



DRAWING INDEX				
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5	4231-01-C-103	0	LAGOON CELL #1 AND #2 PLAN	AERATION REPLACEMENT
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Associated
Engineering



BEST
MANAGED
COMPANIES



THE
MANITOBA
WATER SERVICES
BOARD



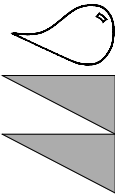
RURAL MUNICIPALITY OF
MUNICIPALITÉ RURALE DE
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RURAL MUNICIPALITY OF GREY
MANITOBA WATER SERVICES BOARD
ST. CLAUDE WASTEWATER LAGOON
AERATION UPGRADES
M.W.S.B.#: 1493
2019-4231-01

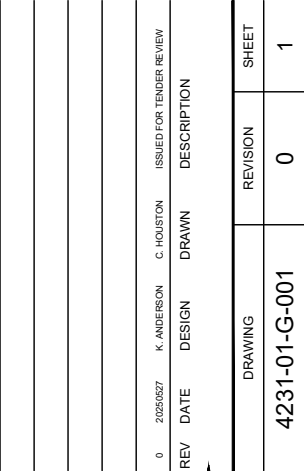


RURAL MUNICIPALITY OF
MUNICIPALITÉ RURALE DE
Grey

ST. CLAUDE WASTEWATER LAGOON AERATION UPGRADES
CONTRACT #2: CIVIL WORKS AND AERATION SYSTEM
REPLACEMENT
M.W.S.B. #: 1785



The Manitoba Water Services Board



REV	DATE	DESIGN	DRAWN	ISSUED FOR TENDER REVIEW	DESCRIPTION
0	20250627	K. ANDERSON	C. HOUSTON		

DRAWING	REVISION	SHEET
4231-01-G-001	0	1

NOTES:

1. ALL MATERIALS AND INSTALLATION PRACTICES SHALL CONFORM TO M.W.S.B. STANDARD CONSTRUCTION SPECIFICATIONS.
2. DECIMALIZED NUMBERS INDICATE METERS AND WHOLE NUMBERS INDICATE MILLIMETERS.
3. LOCATION OF UNDERGROUND SERVICES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT.
4. CONTRACTOR MUST CONFIRM WITH THE INDIVIDUAL UTILITIES FOR EXISTENCE AND EXACT LOCATIONS OF ALL THE SERVICES PRIOR TO CONSTRUCTION.
5. CONTRACTOR MUST EXPOSE EXISTING INFRASTRUCTURE AT THE PROPOSED TIE-IN LOCATIONS TO ALLOW SITE ENGINEER TO VERIFY SIZE, MATERIAL AND INVERT'S PRIOR TO CONSTRUCTION OF TIE-INS.
6. ALL SITE LAYDOWN AREAS SHALL BE AS NOTED IN THE SPECIFICATIONS AND APPROVED BY THE OWNER AND ENGINEER.
7. ALL AREAS SUBJECT TO CONSTRUCTION OPERATIONS SHALL BE RESTORED TO THE CONDITION IN WHICH THEY EXISTED PRIOR TO CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO: PAVEMENT REPAIRS, RE-GRAVELLING, TRENCH SETTLEMENT CORRECTIONS, EROSION CONTROL, AND REPAIRS TO EXISTING UTILITIES.
8. CONTRACTOR SHALL MAINTAIN THE FOLLOWING INSTALLATION DISTANCES:
 - 8.1. SEPARATION BETWEEN POTABLE WATER AND RAW WATER OR WASTE WATER:
 - 8.1.1. HORIZONTAL = 3.0 m
 - 8.1.2. VERTICAL = 0.45 M. POTABLE WATER ABOVE.
 - 8.2. MINIMUM BURY DEPTH:
 - 8.2.1. WITHIN CITY, TOWN AND VILLAGE LIMITS = 2.75 m
 - 8.2.2. RURAL AREAS = 2.4 m
 - 8.2.3. CROSSINGS (ROAD, DRAIN, ETC.) = 3.0 m
 - 8.2.4. INSTALLATIONS WITH LESS THAN MINIMUM COVER SHALL BE INSULATED AS PER M.W.S.B. SPECIFICATIONS.
9. WHERE THE PROPOSED ALIGNMENT CROSSES PTHS, PRS, DEVELOPED ROAD ALLOWANCES, PRIVATE LANES, WATER RUNS AND WETLANDS, A TRENCHLESS METHOD OF INSTALLATION SHALL BE USED.

