



KEY PLAN



DRAWING LIST

- P001 EXISTING CONDITIONS & REMOVALS
- P002 PROPOSED AERATION PLAN
- P003 SECTIONS & DETAILS
- P004 MISCELLANEOUS DETAILS

REGIONAL AERATION UPGRADES 2022

MUNICIPALITY OF THE COUNTY OF KINGS

NEW MINAS, NOVA SCOTIA

PROJECT NO. 22-3289

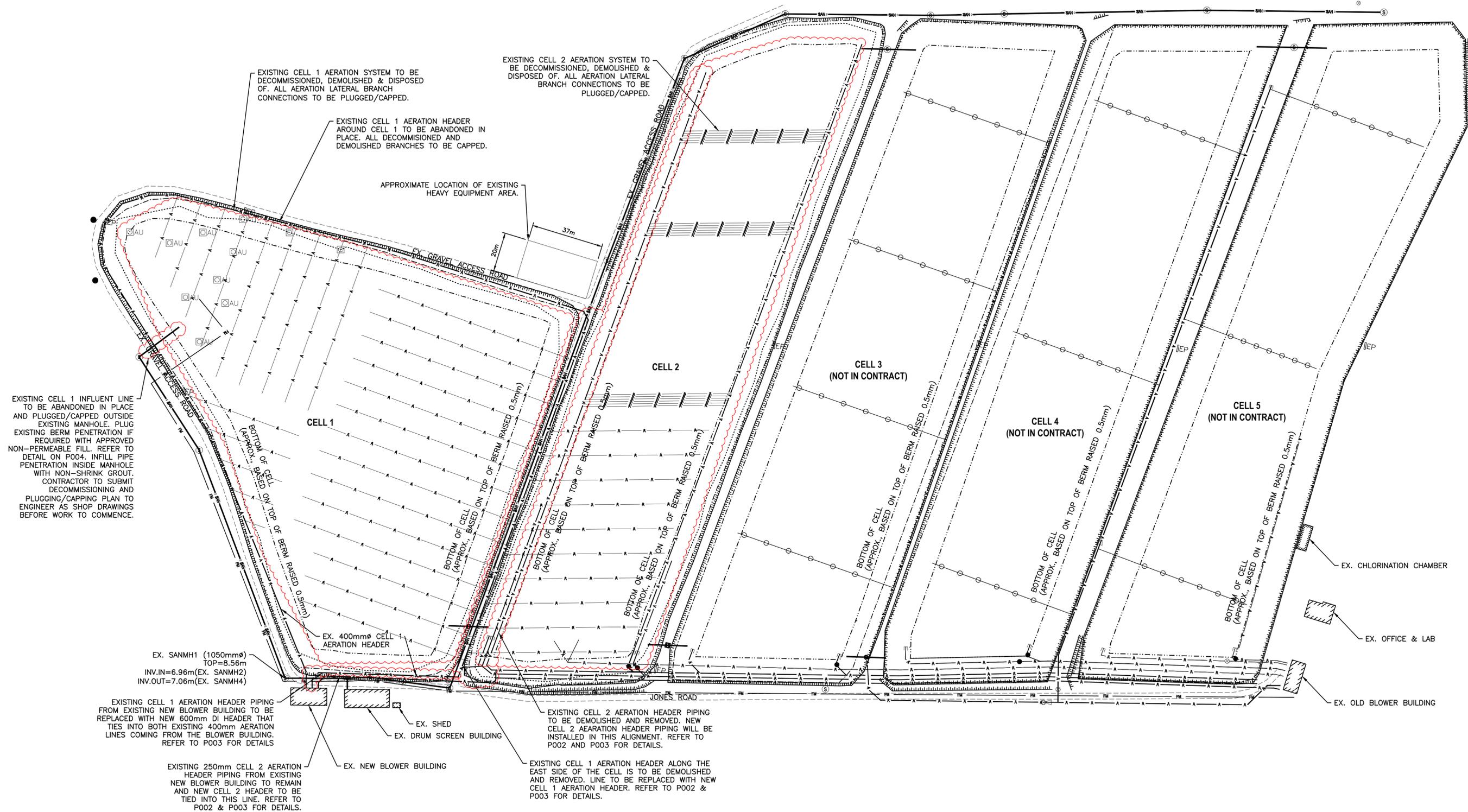
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2022-JULY-29
ISSUED FOR TENDER
REVISION 1



