



MUNICIPALITY OF  
**West Elgin**

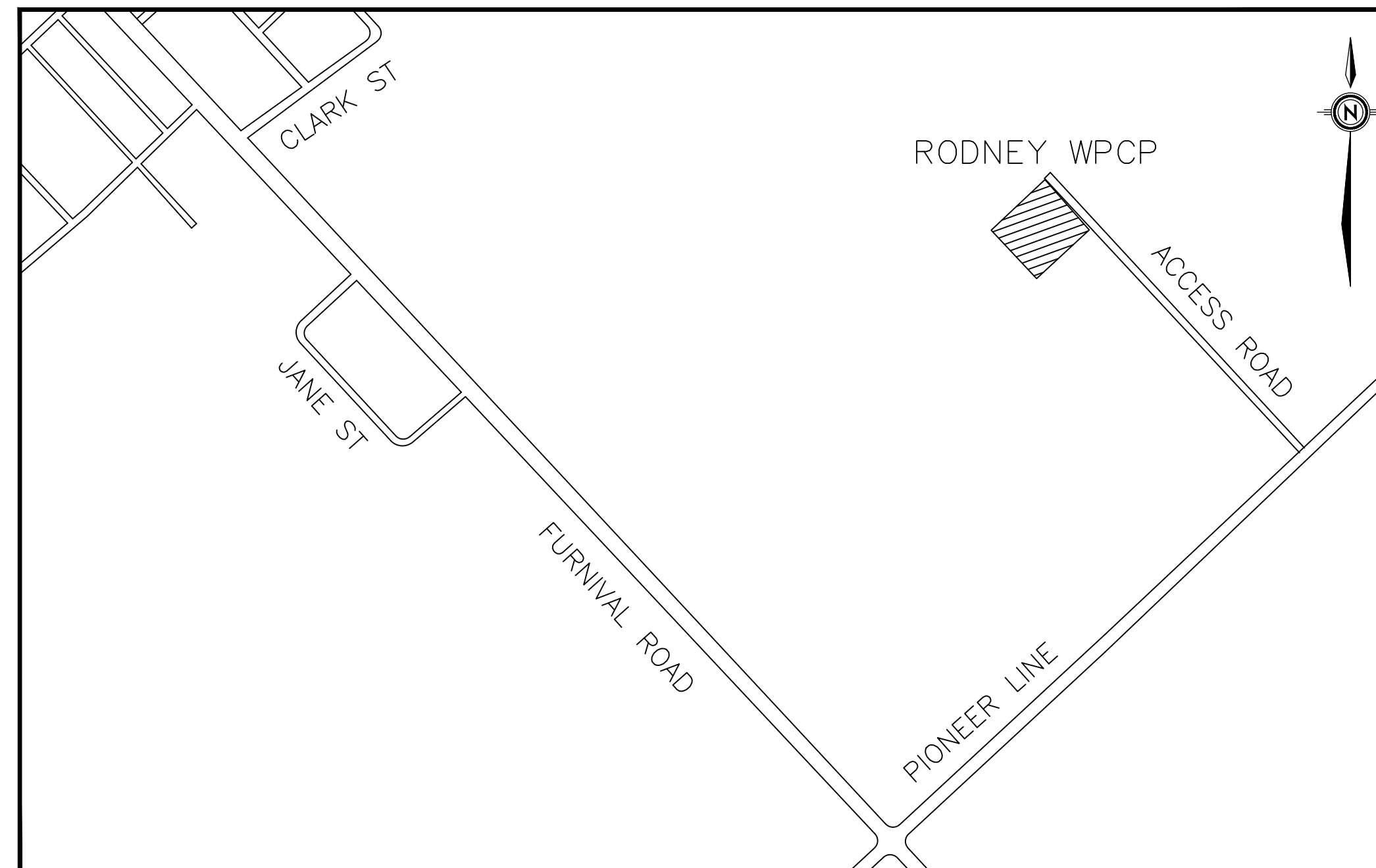
# MUNICIPALITY OF WEST ELGIN

## RODNEY WATER POLLUTION CONTROL PLANT

### UPGRADES

CONTRACT NO. WE-2024-01

LIST OF DRAWINGS	
CS & DL	COVER SHEET AND DRAWING LIST
P001	PROCESS - LEGEND AND ABBREVIATIONS
M001	MECHANICAL - LEGEND AND ABBREVIATIONS
E001	ELECTRICAL - LEGEND AND ABBREVIATIONS
I001	I & C - LEGEND AND ABBREVIATIONS (1)
I002	I & C - LEGEND AND ABBREVIATIONS (2)
G101	SITE PLAN
R101	P&ID - REMOVALS
R102	SITE PLAN - REMOVALS
R103	HEADWORKS - REMOVALS
R104	AERATION TANK - REMOVALS
R105	CONTROL BUILDING B - REMOVALS
R106	CLARIFIER - REMOVALS
R107	DECANT PUMP SYSTEM
S001	GENERAL NOTES
S101	HEADWORKS - DEMOLITION PLAN
S102	HEADWORKS - NEW PLATFORM AND STAIR PLAN
S103	HEADWORKS - SECTIONS
S104	HEADWORKS - PLATFORM PLAN AND ELEVATIONS
S105	HEADWORKS - SECTIONS
A201	OBC, LEGENDS AND ABBREVIATIONS
A202	PLANS, DETAILS AND SCHEDULES
S201	CONTROL BUILDING B - FLOOR PLAN
S202	CONTROL BUILDING B - ROOF PLAN
S203	CONTROL BUILDING B - PLANS AND SECTIONS
S301	CLARIFIER - PLAN AND SECTIONS
S1001	TYPICAL DETAILS (1)
S1002	TYPICAL DETAILS (2)
S1003	TYPICAL DETAILS (3)
S1004	TYPICAL DETAILS (4)



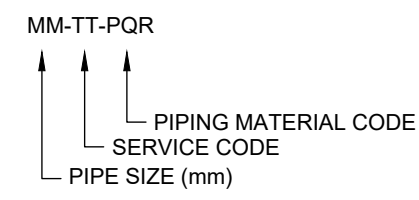
P100	PROCESS FLOW DIAGRAM
P101	HEADWORKS - PLAN AND SECTION
P102	AERATION TANKS - PLAN AND SECTION
P103	CONTROL BUILDING B - PLAN AND SECTION
P104	CLARIFIER -PLAN AND SECTIONS
P105	P105
M100	CONTROL BUILDING B - PLAN REMOVALS
M101	CONTROL BUILDING B - HVAC AND PLUMBING PLAN
M102	CONTROL BUILDING B - SECTIONS
M103	DETAILS
M104	HEADWORKS - PLAN AND SECTION
M105	SCHEDULE
E101	ELECTRICAL SITE PLAN
E102	DETAILS
E103	REMOVALS AND RELOCATIONS
E104	SINGLE LINE DIAGRAM
E105	POWER LAYOUT
E106	LIGHTING PLAN
E107	CLARIFIER POWER PLAN AND SCHEMATICS
E108	SCREEN ROOM AND AERATION BASIN POWER PLAN
E109	ELECTRICAL DETAILS
E110	BLOWER SCHEMATIC
I101	AERATION AND CLARIFIER - P&ID
I102	FILTRATION AND UV DISINFECTION - P&ID
I103	ALUM DOSING SYSTEM - P&ID
I104	AERATION BLOWER SYSTEM - P&ID
I105	ROD2 CONTROL PANEL MODIFICATIONS
I106	NETWORK ARCHITECTURE



**R.V. ANDERSON ASSOCIATES LIMITED**  
Innovative solutions for complex challenges

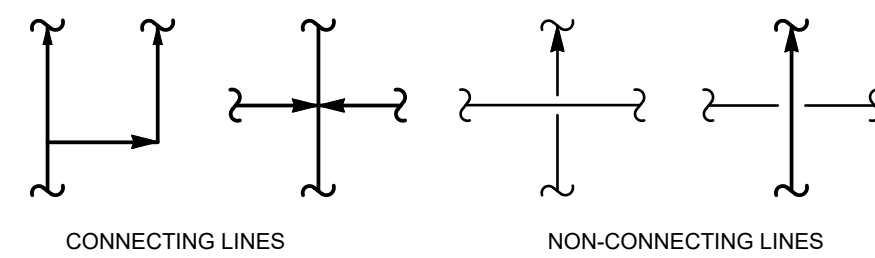
ISSUED FOR TENDER  
MAY 13, 2024

**LINE IDENTIFICATION**

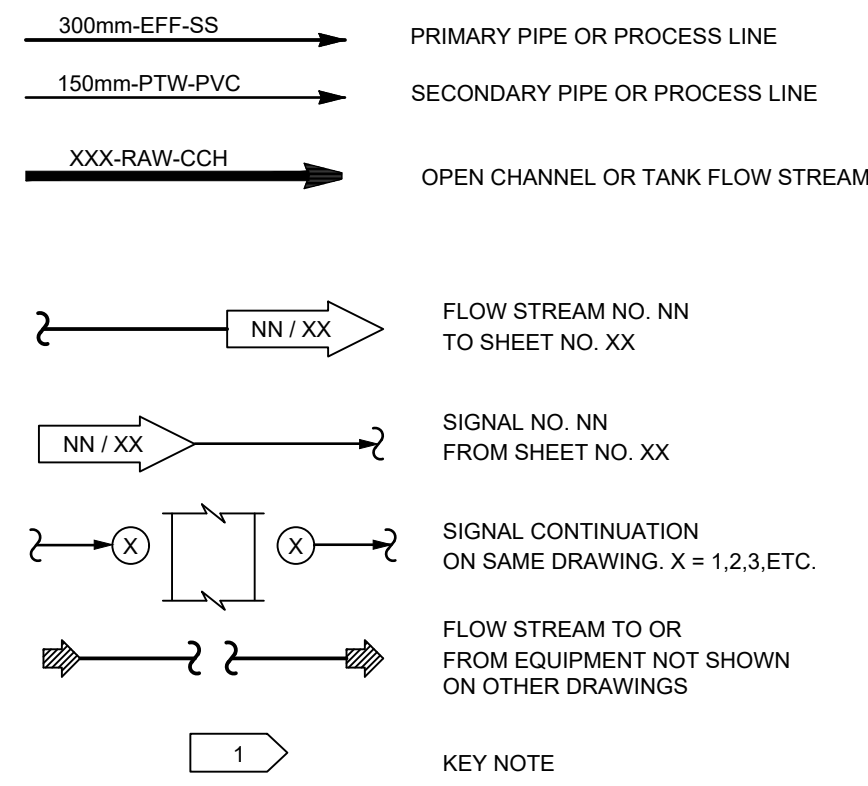


**PIPING MATERIAL CODE**

- |   |                                |
|---|--------------------------------|
| CCH - CONCRETE CHANNEL                  | PE - POLYETHYLENE              |
| CS - CARBON STEEL                       | PVC - PVC (UPVC / MPVC / OPVC) |
| CU - COPPER TUBE                        | RC - REINFORCED CONCRETE       |
| DI - DUCTILE IRON                       | RRJ - RUBBER RING JOINT        |
| GRP - GLASS FILAMENT REINFORCED PLASTIC | SS - STAINLESS STEEL 304L/316L |
| HDPE - HIGH DENSITY POLYETHYLENE        | VC - VITRIFIED CLAY            |
| XMTL - UNSPECIFIED MATERIAL             |                                |



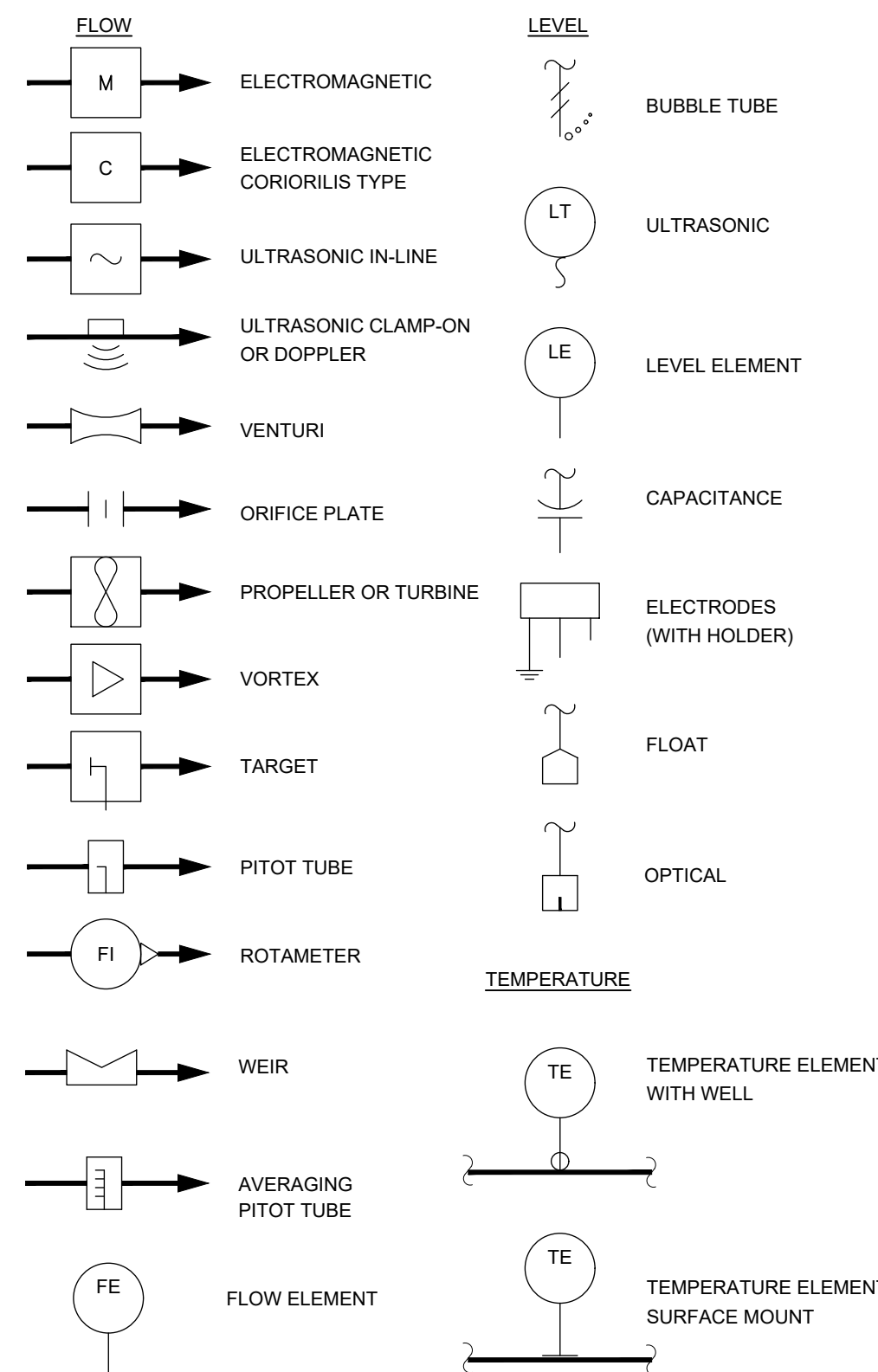
**FLOW STREAM SYMBOLS**



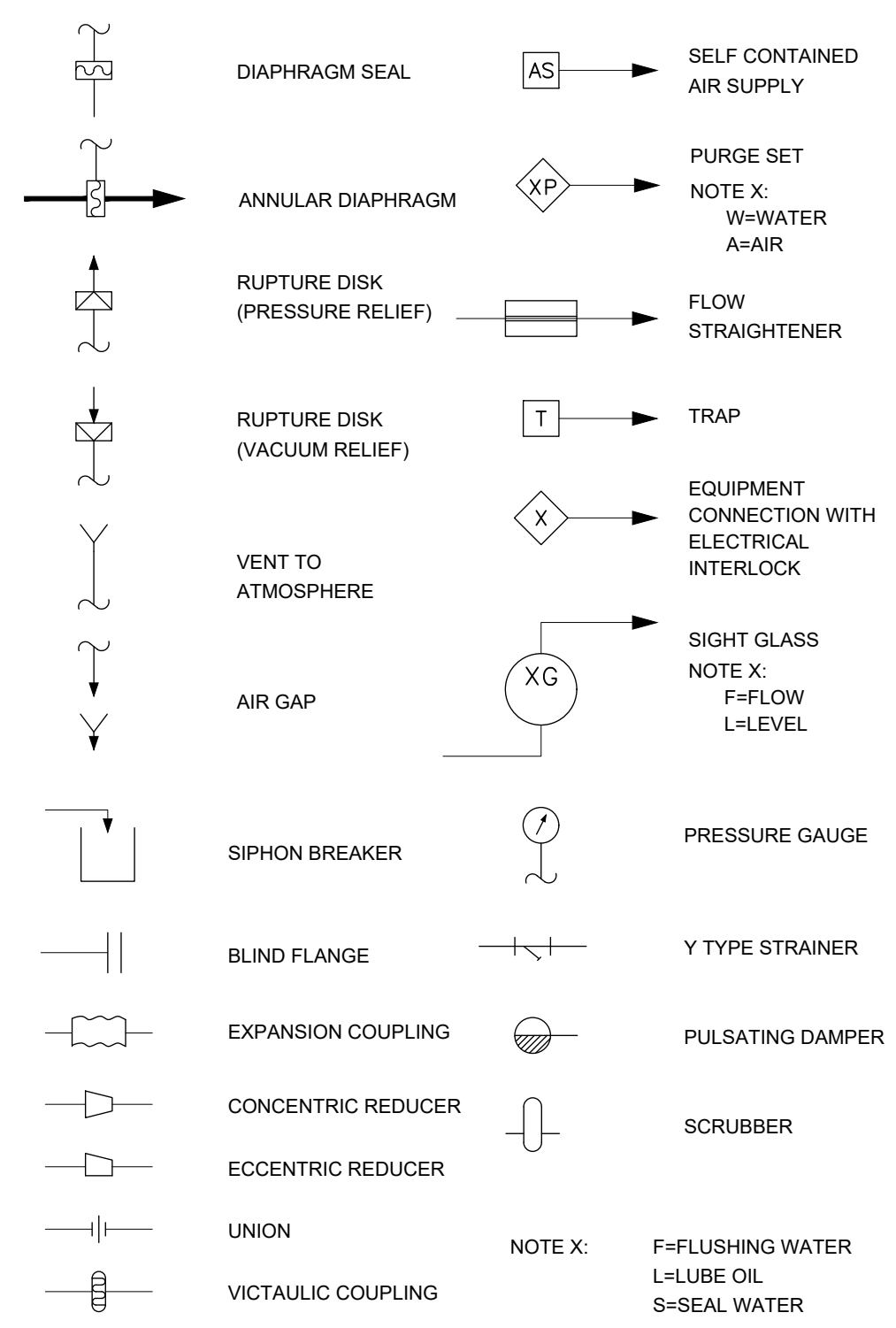
**SERVICE CODES**

- |                               |  |
|-------------------------------|--|
| AEA - AERATION AIR            | NG - NATURAL GAS                         |
| ASW - AIR SATURATED WATER     | OD - OVERFLOW DRAIN OF OVERFLOW          |
| BEE - BIO-FILTER EFFLUENT     | PEFF - PRIMARY EFFLUENT                  |
| BFI - BIO-FILTER INFLUENT     | PER - PERMEATE                           |
| BWW - BACKWASH WATER          | PINF - PRIMARY INFLUENT                  |
| CE - CHLORINATED EFFLUENT     | PRA - PROCESS AIR                        |
| CF - CHLORINATED FERROUS      | PRW - SERVICE WATER (PROCESS WATER)      |
| CM - CHEMICAL                 | PTW - POTABLE WATER                      |
| CEN - CENTRATE                | PSD - PRIMARY SLUDGE                     |
| CMA - COMPRESSED AIR          | PSM - PRIMARY SCUM                       |
| DCW - DECANT WATER            | RAS - RETURN (RECYCLED) ACTIVATED SLUDGE |
| DGG - DIGESTER GAS            | RDS - RECIRCULATED DIGESTED SLUDGE       |
| DGS - DIGESTED SLUDGE         | RAW - RAW WATER                          |
| DR - DRAIN                    | RPS - RETURN PRIMARY SLUDGE              |
| DSN - DIGESTED SUPERNATANT    | REW - RECYCLED WATER (REUSE WATER)       |
| DS - DIGESTED SLUDGE          | SCR - SCREENINGS                         |
| EFF - EFFLUENT                | SCS - SCREENED SOLIDS                    |
| EOF - EMERGENCY OVERFLOW      | SCM - SCUM CONCENTRATE                   |
| FLW - FLOC WATER              | SEW - RAW SEWAGE                         |
| FIL - FILTRATE                | SD - STORM DRAIN                         |
| FEW - FILTRATE EFFLUENT WATER | SLG - SLUDGE                             |
| FWS - FIRE WATER SERVICE      | SSN - SLUDGE SUPERNATANT                 |
| FLA - FOUL AIR                | SRS - SCREENED RAW SEWAGE                |
| FO - FUEL OIL                 | SEFF - SECONDARY EFFLUENT                |
| INF - INFLUENT                | SINF - SECONDARY INFLUENT                |
| GFL - GRIT FLOW               | SL - SALT                                |
| GSN - GRIT SUPERNATANT        | SPD - SUNP PUMP DRAIN                    |
| HTW - HEATING WATER RETURN    | SSM - SECONDARY SCUM                     |
| HWS - HEATING WATER SUPPLY    | TS - THICKENING SLUDGE                   |
| HPHW - HIGH PRESSURE HOT      | TWS - TEMPERED WATER SUPPLY              |
| IA - INSTRUMENT AIR           | UVE - UV EFFLUENT                        |
| LPO - LIQUID POLYMER          | WAS - WASTE ACTIVATED SLUDGE             |
| MLQ - MIXED LIQUOR            | WWD - WASH WATER DRAIN                   |
| MLR - MIXED LIQUOR RETURN     |  |

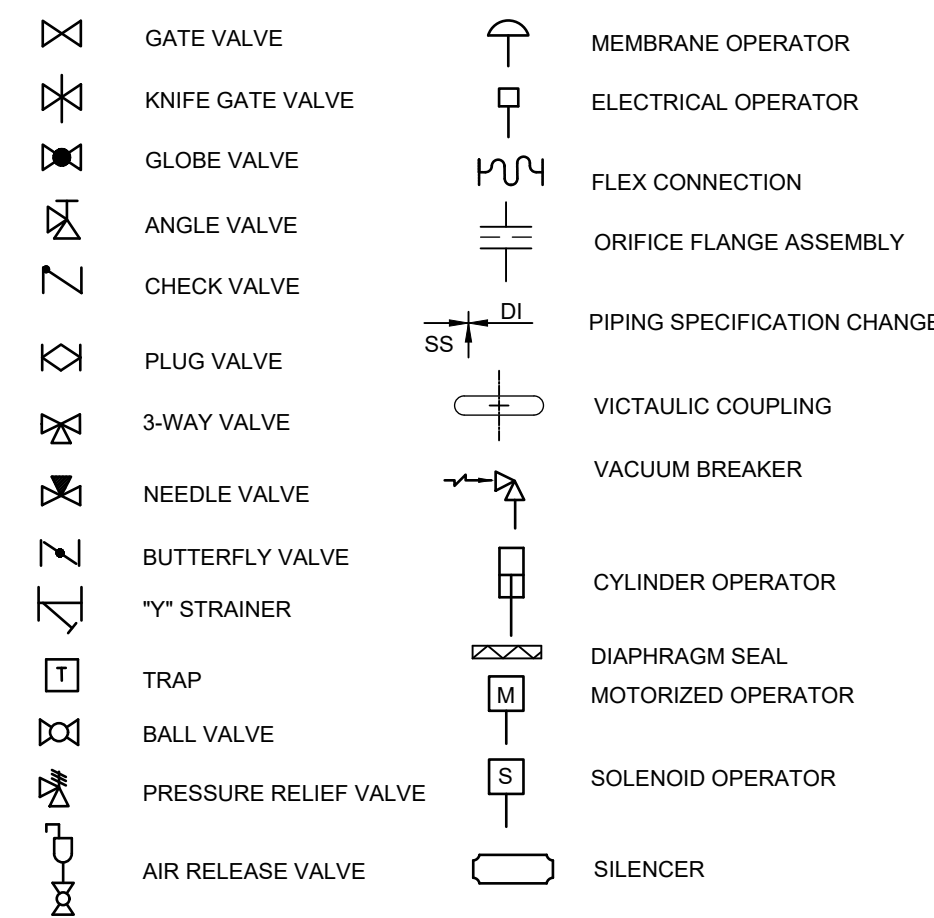
**PRIMARY ELEMENT SYMBOLS**



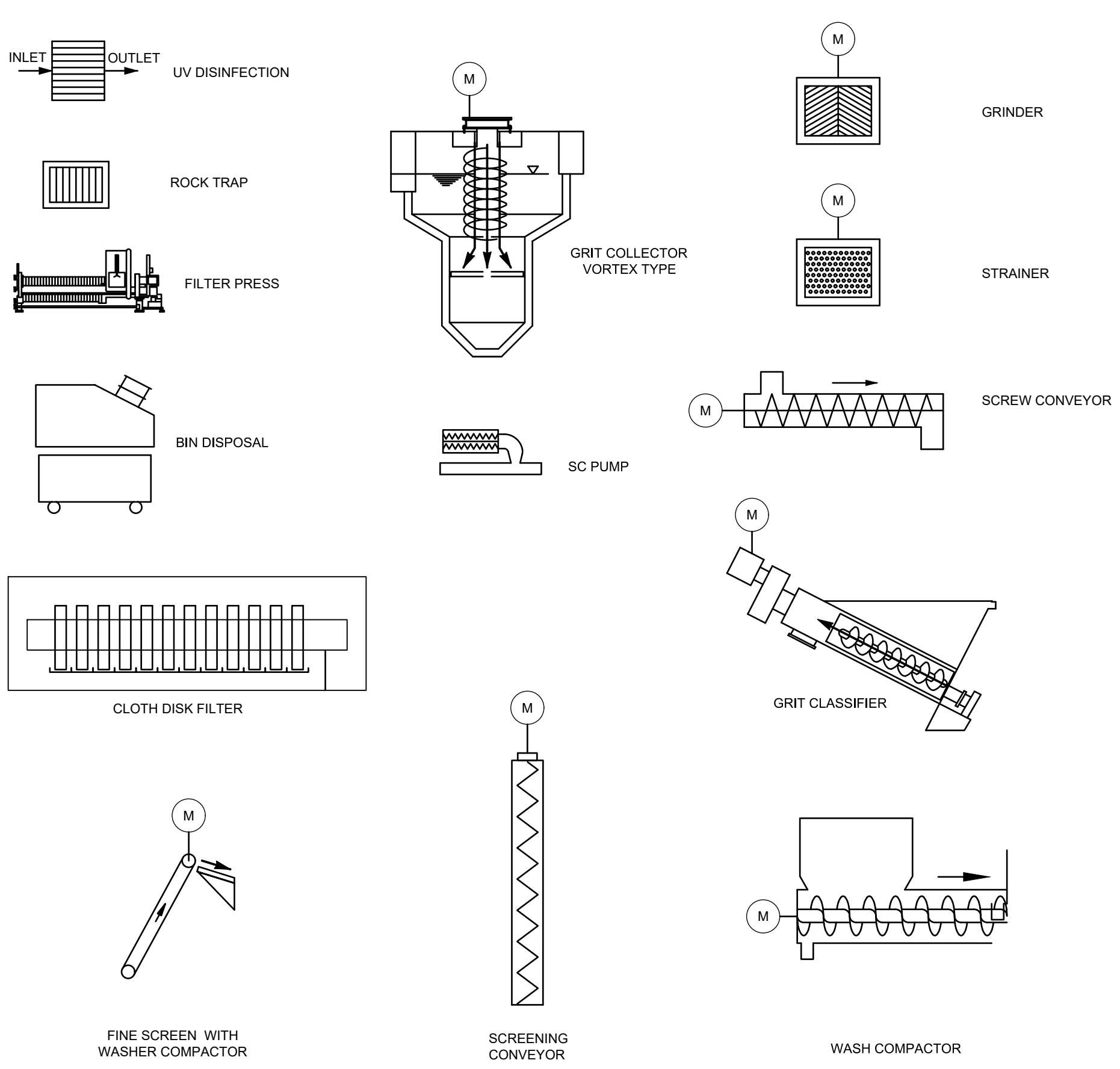
**MISCELLANEOUS SYMBOLS**



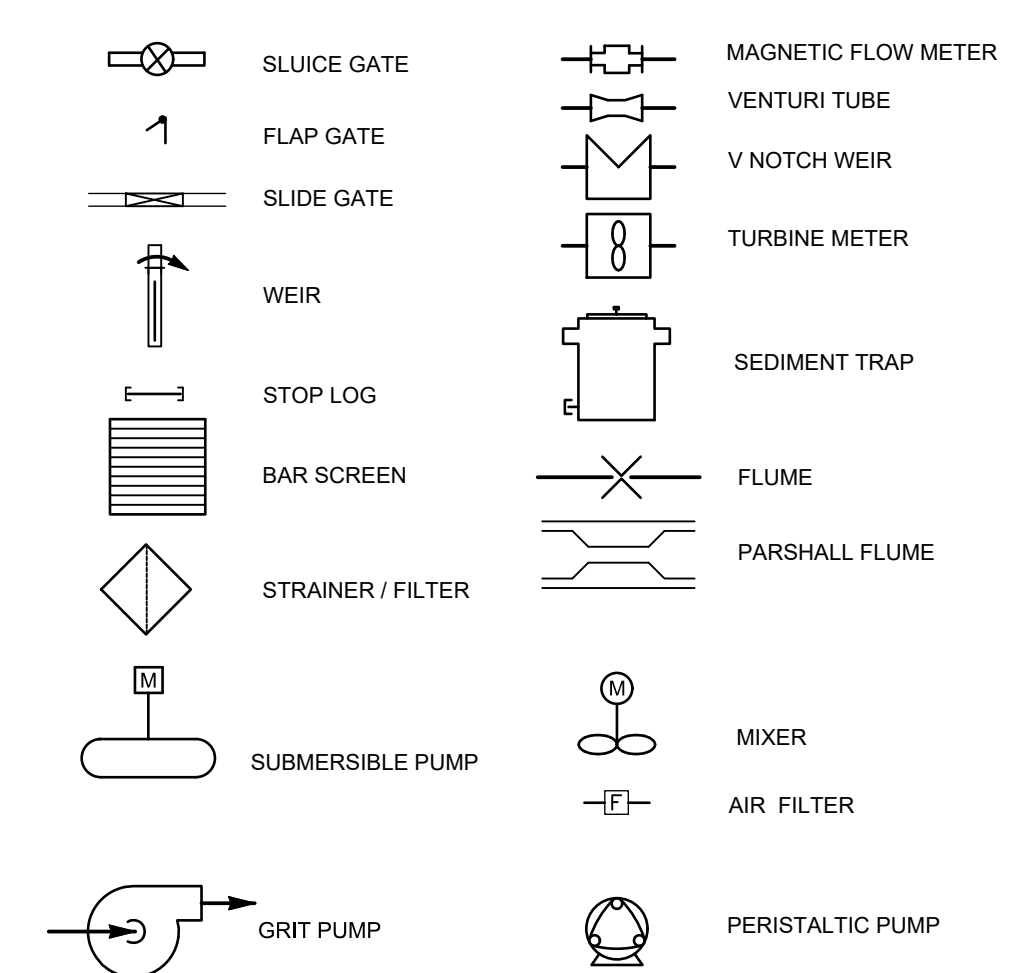
**PIPING COMPONENT SYMBOLS**



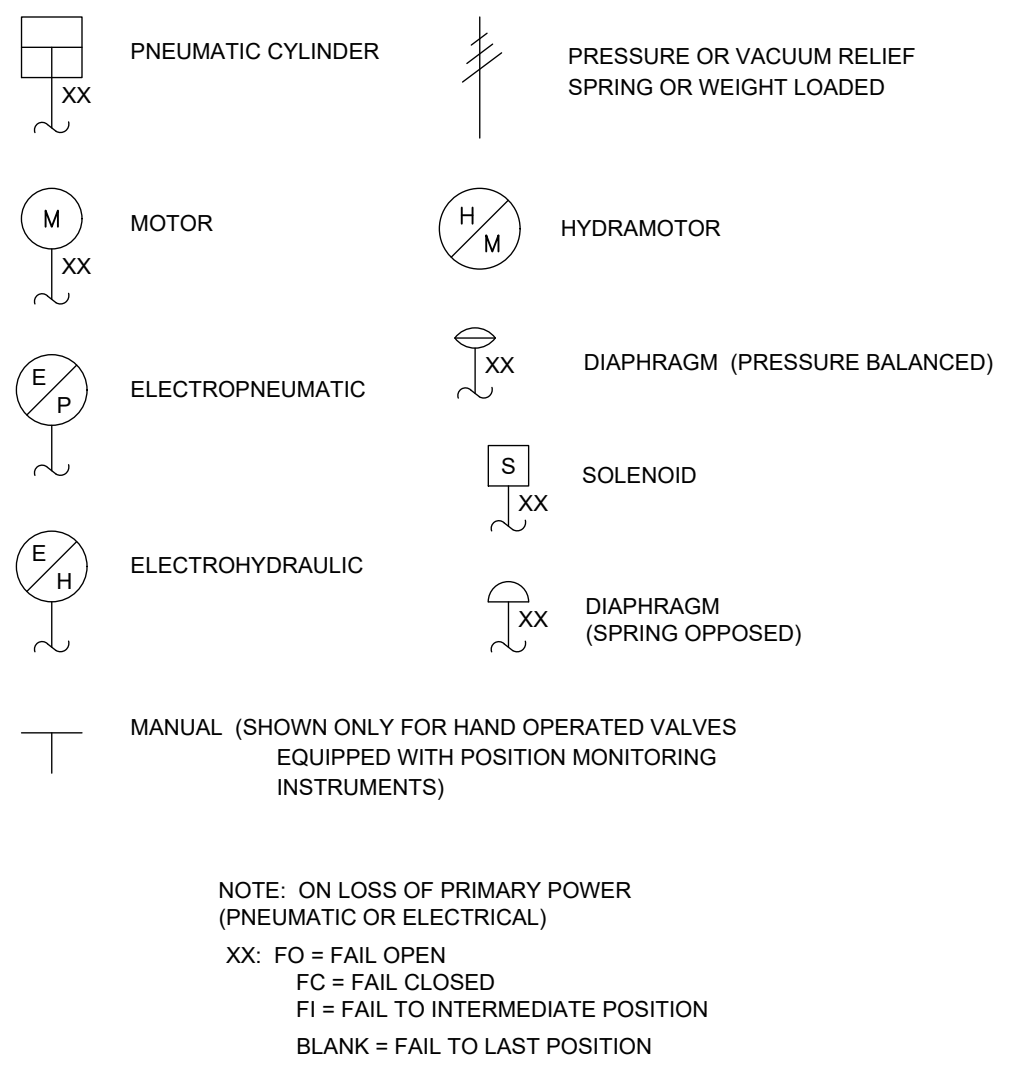
**WATER & WASTEWATER PROCESS EQUIPMENT SYMBOLS**



**FLOW DIAGRAM EQUIPMENT SYMBOLS**

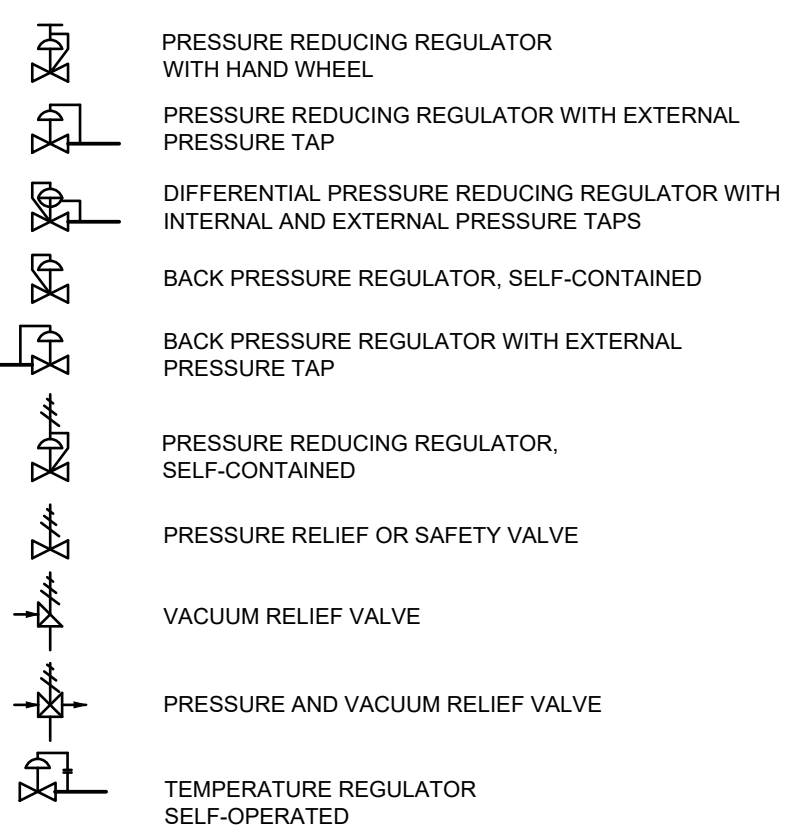


**ACTUATOR SYMBOLS**



NOTE: ON LOSS OF PRIMARY POWER (PNEUMATIC OR ELECTRICAL)  
 XX: FO = FAIL OPEN  
 FC = FAIL CLOSED  
 FI = FAIL TO INTERMEDIATE POSITION  
 BLANK = FAIL TO LAST POSITION

**VALVE & REGULATOR SYMBOLS**



00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

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CONTRACT NO. WE-2024-01



**RODNEY WPCP  
UPGRADES**

PROCESS  
**LEGEND AND ABBREVIATIONS**

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. P001
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC

STANDARD MECHANICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FUEL OIL SUPPLY		LOCK SHIELD VALVE		DIFFUSER GRILLE OR REGISTER TYPE		INVERT LEVEL
	FUEL OIL RETURN		CONTROL VALVE		SL-#		MFRs
	REFRIGERATION SUCTION		3-WAY CONTROL VALVE		OR FC		MOTORIZED DAMPER
	REFRIGERATION LIQUID		SOLENOID VALVE		EUH-#		MOTORIZED DAMPER
	SANITARY ABOVE GRADE OR FLOOR		THERMOSTATIC MIXING VALVE		UH-#		NG
	SANITARY BELOW GRADE OR FLOOR		'Y' STRAINER		EBH		NC
	POTABLE/DOMESTIC COLD WATER(DCW)		BACKFLOW PREVENTER ASSEMBLY		F-#		NO
	POTABLE/DOMESTIC HOT WATER(DHW)		PIPE RISING		P-#		OA
	TEMPERED WATER		PIPE DROPPING				OAT
	PLUMBING VENT		TOP RUNOUT CONNECT'N		WALL FIN TYPE		RA
	DRAIN LINE		BOTTOM RUNOUT CONNECT'N		45° RADIUS ELBOW		SA
	RAIN WATER LEADER		DIRECTION OF FLOW		90° RADIUS ELBOW		RWL
	RAIN WATER LEADER BELOW GRADE OR FLOOR		DIRECTION OF SLOPE		SQUARE ELBOW WITH AIRFOIL TURNING VANES		SP/ESP
	CLEANOUT THROUGH FLOOR		PIPE ANCHOR		EHC		STM
	CLEANOUT IN CEILING		PIPE FLANGE		HWC		TP
	NON-FREEZE HOSE BIBB		PIPE GUIDE		SCR		TWMS
	HOSE BIBB		PIPE UNION		BPB		F
	RUNNING TRAP		CAPPED PIPE		AC		FE
	FLOOR DRAIN		AIR FLOW SWITCH		CU		PS
	ROOF DRAIN		DIFFERENTIAL PRESSURE SWITCH		AFF		Tc OR Tc
	EYE WASH		PRESSURE GAUGE		AHU		+
	HOT WATER TANK		THERMOMETER		BPB		-
	JANITOR SINK		THERMOSTAT		CI		+
	WASH FOUNTAIN		HUMIDISTAT		CV		-
	WASHBASIN/LAVATORY		AUTOMATIC AIR VENT		CW		GM
	URINAL		VACUUM BREAKER		C/W		WM
	WATER CLOSET FLUSH TANK		DUCT MOUNTED THERMOSTAT		C.T.E.		
	WATER CLOSET FLUSH VALVE		END SWITCH		DG		
	CONCENTRIC REDUCER		FIRE STAT		DN		DS
	ECCENTRIC REDUCER		FREEZE STAT		DPT		G
	GATE VALVE		STEP CONTROLLER		EA		
	PRV		RETURN/EXHAUST AIR DUCT		EBH		VD
	BALL VALVE		SUPPLY/FRESH AIR DUCT		EF		SD
	BUTTERFLY VALVE		FIRE DAMPER		ELEV / EL		HD
	ANGLE VALVE		MOTORIZED CONTROL DAMPER		ET		FFD
	CHECK VALVE		BALANCING DAMPER		FC		FFL
	CIRCUIT BALANCING VALVE		BACKDRAFT DAMPER				HW
	PLUG VALVE		RETURN AIR GRILLE OR REGISTER		NPW		HRV
	HOSE REEL		SUPPLY AIR GRILLE				

No.	REVISION	DATE	BY
3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR 100% CLIENT REVIEW 2023	2023.08.30	DC
1	ISSUED FOR DESIGN REVIEW	2023.06.30	DC

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CONTRACT NO. WE-2024-01



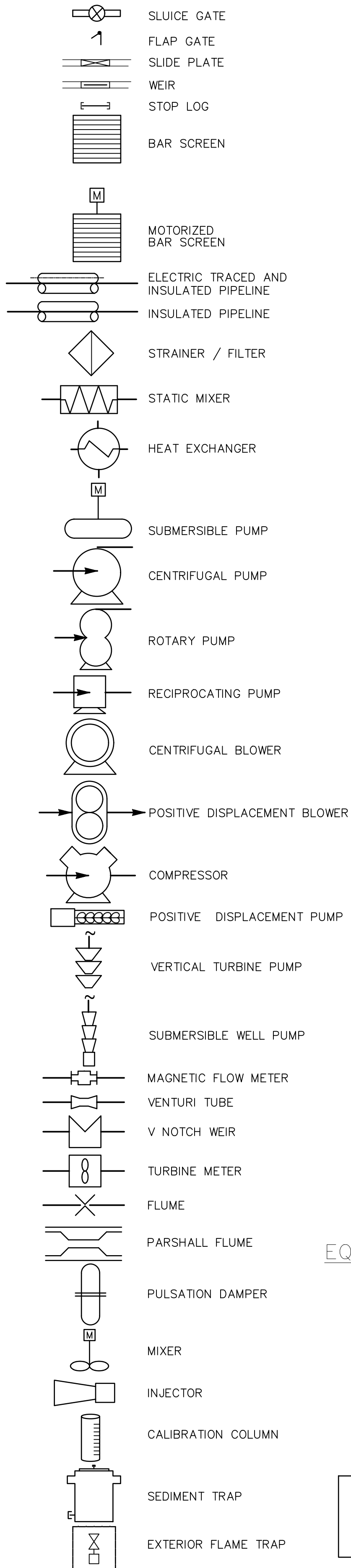
RODNEY WPCP  
UPGRADES

MECHANICAL  
LEGEND & ABBREVIATIONS

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	
Drawn by: BAQ	Designed by: PHP
Checked by: BJM	Approved by: DC
	DWG NO. M001



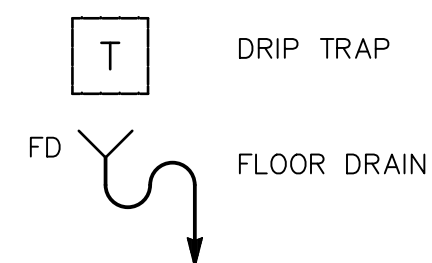
**FLOW DIAGRAM  
EQUIPMENT SYMBOLS**



**PIPING COMPONENT  
SYMBOLS**



**FLOW DIAGRAM  
EQUIPMENT SYMBOLS (CONTD.)**



NOTE: NOT ALL OF THE ABOVE ITEMS ARE NECESSARILY INCLUDED IN THIS CONTRACT.

**COMMON TYPICAL INSTRUMENT  
ABBREVIATIONS**

AE	- ANALYTICAL ELEMENT
AIT	- ANALYTICAL INDICATING TRANSMITTER
AI	- ANALOG INPUT (PLC)
AO	- ANALOG OUTPUT (PLC)
AS (L/H)	- ANALYTICAL SWITCH (L = LOW, H = HIGH)
DE	- DENSITY ELEMENT
DIT	- DENSITY INDICATING TRANSMITTER
DI	- DIGITAL INPUT (PLC)
DO	- DIGITAL OUTPUT (PLC)
FE	- FLOW ELEMENT
FIT	- FLOW/INDICATING TRANSMITTER
FS (L/H)	- FLOW SWITCH (L = LOW, H= HIGH)
LE	- LEVEL ELEMENT
LIT	- LEVEL INDICATING TRANSMITTER
LSL	- LEVEL SWITCH LOW
LSH	- LEVEL SWITCH HIGH
NIT	- TURBIDITY TRANSMITTER
PE	- PRESSURE ELEMENT
PIT	- PRESSURE INDICATING TRANSMITTER
PSL	- PRESSURE SWITCH LOW
PSH	- PRESSURE SWITCH HIGH
SE	- SPEED ELEMENT
SIT	- SPEED INDICATING TRANSMITTER
TE	- TEMPERATURE ELEMENT
TIT	- TEMPERATURE INDICATING TRANSMITTER
TSL	- TEMPERATURE SWITCH LOW
TSH	- TEMPERATURE SWITCH HIGH
ZS	- POSITION SWITCH

**INSTRUMENT IDENTIFICATION TABLE**

ISA-S5.1-1984

LETTER	FIRST LETTER		SUCCEEDING LETTERS		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS (2)		ALARM		
B	BURNER, COMBUSTION			CLOSE, STOP, DECREASE (1)	
C				CONTROL	
D	DENSITY	DIFFERENTIAL		OPEN, START, INCREASE (1)	
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)			FAIL (1)
G			GLASS, VIEWING DEVICE		
H	HAND				HIGH (OPENED)
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW (CLOSED)
M	MOTOR, MOTION (1)	MOMENTARY		MOTOR (1)	MIDDLE OR INTERMEDIATE ON OR OPERATE (1)
N					OVERLOAD (1)
O			ORIFICE, RESTRICTION		
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION	PUMP (1)	
Q	QUANTITY (2)	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD		
S	SPEED, FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTI-VARIABLE (2)		MULTI-FUNCTION (2)	MULTIFUNCTION (2)	MULTI-FUNCTION (2)
V	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED (2)		UNCLASSIFIED (2)	UNCLASSIFIED (2)	UNCLASSIFIED (2)
Y	EVENT, STATE, PRESENCE			RELAY, COMPUTE, CONVERT	
Z	POSITION, DIMENSION			DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

(1) USER'S CHOICE  
(2) WHEN USED, SYMBOL OR SIGNAL LINE IS ANNOTATED.

**INSTRUMENT SYMBOL IDENTIFICATION CHART**

ABBR.	IDENTIFICATION	SYMBOL	IDENTIFICATION	SYMBOL	IDENTIFICATION	
VFD, VSD	VARIABLE FREQUENCY DRIVE, VARIABLE SPEED DRIVE		LOGIC GATE - AND (INTERLOCK IS EFFECTIVE ONLY IF ALL INPUT ARE ACTIVE)		MOUNTED LOCALLY	INSTRUMENT SYMBOLS
DIS	EQUIPMENT DISCONNECT SWITCH		LOGIC GATE - OR (INTERLOCK IS EFFECTIVE IF ONE OR MORE INPUT ARE ACTIVE)		MOUNTED ON FACE OF PANEL	
CPU	CENTRAL PROCESSING UNIT		LOGIC GATE - XOR (INTERLOCK IS EFFECTIVE IF ONLY ONE INPUT IS ACTIVE)		MOUNTED BEHIND PANEL DOOR	
I/O	INPUT/OUTPUT		COMPLEX OR UNDEFINED INTERLOCK		LIGHT	
I/I	CURRENT TO CURRENT ISOLATOR		EQUIPMENT SUPPLIED BY ANOTHER DIVISION		SCADA INPUT/OUTPUT	SCADA SYMBOL
E/S	ELECTRIC SUPPLY		SUMMATION		NOT ACCESSIBLE TO OPERATOR	DISTRIBUTED CONTROL SYMBOLS OR SHARED INSTRUMENTS
O/S/C	OPEN/STOP/CLOSE HANDSWITCH		PLC INPUT		ACCESSIBLE TO OPERATOR (SOFTWARE FUNCTION)	
O/S/C/A	OPEN/STOP/CLOSE/AUTO HANDSWITCH		AUXILIARY LOCATION		NOT ACCESSIBLE TO OPERATOR	
H/O/A, H-O-A	HAND/OFF/AUTO HANDSWITCH		ACCESSIBLE TO OPERATOR CONNECTION TO/FROM PRIMARY OR MAIN PLC		PROGRAMMABLE CONTROLLER SYMBOLS	
L/R	LOCAL/REMOTE HANDSWITCH		DI -DIGITAL INPUT		DO -DIGITAL OUTPUT	PROGRAMMABLE CONTROLLER SYMBOLS
LOS	LOCKOUT STOP		AI -ANALOG INPUT		AO -ANALOG OUTPUT	
C/M	COMPUTER/MANUAL HANDSWITCH					
NC/NO	NORMALLY CLOSED/NORMALLY OPEN					
SCR	SPEED CONTROLLER					
ST, SP	START PUSHBUTTON, STOP PUSHBUTTON					
MCC	MOTOR CONTROL CENTRE					
OL/O/L	THERMAL PROTECTION RELAY (OVERLOAD)					
PLC	PROGRAMMABLE LOGIC CONTROLLER					
MD	MODEM					
OI/OIT	OPERATOR INTERFACE TERMINAL					
CP	CONTROL PANEL					
UPS	UNINTERRUPTABLE POWER SUPPLY					
CB	CIRCUIT BREAKER					
FU	FUSE					
PFR	POWER FAIL RELAY					
UPS	UPS POWER					
E/S	NON-UPS POWER					

NOTE: ABOVE POINT DESIGNATIONS ARE USED ON P & ID DETAIL DRAWINGS ONLY.

C	ISSUED FOR TENDER	24.05.13	DC
B	ISSUED FOR APPROVAL	23.08.30	DC
A	ISSUED FOR 50% DETAIL DESIGN	22.06.30	DC
No.	REVISION	DATE	BY

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Plot: May, 2024, - 03:47:55 PM



CONTRACT NO. WE-2024-01



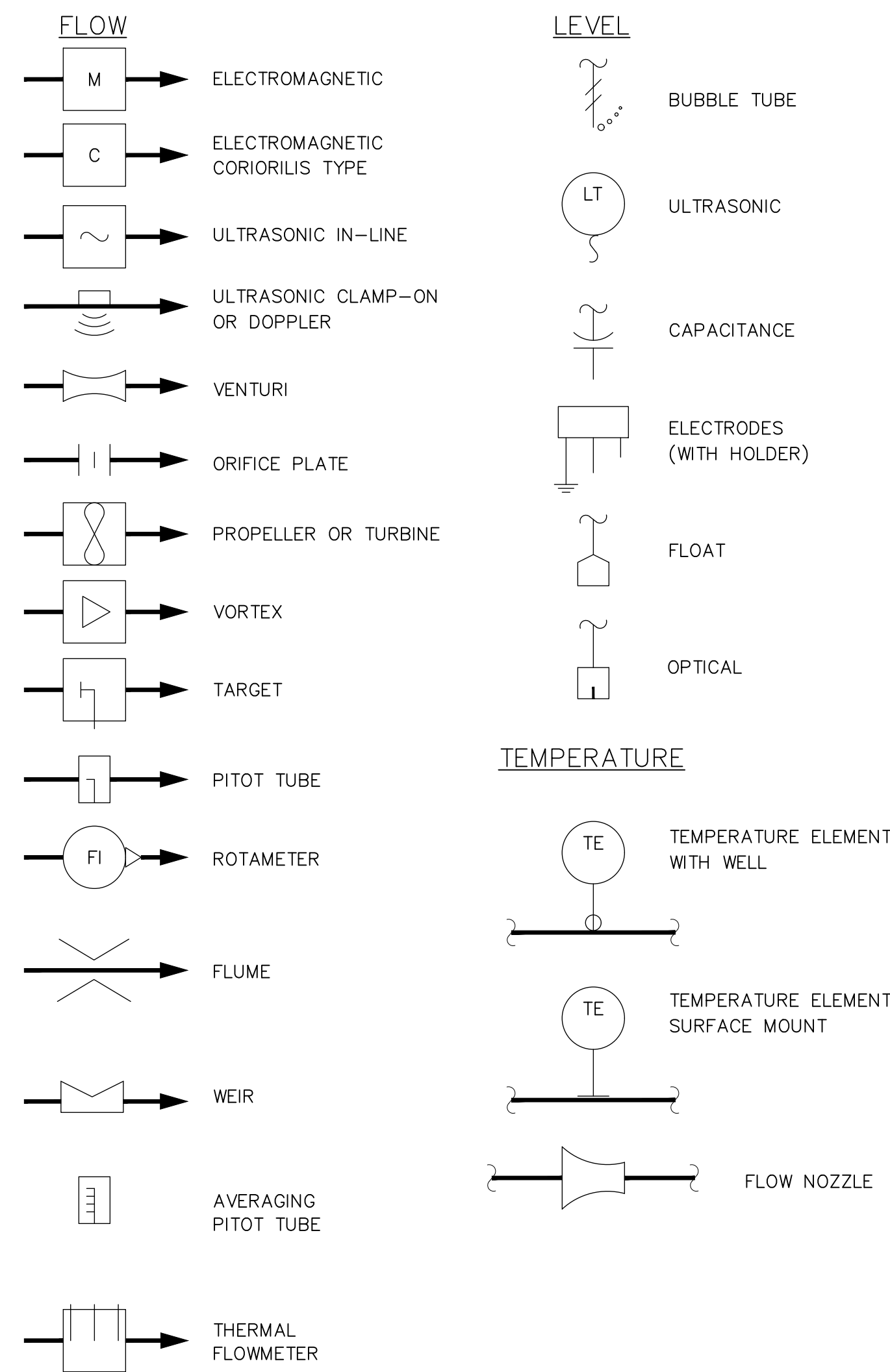
**RODNEY WPCP  
UPGRADES**

INSTRUMENTATION AND CONTROLS

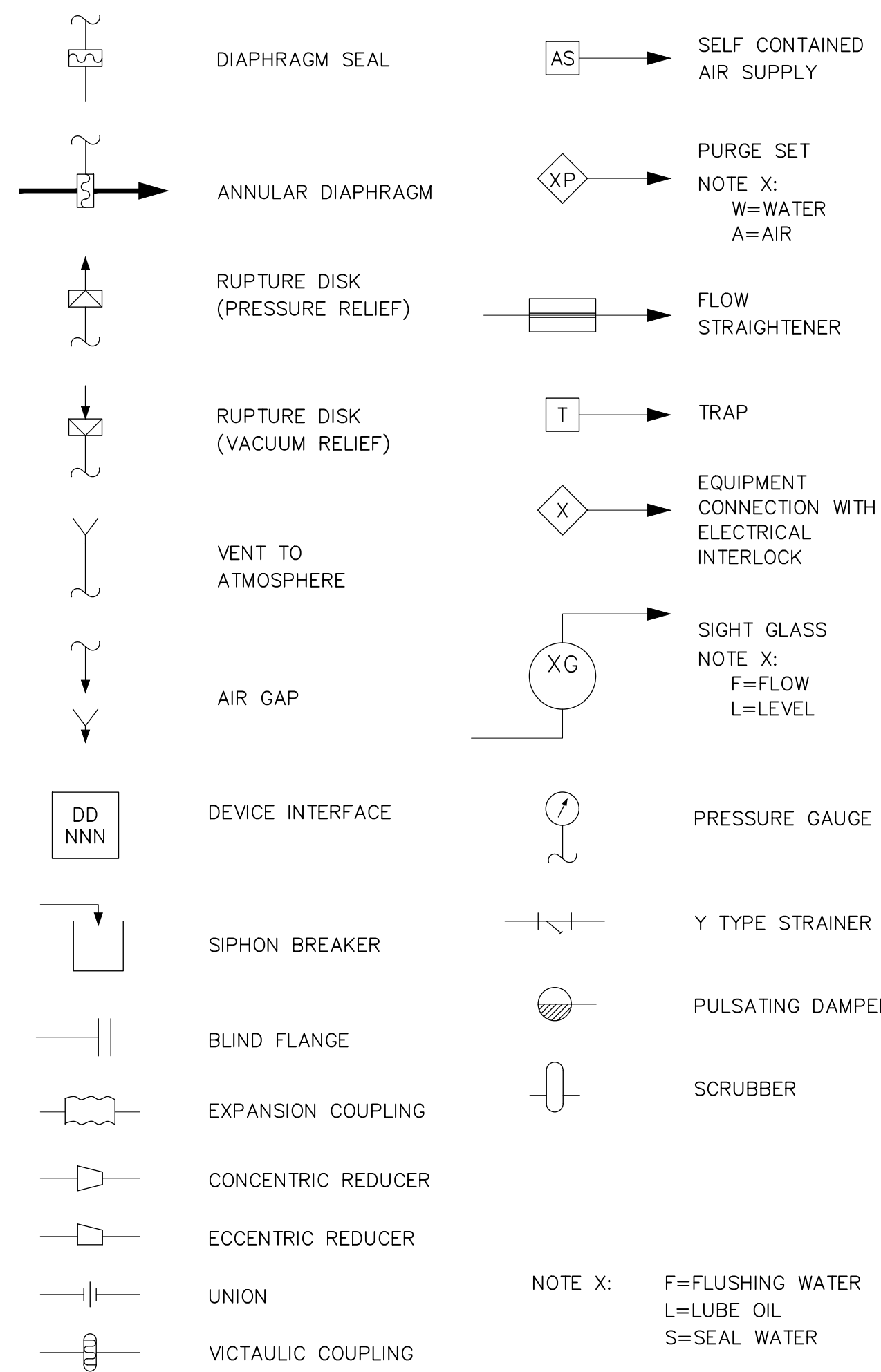
**LEGEND AND ABBREVIATIONS (1)**

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	Drawn by: CO
Designed by: MB	Checked by: PB
Approved by: DC	DWG NO. 1001

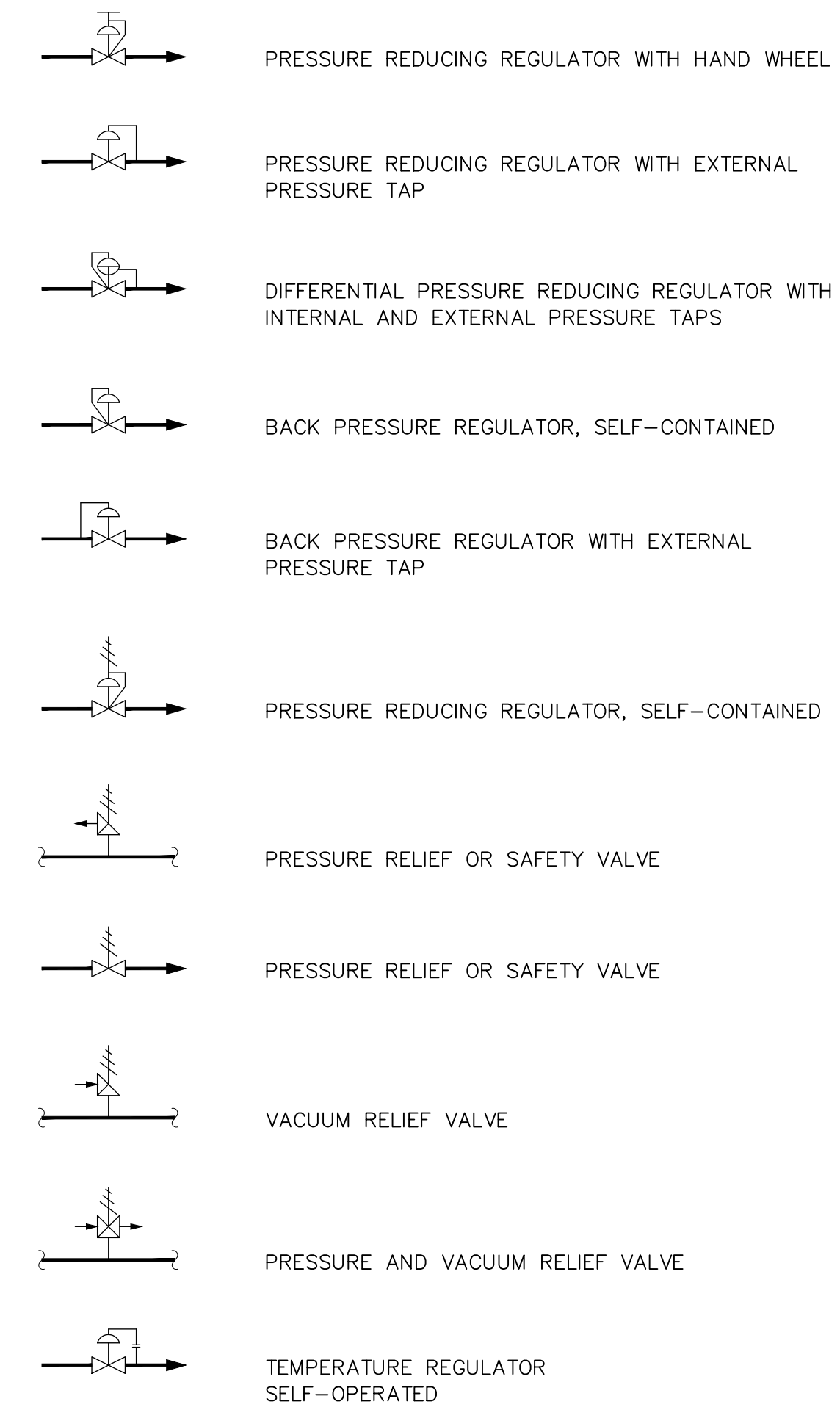
**PRIMARY ELEMENT SYMBOLS**



**MISCELLANEOUS SYMBOLS**



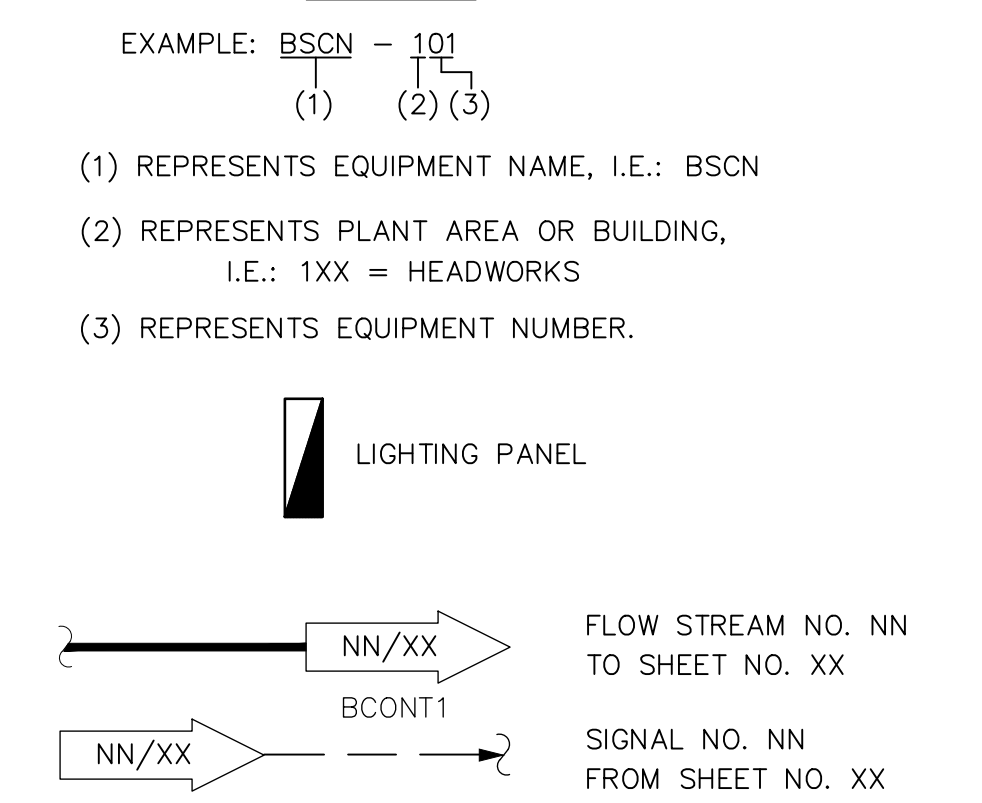
**VALVE & REGULATOR SYMBOLS**



**P&ID LINE DESIGNATIONS**

DESIGNATIONS	DESCRIPTION
---	ELECTRIC SIGNAL (P&ID)
---	AIR SUPPLY LINE
---	HYDRAULIC SIGNAL
---	PNEUMATIC SIGNAL
---	CAPILLARY TUBING
---	SONIC SIGNAL (GUIDED)
---	SONIC SIGNAL (UNGUIDED)
---	FIBER OPTIC CABLE
---	TELEPHONE LINE
---	SOFTWARE LINK
---	EXISTING WIRING OR EQUIPMENT WHERE INDICATED
---	NEW WIRING OR EQUIPMENT WHERE INDICATED

**EQUIPMENT IDENTIFICATION (TAGS)**

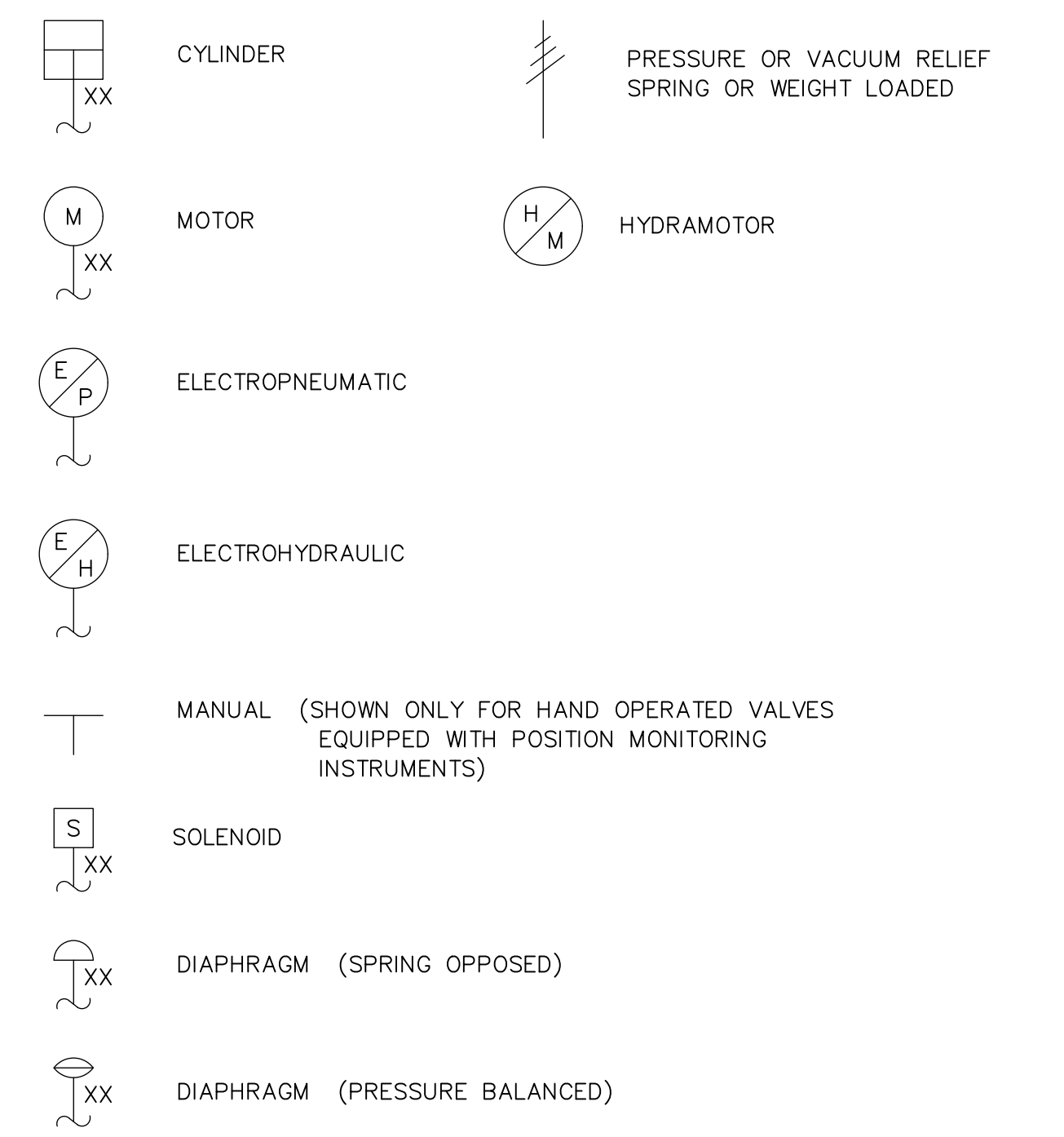


**ANALYSIS INSTRUMENTS**

NOTE XX:

AE XX	ALR = ALUMINUM RESIDUAL
AE XX	COL = COLOR
AE XX	CDG = CARBON DIOXIDE GAS
AE XX	CG = COMBUSTIBLE GAS
AE XX	CH4 = METHANE
AE XX	CLG = CHLORINE GAS
AE XX	CLR = CHLORINE RESIDUAL
AE XX	COG = CARBON MONOXIDE GAS
AE XX	DO = DISSOLVED OXYGEN
AE XX	FA = FREE AMMONIA
AE XX	FHS = FLUORIDE
AE XX	HC = HYDROCARBONS
AE XX	HUM = HUMIDITY
AE XX	H2S = HYDROGEN SULFIDE
AE XX	MHO = CONDUCTIVITY
AE XX	NOG = NITRIC OXIDE GAS
AE XX	NH4 = AMMONIA
AE XX	N2G = NITROGEN GAS
AE XX	OG = OXYGEN GAS
AE XX	ORP = OXIDATION REDUCTION POT.
AE XX	OUR = OXYGEN UPTAKE RATE
AE XX	OZG = OZONE GAS
AE XX	PC = PARTICLE COUNTER
AE XX	PH = pH
AE XX	SD = SOLIDS DENSITY
AE XX	SO2 = SULPHUR DIOXIDE GAS
AE XX	SS = SUSPENDED SOLIDS
AE XX	TMP = TEMPERATURE
AE XX	TOC = TOTAL ORGANIC CARBON
AE XX	TRB = TURBIDITY
AE XX	WT = WEIGHT
AE XX	TSS = TOTAL SUSPENDED SOLIDS
AE XX	UVT = ULTRA VIOLET TRANSMITTER

**ACTUATOR SYMBOLS**



NOTE: ON LOSS OF PRIMARY POWER (PNEUMATIC OR ELECTRICAL)  
 XX: FO = FAIL OPEN  
 FC = FAIL CLOSED  
 FI = FAIL TO INTERMEDIATE POSITION  
 BLANK = FAIL TO LAST POSITION

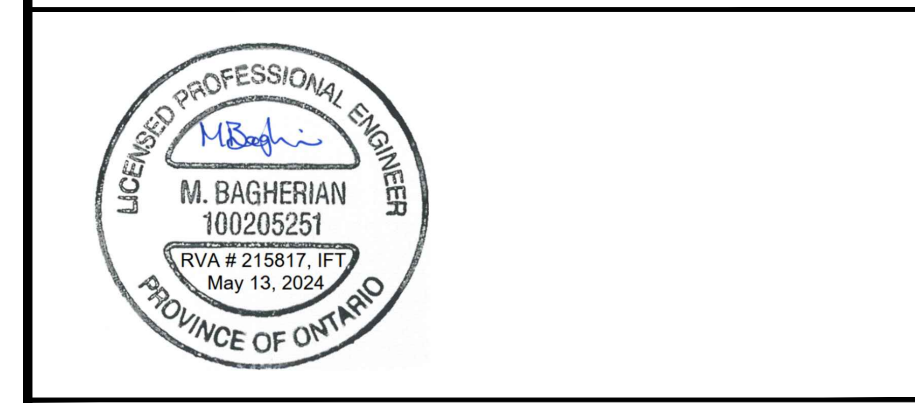
NOTE: NOT ALL OF THE ABOVE ITEMS ARE NECESSARILY INCLUDED IN THIS CONTRACT.

No.	REVISION	DATE	BY
C	ISSUED FOR TENDER	24.05.13	DC
B	ISSUED FOR APPROVAL	23.08.30	DC
A	ISSUED FOR 50% DETAIL DESIGN	22.06.30	DC

File: \\rvaint.com\rvva-data\2021\215817 - West Elgin-rodney Wwtp Upgrades\10 Caddwg\01 RevitA.000.1 Legends\Sheets\1002 LEGEND AND ABBREVIATIONS (2).dwg  
 Plot: May, 2024, - 03:47:59 PM



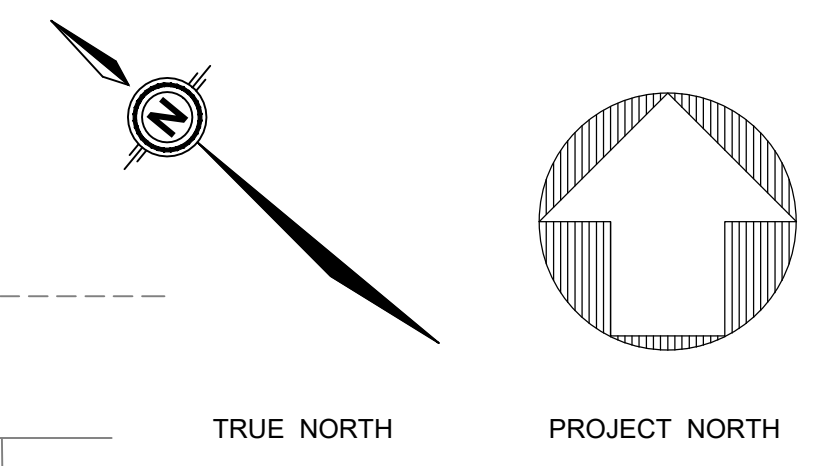
CONTRACT NO. WE-2024-01



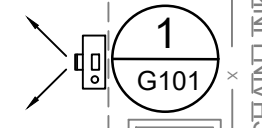
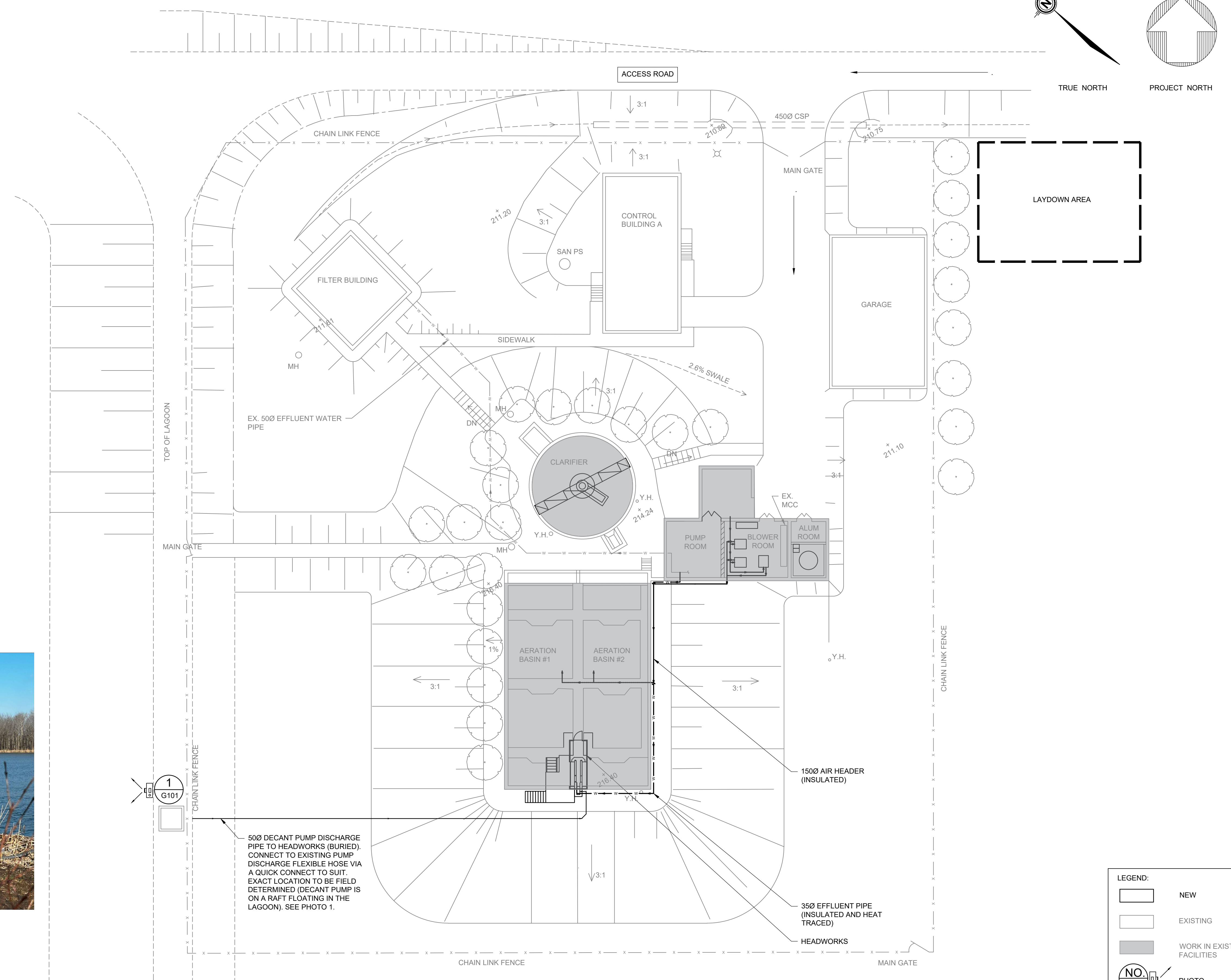
**RODNEY WPCP UPGRADES**

INSTRUMENTATION AND CONTROLS  
**LEGEND AND ABBREVIATIONS (2)**

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	Drawn by: CO
Designed by: MB	Checked by: PB
Approved by: DC	DWG NO. 1002



NOTES:  
 1. FIELD VERIFY ROUTING OF PIPING SHOWN TO AVOID POTENTIAL INTERFERENCES WITH EXISTING INFRASTRUCTURE AND FIELD CONDITION PRIOR TO CONSTRUCTION.

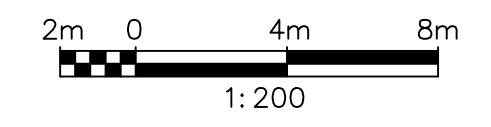


500 DECANT PUMP DISCHARGE PIPE TO HEADWORKS (BURIED). CONNECT TO EXISTING PUMP DISCHARGE FLEXIBLE HOSE VIA A QUICK CONNECT TO SUIT. EXACT LOCATION TO BE FIELD DETERMINED (DECANT PUMP IS ON A RAFT FLOATING IN THE LAGOON). SEE PHOTO 1.

LEGEND:

	NEW
	EXISTING
	WORK IN EXISTING FACILITIES
	PHOTO

**1 SITE PLAN**  
 SCALE 1:200



THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.000.2			
Site\Sheets\215817 - G101.dwg			
Plot: May, 2024, - 02:55:05 PM			



CONTRACT NO. WE-2024-01



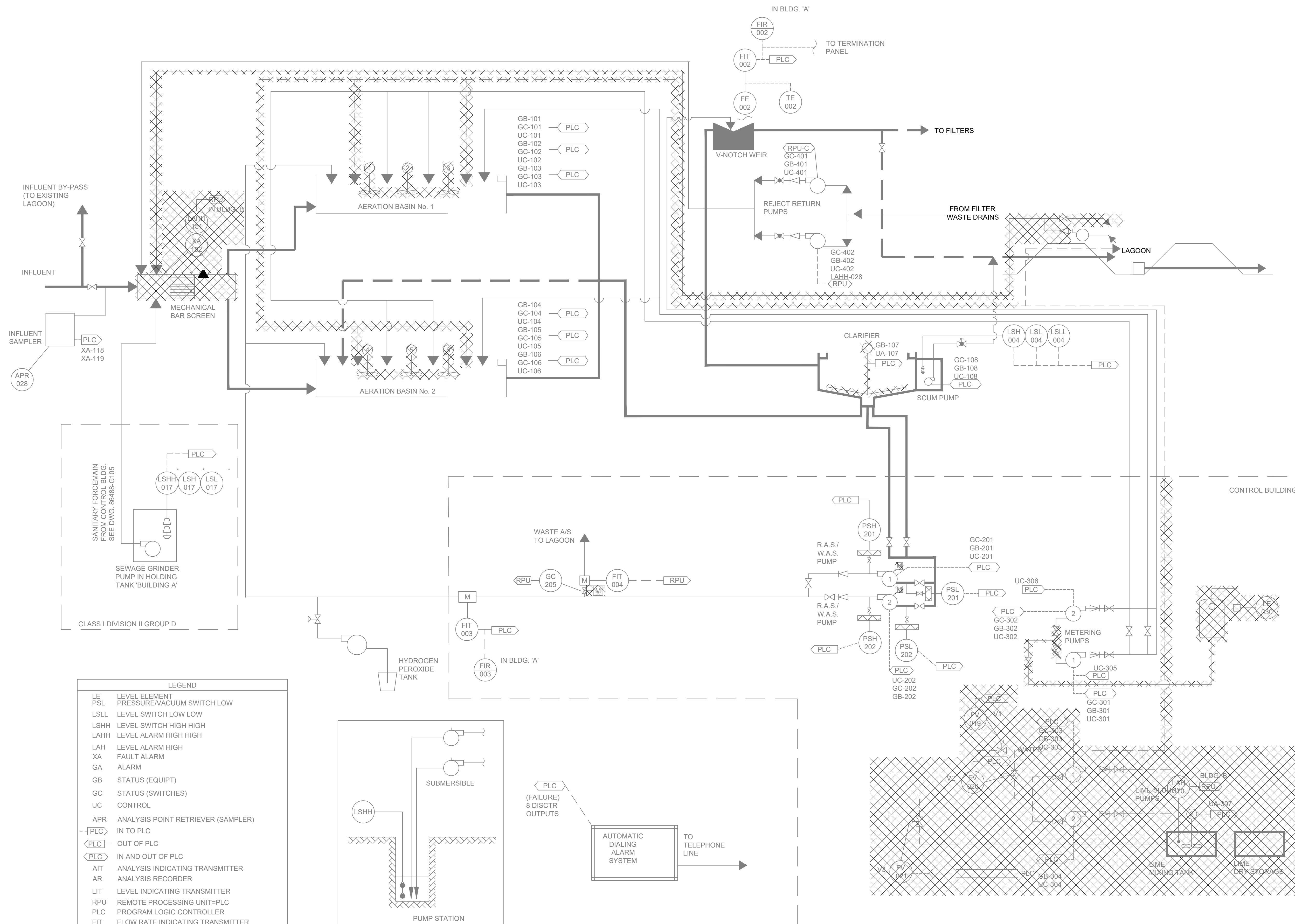
**RODNEY WPCP  
 UPGRADES**

GENERAL  
**SITE PLAN**

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: RNM	Designed by: TSY
Checked by: AHN	Approved by: DC
	DWG NO. <b>G101</b>

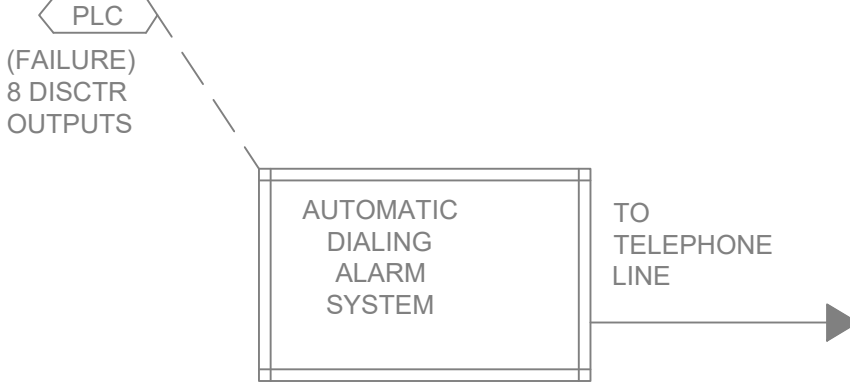
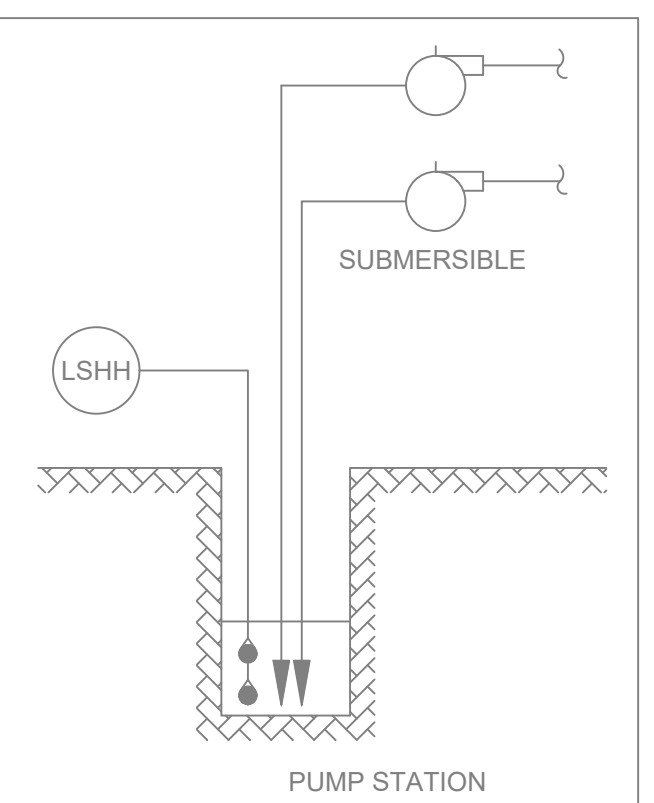


**PHOTO 1**



**LEGEND**

LE	LEVEL ELEMENT
PSL	PRESSURE/VACUUM SWITCH LOW
LSLL	LEVEL SWITCH LOW LOW
LSHH	LEVEL SWITCH HIGH HIGH
LAHH	LEVEL ALARM HIGH HIGH
LAH	LEVEL ALARM HIGH
XA	FAULT ALARM
GA	ALARM
GB	STATUS (EQUIPT)
GC	STATUS (SWITCHES)
UC	CONTROL
APR	ANALYSIS POINT RETRIEVER (SAMPLER)
IN TO PLC	IN TO PLC
OUT OF PLC	OUT OF PLC
IN AND OUT OF PLC	IN AND OUT OF PLC
AIT	ANALYSIS INDICATING TRANSMITTER
AR	ANALYSIS RECORDER
LIT	LEVEL INDICATING TRANSMITTER
RPU	REMOTE PROCESSING UNIT-PLC
PLC	PROGRAM LOGIC CONTROLLER
FIT	FLOW RATE INDICATING TRANSMITTER
ALUM./FERRIC CHLORIDE TANK	



**LEGEND:**

	REMOVALS
	EXISTING

- NOTES:**
- REMOVE AND DISPOSE OF ONE (1) EXISTING FRP SCREEN ENCLOSURE AND ALL ASSOCIATED SCREENING EQUIPMENT AND ACCESSORIES.
  - REMOVE AND DISPOSE OF SIX (6) EXISTING MECHANICAL AERATORS, ASSOCIATED SUPPORTS AND ACCESSORIES.
  - REMOVE AND DISPOSE OF SIX (6) CONCRETE BAFFLES. REPAIR SURFACES TO MATCH EXISTING TANKS.
  - REMOVE AND DISPOSE OF EXISTING LIME PUMPS, STORAGE TANK, CONTAINMENT CURBS, INSULATED AND HEAT TRACED PIPING, SUPPORTS, AND ASSOCIATED ACCESSORIES.
  - REMOVE AND DISPOSE OF ONE (1) EXISTING STEEL ALUM STORAGE TANK AND ASSOCIATED ACCESSORIES INCLUDING CONNECTED PIPING, VALVES, LOCAL PANEL, EQUIPMENT PAD.
  - REMOVE AND DISPOSE OF ALL ITEMS INSIDE THE SUMP AREA, INCLUDING BUT NOT LIMITED TO, CHEMICAL TOTES, SUMP PUMP, PIPING, SUPPORTS, EQUIPMENT, AND ASSOCIATED EQUIPMENT. FILL SUMP TO MATCH EXISTING FLOOR ELEVATION.
  - REMOVE AND DISPOSE OF ONE (1) EXISTING CLARIFIER MECHANISM AND ASSOCIATED ACCESSORIES INCLUDING A FRP COVER.
  - THIS DRAWING SHOWS THE MAJOR EQUIPMENT REMOVAL SCOPE OF WORK. REFER TO OTHER REMOVAL DRAWINGS FOR FURTHER DETAILS AND COMPLETE SCOPE OF REMOVALS.
  - LOCATION AND ROUTING SHOWN IS APPROXIMATE. LOCATE EXACT LOCATION AND ROUTING OF DECANT PIPE AND VERIFY EXISTING UTILITIES IN THE AREA PRIOR TO EXCAVATION AND REMOVAL.

THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY



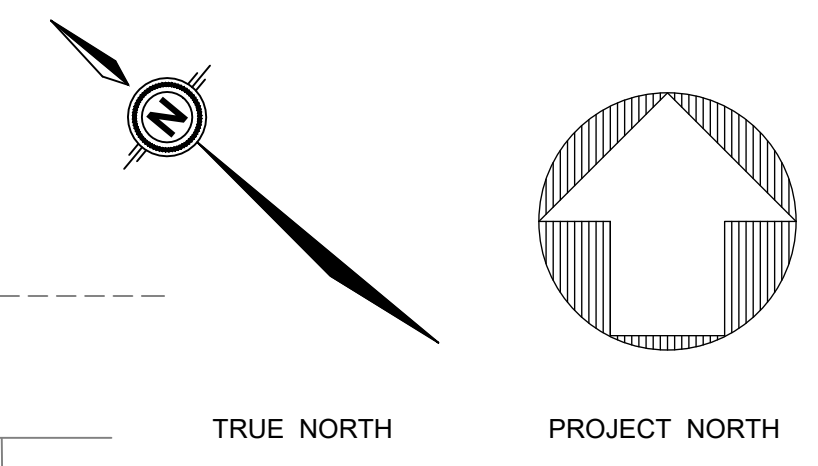
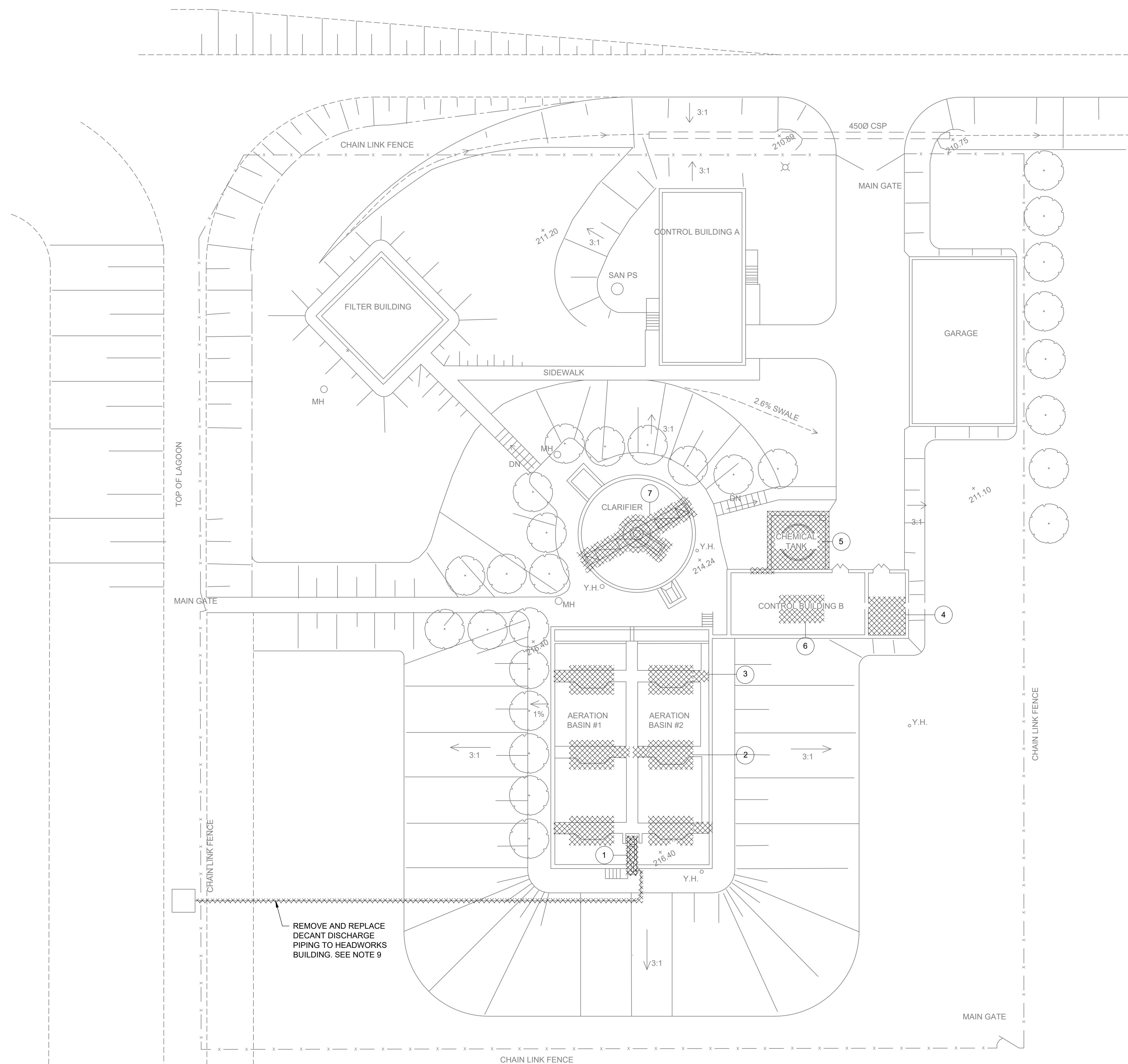
CONTRACT NO. WE-2024-01



**RODNEY WPCP  
UPGRADES**  
PROCESS  
**P&ID - REMOVALS**

Scale:	AS SHOWN	RVA Project No:	215817
Date:	May-24	Drawn by:	ADD
Checked by:	AHN	Designed by:	TSY
		Approved by:	DC
		DWG NO.:	R101





- NOTES:**
- REMOVE AND DISPOSE OF ONE (1) EXISTING FRP SCREEN ENCLOSURE AND ALL ASSOCIATED SCREENING EQUIPMENT AND ACCESSORIES.
  - REMOVE AND DISPOSE OF SIX (6) EXISTING MECHANICAL AERATORS, ASSOCIATED SUPPORTS AND ACCESSORIES.
  - REMOVE AND DISPOSE OF SIX (6) CONCRETE BAFFLES. REPAIR SURFACES TO MATCH EXISTING TANKS.
  - REMOVE AND DISPOSE OF EXISTING LIME PUMPS, STORAGE TANK, CONTAINMENT CURBS, INSULATED AND HEAT TRACED PIPING, SUPPORTS, AND ASSOCIATED ACCESSORIES.
  - REMOVE AND DISPOSE OF ONE (1) EXISTING STEEL ALUM STORAGE TANK AND ASSOCIATED ACCESSORIES INCLUDING CONNECTED PIPING, VALVES, LOCAL PANEL, EQUIPMENT PAD.
  - REMOVE AND DISPOSE OF ALL ITEMS INSIDE THE SUMP AREA, INCLUDING BUT NOT LIMITED TO, CHEMICAL TOTES, SUMP PUMP, PIPING, SUPPORTS, EQUIPMENT, AND ASSOCIATED EQUIPMENT. FILL SUMP TO MATCH EXISTING FLOOR ELEVATION.
  - REMOVE AND DISPOSE OF ONE (1) EXISTING CLARIFIER MECHANISM AND ASSOCIATED ACCESSORIES INCLUDING A FRP COVER.
  - THIS DRAWING SHOWS THE MAJOR EQUIPMENT REMOVAL SCOPE OF WORK. REFER TO OTHER REMOVAL DRAWINGS FOR FURTHER DETAILS AND COMPLETE SCOPE OF REMOVALS.
  - LOCATION AND ROUTING SHOWN IS APPROXIMATE. LOCATE EXACT LOCATION AND ROUTING OF DECANT PIPE AND VERIFY EXISTING UTILITIES IN THE AREA PRIOR TO EXCAVATION AND REMOVAL.

THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.000.2			
Site\Sheets\215817 - R102.dwg			
Plot: May, 2024, - 02:24:23 PM			



CONTRACT NO. WE-2024-01



**RODNEY WPCP  
UPGRADES**

GENERAL  
**SITE PLAN - REMOVALS**

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: RNM	Designed by: TSY
Checked by: AHN	Approved by: DC
	DWG NO. <b>R102</b>

**1 SITE PLAN - REMOVALS**  
SCALE 1:200

**LEGEND:**

	REMOVALS
	EXISTING

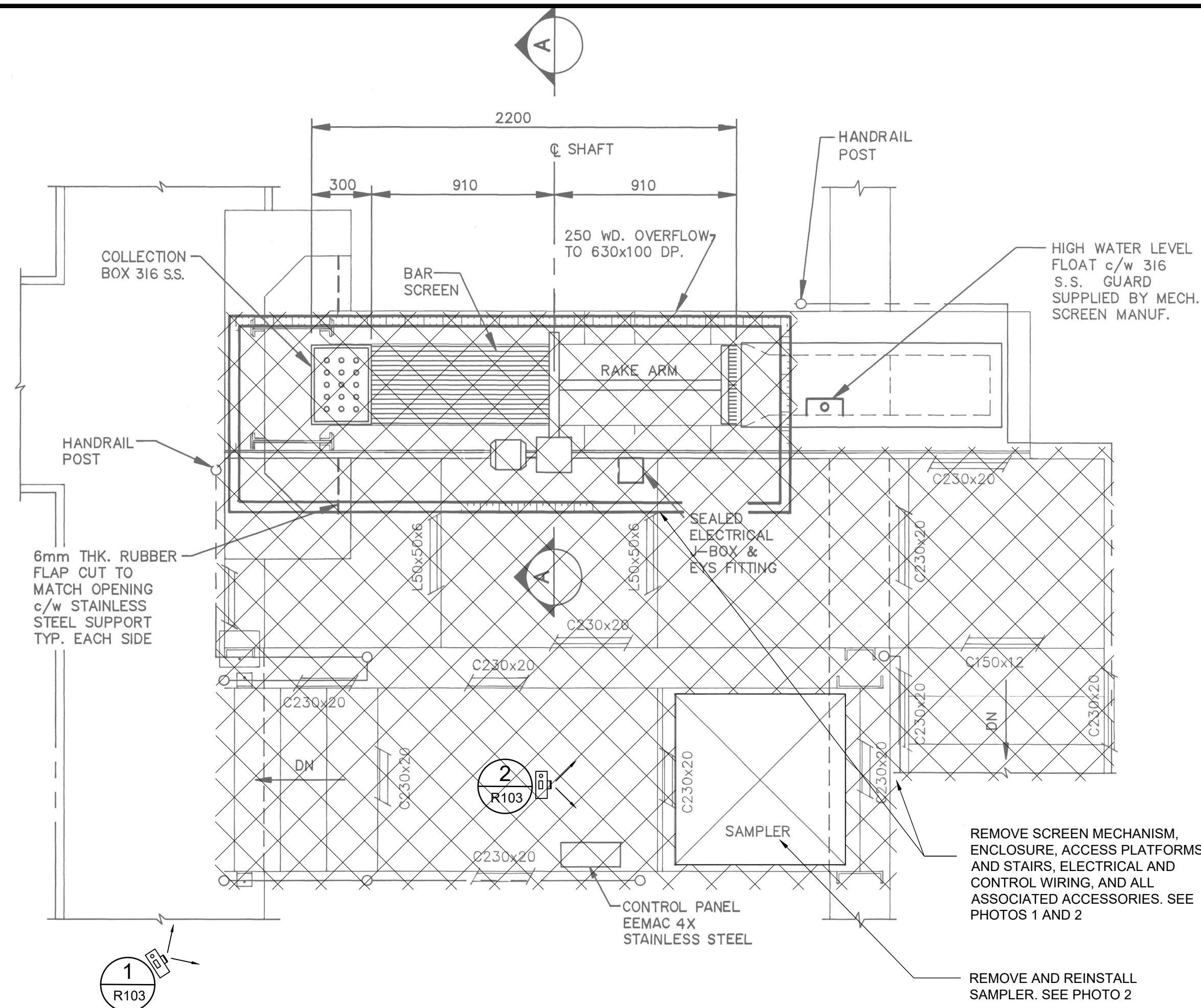




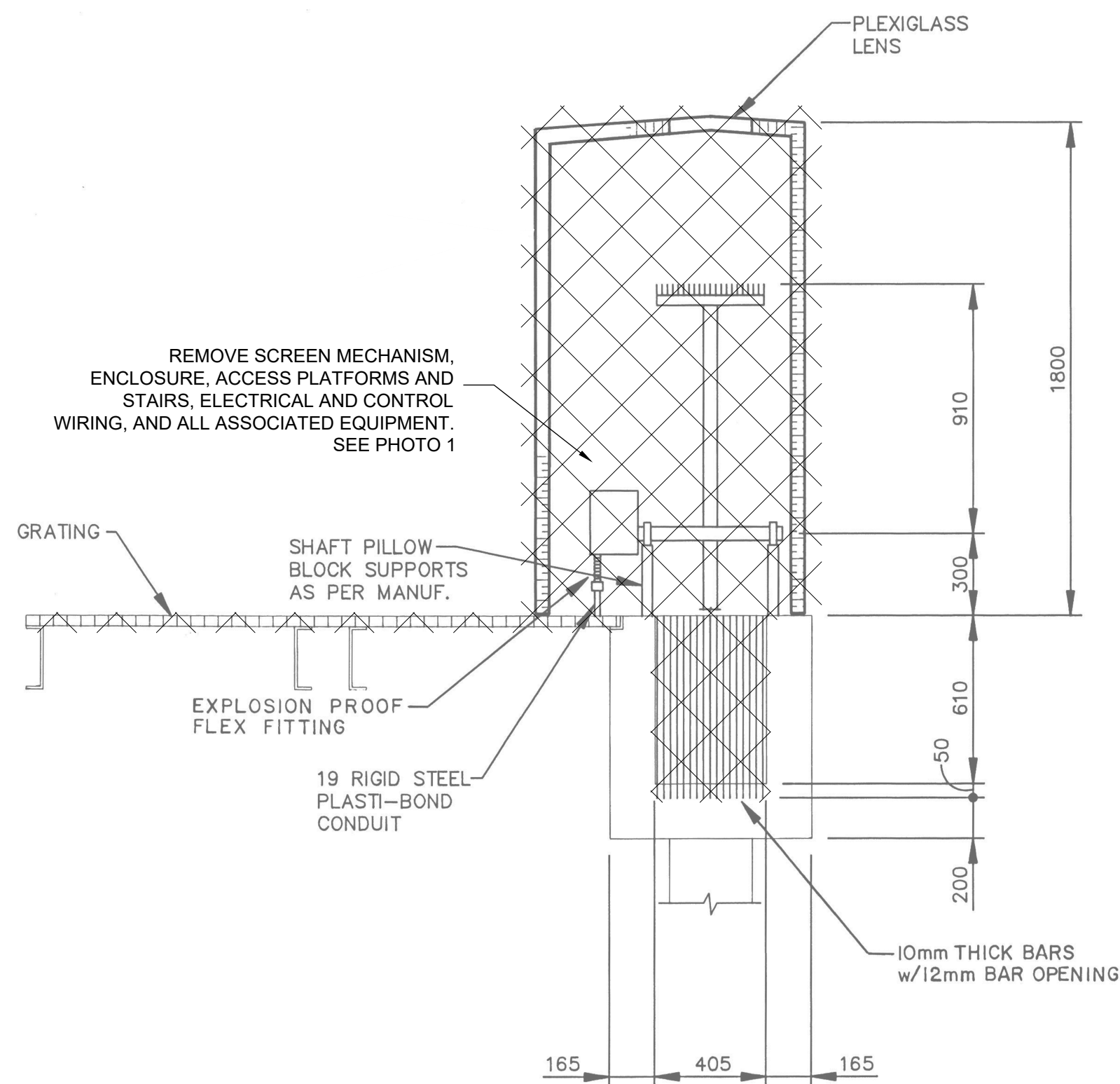
PHOTO 1



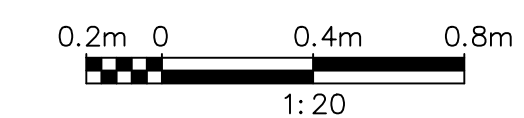
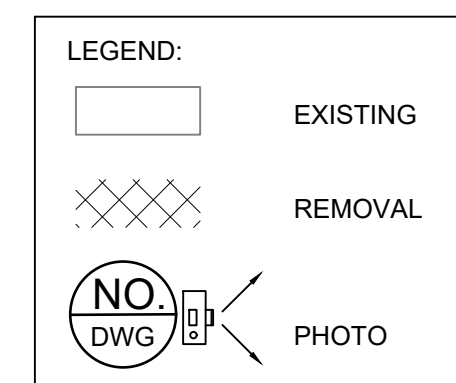
PHOTO 2



1 PLAN - REMOVALS  
SCALE 1:20



A SECTION - REMOVALS  
SCALE 1:20



NOTE:  
FIELD VERIFY SCOPE OF REMOVAL PRIOR TO CONSTRUCTION.

THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100  
Building 01\Sheets\215817 - R103.dwg  
Plot: May, 2024, - 02:24:56 PM



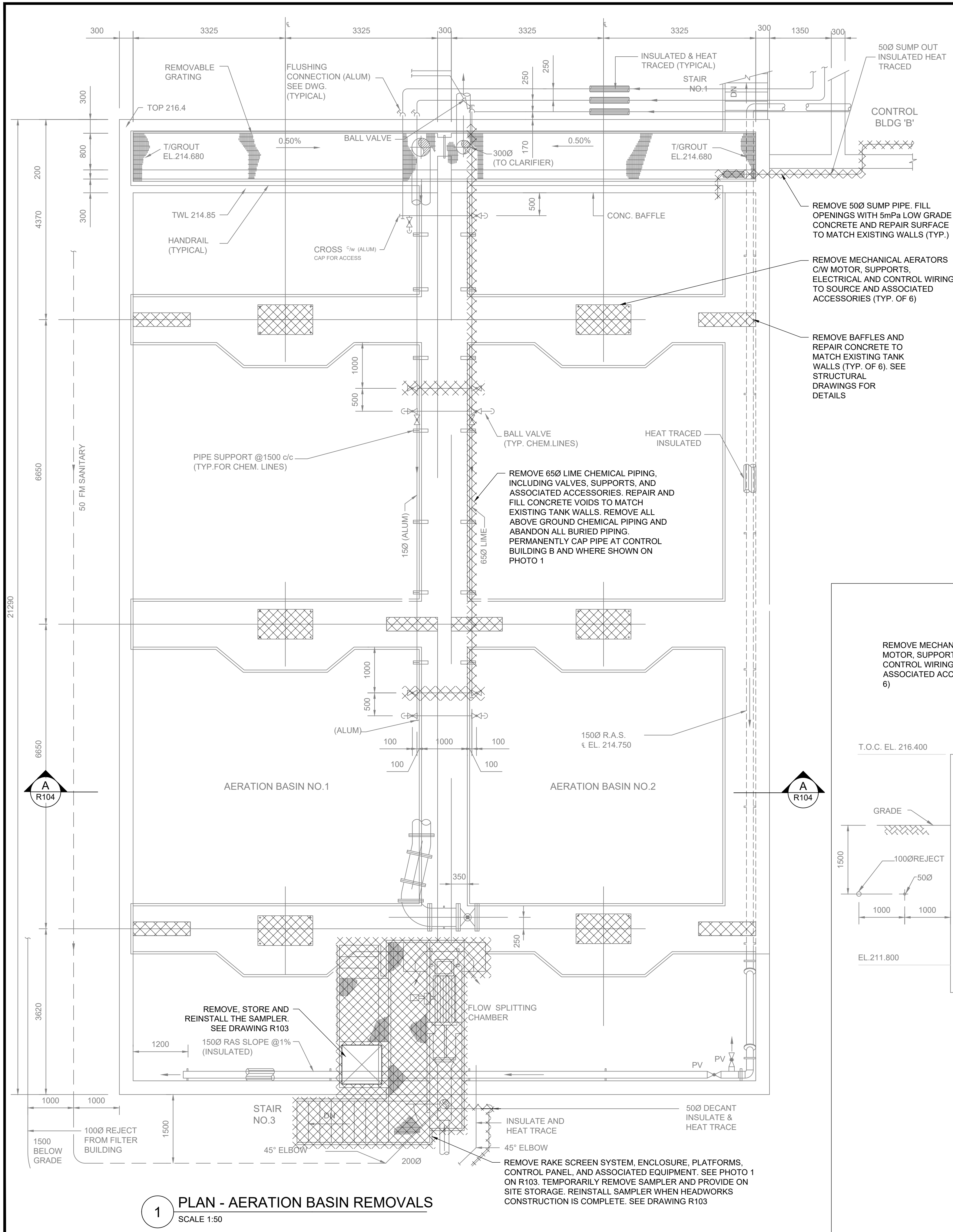
CONTRACT NO. WE-2024-01



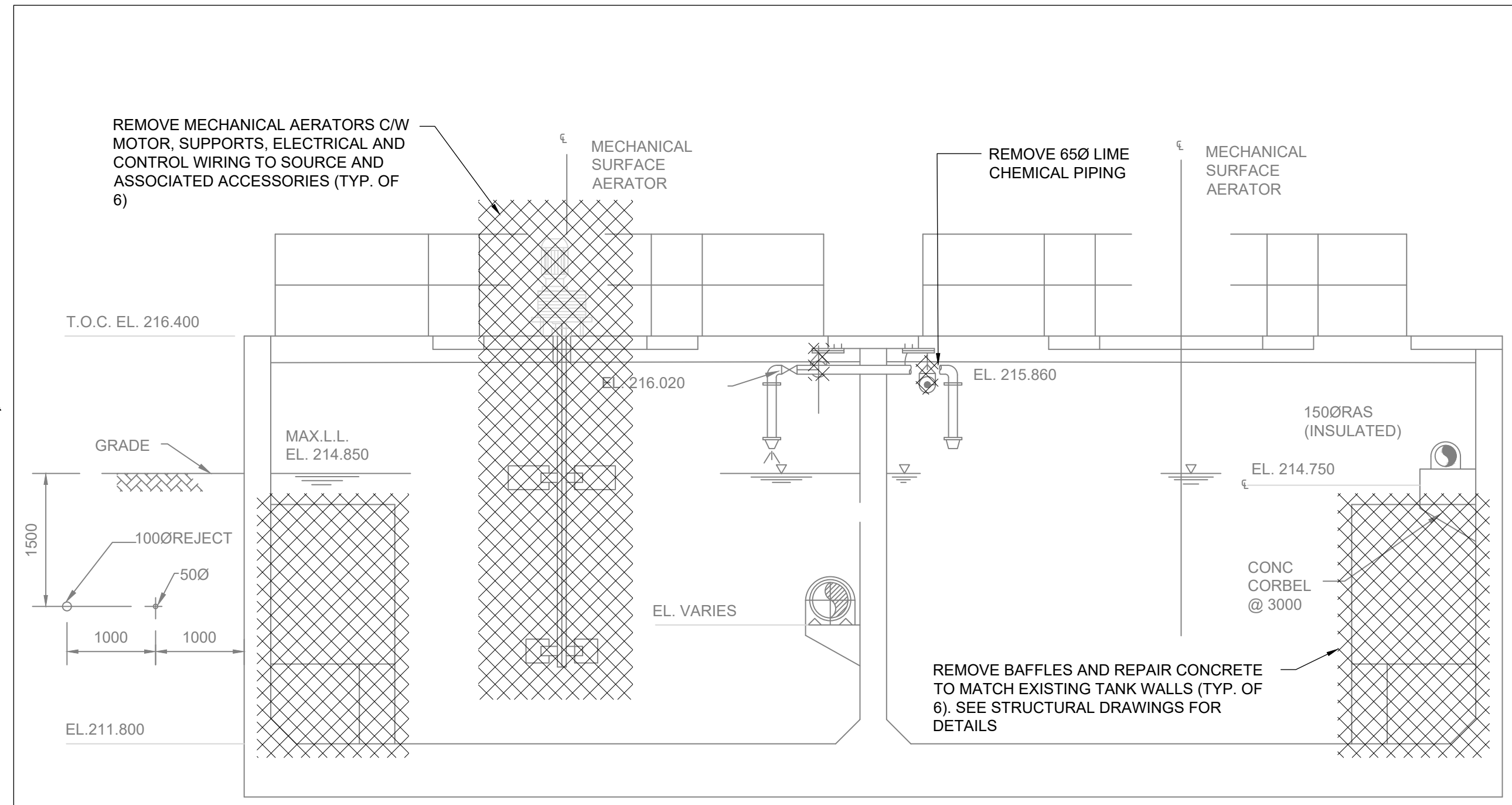
RODNEY WPCP  
UPGRADES

PROCESS  
HEADWORKS  
HEADWORK - REMOVALS

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. R103
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC



**1 PLAN - AERATION BASIN REMOVALS**  
SCALE 1:50



**A SECTION - AERATION BASIN REMOVALS**  
SCALE 1:50

**LEGEND:**

EXISTING

REMOVAL

0.5m 0 1m 2.0m  
1:50

NOTE:  
FIELD VERIFY SCOPE OF REMOVAL PRIOR TO CONSTRUCTION.

THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:12021215817 - West Elgin-Rodney WWTP Upgrades10 CAD.dwg/01 RevitA.100  
Building 01/Sheets/215817 -R104.dwg  
Plot: May, 2024, - 02:25:19 PM



CONTRACT NO. WE-2024-01



**RODNEY WPCP  
UPGRADES**

PROCESS  
**AERATION TANK  
AERATION TANK - REMOVALS**

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC
	DWG NO. <b>R104</b>



PHOTO 1



PHOTO 2

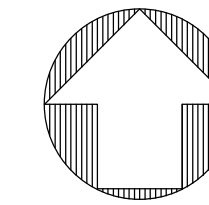
CUT AND REMOVE EXISTING ALUM PIPES FROM THE EXISTING SUPPORT ONWARDS



PHOTO 3



PHOTO 4



NOTE:  
FIELD VERIFY SCOPE OF REMOVAL PRIOR TO CONSTRUCTION.



PHOTO 5



PHOTO 6

THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

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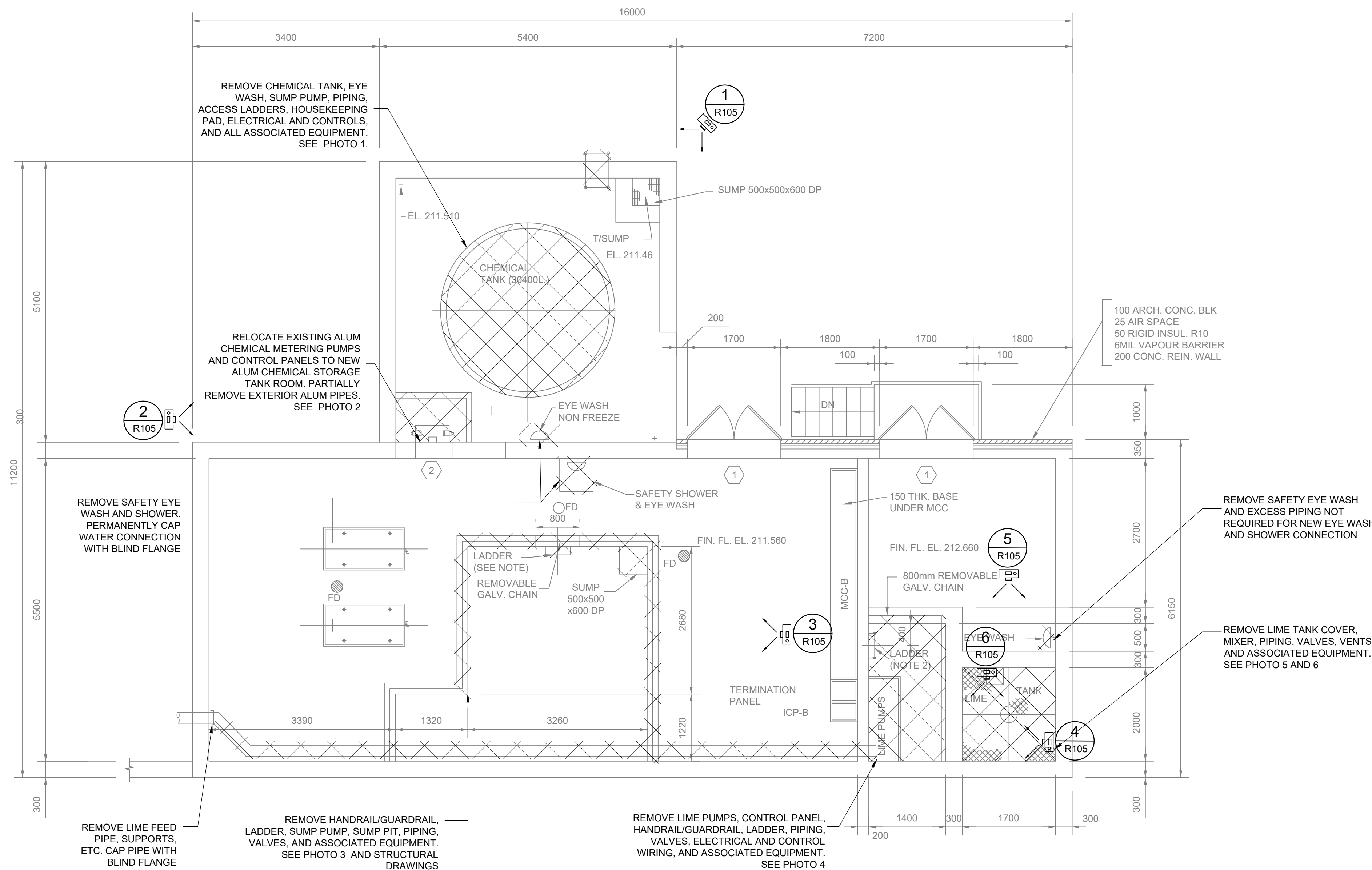
CONTRACT NO. WE-2024-01



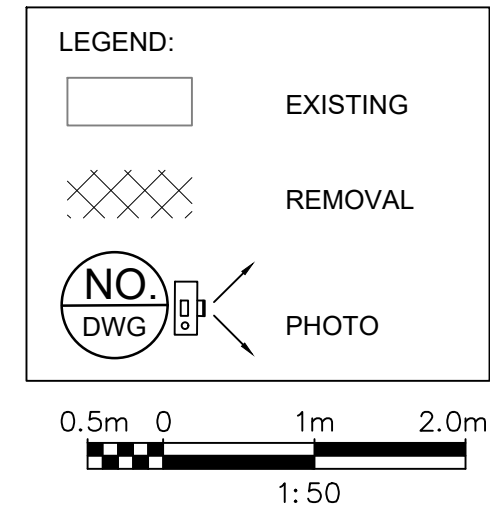
RODNEY WPCP  
UPGRADES

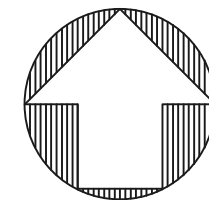
PROCESS  
CONTROL BUILDING B  
CONTROL BUILDING B - REMOVALS

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC
	DWG NO.
	R105



1 PLAN - REMOVALS  
SCALE 1:50

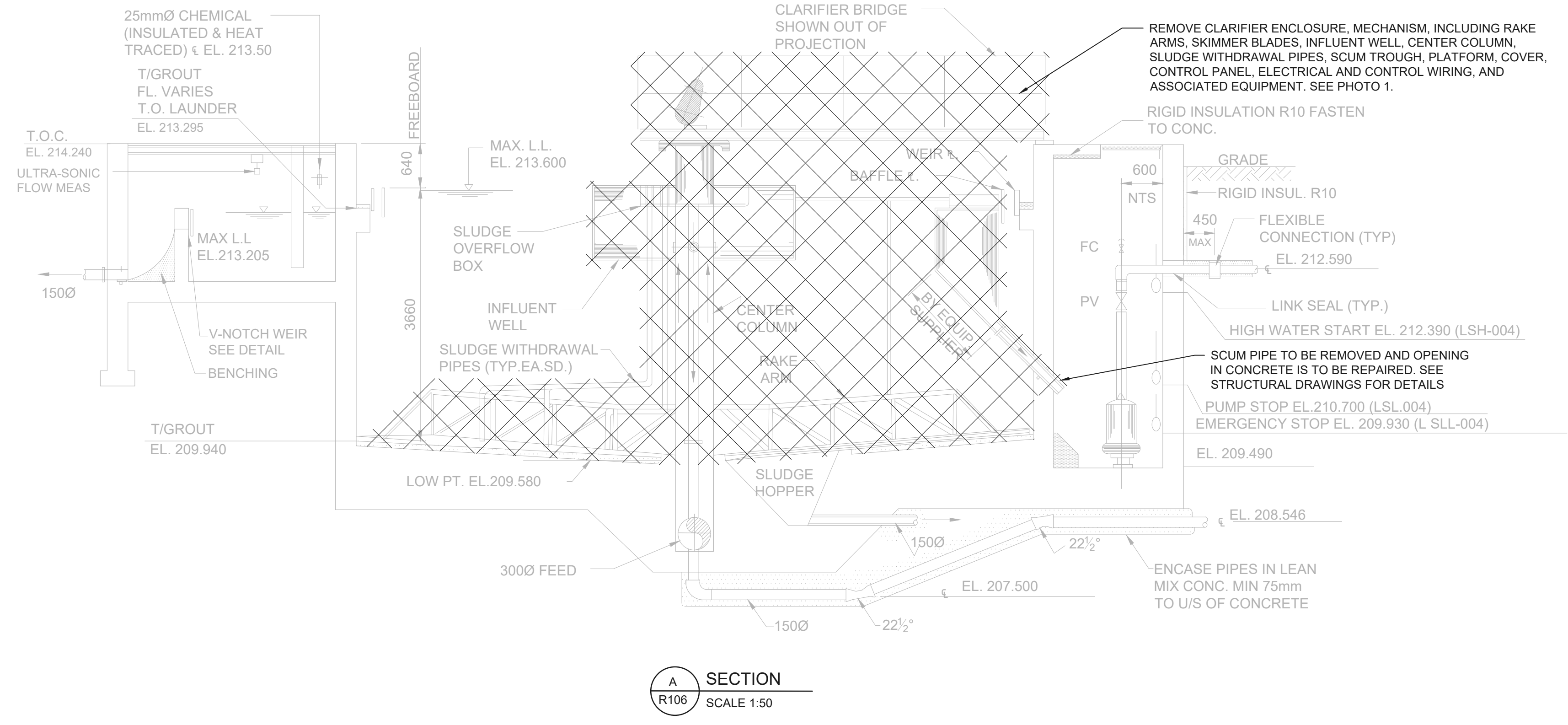
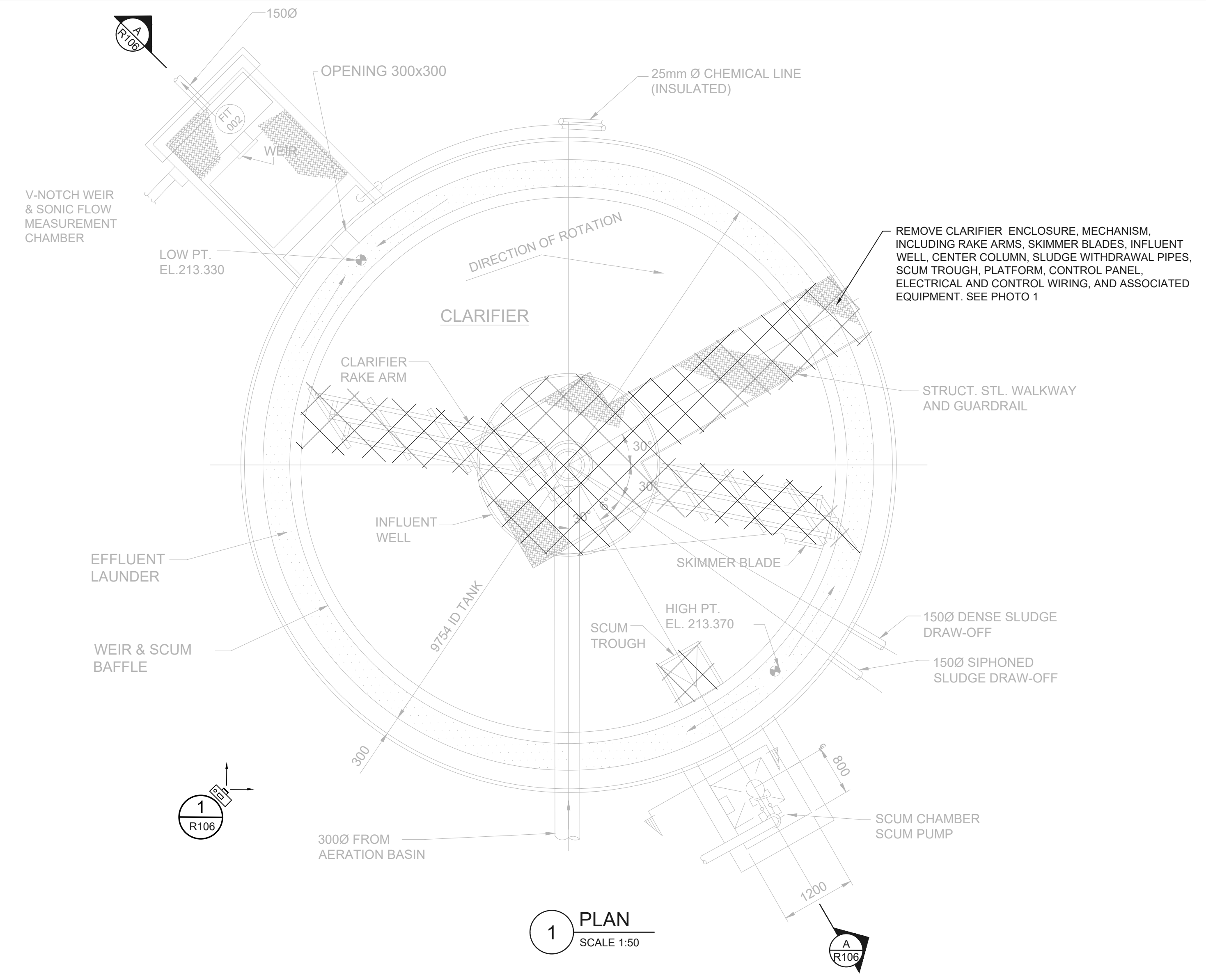




NOTE:  
FIELD VERIFY SCOPE OF REMOVAL PRIOR TO CONSTRUCTION.



PHOTO 1



**LEGEND:**

- EXISTING
- REMOVAL
- PHOTO

0.5m 0 1m 2.0m  
1:50

THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.200  
Building 02\Sheets\215817 - R106.dwg  
Plot: May, 2024, - 02:53:14 PM



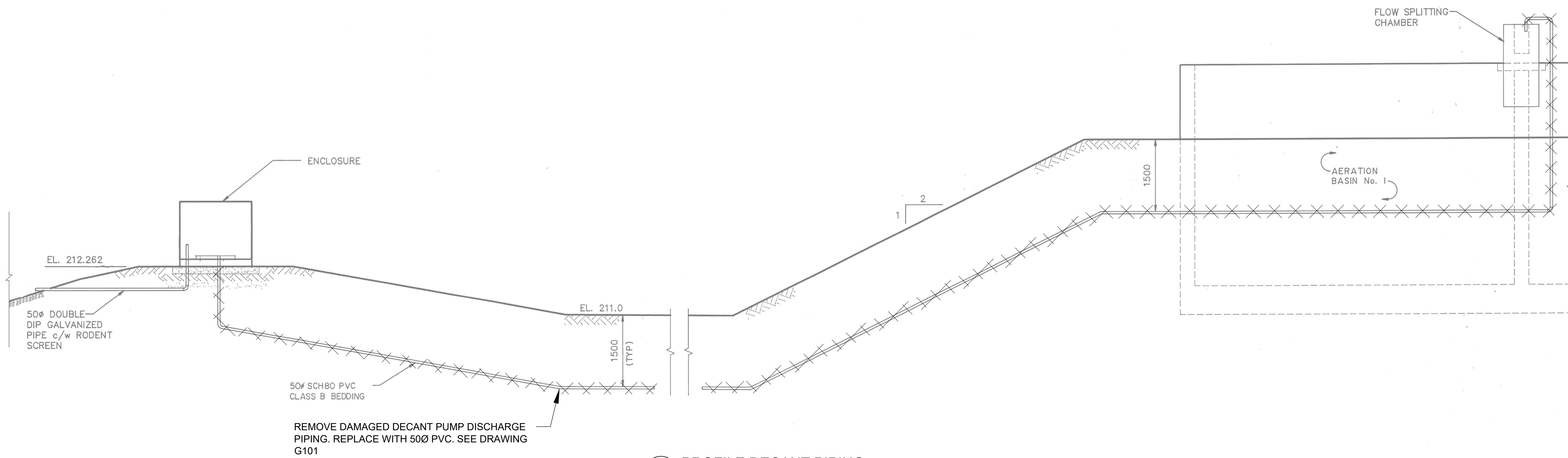
CONTRACT NO. WE-2024-01



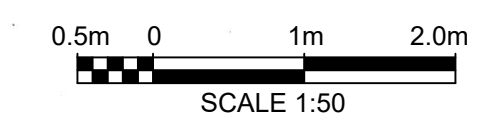
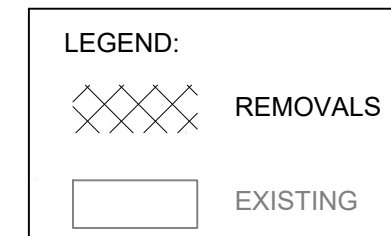
RODNEY WPCP  
UPGRADES

PROCESS  
CLARIFIER  
CLARIFIER - REMOVALS

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC
	DWG NO. R106



**1 PROFILE DECANT PIPING**  
SCALE 1:50



NOTE:

1. LOCATION AND ROUTING SHOWN IS APPROXIMATE. LOCATE EXACT LOCATION AND ROUTING OF DECANT PIPE AND VERIFY EXISTING UTILITIES IN THE AREA PRIOR TO EXCAVATION AND REMOVAL.

THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

No.	REVISION	DATE	BY
00	ISSUED FOR TENDER	2024.05.13	DC

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.000.3  
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Plot: May, 2024, - 02:26:03 PM



CONTRACT NO. WE-2024-01



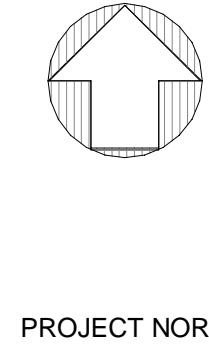
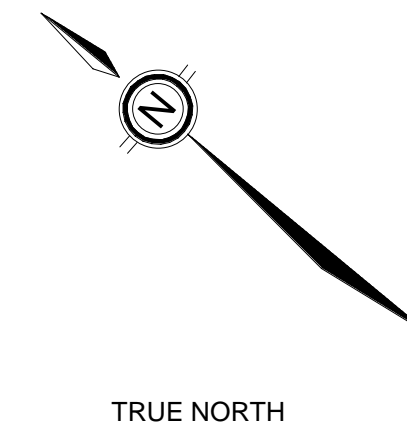
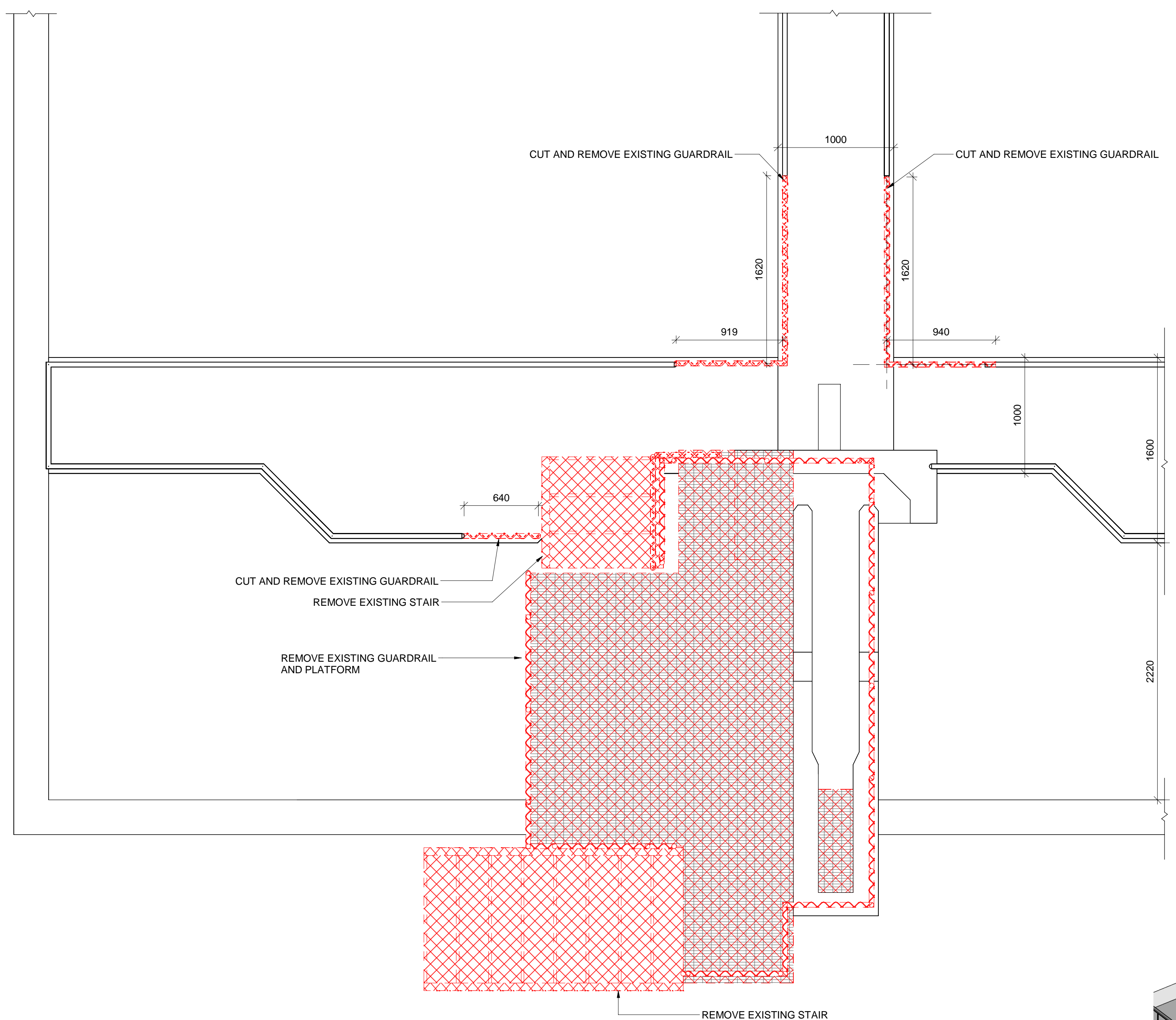
RODNEY WPCP  
UPGRADES

PROCESS

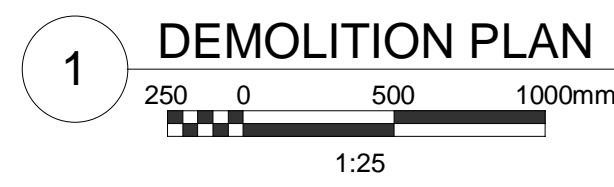
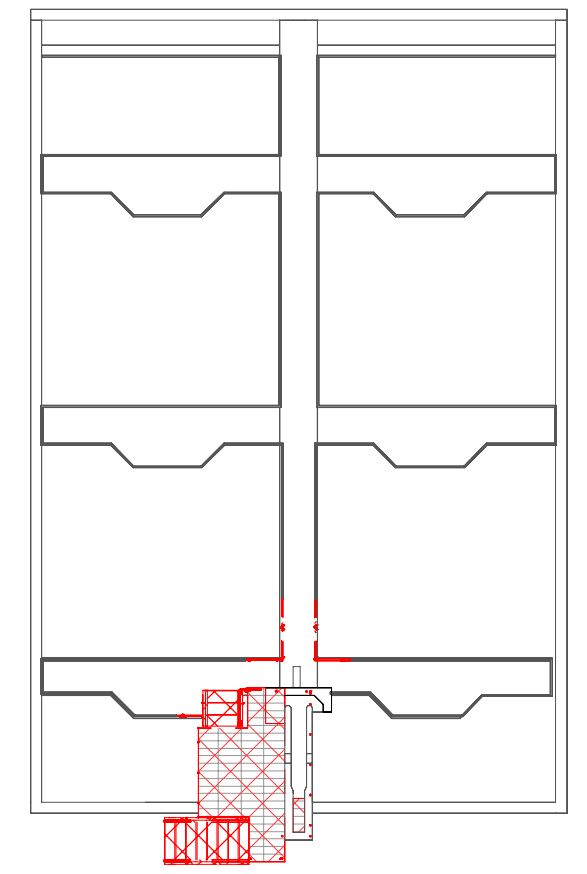
DECANT PUMP SYSTEM

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. R107
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC

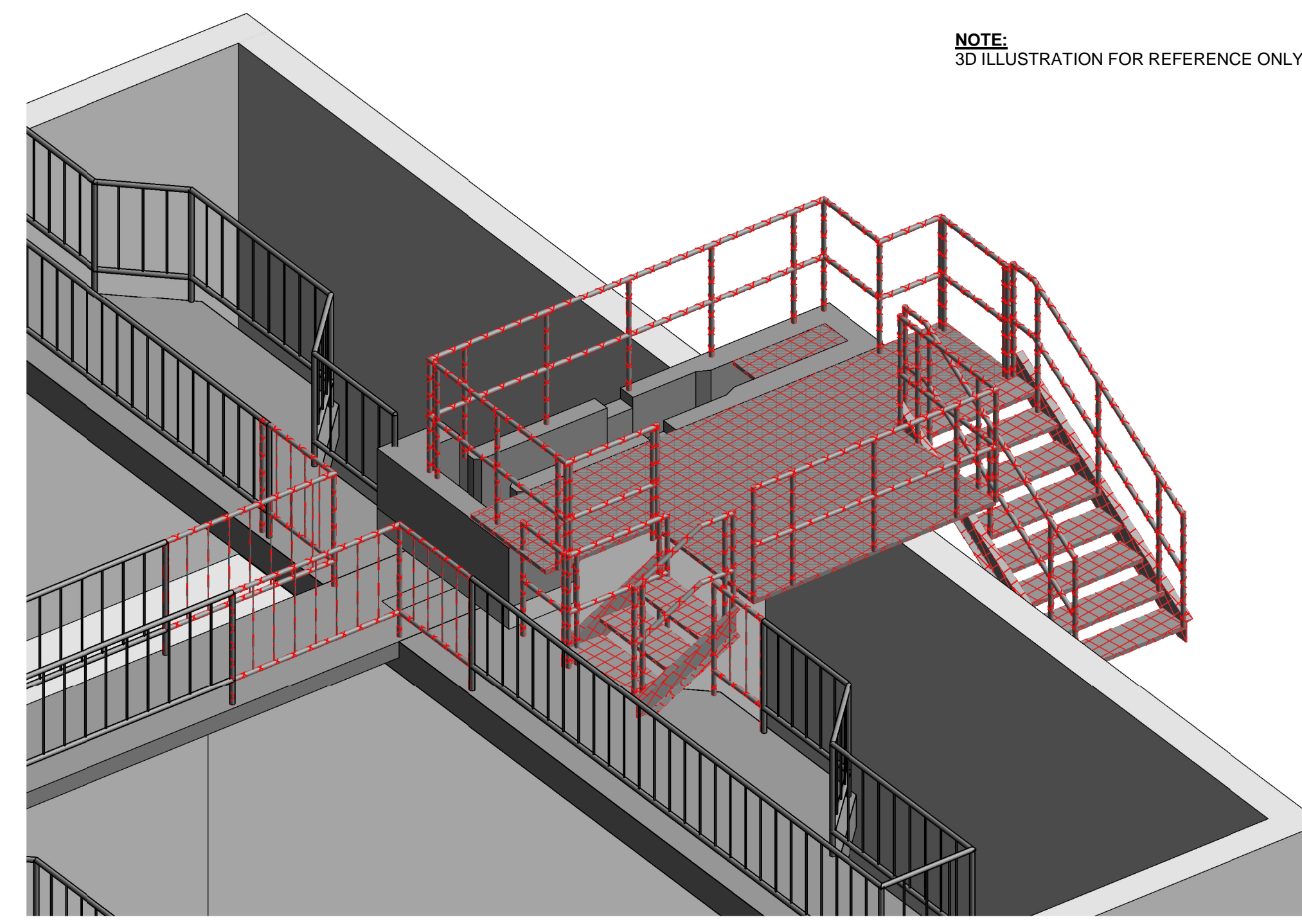




NOTES:



NOTE:  
3D ILLUSTRATION FOR REFERENCE ONLY



No.	REVISION	DATE	BY
A	ISSUED FOR TENDER	2024.05.13	DC

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Revit 20XX\Aeration basin.rvt  
Plot: ---



CONTRACT NO. WE-2024-01

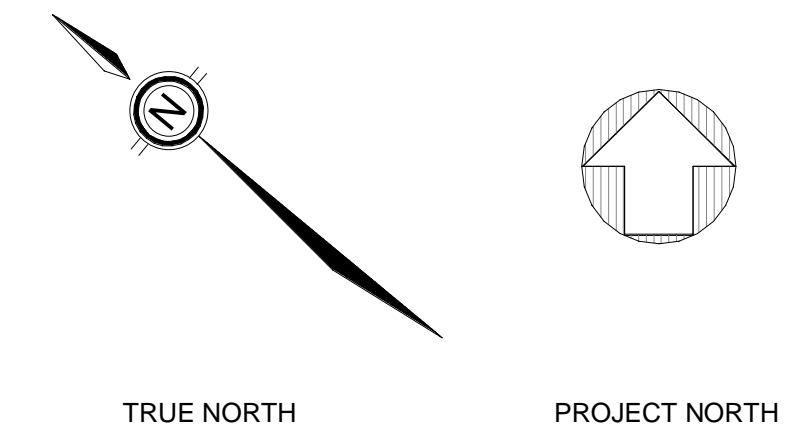
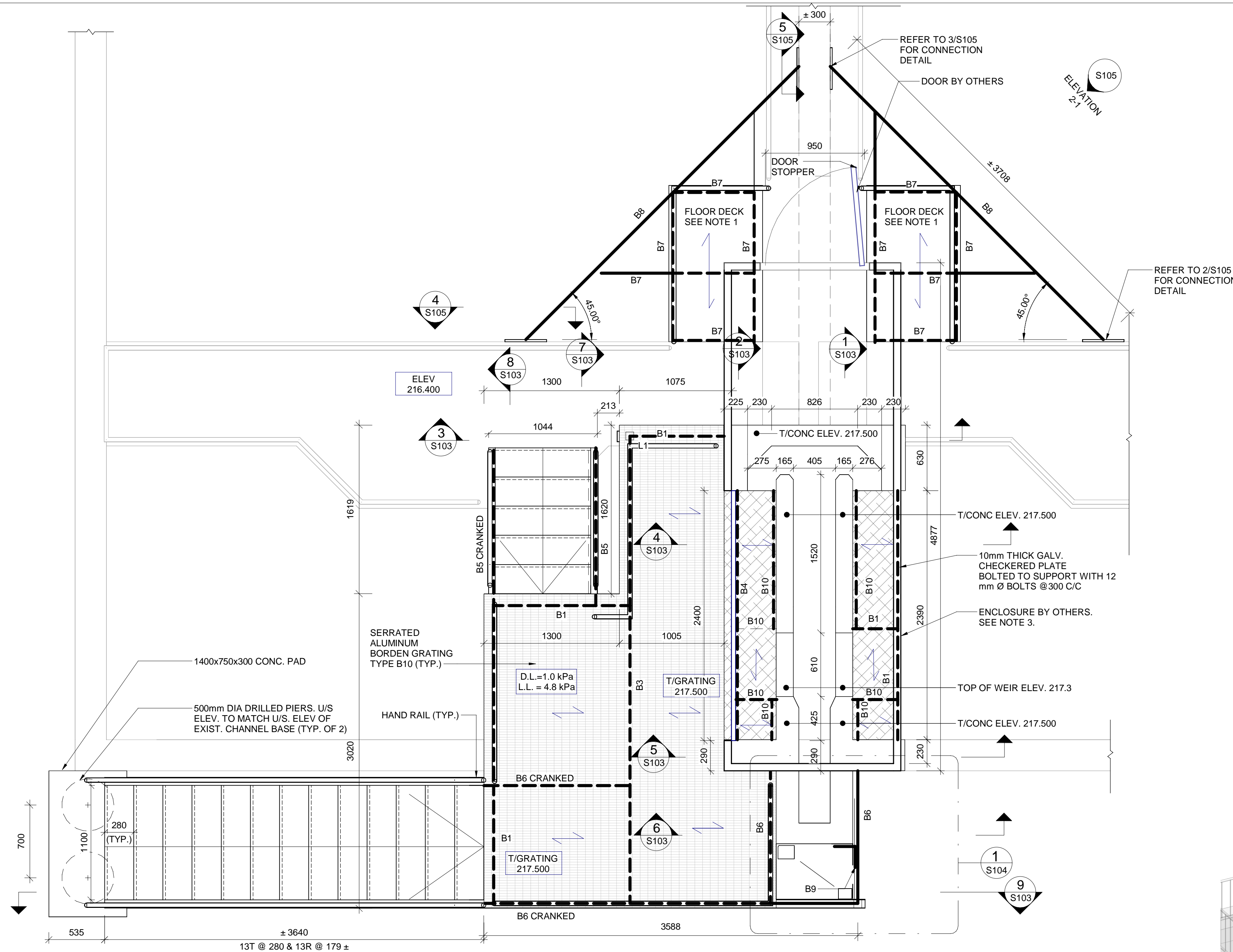


RODNEY WPCP  
UPGRADES

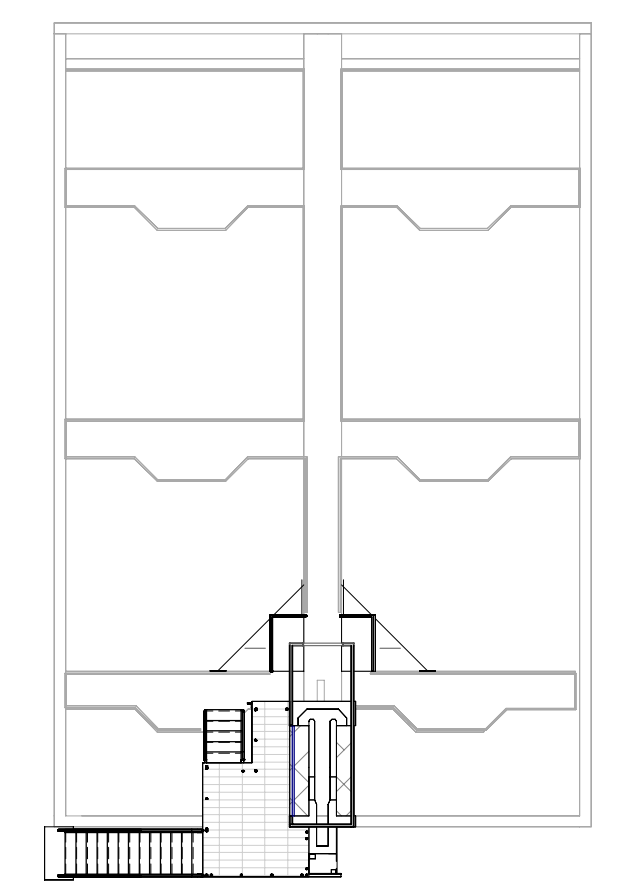
STRUCTURAL  
HEADWORKS  
DEMOLITION PLAN

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
	S101





**NOTES:**



KEY VIEW

A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Revit 20XX\Aeration basin.rvt			
Plot: ---			



CONTRACT NO. WE-2024-01



**RODNEY WPCP  
UPGRADES**  
STRUCTURAL  
**HEADWORKS  
NEW PLATFORM AND STAIR PLAN**

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
<b>S102</b>	

**1 PLATFORM AND STAIR**  
1:25  
0 250 500 1000mm

**LEGEND**

	EXISTING
	NEW
	CONCRETE
	CELLULAR GROUT
	STEEL FLOOR

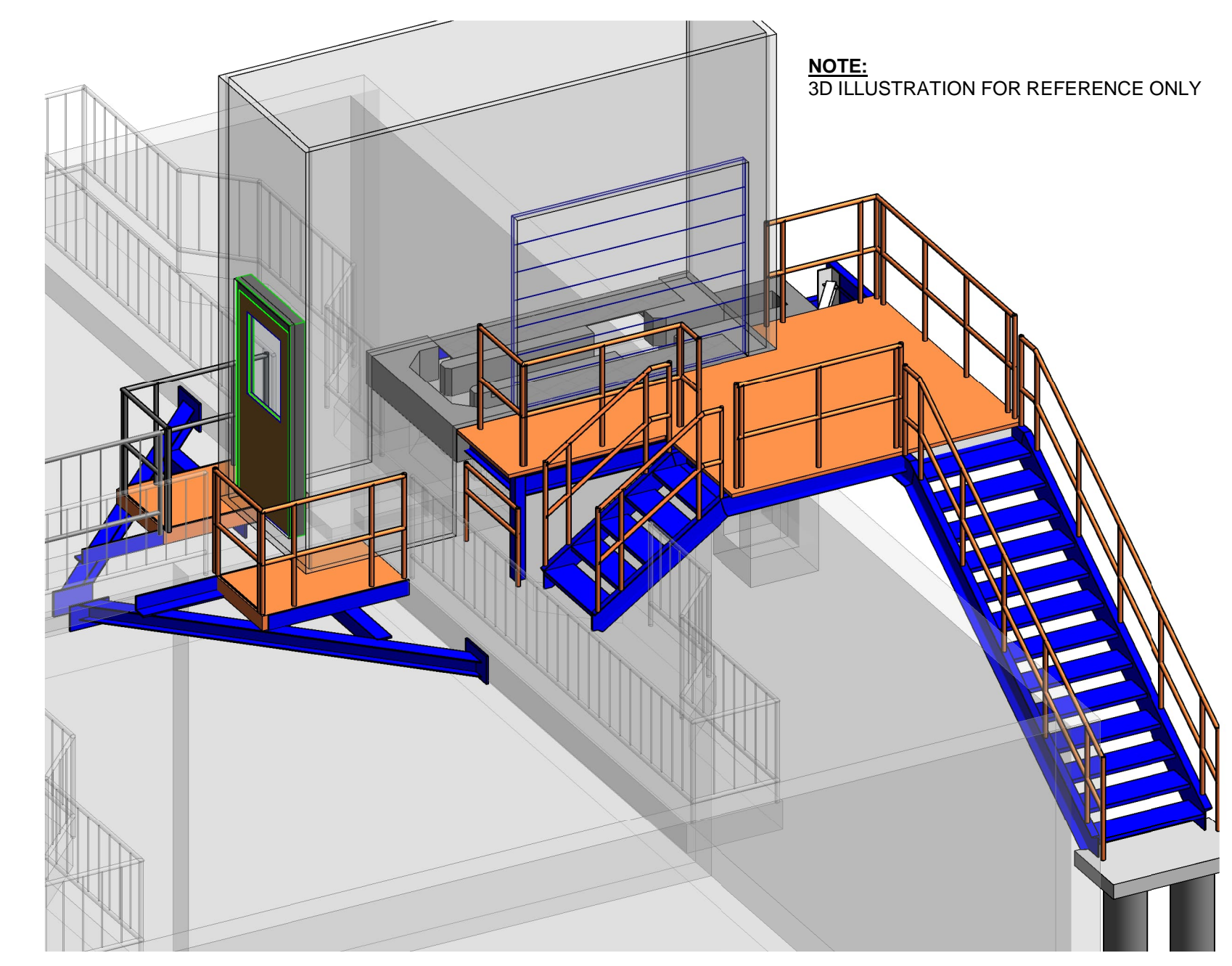
**MEMBER SCHEDULE**

MEMBER	MEMBER SIZE
B1	C200x17
B2	W200x46
B3	W200x27
B4	W200x22
B5	C200x28
B6	C310x45
B7	L152x152x13
B8	W150x30
B9	L203x203x16
B10	L51x51x6.4

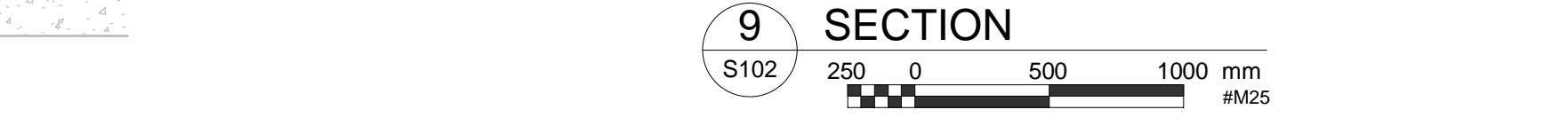
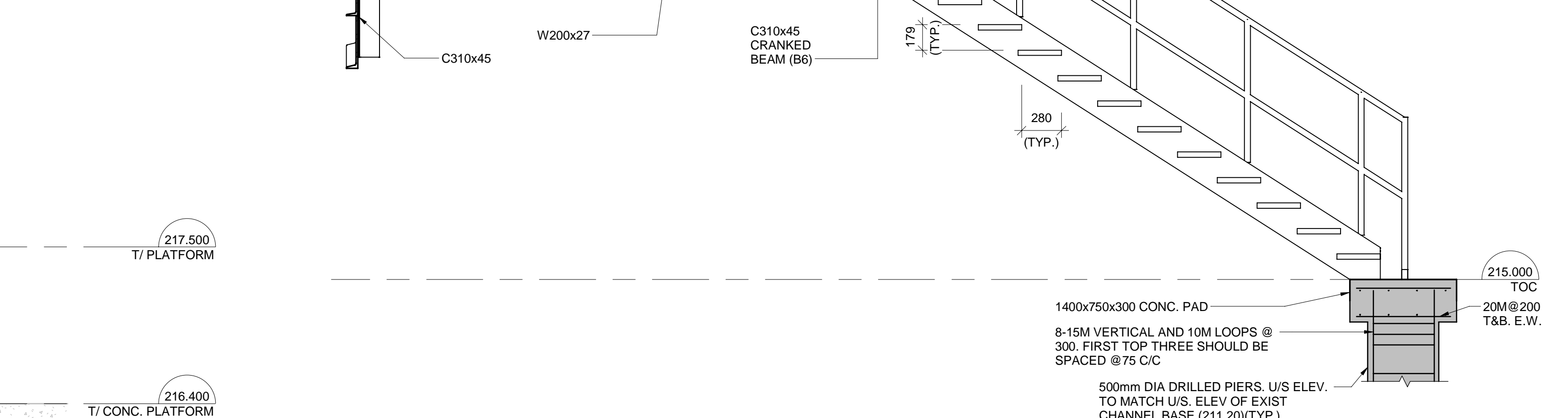
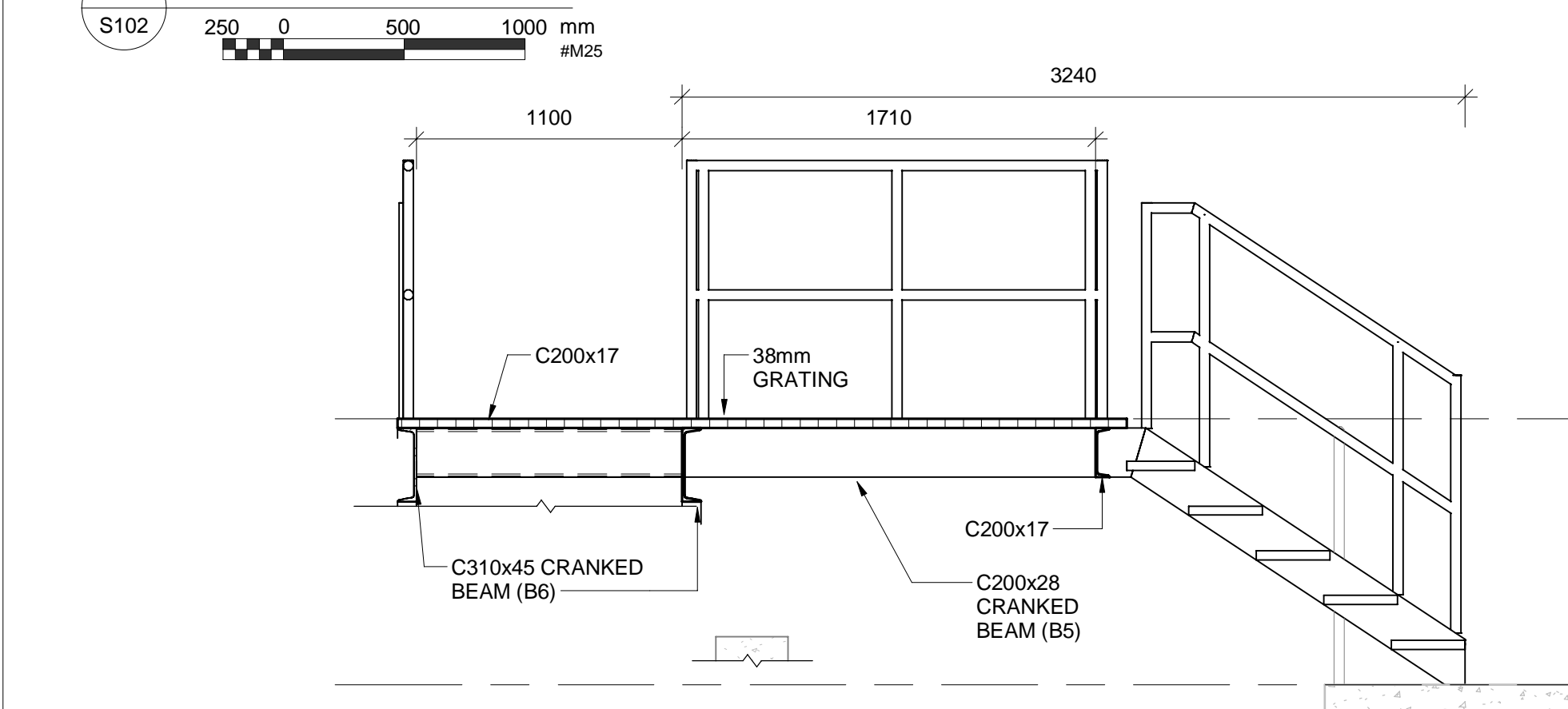
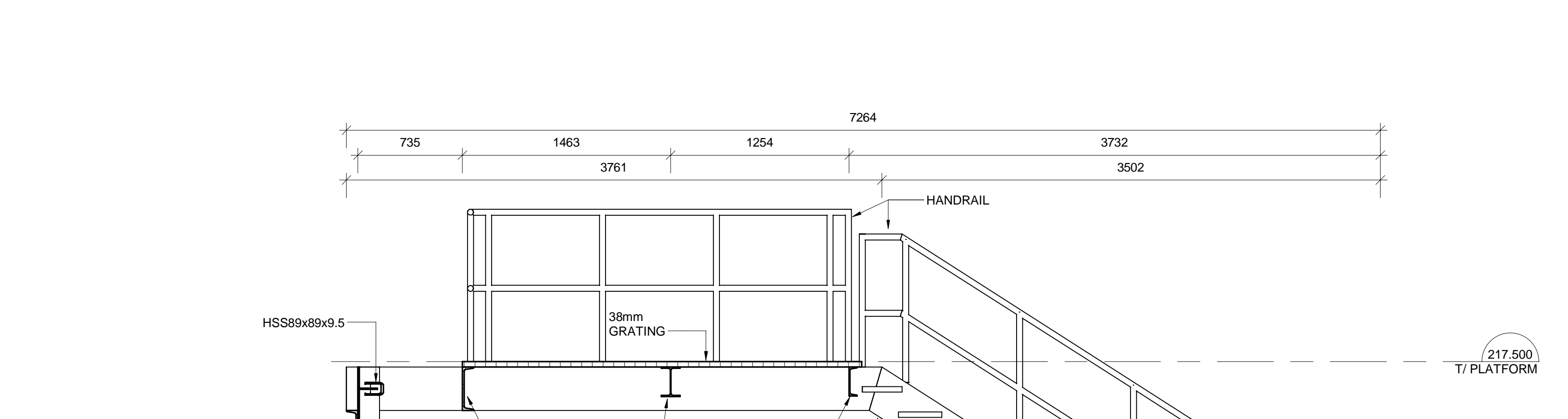
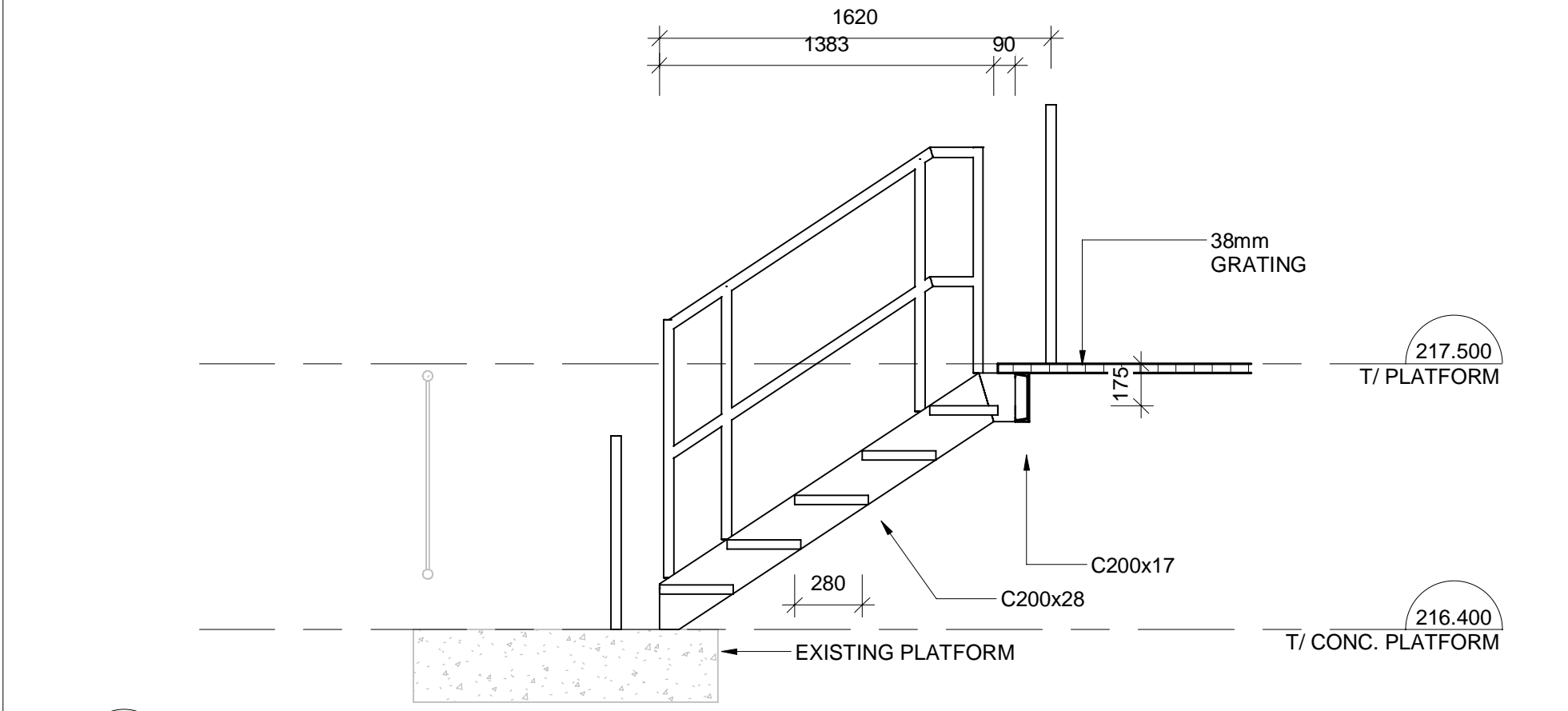
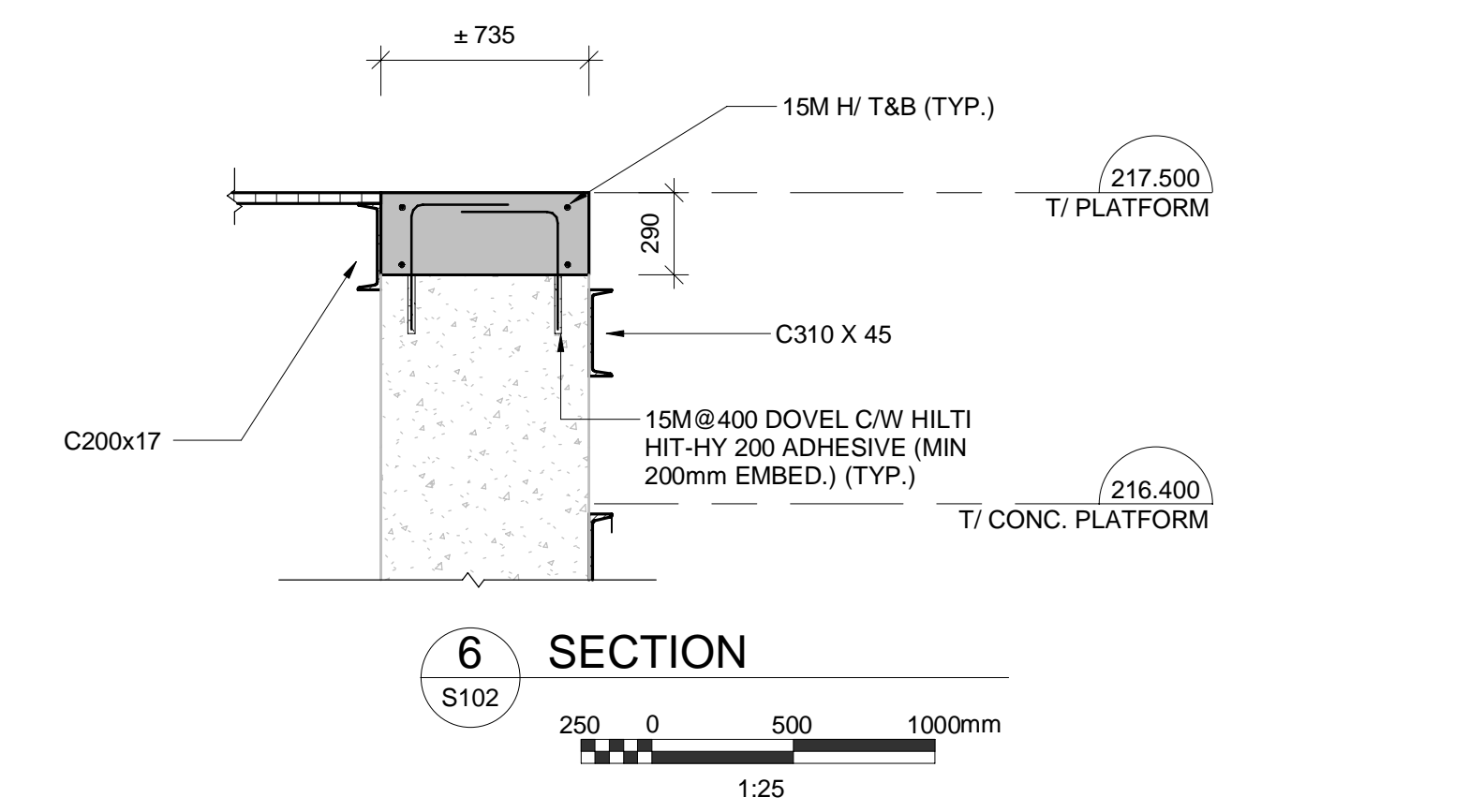
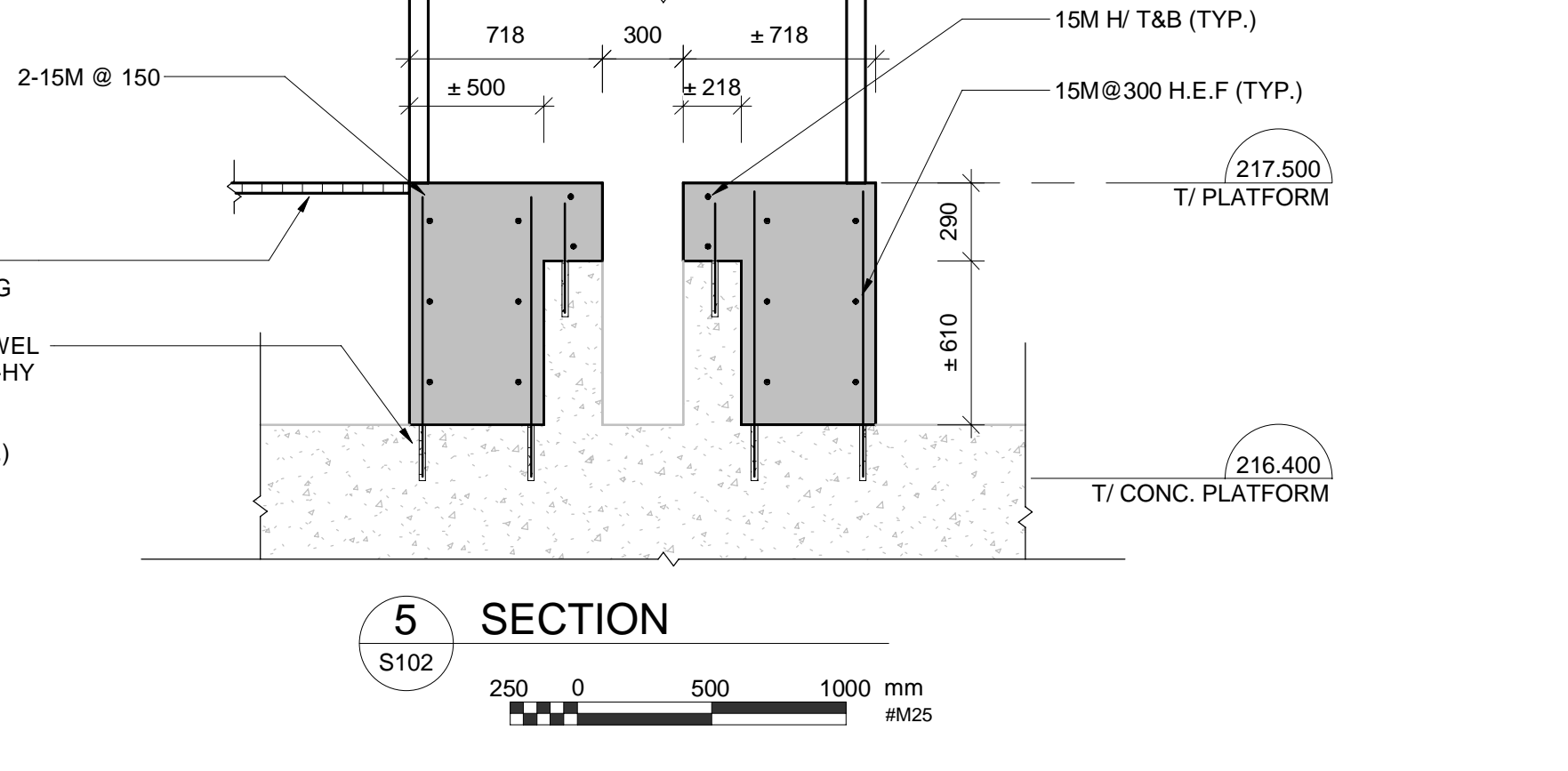
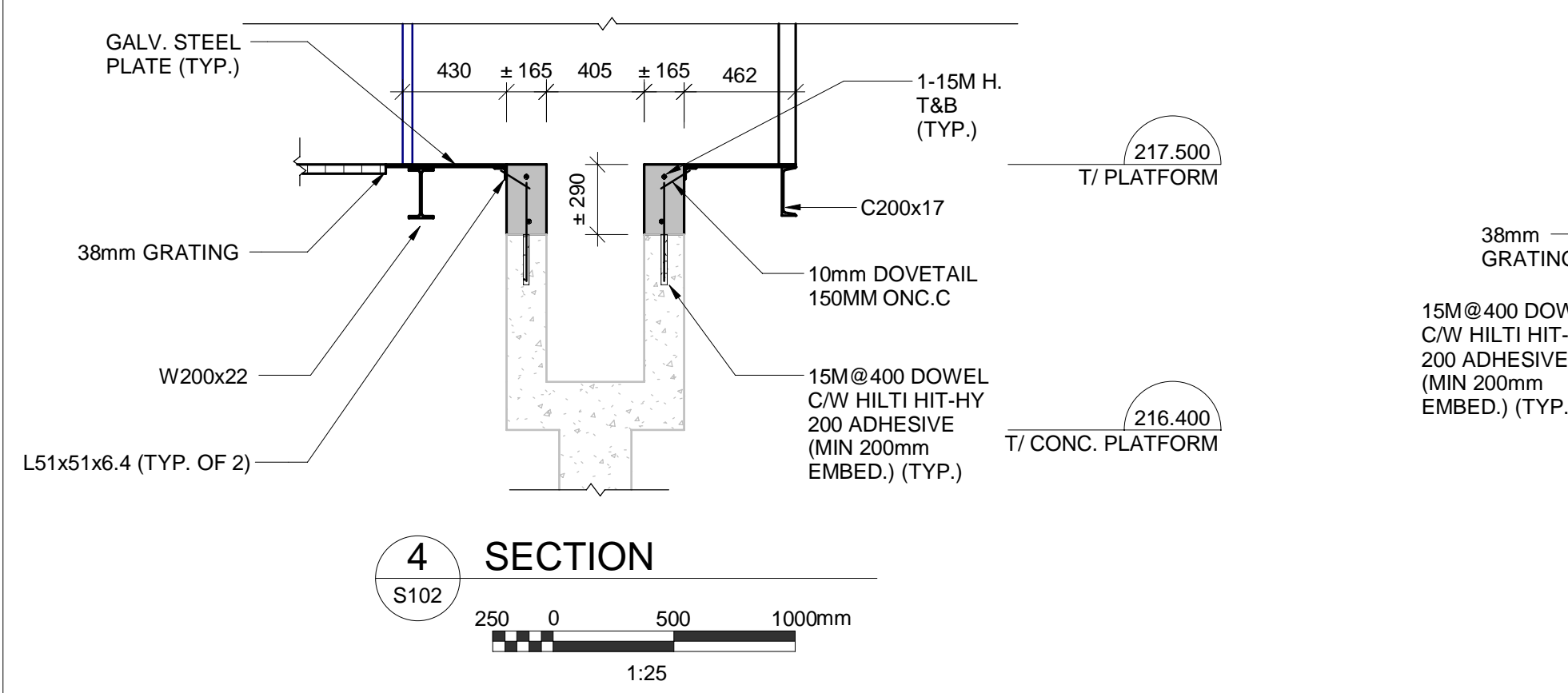
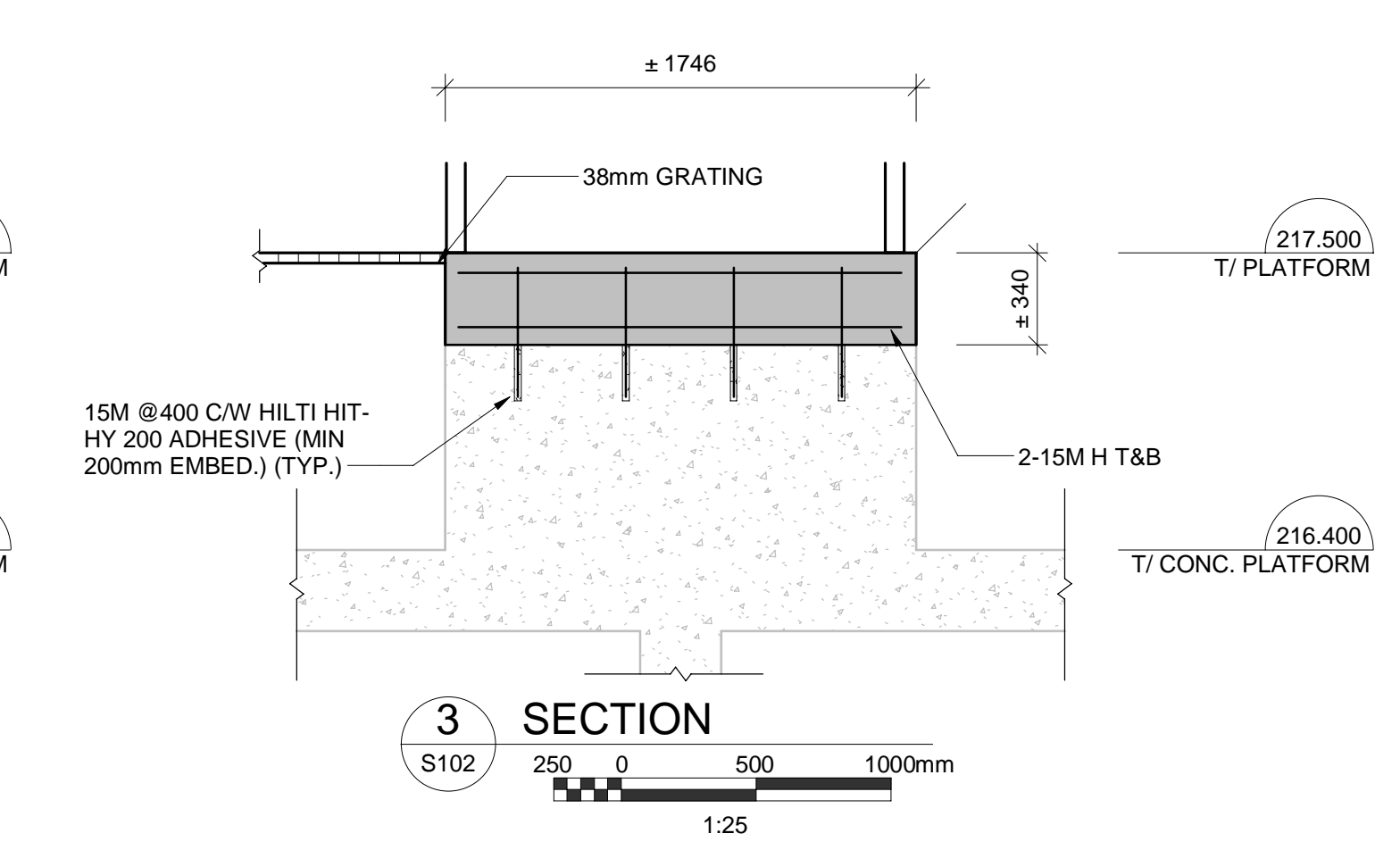
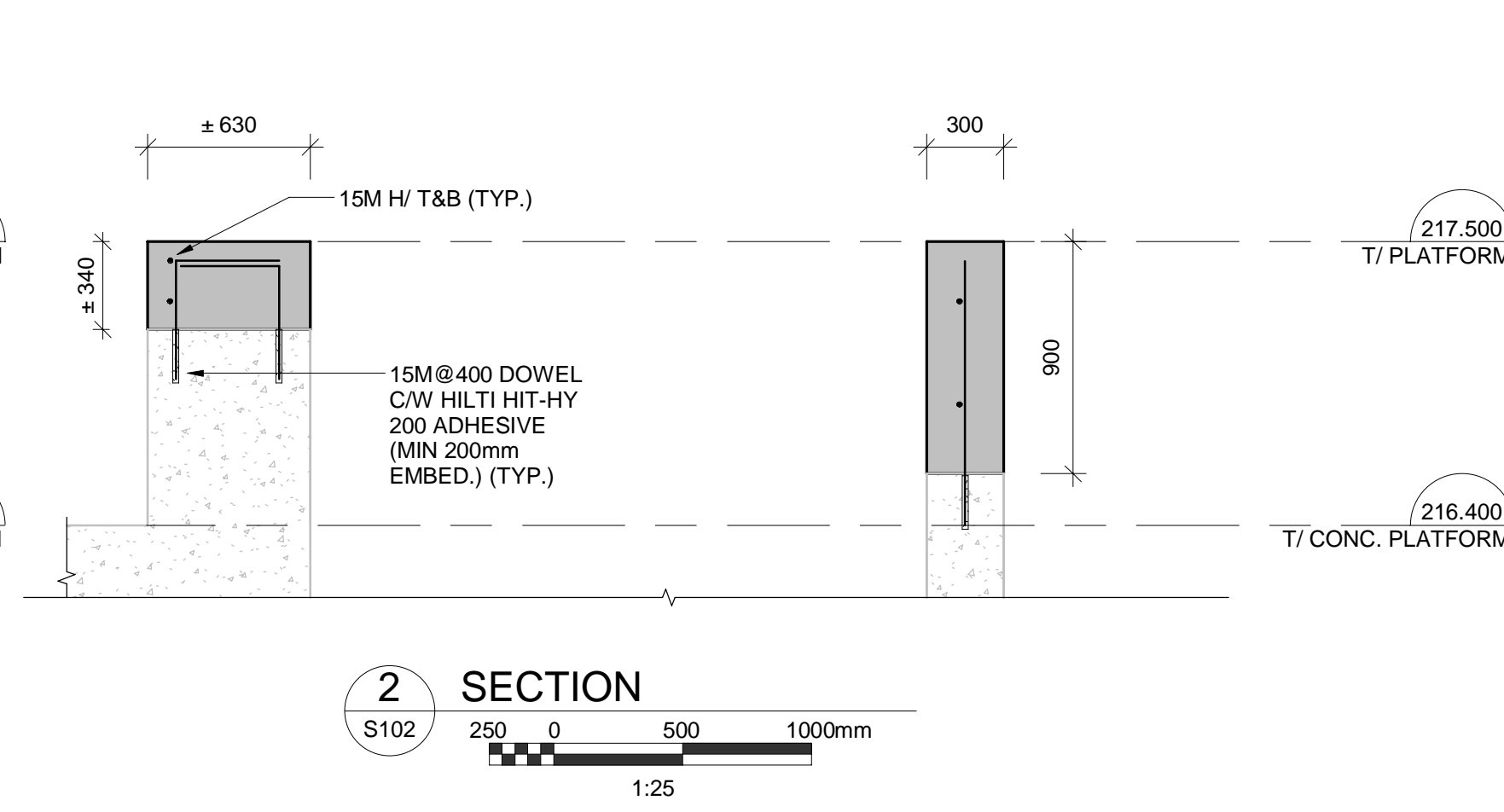
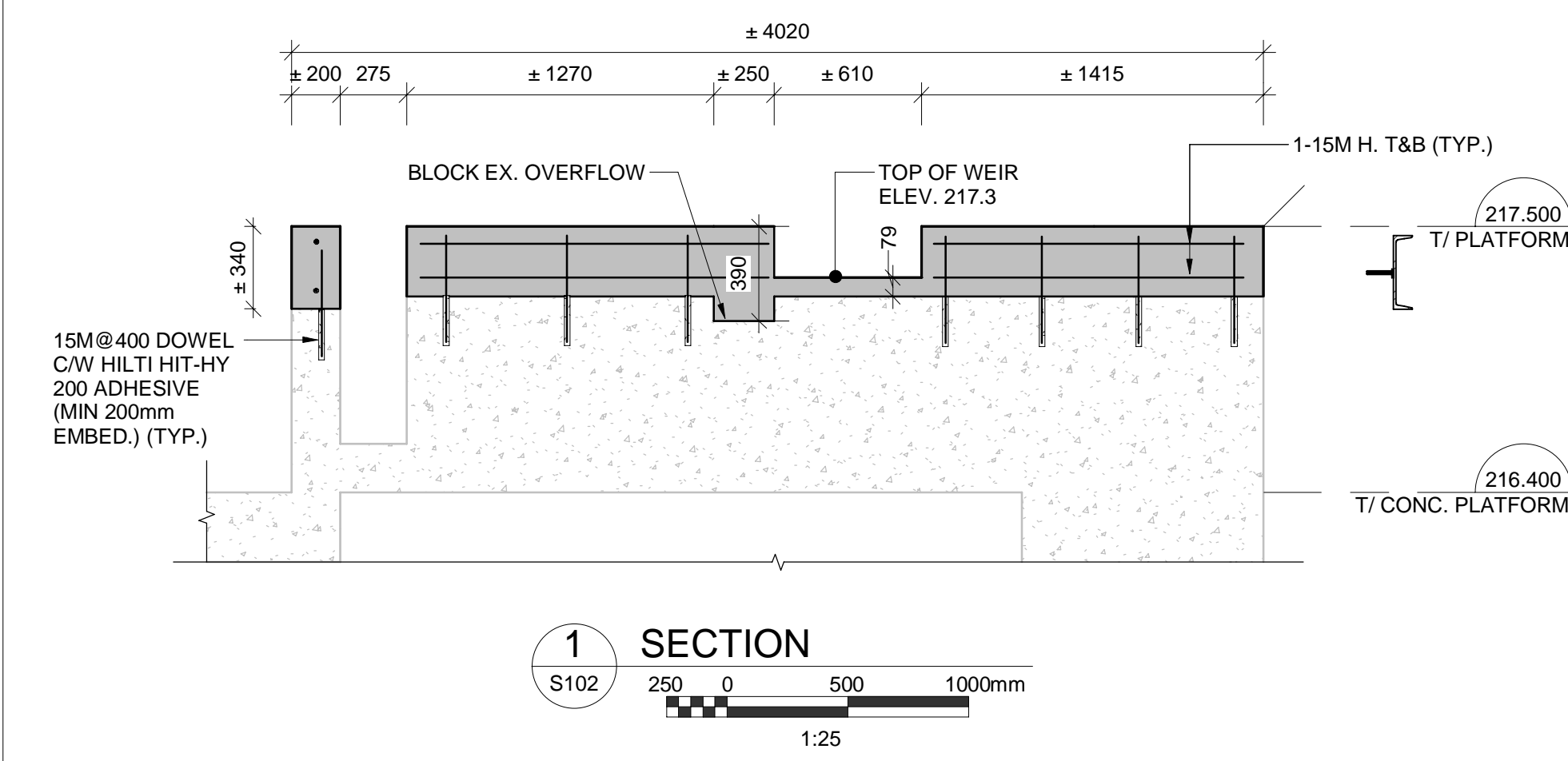
**COLUMN SCHEDULE**

