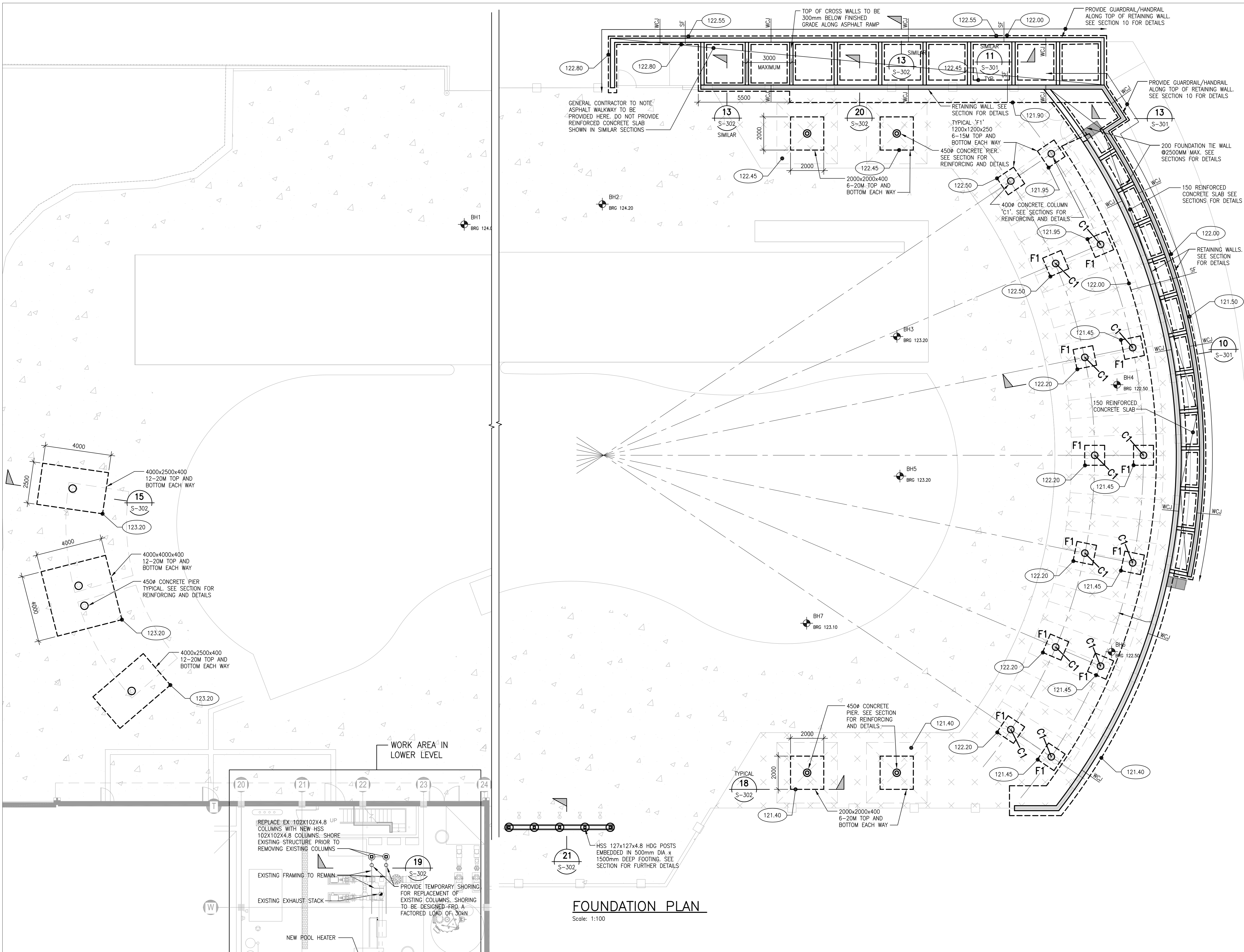


MOUNTAINSIDE POOL REVITALIZATION

CLIENT PROJECT NO. RFP 222-20



FOUNDATION PLAN
Scale: 1:100

ORIGINAL DRAWING SEALED BY J.A. GILLET, P.ENG.

DO NOT SCALE DRAWINGS. CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED OR REUSED WITHOUT THE ENGINEER'S WRITTEN PERMISSION. THE OWNER/ARCHITECT/CONTRACTOR IS ADVISED THAT M.T.E. CONSULTANTS INC. CANNOT CERTIFY ANY COMPONENT OF THE SITE WORKS NOT INSPECTED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY M.T.E. CONSULTANTS INC. PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR INSPECTION.

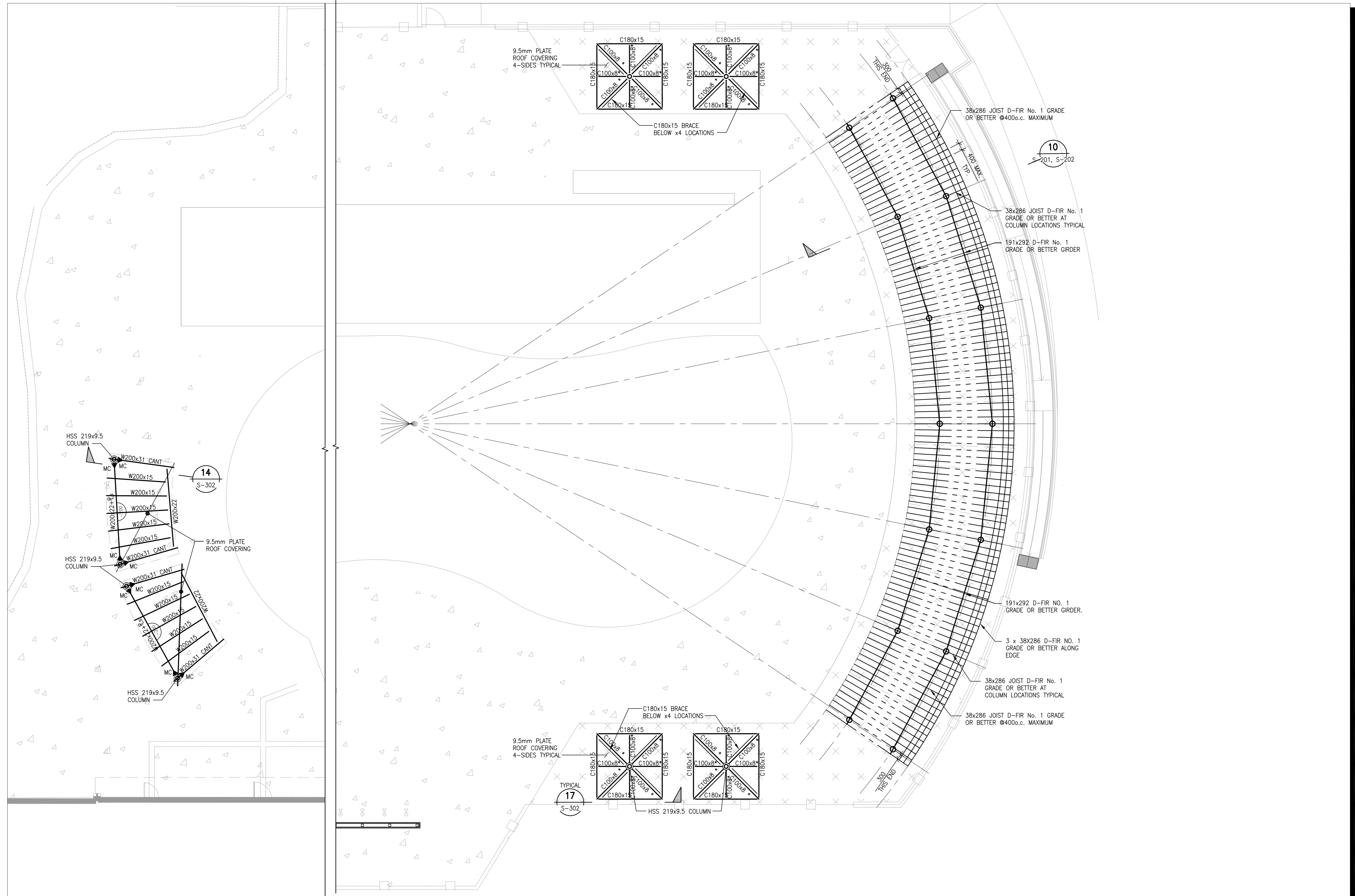
NO.	ISSUED FOR	DATE
3.	ISSUED FOR TENDER	JUNE 29, 2021
2.	ISSUED FOR BUILDING PERMIT	MAY 28, 2021
1.	ISSUED FOR COSTING	APR 22, 2021
NO.	ISSUED FOR	DATE

DRAWING TITLE:
FOUNDATION PLAN

DATE:	SCALE:	PROJECT NO.:
June 30, 2021	SHOWN	48888-100
DRAWN:	CHECKED:	
AMM	KSB	

DRAWING NO.: **S-201**

Plot Date: Wednesday, June 30, 2021 | Pinned by: Kyle Williams | Filename: P:\P\48888\100\02_DWG\01_Current\01_Struct\48888-100 - Shade Structure.dwg



SHADE STRUCTURE FRAMING PLANS

Scale: 1:100

ORIGINAL
DRAWING
SEALED BY
J.A. GILLET,
P.ENG.

DO NOT SCALE DRAWINGS. CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED OR ISSUED WITHOUT THE ENGINEER'S WRITTEN PERMISSION. THE OWNER/ARCHITECT/CONTRACTOR IS ADVISED THAT M.T.E. CONSULTANTS INC. CANNOT CERTIFY ANY COMPONENT OF THE SITE WORKS NOT INSPECTED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY M.T.E. CONSULTANTS INC. PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR INSPECTION.

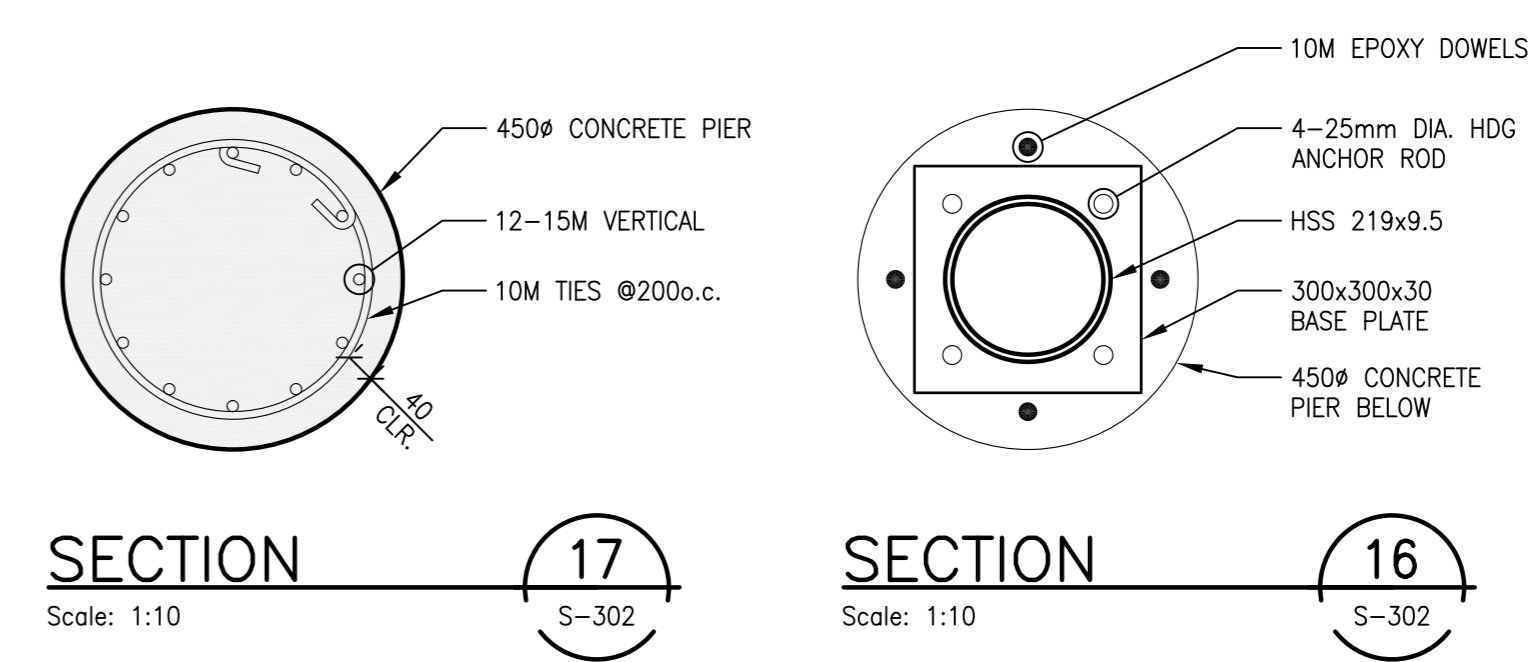
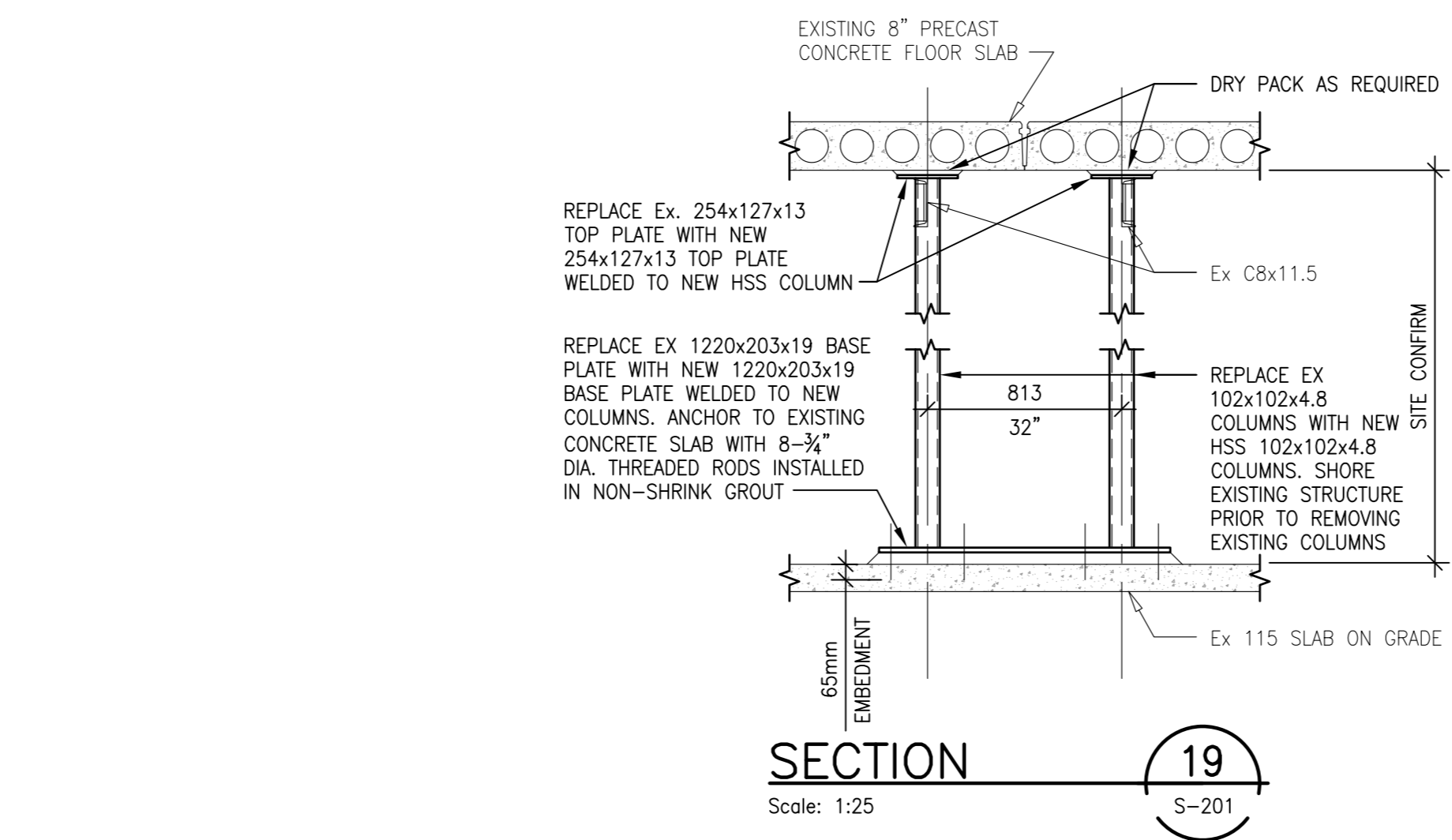
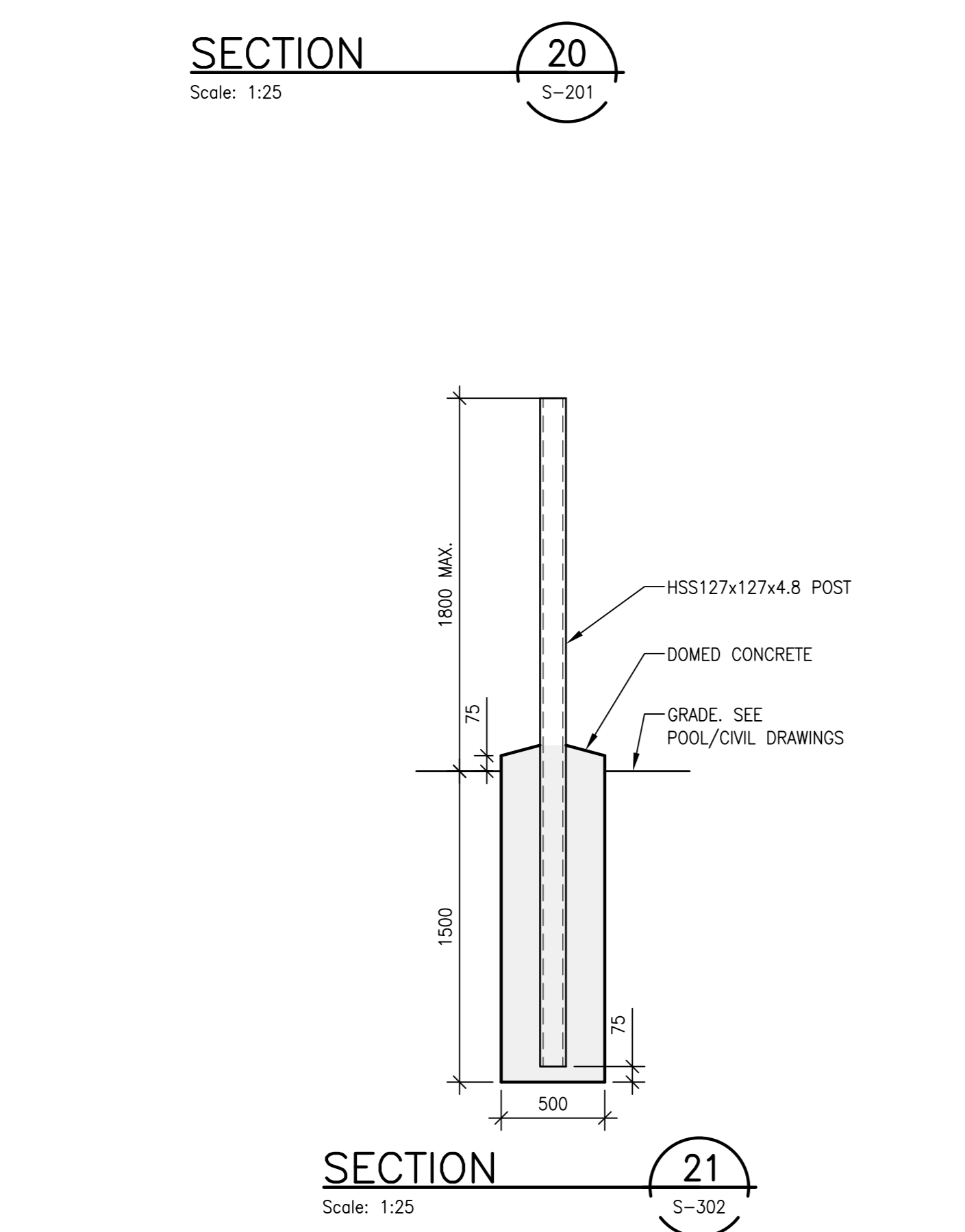
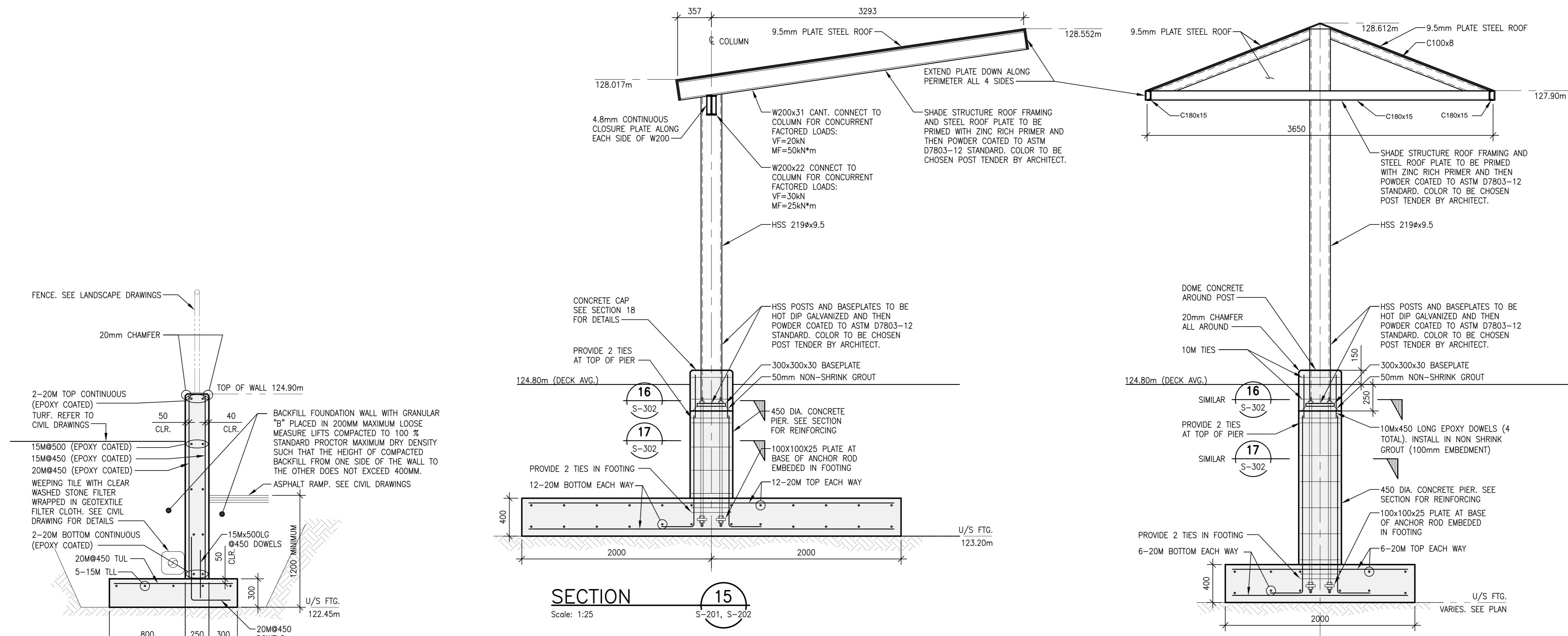
3.	ISSUED FOR TENDER	JUNE 29, 2021
2.	ISSUED FOR BUILDING PERMIT	MAY 28, 2021
1.	ISSUED FOR COSTING	APR 22, 2021
NO.	ISSUED FOR	DATE

DRAWING TITLE:
**SHADE STRUCTURES
FRAMING PLANS**

DATE:	SCALE:	PROJECT NO:
June 30, 2021	SHOWN	4888-100
DRAWN:	CHECKED:	
AMM	KSB	

DRAWING NO:
S-202

Plot Date: Wednesday, June 30, 2021 Plotted by: Kyle Williams Filename: P:\P\4888\100\02_DWG\01_Current\01_Struct\4888-100 - Shade Structure.dwg



ORIGINAL DRAWING SEALED BY J.A. GILLET, P.ENG.

DO NOT SCALE DRAWINGS. CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED OR ISSUED WITHOUT THE ENGINEER'S WRITTEN PERMISSION. THE OWNER/ARCHITECT/CONTRACTOR IS ADVISED THAT M.T.E. CONSULTANTS INC. CANNOT CERTIFY ANY COMPONENT OF THE SITE WORKS NOT INSPECTED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY M.T.E. CONSULTANTS INC. PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR INSPECTION.

3.	ISSUED FOR TENDER	JUNE 29, 2021
2.	ISSUED FOR BUILDING PERMIT	MAY 28, 2021
1.	ISSUED FOR COSTING	APR 22, 2021
NO.	ISSUED FOR	DATE

DRAWING TITLE:
SECTIONS

DATE:	SCALE:	PROJECT NO:
June 30, 2021	SHOWN	48888-100
DRAWN:	CHECKED:	
AMM	KSB	
DRAWING NO:		

S-302

Plot Date: Wednesday, June 30, 2021 Plotted by: Kyle Williams Filepath: P:\P\48888\100\02_DRAW\01_Current\01_Struct\48888-100 - Shade Structure.dwg

MOUNTAINSIDE POOL UPGRADES

BURLINGTON, ONTARIO

KEY PLAN



Smith + Andersen

148 Fullerton St. Suite 1400 London Ontario N6A 5P3
519 863 8888 www.smithandandersen.com

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FIRE DAMPER		SMOKE DAMPER
	MOTOR OPERATED DAMPER		POSITIVE SEAL DAMPER
	MANUAL DAMPER		GRAVITY OR BACKDRAFT DAMPER
	BALANCING DAMPER		SPLITTER DAMPER
	COMBINATION SMOKE AND FIRE DAMPER		REMOTE OPERATED BALANCING DAMPER
	VOLUME EXTRACTOR		
<p>V.A.V. AND F.P.V.A.V. TAG</p> <p>V.A.V. BOX TYPE MIN. FLOW (L/s) IMPERIAL: CFM,[INS.] MAX. FLOW (L/s) METRIC: L/s,[mm]</p> <p>MIN. PRIMARY FLOW MAX. PRIMARY FLOW (L/s) IMPERIAL: CFM,[INS.] SECONDARY FLOW (L/s) METRIC: L/s,[mm]</p> <p>REHEAT COIL CAPACITY (KW)</p>			
	V.A.V. BOX (VARIABLE AIR VOLUME)		FAN POWERED BOX C/W RETURN AIR SILENCER OR ACOUSTICALLY LINED RETURN AIR
	V.A.V. BOX WITH ATTENUATOR		INDUCTION V.A.V. BOX
	V.A.V. BOX WITH REHEAT COIL		PRESSURE INDEPENDENT AIR VALVE (PIAV)
	V.A.V. BOX WITH REHEAT COIL AND ATTENUATOR		FAN COIL UNIT
<p>HEATING ELEMENT TAG</p> <p> HEATING CAPACITY ACTIVE ELEMENT LENGTH ENCLOSURE TYPE</p>			
	HORIZONTAL UNIT HEATER		DUCT COIL
	DOWN BLAST UNIT HEATER		RADIATION HEATING RISER NUMBERS (S=SUPPLY AND R=RETURN)
	RADIANT HEATING PANEL		WALL FIN ELEMENT IN CONTINUOUS ENCLOSURE
NOTE: NOT ALL SYMBOLS APPLY. REFER TO FLOOR PLANS AND DRAWINGS			

3 AIR HANDLING SYMBOLS AND ABBREVIATIONS
(MSD-012.09)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DETAIL NUMBER		SECTION NUMBER
	DRAWING NUMBER		REVISION BUBBLE
	REVISION NUMBER		
	ROUGH IN ONLY		NORMALLY OPEN
	ROUGH IN AND CONNECT		NORMALLY CLOSED
	ACCESS DOOR		STAINLESS STEEL
	PIPING SERVICE CONTINUES		ELBOWS
	REFER TO STANDARD DETAIL DRAWINGS FOR ADDITIONAL REQUIREMENTS OF EQUIPMENT NOTED		TEE
	EQUIPMENT/PIPING/DUCTWORK SHOWN DASHED BELOW		BRANCH OFF BOTTOM OF MAIN
	PIPING INTERSECTS PIPING BELOW		BRANCH OFF TOP OF MAIN
	PIPE DROP OR FROM BELOW		DIRECTION OF FLOW
	PIPE UP OR FROM ABOVE		CONNECT TO EXISTING
	CAPPED CONNECTION		NEW
	CONNECT TO EXISTING		
	THRUST BLOCK		
	GAS METER		
NOTE: NOT ALL SYMBOLS APPLY. REFER TO FLOOR PLANS AND DRAWINGS			

2 GENERAL AND SITE PLAN SYMBOLS AND ABBREVIATIONS
(MSD-012.01)

MECHANICAL DRAWINGS LIST	
DRAWING NUMBER	DRAWING TITLE
GENERAL	
M1	MECHANICAL DRAWING LIST AND LEGENDS
M2	LEGENDS AND DETAILS
M3	DETAILS
SITE PLAN	
M4	SITE PLAN - MECHANICAL
SCHEMATICS AND DIAGRAMS	
M5	POOL SCHEMATIC
DEMOLITION	
M6	POOL PLAN - MECHANICAL DEMOLITION
MECHANICAL	
M7	POOL PLAN - MECHANICAL
PART PLANS AND DETAILS	
M8	POOL MECHANICAL ROOM PLAN - MECHANICAL
M9	POOL PLAN - SEPARATE PRICE

1 DRAWING LIST

Filename: H:\2021\21089 Current-M1 MECHANICAL DRAWING LIST AND LEGENDS.dwg
Plot Date: June 28, 2021

NO.	ISSUED FOR	DATE
5	ISSUED FOR TENDER	2021.06.29
4	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.27
3	ISSUED FOR CLASS B COST ESTIMATE	2021.04.21
2	ISSUED FOR OWNER REVIEW	2021.04.06
1	ISSUED FOR PROGRESS	2021.03.31

DRAWING TITLE:
MECHANICAL
DRAWING LIST
AND LEGENDS

DATE:	SCALE:	PROJECT NO.:
J.V.	1:100	21069.001
CHECKED:	S.M.	

DRAWING NO:
M1



NO.	ISSUED FOR	DATE
5	ISSUED FOR TENDER	2021.06.29
4	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.27
3	ISSUED FOR CLASS B COST ESTIMATE	2021.04.21
2	ISSUED FOR OWNER REVIEW	2021.04.06
1	ISSUED FOR PROGRESS	2021.03.30

DRAWING TITLE:
**LEGENDS AND
DETAILS**

DATE:	SCALE:	PROJECT NO.:
J.V.	1:100	21069.001
DRAWN:	CHECKED:	
	S.M.	
DRAWING NO.:		

M2

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	200W POWER REQUIREMENT FOR ELECTRIC TRACING	P.E.	PNEUMATIC-ELECTRIC
	ELECTRIC PIPE DEVICE FOR SINGLE LINE PIPES	C	CONTROLLER
	ELECTRIC PIPE DEVICE FOR DOUBLE LINE PIPES	TS	TEMPERATURE SENSOR
M.C.C.	MOTOR CONTROL CENTRE	HS	HUMIDITY SENSOR
	D.S. DISCONNECT SWITCH		POWER OUTLET FOR B.A.S.
	SWITCH (MANUAL STARTER)		AIR FLOW MONITORING STATION
H.O.A.	HAND-OFF-AUTO	S	STATIC
FZ	LOW TEMPERATURE THERMOSTAT	VFD	VARIABLE FREQUENCY DRIVE
FS	HIGH TEMPERATURE THERMOSTAT	CO	CARBON MONOXIDE SENSOR
T	ELECTRIC THERMOSTAT/SENSOR	RS	REFRIGERANT SENSOR
Ⓣ	PNEUMATIC THERMOSTAT/SENSOR	CO2	CARBON DIOXIDE SENSOR
BAS	BASE BUILDING AUTOMATION SYSTEM	NO2	NITROGEN OXIDE SENSOR
FS	FLOW SWITCH	A.F.S.	AIR FLOW STATION
Ⓢ	SPEED SWITCH	PS	PRESSURE SENSOR
	FLOW MONITORING WATER		

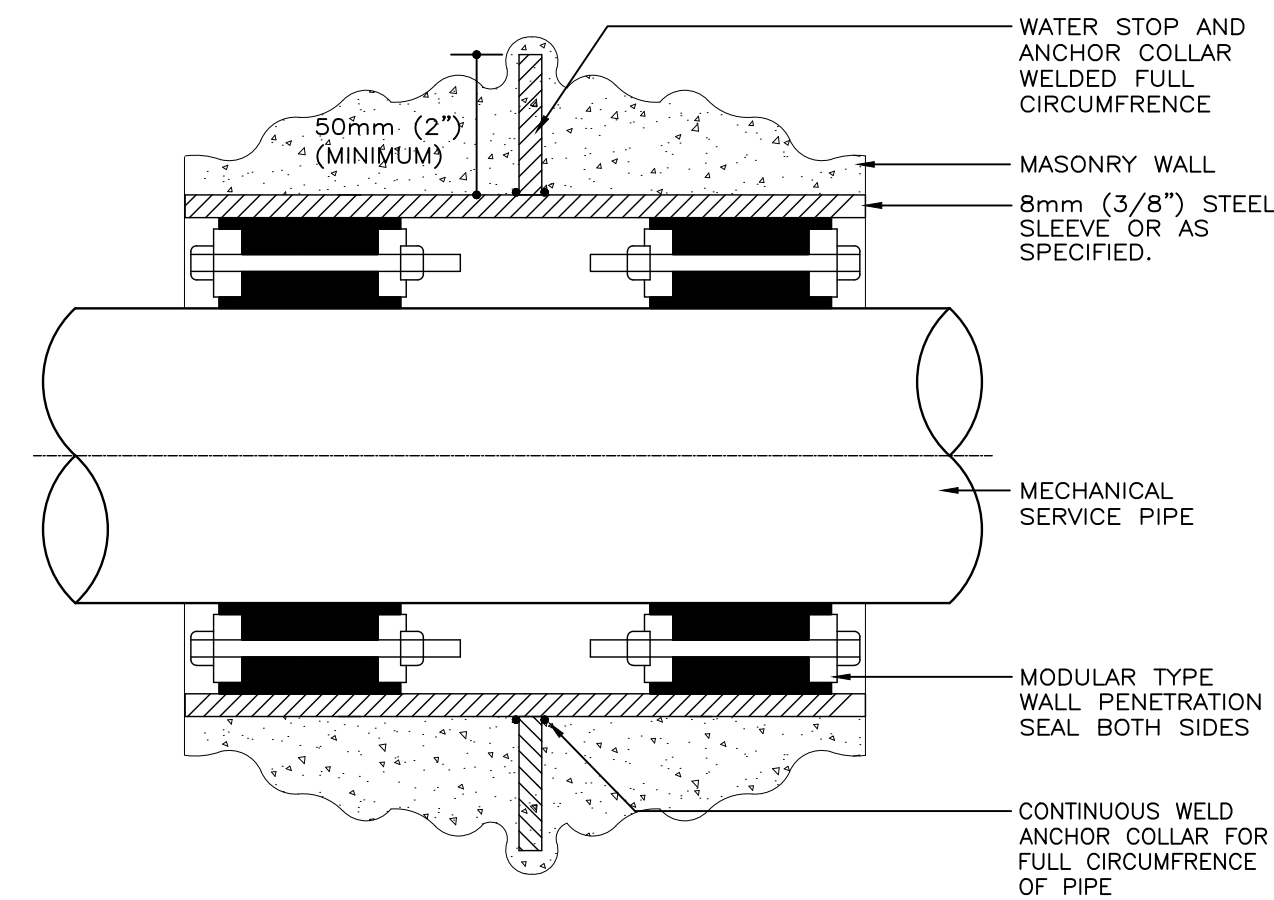
NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

