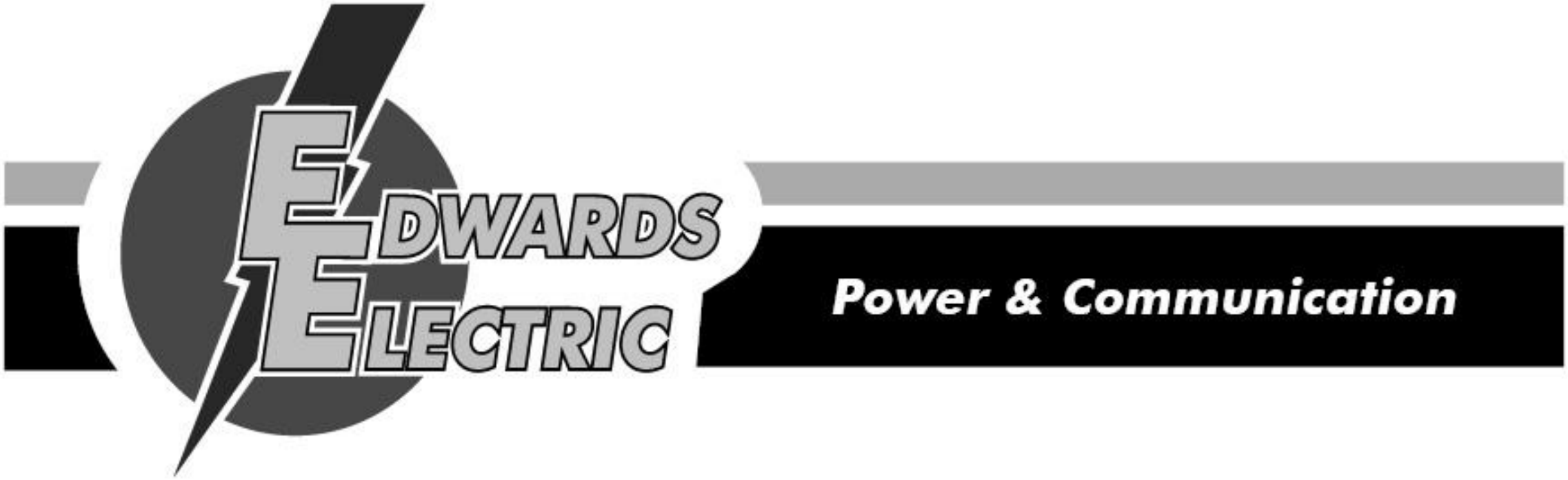


Electrical Requirements To Charge Your EV

LEE MACFARLANE, EVITP

PROJECT MANAGER

Where do 'THEY' want you to Charge?

