

RFP - Sourcing Summary

General Information

Organization:	ISD #273 – Edina Public Schools	Date:	10/29/2024
Department:	Transportation	Category:	Electrification as a Service

Process Notes

Process used:	<ul style="list-style-type: none"> RFQ
Vendors participating:	<ul style="list-style-type: none"> Highland Electric Fleets (submitted) In-Charge (no quote) Sia-Partners (no quote)

Your Company Information

Data Point	Highland Electric
Company Name:	Highland Electric Fleets, Inc.
Address:	200 Cummings Center Suite 273D
City, State Zip:	Beverly, MA 012915
Years in Business:	5 Years
Organizations served:	School District and Public Customers
Public School Districts served:	20+ School districts served in 30+ states
Minnesota Public School Districts served:	Red Lake School District #38
Cooperative Agreement utilized:	Sourcewell
Local Account Support Name:	Caitlin Goodspeed
Local Support Phone:	caitlin@highlandfleets.com
Local Support Email:	210-218-7731

Qualifications Information

Data Point	Highland Electric
Do you agree with the District Terms, conditions, specifications, & requirements as described?	Yes
Does your organization meet all eligibility requirements defined in this document?	Yes
Are you authorized to do business with Minnesota public schools?	Yes
Have you included all required forms and documents?	Yes

References

	Organization	Contact Name	Contact Phone	Contact Email
#1	Red Lake Schools #38	Willie Larson	218-679-1708	williel@redlake.k12.mn.us
#2	Jackson Public Schools	Marcus Leon	517-841-2203	Marcus.leon@ipsk12.org

Fleet Electrification Services

Implementation and Training

Data Point/Question	Highland Electric
<p>What is the expected timeline for implementation, from planning to trained and operational?</p>	<p>The expected timeline for implementation is 1 year from award.</p> <p>Please see the attached file "Edina Project GANTT Chart" for a more detailed timeline</p>
<p>What training will be provided to district staff on managing and operating the electrified systems?</p>	<p>Highland will coordinate training across the Edina Public Schools organization to ensure all aspects of their operations can support the electric vehicles. These trainings are included in the annual price for our services and will be tailored for:</p> <ul style="list-style-type: none"> • Transportation Operations • Mechanics/maintenance • Bus Drivers • Community/parents • Emergency Response • District & board of education <p>We will ensure Edina Public Schools members are properly trained to operate, maintain, and repair their vehicles by working closely with OEMs and dealers. Presentations and materials are tailored to meet the specifications of a customer's particular depot, addressing specific operational needs to vehicle and charger type. Before putting the buses into service Highland will confirm that district stakeholders complete our initial training and understand how to provide safe and reliable transportation services. Highland initial training ensures that all drivers, mechanics and operation staff for a customer's fleet are prepared to:</p> <ul style="list-style-type: none"> • understand proper operation & maintenance procedures for electric buses • know who to contact when they have questions and concerns, or if issues arise. <p>Upon completion of in-person training for the various stakeholders, Highland creates and maintains a central repository for all training materials provided. We are available to provide additional training for all stakeholders throughout the term of our contract.</p>
<p>What software and network connectivity is required?</p>	<p>Highland has partnered with a software developer to design Highland Dashboard, a proprietary managed charging software that remotely monitors the status of electric buses. Highland Dashboard automates and optimizes all aspects of electric fleet management. Through Dashboard, Edina Public Schools can 1) monitor vehicle operations, including battery efficiency, performance and maintenance alerts, 2) schedule vehicle charging and monitor status, and 3) collect fleet data reports, including vehicle location, route history, mileage, and battery efficiency.</p> <p>Highland Dashboard is interoperable with any school bus or charger OEM, and with all school bus monitoring and telemetry systems. Highland Dashboard is currently installed across 400+ vehicles and chargers deployed at all of Highland's projects. These projects utilize Thomas, Navistar (IC) and Collins vehicles. Highland customer service is available 24/7 via a unique support telephone line that will be assigned to Edina Public Schools. If a person does not pick up the phone immediately, calls will be returned within 1 hour. Edina Public Schools will also be assigned a custom support email address where less critical issues can be reported and will be answered within one business day. Highland Dashboard is compliant with Open Charge Point Protocol (OCPP) v1.6 and will be updated to OCPP 2.0 when it is available.</p>

Fleet Electrification Services (cont'd)