1 ELECTRICAL AND CONTROLS SYMBOLS AND ABBREVIATIONS
(MSD-012.11)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EQUIPMENT DESIGNATION		DESIGNATION EQUIPMENT DESIGNATION
	FLOOR NUMBER SEQUENTIAL NUMBER		TYPICAL EQUIPMENT DESIGNATION SEQUENTIAL NUMBER
FC-12-01		SL-AHU-12-01-01	SILENCER TAG
UH-01			
AC	SPLIT SYSTEM AIR CONDITIONING UNIT (REFER TO CU BELOW)	RF	RETURN FAN
ACH	AIR CURTAIN HEATER	RP	RADIANT PANEL
AFS	AIR FLOW STATION	RTU	ROOF TOP UNIT
AHU	AIR HANDLING UNIT	SCAC	SELF CONTAINED AIR CONDITIONING UNIT
SL	SILENCERS (TO BE READ IN CONJUNCTION WITH ASSOCIATED AIR HANDLING UNIT)	SF	SUPPLY FAN ALTERNATIVELY IF ASSOCIATED TO AIR HANDLING UNIT
B	BOILER	TF	TRANSFER FAN
CH	CHILLER	UH	UNIT HEATER
CRU	COMPUTER ROOM AIR CONDITIONING UNIT	VHP	VERTICAL HEAT PUMP
CT	COOLING TOWER	VFC	VERTICAL FAN COIL
CUH	CABINET UNIT HEATER		
CU	CONDENSING UNIT		
DHWT	DOMESTIC HOT WATER TANK		
DHWH	DOMESTIC HOT WATER HEATER		
EF	EXHAUST FAN		
ET	EXPANSION TANK		
EV	EVAPORATOR		
EW	ENTHALPY WHEEL		
FC	FLUID COOLER		
FCU	FAN COIL UNIT		
FFH	FORCE FLOW HEATER		
HE	HEAT EXCHANGER		
HHP	HORIZONTAL HEAT PUMP		
HU	HUMIDIFIER		
MUA	MAKEUP AIR UNIT		
P-	PUMP (GENERAL)		
P-HTG	HEATING WATER PUMP		
P-CLG	COOLING WATER PUMP		
P-FSP/FIRE	FIRE STANDPIPE PUMP/FIRE PUMP		
P-DW	DOMESTIC WATER PUMP		
P-SAN	SANITARY PUMP		
P-STW	STORM PUMP		
P-SMP	SUMP PUMP		
P-DHWR	DOMESTIC HOT WATER RECIRC PUMP		
P-FO	FUEL OIL PUMP		
P-CHEM	CHEMICAL FEED PUMP		
P-CHW	CHILLED WATER PUMP		
P-CON	CONDENSER WATER PUMP		

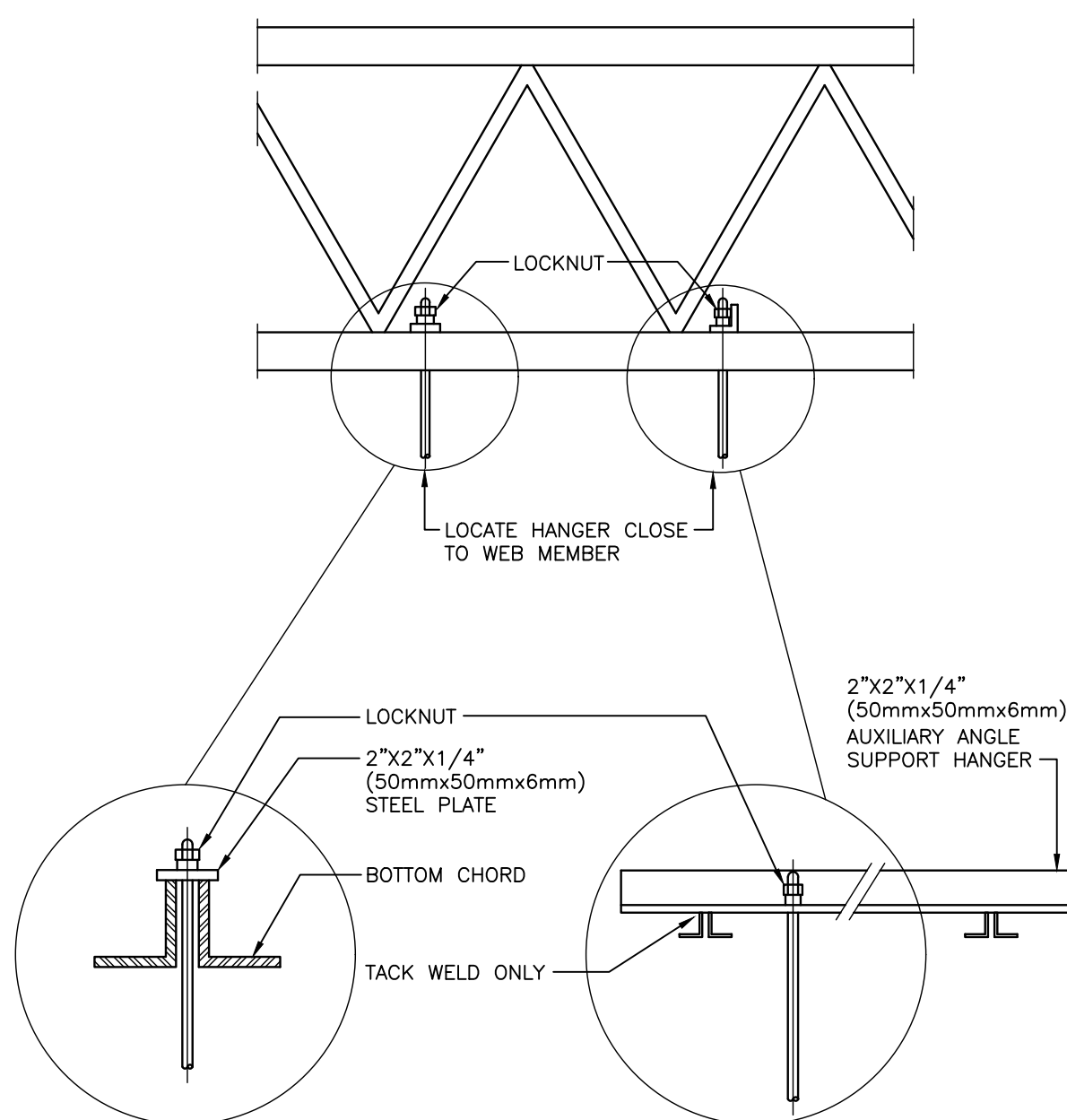
NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

2 MECHANICAL EQUIPMENT NOMENCLATURE CONVENTION
(MSD-012.12)



NOTES:
1. MANUFACTURED WALL SLEEVES WITH WATER STOP AND ANCHOR COLLAR ACCEPTABLE WHERE MODULAR SEAL MANUFACTURER'S SPECIFICATIONS PERMIT. SPLIT SLEEVES ON SLEEVES WITHOUT A WATER STOP ARE NOT PERMITTED.

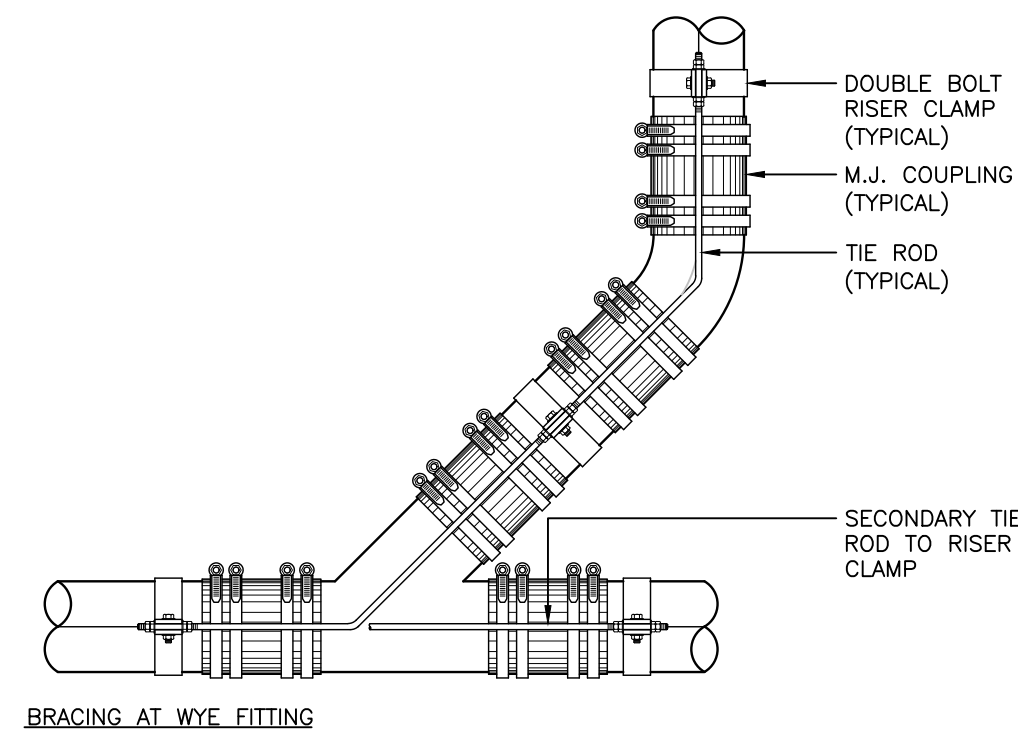
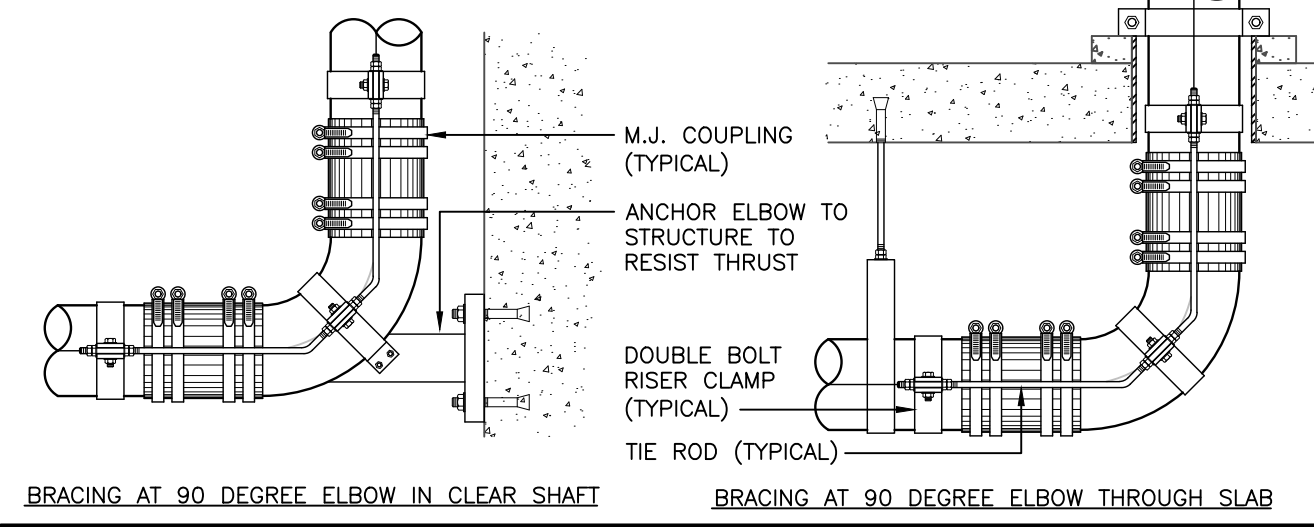
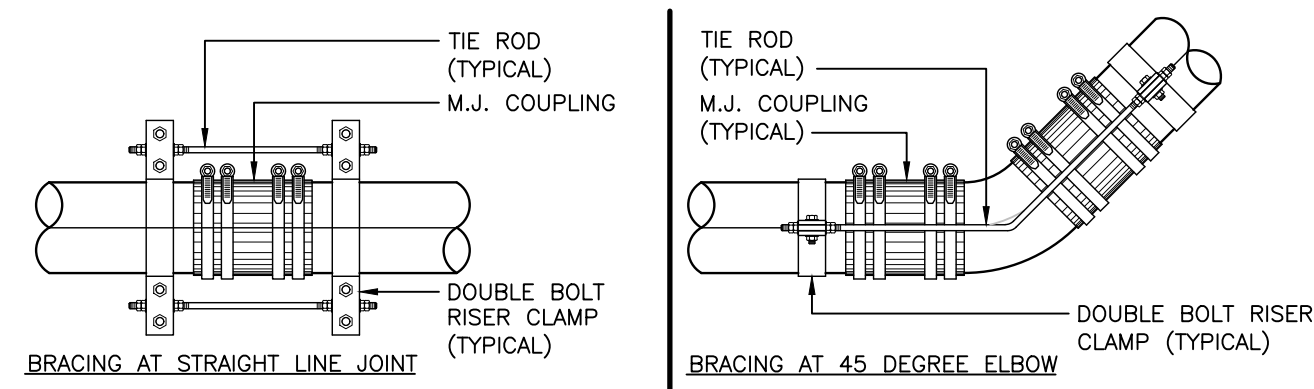
3 PENETRATION THROUGH FOUNDATION WALL
(MSD-052.02)



FOR DOUBLE ANGLE BOTTOM CHORD FOR COLD FORMED BOTTOM CHORD

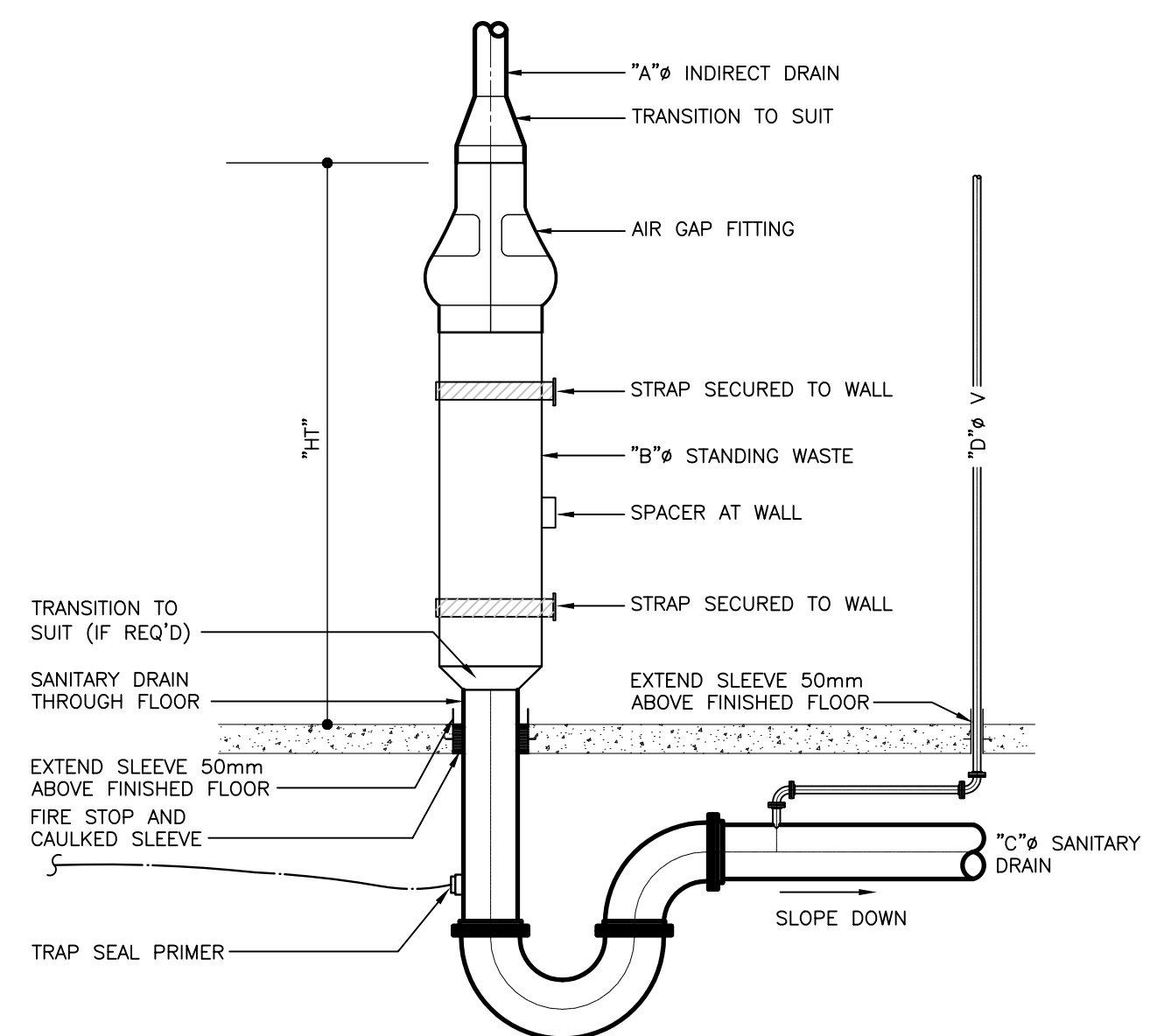
MAXIMUM LOAD ON HANGER - 150 LB. (70Kg)

4 JOIST HANGERS
(MSD-094.01)

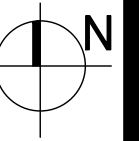


5 MECHANICAL JOINT SPACING
(MSD-410.02)

TYPE	A	B	C DRAIN	D VENT	HT	ZURN AIR GAP	SLOPE
FIRE PROTECTION	75 (3")	150 (6")	100 (4")	50 (2")	1200 (48")	100X150 (4"X6")	1%
GENERAL SERVICE	0-38 (0-1-1/2")	75 (3")	75 (3")	38 (1-1/2")	600 (24")	50X75 (2"X3")	2%
	50 (2")	100 (4")	100 (4")	50 (2")	600 (24")	75X100 (3"X4")	2%



6 INDIRECT STANDING WASTE
(MSD-410.04)



Filename: H:\2021\21089 Current-MM1 MECHANICAL DRAWING LIST AND LEGENDS.dwg

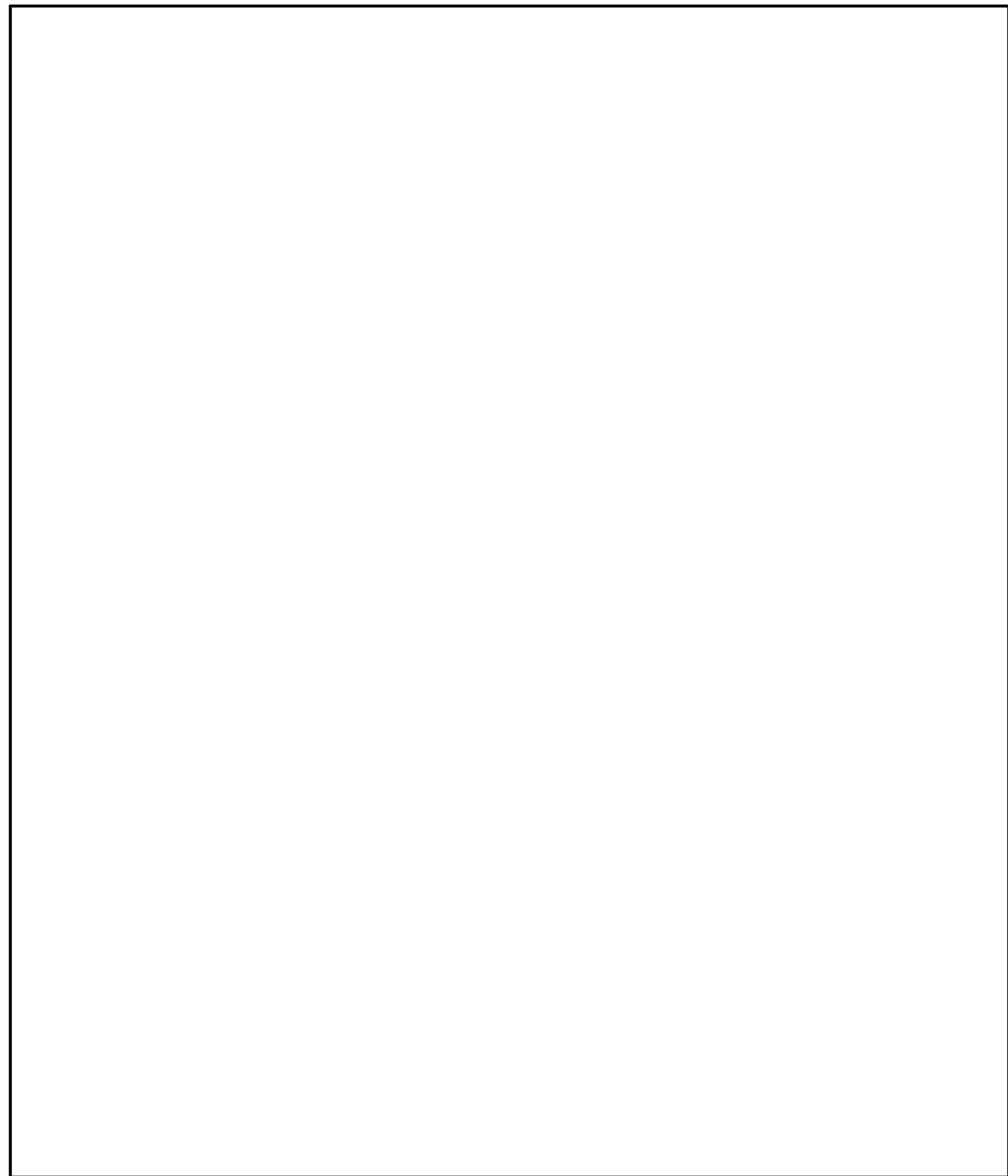
NO.	ISSUED FOR	DATE
4	ISSUED FOR TENDER	2021.06.29
3	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.27
2	ISSUED FOR CLASS B COST ESTIMATE	2021.04.21
1	ISSUED FOR PROGRESS	2021.03.30

DRAWING TITLE:
DETAILS

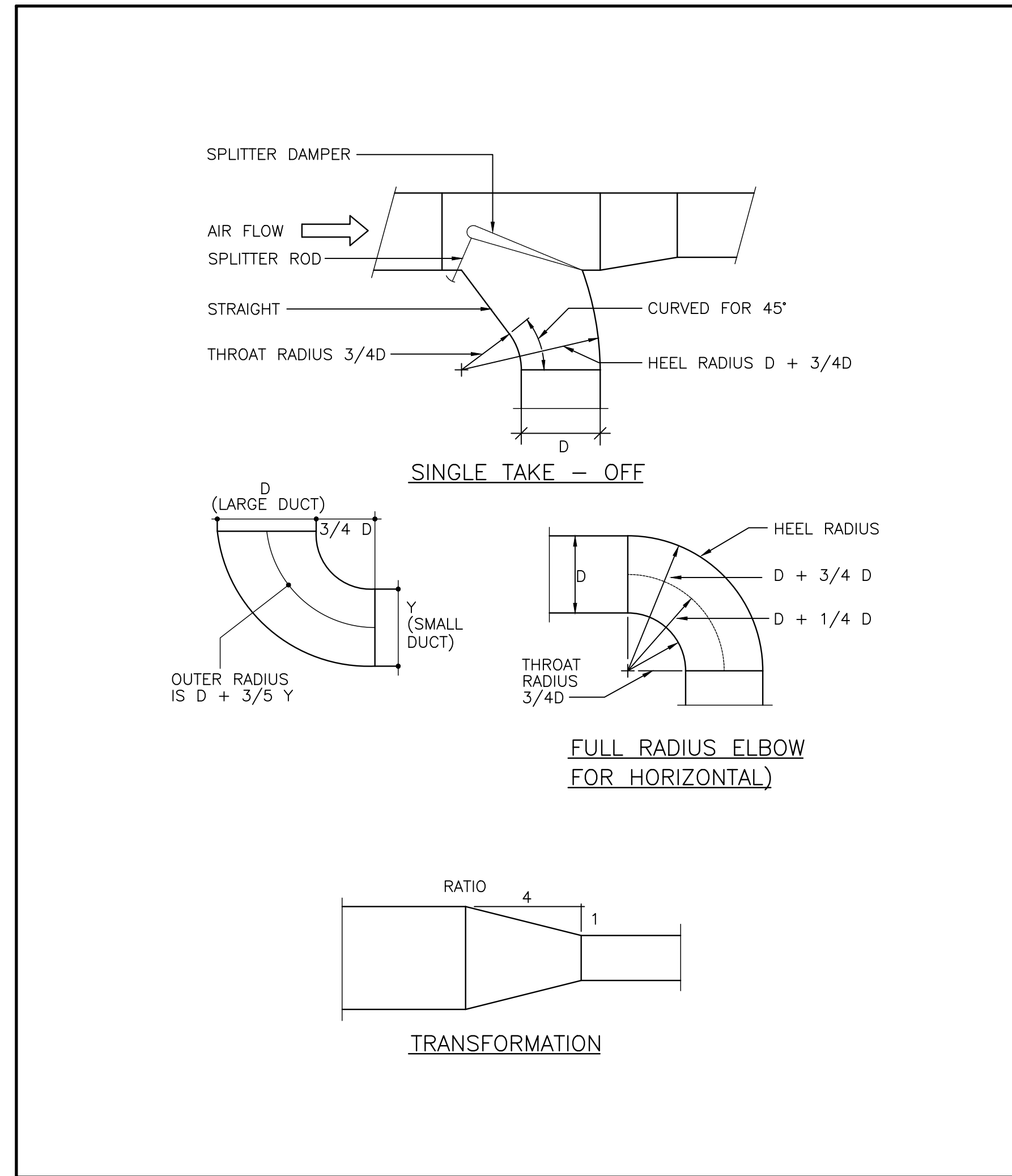
DATE:	SCALE:	PROJECT NO.:
J.V.	1:100	21069.001
CHECKED:	S.M.	

DRAWING NO:
M3

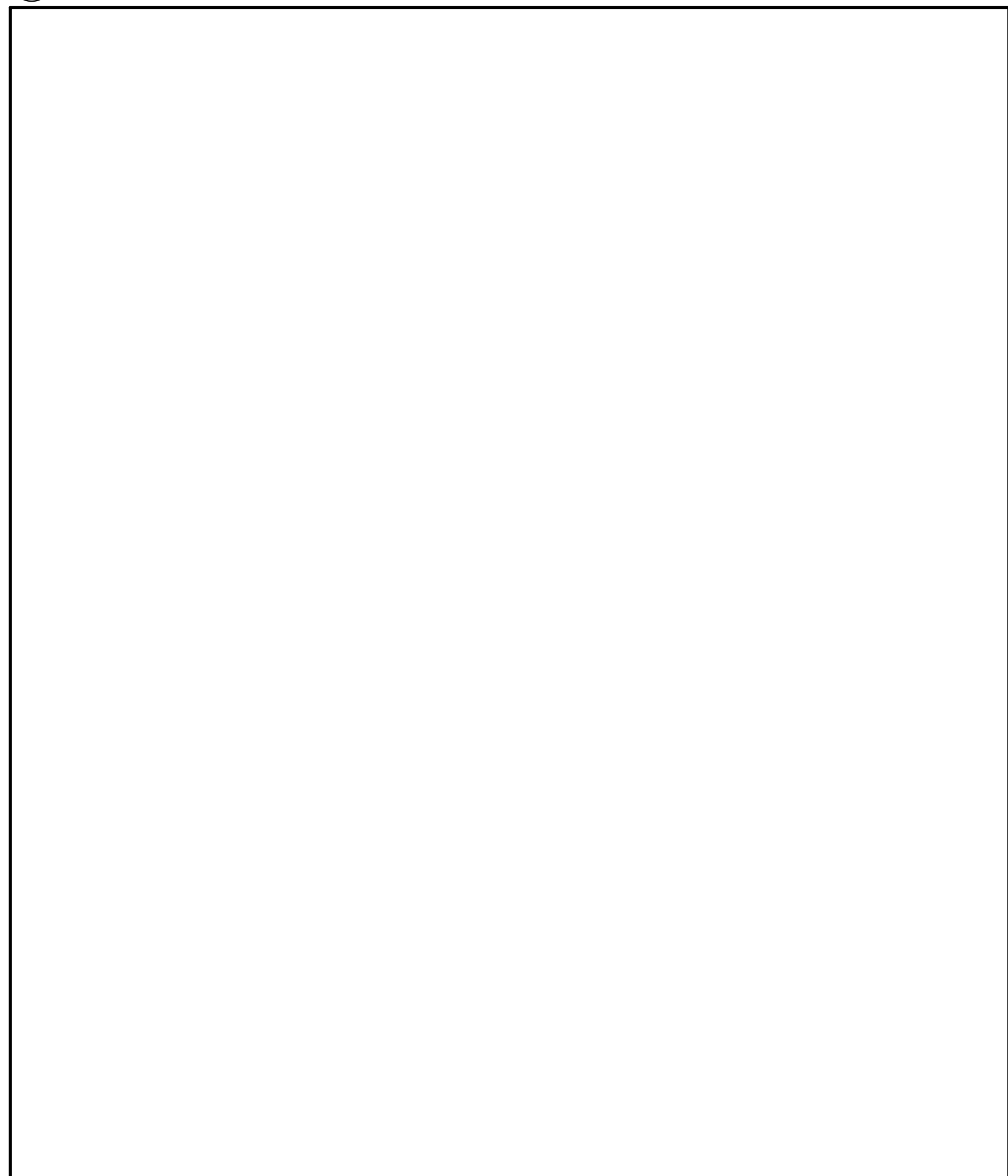
Plot Date: June 28, 2021



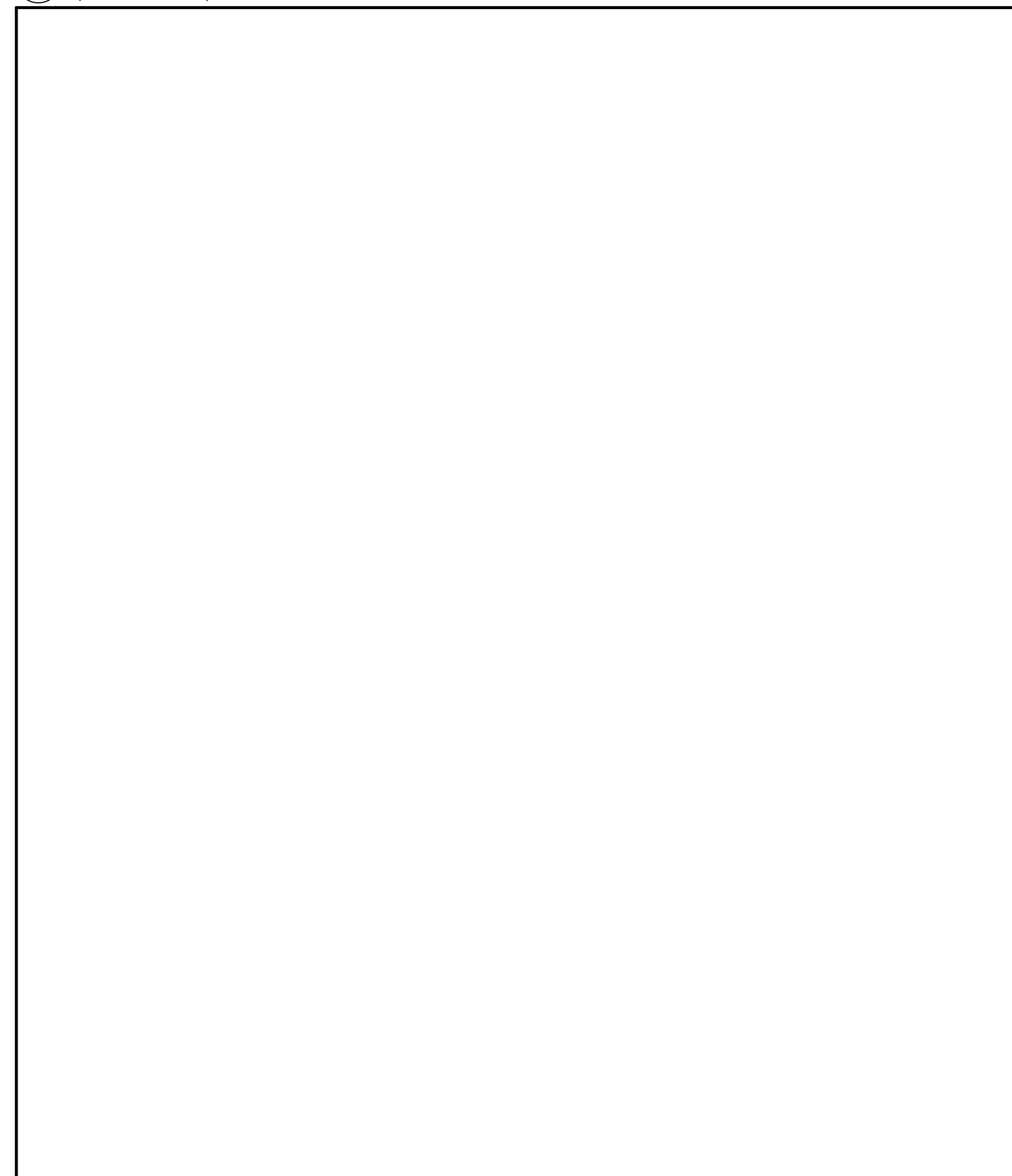
5 NOT USED
M3



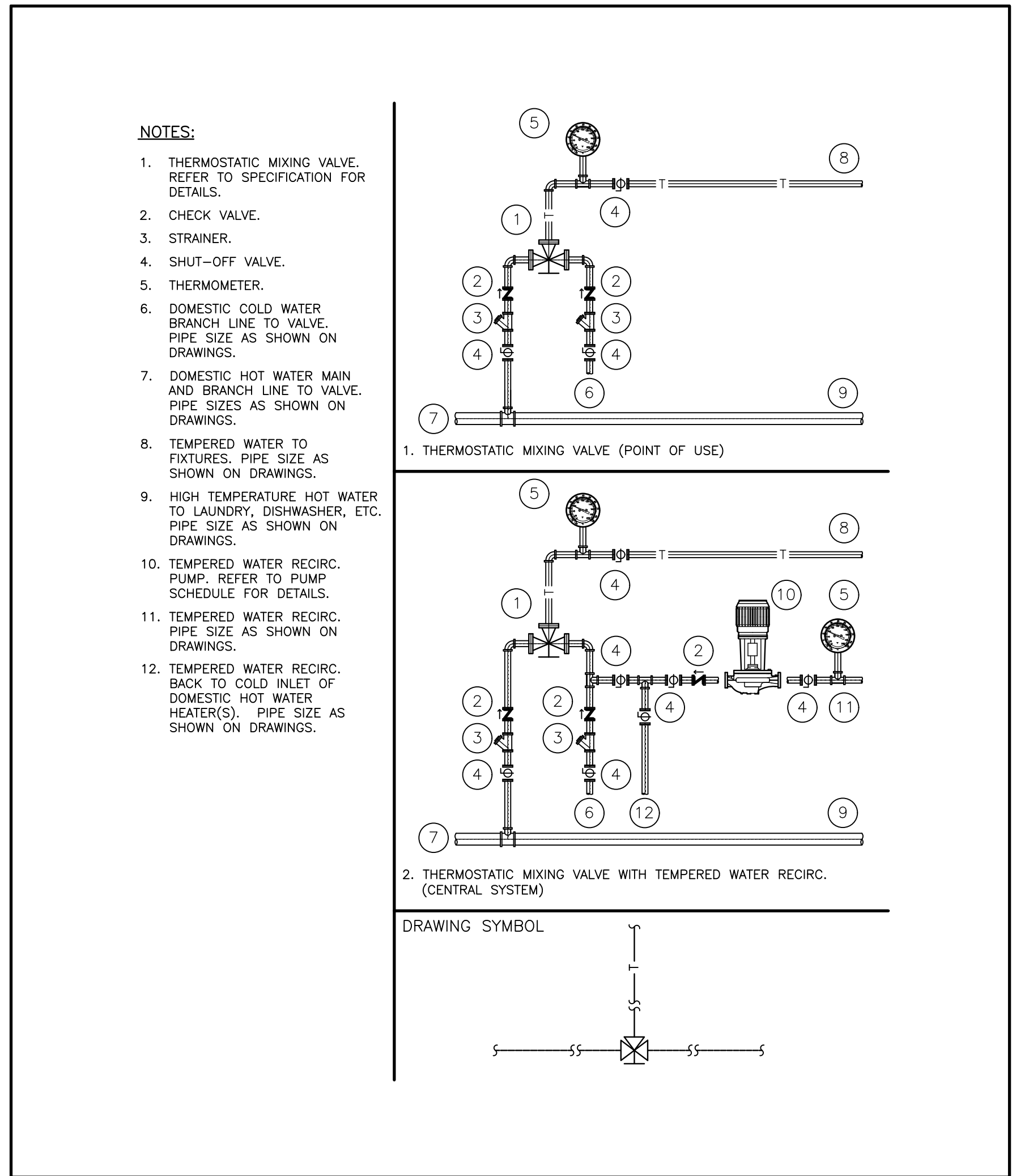
3 DUCT DETAILS
(MSD-840.05)
M3



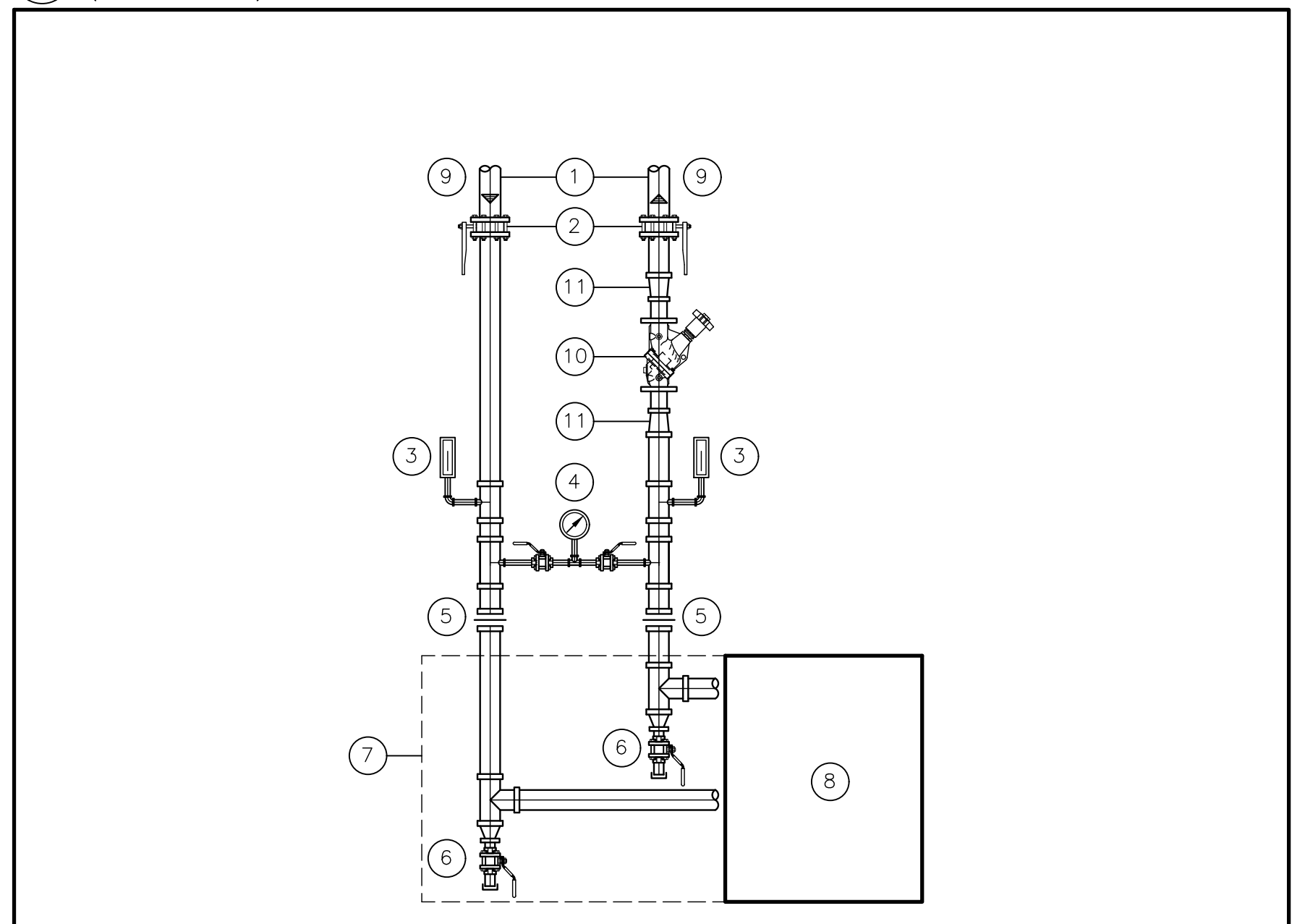
6 NOT USED
M3



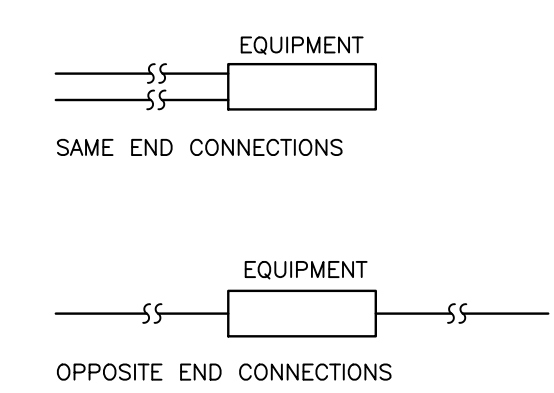
4 NOT USED
M3



1 THERMOSTATIC MIXING VALVES
(MSD-450.31)
M3



- NOTES:**
- PIPE SIZES AS SHOWN ON PLANS.
 - SHUT-OFF VALVES.
 - THERMOMETER.
 - PRESSURE GAUGE.
 - UNIONS OR FLANGES LOCATED CLEAR OF SERVICE SPACE AND TUBE REMOVAL.
 - DRAIN LEG AND VALVE.
 - TUBE REMOVAL AND SERVICE SPACE WHERE REQUIRED.
 - MECHANICAL EQUIPMENT REQUIRING SERVICE.
 - REFER TO SEPARATE MSD FOR CONTROL VALVE INSTALLATION DETAILS WHERE APPLICABLE.
 - FLOW BALANCING VALVE. REFER TO MSD- FOR INSTALLATION DETAILS.
 - CONCENTRIC FITTINGS.