Associated Engineering

THE MANITOBA WATER SERVICES BOARD

BEST MANAGED COMPANIES CANADA

Platinum member

SYMBOLS

PROPOSED

 IP
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INFANT



CATEVA

COUPLING



MANHOLE

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STORM DRAINAGE



LIGHT / I AND STANDARDS

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COMMUNICATIONS / TELEPHONE

REV	DATE	DESIGN	DRAWN	DESCRIPTION
0	20250527	K. ANDERSON	C. HOUSTON	ISSUED FOR TENDER REVIEW

RURAL MUNICIPALITY OF GREY
MANITOBA WATER SERVICES BOARD

ST. CLAUDE WASTEWATER LAGOON
AERATION UPGRADES
M.W.S.B.#: 1493
2019-4231-01

SCALE: AS SHOWN

CIVIL
NOTES AND LEGEND

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Platinum member



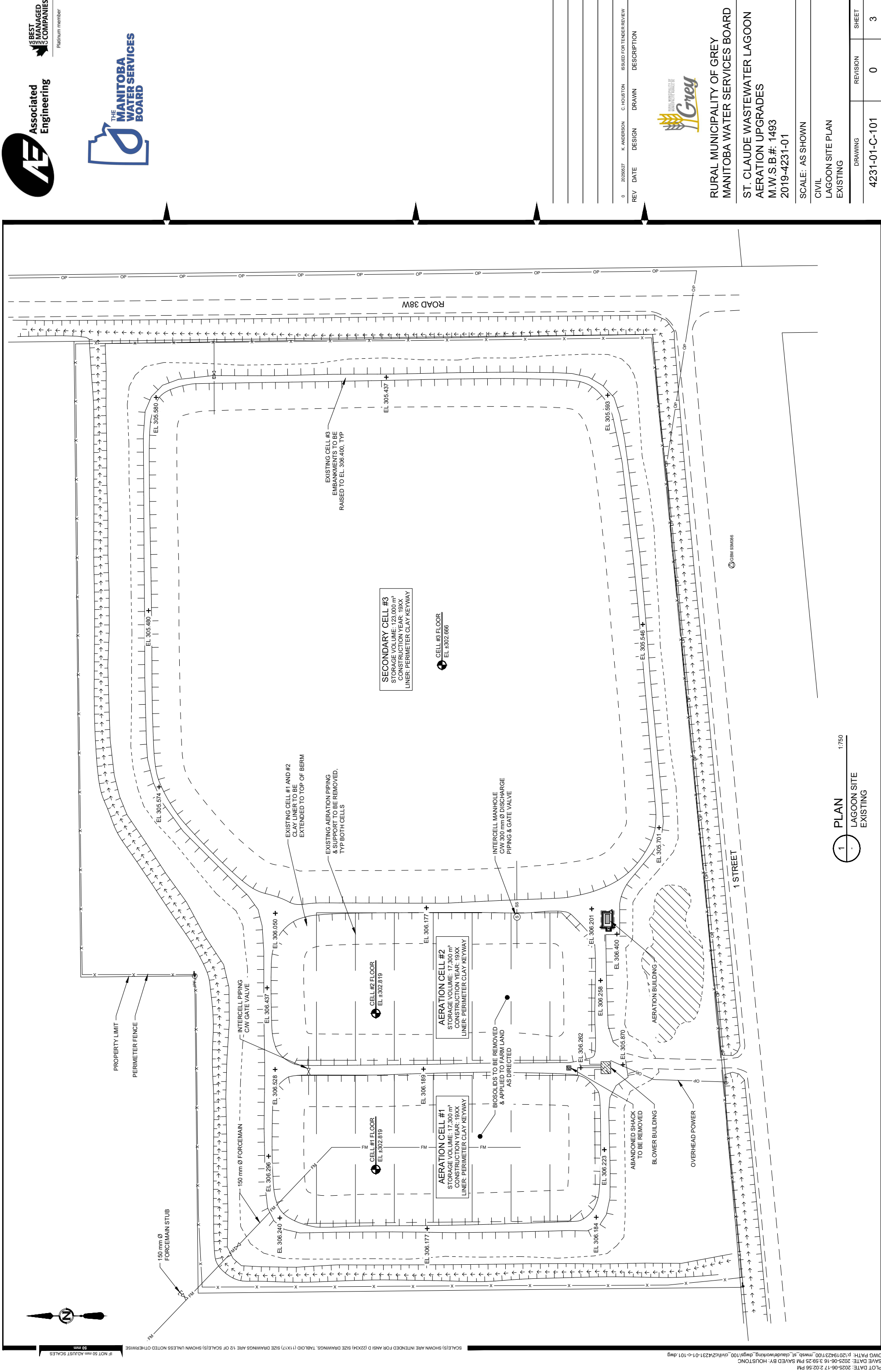
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MANITOBA WATER SERVICES BOARD

