NORWICH EV

Turnkey EVSE Proposal
for
Town of Bristol

Turnkey EV Charging Solutions for New England Businesses and Nonprofits

November, 2023

Norwich EV is a division of Norwich Technologies, Inc. which was founded in 2011 with a vision of developing and commercializing leading-edge innovations in Clean Technology. Norwich EV continues this mission by providing business, non-profits, and municipalities with integrated EV charging solutions

Proposed Site Plan
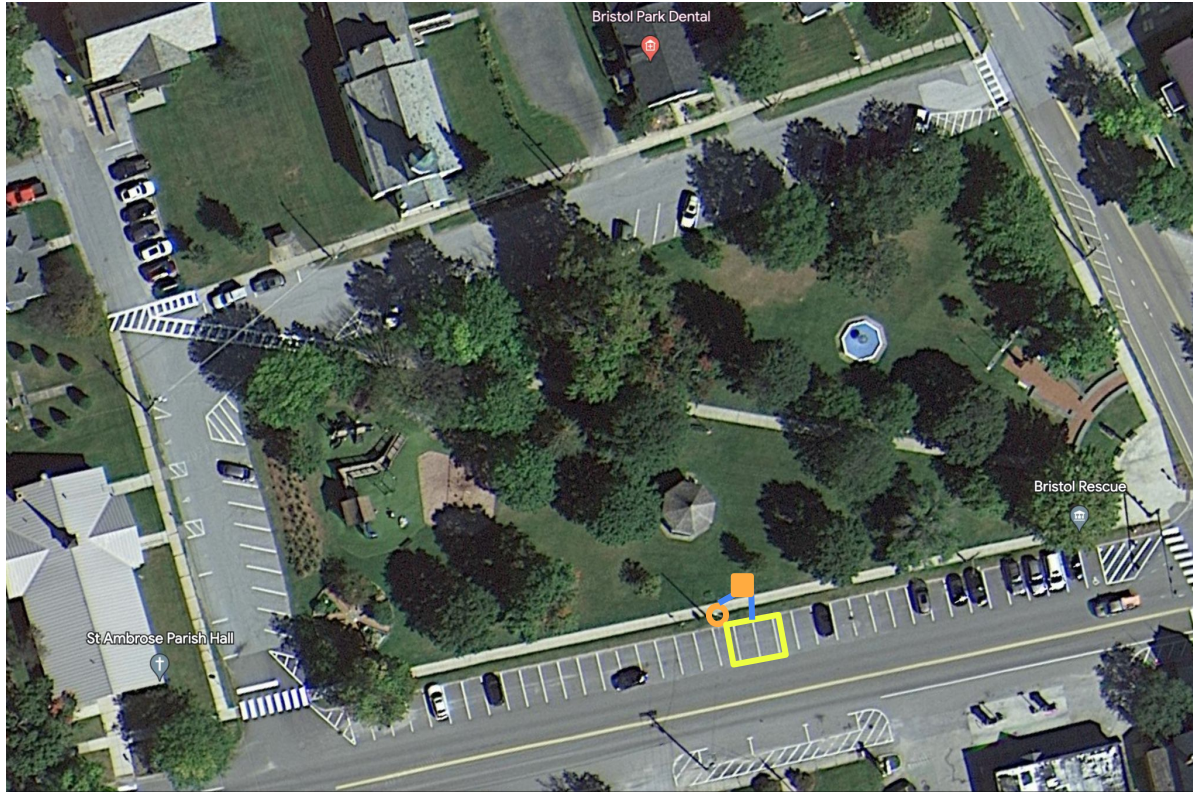
Map Key

GMP Pole ◯

New meter & Panel 🟧

Trenching/ Conduit Run |

Dedicated Parking space with EVSE ▢

Installation Notes

- A new electric service will be brought in from the existing GMP pole located on Route 116
- Trenching will bring conduit from the pole and cut across the side and come up into a new meter and panel mounted on a wooden pedestal
- Trenching will go from the new panel back cutting across the sidewalk and come up into to two (2) single port BTC 70A Level 2 charging stations

