

1 SITE PLAN
E001 1:4000

DRAWING LIST	
DRAWING NUMBER	TITLE
E001	ELECTRICAL SYMBOL LEGEND, GENERAL NOTES, SITE PLAN, & DRAWING LIST
E101	ELECTRICAL PLAN (1)
E102	ELECTRICAL PLAN (2)
E103	ELECTRICAL PLAN (3)
E104	ELECTRICAL PLAN (4)
E601	ELECTRICAL SINGLE LINE DIAGRAMS (1)
E602	ELECTRICAL SINGLE LINE DIAGRAMS (2)
E801	ELECTRICAL PANEL SCHEDULES (1)
E802	ELECTRICAL PANEL SCHEDULES (2)
E901	ELECTRICAL TYPICAL DETAILS (1)
E902	ELECTRICAL TYPICAL DETAILS (2)

HORIZONTAL UTILITY CLEARANCES	
UTILITY	HORIZONTAL CLEARANCE (m)
OVERHEAD ELECTRICAL (25kV OR LESS)	5
UNDERGROUND ELECTRICAL	1
COMMUNICATIONS (TELEPHONE AND CABLE)	1
UNDERGROUND FIBER OPTIC	5
LOW PRESSURE NATURAL GAS (690 kPa OR LESS)	1
HIGH PRESSURE LINES (GAS OR OTHER)($>$ 690 kPa)	5
SEWER LINES (STORM OR SANITARY)	3
WATER MAINS	3
PRIVATE IRRIGATION	0.3

NOTE:

- CLEARANCES SHOWN ARE SUGGESTED GUIDELINES BASED ON THE ALBERTA ELECTRICAL UTILITY CODE. CONTRACTOR TO CONTACT RESPECTIVE UTILITIES AND ALBERTA FIRST CALL TO CONFIRM. REFER TO AEUC TABLE 7 FOR ADDITIONAL CLEARANCE REQUIREMENTS.
- ALL DISTANCES ARE TO CENTERLINE OF NEAREST UTILITY.

GENERAL NOTES

- ALL ELECTRICAL MATERIALS AND INSTALLATIONS SHOWN AND/OR SPECIFIED SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS AND SHALL COMPLY IN STRICT ACCORDANCE WITH THE LATEST EDITION OF C.S.A. STANDARDS AND THE C.E.C.
- THE CONTRACTOR SHALL OBTAIN AN ELECTRICAL PERMIT PRIOR TO THE START OF THE WORK OF THIS PROJECT AND SUBMIT A COPY OF THE PERMIT TO THE CONSULTANT.
- ALL CONDUIT WORK AND JUNCTION BOXES AS REQUIRED FOR COMPLIANCE WITH LOCAL CODES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- ALL SURFACES SHALL BE RESTORED TO EXISTING CONDITIONS, OR BETTER. THE CONTRACTOR SHALL ALLOW FOR CONFIRMATION OF ALL SEED MIX & AND SEEDING IN ACCORDANCE WITH PARKS CANADA SPECIFICATIONS.
- PROPOSED FACILITIES ARE SCHEMATICALLY SHOWN ON DRAWINGS. FOR CLARIFICATION, REFER TO COORDINATES LISTED AND OFFSETS TO ACTUAL ALIGNMENTS.
- CONTRACTOR SHALL BE AVAILABLE AND PRESENT FOR ALL COMMISSIONING & TESTING.
- CONTRACTOR TO OBTAIN AND OR CONFIRM CROSSING PERMITS HAVE BEEN ESTABLISHED. TEMPORARY CROSSING PERMITS MUST BE IN PLACE BEFORE HYDROVACING, TRENCHING, OR BACKFILLING IN AREAS OF BURIED PIPELINES OR UTILITIES.
- ESTABLISH EXACT LOCATIONS OF EXISTING BURIED UTILITIES OR SERVICES. THE CONTRACTOR SHALL CALL ALBERTA ONE CALL AND THE RESPECTIVE UTILITIES TO LOCATE AND MARK EXISTING UNDERGROUND UTILITIES. DAMAGE TO ANY UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. HYDROVAC ANY POTENTIAL CONFLICT POINTS. REPAIR SURFACE TO ORIGINAL CONDITION OR BETTER.
- SUBMIT TO THE ENGINEER SHOP DRAWINGS FOR THE FOLLOWING MATERIAL:
 - ALL DISTRIBUTION EQUIPMENT (ENCLOSURES, PANELS, CONTACTORS, PEDESTALS, ETC.)
 - ALL CABLES, CONDUITS, AND CONNECTORS
- THE CONTRACTOR SHALL KEEP AN ACCURATE COMPLETE SET OF RECORD DRAWINGS AND UPON COMPLETION OF THE WORK SUBMIT THESE DRAWINGS TO THE ENGINEER.
- THE ELECTRICAL INSTALLATION SHALL BE COMPLETELY TESTED, INCLUDING, BUT NOT LIMITED TO; MEGGER AND GROUND TESTING TO BE CERTIFIED BY A QUALIFIED LICENSED ELECTRICIAN DEMONSTRATING TO THE SATISFACTION OF THE CONSULTANT THAT THE EQUIPMENT AND SYSTEM INSTALLED PERFORMS IN THE MANNER INTENDED. THE CONSULTANT SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF THE CERTIFICATION TESTING.
- TRENCH AND INSTALL SPECIFIED CONDUITS AT THE SPECIFIED SETBACK. CONTRACTOR TO PLACE MULTIPLE CONDUITS IN A COMMON TRENCH WHENEVER POSSIBLE.
- ALL BASES SHALL BE PRE-CAST UNLESS SPECIFIED OTHERWISE.
- SPLICE CABLES/WIRE IN HAND-HOLES OR JUNCTION BOXES ONLY. NO BURIED SPLICES PERMITTED.
- IDENTIFY CONDUCTOR CIRCUIT NUMBERS IN ALL ACCESSIBLE LOCATIONS.
- SCOPE OF WORK IS LIMITED TO LAKE LOUISE CAMPGROUND SITES 1-34, SITES 72-97, SITES 136-189, SANITARY DUMPING STATION, AND WASHROOM BUILDINGS A, B AND D.
- ABBREVIATIONS:
 - U/G = UNDERGROUND
 - O/H = OVERHEAD
 - GND = GROUNDED
 - DIA = DIAMETER
 - C/W = COMPLETE WITH
 - EOR = EDGE OF ROADWAY
 - S/W = SIDEWALK
 - CDP = CENTRAL DISTRIBUTION PANEL
 - MDP = MAIN DISTRIBUTION PANEL
 - CB = CIRCUIT BREAKER

SYMBOL LEGEND

-----	NEW U/G 240V POWER CIRCUIT
-----	NEW U/G 600V POWER CIRCUIT
-----	EXISTING U/G POWER CIRCUIT
-----	EXISTING U/G 25kV PRIMARY POWER CIRCUIT BY FORTISALBERTA
-----	EXISTING O/H POWER LINE
☑ #	NEW 50A TRAILER SITE SERVICE PEDESTAL AND SITE NUMBER
☒	EXISTING TRAILER SITE SERVICE PEDESTAL
☒	EXISTING TRAILER SITE SERVICE PEDESTAL AND BASE TO BE REMOVED
P/S	NEW OR EXISTING TRANSFORMER C/W BASE AND GROUNDING BY FORTISALBERTA
☐	EXISTING PANELBOARD ENCLOSURE
☒	EXISTING PANELBOARD ENCLOSURE TO REMOVED
☒	NEW PAD MOUNTED COMBINATION 347/600V MDP AND 150kVA 600V TO 120/240V 1 ϕ UNIT SUBSTATION WITH 120/240V CDP C/W BASE
☒	NEW PAD MOUNTED 3 ϕ STEP DOWN UNIT SUBSTATION WITH 120/208V CDP C/W BASE (SEE PLAN FOR KVA RATING)
☐	NEW PAD MOUNTED 150kVA 600V TO 120/240V 1 ϕ UNIT SUBSTATION WITH 120/240V CDP C/W BASE
●	EXISTING UTILITY WOOD POLE



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Legend

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Notes

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C ISSUED FOR TENDER	BL	RD	18.07.30
B ISSUED FOR TENDER REVIEW	BL	TS	18.07.05
A ISSUED FOR 60% REVIEW	BL	TS	18.04.06
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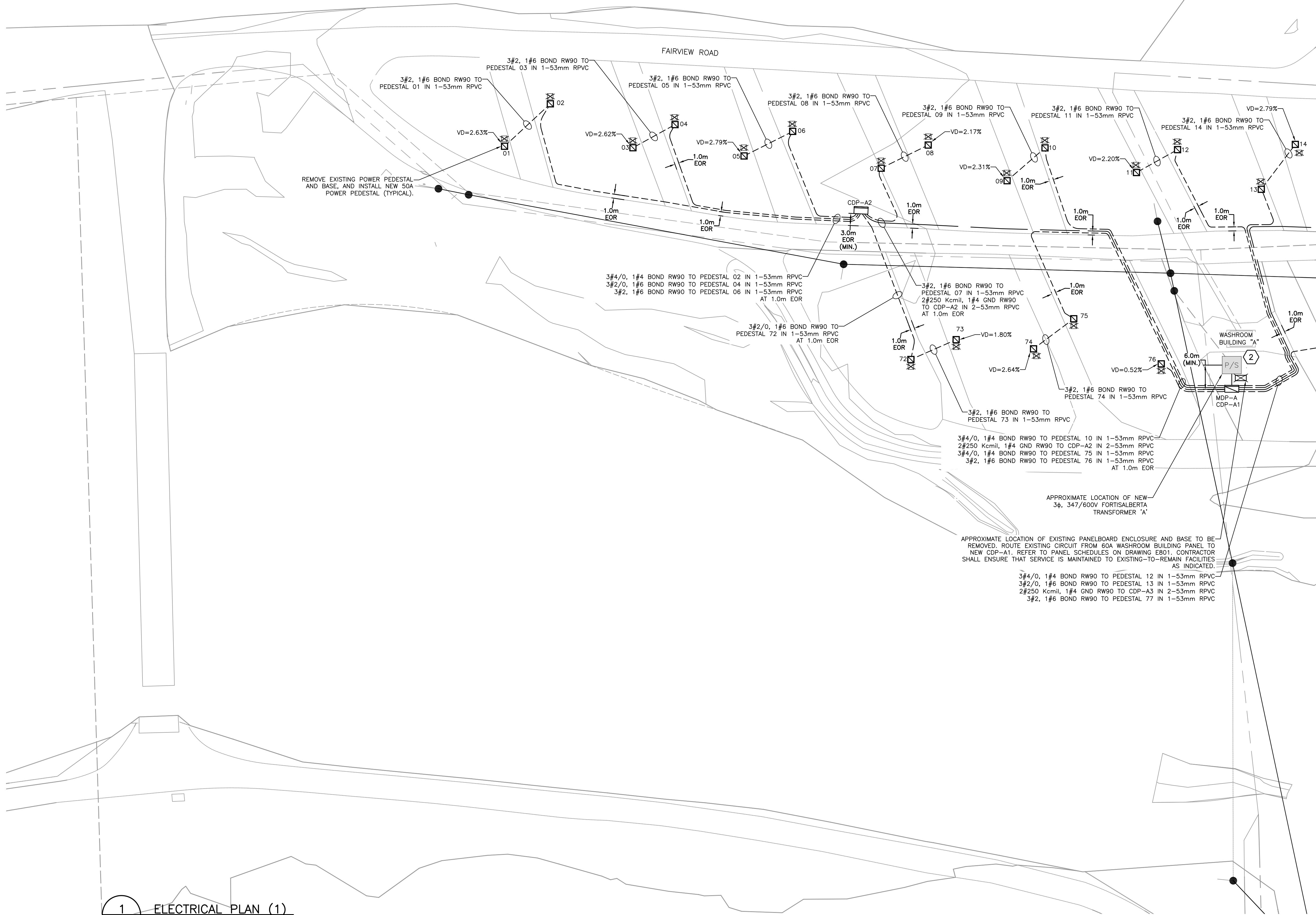
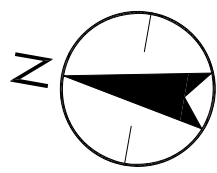
Parks Canada
Parks Canada
PARKS CANADA
LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

Title

ELECTRICAL SYMBOL LEGEND,
GENERAL NOTES, SITE PLAN,
& DRAWING LIST

Project No. 113678159	Scale 1:4000 0 40 120 200m
Drawing No.	Sheet Revision

E001 1 of 11 C/0



MATCHLINE – FOR CONTINUATION SEE DWG. E-102



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- Legend
- 2 6#4/0, 2#3 GND RW90 IN 2-53mm DB2 FROM NEW 347/600V FORTISALBERTA TRANSFORMER TO NEW COMBINATION 600V MDP AND 600V-120/240V UNIT SUBSTATION WITH 120/240V CDP. COORDINATE CONNECTION WITH FORTISALBERTA.

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- Notes
- COORDINATE DISTRIBUTION CABINET UNIT SUBSTATION LOCATIONS WITH TREE LAYOUT AND EXISTING FACILITIES TO MAINTAIN MINIMUM CLEARANCES.
 - FOLLOW COMMON TRENCH AND AVOID DISTURBANCE TO ROADWAYS AND TREES.

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Parks Canada
Parks Canada
LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

Title
ELECTRICAL PLAN (1)

Project No.	Scale
113678159	1:500
Drawing No.	Sheet
E101	2 of 11
	Revision
	C/0



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1 DEFLECT TRENCH TO MAINTAIN MAXIMUM CLEARANCE
AROUND EXISTING FORTISALBERTA WOOD POLE.

2 6#4/0, 2#3 GND RW90 IN 1-53mm DB2 FROM NEW 3 ϕ , 347/600V FORTISALBERTA TRANSFORMER TO NEW COMBINATION 600V MDP AND 600V-120/240V UNIT SUBSTATION WITH 120/240V CDP. COORDINATE CONNECTION WITH FORTISALBERTA.


Notes

1. COORDINATE DISTRIBUTION CABINET UNIT SUBSTATION LOCATIONS WITH TREE LAYOUT AND EXISTING FACILITIES TO MAINTAIN MINIMUM CLEARANCES.
2. FOLLOW COMMON TRENCH AND AVOID DISTURBANCE TO ROADWAYS AND TREES.

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 Parks Canada
Parcs Canada

PARKS CANADA

LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

Title

ELECTRICAL PLAN (2)