DRAWING SYMBOL

2 EQUIPMENT INSTALLATION
(MSD-705.04)
M3

GENERAL NOTES:

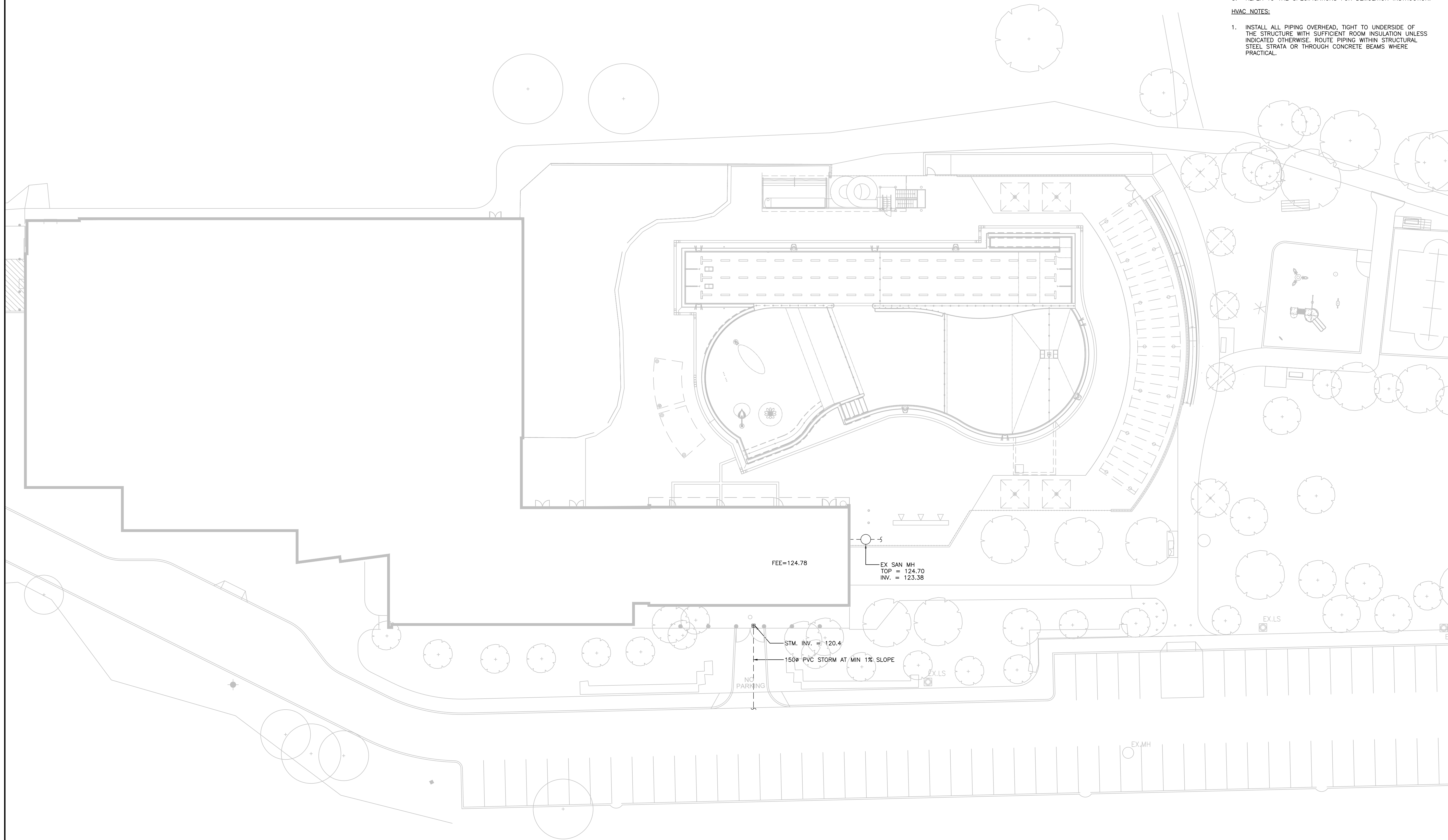
DO NOT SCALE DRAWINGS. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR SPECIFIED THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE. DETERMINE THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS BASED ON THE SITE CONDITIONS. REVIEW ALL REVISIONS WITH THE CONSULTANT.

DEMOLITION NOTES:

- ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL THE MECHANICAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.
- DUCT LOCATION AND SIZE IS BASED ON OLD DRAWINGS THAT MAY NOT BE UPDATED. THE CONTRACTOR IS RESPONSIBLE ON PERFORMING SITE SURVEY FOR THE EXACT LOCATION AND SIZE OF ALL DUCTWORK.
- REFER TO THE SPECIFICATIONS FOR DEMOLITION INSTRUCTION.

HVAC NOTES:

- INSTALL ALL PIPING OVERHEAD, TIGHT TO UNDERSIDE OF THE STRUCTURE WITH SUFFICIENT ROOM INSULATION UNLESS INDICATED OTHERWISE. ROUTE PIPING WITHIN STRUCTURAL STEEL STRATA OR THROUGH CONCRETE BEAMS WHERE PRACTICAL.



KEY PLAN



Smith + Andersen
148 Fullerton St. Suite 1400 London Ontario N6A 5P3
519 863 8888 www.smithandandersen.com

Filename: H:\2021\21089 Current-MM SITE PLAN - MECHANICAL.dwg

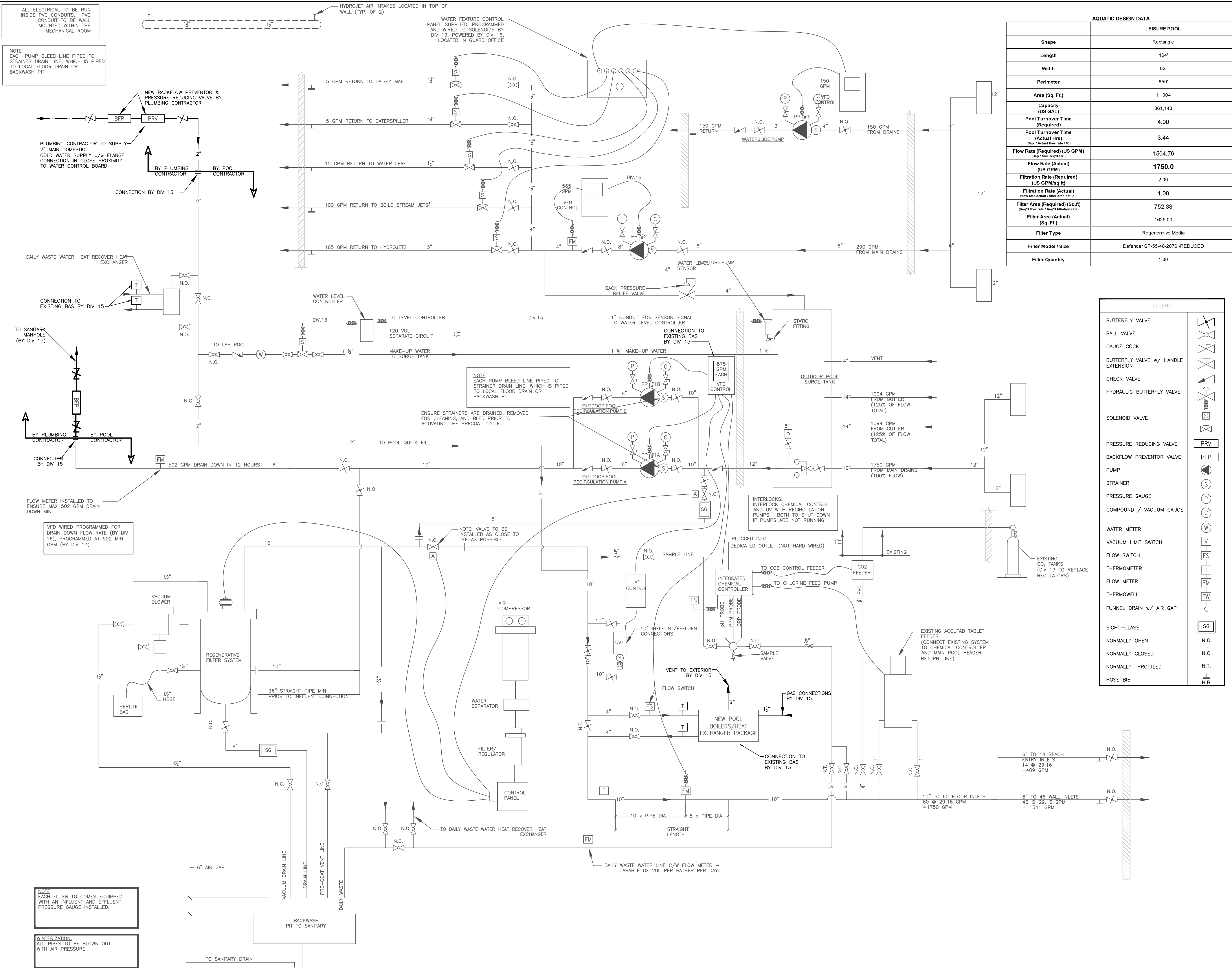
NO.	ISSUED FOR	DATE
5	ISSUED FOR TENDER	2021.06.29
4	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.27
3	ISSUED FOR CLASS B COST ESTIMATE	2021.04.21
2	ISSUED FOR PROGRESS	2021.04.06
1	ISSUED FOR PROGRESS	2021.03.30

DRAWING TITLE:
**SITE PLAN –
MECHANICAL**

DATE:	SCALE:	PROJECT NO.:
J.V.	1: 250	21069.001
CHECKED:	S.M.	

DRAWING NO:
M4

Plot Date: June 28, 2021



AQUATIC DESIGN DATA	
LEISURE POOL	
Shape	Rectangle
Length	164'
Width	82'
Perimeter	650'
Area (Sq. Ft.)	11,304
Capacity (US GAL)	361,143
Pool Turnover Time (Required)	4.00
Pool Turnover Time (Actual hrs)	3.44
Flow Rate (Required) (US GPM)	1504.76
Flow Rate (Actual) (US GPM)	1750.0
Filtration Rate (Required) (US GPM/sq ft)	2.00
Filtration Rate (Actual) (Flow rate actual / filter area actual)	1.08
Filter Area (Required) (Sq. Ft.)	752.38
Filter Area (Actual) (Sq. Ft.)	1625.00
Filter Type	Regenerative Media
Filter Model / Size	Defender SP-55-48-2076 -REDUCED
Filter Quantity	1.00

LEGEND	
BUTTERFLY VALVE	
BALL VALVE	
GAUGE COCK	
BUTTERFLY VALVE w/ HANDLE EXTENSION	
CHECK VALVE	
HYDRAULIC BUTTERFLY VALVE	
SOLENOID VALVE	
PRESSURE REDUCING VALVE	
BACKFLOW PREVENTOR VALVE	
PUMP	
STRAINER	
PRESSURE GAUGE	
COMPOUND / VACUUM GAUGE	
WATER METER	
VACUUM LIMIT SWITCH	
FLOW SWITCH	
THERMOMETER	
FLOW METER	
THERMOWELL	
FUNNEL DRAIN w/ AIR GAP	
SIGHT-GLASS	
NORMALLY OPEN	N.O.
NORMALLY CLOSED	N.C.
NORMALLY THROTTLED	N.T.
HOSE BIB	H.B.

tillmann architects ruth robinson

MOUNTAINSIDE POOL REVITALIZATION
CLIENT PROJECT NO. RFP 222-20

KEY PLAN

Smith + Andersen
148 Fullerton St. Suite 1400 London Ontario N6A 5P3
519 963 8888 www.smithandandersen.com

NO.	ISSUED FOR	DATE
5	ISSUED FOR TENDER	2021.06.29
4	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.27
3	ISSUED FOR CLASS B COST ESTIMATE	2021.04.21
2	ISSUED FOR OWNER REVIEW	2021.04.06
1	ISSUED FOR PROGRESS	2021.03.30

DRAWING TITLE:
POOL SCHEMATIC

DATE:	SCALE:	PROJECT NO.:
J.V.	1:100	21069.001
DRAWN:	CHECKED:	
	S.M.	
DRAWING NO.:		
M5		

Plot Date: June 28, 2021

KEY PLAN



Smith + Andersen
148 Fullerton St. Suite 1400 London Ontario N6A 5P3
519 863 8888 www.smithandandersen.com

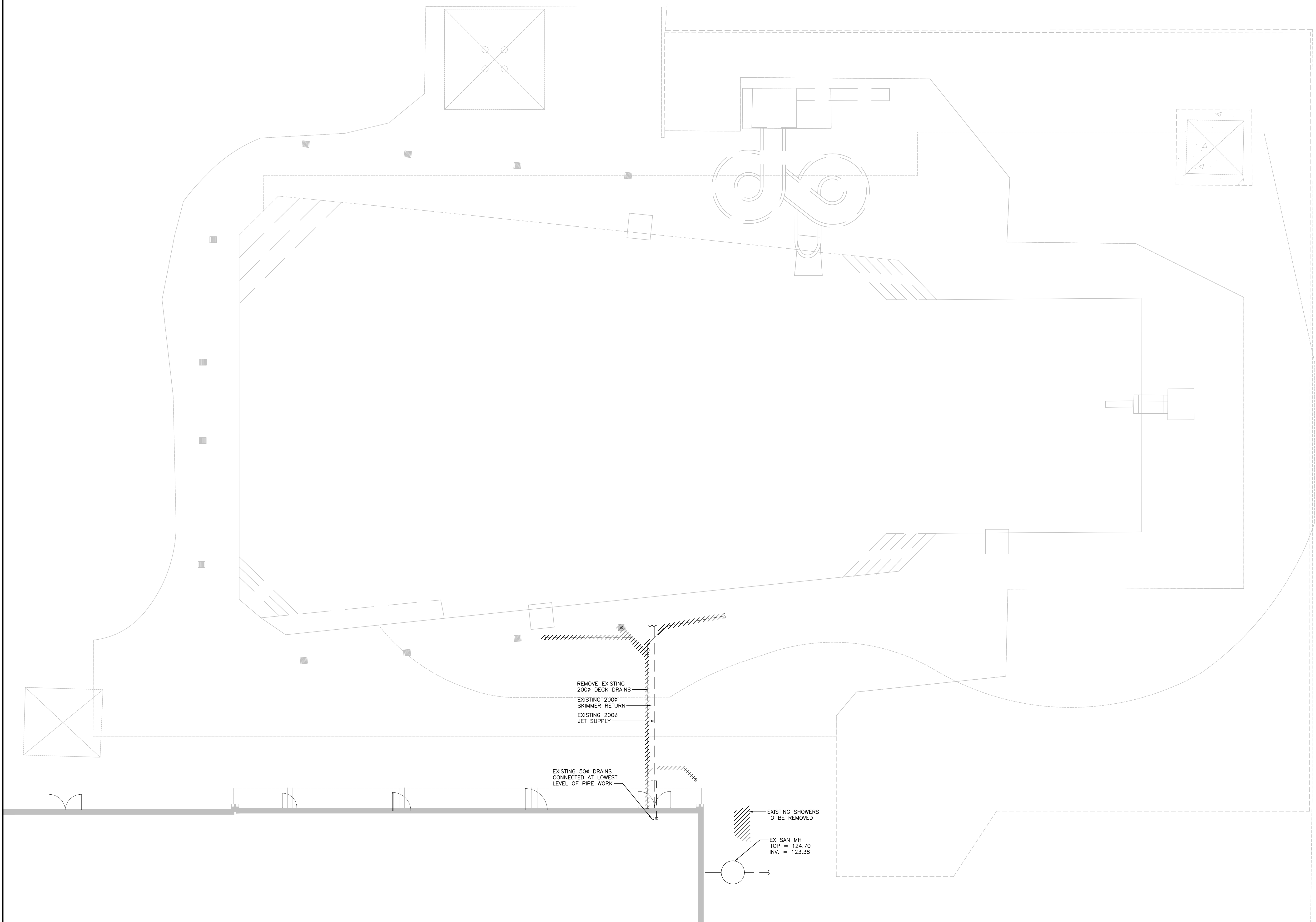
NO.	ISSUED FOR	DATE
5	ISSUED FOR TENDER	2021.06.29
4	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.27
3	ISSUED FOR CLASS B COST ESTIMATE	2021.04.21
2	ISSUED FOR OWNER REVIEW	2021.04.06
1	ISSUED FOR PROGRESS	2021.03.30

DRAWING TITLE:
**POOL PLAN —
MECHANICAL
DEMOLITION**

DATE:	SCALE:	PROJECT NO.:
J.V.	CHECKED: S.M.	21069.001

DRAWING NO:
M6

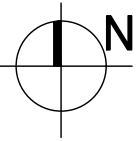
Plot Date: June 29, 2021
Filename: H:\2021\21069 Current-M6 Pool Plan - MECHANICAL DEMOLITION.dwg



**MOUNTAINSIDE POOL
REVITALIZATION**

CLIENT PROJECT NO. RFP 222-20

KEY PLAN



Smith + Andersen

148 Fullerton St. Suite 1400 London Ontario N6A 5P3
519 863 8888 www.smithandandersen.com

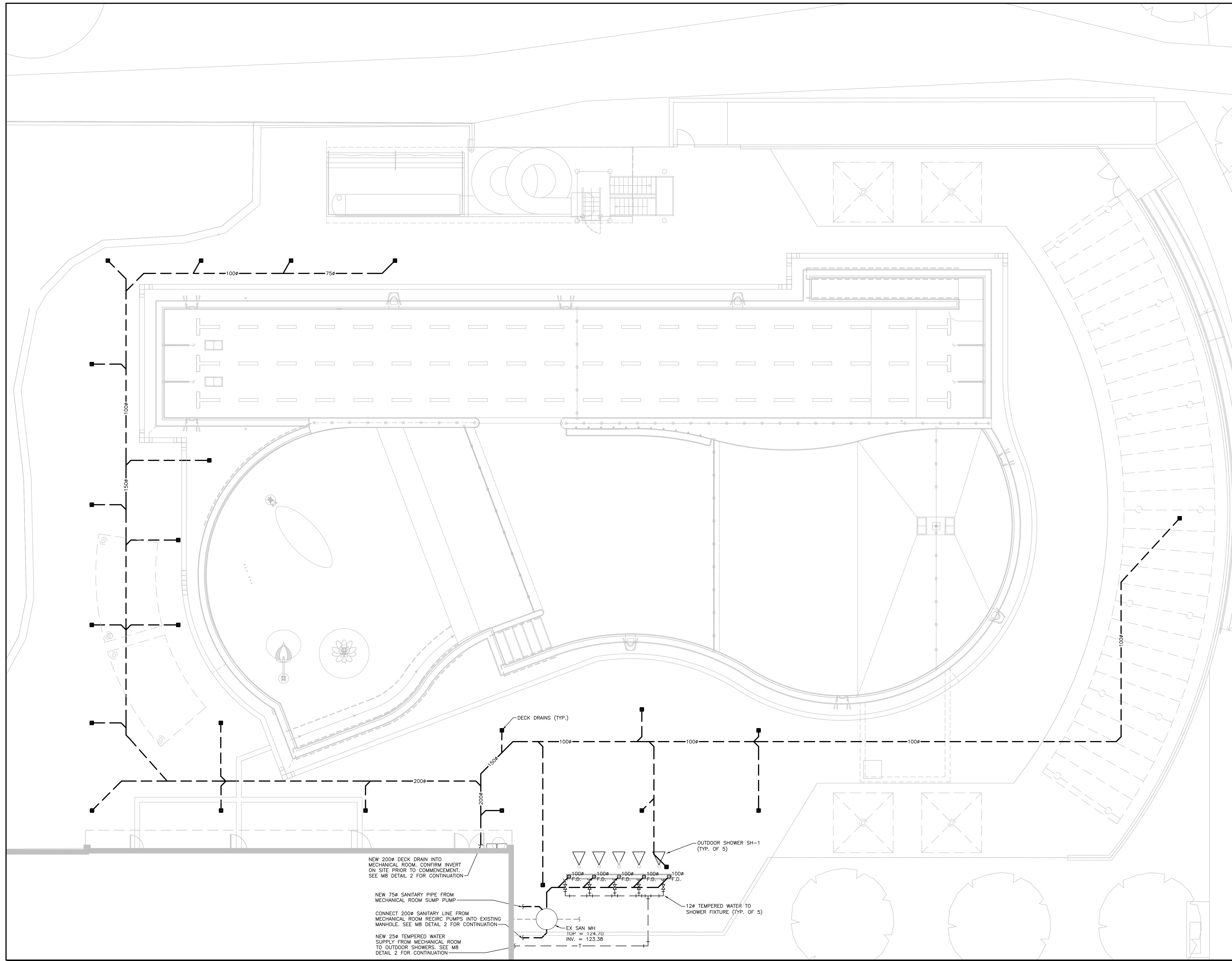
Plot Date: June 30, 2021
Filename: H:\2021\21089 Current-MMP POOL PLAN - MECHANICAL.dwg

NO.	ISSUED FOR	DATE
5	ISSUED FOR TENDER	2021.06.29
4	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.27
3	ISSUED FOR CLASS B COST ESTIMATE	2021.04.21
2	ISSUED FOR OWNER REVIEW	2021.04.06
1	ISSUED FOR PROGRESS	2021.03.30

DRAWING TITLE:
**POOL PLAN -
MECHANICAL**

DATE:	SCALE:	PROJECT NO.:
J.V.	CHECKED: S.M.	21069.001

DRAWING NO:
M7

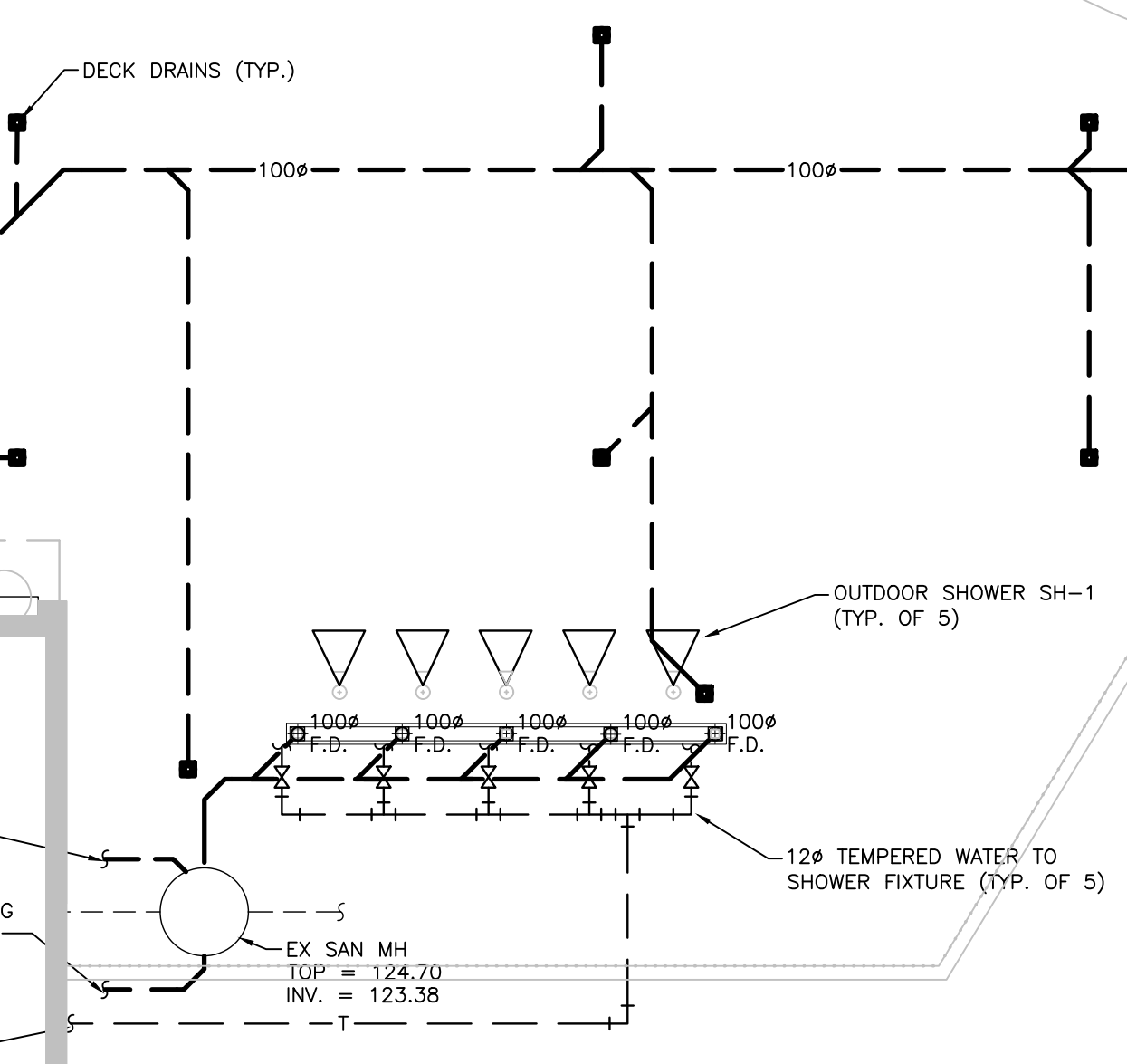


NEW 200# DECK DRAIN INTO MECHANICAL ROOM. CONFIRM INVERT ON SITE PRIOR TO COMMENCEMENT. SEE M8 DETAIL 2 FOR CONTINUATION

NEW 75# SANITARY PIPE FROM MECHANICAL ROOM SUMP PUMP

CONNECT 200# SANITARY LINE FROM MECHANICAL ROOM RECIRC PUMPS INTO EXISTING MANHOLE. SEE M8 DETAIL 2 FOR CONTINUATION

NEW 25# TEMPERED WATER SUPPLY FROM MECHANICAL ROOM TO OUTDOOR SHOWERS. SEE M8 DETAIL 2 FOR CONTINUATION



**MOUNTAINSIDE POOL
REVITALIZATION**

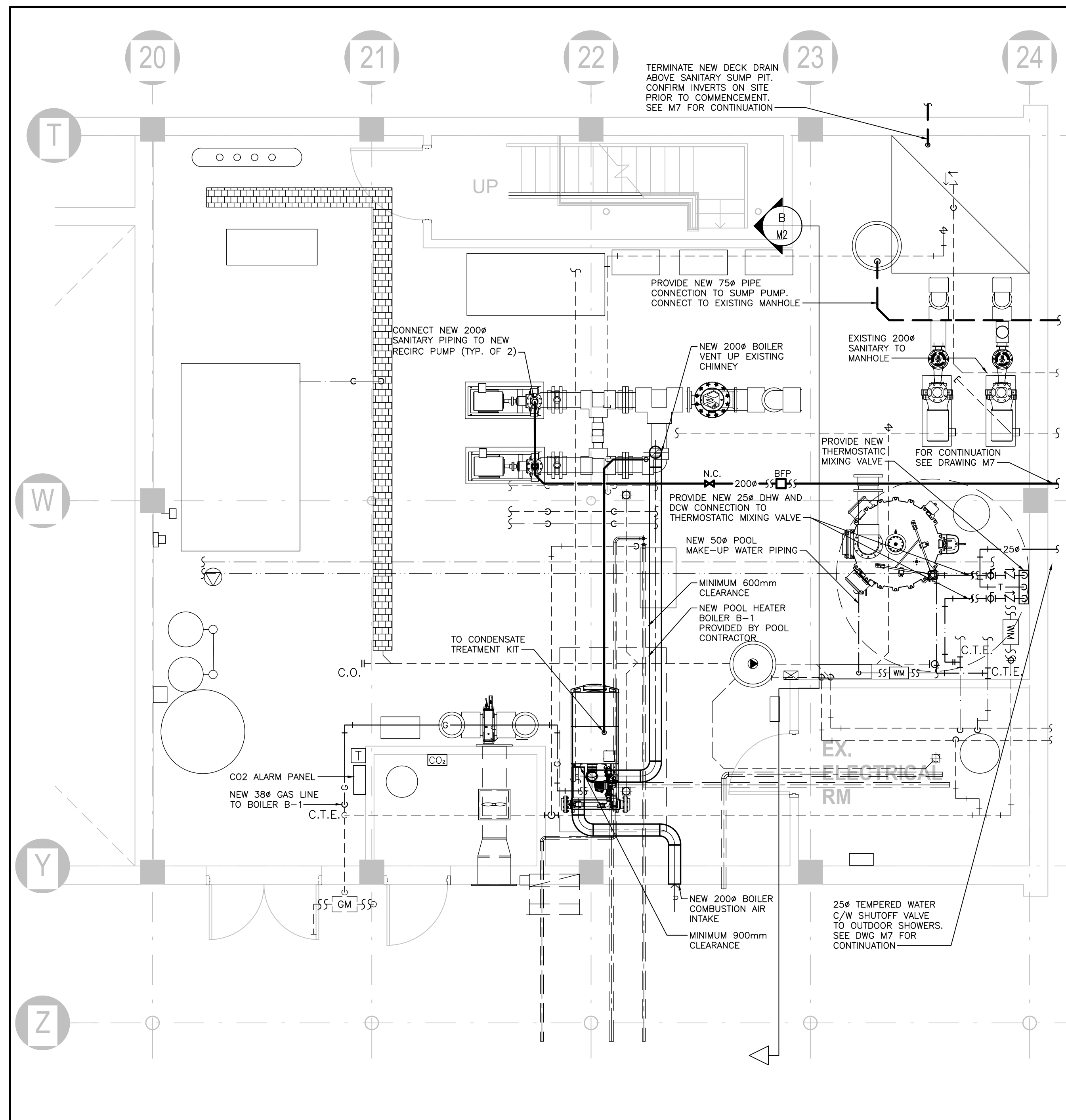
CLIENT PROJECT NO. RFP 222-20

KEY PLAN

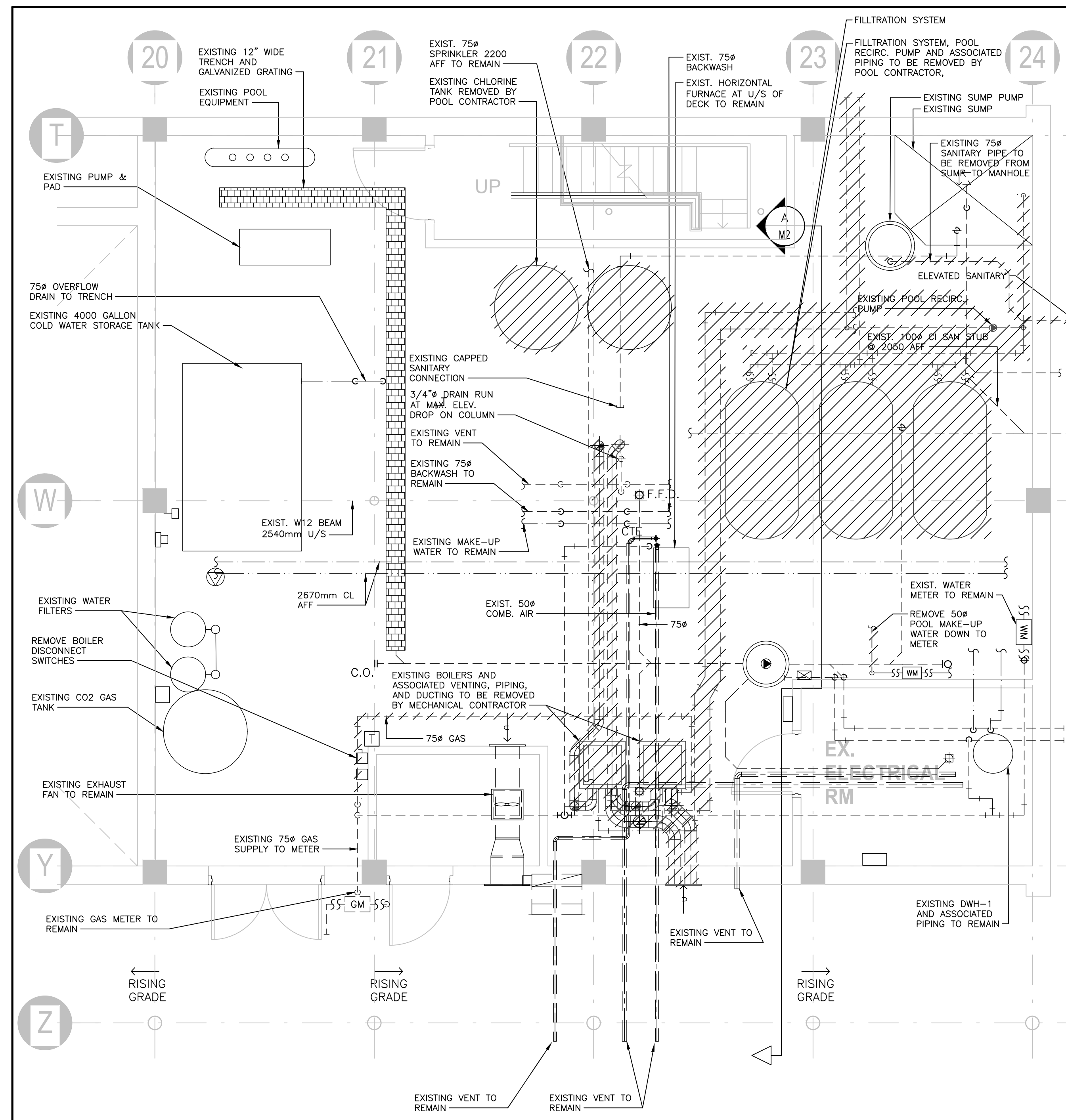


Smith + Andersen

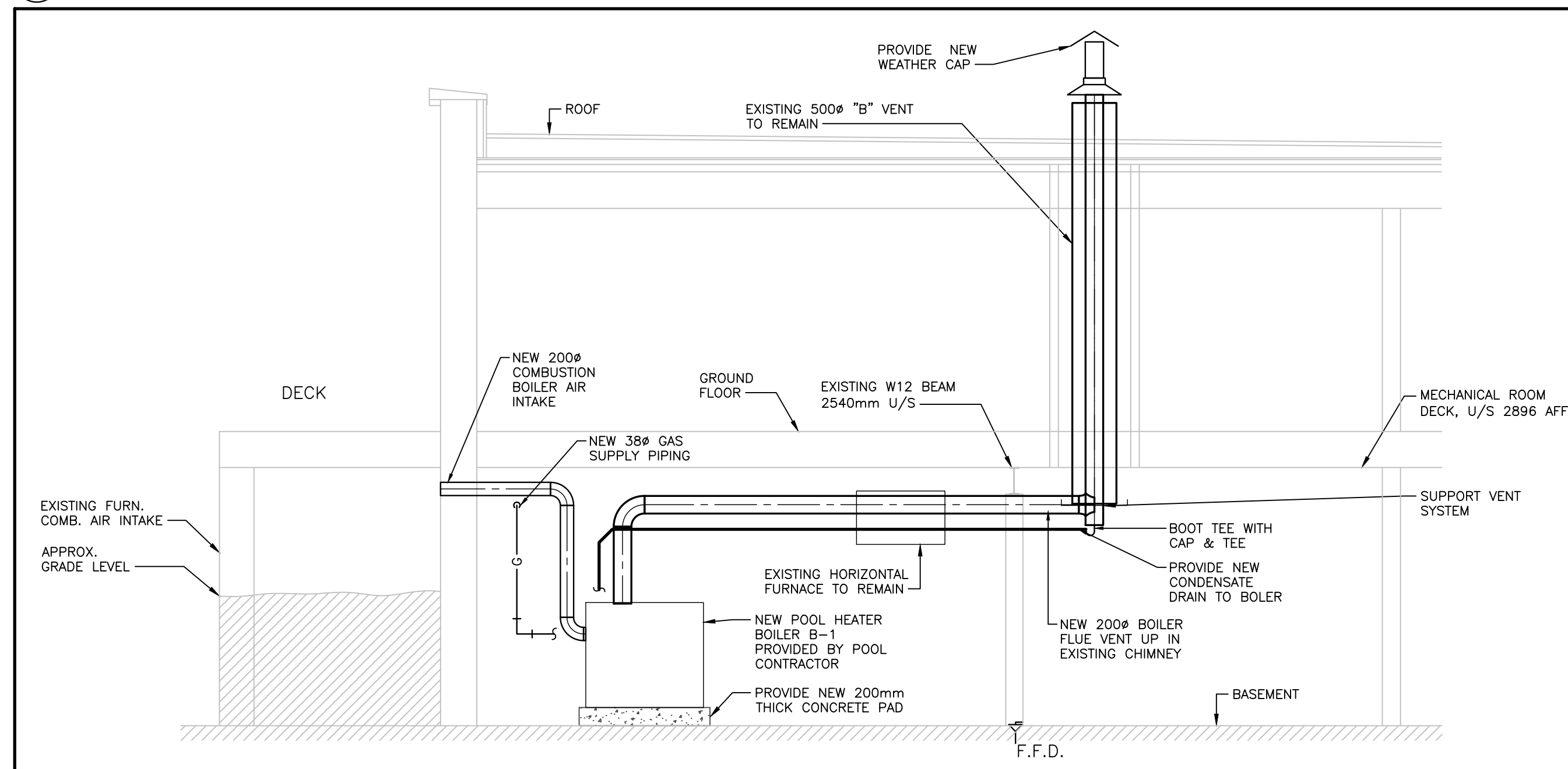
148 Fullerton St. Suite 1400 London Ontario N6A 5P3
519 863 8888 www.smithandandersen.com