ST. CLAUDE WASTEWATER LAGOON
AERATION UPGRADES
M.W.S.B #: 1493
2019-4231-01

SCALE: AS SHOWN

CIVIL
LAGOON SITE PLAN
EXISTING

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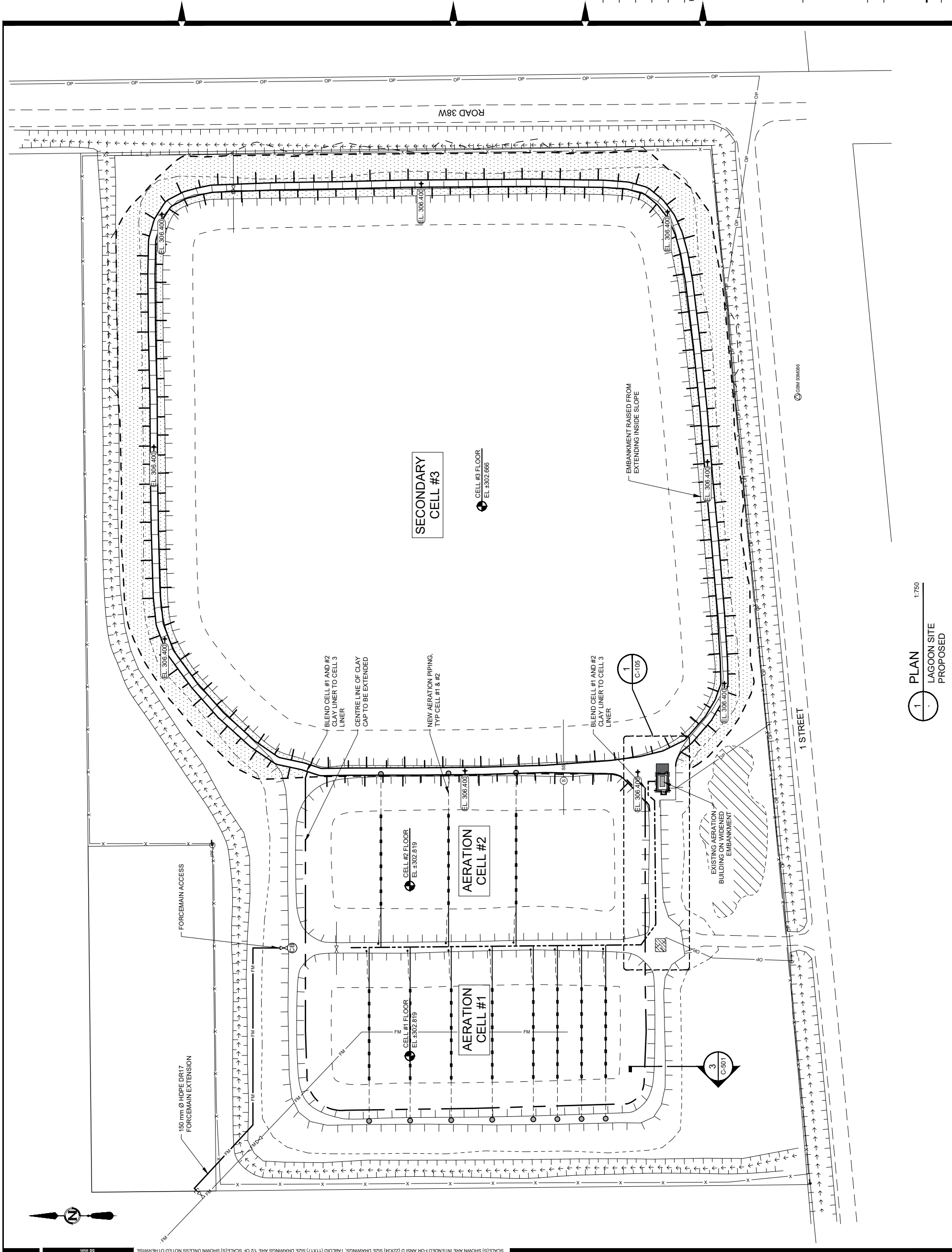
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LAGOON SITE
EXISTING
1:750



RURAL MUNICIPALITY OF GREY
MANITOBA WATER SERVICES BOARD
ST. CLAUDE WASTEWATER LAGOON
AERATION UPGRADES
M.W.S.B #: 1493
2019-4231-01