MEMBER	MEMBER SIZE
L1	HSS102x102x8.0

- NOTES:**
- CONTRACTOR TO COORDINATE AND SITE VERIFY DIMENSIONS OF EXISTING STRUCTURES AND COORDINATE LOCATIONS AND PLATFORM IN SHOP DRAWINGS BEFORE FABRICATION. RESOLVE ANY DISCREPANCIES WITH THE ENGINEER.
  - EXISTING REINFORCING BARS IN THE CONCRETE FLOOR/WALL MAY CONFLICT WITH DOWEL LOCATIONS. DO NOT CUT EXISTING REINF. BARS. REVIEW THE EXISTING STRUCTURAL DRAWINGS AND LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE NEW CONCRETE BASES, BY HILTI FERROSCAN, GPR, X-RAY, OR OTHER MEANS (DO NOT CUT OR CHIP EX. CONCRETE TO LOCATE REINF.).
  - SUPPLIER TO PROVIDE CONNECTIONS BETWEEN ENCLOSURE AND PLATFORM INCLUDING CONNECTIONS DIFFERENT BUILDING MATERIALS TO WITHSTAND SEISMIC LOAD, WIND LOADS AND VIBRATION. CONNECTION B/W THE FRAMING AND THE ENCLOSURE MUST BE COORDINATED BETWEEN THE ENCLOSURE SUPPLIER AND THE STRUCTURAL STEEL SUPPLIER.
  - ALL STEEL FRAMING BEAMS GALV UNLESS NOTED.
- FLOOR DECK NOTE**
- 150mm COMPOSITE FLOOR AS FOLLOW:  
112mm NORMAL DENSITY CONCRETE ON 38 X 0.91 COMPOSITE STEEL DECK (TYP. VICWEST H1-BOND) HB938 OR EQUIVALENT WITH 152 X 152 MW18.7 / W 18.7 (6X6 - 6X6) WELDED WIRE MESH. INSTALL DOUBLE LAYER TOP OVER SUPPORT, AND FOR QUARTER SPAN ON EACH SIDE INSTALL MESH @ 25mm BELOW TOP OF SLAB



ISOMETRIC VIEW OF PLATFORM AND STAIR



NOTES:  
 1. CONTRACTOR TO SITE VERIFY DIMENSIONS OF EXISTING STRUCTURES AND COORDINATE LOCATIONS. RESOLVE ANY DISCREPANCIES WITH THE ENGINEER.  
 2. THE CLIENT IS TO ENGAGE A GEOTECHNICAL CONSULTANT TO VERIFY THE BEARING CAPACITY OF THE SOIL AT THE BEARING ELEVATION AND INFORM THE ENGINEER PRIOR TO THE CONSTRUCTION OF THE DRILLED PIERS. ASSUMED SOIL BEARING CAPACITY: 260 kPa (SLS)

NOTES:

A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100 Building 01\Revit 20XX\Aeration basin.rvt  
 Plot: ---

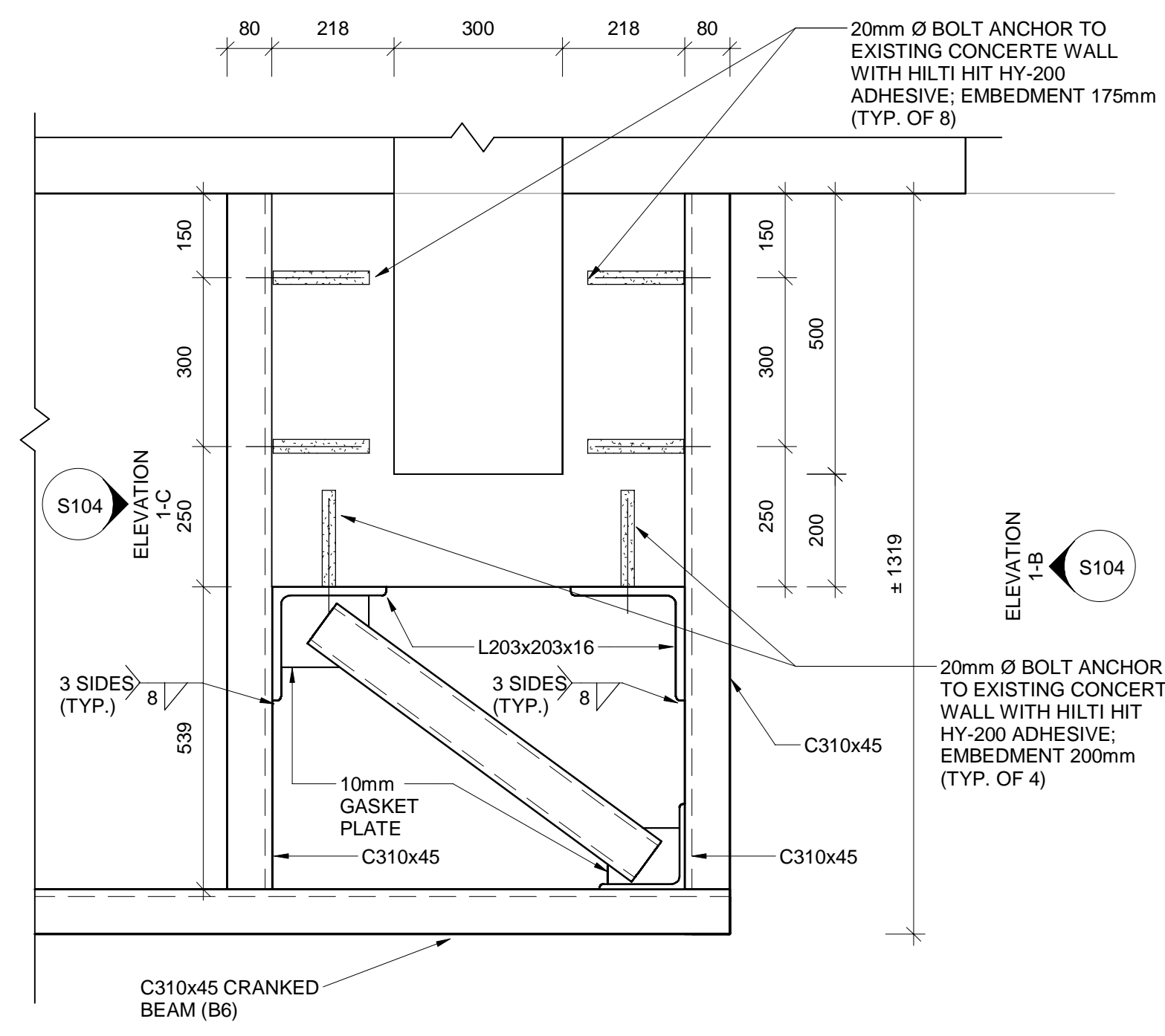


CONTRACT NO. WE-2024-01

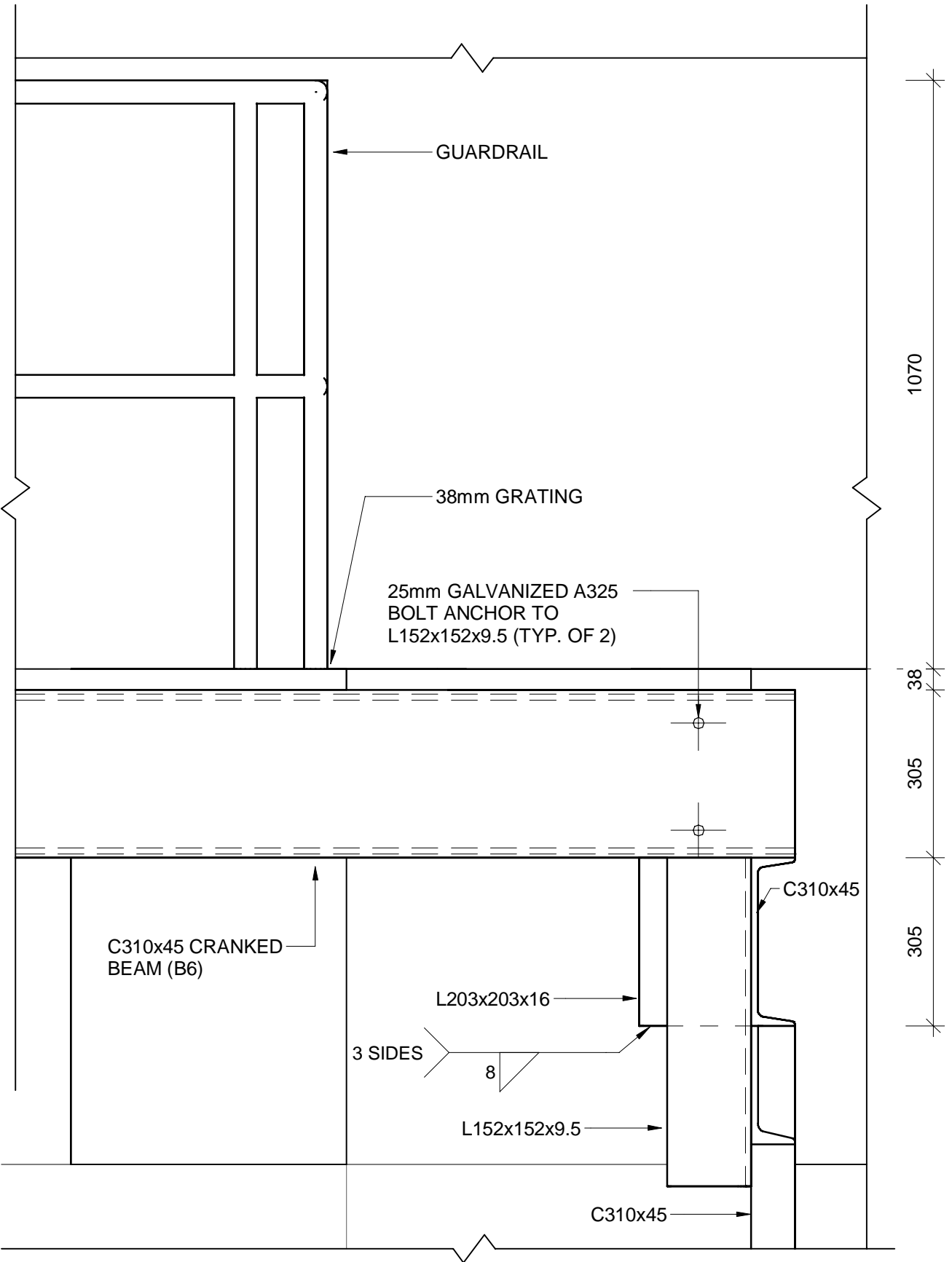


RODNEY WPCP  
 UPGRADES  
 STRUCTURAL  
 HEADWORKS  
 SECTIONS

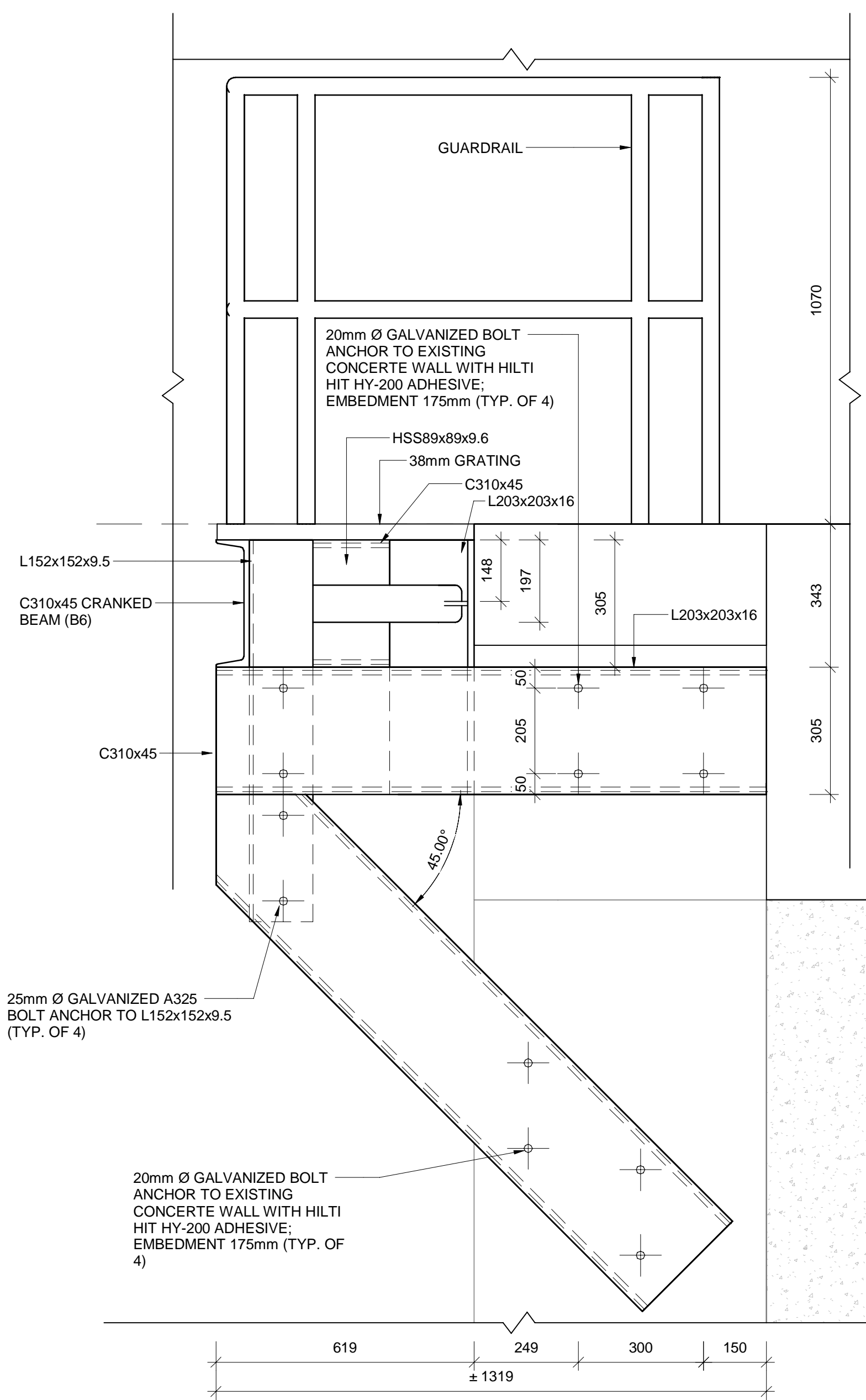
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Date:	AUG 2023	DWG NO.	S103
Drawn by:	CCWP	Designed by:	HOA
Checked by:	RSM	Approved by:	



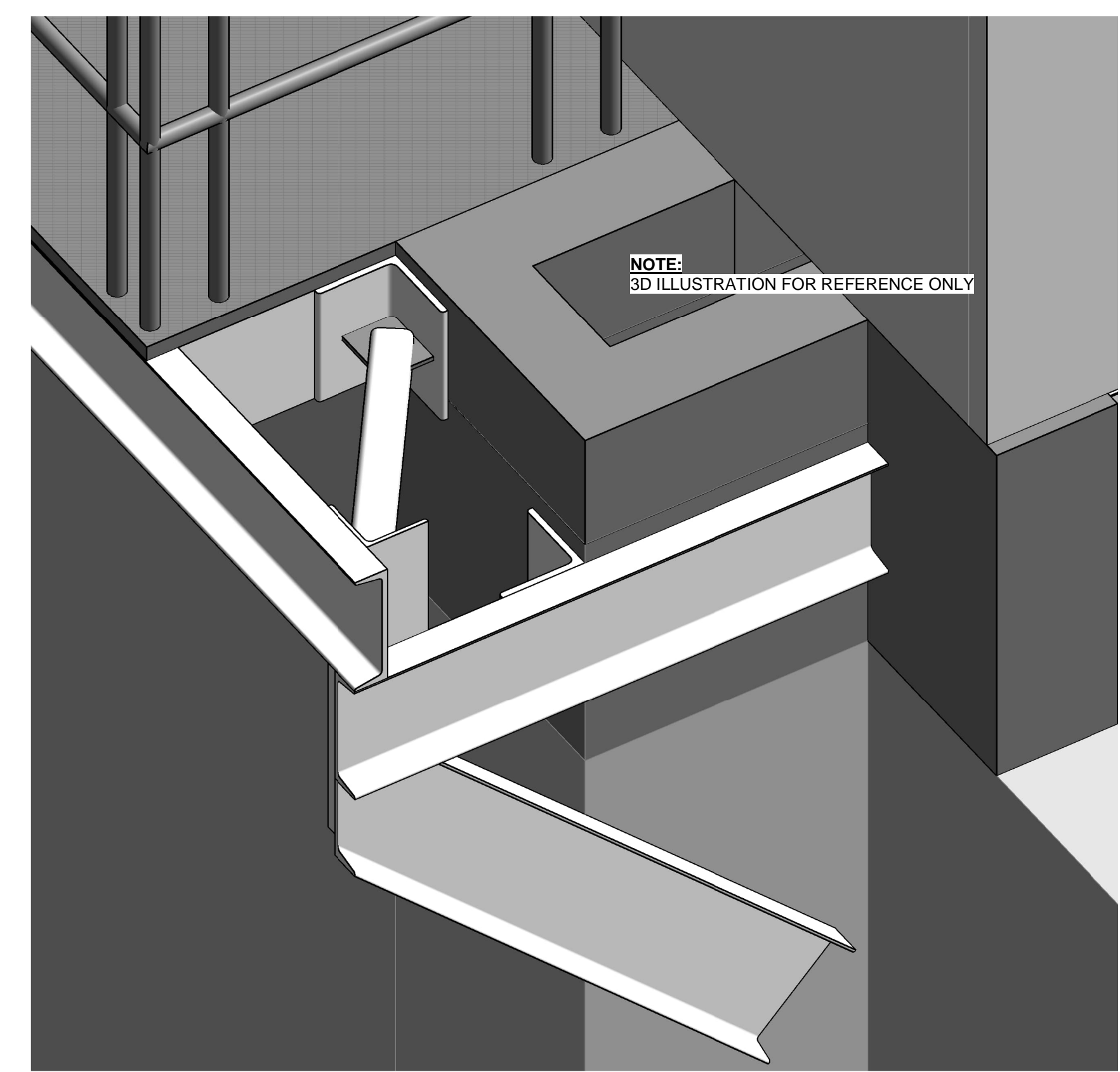
**1 PLATFORM AND STAIR PLAN - CALL OUT**  
 Scale: 1:10  
 Elevation: S104



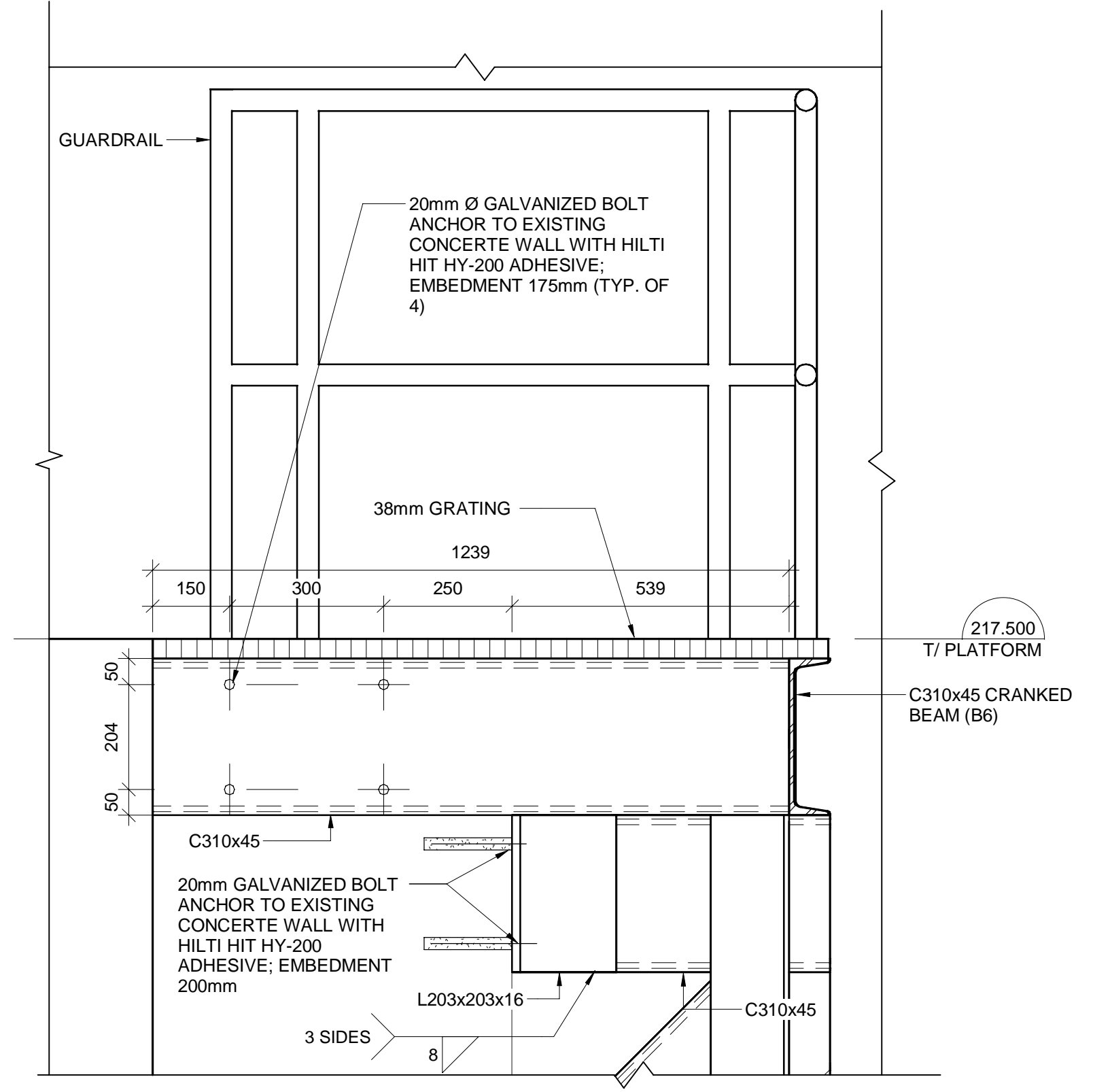
**2 ELEVATION VIEW 1-A**  
 Scale: 1:10  
 Elevation: S104



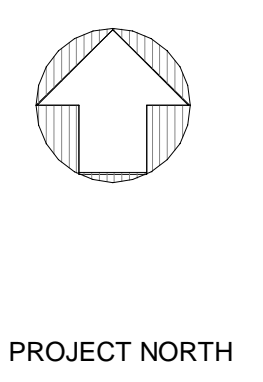
**3 ELEVATION VIEW 1-B**  
 Scale: 1:10  
 Elevation: S104



**ISOMETRIC VIEW OF REAR SECTION**



**4 ELEVATION 1-C**  
 Scale: 1:10  
 Elevation: S104



**NOTES:**  
 1. CONTRACTOR TO COORDINATE AND SITE VERIFY DIMENSIONS OF EXISTING STRUCTURES AND COORDINATE LOCATIONS AND PLATFORM IN SHOP DRAWINGS BEFORE FABRICATION. RESOLVE ANY DISCREPANCIES WITH THE ENGINEER.  
 2. EXISTING REINFORCING BARS IN THE CONCRETE WALL MAY CONFLICT WITH DOWEL LOCATIONS. DO NOT CUT EXISTING REINF. BARS. REVIEW THE EXISTING STRUCTURAL DRAWINGS AND LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE NEW CONCRETE BASES, BY HILTI FERROSCAN, GPR, X-RAY, OR OTHER MEANS (DO NOT CUT OR CHIP EX. CONCRETE TO LOCATE REINF.).

**NOTE:**  
 3D ILLUSTRATION FOR REFERENCE ONLY

**NOTES:**

No.	REVISION	DATE	DC	BY
A	ISSUED FOR TENDER	2024.05.13	DC	

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100 Building 01\Revit 20XX\raeration basin.rvt  
 Plot: ---

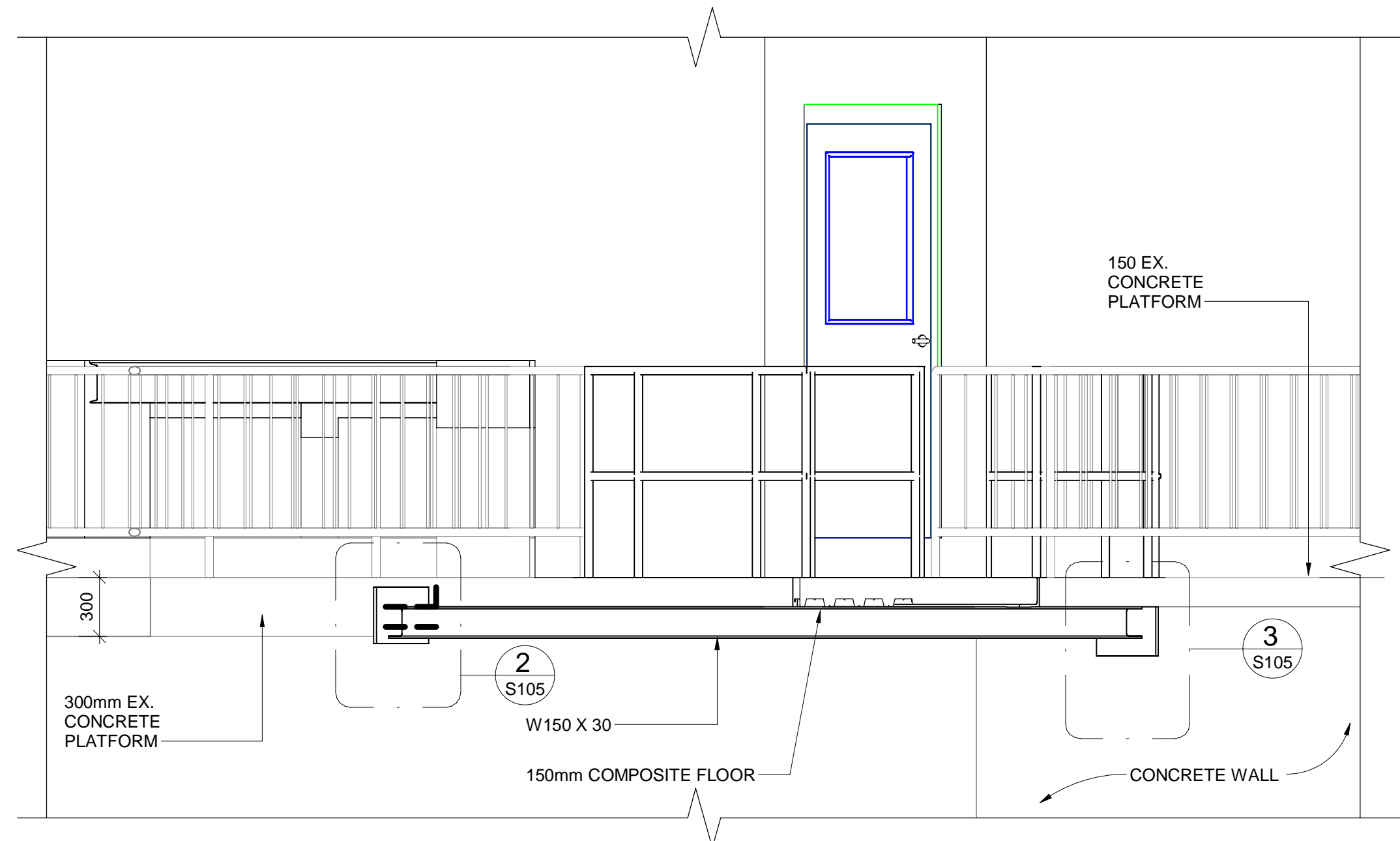


CONTRACT NO. WE-2024-01



**RODNEY WPCP  
 UPGRADES**  
 STRUCTURAL  
**HEADWORKS  
 PLATFORM PLAN AND ELEVATIONS**

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
<b>S104</b>	

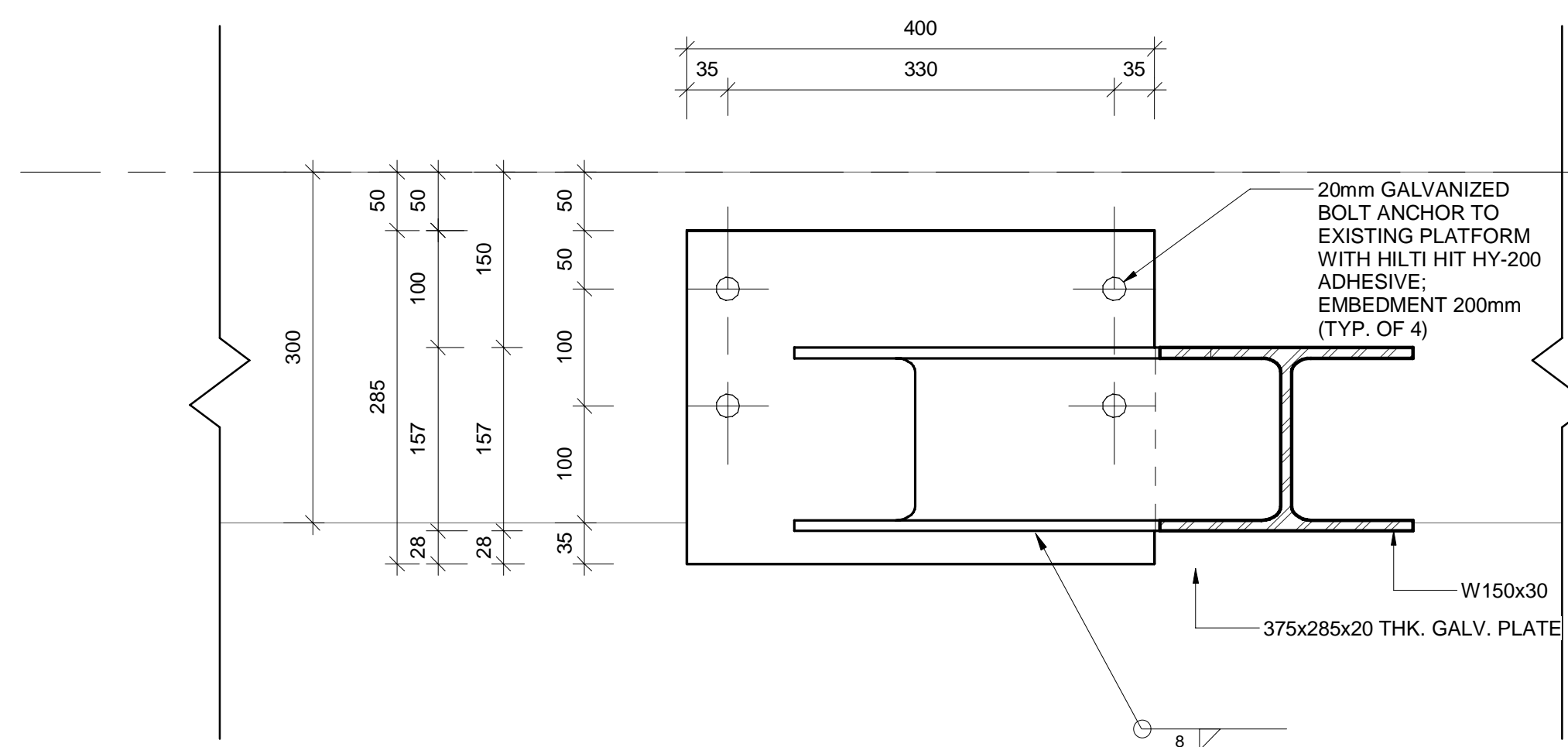


216.400  
T/ CONC. PLATFORM

1 ELEVATION 2-1  
S102 250 0 500 1000mm  
1:25

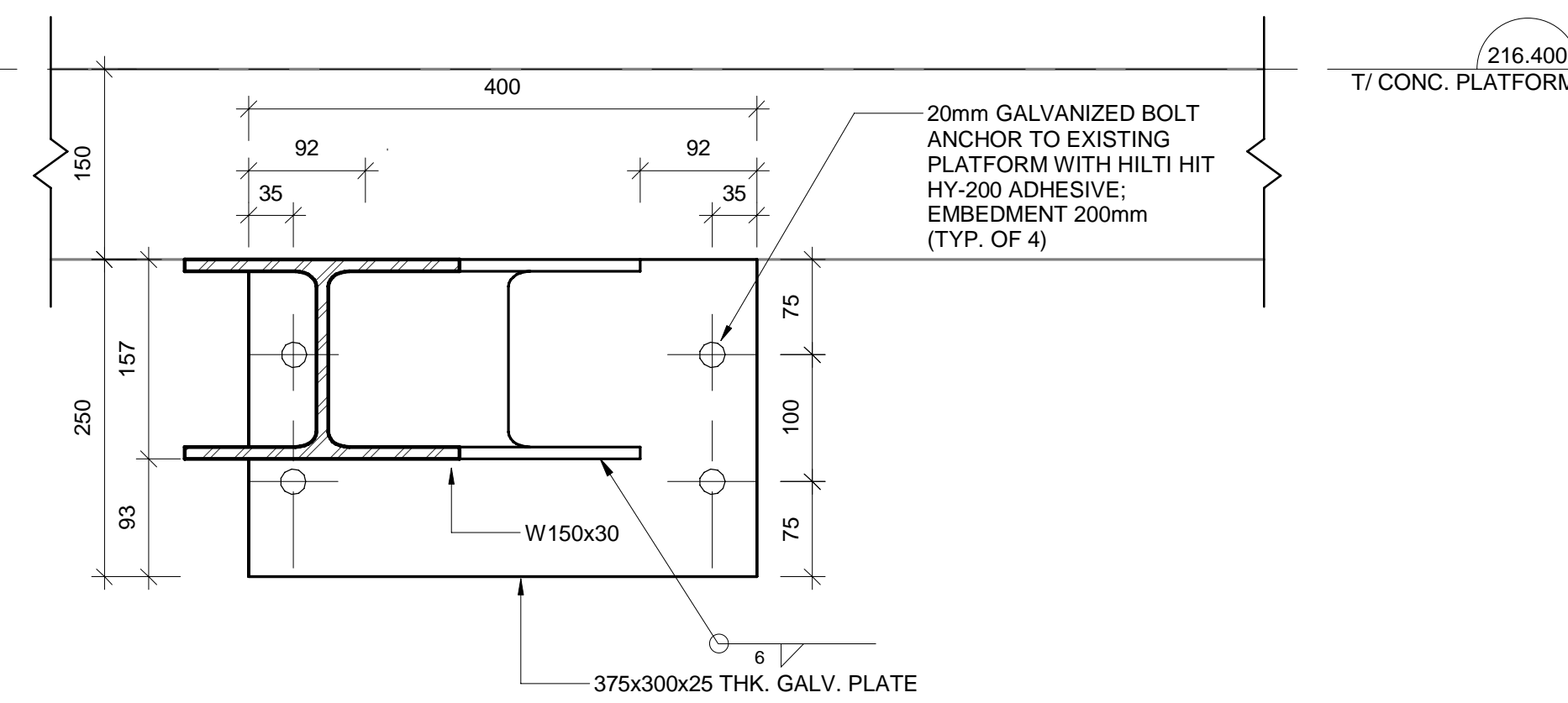


ISOMETRIC VIEW OF BEAM (B8)



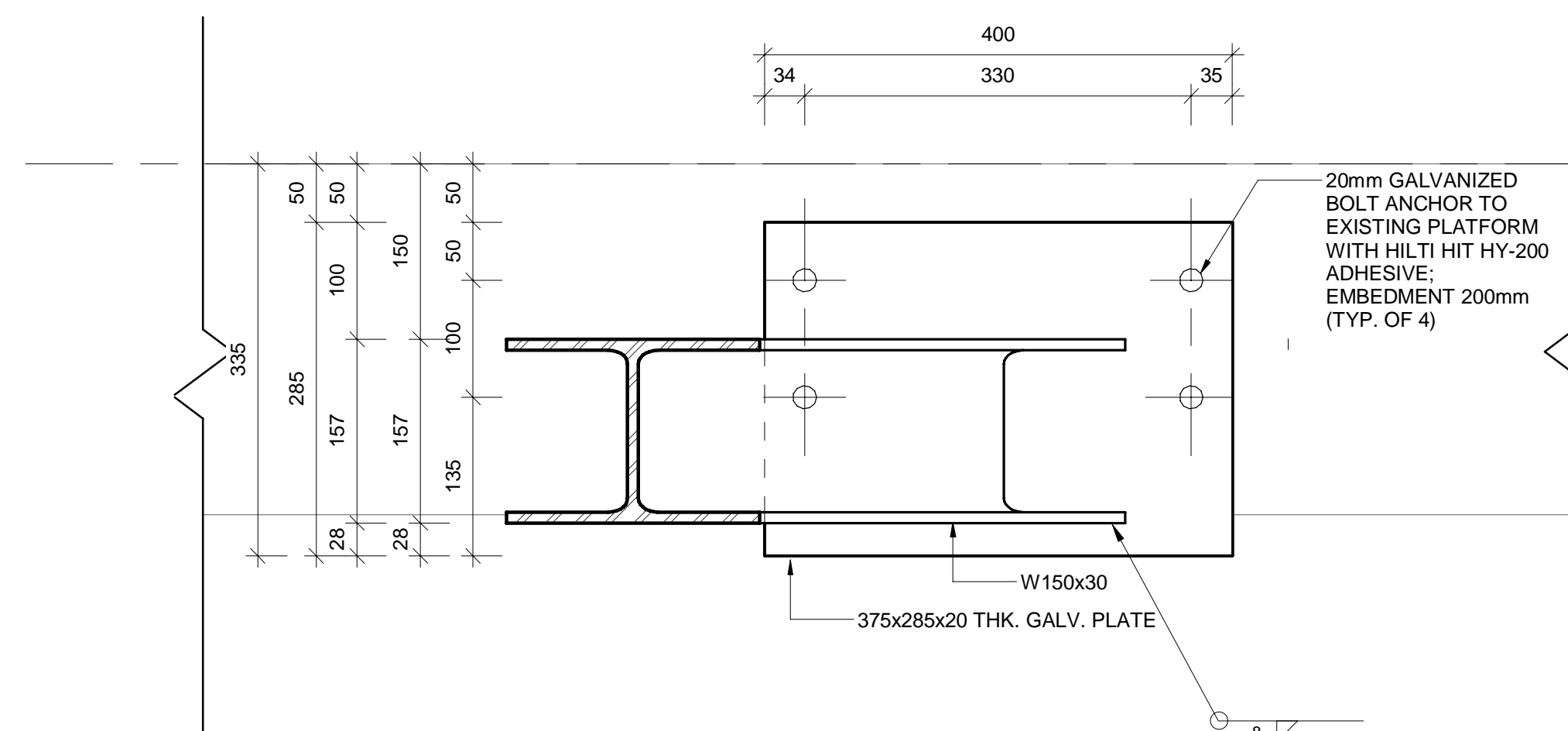
216.400  
T/ CONC. PLATFORM

2 SECTION - CALLOUT  
S105 50 0 100 200 mm  
1:5



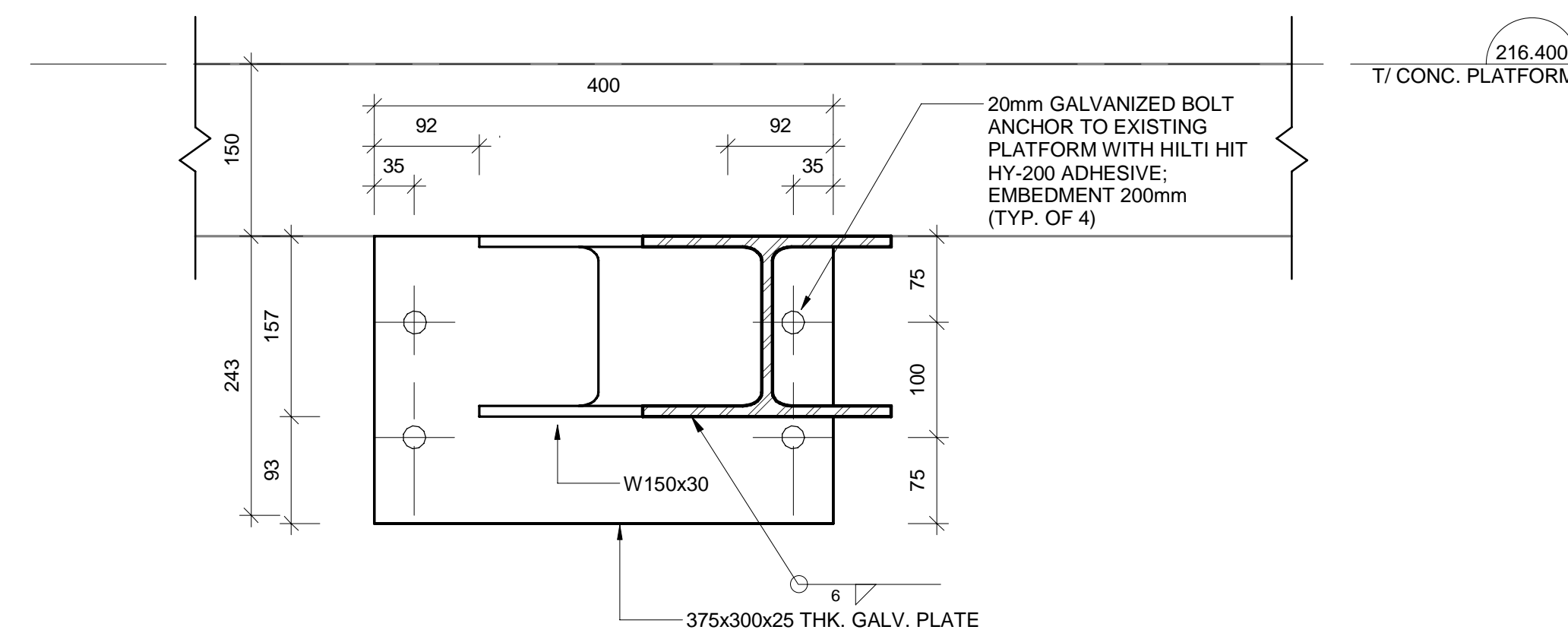
216.400  
T/ CONC. PLATFORM

3 SECTION - CALLOUT  
S105 50 0 100 200 mm  
1:5



216.400  
T/ CONC. PLATFORM

4 SECTION  
S102 50 0 100 200 mm  
1:5



216.400  
T/ CONC. PLATFORM

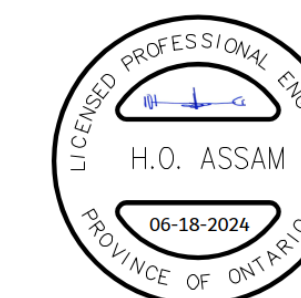
5 SECTION  
S102 50 0 100 200 mm  
1:5

NOTES:

A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Revit 20XX\Aeration basin.rvt			
Plot: ---			



CONTRACT NO. WE-2024-01



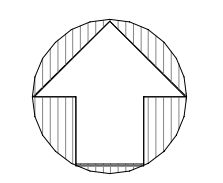
RODNEY WPCP  
UPGRADES

STRUCTURAL

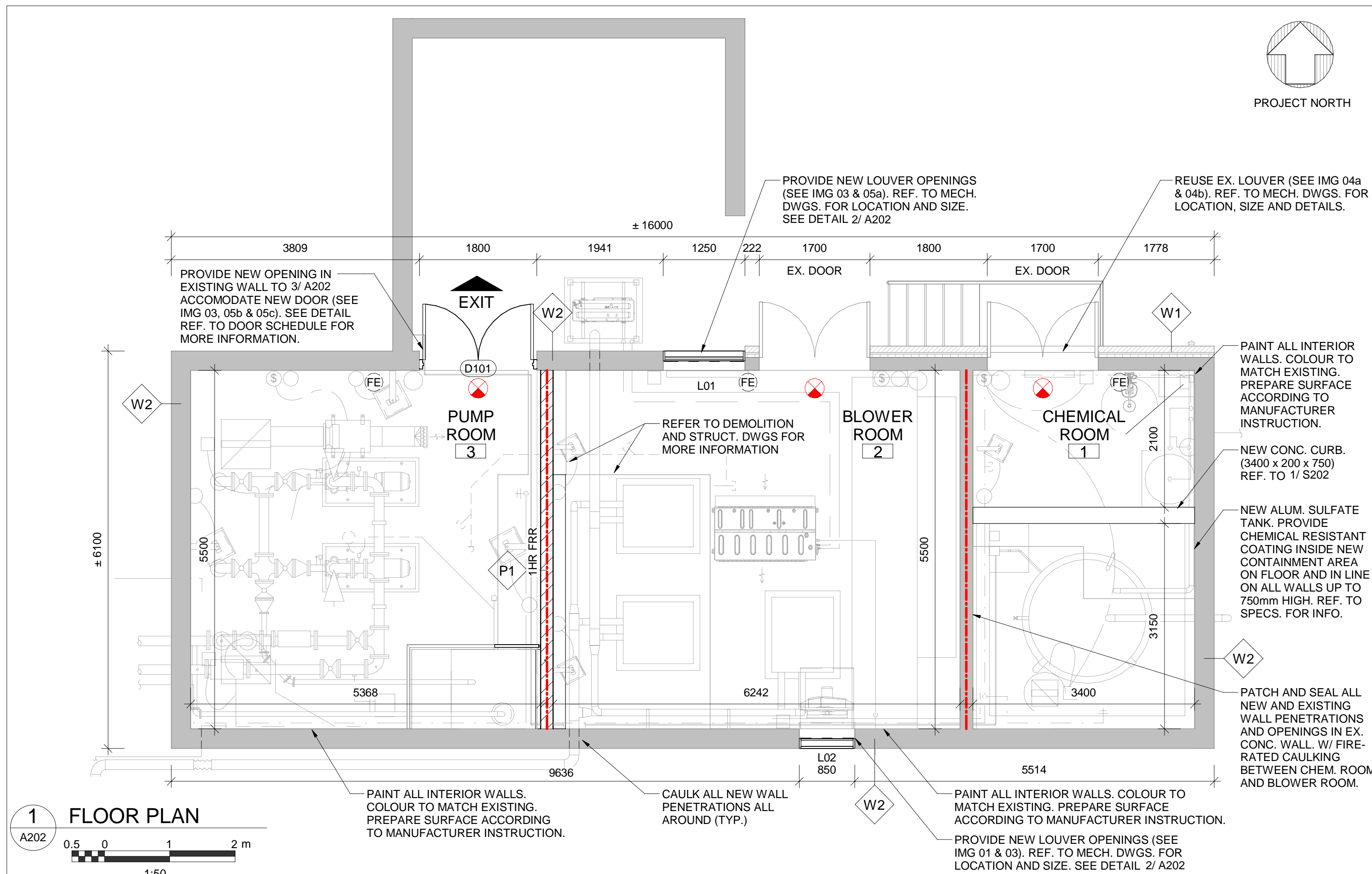
HEADWORKS  
SECTIONS

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
S105	





PROJECT NORTH



**1 FLOOR PLAN**  
A202  
0.5 0 1 2 m  
1:50

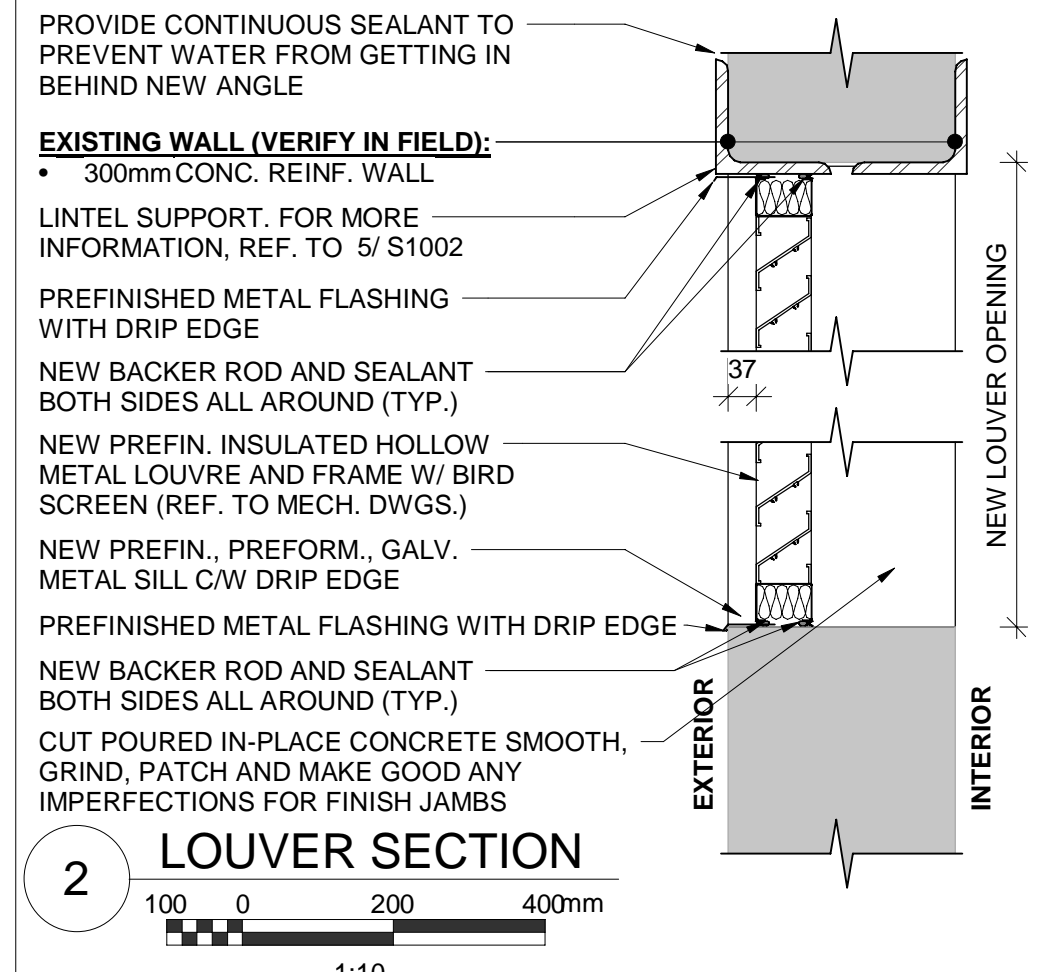
**EXISTING SITE CONDITIONS**



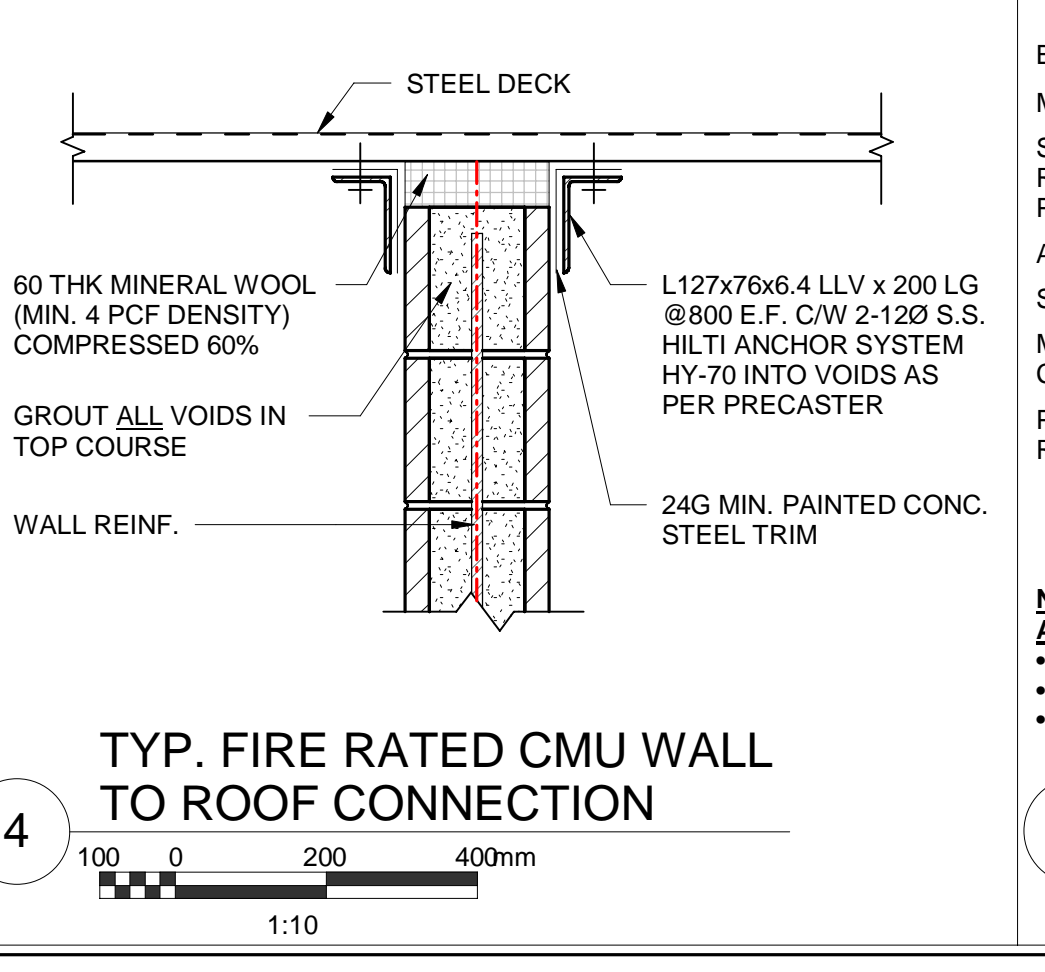
- NOTES:**
- VERIFY EXISTING ROOFING MATERIAL AND ENSURE COMPATIBILITY WITH THE NEW ROOFING MATERIAL. 2% MIN. ROOF SLOPE. PROVIDE ROOF CRICKET AS REQUIRED.
  - NEW CONTAINMENT TANK IN CHEMICAL ROOM IS DESIGNED TO HOLD 6500L OF ALUMINUM SULFATE.

**LEGEND:**

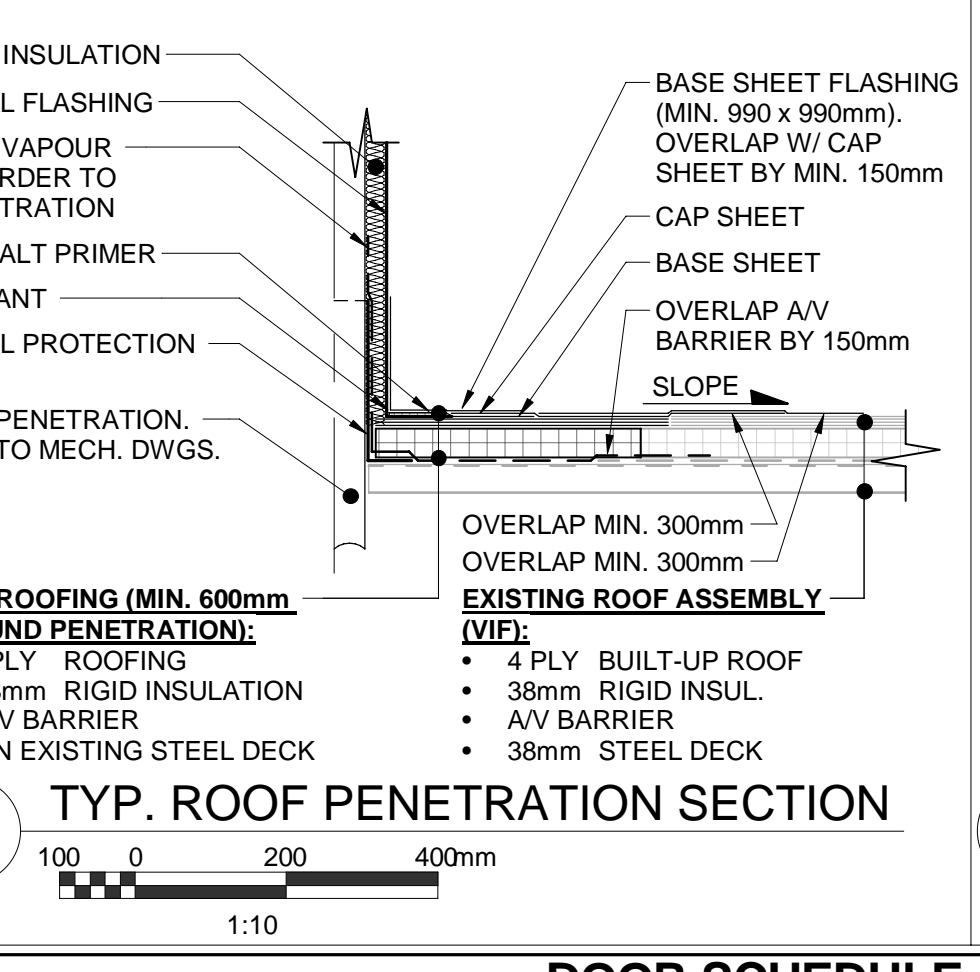
1 HOUR FIRE SEPARATION



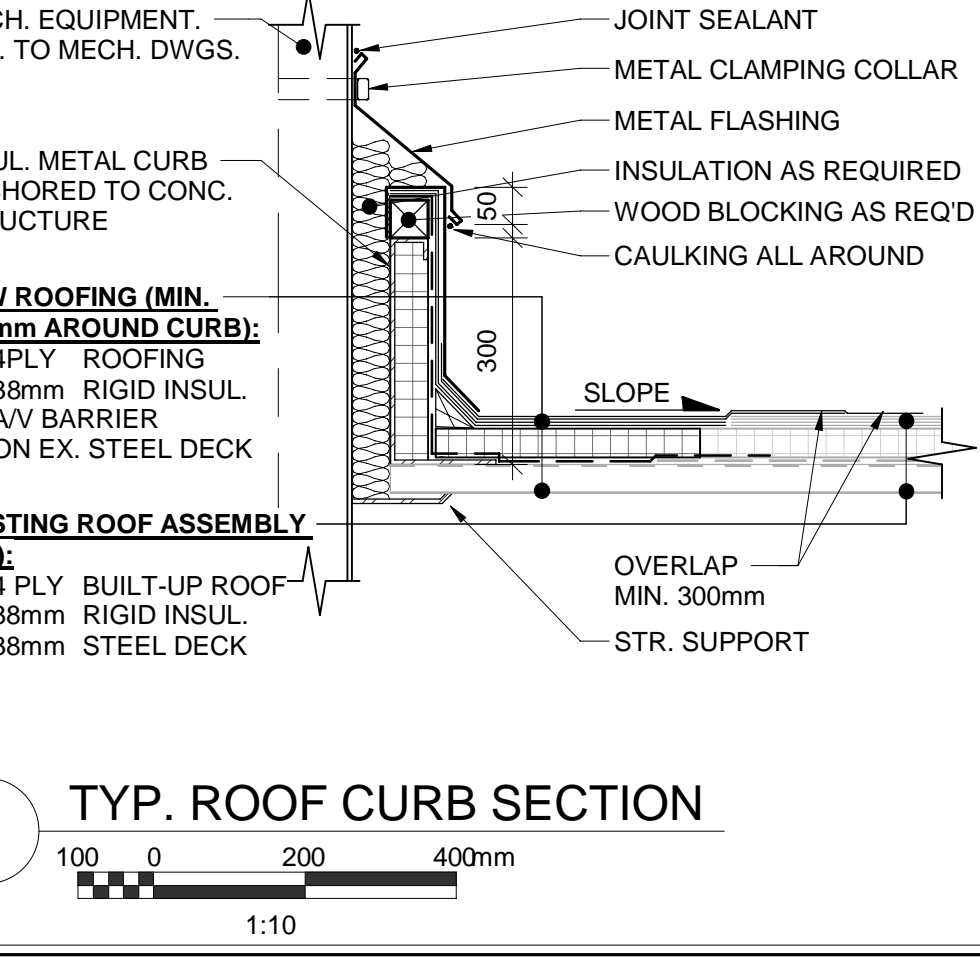
**2 LOUVER SECTION**  
100 0 200 400mm  
1:10



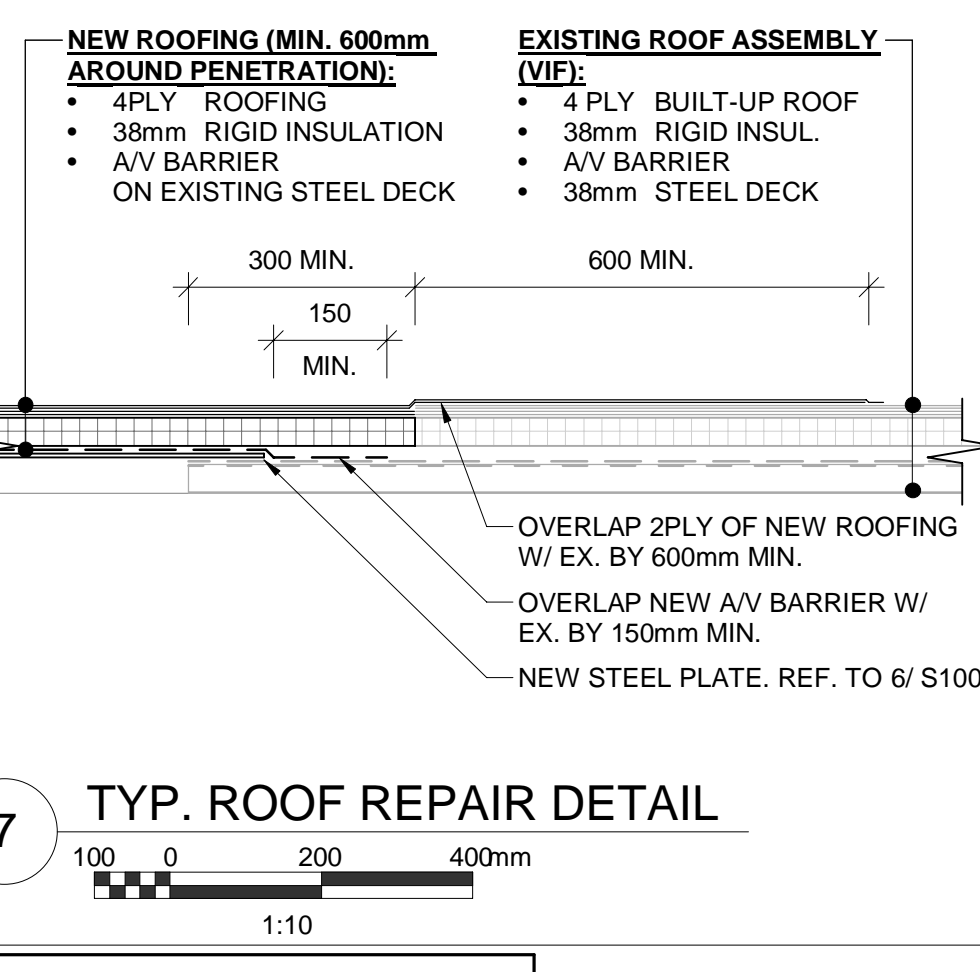
**4 TYP. FIRE RATED CMU WALL TO ROOF CONNECTION**  
100 0 200 400mm  
1:10



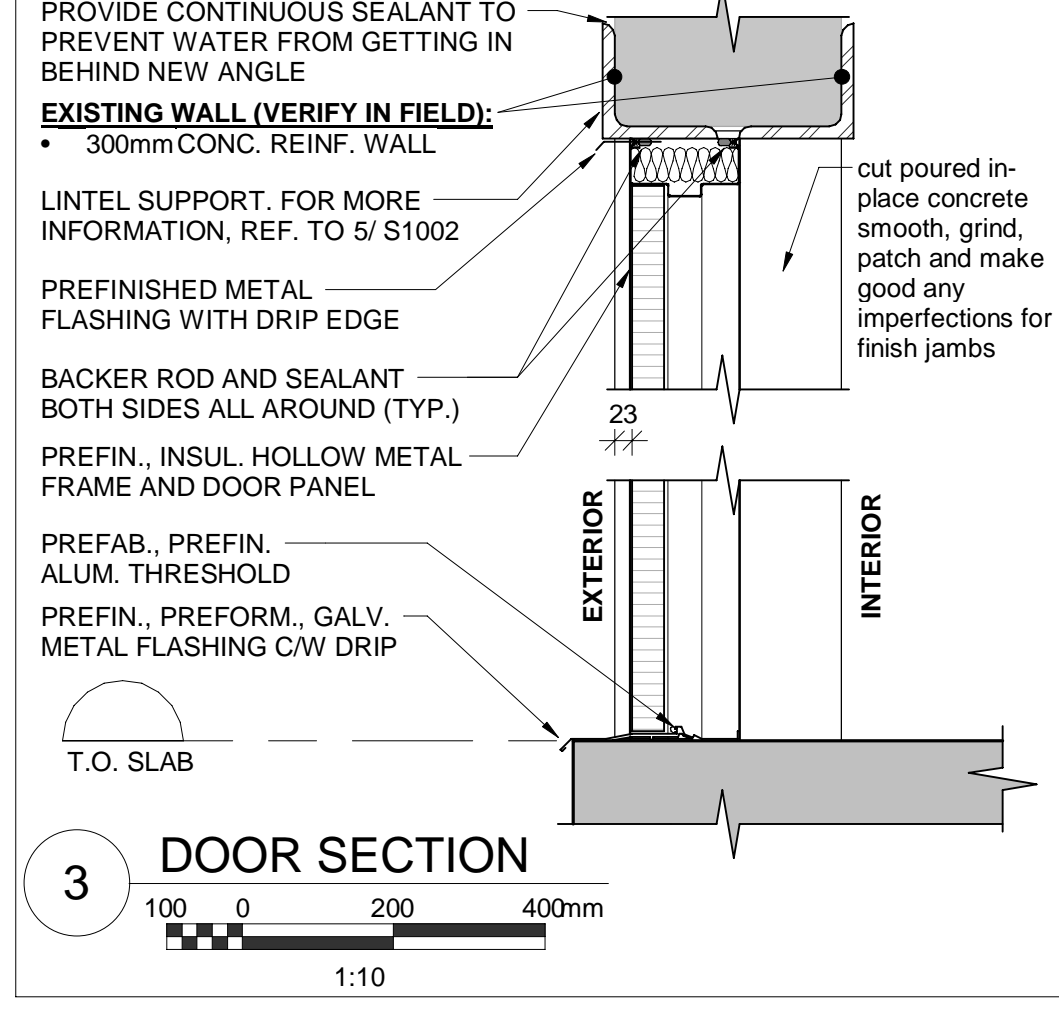
**5 TYP. ROOF PENETRATION SECTION**  
100 0 200 400mm  
1:10



**6 TYP. ROOF CURB SECTION**  
100 0 200 400mm  
1:10



**7 TYP. ROOF REPAIR DETAIL**  
100 0 200 400mm  
1:10



**3 DOOR SECTION**  
100 0 200 400mm  
1:10

No.		ROOM #	LOCATION	DOOR EXTERIOR PANEL TYPE	DOOR INTERIOR PANEL TYPE	DOOR WIDTH	DOOR HEIGHT	PANEL MATERIAL	FRAME MATERIAL	FRAME FINISH	TRANSOM TYPE	TRANSOM HEIGHT	GLASS PANEL	HANDLE	HINGE	CLOSER	OPERATOR	REMARKS
D101	3	PUMP ROOM	A	850	850	2150	50	146	1									

RM#	ROOM NAME	FLOOR		WALL		CEILING		REMARKS
		MAT.	FIN.	NORTH	SOUTH	EAST	WEST	
1	CHEMICAL ROOM	CONC.	EP/CRT	CONC.	PT	CONC.	PT	CRT IN CONTAINMENT AREA UP TO CURB HEIGHT, USE FLAKE EPOXY COATING SYSTEM (SEE SPECS)
2	BLOWER ROOM	CONC.	EP	CONC.	PT	CONC.	PT	USE FLAKE EPOXY COATING SYSTEM (SEE SPECS)
3	PUMP ROOM	CONC.	EP	CONC.	PT	CONC.	PT	USE FLAKE EPOXY COATING SYSTEM (SEE SPECS)

LOUVRE SCHEDULE				
TYPE	COUNT	HEIGHT	WIDTH	REMARKS
L01	1	1250	1250	
L02	1	850	850	

**MUNICIPALITY OF West Elgin**

CONTRACT NO. WE-2024-01

**RVA R.V. ANDERSON ASSOCIATES LIMITED**  
Innovative solutions for complex challenges

**ONTARIO ASSOCIATION OF ARCHITECTS**  
RVA 215817 of ARCHITECTS  
May 13, 2024  
MOHAMED ABDEL LATIF  
LICENCE 7896

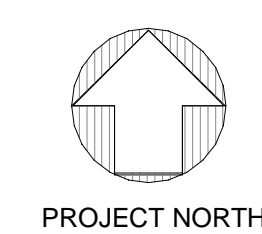
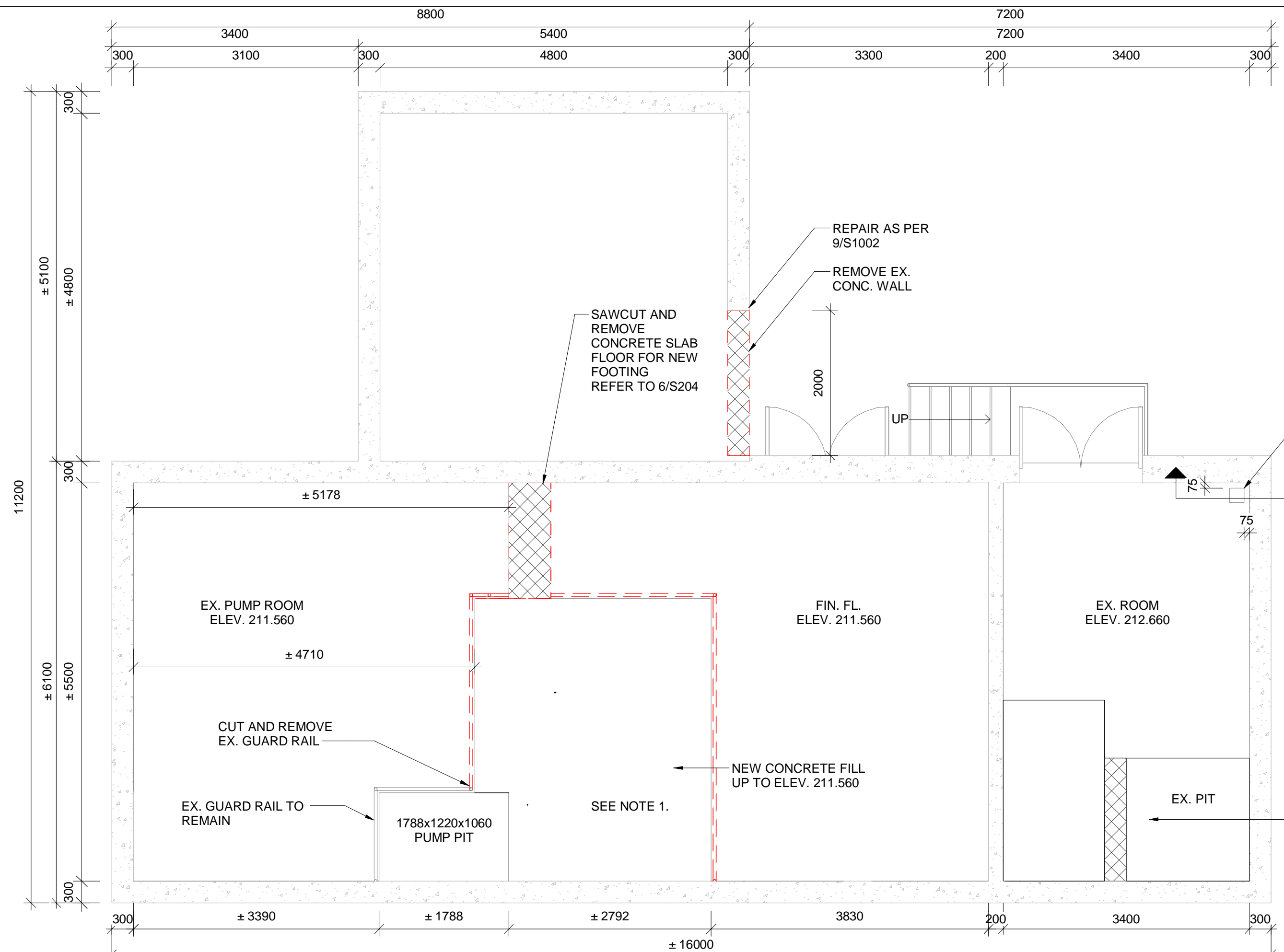
**RODNEY WPCP UPGRADES**

ARCHITECTURAL

**CONTROL BUILDING B PLANS, DETAILS AND SCHEDULES**

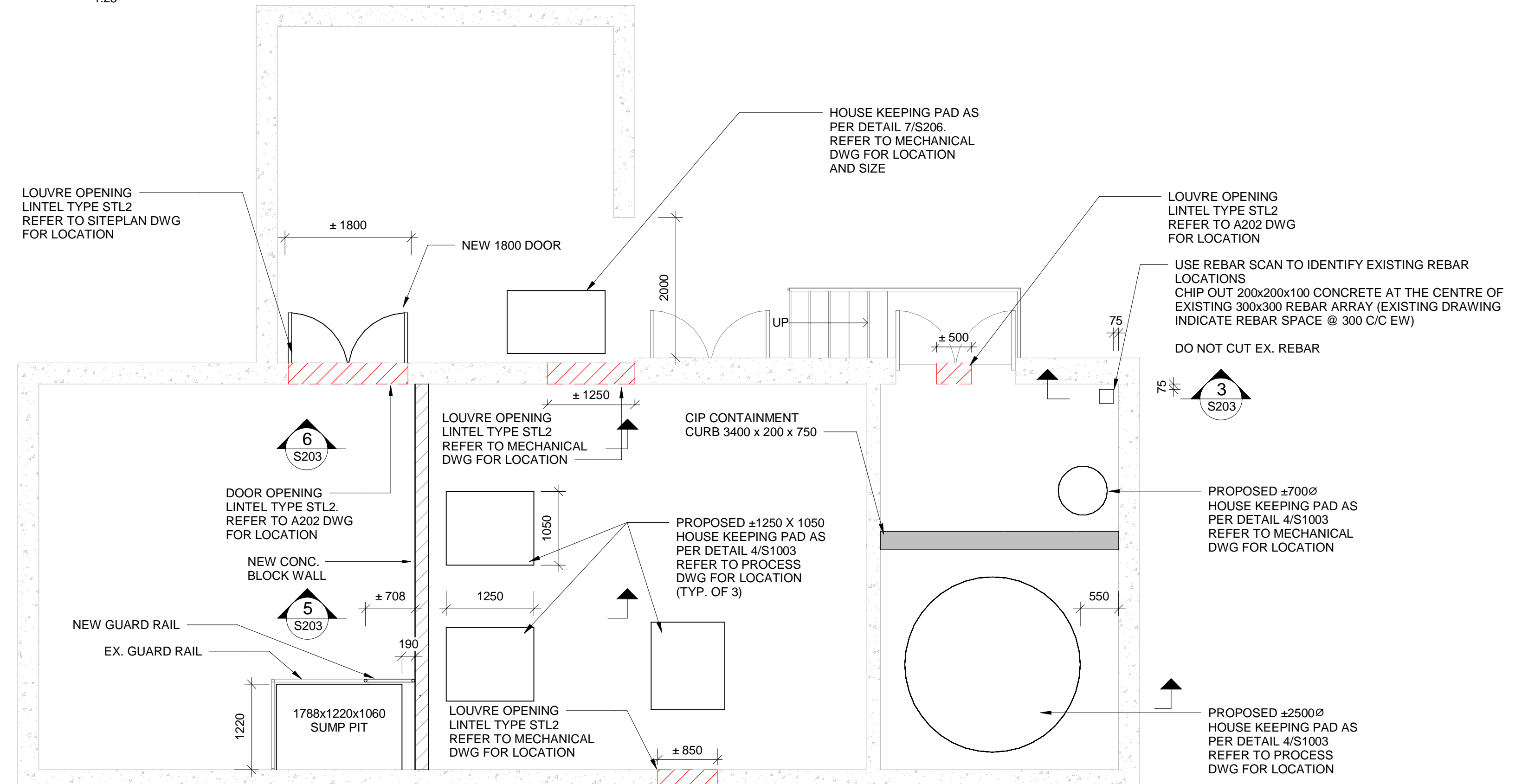
Scale: AS SHOWN  
Date: JAN 2024  
Drawn by: AP  
Checked by: AWD

RVA Project No: 215817  
Designed by: SAD  
Approved by: TSY  
DWG NO. A202



LEGEND	
	EXISTING
	NEW
	EXISTING CONCRETE
	CONCRETE
	CELLULAR GROUT
	MASONARY

1 MAIN FLOOR DEMOLITION PLAN  
250 0 500 1000mm  
1:25



**GENERAL:**

- CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
- EXISTING DIMENSIONS ARE SHOWN AS A BEST APPROXIMATION AT THE TIME OF DESIGN. ALL EXISTING DIMENSIONS MUST BE CONFIRMED ON SITE.
- EXISTING REINFORCING BARS IN THE CONCRETE FLOOR MAY CONFLICT WITH THE FLOOR LOCATION. DO NOT CUT EXISTING REINFORCEMENT. SCAN THE EXISTING FLOOR PRIOR TO DRILLING THE DOWELS AND AVOID CONFLICT.
- COORDINATE WITH PROCESS FOR PIPE OPENINGS ON THE MAIN FLOOR SLAB.
- NOT ALL LINTELS ARE SHOWN ON PLAN. REFER TO MECHANICAL, PROCESS AND ELECTRICAL DRAWINGS FOR ADDITIONAL WALL PENETRATIONS. OPENINGS WIDER THAN 300mm WOULD REQUIRE LINTEL AND PROVIDE LINTEL AS PER DETAIL 6/S207.
- CONTRACTOR TO PROVIDE SEALED SHOP DRAWING BY PROFESSIONAL ENGINEER FOR TEMPORARY SUPPORT OF WALL ABOVE LINTEL.