Project No. _____

113678159

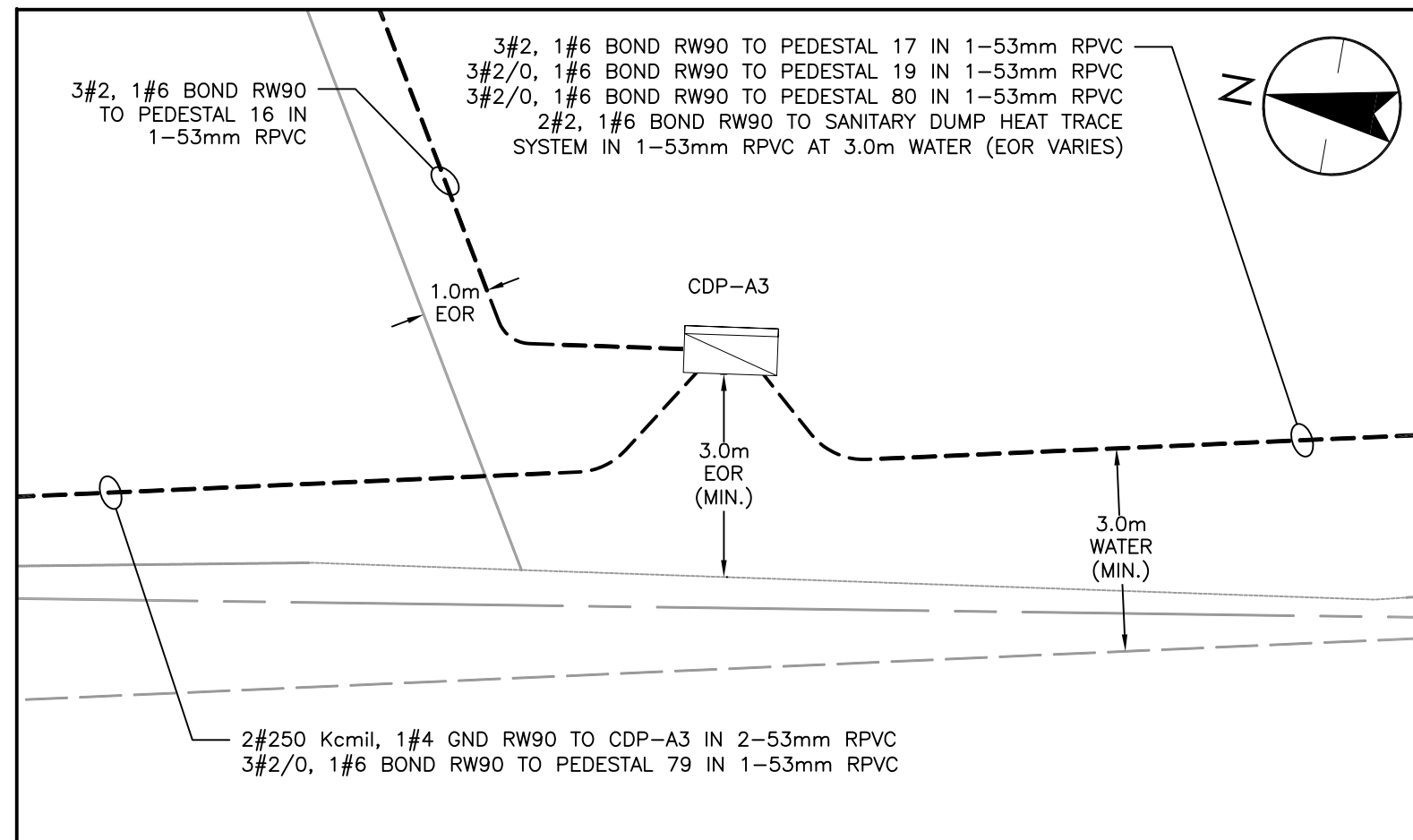
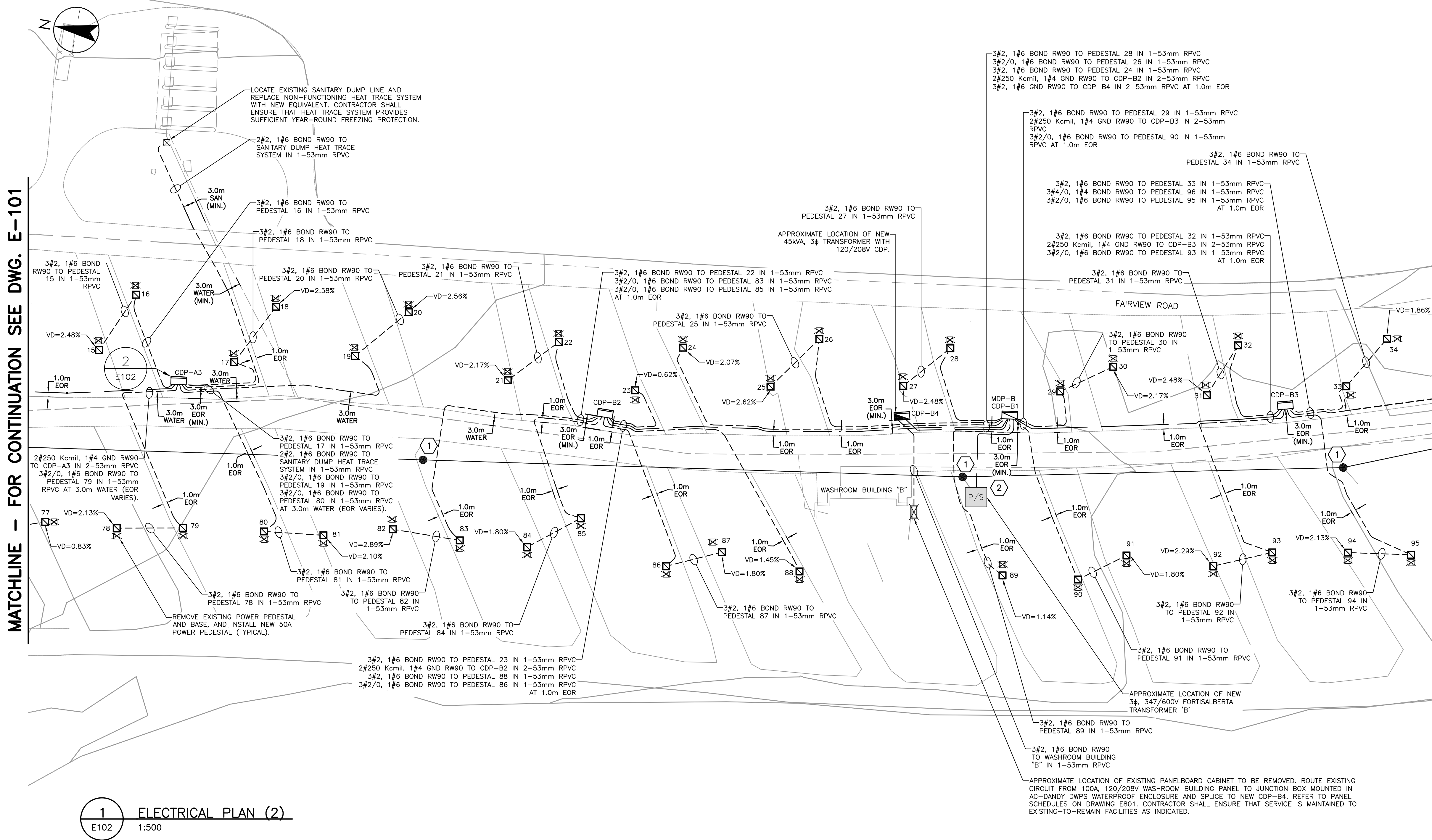
Scale

15

E102

3 of 11

C/O



2 CDP-A3 ALIGNMENT DETAIL
E102 1:100

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Notes

- COORDINATE DISTRIBUTION CABINET UNIT SUBSTATION LOCATIONS WITH TREE LAYOUT AND EXISTING FACILITIES TO MAINTAIN MINIMUM CLEARANCES.
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PARKS CANADA

LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

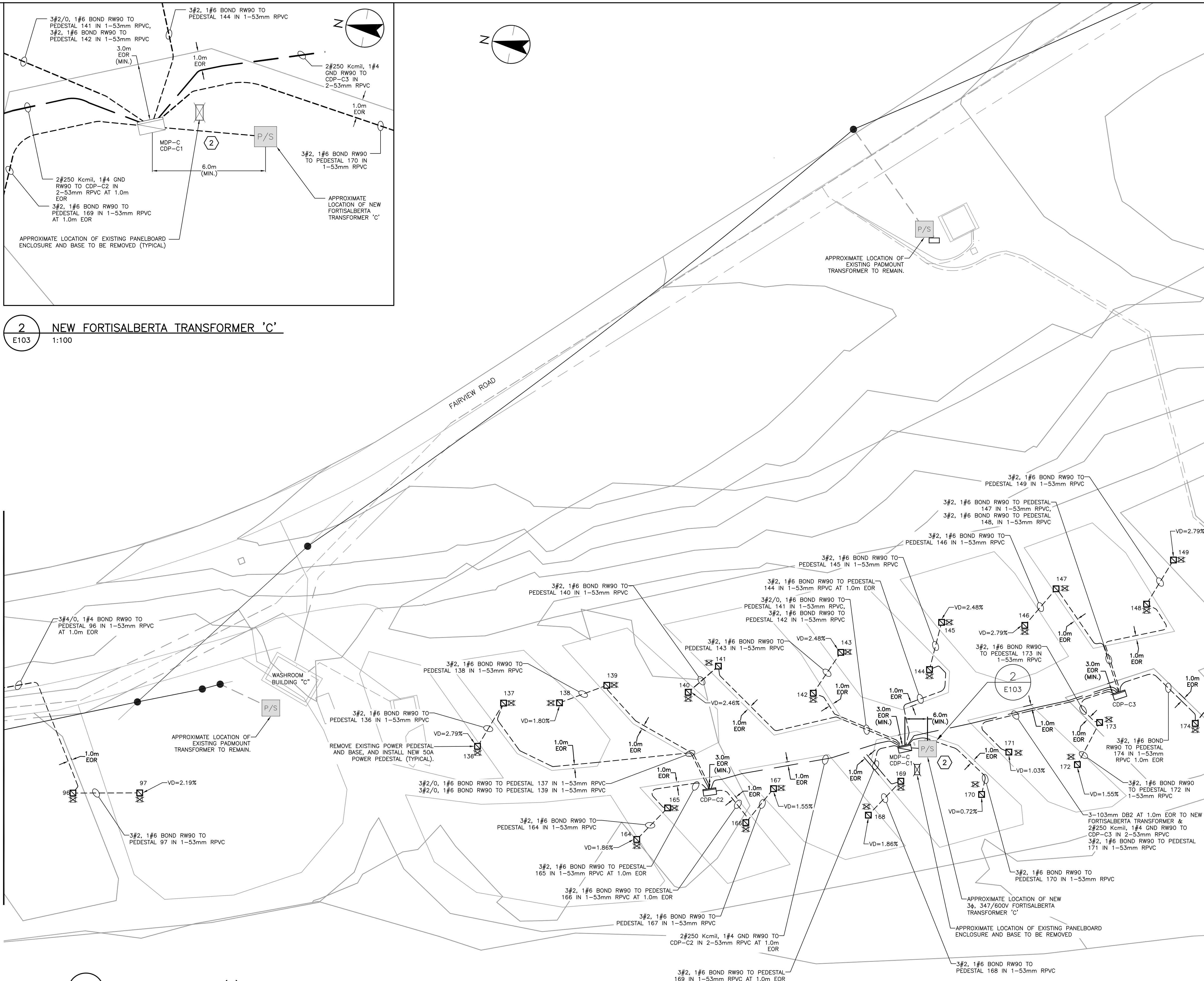
Title

ELECTRICAL PLAN (3)

Project No.	Scale
113678159	1:500
Drawing No.	Sheet
E103	4 of 11
	Revision
	C/0

MATCHLINE - FOR CONTINUATION SEE DWG. E-102

MATCHLINE - FOR CONTINUATION SEE DWG. E-104



2 NEW FORTISALBERTA TRANSFORMER 'C'
E103 1:100

1 ELECTRICAL PLAN (3)
E103 1:500



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Legend

- 2 6#4/0, 2#3 GND RW90 IN 2-53mm DB2 FROM NEW
3ø, 347/600V FORTISALBERTA TRANSFORMER TO NEW
COMBINATION 600V MDP AND 600V-120/240V UNIT
SUBSTATION WITH 120/240V CDP. COORDINATE
CONNECTION WITH FORTISALBERTA.

Notes

1. COORDINATE DISTRIBUTION CABINET UNIT SUBSTATION LOCATIONS WITH TREE LAYOUT AND EXISTING FACILITIES TO MAINTAIN MINIMUM CLEARANCES.
2. FOLLOW COMMON TRENCH AND AVOID DISTURBANCE TO ROADWAYS AND TREES.

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PARKS CANADA
LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

Title
ELECTRICAL PLAN (4)

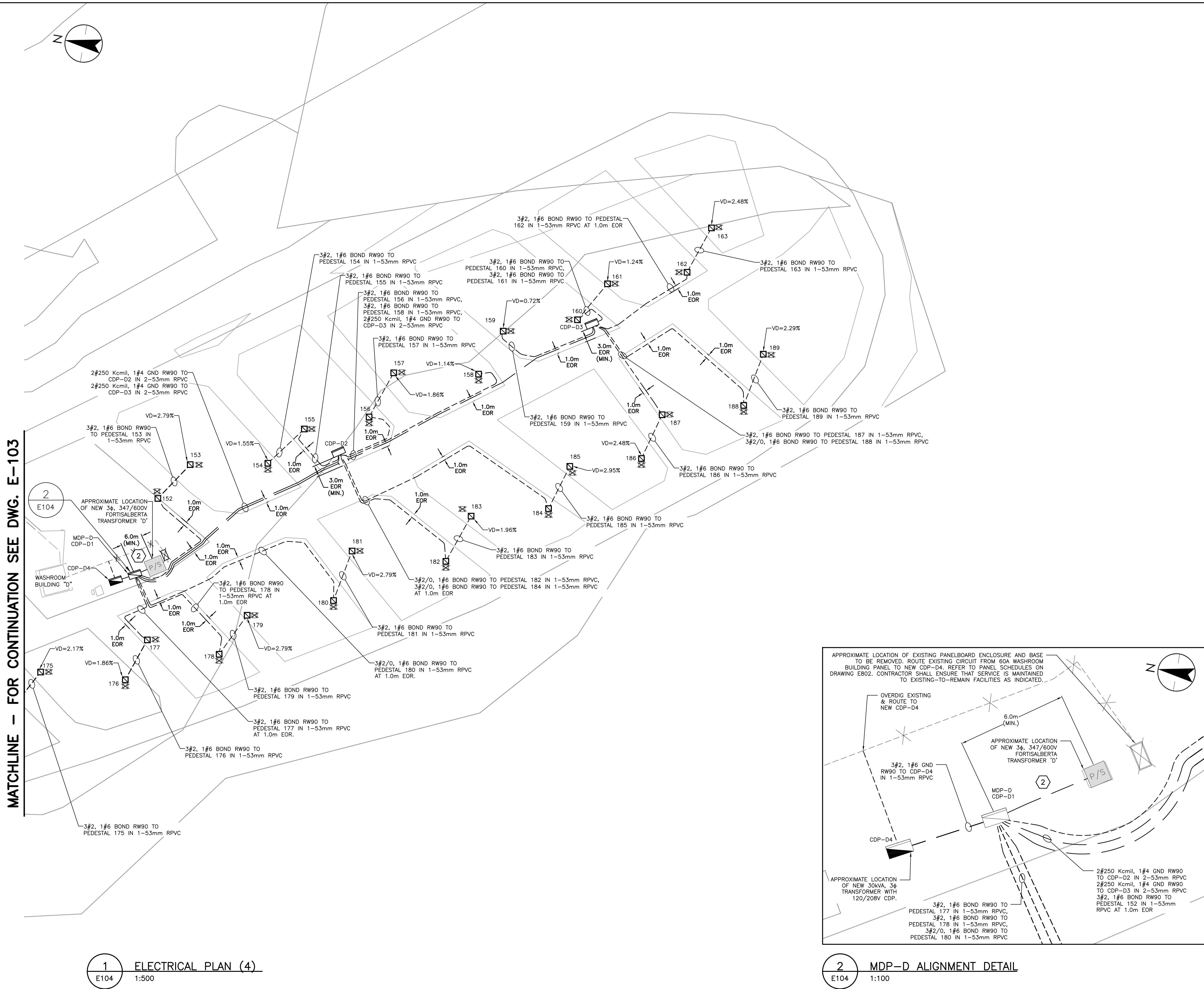
Project No. 113678159

Scale 1:500

A graphic scale bar with markings at 0, 5, 15, and 20 units. The bar is divided into segments of varying lengths, with the first segment being the shortest and the last being the longest. The segments are labeled with their respective values: 0, 5, 15, and 20. The scale is 1:500.