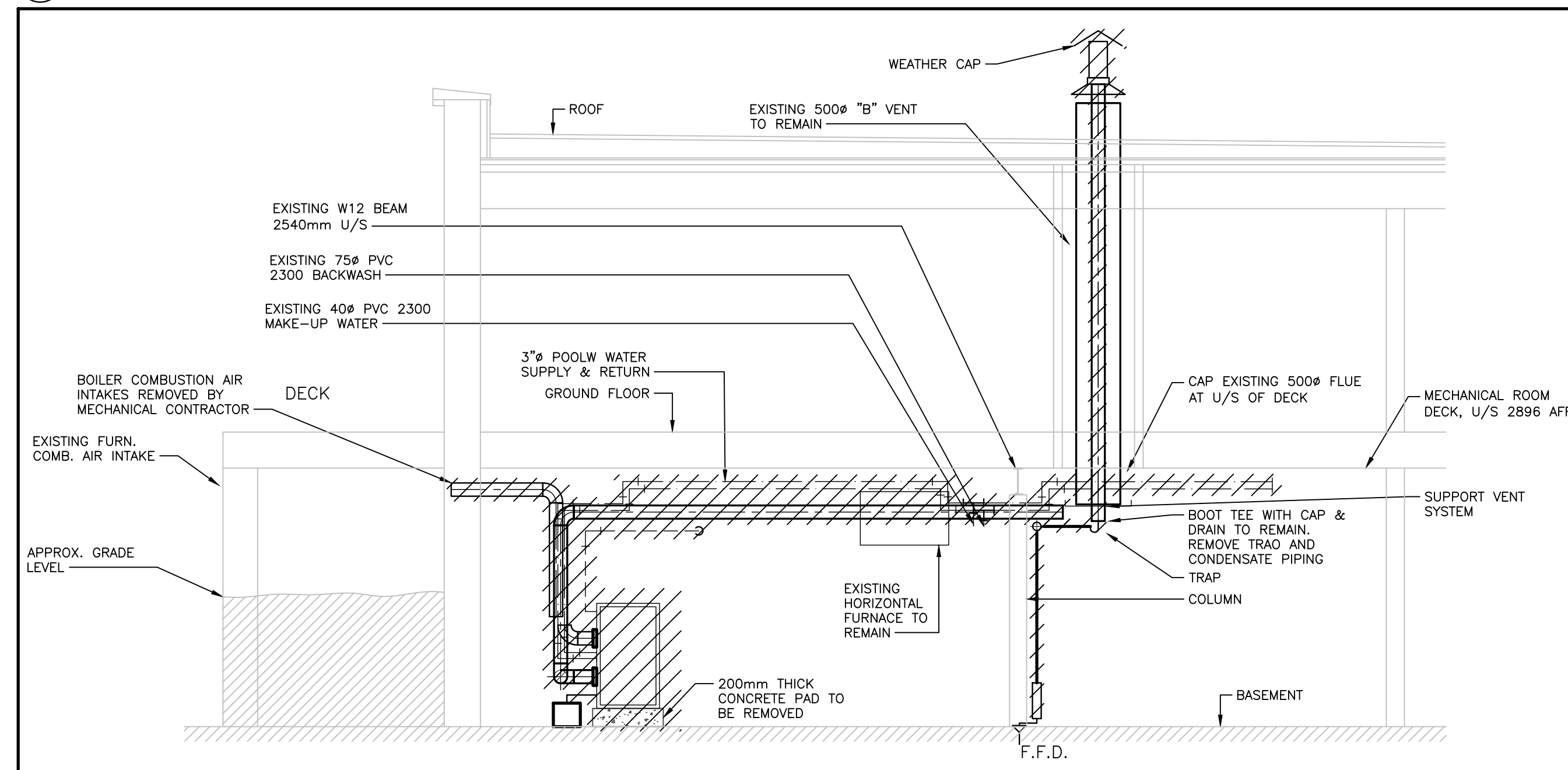
2 M8 POOL MECHANICAL ROOM - NEW
1:50



1 M8 POOL MECHANICAL ROOM - DEMOLITION
1:50



B M8 CROSS SECTION A-A MECHANICAL - NEW
1:50



A M8 CROSS SECTION A-A MECHANICAL - DEMOLITION
1:50

Filename: H:\2021\21089 Current-M8 POOL MECHANICAL ROOM PLAN.dwg

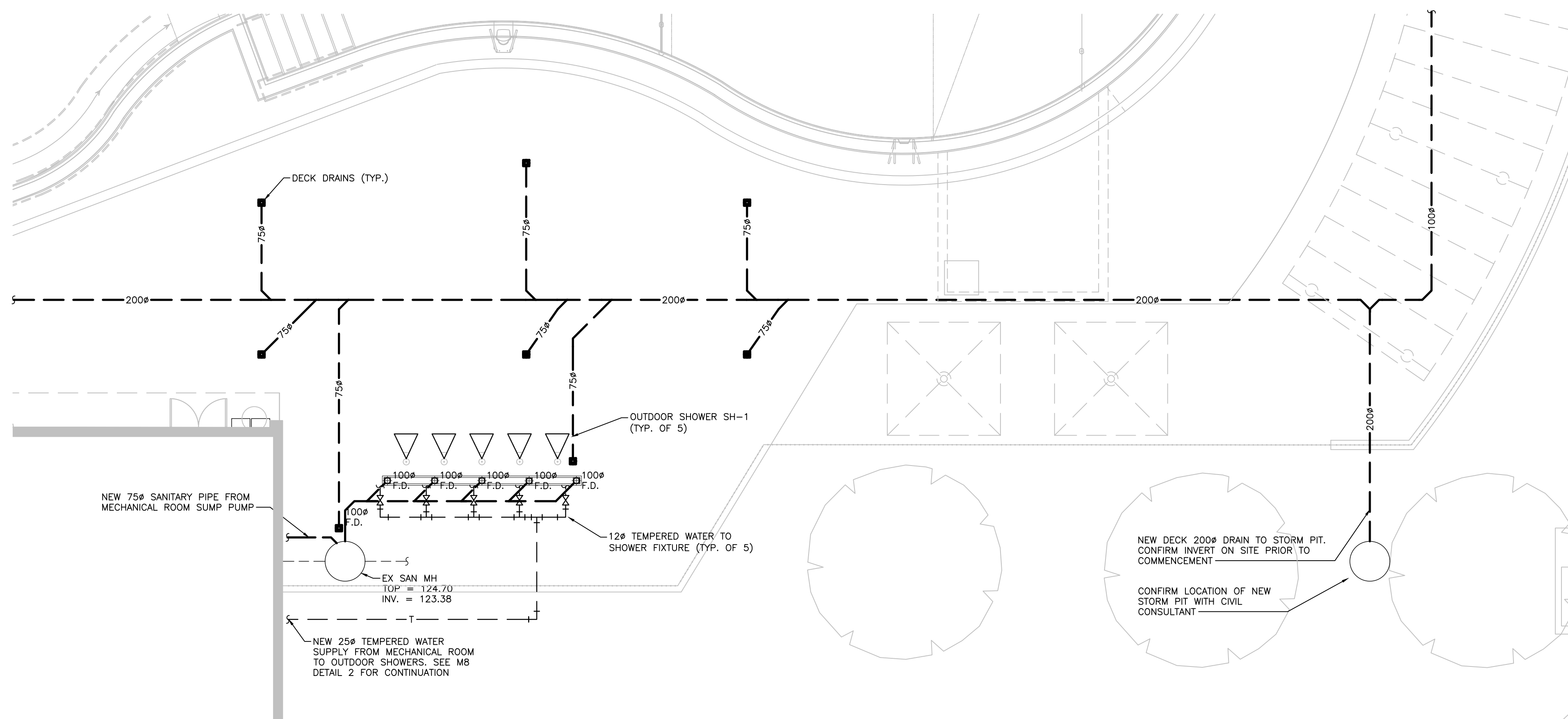
NO.	ISSUED FOR	DATE
5	ISSUED FOR TENDER	2021.06.29
4	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.27
3	ISSUED FOR CLASS B COST ESTIMATE	2021.04.21
2	ISSUED FOR OWNER REVIEW	2021.04.06
1	ISSUED FOR PROGRESS	2021.03.30

DRAWING TITLE:
**POOL MECHANICAL
ROOM PLAN -
MECHANICAL**

DATE:	SCALE:	PROJECT NO.:
J.V.	1:100	21069.001
DRAWN:	CHECKED:	
	S.M.	

DRAWING NO:
M8

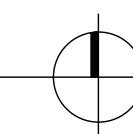
Plot Date: June 28, 2021



1 POOL PLAN - SEPARATE PRICE
M9 SCALE: 1:100

2 NOT USED
M9

KEY PLAN



Smith + Andersen

148 Fullerton St. Suite 1400 London Ontario N6A 5P3
519 863 8888 www.smithandandersen.com

Filename: H:\2021\21069\Current-M\9 POOL PLAN - SEPARATE PRICE.dwg

NO.	ISSUED FOR	DATE
1	ISSUED FOR TENDER	2021.06.29

DRAWING TITLE:
POOL PLAN - SEPARATE PRICE

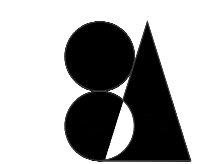
DATE:	SCALE:	PROJECT NO:
J.V.	1:100	21069.001
DRAWN:	CHECKED:	
J.V.	S.M.	
DRAWING NO:		

M9

Plot Date: June 30, 2021

MOUNTAINSIDE POOL REVITALIZATION

2205 Mount Forest Drive



Smith + Andersen

148 Fullarton St. Suite 1400 London Ontario N6A 5P3
519 963 8888 www.smithandandersen.com

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
ALARM INITIATING DEVICES			
	CEILING MOUNTED PHOTO-ELECTRIC SMOKE DETECTOR		AIR SAMPLING SYSTEM C/W SUPERVISORY AND ALARM ZONE
	WALL MOUNTED PHOTO-ELECTRIC SMOKE DETECTOR		MANUAL PULL STATION
	CEILING MOUNTED PHOTO-ELECTRIC SMOKE DETECTOR C/W RELAY BASE		ALARM FLOW SWITCH (SUPPLIED BY OTHERS)
	CEILING MOUNTED RATE-OF-RISE HEAT DETECTOR		ALARM PRESSURE SWITCH (SUPPLIED BY OTHERS)
	WALL MOUNTED RATE-OF-RISE HEAT DETECTOR		ALARM CHECK VALVE (SUPPLIED BY OTHERS)
	CEILING MOUNTED FIXED TEMPERATURE HEAT DETECTOR		ALARM DRY PIPE VALVE (SUPPLIED BY OTHERS)
	WALL MOUNTED FIXED TEMPERATURE HEAT DETECTOR		BEAM SMOKE DETECTOR (TRANSMITTER)
	DUCT TYPE PHOTO-ELECTRIC SMOKE DETECTOR		BEAM SMOKE DETECTOR (RECEIVER)
	CEILING MOUNTED COMBINATION HEAT + SMOKE DETECTOR		FLAME DETECTOR
	LOCAL 120V SMOKE ALARM		
	LOCAL 120V COMBINATION CARBON MONOXIDE AND SMOKE ALARM		
	LOCAL 120V CARBON MONOXIDE DETECTOR		
	LOCAL 120V COMBINATION STROBE AND SMOKE ALARM		
SUPERVISORY INITIATING DEVICES			
	LOW PRESSURE SUPERVISED SWITCH (SUPPLIED BY OTHERS)		
	SPRINKLER SUPERVISED VALVE (SUPPLIED BY OTHERS)		

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

3
E0.0 FIRE ALARM LEGEND 1 OF 2
(ESD-000.07)

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DETAIL NUMBER		SECTION NUMBER
	DRAWING NUMBER		DRAWING NUMBER
	REVISION NUMBER		REVISION BUBBLE
A	AMPS	MO	MOTOR OPERATED
AD	ACCESS DOOR	MOD	MOTOR OPERATED DAMPER
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MW	MICROWAVE
AFF	ABOVE FINISHED FLOOR	N	NEW
BBH	BASEBOARD HEATER	NC	NORMALLY CLOSED
BU	BATTERY UNIT	NIC	NOT IN CONTRACT
C	CONDUIT	NL	NIGHT LIGHT
CD	CANDELA	NO	NORMALLY OPEN
CL	CEILING MOUNTED	OC	OVER COUNTER
CS	CHARGING STATION	OL	OBSTRUCTION LIGHT
CV	CONVENTIONAL STYLE DEVICE	P	PARABOLIC LOUVRE
D	DEDICATED	PL	PATIENT LIFT
DG	DEDICATED GROUND	R	RELOCATE
DHWT	DOMESTIC HOT WATER TANK	RA	RANGE
DNC	DEDICATED NEUTRAL + BOND	RC	REVISE EXISTING CIRCUIT
DR	LAUNDRY DRYER	RH	RANGE HOOD
DW	DISHWASHER	RIC	ROUGH IN AND CONNECT
E	EXISTING	RO	ROUGH IN ONLY
EF	EXHAUST FAN	RR	REMOVE AND REINSTALL
EM	EMERGENCY CIRCUIT	SC	SEPARATE CIRCUIT
EP	ELECTRICAL SUITE PANEL	SF	SYSTEM FURNITURE
ER	EXISTING TO BE REMOVED	SP	SUITE ALARM PANEL
F	REFRIGERATOR	SSP	SLAVE SUITE ALARM PANEL
FF	FLOOR FEED	TYP	TYPICAL
FFH	FORCE FLOW HEATER	UC	UNDER CABINET MOUNTED
FL	FLOOR MOUNTED	U	UPS CIRCUIT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	UH	UNIT HEATER
GFI	GROUND FAULT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
GND	GROUND	V	VOLTS
HK	HOUSE KEEPING	W	WATTS
HMT	HARMONIC MITIGATING TRANSFORMER	WG	WIRE GUARD
ICE	ICE MACHINE	WAP	WIRELESS ACCESS POINT
IG	ISOLATED GROUND	WF	WALL FEED
JB	JUNCTION BOX	WP	WEATHERPROOF
KW	KILOWATTS	X	EXPLOSION PROOF DEVICE + BACK BOX
LV	LOW VOLTAGE	ZSCT	ZERO SEQUENCE CURRENT TRANSFORMER

NOTE: NOT ALL SYMBOLS APPLY, REFER TO FLOOR PLANS AND DRAWINGS

2
E0.0 GENERAL AND SYMBOLS AND ABBREVIATIONS
(ESD-000.03)

Electrical Drawing List	
Sheet Number	Sheet Title
GENERAL	
E0.0	ELECTRICAL DRAWING LIST AND LEGENDS
E0.1	ELECTRICAL LEGENDS AND DETAILS
E0.2	ELECTRICAL TYPICAL DETAILS
SITE PLAN	
E1.0	SITE PLAN - ELECTRICAL - DEMO
E1.1	SITE PLAN - ELECTRICAL - NEW
SCHEMATICS AND DIAGRAMS	
E2.0	SINGLE LINE DIAGRAM
PART PLANS AND DETAILS	
E4.0	ELECTRICAL PART PLANS

1
E0.0 ELECTRICAL DRAWINGS LIST

Plot Date: June 23, 2021
Plotted by: Mohammad Al-Jene
Filename: H:\2021\101089\Current-E\ELECTRICAL DRAWING LIST AND LEGENDS.dwg

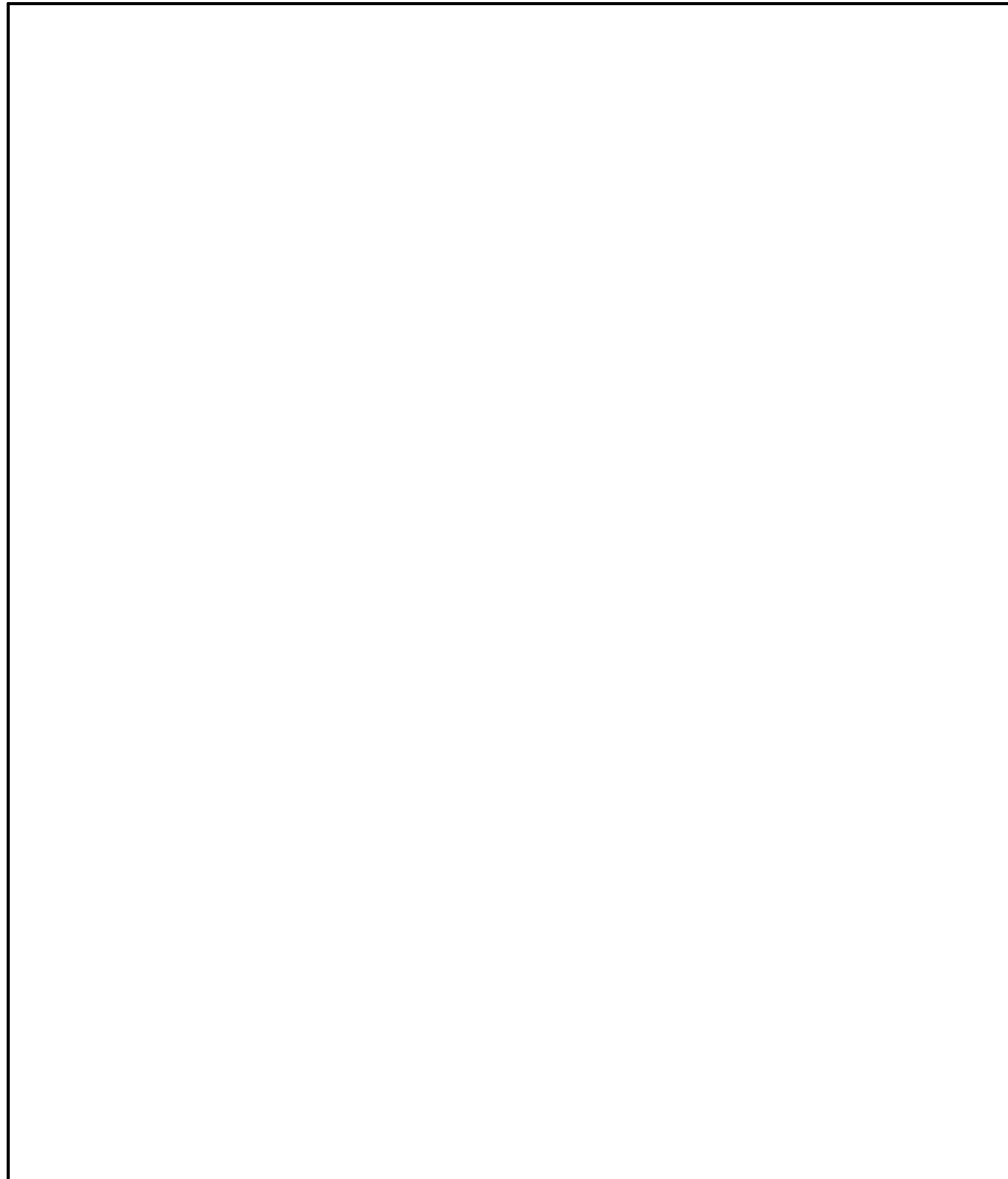
NO.	ISSUED FOR	DATE
04	ISSUED FOR TENDER	2021.06.29
03	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.28
02	ISSUED FOR CLASS B COSTING	2021.04.23
01	ISSUED FOR CLIENT REVIEW	2021.04.06

DRAWING TITLE:
ELECTRICAL DRAWING
LIST AND LEGENDS

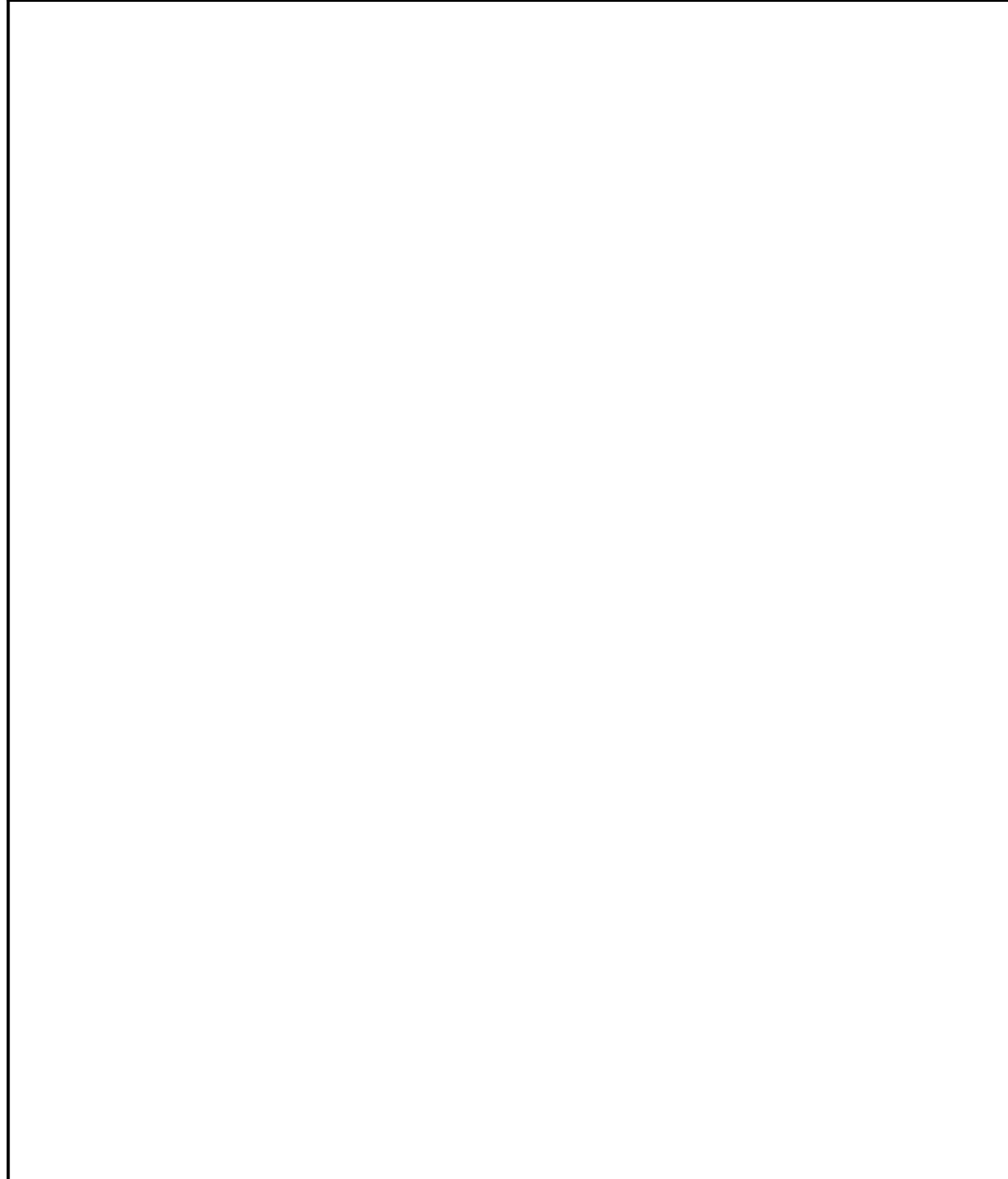
DATE: June 23, 2021 SCALE: N.T.S. PROJECT NO: 21069.001

DRAWN: M.I.C. CHECKED: M.A.

DRAWING NO: E0.0



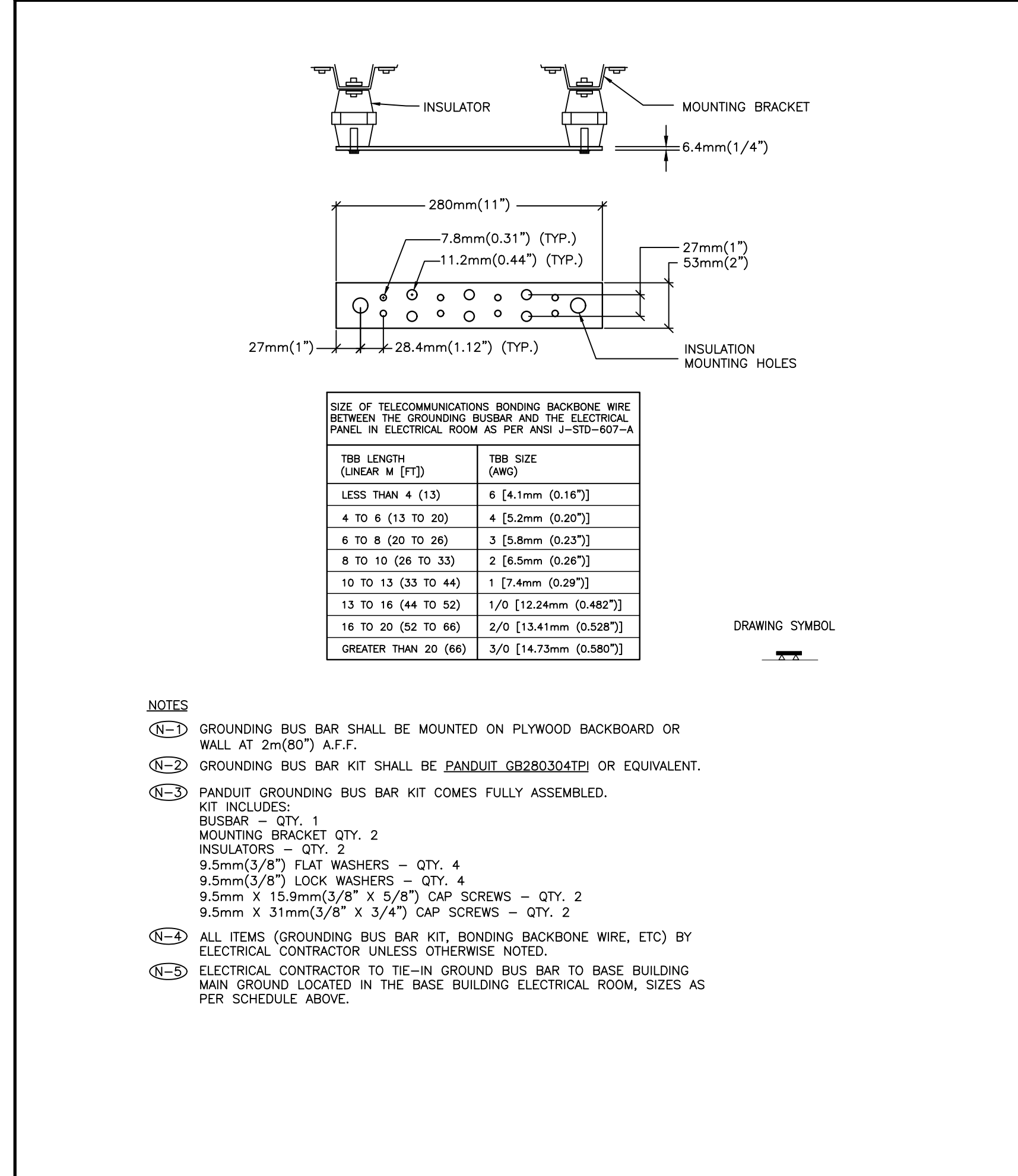
5 NOT USED
E0.2



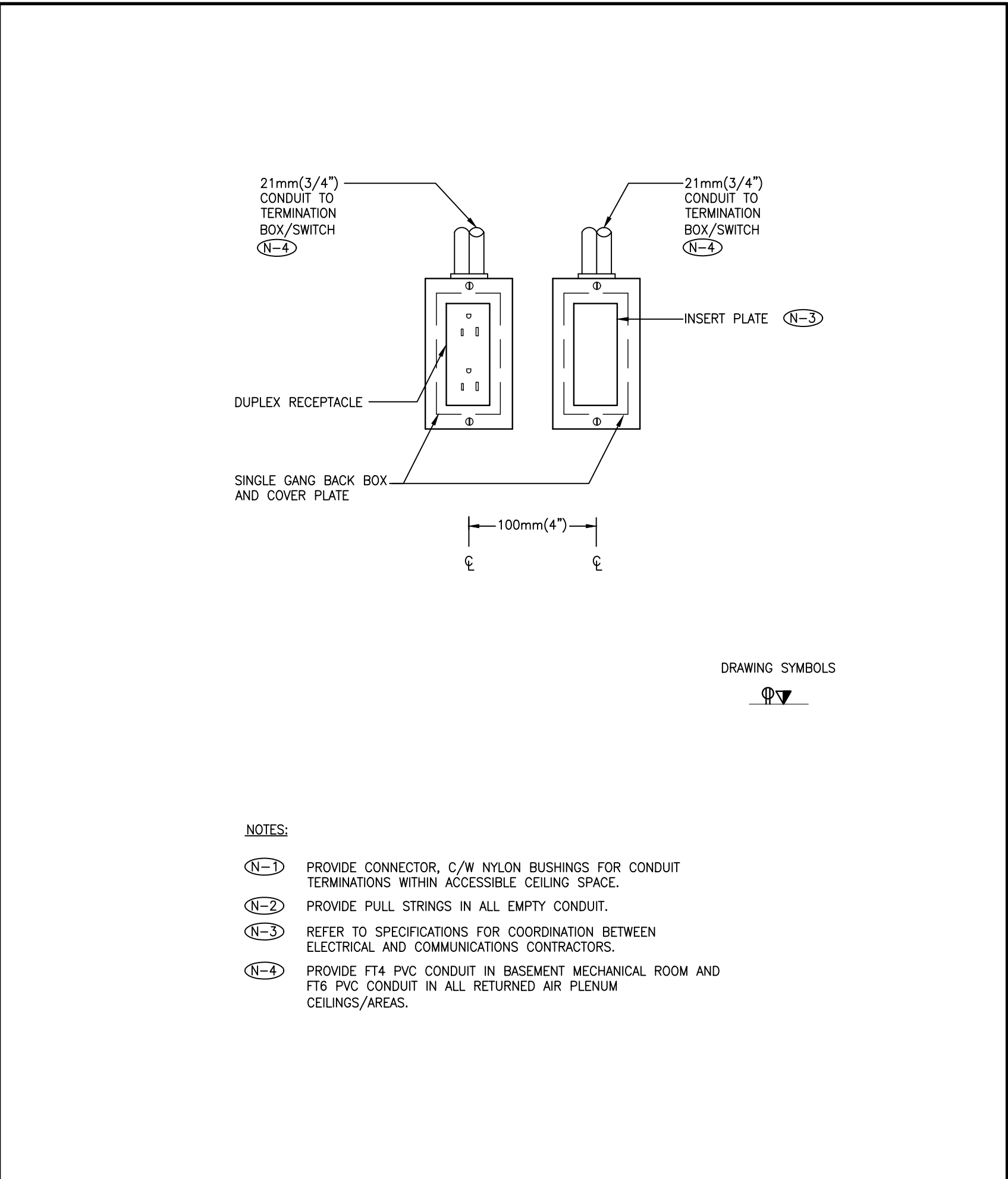
6 NOT USED
E0.2

LUMINAIRE SCHEDULE					
TYPE	DIMENSIONS	LAMP TYPE	VOLTAGE	DESCRIPTION	MANUFACTURER/CATALOGUE NO.
L1	330MM (W) X 140MM (D) X 127MM (H)	LED 12W 3000K 1000LM 80 CRI	120V	LED WALL RECESSED LUMINAIRES WITH ASYMMETRICAL LIGHT DISTRIBUTION, DIE CAST ALUMINUM MARINE GRADE, COPPER FREE HOUSING, IP65 RATED, -30 DEGREE OPERATION, HIGH TEMPERATURE SILICON GASKET, PROVIDE WITH VANDAL RESISTANT S.S. SCREWS.	BEGA LIGHTING 33058 SERIES. GHIDINI EDGE AS 5L GH2006.CAAT300EC