**CONCRETE**

- CONCRETE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF CSA - A23.1-19 AND A23.2-19.
- SUPPLY LOW-SHRINKAGE CONCRETE, SUBSECTION 8.8 TO ALTERNATIVE (1) OF TABLE 5, CSA A23.1, WITH THE FOLLOWING PERFORMANCE PROPERTIES:
  - STRENGTH - 35 MPa @ 28 DAYS
  - EXPOSURE CLASS - A1
  - SHRINKAGE LIMIT - 0.04 %
  - CURE CONCRETE FOR A MINIMUM OF 7 DAYS BY CONTINUOUS WET CURE
  - REINFORCING STEEL BARS TO CONFORM TO CSA G30.18, GRADE 400, DEFORMED

2 MAIN FLOOR PLAN  
250 0 500 1000mm  
1:25

**NOTES:**

No.	REVISION	DATE	BY
A	ISSUED FOR TENDER	2024.05.13	DC

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100  
Building 01\Revit 20XX\Control Building B.rvt  
Plot: ---



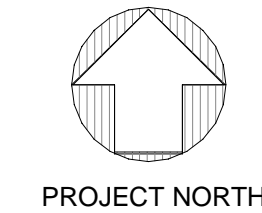
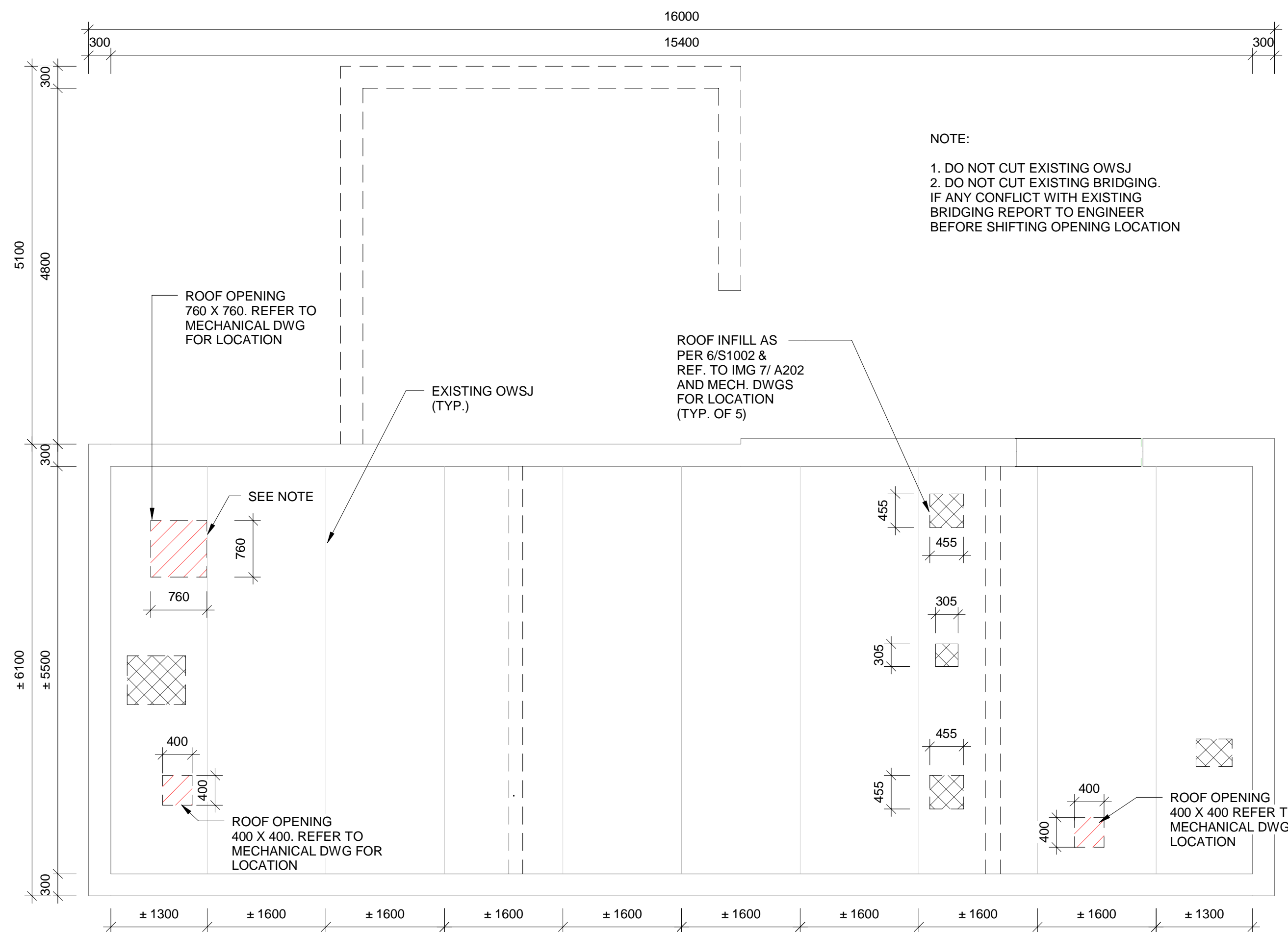
CONTRACT NO. WE-2024-01



RODNEY WPCP  
UPGRADES

STRUCTURAL  
CONTROL BUILDING B  
FLOOR PLAN

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
	S201



NOTE:  
 1. DO NOT CUT EXISTING OWSJ  
 2. DO NOT CUT EXISTING BRIDGING.  
 IF ANY CONFLICT WITH EXISTING  
 BRIDGING REPORT TO ENGINEER  
 BEFORE SHIFTING OPENING LOCATION

ROOF OPENING  
 760 X 760. REFER TO  
 MECHANICAL DWG  
 FOR LOCATION

EXISTING OWSJ  
 (TYP.)

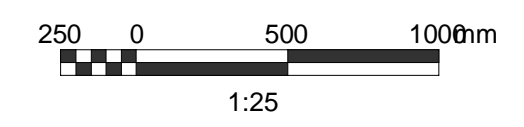
ROOF INFILL AS  
 PER 6/S1002 &  
 REF. TO IMG 7/ A202  
 AND MECH. DWGS  
 FOR LOCATION  
 (TYP. OF 5)

SEE NOTE

ROOF OPENING  
 400 X 400. REFER TO  
 MECHANICAL DWG FOR  
 LOCATION

ROOF OPENING  
 400 X 400 REFER TO  
 MECHANICAL DWG FOR  
 LOCATION

1 CEILING PLAN



NOTES:


A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100  
 Building 01\Revit 20XX\Control Building B.rvt

Plot: ---



CONTRACT NO. WE-2024-01



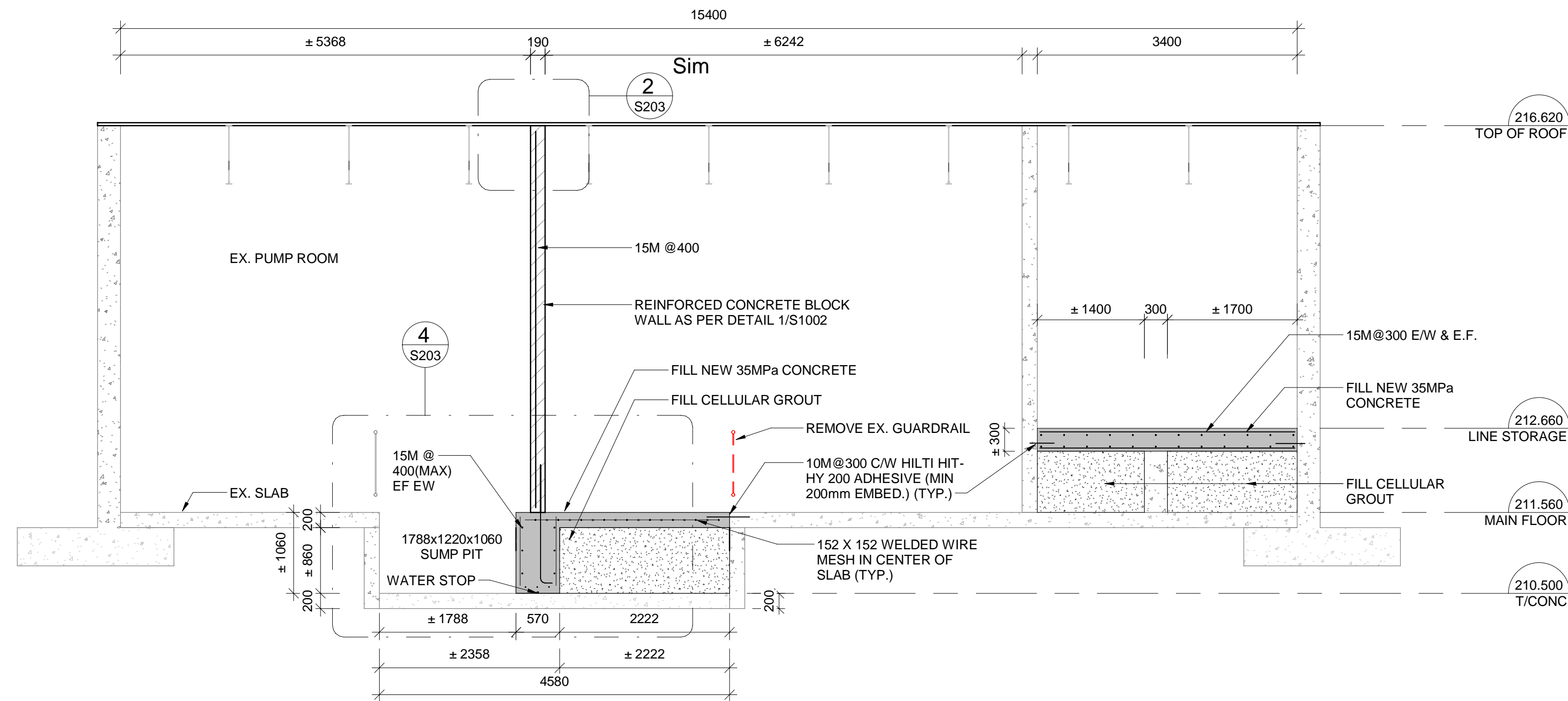
RODNEY WPCP  
 UPGRADES

STRUCTURAL  
 CONTROL BUILDING B  
 ROOF PLAN

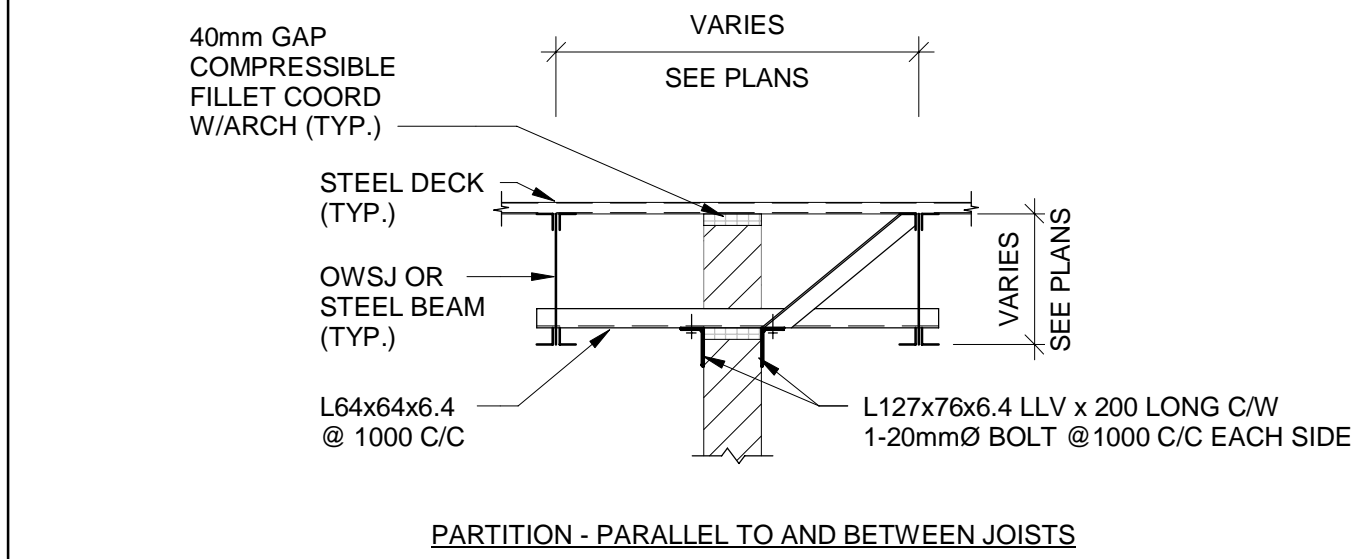
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Date: AUG 2023	DWG NO. S202
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:



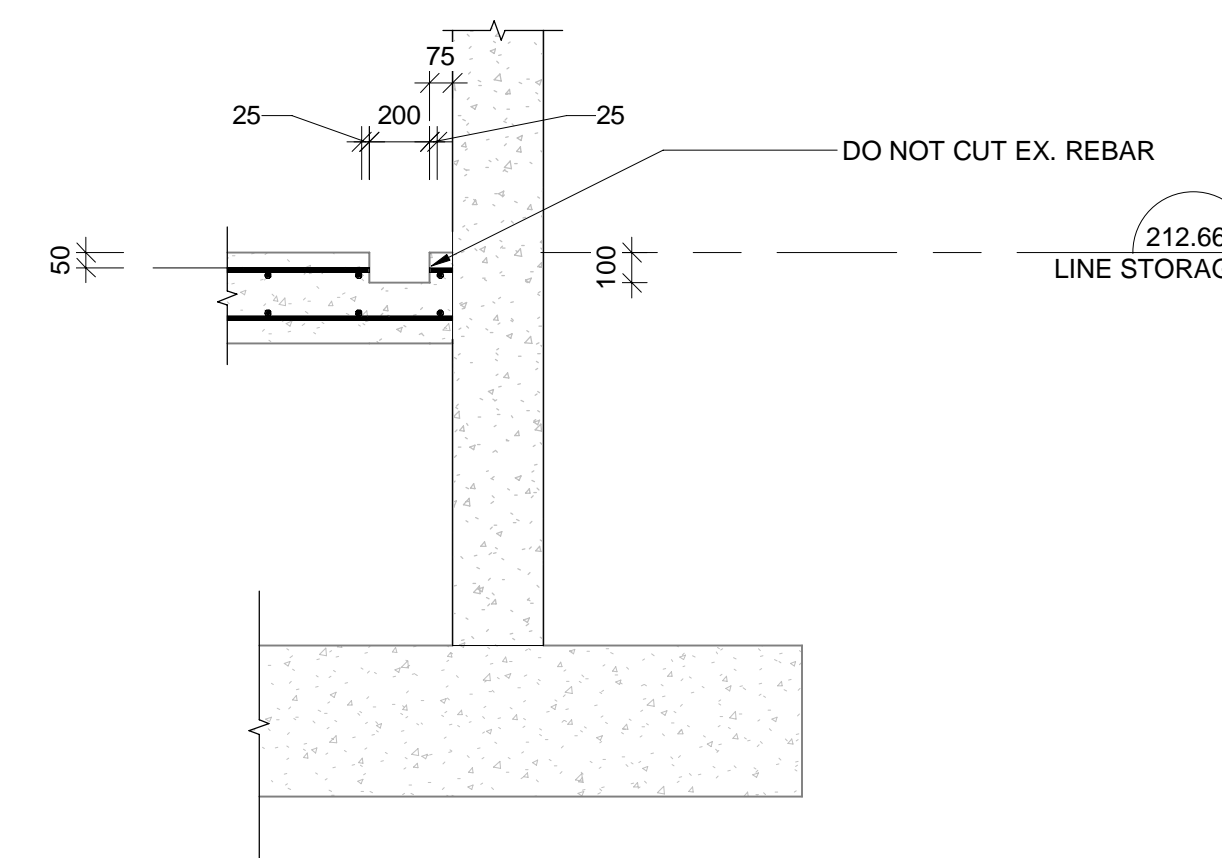
LEGEND	
	EXISTING
	NEW
	EXISTING CONCRETE
	CONCRETE
	CELLULAR GROUT
	MASONARY



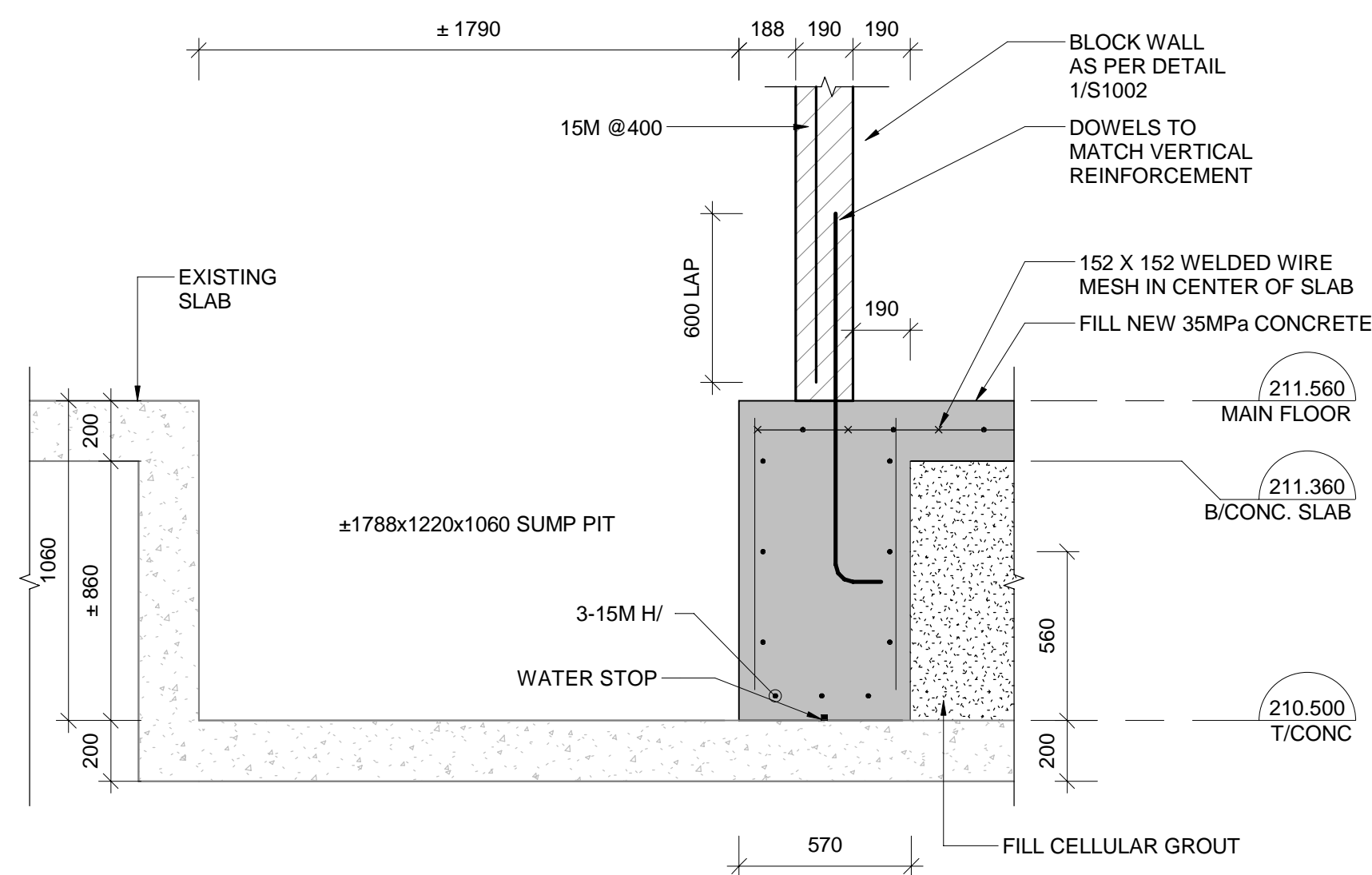
**1 SECTION VIEW**  
S201  
0.5 0 1 2 m  
1:50



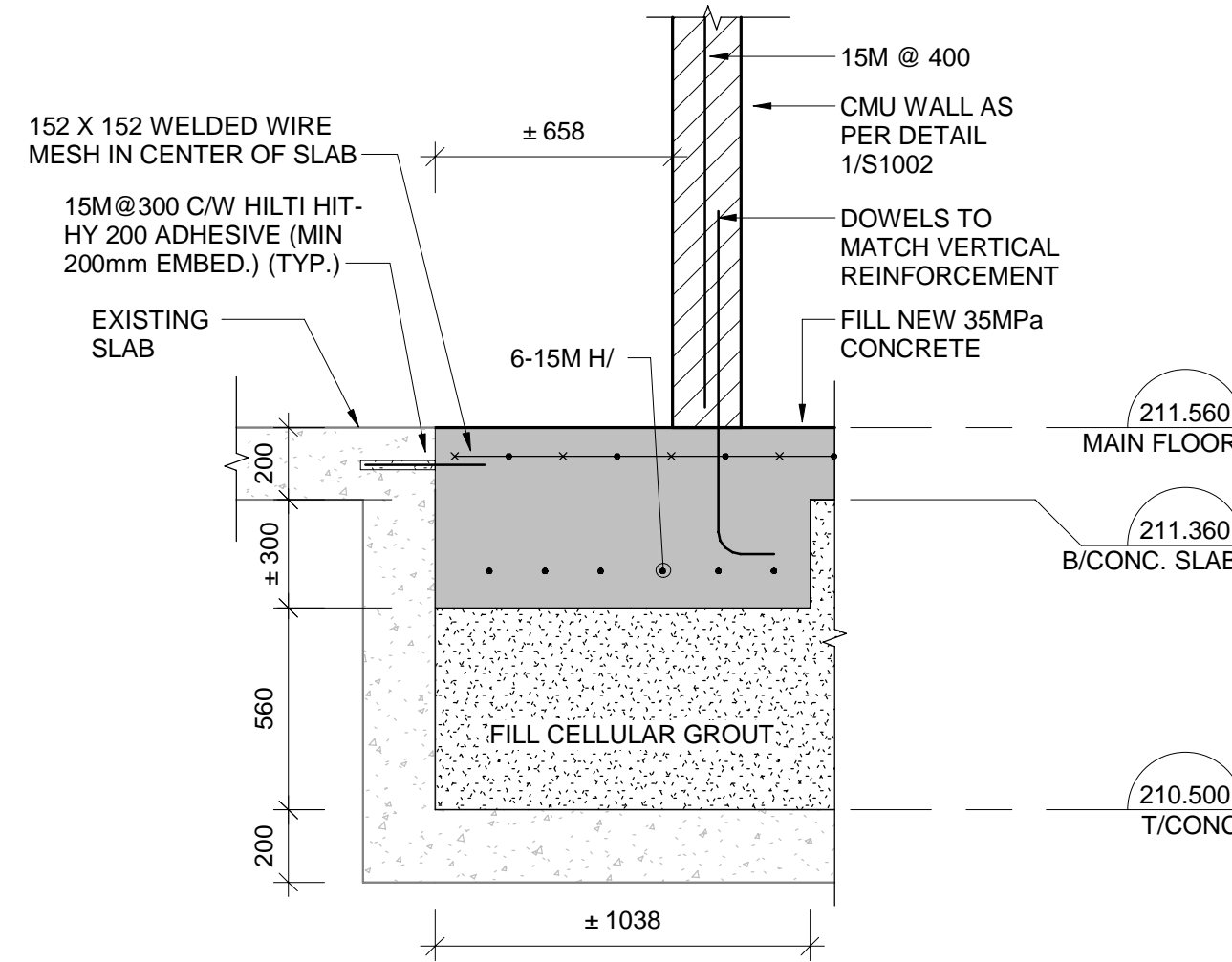
**2 CMU WALL TO U/S OF JOIST, BEAM OR DECK CONNECTION**  
S203  
250 0 500 1000mm  
1:25



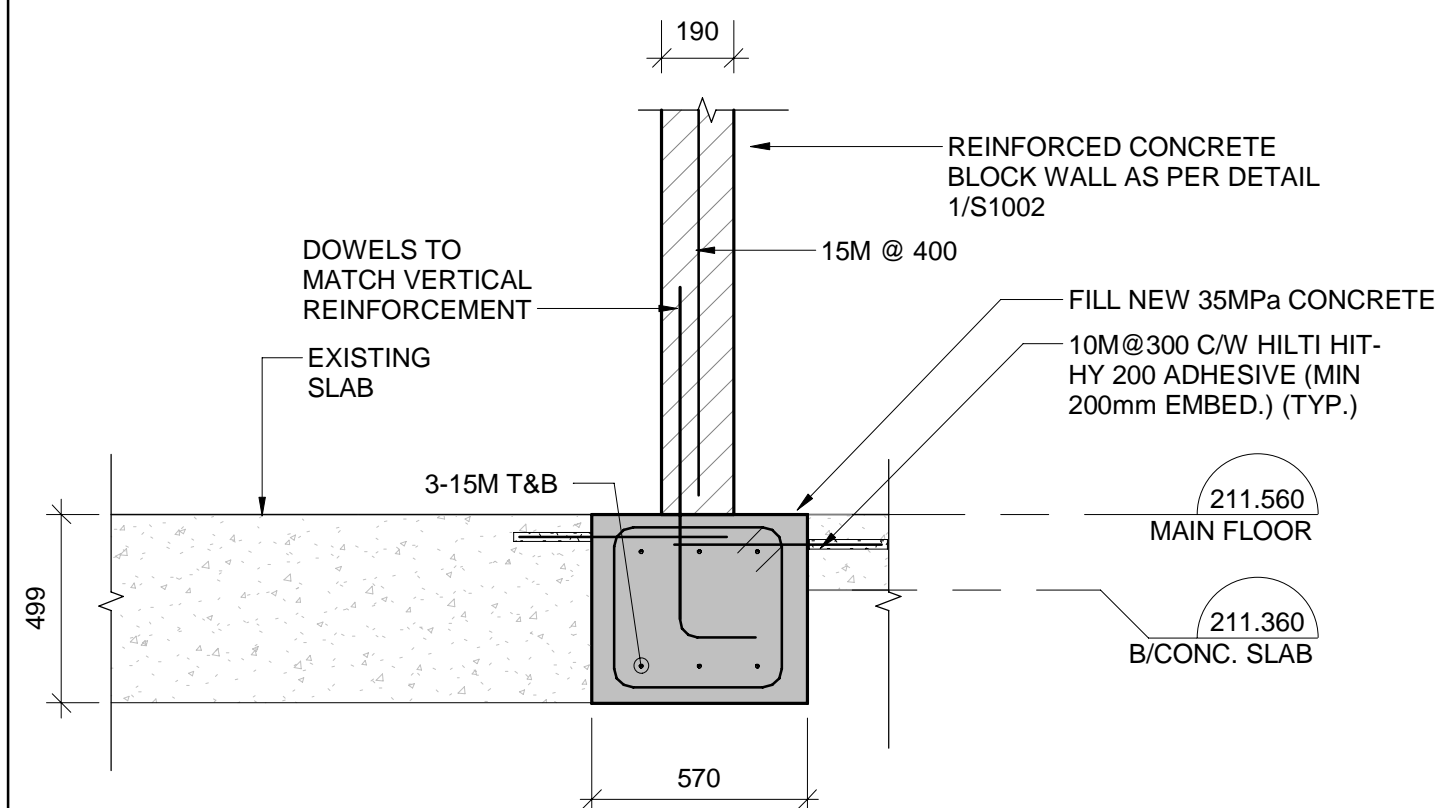
**3 SUMP PIT SECTION**  
S201  
100 0 200 400mm  
1:10



**4 SECTION**  
S201  
200 0 400 800mm  
1:20



**5 SECTION**  
S201  
200 0 400 800mm  
1:20



**6 SECTION**  
S201  
200 0 400 800mm  
1:20

NOTES:

No.	REVISION	DATE	DC	BY
A	ISSUED FOR TENDER	2024.05.13	DC	

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100  
Building 01\Revit 20XX\Control Building B.rvt  
Plot: ---



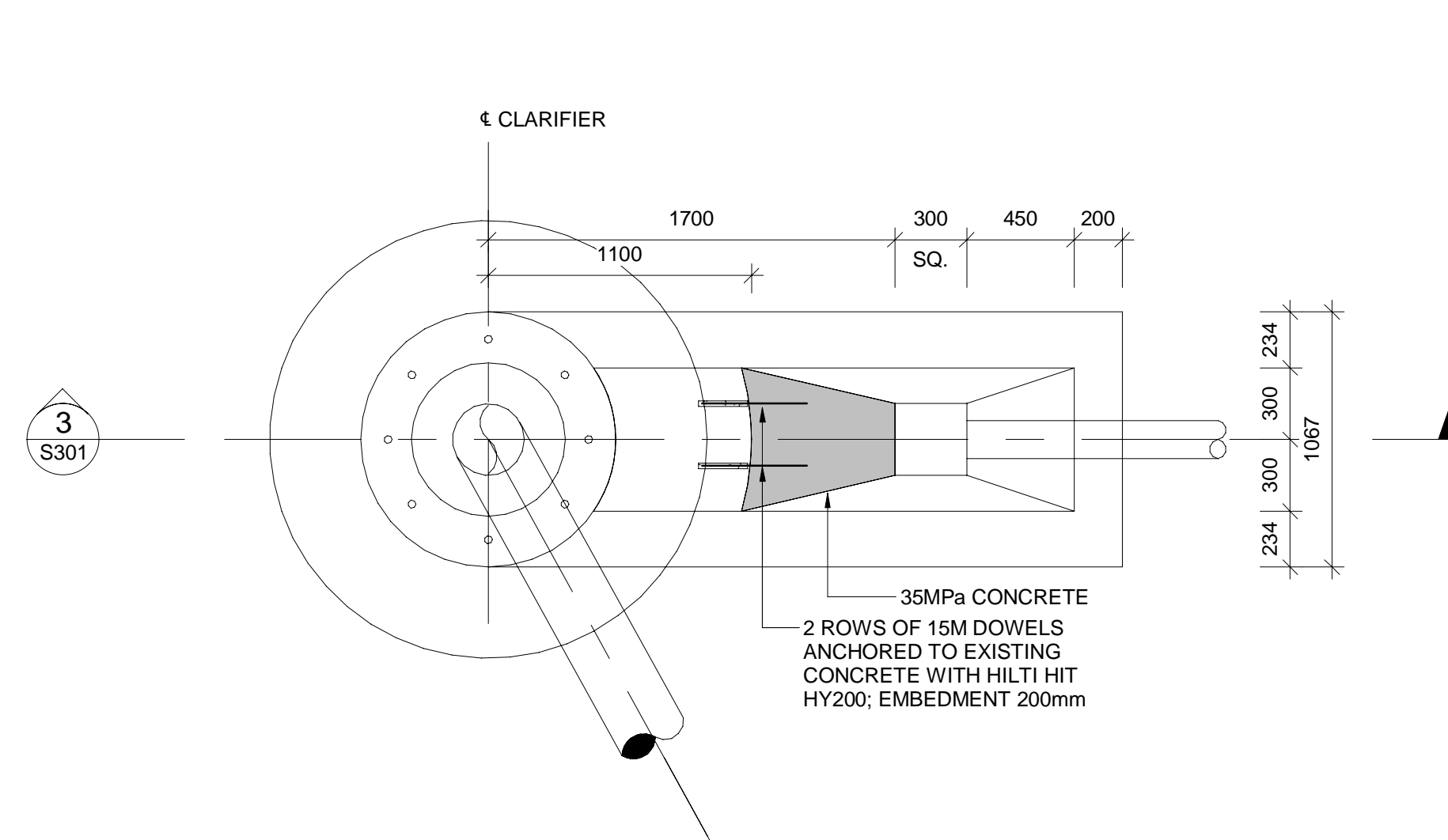
CONTRACT NO. WE-2024-01



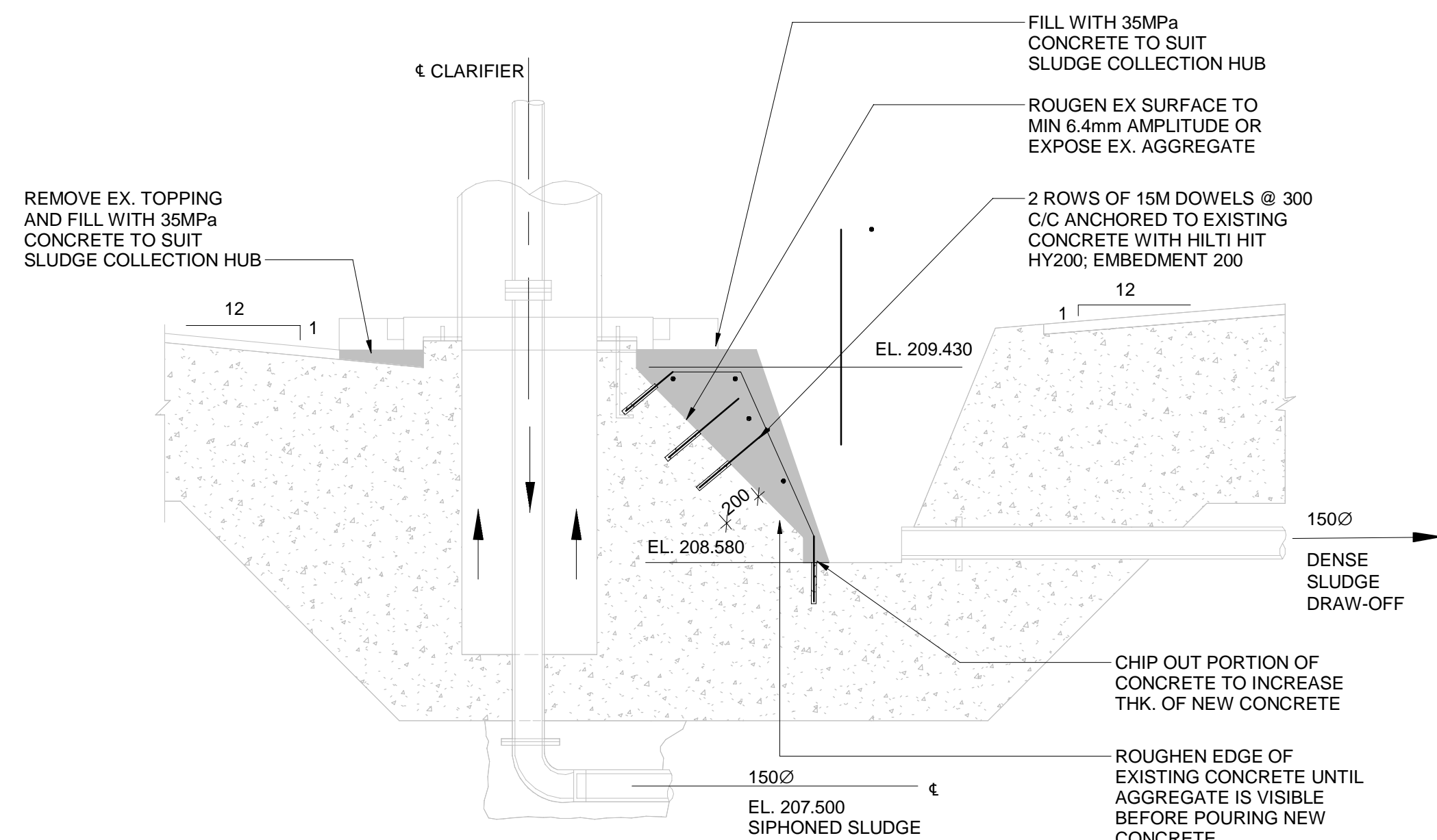
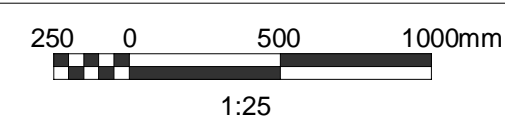
RODNEY WPCP  
UPGRADES

STRUCTURAL  
CONTROL BUILDING B  
PLANS AND SECTIONS

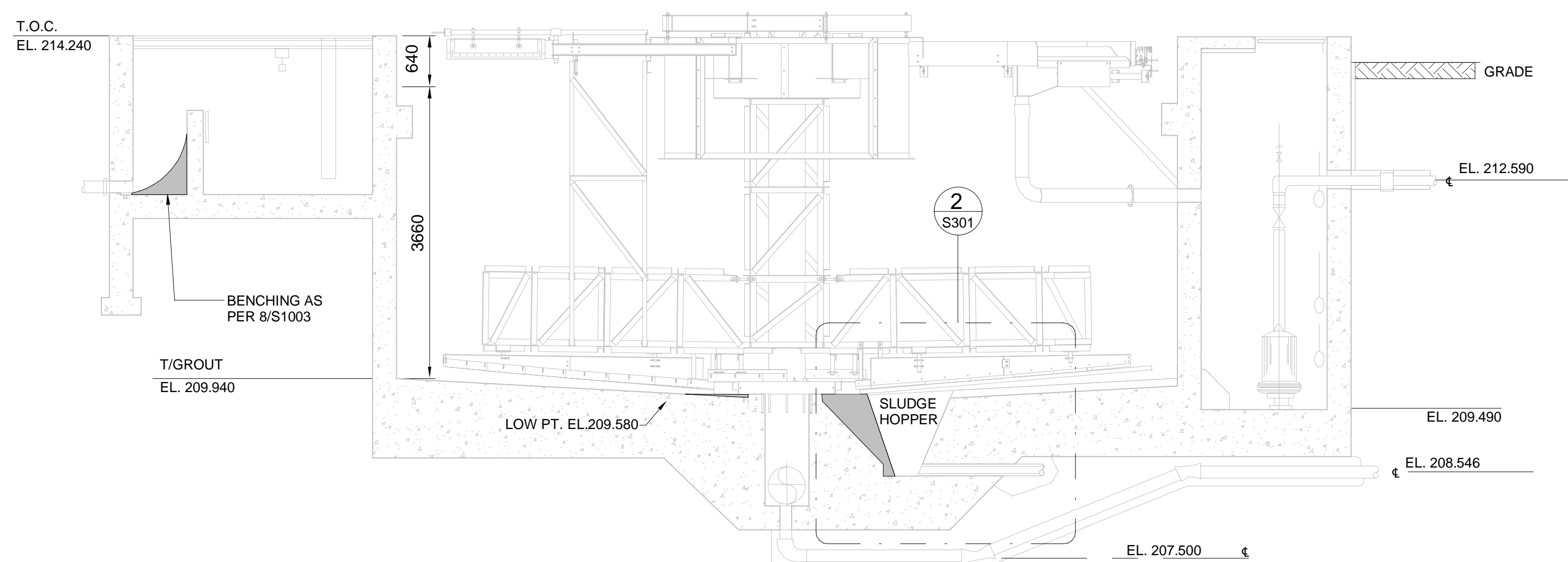
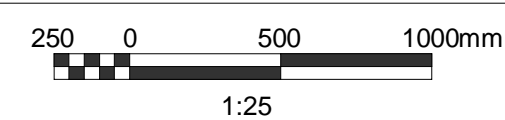
Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
	S203



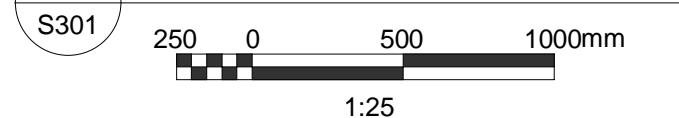
1 SLUDGE HOPPER PLAN



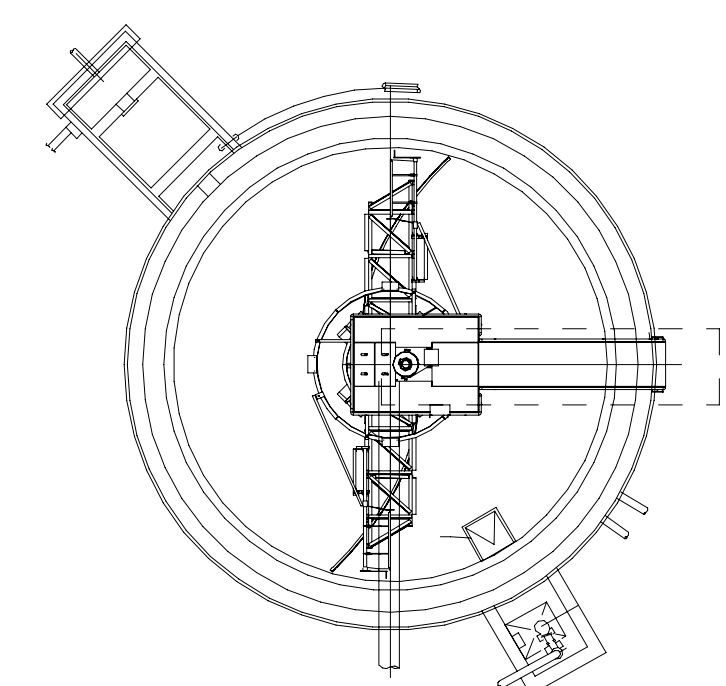
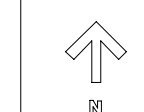
2 SECTION



3 SECTION



NOTES:



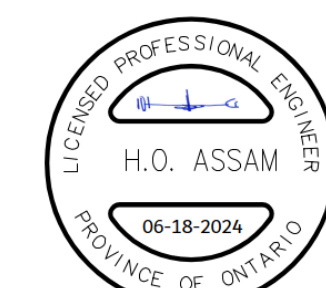
KEY PLAN

No.	REVISION	DATE	BY
A	ISSUED FOR TENDER	2024.05.13	DC

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Revit 20XX\Aeration basin.rvt  
Plot: ---



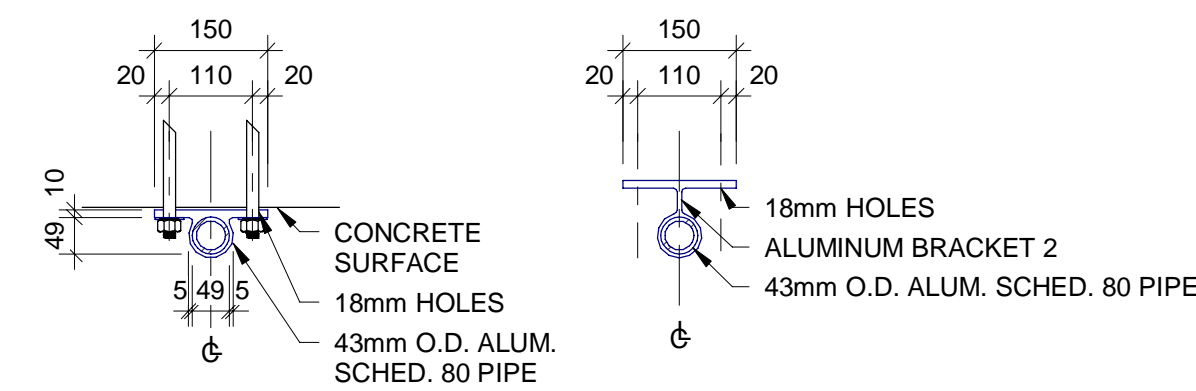
CONTRACT NO. WE-2024-01



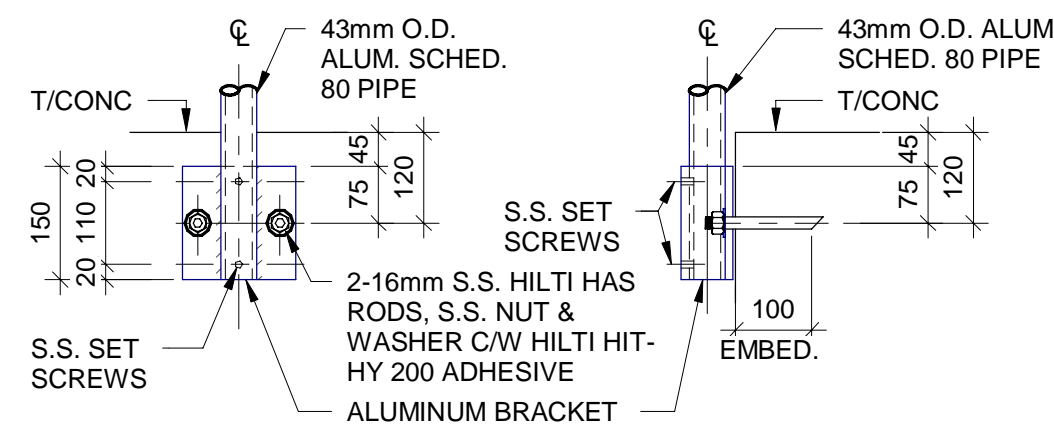
RODNEY WPCP  
UPGRADES

STRUCTURAL  
CLARIFIER  
PLAN AND SECTIONS

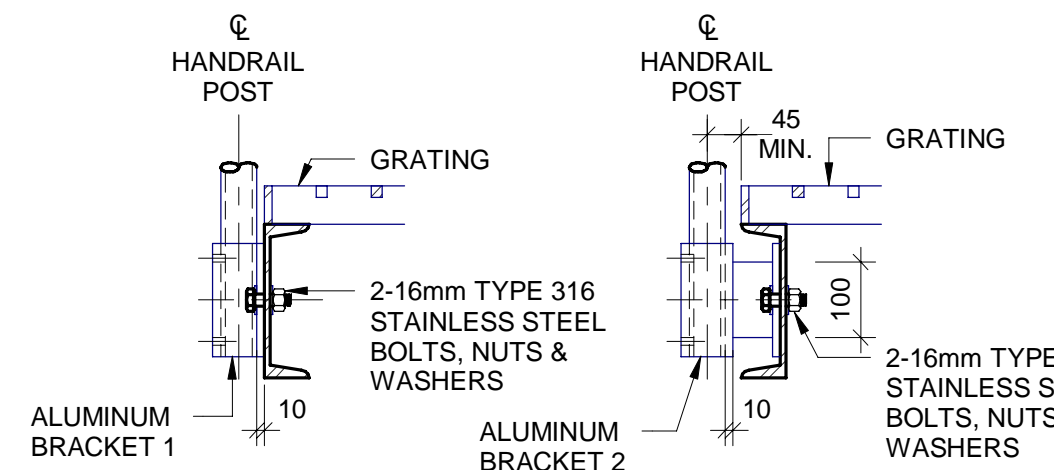
Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO. S301
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:



BRACKET 1 - PLAN VIEW BRACKET 2 - PLAN VIEW



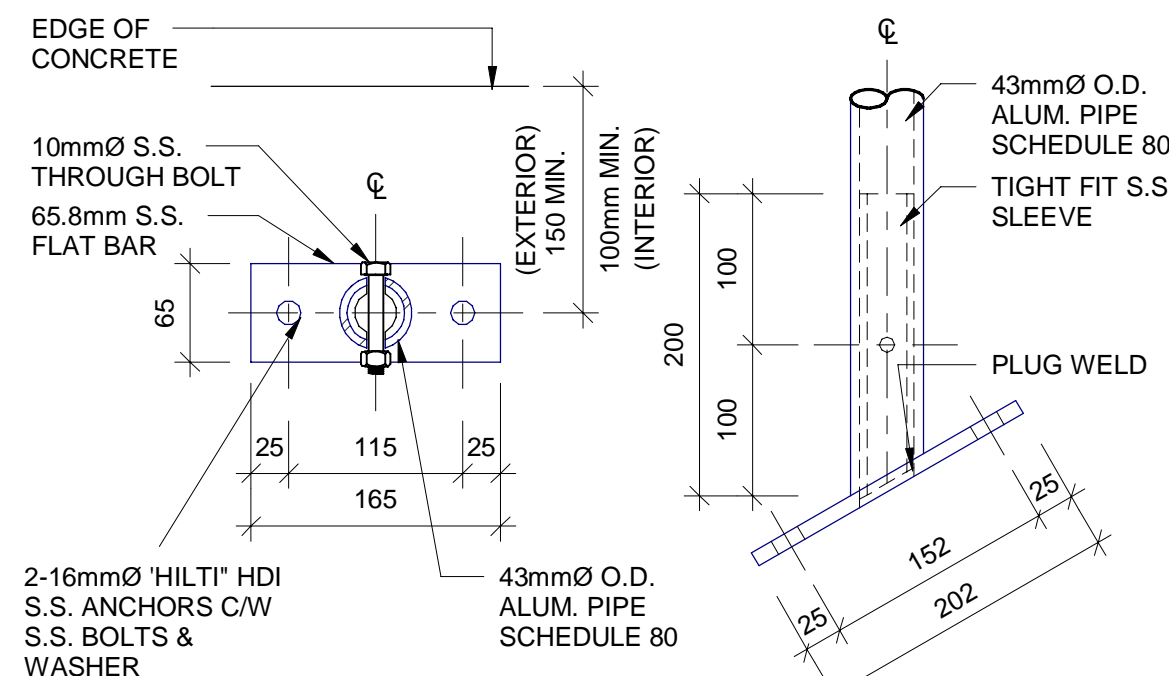
ELEVATION SIDE VIEW



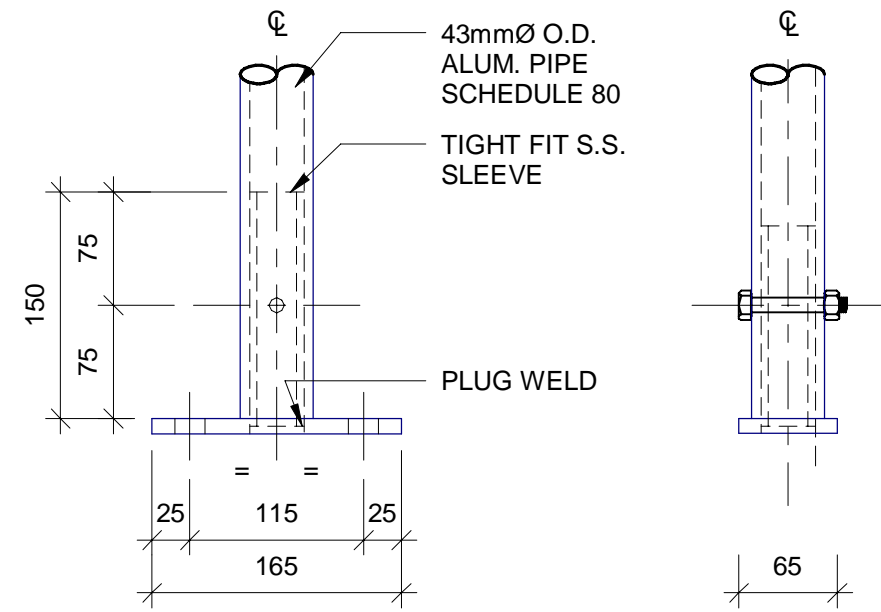
BRACKET 1 - SIDE VIEW BRACKET 2 - SIDE VIEW

- NOTES:
1. ALL ALUMINUM IN CONTACT WITH CONCRETE SHALL HAVE A MIN. OF 2 COATS OF ALUMINUM COLOURED BITUMINOUS PAINT.
  2. ALL BOLTS, NUTS AND WASHERS TO BE STAINLESS STEEL.

1 GUARDRAIL ANCHORAGE - SIDE MOUNTED  
NTS

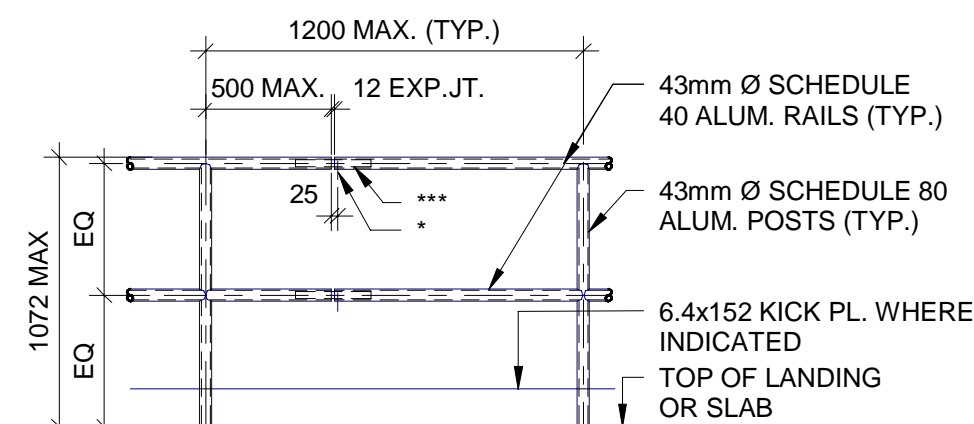


PLAN ELEVATION (BEVELED)

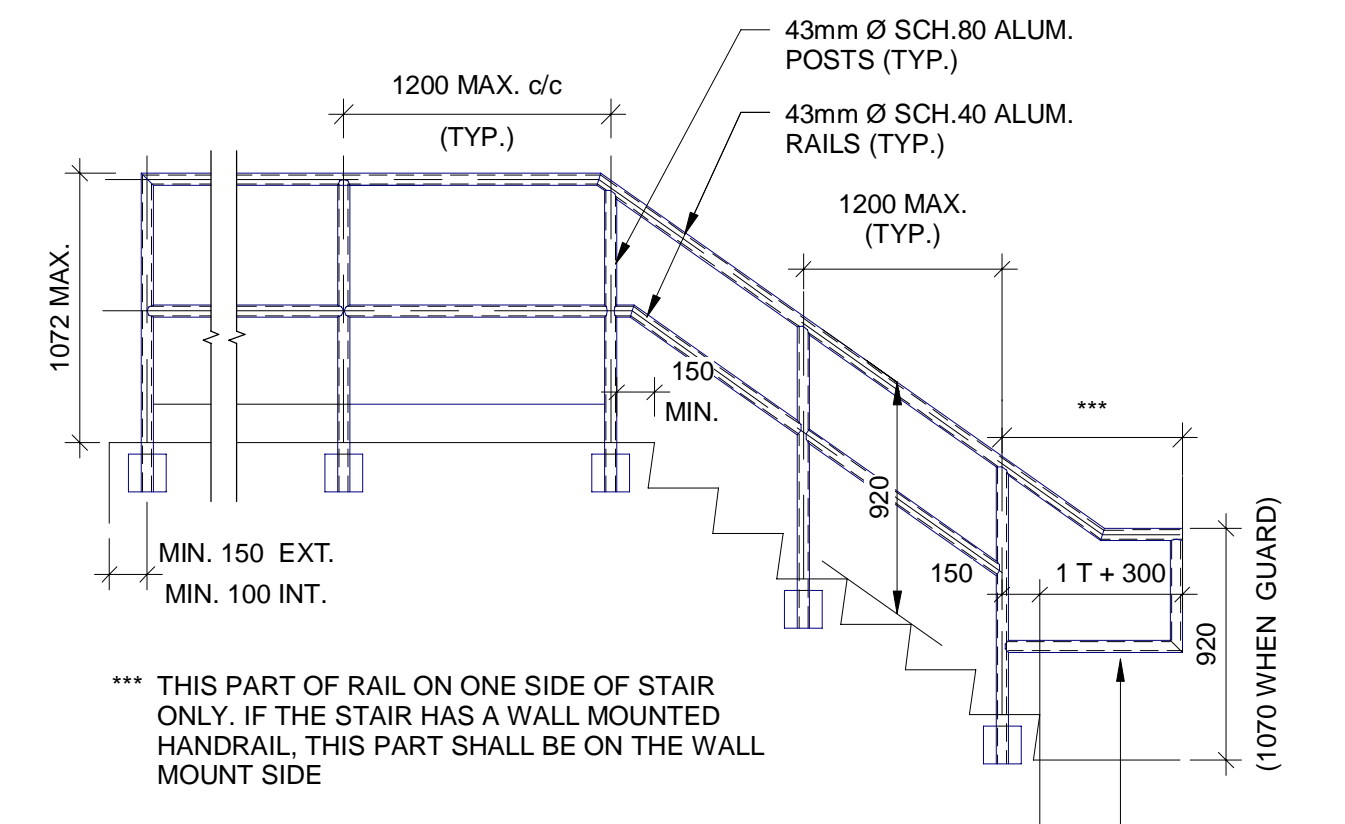


- NOTE:
1. ALL ALUMINUM IN CONTACT WITH CONCRETE SHALL HAVE A MIN. OF 2 COATS OF ALUMINUM COLOURED BITUMINOUS PAINT.
  2. ALL BOLTS, NUTS AND WASHERS TO BE STAINLESS STEEL.

2 GUARDRAIL ANCHORAGE - TOP MOUNTED  
NTS

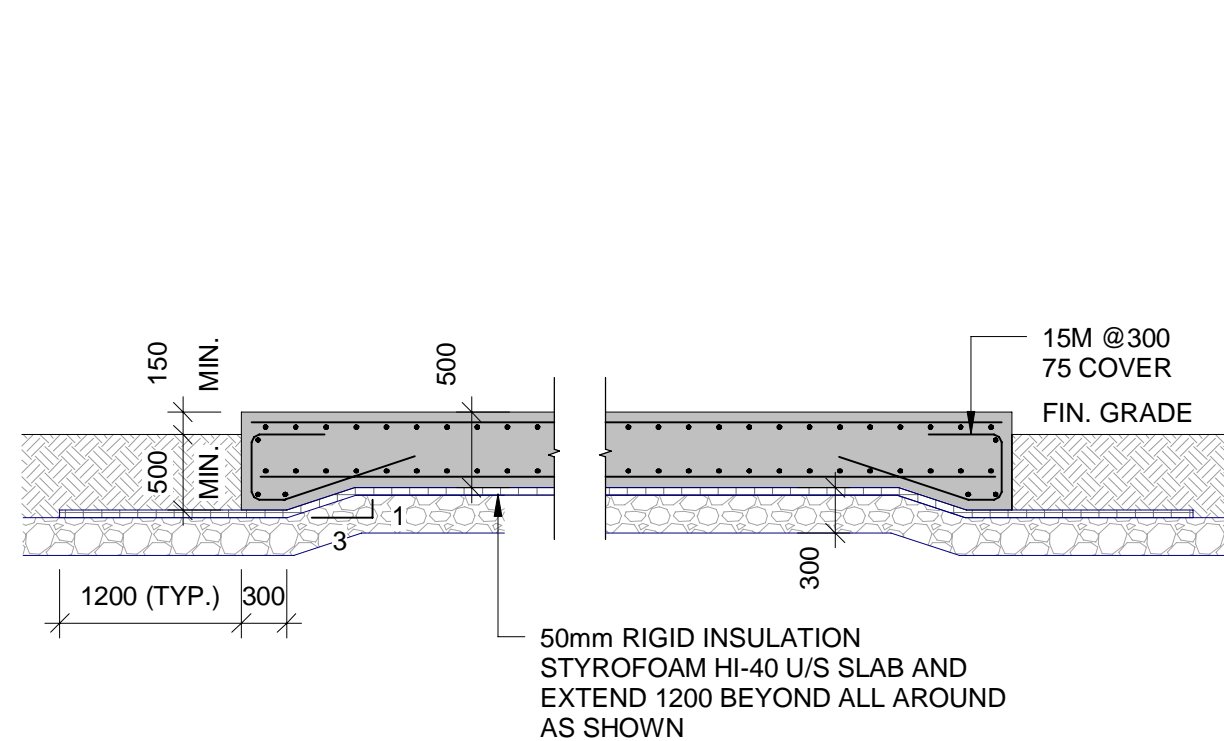


3 TYP. GUARDRAIL  
NTS



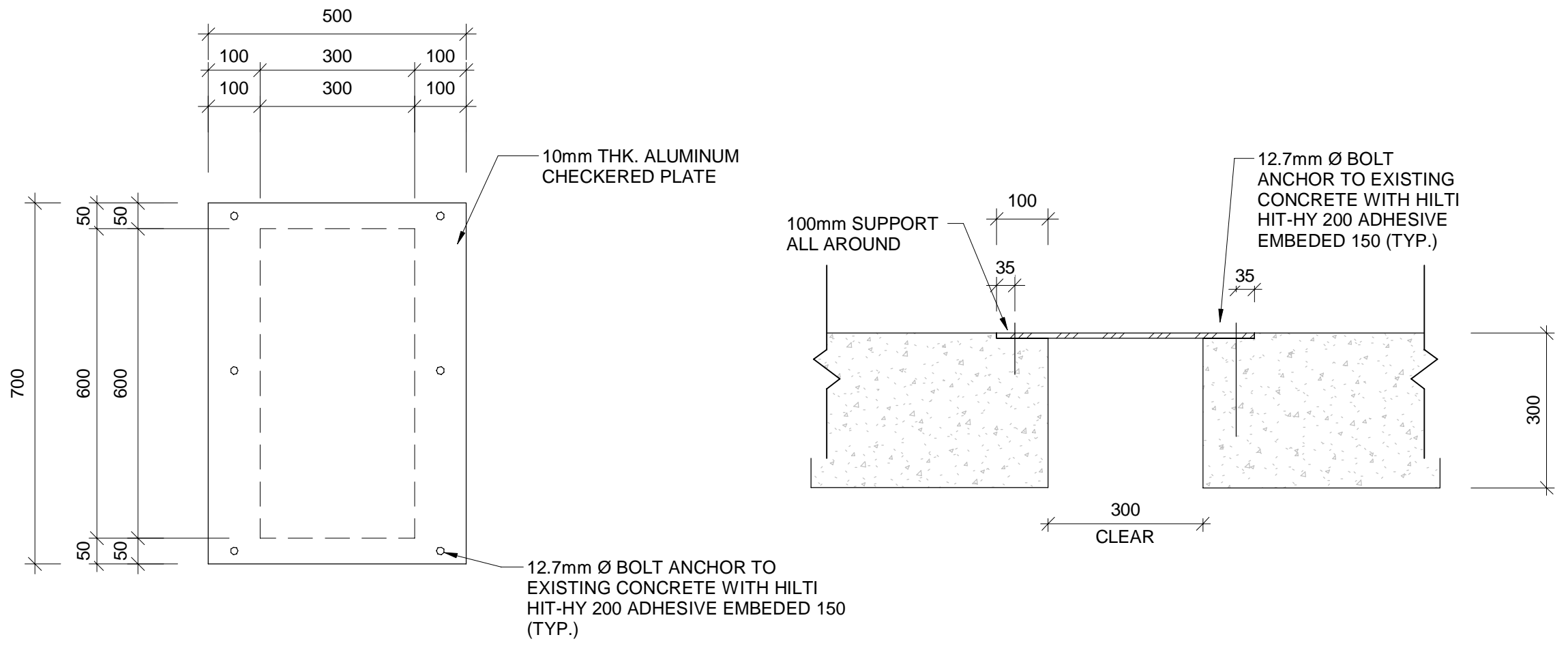
- NOTES:
1. MINIMUM SPECIFIED APPLIED LOAD PER OBC 4.1.5.15 (1), (2), (3), (4).
  2. MATERIAL SPECIFICATION: ALUMINUM PIPE 6061-T6
  3. SMOOTH AND CLEAN ALL WELDS BEFORE ANODIZING

4 TYP. STAIR GUARDRAIL  
NTS



- NOTES:
1. REMOVE ALL TOP SOIL AND ORGANIC MATERIALS AND BACKFILL MINIMUM DEPTH OF 300mm, WITH GRANULAR "B" MATERIAL COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
  2. REINFORCE SLAB WITH 15M @ 200 TOP AND BOTTOM IN BOTH DIRECTIONS.
  3. USE 35MPa STRENGTH CLASS C-1 CONCRETE (SEE SPECIFICATIONS).

5 EXTERIOR CONCRETE PAD DETAIL  
NTS



6 CHECKER PLATE  
NTS

NOTES:

A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY
File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Revit 20XX\Aeration basin.rvt			
Plot: ---			



CONTRACT NO. WE-2024-01

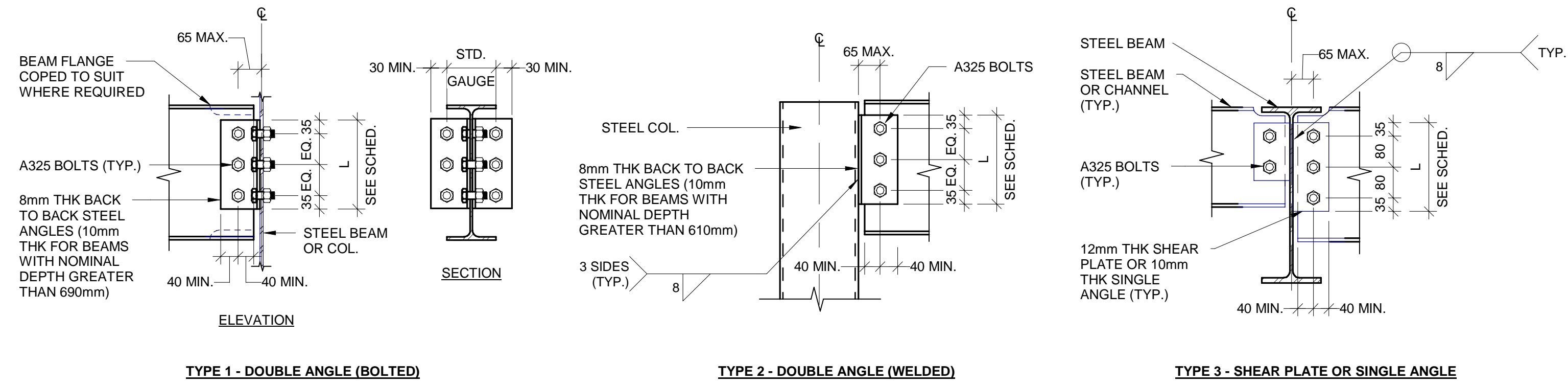


RODNEY WPCP UPGRADES

STRUCTURAL

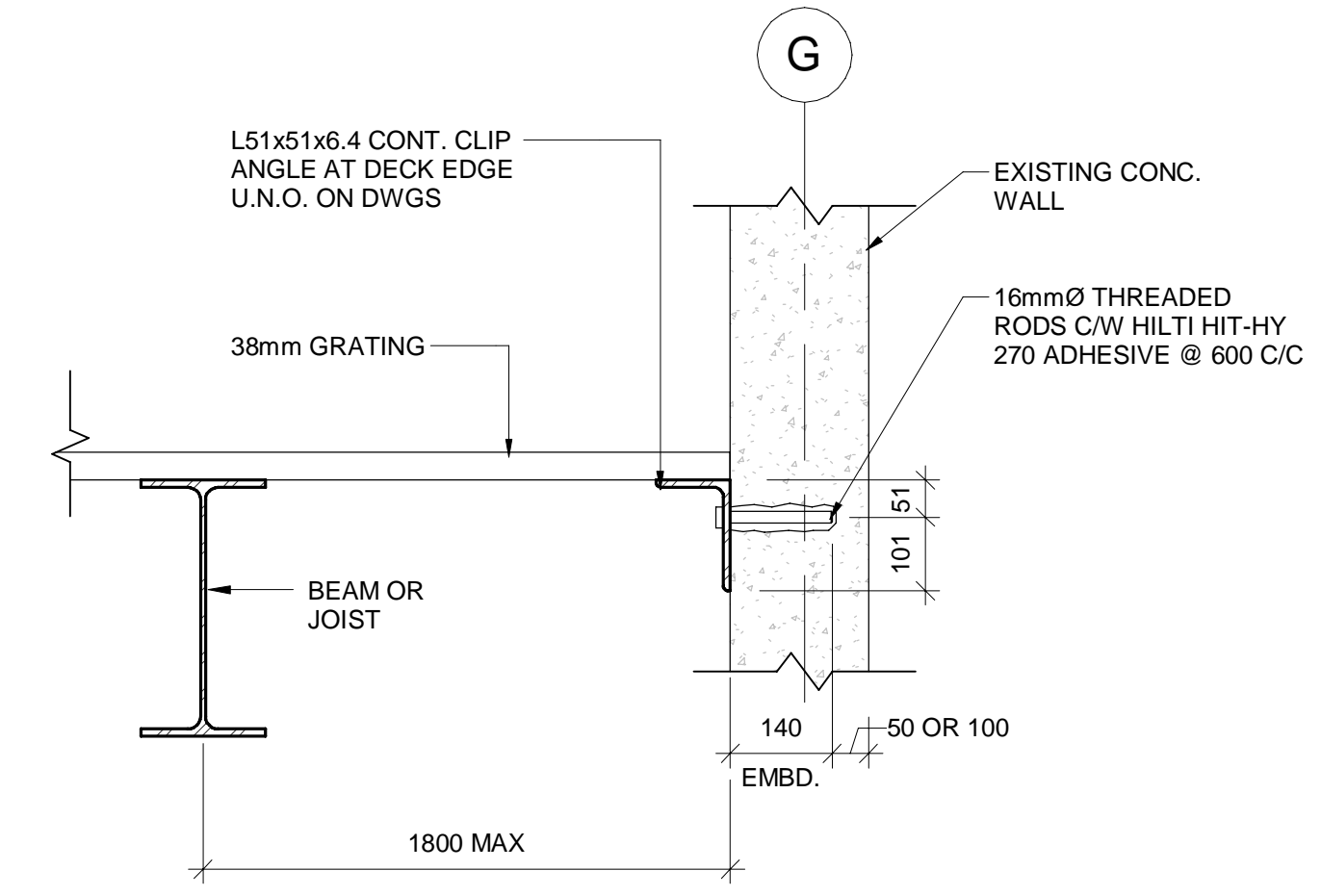
TYPICAL DETAILS

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
S1001	



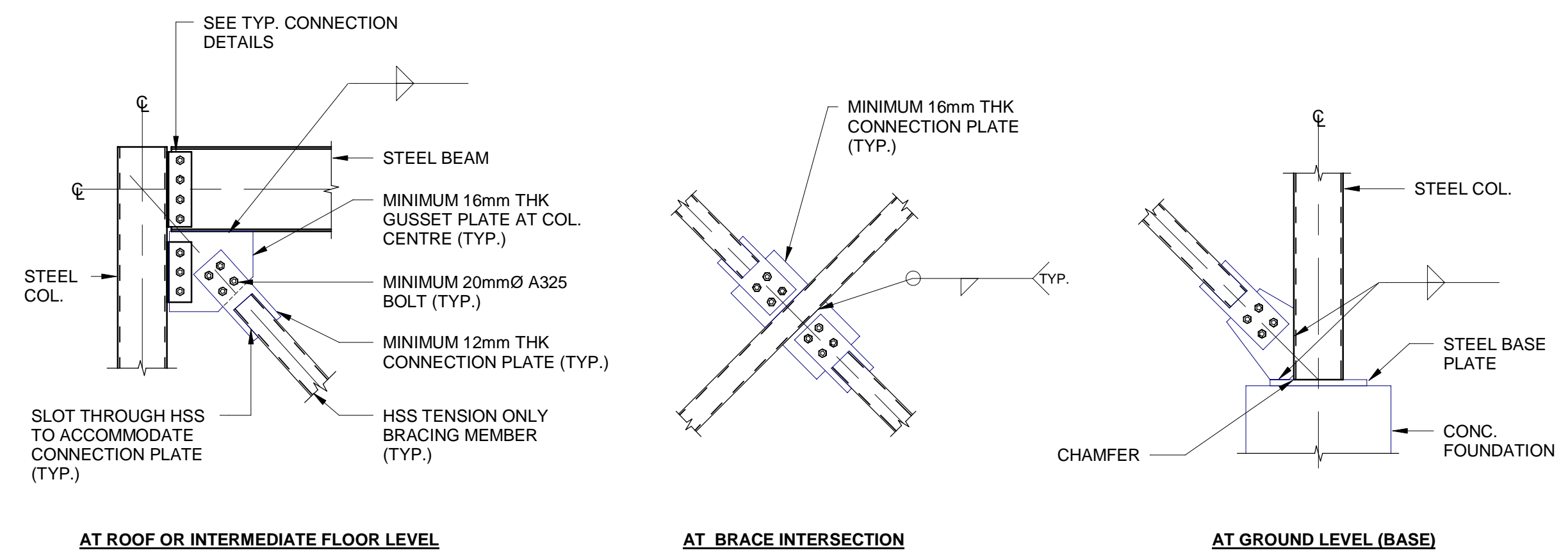
BEAM DEPTH (NOMINAL) [mm]	NO. OF BOLT ROWS	BOLT DIA. [mm]	L- ANGLE OR PLATE LENGTH [mm]	TYPE 1 & 2 SHEAR CAPACITY [kN]	TYPE 3 SHEAR CAPACITY [kN]	MIN. SUPPORTED BEAM WEB THICKNESS [mm]	NOTES
920	10	22	790	2120	N/A	8.9	TYPE 3 CONNECTION NOT PERMITTED
840	9	22	710	1910	N/A	8.9	TYPE 3 CONNECTION NOT PERMITTED
690-760	8	22	630	1700	N/A	8.9	TYPE 3 CONNECTION NOT PERMITTED
610	7	20	550	1230	613	6.0	
530	6	20	470	1050	526	6.0	
460	5	20	390	876	438	6.0	
410	4	20	310	701	350	6.0	
310-360	3	20	230	526	263	6.0	
200-250	2	20	150	350	175	6.0	

**NOTE:**  
1. PROVIDE TYPE 1 AND/OR TYPE 2 CONNECTIONS UNLESS TYPE 3 IS SPECIFICALLY REQUIRED TO ACCOMMODATE STEEL ERECTION.



**1 TYP. BEAM CONNECTION DETAILS**  
NTS

**2 DETAIL - DECK SUPPORT ANGLE**  
NTS



**NOTES:**  
1. REFER TO PLANS, ELEVATIONS AND SECTIONS FOR MEMBER SIZE, ORIENTATION AND LOCATION.  
2. CONNECTIONS TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. REFER TO ELEVATIONS & SECTIONS FOR DESIGN TENSION FORCES.  
3. SUBMIT SEALED SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION.  
4. SEE SECTION 05120 FOR ADDITIONAL CONNECTION DESIGN REQUIREMENTS.

**3 TENSION ONLY CROSS BRACING**  
NTS

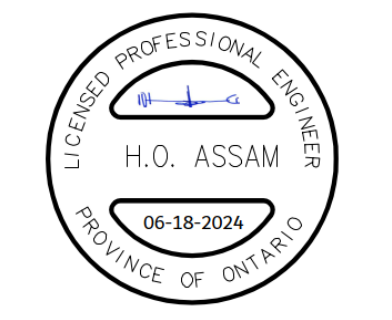
**NOTES:**

A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100 Building 01\Revit 20XX\raeration basin.rvt  
Plot: ---



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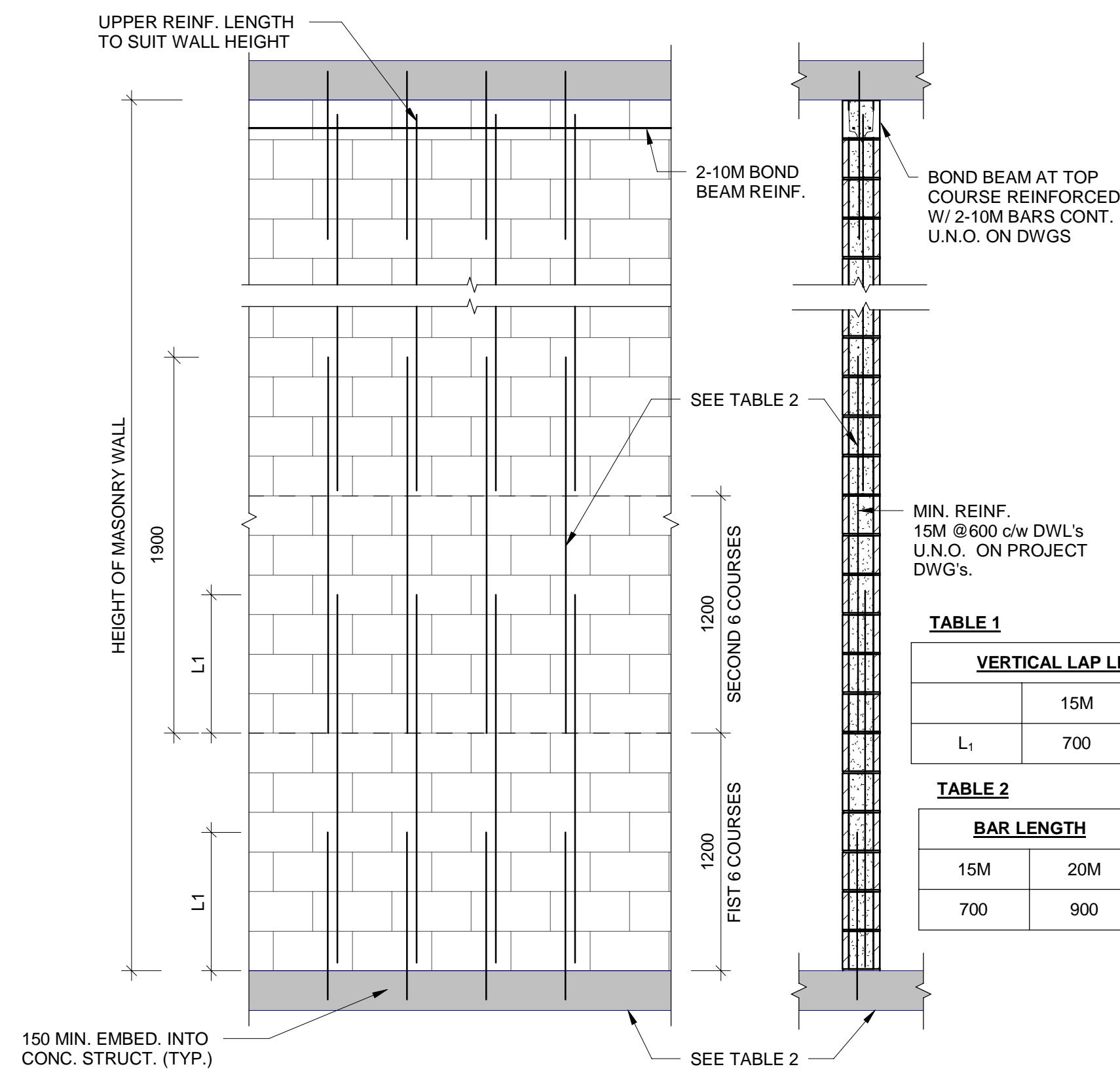


**RODNEY WPCP UPGRADES**

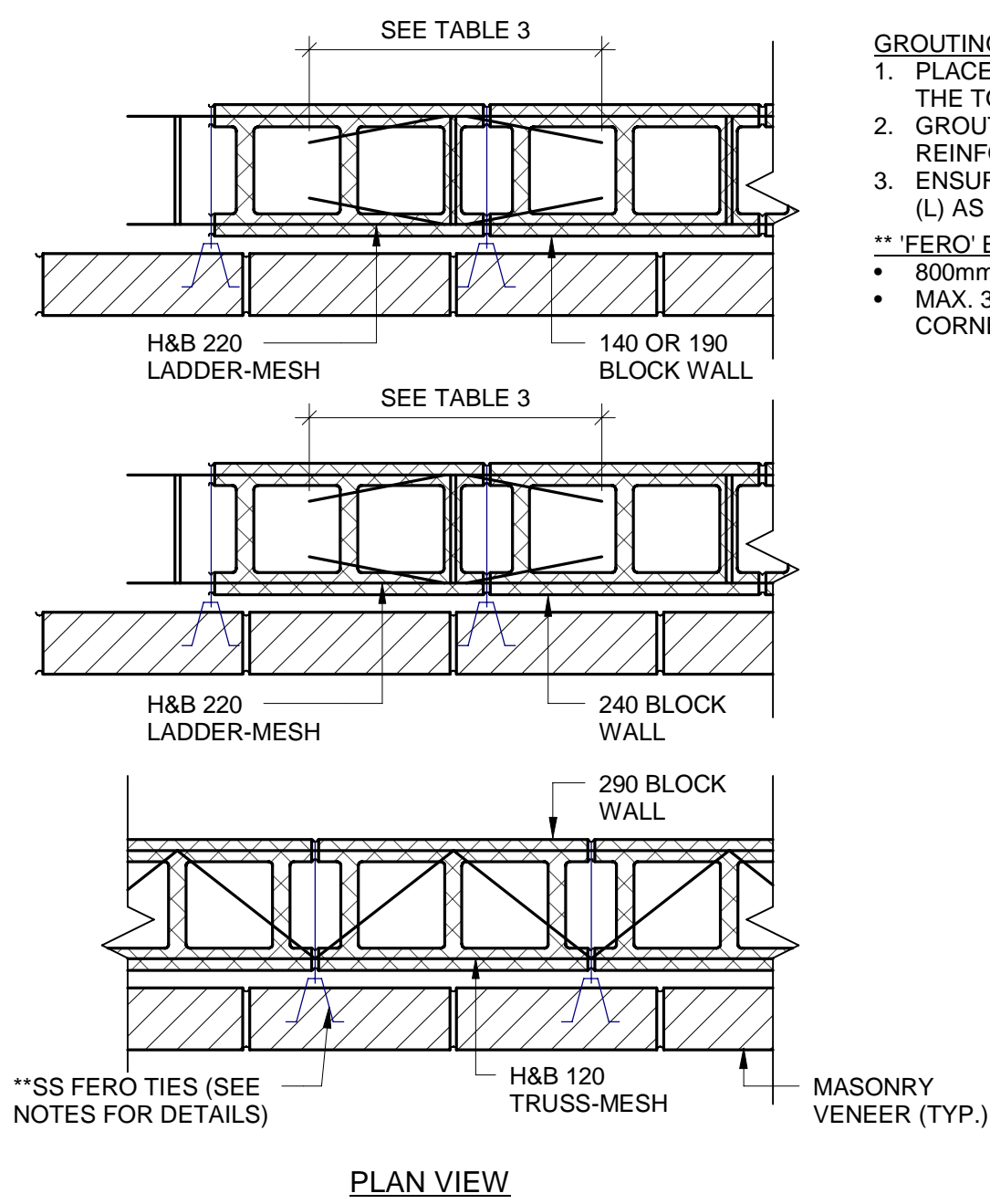
STRUCTURAL

**TYPICAL DETAILS**

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO. S1002
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:



1 MASONRY WALL REINF. DETAILS  
NTS



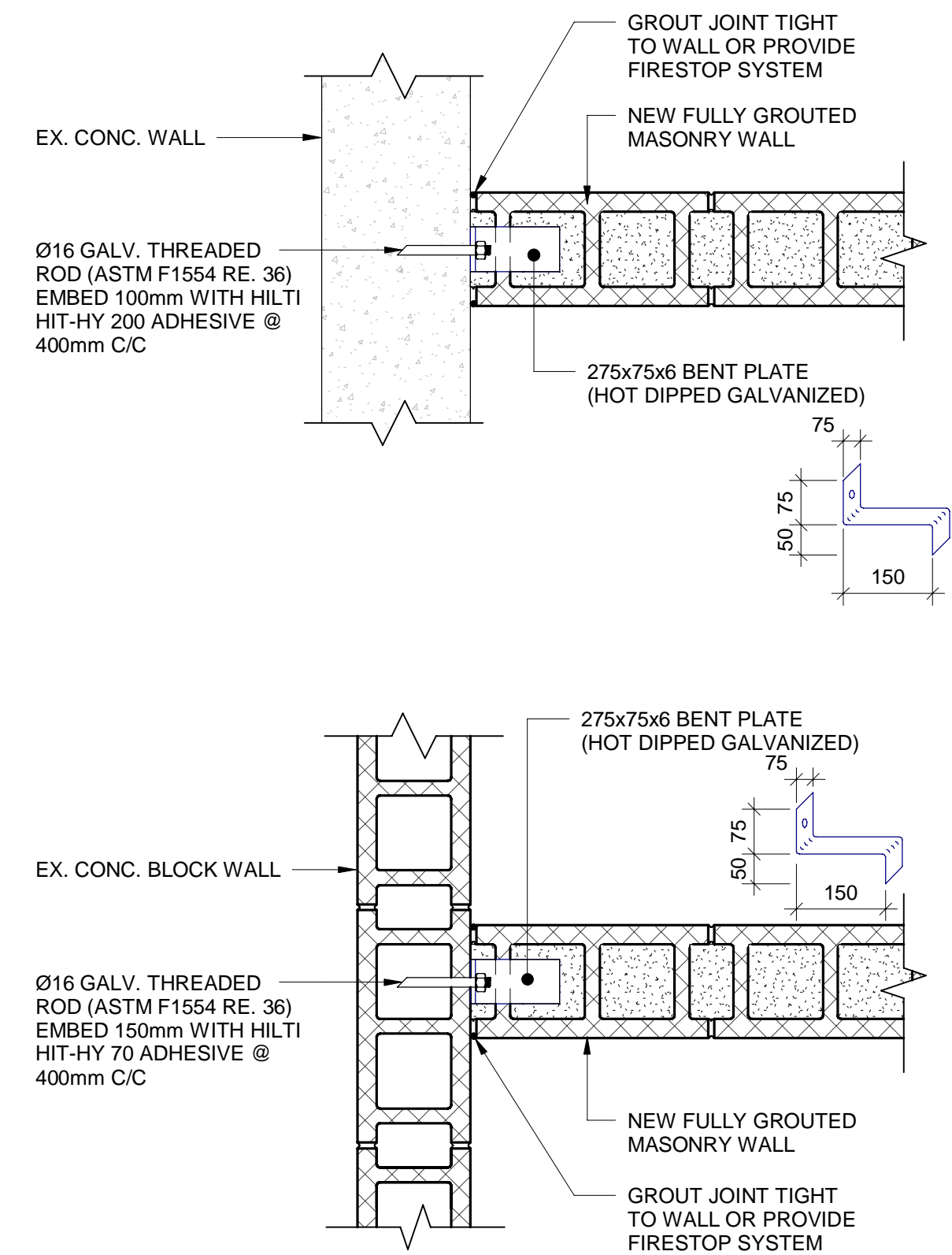
**GROUTING AND INSTALLATION INSTRUCTIONS**

- PLACE VERTICAL REINFORCEMENT BARS INTO VOIDS FROM THE TOP AT SPECIFIED LENGTH AND SPACING.
- GROUT ALL VOIDS SOLID (INCLUDING VOIDS WITHOUT REINFORCEMENT) WITH CONCRETE GROUT.
- ENSURE VERTICAL REINFORCEMENT BARS HAVE LAP LENGTH (L) AS PER TABLE 1.

