As Built Report
Effluent Water Treatment Plant (EWTP-WTC) Modifications

6526-693-132-REP-003

In Accordance with Licence 2AM-MEL1631 Part D, item 1 & 2

Prepared by:

Agnico Eagle Mines Limited – Meliadine Division

DOCUMENT CONTROL

Version	Date (YMD)	Section	Page	Revision
R0	11/10/2021			As built report

Prepared By: 

2021-10-11

Thomas Genty
Water Treatment Eng.

Approved by: 2021-10-11

Jessica Huza
Environment Superintendent

Mark Long Digitally signed by Mark Long Date: 2021.10.14 16:04:10 -05'00' 2021-10-11

Mark Long
Construction Superintendent

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

1 INTRODUCTION

1.1 SITE LOCATION AND ACCESS

Agnico Eagle Mines Limited (Agnico Eagle) is operating the Meliadine gold mine located approximately 25 km north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet in the Kivalliq Region of Nunavut. The site is located on the peninsula between the East, South, and West basins of Meliadine Lake (63°01'23.8"N, 92°13'6.42"W). The area is accessible from the all-weather gravel road linking the Meliadine mine site with Rankin Inlet.

A general location plan for the project is shown in Figure 1.

1.2 SITE FACILITIES

The current mine plan focuses on the development of the Tiriganiaq gold deposit which will be mined using both conventional open-pit and underground mining operations. Current mining facilities to support the Mine include a plant site and accommodations, tailings storage facility, waste rock storage facilities, ore storage pads, process plant, power plant, maintenance facilities, water management treatment plants and supporting infrastructures.

Such infrastructures include water retention dikes, berms, culverts, channels, collection ponds, pumping stations, fresh water intake and water treatment plants are required to manage water during pre-production, operation, and interim mine closure.

1.3 PURPOSE OF DOCUMENT

As required by the Water License A (No. 2AM-MEL1631), this report summarizes the construction and commissioning work associated with the Effluent Water Treatment Plant (EWTP) in the Water Treatment Complex Building (WTC). Included in this report are:

- A description of the Process;
- Documentation on field decisions that deviate from the original plans;
- Building location; and
- Photographs.

The present report does not present the construction of the WTC building which is summarized in the approved as built report 6526-694-132-REP-002. Note that the construction activities are mainly focused on mobilization of the EWTP equipment into a new building (the WTC).

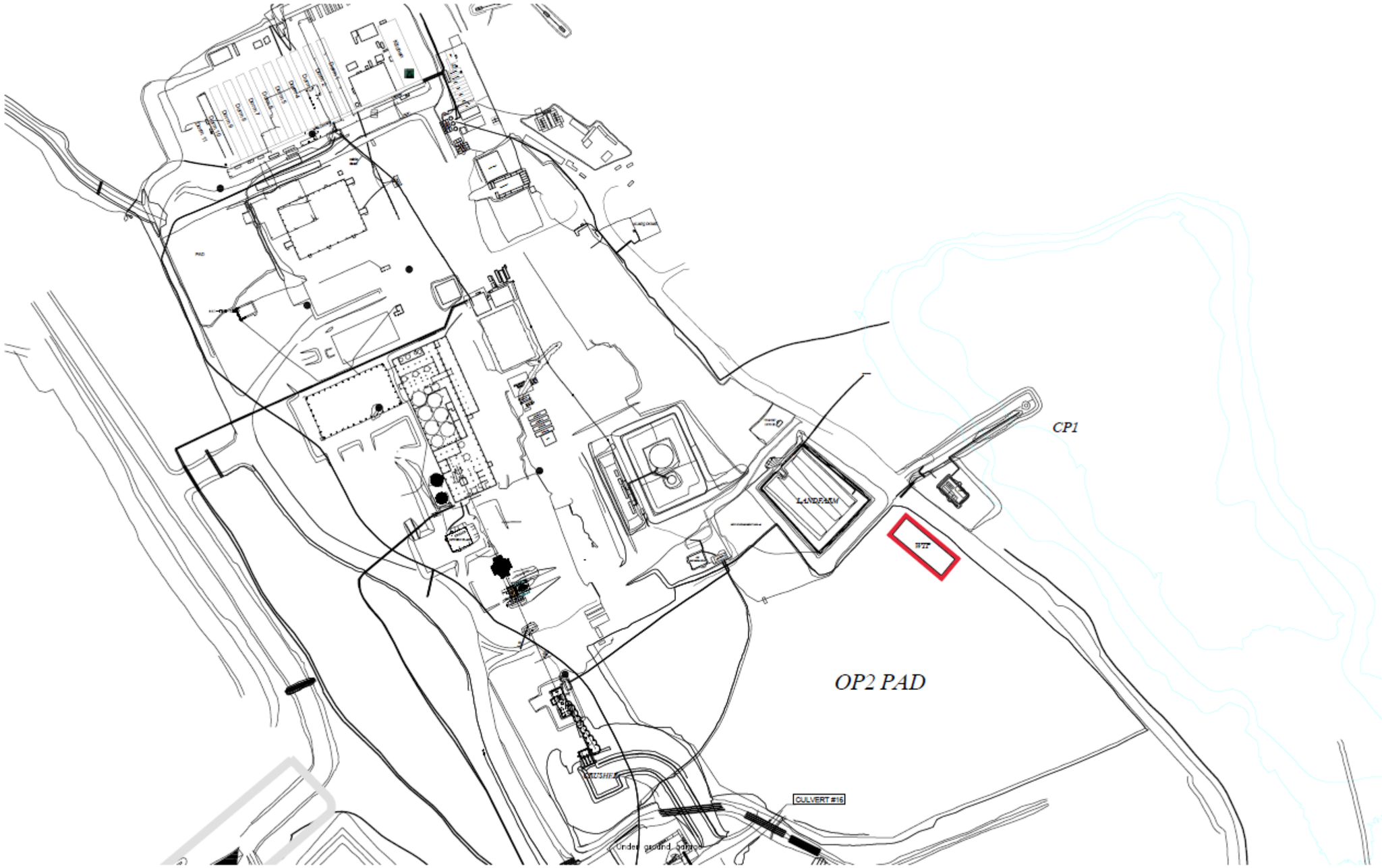


Figure 1 : General location plan

2 PROCESS DESCRIPTION

2.1 EFFLUENT WATER TREATMENT PLANT (EWTP)

The purpose of the EWTP (ACP-700R) is to remove TSS from the influent water pumped from CP1. The equipment has an operational range of 6,250 to 28,000 m^3/d.