Drawing No.	Sheet	Revision
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E104 5 of 11 C/0



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2018/07/30 2:12 PM By: Ali Hasan

ORIGINAL SHEET - ISO A1

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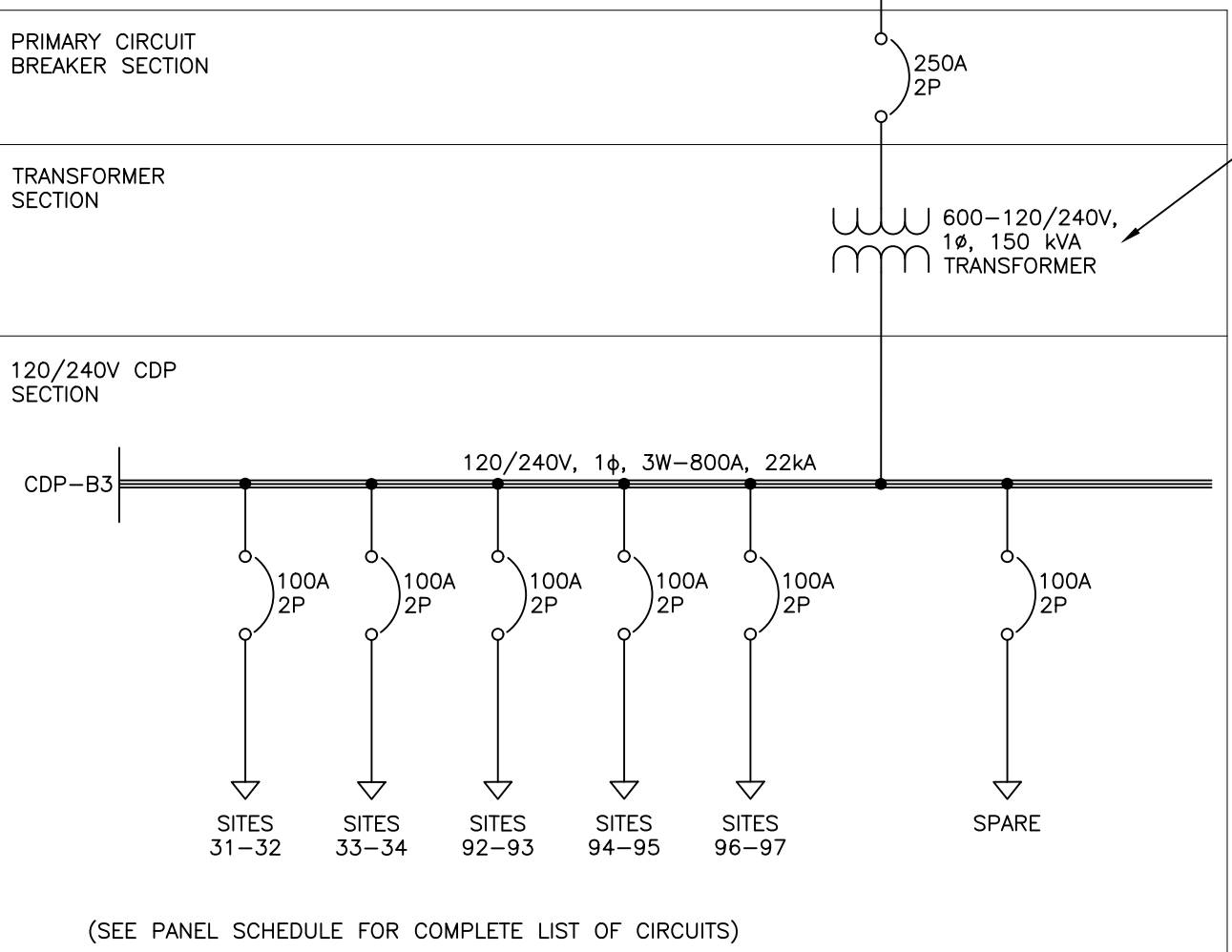
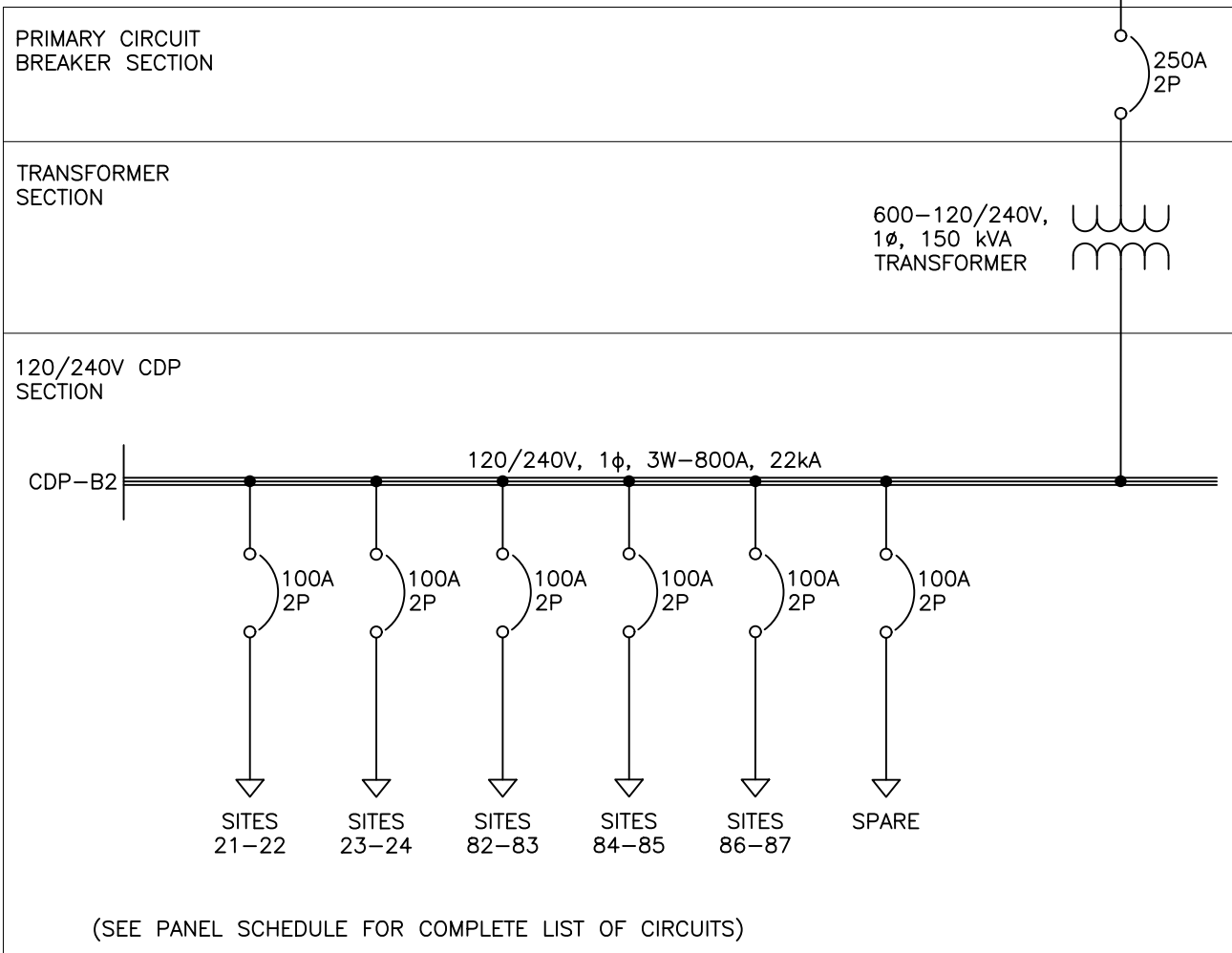
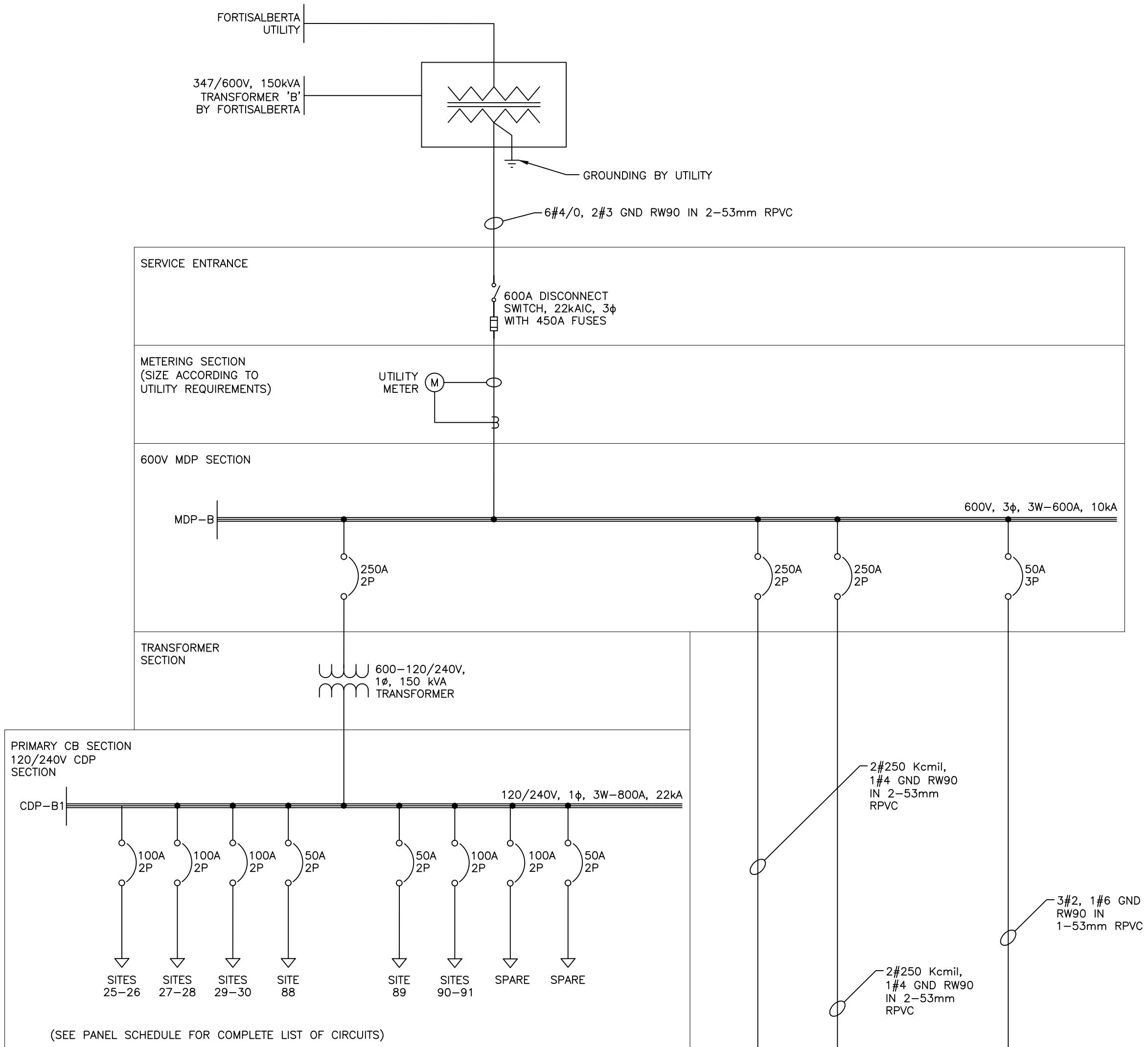
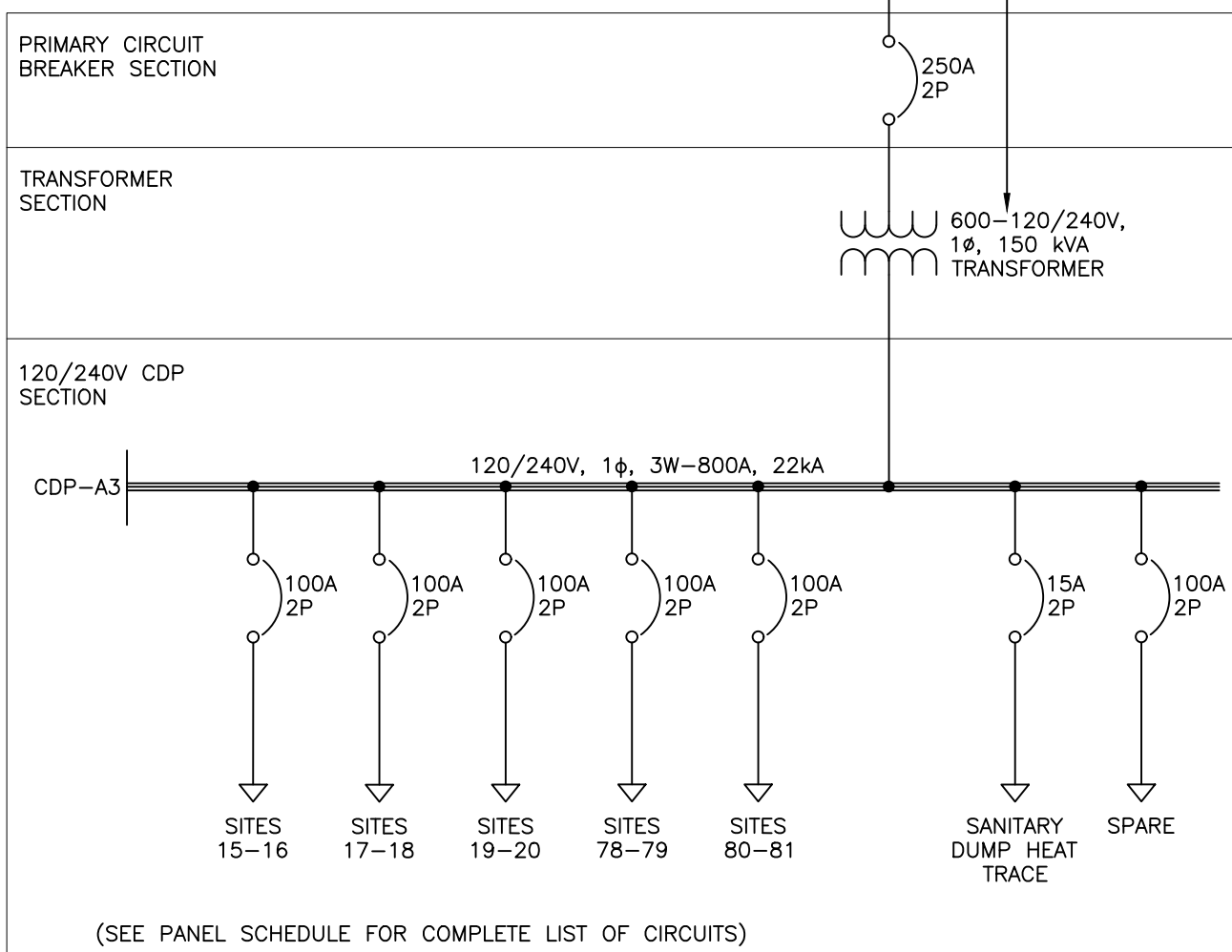
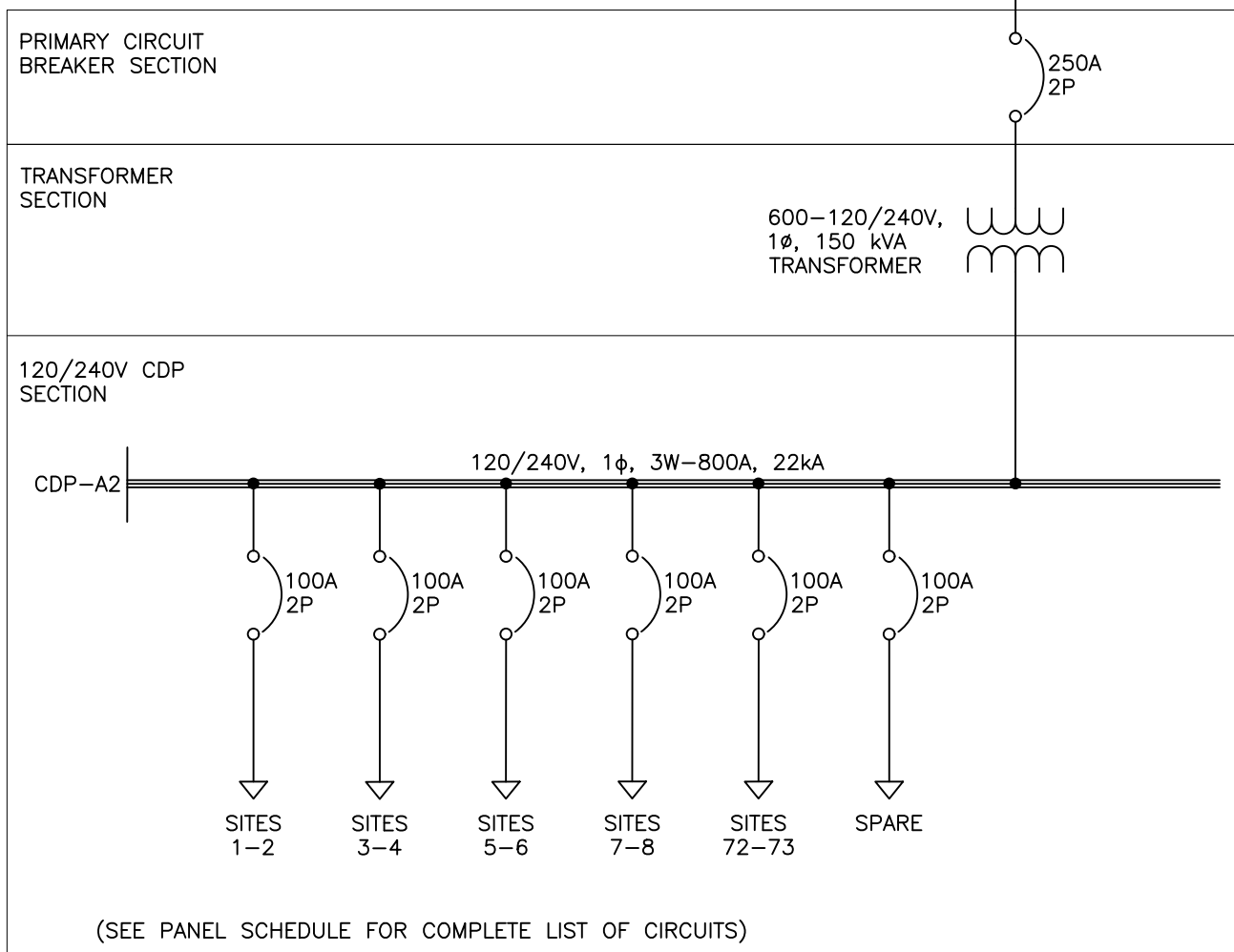
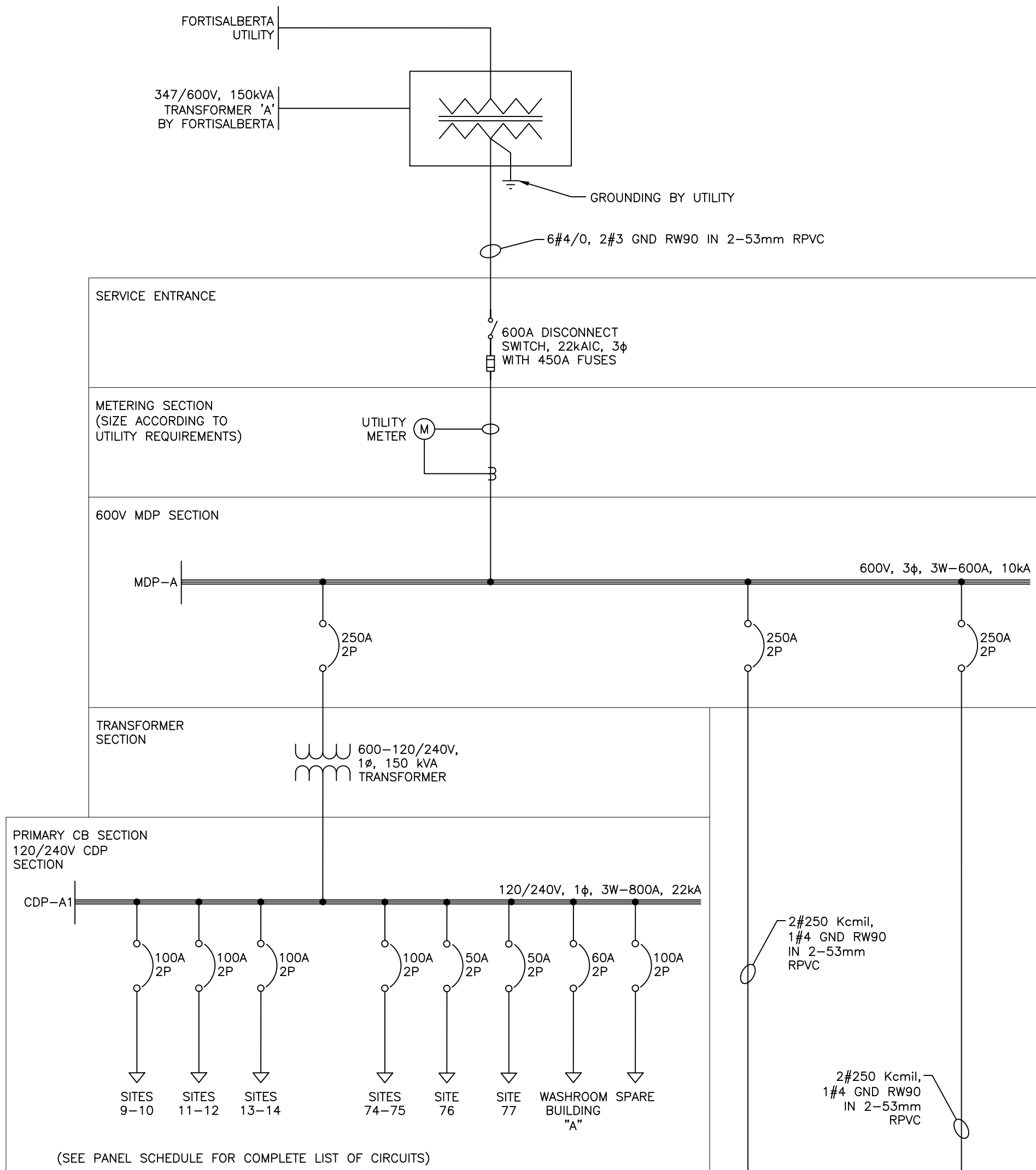
Client/Project



