Notice of Alteration Form

Manitoba
Sustainable Development

Client File No.: 491.10	Environment Act Licence No.: 1085 RR

Legal name of the Licencee: Rothsay, A Division of Darling of Darling International Canada Inc.

Name of the development: Rothsay

Category and Type of development per Classes of Development Regulation:

Agriculture — Rendering plants

Licencee Contact Person: Mariana Moreira
Mailing address of the Licencee: 607 Dawson Rd N
City: Winnipeg Province: MB Postal Code: R2J 0T2
Phone Number: (204) 800-5625 Fax: (204) 235-1264 Email: mariana.moreira@rothsay.ca

Name of proponent contact person for purposes of the environmental assessment (e.g. consultant):
Mariana Moreira

Phone: (204) 800-5625 Fax: (204) 235-1264	Mailing address: 607 Dawson Rd. N, Winnipeg, MB R2J 0T2

Email address: mariana.moreira@rothsay.ca

Short Description of Alteration *(max 90 characters):*

Replace a 2,000 CFM Venturi with a 6,000 CFM Venturi. Replace storage tanks #3,4 and 5.

Alteration fee attached: Yes: ☑ No: ☐

If No, please explain:

Date: 2019-12-16	Signature:  Printed name: mariana moreira

A complete Notice of Alteration **(NoA)** consists of the following components:

- ☑ **Cover letter**
- ☑ **Notice of Alteration Form**
- ☑ **2 hard copies and 1 electronic copy of the NoA detailed report** (see "Information Bulletin - Alteration to Developments with Environment Act Licences")
- ☑ **$500 Application fee, if applicable** (Cheque, payable to the Minister of Finance)

Submit the complete NoA to:

Director
Environmental Approvals Branch
Manitoba Sustainable Development
1007 Century Street
Winnipeg, Manitoba R3H 0W4

For more information:

Phone: (204) 945-8321
Fax: (204) 945-5229
http://www.gov.mb.ca/sd/eal

Note: Per Section 14(3) of the Environment Act, Major Notices of Alteration must be filed through submission of an Environment Act Proposal Form (see "Information Bulletin – Environment Act Proposal Report Guidelines")

ROTHSAY

Darling International Canada Inc.
607 Dawson Rd.,
Winnipeg, MB R2J 0T2

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rothsay.ca

December 24, 2019

Director
Environmental Approvals Branch
Manitoba Conservation and Climate
1007 Century Street
Winnipeg, MB R3H 0W4

Re: Notice of Alteration, Environment Act Licence No. 1085 RR, File No. 491.10
Venturi Scrubber Upgrade (South Receiving Area) &
Liquid Product Storage Tank Replacements
Rothsay, Winnipeg Plant

Please find enclosed an application for a Notice of Alteration for the Rothsay, Winnipeg Plant ('Plant') located at 607 Dawson Road, Winnipeg, Manitoba. This application is being submitted under the existing Environment Act Licence No. 1085 RR, File No. 491.10, and pertains to the odour abatement equipment within the south receiving area of the Plant and the existing Liquid Product Storage Tanks at the Plant.

Venturi Scrubber Upgrade (South Receiving Area)

Rothsay is always aiming to improve air emissions and reduce odour inside of and leaving the Plant. The air quality treatment system at the Plant is comprised of a series of venturis and scrubbers to clean and treat the air leaving production areas in the Plant. The South Receiving Area is currently treated by a 2,000 CFM venturi and a 30,000 CFM packed bed tower. The venturi is responsible to treat the emissions coming from the decanting system prior to discharging air into the packed bed tower. Low efficiency and low airflow through the venturi can increase fouling in the packed bed scrubber, thus reducing its overall efficiency.

Rothsay is proposing to replace the 2,000 CFM venturi with a new 6,000 CFM venturi in Q1 2020. The new venturi will be installed in the vicinity of the existing venturi, have similar design characteristics and will discharge to the existing 30,000 CFM packed bed scrubber. Specifications and a drawing of the proposed 6K venturi is provided in Attachment 1 – Venturi Scrubber Upgrade.

Increasing the size of the venturi will allow for better treatment of the air leaving the decanting system prior to entering the 30,000 CFM scrubber, thus improving the odour removal efficiency of the system. Therefore, environmental effects are anticipated to be reduced.