SCALE: AS SHOWN
CIVIL

REV	DATE	DESIGN	DRAWN	ISSUED FOR	DESCRIPTION
X	YYMMDD	E. ENGINEER	D. DRAFTER	ISSUED FOR XXXXX	



1 PLAN
LAGOON SITE
PROPOSED
1:750

DRAWING	REVISION	SHEET
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	RURAL MUNICIPALITY OF GREY MANITOBA WATER SERVICES BOARD	
	ST. CLAUDE WASTEWATER LAGOON AERATION UPGRADES M.W.S.B #: 1493 2019-4231-01	
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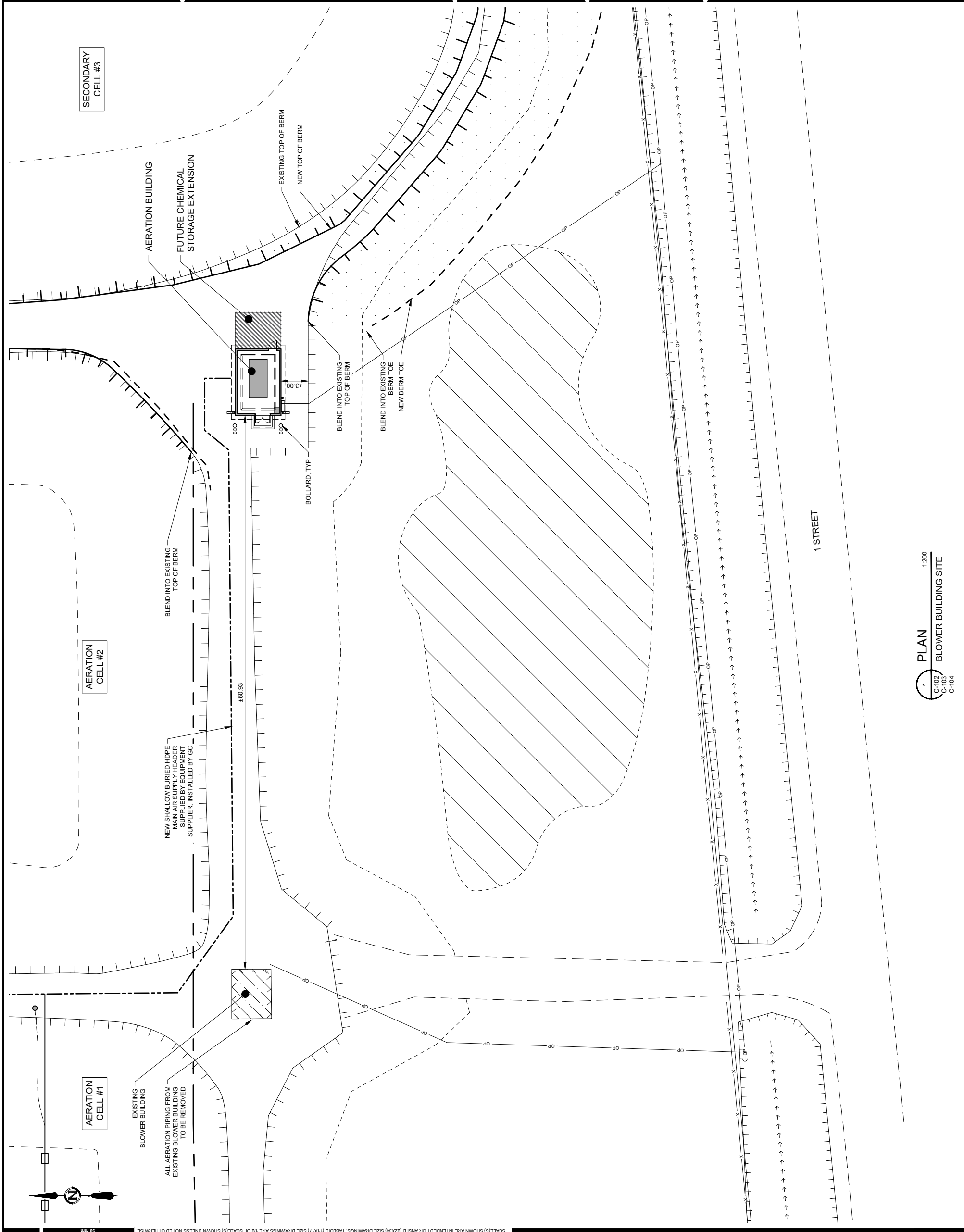
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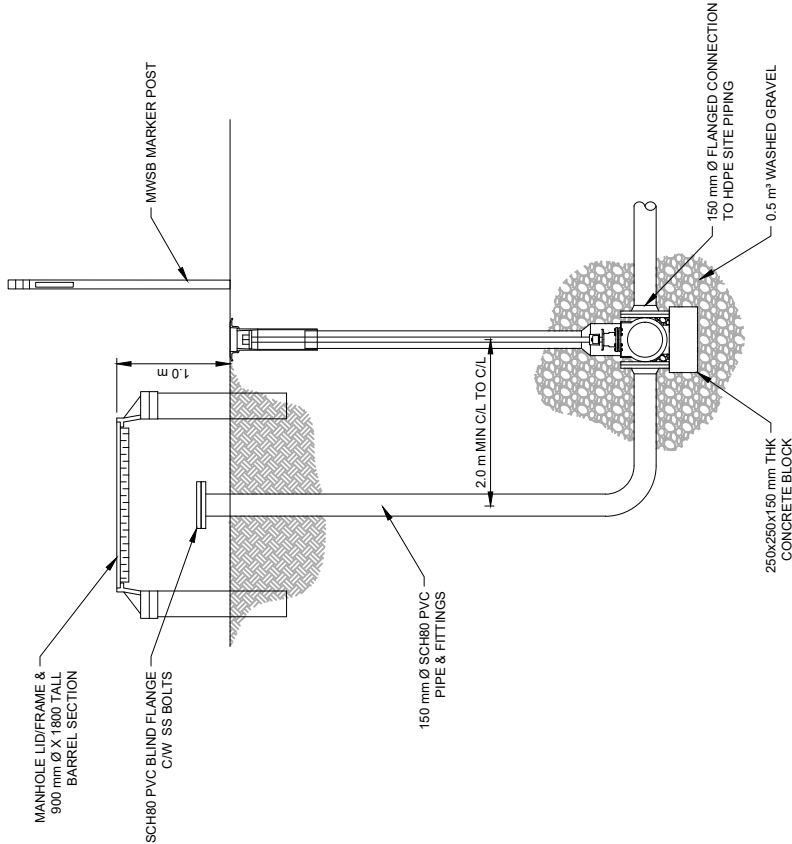
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MANITOBA WATER SERVICES BOARD
ST. CLAUDE WASTEWATER LAGOON
AERATION UPGRADES
M.W.S.B #: 1493
2019-4231-01