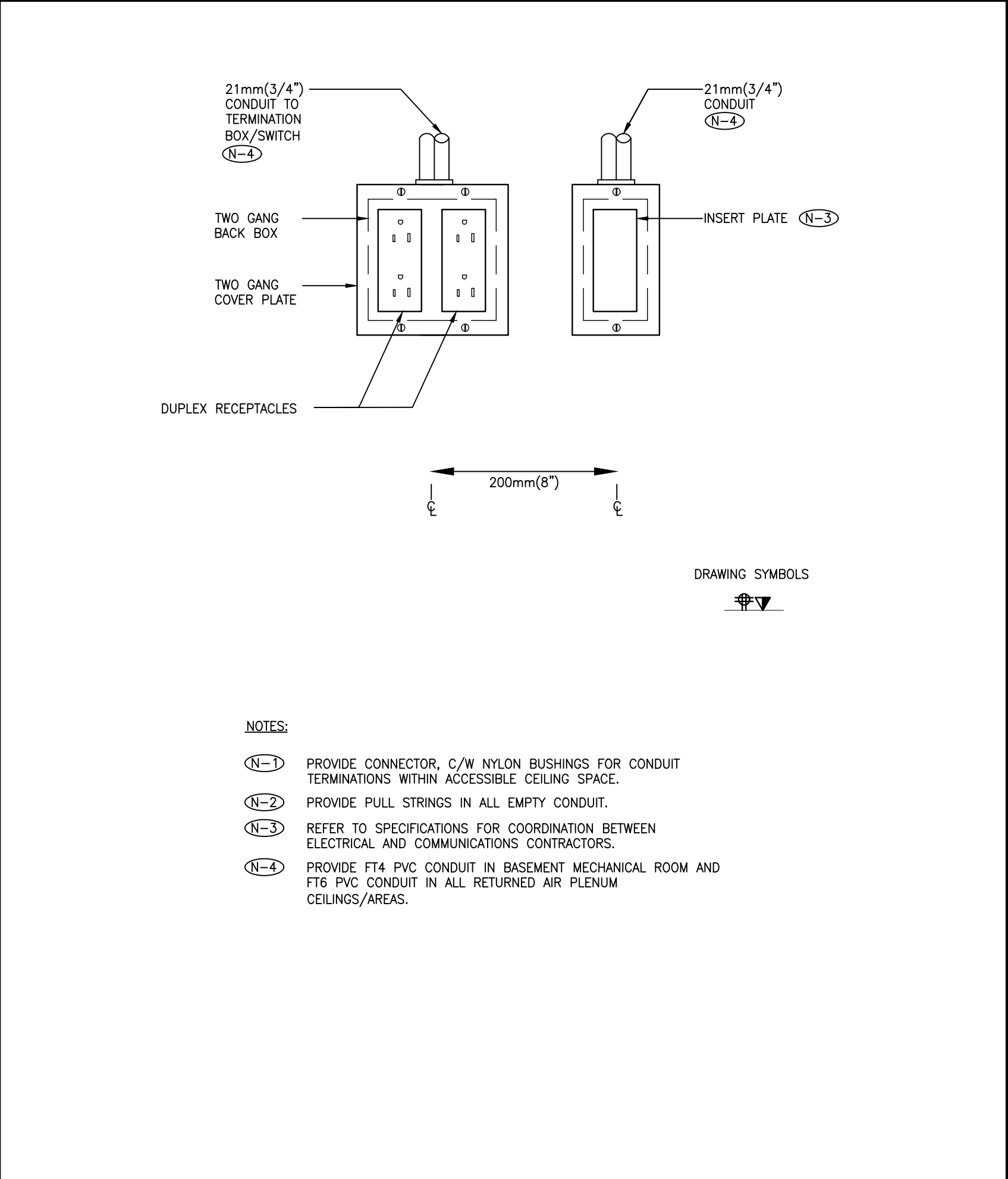
3 LIGHTING SCHEDULE
E0.2 N.T.S



4 GROUND BUS BAR
E0.2 N.T.S



1 SINGLE GANG DUPLEX RECEPTACLE AND COMMUNICATION OUTLETS
E0.2 N.T.S



2 QUAD RECEPTACLES AND COMMUNICATION OUTLETS
E0.2 N.T.S

File Name: H:\2021\210609\Current-ELECTRICAL-TYPICAL DETAILS.dwg
Plotted by: Mohammad Al-Aree

NO.	ISSUED FOR	DATE
04	ISSUED RFOR TENDER	2021.06.29
03	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.28
02	ISSUED FOR CLASS B COSTING	2021.04.23
01	ISSUED FOR CLIENT REVIEW	2021.04.06
NO.	ISSUED FOR	DATE

DRAWING TITLE:
ELECTRICAL TYPICAL DETAILS

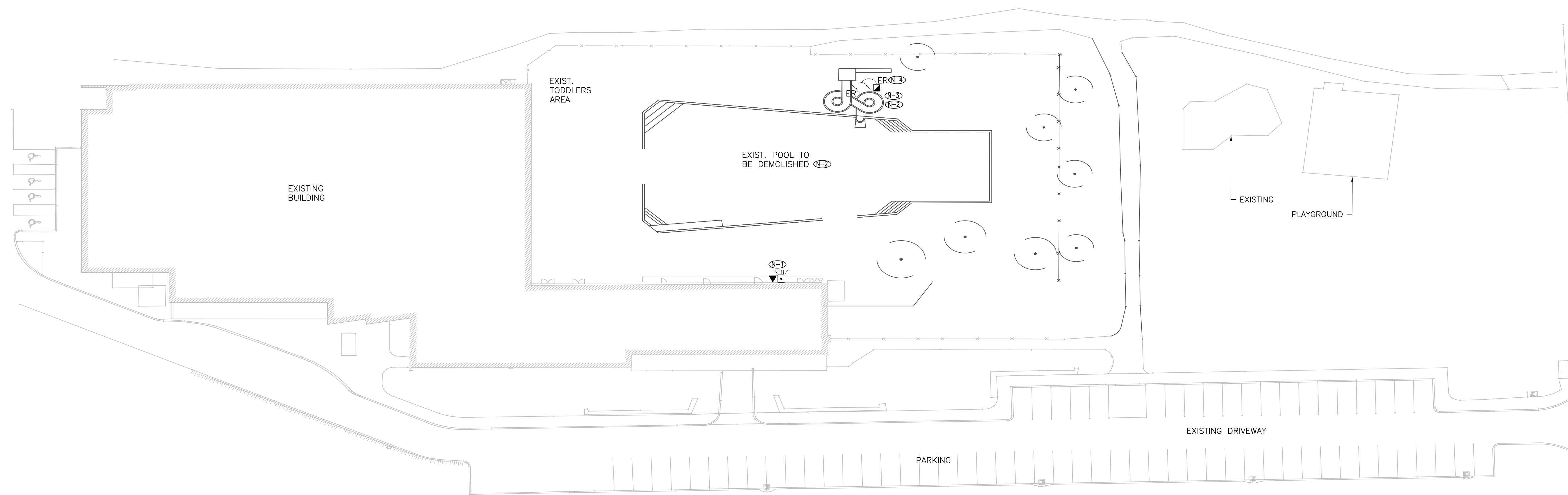
DATE: June 23, 2021	SCALE: N.T.S	PROJECT NO: 21069.001
DRAWN: M.I.C	CHECKED: M.A.	
DRAWING NO: E0.2		

GENERAL NOTES:

1. VISIT THE SITE TO IDENTIFY ALL EXISTING CONDITIONS AND COORDINATE ALL REQUIREMENTS PRIOR TO TENDER. ALLOW FOR ALL COST IN THE TENDER BID.

DRAWING NOTES:

- (E-1) REMOVE EXISTING E-STOP COMPLETE WITH ASSOCIATED AUDIO AND VISUAL STROBES. RE-USE THE EXISTING CONDUIT PATH TO THE POOL ROOM AS REQUIRED TO CONNECT THE NEW VISUAL/AUDIBLE DEVICES TO THE POOL ROOM .
- (E-2) REMOVE EXISTING POOL AND WATER SLIDE BONDING LOOPS BACK TO SOURCE. MAINTAIN A MINIMUM OF 3m OF GROUND CONDUCTORS ENTERING BUILDING TO MAIN BUILDING GROUND FOR RE-USE. EXTEND NEW GROUND LOOP FROM EXISTING LEADS.
- (E-3) REMOVE EXISTING CIRCUIT FEEDING THE WATER SLIDE COMPLETE WITH ASSOCIATED WIRING.
- (E-4) DISCONNECT EXISTING WATER SLIDE PUMP. REMOVE EXISTING ELECTRICAL CONNECTIONS. STARTER COMPLETE WITH ASSOCIATED POWER WIRING IN CONDUITS BACK TO SOURCE.



**MOUNTAINSIDE POOL
REVITALIZATION**
CLIENT PROJECT NO. RFP 222-20

KEY PLAN



Smith + Andersen
148 Fullarton St. Suite 1400 London Ontario N6A 5P3
519 963 8888 www.smithandandersen.com

NO.	ISSUED FOR	DATE
04	ISSUED FOR TENDER	2021.06.29
03	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.28
02	ISSUED FOR CLASS B COSTING	2021.04.23
01	ISSUED FOR CLIENT REVIEW	2021.04.06

DRAWING TITLE:
**SITE PLAN –
ELECTRICAL – DEMO**

DATE: June 23, 2021	SCALE: 1:250	PROJECT NO: 21069.001
DRAWN: M.I.C	CHECKED: M.A.	

DRAWING NO:
E1.0

Plotted by: Mohammad Al-Fene
 File name: H:\2021\21069\Current-E\SITE PLAN - ELECTRICAL - DEMO.dwg
 Plot Date: June 23, 2021



Plot Date: June 23, 2021
Filename: H:\2021\121089\Current-E\SITE PLAN - ELECTRICAL - NEW.dwg

NO.	ISSUED FOR	DATE
04	ISSUED FOR TENDER	2021.06.29
03	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.28
02	ISSUED FOR CLASS B COSTING	2021.04.23
01	ISSUED FOR CLIENT REVIEW	2021.04.06

DRAWING TITLE:

SITE PLAN -
ELECTRICAL - NEW

DATE:	SCALE:	PROJECT NO:
June 23, 2021	1:250	21069.001
DRAWN:	CHECKED:	
M.I.C	M.A.	

DRAWING NO:

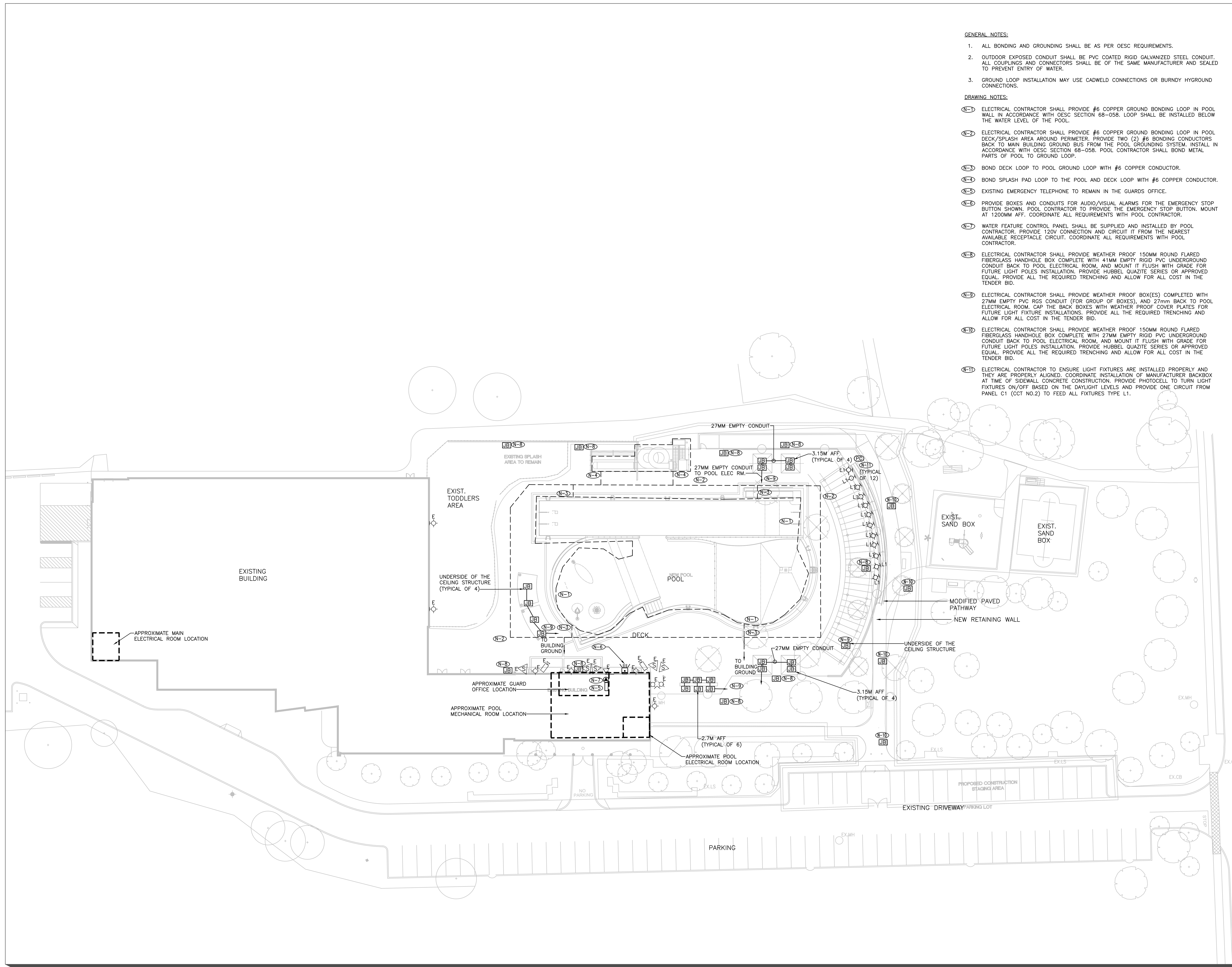
E1.1

GENERAL NOTES:

1. ALL BONDING AND GROUNDING SHALL BE AS PER OESC REQUIREMENTS.
2. OUTDOOR EXPOSED CONDUIT SHALL BE PVC COATED RIGID GALVANIZED STEEL CONDUIT. ALL COUPLINGS AND CONNECTORS SHALL BE OF THE SAME MANUFACTURER AND SEALED TO PREVENT ENTRY OF WATER.
3. GROUND LOOP INSTALLATION MAY USE CADWELD CONNECTIONS OR BURNDY HYGROUND CONNECTIONS.

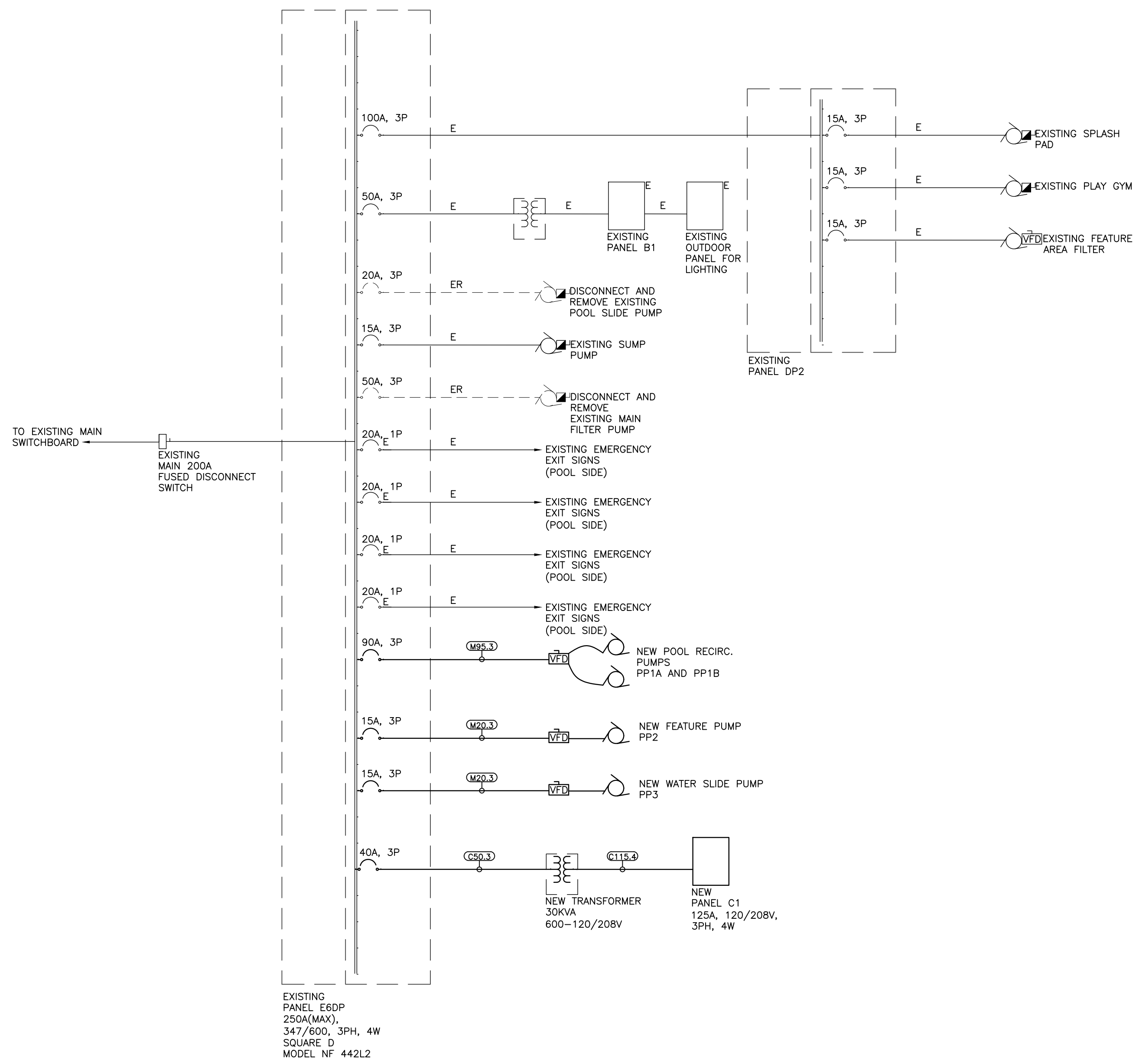
DRAWING NOTES:

- (N-1) ELECTRICAL CONTRACTOR SHALL PROVIDE #6 COPPER GROUND BONDING LOOP IN POOL WALL IN ACCORDANCE WITH OESC SECTION 68-058. LOOP SHALL BE INSTALLED BELOW THE WATER LEVEL OF THE POOL.
- (N-2) ELECTRICAL CONTRACTOR SHALL PROVIDE #6 COPPER GROUND BONDING LOOP IN POOL DECK/SPLASH AREA AROUND PERIMETER. PROVIDE TWO (2) #6 BONDING CONDUCTORS BACK TO MAIN BUILDING GROUND BUS FROM THE POOL GROUNDING SYSTEM. INSTALL IN ACCORDANCE WITH OESC SECTION 68-058. POOL CONTRACTOR SHALL BOND METAL PARTS OF POOL TO GROUND LOOP.
- (N-3) BOND DECK LOOP TO POOL GROUND LOOP WITH #6 COPPER CONDUCTOR.
- (N-4) BOND SPLASH PAD LOOP TO THE POOL AND DECK LOOP WITH #6 COPPER CONDUCTOR.
- (N-5) EXISTING EMERGENCY TELEPHONE TO REMAIN IN THE GUARDS OFFICE.
- (N-6) PROVIDE BOXES AND CONDUITS FOR AUDIO/VISUAL ALARMS FOR THE EMERGENCY STOP BUTTON SHOWN. POOL CONTRACTOR TO PROVIDE THE EMERGENCY STOP BUTTON. MOUNT AT 1200MM AFF. COORDINATE ALL REQUIREMENTS WITH POOL CONTRACTOR.
- (N-7) WATER FEATURE CONTROL PANEL SHALL BE SUPPLIED AND INSTALLED BY POOL CONTRACTOR. PROVIDE 120V CONNECTION AND CIRCUIT IT FROM THE NEAREST AVAILABLE RECEPTACLE CIRCUIT. COORDINATE ALL REQUIREMENTS WITH POOL CONTRACTOR.
- (N-8) ELECTRICAL CONTRACTOR SHALL PROVIDE WEATHER PROOF 150MM ROUND FLARED FIBERGLASS HANDHOLE BOX COMPLETE WITH 41MM EMPTY RIGID PVC UNDERGROUND CONDUIT BACK TO POOL ELECTRICAL ROOM, AND MOUNT IT FLUSH WITH GRADE FOR FUTURE LIGHT FIXTURE INSTALLATION. PROVIDE HUBBEL QUAZITE SERIES OR APPROVED EQUAL. PROVIDE ALL THE REQUIRED TRENCHING AND ALLOW FOR ALL COST IN THE TENDER BID.
- (N-9) ELECTRICAL CONTRACTOR SHALL PROVIDE WEATHER PROOF BOX(ES) COMPLETED WITH 27MM EMPTY PVC RGS CONDUIT (FOR GROUP OF BOXES), AND 27mm BACK TO POOL ELECTRICAL ROOM. CAP THE BACK BOXES WITH WEATHER PROOF COVER PLATES FOR FUTURE LIGHT FIXTURE INSTALLATIONS. PROVIDE ALL THE REQUIRED TRENCHING AND ALLOW FOR ALL COST IN THE TENDER BID.
- (N-10) ELECTRICAL CONTRACTOR SHALL PROVIDE WEATHER PROOF 150MM ROUND FLARED FIBERGLASS HANDHOLE BOX COMPLETE WITH 27MM EMPTY RIGID PVC UNDERGROUND CONDUIT BACK TO POOL ELECTRICAL ROOM, AND MOUNT IT FLUSH WITH GRADE FOR FUTURE LIGHT FIXTURE INSTALLATION. PROVIDE HUBBEL QUAZITE SERIES OR APPROVED EQUAL. PROVIDE ALL THE REQUIRED TRENCHING AND ALLOW FOR ALL COST IN THE TENDER BID.
- (N-11) ELECTRICAL CONTRACTOR TO ENSURE LIGHT FIXTURES ARE INSTALLED PROPERLY AND THEY ARE PROPERLY ALIGNED. COORDINATE INSTALLATION OF MANUFACTURER BACKBOX AT TIME OF SIDEWALL CONCRETE CONSTRUCTION. PROVIDE PHOTOCELL TO TURN LIGHT FIXTURES ON/OFF BASED ON THE DAYLIGHT LEVELS AND PROVIDE ONE CIRCUIT FROM PANEL C1 (CCT NO.2) TO FEED ALL FIXTURES TYPE L1.



LINE LEGEND

-----	DEMOLITION - EXISTING TO BE REMOVED
_____	EXISTING - EXISTING TO REMAIN
_____	NEW - NEW SCOPE



3 SINGLE LINE DIAGRAM - NEW

- GENERAL NOTES:**
- TRANSFORMERS SHALL BE K-13 RATED UNLESS NOTED OTHERWISE.
 - ALL BREAKERS SHOWN SHALL BE 3 POLE UNLESS NOTED OTHERWISE.

1 DRAWING NOTES

COPPER FEEDER SCHEDULE
(PER TABLE 2 CEC (2018) AND 4-006, 60C (FOR EQUIPMENT 100A AND BELOW), 75C AND TABLE 6B, 1000V WITHOUT JACKET, TABLE 6C)

M-COPPER (MOTOR), C-COPPER, A-ALUMINUM, 3-(WIRE+BOND), 4-(4WIRE+BOND), 5-(5WIRE+BOND)
AMPACITY RATING

NOTES:

- SCHEDULE IS TO BE USED FOR FEEDERS AND MOTOR BRANCH WIRING ONLY. DO NOT USE FOR BRANCH WIRING FROM PANELBOARDS.
- RW90 WIRING IS TO BE USED FOR UNDERGROUND INSTALLATIONS. CONDUIT SIZE HAS BEEN ADJUSTED TO ACCOMMODATE FOR 1000V INSULATOR RATINGS.
- FOR MOTORS REQUIRING FEEDERS GREATER THAN 100A, THE BONDING CONDUCTOR SHALL BE SIZED ACCORDING TO CEC RULE 10-614.

FEEDER NO.	NO. OF RUNS	CONDUCTOR SIZE + BONDING CONDUCTOR SIZE (AWG OR KCMIL) PER RUN	MAXIMUM CIRCUIT CAPACITY PER 75°C COLUMN (PER 60°C COLUMN FOR MOTORS)				MAXIMUM CIRCUIT CAPACITY PER 75°C/90°C COLUMN				
			FEEDER AMPACITY FOR 3 AND 4 WIRE SYSTEMS		5 WIRE + BONDING CONDUCTOR CONDUIT SIZE PER RUN		FEEDER AMPACITY FOR 5 WIRE SYSTEMS		5 WIRE (DOUBLE NEUTRAL) + BONDING CONDUCTOR (MARKING MITIGATING TRANSFORMERS) CONDUIT SIZE PER RUN		
			RW90	RW90	RW90	RW90	RW90	RW90	RW90	RW90	
M20	1	#12 AWG + #12 AWG	20	21 (1*)	21 (1*)	N/A	N/A	N/A	N/A	N/A	N/A
M30	1	#10 AWG + #10 AWG	30	21 (1*)	27 (1*)	N/A	N/A	N/A	N/A	N/A	N/A
M40	1	#8 AWG + #8 AWG	40	27 (1*)	27 (1*)	N/A	N/A	N/A	N/A	N/A	N/A
M55	1	#6 AWG + #6 AWG	55	27 (1*)	35 (1*)	N/A	N/A	N/A	N/A	N/A	N/A
M70	1	#4 AWG + #6 AWG	70	35 (1*)	41 (1*)	N/A	N/A	N/A	N/A	N/A	N/A
M85	1	#3 AWG + #6 AWG	85	35 (1*)	41 (1*)	N/A	N/A	N/A	N/A	N/A	N/A
M95	1	#2 AWG + #6 AWG	95	41 (1*)	41 (1*)	N/A	N/A	N/A	N/A	N/A	N/A
M110	1	#1 AWG + #4 AWG	110	53 (2*)	53 (2*)	N/A	N/A	N/A	N/A	N/A	N/A
C20	1	#12 AWG + #12 AWG	20	21 (1*)	21 (1*)	21 (1*)	27 (1*)	C20	20	21 (1*)	27 (1*)
C30	1	#10 AWG + #12 AWG	30	21 (1*)	27 (1*)	27 (1*)	27 (1*)	C30	30	27 (1*)	27 (1*)
C50	1	#8 AWG + #10 AWG	50	27 (1*)	27 (1*)	27 (1*)	35 (1*)	C44	44	27 (1*)	35 (1*)
C65	1	#6 AWG + #8 AWG	65	27 (1*)	35 (1*)	35 (1*)	35 (1*)	C60	60	35 (1*)	41 (1*)
C85	1	#4 AWG + #6 AWG	85	35 (1*)	41 (1*)	41 (1*)	41 (1*)	C76	76	41 (1*)	53 (2*)
C100	1	#3 AWG + #6 AWG	100	35 (1*)	41 (1*)	41 (1*)	53 (2*)	C92	92	53 (2*)	53 (2*)
C115	1	#2 AWG + #6 AWG	115	41 (1*)	41 (1*)	41 (1*)	53 (2*)	C104	104	53 (2*)	53 (2*)
C130	1	#1 AWG + #6 AWG	130	53 (2*)	53 (2*)	53 (2*)	53 (2*)	C116	116	53 (2*)	63 (2*)
C150	1	#1/2 AWG + #6 AWG	150	53 (2*)	53 (2*)	53 (2*)	63 (2*)	C136	136	63 (2*)	63 (2*)
C175	1	#2/0 AWG + #6 AWG	175	53 (2*)	53 (2*)	63 (2*)	63 (2*)	C156	156	63 (2*)	63 (2*)
C200	1	#3/0 AWG + #4 AWG	200	63 (2*)	63 (2*)	63 (2*)	63 (2*)	C180	180	78 (3*)	78 (3*)
C230	1	#4/0 AWG + #4 AWG	230	63 (2*)	63 (2*)	78 (3*)	78 (3*)	C208	208	78 (3*)	78 (3*)
C255	1	250 KCMIL + #4 AWG	255	63 (2*)	78 (3*)	78 (3*)	78 (3*)	C232	232	78 (3*)	91 (3*)
C285	1	300 KCMIL + #4 AWG	285	78 (3*)	78 (3*)	78 (3*)	91 (3*)	C256	256	91 (3*)	91 (3*)
C300	2	#1/0 AWG + #6 AWG	300	53 (2*)	53 (2*)	53 (2*)	63 (2*)	C272	272	63 (2*)	63 (2*)
C310	1	350 KCMIL + #3 AWG	310	78 (3*)	78 (3*)	91 (3*)	91 (3*)	C280	280	91 (3*)	91 (3*)
C335	1	400 KCMIL + #3 AWG	335	78 (3*)	91 (3*)	91 (3*)	91 (3*)	C304	304	103 (4*)	103 (4*)
C350	2	#2/0 AWG + #6 AWG	350	53 (2*)	53 (2*)	63 (2*)	63 (2*)	C312	312	63 (2*)	63 (2*)
C380	1	500 KCMIL + #3 AWG	380	91 (3*)	91 (3*)	103 (4*)	103 (4*)	C344	344	103 (4*)	116 (4*)
C400	2	#3/0 AWG + #4 AWG	400	63 (2*)	63 (2*)	63 (2*)	63 (2*)	C360	360	78 (3*)	78 (3*)
C420	1	600 KCMIL + #2 AWG	420	91 (3*)	103 (4*)	103 (4*)	116 (4*)	C380	380	116 (4*)	116 (4*)
C460	2	#4/0 AWG + #4 AWG	460	63 (2*)	63 (2*)	78 (3*)	78 (3*)	C416	416	78 (3*)	78 (3*)
C475	1	750 KCMIL + #2 AWG	475	103 (4*)	116 (4*)	116 (4*)	116 (4*)	C428	428	129 (5*)	129 (5*)
C510	2	250 KCMIL + #4 AWG	510	63 (2*)	78 (3*)	78 (3*)	78 (3*)	C464	464	78 (3*)	91 (3*)
C545	1	1000 KCMIL + #1 AWG	545	116 (4*)	129 (5*)	129 (5*)	155 (6*)	C492	492	155 (6*)	155 (6*)
C570	2	300 KCMIL + #4 AWG	570	78 (3*)	78 (3*)	78 (3*)	91 (3*)	C512	512	91 (3*)	91 (3*)
C620	2	350 KCMIL + #3 AWG	620	78 (3*)	78 (3*)	91 (3*)	91 (3*)	C560	560	91 (3*)	91 (3*)
C670	2	400 KCMIL + #3 AWG	670	78 (3*)	91 (3*)	91 (3*)	91 (3*)	C608	608	103 (4*)	103 (4*)
C760	2	500 KCMIL + #3 AWG	760	91 (3*)	91 (3*)	103 (4*)	103 (4*)	C688	688	103 (4*)	116 (4*)
C785	3	250 KCMIL + #4 AWG	785	63 (2*)	78 (3*)	78 (3*)	78 (3*)	C696	696	78 (3*)	91 (3*)
C840	2	600 KCMIL + #2 AWG	840	91 (3*)	103 (4*)	103 (4*)	116 (4*)	C760	760	116 (4*)	116 (4*)
C855	3	300 KCMIL + #4 AWG	855	78 (3*)	78 (3*)	78 (3*)	91 (3*)	C768	768	91 (3*)	91 (3*)
C930	3	350 KCMIL + #3 AWG	930	78 (3*)	78 (3*)	91 (3*)	91 (3*)	C840	840	91 (3*)	91 (3*)
C950	2	750 KCMIL + #2 AWG	950	103 (4*)	116 (4*)	116 (4*)	116 (4*)	C856	856	129 (5*)	129 (5*)
C1005	3	400 KCMIL + #3 AWG	1005	78 (3*)	91 (3*)	91 (3*)	91 (3*)	C912	912	103 (4*)	103 (4*)
C1020	4	250 KCMIL + #4 AWG	1020	63 (2*)	78 (3*)	78 (3*)	78 (3*)	C928	928	78 (3*)	91 (3*)
C1090	2	1000 KCMIL + #1 AWG	1090	116 (4*)	129 (5*)	129 (5*)	155 (6*)	C984	984	155 (6*)	155 (6*)
C1140	3	500 KCMIL + #3 AWG	1140	91 (3*)	91 (3*)	103 (4*)	103 (4*)	C1032	1032	103 (4*)	116 (4*)
C1240	4	350 KCMIL + #3 AWG	1240	78 (3*)	78 (3*)	91 (3*)	91 (3*)	C1120	1120	91 (3*)	91 (3*)
C1260	3	600 KCMIL + #2 AWG	1260	91 (3*)	103 (4*)	103 (4*)	116 (4*)	C1140	1140	116 (4*)	116 (4*)
C1340	4	400 KCMIL + #3 AWG	1340	78 (3*)	91 (3*)	91 (3*)	91 (3*)	C1216	1216	103 (4*)	103 (4*)
C1425	3	750 KCMIL + #2 AWG	1425	103 (4*)	116 (4*)	116 (4*)	116 (4*)	C1284	1284	129 (5*)	129 (5*)
C1520	4	500 KCMIL + #3 AWG	1520	91 (3*)	91 (3*)	103 (4*)	103 (4*)	C1376	1376	103 (4*)	116 (4*)
C1635	3	1000 KCMIL + #1 AWG	1635	116 (4*)	129 (5*)	129 (5*)	155 (6*)	C1476	1476	155 (6*)	155 (6*)
C1680	4	600 KCMIL + #2 AWG	1680	91 (3*)	103 (4*)	103 (4*)	116 (4*)	C1520	1520	116 (4*)	116 (4*)
C1900	4	750 KCMIL + #2 AWG	1900	103 (4*)	116 (4*)	116 (4*)	116 (4*)	C1712	1712	129 (5*)	129 (5*)
C2180	4	1000 KCMIL + #1 AWG	2180	116 (4*)	129 (5*)	129 (5*)	155 (6*)	C1968	1968	155 (6*)	155 (6*)

USE ABOVE MOTOR FEEDER SCHEDULE FOR AMPACITIES LESS THAN 1000V (PER CEC 2018 RULE 10-914)

2 COPPER FEEDER SCHEDULE (ESD-122.01)



MOUNTAINSIDE POOL REVITALIZATION
CLIENT PROJECT NO. RFP 222-20



148 Fullarton St. Suite 1400 London Ontario N6A 5P3
519 963 8888 www.smithandandersen.com

NO.	ISSUED FOR	DATE
04	ISSUED FOR TENDER	2021.06.29
03	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.28
02	ISSUED FOR CLASS B COSTING	2021.04.23
01	ISSUED FOR CLIENT REVIEW	2021.04.06

DRAWING TITLE:
SINGLE LINE DIAGRAM

DRAWING NO: **E2.0**

DATE: June 23, 2021
SCALE: N.T.S
PROJECT NO: 21069.001

DRAWN: M.I.C
CHECKED: M.A.