The first treatment component consists of one Actiflo® clarifier with two (2) recirculation lines and two (2) hydrocyclones. The Actiflo® can be operated with one (1) or two (2) lines, depending on the influent flow rate and TSS content. The hydrocyclone overflow is sent to the Multiflo for sludge thickening. The Multiflo overflows by gravity into a tank which is then pumped into the raw water Actiflo® inlet pipe for recirculation. The principal purpose of the Multiflo is to decrease the amount of water in the sludge. This unit does not contribute to the efficiency of the system to reduce dissolved chemical parameters within the water effluent. The Actiflo® overflow is designed to meet the Type A License final effluent discharge criteria for TSS concentrations. The final effluent is monitored for pH, turbidity and flow rate, which are monitored continuously.

The treatment concept is presented in Figure 2. The P&ID can be found in Appendix A.

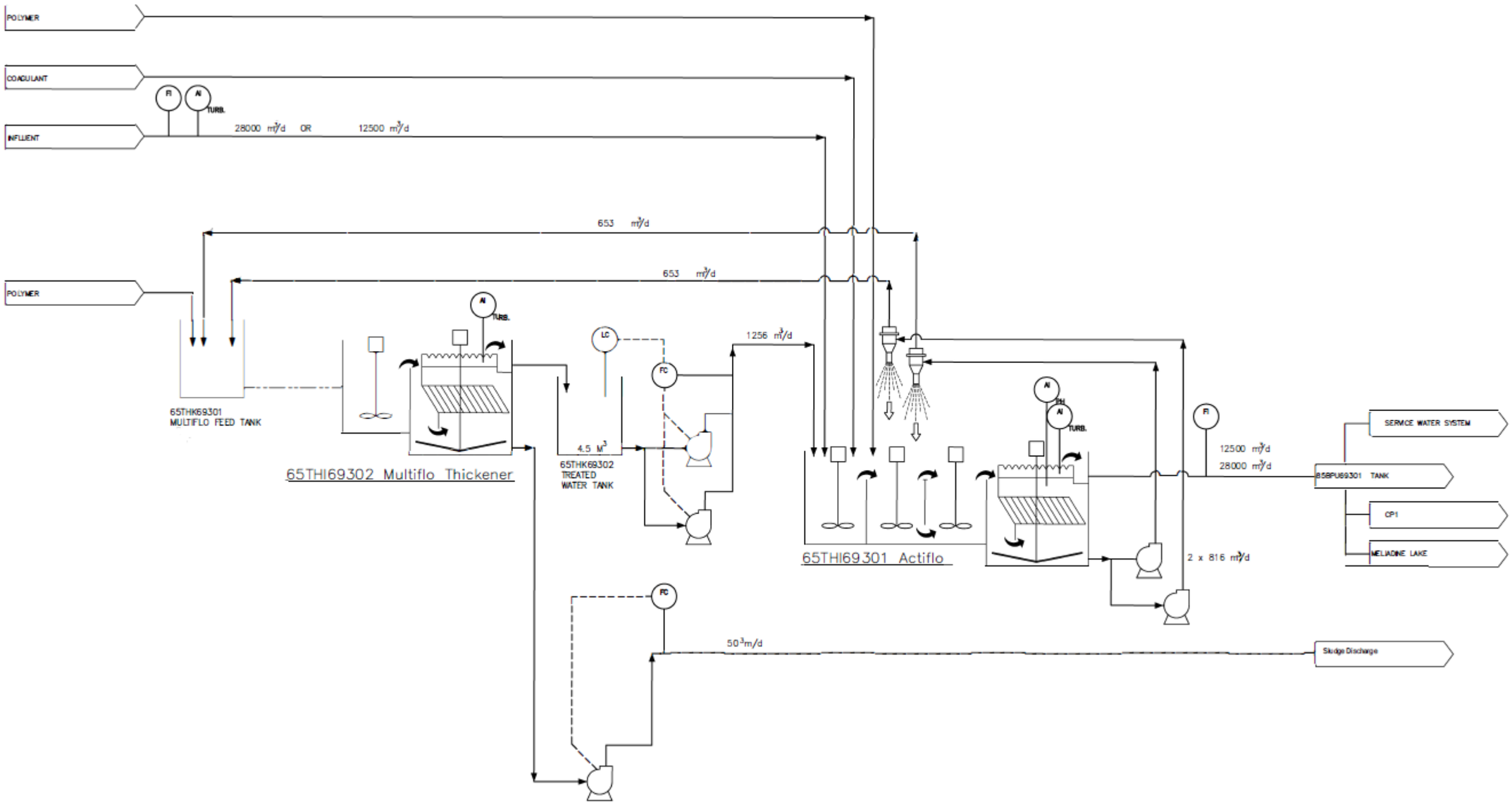


Figure 2 : EWTP Overall Process Concept

2.2 ACTIFLO®

The Actiflo® clarifier uses sand ballasted settling, a high rate coagulation/flocculation/sedimentation process. In the coagulation basin, TSS are destabilised under the action of the coagulant and start to form small aggregates (also called flocs). The coagulant is a trivalent soluble metal compound, usually iron or aluminium, which will cause coagulation when it reaches a certain concentration. Once the coagulant has performed the destabilising effect, it will precipitate as a metal hydroxide and will participate in the formation of the aggregates. Water then flows into a second tank called the injection tank. There, micro-sand and polymer (anionic or cationic) are added. The polymer acts as a flocculant aid, binding the destabilised solids together with the micro-sand particles by forming polymer bridges. The micro-sand provides a large contact area for floc attachment and acts as a ballast, thereby accelerating the settling of the flocs. From the injection tank, water flows into the maturation tank where flocs formed in the previous stage agglomerate and grow into high density flocs known as micro-sand ballasted flocs. Water then overflows to the settling section of the tank, and with the help of the lamella system, a solid-liquid separation is achieved resulting in clarified water exiting from the system via a collection trough or weirs. The clarified water is monitored for pH, turbidity and flow rate prior to final discharge. The flow rate signal is also connected to a flow totalizer.