Liquid Product Storage Tank Replacements

The Plant currently has a liquid product storage tank farm consisting of four (4) tanks (Tank 3, 4, 5 & 6). Most of the tanks are over 30 years old and are showing significant signs of deterioration. Recent inspections have revealed thinning of the tank shells which presents increased risks such as the potential for releases/spills as a result of a tank failure. The steam coils within the tank have also experienced leaks resulting in inefficient heating and circulation of finished liquid products (especially in cold weather) as well as adversely impacting the

overall quality of the products. In 2019, the Plant had to conduct two (2) unplanned cleanings of Tank 5 due to leaking coils. These unplanned events resulted in the disposal of approximately 40 MT tonnes of spoiled finished product. Rothsay is anticipating that the replacement of Tanks 5 will reduce the frequency of tank cleaning resulting in approximately 30 – 50 MT of waste liquid product being diverted from waste disposal each year.

Rothsay is proposing to replace Tanks 3, 4 and 5, as well as the two (2) existing mechanical room buildings that serve the liquid product storage tank farm. Details for the replacement of these tanks and buildings are provided in the sections below.

Liquid Product Storage Tanks #3 & 4

Rothsay is planning to replace Tanks #3 & 4 in Q3 2020. Tank 3 has a capacity of 70 MT and is used to store Animal Fat. Tank 4 has a capacity of 70 MT and is used to store Used Cooking Oil (UCO).

Tanks 3 & 4 are undersized resulting in excess Animal Fat and UCO being stored onsite in tanker trucks resulting in material having to be rehandled, thereby increasing the potential for spills/releases. Increasing the capacity of the tanks also allows the Plant to optimize offsite railcar loading and product traceability as the typical capacity of a railcar is 90 MT.

Both tanks will be replaced with 110 MT capacity tanks. The location of the new tanks will be in the general vicinity of the existing tanks. Tanks specifications and drawings are provided in Attachment 2 - Liquid Product Storage Tank Replacement

Liquid Product Storage Tanks #5

Rothsay is planning to replace Tank #5 in Q1 2020. Tank #5 has a capacity of 140 MT and is used to store Animal Fat. The replacement tank will be identical to the existing tank in terms of capacity and location.

Given that the replacement of Tank #5 is considered "like-for-like", Rothsay understands that this replacement will not warrant a Notice of Alteration; however, supporting documentation that demonstrates that the new tank will be the same capacity and installed in the same location as the existing tank has been included in this application (see Attachment 2).

Mechanical Room Building

The liquid product storage tank farm is currently served by two (2) mechanical rooms. Rothsay is planning to replace these mechanical rooms with one (1) central mechanical room that will house pumps, chemicals and electrical power distribution.

Given that the existing two (2) mechanical rooms are being replaced with one (1) central mechanical room, any environmental effects are anticipated to be reduced. Details regarding the new mechanical room are provided in Attachment 3 – Mechanical Room Building Replacement.

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Closing

A Notice of Alteration Form and the required application fee has also been provided as part of this application.

If you have any questions or require any additional information, please don't hesitate to contact me directly.

Sincerely,

Mariana Moreira
Environmental & QA Supervisor
Rothsay, a Division of Darling International Canada Inc.

cc: Ron Vincent, Rothsay, Winnipeg Plant, Plant Manager
John Bayliss, Rothsay, Environmental Manager

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Attachment 1 – Venturi Scrubber Upgrade

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Robertson Technologies, LLC

Emission Control Equipment & Consulting Services

4433 Victoria Street, Shoreview, Minnesota 55126
612-306-7461 / Email: jrobertson1811@gmail.com

Ref: Proposal for 6,000 cfm venturi

The 6,000 cfm venturi scrubber is made up of the following components.