PARKS CANADA
LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

Title
ELECTRICAL SINGLE LINE DIAGRAMS (1)

Project No.	Scale
113678159	NO SCALE
Drawing No.	Sheet
E601	Revision



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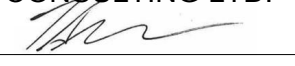
Legend

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B	ISSUED FOR TENDER REVIEW	BL	TS 18.07.05
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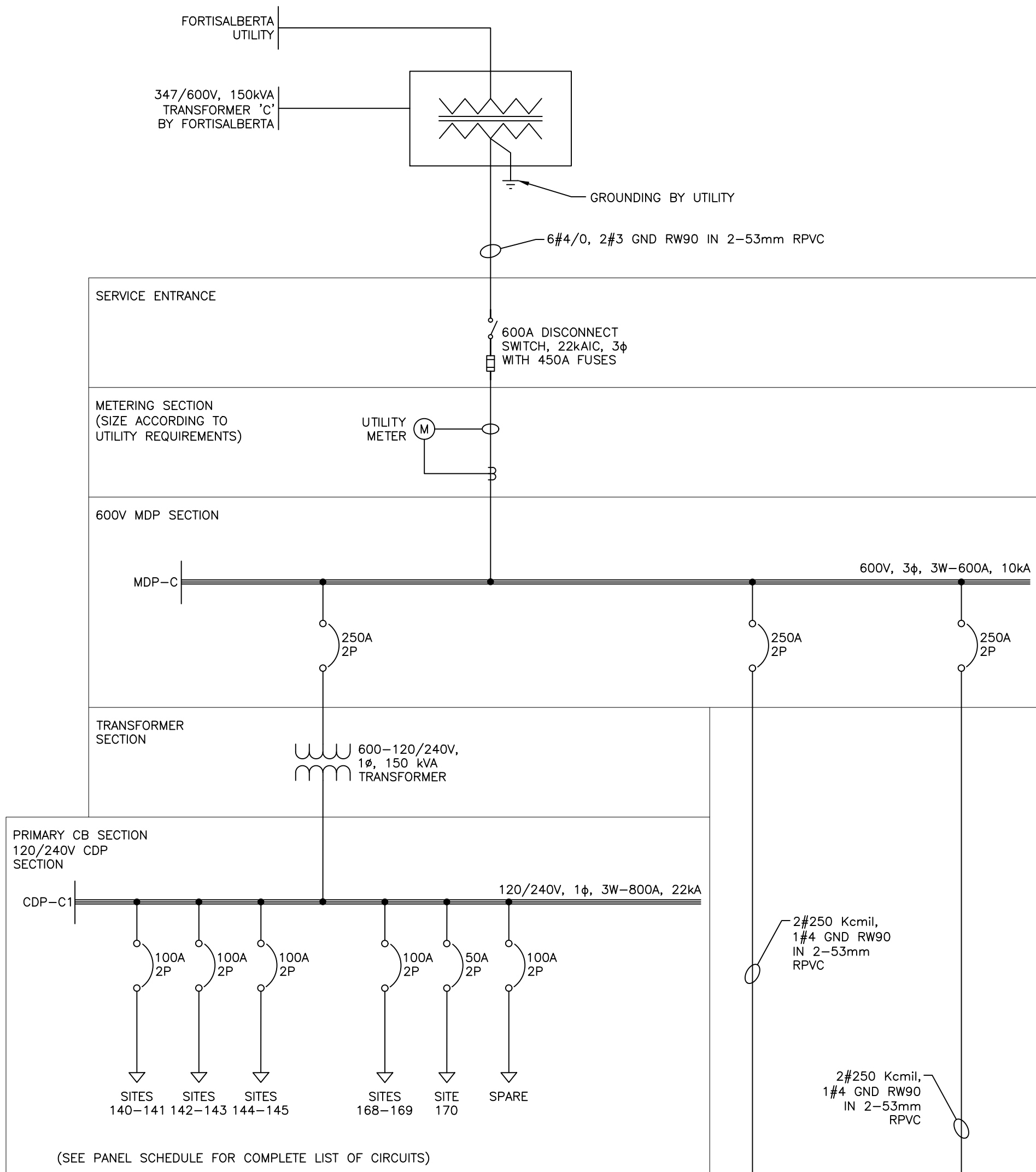
PARKS CANADA
LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

Title

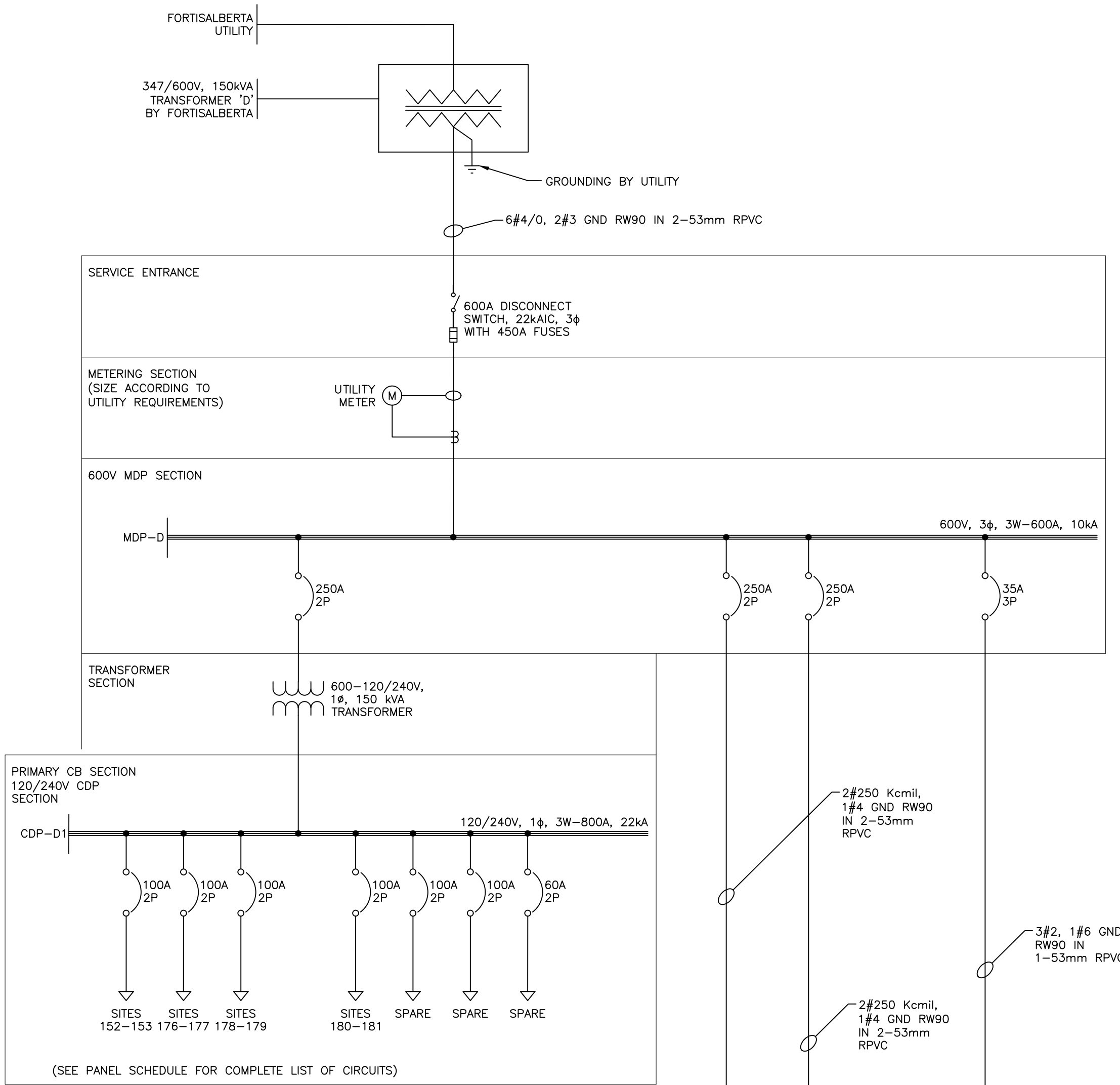
ELECTRICAL SINGLE LINE DIAGRAMS (2)

Project No.	Scale
113678159	NO SCALE
Drawing No.	Sheet
E602	Revision

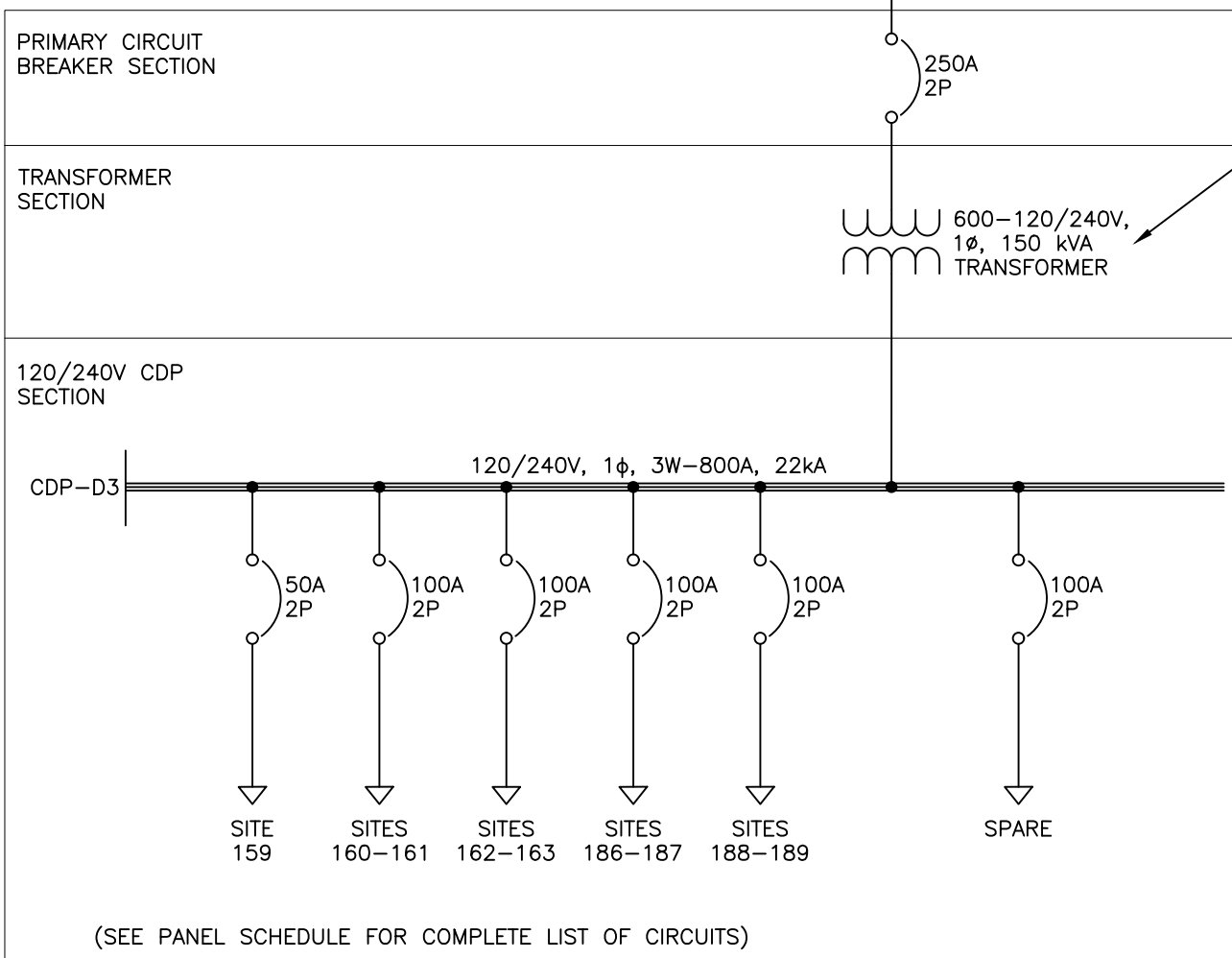
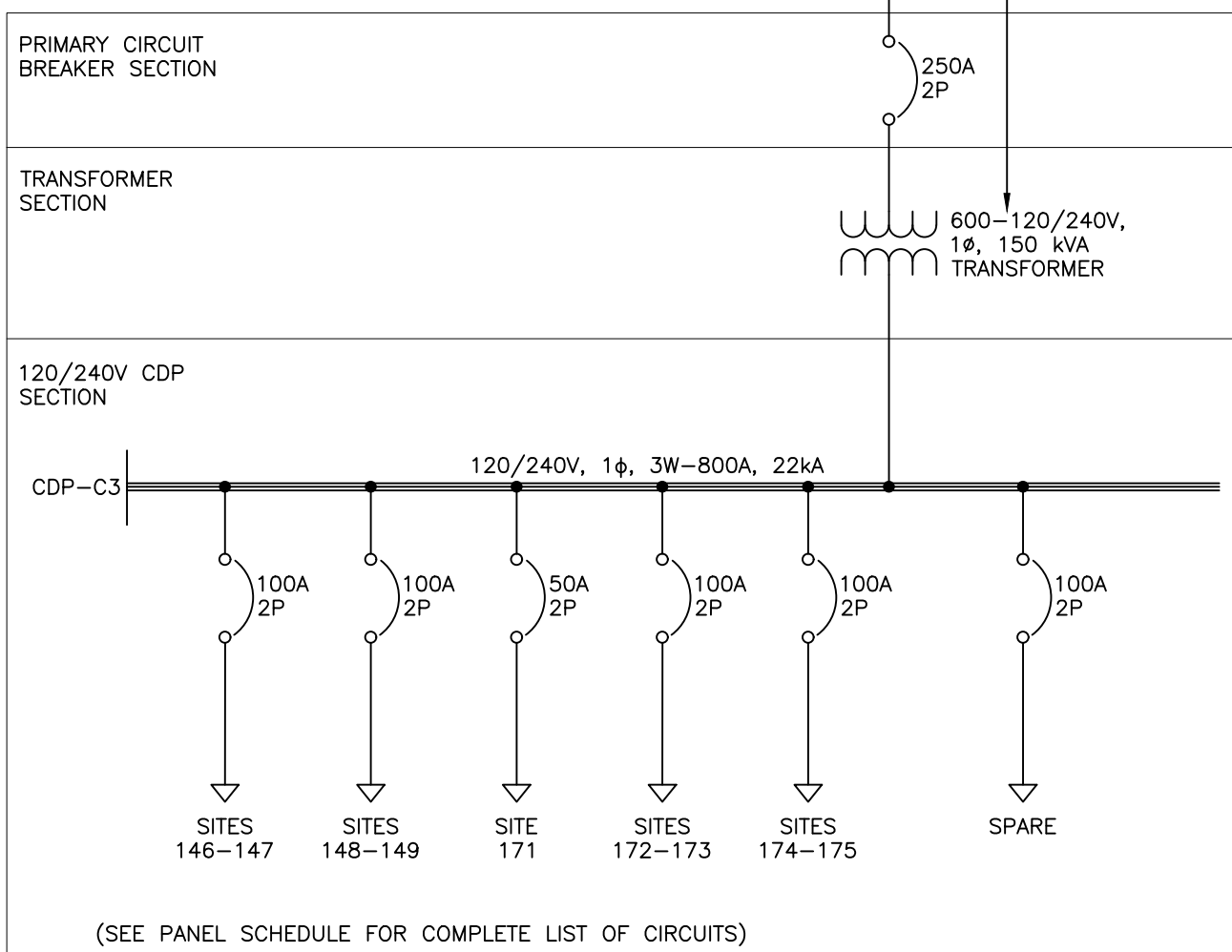
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1 MDP-C SINGLE LINE DIAGRAM
E602 N.T.S.