Home

Single Family Residential

Townhouse

MURB/Condo

Workplace

Public

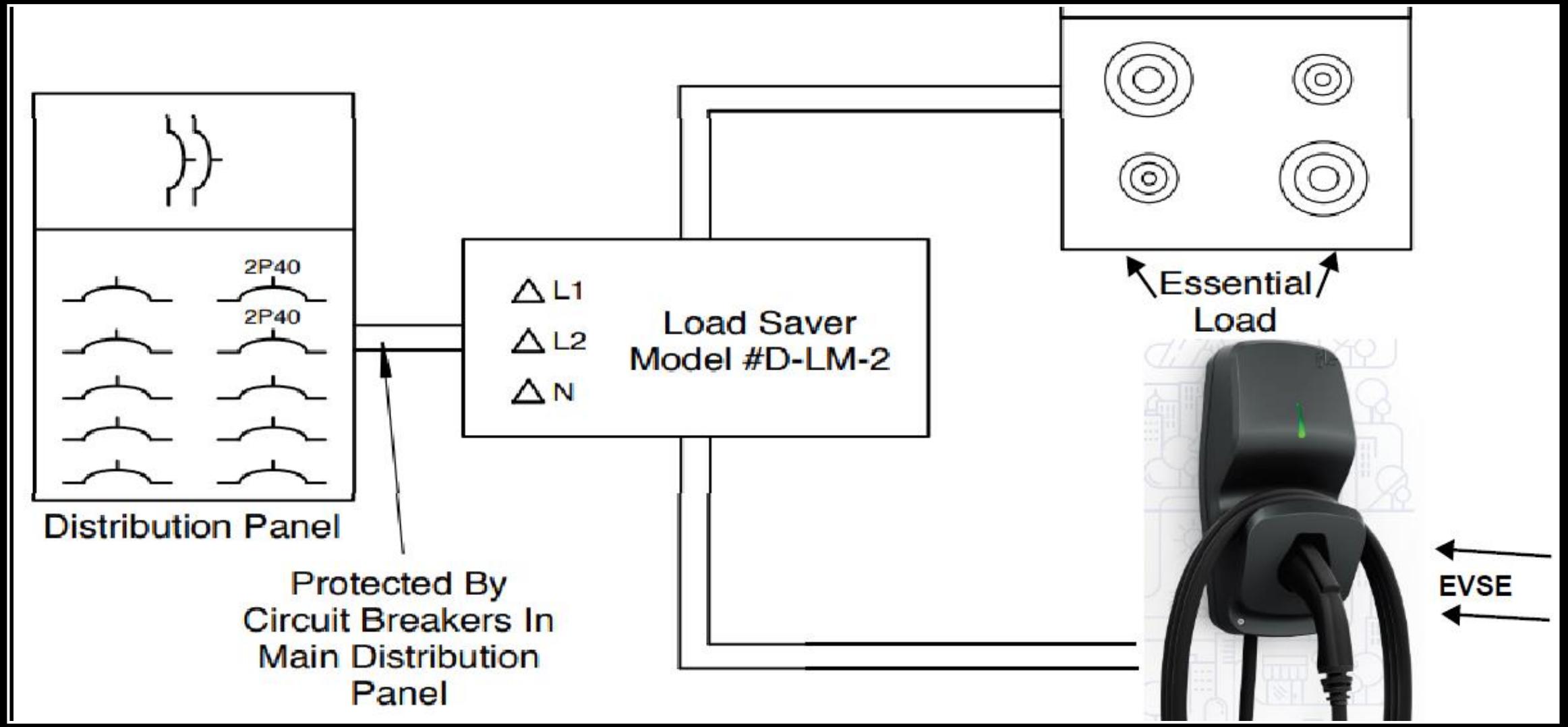
Library

Malls

Stations

Single Family Home
Canadian Electrical Code

- Demand Calculations – How much capacity do you have?
  - 5000W – Basic to 90m2
  - 1000W – Every other 90m2
  - 6000W – Range
  - 25% -- Over 1500W, Dryer, Hot Water, Pump
  - 100% -- Hot Tubs, Spas, Swimming Pool
  - 100% -- Heat up to 10,000W
