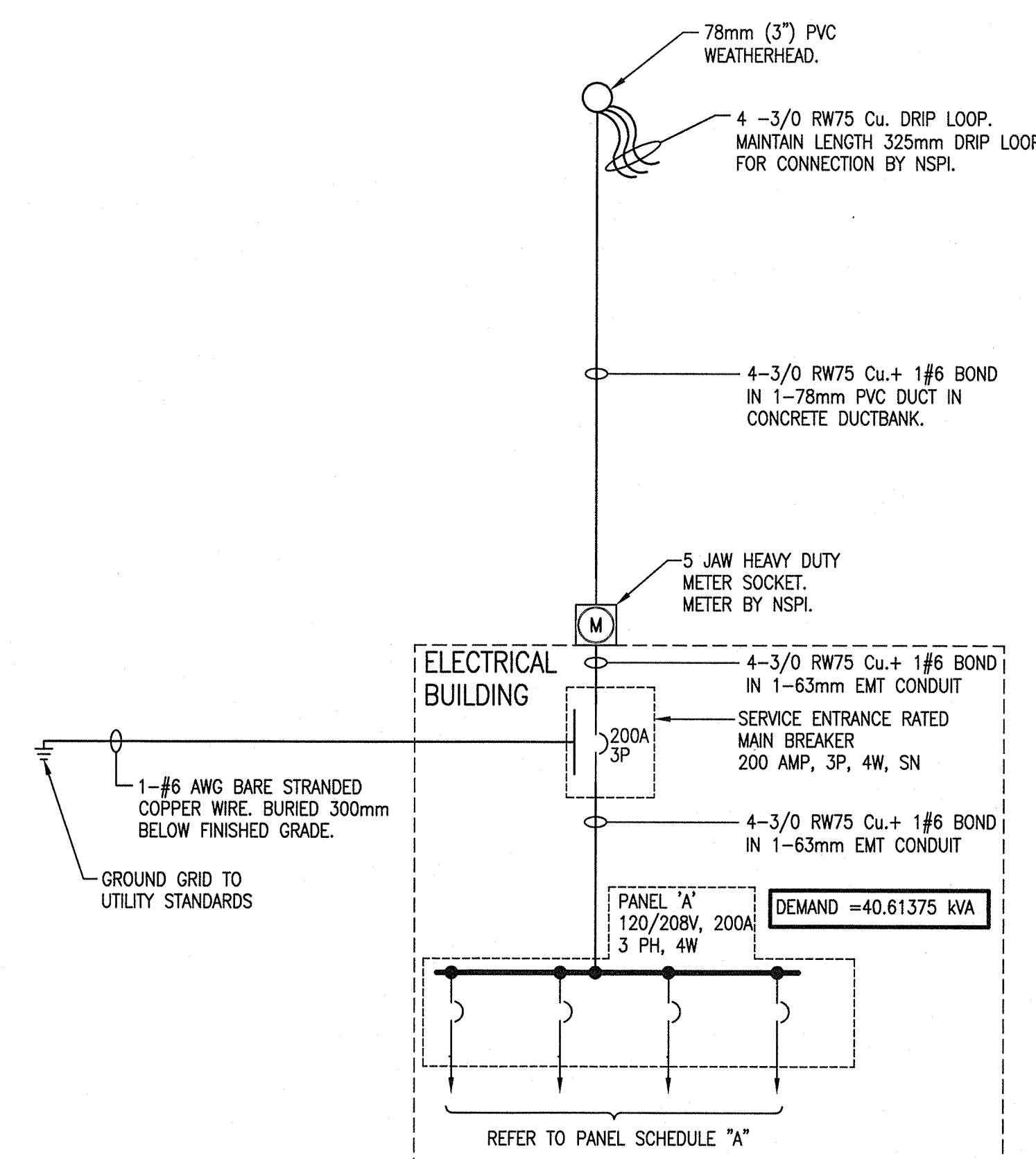


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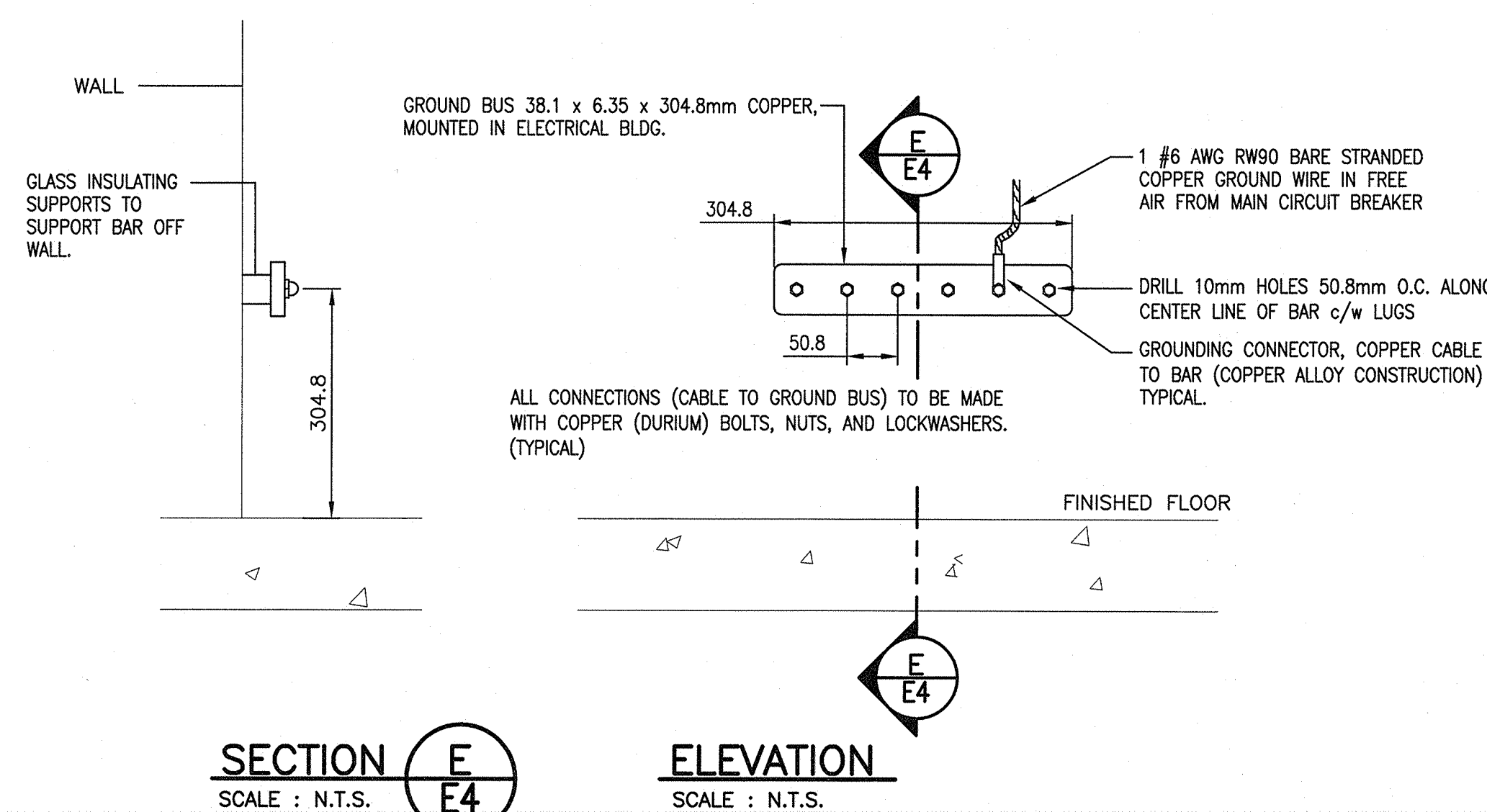
1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. CONDUIT SHALL BE SECURED TO THE POLE WITH CONDUIT STRAPS.
3. ALL CONDUITS MUST BE SWABBED FOR PROTECTION.
4. SPARE CONDUIT TO BE CAPPED AT BOTH ENDS.
5. ALL CONDUITS MUST HAVE A NYLON FISH LINE INSTALLED PRIOR TO CAPPING.
 NYLON FISH LINE - POLYETHYLENE BRAIDED TWINE, 4mm DIAMETER.