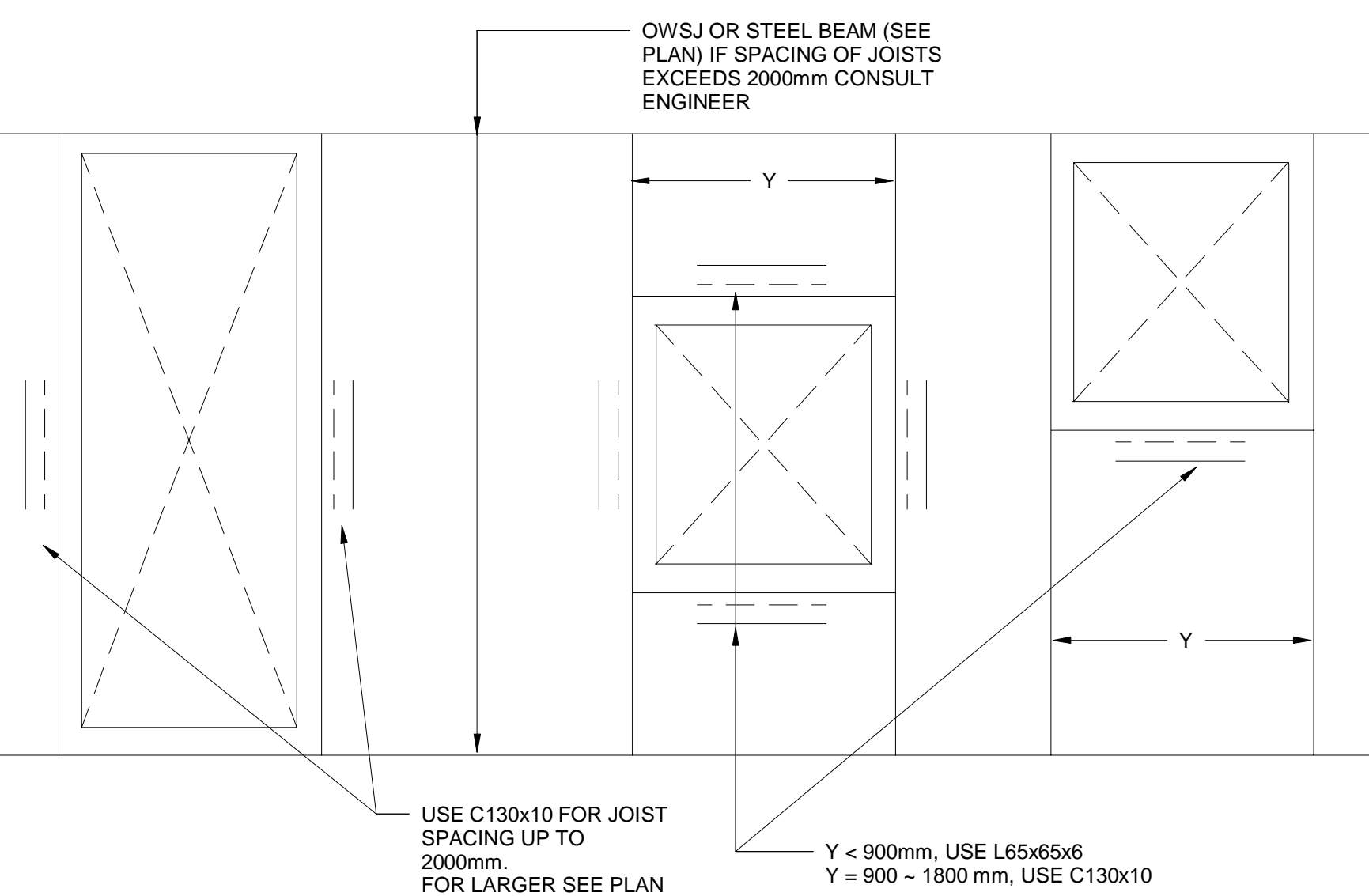
**\*\* FERRO' BLOCK SHEAR TIES SPACING**

- 800mm HORIZONTAL / 600mm VERTICAL
- MAX. 300mm AROUND WALL OPENINGS, TOP, BASE, AND CORNERS

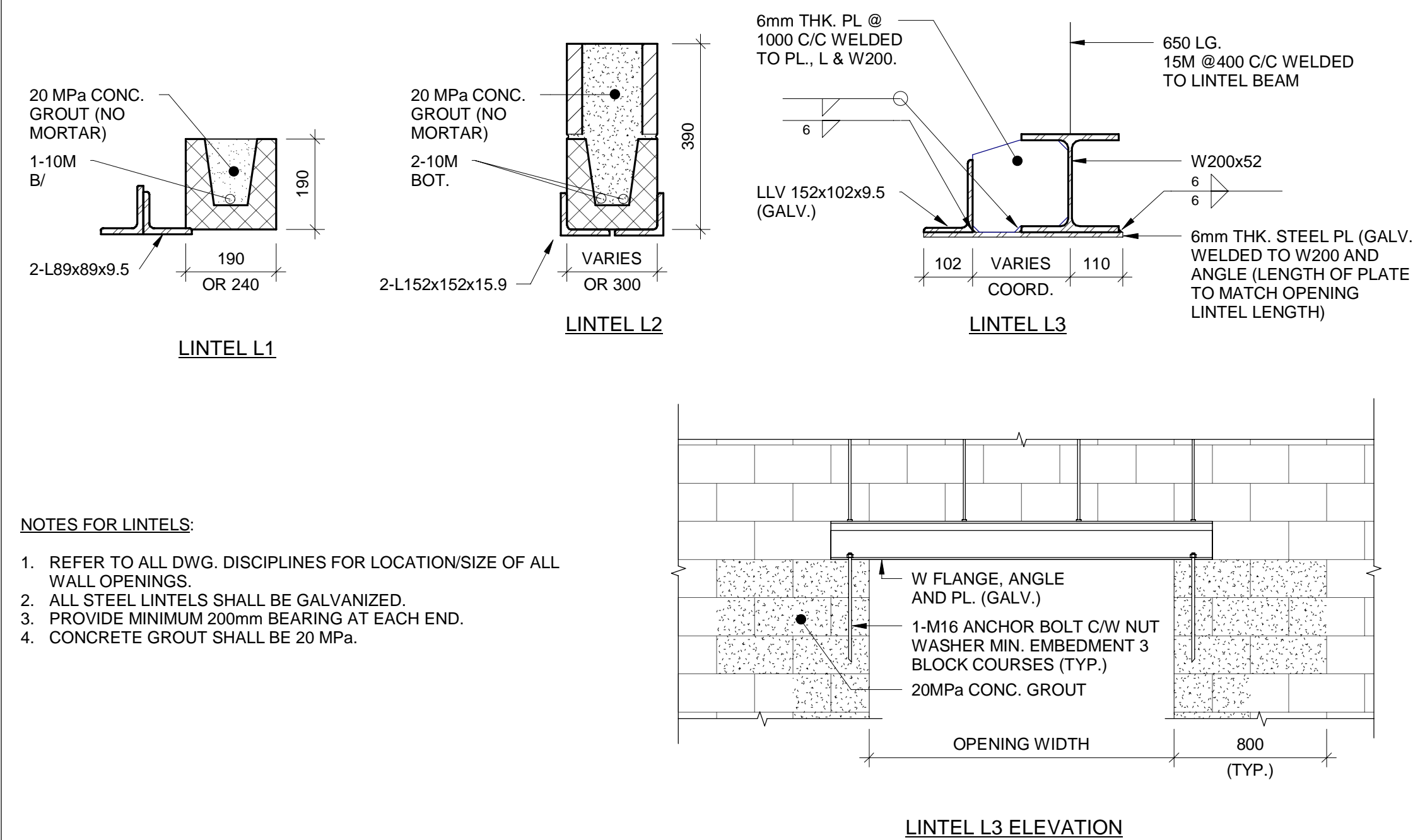
2 MASONRY WALL REINF. TIE DETAILS  
NTS



3 MASONRY WALL ANCHORAGE TO EXISTING WALL  
NTS



4 TYP. ROOF OPENING  
NTS

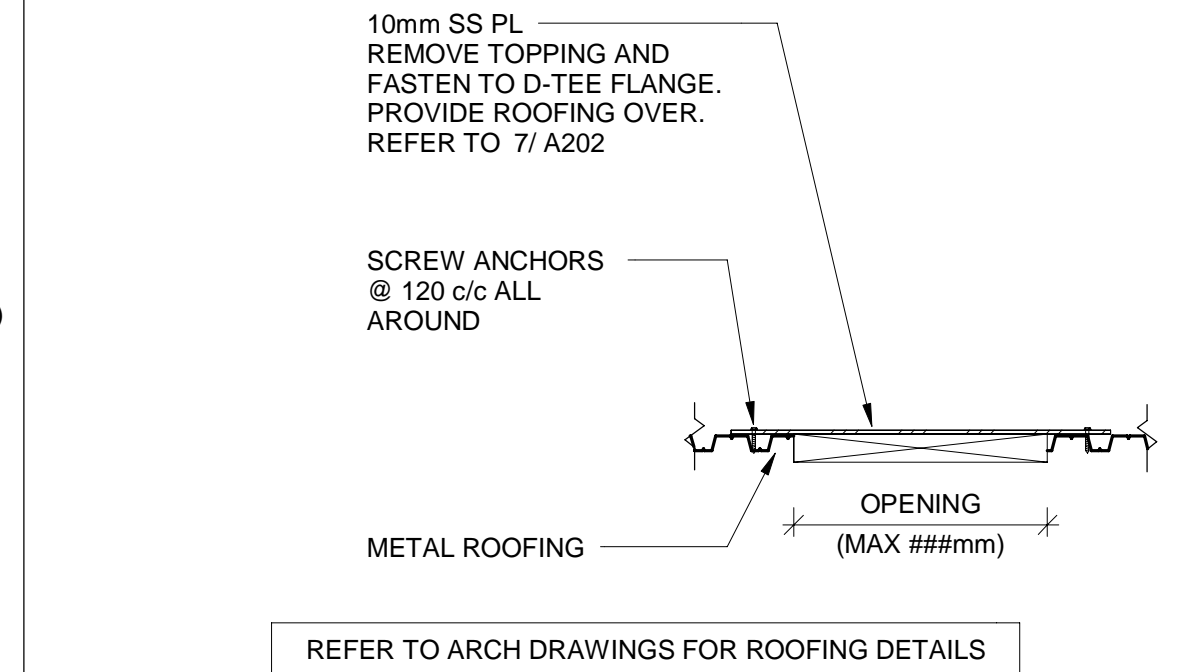


**NOTES FOR LINTELS:**

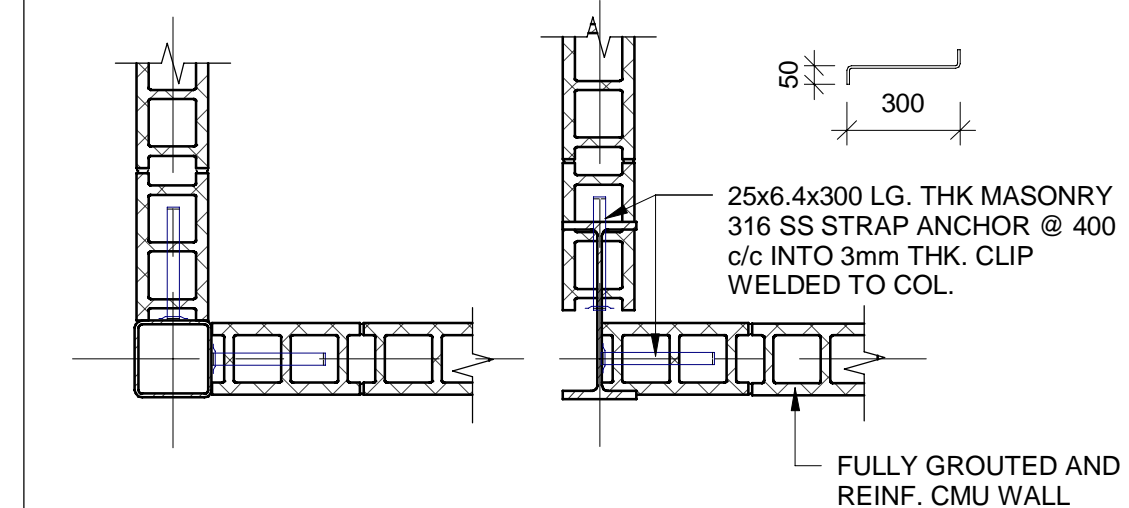
- REFER TO ALL DWG. DISCIPLINES FOR LOCATION/SIZE OF ALL WALL OPENINGS.
- ALL STEEL LINTELS SHALL BE GALVANIZED.
- PROVIDE MINIMUM 200mm BEARING AT EACH END.
- CONCRETE GROUT SHALL BE 20 MPa.

LINTEL SCHEDULE			
TYPE	DESCRIPTION	WALL THICKNESS	OPENING WIDTH
L1 / L1A	MASONRY, 1 COURSE	190 OR 240 mm	≤ 1200mm
L2	2 - L152 X 152 X 15.9	300 mm	≤ 2400mm
L3	STEEL, 200 DEEP	240 mm	≤ 3600mm

5 LINTEL DETAILS  
NTS



6 STEEL ROOF CLOSURE PATCH DETAIL (TYP.)  
NTS



**NOTE:**

- SEE DRAWINGS FOR WALL / COLUMN SIZE AND LOCATION LINE.
- COORDINATE STRAP VERTICAL POSITIONING w/ MASONRY COURSING. ALLOW FOR BASE PL., etc., INSTALLATIONS.

7 MASONRY ANCHOR TO STEEL COLUMN  
NTS

NOTES:

A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100 Building 01\Revit 20XX\Control Building B.rvt  
Plot: ---



CONTRACT NO. WE-2024-01

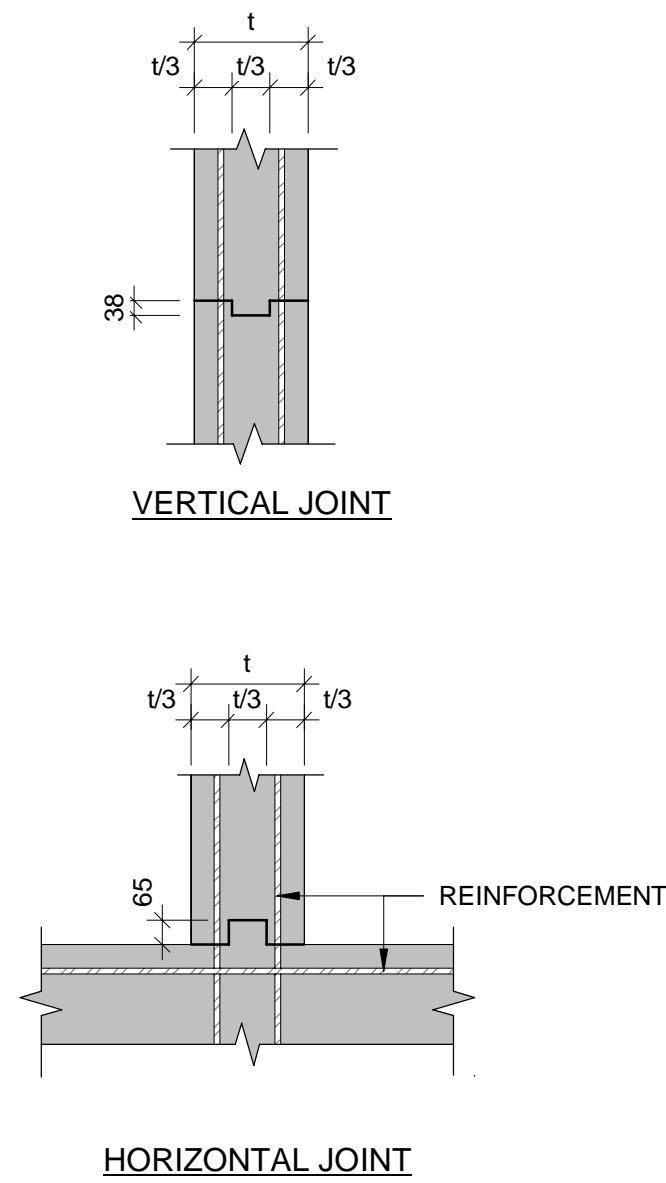


RODNEY WPCP  
UPGRADES

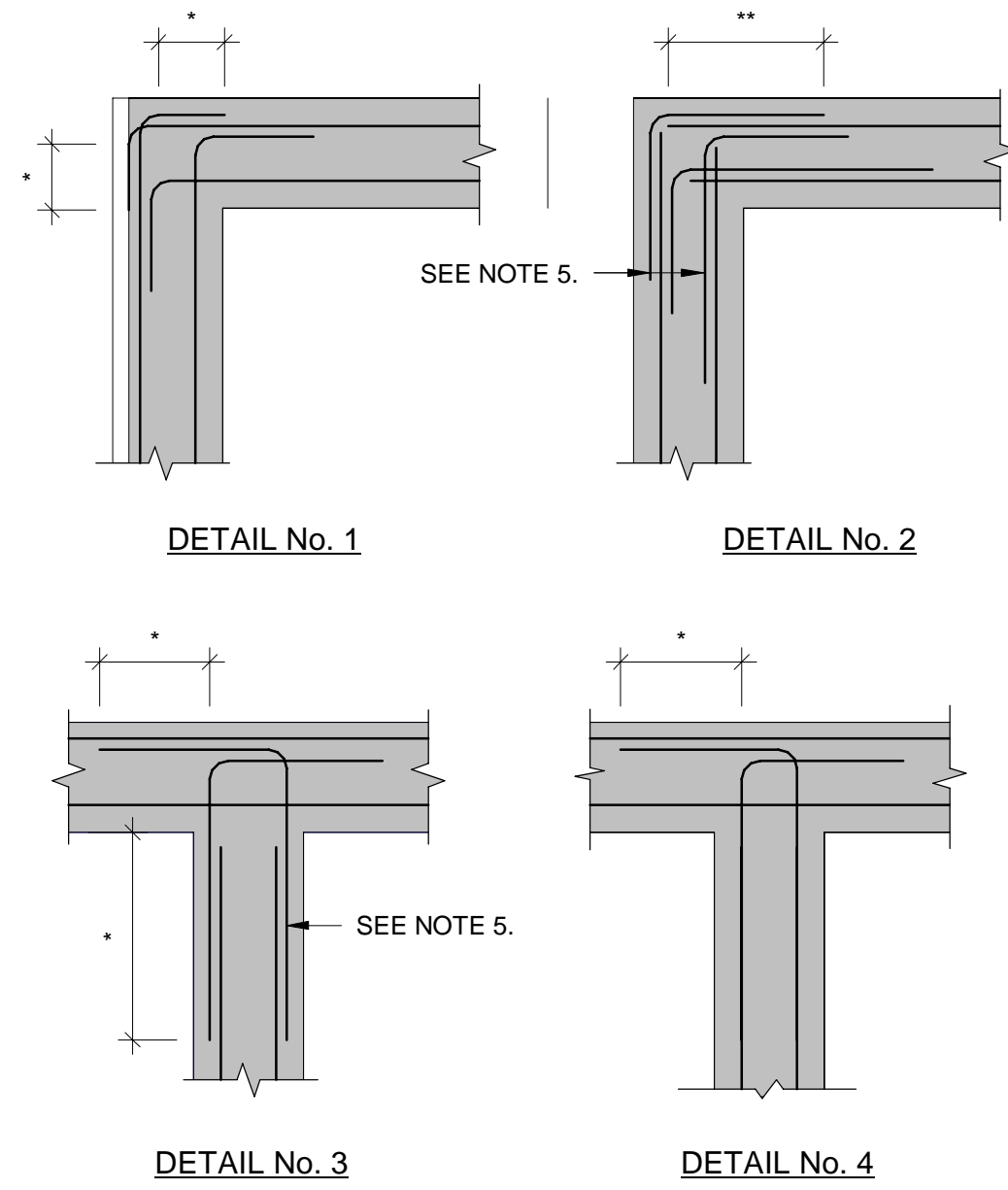
STRUCTURAL

TYPICAL DETAILS

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
	S1003

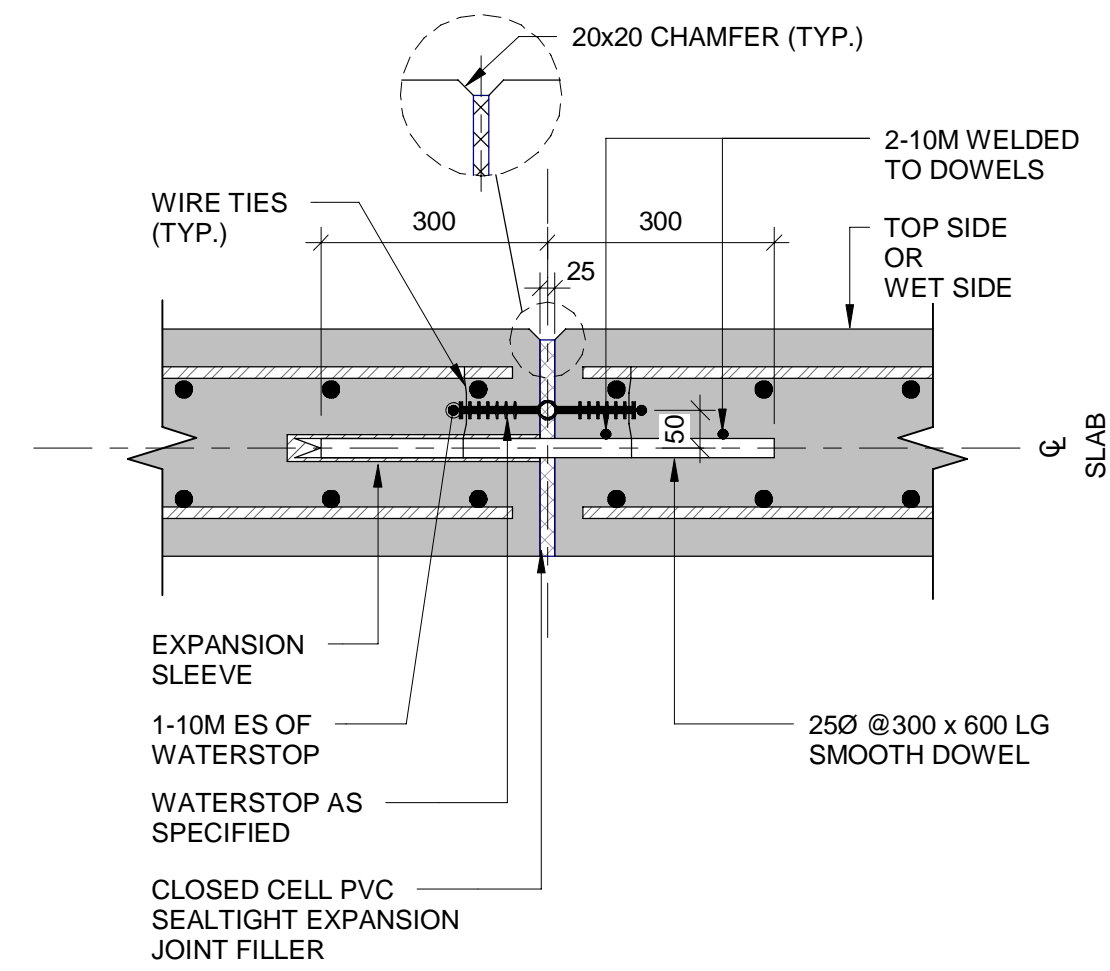


1 CONSTRUCTION JOINT



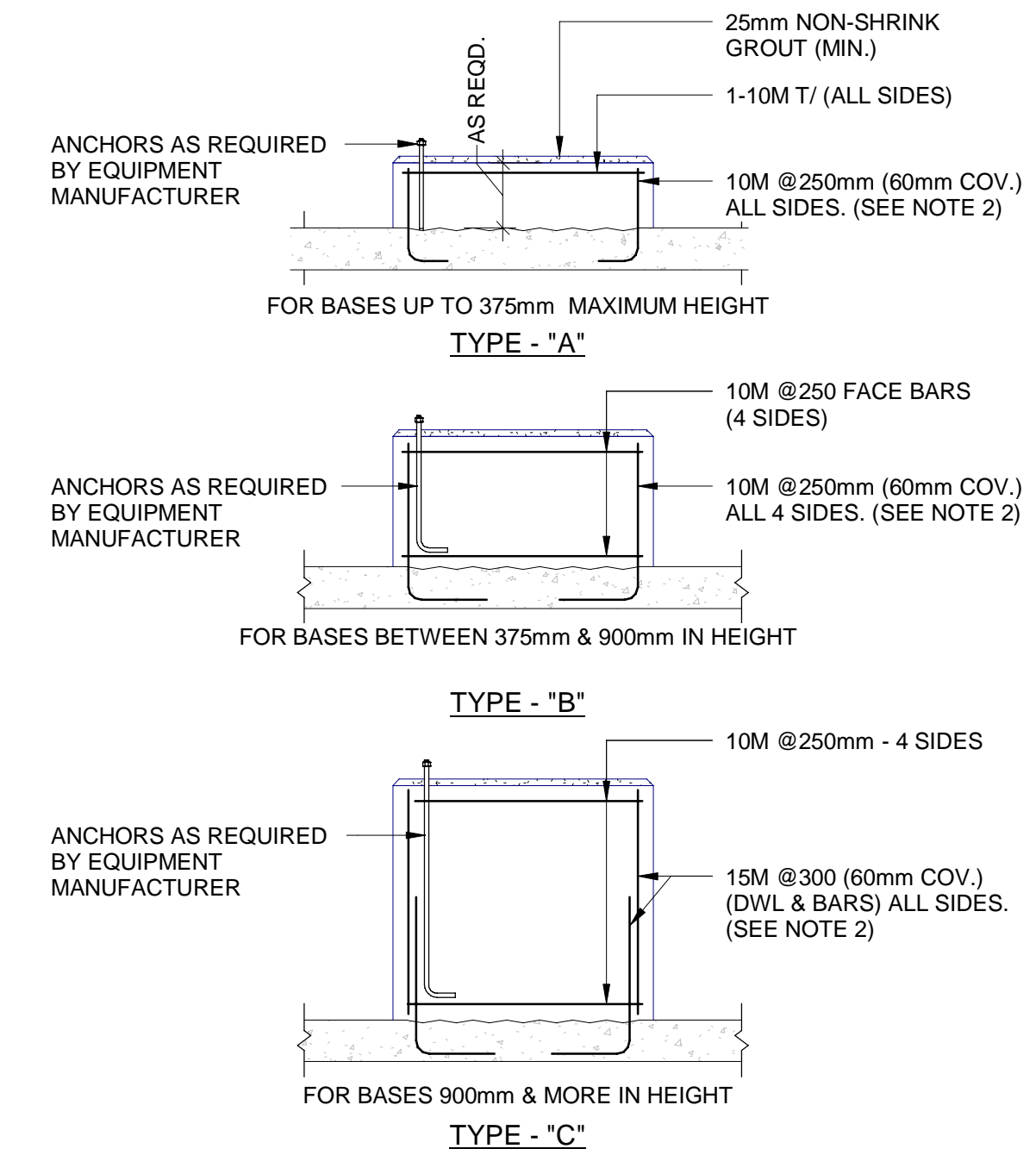
- NOTES:**
1. ALL 90° BENDS AS SHOWN U.N.O. ON DESIGN DRAWINGS.
  2. VERTICAL STEEL NOT SHOWN.
  3. \* - STANDARD 90° HOOK.
  4. \*\* - SPLICE AS SPECIFIED.
  5. CORNER BARS TO BE SAME SIZE AND SPACING AS MAIN HORIZONTAL BARS.

2 HORIZONTAL REINF. AT WALL INTERSECTIONS



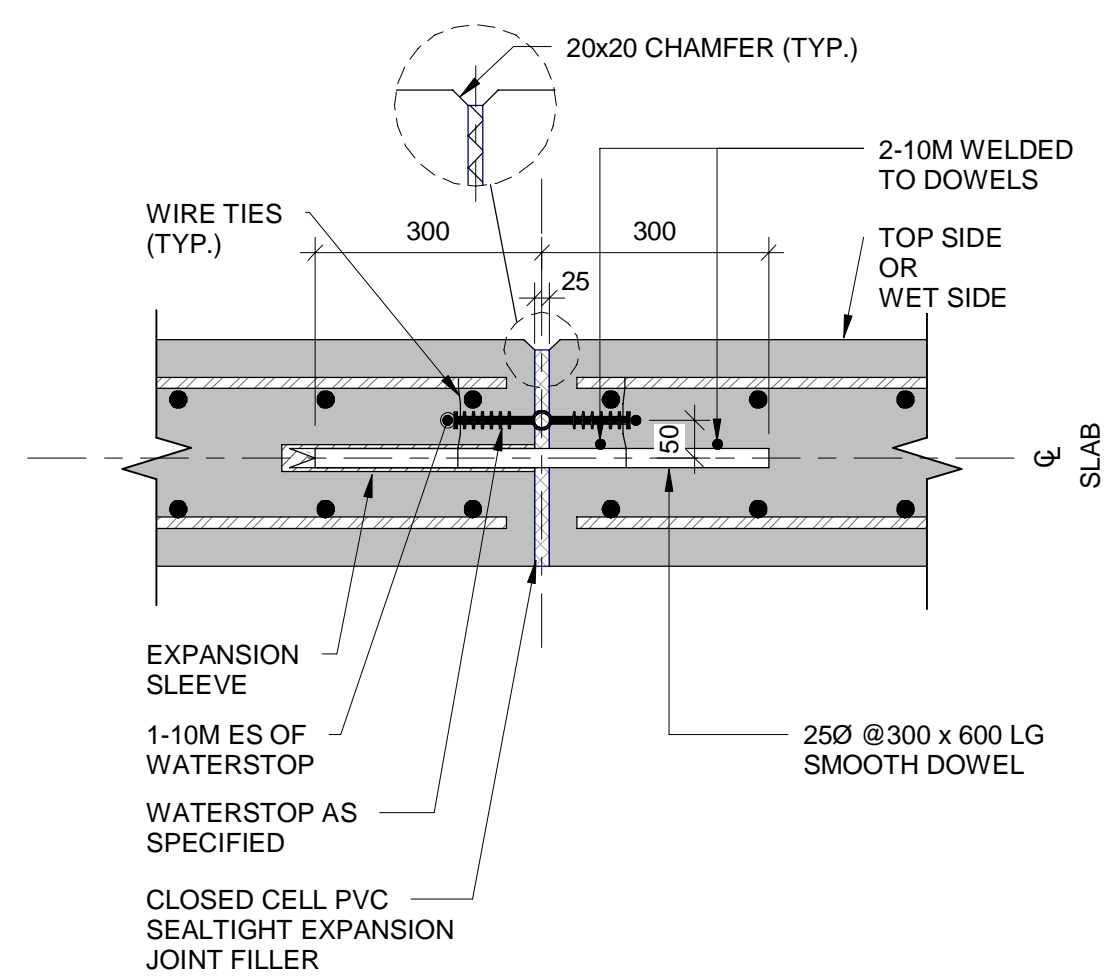
- NOTES:**
1. 10M BARS TO BE WELDED TO DOWELS PRIOR TO INSTALLATION. SET ON CHAIRS TO SPECIFIED HEIGHT AND SECURE.
  2. ENSURE DOWELS ARE BOTH LEVEL AND PERPENDICULAR TO JOINT.
  3. SUBMIT SHOP DRAWINGS FOR REVIEW.

3 EXPANSION JOINT IN BASE SLAB OR WALL



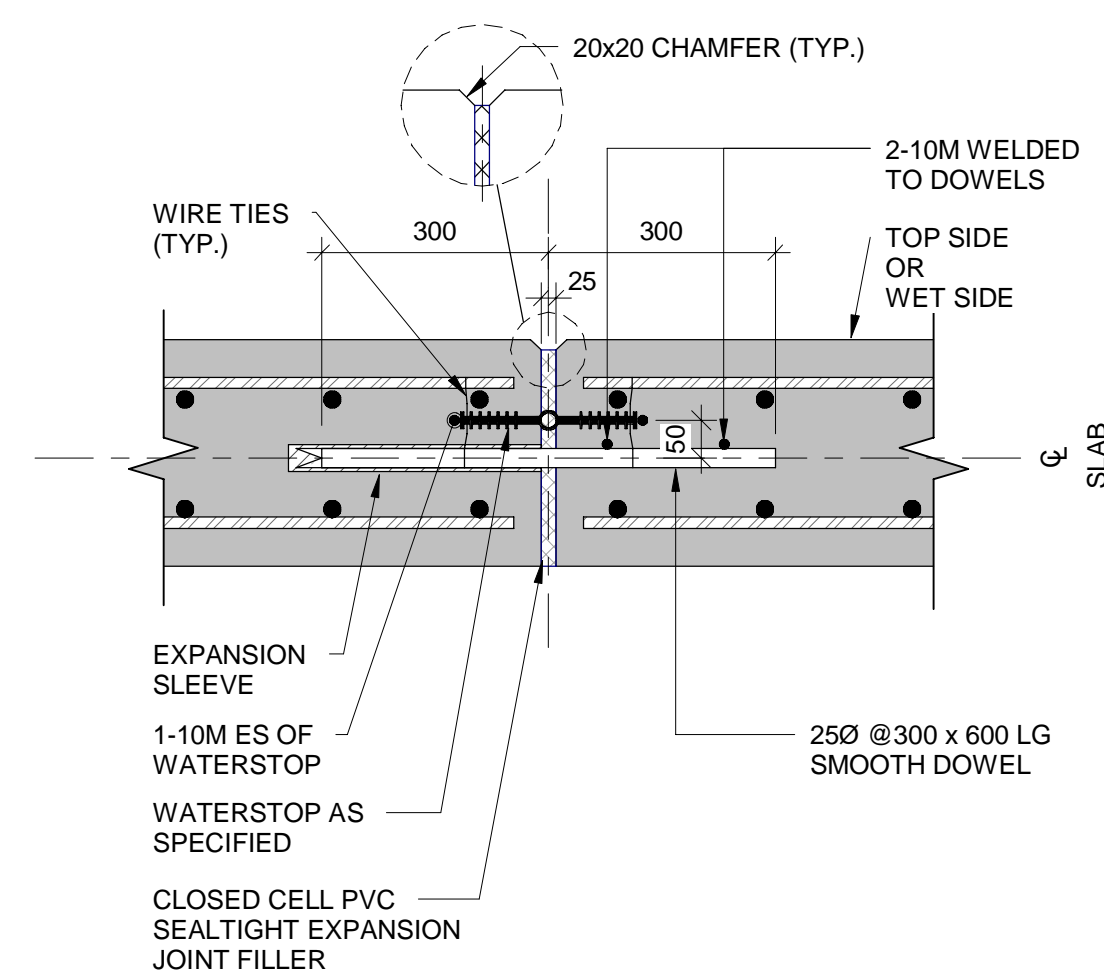
- NOTES:**
1. CONCRETE FOR BASES TO BE STRUCTURAL MIX UNLESS OTHERWISE SPECIFIED.
  2. USE HILTI HY200 MAX ADHESIVE, EMBEDMENT AS PER MANUFACTURER'S RECOMMENDATION FOR BASES ON EXISTING FLOORS.

4 CONCRETE BASES FOR EQUIPMENT



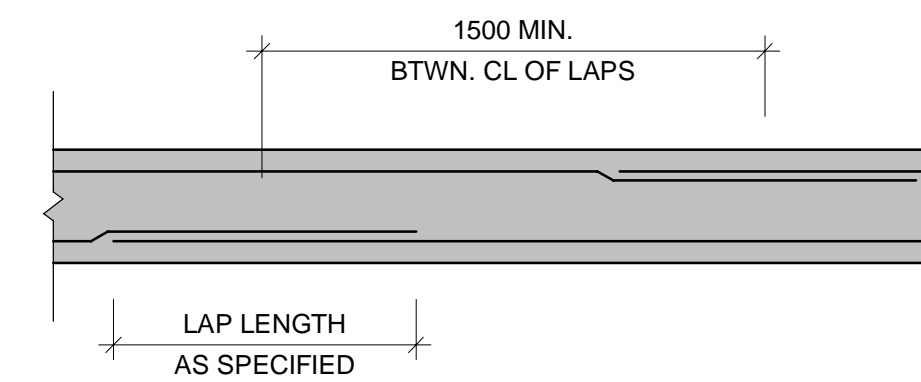
- NOTES:**
1. 10M BARS TO BE WELDED TO DOWELS PRIOR TO INSTALLATION. SET ON CHAIRS TO SPECIFIED HEIGHT AND SECURE.
  2. ENSURE DOWELS ARE BOTH LEVEL AND PERPENDICULAR TO JOINT.
  3. SUBMIT SHOP DRAWINGS FOR REVIEW.

5 OPENING REINFORCEMENT IN WALLS AND SLABS



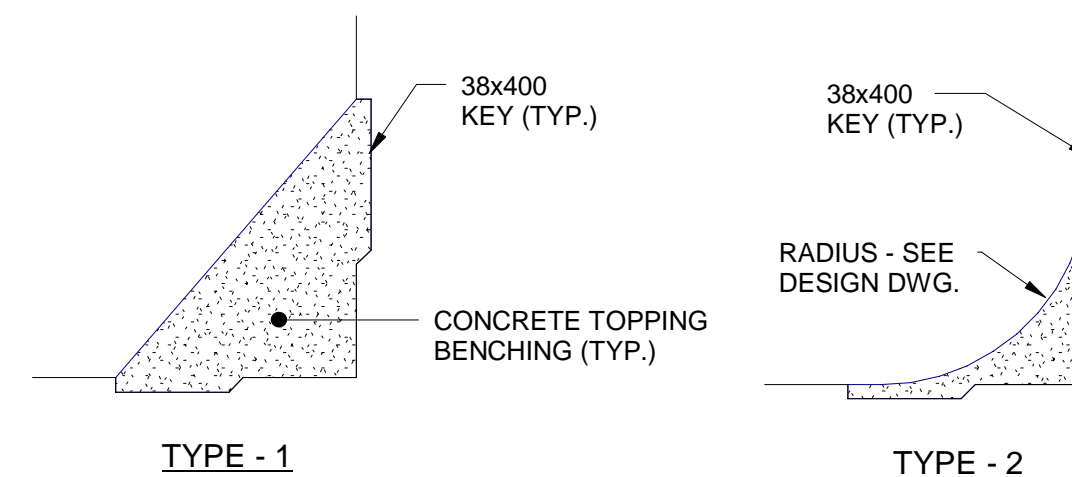
- NOTES:**
1. 10M BARS TO BE WELDED TO DOWELS PRIOR TO INSTALLATION. SET ON CHAIRS TO SPECIFIED HEIGHT AND SECURE.
  2. ENSURE DOWELS ARE BOTH LEVEL AND PERPENDICULAR TO JOINT.
  3. SUBMIT SHOP DRAWINGS FOR REVIEW.

6 REINF. DETAIL FOR PIPE OPENINGS

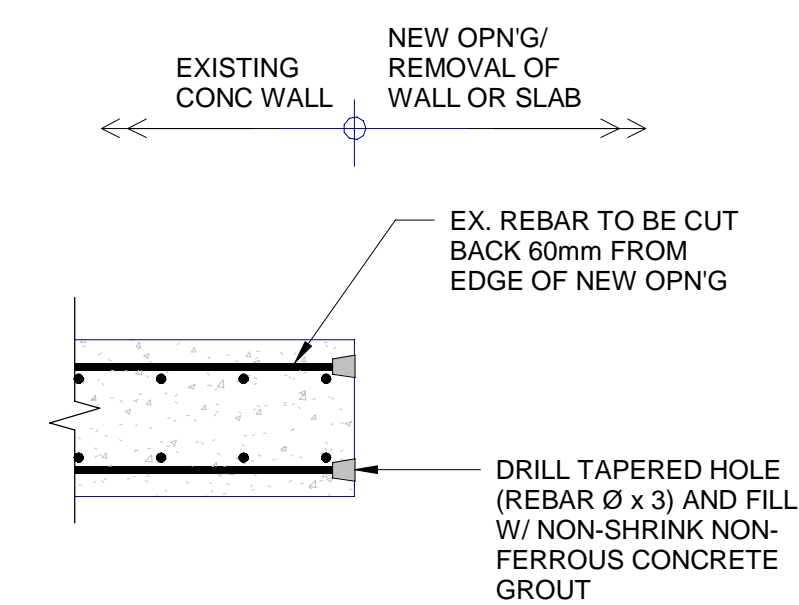


- NOTES:**
1. LAP SPLICES ARE TO BE STAGGERED AS SHOWN
  2. LAP LENGTH AS SPECIFIED OR INDICATED ON DRAWINGS.

7 LAP ARRANGEMENT FOR HOR. REINF.



8 CONCRETE BENCHING



9 EXISTING REINFORCEMENT PROTECTION

NOTES:

A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

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Building 01\Revit 20XX\Control Building B.rvt  
Plot: ---



CONTRACT NO. WE-2024-01

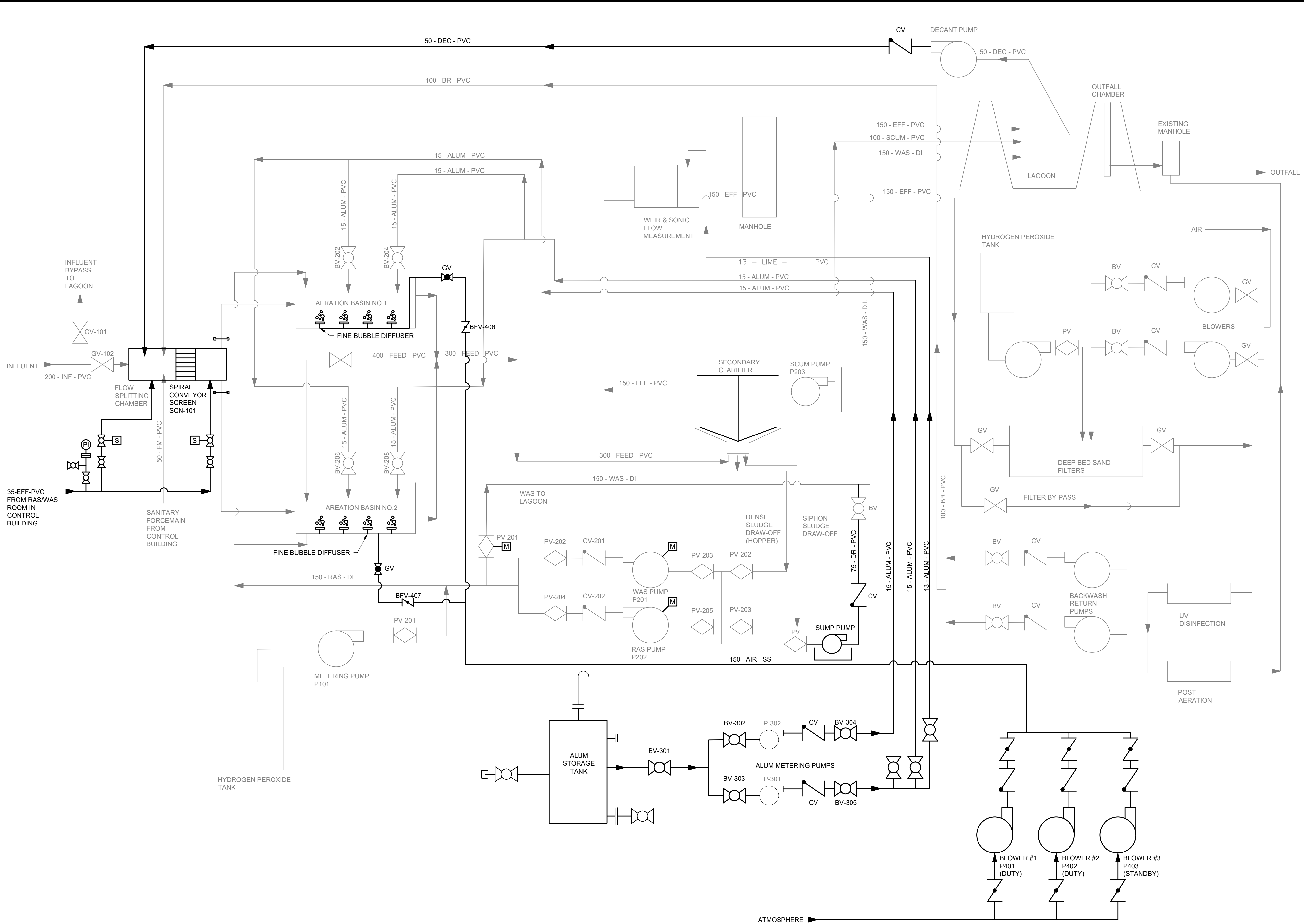


RODNEY WPCP  
UPGRADES

STRUCTURAL

TYPICAL DETAILS

Scale: AS SHOWN	RVA Project No: 215817
Date: AUG 2023	DWG NO.
Drawn by: CCWP	Designed by: HOA
Checked by: RSM	Approved by:
	S1004



**LEGEND:**

	EXISTING
	NEW

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY
File: R:2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.000.3 Schematics\Sheets\215817 - P100.dwg			
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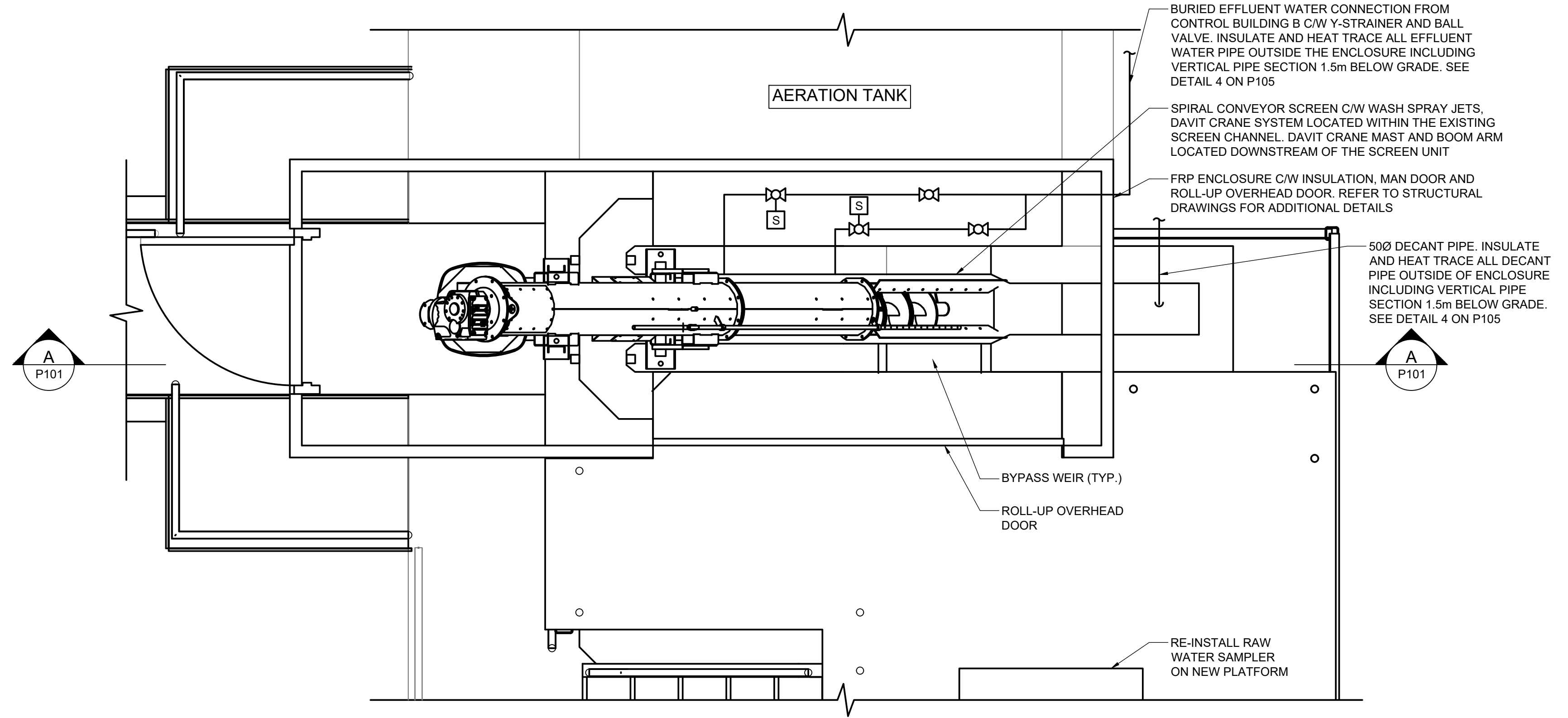
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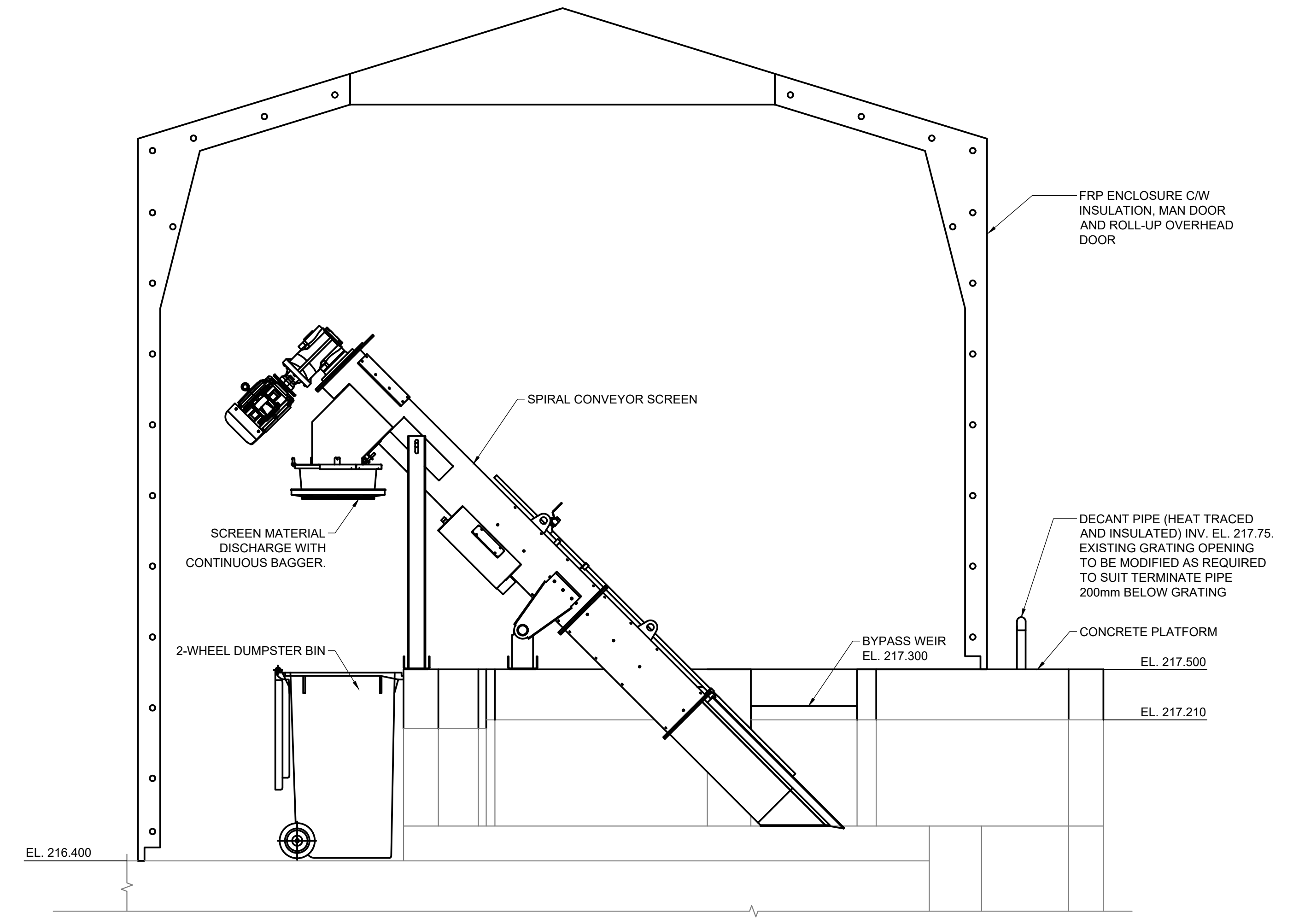
**RODNEY WPCP  
UPGRADES**

PROCESS  
**PROCESS FLOW DIAGRAM**

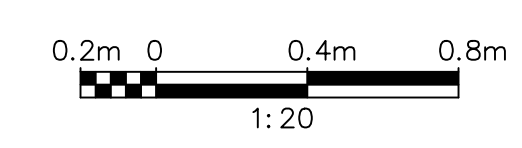
Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. P100
Drawn by: RNM	Designed by: TSY
Checked by: AHN	Approved by: DC



1 PLAN  
SCALE 1:20



A SECTION  
P101 SCALE 1:20



00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100  
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CONTRACT NO. WE-2024-01

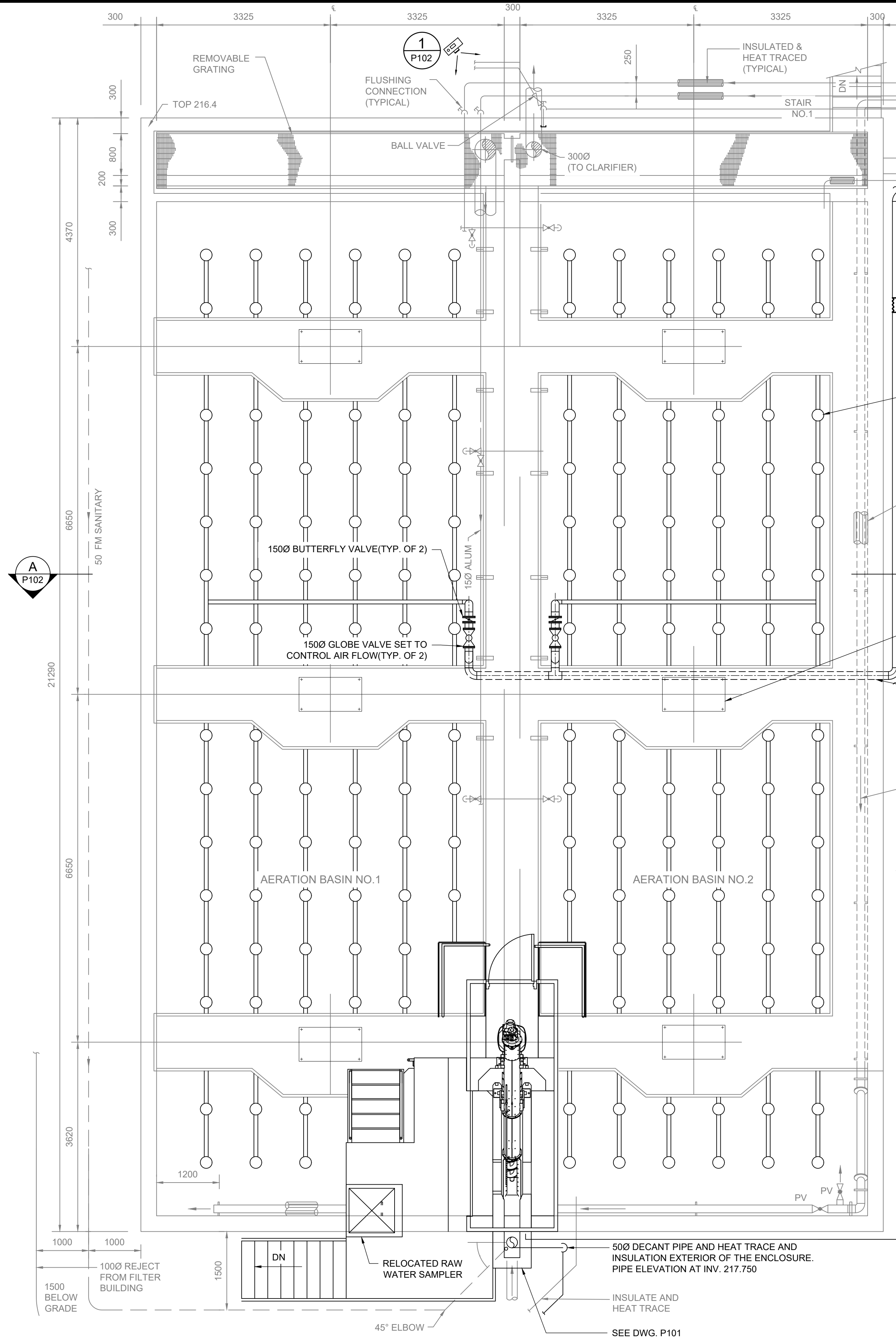


RODNEY WPCP  
UPGRADES

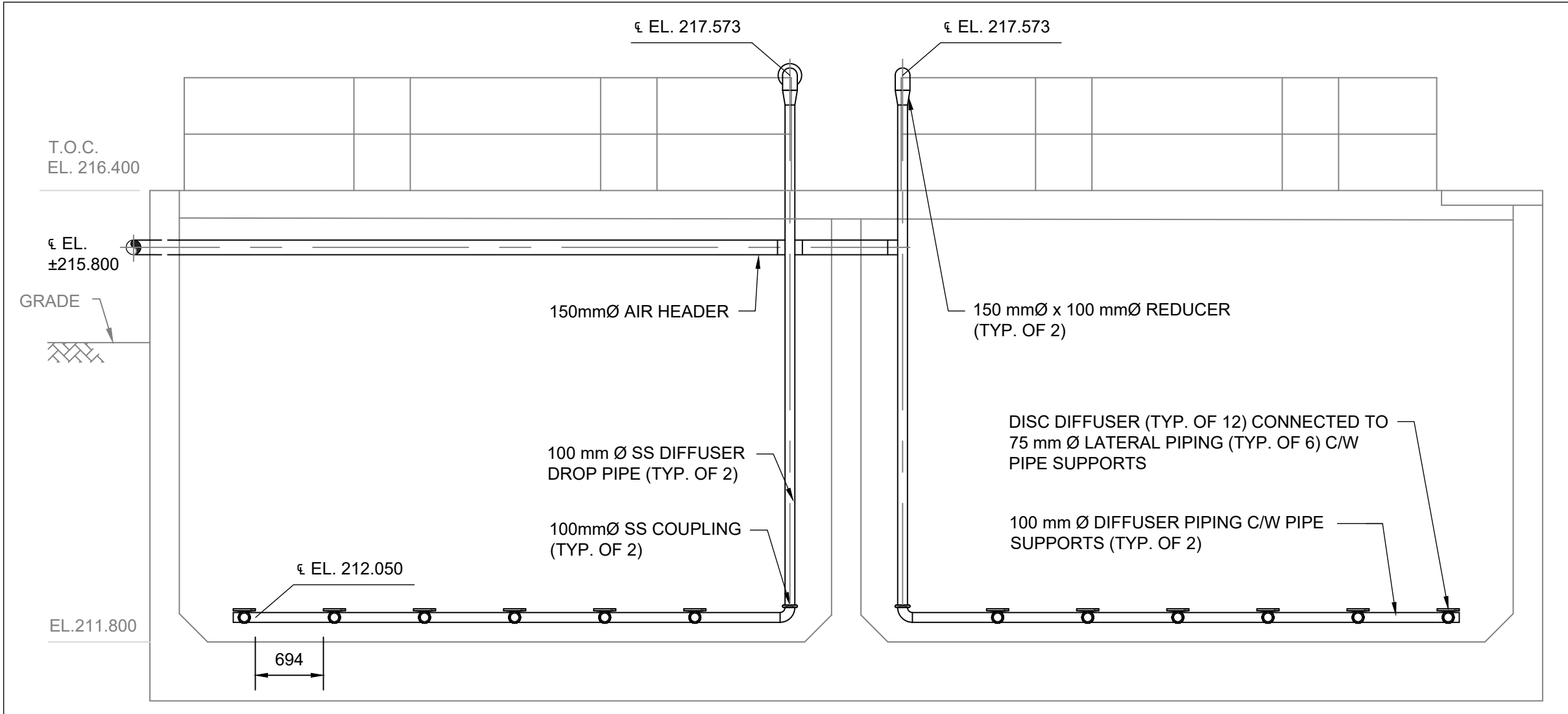
PROCESS  
HEADWORKS  
PLAN & SECTION

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC
	DWG NO.
	P101





**1 PLAN - AERATION BASIN**  
SCALE 1:50



**A SECTION - AERATION BASIN**  
SCALE 1:50

LEGEND:

- EXISTING
- NEW
- NO. DWG PHOTO



**PHOTO 1**

- NOTE:
1. ALL PROPOSED PIPE ROUTING ARE INDICATIVE WITH SUGGESTED ELEVATIONS. CONTRACTOR TO FIELD VERIFY AND DETERMINE OPTIMAL PIPE ROUTING TO AVOID INTERFERENCES. SUBMIT REVISE PIPE ROUTING TO OWNER AND ENGINEER FOR REVIEW.
  2. DRAWINGS DO NOT SHOW ALL PIPE AND EQUIPMENT SUPPORTS. DESIGN AND PROVIDE EQUIPMENT ANCHORS PER DIVISION 11 AND PIPE SUPPORTS PER REFERENCED DETAILS AND DIVISION 15.
  3. CONTRACTOR TO DETERMINE NUMBER OF EXPANSION JOINTS REQUIRED TO SUIT TEMPERATURE DIFFERENTIAL BETWEEN -40 C AMBIENT TEMPERATURE AND THE MAXIMUM DISCHARGE AIR TEMPERATURE FROM BLOWER. PROVIDE SUPPORTS AS RECOMMENDED BY MANUFACTURER.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100  
Building 01\Sheets\215817 - P102.dwg  
Plot: May, 2024, - 02:26:31 PM



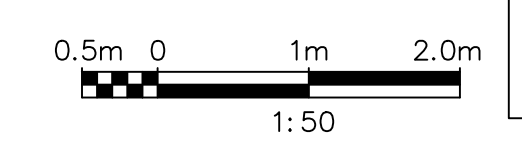
CONTRACT NO. WE-2024-01

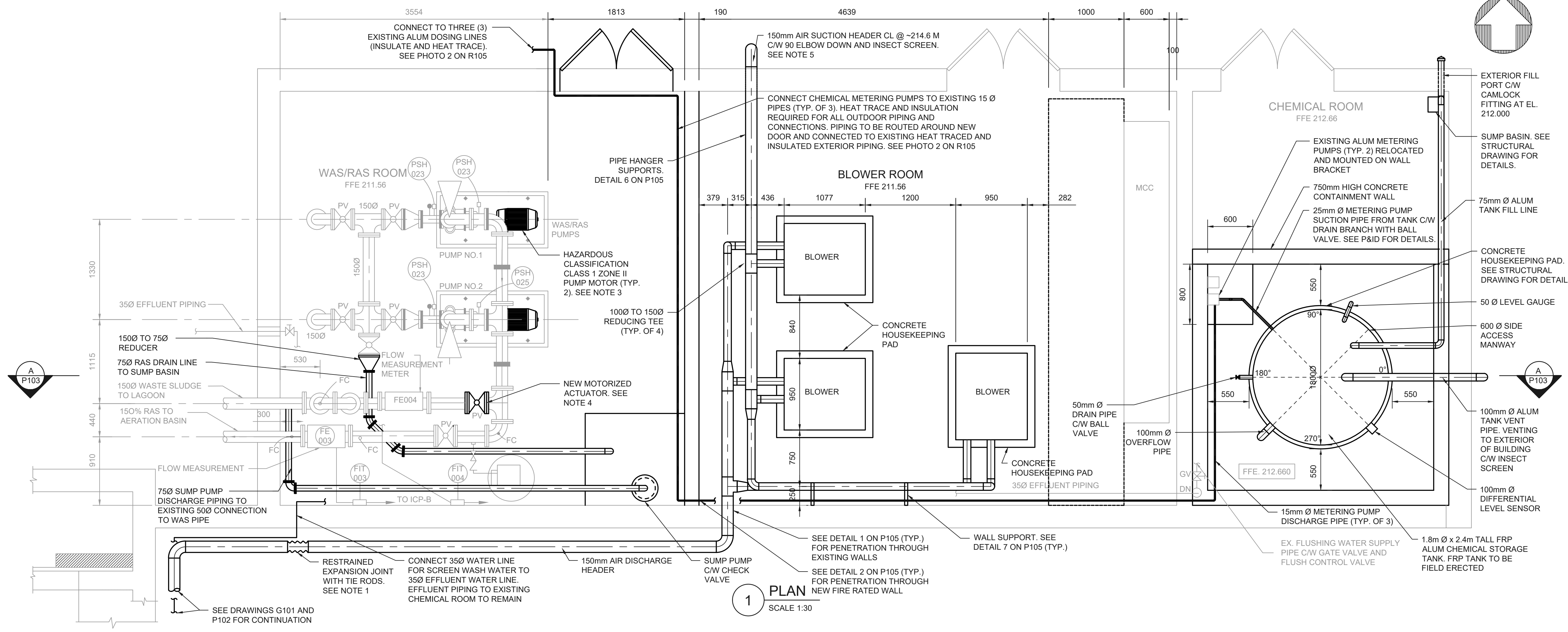


**RODNEY WPCP  
UPGRADES**

PROCESS  
**AERATION TANKS  
PLAN AND SECTION**

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC
	DWG NO. P102

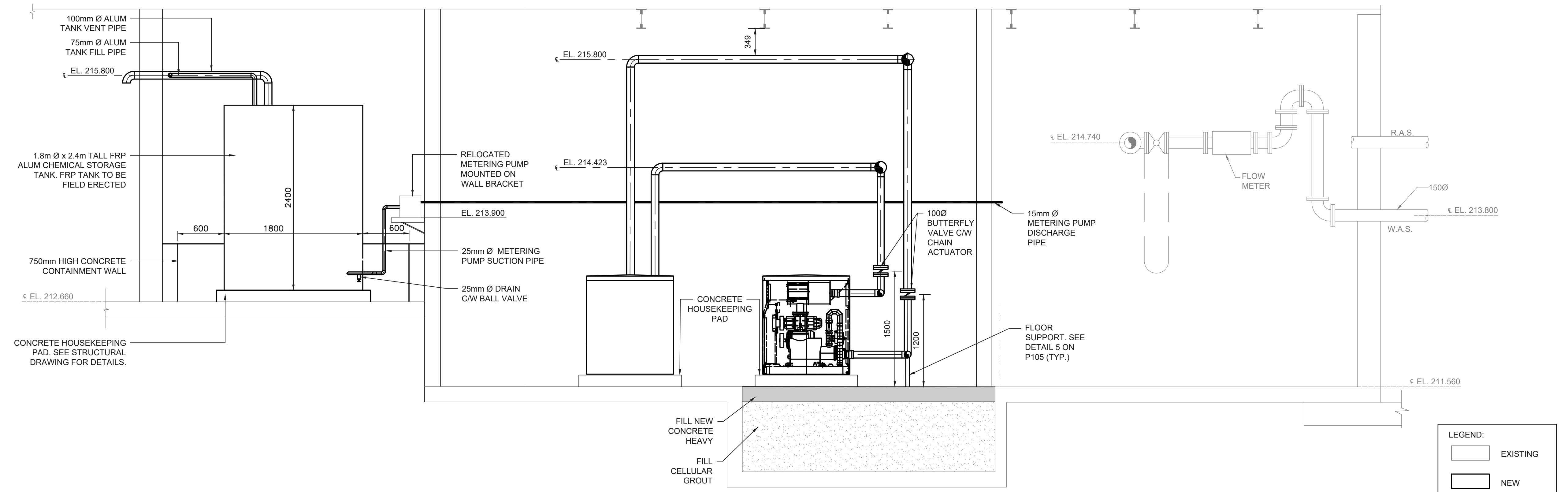




- NOTE:
- CONTRACTOR TO DETERMINE NUMBER OF EXPANSION JOINTS REQUIRED TO SUIT TEMPERATURE DIFFERENTIAL BETWEEN -40 C AMBIENT TEMPERATURE AND THE MAXIMUM DISCHARGE AIR TEMPERATURE FROM BLOWER. PROVIDE SUPPORTS AS RECOMMENDED BY MANUFACTURER.
  - DRAWINGS DO NOT SHOW ALL PIPE AND EQUIPMENT SUPPORTS. DESIGN AND PROVIDE EQUIPMENT ANCHORS PER DIVISION 11 AND PIPE SUPPORTS PER REFERENCED DETAILS AND DIVISION 15.
  - REPLACE EXISTING RAS/WAS PUMPS MOTORS (TYP. OF 2) WITH NEW MOTORS OF SIMILAR NAME PLATES, SUITABLE FOR EXISTING PUMPS, VARIABLE FREQUENCY DRIVES AND RATED FOR CLASS 1 ZONE II HAZARDOUS AREA.
  - REPLACE EXISTING VALVE ACTUATOR (OPEN/CLOSE) WITH NEW ACTUATOR RATED FOR CLASS 1 ZONE II HAZARDOUS AREA.
  - MINIMUM DISTANCE FROM C/L OF AIR SUCTION HEADER SHOULD BE NO LESS THEN 1000mm FROM WAS/RAS ROOM DOUBLE DOOR.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:2021215817 - West Elgin-Rodney WWTP Upgrades\01 CAD\dwg\01 Revit\A.100 Building 01\Sheets\215817 - P103.dwg  
 Plot: May, 2024, - 04:14:48 PM



LEGEND:

- EXISTING
- NEW

Scale: 0 0.3m 0.6m 1.2m

1:30

**MUNICIPALITY OF West Elgin**

CONTRACT NO. WE-2024-01

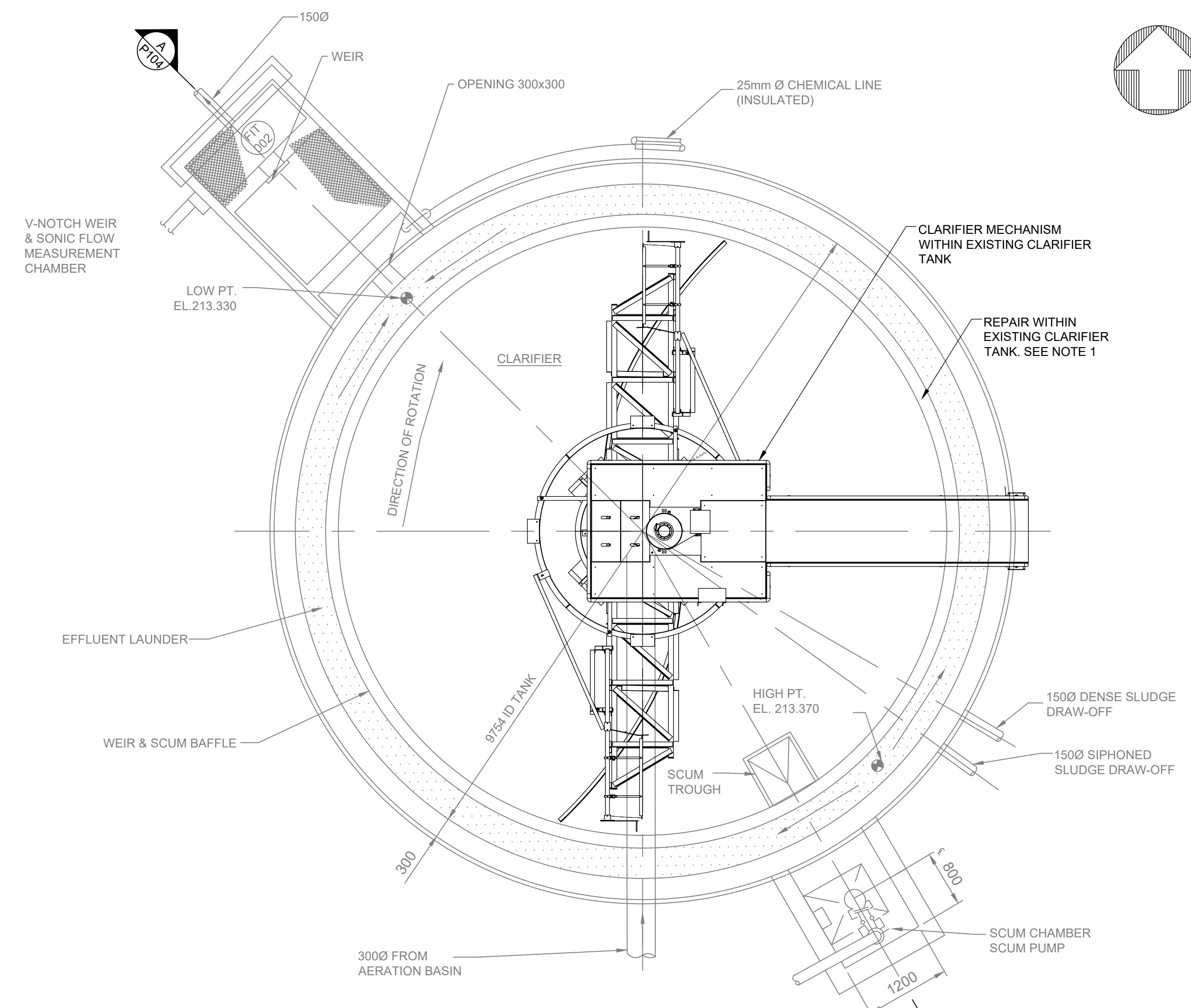
**RVA** R.V. ANDERSON ASSOCIATES LIMITED  
 Innovative solutions for complex challenges

**PROFESSIONAL ENGINEER**  
 H. T. A. NGUYEN  
 100110770  
 May 14, 2024  
 PROVINCE OF ONTARIO

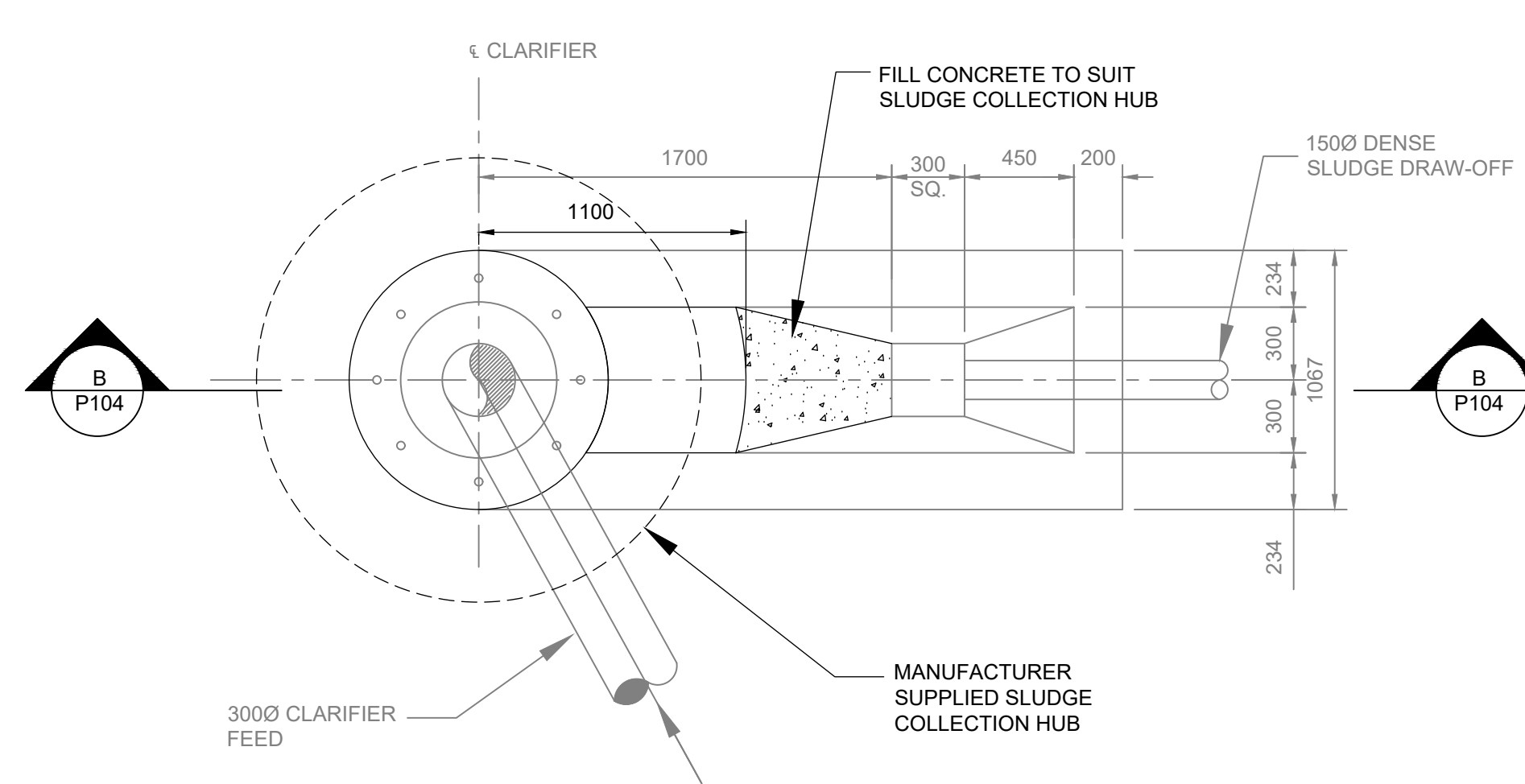
**RODNEY WPCP UPGRADES**

PROCESS CONTROL BUILDING B  
 PLAN AND SECTION

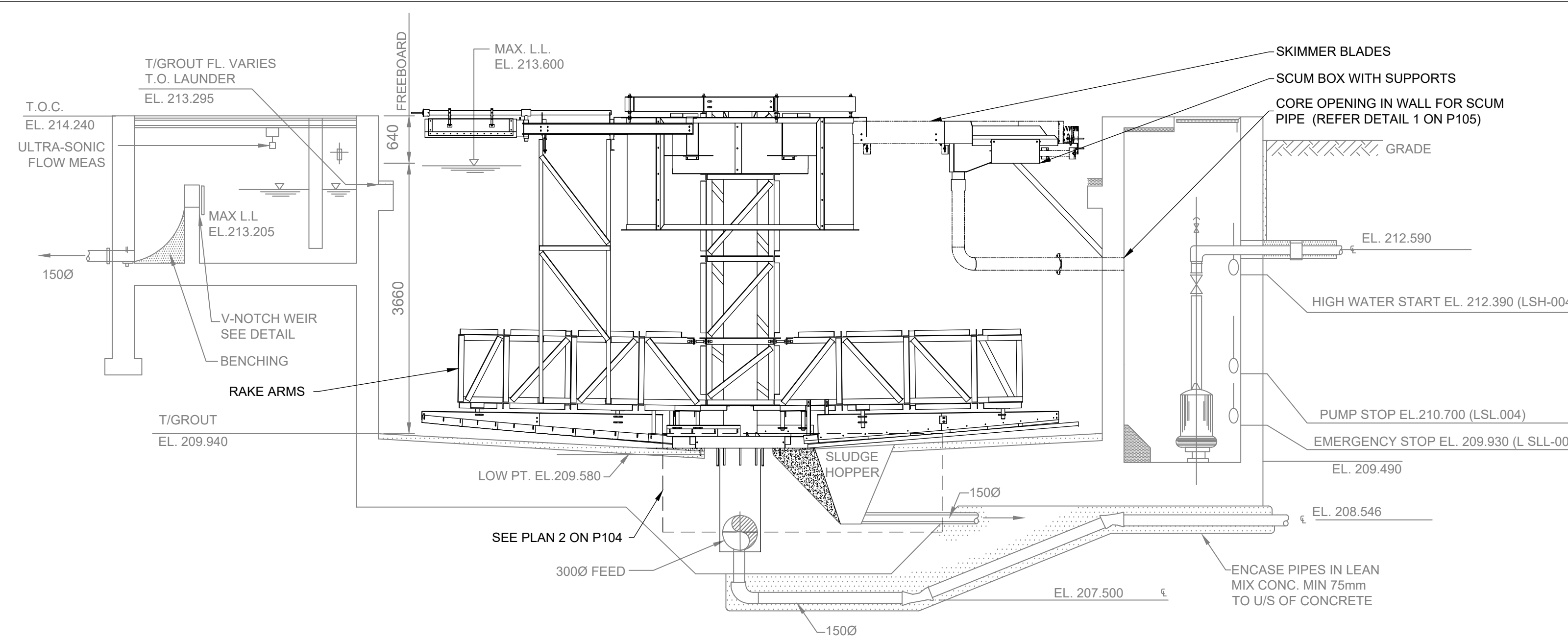
Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	Drawn by: ADD
Designed by: TSY	Checked by: AHN
Approved by: DC	DWG NO. P103



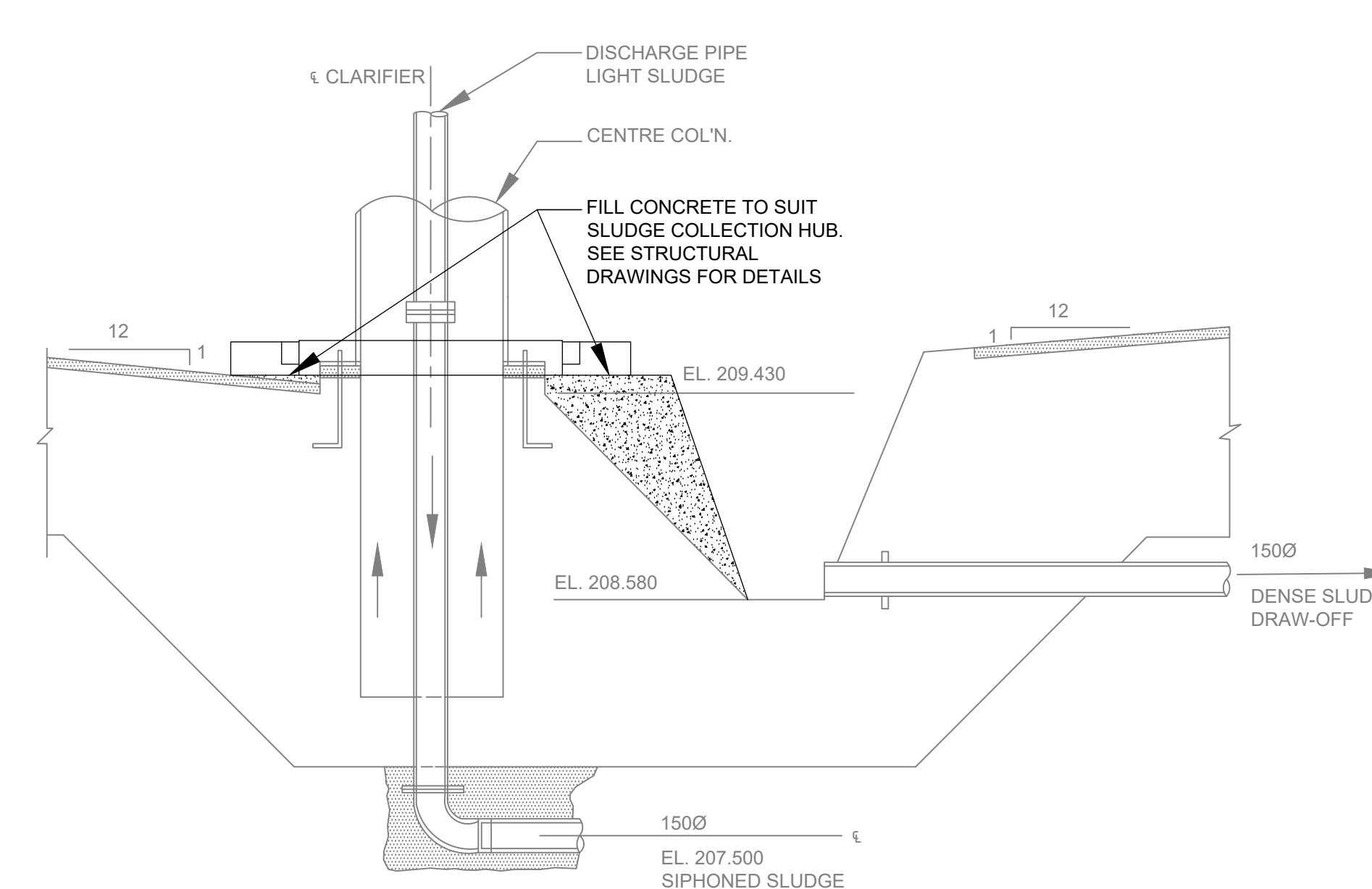
**1 PLAN**  
SCALE 1:50  
0.5m 0 1m 2.0m  
1:50



**2 PLAN - SLUDGE HOPPER**  
SCALE 1:25  
0.25m 0 0.5m 1m  
1:25



**A SECTION**  
P104 SCALE 1:50  
0.5m 0 1m 2.0m  
1:50



**B SECTION**  
P104 SCALE 1:25  
0.25m 0 0.5m 1m  
1:25

LEGEND:

	EXISTING
	NEW

NOTES  
1. CONCRETE REPAIRS WITHIN THE CLARIFIER TANK ARE PROVISIONAL ITEMS. PROVISIONAL ITEMS ARE NOT TO BE COMPLETED UNTIL WRITTEN CONFIRMATION IS PROVIDED BY THE ENGINEER. FOLLOWING CLEANING OF THE TANK, THE CONCRETE WILL BE REVIEWED AND REPAIRS WILL BE IDENTIFIED.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Rev\A.100  
Building 01\Sheets\215817 - P104.dwg  
Plot: May, 2024, - 02:26:58 PM



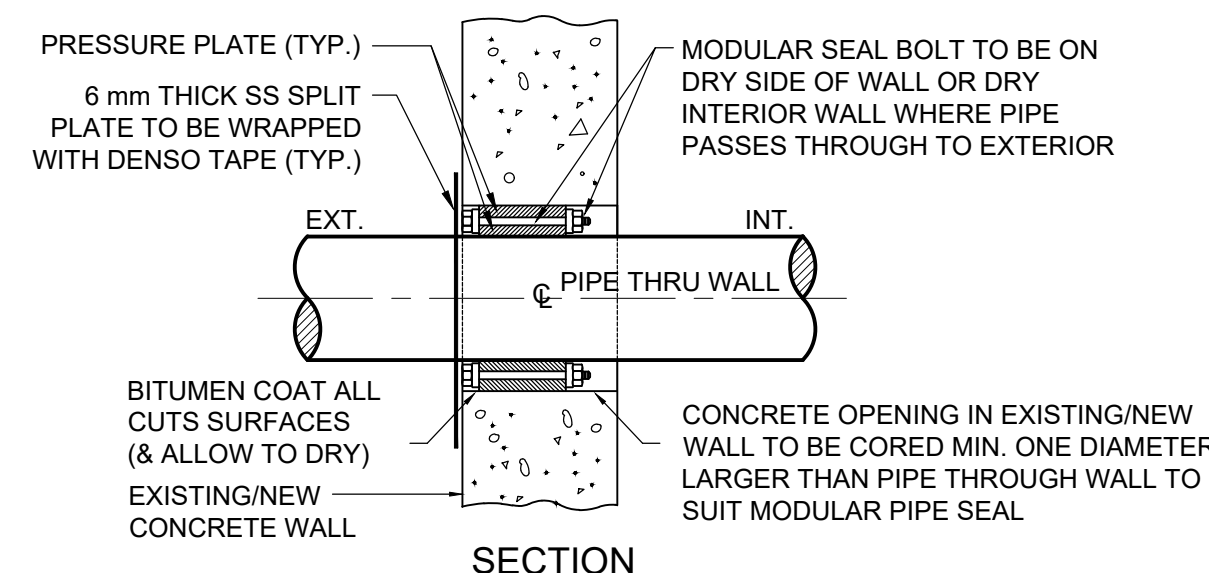
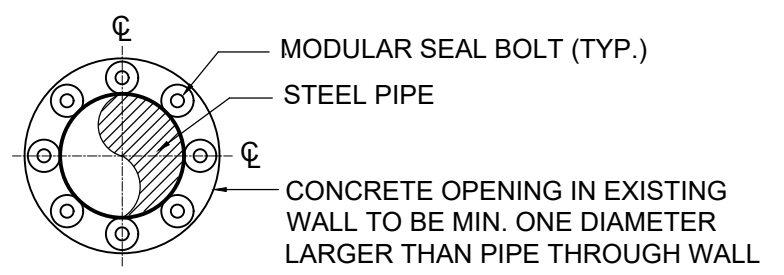
CONTRACT NO. WE-2024-01



RODNEY WPCP  
UPGRADES

PROCESS  
CLARIFIER  
PLAN AND SECTIONS

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: ADD	Designed by: TSY
Checked by: AHN	Approved by: DC
	DWG NO. P104

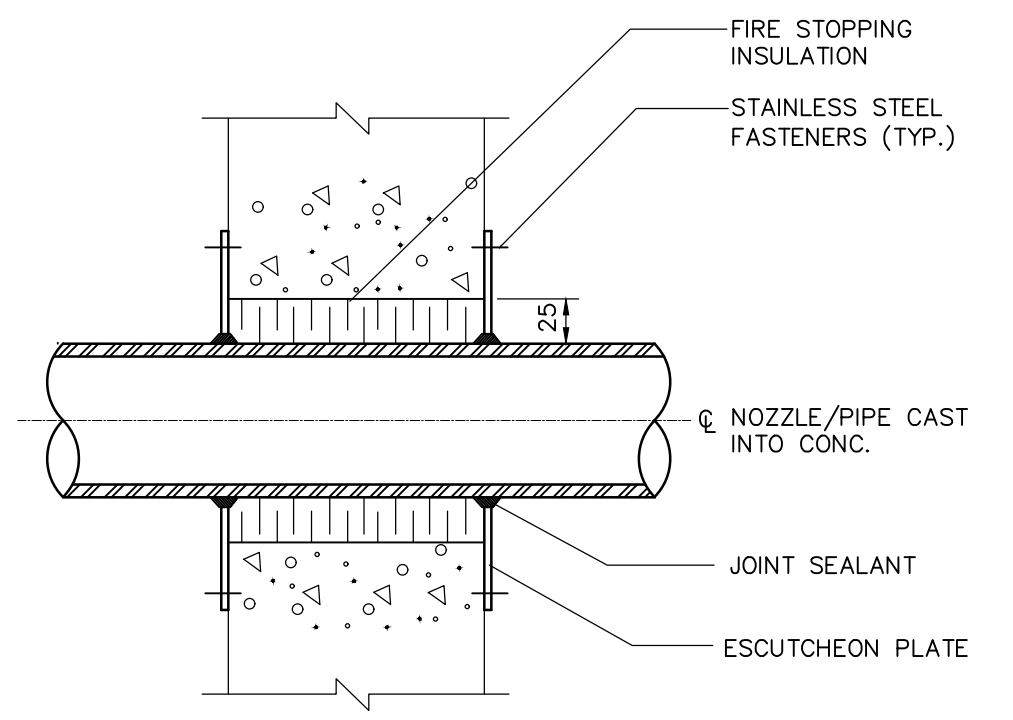


**NOTES:**

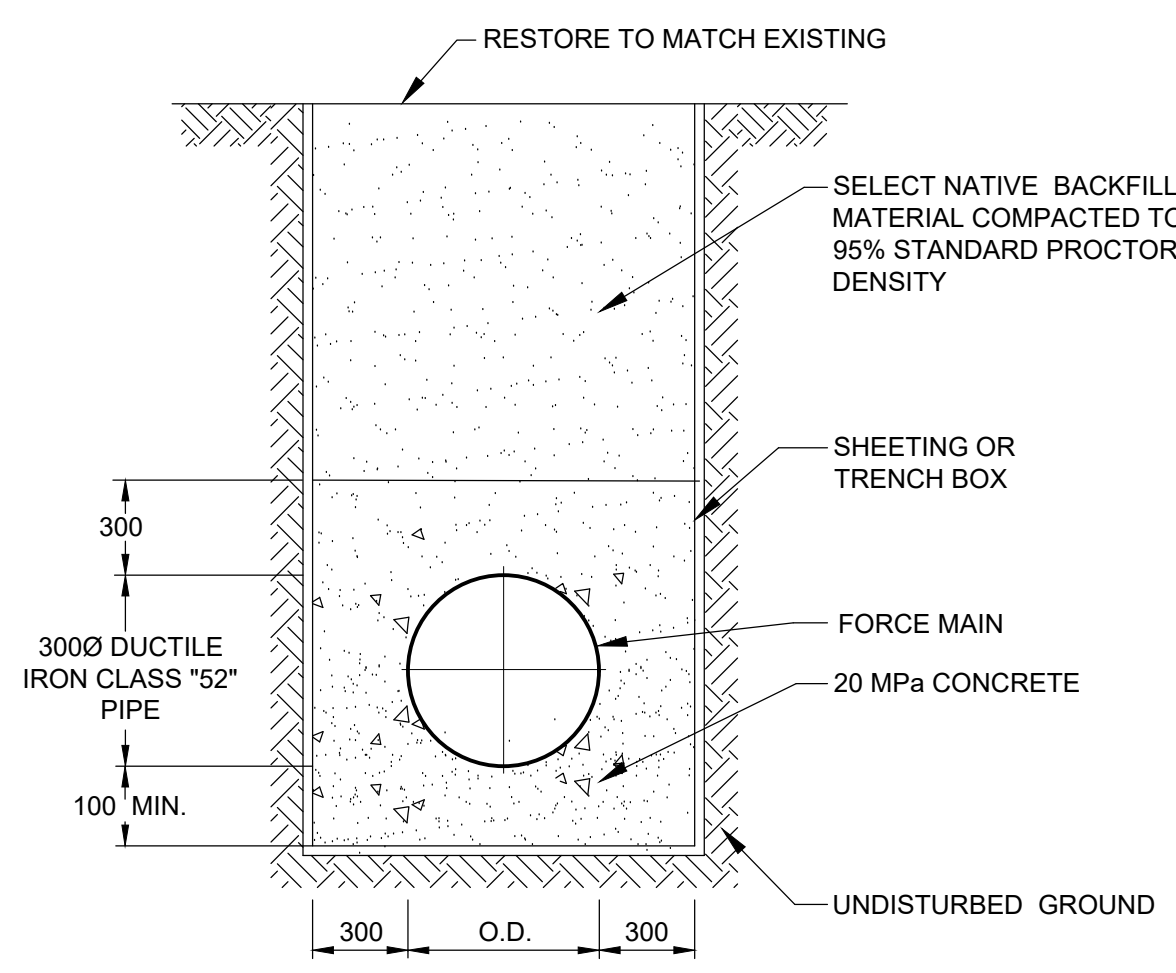
- MODULAR PIPE SEALS SHALL BE EQUAL TO LINK - SEAL AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURES RECOMMENDATIONS.
- PAINT TIGHTENED SEAL NUTS AND BOLTS WITH ROSS - KOTE MASTIC PAINT ON ALL EXTERNAL AND /OR DRY WALL CONDITIONS. PAINT TIGHTENED SEAL NUTS AND BOLTS WITH CARBOLINE # 191 EPOXY PAINT ON ALL WET WALL CONDITIONS.