Plot Date: June 23, 2021
Pilot Date: June 23, 2021
Filename: H:\2021\10109\Current-E\Single Line Diagram.dwg
Plotted by: Mohammad Al-Jase

**MOUNTAINSIDE POOL
REVITALIZATION**

CLIENT PROJECT NO. RFP 222-20

KEY PLAN



Smith + Andersen

148 Fullarton St. Suite 1400 London Ontario N6A 5P3
519 963 8888 www.smithandandersen.com

Plot Date: June 23, 2021
Plotted by: Mohammad Al-Fene
Filename: H:\2021\171089\Current-ELECTRICAL PART PUMPS.dwg

NO.	ISSUED FOR	DATE
04	ISSUED FOR TENDER	2021.06.29
03	ISSUED FOR PERMIT/CLASS A COSTING	2021.05.28
02	ISSUED FOR CLASS B COSTING	2021.04.23
01	ISSUED FOR CLIENT REVIEW	2021.04.06

DRAWING TITLE:

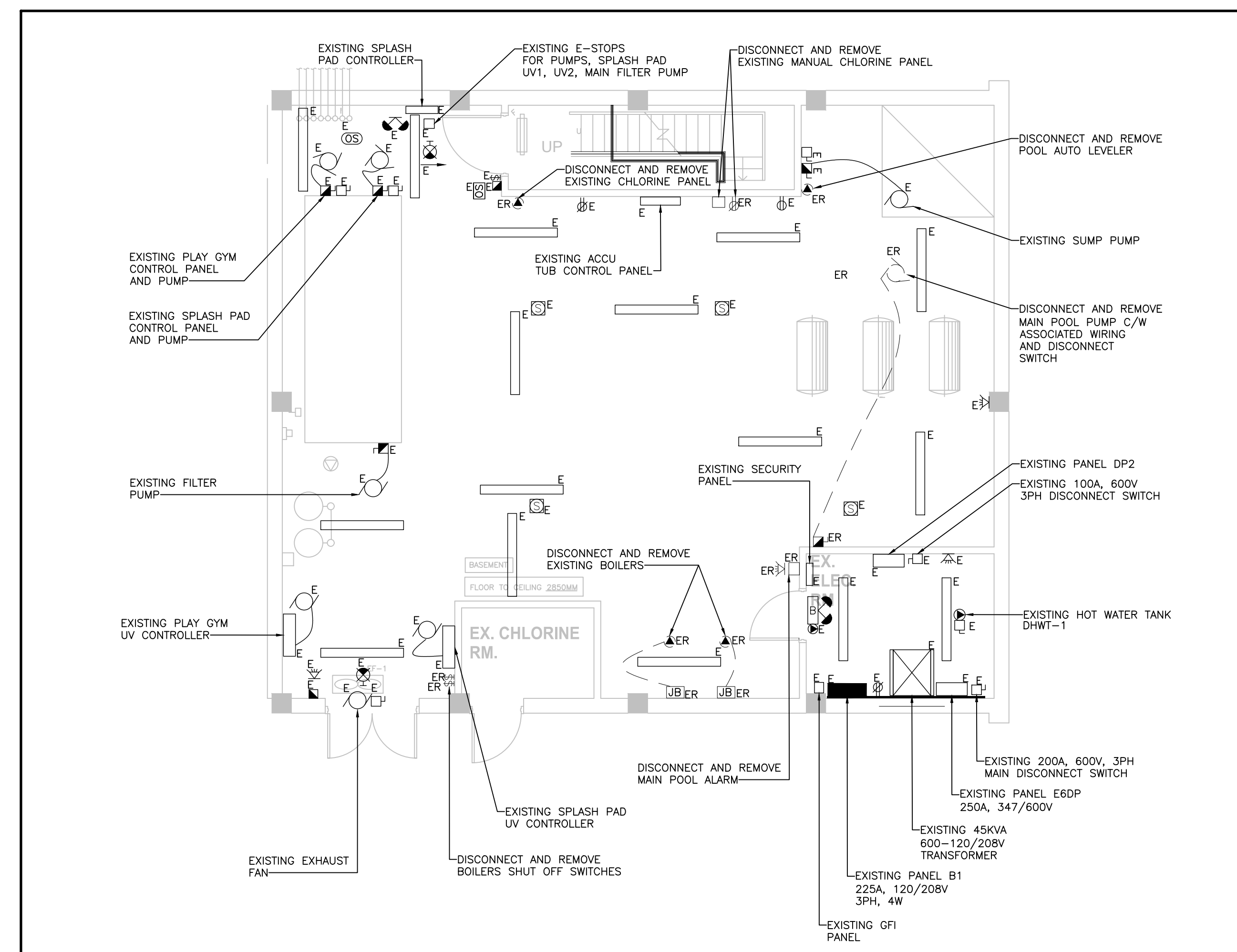
**ELECTRICAL PART
PLANS**

DATE: June 23, 2021 SCALE: 1:50 PROJECT NO: 21069.001

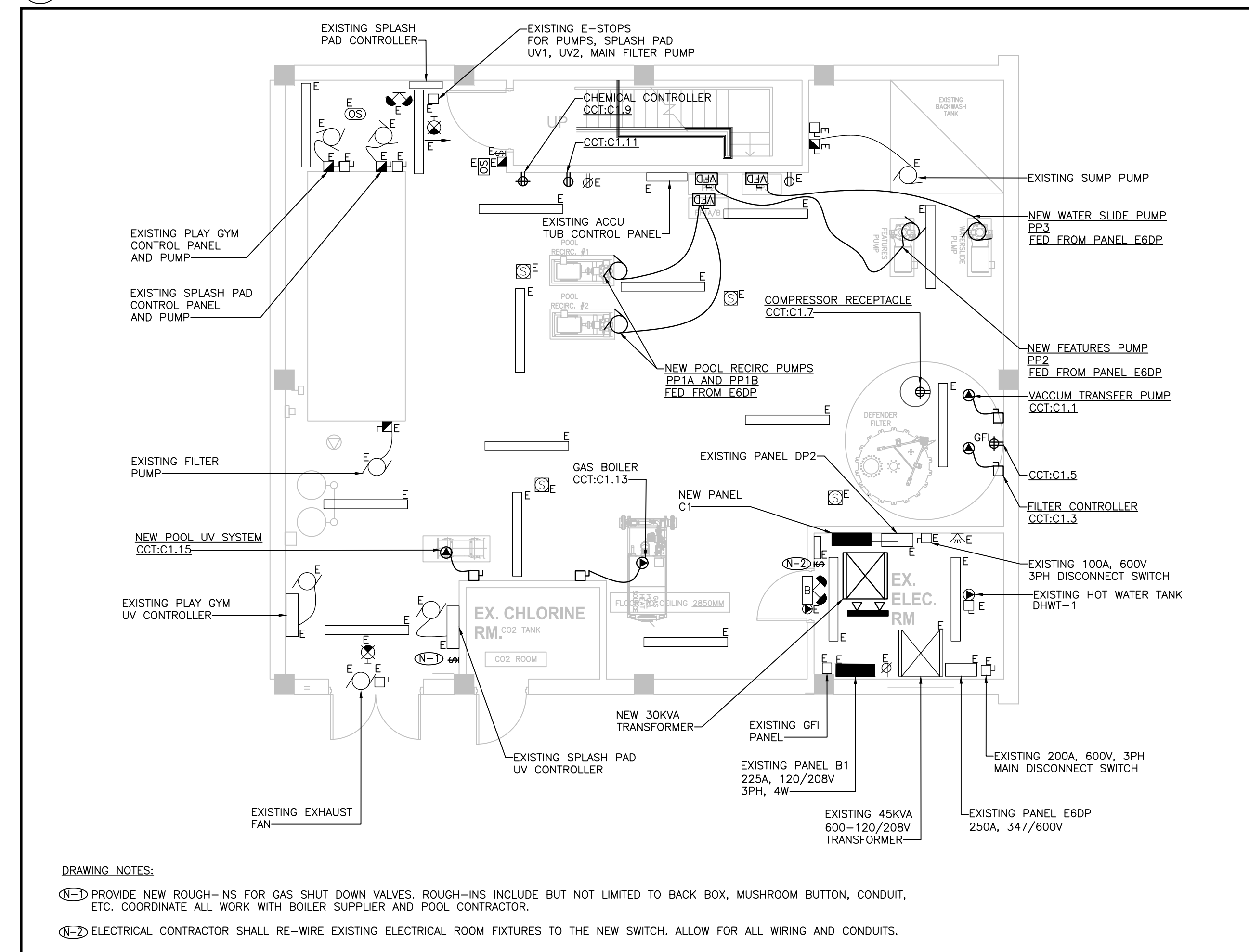
DRAWN: M.I.C CHECKED: M.A.

DRAWING NO:

E4.0



1 MECHANICAL ROOM LAYOUT - DEMO
1:50



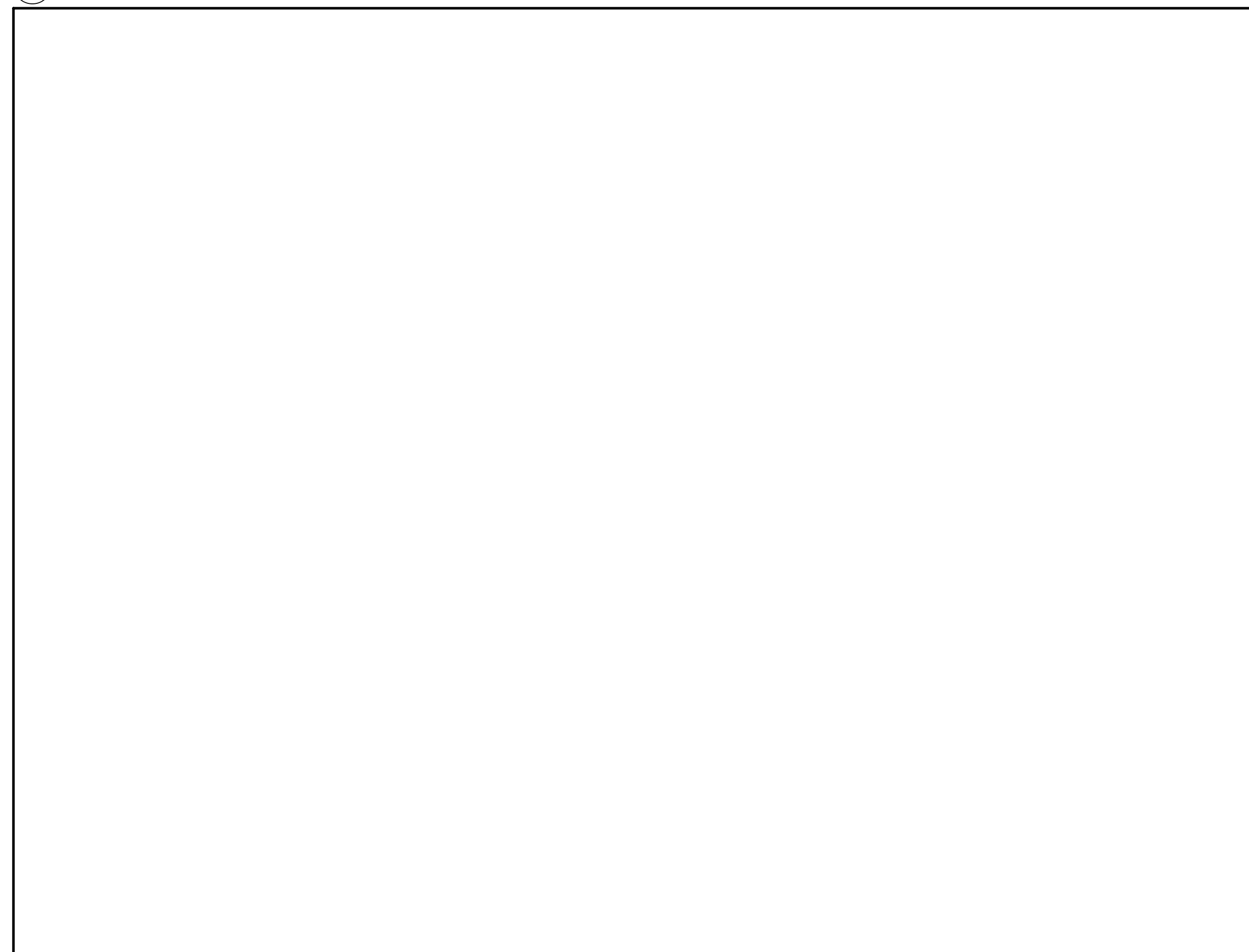
2 MECHANICAL ROOM LAYOUT - NEW
1:50

DRAWING NOTES:

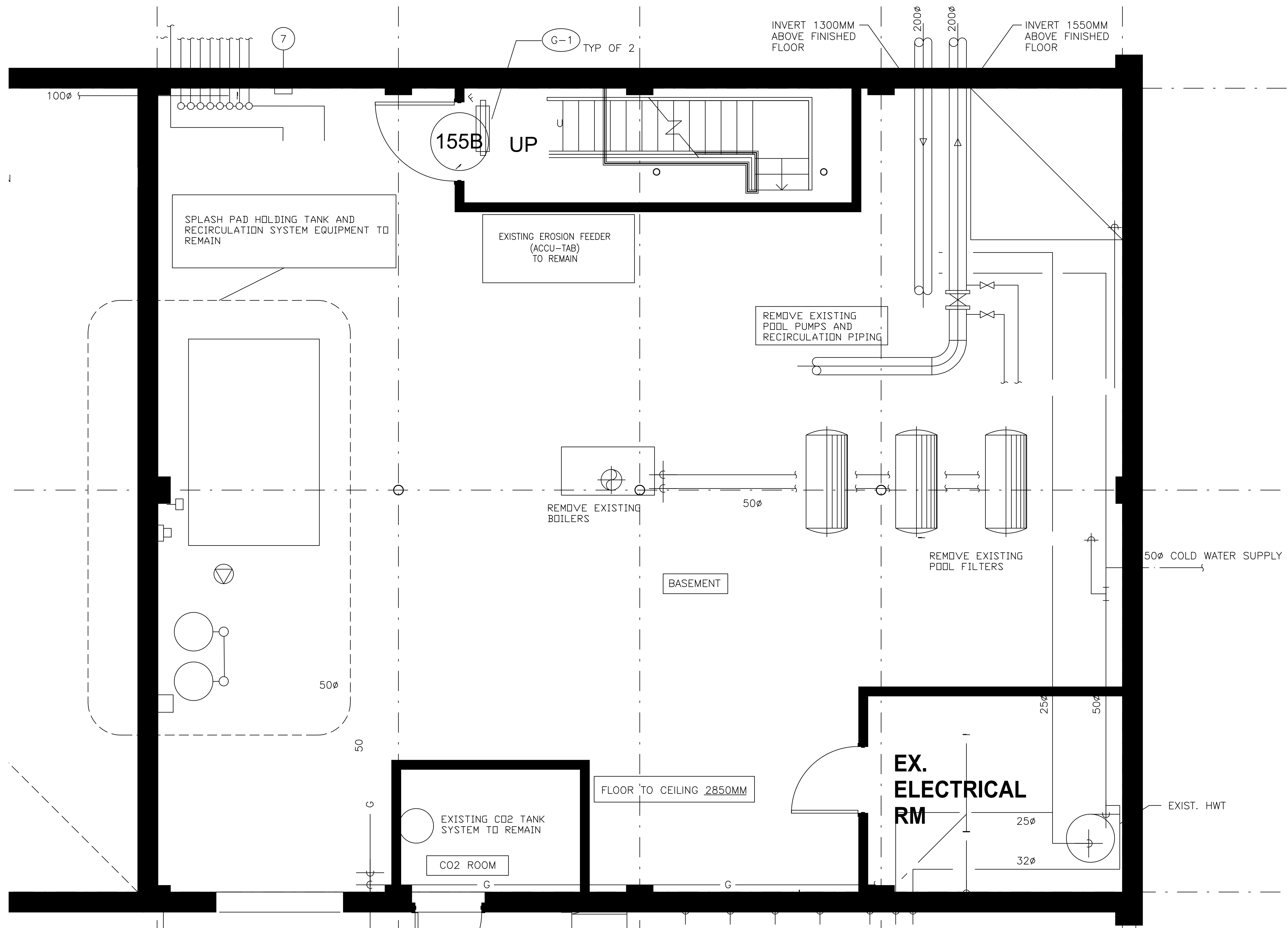
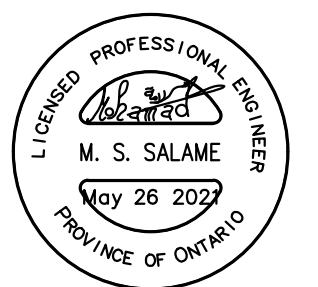
1- PROVIDE NEW ROUGH-INS FOR GAS SHUT DOWN VALVES. ROUGH-INS INCLUDE BUT NOT LIMITED TO BACK BOX, MUSHROOM BUTTON, CONDUIT, ETC. COORDINATE ALL WORK WITH BOILER SUPPLIER AND POOL CONTRACTOR.

2- ELECTRICAL CONTRACTOR SHALL RE-WIRE EXISTING ELECTRICAL ROOM FIXTURES TO THE NEW SWITCH. ALLOW FOR ALL WIRING AND CONDUITS.

3 NOT USED
E4.0



4 NOT USED
E4.0



- NOTE:
1. THIS DRAWING REPRESENTS THE EXISTING MECHANICAL ROOM CONDITION.
 2. ALL EXISTING POOL EQUIPMENT AND PIPING IS TO BE DISCONNECTED, REMOVED, AND DISPOSED OF OFF SITE, UNLESS OTHERWISE NOTED.
 3. ALL EXISTING SPLASH PAD EQUIPMENT AND PIPING IS TO REMAIN ON SITE AND CONNECTED

PLO.1 - Mechanical Room Demo Plan.dwg
 MOUNTAINSIDE POOL - Burlington PLO.1 - Mechanical Room Demo Plan.dwg
 Current\Projects\A - Current\MountainSide Pool - Burlington\PLO.1 - Mechanical Room Demo Plan.dwg
 Plotted by: Lee Bottoms
 Plot Date: June 28, 2021

NO.	ISSUED FOR	DATE
2	ISSUED FOR TENDER	6/29/21
1	ISSUED FOR PERMIT	5/28/21

DRAWING TITLE:
EXISTING POOL MECHANICAL ROOM
DEMO PLAN

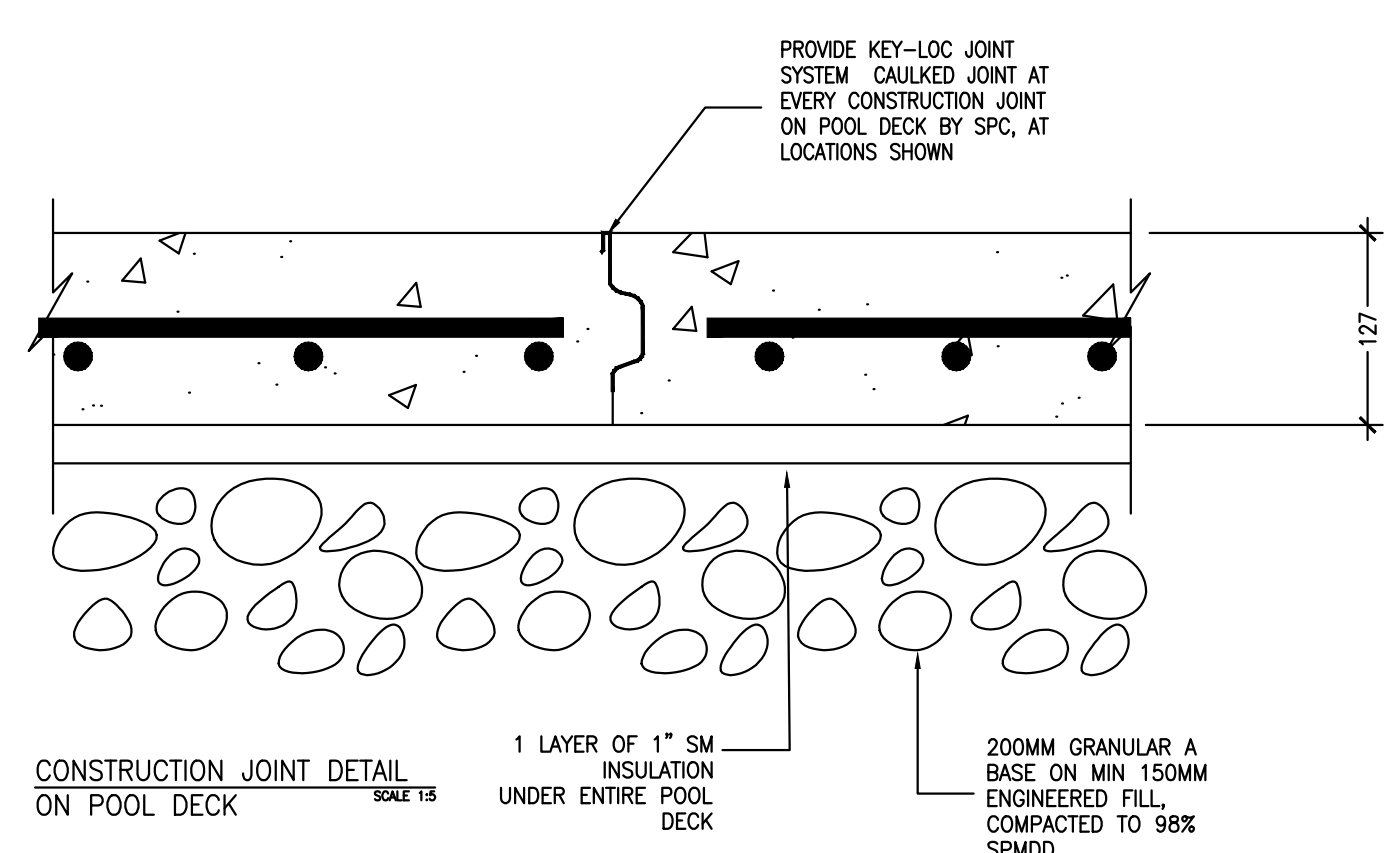
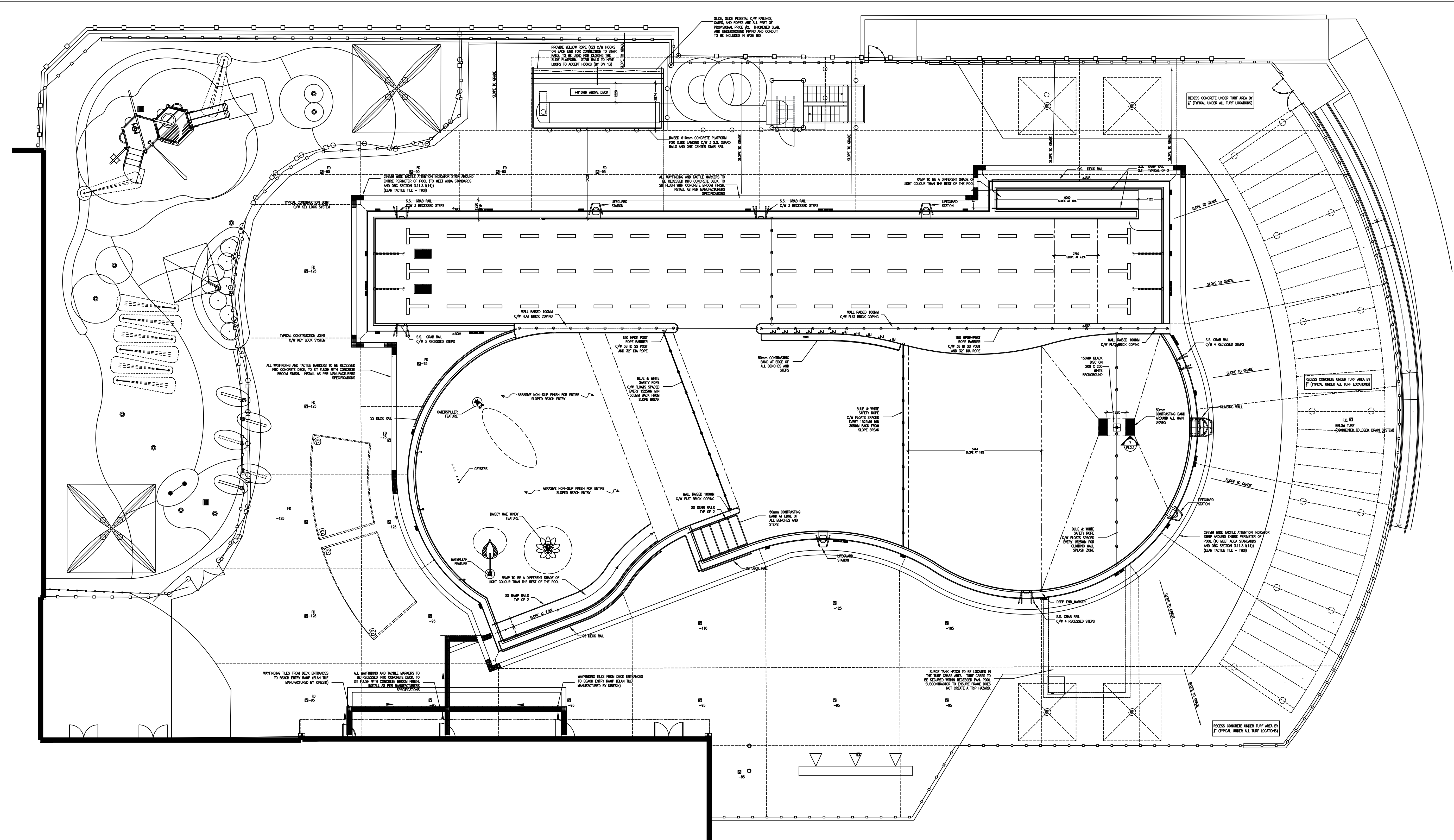
DATE: FEBRUARY, 2021	SCALE: AS SHOWN	PROJECT NO: D21001
DRAWN: LB	CHECKED: MS	

DRAWING NO:
PLO.1

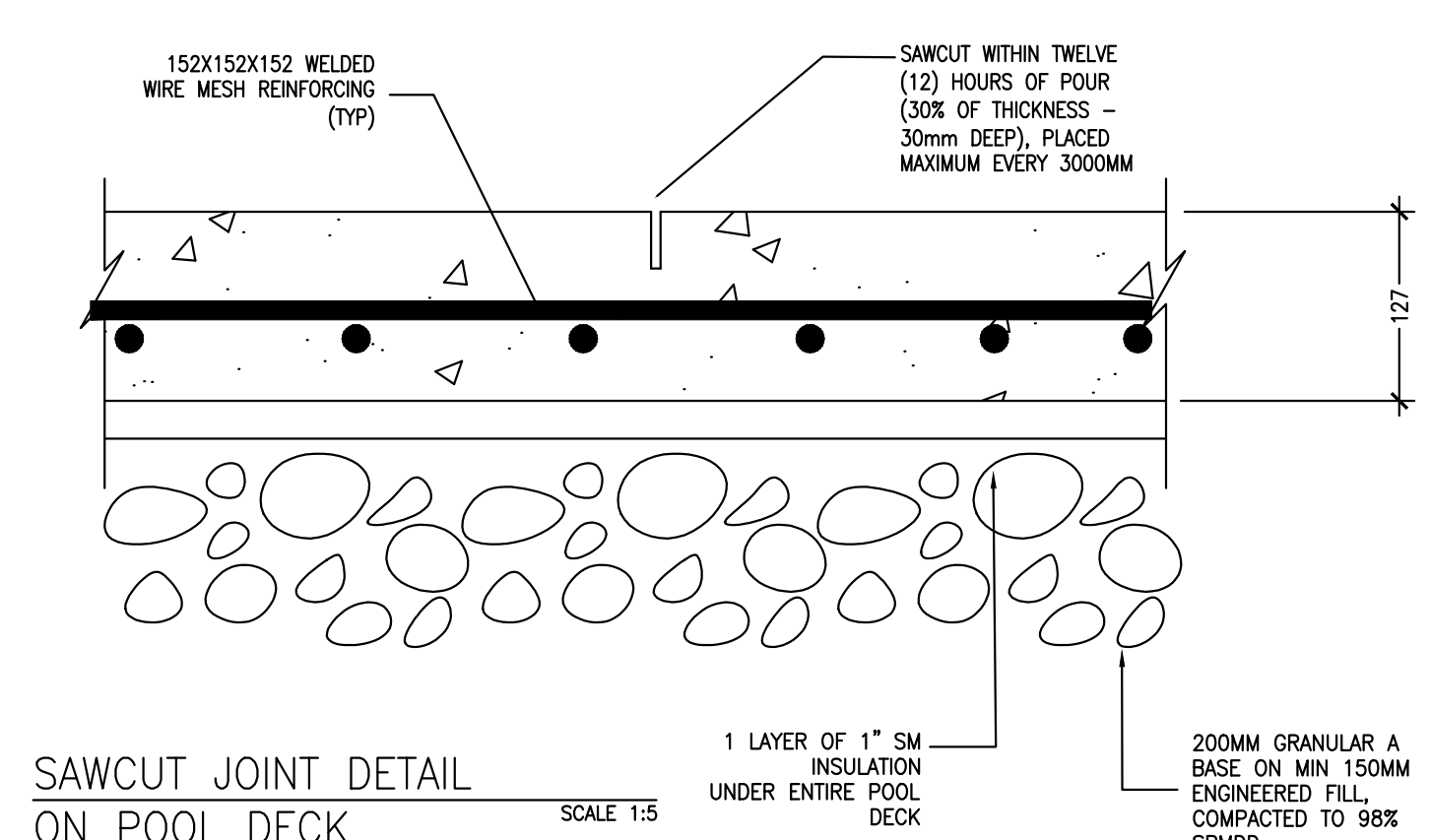
MOUNTAINSIDE POOL REVITALIZATION

CLIENT PROJECT NO. RFP 222-20

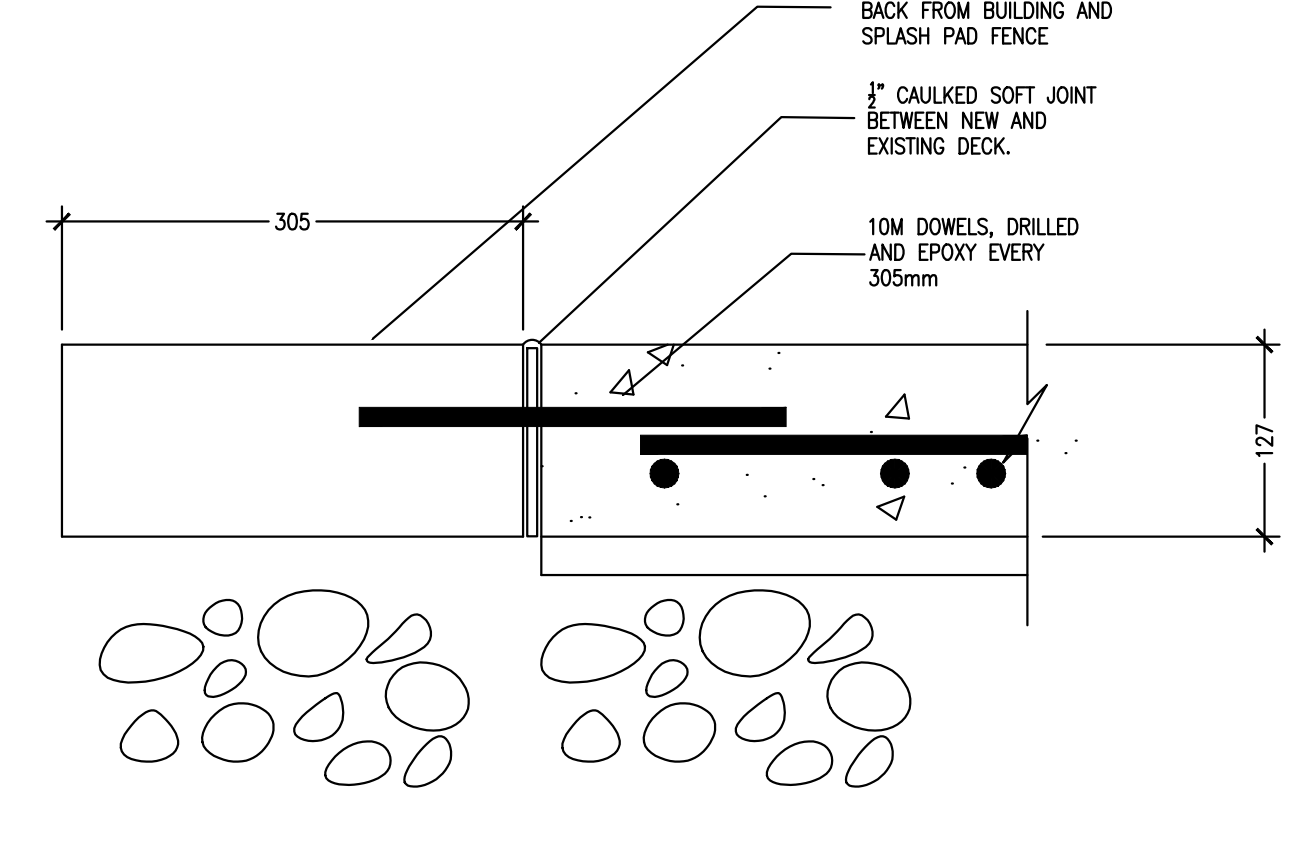
AQUA PLANS
aquatic consultants inc.



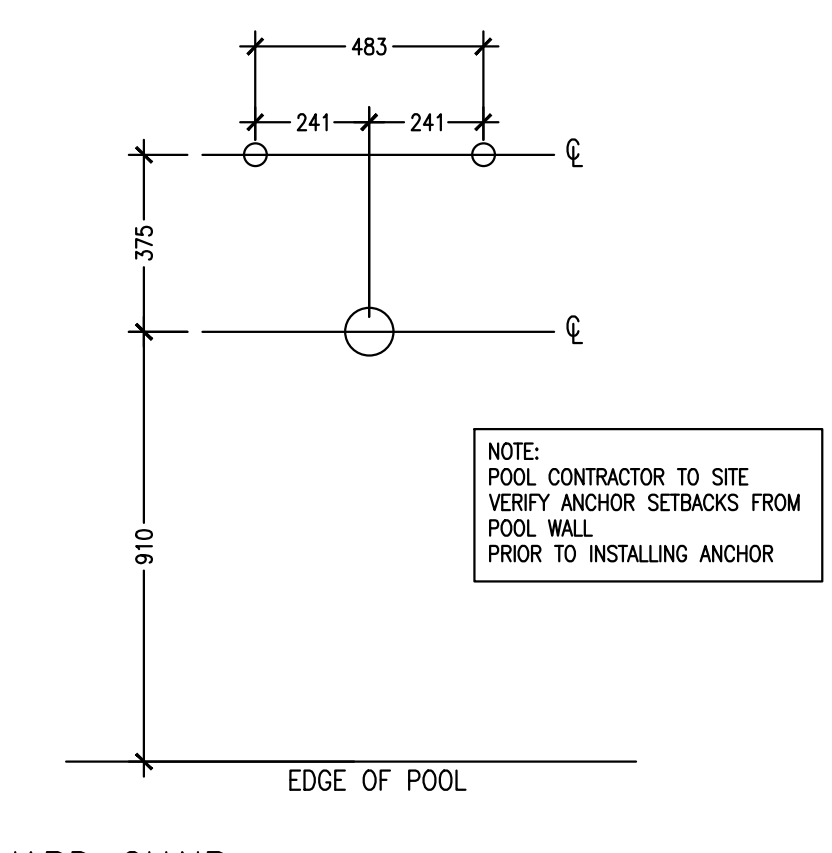
CONSTRUCTION JOINT DETAIL ON POOL DECK
SCALE 1:5
1 LAYER OF 1" SM INSULATION UNDER ENTIRE POOL DECK
200MM GRANULAR A BASE ON MIN 150MM ENGINEERED FILL COMPACTED TO 98% SPMDD



SAWCUT JOINT DETAIL ON POOL DECK
SCALE 1:5
152x152x152 WELDED WIRE MESH REINFORCING (TYP)
SAWCUT WITH TWELVE (12) HOURS OF POUR (30% OF THICKNESS - 30mm DEEP), PLACED MAXIMUM EVERY 3000MM
1 LAYER OF 1" SM INSULATION UNDER ENTIRE POOL DECK
200MM GRANULAR A BASE ON MIN 150MM ENGINEERED FILL COMPACTED TO 98% SPMDD



NEW/EXISTING JOINT DETAIL ON POOL DECK
SCALE 1:5
305MM EXISTING DECK BACK FROM BUILDING AND SPLASH PAD FENCE
1" CAULKED SOFT JOINT BETWEEN NEW AND EXISTING DECK
10M DOWELS, DRILLED AND EPOXY EVERY 305mm