2 MDP-D SINGLE LINE DIAGRAM
E602 N.T.S.



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Legend

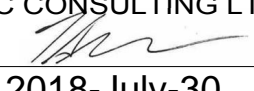
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A	ISSUED FOR 60% REVIEW	BL	TS	18.04.06	
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PARKS CANADA
LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

Title

ELECTRICAL PANEL SCHEDULES (1)

Project No.	Scale
113678159	NO SCALE
Drawing No.	Sheet
	Revision

E801 8 of 11 C/O

PANEL NUMBER: CDP-A1

Mounting : Surface VOLTAGE 120/240 V BUS RAT. : 600 A
PHASES 1 MAIN BRKR. : 250 A
Panel Loc: WIRE 3 CAPACITY : 10 kA
CIRCUITS 24
Print Date: Jul 30, 2018 11:55 AM

CCT	LOAD	KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD	CCT
No	Type Description						Type Description	No
1	REC. SITES 09 - 10	9.60	100A	A	60A	5.76	OTH. WASHROOM BUILDING "A"	2
3	REC.	9.60	2P	B	2P	5.76	OTH.	4
5	REC. SITES 11 - 12	9.60	100A	A	100A		SPARE	6
7	REC.	9.60	2P	B	2P			8
9	REC. SITES 13 - 14	9.60	100A	A	50A		SPARE	10
11	REC.	9.60	2P	B	2P			12
13	REC. SITES 74 - 75	9.60	100A	A			SPACE	14
15	REC.	9.60	2P	B			SPACE	16
17	REC. SITE 76	4.80	50A	A			SPACE	18
19	REC.	4.80	2P	B			SPACE	20
21	REC. SITE 77	4.80	50A	A			SPACE	22
23	REC.	4.80	2P	B			SPACE	24

PANEL NUMBER: CDP-A2

Mounting : Surface VOLTAGE 120/240 V BUS RAT. : 800 A
PHASES 1 MAIN BRKR. : 250 A
Panel Loc: WIRE 3 CAPACITY : 22 kA
CIRCUITS 24
Print Date: Jul 30, 2018 01:49 PM

CCT	LOAD	KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD	CCT
No	Type Description						Type Description	No
1	REC. SITES 1 - 2	9.60	100A	A	100A		SPARE	2
3	REC.	9.60	2P	B	2P			4
5	REC. SITES 3 - 4	9.60	100A	A	50A		SPARE	6
7	REC.	9.60	2P	B	2P			8
9	REC. SITES 5 - 6	9.60	100A	A			SPACE	10
11	REC.	9.60	2P	B			SPACE	12
13	REC. SITES 7 - 8	9.60	100A	A			SPACE	14
15	REC.	9.60	2P	B			SPACE	16
17	REC. SITES 72 - 73	9.60	100A	A			SPACE	18
19	REC.	9.60	2P	B			SPACE	20
21	SPACE			A			SPACE	22
23	SPACE			B			SPACE	24

PANEL NUMBER: CDP-A3

Mounting : Surface VOLTAGE 120/240 V BUS RAT. : 800 A
PHASES 1 MAIN BRKR. : 250 A
Panel Loc: WIRE 3 CAPACITY : 22 kA
CIRCUITS 24
Print Date: Jul 30, 2018 01:50 PM

CCT	LOAD	KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD	CCT
No	Type Description						Type Description	No
1	REC. SITES 15 - 16	9.60	100A	A	100A		SPARE	2
3	REC.	9.60	2P	B	2P			4
5	REC. SITES 17 - 18	9.60	100A	A	50A		SPARE	6
7	REC.	9.60	2P	B	2P			8
9	REC. SITES 19 - 20	9.60	100A	A	15A	2.92	OTH. SANI DUMP HEAT TRACE	10
11	REC.	9.60	2P	B	2P	2.92		12
13	REC. SITES 78 - 79	9.60	100A	A			SPACE	14
15	REC.	9.60	2P	B			SPACE	16
17	REC. SITES 80 - 81	9.60	100A	A			SPACE	18
19	REC.	9.60	2P	B			SPACE	20
21	SPACE			A			SPACE	22
23	SPACE			B			SPACE	24

PANEL NUMBER: CDP-B1

Mounting : Surface VOLTAGE 120/240 V BUS RAT. : 800 A
PHASES 1 MAIN BRKR. : 250 A
Panel Loc: WIRE 3 CAPACITY : 22 kA
CIRCUITS 24
Print Date: Jul 30, 2018 01:51 PM

CCT	LOAD	KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD	CCT
No	Type Description						Type Description	No
1	REC. SITES 25 - 26	9.60	100A	A	100A		SPARE	2
3	REC.	9.60	2P	B	2P			4
5	REC. SITES 27 - 28	9.60	100A	A	50A		SPARE	6
7	REC.	9.60	2P	B	2P			8
9	REC. SITES 29 - 30	9.60	100A	A			SPACE	10
11	REC.	9.60	2P	B			SPACE	12
13	REC. SITE 88	4.80	50A	A			SPACE	14
15	REC.	4.80	2P	B			SPACE	16
17	REC. SITE 89	4.80	50A	A			SPACE	18
19	REC.	4.80	2P	B			SPACE	20
21	REC. SITES 90 - 91	9.60	100A	A			SPACE	22
23	REC.	9.60	2P	B			SPACE	24

PANEL NUMBER: CDP-B2

Mounting : Surface VOLTAGE 120/240 V BUS RAT. : 800 A
PHASES 1 MAIN BRKR. : 250 A
Panel Loc: WIRE 3 CAPACITY : 22 kA
CIRCUITS 24
Print Date: Jul 30, 2018 01:53 PM

CCT	LOAD	KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD	CCT
No	Type Description						Type Description	No
1	REC. SITES 21 - 22	9.60	100A	A	100A		SPARE	2
3	REC.	9.60	2P	B	2P			4
5	REC. SITES 23 - 24	9.60	100A	A	50A		SPARE	6
7	REC.	9.60	2P	B	2P			8
9	REC. SITES 82 - 83	9.60	100A	A			SPACE	10
11	REC.	9.60	2P	B			SPACE	12
13	REC. SITES 84 - 85	9.60	100A	A			SPACE	14
15	REC.	9.60	2P	B			SPACE	16
17	REC. SITES 86 - 87	9.60	100A	A			SPACE	18
19	REC.	9.60	2P	B			SPACE	20
21	SPACE			A			SPACE	22
23	SPACE			B			SPACE	24

PANEL NUMBER: CDP-B3

Mounting : Surface VOLTAGE 120/240 V BUS RAT. : 800 A
PHASES 1 MAIN BRKR. : 250 A
Panel Loc: WIRE 3 CAPACITY : 22 kA
CIRCUITS 24
Print Date: Jul 30, 2018 01:53 PM

CCT	LOAD	KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD	CCT
No	Type Description						Type Description	No
1	REC. SITES 31 - 32	9.60	100A	A	100A		SPARE	2
3	REC.	9.60	2P	B	2P			4
5	REC. SITES 33 - 34	9.60	100A	A	50A		SPARE	6
7	REC.	9.60	2P	B	2P			8
9	REC. SITES 92 - 93	9.60	100A	A			SPACE	10
11	REC.	9.60	2P	B			SPACE	12
13	REC. SITES 94 - 95	9.60	100A	A			SPACE	14
15	REC.	9.60	2P	B			SPACE	16
17	REC. SITES 96 - 97	9.60	100A	A			SPACE	18
19	REC.	9.60	2P	B			SPACE	20
21	SPACE			A			SPACE	22
23	SPACE			B			SPACE	24

PANEL NUMBER: CDP-B4

Mounting : Surface VOLTAGE 120/208 V BUS RAT. : 250 A
PHASES 3 MAIN BRKR. : 50 A
Panel Loc: WIRE 4 CAPACITY : 22 kA
CIRCUITS 12
Print Date: Jul 30, 2018 03:20 PM

CCT	LOAD	KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD	CCT
No	Type Description						Type Description	No
1	OTH. WASHROOM BUILDING "B"	9.60	100A	A			SPACE	2
3	OTH.	9.60		B			SPACE	4
5	OTH.	9.60	3P	C			SPACE	6
7	SPACE			A			SPACE	8
9	SPACE			B			SPACE	10
11	SPACE			C			SPACE	12

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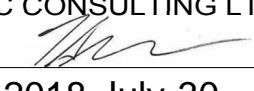
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Notes

Revision

C	ISSUED FOR TENDER	BL	RD	18.07.30
B	ISSUED FOR TENDER REVIEW	BL	TS	18.07.05
A	ISSUED FOR 60% REVIEW	BL	TS	18.04.06
Issued		By	Appd.	YY.MM.DD
File Name: 78159_Lake Louise_elec.dwg		HA	RD	BL
		Dwn.	Chkd.	Dsgn.
				YY.MM.DD

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Client/Project



Title
ELECTRICAL PANEL SCHEDULES (2)

Project No. 113678159	Scale NO SCALE
Drawing No.	Sheet Revision

PANEL NUMBER: CDP-C1

Mounting : Surface

VOLTAGE 120/240 V

BUS RAT. : 600 A

PHASES 1

MAIN BRKR. : 250 A

Panel Loc: WIRE 3

CAPACITY : 10 kA

CIRCUITS 24

Print Date: Jul 30, 2018

11:55 AM

CCT	LOAD		KVA	BRK	P	BRK	KVA	LOAD		CCT
No	Type	Description		SIZE	H	SIZE		Type	Description	No
1	REC.	SITES 140 – 141	9.60	100A	A	100A			SPARE	2
3	REC.		9.60	2P	B	2P				4
5	REC.	SITES 142 – 143	9.60	100A	A	50A			SPARE	6
7	REC.		9.60	2P	B	2P				8
9	REC.	SITES 144 – 145	9.60	100A	A				SPACE	10
11	REC.		9.60	2P	B				SPACE	12
13	REC.	SITES 168 – 169	9.60	100A	A				SPACE	14
15	REC.		9.60	2P	B				SPACE	16
17	REC.	SITE 170	4.80	50A	A				SPACE	18
19	REC.		4.80	2P	B				SPACE	20
21		SPACE			A				SPACE	22
23		SPACE			B				SPACE	24

PANEL NUMBER: CDP-C2

Mounting : Surface

VOLTAGE 120/240 V

BUS RAT. : 800 A

PHASES 1

MAIN BRKR. : 250 A

Panel Loc: WIRE 3

CAPACITY : 22 kA

CIRCUITS 24

Print Date: Jul 30, 2018
01:56 PM

CCT	LOAD		KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD		CCT
No	Type	Description						Type	Description	No
1	REC.	SITES 136 - 137	9.60	100A	A	100A			SPARE	2
3	REC.		9.60	2P	B	2P				4
5	REC.	SITES 138 - 139	9.60	100	A	50A			SPARE	6
7	REC.		9.60	2P	B	2P				8
9	REC.	SITES 164 - 165	9.60	100	A				SPACE	10
11	REC.		9.60	2P	B				SPACE	12
13	REC.	SITES 166 - 167	9.60	100	A				SPACE	14
15	REC.		9.60	2P	B				SPACE	16
17		SPACE			A				SPACE	18
19		SPACE			B				SPACE	20
21		SPACE			A				SPACE	22
23		SPACE			B				SPACE	24

PANEL NUMBER: CDP-C3

Mounting : Surface	VOLTAGE	120/240 V	BUS RAT. :	800 A
	PHASES	1	MAIN BRKR. :	250 A
Panel Loc:	WIRE	3	CAPACITY :	22 kA
	CIRCUITS	24		

Print Date: Jul 30, 2018
01:56 PM

CCT	LOAD		KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD		CCT
No	Type	Description						Type	Description	No
1	REC.	SITES 146 - 147	9.60	100A	A	100A			SPARE	2
3	REC.		9.60	2P	B	2P				4
5	REC.	SITES 148 - 149	9.60	100A	A	50A			SPARE	6
7	REC.		9.60	2P	B	2P				8
9	REC.	SITE 171	4.80	50A	A				SPACE	10
11	REC.		4.80	2P	B				SPACE	12
13	REC.	SITES 172 - 173	9.60	100A	A				SPACE	14
15	REC.		9.60	2P	B				SPACE	16
17	REC.	SITES 174 - 175	9.60	100A	A				SPACE	18
19	REC.		9.60	2P	B				SPACE	20
21		SPACE			A				SPACE	22
23		SPACE			B				SPACE	24

PANEL NUMBER: CDP-D1

Mounting : Surface

VOLTAGE 120/240 V

BUS RAT. : 800 A

PHASES 1

MAIN BRKR. : 250 A

Panel Loc:

WIRE 3

CAPACITY : 22 kA

CIRCUITS 24

Print Date: Jul 30, 2018

01:56 PM

CCT	LOAD		KVA	BRK	P	BRK	KVA	LOAD		CCT
No	Type	Description		SIZE	H	SIZE		Type	Description	No
1	REC.	SITES 152 – 153	9.60	100A	A	100A			SPARE	2
3	REC.		9.60	2P	B	2P				4
5	REC.	SITES 176 – 177	9.60	100A	A	50A			SPARE	6
7	REC.		9.60	2P	B	2P				8
9	REC.	SITES 178 – 179	9.60	100A	A				SPACE	10
11	REC.		9.60	2P	B				SPACE	12
13	REC.	SITES 180 – 181	9.60	100A	A				SPACE	14
15	REC.		9.60	2P	B				SPACE	16
17		SPACE			A				SPACE	18
19		SPACE			B				SPACE	20
21		SPACE			A				SPACE	22
23		SPACE			B				SPACE	24

PANEL NUMBER: CDP-D2

Mounting : Surface

VOLTAGE120/240 V

BUS RAT. :800 A

PHASES1

MAIN BRKR. :250 A

Panel Loc:WIRE3

CAPACITY :22 kA

CIRCUITS24

Print Date: Jul 30, 2018

01:56 PM

CCT	LOAD		KVA	BRK	P	BRK	KVA	LOAD		CCT
No	Type	Description		SIZE	H	SIZE		Type	Description	No
1	REC.	SITES 154 – 155	9.60	100A	A	100A			SPARE	2
3	REC.		9.60	2P	B	2P				4
5	REC.	SITES 156 – 157	9.60	100A	A	50A			SPARE	6
7	REC.		9.60	2P	B	2P				8
9	REC.	SITE 158	4.80	50A	A				SPACE	10
11	REC.		4.80	2P	B				SPACE	12
13	REC.	SITES 182 – 183	9.60	100A	A				SPACE	14
15	REC.		9.60	2P	B				SPACE	16
17	REC.	SITES 184 – 185	9.60	100A	A				SPACE	18
19	REC.		9.60	2P	B				SPACE	20
21		SPACE			A				SPACE	22
23		SPACE			B				SPACE	24