Project Timeline, after a signed contract is in place:
- 4-6 weeks for engineering and design work
- 10-12 weeks for procurement of materials
- 2-4 weeks to complete construction

Networked EV Charging Station Proposal

Line Item	Total Cost	Notes
Hardware Costs	$4,920.00	
Civil Make Ready Costs	$21,567.60	
Labor Costs	$17,688.00	
Utility Make Ready Costs	$964.86	
Turnkey Price	$45,140.46	
Anticipated Utility Rebates Available	$1,500.00	$750 per charging port, collected from GMP upon project completion
No. of Ports	2	Level 2, OCCP
One-Time Network Activation Fee	$100.00	$50 per charging port
Annual Networking Fee	$500.00	$250 annual fee per charging port for ampUp Core

FAQ

- **How many miles of range is added per hour?**
  At a charging rate of ~16kWh, an EV will gain approximately 60 miles of range per hour.
- **How much in electricity does it cost per hour of charging?**
  Depending on your electric rate, it will cost approximately $1.00 to $1.20 in electricity (without demand charges).
- **How long does it take to reach a full charge?**
  If completely empty it will take approximately eight (8) hours to reach a full charge.
- **Can I add a non-networked charging station to public charging station maps?**
  Yes, a non-networked charging station can be added to PlugShare.com. PlugShare is one of the top rated EV charger maps.
  The application allows EV drivers to find compatible charging stations, explore nearby amenities, and plan a travel route.
  Adding your new charging station to the PlugShare map will help draw EV drivers to your location.

Benefits of EV Charging Stations

- You foster greater loyalty among existing customers and stronger interest among new customers.
- EV customers spend twice as much time at retailers as average customers, and 43% are likely to return weekly to retail locations with EV chargers.
- For employees, you offer a valuable and tangible benefit-providing them with a low-cost, reliable form of transportation to work.
- Making EV charging equipment available to employees is a great way to attract value-driven talent to your organization.
- You can build a culture of commitment to environmental stewardship in the workplace and demonstrate your corporate social responsibility to visitors.

ampUp

AmpUp Software Plans
Level 2 Charger Pricing

Starter

$175
Per port per year

✓ Analytics & Reporting

✓ Driver Reservations

✓ Driver RFID Card

✓ Location Access Control

✓ Driver Support

✓ Remote Troubleshooting

✓ Standard Host Support

Core   `MOST POPULAR`

$250
Per port per year

✓ **Everything in STARTER +**

✓ Revenue Collection

✓ Direct Deposit

✓ Driver Access Groups

✓ Multi-Site Management

✓ Multi-User Account

✓ Extended Host Support

Pro

$350
Per port per year

✓ **Everything in CORE +**

✓ Tiered Pricing

✓ Time-of-Use Rates

✓ Time-Based Access Control

✓ Session Limits & Idle Fees

✓ Advanced Load Management

✓ Premium Host Support

ONE-TIME **ACTIVATION FEE** $50 per port

CONTACT US TODAY

🌐 ampup.io

✉ sales@ampup.io

- Connectivity cost included (SIM, Wi-Fi)
- Hosts receive all revenue; drivers pay additional transaction processing fees
- RFID available on supported hardware
- Demand response ready

AMPUP
FEATURE DESCRIPTIONS

📊 ANALYTICS & REPORTING

Analytics & Reporting

View charging session data, utilization, revenue, and sustainability metrics. Download reports and analytics for utility or ESG reporting.

💳 DRIVER ACCESS

Driver Reservations

Drivers can be sure a charger is available by reserving in advance.

Driver RFID Card

Charge with the tap of a RFID card. AmpUp supports adding charging to a RFID the driver already has (for example, a building badge).

Location Access Control

Publish charging stations to the AmpUp mobile app, Google Maps, and PlugShare, or keep them private.