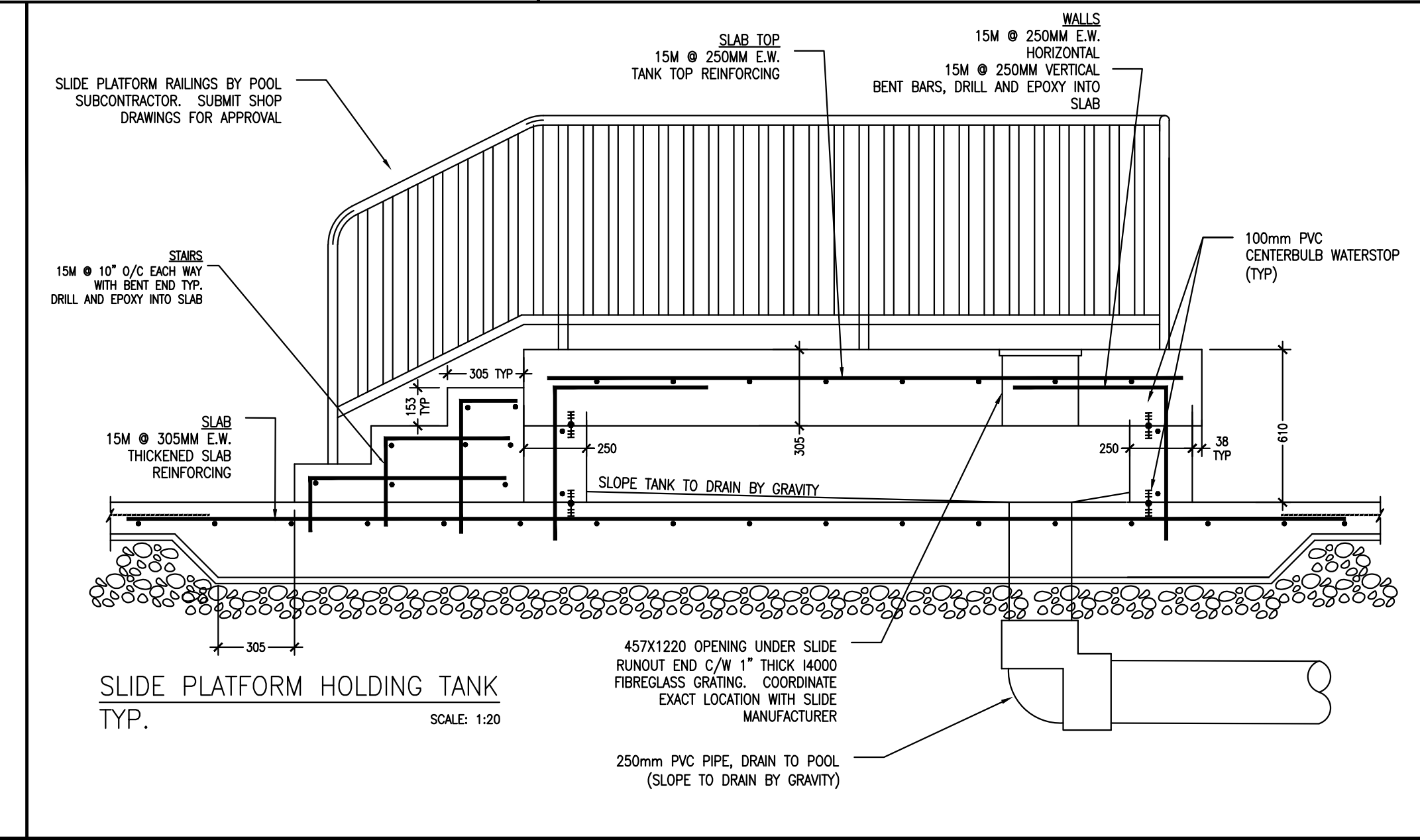
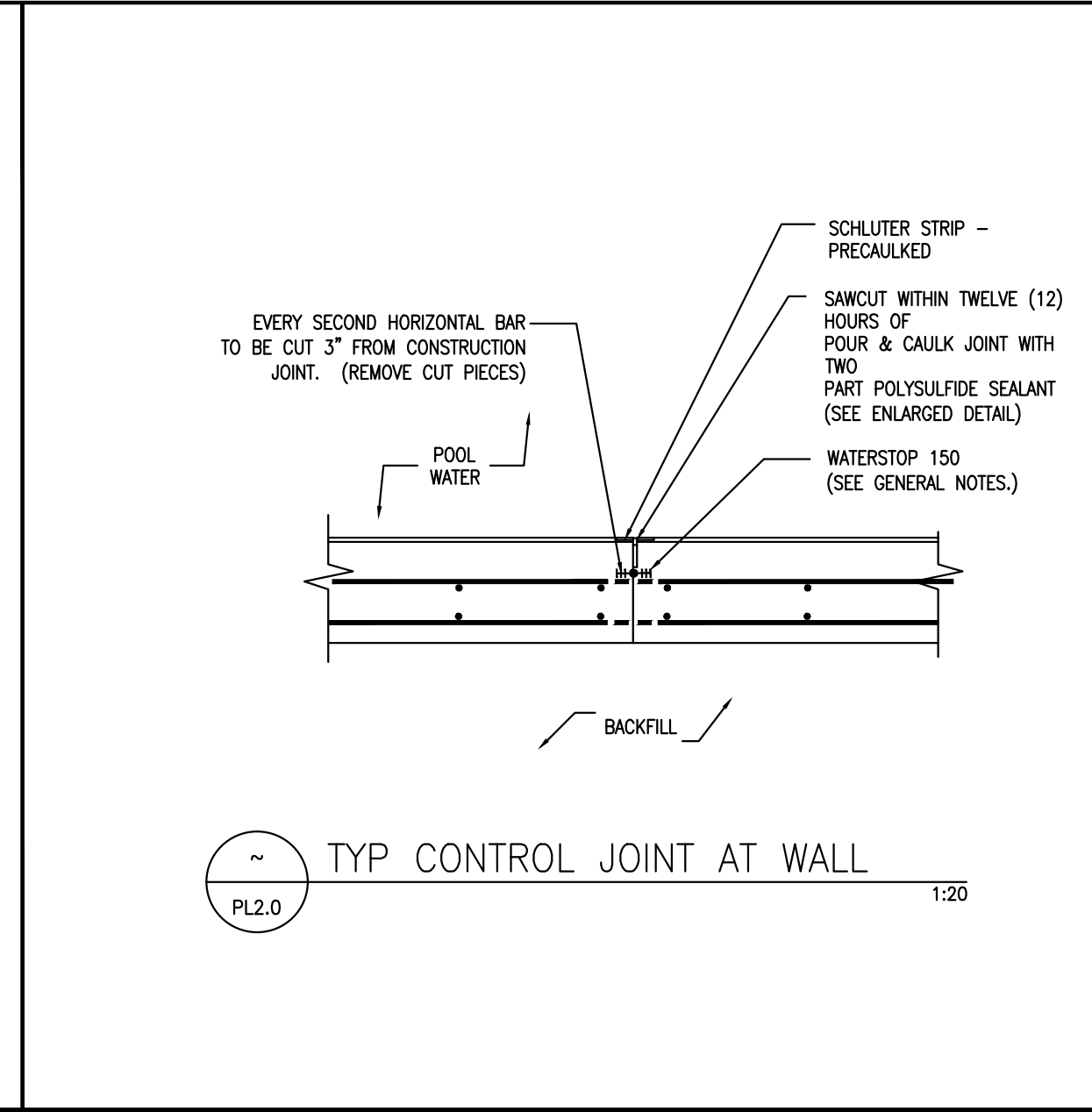
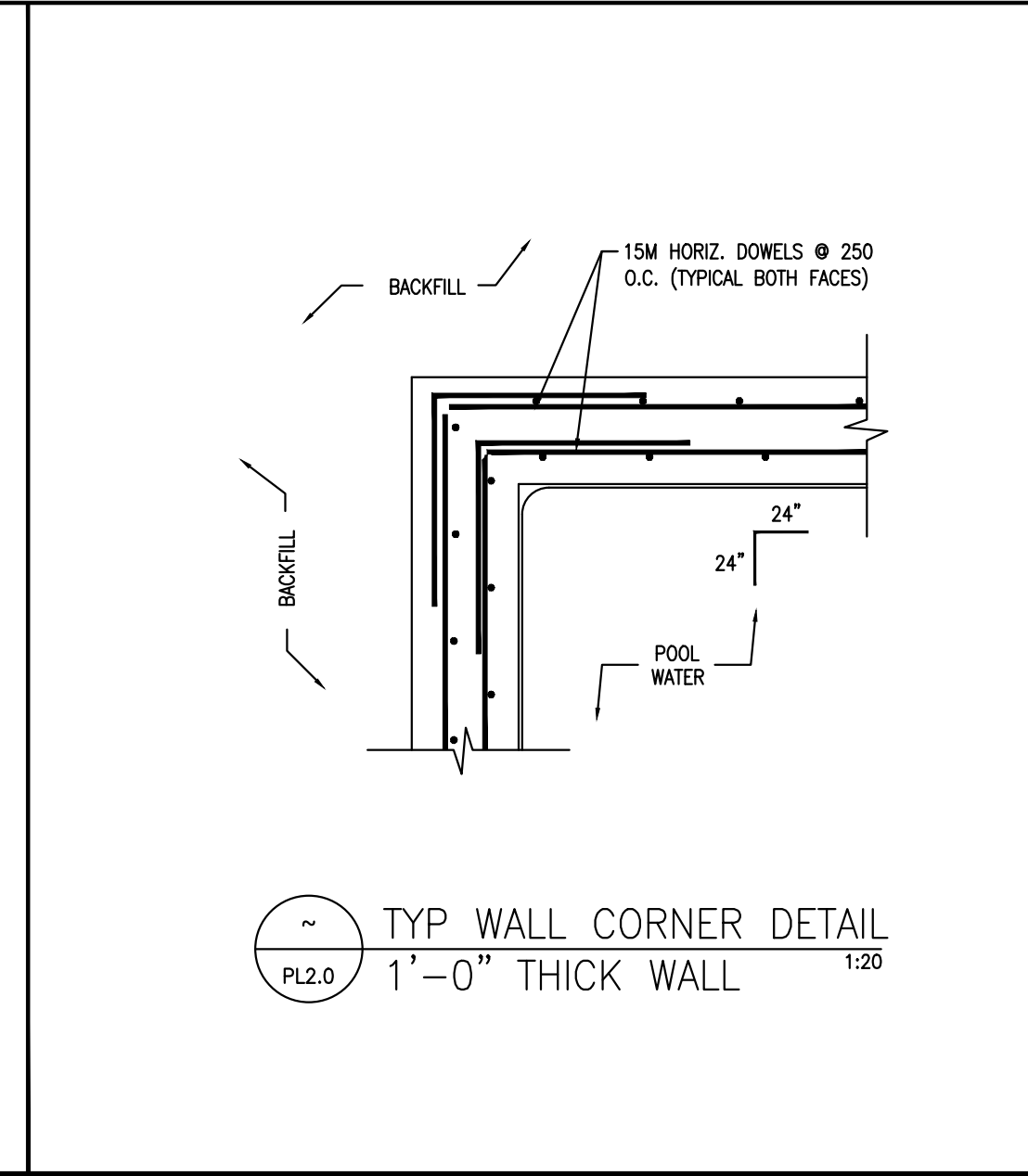
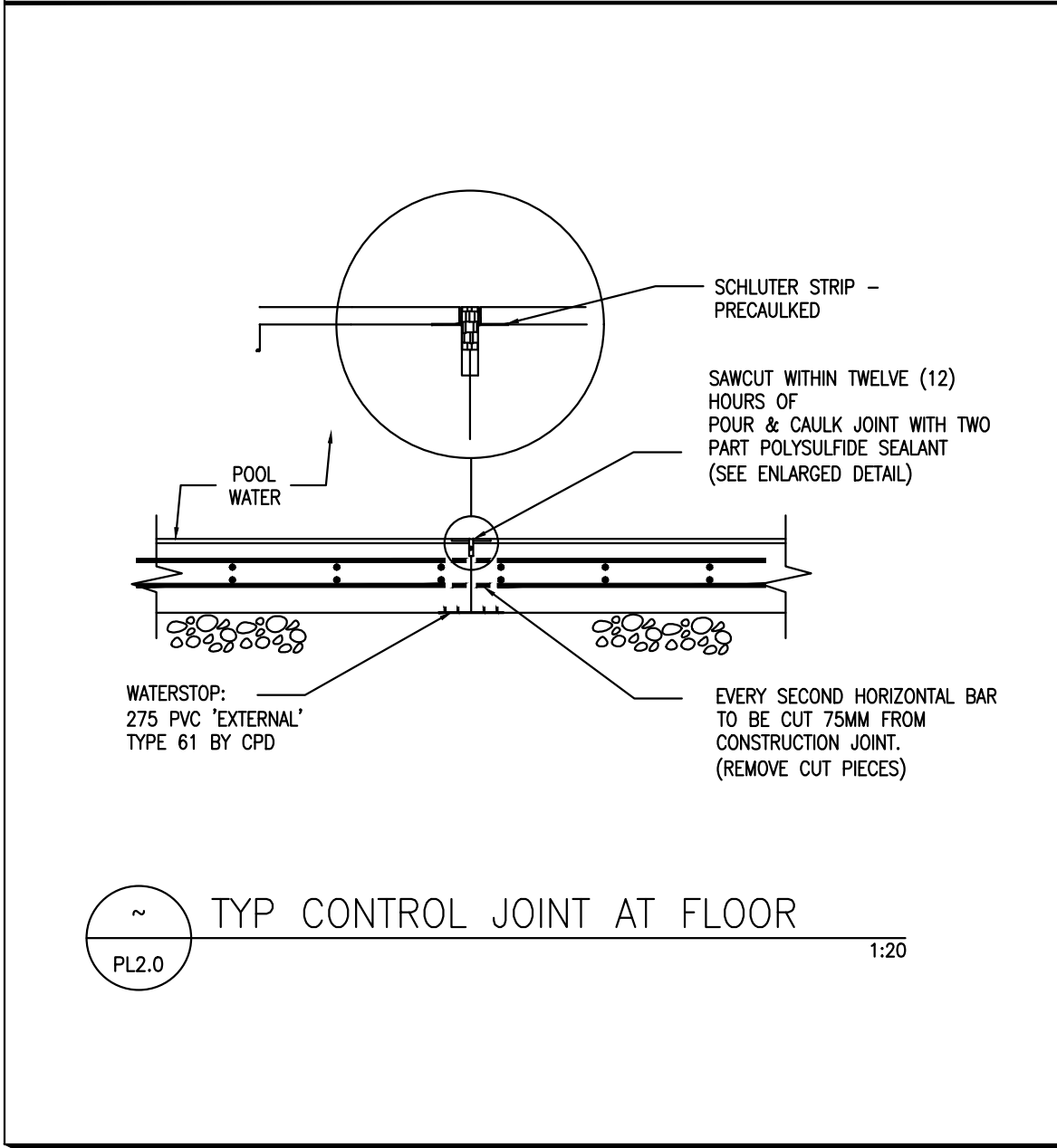
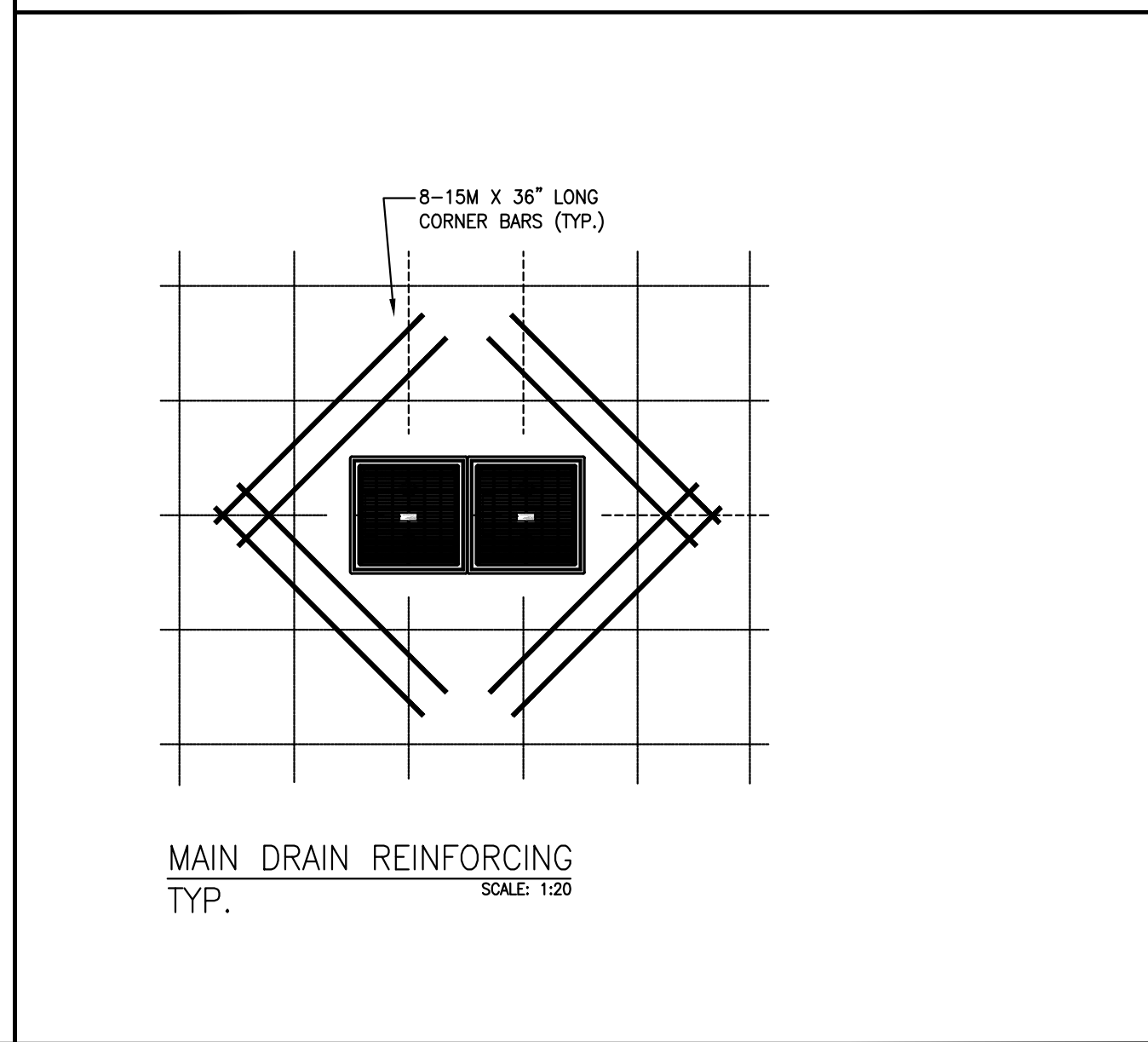
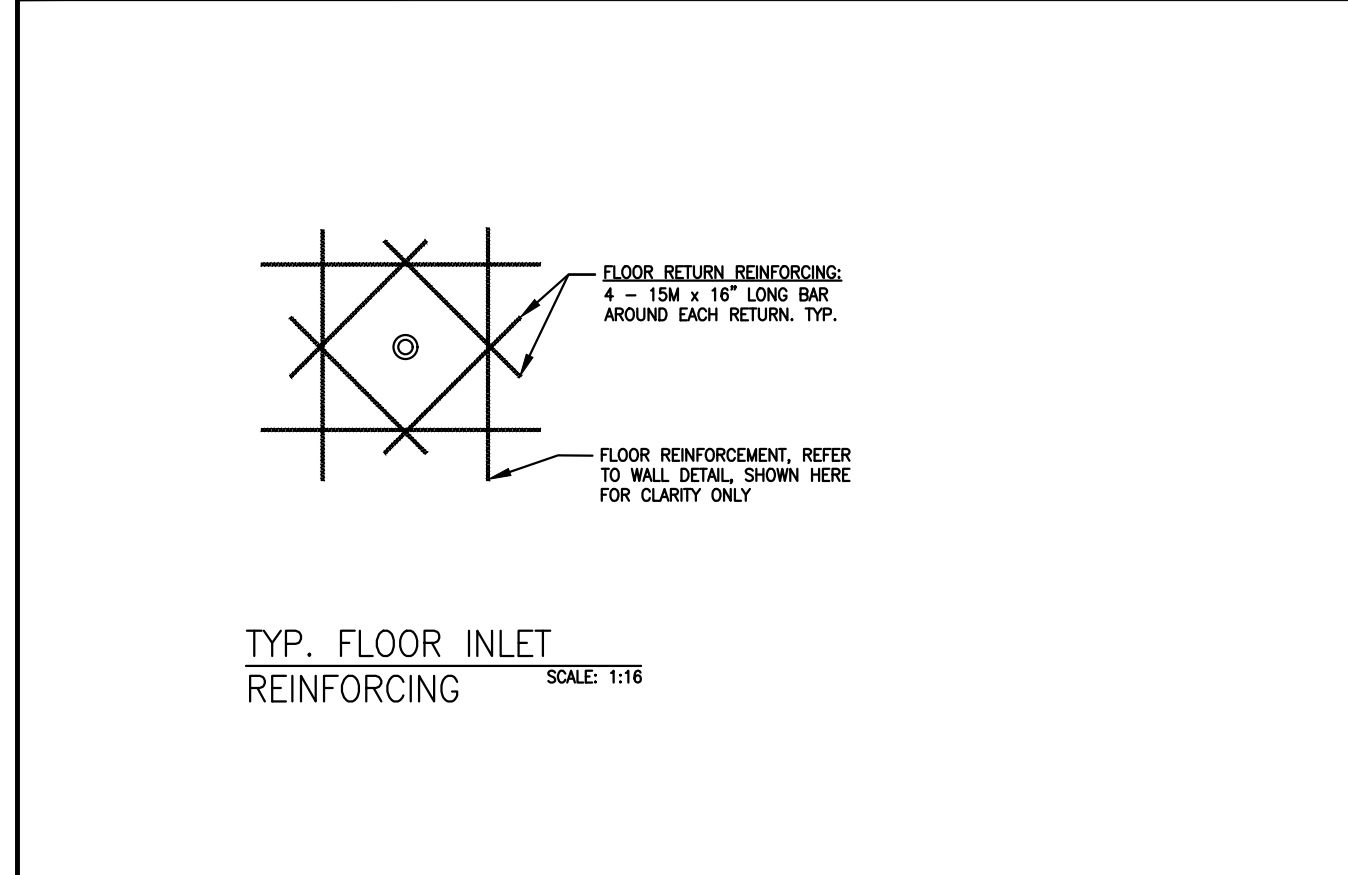
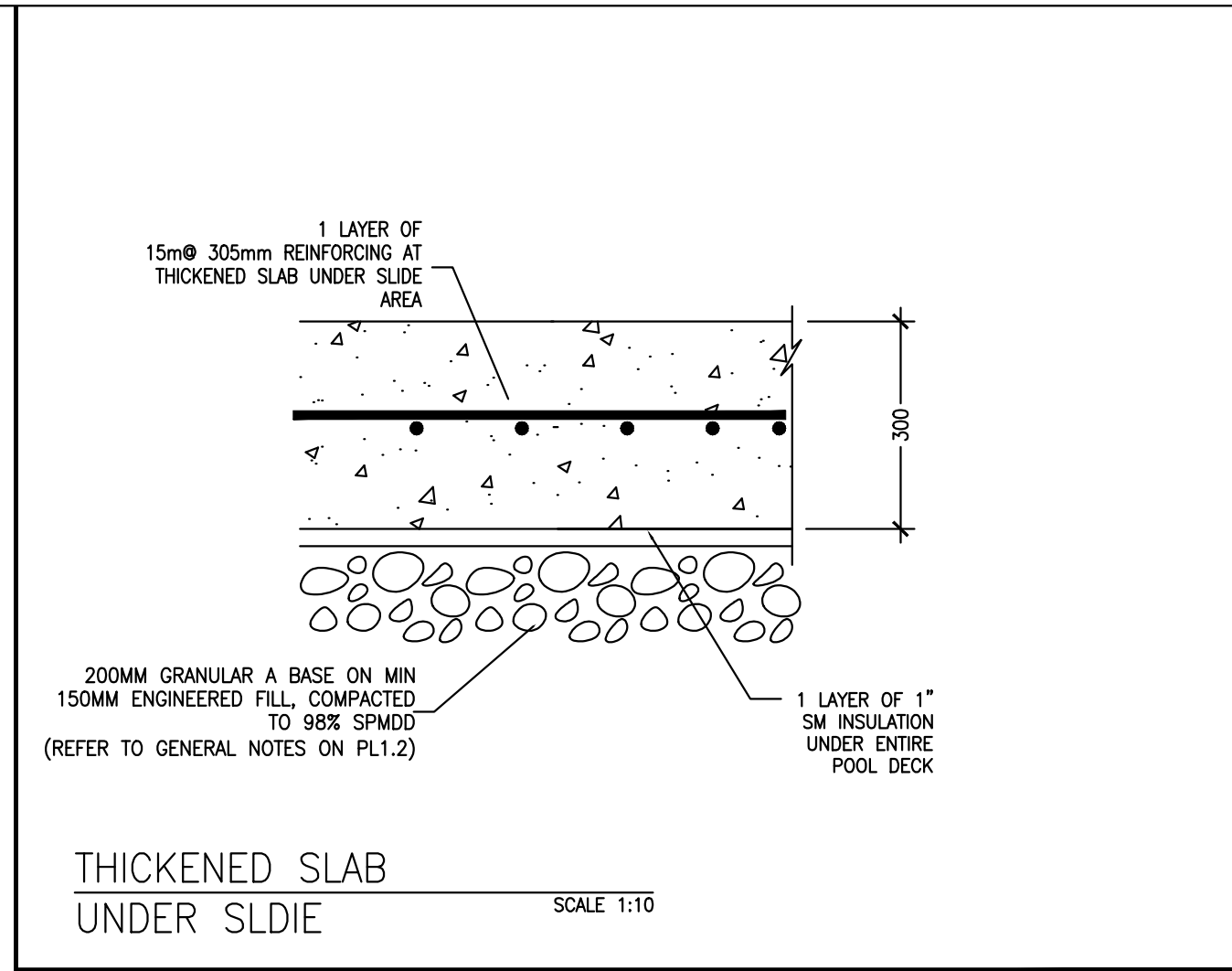
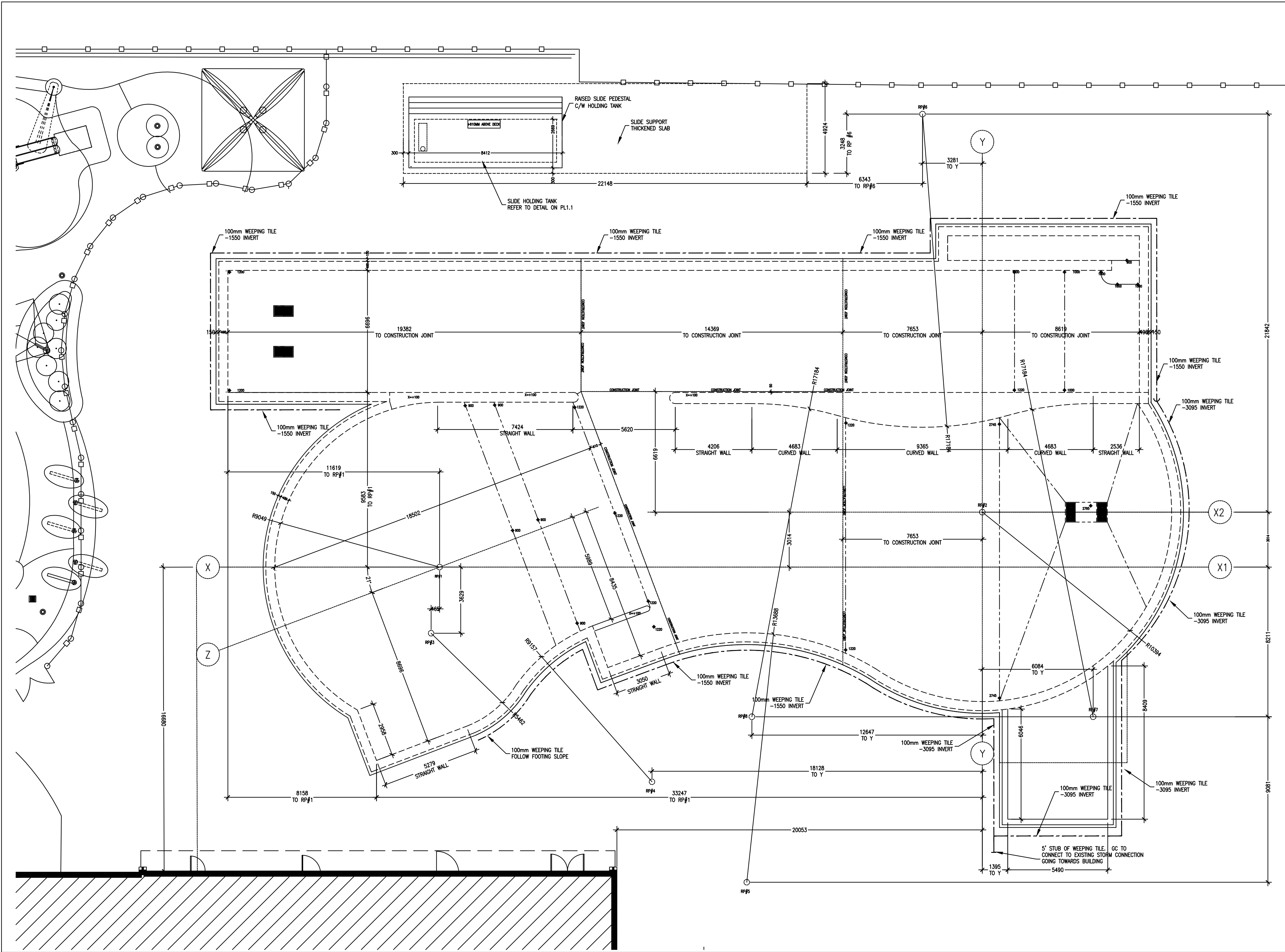
LIFEGUARD CHAIR ANCHOR LOCATIONS
SCALE: 3/4"=1'-0"
NOTE: POOL CONTRACTOR TO SITE VERIFY ANCHOR SETBACKS FROM POOL WALL PRIOR TO INSTALLING ANCHOR

Plot Date: July 5, 2021
Plotted by: Lee Baltans
Filename: H:\Projects\A - Current\Mountainside Pool - Burlington\PL1.0 - Mountainside Pool - Pool Site Layout.dwg

NO.	ISSUED FOR	DATE
2	ISSUED FOR TENDER	6/29/21
1	ISSUED FOR PERMIT	5/28/21

DRAWING TITLE:
POOL SITE PLAN

DATE: FEBRUARY, 2021	SCALE: 1:125	PROJECT NO: D21001
DRAWN: LB	CHECKED: MS	
DRAWING NO: PL1.0		



CITY OF **Burlington**

MOUNTAINSIDE POOL REVITALIZATION

CLIENT PROJECT NO. RFP 222-20

AQUA PLANS
aquatic consultants inc.

PROFESSIONAL ENGINEER
M. S. SALAME
May 26 2022
PROVINCE OF ONTARIO

Filename: H:\Projects\A - Current\Mountainside Pool - Burlington\PL1.1 - Mountainside Pool - Pool Concrete Layout.dwg
Plotted by: Lee Bottoms
Plot Date: July 5, 2021

NO.	ISSUED FOR	DATE
2	ISSUED FOR TENDER	6/29/21
1	ISSUED FOR PERMIT	5/28/21

DRAWING TITLE:
OUTDOOR LEISURE POOL CONCRETE STRUCTURE LAYOUT

DATE:	SCALE:	PROJECT NO:
FEBRUARY, 2021	AS SHOWN	D21001

DRAWN:	CHECKED:
LB	MS

DRAWING NO:
PL1.1

GENERAL NOTES:

- COORDINATE POOL LAYOUT DIMENSIONS WITHIN THE POOL NATATORIUM WITH LATEST ARCHITECTURAL CONSTRUCTION DRAWINGS. IN CASE OF DISCREPANCIES, ARCHITECTURAL DRAWINGS SHALL GOVERN.
- FOR ALL EQUIPMENT, REQUIREMENTS, ACCESSORIES AND ALL MATERIAL ASSEMBLIES, SEE SPECIFICATIONS AND DRAWINGS.
- ALL ASSEMBLIES, LAYOUTS, EQUIPMENT AND MATERIALS SHALL MEET LOCAL, PROVINCIAL, OR PREVAILING CODES, AMENDMENTS AND HEALTH DEPARTMENT REQUIREMENTS (MOST STRINGENT OF SUCH).
- SPC SHALL VERIFY ALL DIMENSIONS, CONDITIONS AND COORDINATE / VERIFY ALL MECHANICAL, ELECTRICAL, STRUCTURAL, EQUIPMENT AND FINISH REQUIREMENTS AS NECESSARY PER CODE AND CONSTRUCTION DOCUMENTS.
- ALL CONDITIONS, CLEARANCES, FINISHES, EQUIPMENT AND ACCESSORIES SHALL COMPLY WITH PREVAILING ACCESSIBILITY REQUIREMENTS IN JURISDICTION.
- SEE SPECIFICATIONS AND ALL DRAWING DETAILS FOR SPC SCOPE OF WORK LIMITS.
- DRAWINGS AND DETAILS DEFINE LIMITS, SCOPE, DETAILS AND DATA FOR POOLS AND POOL-RELATED EQUIPMENT AND ACCESSORIES ONLY.

DEPTH MARKINGS:

- DEPTH MARKERS ON POOL DECK SUPPLIED AND INSTALLED BY SPC. CONFIRM SPACING WITH PROVINCIAL CODE AND / OR LOCAL BY-LAWS.
- HEIGHT OF MARKERS TO BE 100mm MINIMUM IN CONTRASTING COLOUR AND SLIP RESISTANT.
- UNITS TO BE SHOWN AS 'M', OR AS GOVERNED BY PROVINCIAL CODE AND / OR LOCAL BY-LAWS.
- DEPTH OF POOL AND DEPTH MARKERS ARE TO BE VERIFIED ON SITE BY THE SPC AND POOL CONSULTANT PRIOR TO INSTALLATION.

PIPING DESIGN NOTES:

- ALL PIPING TO BE SCHEDULE 40 PVC (BURIED) AND SCHEDULE 80 (EXPOSED), NSF APPROVED, ASTM #D1785, UNLESS OTHERWISE NOTED.
 - ALL PIPING TO AND FROM HEAT EXCHANGERS SHALL BE CPVC WITHIN 3050mm OF THE EXCHANGER UNIT.
 - ALL VISIBLE PIPING MUST BE LABELED WITH DIRECTIONAL ARROWS & TYPE OF WATER IT CARRIES (i.e. SKIMMERS, MAIN DRAINS, ETC.) IDENTIFICATION AT 3048mm MAXIMUM C/C INTERVALS.
- CLOUR CODE:**
 CHLORINE (LIQUID OR GAS) - YELLOW
 POTABLE WATER - GREEN
 (AS PER ONTARIO REGULATION - P.R.O. 1990, REG. 565, S. 6(4))
- PRESSURE PIPING:
 - MAX. 3.0 m/s (10 FPS)
 - SUCTION PIPING:
 - MAX. 1.8 m/s (6 FPS)
 - GRAVITY PIPING:
 - MAX. 0.9 m/s (3 FPS)
- DRAIN AND SUCTION GRATES FREE OPEN AREAS TO PROVIDE FLOW VELOCITIES NOT TO EXCEED 0.45 m/s (1 1/2 FPS). ALL DRAIN GRATES SHALL BE SIZED FOR FULL PUMP FLOW.
 - STRUCTURAL SUPPORT FOR PIPING AS SPECIFIED BY MANUFACTURER. REFER TO DETAIL SHEETS.

ELECTRICAL NOTES:

- PRIMARY GROUNDING LOOP MUST BE PROVIDED BY CERTIFIED ELECTRICAL CONTRACTOR.
- ALL REINFORCING BAR IN POOL STRUCTURE MUST BE BONDED TO PRIMARY GROUNDING LOOP BY CERTIFIED ELECTRICAL CONTRACTOR.
- ALL METAL POOL FITTINGS AND ACCESSORIES WITHIN 1524mm OF POOL WATER MUST BE BONDED TO PRIMARY GROUNDING LOOP.
- ALL PUMPS SHALL BE WIRED BY CERTIFIED ELECTRICAL CONTRACTOR.
- GROUNDING OF CONCRETE REINFORCEMENT BY CERTIFIED ELECTRICAL CONTRACTOR.

STANDARD RAILINGS:

- ALL RAILINGS, GRAB RAILS, AND GUARD CHAIRS ARE TO BE 38mm O.D. STAINLESS STEEL, 1.65mm WALL THICKNESS; TYPE 304 POLISHED TO #320 GRIT FINISH (ALL LOCATIONS).
- JOINTS TO BE CONTOUR CUT AND FUSION WELDED.
- ALL WELDS TO BE GRIND SMOOTH WITH NO SHARP EDGES OR BURRS.
- RADIUS OF ALL BENDS IS 150mm UNLESS OTHERWISE NOTED.
- ALL VERTICALS TO PENETRATE INTO FLOOR 100mm DEEP.
- PROVIDE BRASS WEDGE ANCHORS C/W STAINLESS STEEL ESCUTCHEON COVERS FOR ALL RAILINGS EXCEPT WHERE NOTED.
- ALL RAILINGS TO HAVE GROUNDING CLIP ATTACHED FOR STANDARD ELECTRICAL CONNECTOR.
- GROUNDING OF ALL RAILINGS SHALL BE BY CERTIFIED ELECTRICAL CONTRACTOR.

BACKWASH DISCHARGE:

- WASTE DISCHARGE FROM ALL POOLS ARE DRAINED TO THE SANITARY SEWER THROUGH A 6" AIR GAP AT THE BACKWASH DRAIN PIT.

PRESSURE TESTING:

- ALL PIPING TO BE PRESSURE TESTED AT 240 kPa FOR 2 HOURS.
- ALL PRESSURE TESTING WITH WATER. TESTING WITH AIR IS NOT PERMITTED.

POOL STRUCTURAL NOTES:

- ALL POOLS ARE DESIGNED TO WITHSTAND ANTICIPATED HYDRAULIC STRUCTURAL LOADING FOR BOTH FULL, AND EMPTY CONDITIONS.

GRANULAR BASE:

- FINAL CONSTRUCTION BENEATH SLABS ON GRADE SHOULD CONSIST OF 200 MM OF UNIFORMLY COMPACTED GRANULAR A UNIFORMLY COMPACTED TO 98 PERCENT OF SPMD. THE MODULI OF SUBGRADE REACTION APPROPRIATE FOR SLAB ON GRADE DESIGN ON THE ABOVEMENTIONED SOILS ARE AS FOLLOWS:
 - PROF-ROLLED EARTH FILL: 18,000 KPA/M
 - CLAYEY SILT TILL: 30,000 KPA/M

FOUNDATION DESIGN:

- FOUNDATION DESIGN IS BASED ON THE FOLLOWING CRITERIA:

SOIL REPORT BY: TARRAPROBE
 DATE OF REPORT: APRIL 1ST, 2021
 REPORT NUMBER: 7-21-0014-01

REFERENCE THE GEOTECHNICAL REPORT FOR SUB GRADE IMPROVEMENT, ENGINEERED BACKFILL GRANULAR MATERIALS SHOULD BE PLACED IN MINIMUM 150mm LAYER LOOSE THICKNESS AND COMPACTED, AS PER SOIL REPORT.