a) One (1) 6,000 cfm Venturi scrubber fabricated of 316 stainless steel with dewatering channels, sloped sump floor to drain, mist eliminator housing, stainless spray header, and inspection/ access openings.
b) One (1) high temp chevron style mist eliminator of glass coupled polypropylene
c) One (1) Teflon spray nozzle.
d) One (1) 50 GPM close coupled recycle pump of 316 stainless with 3 hp TEFC, 3600 rpm, 575/6/30 and wash down duty motor mounted on stainless base
e) One (1) 20 gpm direct view flow meter for monitoring water make up
f) One (1) 50 gpm direct view flow meter for monitoring recycled water
g) One (1) stainless stem thermometer with 5" dia. dial and 240F scale
h) One (1) 0-15" differential pressure gauge with moisture traps and connecting tubing
i) One (1) lot of miscellaneous stainless hardware (bolts, nuts & washers) to assemble venturi
j) One (1) 6,000 cfm fan fabricated of 304 stainless air stream, constant speed drives and 20 hp TEFC 575/6/30 motor with set of vibration isolators. Fan is inclusive of shaft seal, bearing and shaft guard, inspection door and OSHA belt guard.
k) One (1) expansion joint with stainless mounting rings for the fan inlet
l) One (1) expansion joint with stainless mounting bars for the fan outlet.
m) IOM manual with supporting mfg. component specifications, data sheets and drawings for plumbing & electrical requirements on compact disks.