The flocs settle in a portion of the system where they are collected by a rake mechanism. A proportion of the unit's design raw water flow is continuously withdrawn from the clarifier and pumped to a hydrocyclone system which separates the micro-sand from the sludge. The recovered micro-sand is reused in the process. A small quantity of the micro-sand is not recovered by the hydrocyclones and remains within the sludge. The lost micro-sand needs to be replaced periodically by adding more to the process. After micro-sand separation, the sludge is sent to the Multiflo clarifier, from which the supernatant water is recirculated to the head of the Actiflo® unit. This step results in densification of the sludge.

2.3 MULTIFLO®

The sludge extracted from the Actiflo® is transferred to the Multiflo to increase the sludge solid content. The Multiflo is a compact clarification system using a flocculation reactor and enhanced lamella settling. The sludge enters the first tank section called the flocculation tank, where an anionic or cationic polymer is added. The polymer binds the suspended solids by forming polymer bridges and the flocs agglomerate and grow into high-density flocs settle quickly to the bottom of the unit. In the settling zone, the efficiency of the settling is further increased by the use of the lamella tubes. The sludge is collected at the bottom of the settling tank, under the lamella tubes. The sludge produced will be extracted, while the supernatant water will flow to a transfer tank and pumped to the Actiflo®. Sludge produced in the Multiflo® system will be pumped into the saline storage ponds.

2.4 REAGENTS

Two (2) types of polymers as well as a coagulant are used to treat the water that flows through the Actiflo®, each is supplied by a dosing system that is adjusted according to the influent flow rate. One cationic and one anionic polymer are used. Treated water from the Actiflo® is used for the mixing of the reagents. The water used for chemical preparation is sourced from the treated water tank. For Polymer preparation, water is heated with two heater units.

3 CONSTRUCTION AND COMMISSIONINGSUMMARY

3.1 CONSTRUCTION SCHEDULE

The construction of the EWTP was conducted between January 2021 and the end of April 2021. The commissioning started in April 2021 and was completed in July 2021. Construction and commissioning were completed according to the milestone dates shown in Table 1.

Table 1: Construction and Commissioning Milestone

Activities	**Timeline**
Start Construction (equipment moving)	January 17th 2021
End main construction (equipment at their place, pipe and electrical done)	April 24th 2021
End of Cold commissioning	May 9th 2021
End of wet commissioning	May 19th 2021
End of hot commissioning	June 1st 2021
End of process commissioning & construction (process stable, chemistry adjusted, complete minor piping modifications)	July 10th 2021

3.2 FIELD DECISIONS THAT DEVIATE FROM ORIGINAL DESIGN

No major variation from the original design were noted during the construction of the building. Minor piping modification occurred to adjust to the field situation.