Vehicle Operations & Maintenance

Data Point/Question	Highland Electric
<p>Please describe how daily charging is handled?</p>	<p>As part of our annual service fee, Edina Public Schools will get access to the Highland Dashboard charge management software. Highland Dashboard is programmed to ensure that buses are sufficiently charged to meet their daily route lengths and will optimize charge levels for weather-related decreases in battery efficiency. It also optimizes what time of day the buses charge to avoid peak demand utility rates to reduce energy costs. The dashboard offers customizable, automated alerts to ensure a bus will not run out of battery during a route. A designated person or team can be alerted to:</p> <ul style="list-style-type: none"> • A bus that was not plugged in • A charger that has faulted or stopped charging • A bus that needs to return to the depot immediately due to low battery charge • A power outage at the depot site; and • Other issues With Highland Dashboard, <p>Edina Public Schools will have full access to a suite of data and reporting tools to track route metrics and bus/charger performance both on a web portal and smartphone app. Dashboard allows users to customize their individual portal to reflect the data and information of their choosing, including vehicle location, charge status, battery percentage charged, time remaining to full charge and estimated range. Additionally, Highland Dashboard collects and stores data such as efficiency, route lengths and charger faults. Highland Dashboard can be remotely operated and managed by Highland on behalf of Edina Public Schools or Edina can self-managed the system.</p>
<p>How is the energy/electricity cost managed?</p>	<p>Highland Manages Energy/Electricity costs in 3 ways:</p> <ol style="list-style-type: none"> 1. Charge Management Software Highland Dashboard comes equipped with charge management features to optimize energy/electricity costs. The charge management platform allows us to optimize charging times, power output, utility signals, billing constraints, and charger telemetry to efficiently manage electricity loads and optimize charging, (e.g, by taking advantage of time of use rates). 2. Energy Efficient EV chargers All installed chargers will be UL 916 certified and managed to reduce demand peak cost wherever possible. 3. Risk Reduction through Fleet-as-a-Service Under the Highland business model, utility fees and electricity usage (from charging the electric vehicles) are included in the bundled contract price and paid by Highland. Thus, Edina Public Schools is not exposed to the risk of excess demand or fluctuating electricity charges.
<p>What plans are in place for energy resilience, such as backup power systems or microgrids, to ensure continuous operation during power outages?</p>	<p>If an emergency results in a power failure during project implementation, Highland is prepared to coordinate a backup power source that will allow for continued project operations. Backup power supply will be provided through either a generator or another uninterruptible power supply that the utility and Highland deem suitable for the project. Highland has close relationships with many electrical providers and is prepared to take actions in an emergency to ensure project completion.</p>

Fleet Electrification Services (cont'd)

Vehicle Operations & Maintenance

Data Point/Question	Highland Electric
Please include all maintenance items included in your proposal/quote:	Axle U-Bolts – Retorque
	Drag Link – Lubricate (x)
	Kingspins and Bushings – Lubricate (x,2)
	Tie Rod Ends – Lubricate (x)
	Wheel Bearing-Grease Type – Repack
	Wheel Bearing-Oil Type (including synthetic) – Change Oil
	Axle Flange Nuts – Retorque
	Axle U-Bolts – Retorque
	Rear Axle with Synthetic Oil – Change
	Emergency Windows Slides – Lubricate
	Air Dryer Desiccant – Replace
	Air Tanks (all) – Drain Water
	S-Cam Bushings – Lubricate
	Replace the air filter element, if necessary whole filter.
	Cabin Heater Coolant Fluid Replacement
	Coolant Liquid Fluid Replacement
	ABS Wiring Connections & Sensors – Reseat
	Visual inspection, and Clean around Location Drive Motor correct as necessary (May have to unbolt and clean ground
	cable mounting location)
	Cleaning (Clean surface of equipment with compressed air)
	BTMS Coolant System Change and Refill
	Power Steering Fluid – Change
	Power Steering Filter – Replace
Steering Gear – Lubricate	
Steering Intermediate Shaft U-Joints / Slip Joint – Lubricate	
Steering Intermediate Shaft U-Joints – Retorque	
Wheel Stud Nuts – Retorque	
Please note maintenance/repair services NOT included in the proposed Fleet Electrification Fees.	Non-reimbursable expenses include any physical damage to either the bus or the charger caused by district personal.