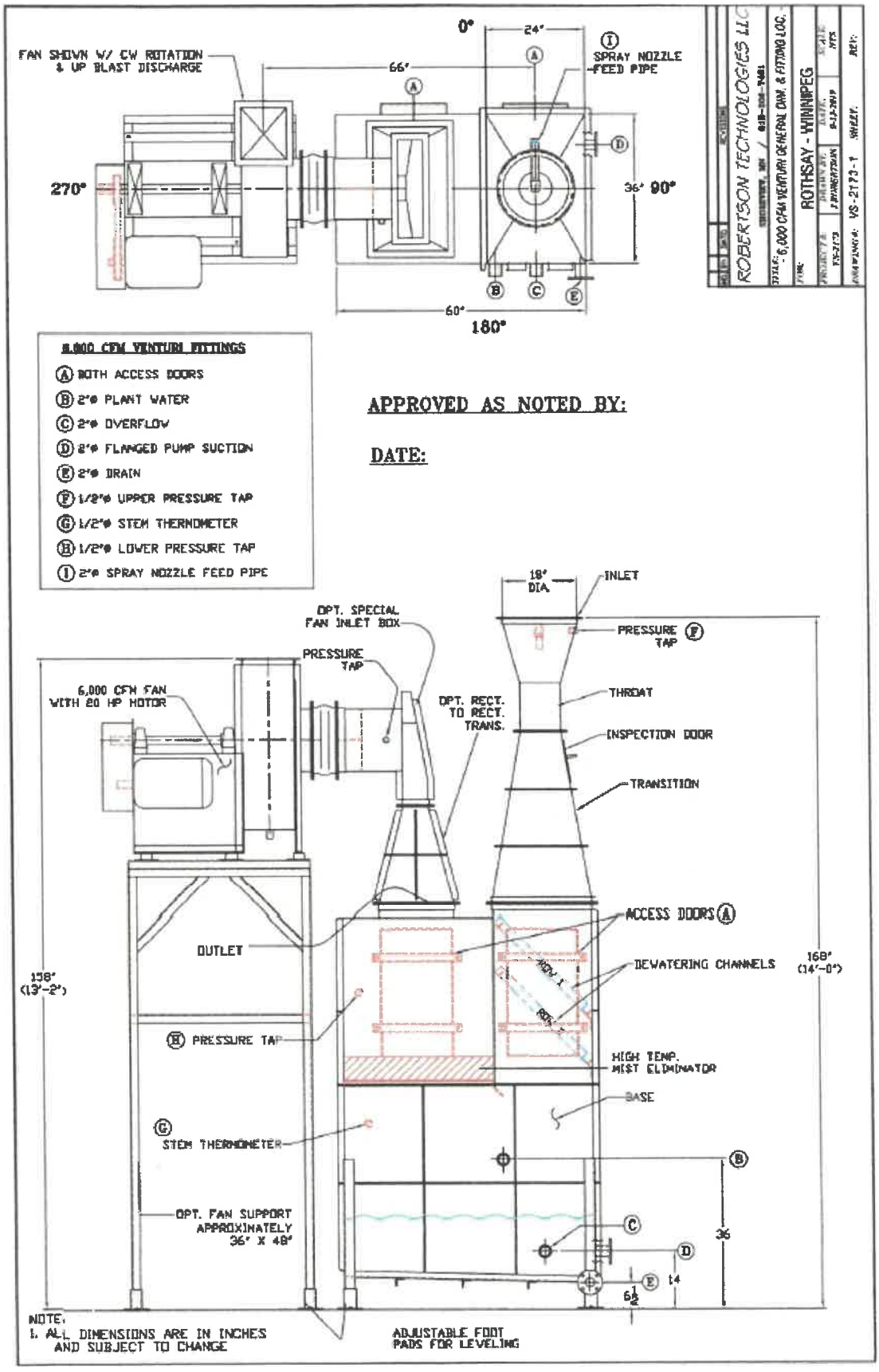

Figure 1: 6,000 CFM Venturi drawing

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Attachment 2 – Liquid Product Storage Tank Replacement