SCHEDULE	
WALL CONDITION	LOCATION OF SEAL
INT. DRY TO EXT. WET	DRY
INT. DRY TO EXT. BELOW GRADE	DRY
INT. DRY TO EXT. ABOVE GRADE	EXT.
INT. WET TO EXT. BELOW GRADE	EXT.
INT. WET TO EXT. ABOVE GRADE	EXT.

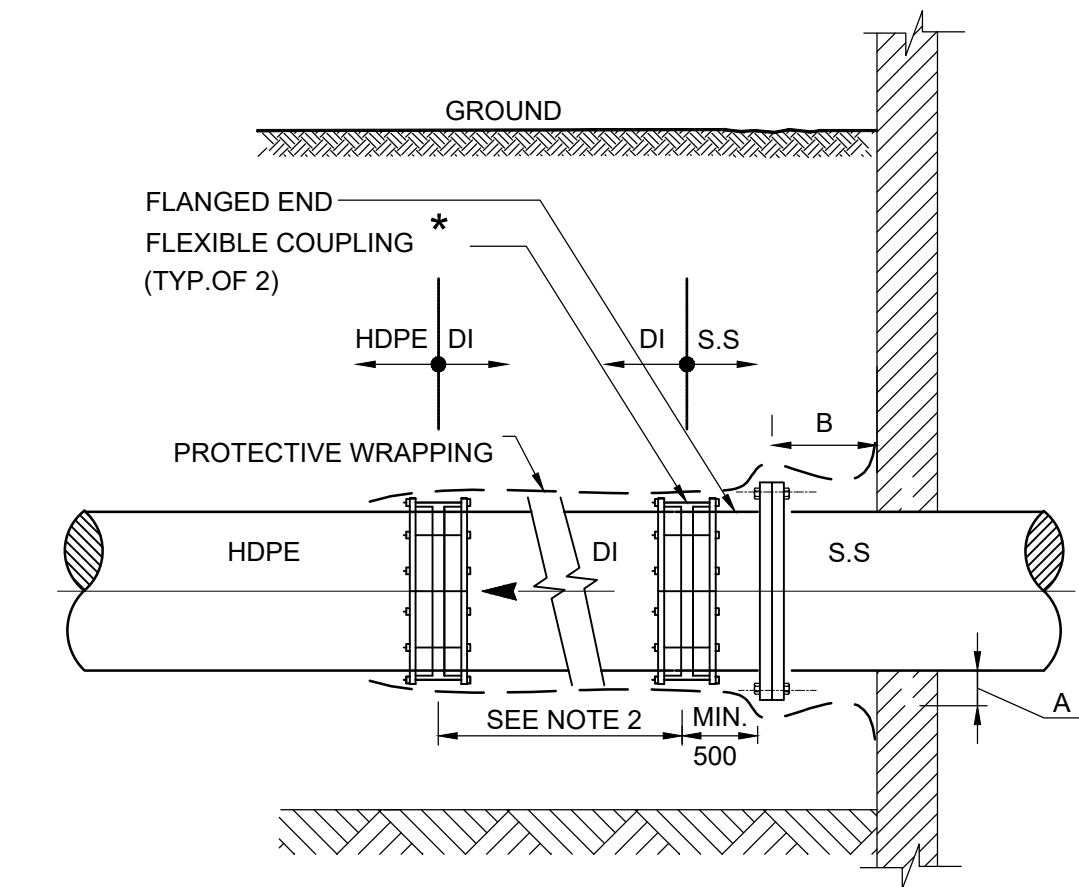
**1 PIPE THROUGH EXISTING CONCRETE WALL W/ PIPE SEAL**  
SCALE : N.T.S.



**2 PIPE THORUGH FIRE RATED WALL**  
SCALE : N.T.S.



**3 TRENCH DETAIL**  
SCALE : N.T.S.



SCHEDULE		
PIPE DIAMETER (mm)	A (mm)	B (mm)
GREATER THAN 600	150	500
250 to 600	100	300
LESS THAN 250	75	200

**NOTE:**

- CONTRACTOR IS RESPONSIBLE TO OBTAIN REQUIREMENTS FOR ASSEMBLY OF COUPLING AND FLANGED JOINTS FROM A MANUFACTURER. TORQUE PROCEDURE HAS TO BE DONE AS PER THE MANUFACTURER REQUIREMENTS.
- TWO (2) RESTRAINED FLEXIBLE COUPLINGS ARE TO BE INSTALLED NO MORE THAN 1000MM APART FROM EACH OTHER EVERY TIME THERE IS A TRANSITION IN PIPE MATERIAL OR WHERE A PIPE THAT IS EMBEDDED INTO A STRUCTURE EXTENDS OUT TO THE EXTERIOR.

**4 PIPE CONNECTION THROUGH WALL DETAILS**  
SCALE : N.T.S.

00	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100  
Building 01\Sheets\215817 - P105.dwg  
Plot: May, 2024, - 03:02:30 PM



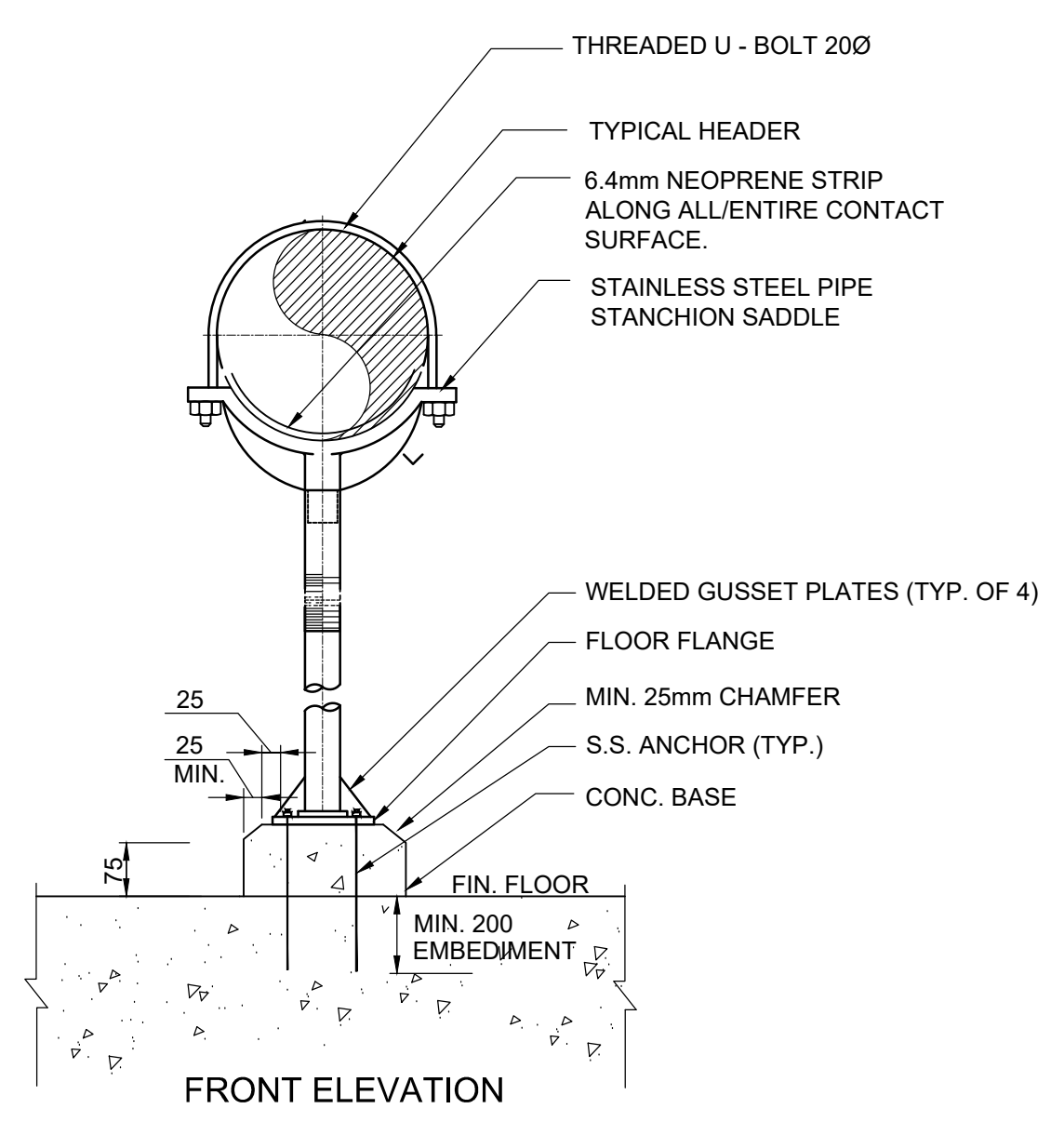
CONTRACT NO. WE-2024-01



**RODNEY WPCP UPGRADES**

PROCESS DETAILS

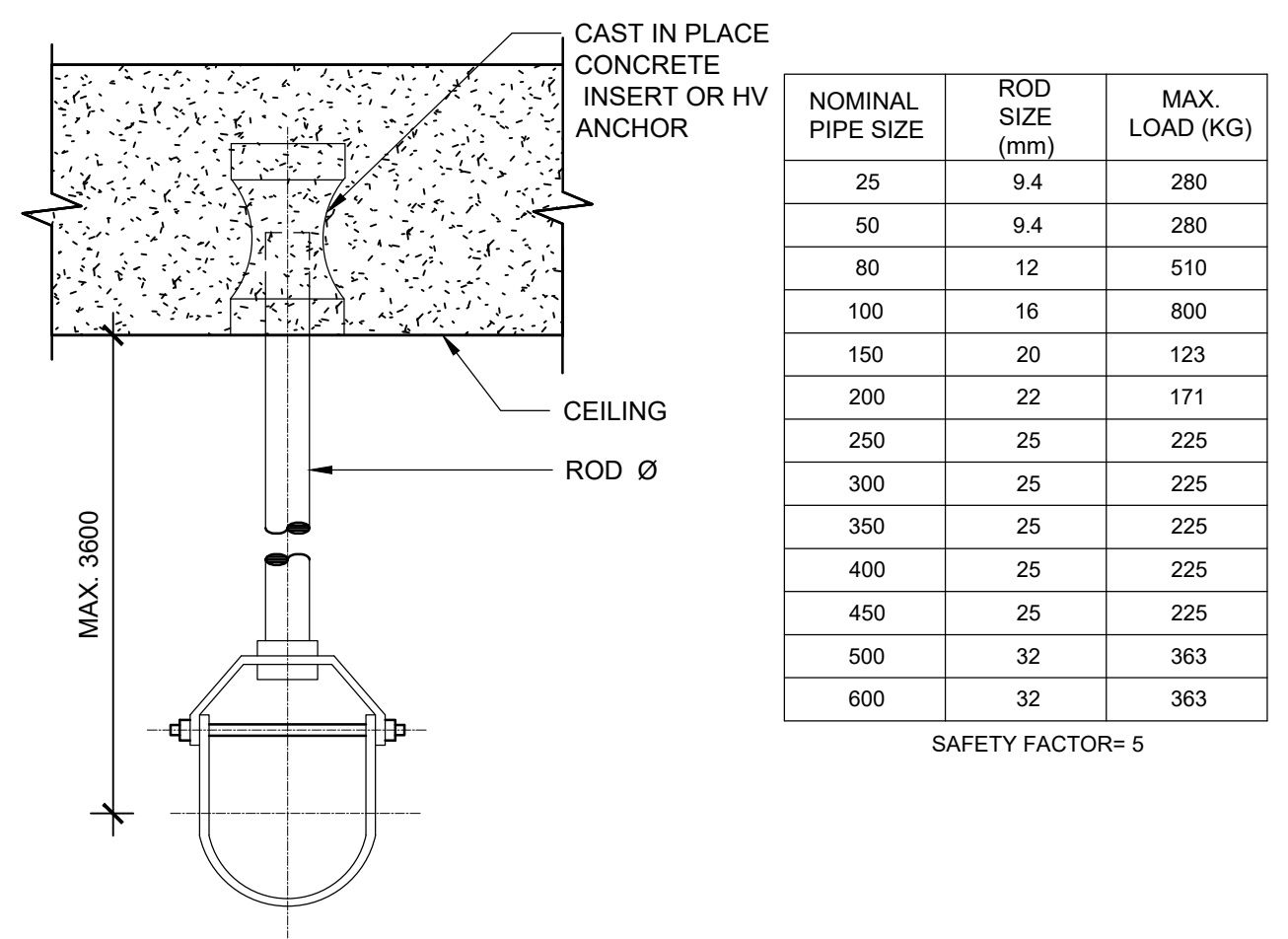
Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	Drawn by: ADD
Checked by: AHN	Designed by: TSY
Approved by: DC	DWG NO. P105



**NOTES:**

- ALL UNSUBMERGED METALWORK TO BE STAINLESS STEEL.
- SUBMIT SHOP DRAWINGS STAMPED BY PROFESSIONAL ENGINEERS LICENCED TO WORK IN ONTARIO.
- DIAMETER OF PIPE STAND TO SUIT SIZE, WEIGHT AND PRESSURE OF THE PIPE (MIN. 800).

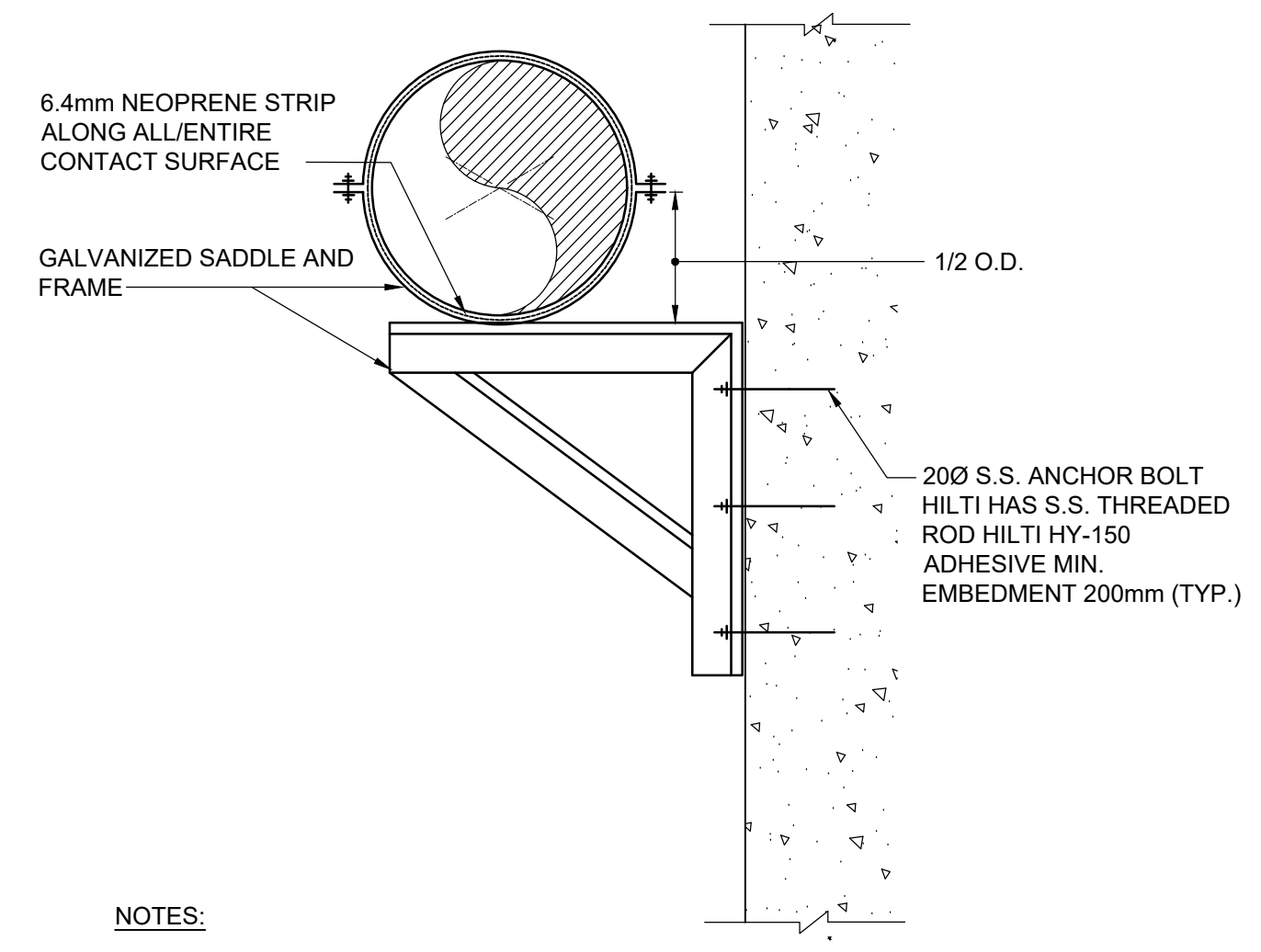
**5 CONCEPTUAL ELEVATED PIPE SUPPORT DETAIL OFF FLOOR**  
SCALE : N.T.S.



**NOTES:**

- ALL UNSUBMERGED METALWORK TO BE STAINLESS STEEL.
- SUBMIT SHOP DRAWINGS STAMPED BY PROFESSIONAL ENGINEERS LICENCED TO WORK IN ONTARIO.

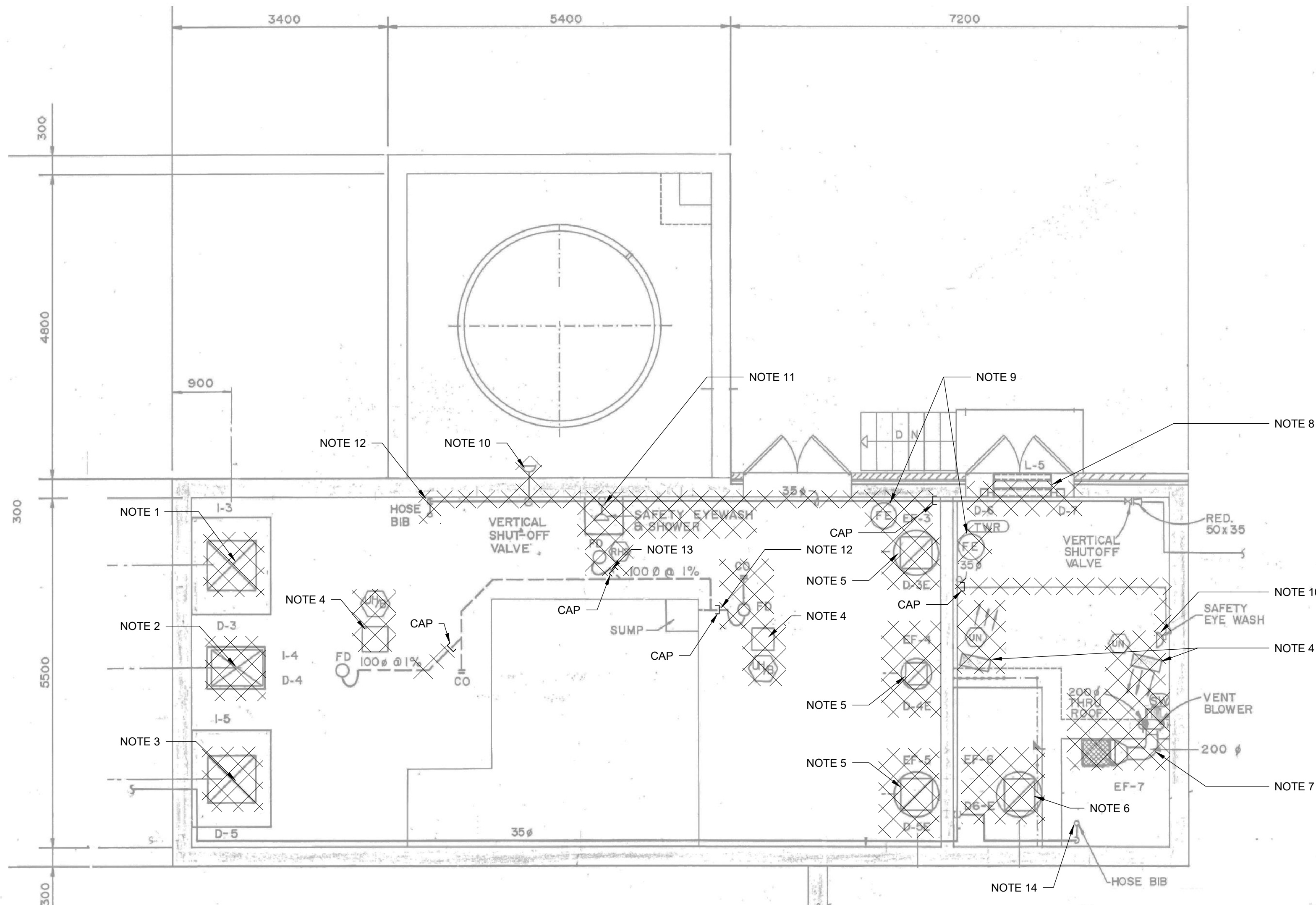
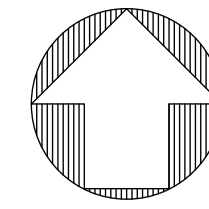
**6 SINGLE PIPE HANGER DETAIL**  
SCALE : N.T.S.



**NOTES:**

- ALL METALWORK TO BE GALVANIZED STEEL
- SUBMIT SHOP DRAWINGS

**7 ELEVATED PIPE SUPPORT DETAIL OFF WALL**  
SCALE : N.T.S.



**1 PLAN - REMOVALS**  
 SCALE: 0.5m 0 1m 2.0m  
 1:50

**DRAWING NOTES:**

1. REMOVE EXISTING GRAVITY INTAKE VENTILATOR COMPLETE WITH MOTORIZED DAMPER, ROOF CURB, ROOF FLASHINGS, ETC. EXISTING ROOF OPENING TO BE REUSED FOR NEW GRAVITY INTAKE VENTILATOR. REFER TO DRAWING M101 AND STRUCTURAL DRAWINGS FOR DETAILS.
2. REMOVE EXISTING GRAVITY INTAKE VENTILATOR COMPLETE WITH MOTORIZED DAMPER, ROOF CURB, ROOF FLASHINGS, ETC. COORDINATE WITH ROOFING CONTRACTOR TO PATCH AND MAKE GOOD EXISTING ROOF OPENING. SEAL WATER TIGHT. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
3. REMOVE EXISTING GRAVITY INTAKE VENTILATOR COMPLETE WITH MOTORIZED DAMPER, ROOF CURB, ROOF FLASHINGS, ETC. EXISTING ROOF OPENING TO BE REUSED FOR NEW ROOF MOUNTED EXHAUST FAN. REFER TO DRAWING M101 AND STRUCTURAL DRAWINGS FOR DETAILS.
4. REMOVE EXISTING UNIT HEATER COMPLETE WITH HANGERS, SUPPORTS, ETC.
5. REMOVE EXISTING ROOF MOUNTED EXHAUST FAN COMPLETE WITH MOTORIZED DAMPER, ROOF CURB, ROOF FLASHINGS, ETC. COORDINATE WITH ROOFING CONTRACTOR TO PATCH AND MAKE GOOD EXISTING ROOF OPENING. SEAL WATER TIGHT. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
6. REMOVE EXISTING ROOF MOUNTED EXHAUST FAN COMPLETE WITH MOTORIZED DAMPER, ROOF CURB, ROOF FLASHINGS, ETC. EXISTING ROOF OPENING TO BE REUSED FOR NEW ROOF MOUNTED EXHAUST FAN. REFER TO DRAWING M101 AND STRUCTURAL DRAWINGS FOR DETAILS.
7. REMOVE EXISTING VENT BLOWER COMPLETE WITH ROOF CURB, ROOF FLASHINGS, DUCTS, ETC. COORDINATE WITH ROOFING CONTRACTOR TO PATCH AND MAKE GOOD EXISTING ROOF OPENING. SEAL WATER TIGHT. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
8. REMOVE EXISTING MOTORIZED DAMPERS. EXISTING 760x760 INTAKE LOUVRE TO REMAIN.
9. REMOVE EXISTING FIRE EXTINGUISHER.
10. REMOVE EXISTING EYE WASH STATION COMPLETE WITH ALL ASSOCIATED APPURTENANCES. CUT AND CAP EXISTING SERVICES AS INDICATED.
11. REMOVE EXISTING EYE WASH & SHOWER STATION COMPLETE WITH ALL ASSOCIATED APPURTENANCES. CUT AND CAP EXISTING SERVICES AS INDICATED.
12. REMOVE EXISTING HOSE BIB COMPLETE WITH ALL ASSOCIATED APPURTENANCES. CUT AND CAP EXISTING SERVICES AS INDICATED.
13. REMOVE EXISTING FLOOR DRAIN INCLUDING TRAP AND CAP SANITARY DRAINAGE PIPING BELOW SLAB.
14. EXISTING HOSE BIB TO REMAIN.

No.	REVISION	DATE	BY
3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR 100% CLIENT REVIEW 2023	2023.08.30	DC
1	ISSUED FOR DESIGN REVIEW	2023.06.30	DC

File: R:12021215817 - West Elgin-Rodney WWTU Upgrades\10 CAD\dwg\01 RevitA.100  
 Building 01\Sheets\M100 MECHANICAL DEMO.dwg  
 Plot: May, 2024, - 10:11:34 AM



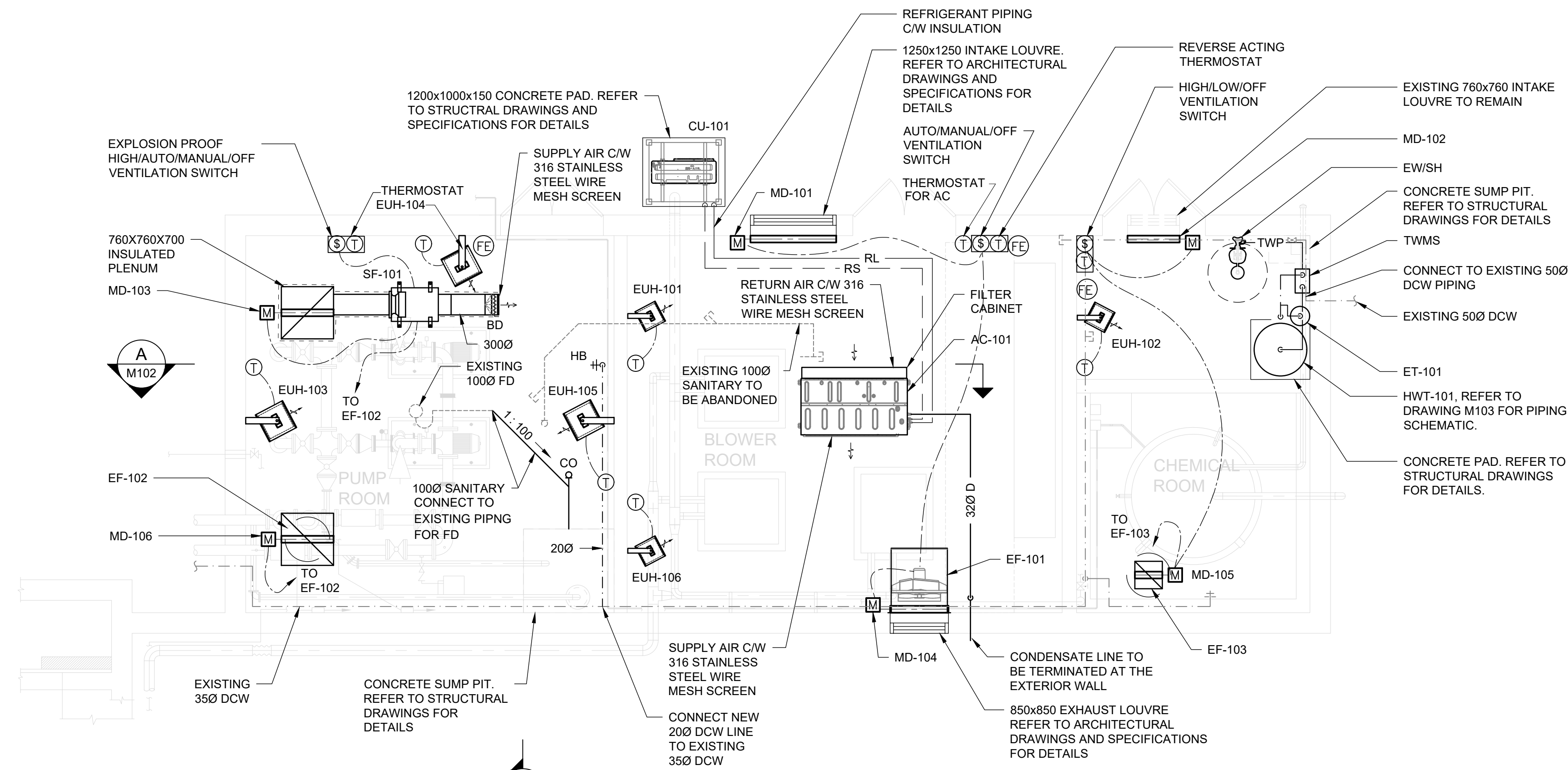
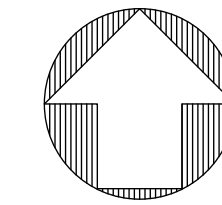
CONTRACT NO. WE-2024-01



**RODNEY WPCP  
UPGRADES**

MECHANICAL  
**CONTROL BUILDING B  
PLAN - REMOVALS**

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: BAQ	Designed by: PHP
Checked by: BJM	Approved by: DC
DWG NO. <b>M100</b>	



- NOTES:
1. ALL DUCTWORK AND PIPING TO BE INSULATED AS PER THE SPECIFICATIONS SECTION 15270 AND 15260.
  2. DO NOT RUN INSULATION THROUGH THE FILTER BOX AND FAN(SF-101).
  3. DRAWINGS ARE DIAGRAMMATIC. COORDINATE EXISTING CONDITIONS ON-SITE.

1 HVAC AND PLUMBING PLAN  
 SCALE: 0.5m 0 1m 2.0m  
 1:50

LEGEND:

	EXISTING
	NEW

No.	REVISION	DATE	BY
3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR 100% CLIENT REVIEW 2023	2023.08.30	DC
1	ISSUED FOR DESIGN REVIEW	2023.06.30	DC

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Sheets\M101 Plan.dwg  
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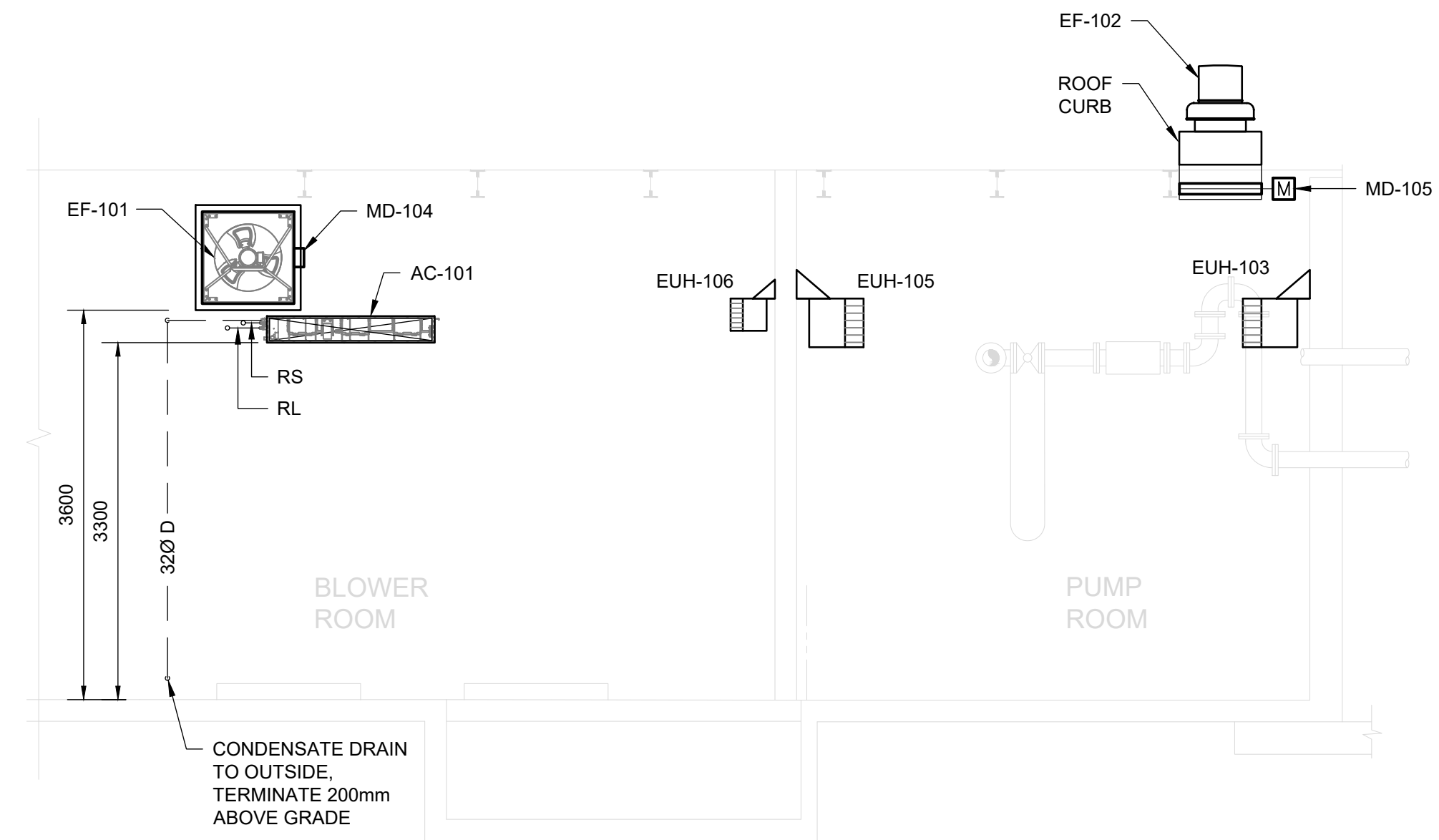
CONTRACT NO. WE-2024-01



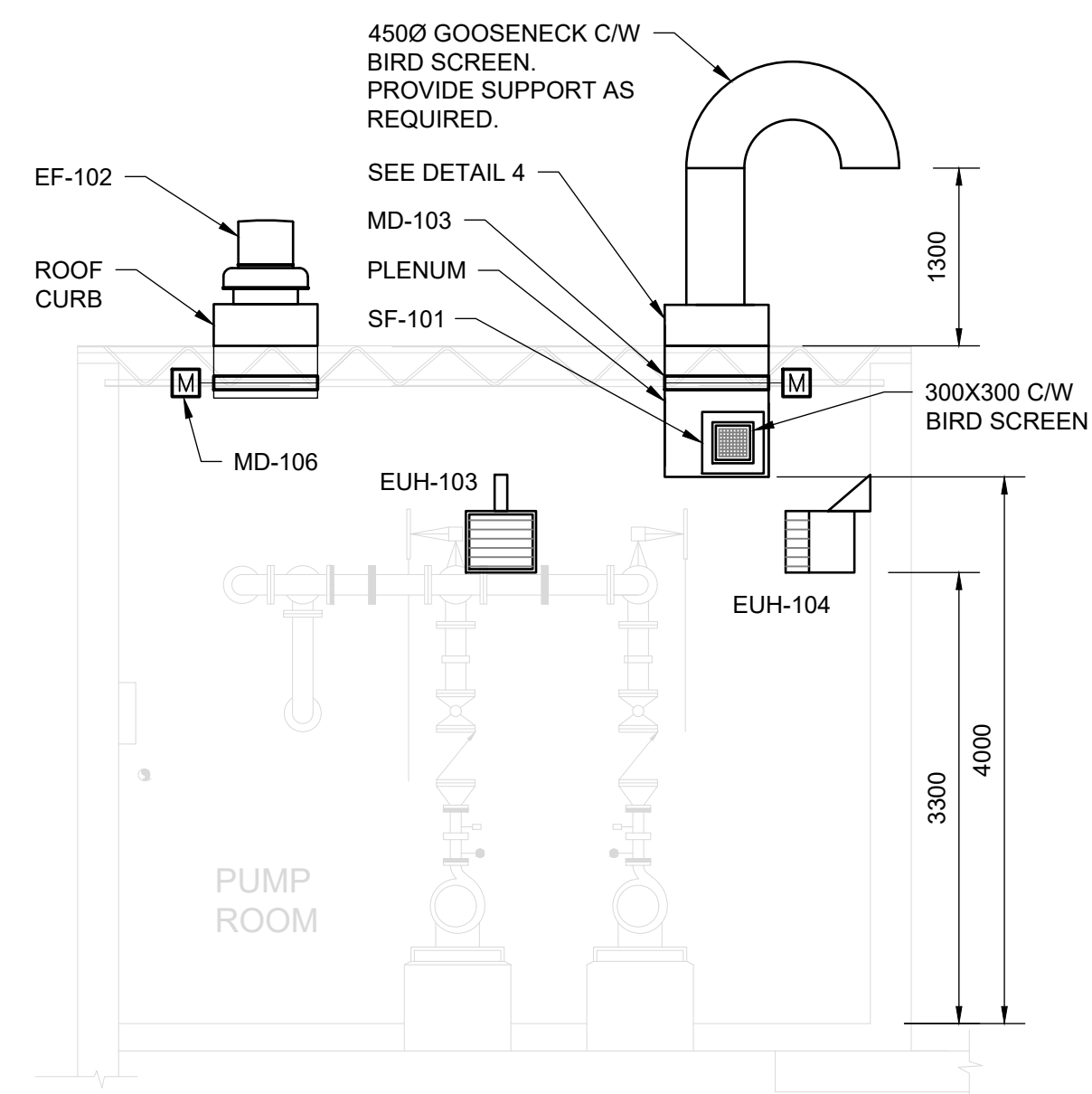
RODNEY WPCP  
 UPGRADES

MECHANICAL  
 CONTROL BUILDING B  
 HVAC AND PLUMBING PLAN

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. M101
Drawn by: BAQ	Designed by: PHP
Checked by: BJM	Approved by: DC



**A SECTION**  
 M101 SCALE: 0.5m 0 1m 2.0m  
 1:50



**B SECTION**  
 M101 SCALE: 0.5m 0 1m 2.0m  
 1:50

No.	REVISION	DATE	BY
3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR 100% CLIENT REVIEW 2023	2023.08.30	DC
1	ISSUED FOR DESIGN REVIEW	2023.06.30	DC

File: R:2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Sheets\M102 Sections.dwg  
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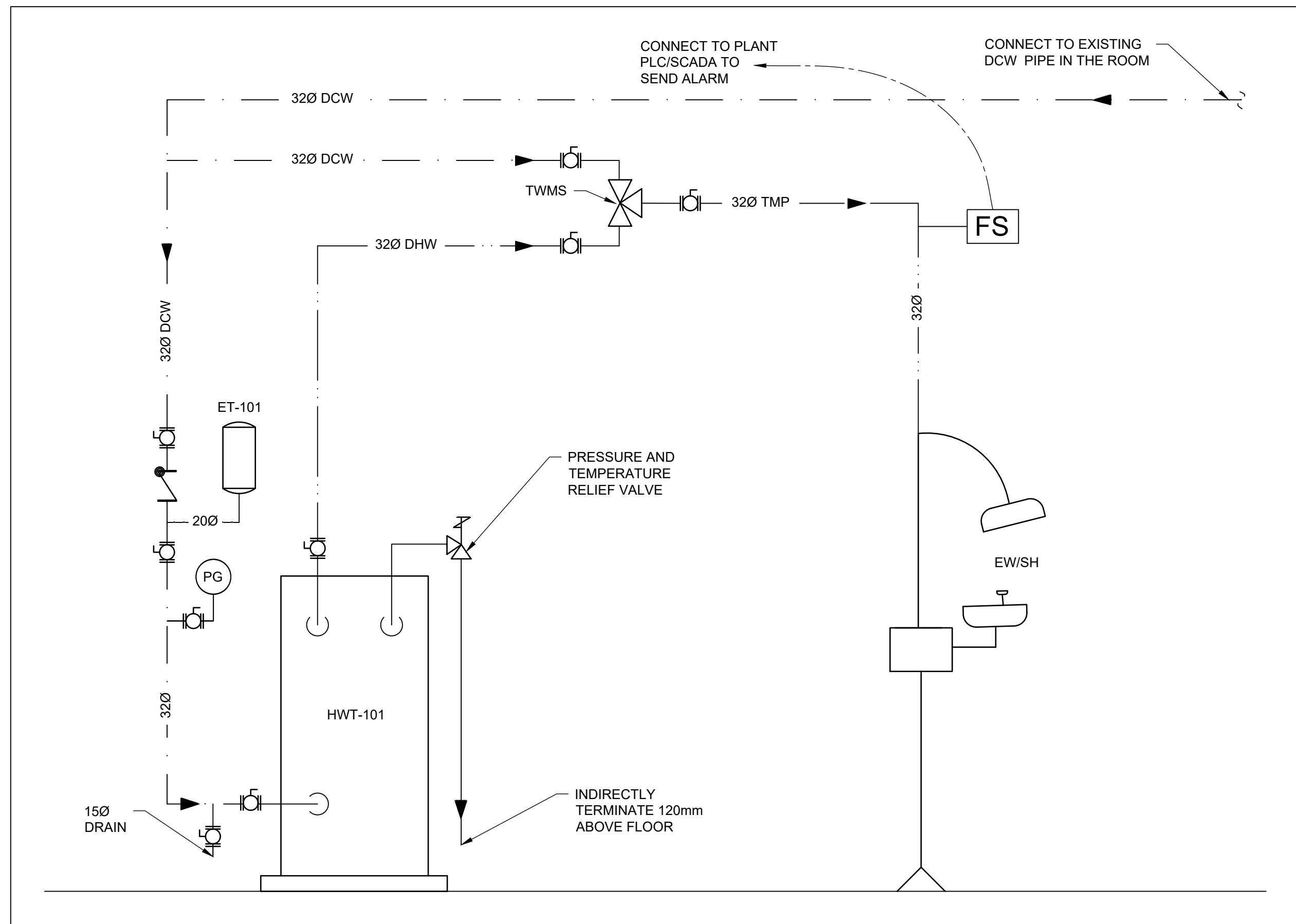
CONTRACT NO. WE-2024-01



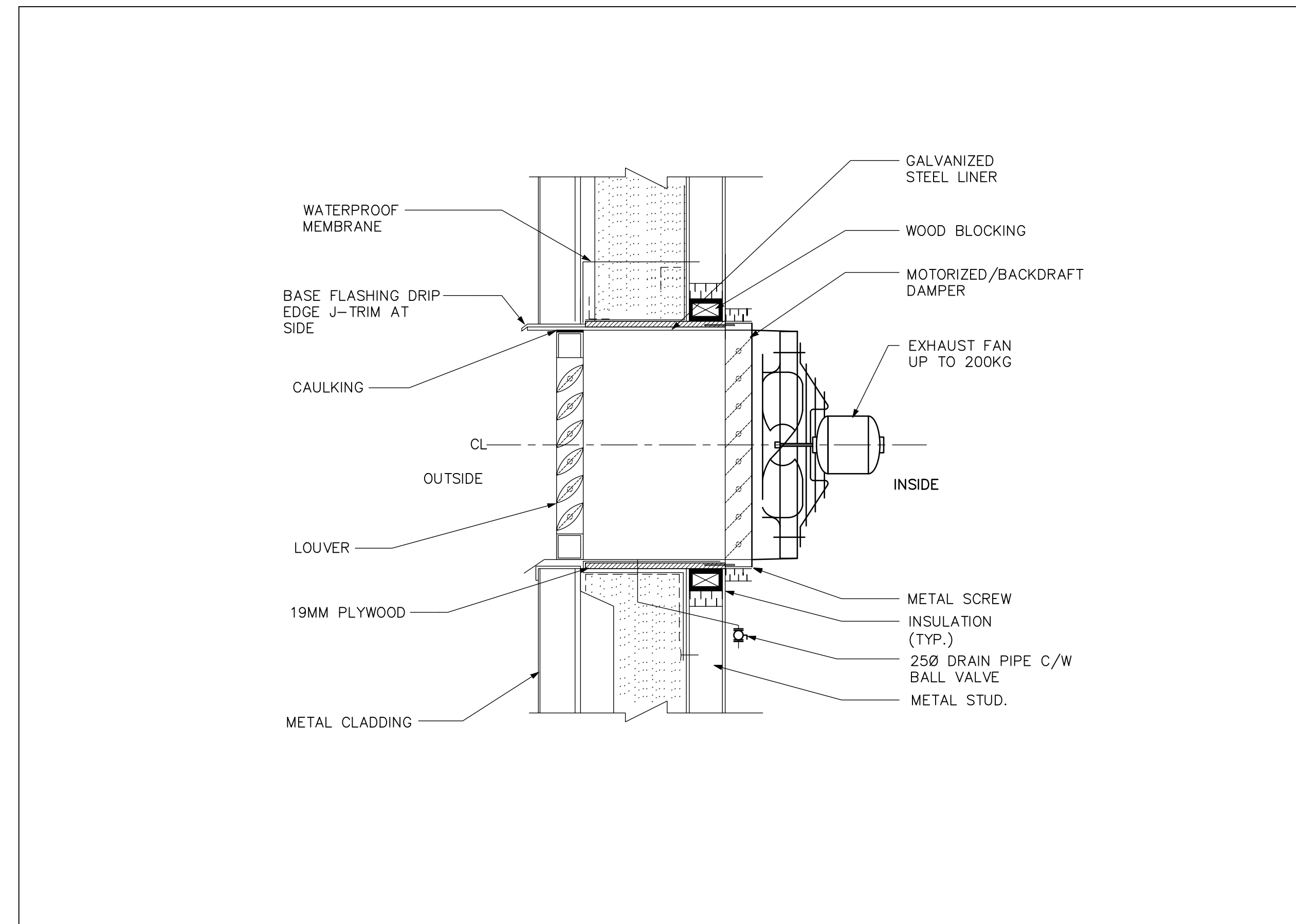
RODNEY WPCP  
 UPGRADES

MECHANICAL  
 CONTROL BUILDING B  
 SECTIONS

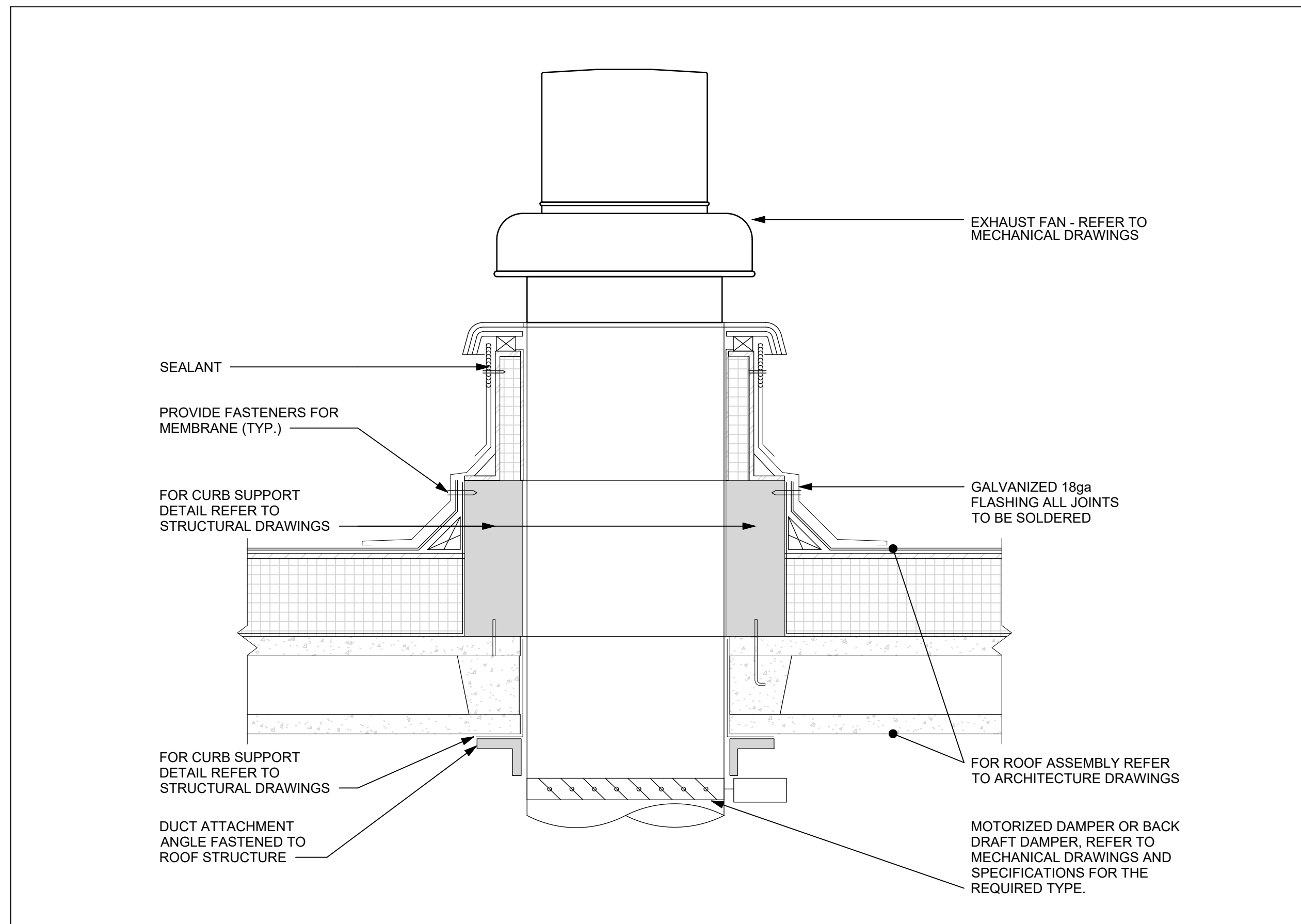
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Date: May-24	DWG NO. M102
Drawn by: BAQ	Designed by: PHP
Checked by: BJM	Approved by: DC



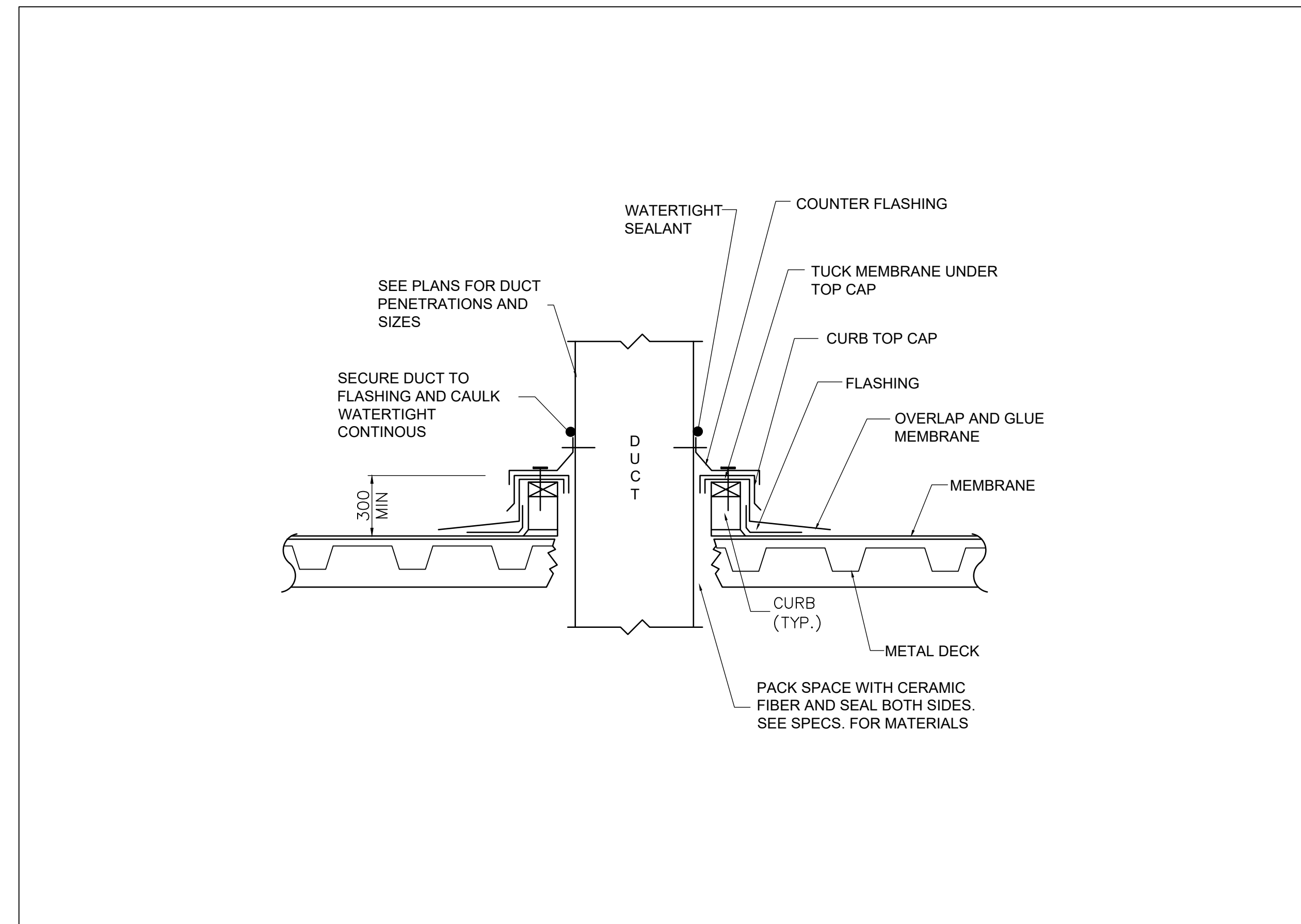
**1 PIPING DETAIL**  
SCALE: N.T.S



**2 WALL MOUNTED EXHAUST FAN DETAIL**  
SCALE: N.T.S



**3 ROOF EXHAUST FAN DETAIL**  
SCALE: N.T.S



**4 DUCT THROUGH ROOF DETAIL**  
SCALE: N.T.S

No.	REVISION	DATE	BY
3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR 100% CLIENT REVIEW 2023	2023.08.30	DC
1	ISSUED FOR DESIGN REVIEW	2023.06.30	DC

File: R:2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100  
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Plot: May, 2024, - 10:11:53 AM



CONTRACT NO. WE-2024-01



RODNEY WPCP

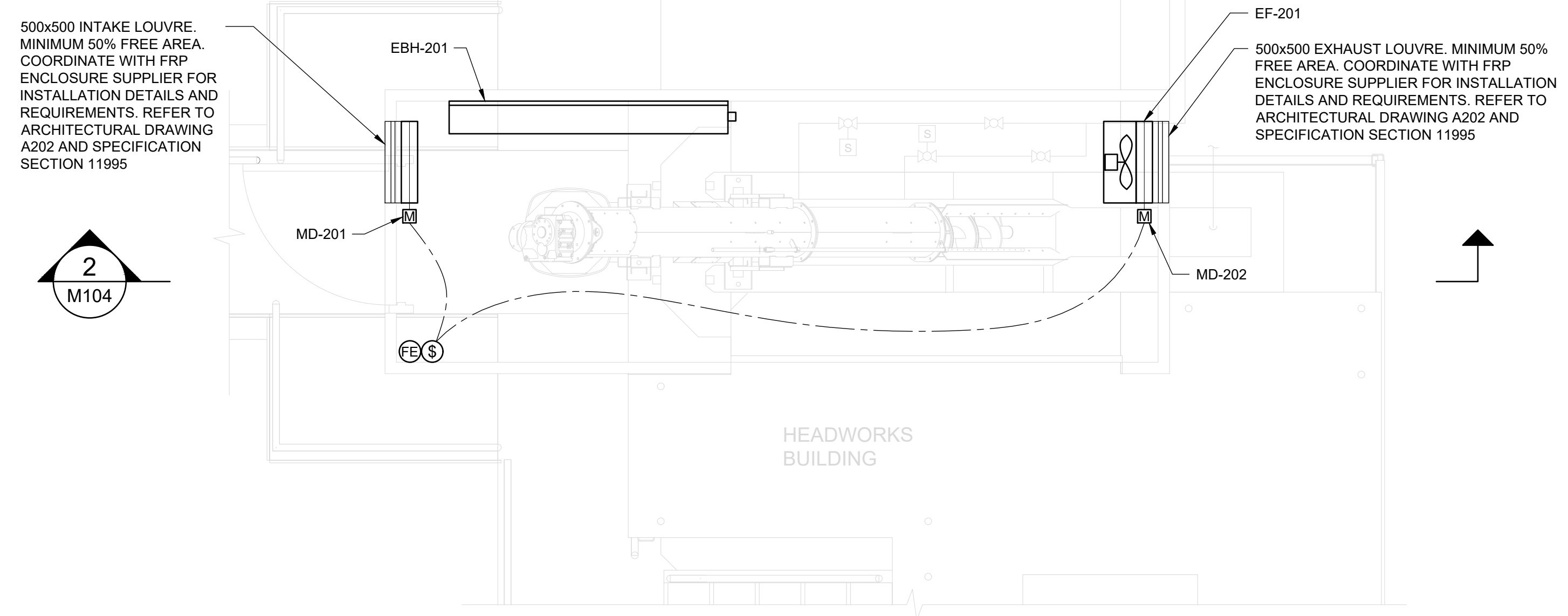
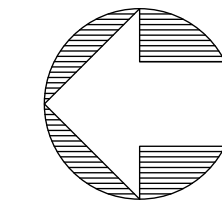
UPGRADES

MECHANICAL

DETAILS

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: BAQ	Designed by: PHP
Checked by: BJM	Approved by: DC
	DWG NO.
	M103

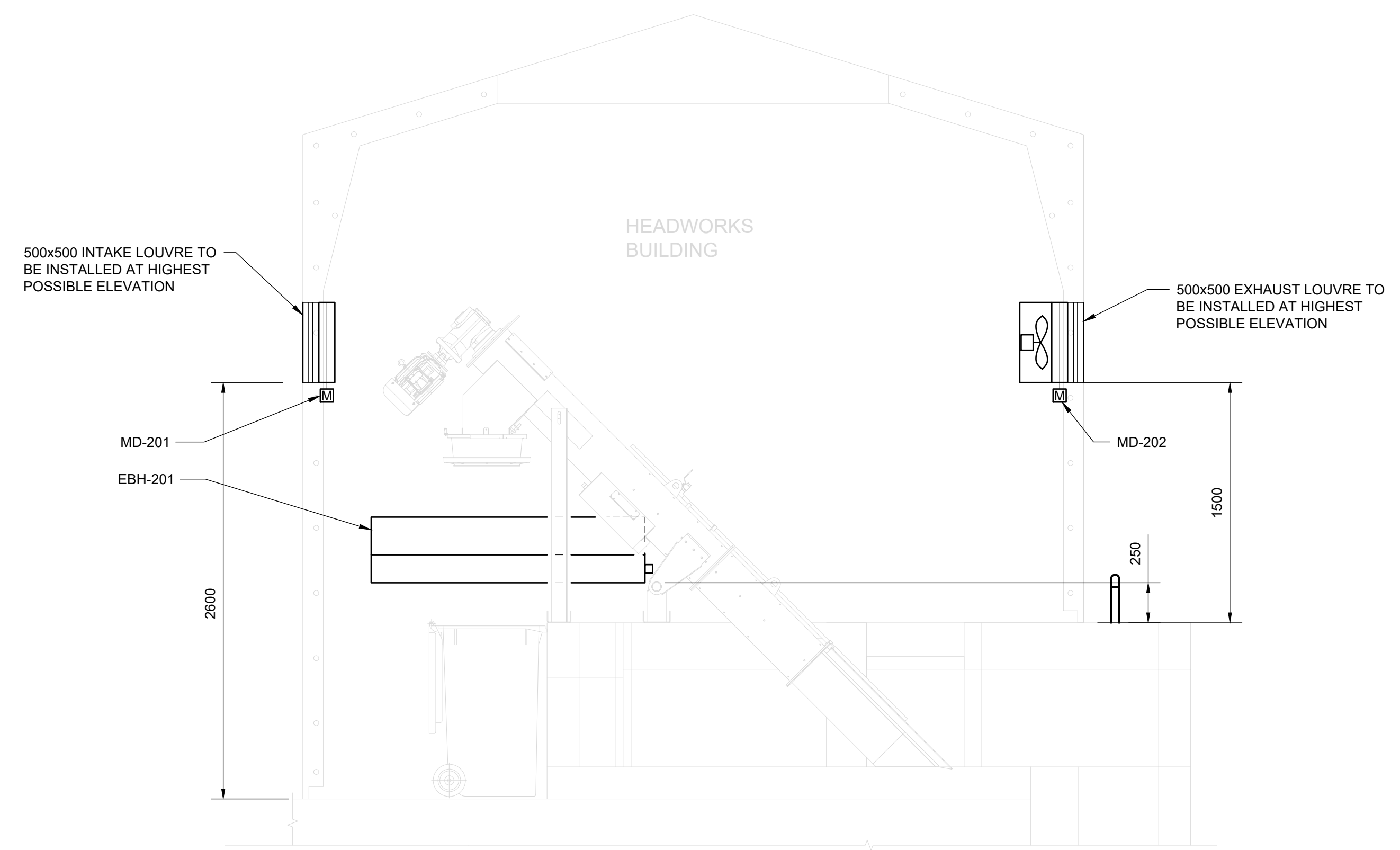




**1**  
M104

**FRP ENCLOSURE PLAN**

SCALE: 0.25m 0 0.5m 1m  
1:25



**2**  
M201

**SECTION**

SCALE: 0.25m 0 0.5m 1m  
1:25

3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR 100% CLIENT REVIEW 2023	2023.08.30	DC
1	ISSUED FOR DESIGN REVIEW	2023.06.30	DC
No.	REVISION	DATE	BY

File: R:2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Sheets\M104 PLAN.dwg  
Plot: May, 2024, - 10:12:00 AM



CONTRACT NO. WE-2024-01



**RODNEY WPCP  
UPGRADES**

MECHANICAL  
**HEADWORKS  
PLAN AND SECTION**

Scale: AS SHOWN	RVA Project No:	215817
Date: May-24	Drawn by: BAQ	Designed by: PHP
Checked by: BJM	Approved by: DC	DWG NO. M104

SCHEDULE A - AIR HANDLING AND AC UNITS																			
TAG	TYPE	LOCATION	MAKE	MODEL	COOLING (TR)	HEATING OUTPUT (kW)	FLOW (L/s)	E.S.P. (Pa)	FAN RPM	FAN MOTOR WATTS	MCA (AMPS)	MOP (AMPS)	VOLTS	PHASE	STARTER BY	CONTROL BY	INTERLOCKED WITH	APPROX. UNIT WEIGHT (KG)	NOTES
CU-101	OUTDOOR CONDENSER UNIT	OUTSIDE BLOWER BUILDING	DAIKIN	RXT048TBVJUA	4.0	-	-	-	-	-	29.1	35	208-230	1	DIV. 15	-	AC-101	80	C/W LOCAL DISCONNECT SWITCH, LOW AMBIENT KIT, WIND BAFFLES AND CONDENSER MOUNTING STAND. UNIT IS SUITABLE TO PROVIDE LOW AMBIENT COOLING DOWN TO -40°C.
AC-101	INDOOR DUCTED CONCEALED AC UNIT	BLOWER ROOM	DAIKIN	FXSQ54TBVJU	4.5	-	716	99	-	-	2.6	15	208-230	1	DIV. 15	REMOTE AC CONTROLLER	CU-101	47	C/W VIBRATION ISOLATOR, FILTER, FILTER CABINET, CONDENSATE PUMP, CONDENSATE DRAIN PAN, AND LOCAL DISCONNECT SWITCH.

SCHEDULE B - FAN SCHEDULE														
TAG	NAME / LOCATION	MAKE / MODEL	FAN DATA						ELECT. CHAR. V/PH	STARTER BY	CONTROL BY	INTERLOCKED WITH	EQUIPMENT WEIGHT kg	NOTES
			FLOW L/s	E.S.P. Pa	FAN RPM	MOTOR kW	SOUND SONES							
EF-101	EXHAUST FAN / BLOWER ROOM	GREENHECK / AER-24-03-0305	1650	74	1750	0.37	32 SONES	120 / 1	DIV. 15	SWITCH	MD-101	106	C/W SPEED CONTROLLER SUITABLE TO CHANGE THE SPEED THROUGH MANUAL SWITCH, LOCAL DISCONNECT SWITCH AND CORROSION RESISTANT COATING.	
EF-102	EXHAUST FAN / PUMP ROOM	GREENHECK / G-098-A	118 / 236	87	1725	0.25	11.3 SONES	600 / 3	DIV. 15	SWITCH	MD-104	26.3	C/W VFD (LOCATED IN ELECTRICAL ROOM), LOCAL DISCONNECT SWITCH AND CORROSION RESISTANT COATING. ALL ELECTRICAL EQUIPMENT SUITABLE FOR CLASS-I ZONE-2 HAZARDOUS AREA.	
EF-103	EXHAUST FAN / CHEMICAL ROOM	GREENHECK / G-097-A	59 / 118	87	1725	0.19	10.5 SONES	120 / 1	DIV. 15	SWITCH	MD-103	37.2	C/W SPEED CONTROLLER SUITABLE TO CHANGE THE SPEED THROUGH MANUAL SWITCH, LOCAL DISCONNECT SWITCH AND CORROSION RESISTANT COATING.	
SF-101	SUPPLY FAN / PUMP ROOM	GREENHECK / BSQ-90	108.5 / 217	158	1725	0.37	9.4 SONES	600 / 3	DIV. 15	SWITCH	MD-105	106	C/W VFD (LOCATED IN ELECTRICAL ROOM), LOCAL DISCONNECT SWITCH AND CORROSION RESISTANT COATING. ALL ELECTRICAL EQUIPMENT SUITABLE FOR CLASS-I ZONE-2 HAZARDOUS AREA. C/W FILTER BOX AND MERV 8 FILTER.	
EF-201	FRP PROPELLER EXHAUST FAN / HEADWORKS BUILDING	M.K. PLASTIC / AXPR 12 (25")	71	75	1725	0.184	7 SONES	120 / 1	DIV. 15	SWITCH	MD-201	41	C/W BACKDRAFT DAMPER, WALL BOX, DIRECT DRIVE, S.S. OUTLET BIRD SCREEN, OSHA MOTOR GUARD, 316 SST MOTOR SHAFT, FACTORY MOUNTED EXPLOSION PROOF LOCAL DISCONNECT SWITCH. ALL ELECTRICAL EQUIPMENT SUITABLE FOR CLASS-I ZONE-1 HAZARDOUS AREA.	

SCHEDULE C - ELECTRIC HEATERS							
TAG	LOCATION	MAKE	MODEL	ELECTRICAL LOAD (kW)	STARTER BY	VOLTAGE/ PHASE	COMMENTS
EUH-101	BLOWER ROOM	OUELLET	OAS05036AM	5	DIV. 15	600 / 3	C/W WALL MOUNT THERMOSTAT, LOCAL DISCONNECT SWITCH, WALL MOUNTING BRACKET AND CORROSION RESISTANT COATING.
EUH-102	CHEMICAL ROOM	OUELLET	OAS07536AM	7.5	DIV. 15	600 / 3	C/W WALL MOUNT THERMOSTAT, LOCAL DISCONNECT SWITCH, WALL MOUNTING BRACKET AND CORROSION RESISTANT COATING.
EUH-103	PUMP ROOM	OUELLET	OHX05036	5	DIV. 15	600 / 3	C/W WALL MOUNT THERMOSTAT, LOCAL DISCONNECT SWITCH, WALL MOUNTING BRACKET AND CORROSION RESISTANT COATING. SUITABLE FOR CLASS-I ZONE-2 HAZARDOUS AREA.
EUH-104	PUMP ROOM	OUELLET	OHX05036	5	DIV. 15	600 / 3	C/W WALL MOUNT THERMOSTAT, LOCAL DISCONNECT SWITCH, WALL MOUNTING BRACKET AND CORROSION RESISTANT COATING. SUITABLE FOR CLASS-I ZONE-2 HAZARDOUS AREA.
EUH-105	PUMP ROOM	OUELLET	OHX05036	5	DIV. 15	600 / 3	C/W WALL MOUNT THERMOSTAT, LOCAL DISCONNECT SWITCH, WALL MOUNTING BRACKET AND CORROSION RESISTANT COATING. SUITABLE FOR CLASS-I ZONE-2 HAZARDOUS AREA.
EUH-106	BLOWER ROOM	OUELLET	OAS05036AM	5	DIV. 15	600 / 3	C/W WALL MOUNT THERMOSTAT, LOCAL DISCONNECT SWITCH, WALL MOUNTING BRACKET AND CORROSION RESISTANT COATING.
EBH-201	FRP ENCLOSURE / HEADWORKS BUILDING	OUELLET	OPX2A6536-CTT	6.5	DIV. 15	600 / 3	C/W WALL MOUNT THERMOSTAT, LOCAL DISCONNECT SWITCH, WALL MOUNTING BRACKET AND CORROSION RESISTANT COATING. SUITABLE FOR CLASS-I ZONE-1 HAZARDOUS AREA.

SCHEDULE D - MOTORIZED DAMPERS								
TAG	LOCATION	SIZE WxH	DAMPER MAKE/SERIES	DAMPER TYPE MODULATING / 2-POSITION	BELIMO ACTUATOR		INTERLOCKED WITH	REMARKS
					VOLT	FAIL-SAFE		
MD-101	BLOWER ROOM	1250X1250	TAMCO / 9000	2 POSITION MOTORIZED	120	CLOSE	EF-101	-
MD-102	CHEMICAL ROOM	760X760	TAMCO / 9000	2 POSITION MOTORIZED	120	CLOSE	EF-103	CORROSION RESISTANT
MD-103	PUMP ROOM	760X760	TAMCO / 9000	2 POSITION MOTORIZED	120	CLOSE	SF-101	C/W EXPLOSION PROOF ENCLOSURE (BELIMO ZS-260)
MD-104	BLOWER ROOM	850X850	TAMCO / 9000	MODULATING	24	CLOSE	EF-101	-
MD-105	CHEMICAL ROOM	400X400	TAMCO / 9000	2 POSITION MOTORIZED	120	CLOSE	EF-103	CORROSION RESISTANT
MD-106	PUMP ROOM	760X760	TAMCO / 9000	2 POSITION MOTORIZED	120	CLOSE	EF-102	C/W EXPLOSION PROOF ENCLOSURE (BELIMO ZS-260)
MD-201	FRP ENCLOSURE / HEADWORKS BUILDING	500X500	TAMCO / 9000	2 POSITION MOTORIZED	120	CLOSE	EF-201	C/W EXPLOSION PROOF ENCLOSURE (BELIMO ZS-260)
MD-202	FRP ENCLOSURE / HEADWORKS BUILDING	500X500	TAMCO / 9000	2 POSITION MOTORIZED	120	CLOSE	EF-201	C/W EXPLOSION PROOF ENCLOSURE (BELIMO ZS-260)

SCHEDULE E - WATER HEATER									
TAG	DESCRIPTION/ LOCATION	MAKE	MODEL	TOTAL VOLUME (L)	INPUT KW	V/PH	MCA	WEIGHT (KG)	NOTES
HWT-101	ELECTRIC HOT WATER TANK/ CHEMICAL ROOM	RHEEM	ES120-9	454	9	208/1	44	320	C/W TEMPERATURE AND PRESSURE RELIEF VALVE, ASME APPROVED TANK

SCHEDULE F - EXPANSION TANK							
TAG	TYPE	LOCATION	MAKE	MODEL	TOTAL VOLUME (L)	NPT CONNECTION (mm)	NOTES
ET-101	INLINE EXPANSION TANK	CHEMICAL ROOM	A.O. SMITH	PMI-5	17.4	20	PRE CHARGED TO 38 PSI, NSF 61 CERTIFIED AND ASME APPROVED TANK

3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR 100% CLIENT REVIEW 2023	2023.07.14	DC
1	ISSUED FOR DESIGN REVIEW	2023.06.30	DC
No.	REVISION	DATE	BY

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CONTRACT NO. WE-2024-01

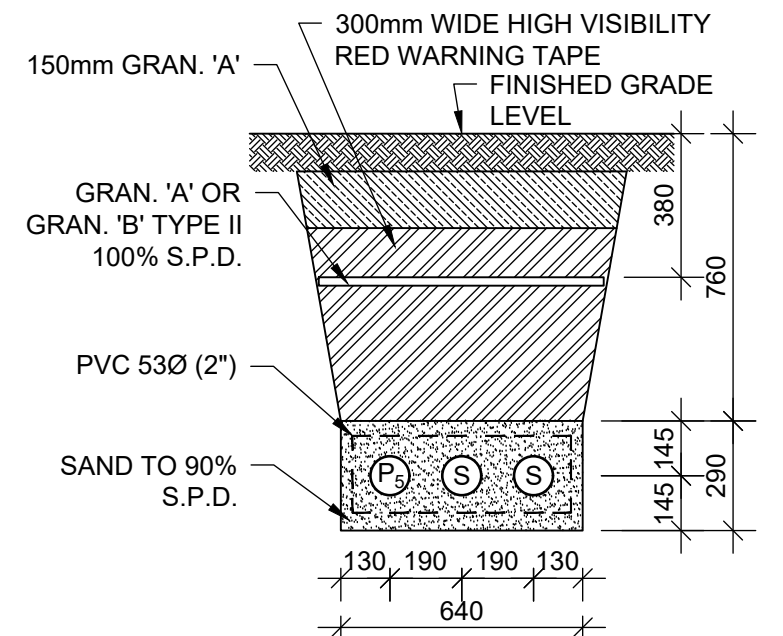
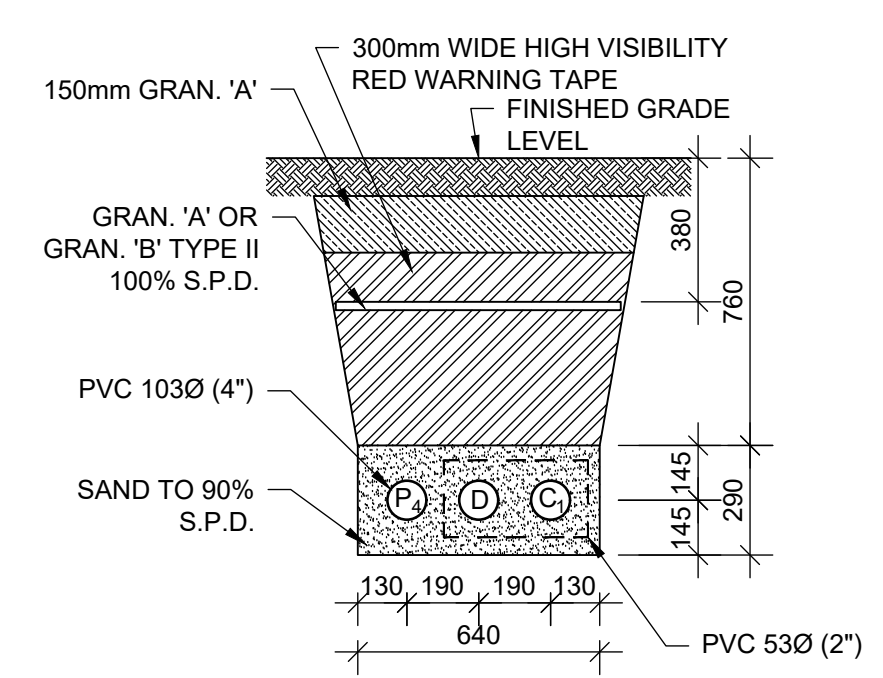
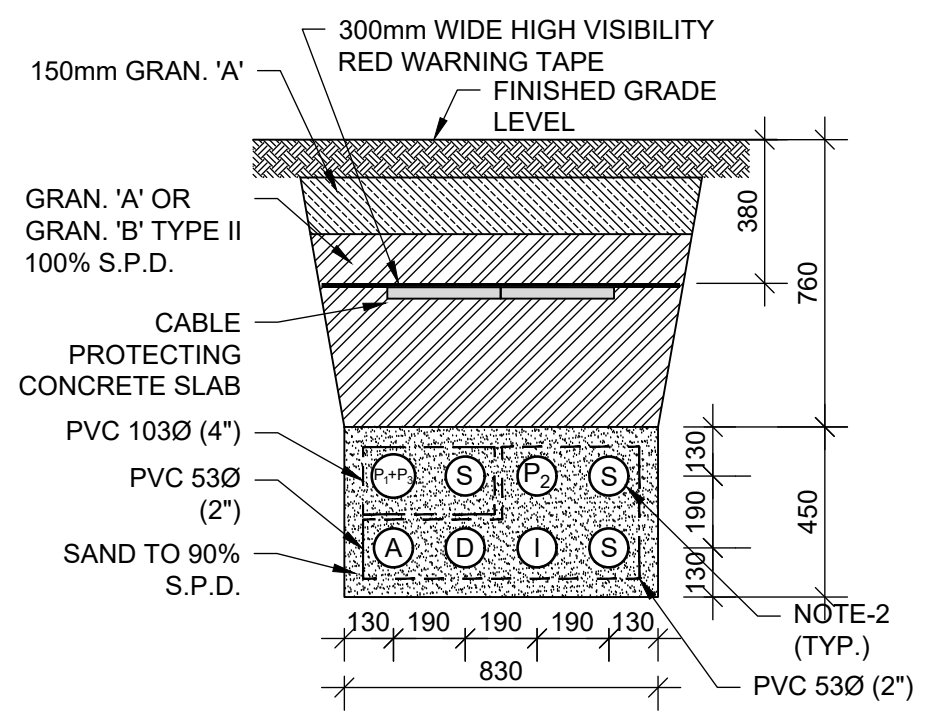
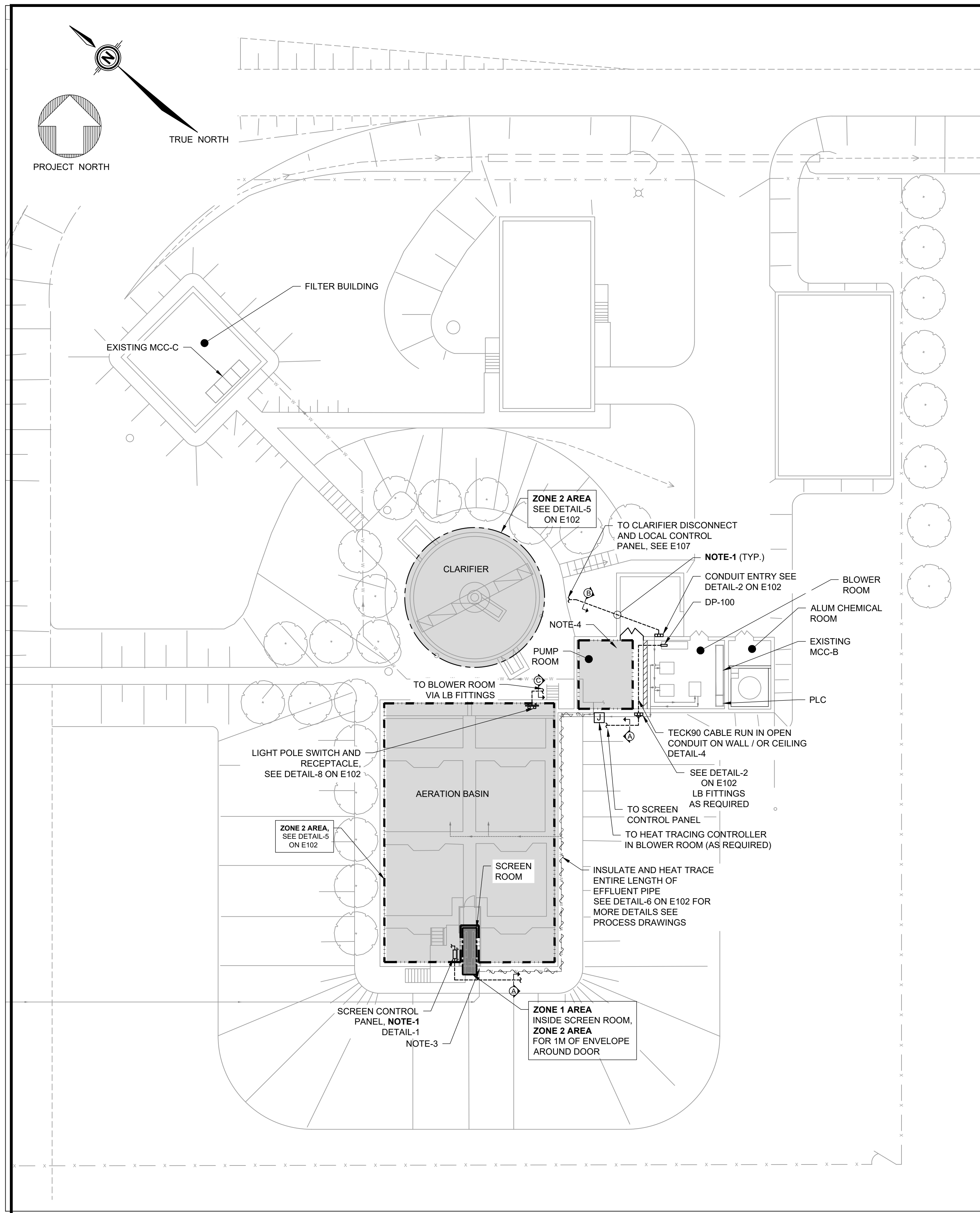


RODNEY WPCP  
UPGRADES

MECHANICAL

SCHEDULE

Scale: AS SHOWN	RVA Project No:	215817
Date: May-24	Drawn by: BAQ	Designed by: PHP
Checked by: BJM	Approved by: DC	DWG NO. M105



- LEGEND:**
- (P<sub>1</sub>) 600V TECK 90 CABLE FOR SCREEN PANEL
  - (P<sub>2</sub>) 120/208V CABLES FOR SCREEN BUILDING
  - (P<sub>3</sub>) 600V TECK 90 CABLE FOR SCREEN ROOM HEATER
  - (P<sub>4</sub>) 600V TECK 90 CABLE FOR CLARIFIER MOTOR
  - (P<sub>5</sub>) 120V CABLES FOR NEW LIGHT POLES AND RECEPTACLES
  - (C) COMMUNICATION CABLE
  - (C<sub>1</sub>) MOTOR SENSOR CABLES
  - (A) A/IAO SIGNAL CABLES
  - (I) INTRINSICALLY SAFE
  - (D) DI/DO SIGNAL CABLES
  - (S) SPARE

- LEGEND:**
- EXISTING INSTALLATION
  - NEW INSTALLATION
  - ▨ INSTALLATION/EQUIPMENT TO BE REMOVED
  - ZONE 1 AREA
  - ▤ ZONE 2 AREA

- GENERAL NOTES:**
- A. PROVIDE EQUIPMENT RATED FOR THE HAZARDOUS AREA CLASSIFICATION FOR THE CLASSIFIED AREA SHOWN.
  - B. PROVIDE EYS SEAL WHERE CONDUIT PASSES FROM HAZARDOUS TO NON-HAZARDOUS AREA.
  - C. PROVIDE EYS SEALS WITH IN 450MM OF ENCLOSURES CONTAINING ARCING DEVICES IN CLASSIFIED AREA.
  - D. ANY EQUIPMENT WITHIN 0.9 METER OF A VENT OR OPENING FROM A ZONE 1 AREA MUST BE ZONE 1 RATED, AND BETWEEN 0.9 TO 1.5 METERS MUST BE ZONE 2 RATED.
  - E. ANY EQUIPMENT WITHIN 0.9 METER OF VENT OR OPENING FROM ZONE 2 AREA MUST BE ZONE 2 RATED.

- NOTES:**
1. ROUTING OF THE DUCTBANK IS SHOWN FOR GUIDANCE ONLY. CONTRACTOR TO FIELD VERIFY AND MODIFY THE ROUTING BASED ON EXISTING UTILITIES AND IN COORDINATION WITH OTHER DISCIPLINES.
  2. CLEAN AND CAP AND INSTALL PULLING ROPE IN ALL SPARE CONDUITS.
  3. EXTEND EXISTING HEAT TRACING TO SUIT NEW PIPING NEAR SCREEN ROOM. SEE PROCESS DRAWINGS FORMORE DETAILS. SEE E103 NOTE-6, FIG-12.
  4. EXTEND EXISTING HEAT TRACING TO SUIT NEW PIPING FOR ALUM CHEMICAL LINES. SEE PROCESS DRAWINGS FOR MORE DETAILS.

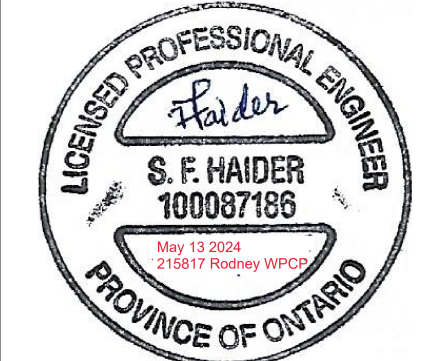
THIS DRAWING HAS BEEN PREPARED UTILIZING BASELINE DRAWINGS PROVIDED BY THE CLIENT. WHILE THE BASELINE INFORMATION IS BELIEVED TO BE RELIABLE, RVA DOES NOT WARRANT ITS ACCURACY OR COMPLETENESS AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. THE BASELINE INFORMATION ON THIS DRAWING ORIGINATED FROM PROCTOR & REDFERN LIMITED CONSULTING ENGINEERS & ARCHITECT. DRAWING AI-86488-G104. PROJECT NUMBER 0.3-0497-02, DATED JUNE 1990.