CABLE/FEEDER/CONDUIT – SCHEDULE/VOLTAGE DROP/WIRE SIZE CALCULATIONS										
CABLE #	LOADS	LOCATION	BRK. RATING	VOLTAGE	RATED CURRENT	CIRCUIT	DISTANCE METER (FT)	VOLTAGE DROP	FEEDER SIZE	JUNCTION BOX SIZE
①	RECEPTACLE #R1	POWER CENTRE #1	20 AMP	120V	16 AMPS	A-1	46M (151')	3.02V (2.52%)	2/C #8 WITH #10 BOND	N/A
②	RECEPTACLE #R2	POWER CENTRE #1	20 AMP	120V	16 AMPS	A-3	46M (151')	3.02V (2.52%)	2/C #8 WITH #10 BOND	N/A
③	RECEPTACLE #R3	POWER CENTRE #2	20 AMP	120V	16 AMPS	A-5	23M (75')	2.37V (1.98%)	2/C #10 WITH #12 BOND	
④	RECEPTACLE #R4	POWER CENTRE #2	20 AMP	120V	16 AMPS	A-7	23M (75')	2.37V (1.98%)	2/C #10 WITH #12 BOND	
⑤	RECEPTACLE #R5	POWER CENTRE #3	20 AMP	120V	16 AMPS	A-9	74M (243')	3.10V (2.58%)	2/C #6 WITH #8 BOND	200mm SQ. x 100mm Dp EEMAC TYPE 4 CAST PVC
⑥	RECEPTACLE #R6	POWER CENTRE #3	20 AMP	120V	16 AMPS	A-11	74M (243')	3.10V (2.58%)	2/C #6 WITH #8 BOND	200mm SQ. x 100mm Dp EEMAC TYPE 4 CAST PVC
⑦	RECEPTACLE #R7	POWER CENTRE #4	20 AMP	120V	16 AMPS	A-13	45M (148')	2.96V (2.46%)	2/C #8 WITH #10 BOND	
⑧	RECEPTACLE #R8	POWER CENTRE #4	20 AMP	120V	16 AMPS	A-15	45M (148')	2.96V (2.46%)	2/C #8 WITH #10 BOND	
⑨	RECEPTACLE #R9	POWER CENTRE #5	20 AMP	120V	16 AMPS	A-17	122M (404')	3.26V (2.72%)	2/C#4 WITH #6 BOND	200mm SQ. x 100mm Dp EEMAC TYPE 4 CAST PVC
⑩	RECEPTACLE #R10	POWER CENTRE #5	20 AMP	120V	16 AMPS	A-19	122M (404')	3.26V (2.72%)	2/C#4 WITH #6 BOND	200mm SQ. x 100mm Dp EEMAC TYPE 4 CAST PVC
⑪	RECEPTACLE #R11	POWER CENTRE #6	20 AMP	120V	16 AMPS	A-21	82M (269')	3.43V (2.86%)	2/C #6 WITH #8 BOND	
⑫	RECEPTACLE #R12	POWER CENTRE #6	20 AMP	120V	16 AMPS	A-23	82M (269')	3.43V (2.86%)	2/C #6 WITH #8 BOND	
⑬	RECEPTACLE #R13	POWER CENTRE #7	20 AMP	120V	16 AMPS	A-25	42M (138')	2.76V (2.30%)	2/C#8 WITH #10 BOND	200mm SQ. x 100mm Dp EEMAC TYPE 4 CAST PVC
⑭	RECEPTACLE #R14	POWER CENTRE #7	20 AMP	120V	16 AMPS	A-27	42M (138')	2.76V (2.30%)	2/C#8 WITH #10 BOND	
⑮	WHARF AREA LIGHTING	POLES LP1 – LP5	15 AMP	120V	5.8 AMPS	A-12	N/A	N/A	2/C#12 WITH #14 BOND	200mm SQ. x 100mm Dp EEMAC TYPE 4 CAST PVC
⑯	WHARF AREA LIGHTING	POLES LP6, LP7 & LP8	15 AMP	120V	4.6 AMPS	A-12	N/A	N/A	2/C#6 WITH #8 BOND	200mm SQ. x 100mm Dp EEMAC TYPE 4 CAST PVC
⑰	WHARF FLOOD LIGHTING	POLES LP1, LP3 AND LP8	15 AMP	120V	7.1 AMPS	A-14	N/A	N/A	2/C#12 WITH #14 BOND	200mm SQ. x 100mm Dp EEMAC TYPE 4 CAST PVC
⑱	FUEL MONITORING	WHARF	N/A	N/A	N/A	N/A	N/A	N/A	53mm RIGID PVC CONDUIT	N/A
⑲	EXISTING DERRICK	WHARF	110 AMP	208V	40 AMPS	A-6,8	27M (89')	3.28V (1.37%)	2/C#6 WITH #8 BOND	COMBINATION STARTER