SCALE: AS SHOWN
CIVIL

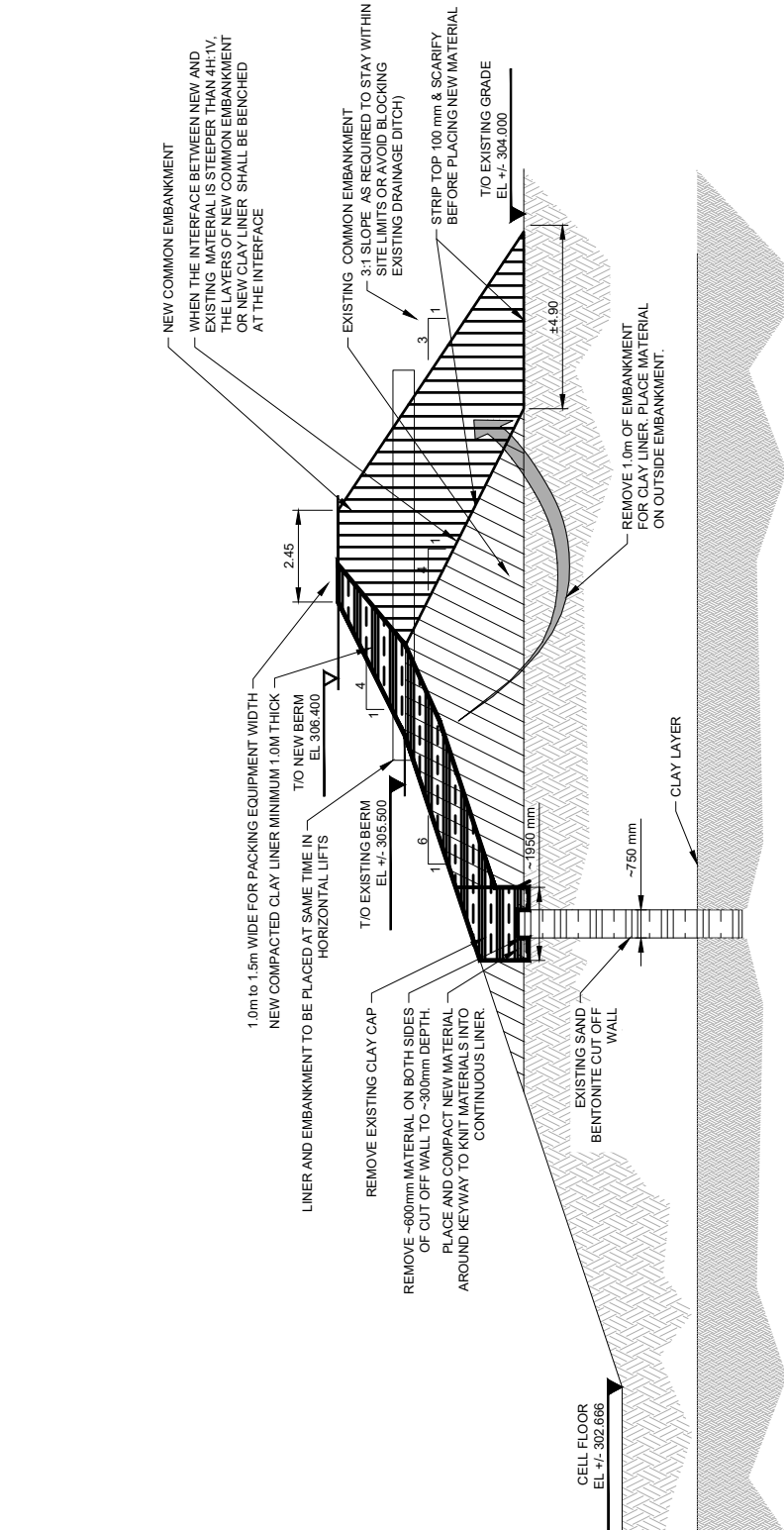
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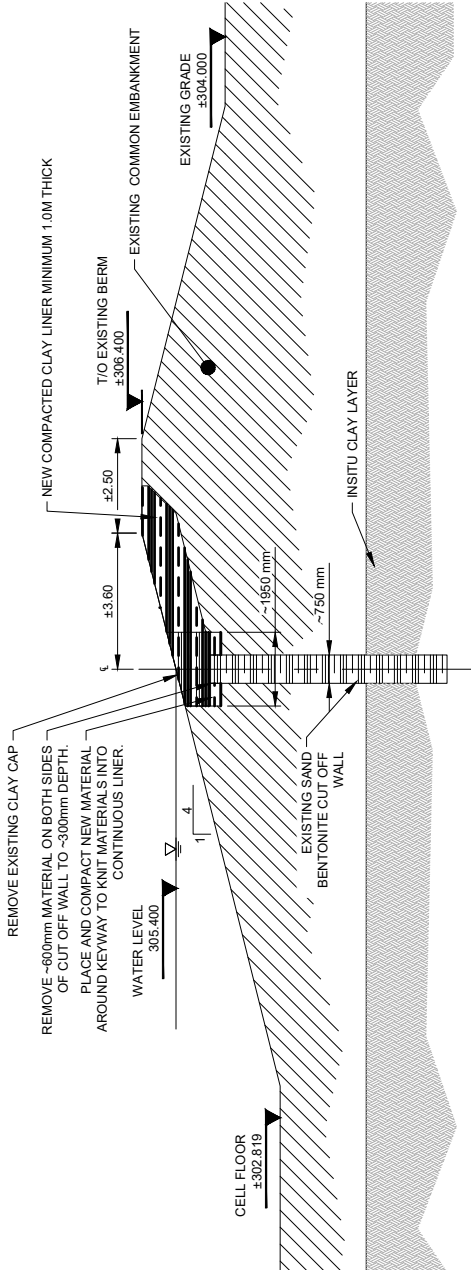
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C-102
C-103
C-104
BLOWER BUILDING SITE
1:200