3.3 AS BUILT DRAWINGS AND PHOTOGRAPHS

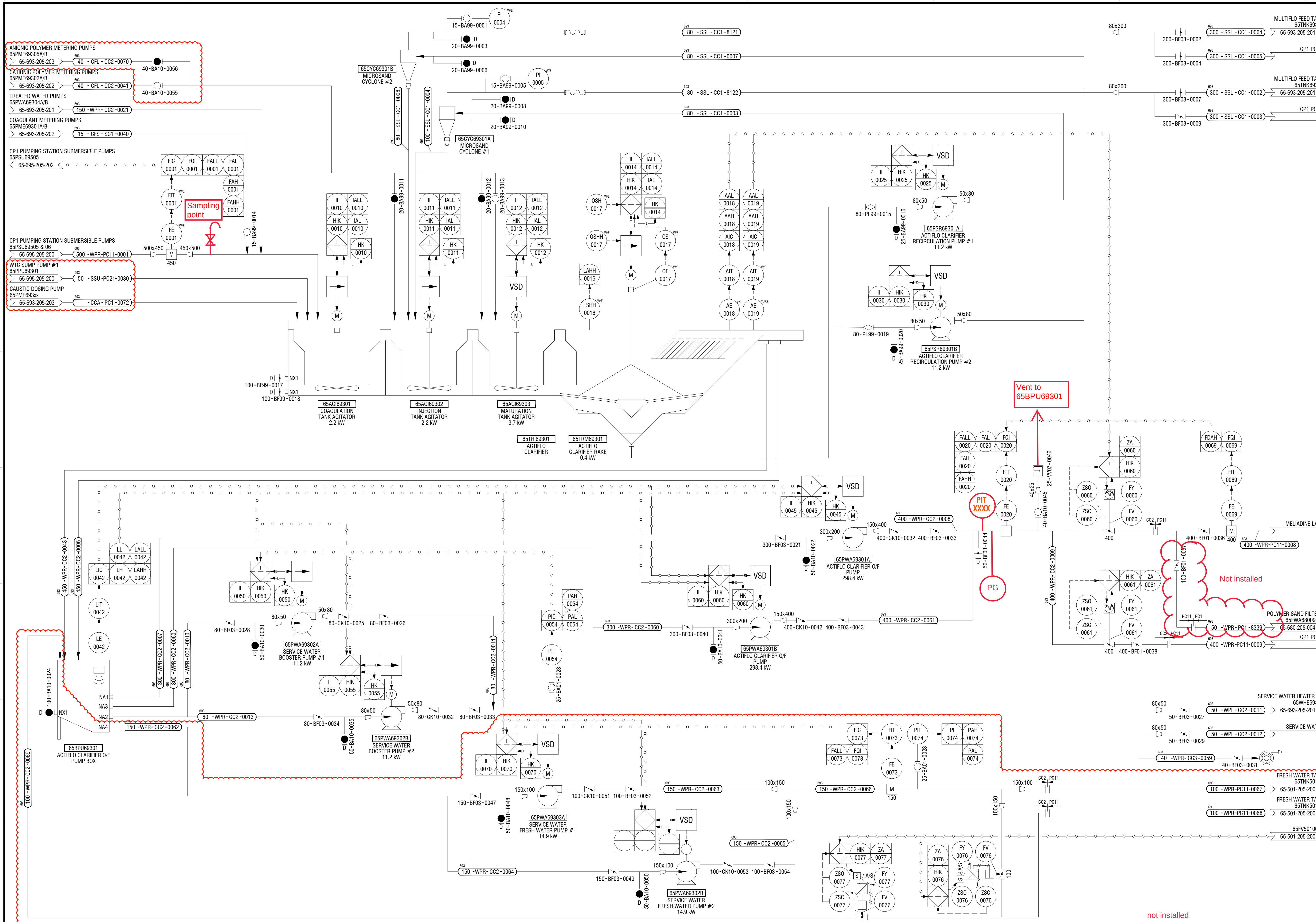
As-built documentation is presented in Appendices A and B:

- As Built Drawings;
- Photographs.

APPENDIX A – As built drawings

NO. DESSIN DRAWING NO. 65-693-205-200_R8

FORMAT ARCHD



PLAN CLÉ KEY PLAN

WSP
1075, 3e AVENUE EST
VAL-D'OR (QUÉBEC) CANADA J9P 0J7
TÉL : 819 825-4274 | TÉLÉC. : 819 824-1514 | WWW.WSPGROUP.COM
Ref. 151-06440-10

NOTES GÉNÉRALES / GENERAL NOTES

AS BUILD REVISION
2021-10-05

T. GENTY LICENSEE L4951 NT/NU

POUR CONSTRUCTION
FOR CONSTRUCTION
DATE : 2021-01-18

BASIC ENGINEERING FINAL APPROVAL PROCESS

NAME	TITLE	APPROVAL SIGNATURE	DATE
F-A BOSSE	PROJECT COORDINATOR		
MARTIN GAUMONT	MELIADINE PROCESS PLANT SUPERINTENDANT		
DANIEL SÉGUIN	ENGINEERING MANAGER MELIADINE		

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
8	2021-01-18	ISSUED FOR CONSTRUCTION	S.P.	T.G.	
7	2020-03-25	FOR TENDER	S.P.	E.L.	
6	2019-04-25	6528 - FOR CONSTRUCTION	S.P.	E.L.	
5	2019-03-21	6528 CHANGED	J.L.	S.P.	
4	2019-02-08	AS BUILT	J.L.	S.P.	
3	2018-03-22	ISSUED FOR CONSTRUCTION	EL/BF	EL/BF	

REVISIONS

TITRE / TITLE
AGNICO EAGLE - MELIADINE DIVISION
693 - FINAL WATER TREATMENT PLANT
205 - PIPING & INSTRUMENTATION DIAGRAM
ACTIFLO CLARIFIER