FILENAME: C:\PW\WORKING DIRECTORIES\PROJECTS_2022\DILLON_43485\UNRESOLVED\223289-10-TRP-CO-101.DWG PLOTTED BY: SPODIER CONSULTING LIMITED 130 DUFFERIN AVENUE, LONDON, ONTARIO, N6A 5R2, PHONE (519) 435-6192, FAX (519) 672-8209
PLOT DATE: 2022-07-29 @ 9:50:05 AM PLOT SCALE: 1:25.4 PLOT STYLE:



EXISTING CELL 1 INFLUENT LINE TO BE ABANDONED IN PLACE AND PLUGGED/CAPPED OUTSIDE EXISTING MANHOLE. PLUG EXISTING BERM PENETRATION IF REQUIRED WITH APPROVED NON-PERMEABLE FILL. REFER TO DETAIL ON P004. INFILL PIPE PENETRATION INSIDE MANHOLE WITH NON-SHRINK GROUT. CONTRACTOR TO SUBMIT DECOMMISSIONING AND PLUGGING/CAPPING PLAN TO ENGINEER AS SHOP DRAWINGS BEFORE WORK TO COMMENCE.

EXISTING CELL 1 AERATION SYSTEM TO BE DECOMMISSIONED, DEMOLISHED & DISPOSED OF. ALL AERATION LATERAL BRANCH CONNECTIONS TO BE PLUGGED/CAPPED.

EXISTING CELL 2 AERATION SYSTEM TO BE DECOMMISSIONED, DEMOLISHED & DISPOSED OF. ALL AERATION LATERAL BRANCH CONNECTIONS TO BE PLUGGED/CAPPED.

EXISTING CELL 1 AERATION HEADER AROUND CELL 1 TO BE ABANDONED IN PLACE. ALL DECOMMISSIONED AND DEMOLISHED BRANCHES TO BE CAPPED.

APPROXIMATE LOCATION OF EXISTING HEAVY EQUIPMENT AREA.

EX. SANMH1 (1050mm)
TOP=8.56m
INV.IN=6.96m(EX. SANMH2)
INV.OUT=7.06m(EX. SANMH4)

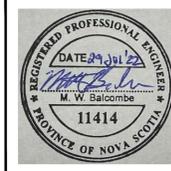
EXISTING CELL 1 AERATION HEADER PIPING FROM EXISTING NEW BLOWER BUILDING TO BE REPLACED WITH NEW 600mm DI HEADER THAT TIES INTO BOTH EXISTING 400mm AERATION LINES COMING FROM THE BLOWER BUILDING. REFER TO P003 FOR DETAILS

EXISTING 250mm CELL 2 AERATION HEADER PIPING FROM EXISTING NEW BLOWER BUILDING TO REMAIN AND NEW CELL 2 HEADER TO BE TIED INTO THIS LINE. REFER TO P002 & P003 FOR DETAILS.

EXISTING CELL 2 AERATION HEADER PIPING TO BE DEMOLISHED AND REMOVED. NEW CELL 2 AERATION HEADER PIPING WILL BE INSTALLED IN THIS ALIGNMENT. REFER TO P002 AND P003 FOR DETAILS.

EXISTING CELL 1 AERATION HEADER ALONG THE EAST SIDE OF THE CELL IS TO BE DEMOLISHED AND REMOVED. LINE TO BE REPLACED WITH NEW CELL 1 AERATION HEADER. REFER TO P002 & P003 FOR DETAILS.

Conditions of Use
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DESIGN	TES	REVIEWED BY	KRM
DRAWN	ABS	CHECKED BY	MWB
DATE	JUNE 2022		
SCALE	1:1000		
1	ISSUED FOR TENDER	2022-JUL-29	KRM
No.	ISSUED FOR	DATE	BY

MUNICIPALITY OF THE COUNTY OF KINGS
REGIONAL AERATION UPGRADES 2022

PROJECT NO. 22-3289

NEW MINAS SEWAGE TREATMENT PLANT
EXISTING CONDITIONS & REMOVALS

SHEET NO. P001



OWNER HAS 6 NEXOM SUPPLIED FLOATING LATERALS DESIGNED FOR CELL 2 CURRENTLY ON SITE FROM A PREVIOUS NOT COMPLETED INSTALLATION PROJECT. THESE FLOATING LATERALS REQUIRE FURTHER EQUIPMENT TO BE SUPPLIED BY CONTRACTOR/VENDOR TO BE COMPLETE. CONTRACTOR TO COORDINATE WITH VENDOR AND OWNER TO UNDERSTAND WHAT REMAINING EQUIPMENT FOR THESE 6 LATERALS ARE REQUIRED.