PANEL NUMBER: CDP-D3

Mounting : Surface

VOLTAGE 120/240 v

BUS RAT. : 800 A

PHASES 1

MAIN BRKR. : 250 A

Panel Loc: WIRE 3

CAPACITY : 22 KA

CIRCUITS 24

Print Date: Jul 30, 2018

01:56 PM

CCT	LOAD		KVA	BRK SIZE	P H	BRK SIZE	KVA	LOAD		CCT
No	Type	Description						Type	Description	No
1	REC.	SITE 159	4.80	50A	A	100A			SPARE	2
3	REC.		4.80	2P	B	2P				4
5	REC.	SITES 160 - 161	9.60	100A	A	50A			SPARE	6
7	REC.		9.60	2P	B	2P				8
9	REC.	SITES 162 - 163	9.60	100A	A				SPACE	10
11	REC.		9.60	2P	B				SPACE	12
13	REC.	SITES 186 - 187	9.60	100A	A				SPACE	14
15	REC.		9.60	2P	B				SPACE	16
17	REC.	SITES 188 - 189	9.60	100A	A				SPACE	18
19	REC.		9.60	2P	B				SPACE	20
21		SPACE			A				SPACE	22
23		SPACE			B				SPACE	24

PANEL NUMBER: CDP-D4

Mounting : Surface	VOLTAGE	120/208 v	BUS RAT. :	125 A
	PHASES	3	MAIN BRKR. :	35 A
Panel Loc:	WIRE	4	CAPACITY :	22 kA
	CIRCUITS	12		

Print Date: Jul 30, 2018
03:21 PM

CCT	LOAD		KVA	BRK	P	BRK	KVA	LOAD		CCT
No	Type	Description		SIZE	H	SIZE		Type	Description	No
1	OTH.	WASHROOM BUILDING "D"	5.76	60A	A				SPACE	2
3	OTH.		5.76		B				SPACE	4
5	OTH.		5.76	3P	C				SPACE	6
7		SPACE			A				SPACE	8
9		SPACE			B				SPACE	10
11		SPACE			C				SPACE	12

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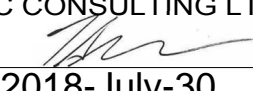
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Notes

Revision	By	Appd.	YY.MM.DD
C	ISSUED FOR TENDER	BL	RD 18.07.30
B	ISSUED FOR TENDER REVIEW	BL	TS 18.07.05
A	ISSUED FOR 60% REVIEW	BL	TS 18.04.06
Issued	By	Appd.	YY.MM.DD
File Name:	78159_Lake_Louise_elec.dwg	HA	RD 18.07.30
		Dwn.	Chkd. Dsgn. YY.MM.DD

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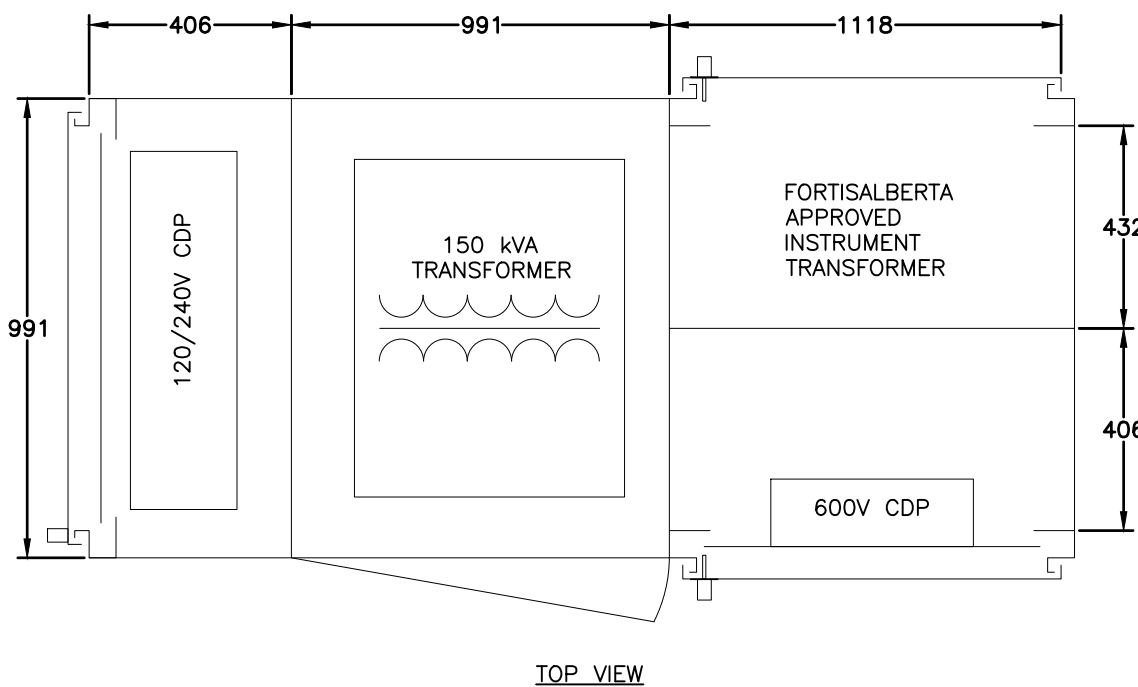
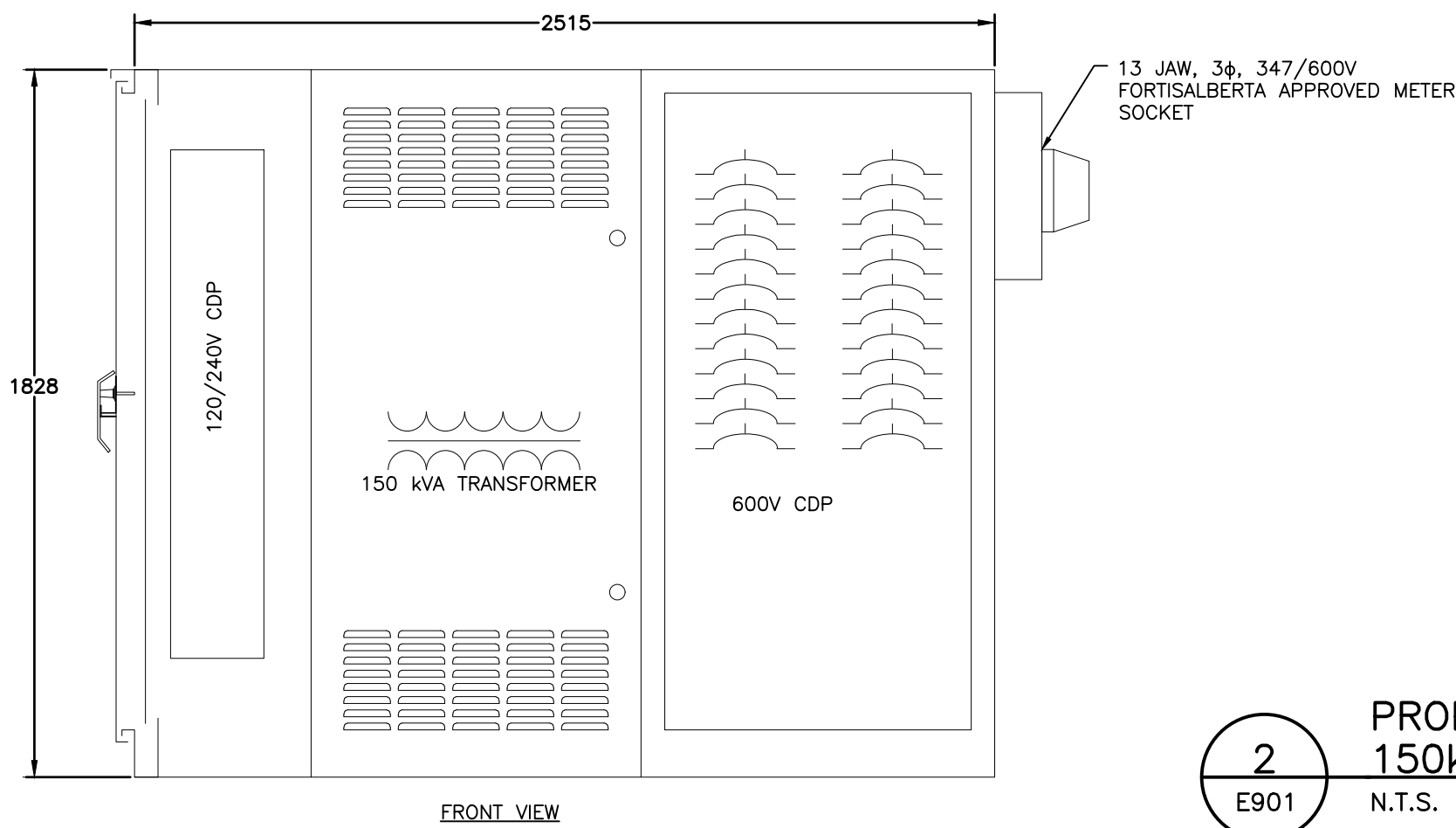
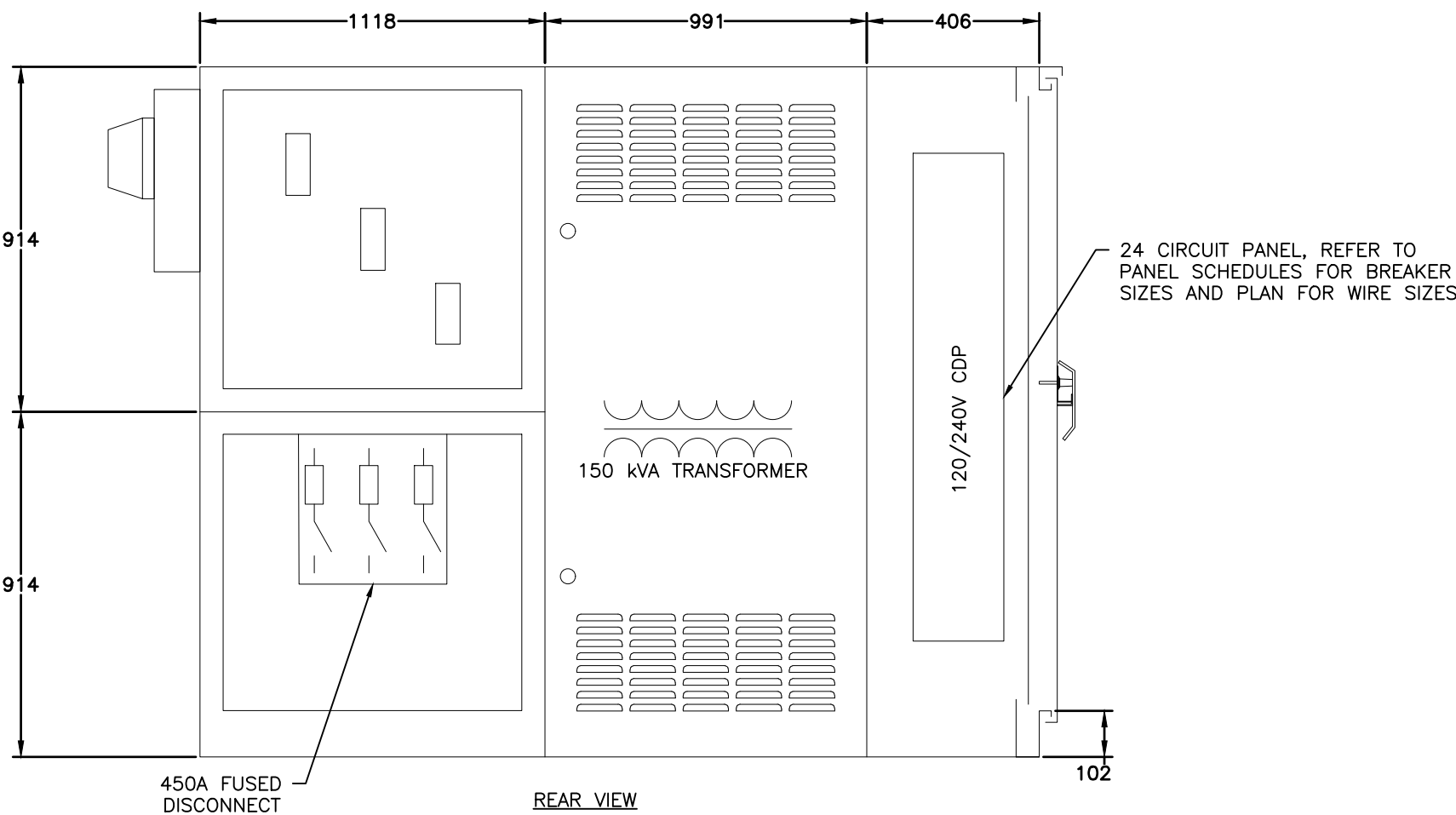


PARKS CANADA
LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

Title

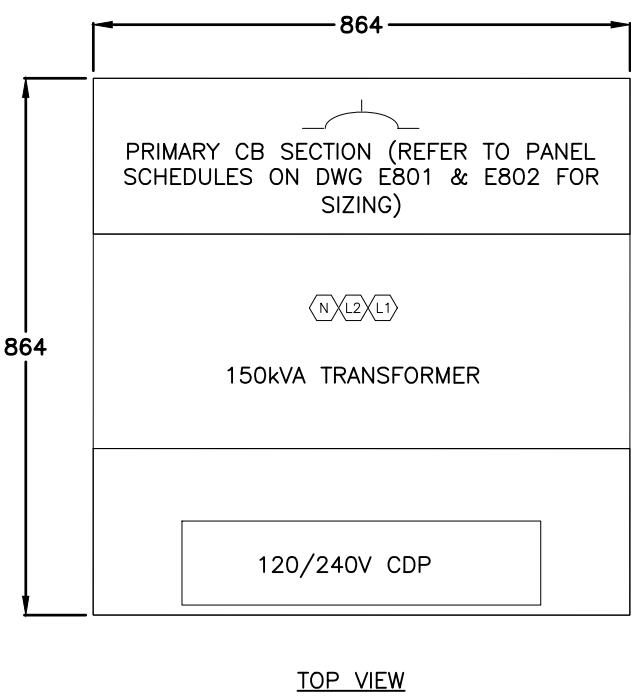
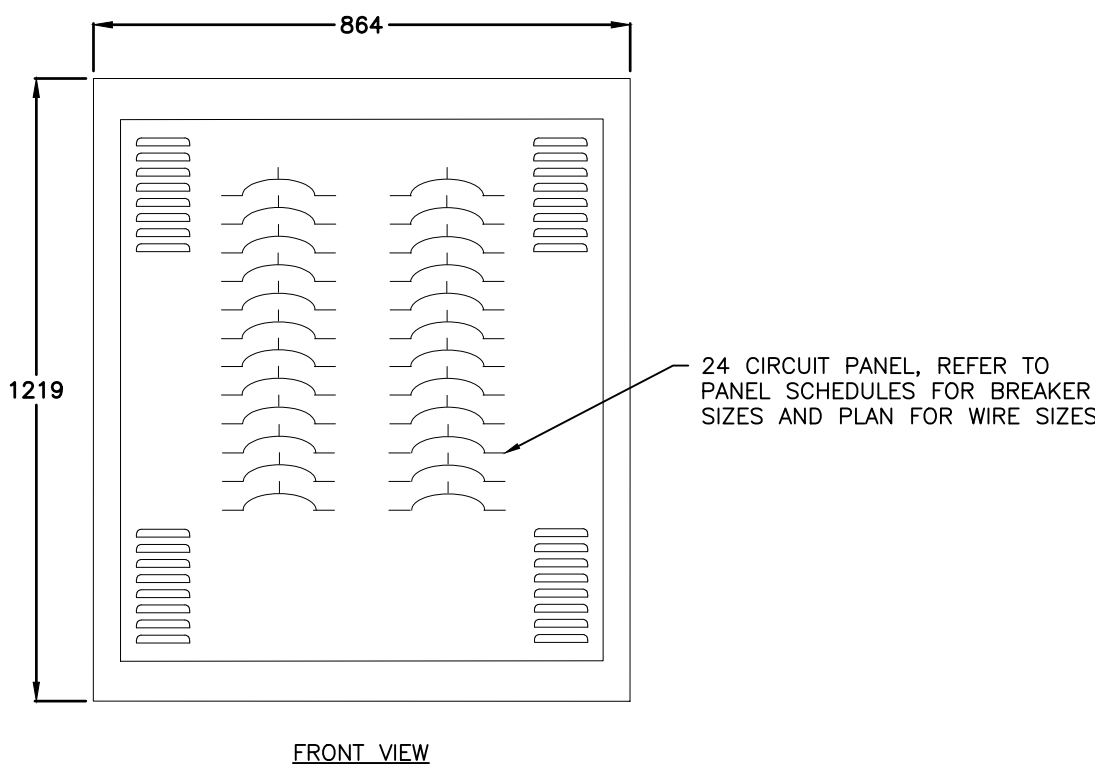
ELECTRICAL TYPICAL DETAILS (1)