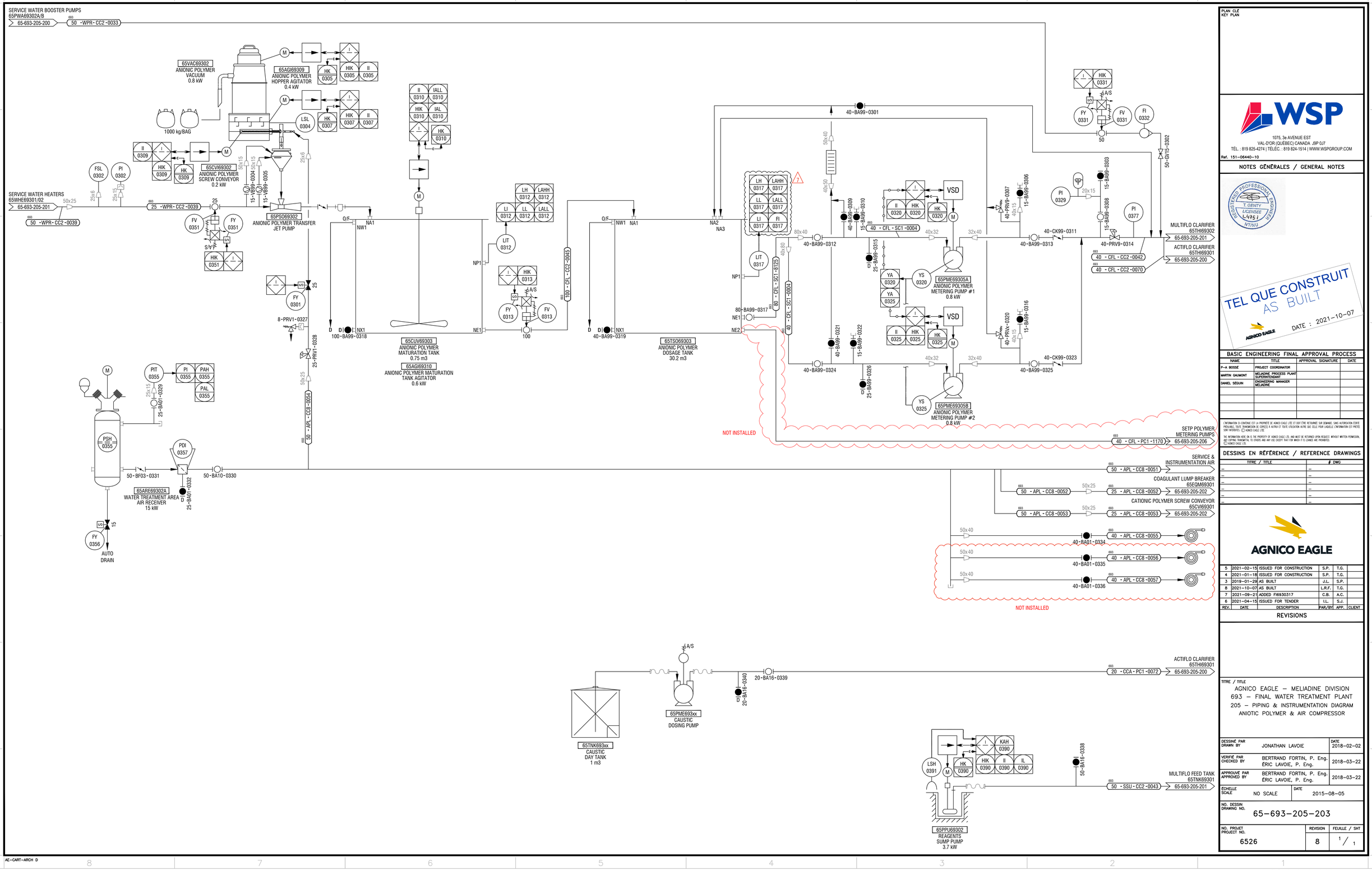
DESSINÉ PAR DRAWN BY	JONATHAN LAVOIE	2018-02-02
VÉRIFIÉ PAR CHECKED BY	BERTRAND FORTIN, P.Eng. ÉRIC LAVOIE, P.Eng.	2018-03-22
APPROUVÉ PAR APPROVED BY	BERTRAND FORTIN, P.Eng. ÉRIC LAVOIE, P.Eng.	2018-03-22
ÉCHELLE SCALE	NO SCALE	DATE 2015-08-05
NO. DESSIN DRAWING NO.	65-693-205-200	
NO. PROJET PROJECT NO. 6526	REVISION 8	FEUILLE / SHT 1 / 1

AE-CART-ARCH D

FILE NO. 65-693-205-200_R8.dwg

NO. DESSIN
DRAWING NO. 65-693-205-203_R8

FORMAT ARCHD



PLAN CLÉ
KEY PLAN

WSP
1075, 3e AVENUE EST
VAL-D'OR (QUÉBEC) CANADA J9P 0J7
TÉL. : 819 825-4274 | TÉLÉC. : 819 824-1514 | WWW.WSPGROUP.COM

Ref. 151-06440-10

NOTES GÉNÉRALES / GENERAL NOTES

ORDRE DES INGÉNIEURS PROFESSIONNELS DU NUNAVUT
T. GENTY
LICENSEE
L4951
NT/NU

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE
DATE : 2021-10-07

BASIC ENGINEERING FINAL APPROVAL PROCESS

NAME	TITLE	APPROVAL SIGNATURE	DATE
P-A BOSSÉ	PROJECT COORDINATOR		
MARTIN GAUMONT	MELIADINE PROCESS PLANT SUPERINTENDANT		
DANIEL SÉGUIN	ENGINEERING MANAGER MELIADINE		

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–
–	–

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
5	2021-02-15	ISSUED FOR CONSTRUCTION	S.P.	T.G.	
4	2021-01-18	ISSUED FOR CONSTRUCTION	S.P.	T.G.	
3	2019-01-29	AS BUILT	J.L.	S.P.	
8	2021-10-07	AS BUILT	L.R.F.	T.G.	
7	2021-09-21	ADDED FI6930317	C.B.	A.C.	
6	2021-04-15	ISSUED FOR TENDER	I.L.	S.J.	

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MELIADINE DIVISION
693 – FINAL WATER TREATMENT PLANT
205 – PIPING & INSTRUMENTATION DIAGRAM
ANIOTIC POLYMER & AIR COMPRESSOR

DESSINÉ PAR DRAWN BY	JONATHAN LAVOIE	DATE 2018-02-02
VERIFIÉ PAR CHECKED BY	BERTRAND FORTIN, P. Eng. ÉRIC LAVOIE, P. Eng.	2018-03-22
APPROUVÉ PAR APPROVED BY	BERTRAND FORTIN, P. Eng. ÉRIC LAVOIE, P. Eng.	2018-03-22
ÉCHELLE SCALE	NO SCALE	DATE 2015-08-05