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 C-103
 120
 FORCE MAIN ACCESS MANHOLE



2
 C-104
 120
 CELL #3 BERM UPGRADE



3
 120
 TYPICAL DETAIL
 CELL #1 AND #2 LINER
 EXTENSION

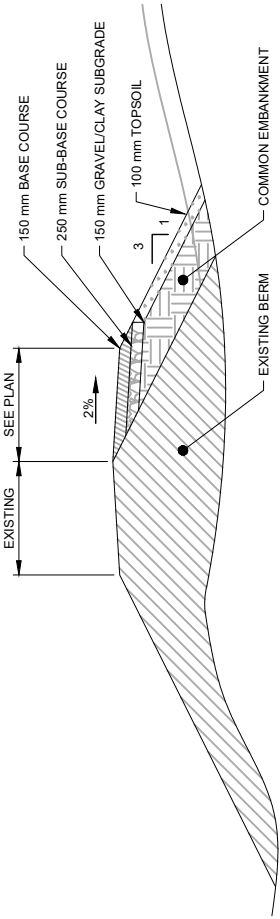
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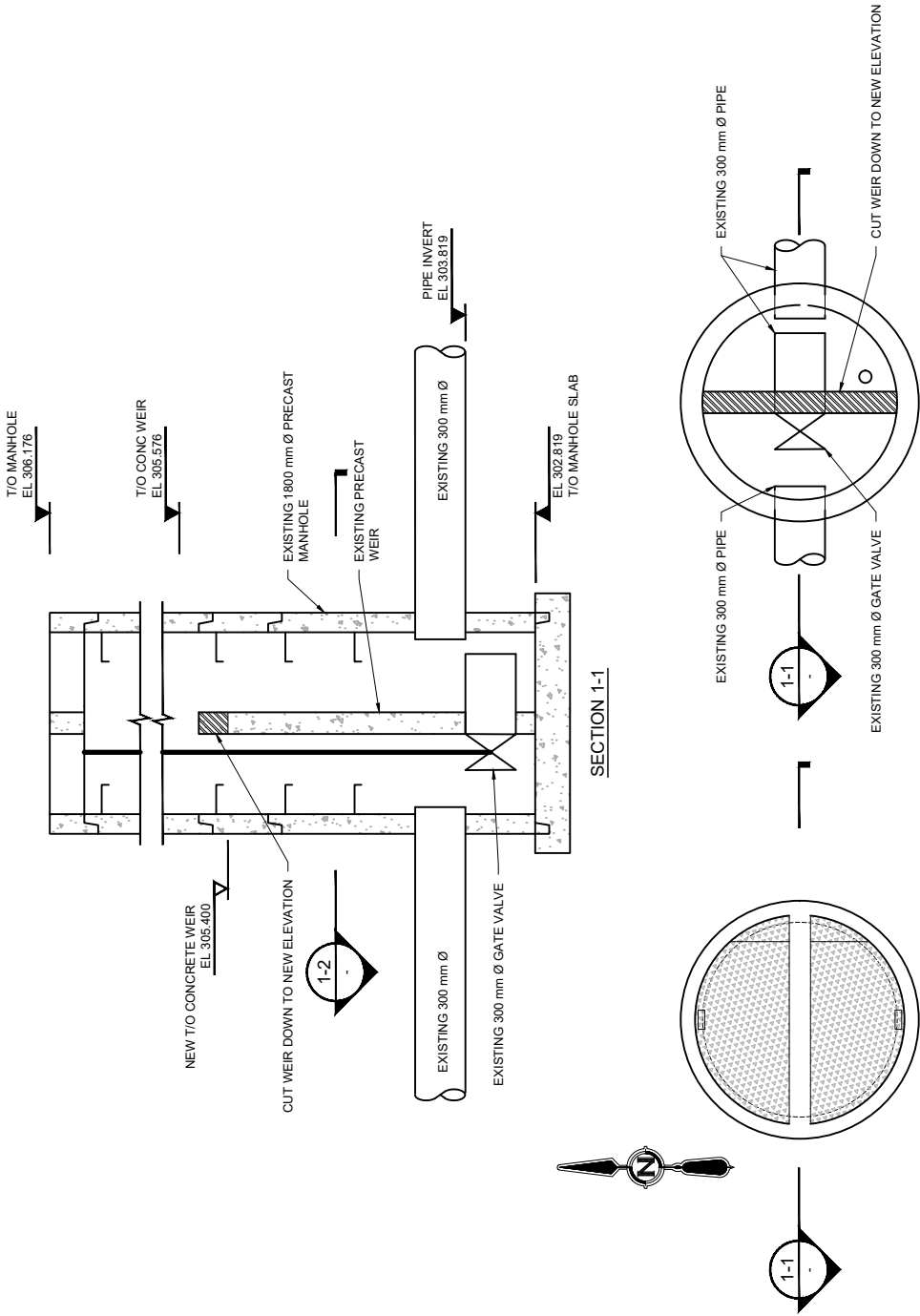
RURAL MUNICIPALITY OF GREY
 MANITOBA WATER SERVICES BOARD
 ST. CLAUDE WASTEWATER LAGOON
 AERATION UPGRADES
 M.W.S.B #: 1493
 2019-4231-01