  - 25% -- Heat over 10,000W
  - 100% -- EVSE
- 100 AMP Home = 24,000 W
- 200 AMP Home = 48,000 W



Load Miser or Other Systems – THEY ARE NOT TO BE USED WITHOUT REFERENCING NEW DEMAND CALCULATION

CURRENT BC Hydro Rebates – Single Family (& Townhouses)

A plug-in unit will only grant you up to $350 rebate

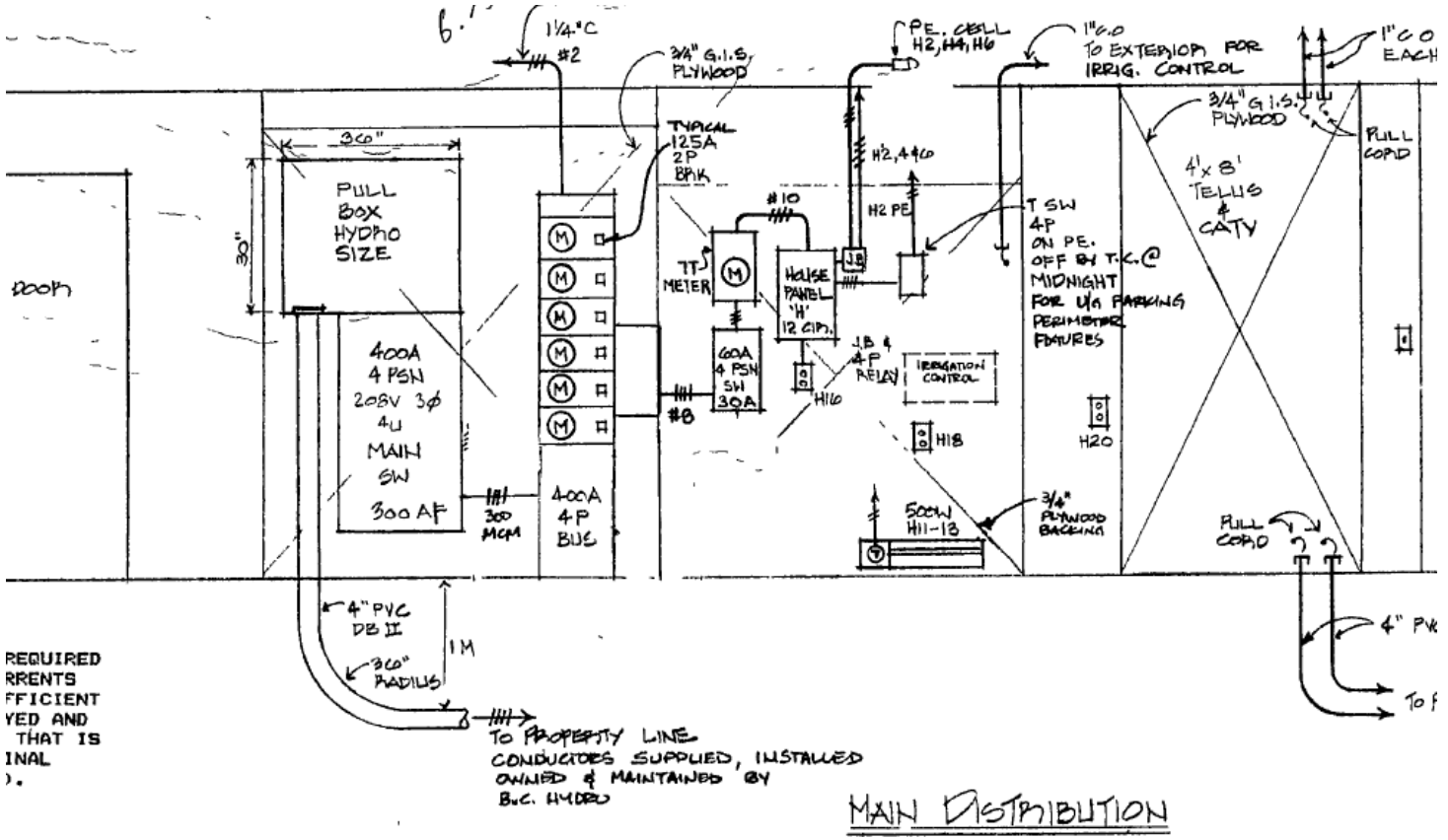
Invoices must have the details of the EVSE separate from the labour, materials, and permit cost.