NO. DESSIN DRAWING NO. 65-693-205-203

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
6526	8	1 / 1

AE-CART-ARCH D

FILE NO. 65-693-205-203_R8.dwg

NO. DESSIN
DRAWING NO. 65-693-205-202_R8

FORMAT ARCHD

SERVICE WATER HEATERS
65WHE69301/02
65-693-205-201
693 50 -WPR- CC2 -0037
50-BA01-0201
50
FV 0201
FY 0201
S/V
FAL 0202
LSL 0202
1000 kg/BAG
65HOP69302
COAGULANT BAG LOADING HOPPER
50x15
693 15 -WPR- CC2 -0058
65SCB69301
COAGULANT SCRUBBER
IAL 0225
II 0225
HIK 0225
HK 0225
M
693 150 - VAL - PC1 -0013
ATM
693 150 - VAL - PC1 -0012
65FAN69301
COAGULANT SCRUBBER EXHAUST FAN
0.1 kW
20x15
15-BA99-0202
HIK 0209
II 0209
HK 0209
M1
M2
65EQM69301
COAGULANT LUMP BREAKER
3 kW
65EQM69302
COAGULANT FEED AGITATOR
II 0205
HIK 0205
HK 0205
II 0207
HIK 0207
HK 0207
VSD
65CVI69303
COAGULANT SCREW FEEDER
0.8 kW
25x6
K3
FY 0206
M
99T
65HST69301
COAGULATION HOIST & TROLLEY
2.6 kW
SERVICE & INSTRUMENTATION AIR
65-693-205-203
8-PRV1-0213
25-PRV1-0215
693 25 - APL - CC8 -0052
O/F
NA1 NA2 NE2
NW1
D DI NX1
50-BA99-0217
IALL 0210
IAL 0210
HIK 0210
HK 0210
LH 0212
LAHH 0212
LI 0212
LL 0212
LALL 0212
LIT 0212
NP1
HIK 0215
HK 0215
II 0215
NE1
50-BA99-0218
50x25
25x40
65PWA69305
COAGULANT TRANSFER PUMP
0.8 kW
65CUV69301
COAGULANT MATURATION TANK
7.4 m3
65AGI69305
COAGULANT MATURATION TANK AGITATOR
1.1 kW
40-ND99-0204
O/F
NW1 NA1
D DI NX1
50-BA99-0219
40 - CFS - PC1 -0043
65TSO69301
COAGULANT DOSAGE TANK
7.4 m3
65AGI69306
COAGULANT DOSAGE TANK AGITATOR
0.8 kW
IALL 0220
II 0220
HIK 0220
HK 0220
IAL 0220
NA3
NA4
LH 0222
LAHH 0222
LL 0222
LALL 0222
LI 0222
FI 0222
LIT 0222
NP1
NE1
NE2
25 - CFS - PC1 -8124
20x25
20 - CFS - SC1 -0004
50x40
40x50
20-BA99-0208
20-BA99-0209
20-BA99-0221
20-BA99-0222
15-BA99-0214
15-BA99-0224
693 20 - CFS - SC1 -0004
VSD
II 0230
HIK 0230
HK 0230
M
YA 0230
YS 0230
YA 0235
65PME69301A
COAGULANT METERING PUMP #1
0.8 kW
65PME69301B
COAGULANT METERING PUMP #2
0.8 kW
YS 0235
II 0235
HIK 0235
HK 0235
15x20
15-BA99-0210
15-BA99-0223
15-PRV9-0206
15-PRV9-0220
40x15
LF
15-BA99-0205
15-BA99-0216
PI 0279
20x15
15-BA99-0203
15-BA99-0207
15-BA99-0211
15-PRV9-0212
PI 0237
693 15 - CFS - SC1 -0040
693 15 - CFS - SC1 -0005
ACTIFLO CLARIFIER
65THI69301
65-693-205-200
NOT INSTALLED
693 25 - CFS - PC1 -1160
SETP COAGULANT METERING PUMPS
65-693-205-206

SERVICE WATER BOOSTER PUMPS
65PWA69302A/B
65-693-205-200
693 50 -WPR- CC2 -0032
65VAC69301
CATIONIC POLYMER VACUUM
0.8 kW
65HOP69304
CATIONIC POLYMER LOADING HOPPER
1000 kg/BAG
65AGI69307
CATIONIC POLYMER HOPPER AGITATOR
0.6 kW
HK 0255
HIK 0255
II 0255
M
LSL 0254
HK 0257
HIK 0257
II 0257
FSL 0232
PI 0233
23x6
25x15
SERVICE WATER HEATERS
65WHE69301/02
65-693-205-201
50x25
693 50 -WPR- CC2 -0038
693 25 -WPR- CC2 -0038
25
II 0259
HIK 0259
HK 0259
65CVI69301
CATIONIC POLYMER SCREW CONVEYOR
0.4 kW
50x10
15-BA99-0228
15-BA99-0229
25x6
65HOP69301
CATIONIC POLYMER WETTING CONE
65PSO69301
CATIONIC POLYMER TRANSFER JET PUMP
FV 0250
FY 0250
S/V
HIK 0250
K3
FY 0251
SERVICE & INSTRUMENTATION AIR
65-693-205-203
8-PRV1-0239
25-PRV1-0240
693 25 - APL - CC8 -0053
O/F
NA1
NW1
D DI NX1
100-BA99-0242
II 0260
IALL 0260
HIK 0260
IAL 0260
HK 0260
LH 0262
LAHH 0262
LI 0262
LL 0262
LALL 0262
LIT 0262
NP1
HIK 0263
A/S
FY 0263
FV 0263
NE1
100
693 100 - CFL - CC2 -0045
65CUV69302
CATIONIC POLYMER MATURATION TANK
0.75 m3
65AGI69308
CATIONIC POLYMER MATURATION TANK AGITATOR
1.1 kW
O/F
NW1 NA1
D DI NX1
100-BA99-0243
65TSO69302
CATIONIC POLYMER DOSAGE TANK
30.2 m3
NA2
NA3
LH 0267
LAHH 0267
LL 0267
LALL 0267
LI 0267
FI 0267
LIT 0267
NP1
NE1
40-BA99-0244
40-BA99-0225
50x40
40x50
40-BA99-0236
40-BA99-0233
40-BA99-0234
15-BA99-0231
15-BA99-0232
II 0270
HIK 0270
HK 0270
VSD
M
YA 0270
YS 0270
YA 0275
65PME69302A
CATIONIC POLYMER METERING PUMP #1
0.8 kW
65PME69302B
CATIONIC POLYMER METERING PUMP #2
0.8 kW
YS 0275
II 0275
HIK 0275
HK 0275
40-BA99-0246
40-BA99-0247
15-BA99-0245
15-BA99-0241
40-BA99-0249
40-BA99-0250
40x32
32x40
40-CK99-0235
40-CK99-0248
40-PRV9-0231
40-PRV9-0245
40x15
LF
15-BA99-0230
15-BA99-0241
PI 0229
20x15
15-BA99-0227
15-BA99-0232
PI 0277
40-PRV9-0238
693 40 - CFL - CC2 -0041
693 40 - CFL - CC2 -0071
ACTIFLO CLARIFIER
65THI69301
65-693-205-200
MULTIFLO CLARIFIER
65THI69302
65-693-205-201
FV 0281
FY 0281
FI 0282
A/S
HIK 0281
50
50-GV15-0226