SCALE: AS SHOWN
 CIVIL
 DETAILS

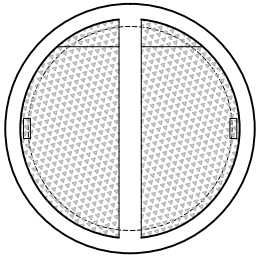
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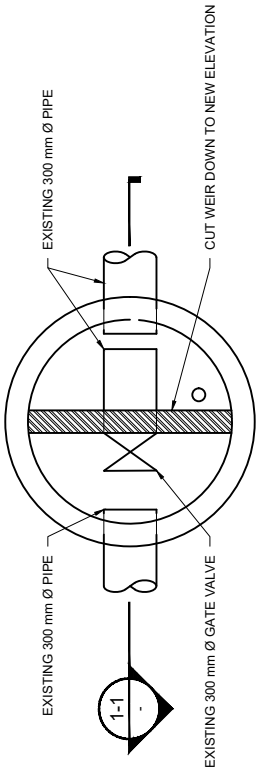
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 C-103
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 DETAIL
 AERATION BUILDING
 BERM EXPANSION
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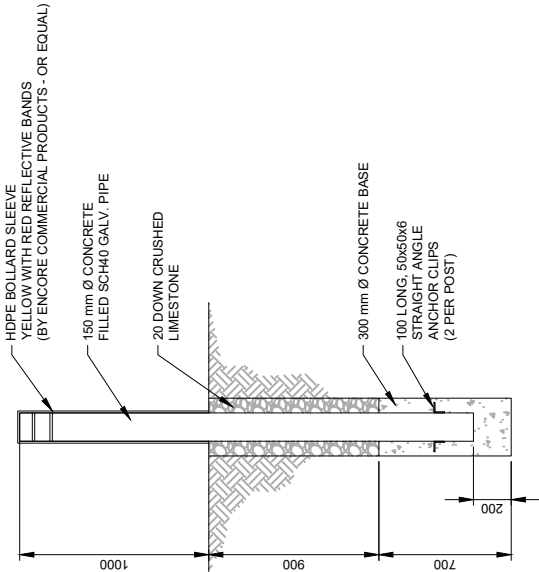
PLAN