Must be CSA/UL - on their approved list.

Townhouses are part of this rebate section and not 'MURB'. MAJOR CONSIDERATIONS

Townhouses

- 125Amp Meter, 110Amp Demand, **15amps Left**
- **Not enough for an EVSE**
- Does the main system also have enough to ‘grant’ your townhome 15 amps?



Planning for your MURB EVSE's

Why….?

Competition / Sales concerns

New Buildings with 100% EVSE capacity

100% Coverage

Infrastructure wastage

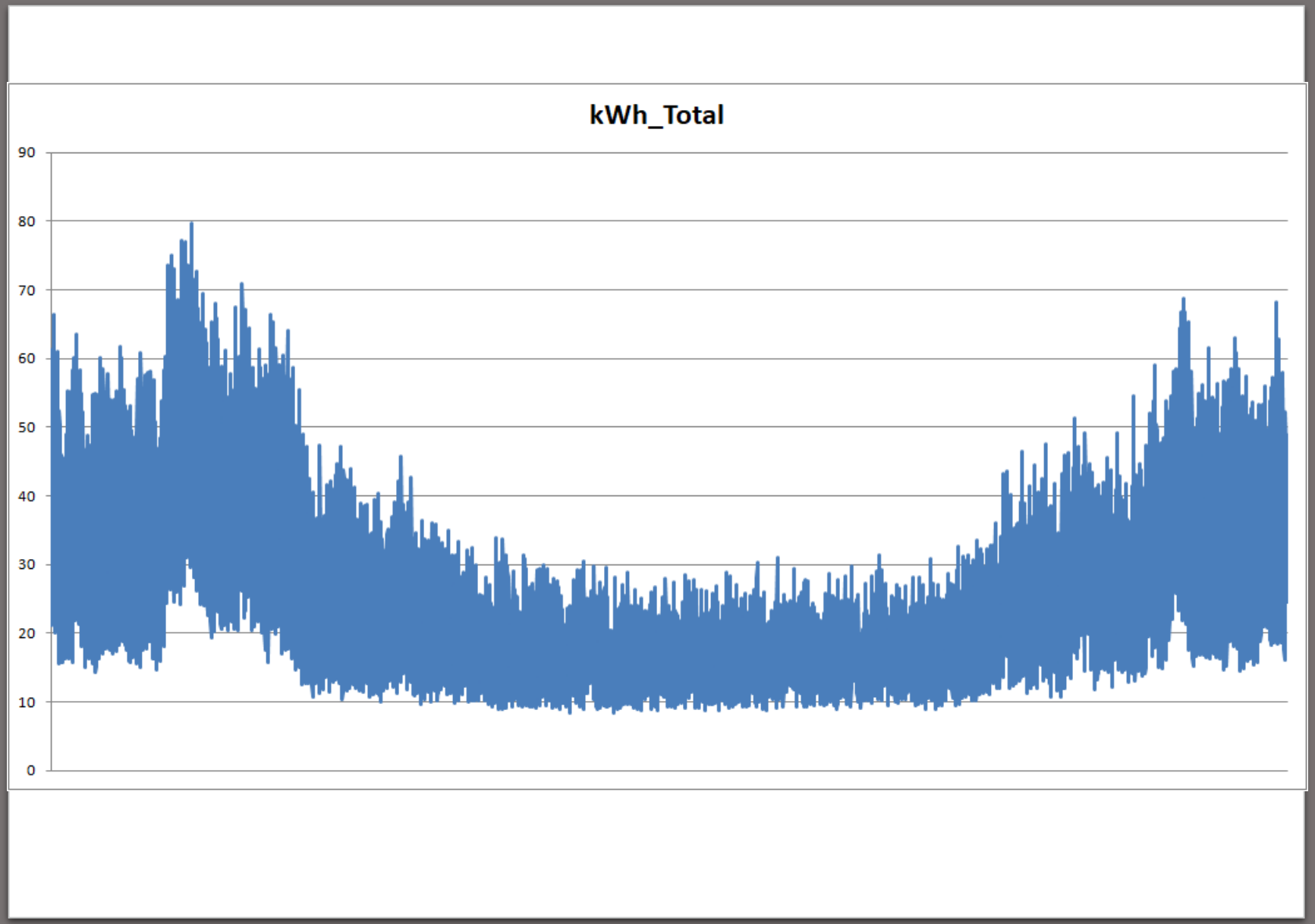
EVSE cost wastage