PLAN CLÉ
KEY PLAN

WSP
1075, 3e AVENUE EST
VAL-D'OR (QUÉBEC) CANADA J9P 0J7
TÉL. : 819 825-4274 | TÉLÉC. : 819 824-1514 | WWW.WSPGROUP.COM

Ref. 151-06440-10

NOTES GÉNÉRALES / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE
DATE : 2021-10-07

BASIC ENGINEERING FINAL APPROVAL PROCESS

NAME	TITLE	APPROVAL SIGNATURE	DATE
P-A BOSSÉ	PROJECT COORDINATOR		
MARTIN GAUMONT	MELIADINE PROCESS PLANT SUPERINTENDANT		
DANIEL SÉGUIN	ENGINEERING MANAGER MELIADINE		

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–
–	–

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
5	2021-02-15	ISSUED FOR CONSTRUCTION	S.P.	T.G.	
4	2021-01-18	ISSUED FOR CONSTRUCTION	S.P.	T.G.	
3	2019-01-29	AS BUILT	J.L.	S.P.	
8	2021-10-07	AS BUILT	L.R.F.	T.G.	
7	2021-09-20	ADD FI6930222 & FI6930267	C.B.	A.C.	
6	2021-04-15	ISSUED FOR TENDER	L.L.	S.J.	

REVISIONS

TITRE / TITLE

AGNICO EAGLE – MELIADINE DIVISION
693 – FINAL WATER TREATMENT PLANT
205 – PIPING & INSTRUMENTATION DIAGRAM
COAGULANT & CATIONIC POLYMER

DESSINÉ PAR DRAWN BY	JONATHAN LAVOIE	DATE 2018-02-02
VERIFIÉ PAR CHECKED BY	BERTRAND FORTIN, P. Eng. ÉRIC LAVOIE, P. Eng.	2018-03-22
APPROUVÉ PAR APPROVED BY	BERTRAND FORTIN, P. Eng. ÉRIC LAVOIE, P. Eng.	2018-03-22
ÉCHELLE SCALE	NO SCALE	DATE 2015-08-05

NO. DESSIN
DRAWING NO. 65-693-205-202

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
6526	8	1 / 1

AE-CART-ARCH D

FILE NO. 65-693-205-202_R8.dwg

NO. DESSIN
DRAWING NO. 65-693-205-201_R6

FORMAT ARCHD

CATIONIC POLYMER METERING PUMPS
65PME69302A/B
65-693-205-202 > 693 40 - CFL - CC2 - 0071 — 40-BA10-0139
ANIONIC POLYMER METERING PUMPS
65PME69305A/B
65-693-205-203 > 693 40 - CFL - CC2 - 0042 — 40-BA10-0140
REAGENTS SUMP PUMP
65PPU69302
65-693-205-203 > 693 50 - SSU - CC2 - 0043
MICROSAND CYCLONE #1
65CYC69301A
65-693-205-200 > 693 300 - SSL - CC1 - 0002
MICROSAND CYCLONE #2
65CYC69301B
65-693-205-200 > 693 300 - SSL - CC1 - 0004