LAGOON WATER LEVELS TO BE DROPPED BY THE CONTRACTOR IN CONSULTATION WITH THE OWNER

NEW CELL 1 INFLUENT LINE COMPLETE WITH CLAY PLUG THROUGH BERM. REFER TO DETAIL ON P004

EXTEND EXISTING PAD WIDTH TO 25m AND INFILL TO GRADE BY CELL 1. REFER TO GEOTUBE DEWATERING PAD DETAIL ON P004.

CELL 2 SUPPLIER PROPOSED AERATION EQUIPMENT

CELL 1: SUPPLIER PROPOSED AERATION EQUIPMENT COMPLETE WITH INTERMEDIATE LATERAL ANCHOR CABLES AS REQUIRED.

APPROXIMATE LOCATION FOR PROPOSED GEOTUBE PAD TO BE PLACED IN THE LOCATION OF EXISTING HEAVY EQUIPMENT AREA. REFER TO DETAIL ON P004

NEW 1800mm MANHOLE

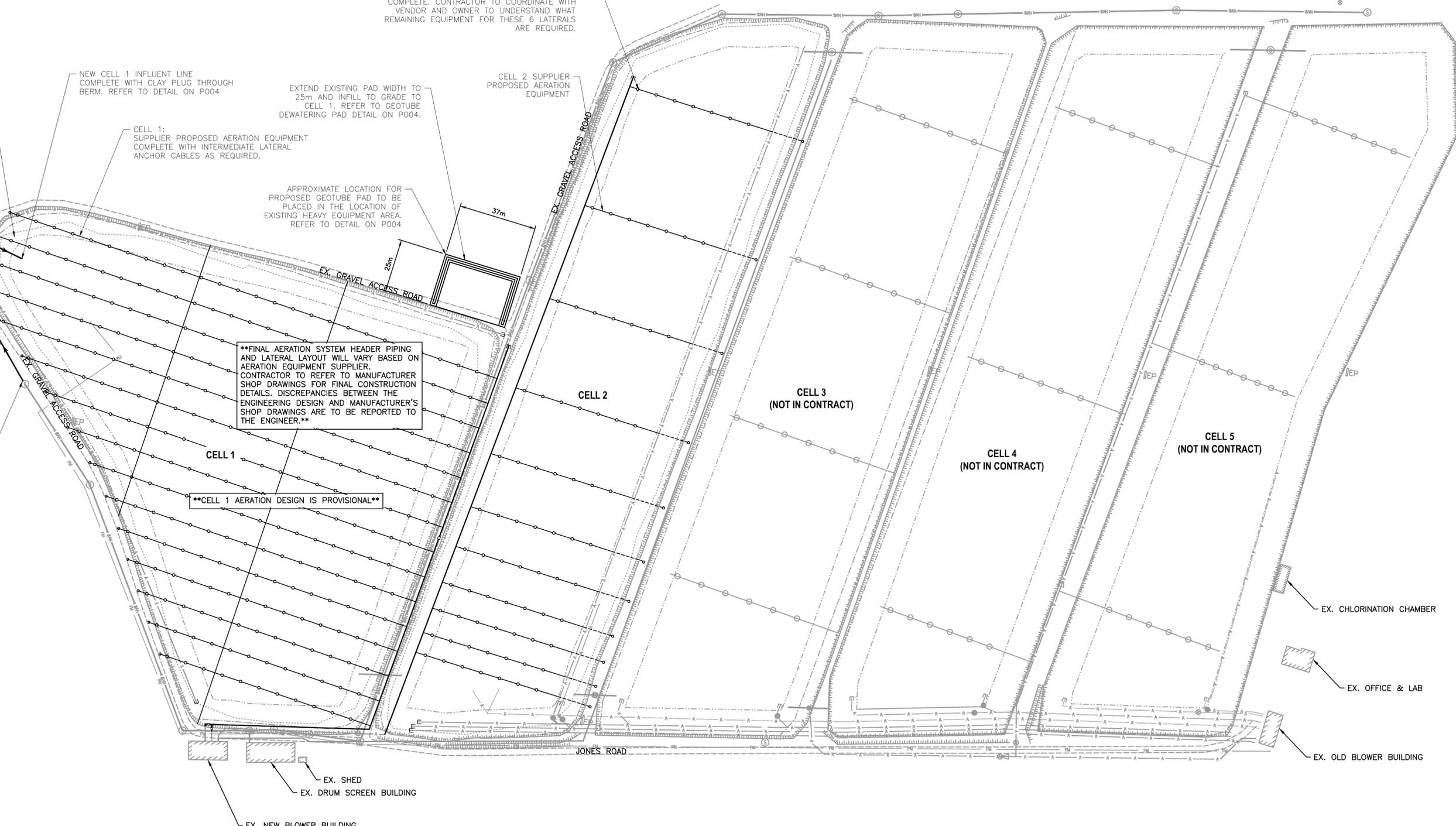
NEW 1500mm MANHOLE

NEW 750mm PVC DR 35 INFLUENT LINE EXTENSION. 750mm LINE TO BE LAID FLAT AND MATCH EXISTING INVERT ELEVATION AT EXISTING MANHOLE TIE IN.

TIE NEW INFLUENT LINE INTO EXISTING MANHOLE AT EXISTING PIPE ELEVATIONS. CONTRACTOR TO FIELD CONFIRM PRIOR TO INSTALLATION.