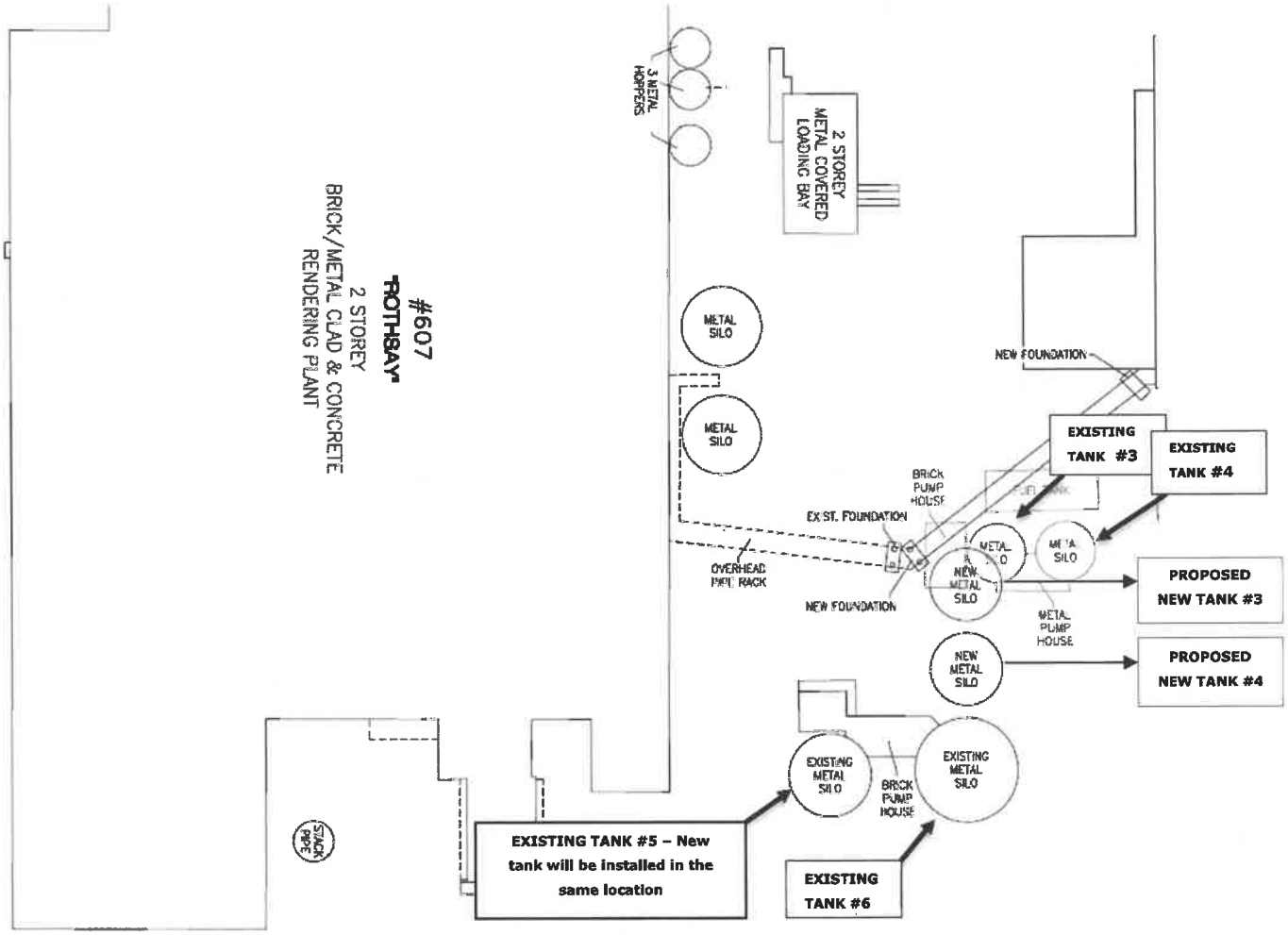

Figure 2: Tank Farm layout and proposed modifications

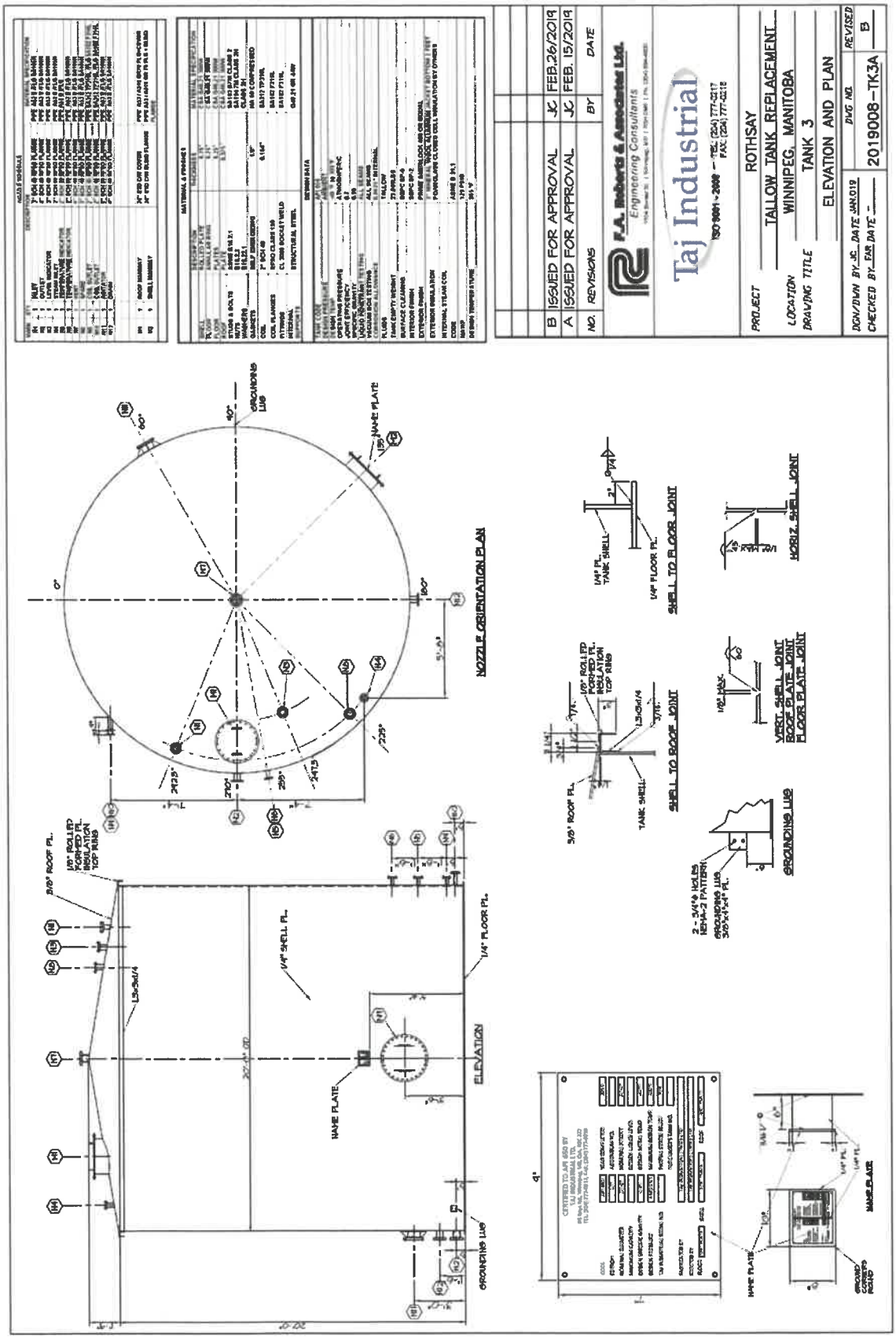