693 300 - SSL - CC1 - 0016

NW1 O/F

II 0110 IALL 0110 HIK 0110 IAL 0110 HK 0110

II 0115 IALL 0115 HIK 0115 IAL 0115 HK 0115

OSH 0177 OSHH 0177 LAHH 0116 LSHH 0116 OS 0117 OE 0117

AIC 0118 AIC 0119 AIT 0118 AIT 0119 AE 0118 AE 0119 TURB

LAHH 0130 LALL 0130 LSHH 0130 LSLL 0130

LI 0132 LIT 0132

NA1 NA2 NY1 NP1 NP2

D NX1 50-BA10-0112 — 65TNK69301 MULTIFLO FEED TANK — NE1 — 693 300 - SSL - CC1 - 0015 — 40-BA10-0110

D NX1 50-BF99-0117 — 65AGI69304 MULTIFLO MATURATION AGITATOR 1.5 kW

693 250 -WPR-CC2-0044

D 15-BA01-0107 — 40-BA01-0104 — NP3

D NX1 50-BA01-0108 — 65TNK69302 TREATED WATER TANK — NE1

65THI69302 MULTIFLO CLARIFIER

65TRM69302 MULTIFLO CLARIFIER RAKE 0.3 kW

XXX-BF03-0XXX — 50x80 — 693 80 - SSL - CC2 - 0017 — XXX-BF03-0XXX

80-KG02-0122 — 80x50 — D 25-BA10-0124 — 65PSR69302 MULTIFLO THICKENER UNDERFLOW PUMP 18.7 kW

II 0120 HIK 0120 HK 0120 VSD M — 80x100 — 100-KG02-0120 — 100x40 — M 40

FQI 0123 FIT 0123 FE 0123

693 100 - SSL - CC2 - 0018

SAMPLING POINT

XXX-BF03-0XXX

XXX-BF03-0XXX

INSIDE BUILDING — OUTSIDE BUILDING — STEEL HDPE

693 100 - SSL -DR17-0019 > SALINE STORAGE

100-BF03-0121

100-BF03-0140

693 150 -WPR-CC2-0021 > 65-693-205-200 — 150-BF03-0101

693 150 -WPR-CC2-0022 > CP1 POND — 150-BF03-0102

FQI 0139 FIT 0139 FE 0139 M 100 — 100x150 — 150x100

II 0135 HIK 0135 HK 0135 VSD M — PI 0137 — 15-BA01-0103

693 150 -WPR-CC2-0020 — 150-BF03-0109 — 150x100 — D 25-BF14-0111 — 100x150 — 150-CK10-0105 150-BF03-0106 — 65PWA69304A TREATED WATER PUMP #1 5.6 kW

693 150 -WPR-CC2-0023

II 0140 HIK 0140 HK 0140 VSD M — PI 0142 — 15-BA01-0113

693 150 -WPR-CC2-0024

150-BF03-0116 — 150x100 — D 25-BF14-0118 — 100x150 — 150-CK10-0114 150-BF03-0115 — 65PWA69304B TREATED WATER PUMP #2 5.6 kW

NOT INSTALLED

SERVICE WATER MILL PUMPS
65PWA69303A/B
65-693-205-200 > 693 100 -WPR-CC2-0069

SERVICE WATER HOSE

XX-BF03-0XXX — CATIONIC POLYMER METERING PUMPS 65PME693302A/B — 693 50 -WPR-CC2-0032 > 65-693-202 — 50-BF03-0123

ANIONIC POLYMER METERING PUMPS 65PME69305A/B — 693 50 -WPR-CC2-0033 > 65-693-203 — 50-BF03-0126

80x50

COLD WATER

XXX-BF03-0XXX

XXX-BF03-0XXX

WARM WATER

ANIONIC TRANSFER PUMP JET 65PSO69302 — 693 50 -WPR-CC2-0039 > 65-693-203

CATIONIC POLYMER TRANSFER JET PUMP 65PSO69301 — 693 50 -WPR-CC2-0038 > 65-693-202

COAGULANT MATURATION TANK 65CUV69301 — 693 50 -WPR-CC2-0037 > 65-693-202

SERVICE WATER BOOSTER PUMP
65PWA69302A/B
65-693-205-200 > 693 80 -WPR-CC2-0032 — 693 80 -WPR-CC2-0036

50x25 — 25-BA99-0129 — 50x25 — 25-BA99-0131 — M — 15-PRVx-0127 — D 20-BA99-0132 — 65WHE69301 SERVICE WATER HEATER #1 kW

50x25 — 25-BA99-0136 — 50x25 — 25-BA99-0137 — M — 15-PRVx-0135 — D 20-BA99-0138 — 65WHE69302 SERVICE WATER HEATER #2 kW

TCV 0171 — TT 0172

XXX-BF03-0XXX

LSH 0191 — M — HK 0190 — KAH 0190 — HIK 0190 — II 0190 — IL 0190 — 50-BA16-0139

65PPU69301 WTC SUMP PUMP #1 kW

693 50 - SSU-PC21-0030 > 65-693-200-205 — ACTIFLO CLARIFIER 65THI69301

PLAN CLÉ
KEY PLAN

WSP
1075, 3e AVENUE EST
VAL-D'OR (QUÉBEC) CANADA J9P 0J7
TÉL. : 819 825-4274 | TÉLÉC. : 819 824-1514 | WWW.WSPGROUP.COM

Ref. 151-06440-10

NOTES GÉNÉRALES / GENERAL NOTES

REGISTERED PROFESSIONAL ENGINEER — T. GENTY — LICENSEE — L'ING. / P.ENG. — NT/NU

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE — DATE : 2021-10-07

BASIC ENGINEERING FINAL APPROVAL PROCESS

NAME	TITLE	APPROVAL SIGNATURE	DATE
P-A BOSSÉ	PROJECT COORDINATOR		
MARTIN GAUMONT	MELIADINE PROCESS PLANT SUPERINTENDANT		
DANIEL SEGUIN	ENGINEERING MANAGER MELIADINE		

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–
–	–

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
6	2021-10-07	AS BUILT	L.R.F.	T.G.	

REVISIONS

TITRE / TITLE

AGNICO EAGLE – MELIADINE DIVISION
693 – FINAL WATER TREATMENT PLANT
205 – PIPING & INSTRUMENTATION DIAGRAM
MULTIFLO CLARIFIER

DESSINÉ PAR / DRAWN BY	JONATHAN LAVOIE	DATE 2018-02-02
VERIFIÉ PAR / CHECKED BY	BERTRAND FORTIN, P. Eng. ÉRIC LAVOIE, P. Eng.	2018-03-22
APPROUVÉ PAR / APPROVED BY	BERTRAND FORTIN, P. Eng. ÉRIC LAVOIE, P. Eng.	2018-03-22
ÉCHELLE / SCALE	NO SCALE	DATE 2015-08-05

NO. DESSIN / DRAWING NO. 65-693-205-201

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
6526	6	1 / 1

AE-CART-ARCH D

FILE NO. 65-693-205-201_R6.dwg

APPENDIX B – Photographs

Construction

Construction

Feed Line and treated water line

Actiflo

Hydrocyclones

Multiflo

Coagulant skid

Polymer Skid

Polymer Skid

Safety Shower, sump, compressor, HMI

Service water pumps

Treated water pumps

Automatic valve (CP1 or Meliadine Lake)