****FINAL AERATION SYSTEM HEADER PIPING AND LATERAL LAYOUT WILL VARY BASED ON AERATION EQUIPMENT SUPPLIER. CONTRACTOR TO REFER TO MANUFACTURER SHOP DRAWINGS FOR FINAL CONSTRUCTION DETAILS. DISCREPANCIES BETWEEN THE ENGINEERING DESIGN AND MANUFACTURER'S SHOP DRAWINGS ARE TO BE REPORTED TO THE ENGINEER.****

****CELL 1 AERATION DESIGN IS PROVISIONAL****



FILENAME: C:\PW\WORKING DIRECTORIES\PROJECTS_2022\DILLON_45465\INSTR\17\23289-10-TBPL-CON-P001.DWG PLOTTED BY: SCHOLLER, ARON PLOT DATE: 2022-07-29 @ 9:50:11 AM PLOT SCALE: 1:25.4 PLOT STYLE: ...

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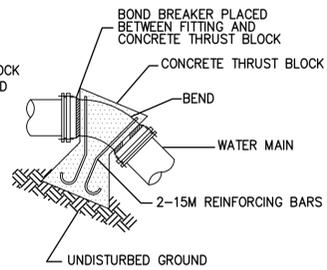
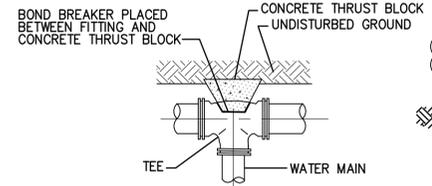
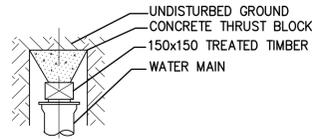
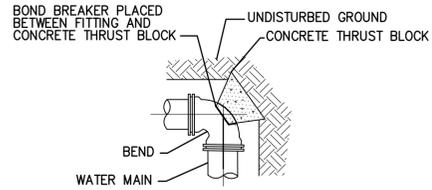


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No.	1	ISSUED FOR TENDER	2022-JUL-29
		ISSUED FOR	DATE BY

MUNICIPALITY OF THE COUNTY OF KINGS REGIONAL AERATION UPGRADES 2022		PROJECT NO. 22-3289
NEW MINAS SEWAGE TREATMENT PLANT PROPOSED AERATION PLAN		SHEET NO. P002