Driver Access Groups

Control charger access and pricing for specific groups of drivers, including free or subsidized charging.

Time-Based Access Control

Change public access based on the day and time for each location.

Session Limits & Idle Fees

Encourage drivers to share charging stations by imposing time limits or charging idle fees for drivers staying after a certain time period.

$ REVENUE GENERATION

Revenue Collection & Direct Deposit

Set rates by time or energy used. Revenue collected from drivers' charging sessions is remitted via direct deposit to a single bank account.

Tiered Pricing

Set two-tier charging rates with one price for initial time period or energy usage and a different rate thereafter.

Time-of-Use Rates

Manage pricing based on the time of day to accommodate for different utility rates or driver demand.

LOCATION & ACCOUNT MANAGEMENT

Multi-Site Management

Manage multiple locations from one dashboard – floors of a parking garage, areas of a campus, different addresses – as unique areas with different settings.

Multi-User Account

Enable multiple users to see analytics, download reports, and manage charging by adding them as a manager or operator to the account.

Advanced Load Management

Set an energy load cap that limits maximum power available across a location to reduce the load on the panel.

? SUPPORT & TROUBLESHOOTING

Driver & Host Support

Drivers have 24/7 access to AmpUp's help desk. Standard host support 9-5 ET via help desk and chat. Extended support 8-8 ET. Premium adds phone and priority support.

Remote Troubleshooting

Get alerts, diagnose problems, and remotely restart chargers.

AC Level 2 30, 40, 70 Amp
SINGLE or DUAL PORT Charging Station

POWER PER PORT	7.2 kW (240VAC @ 30A)	9.6 kW (240VAC @ 40A)	16.8 kW (240 VAC @ 70A)
SINGLE PORT MODEL - PEDESTAL	L2P-30-240-16	L2P-40-240-16	L2P-70-240-16
SINGLE PORT MODEL - WALL	L2W-30-240-16	L2W-40-240-16	L2W-70-240-16
DUAL PORT MODEL - PEDESTAL	L2P-30-240-15	L2P-40-240-15	
DUAL PORT MODEL - WALL	L2W-30-240-15	L2W-40-240-15	

Electrical Service

Power	240/208 VAC @ 30, 40, or 70A Circuit Per Port	
Service Wiring	Single: 3-Wire (L1, L2, Earth Ground)	Dual: 5-wire (L1, L1, L2, L2, Earth Ground)

Functional Interfaces

Connector Type	SAE J1772
Charging Protocol	SAF11772
Standard Cable Length	25 ft
Cable Retractor	Optional (Cable 18 ft w/ Cable Management)
LCD Display	500 Nits, 7" Color, 800 x 480, UV Protected
Card Reader	ISO 14443 Type A & B, ISO 18092 NFC

Standard

SINGLE or DUAL PORT options

CHARGING PROTOCOL: SAEJ1772

NEMA 3R HOUSING

RFID READER

OCPP COMPLIANT

7" COLOR SCREEN

UL COMPLIANT - ETL CERTIFIED

Safety and Connectivity

Ground Fault Detection	20 mA
Plug-Out Detection	SAE J1772
Power Measurement (opt)	Accuracy: 1% - 5%
Power Report Interval	Every 15 minute on the hour
Wireless	2.4 GHz Wi-Fi (802.11 b/g/n)
Wide Area Network	4G Modem
Communication Protocols	OCP 1.5 and 1.6 Compliant

Options

CABLE RETRACTOR

CREDIT CARD READER

CREDIT CARD SCANNER

HB44 Meter

Safety and Operation

Enclosure Rating	NEMA 3R
Regulatory Compliance	ET Certified for USA and cUL Certified for Canada; Complies with UL 2594, UL 2231-1, UL 2231-2, and NEC Article 625, EMC: FCC Part 15 Class A
Operating Temperature	-30°C to +60°C (-22°F to 140°F)
Storage Temperature	-50°C to +80°C (-58°F to 176°F)
Humidity	95% Non-Condensing