SECTION 1-2



2
 C-103
 DETAIL
 DISCHARGE WEIR MANHOLE
 NTS



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 TYPICAL DETAIL
 CONCRETE BOLLARD
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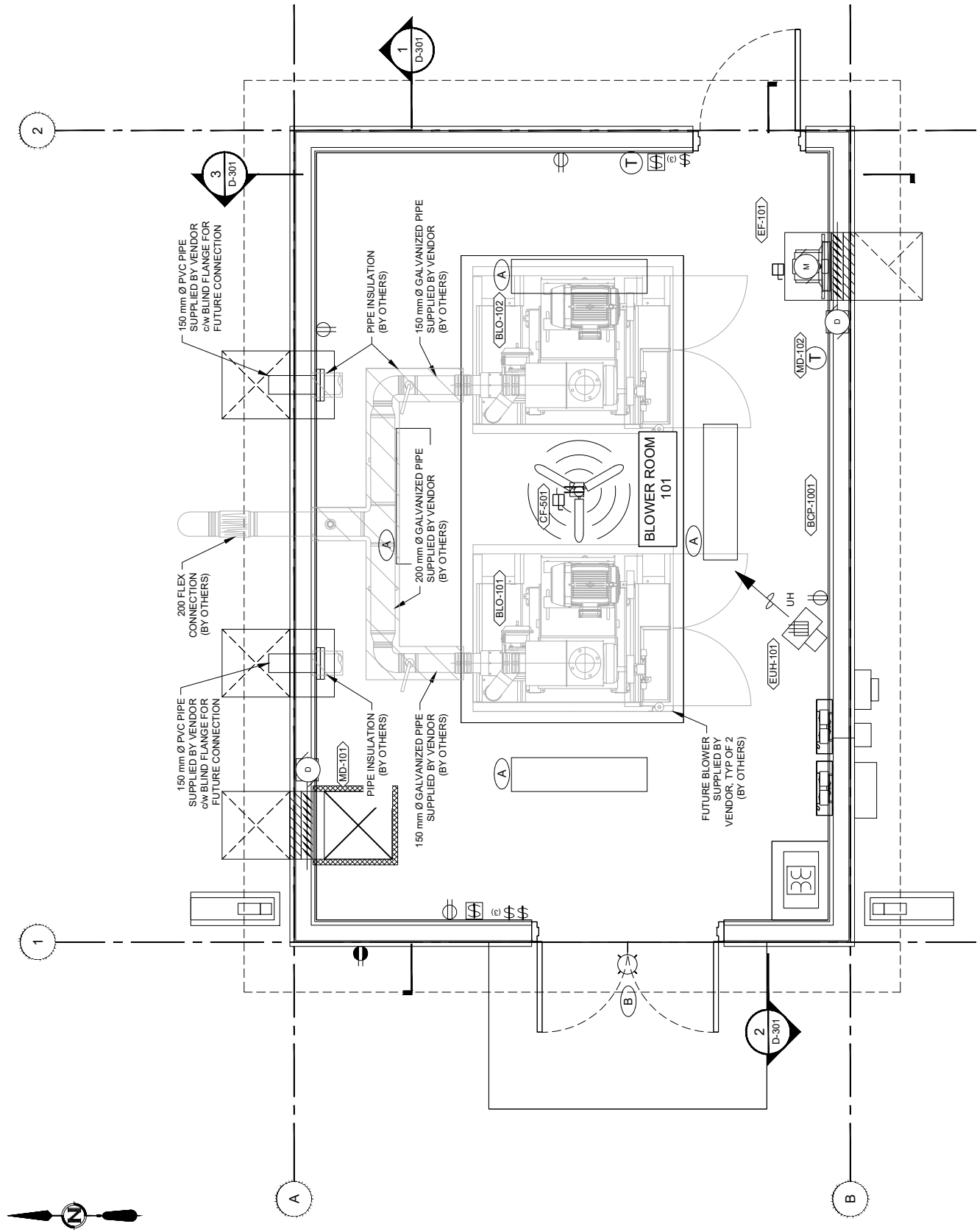
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0	2025JUN03	K. ANDERSON	C. HOUSTON		



RURAL MUNICIPALITY OF GREY
 MANITOBA WATER SERVICES BOARD
 ST. CLAUDE WASTEWATER LAGOON
 AERATION UPGRADES
 M.W.S.B.#: 1493
 20194231-00

SCALE: AS SHOWN
 CIVIL
 DETAILS

DRAWING	REVISION	SHEET
4231-01-C-502	0	



X	YYYYMMDD	E	ENGINEER	D	DRAFTER	ISSUED FOR	XXXXXX
REV	DATE	DESIGN	DRAWN	DESCRIPTION			



RURAL MUNICIPALITY OF GREY
MANITOBA WATER SERVICES BOARD
ST. CLAUDE WASTEWATER LAGOON
AERATION UPGRADES
M.W.S.B #: 1493
2019-4231-01
SCALE: AS SHOWN
PROCESS

DRAWING	REVISION	SHEET
4231-01-D-101	X	9



REV	DATE	DESIGN	DRAWN	DESCRIPTION
X	YYYYMMDD	E. ENGINEER	D. DRAFTER	ISSUED FOR XXXXXX



SCALE: AS SHOWN
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