MINIMUM CONTACT AREAS FOR CONCRETE THRUST BLOCKS

PIPE DIA. mm	AREA (M ²) FOR SOIL SUPPORTING CAPACITY OF 100 kPa					
	CAP OR PLUG	TEE	90° BEND	45° BEND	22.5° BEND	11.25° BEND
150	0.48	0.48	0.64	0.40	0.24	0.16
200	0.80	0.80	1.12	0.64	0.32	0.16

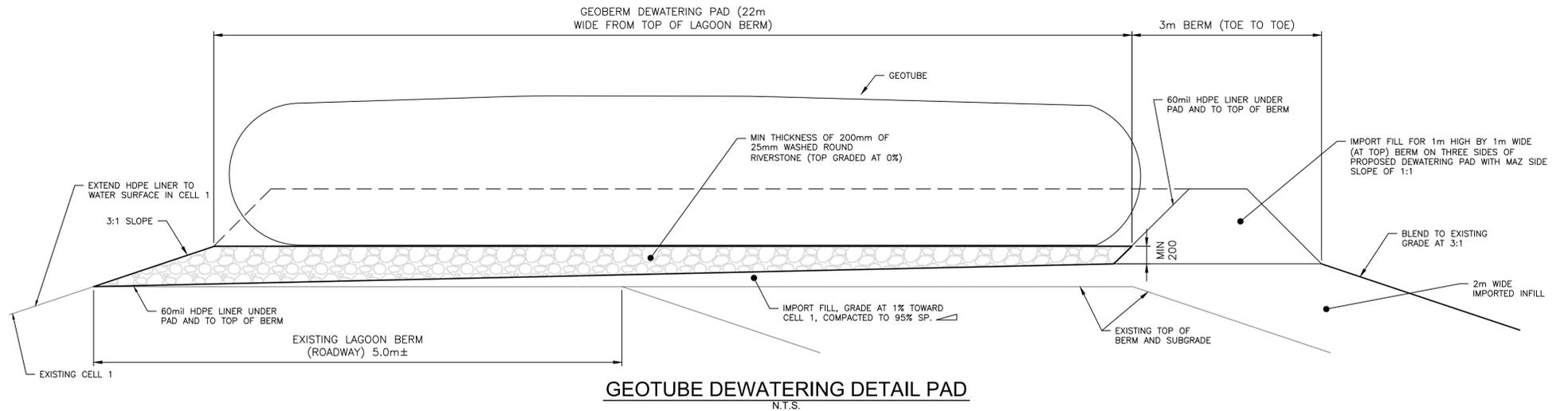
MINIMUM DISTANCE FROM FITTING TO UNDISTURBED GROUND

PIPE DIAMETER (mm)	mm
150	450
200	450

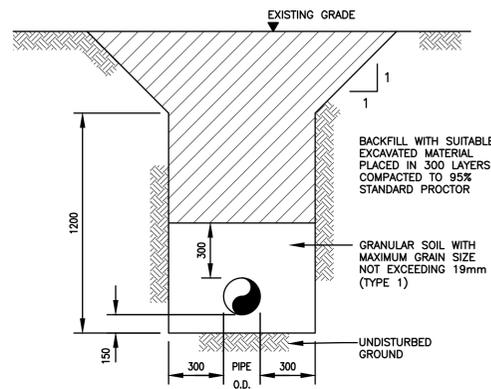
NOTE:

THESE TABLES ARE BASED ON SOIL SUPPORTING CAPACITIES OF 100kPa AND AN INTERNAL PRESSURE OF 1035kPa. WHERE DIFFERENT SUPPORTING CAPACITIES OR INTERNAL PRESSURES ARE ENCOUNTERED, CONTACT AREAS SHOULD BE CALCULATED ACCORDINGLY. SAFE SUPPORTING CAPACITY SHOULD BE DETERMINED BY THE DESIGN ENGINEER, AND SHOULD INCLUDE AN APPROXIMATE FACTOR OF SAFETY.