Figure 3: Tank #3 drawing and specifications

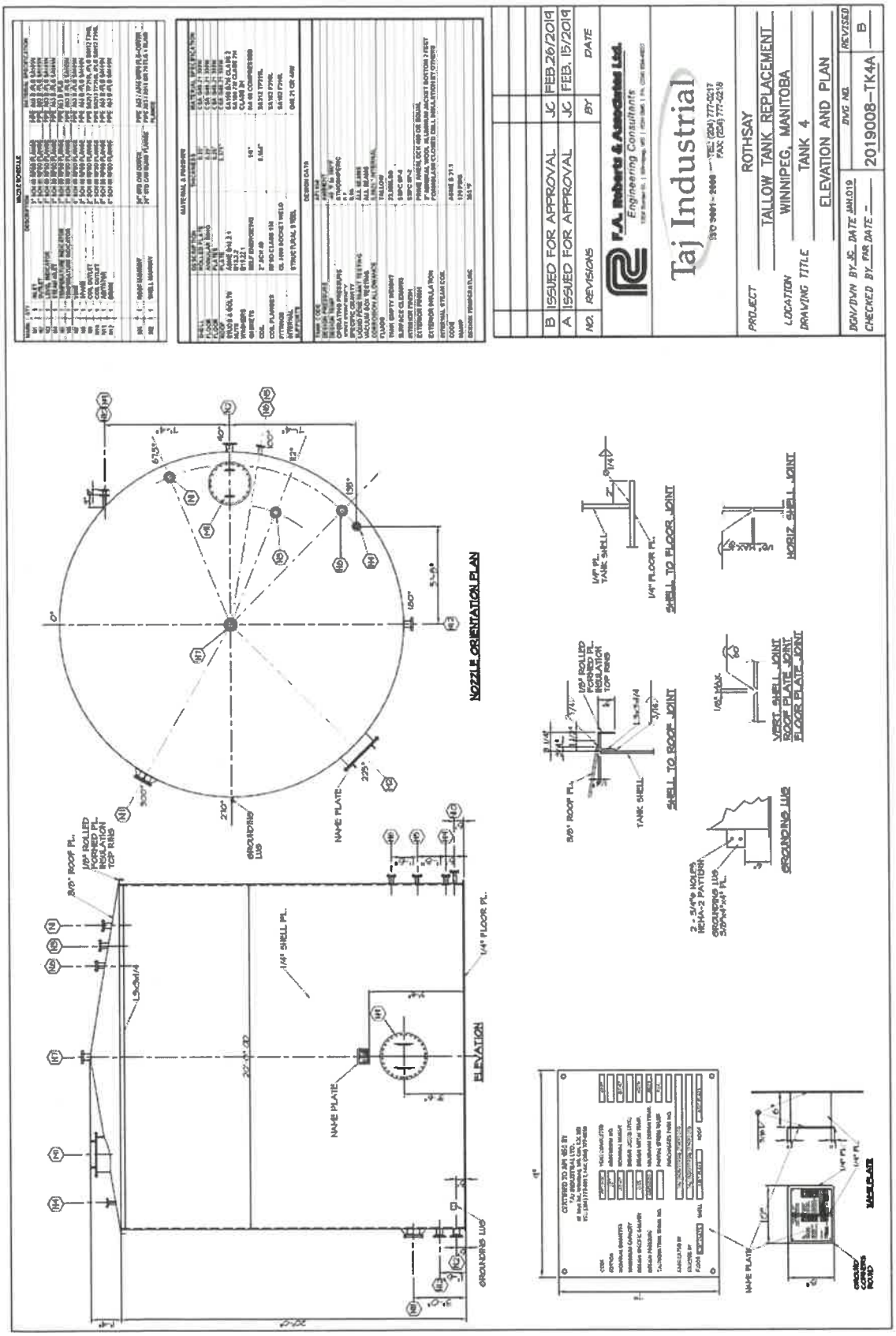

Figure 4: Tank #4 drawing and specifications

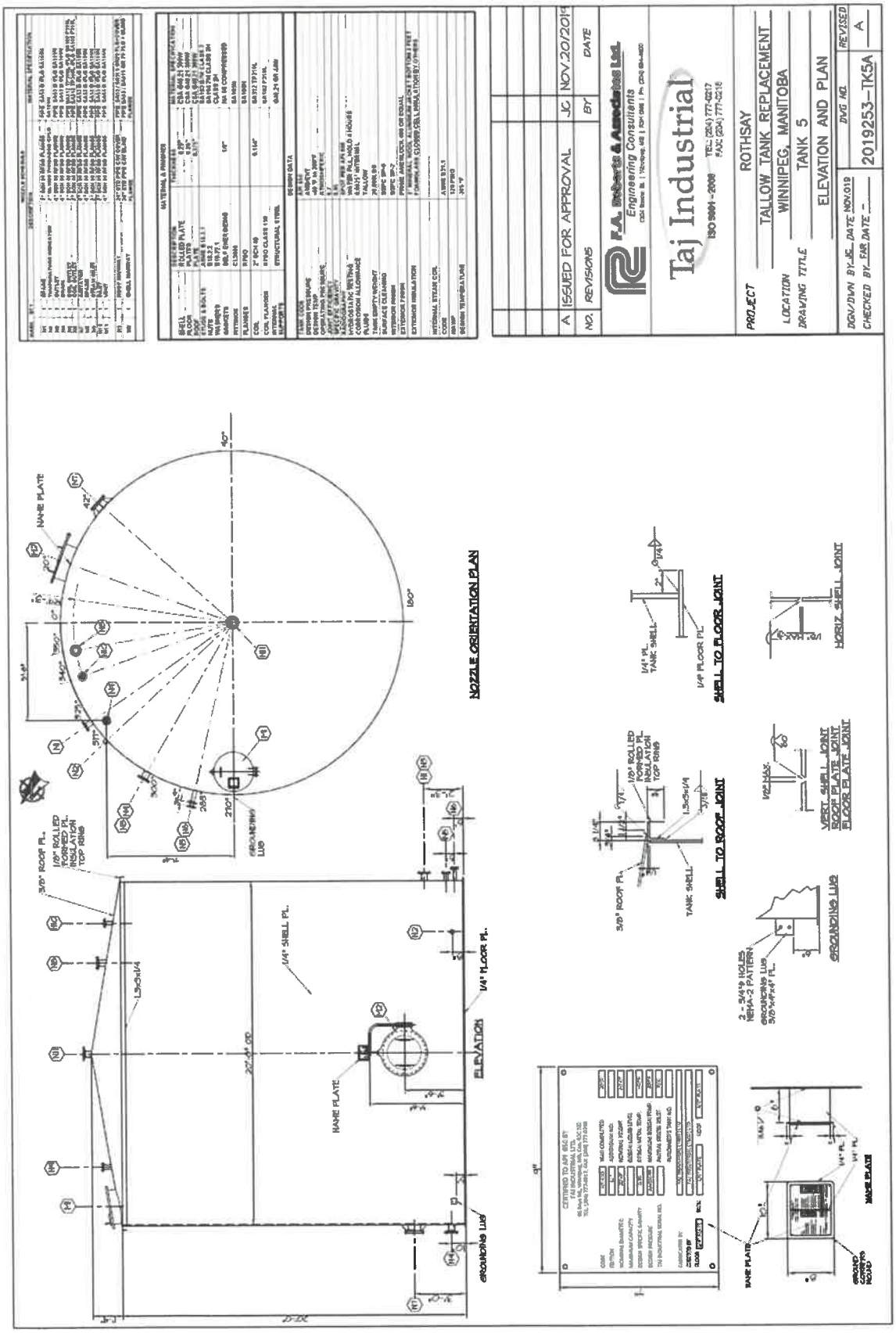

Figure 5: Tank #5 drawing and specifications

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Attachment 3 – Mechanical Room Building Replacement