Installing 1 or 2 chargers now can use up 8 to 10 times your capacity

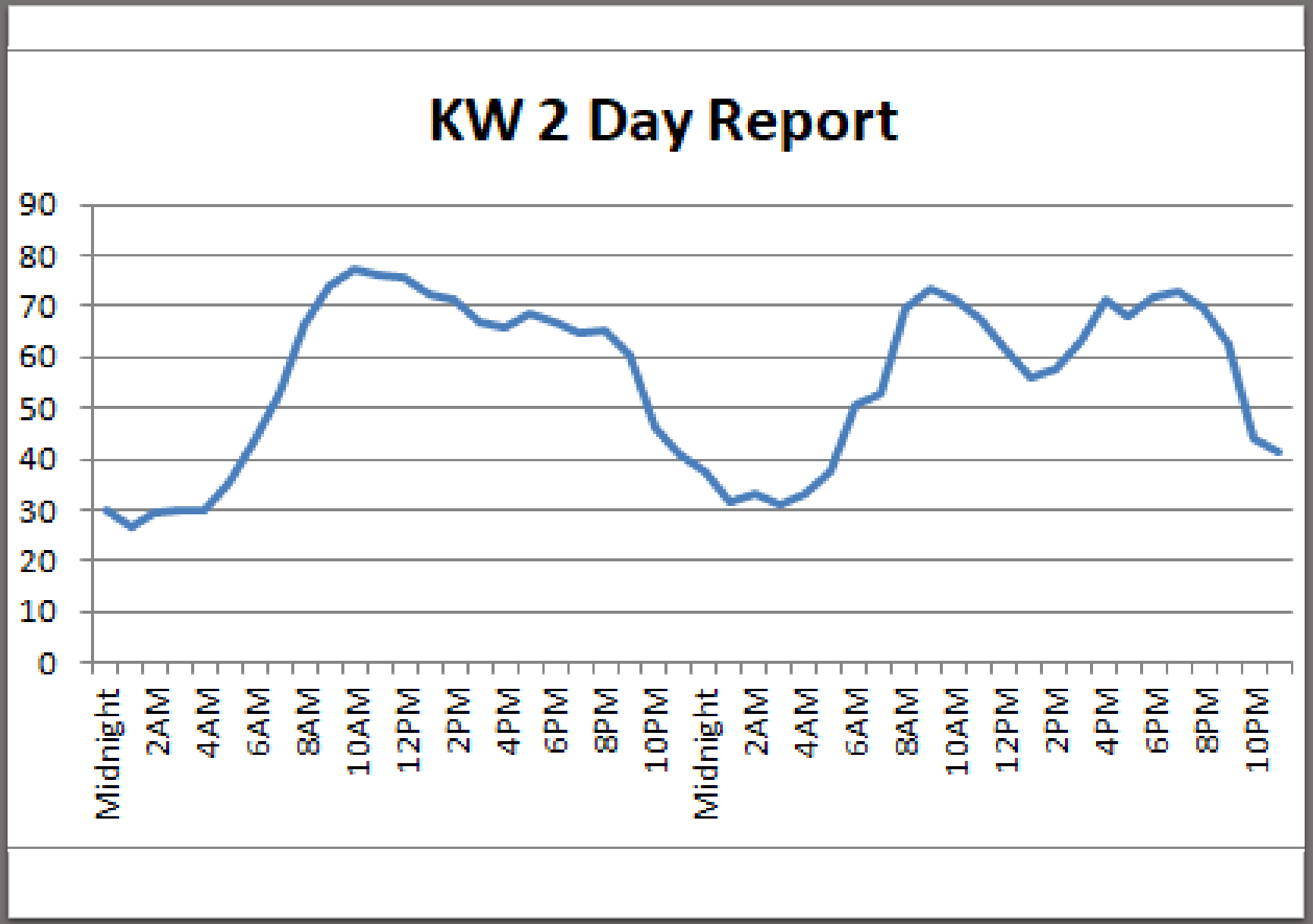
Take your time and make informed decisions

BC Hydro Information and Rebates

- Plan for 100% EVSE distribution with BC Hydro / Electrician's help
- Annual Hourly Peak Load Report
  - Useful / Needed info
- What type of end user product? What features does your strata need?
- Rebates require EV Ready Plan to access Infrastructure and Level 2 networked charger rebates