Project No.	Scale
113678159	NO SCALE
Drawing No.	Sheet
E901	10 of 11
	Revision
	C/0



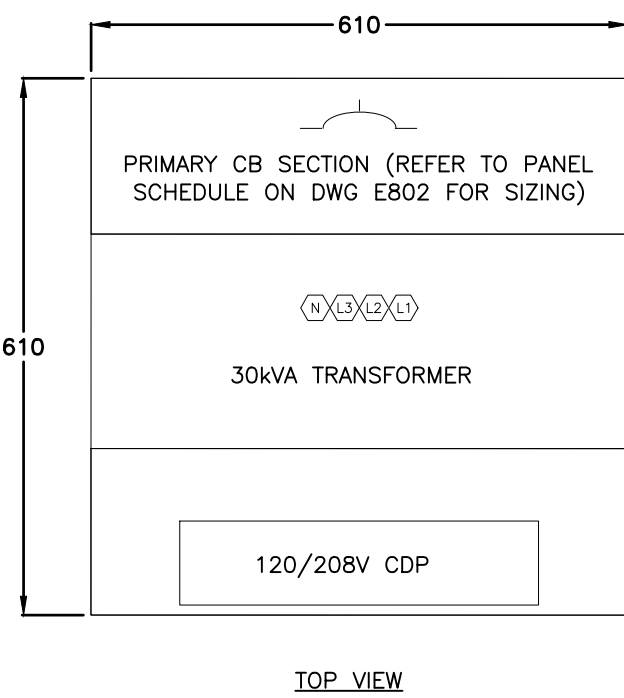
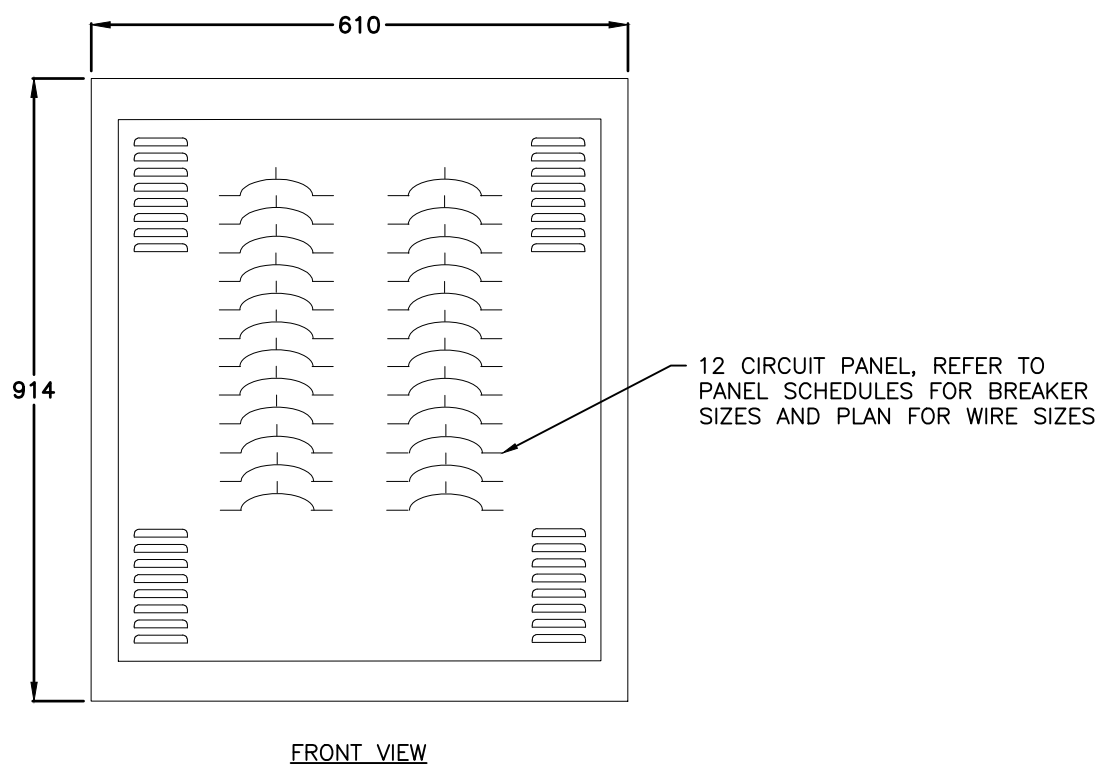
NOTES:
1. PROVIDE COMBINATION UNIT SUBSTATION IN PARKS GREEN POWDER COAT FINISH.
2. ALL SIZES TO BE CONFIRMED BY CONTRACTOR.
3. UTILITY METERING DOCUMENTS SHALL TAKE PRECEDENCE OVER DIMENSIONS SHOWN.
4. PROVIDE PRECAST OR CAST IN PLACE CONCRETE BASE STAMPED BY A STRUCTURAL ENGINEER IN THE PROVINCE OF ALBERTA. PROVIDE A GROUND GRID AT EACH SUBSTATION.

PROPOSED COMBINATION 347/600V MDP AND 150kVA 600V TO 120/240V UNIT SUBSTATION WITH 120/240V CDP (AC DANDY DUS-G5)
N.T.S.



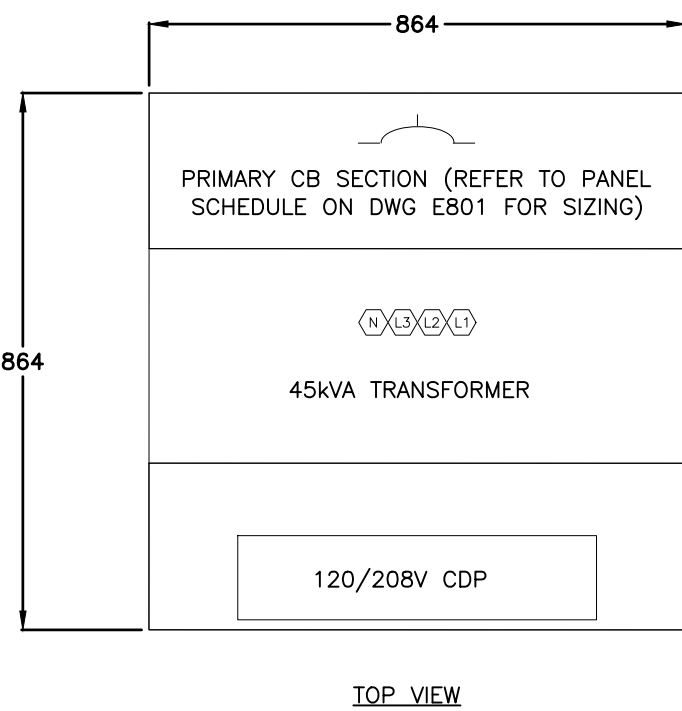
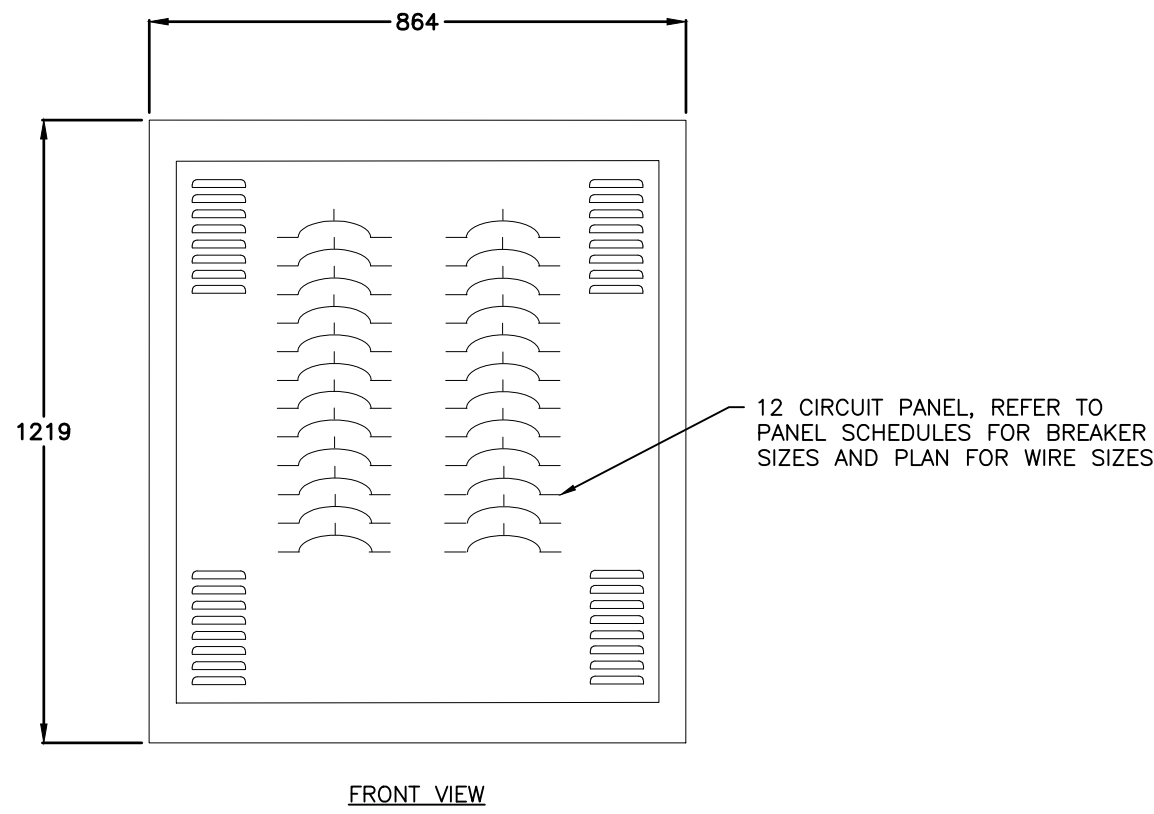
NOTES:
1. PROVIDE UNIT SUBSTATION IN PARKS GREEN POWDER COAT FINISH.
2. ALL SIZES TO BE CONFIRMED BY CONTRACTOR.
3. PROVIDE PRECAST OR CAST IN PLACE CONCRETE BASE STAMPED BY A STRUCTURAL ENGINEER IN THE PROVINCE OF ALBERTA. PROVIDE A GROUND GRID AT EACH SUBSTATION.

PROPOSED 600V TO 120/240V UNIT SUBSTATION WITH 150kVA TRANSFORMER AND 120/240V CDP (AC DANDY DUS-B)
N.T.S.



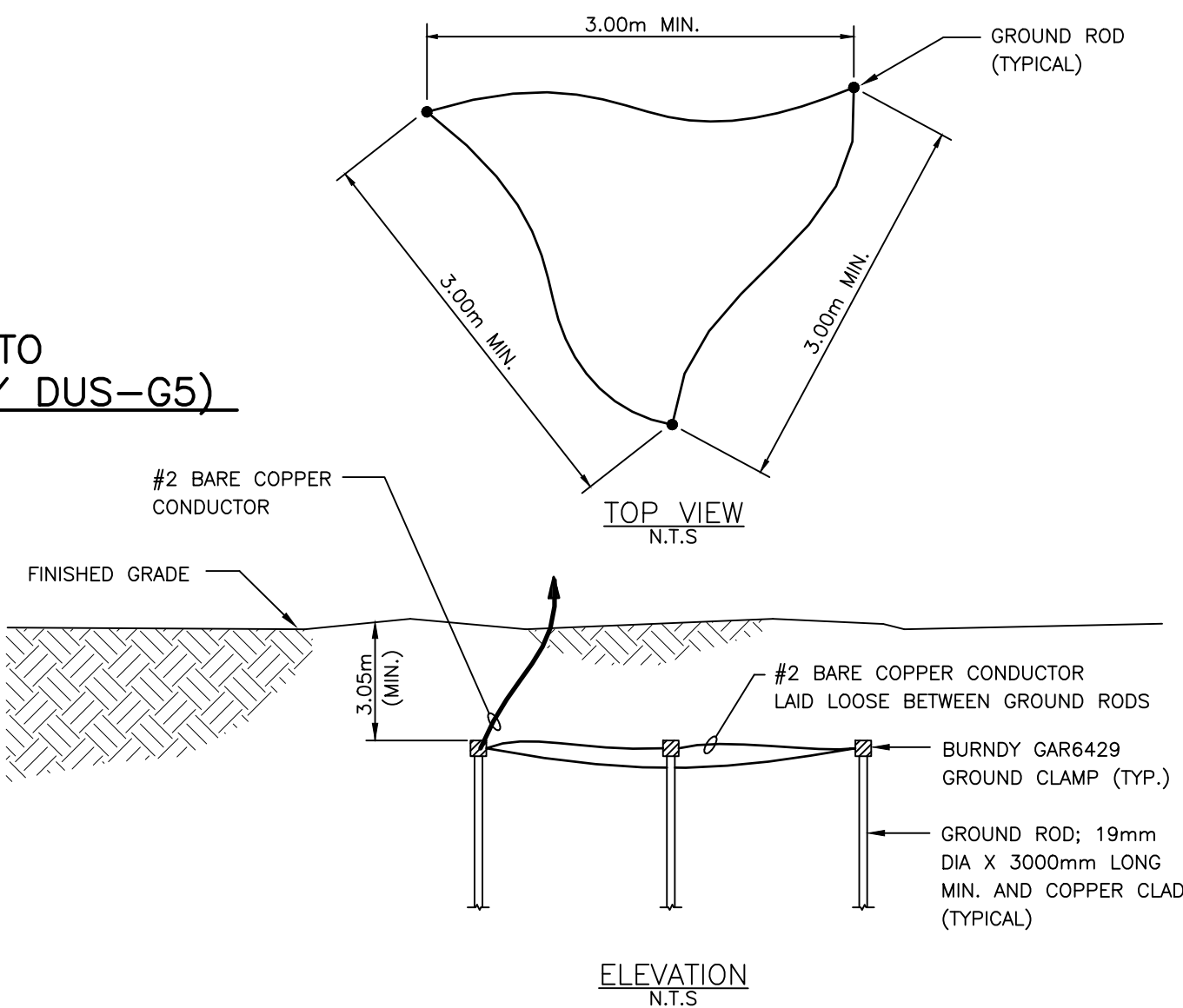
NOTES:
1. PROVIDE UNIT SUBSTATION IN PARKS GREEN POWDER COAT FINISH.
2. ALL SIZES TO BE CONFIRMED BY CONTRACTOR.
3. PROVIDE PRECAST OR CAST IN PLACE CONCRETE BASE STAMPED BY A STRUCTURAL ENGINEER IN THE PROVINCE OF ALBERTA. PROVIDE A GROUND GRID AT EACH SUBSTATION.

PROPOSED 600V TO 120/208V UNIT SUBSTATION WITH 30kVA TRANSFORMER AND 120/208V CDP (AC DANDY DUS-C)
N.T.S.



NOTES:
1. PROVIDE UNIT SUBSTATION IN PARKS GREEN POWDER COAT FINISH.
2. ALL SIZES TO BE CONFIRMED BY CONTRACTOR.
3. PROVIDE PRECAST OR CAST IN PLACE CONCRETE BASE STAMPED BY A STRUCTURAL ENGINEER IN THE PROVINCE OF ALBERTA. PROVIDE A GROUND GRID AT EACH SUBSTATION.

PROPOSED 600V TO 120/208V UNIT SUBSTATION WITH 45kVA TRANSFORMER AND 120/208V CDP (AC DANDY DUS-D)
N.T.S.



NOTES:
1. ADDITIONAL GROUND RODS MAY BE REQUIRED ACCORDING TO LOCAL CONDITIONS. SPACE ADDITIONAL GROUND RODS A MINIMUM OF 3.00m FROM OTHER RODS.

POWER DISTRIBUTION UNIT SUBSTATION GROUND GRID
N.T.S.