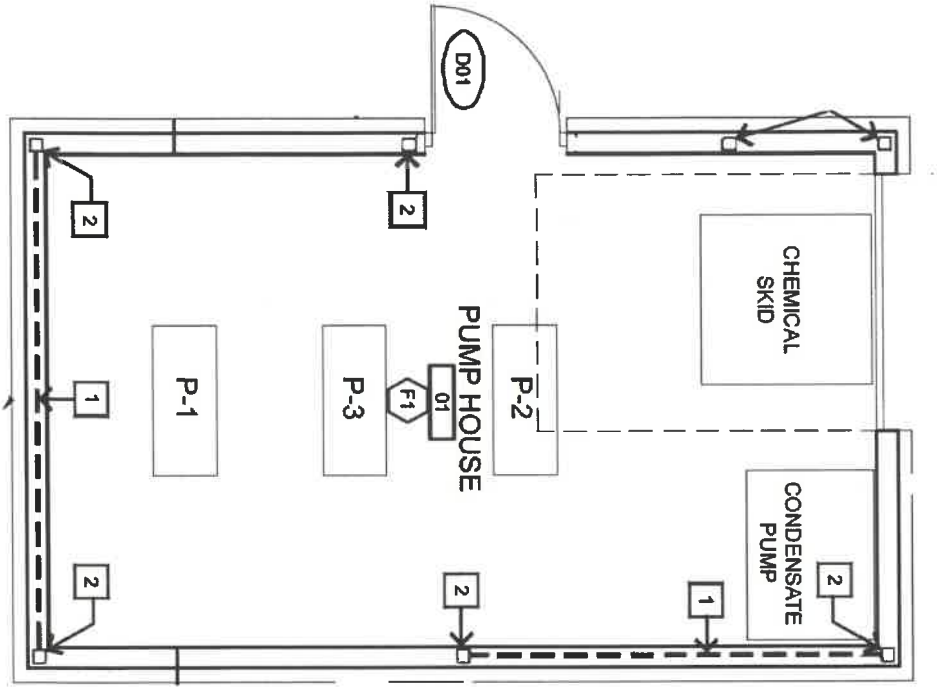

Figure 6: Proposed Mechanical Room Plan

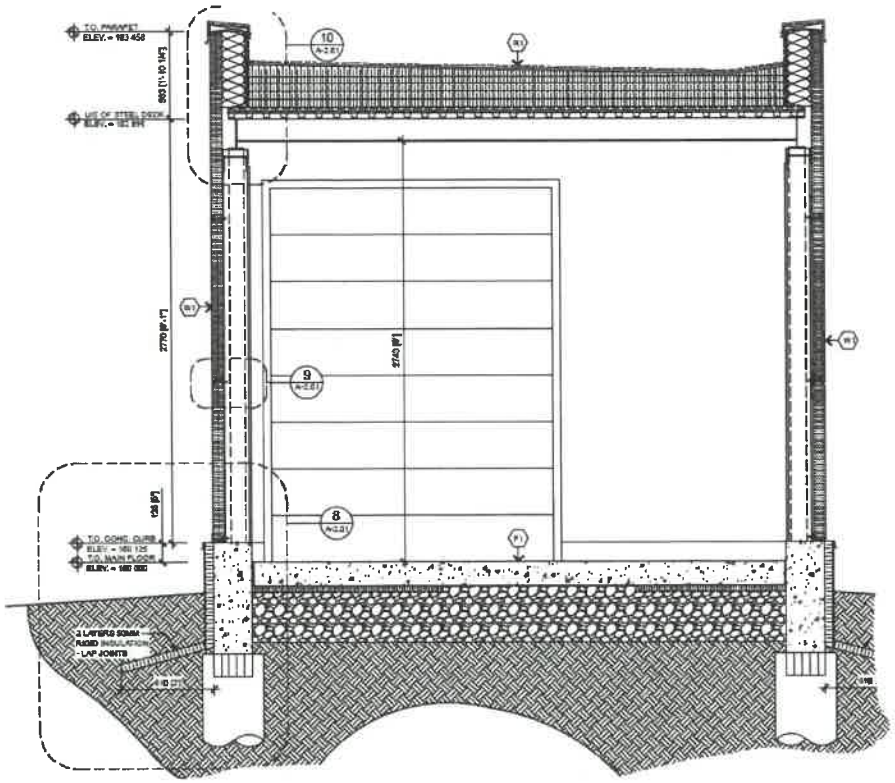

Figure 7: Proposed Mechanical Room Elevation