BC Hydro Annual Hourly Peak Report

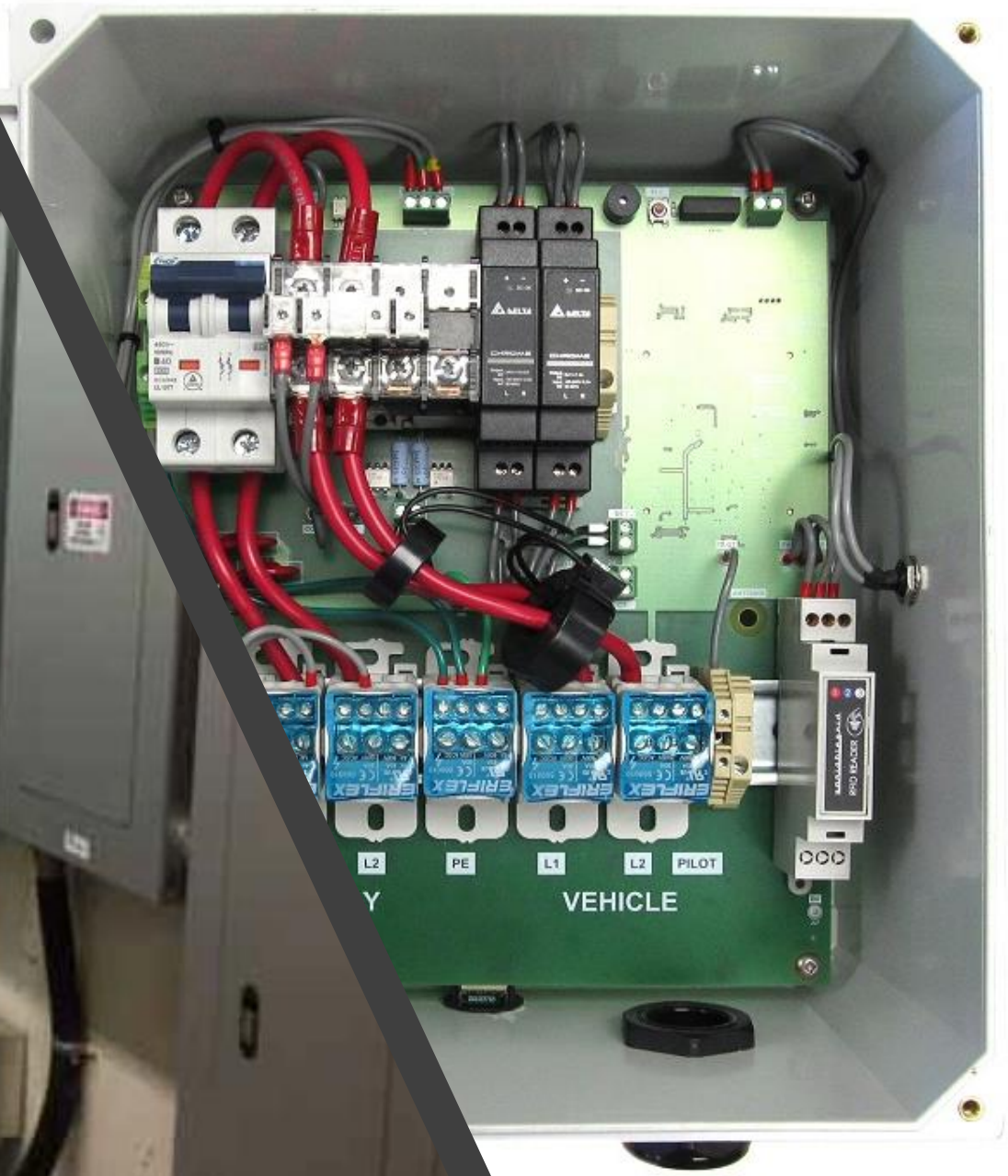


BC Hydro Annual Hourly Peak Report