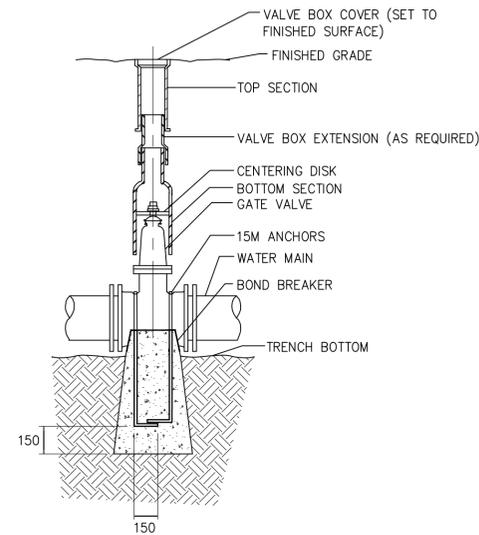
THRUST BLOCK DETAIL
N.T.S.



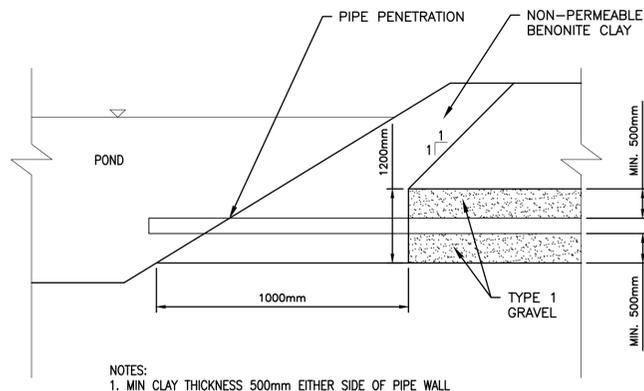
GEOTUBE DEWATERING DETAIL PAD
N.T.S.



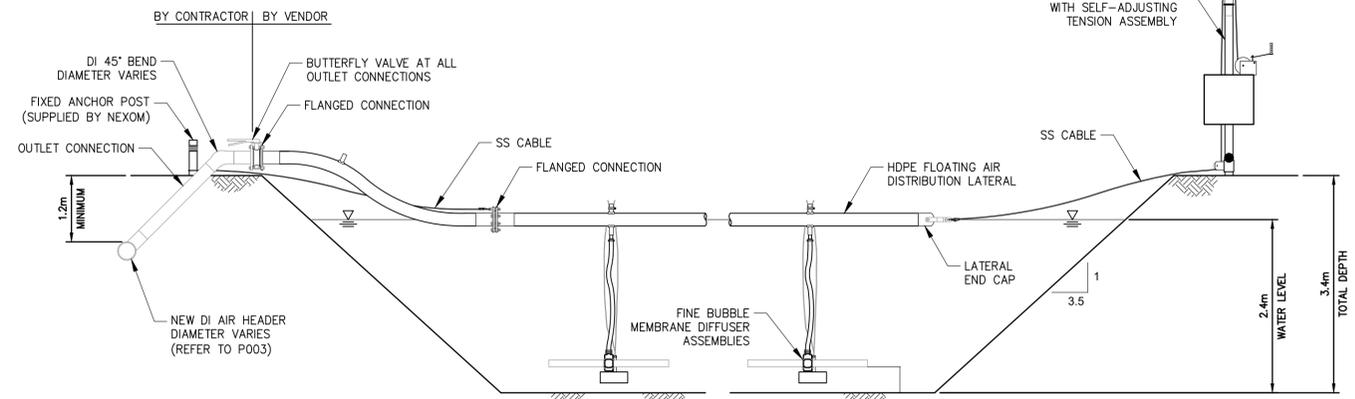
TYPICAL PIPE TRENCH
N.T.S.



VALVE DETAIL
N.T.S.



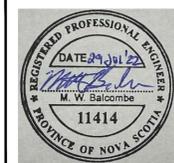
TYPICAL POND LINER PENETRATION
N.T.S.



AERATED LAGOON SECTION
N.T.S.

FILENAME: C:\PW\WORKING DIRECTORIES\PROJECTS_2022\DILLON_43485\MS2137\223289-10-TRPL-CO-N-P004.DWG PLOTTED BY: SCHROEDER, ARON PLOT DATE: 2022-07-29 @ 9:50:18 AM PLOT SCALE: 1:25.4 PLOT STYLE: ...

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DRAWN ABS	CHECKED BY MWB		SHEET NO. P004
DATE JUNE 2022		NEW MINAS SEWAGE TREATMENT PLANT MISCELLANEOUS DETAILS	P004
SCALE AS SHOWN			