No.	REVISION	DATE	BY
3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR APPROVAL	2023.08.30	DC
1	ISSUED FOR 50% DESIGN REVIEW	2023.06.30	DC

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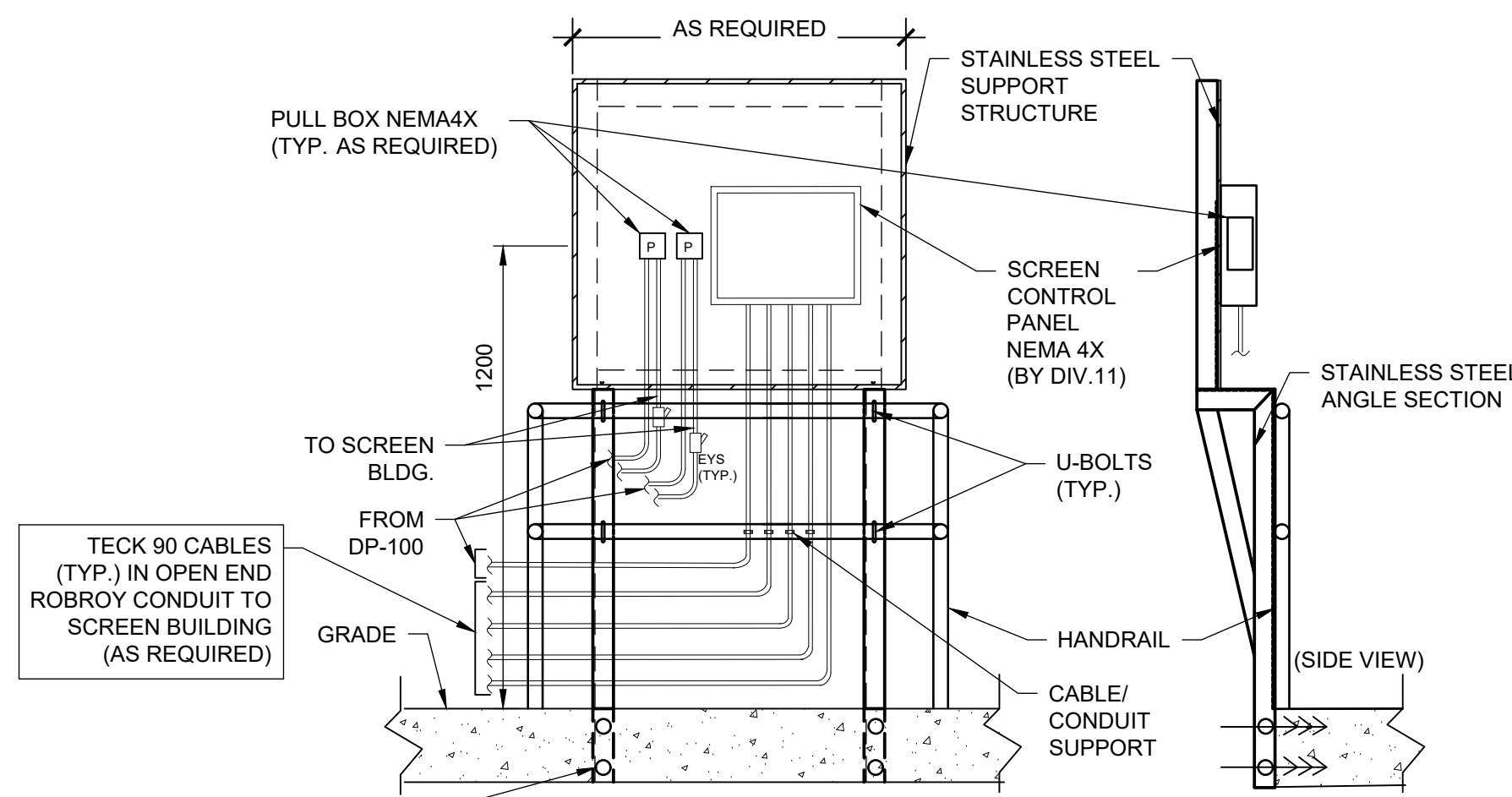
CONTRACT NO. WE-2024-01



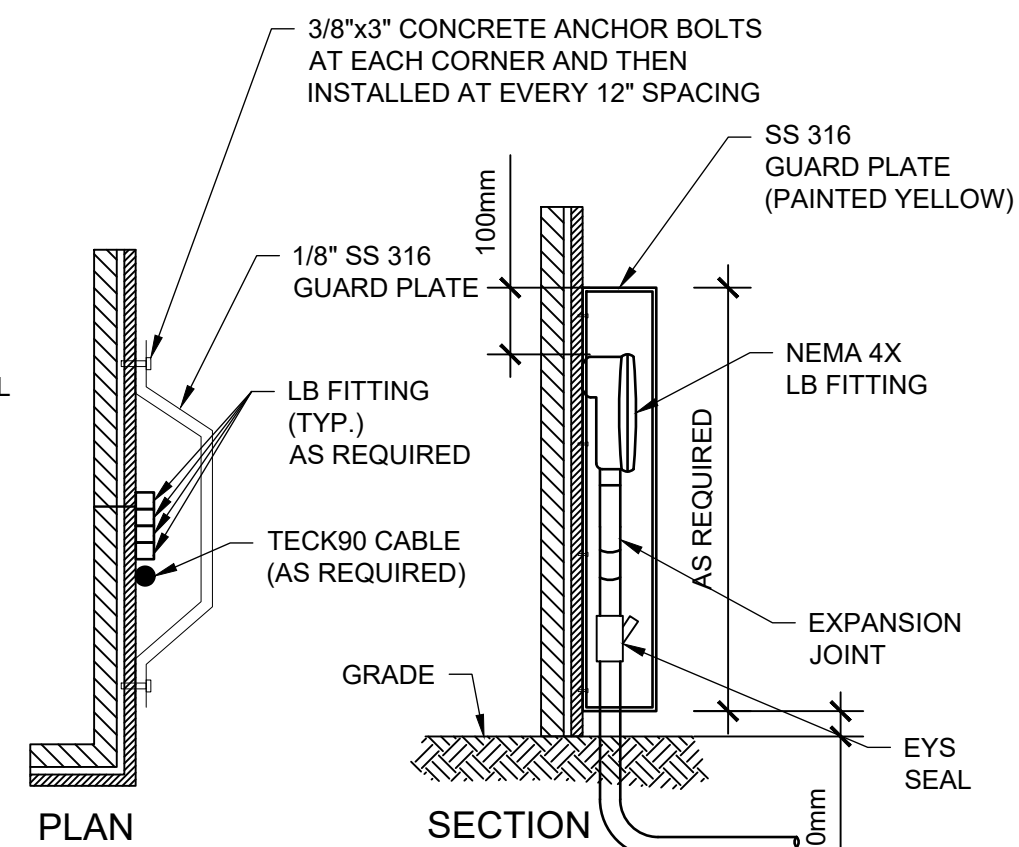
**RODNEY WPCP  
UPGRADES**

ELECTRICAL  
**ELECTRICAL SITE PLAN**

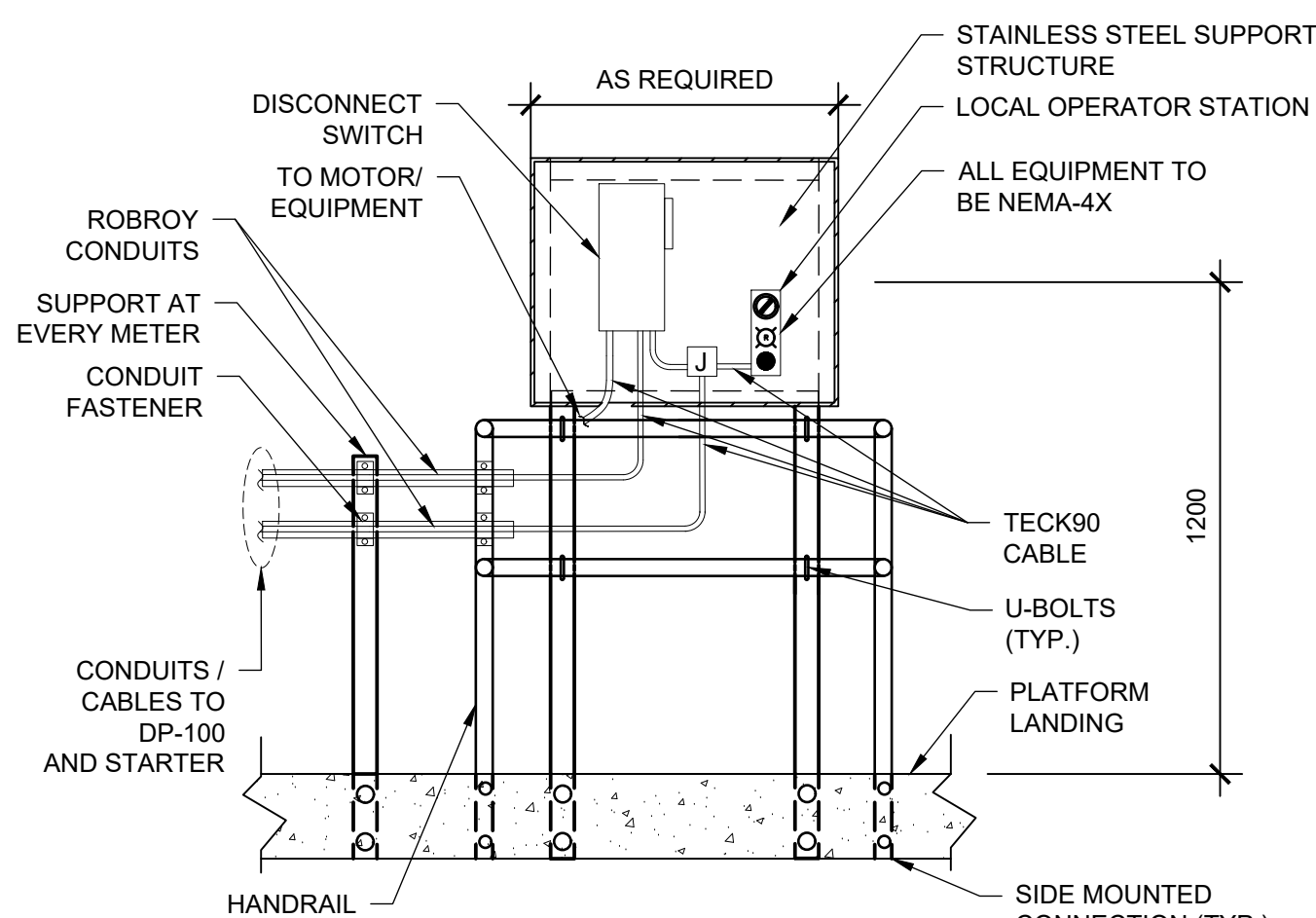
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Date: May-24	215817
Drawn by: RK/MSH	Designed by: FH
Checked by: SQR	Approved by: DC
	DWG NO. <b>E101</b>



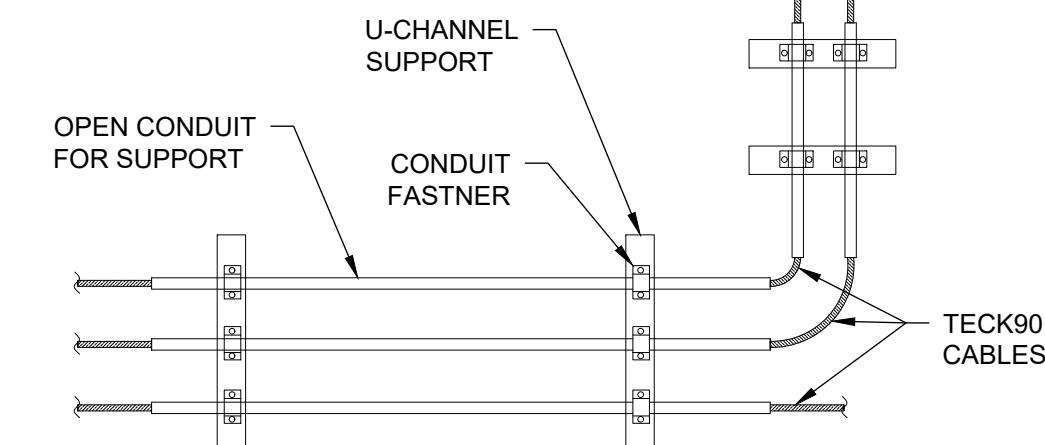
**DETAIL-1**  
**SCREEN PANEL INSTALLATION**  
N.T.S.



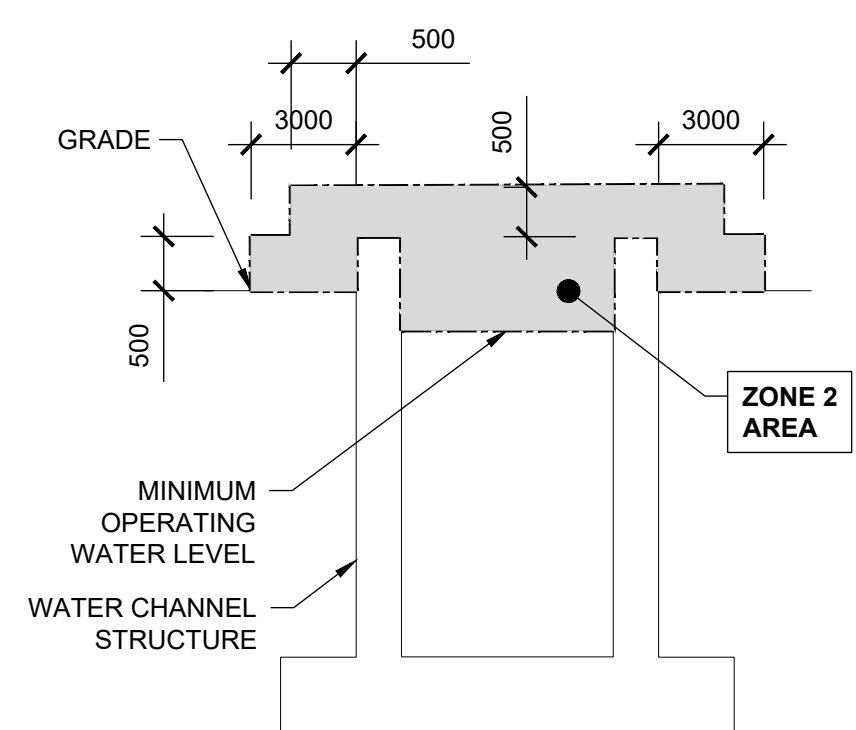
**DETAIL-2**  
**CONDUIT/CABLE ENTRY**  
N.T.S.



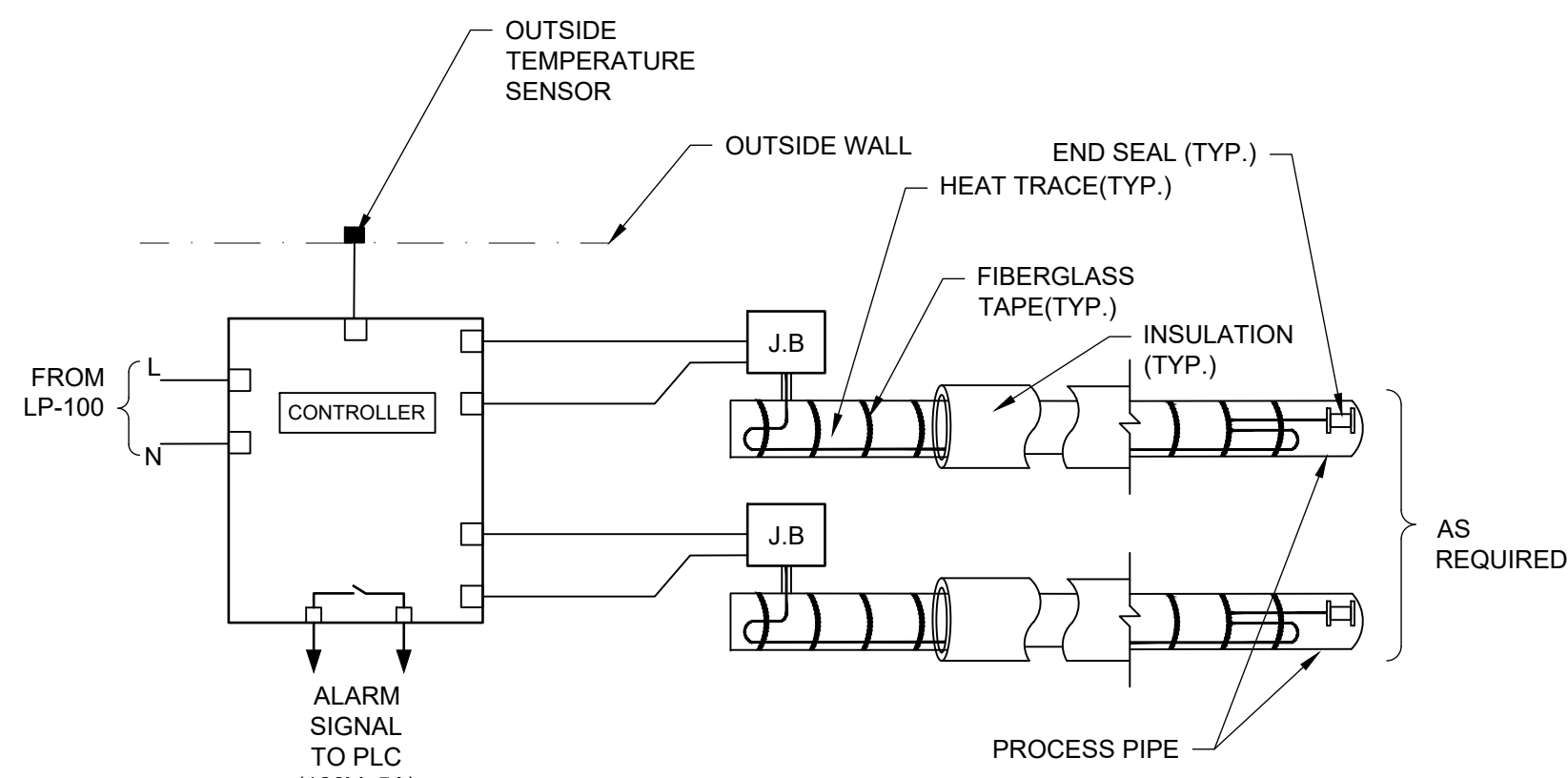
**DETAIL-3**  
**CLARIFIER CONTROL STATION**  
NTS



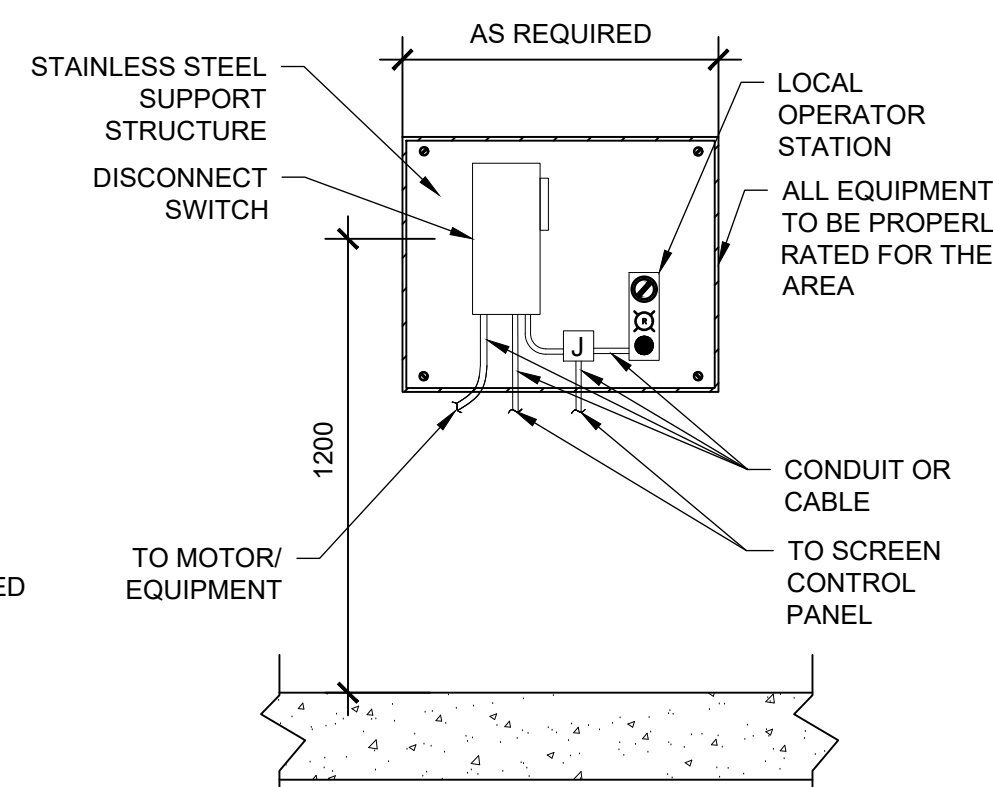
**DETAIL-4**  
**TECK CABLE SUPPORTED BY OPEN CONDUIT ALONG THE CEILING**  
NTS



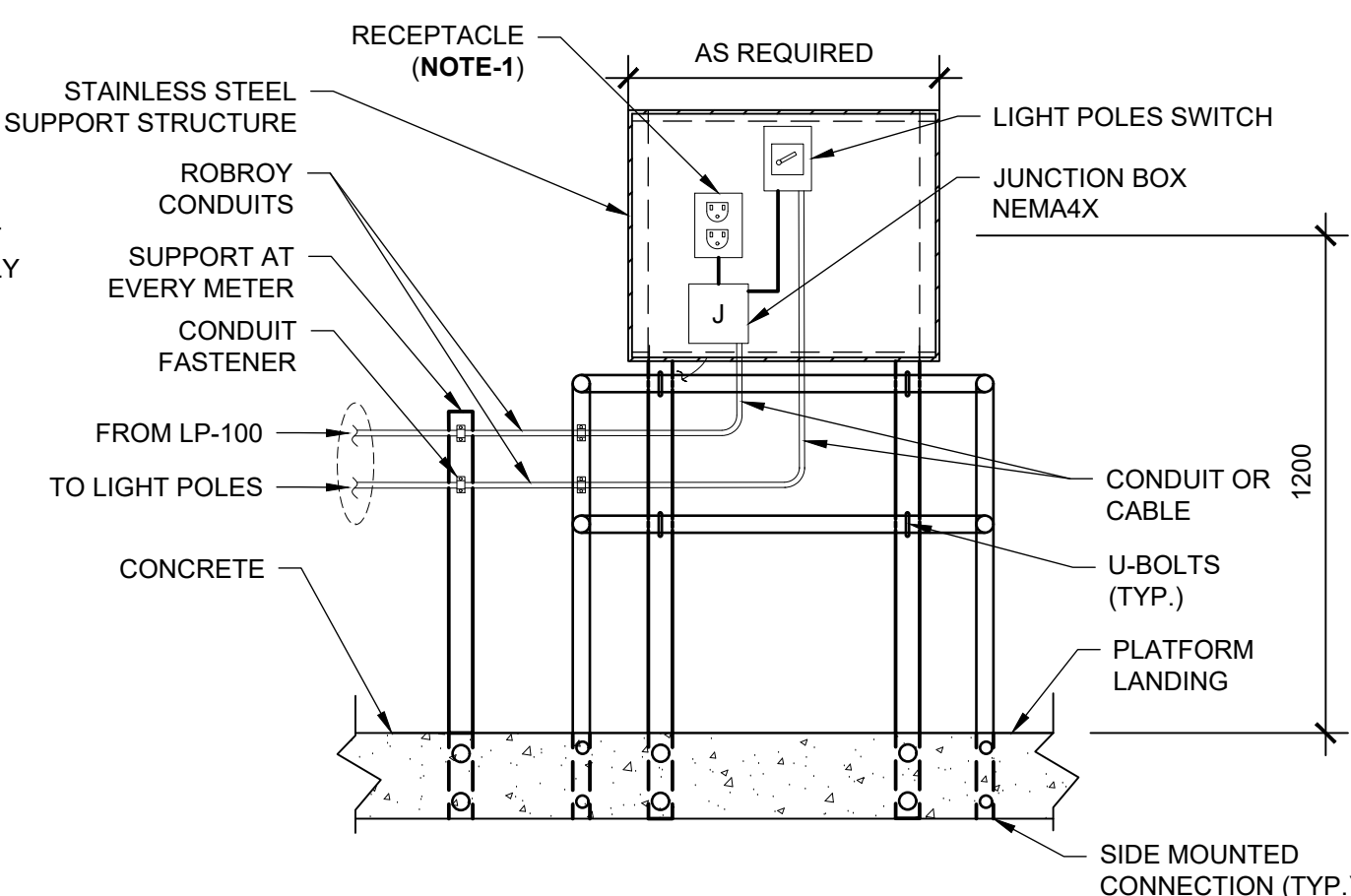
**DETAIL-5**  
**ZONE 2 AREA ILLUSTRATION**  
FROM NFPA 820 2024 FIGURE A.5.2  
N.T.S.



**DETAIL-6:**  
**TYPICAL HEAT TRACING CIRCUIT**  
N.T.S.



**DETAIL-7:**  
**SCREEN DISCONNECT AND LOCAL CONTROL PANEL INSTALLATION**  
N.T.S.



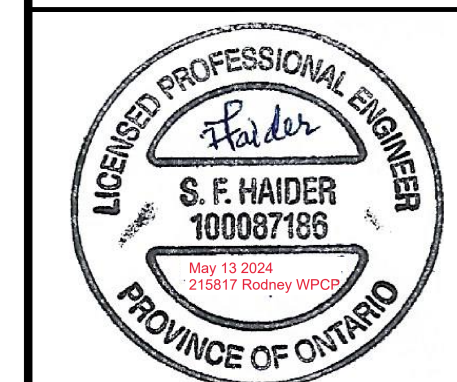
**DETAIL-8:**  
**AERATION BASIN LIGHT SWITCH AND RECEPTACLE**  
N.T.S.

NOTES:  
1. PROVIDE GFCI RECEPTACLE WITH RAIN TIGHT WHILE-IN-USE COVER.

3	ISSUED FOR TENDER	2024.05.13	DC
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UPGRADES

ELECTRICAL  
DETAILS

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: MSH	Designed by: FH
Checked by: SQR	Approved by: DC
	DWG NO. E102



FIG.1 - SCREEN LOCAL CONTROL PANEL



FIG.2 - AERATOR LOCAL CONTROL PANELS



FIG.3 - CLARIFIER LOCAL CONTROL PANEL

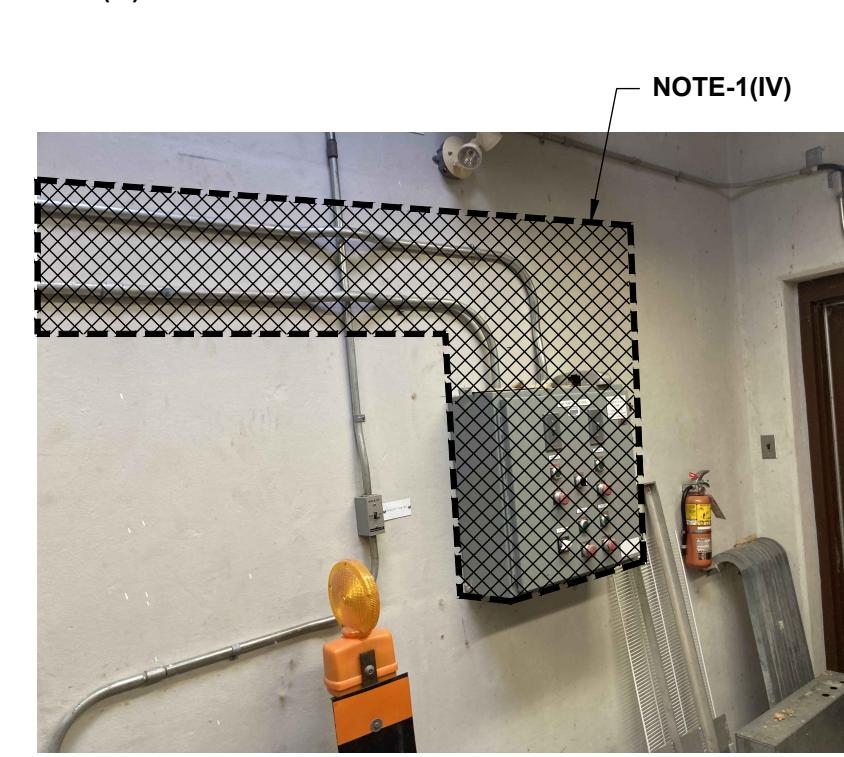
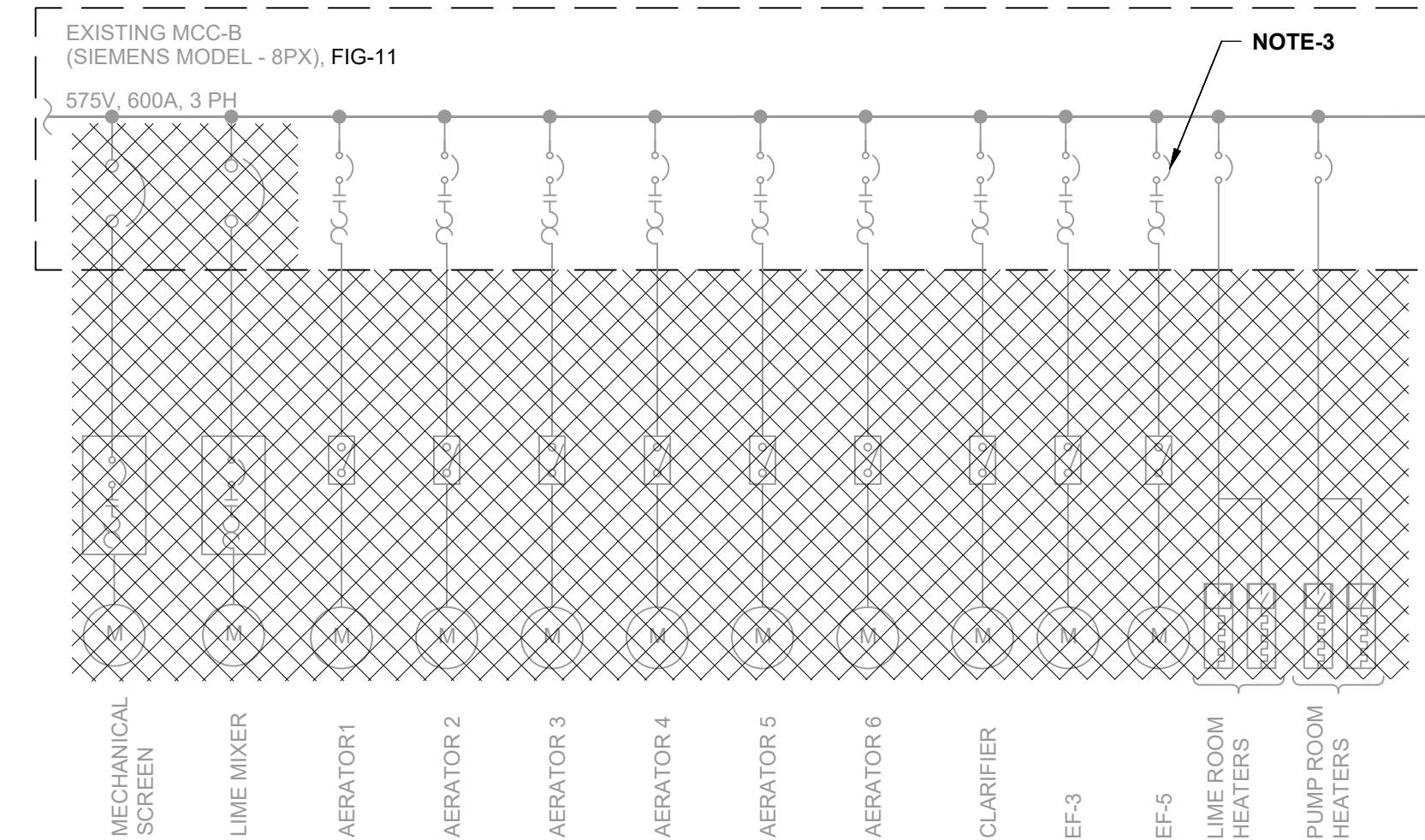


FIG.4 - LIME PUMPS CONTROL PANEL CHEMICAL ROOM



MCC- B REMOVALS  
BLOWER ROOM

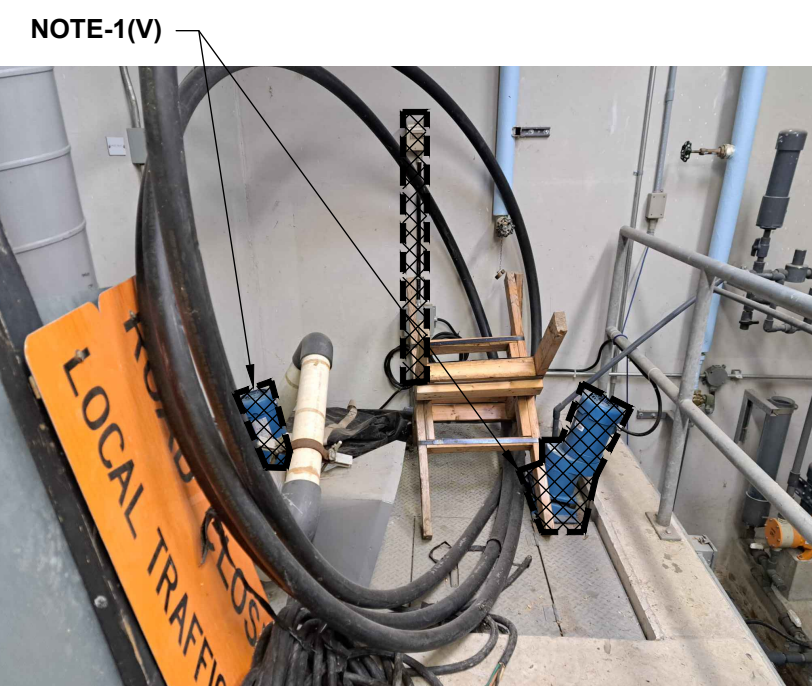


FIG.5 - LIME MIXERS CHEMICAL ROOM

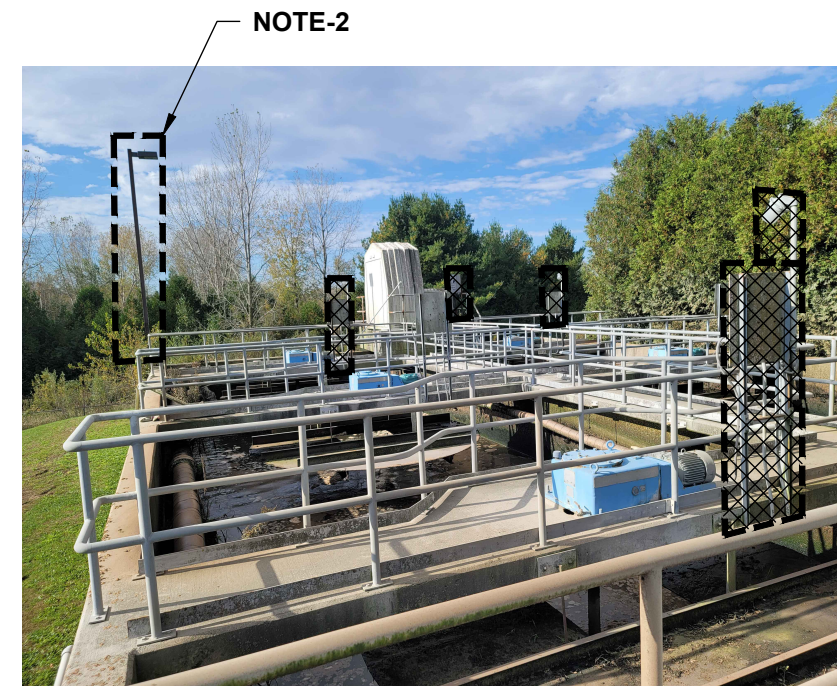


FIG.6 (1) - LIGHTING STANDARD WIRING AERATION BASIN



FIG.6 (2) - LIGHTING STANDARD WIRING AERATION BASIN

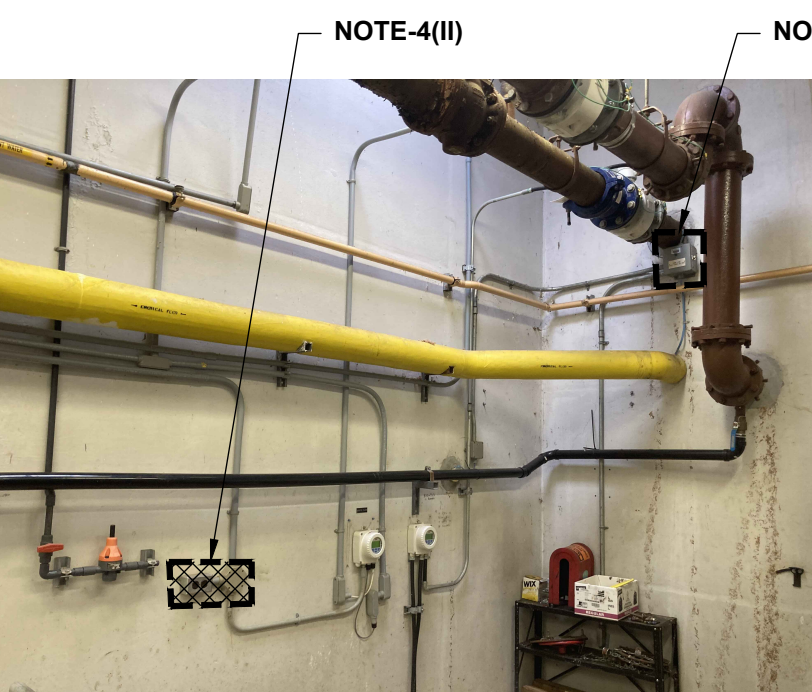


FIG.7 (1) - HEAT TRACING AND RECEPTACLE PUMP ROOM

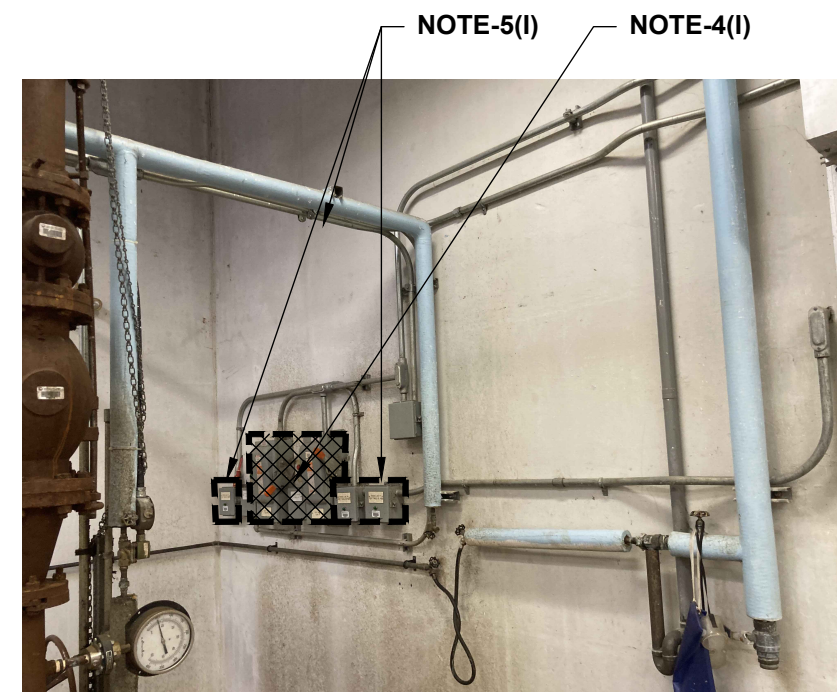


FIG.7 (2) - HEAT TRACING AND CONTROLS PUMP ROOM

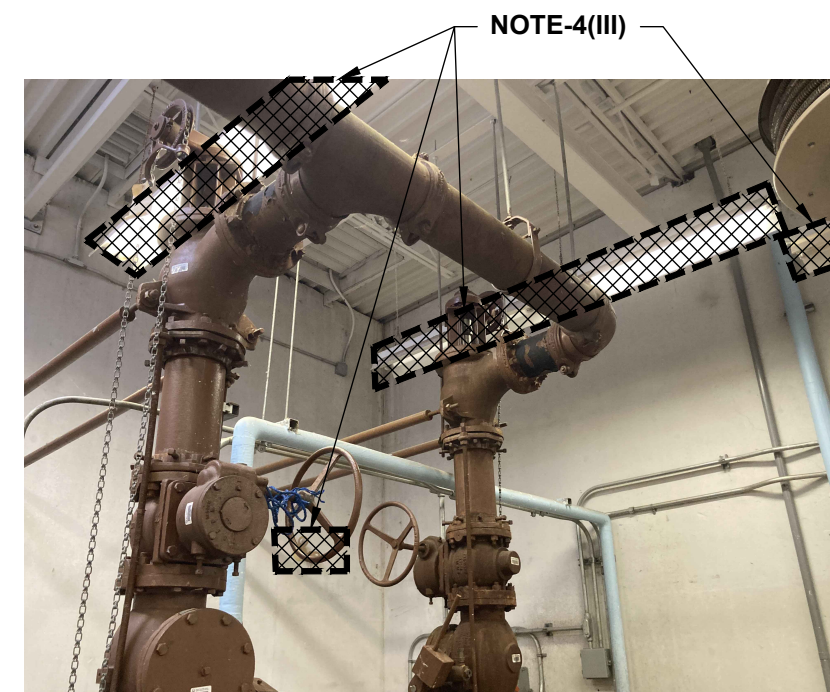


FIG.7 (3) - LIGHTING FIXTURE AND REMOTE HEAD PUMP ROOM

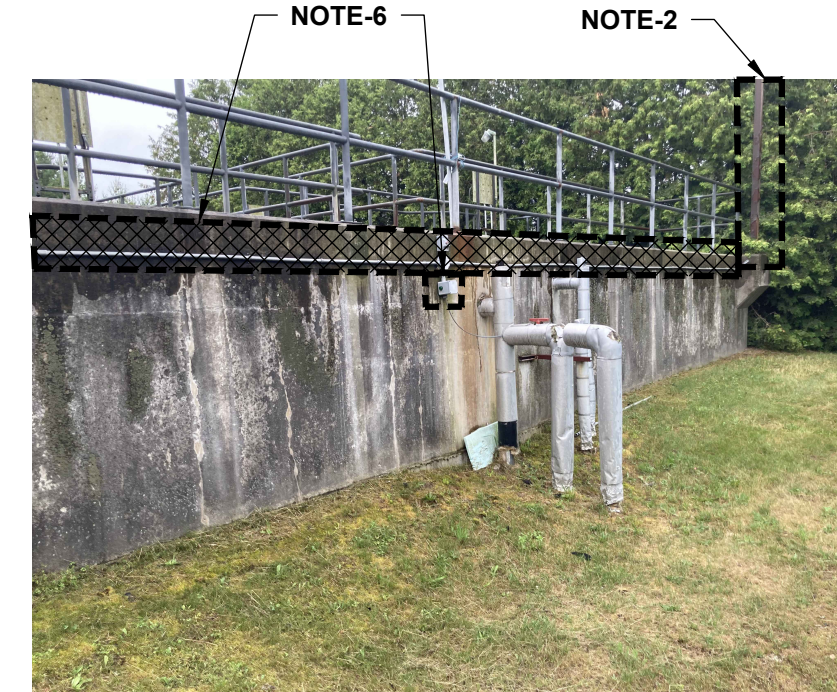


FIG.8 - HEAT TRACING AND LIGHTING STANDARD WIRING AERATION BASIN

NOTES:

- DECOMMISSION AND REMOVE THE FOLLOWING COMPLETE WITH LOCAL CONTROL PANEL, DISCONNECT SWITCHES, POWER AND CONTROL CABLES UP TO THE SOURCE. REFER TO 'R' SERIES DRAWINGS FOR MORE REMOVAL DETAILS. CLEAN THE ASSOCIATED CONDUITS AND CAP THEM FOR FUTURE USE.
  - MECHANICAL SCREEN, FIG-1.
  - AERATORS 1, 2, 3, 4, 5 AND 6 INCLUDING LOCAL CONTROLS, RECEPTACLES AND LIGHTING POLES (QTY = 4), FIG-2.
  - CLARIFIER MECHANISM INCLUDING INTERIOR LIGHTING FIXTURE, LOCAL CONTROLS AND RECEPTACLE, FIG-3.
  - LIME PUMPS COMPLETE WITH LOCAL CONTROL PANEL WHICH IS FED FROM EXISTING LIGHTING PANEL LP-B CCT 11, FIG-4.
  - LIME MIXERS, FIG-5.
  - EXHAUST FANS, HEATERS AND DAMPERS. REFER TO M100 FOR MORE REMOVAL DETAILS.
  - EXISTING LIGHTING FIXTURES FROM ALUM CHEMICAL ROOM.
- RETAIN LIGHTING STANDARDS (QTY = 2) NEAR AERATORS, FIG-6(1), FIG-6(2) AND FIG-8. REMOVE EXISTING PVC CONDUIT COMPLETE WITH CABLES FOR THE LIGHTING STANDARDS AROUND AERATION TANK. PROVIDE NEW JUNCTION BOXES NEAR TANK AND EXTEND EXISTING WIRING WITH NEW SIMILAR SIZED TECK90 CABLES.
- RETAIN STARTERS/ BREAKERS FOR AERATOR 1-6, CLARIFIER, EF-3, EF-5, PUMP/LIME ROOM HEATERS. CLEAN THE MCC BUCKETS AND LABEL BUCKETS AS SPARE, FIG-11.
- REMOVE THE FOLLOWING COMPLETE WITH WIRING UPTO THE SOURCE FROM THE PROPOSED PUMP ROOM WHICH IS DESIGNATED AS ZONE 2 AREA.
  - DISCONNECTS AND CONTROL STATION FOR EXISTING RAS / WAS PUMPS 1 AND 2, FIG-7(2), RECEPTACLES (x2), FIG-7(1) FIG-10.
  - LIGHTING FIXTURES (PUMP AND BLOWER ROOM) AND REMOTE HEAD, FIG-7(3).
  - REPLACE ANY EXISTING PVC CONDUITS WITH RGS AND BOXES WITH CLASSIFIED AREA RATED.
  - REPLACE THE FOLLOWING EXISTING HEAT TRACING END OF LINE LIGHT JUNCTION BOXES WITH CLASSIFIED AREA RATED BOXES WITH PILOT LIGHT. COORDINATE WITH SUPPLIER FOR MORE INFORMATION AND PROVIDE EYS SEAL AS REQUIRED. FIELD VERIFY THE NEW INSTALL LOCATION AND EXTEND CABLING IF REQUIRED.
- FERRIC LINE 1, LINE 2, LINE 3 AND LIME LINE, FIG-7(1) AND FIG-7(2).
- REMOVE EXISTING HEAT TRACING SWITCH, JUNCTION BOXES AND PVC CONDUIT COMPLETE WITH CABLES AROUND AERATION TANK. PROVIDE NEW JUNCTION BOXES AND SWITCH NEAR TANK AND EXTEND EXISTING WIRING WITH NEW SIMILAR SIZED TECK90 CABLES. COORDINATE WITH HEAT TRACING SUPPLIER FOR MORE DETAILS.
- REMOVE WIRING AND JUNCTION BOX ASSOCIATED WITH SUMP PUMP BACK TO THE SOURCE, FIG-9.
- REMOVE FERRIC CHLORIDE PUMP CONTROL PANELS COMPLETE WITH WIRING UPTO THE SOURCE. THE PANELS ARE FED FROM EXISTING LIGHTING PANEL LP-B CCT 12 AND 14. REMOVE GENERAL PURPOSE DUPLEX RECEPTACLES (QTY = 2) COMPLETE WITH WIRING BACK TO THE SOURCE.
- REMOVE EXISTING PVC CONDUIT COMPLETE WITH CABLES FOR INFLUENT SAMPLER. PROVIDE NEW JUNCTION BOXES NEAR TANK AND EXTEND EXISTING WIRING WITH NEW SIMILAR SIZED TECK90 CABLES.

LEGEND:

- EXISTING INSTALLATION
- NEW INSTALLATION
- INSTALLATION/EQUIPMENT TO BE REMOVED



FIG.9 - SUMP PUMP BLOWER ROOM

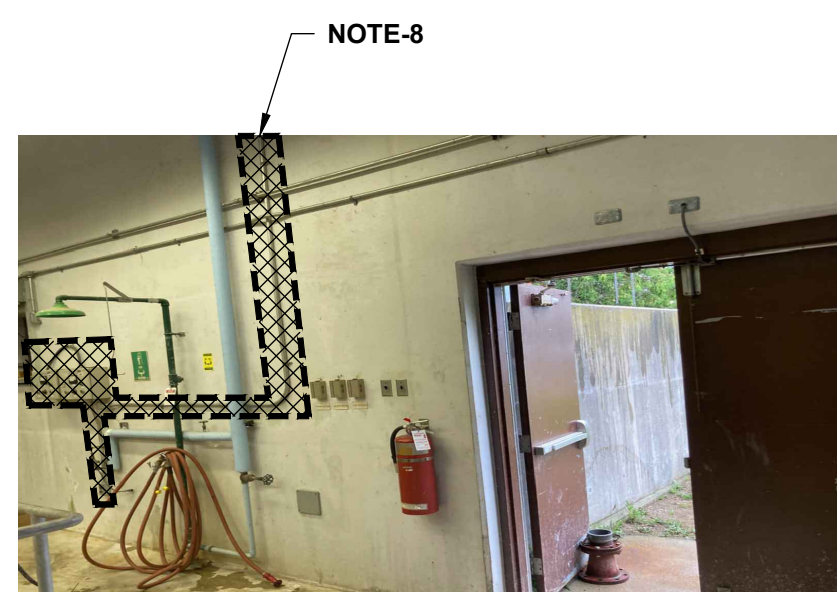


FIG.10 - FERRIC PUMPS METERS BLOWER ROOM

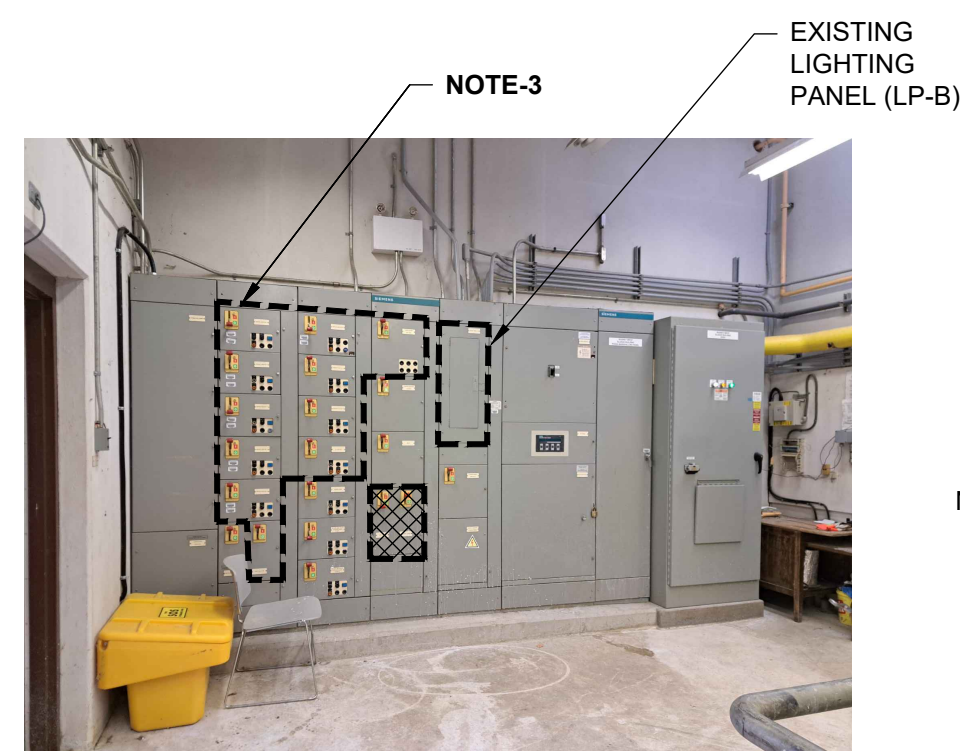


FIG.11 - MCC-B BLOWER ROOM

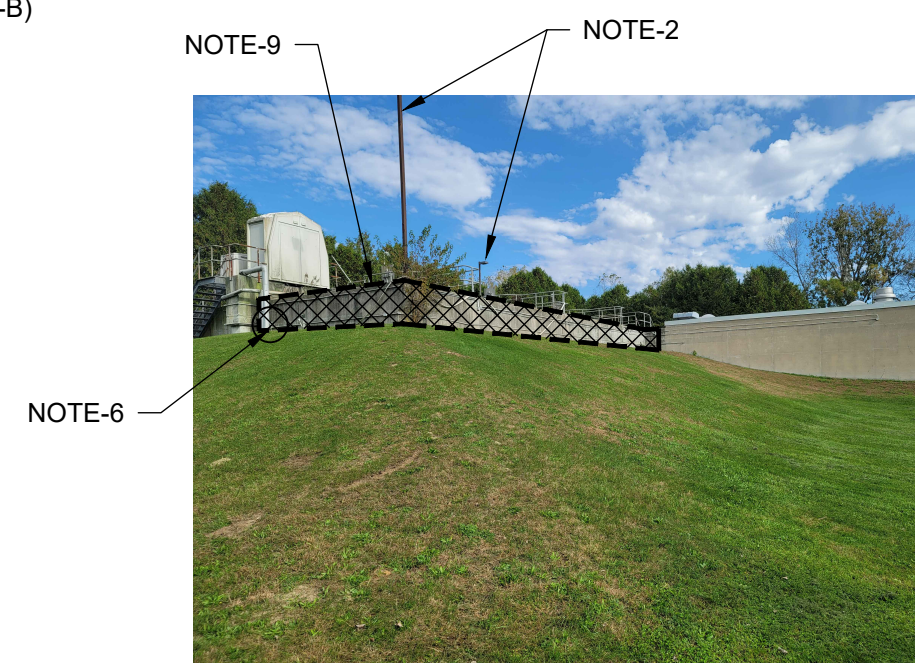
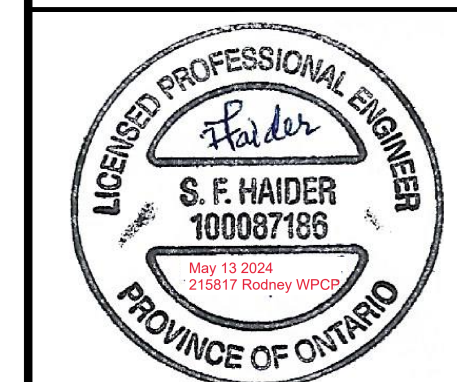


FIG.12 - LIGHTING STANDARD, INFLUENT SAMPLER, HEAT TRACING

3	ISSUED FOR TENDER	2024.05.13	DC
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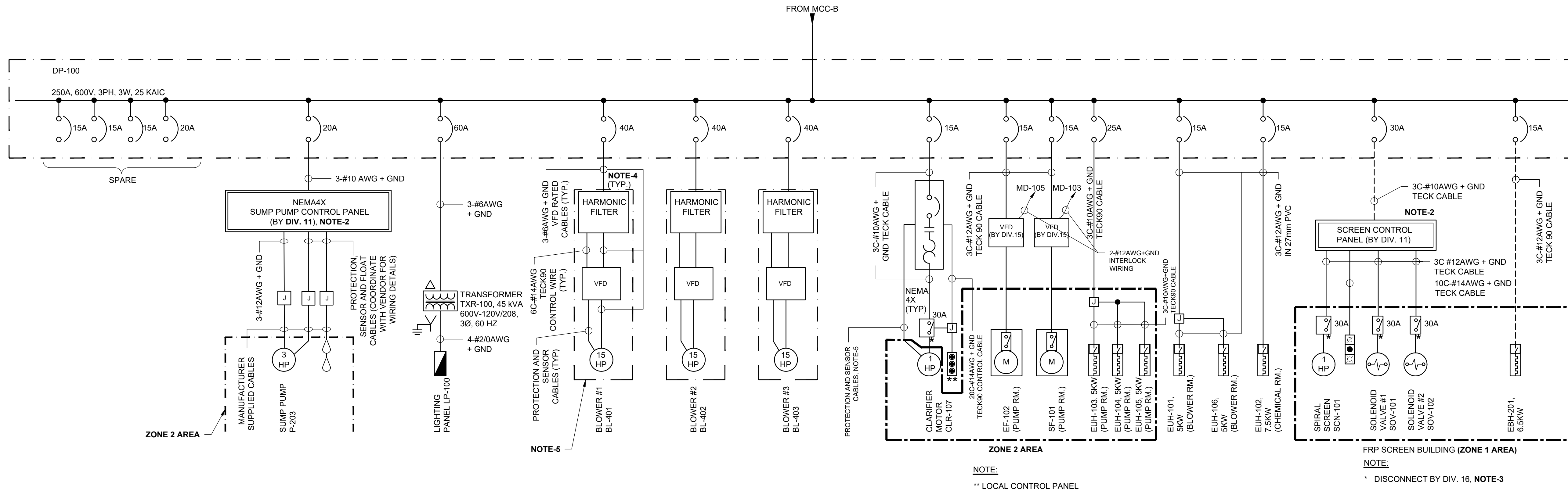


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UPGRADES

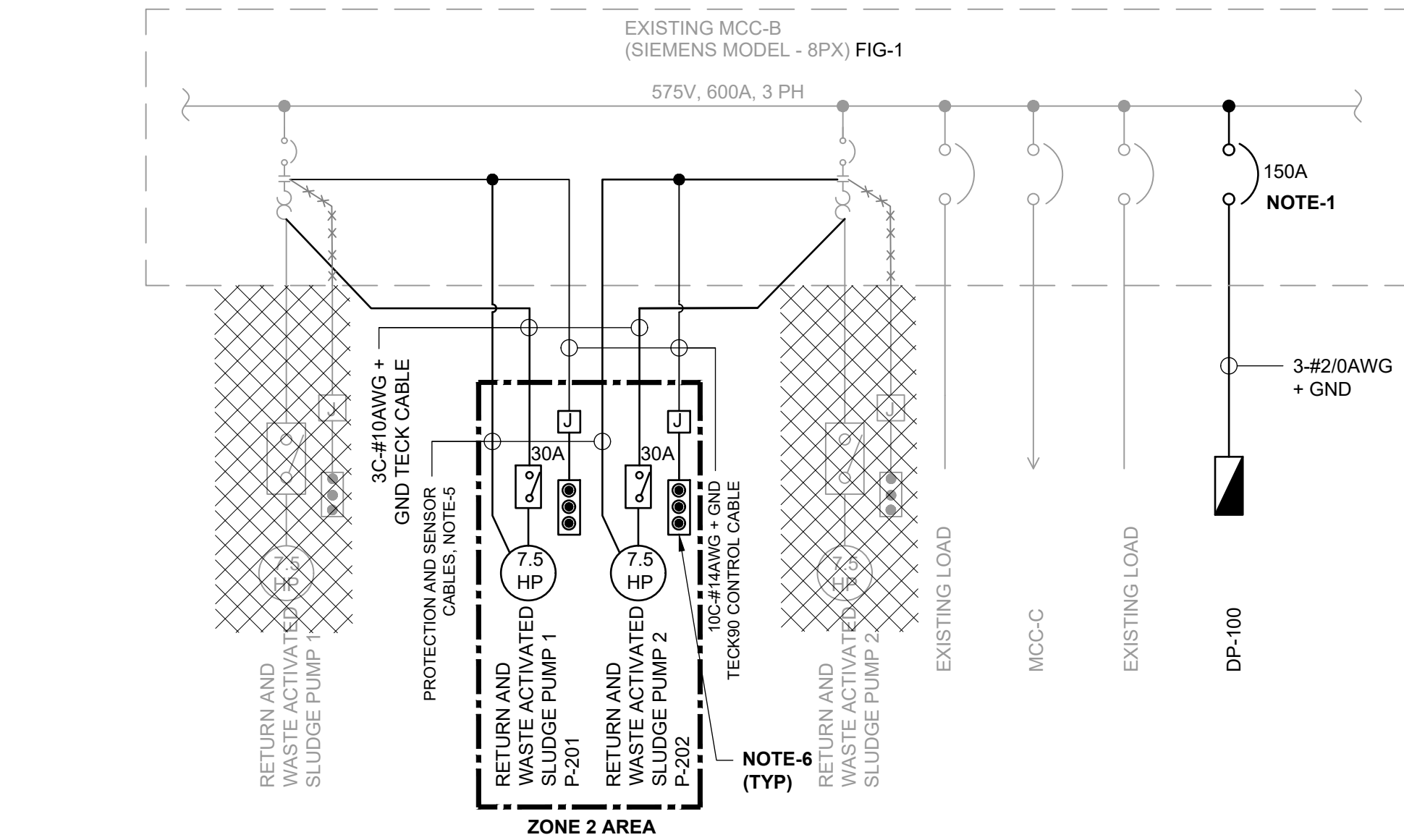
ELECTRICAL

REMOVALS AND MODIFICATIONS

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. E103
Drawn by: MSH/RK	Designed by: FH
Checked by: SQR	Approved by: DC



- NOTES:
- INSTALL NEW BREAKER FOR DP-100 IN THE EMPTY BUCKET AFTER THE REMOVAL OF BREAKERS FOR LIME MIXER AND SCREEN. NEW BREAKER TO MATCH THE SHORT CIRCUIT RATING OF THE MCC. BREAKER TO BE INSTALLED AS PER THE RECOMMENDATION OF MCC MANUFACTURER.
  - SCREEN AND SUMP PUMP EQUIPMENT IS PROVIDED AS A PACKAGE UNIT. THE EQUIPMENT IS SHOWN FOR REFERENCE ONLY. ONLY MAJOR EQUIPMENT ARE SHOWN IN THE SINGLE LINE DIAGRAM. COORDINATE WITH EQUIPMENT SUPPLIER AND PROVIDE WIRING ACCORDINGLY.
  - PROVIDE DISCONNECT SWITCHES WITH AUXILIARY CONTACTS. DISCONNECT SWITCH ENCLOSURE TO INCLUDE KNOCKOUTS FOR SEPARATE POWER AND CONTROL WIRES BACK TO THE SCREEN PANEL.
  - PROVIDE HARMONIC FILTER WITH CONTACTOR TO ISOLATE THE INTERNAL CAPACITORS WHEN VFD IS NOT RUNNING.
  - BLOWER IS PROVIDED AS A PACKAGED UNIT UNDER DIV 11 AND ONLY MAJOR EQUIPMENT ARE SHOWN IN THE SINGLE LINE DIAGRAM. COORDINATE WITH EQUIPMENT SUPPLIER AND PROVIDE WIRING ACCORDINGLY.
  - PROVIDE LOCAL OPERATOR TO MATCH THE EXISTING SWITCH CONFIGURATION BUT RATED FOR ZONE 2 AREA.

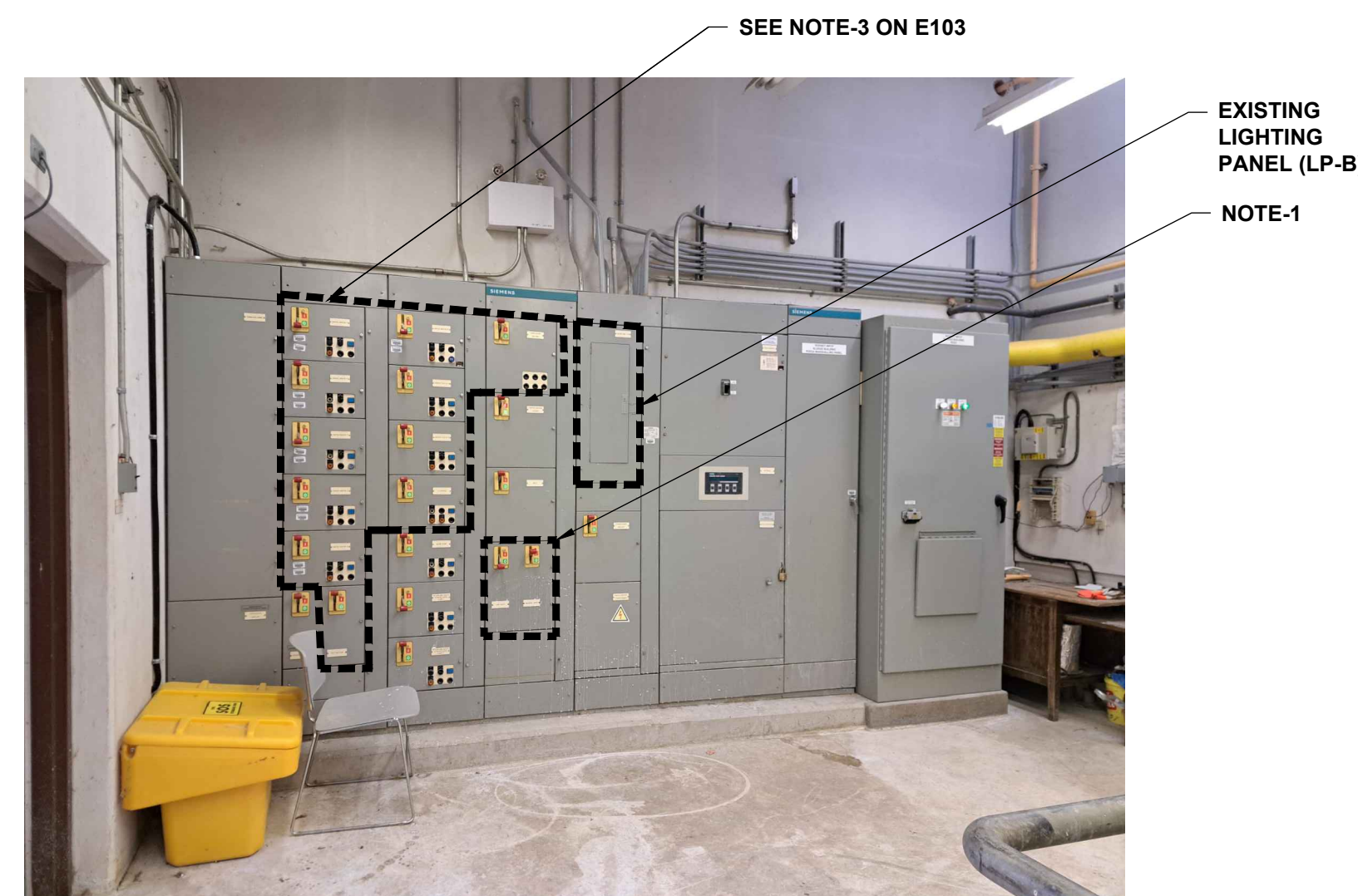


**MCC- B MODIFICATIONS**

**LEGEND:**

- EXISTING INSTALLATION
- NEW INSTALLATION
- ▨ INSTALLATION/EQUIPMENT TO BE REMOVED

- GENERAL NOTES:**
- PROVIDE EQUIPMENT RATED FOR THE HAZARDOUS AREA CLASSIFICATION FOR THE CLASSIFIED AREA SHOWN.
  - PROVIDE EYS SEAL WHERE CONDUIT PASSES FROM HAZARDOUS TO NON-HAZARDOUS AREA.
  - PROVIDE EYS SEALS WITH IN 450MM OF ENCLOSURES CONTAINING ARCING DEVICES IN CLASSIFIED AREA.
  - ANY EQUIPMENT WITHIN 0.9 METER OF A VENT OR OPENING FROM A ZONE 1 AREA MUST BE ZONE 1 RATED, AND BETWEEN 0.9 TO 1.5 METERS MUST BE ZONE 2 RATED.
  - ANY EQUIPMENT WITHIN 0.9 METER OF VENT OR OPENING FROM ZONE 2 AREA MUST BE ZONE 2 RATED.



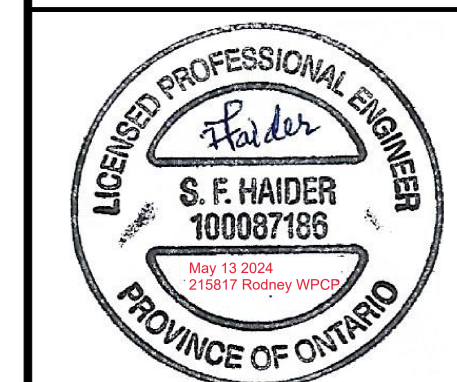
**FIG. 1 - MCC-B (BLOWER ROOM)**

3	ISSUED FOR TENDER	2024.05.13	DC
2	ISSUED FOR APPROVAL	2023.08.30	DC
1	ISSUED FOR 50% DESIGN REVIEW	2023.06.30	DC
No.	REVISION	DATE	BY

File: R:2021215817 - West Elgin-Rodney WWTU Upgrades\10 CAD\dwg\01 Rev\A.100 Building 01\Sheets\215817 - E104.dwg  
Plot: May, 2024, - 09:52:13 AM



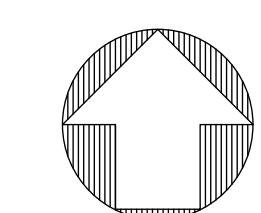
CONTRACT NO. WE-2024-01



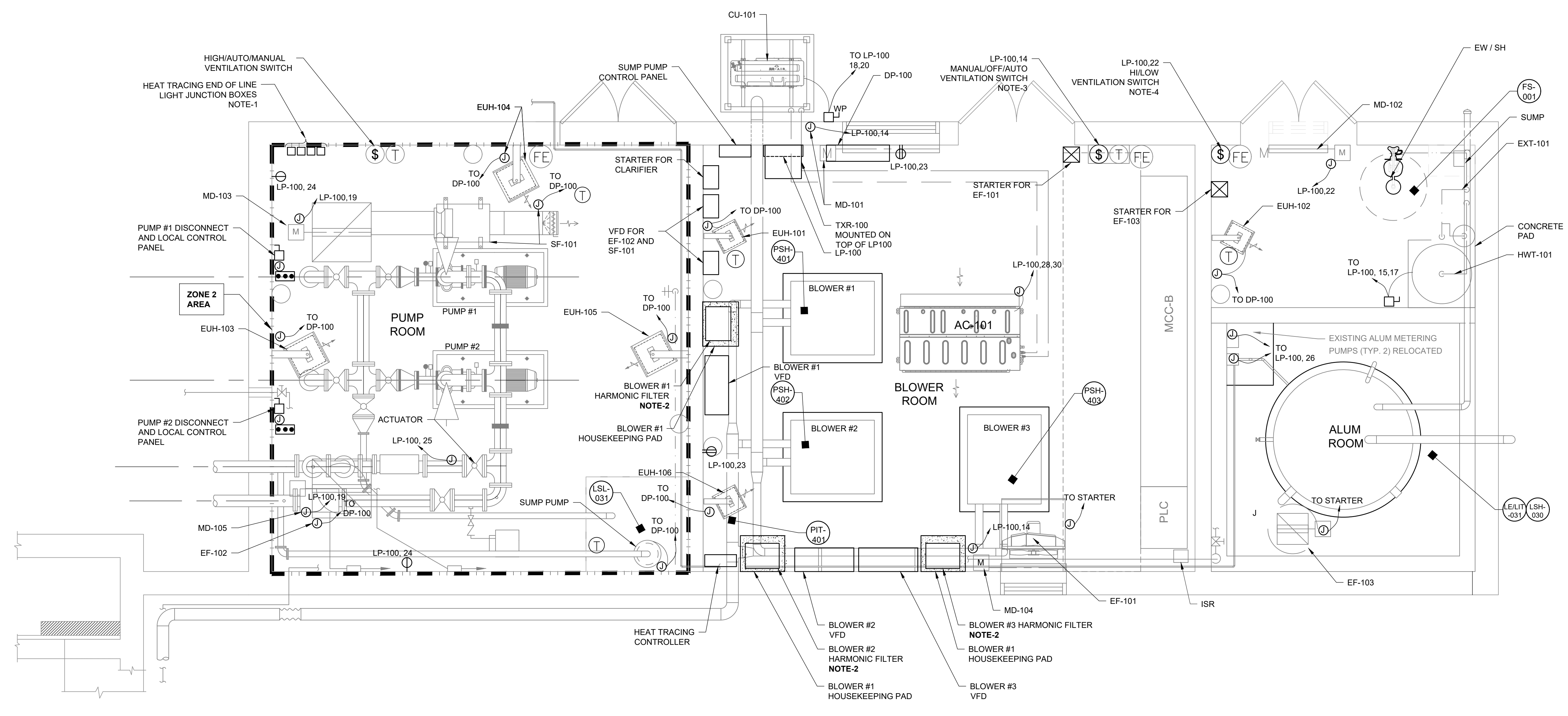
**RODNEY WPCP  
UPGRADES**

ELECTRICAL  
**SINGLE LINE DIAGRAM**

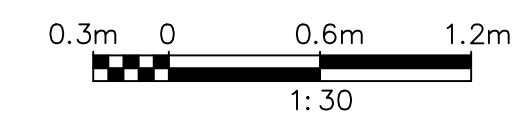
Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: MSH/RK	Designed by: FH
Checked by: SQR	Approved by: DC
	DWG NO. <b>E104</b>



- NOTES:
- SEE E103, NOTE 5(I).
  - INSTALL HARMONIC FILTER ON A 100MM HIGH CONCRETE PAD. SIZE HOUSEKEEPING PAD AS REQUIRED.
  - SEE DETAIL-4 ON E109 FOR WIRING DETAILS.
  - SEE DETAIL-5 ON E109 FOR WIRING DETAILS.



**POWER PLAN - PUMP ROOM, BLOWER ROOM, ALUM CHEMICAL ROOM**



**LEGEND:**

—	EXISTING INSTALLATION
—	NEW INSTALLATION
- - -	ZONE 2 AREA

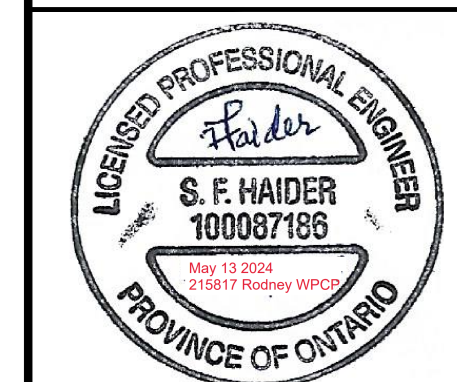
- GENERAL NOTES:**
- PROVIDE EQUIPMENT RATED FOR THE HAZARDOUS AREA CLASSIFICATION FOR THE CLASSIFIED AREA SHOWN.
  - PROVIDE EYS SEAL WHERE CONDUIT PASSES FROM HAZARDOUS TO NON-HAZARDOUS AREA.
  - PROVIDE EYS SEALS WITH IN 450MM OF ENCLOSURES CONTAINING ARCING DEVICES IN CLASSIFIED AREA.
  - ANY EQUIPMENT WITHIN 0.9 METER OF A VENT OR OPENING FROM A ZONE 1 AREA MUST BE ZONE 1 RATED, AND BETWEEN 0.9 TO 1.5 METERS MUST BE ZONE 2 RATED.
  - ANY EQUIPMENT WITHIN 0.9 METER OF VENT OR OPENING FROM ZONE 2 AREA MUST BE ZONE 2 RATED.

3	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:12021215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Sheets\215817 - E105.dwg  
Plot: May, 2024, - 09:52:52 AM



CONTRACT NO. WE-2024-01



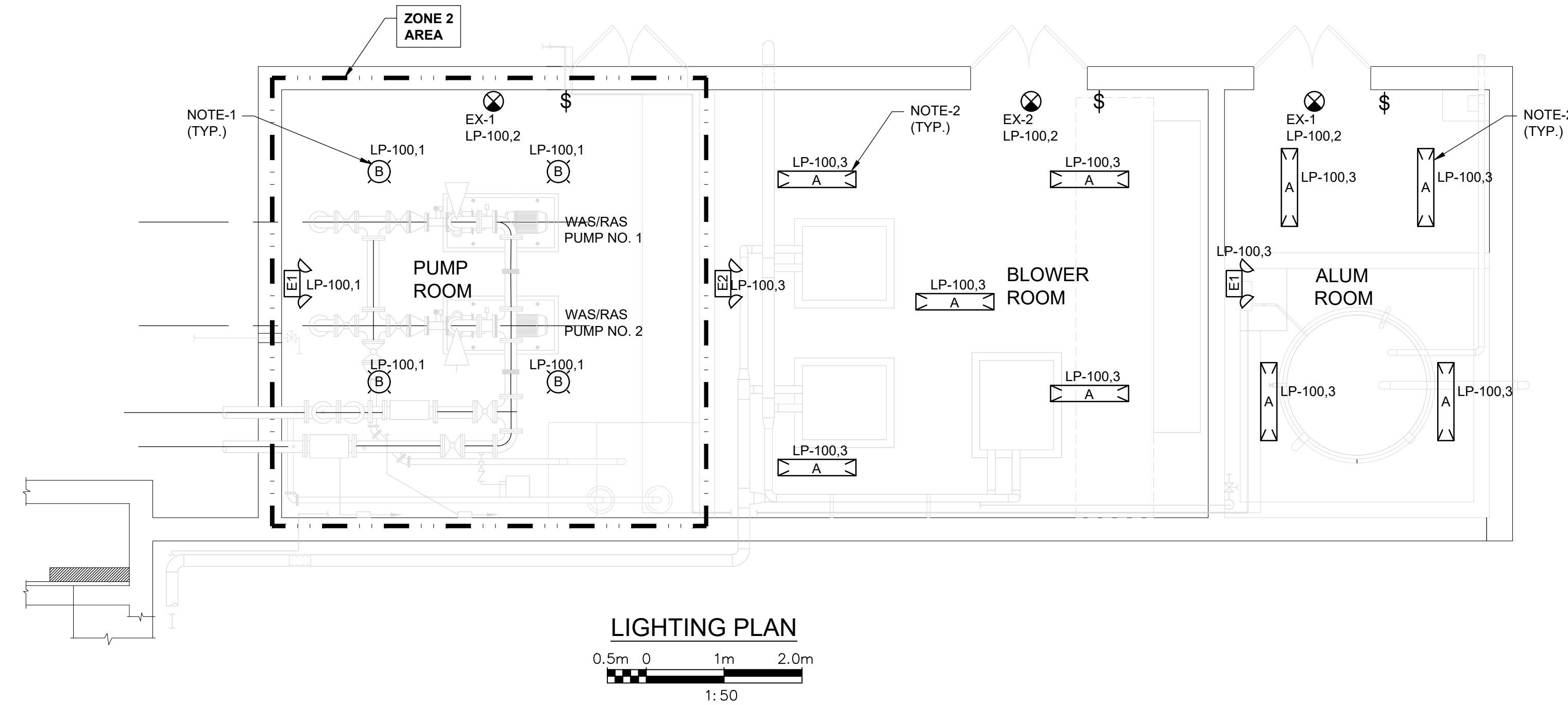
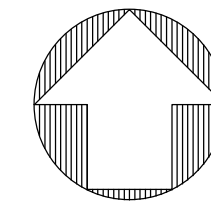
**RODNEY WPCP**

**UPGRADES**

ELECTRICAL

**POWER PLAN**

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. E105
Drawn by: MSH/RK	Designed by: FH
Checked by: SQR	Approved by: DC



**LIGHTING PLAN**  
0.5m 0 1m 2.0m  
1:50

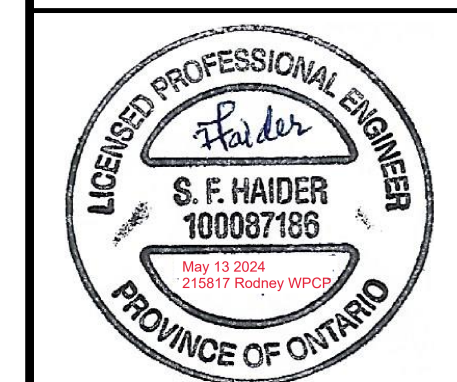
- NOTES:
1. INSTALL AT 3500mm FROM FINISHED FLOOR.
  2. INSTALL AT 3200mm FROM FINISHED FLOOR.
  3. INSTALL GENERAL AREA LIGHTS ATTACHED TO RAILING. USE RECOGNIZED MOUNTING SYSTEMS LIKE V-SPRING SYSTEM FROM EATON, KILLARK SPARTONPOLE OR SWIVELPOLE. COORDINATE WITH SYSTEM SUPPLIER FOR LIGHT FIXTURE MOUNTING ACCESSORIES.

3	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 RevitA.100 Building 01\Sheets\215817-E106.dwg  
Plot: May, 2024, - 02:43:13 PM



CONTRACT NO. WE-2024-01



RODNEY WPCP

UPGRADES

ELECTRICAL

LIGHTING PLAN

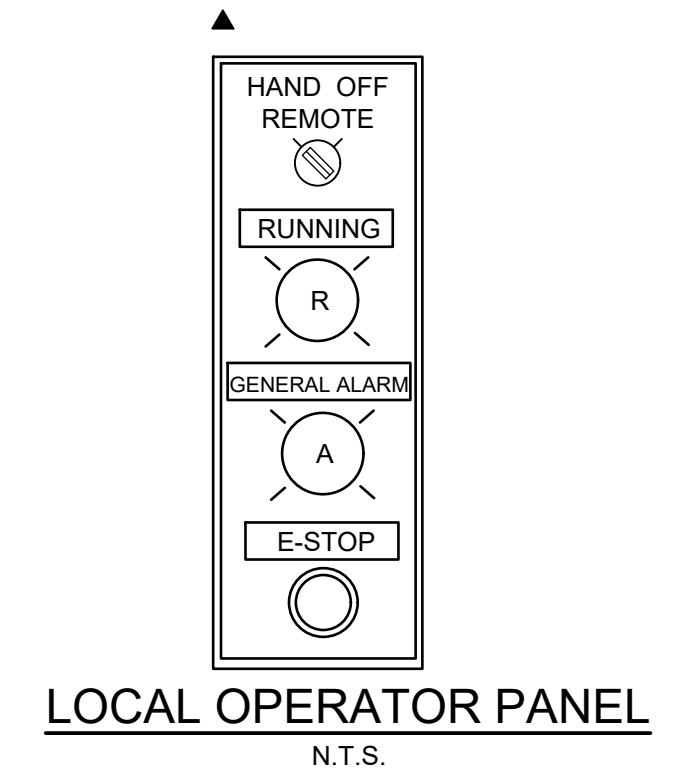
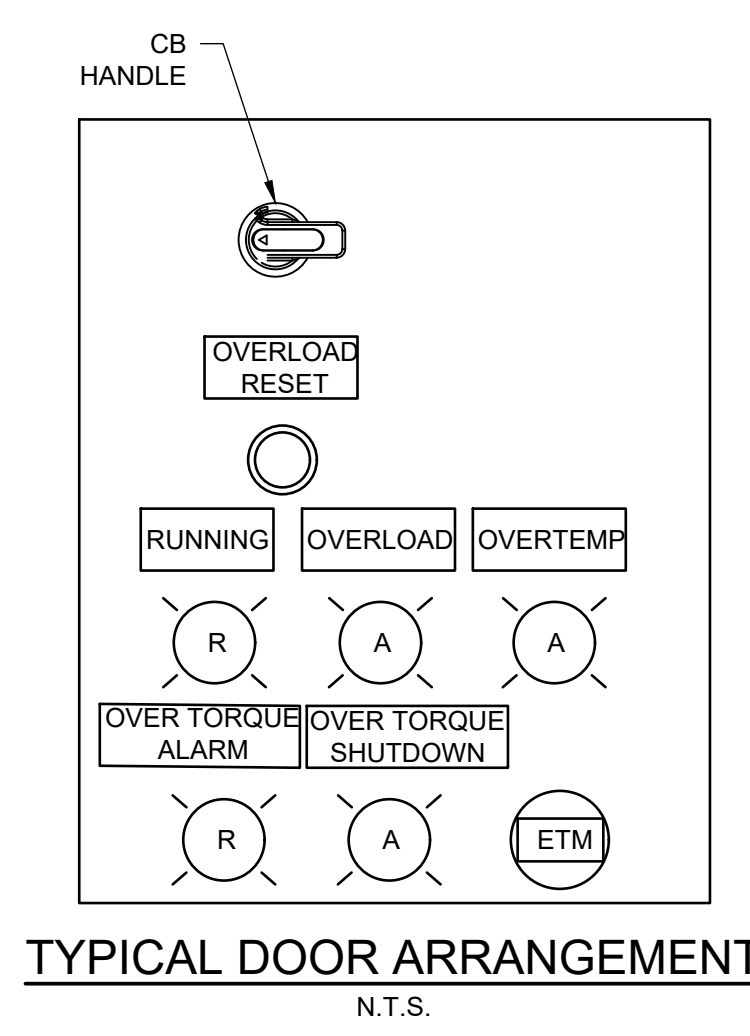
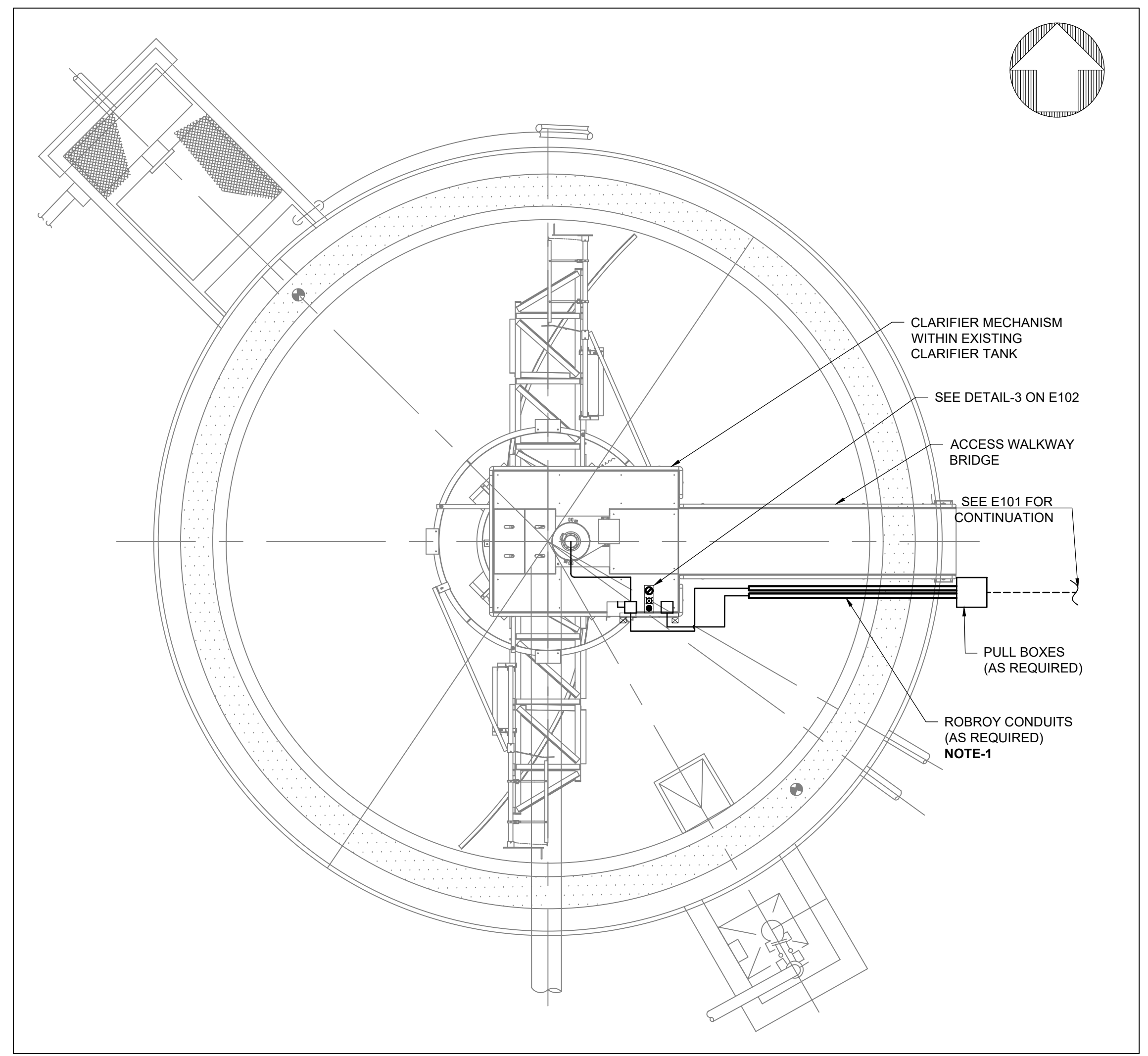
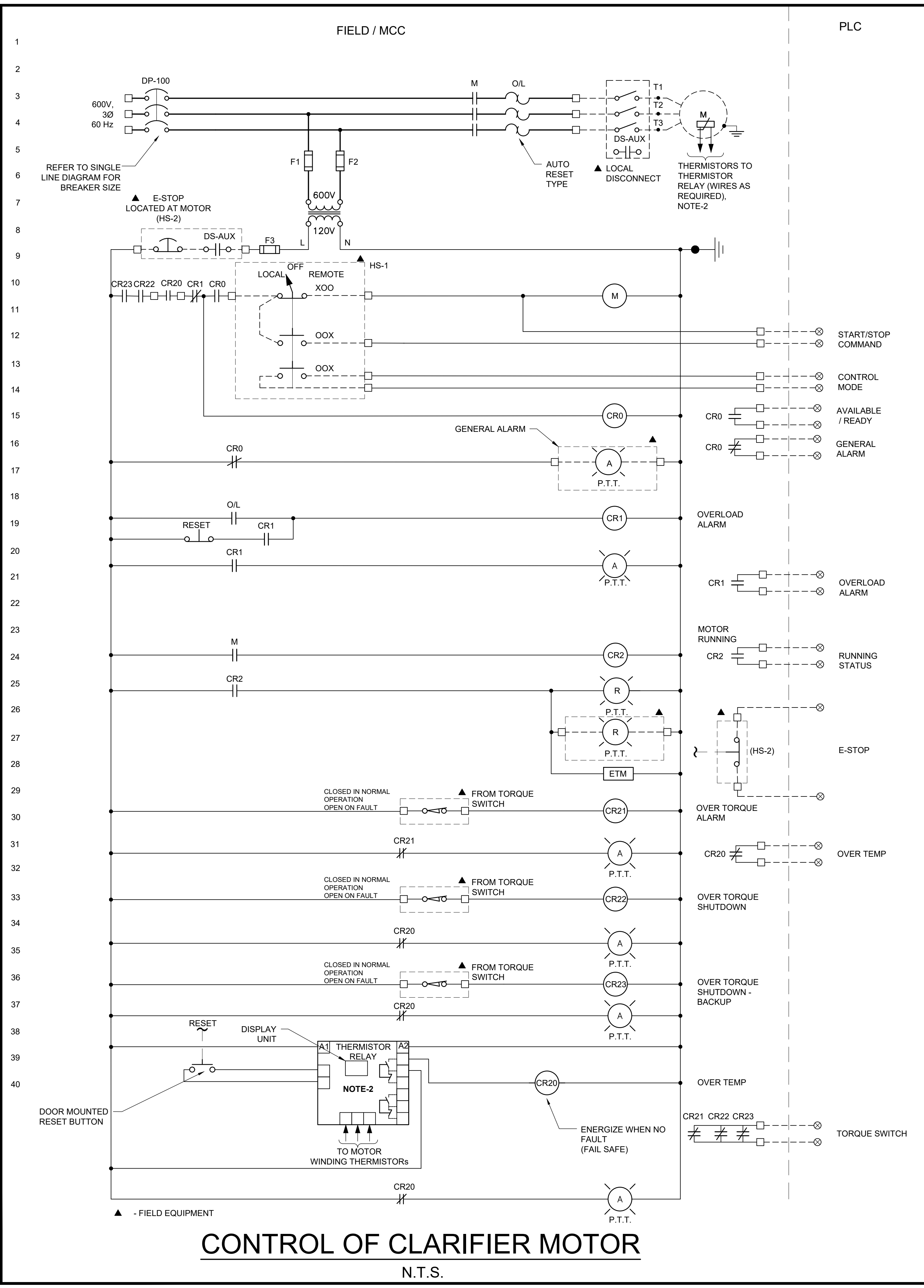
Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. E106
Drawn by: RK	Designed by: FH
Checked by: SQR	Approved by: DC

LIGHTING FIXTURE SCHEDULE			
FIXTURE TYPE	DESCRIPTION	VOLTAGE	MANUFACTURER NAME & CATALOG REFERENCE
A	PENDANT 4' LONG LED LIGHT FIXTURE, FIBERGLASS BODY, GASKETED, POM LATCHES, C/W LEDS, 4000K, ML (5400 LUMEN) PACKAGE, DFA LENS, DIMMING DRIVER AND MOUNTING ACCESSORIES	120V	CURRENT LIGHTING LXEM SERIES OR APPROVED EQUAL FROM ACUITY AND COOPER OR STANPRO LIGHTING
B	PENDANT MOUNTED LED LIGHT FIXTURE, COPPER FREE ALUMINUM HOUSING, SUITABLE FOR ZONE 2 LOCATION, 4000K c/w HIGH EFFICIENCY 5L LUMEN PACKAGE (5500 LUMEN), TYPE V OPTICS, DIFFUSED GLASS LENS AND MOUNTING ACCESSORIES.	120V	CROUSE-HINDS VMVL SERIES OR APPROVED EQUAL FROM KILLARK, CURRENT LTG. ACUITY OR STANPRO LIGHTING
C	PENDANT/WALL MOUNTED, LED LIGHT FIXTURE 2' LONG ALUMINUM ALLOY HOUSING, SUITABLE FOR ZONE 1 LOCATIONS, 4000K C/W DIFFUSED GLASS LENS, ELECTRONIC DRIVER, GRAY EPOXY POWDER COATED AND MOUNTING ACCESSORIES INCLUDING 45° BRACKETS	120V	CROUSE-HIND XPLA SERIES OR APPROVED EQUAL FROM KILLARK, CURRENT, ACUITY OR STANPRO LIGHTING
D	AREA LIGHT FIXTURE, DIECAST ALUMINUM HOUSING, GRAY CORROSION RESISTANT POWDER PAINT SMOOTH FINISH, SIZE 1, 4000K, 160L-50 (7500 LUMEN) PACKAGE, TYPE 4F DISTRIBUTION ND MOUNTING ACCESSORIES. MOUNT THE LIGHT FIXTURE ON 2" GALVANIZED PIPE AT 10 FT FROM TOP OF WALKWAY (NOTE-3)	120V	CURRENT LIGHTING VIPER SERIES OR APPROVED EQUAL FROM ACUITY, COOPER OR STANPRO LIGHTING
E1	CSA CERTIFIED EMERGENCY LIGHTING UNIT SUITABLE FOR ZONE 2 LOCATIONS c/w 12V - 36W INTEGRAL BATTERIES, TWO MR16-5W LED HEADS (340 LUMEN), SELF-DIAGNOSTIC, TEST SWITCH AND MOUNTING ACCESSORIES.	120V	EMERGI-LITE, HZM SERIES OR APPROVED EQUAL FROM BEGHELLI, STANPRO
E1	CSA COMPLIANT EMERGENCY LIGHT, C/W 2-6W LAMP HEADS, 36 W LEAD ACID BATTERY, AUTO DIAGNOSTIC, LAMP TEST SWITCH AND MOUNTING ACCESSORIES.	120V	EMERGI-LITE ESL SERIES, BEGHELLI OR STANPRO LIGHTING
EX-1	CSA COMPLIANT EXIT SIGN (WITH PICTOGRAM) SUITABLE FOR ZONE 2 LOCATIONS c/w SELF POWERED BACKUP FOR 2 HR WITH TEST SWITCH AND PILOT LIGHT, SELF-DIAGNOSTIC AND MOUNTING ACCESSORIES.		EMERGI-LITE EH SERIES OR APPROVED EQUAL FROM BEGHELLI, STANPRO
EX-2	CSA COMPLIANT, UNIVERSAL MOUNTED CSA CERTIFIED PICTOGRAM EXIT SIGN WITH FLAT CANOPY, SELF POWERED, WHITE FINISH, ALUMINUM HOUSING, CLEAR ACRYLIC PANEL WITH PICTOGRAM, SINGLE OR DOUBLE FACE AND MOUNTING HARDWARE	120V	EMERGI-LITE EA SERIES OR APPROVED EQUAL FROM BEGHELLI, STANPRO

LEGEND:  
- - - - - ZONE 2 AREA

- GENERAL NOTES:
- PROVIDE EQUIPMENT RATED FOR THE HAZARDOUS AREA CLASSIFICATION FOR THE CLASSIFIED AREA SHOWN.
  - PROVIDE EYS SEAL WHERE CONDUIT PASSES FROM HAZARDOUS TO NON-HAZARDOUS AREA.
  - PROVIDE EYS SEALS WITH IN 450MM OF ENCLOSURES CONTAINING ARCING DEVICES IN CLASSIFIED AREA.
  - ANY EQUIPMENT WITHIN 0.9 METER OF A VENT OR OPENING FROM A ZONE 1 AREA MUST BE ZONE 1 RATED, AND BETWEEN 0.9 TO 1.5 METERS MUST BE ZONE 2 RATED.
  - ANY EQUIPMENT WITHIN 0.9 METER OF VENT OR OPENING FROM ZONE 2 AREA MUST BE ZONE 2 RATED.