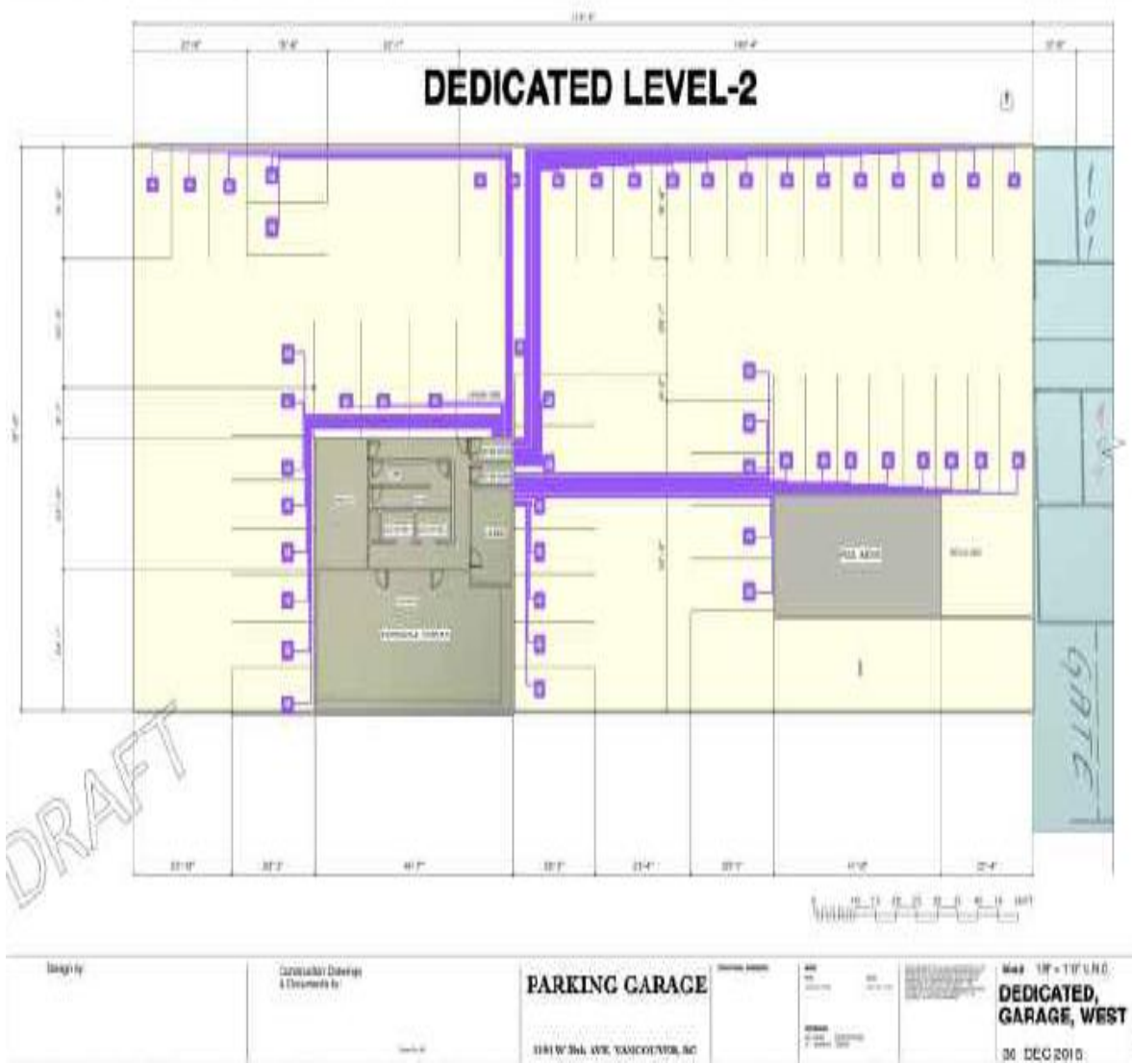
Demand Charges?

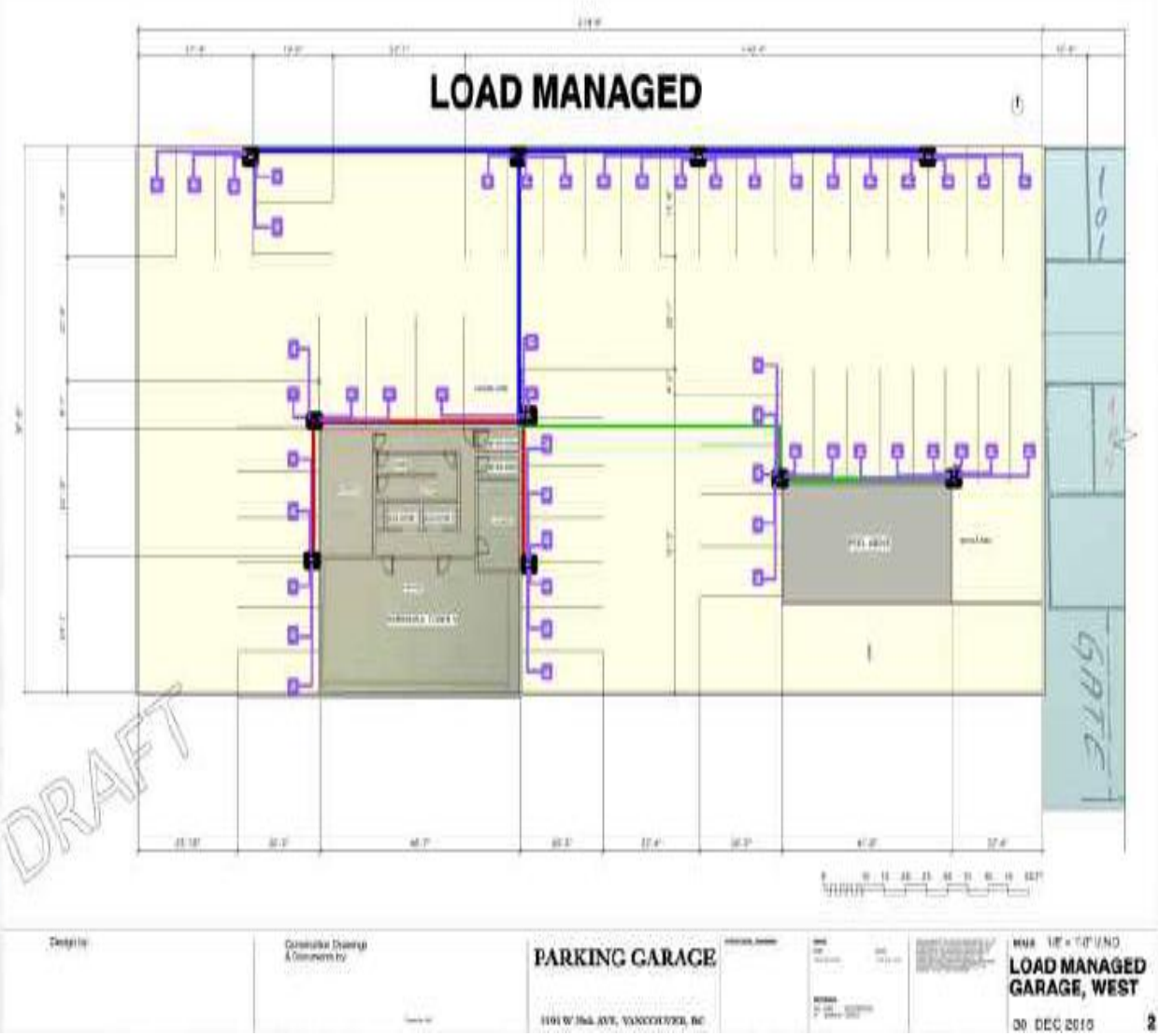
Designing and Planning EVSE Infrastructure