⑳	FUEL PUMP	WHARF	15 AMP	120V	12 AMPS	A-10	29M (95')		2/C#12 WITH #14 BOND	WIRED THRU EXISTING EMOORING SHUT-OFF
㉑	FLOATING DOCK POWER (FUTURE)	WHARF	N/A	N/A	N/A	N/A	N/A	N/A	2 X 78mm RIGID PVC CONDUITS	FLOATING DOCK POWER (FUTURE)

NOTES	VOLTS <u>120/208</u>			PANEL <u>A</u>			INTERRUPTING <u>10</u> KA											
	PHASE <u>3</u>			LOCATION <u>ELECTRICAL BLDG.</u>			MAINTS <u>200</u> AMPS											
	WIRE <u>4</u>			FED FROM <u>NSPI 3ø XFMR BANK</u>			GROUNDING <u>SURFACE</u>											
	DESIGNATION			KW			DESIGNATION											
		A	B	C	WIRE SIZE	CIR NO.	BKR	A	B	C	BKR	CIR NO.	WIRE SIZE	A	B	C		
	RECEPTACLE #R1 - POWER CENTRE #1	1.920			12/8/12	1	20A	○				20A	2	14	0.500			TIME CLOCK & CONTACTOR
	RECEPTACLE #R2 - POWER CENTRE #1	1.920			12/8/12	3	20A		○			20A	4	12	1.920			RECEPTACLE #R15 - ELECTRICAL BLDG.
	RECEPTACLE #R3 - POWER CENTRE #2		1.920		12/10/12	5	20A			○		2P	6					DERRICK (7.5 HP)
	RECEPTACLE #R4 - POWER CENTRE #2	1.920			12/10/12	7	20A	○				110A	8	6	4.476			FUEL PUMP
	RECEPTACLE #R5 - POWER CENTRE #3		1.920		12/6/12	9	20A		○			15A	10	12	0.500			WHARF AREA LIGHTING
	RECEPTACLE #R6 - POWER CENTRE #3			1.920	12/6/12	11	20A			○		20A	12	12 - 6		1.529		WHARF FLOOD LIGHTING
	RECEPTACLE #R7 - POWER CENTRE #4	1.920			12/8/12	13	20A	○				15A	14	12	0.861			ELECTRICAL BLDG. - LIGHTS
	RECEPTACLE #R8 - POWER CENTRE #4		1.920		12/8/12	15	20A		○			15A	16	12	0.110			ELECTRICAL BLDG. - RECEPTACLES
	RECEPTACLE #R9 - POWER CENTRE #5		1.920		12/4/12	17	20A			○		15A	18	12	1.000	0.800		ELECTRICAL BLDG. - HEATING
	RECEPTACLE #R10 - POWER CENTRE #5	1.920			12/4/12	19	20A	○				15A	20	12				
	RECEPTACLE #R11 - POWER CENTRE #6			1.920	12/6/12	21	20A		○			20A	22					
	RECEPTACLE #R12 - POWER CENTRE #6				1.920	12/8/12	23	20A			○		24					
	RECEPTACLE #R13 - POWER CENTRE #7	1.920			12/8/12	25	20A	○					26					
	RECEPTACLE #R14 - POWER CENTRE #7		1.920		12/8/12	27	20A			○			28					
						29				○			30					
						31				○			32					
						33				○			34					
						35				○			36					
						37				○			38					
	SPARE					39	15A			○			20A	40				SPARE
	SPARE					41	15A			○			20A	42				SPARE
ø "A" TOTAL <u>14199</u> WATTS																		
ø "B" TOTAL <u>12130</u> WATTS																		
ø "C" TOTAL <u>12247</u> WATTS																		
FEEDER <u>4-3/0 RW75 Cu.+ 1#6 BOND</u>																		
TOTAL LOAD <u>38576</u> KW <u>107.076</u> AMPS @ 208V, 3ø																		



ELECTRICAL SINGLE LINE DIAGRAM



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NOTE: ALL DIMENSIONS ARE IN MILLIMETERS