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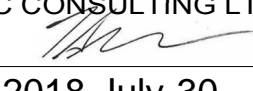
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Notes

Revision	By	Appd.	YY.MM.DD
C	ISSUED FOR TENDER	BL	RD 18.07.30
B	ISSUED FOR TENDER REVIEW	BL	TS 18.07.05
A	ISSUED FOR 60% REVIEW	BL	TS 18.04.06
Issued	By	Appd.	YY.MM.DD
File Name:	78159_Lake_Louise_elec.dwg	HA	RD 18.07.30
		Dwn.	Chkd. Dsgn. YY.MM.DD

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Signature	
Date	2018-July-30
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Client/Project

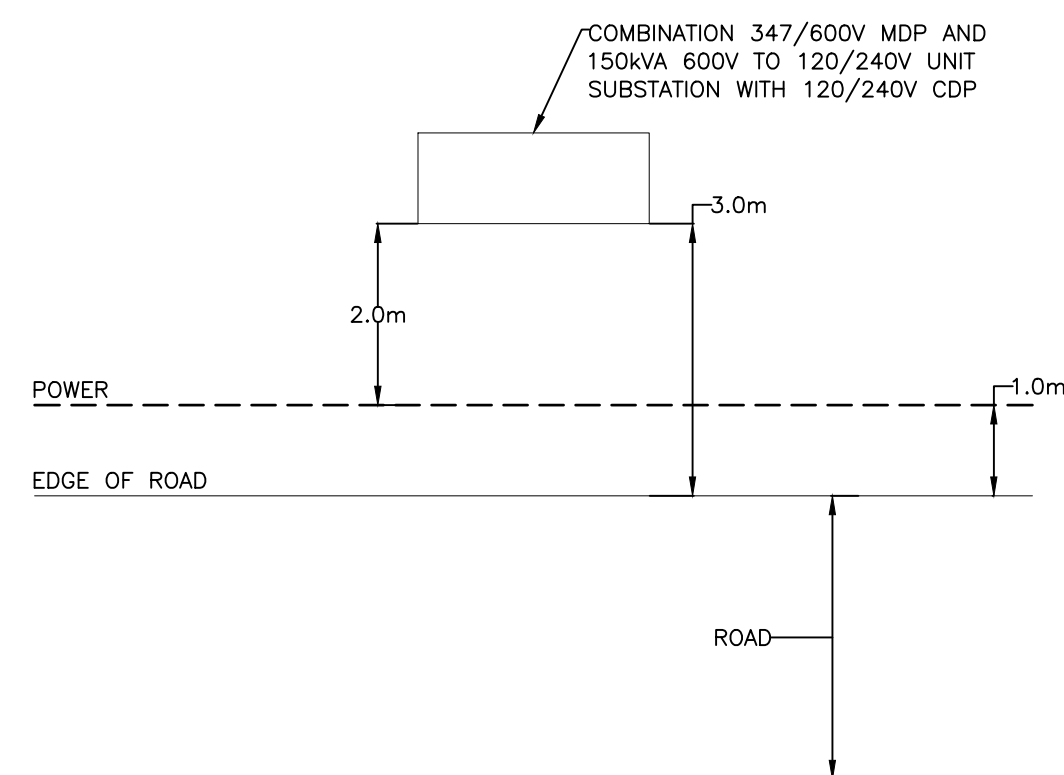


PARKS CANADA
LAKE LOUISE CAMPGROUND ELECTRICAL UPGRADES
LAKE LOUISE, AB

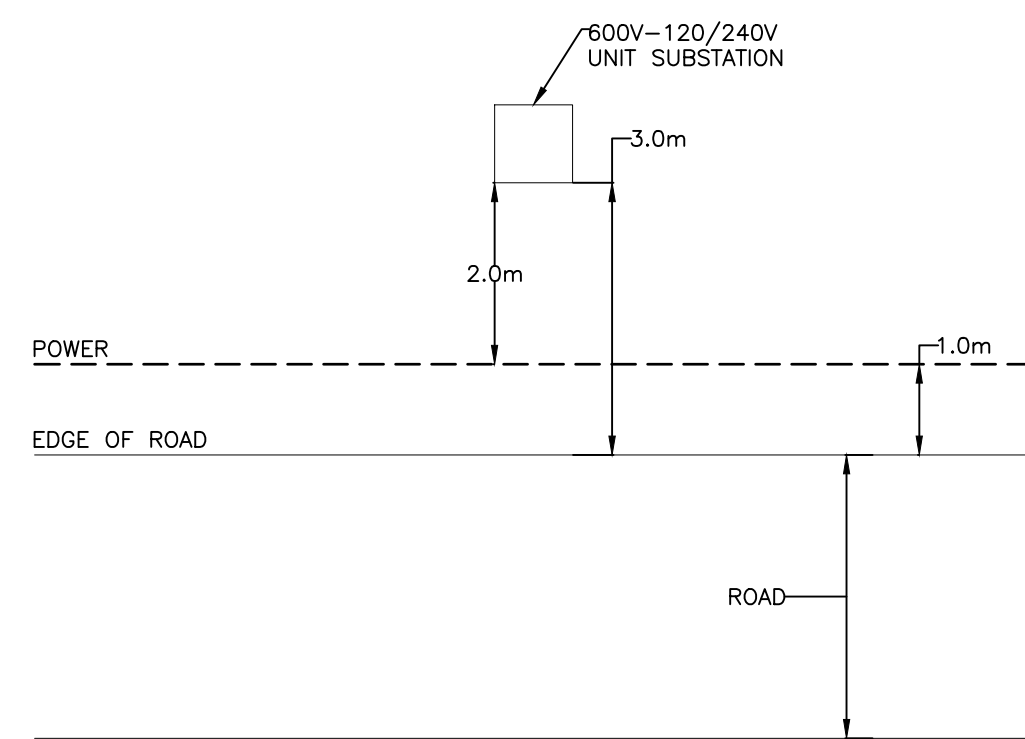
Title

ELECTRICAL TYPICAL DETAILS (2)

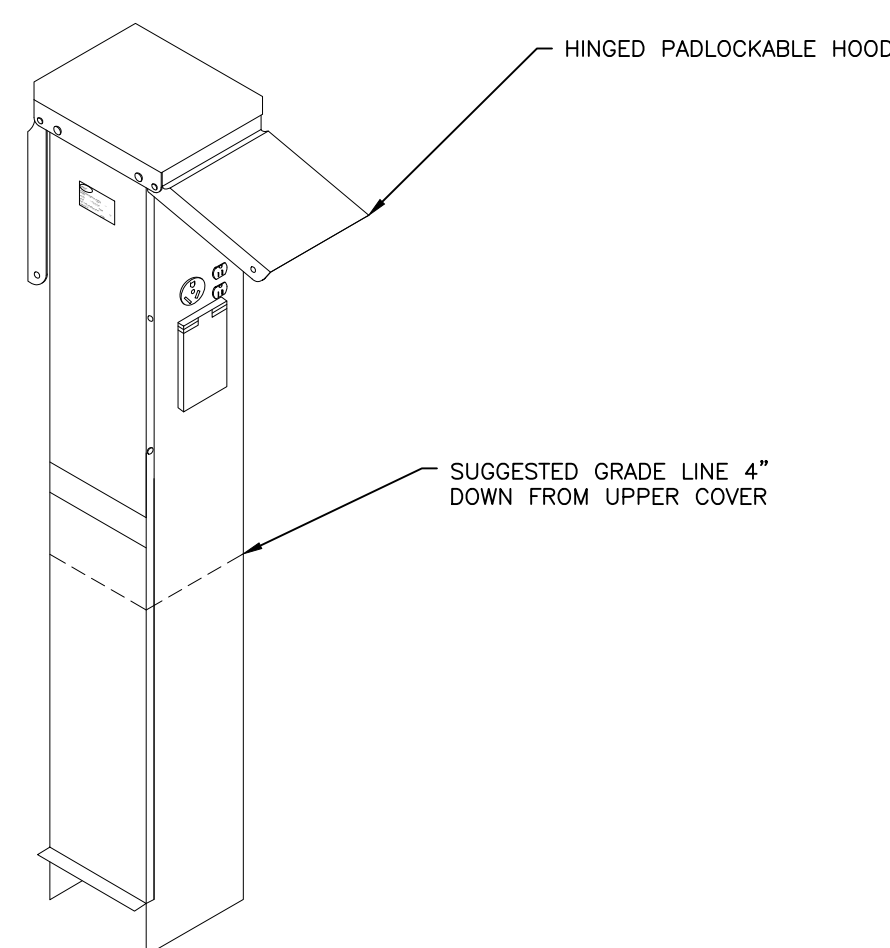
Project No.	Scale
113678159	NO SCALE
Drawing No.	Sheet
E902	11 of 11
	Revision
	C/0



1 TYPICAL ORIENTATION OF COMBINATION 347/600V MDP AND 150kVA 600V TO 120/240V UNIT SUBSTATION WITH 120/240V CDP
E902 N.T.S.

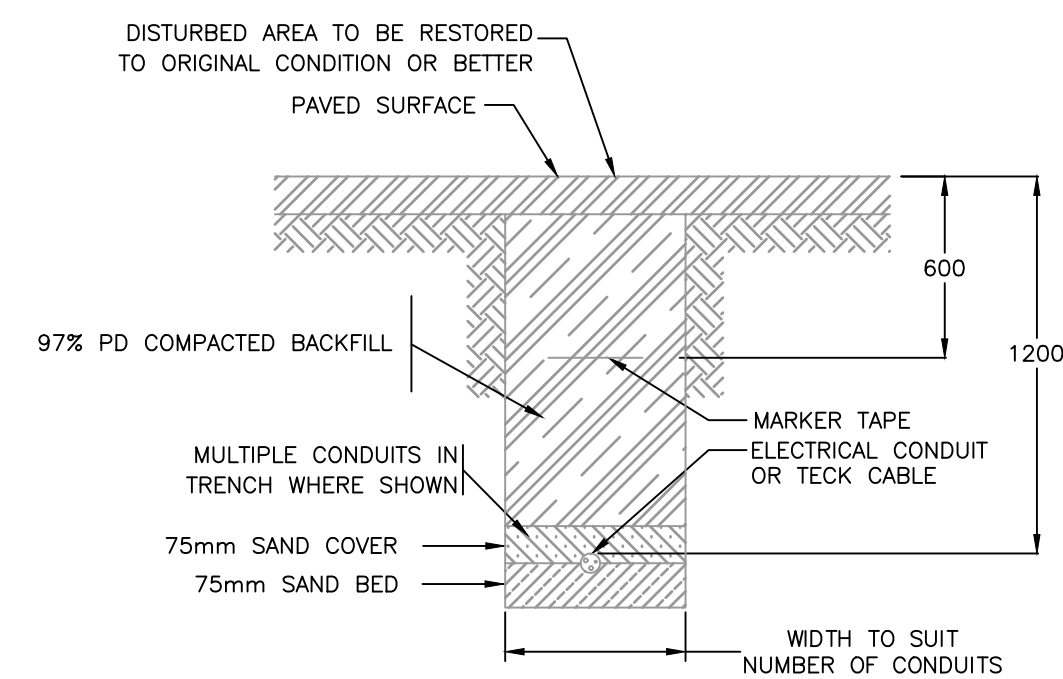


3 TYPICAL ORIENTATION OF 600V-120/240V UNIT SUBSTATION AND 120/208V UNIT SUBSTATION
E902 N.T.S.



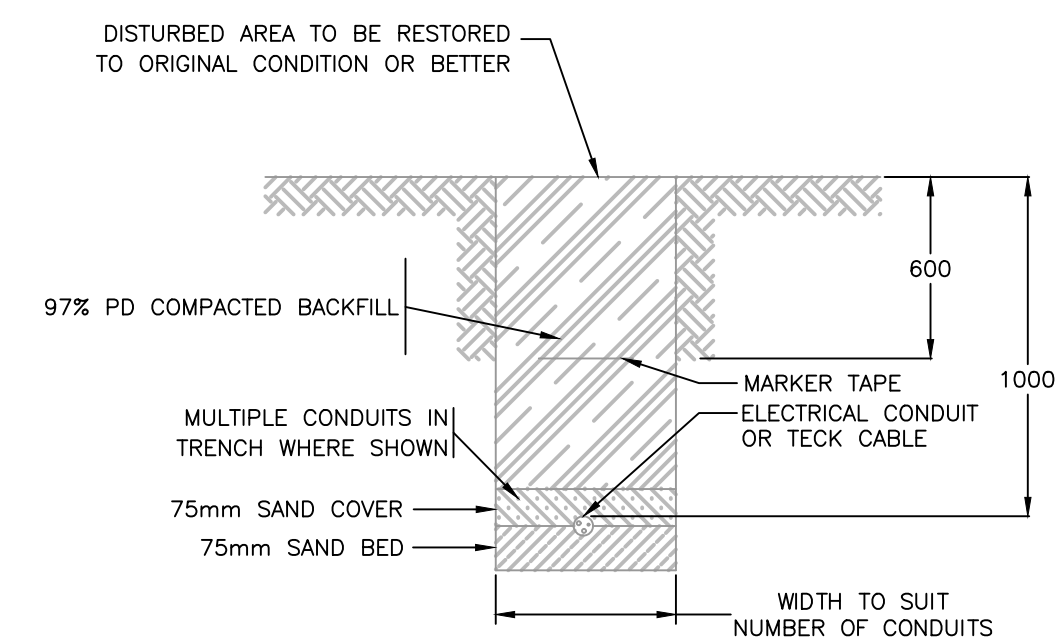
- NOTES:
1. PROVIDE PEDESTAL IN PARKS GREEN POWDER COAT FINISH.
 2. PEDESTAL RECEPTACLES INCLUDE:
 - 1x50A 120/240V RECEPTACLE C/W 50A 2P BREAKER
 - 1x30A 120V RECEPTACLE C/W 30A 1P BREAKER
 - 1x15A 120V GFCI RECEPTACLE C/W 15A 1P BREAKER

5 PROPOSED DIRECT BURIED POWER PEDESTAL (AC DANDY 2C-DPP-11-HH)
E902 N.T.S.



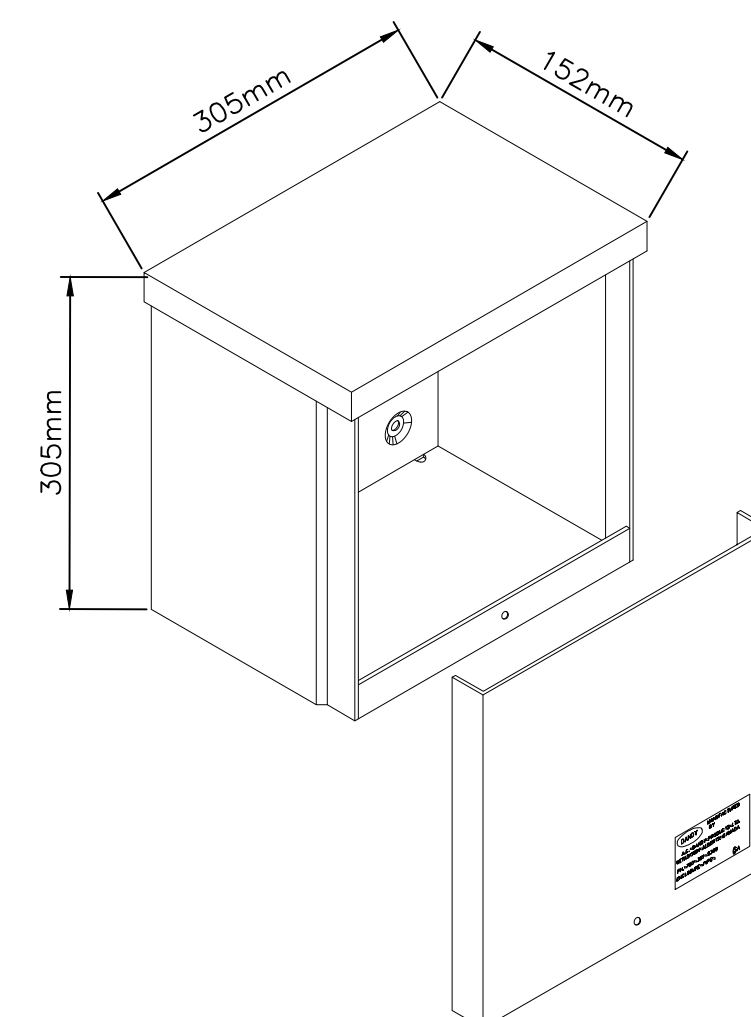
- NOTES:
1. FINE TAILINGS MAY BE USED IN PLACE OF SAND.
 2. DEPTH TO BE WITHIN 1.2m TO 1.5m FOR ROAD CROSSINGS FROM FINAL GROUND GRADE TO THE TOP OF THE CONDUIT.
 3. ADD 200mm SAND, AS REQUIRED, AND RED ELECTRICAL MARKER TAPE ON TOP.

2 TRENCH FOR PAVED SURFACES
E902 N.T.S.



- NOTES:
1. FINE TAILINGS MAY BE USED IN PLACE OF SAND.
 2. DEPTH TO BE WITHIN 1.0m TO 1.2m FOR STANDARD TRENCH FROM FINAL GROUND GRADE TO THE TOP OF THE CONDUIT.
 3. ADD 200mm SAND, AS REQUIRED, AND RED ELECTRICAL MARKER TAPE ON TOP.

4 TRENCH FOR UNPAVED SURFACES
E902 N.T.S.



- NOTES:
1. PROVIDE ENCLOSURE IN PARKS GREEN POWDER COAT FINISH.
 2. INSTALL ENCLOSURE C/W:
 - PADLOCKABLE BOTTOM LIP
 - GROUND STUD ON DOOR AND BODY

6 AC DANDY DWPS WATERPROOF ENCLOSURE
E902 N.T.S.