- Size of Electrical Room
- Equipment in Electrical Room
- Current Demand
- Drawings
- Location of EVSE issues – GC needed?

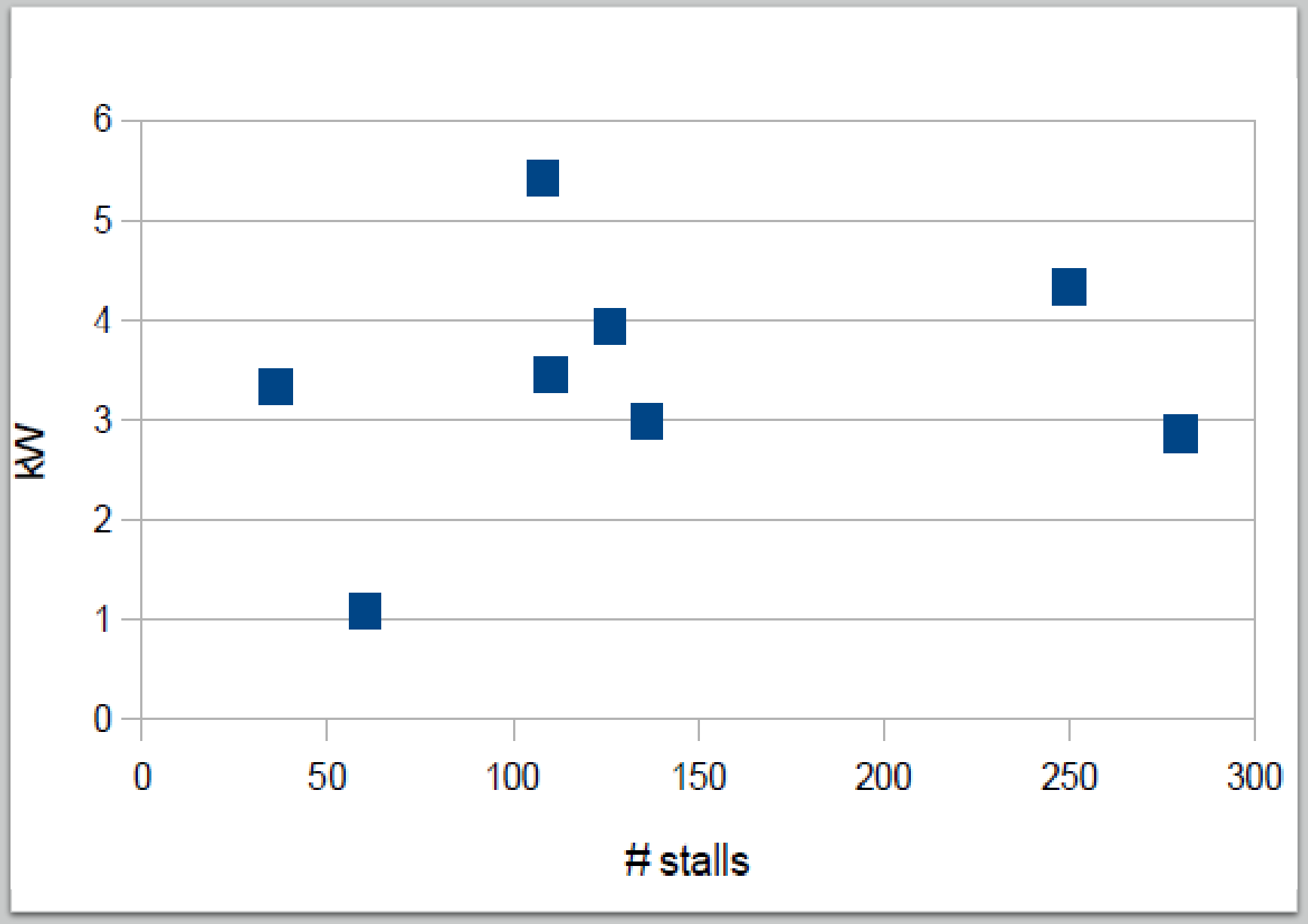


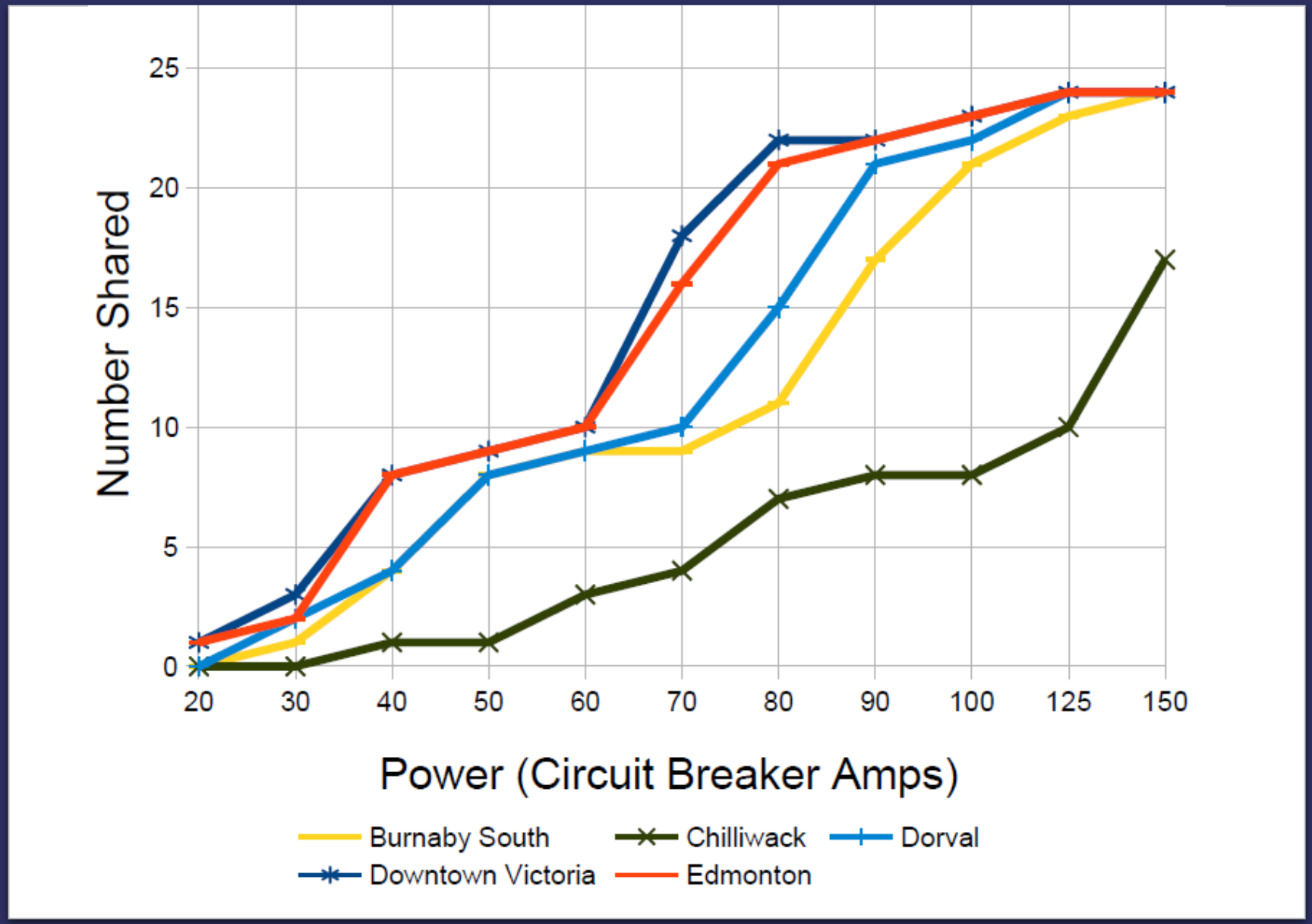
Designing your EVSE System





EVSE Spare Capacity





Depending on where you live – you may require more power

Recap – Infrastructure Work

Have an electrician visit your strata/building

EVEMS to use ALL available power?

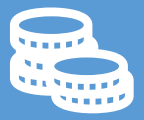
Ask what your electrician will be able to do for you – Design? Suggestions? EVSE Supplier? GC work?... Part of the EV Ready Plan

Recap – EVSE Installation

Watch for Annual Costs

Watch for Hourly or Usage Costs

Design Efficiently



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How We May Help?

- Finance Infrastructure costs
- Lease EVSE's including service and monitoring