- SOIL BEARING SHALL BE 150 kPa PRIOR TO NEW SOIL REPLACEMENT.
- THE SUBSURFACE CONDITIONS WITHIN THE INVESTIGATED AREA ARE EXPECTED TO COMPRISE OF EXISTING FILL MATERIALS AND TOPSOIL. BASED ON THE FINDINGS OF THE SOIL INVESTIGATION, THE EXISTING FILL IS NOT CONSIDERED SUITABLE FOR CONSTRUCTION OF A SLAB-ON-GRADE STRUCTURE AND SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLY COMPACTED ENGINEERED FILL. TEST PITS MAY BE REQUIRED IN THE SLAB ON GRADE AREA TO DETERMINE THE EXISTING FILL THICKNESS AND TO ASSESS THE SUB-EXCAVATION REQUIREMENTS. ALSO, SOME LOCALIZED WEAK ZONES OF NATIVE OR SUITABLE FILL SOILS MAY BE ENCOUNTERED AT THE DESIGN SUBGRADE FOR THE SLAB THAT SHOULD BE SUB-EXCAVATED AND REMOVED PRIOR TO BACKFILLING FOR CONSTRUCTION AND REPLACED WITH SUITABLE FILL MATERIALS COMPACTED TO A MINIMUM OF 98 PERCENT OF SPMD.
- ALL SOIL, CONCRETE, AND ANY OTHER TESTING WILL BE DONE AT GC'S EXPENSE.
- PROVIDE HYDROSTATIC RELIEF VALVES IN EVERY MAIN DRAIN SUMP AT THE BOTTOM OF POOLS TO RELIEVE HYDROSTATIC PRESSURE.
- CONTRACTOR SHALL VERIFY THAT EXISTING BUILDING FOUNDATIONS WILL NOT BE UNDERMINED BY THE PROPOSED EXCAVATION. A MINIMUM SLOPE OF 1:1 FROM THE BOTTOM OF EXISTING FOOTING SHALL NOT BE UNDERMINED. SHOULD EXCAVATION INFRINGE UPON THIS AREA, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF SHORING. A LICENSED STRUCTURAL ENGINEER HAVING JURISDICTION IN THE PROVINCE WHERE PROJECT IS LOCATED, SHALL BE RETAINED FOR THIS PURPOSE BY THE CONTRACTOR.

CODES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST ISSUES AND AMENDMENTS OF THE FOLLOWING CODES:
 - PROVINCIAL BUILDING CODE
 - PROVINCIAL BUILDING CODE ACT
 - OCCUPATIONAL HEALTH AND SAFETY ACT.
 - PROVINCIAL PLUMBING CODE
 - ELECTRICAL SAFETY AUTHORITY
 - LOCAL BUILDING REGULATIONS AND BY-LAWS
- REQUIREMENTS FOR CONCRETE TO COMPLY WITH CSA A23.3 DESIGN OF CONCRETE STRUCTURES.
- CONCRETE AND REINFORCING STEEL: CAN/CSA A23.4 PRE-CAST CONCRETE MATERIALS AND CONSTRUCTION.
- WHERE CONFLICTS OCCUR BETWEEN THE BUILDING CODE AND MATERIAL CODES, THE BUILDING CODE SHALL GOVERN.

REINFORCEMENT:

- HOOKS AND BENDS SHALL CONFORM TO CAN/CSA A23.4 STANDARDS FOR MINIMUM BEND RADIUS AND EXTENSIONS. LENGTHS GIVEN FOR BENT BARS DO NOT INCLUDE THE RADIUS AND MINIMUM EXTENSION FOR STANDARD HOOKS.
- BAR SHALL BE LAPPED 36 BAR DIAMETERS AT SPLICES UNLESS DETAILED OTHERWISE. NO SPLICES SHALL BE PERMITTED IN SQUARE FOOTINGS.
- PROVIDE CORNER BARS AT ALL INTERSECTIONS OF BEAMS AND WALLS PER 'TYPICAL DETAILS'.
- COVER REQUIREMENTS FOR REINFORCING:
 - A) POOL SLABS: 75mm RE: DETAILS
 - B) POOL WALLS: 75mm RE: DETAILS
- REINFORCING IN SLABS ON GRADE SHALL BE PLACED AT THE CENTER OF THE SLAB, UNLESS NOTED OTHERWISE.

CAST-IN-PLACE CONCRETE:

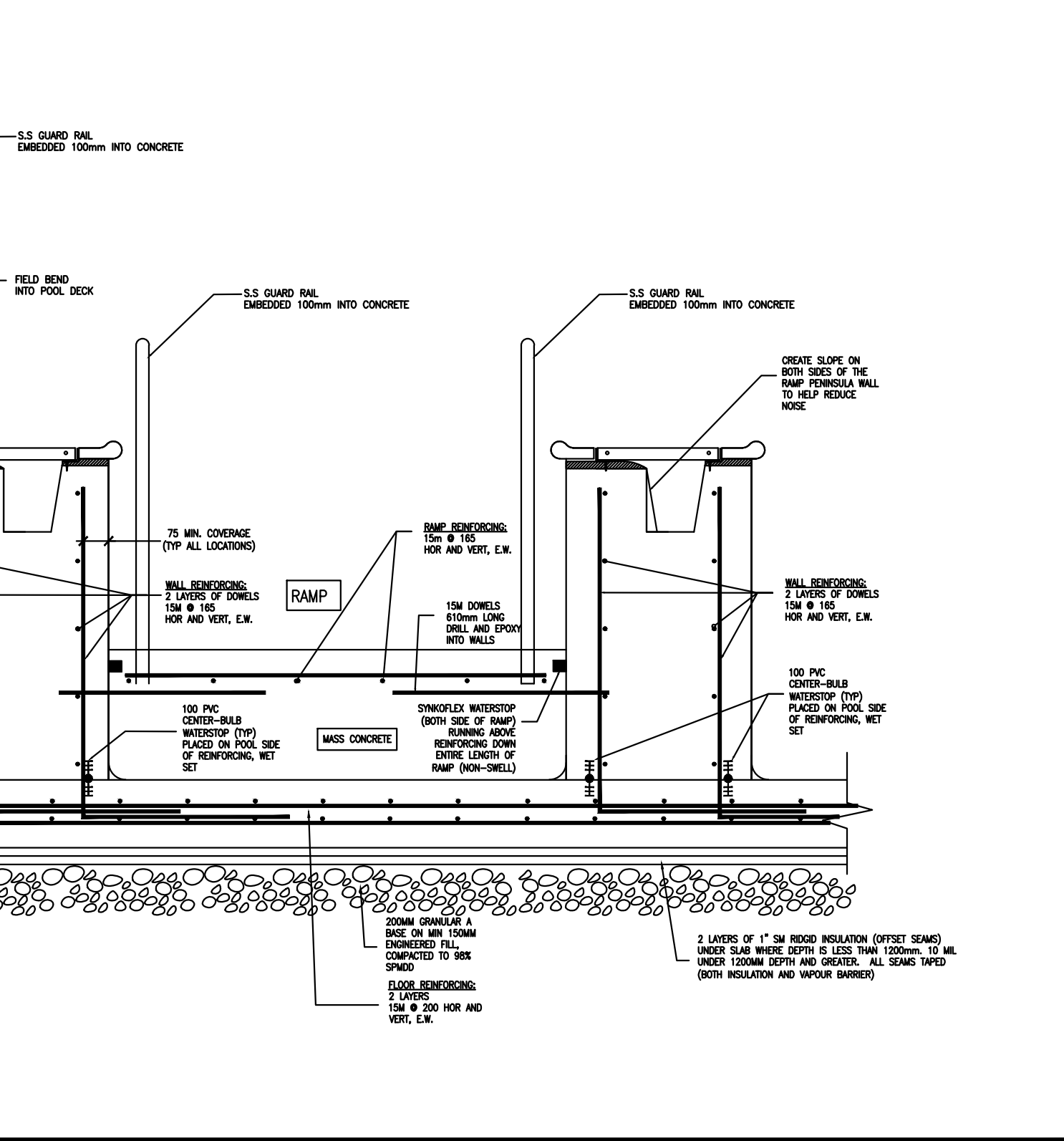
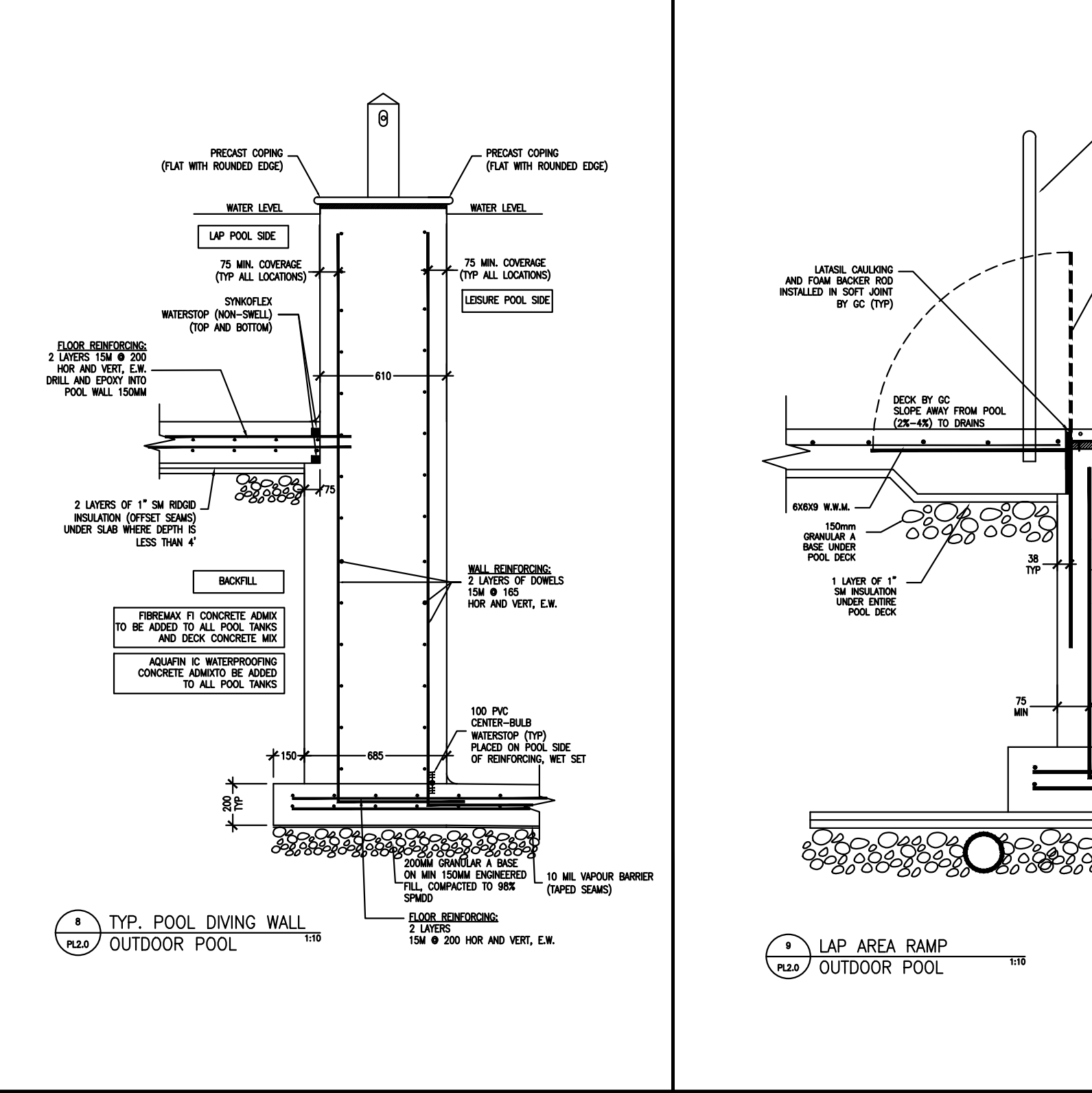
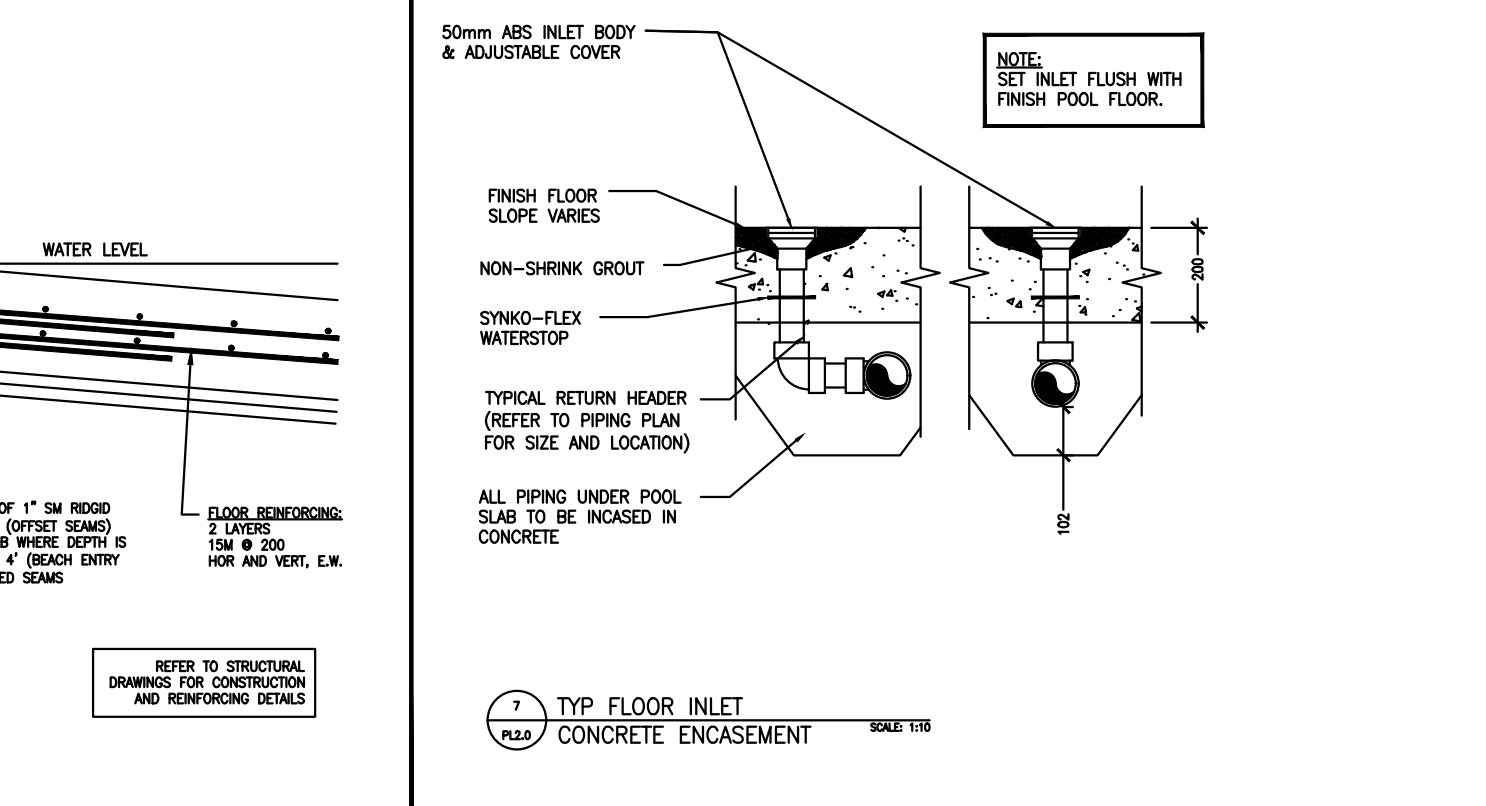
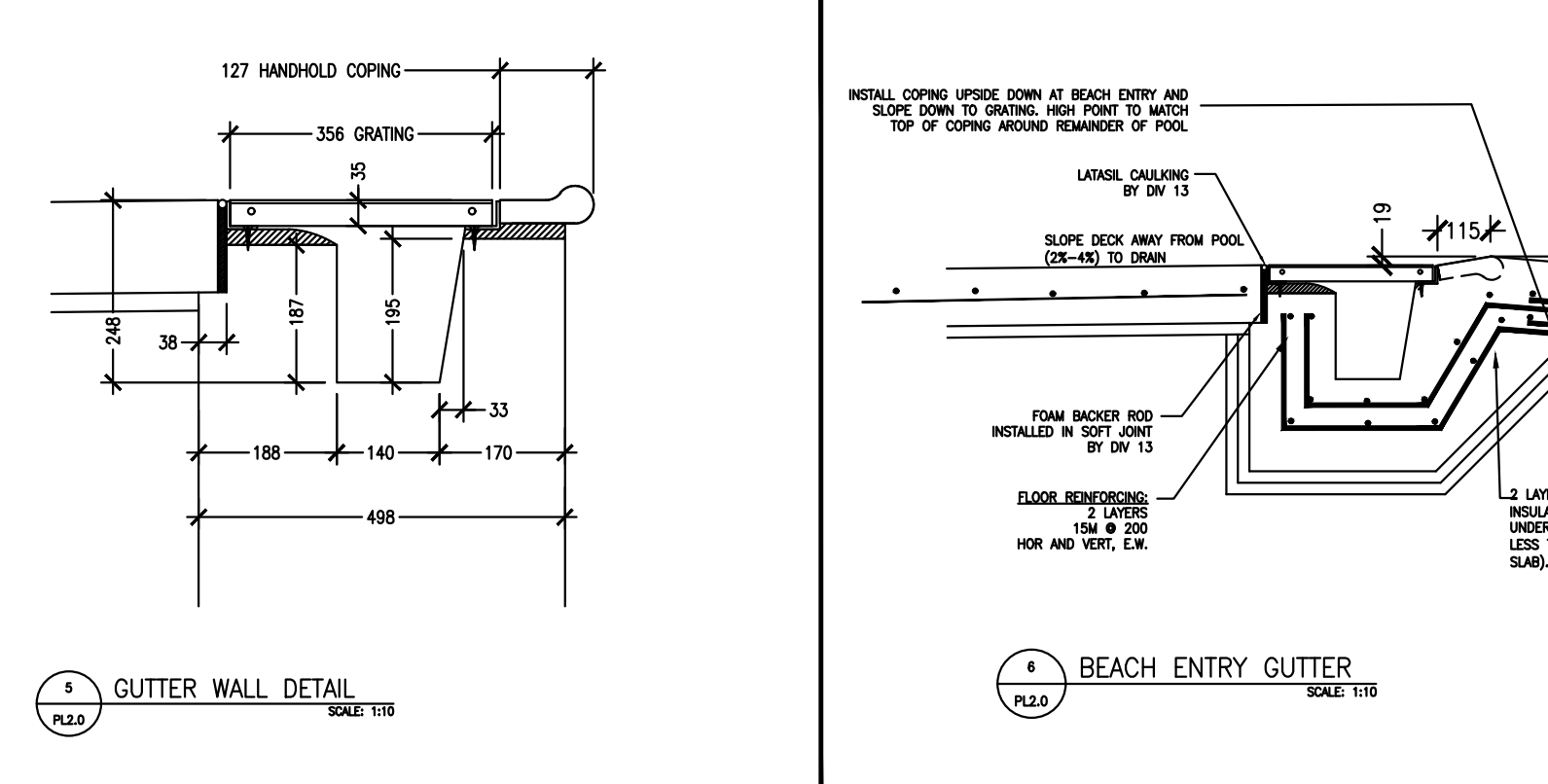
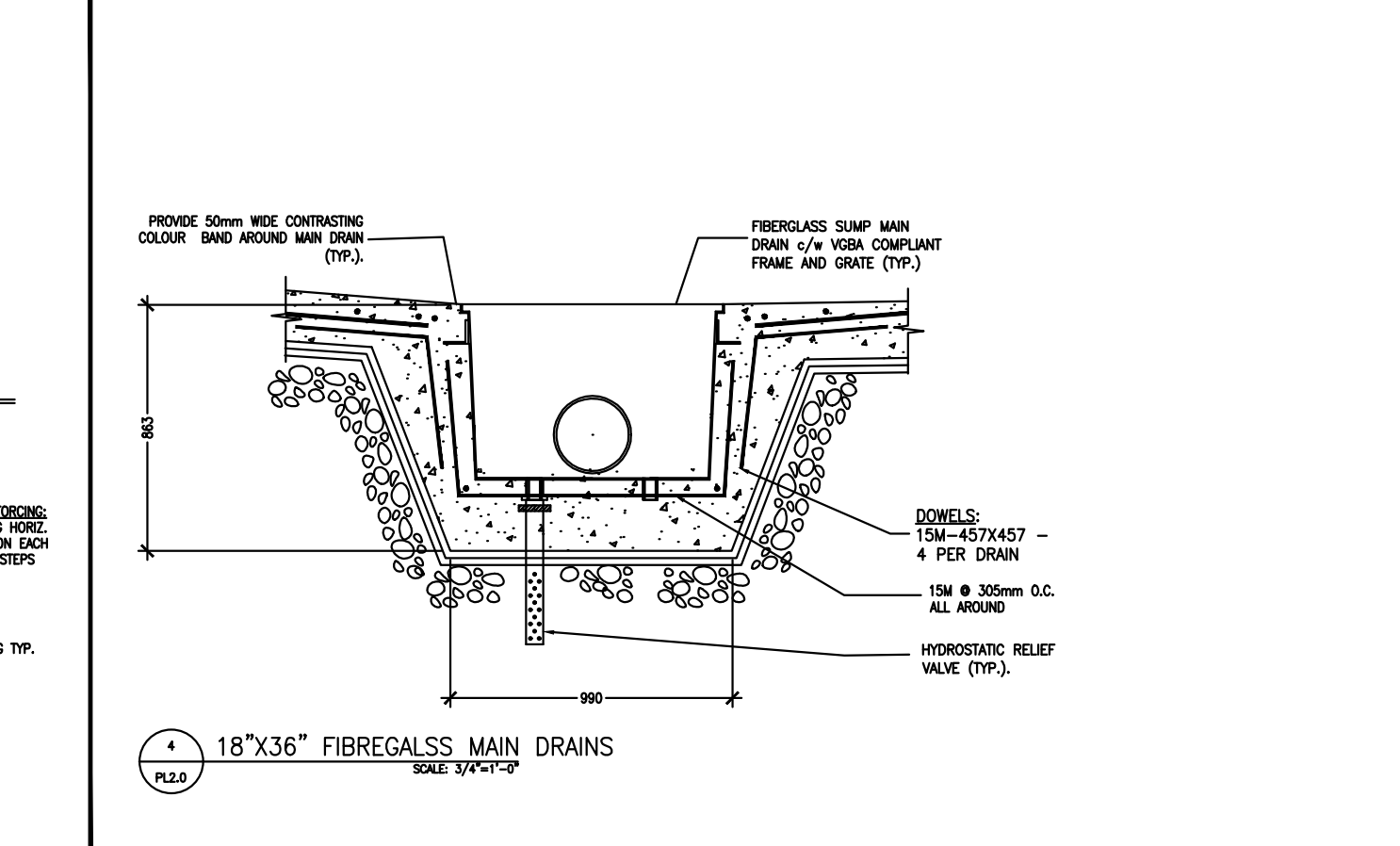
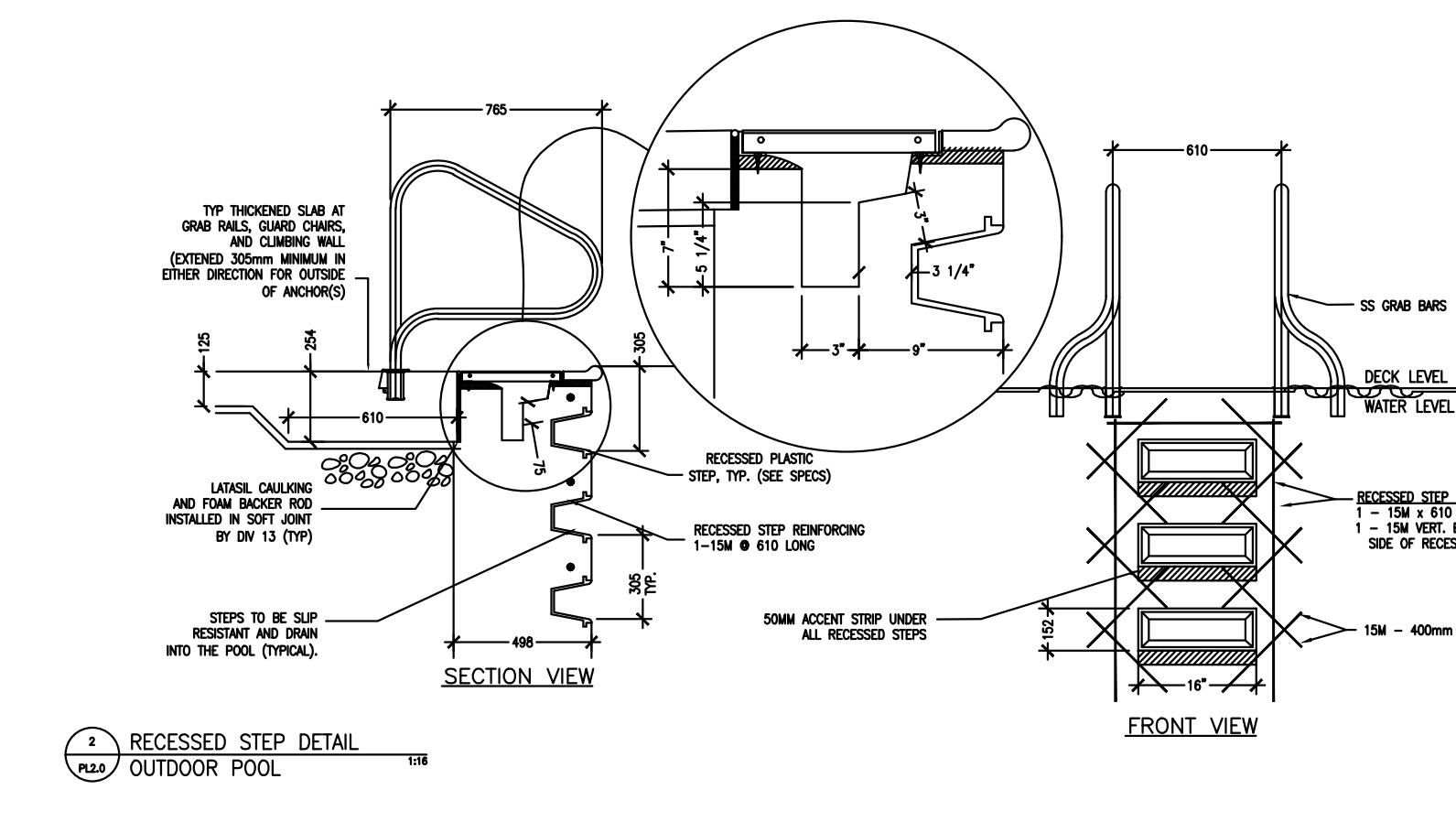
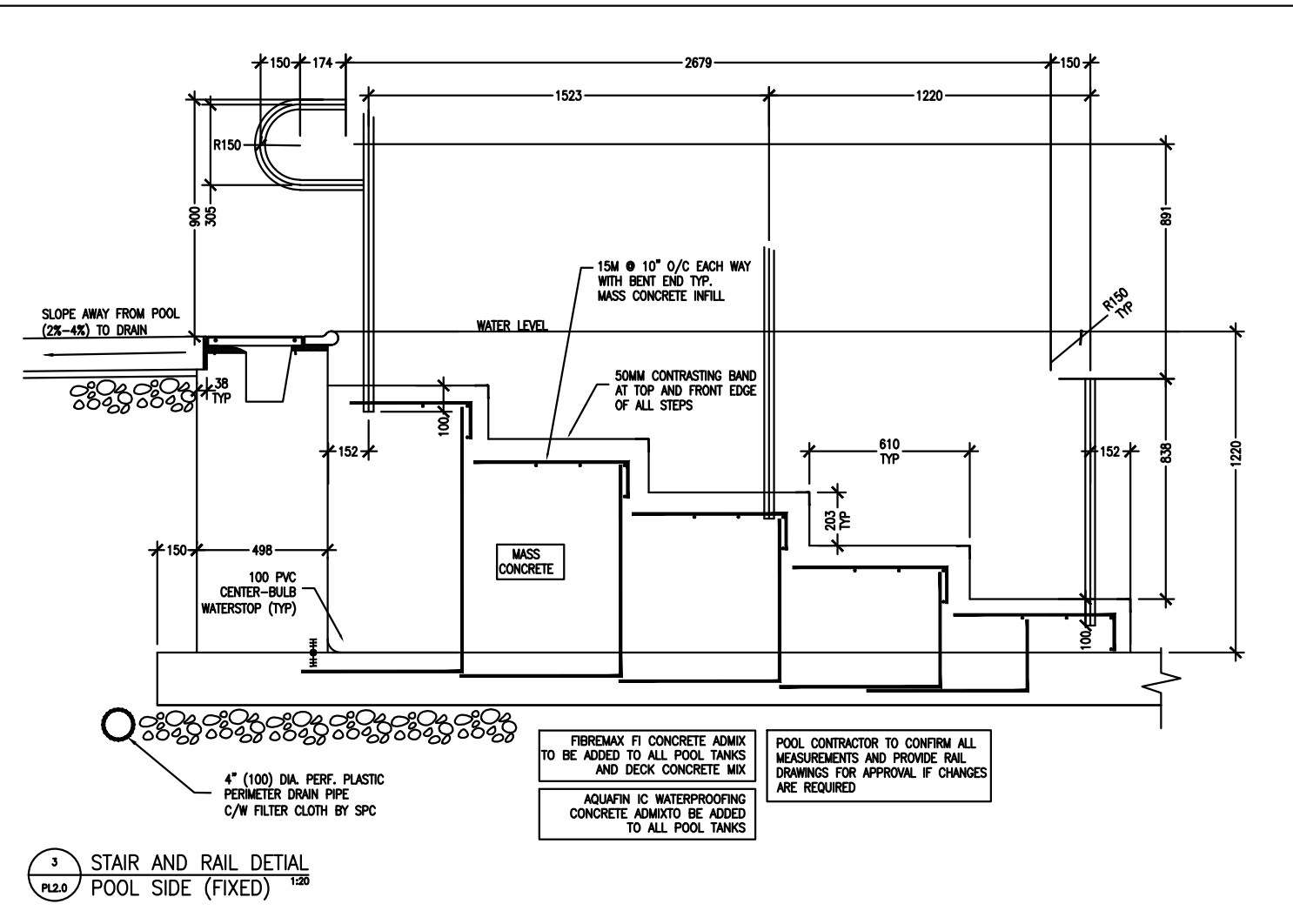
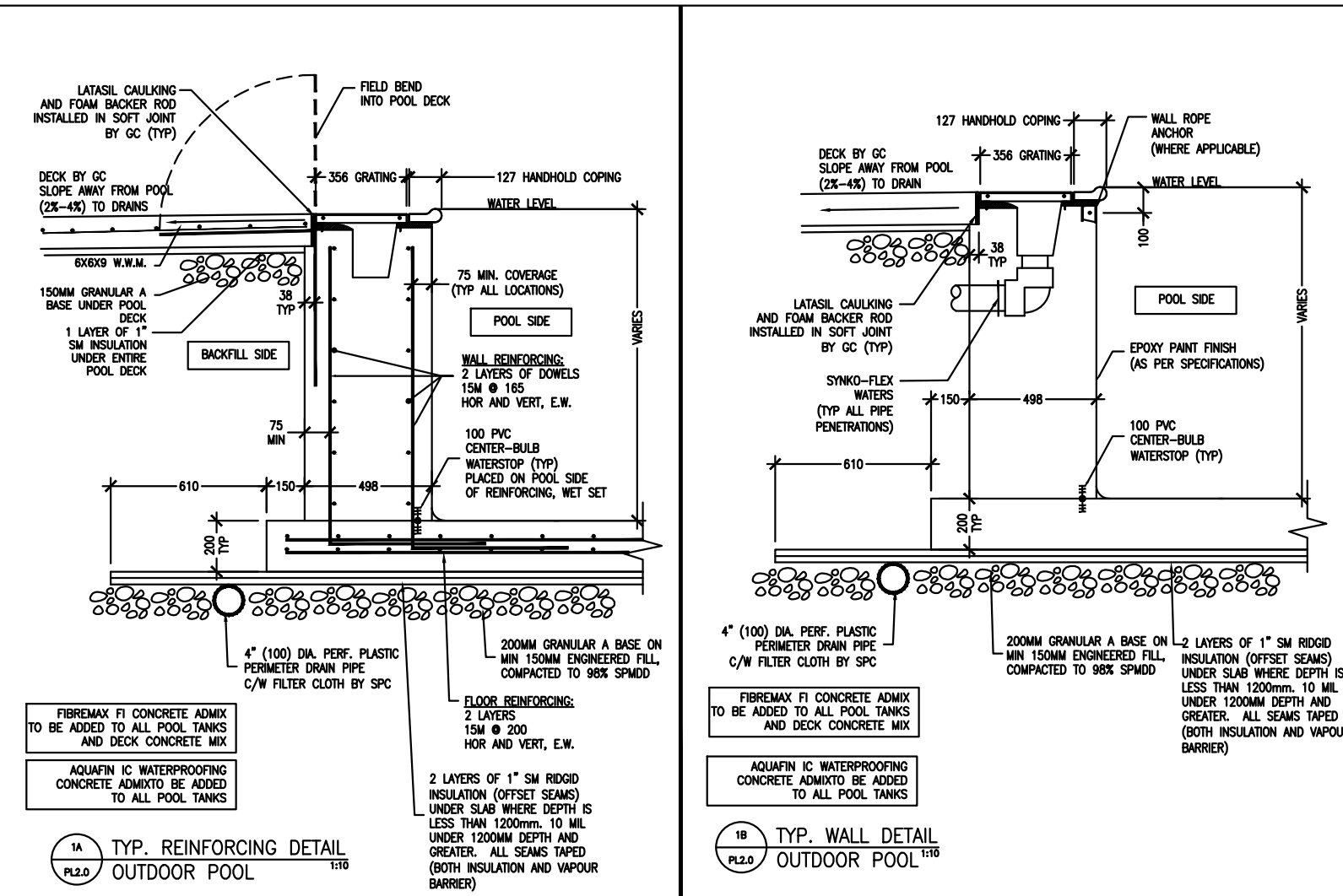
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CSA A23.1 CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION.
- CONCRETE MIX SCHEDULE: PORTLAND CEMENT: ASTM C150, TYPE F-1. PLASTICIZING ADMIXTURE: ASTM C494, TYPE A. CORROSION INHIBITOR ADMIXTURE: WATER TO CEMENT RATIO: 0.50
- 275Kg CEMENT WITH A MAXIMUM OF 65Kg OF FLY ASH
- STRENGTH LISTED SHALL BE MINIMUM DESIGN STRENGTH AT TWENTY EIGHT (28) DAYS OF 30 MPa.
- FIVE TO EIGHT PERCENT (5-8%) AIR ENTRAINMENT SHALL BE ADDED TO CONCRETE MIXES FOR STRUCTURAL ELEMENTS PERMANENTLY EXPOSED TO WEATHER.
- CALCIUM CHLORIDE SHALL NOT BE ADDED TO CONCRETE MIXTURES WITHOUT WRITTEN APPROVAL.
- DO NOT ADD WATER ON SITE.
- MAX SLUMP 75mm BEFORE ADDITION OF PLASTICIZER. PLASTICIZER TO BE SITE ADDED.
- ALL CONCRETE TO BE CONTINUOUSLY WET CURED FOR 14 DAYS

WATER STOPS:

- WATER STOP AT WALL AND FLOOR INTERSECTION SHALL BE 100MM PVC, RIBBED WITH CENTER BULB, TYPE 3A.
- WATER STOP IN FLOOR CONTROL JOINTS SHALL BE 150MM PVC, RIBBED WITH LARGE CENTER BULB, TYPE 4.
- WATER STOP IN WALL CONTROL JOINTS SHALL BE 150MM PVC, RIBBED WITH LARGE CENTER BULB, BY CPD OR DURAJOINT, TYPE 4.

CONTROL JOINTS:

- PROVIDE SAW CUT CONTROL JOINTS IN FLOOR AND WALLS OF POOLS AS SHOWN IN DRAWINGS & PER SPECIFICATIONS.
- SAW CUT SHALL BE FILLED WITH A HIGH PERFORMANCE, ONE COMPONENT, NEUTRAL CURE 100% SILICONE SEALANT WHICH IS COMPATIBLE FOR USE IN WET APPLICATIONS.



CITY OF Burlington

MOUNTAINSIDE POOL REVITALIZATION

CLIENT PROJECT NO. RFP 222-20

AQUA PLANS
 aquatic consultants inc.

PROFESSIONAL ENGINEER
 M. S. SALAME
 May 26 2022
 PROVINCE OF ONTARIO

Filename: H:\Projects\A - Current\MountainSide Pool - Burlington\PL1.2 (MountainSide Pool - Structural Notes & Details).dwg
 Plotted by: Lee Bottoms
 Plot Date: June 21, 2021

NO.	ISSUED FOR	DATE
2	ISSUED FOR TENDER	6/29/21
1	ISSUED FOR PERMIT	5/28/21

DRAWING TITLE:
POOL GENERAL NOTES AND STRUCTURAL DETAILS

DATE:	SCALE:	PROJECT NO:
FEBRUARY, 2021	AS SHOWN	D21001

DRAWN:	CHECKED:
LB	MS

DRAWING NO:
PL1.2