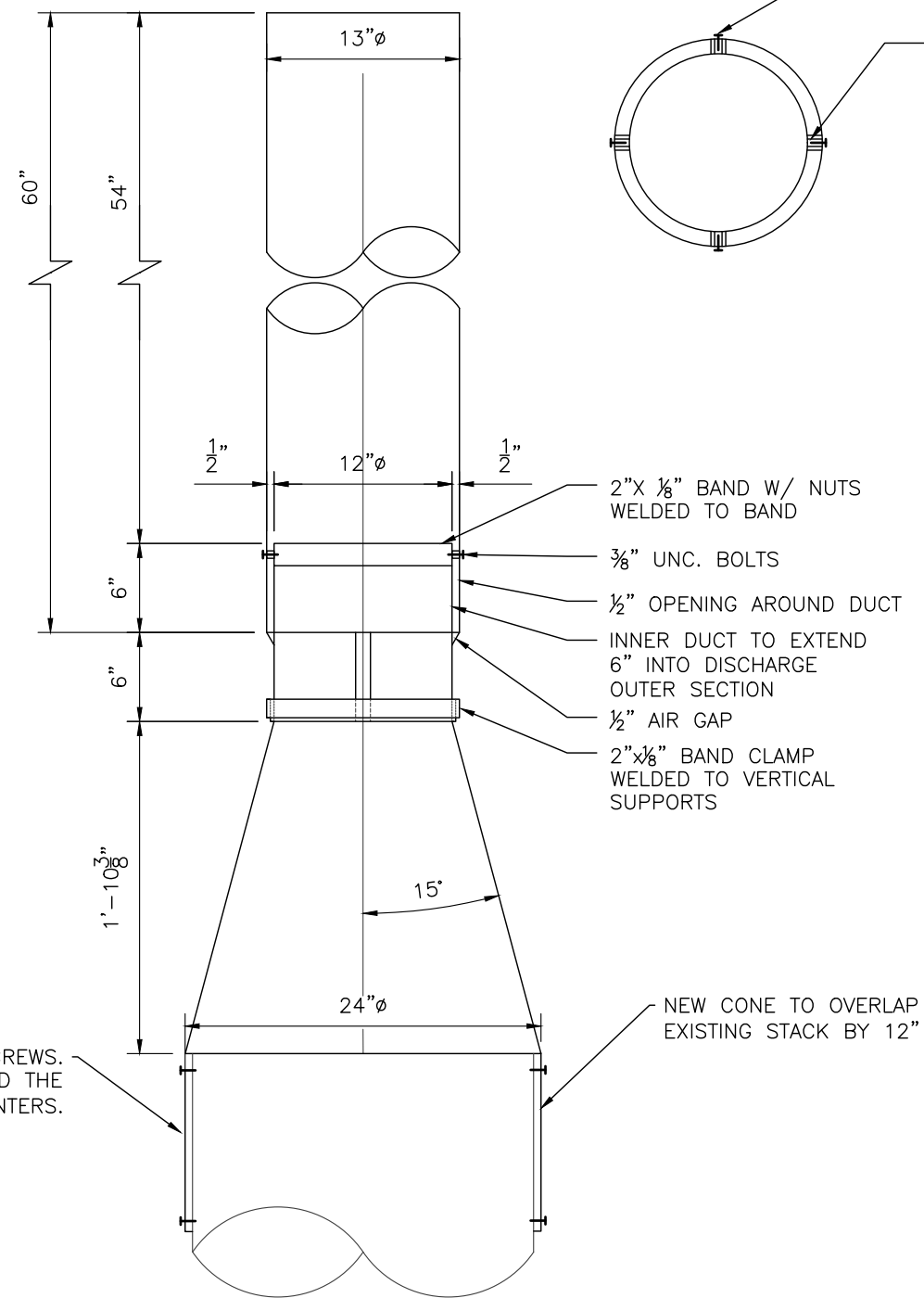
1. **DUCTWORK, FITTINGS AND EQUIPMENT**

- 1.1 All ductwork construction, support and installation shall be in accordance with the latest A.S.H.R.A.E. and S.M.A.C.N.A. recommendations and the base building standards.
- 1.2 Provide duct sealer on all new duct joints.
- 1.3 Duct sealer to be equal to Duro-Dyne Model #SWB, to be applied with a brush or flow gun. Application to be made when the air system is "off", to allow material to cure. Where ducts are exposed, all joints are to be wiped clean of any excess sealer. Where ducts are externally insulated, sealer must be 100% air tight, to avoid blowing off the insulation.
- 1.4 Rigid round ducts shall be of spiral construction.
- 1.5 Provide flexible connections between all fans and adjacent ductwork with a minimum 6 in. (150 mm) separation between fan and ductwork. Flexible connections shall consist of a preassembled unit of fire resistant P.V.C. weave equal to Duro Dyne Canflex.
- 1.6 Provide 1 in. (25 mm) flexible scrim faced acoustic insulation equal to "Knauf" duct liner "M" for supply, return or exhaust ductwork where indicated. All dimensions on drawings are clear inside dimensions. Where acoustic insulation is installed, increase dimensions accordingly. Lining to be attached with complete coverage of adhesive and pins on maximum 18 in. centres. All raw edges of lining to be buttered down with duct sealer or metal edges to avoid erosion of fibres. Spray adhesive is not acceptable.
- 1.7 New motorized dampers to be provided as indicated on the drawings and schedules. Dampers to be manufactured by Tamco. Alternate manufacturer's may be accepted but must be equal in all ways and can be rejected at the engineer's discretion.
- 1.8 Dampers used for mixing are to be parallel blades with airflows directed to maximize mixing. Modulating Dampers for flow control are to be opposed blades. Round duct can be a single blade, up to 18" dia. The blades must be supported on both sides.
- 1.9 Provide fire dampers where shown on drawing and where required by local authorities and applicable codes.
- 1.10 Fire dampers shall be type 'B', with blades outside the air stream, U.L.C. labelled, fabricated and installed to the approval of all authorities having jurisdiction. Install fire dampers in sleeves, secured with angle supports in accordance with NFPA 90A and CUA 90-1.



NOZZLE WELDED TO LOWER DUCT SECTION
VERTICAL SUPPORTS ON 90° INTERVALS

1
MSK-1
ROBSON VALLEY REC CENTRE EXHAUST DISCHARGE DETAIL
SCALE: 1" = 1'-0"



PROVIDE 2 ROWS OF SCREWS. PROVIDE SCREWS AROUND THE CIRCUMFERENCE ON 12" CENTERS.

2
MSK-1
CANOE VALLEY REC CENTRE EXHAUST DISCHARGE DETAIL
SCALE: 1" = 1'-0"

CS-18-05
Addendum No 1
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No.	DESCRIPTION	DATE	No.	DESCRIPTION	DATE



1395 5th Avenue Prince George, BC V2L 3L6
T 250.596.1710 MIRKENG.CA

PROJECT:
ROBSON VALLEY RECREATION & CANOE VALLEY RECREATION CENTRES AMMONIA ICEPLANT EXHAUSTS EXHAUST DISCHARGE DETAILS

REFERENCE DWG. NO.: M2	
DATE: 2018-06-20	PROJECT NO.: 18-1022,-24
SCALE: 1"=1'-0"	SKETCH NO.:
DRAWN:	CHECK: MSK-01