**GENERAL NOTES:**

A. PROVIDE EQUIPMENT RATED FOR THE HAZARDOUS AREA CLASSIFICATION FOR THE CLASSIFIED AREA SHOWN.

B. PROVIDE EYS SEAL WHERE CONDUIT PASSES FROM HAZARDOUS TO NON-HAZARDOUS AREA.

C. PROVIDE EYS SEALS WITH IN 450MM OF ENCLOSURES CONTAINING ARCING DEVICES IN CLASSIFIED AREA.

D. ANY EQUIPMENT WITHIN 0.9 METER OF A VENT OR OPENING FROM A ZONE 1 AREA MUST BE ZONE 1 RATED, AND BETWEEN 0.9 TO 1.5 METERS MUST BE ZONE 2 RATED.

E. ANY EQUIPMENT WITHIN 0.9 METER OF VENT OR OPENING FROM ZONE 2 AREA MUST BE ZONE 2 RATED.

**LEGEND:**

— EXISTING INSTALLATION

— NEW INSTALLATION

**NOTES:**

1. INSTALL ROBROY CONDUIT ALONG THE SIDE RAIL OF CLARIFIER BRIDGE UP TO THE DISCONNECT / LOCAL CONTROL PANEL.

2. THE WIRING IS BASED ON THERMISTORS. REFER TO MOTOR SHOP DRAWING AND PROVIDE PROTECTION RELAY BASED ON THE ACTUAL SENSORS PROVIDED. MODIFY THE WIRING ACCORDINGLY.

3	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:12021215817 - West Elgin-Rodney WWTP Upgrades10 CAD.dwg Rev1A.100  
Building 01/Sheets/215817 - E107.dwg  
Plot: May, 2024, - 09:52:15 AM



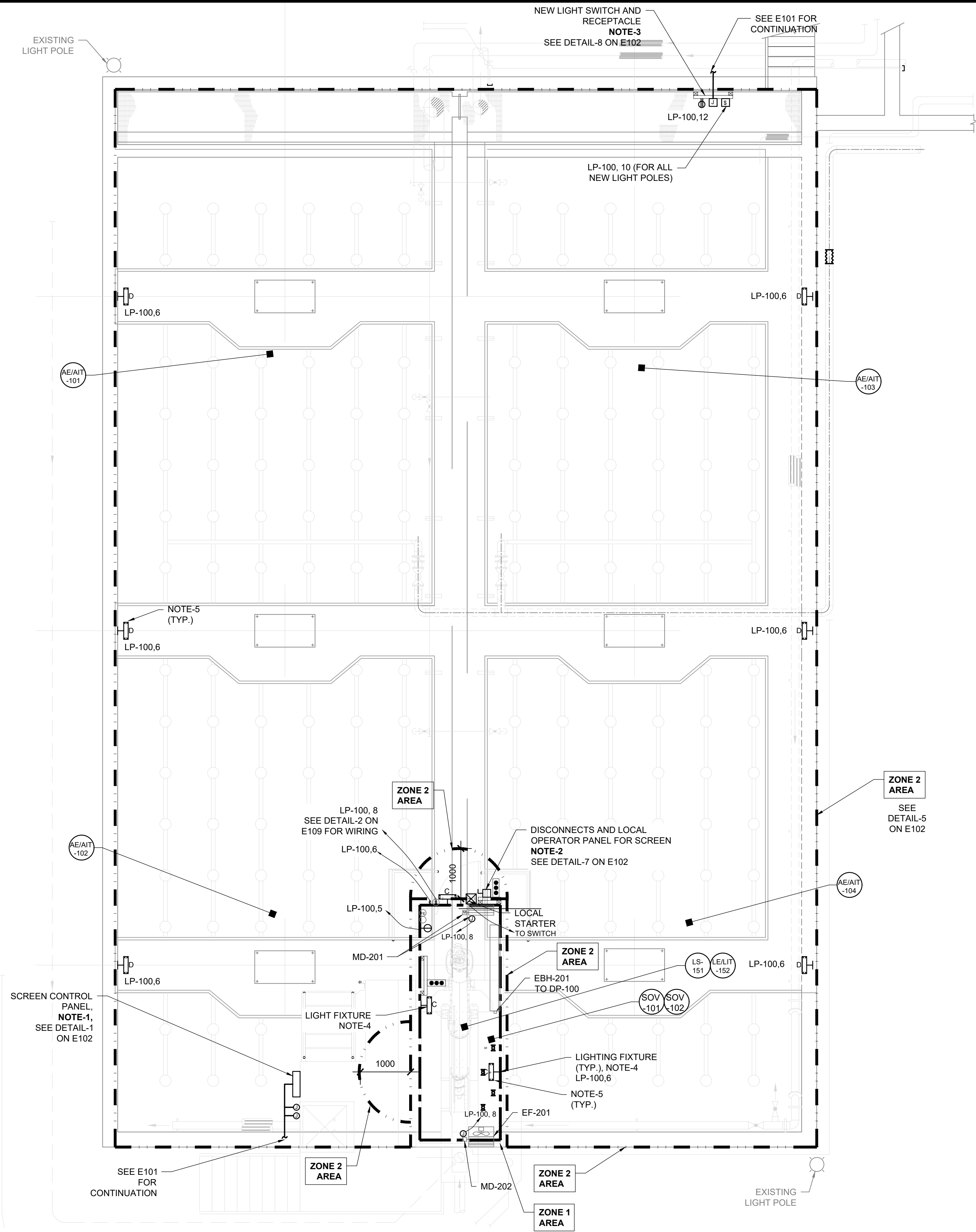
CONTRACT NO. WE-2024-01



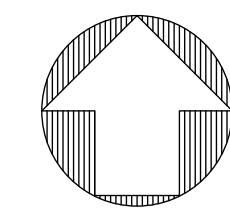
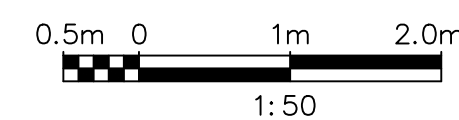
**RODNEY WPCP**  
UPGRADES

ELECTRICAL  
**CLARIFIER POWER PLAN AND SCHEMATICS**

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. E107
Drawn by: MSH/RK	Designed by: FH
Checked by: SQR	Approved by: DC



POWER PLAN - SCREEN ROOM AND AERATION BASIN - POWER AND LIGHTING PLAN



LEGEND:

	EXISTING INSTALLATION
	NEW INSTALLATION
	ZONE 1 AREA
	ZONE 2 AREA

- GENERAL NOTES:
- PROVIDE EQUIPMENT RATED FOR THE HAZARDOUS AREA CLASSIFICATION FOR THE CLASSIFIED AREA SHOWN.
  - PROVIDE EYS SEAL WHERE CONDUIT PASSES FROM HAZARDOUS TO NON-HAZARDOUS AREA.
  - PROVIDE EYS SEALS WITH IN 450MM OF ENCLOSURES CONTAINING ARCING DEVICES IN CLASSIFIED AREA.
  - ANY EQUIPMENT WITHIN 0.9 METER OF A VENT OR OPENING FROM A ZONE 1 AREA MUST BE ZONE 1 RATED, AND BETWEEN 0.9 TO 1.5 METERS MUST BE ZONE 2 RATED.
  - ANY EQUIPMENT WITHIN 0.9 METER OF VENT OR OPENING FROM ZONE 2 AREA MUST BE ZONE 2 RATED.

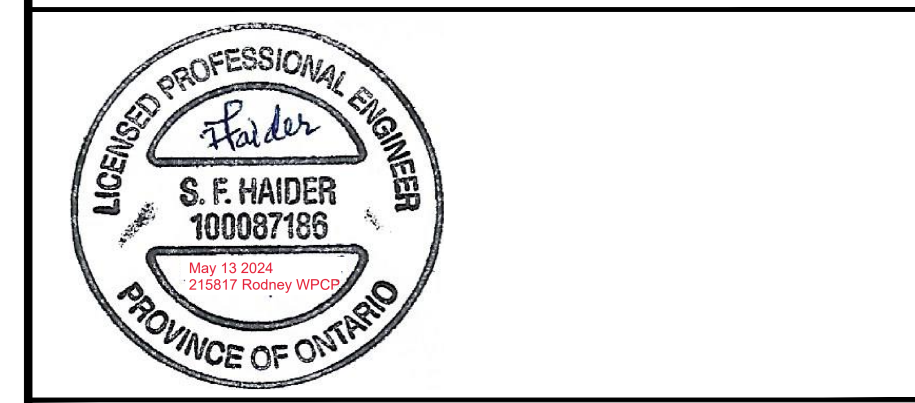
- NOTES:
- INSTALL SCREEN CONTROL PANEL ON THE HAND RAILS AT LEAST 1M AWAY FROM THE FRP SCREEN ENCLOSURE AND AT LEAST 1M HIGH FROM FLOOR GRATING.
  - LOCATION OF DISCONNECT AND LOCAL CONTROL PANEL IS SHOWN FOR GUIDANCE ONLY. CONTRACTOR TO MODIFY BASED ON THE FINAL LOCATION OF THE EQUIPMENT.
  - BRING THE CONDUIT/CABLE ABOVE THE GROUND AND RUN ALONG THE WALL OF THE AERATION BASIN TANK AND TERMINATE INTO PULL BOXES.
  - MOUNT LIGHT FIXTURE 45 DEGREE ANGLE BRACKET SUPPLIED FROM MANUFACTURER AT 2700mm FROM FLOOR LEVEL.
  - REFER TO DWG. E106 LIGHT FIXTURE SCHEDULE FOR LIGHTING DETAILS

No.	REVISION	DATE	BY
3	ISSUED FOR TENDER	2024.05.13	DC

File: R:\2021\215817 - West Elgin-Rodney WWTP Upgrades\10 CAD\dwg\01 Revit\A.100 Building 01\Sheets\215817 - E108.dwg  
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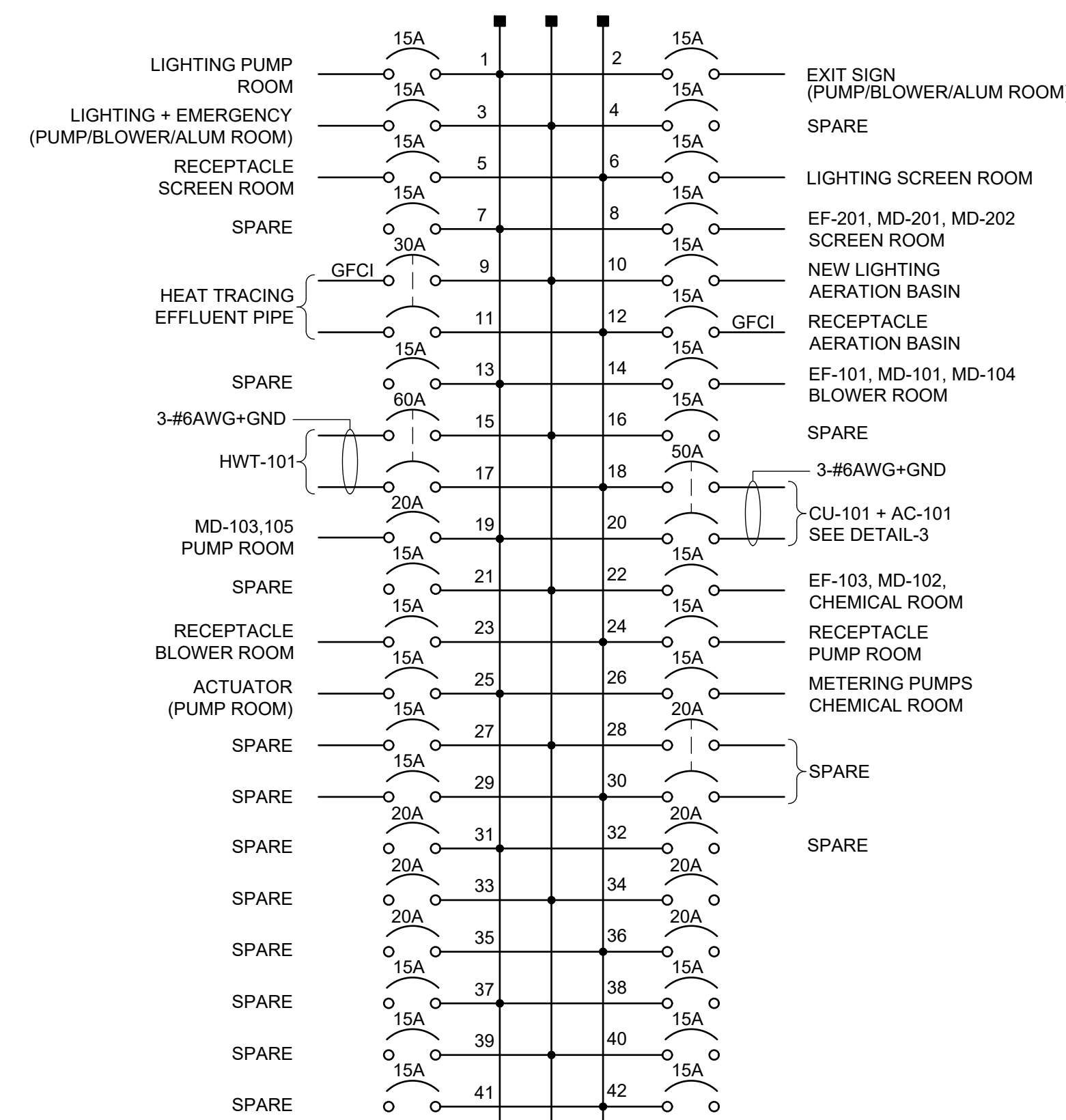
CONTRACT NO. WE-2024-01



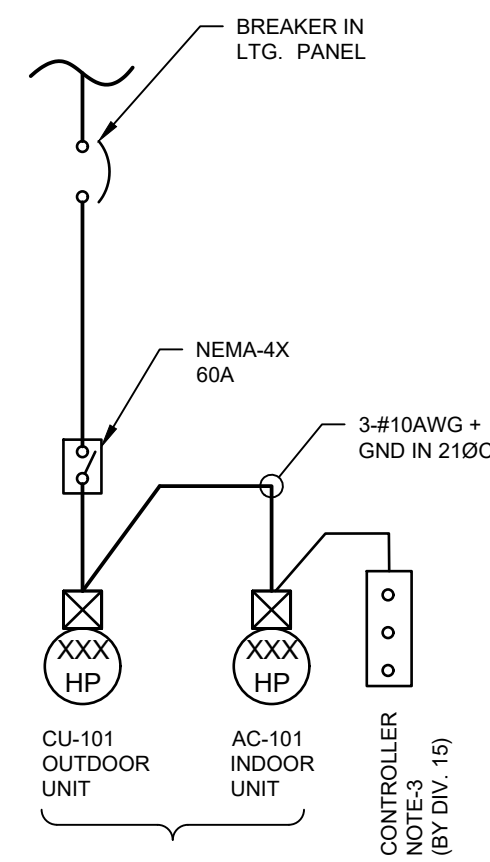
RODNEY WPCP  
UPGRADES  
ELECTRICAL

POWER AND LIGHTING PLAN - SCREEN ROOM AND AERATION BASIN

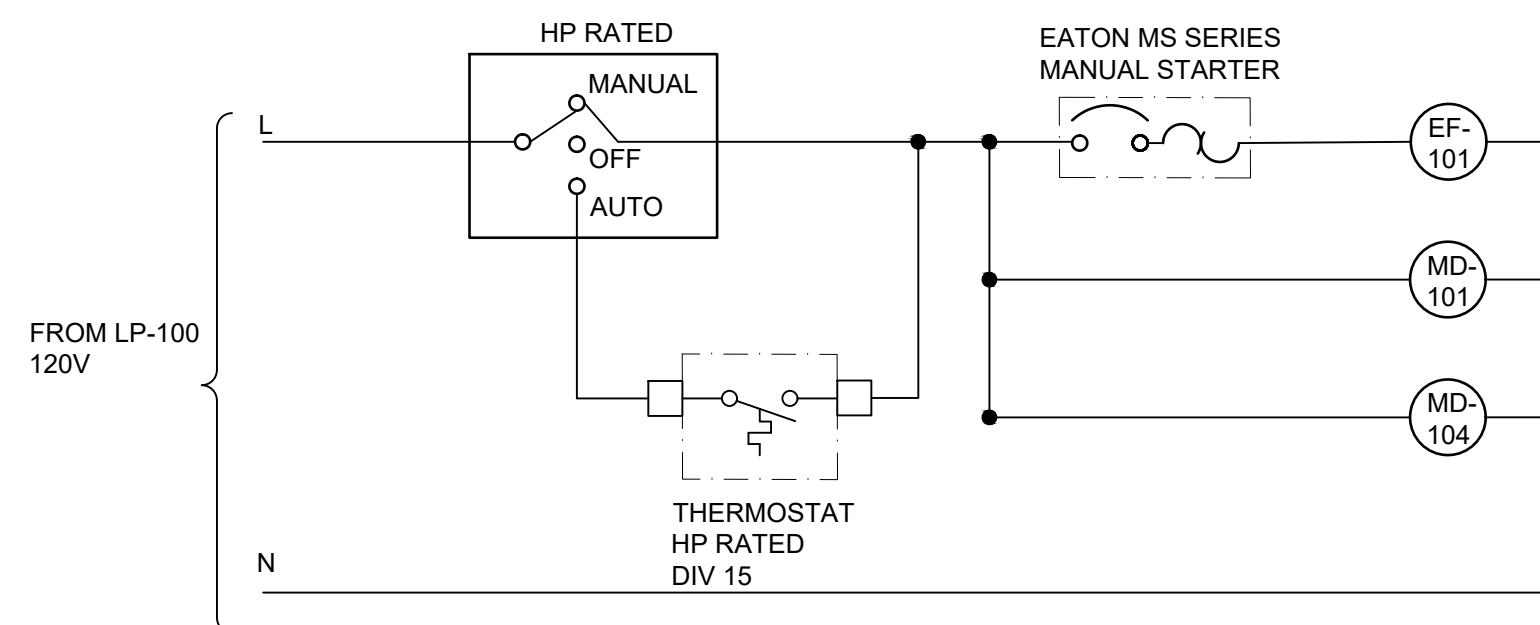
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Date: May-24	DWG NO. E108
Drawn by: MSH	Designed by: FH
Checked by: SQR	Approved by: DC



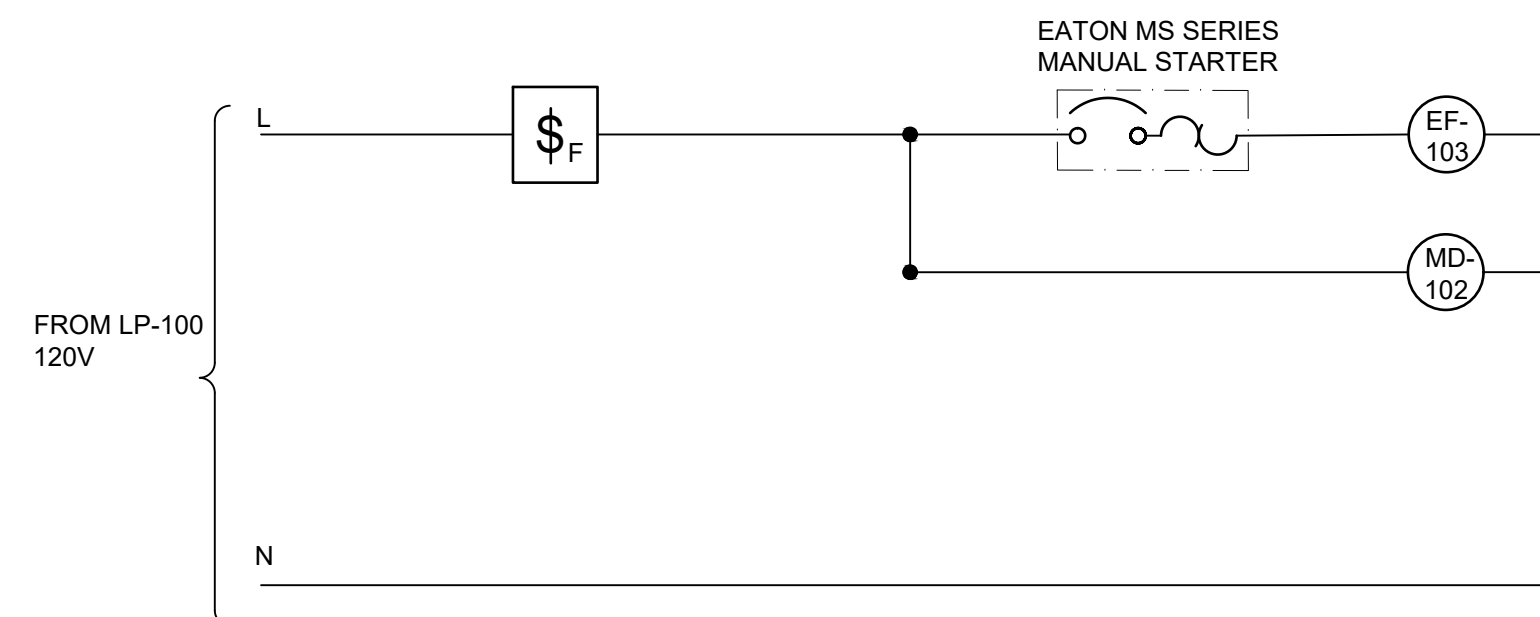
**LIGHTING PANEL: LP-100**  
225A, 208/120V, 3Ø, 4W, 10KA



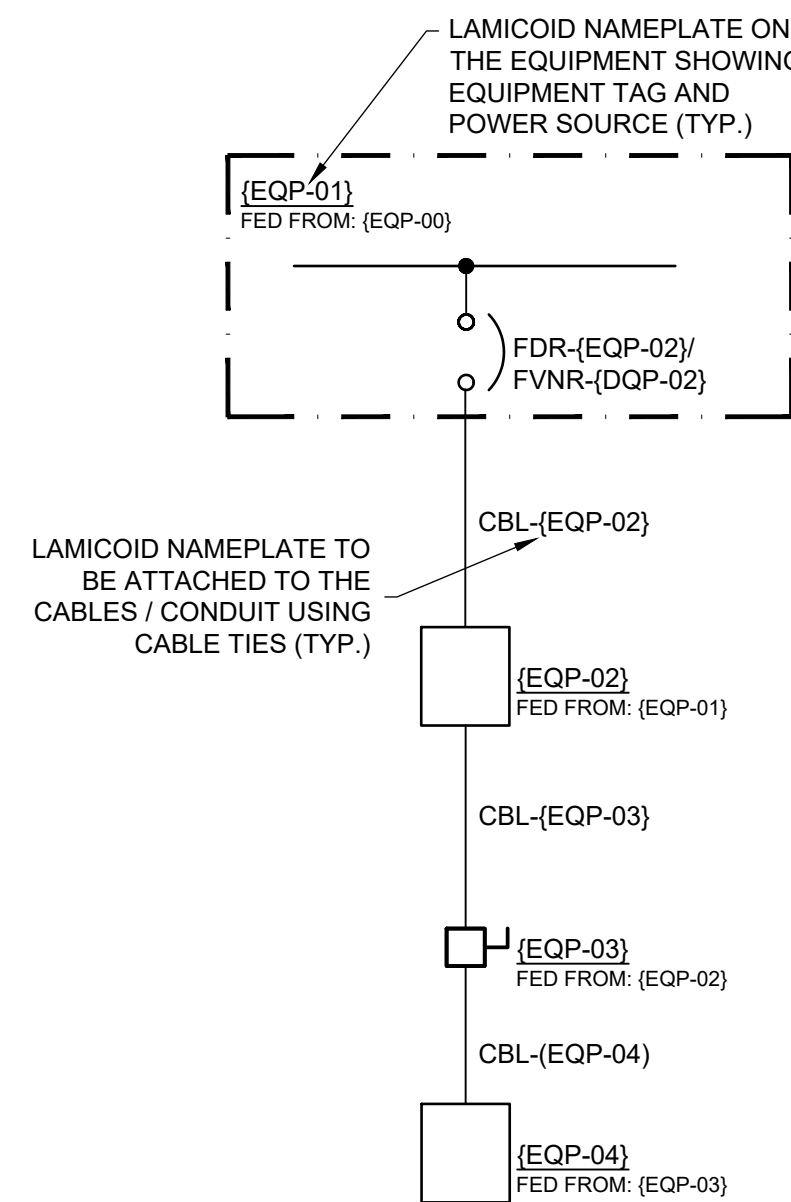
**DETAIL-3**  
**TYPICAL WIRING DIAGRAM**  
**FOR AC UNIT**



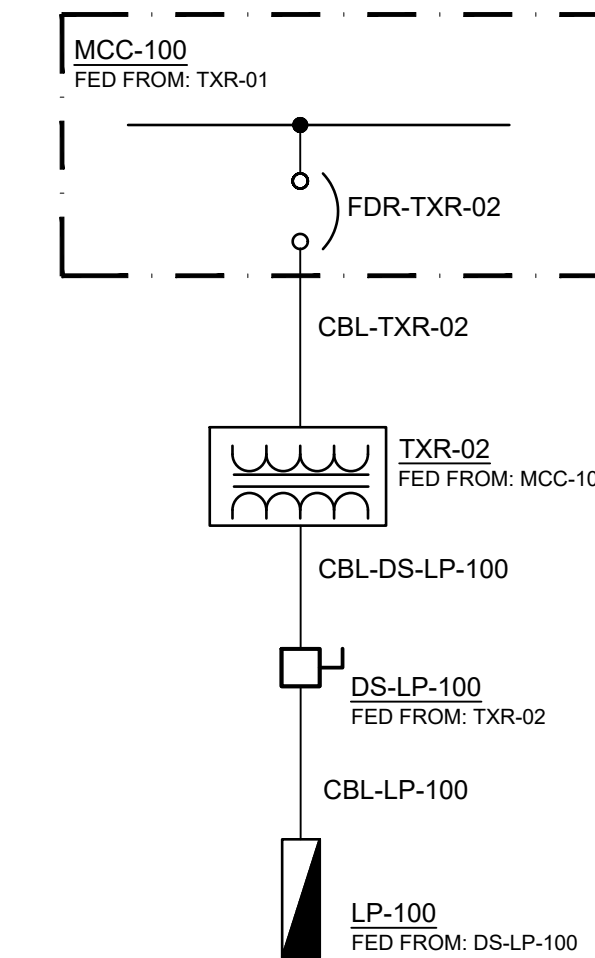
**DETAIL-4**  
**WIRING DIAGRAM FOR EF-101 & MD-101, MD-104**  
**(BLOWER ROOM)**  
N.T.S.



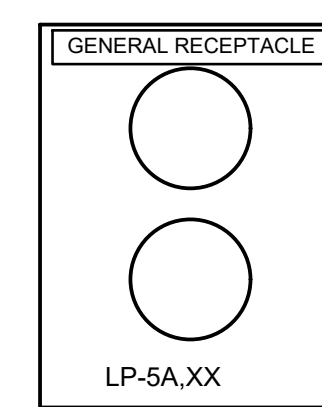
**DETAIL-5**  
**WIRING DIAGRAM FOR EF-103 & MD-102,**  
**(CHEMICAL ROOM)**  
N.T.S.



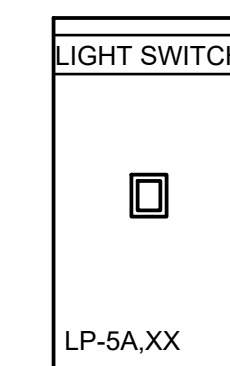
**TYPICAL EQUIPMENT**  
**TAGGING SCHEME (SEE**  
**SECTION 16000)**



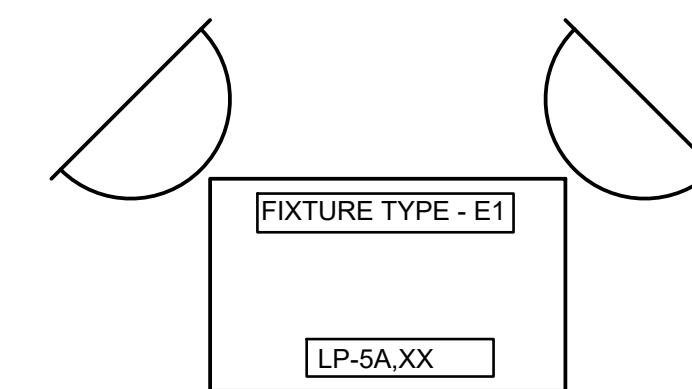
**EQUIPMENT TAGGING**  
**EXAMPLE**



**RECEPTACLE TAGGING**  
**EXAMPLE**

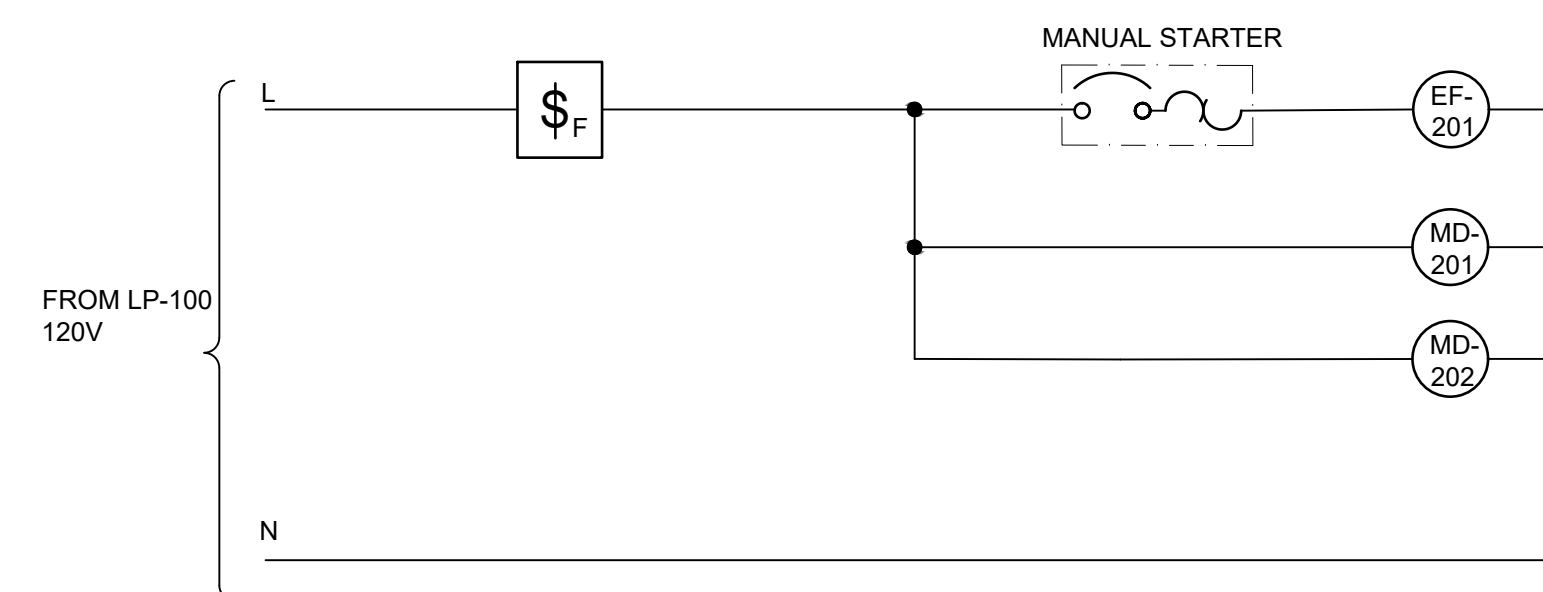


**SWITCH TAGGING**  
**EXAMPLE**



**LIGHT FIXTURE TAGGING**  
**EXAMPLE**

**DETAIL-1:**  
**LABELING/TAGGING EXAMPLE (NOTE-1,2)**  
N.T.S.



**DETAIL-2**  
**WIRING DIAGRAM FOR EF-201 & MD-201,202**  
**(FRP SCREEN BUILDING)**  
N.T.S.

NOTE:

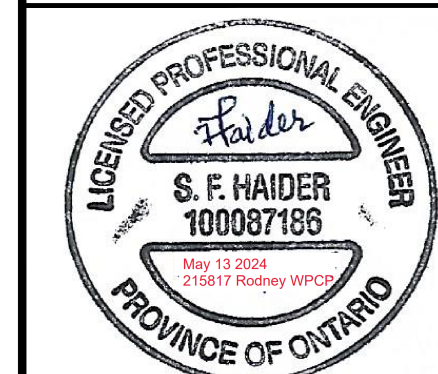
- ATTACH LABELS CONDUITS/CABLES AT MAXIMUM 10 METER INTERVAL (MINIMUM TWO LABELS).
- CIRCUIT BREAKERS, FUSES AND SWITCHES AT EACH DISTRIBUTION POINT SHALL BE MARKED IN A CONSPICUOUS AND LEGIBLE MANNER TO INDICATE WHICH PORTION OF INSTALLATION THEY PROTECT OR CONTROL. MARKING SHALL ALSO SHOW OVERCURRENT DEVICE RATING.
- REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR SEQUENCING OF OPERATION AND PROVIDE WIRING ACCORDINGLY.

3	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: R:2021215817 - West Elgin-Rodney WWTP Upgrades10 CAD.dwg/01 RevitA.100  
Building 01/Sheets/215817 - E109.dwg  
Plot: May, 2024, - 09:52:52 AM



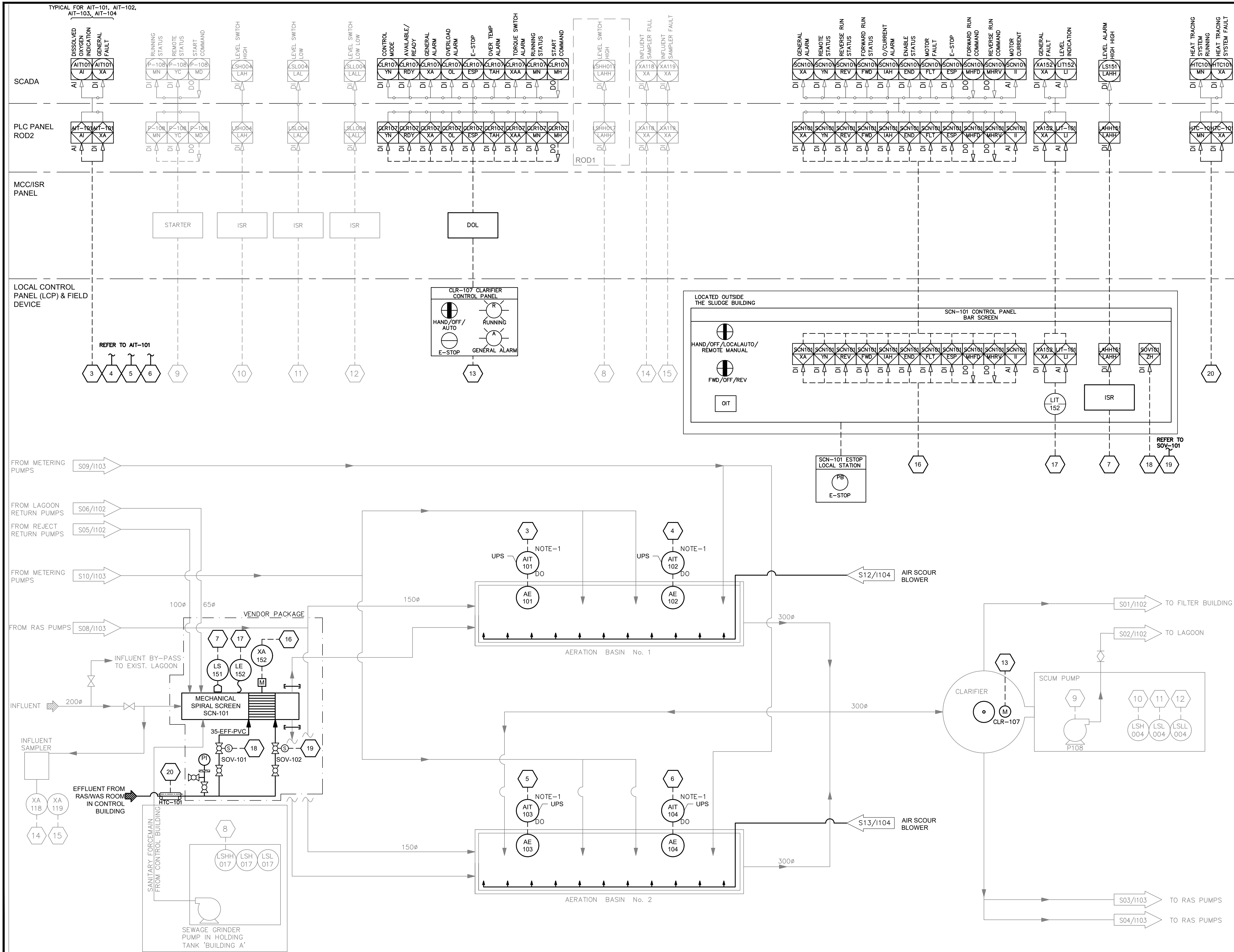
CONTRACT NO. WE-2024-01



**RODNEY WPCP**  
**UPGRADES**

ELECTRICAL  
**ELECTRICAL DETAILS**

Scale: AS SHOWN	RVA Project No:
Date: May-24	215817
Drawn by: MSH	Designed by: FH
Checked by: SQR	Approved by: DC
DWG NO. <b>E109</b>	



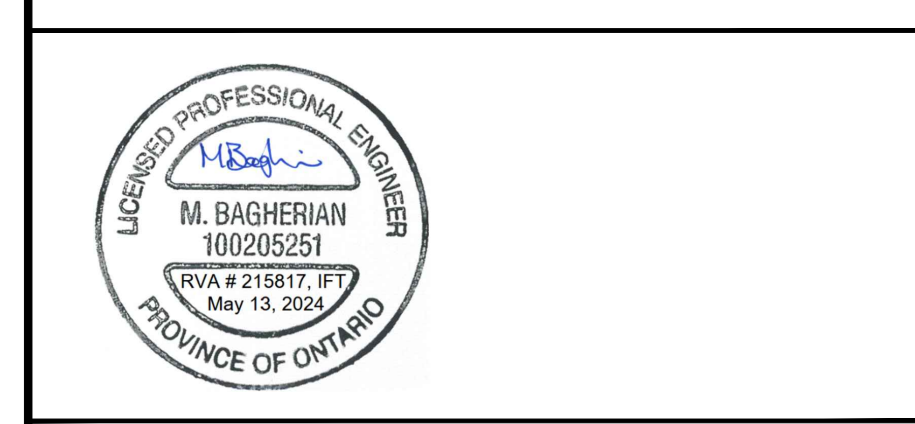
NOTES:  
 1. PROVIDE DO ANALYZERS AS SHOWN IN I101. PROVIDE WIRING AND CIRCUIT BREAKERS TO PROVIDE 120 VDC UPS POWER FROM RODNEY WPCP SLUDGE BUILDING ROD2 CONTROL PANEL. PROVIDE ADDITIONAL TERMINALS, FUSES, AND ALL NECESSARY ACCESSORIES TO MAKE THE SYSTEM FUNCTIONAL. REFER TO SPECIFICATIONS.

No.	REVISION	DATE	BY
C	ISSUED FOR TENDER	2024.05.13	DC
B	ISSUED FOR APPROVAL	2023.08.30	DC
A	ISSUED FOR DESIGN REVIEW	2023.06.30	DC
No.	REVISION	DATE	BY

File: \\rvaint.com\rv-a-data\2021\215817 - West Elgin-rodney Wwtp Upgrades\10 Caddwg\01 Revit\A.000.3 Schematics\Sheets\1101 PROCESS AND INSTRUMENTATION Plot: 1101.dwg Date: 2024.05.04 PM 1:16:24

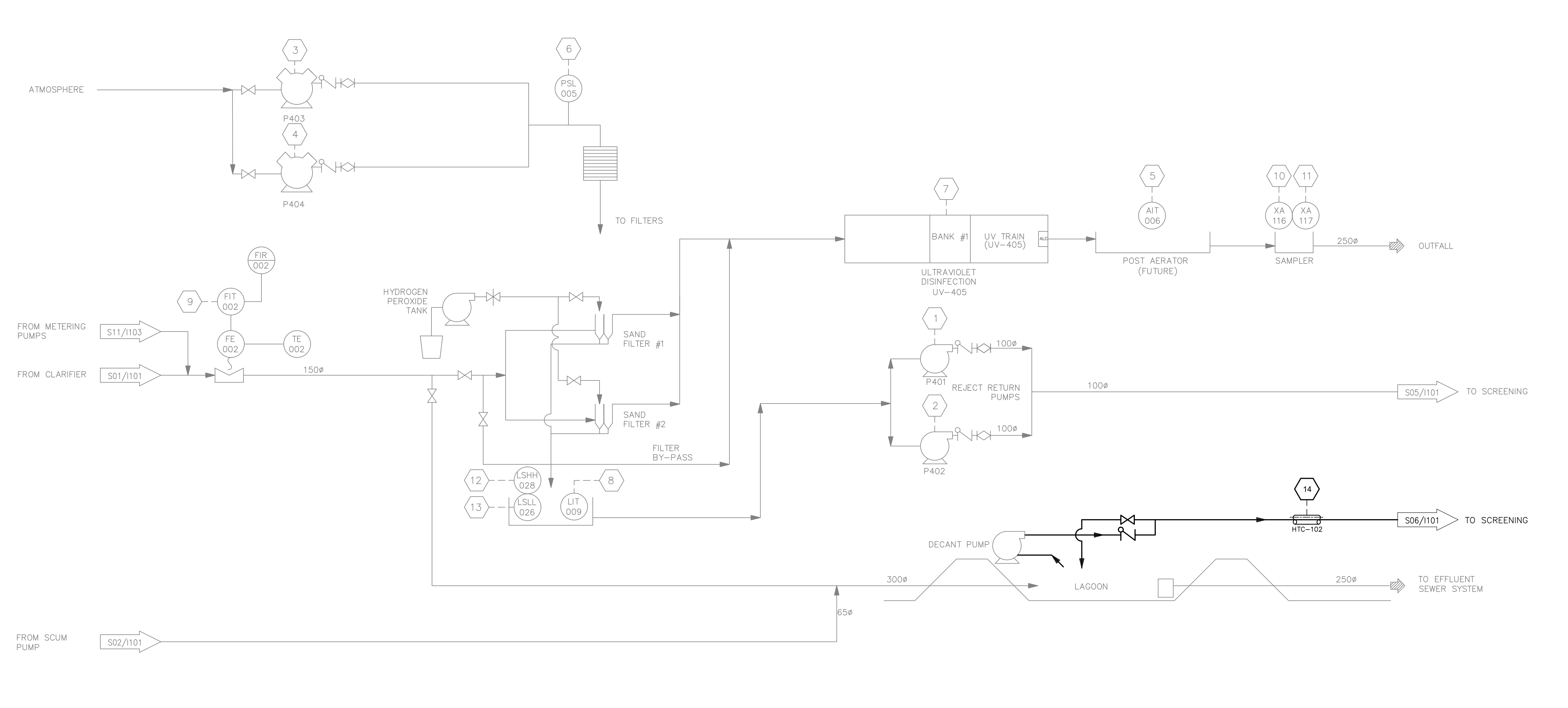
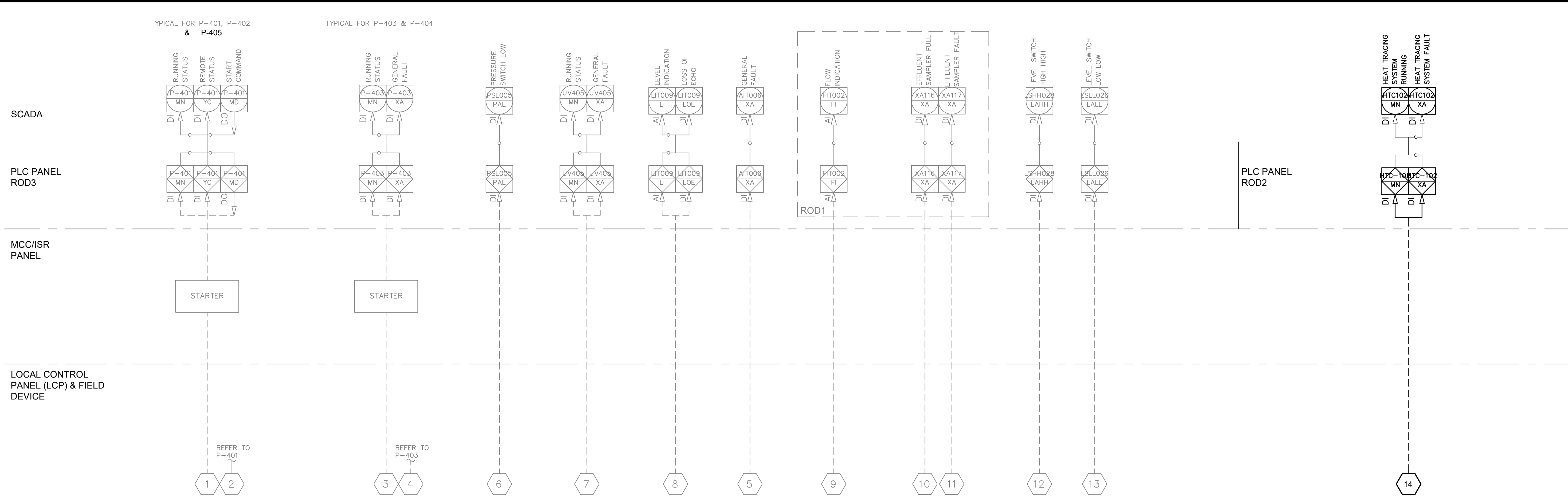


CONTRACT NO. WE-2024-01



**RODNEY WPCP UPGRADES**  
 INSTRUMENTATION AND CONTROLS  
**AERATION AND CLARIFIER P&ID**

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. 1101
Drawn by: CO	Designed by: MB
Checked by: PB	Approved by: DC

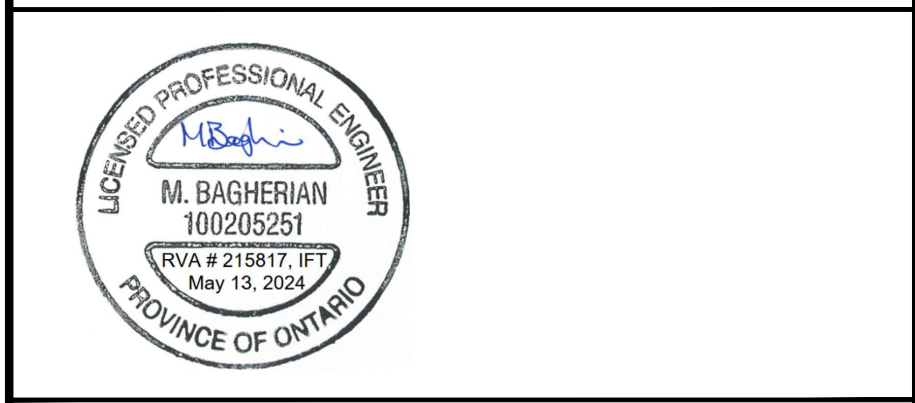


No.	REVISION	DATE	BY
C	ISSUED FOR TENDER	2024.05.13	DC
B	ISSUED FOR APPROVAL	2023.08.30	DC
A	ISSUED FOR DESIGN REVIEW	2023.06.30	DC

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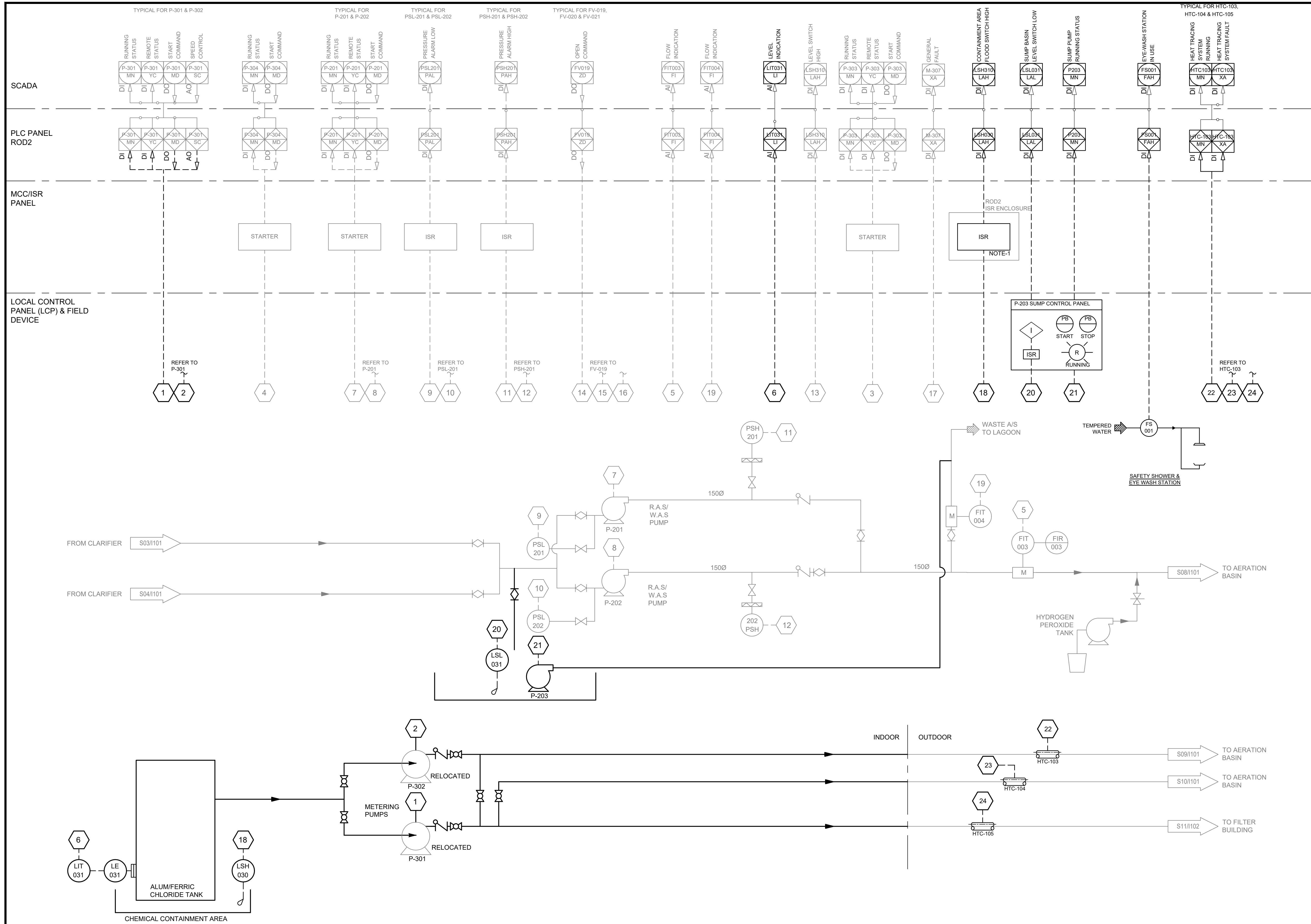


CONTRACT NO. WE-2024-01



**RODNEY WPCP UPGRADES**  
INSTRUMENTATION AND CONTROLS  
**FILTRATION AND UV DISINFECTION P&ID**

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	Drawn by: CO
Designed by: MB	Checked by: PB
Approved by: DC	DWG NO. 1102



NOTES:

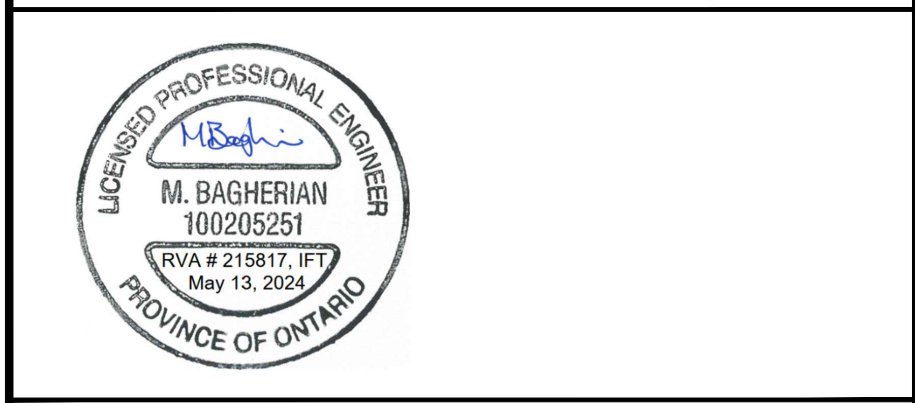
1. PROVIDE PEPPERL + FUCHS KFA5 SERIES INTRINSIC SAFE BARRIER TO ROD2 ISR ENCLOSURE. PROVIDE ADDITIONAL WIRING, TERMINALS, FUSES, CIRCUIT BREAKERS AND ALL NECESSARY ACCESSORIES TO MAKE THE SYSTEM FUNCTIONAL. REFER TO SPECIFICATIONS.

C	ISSUED FOR TENDER	2024.05.13	DC
B	ISSUED FOR APPROVAL	2023.08.30	DC
A	ISSUED FOR DESIGN REVIEW	2023.06.30	DC
No.	REVISION	DATE	BY

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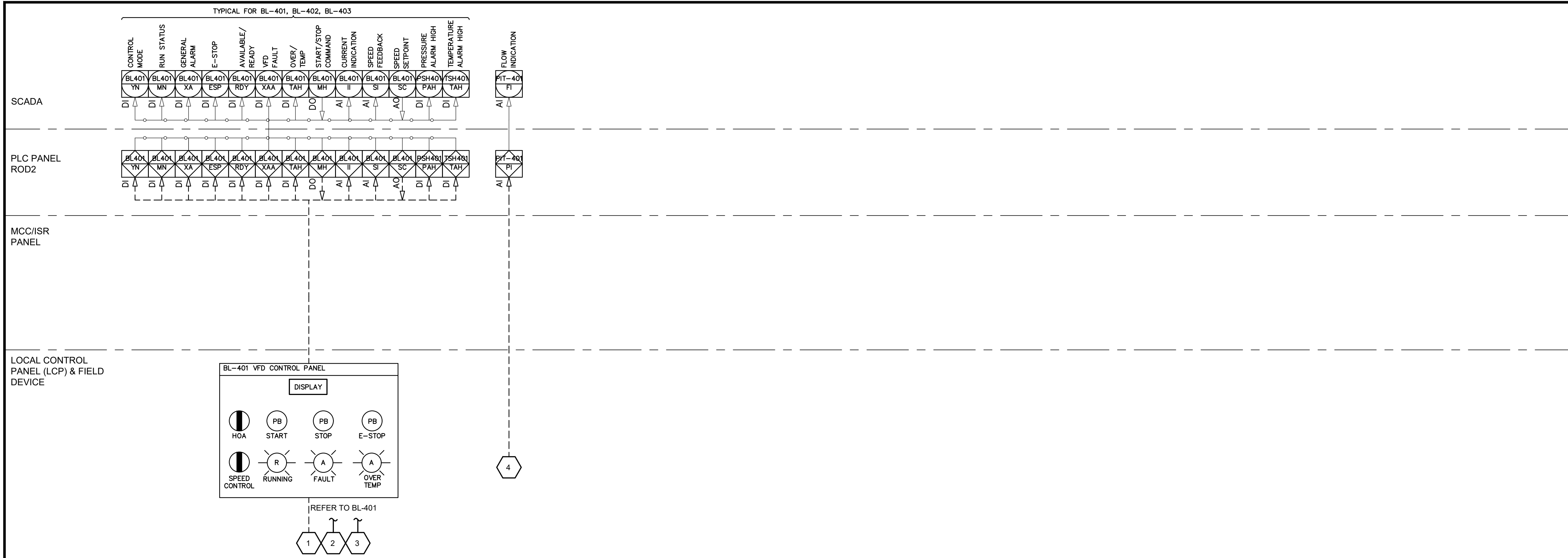


CONTRACT NO. WE-2024-01



**RODNEY WPCP  
UPGRADES**  
INSTRUMENTATION AND CONTROLS  
ALUM DOSING SYSTEM  
P&ID

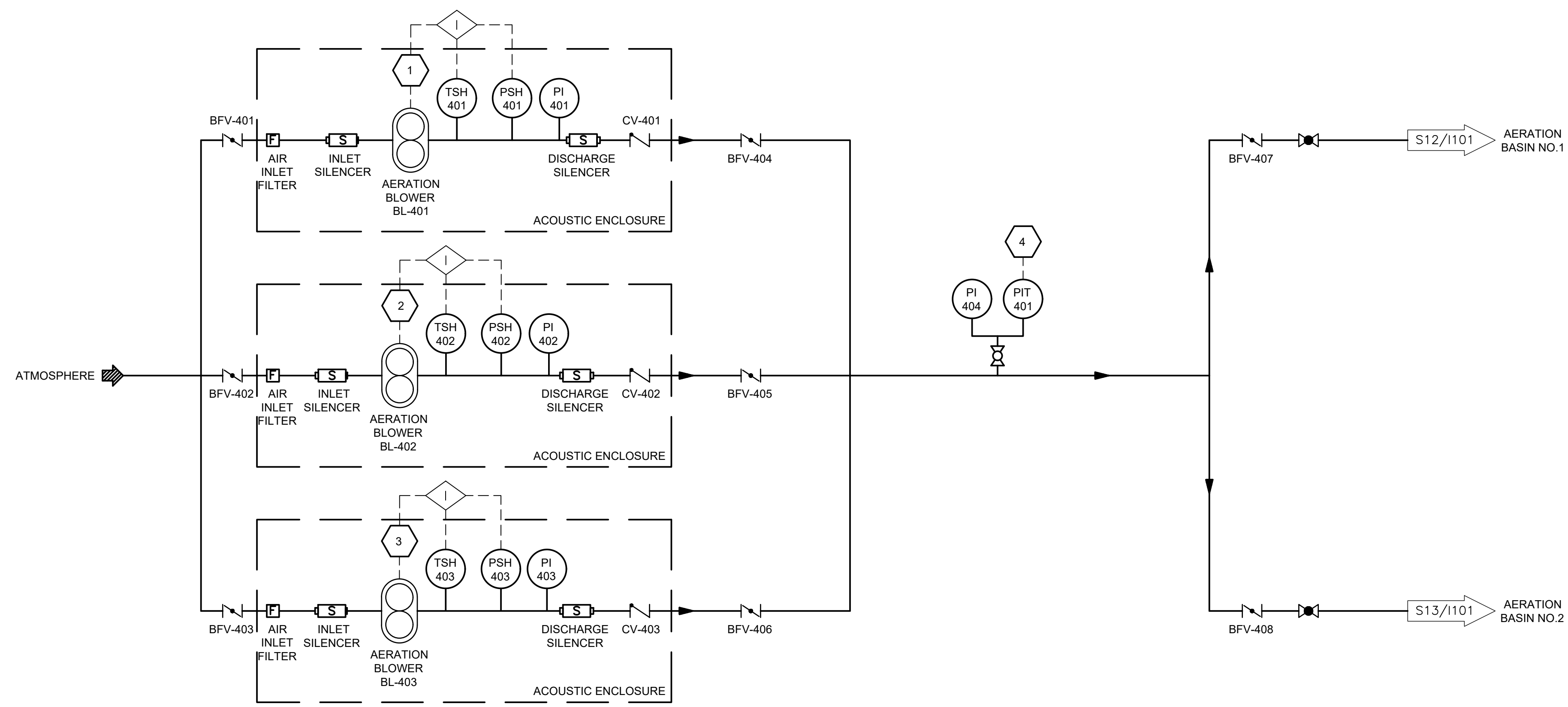
Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. 1103
Drawn by: CO	Designed by: MB
Checked by: PB	Approved by: DC



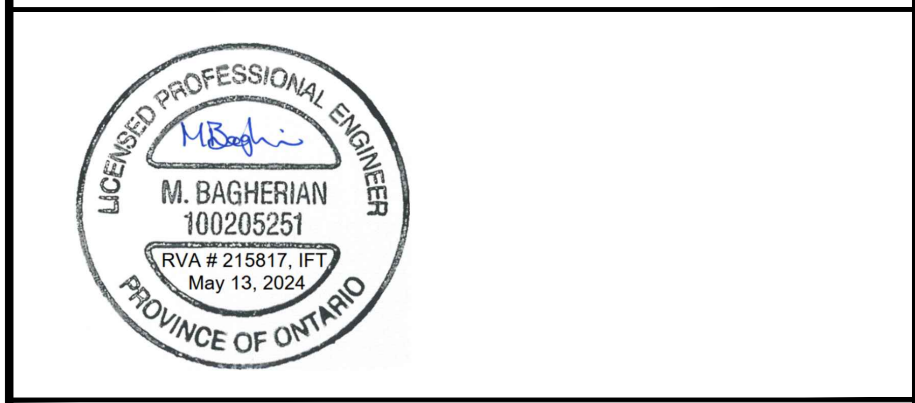
NOTES:

No.	REVISION	DATE	BY
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B	ISSUED FOR APPROVAL	2023.08.30	DC
A	ISSUED FOR DESIGN REVIEW	2023.06.30	DC

File: \\rvaint.com\rvva-data\2021\215817 - West Elgin-rodney Wwtp Upgrades\10 Caddwg\01 Revit\A.000.3 Schematics\Sheets\1104 P&ID RODNEY WPCP INSTRUMENTATION\DIAGRAM(4).dwg  
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CONTRACT NO. WE-2024-01

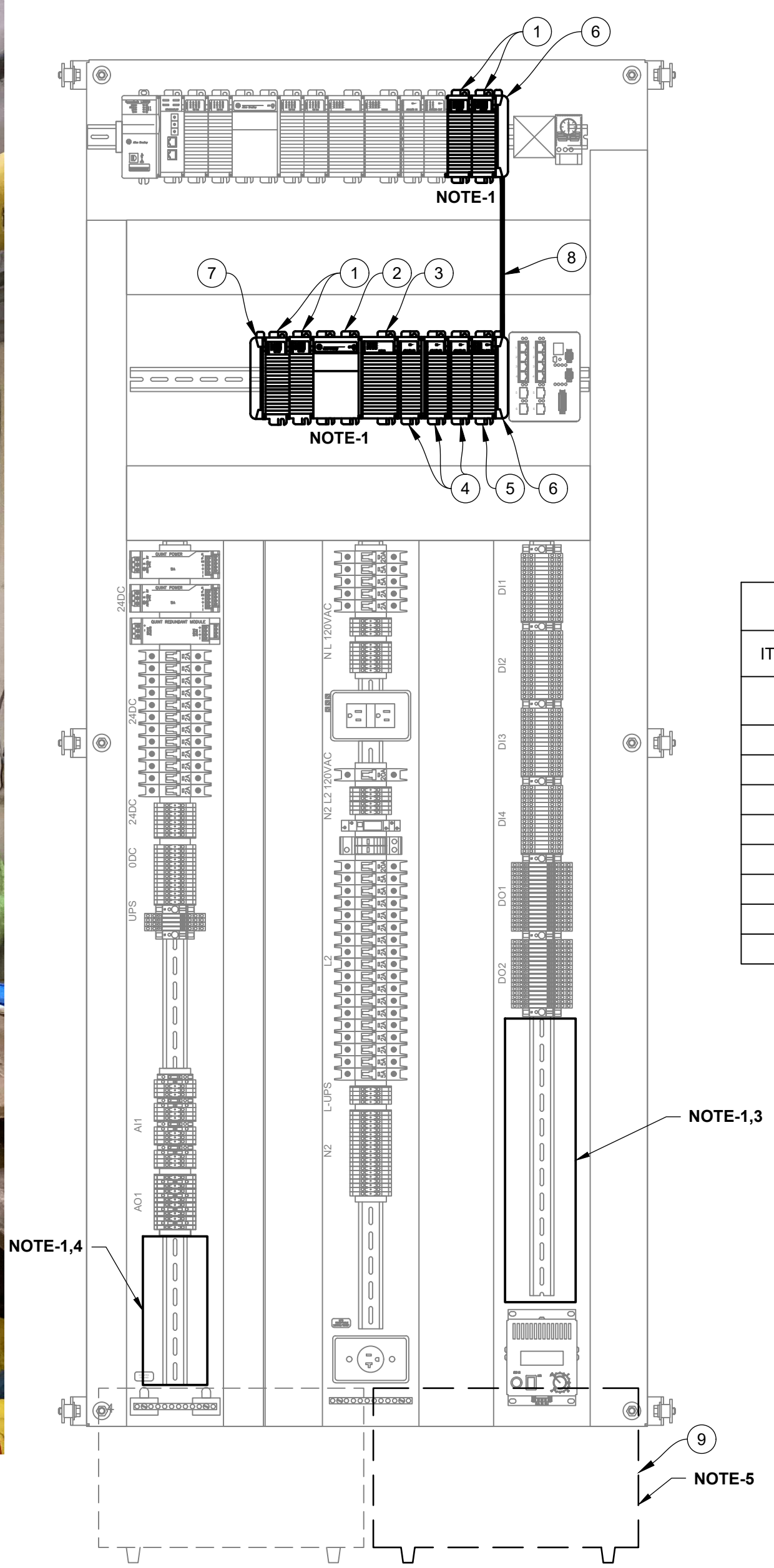


RODNEY WPCP  
UPGRADES  
INSTRUMENTATION AND CONTROLS  
AERATION BLOWER SYSTEM  
P&ID

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. 1104
Drawn by: CEN	Designed by: MB
Checked by: PB	Approved by: DC



1 FIGURE-1:RODNEY WPCP SLUDGE BUILDING (ROD2)  
1105 EXTERIOR LAYOUT



2 FIGURE-2: RODNEY WPCP SLUDGE BUILDING (ROD2)  
1105 INTERIOR LAYOUT

BILL OF MATERIALS NOTE-2				
ITEM	DESCRIPTION	PART NUMBERS	QUANTITY	MANUFACTURER'S OR APPROVE EQUAL
1	COMPACTLOGIX, DIGITAL INPUT, 16 CHANNEL, 120VAC	1769-IA16	4	ALLEN BRADLEY
2	COMPACTLOGIX, POWER SUPPLY, 120VAC, 2x2A	1769-PA4	1	ALLEN BRADLEY
3	COMPACTLOGIX, DIGITAL OUTPUT, 16 CHANNEL, 120VAC	1769-OA16	1	ALLEN BRADLEY
4	COMPACTLOGIX, ANALOG INPUT, 8 POINT	1769-IF8	3	ALLEN BRADLEY
5	COMPACTLOGIX, ANALOG OUTPUT, 8 POINT	1769-OF8C	1	ALLEN BRADLEY
6	COMPACTLOGIX, RIGHT END CAP	1769-ECR	2	ALLEN BRADLEY
7	COMPACTLOGIX, LEFT END CAP	1769-ECL	1	ALLEN BRADLEY
8	RIGHT BANK-TO-RIGHT BANK EXPANSION CABLE	1769-CRR3	1	ALLEN BRADLEY
9	9SX EXTENDED BATTERY MOUDULE (EBM)	9SXEBM96	1	EATON

- NOTES:
1. PROVIDE I/O MODULES TO THE COMPACT LOGIC PLC AS SHOWN IN FIGURE-2. PROVIDE ADDITIONAL TERMINALS, RELAYS, CIRCUIT BREAKERS AND OTHER REQUIRED COMPONENTS TO ACCOMMODATE FOR I/O SIGNALS.
  2. BILL OF MATERIALS ONLY COVERS MAJOR COMPONENTS. PROVIDE ALL NECESSARY ACCESSORIES TO MAKE THE SYSTEM FUNCTIONAL. REFER TO SPECIFICATIONS.
  3. PROVIDE TERMINALS AND TERMINATE DIGITAL INPUT AND DIGITAL OUTPUT SIGNALS AT THIS LOCATION.
  4. PROVIDE TERMINALS AND TERMINATE ANALOG INPUT AND ANALOG OUTPUT SIGNALS AT THIS LOCATION.
  5. PROVIDE EXTENDED BATTERY MODULE (EBM) AS SHOWN IN FIGURE-2 AND TERMINATE TO UPS TOWER.

A	ISSUED FOR TENDER	2024.05.13	DC
No.	REVISION	DATE	BY

File: \\rvaint.com\rvva-data\2021\215817 - West Elgin-rodney Wwtp Upgrades\10 Caddwg\01 RevitA.200 Building 02\Sheets\1105 ROD2 CONTROL PANEL MODIFICATIONS.dwg  
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CONTRACT NO. WE-2024-01

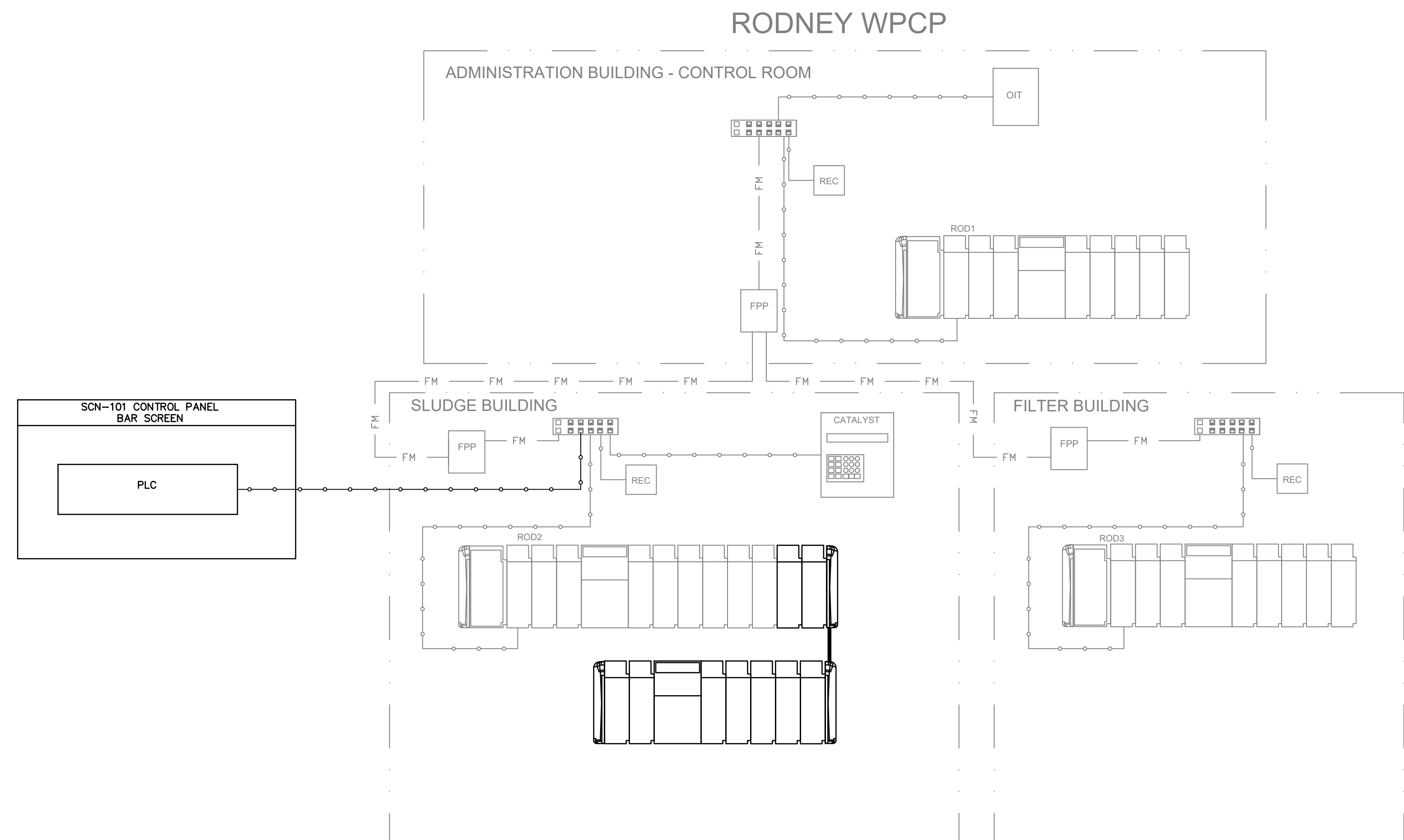
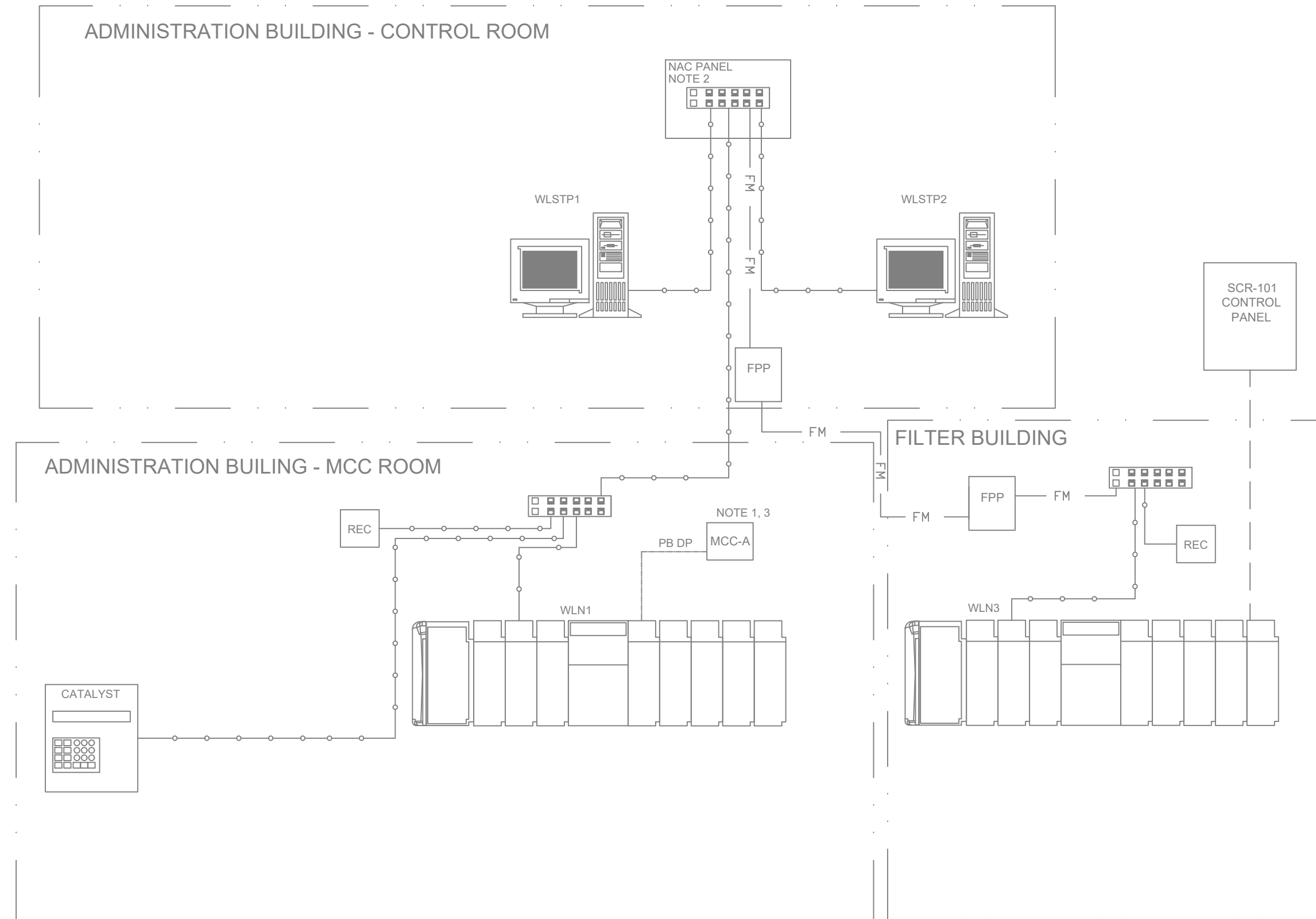
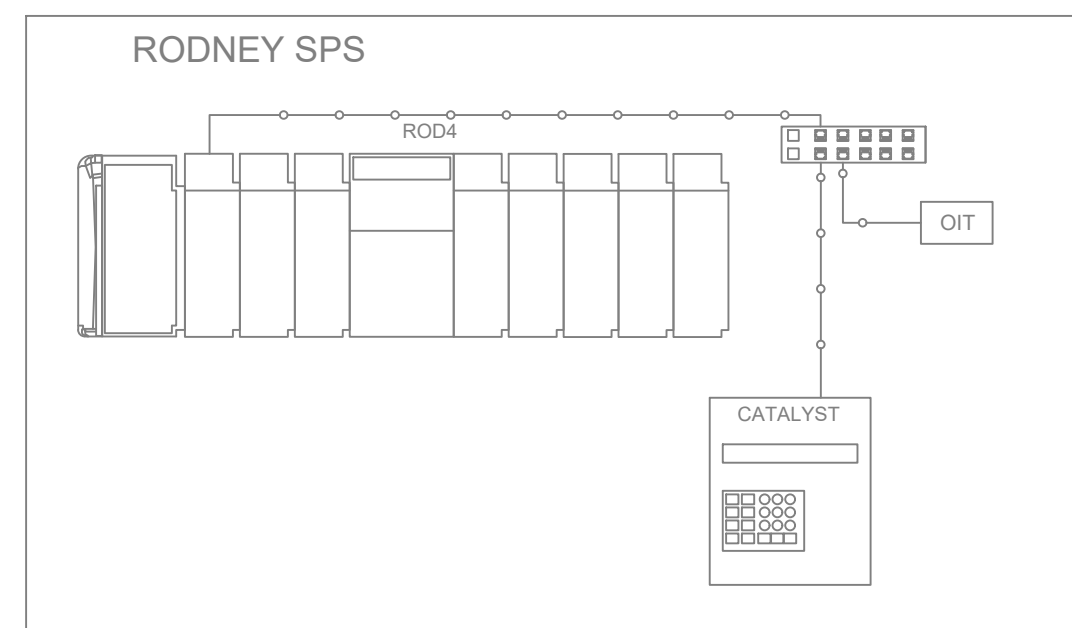
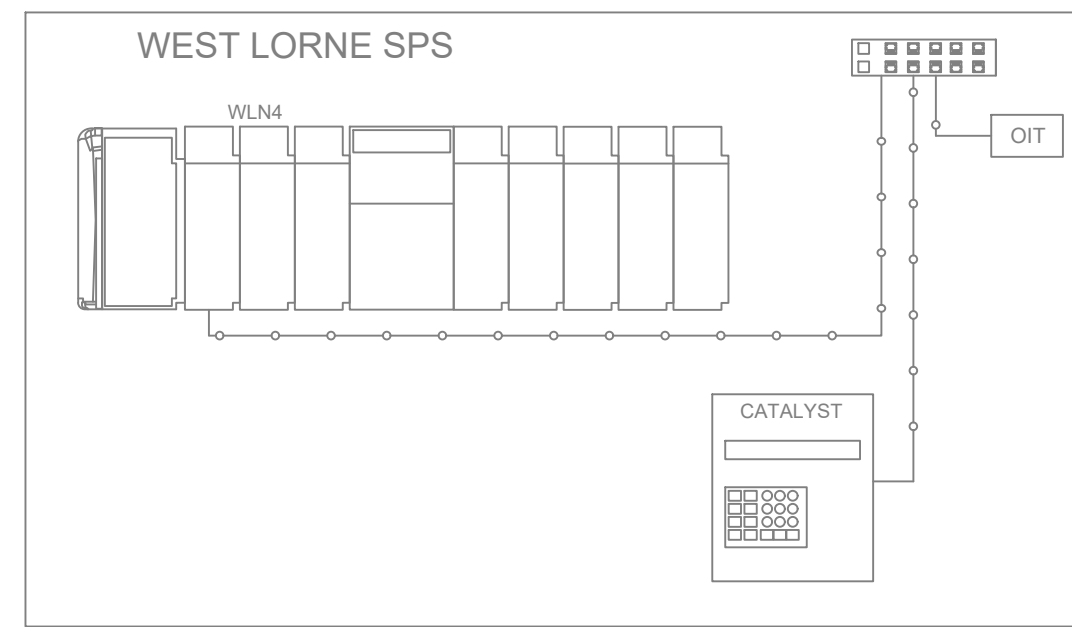


RODNEY WPCP  
UPGRADES  
INSTRUMENTATION AND CONTROLS  
ROD2 CONTROL PANEL MODIFICATIONS

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	Drawn by: CO
Designed by: MB	Checked by: PB
Approved by: DC	DWG NO. 1105



## WEST LORNE WPCP



**LEGEND:**

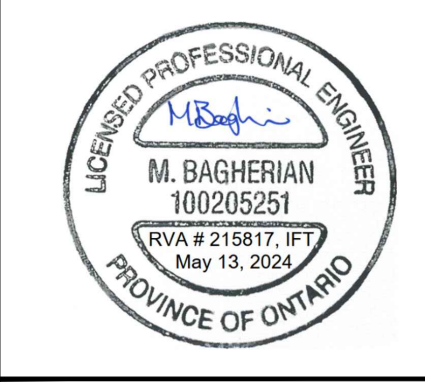
	EXISTING EQUIPMENT
	NEW EQUIPMENT
	PROFIBUS DP
	MULTIMODE FIBER OPTIC CABLE
	CAT 6, ETHERNET CABLE
	HARD WIRE SIGNAL
	EXISTING MULTIMODE FIBER OPTIC CABLE
	EXISTING CAT 6, ETHERNET CABLE
	FIBRE PATCH PANEL
	AUTO-DIALER
	SWITCH
	RECEPTACLE

No.	REVISION	DATE	BY
A	ISSUED FOR TENDER	2024.05.13	DC

File: \\rvaint.com\rvva-data\2021\215817 - West Elgin-rodney Wwtp Upgrades\10 Caddwg\01 RevitA.200 Building 02\Sheets\1106 NETWORK ARCHITECTURE.dwg  
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CONTRACT NO. WE-2024-01



### RODNEY WPCP UPGRADES

INSTRUMENTATION AND CONTROLS

### NETWORK ARCHITECTURE

Scale: AS SHOWN	RVA Project No: 215817
Date: May-24	DWG NO. 1106
Drawn by: CO	Designed by: MB
Checked by: PB	Approved by: DC