Fleet Electrification Services (cont'd)

Vehicle Operations & Maintenance (cont'd)

Data Point/Question	Highland Electric
What is the typical turnaround time for Prescheduled Repair and Services?	Routine maintenance usually can be completed in one day and most other repairs and services may take 1 to 3 days.
Is there a guaranteed turnaround time?	Since turnaround time depends on the complexity of the repair and parts availability, it is therefore difficult to determine the turnaround time precisely or to provide a guarantee.
How are expenses related to non-included repaired/maintenance items managed?	Typically, the fleet manager keeps all records for repairs completed by the depot or an outside vendor. Every month the records would be sent to our maintenance team for analysis to determine what is covered according to Edina Public Schools's contract and what is not. For example, repairs for the misuse of equipment causing damage or neglect would not be covered. If Highland completes repairs and deems them not covered, a bill will be sent.
What do you estimate the annual cost of non-covered repairs	We are unable to provide an annual cost of non-covered repairs because we cannot determine whether any events leading to non-covered repairs, such as collisions or driver induced malfunctions, will occur.
If the bus is decommissioned for maintenance or repair, how does your organization cover the route operations for that vehicle?	If the bus is decommissioned for mechanical issues, the district would typically use a spare fleet bus to cover the route operations. If the bus is inoperable due to Highland's fault, Highland would pay a per diem of \$100/day to cover the costs to operate a spare diesel bus on the understanding that the district has access to a spare bus. If the bus is inoperable due to a manufacturer defect or warranty issue, Highland would partner with the district to obtain a remedy from the manufacturer to cover the route. If the bus is inoperable due to damage or other issues caused by the district, then the district would be responsible for covering the route.

Fleet Electrification Services (cont'd)

Wall Charging Station

Data Point/Question	Highland Electric
Manufacturer:	Tellus
Model:	Tellus Power Green DC Fast Charger 30kW Wall Mount DC Fast Charging Station
Product #:	TP5 30 480
Connection required:	480 VAC (3P+N+PE)
Device footprint (LxWxH):	21" x 12" x 27"
Time Required to Charge Buses specified:	7 Hours 0-100%
Manufacturer Warranty Length:	2 Years Standard
Warranty conditions, inclusions, exclusions:	In Highland Fleet – and Depot as a service offering, Highland pays for charger maintenance for the entire contract's length. Effectively this gives Edina a 10-year warranty.
Rationale for choosing this unit:	Highland is experienced with Tellus Power Green DC chargers and is confident in the performance when paired with an IC electric school bus. These units are the most cost-effective solution that will provide more than sufficient charging rates to meet the needs of Edina Public Schools. Additionally, the chargers will not require upgrades to the existing power system for the building, accelerating build timelines and lowering costs to the district

Fleet Electrification Services (cont'd)

Vehicle Quoted

Data Point/Question	Highland Electric
Year:	2026
Manufacturer:	IC Bus
Model:	eCE School Bus (PB11E)
Motor:	Dana TM4 SUMO MD HV2200-6P
Horsepower:	255kW Rates Power @ 10000 RPM, 2355 Nm Rated Torque @ 1000 RPM
Range:	135 Mile Maximum Range
Rider Capacity:	77 with Air Brakes; 65 with Hydraulic
Climate Control/Heater:	Driver Air Conditioner with Integral Heater & Defroster Cabin: Electric Stepwell heater Electric Midship heater (50,000 btu) Electric Rear Heater (84,500 btu)
Vehicle Purchase Cost (as specified):	Price Included in Highland's Annual Fee
Additional Manufacturer Options:	Please see attached spec sheet for all included options
Manufacturer Warranty Length:	Battery: 8 Years Drivetrain & chassis: 5 years In Highland Fleet- and Depot-as-a-Service offerings, Highland pays for and is responsible for vehicle maintenance for the entire length of the contract. Effectively this gives Edina a 10-year warranty on all vehicle components.
Warranty conditions (inclusions/exclusions):	Please see attached document "IC Type C EV Warranty"

Quotes

OPTION A: Fleet Electrification with NO (\$0.00) upfront cost [10-Year Term]

Description	Quote (\$)	U/M
Setup/Implementation Fees/Costs:	\$0	N/A
Fleet Electrification Service* including Vehicle Fees:	\$39,350.00	Per Year/Per Bus
Total Annual Costs:	\$39,350.00*	Per Year
Quoted Vehicle FMV at end of 10-year term:	TBD**	Per vehicle

*Fleet Electrification Service should include vehicles, all maintenance (or reimbursement of maintenance costs), electricity costs/reimbursements, software licenses; and equipment and training

OPTION B: Fleet Electrification with \$400,000 initial investment [10-Year Term]

Description	Quote (\$)	U/M
Setup/Implementation Fees/Costs:	\$0	N/A
Fleet Electrification Service* including Vehicle Fees:	\$16,800.00	Per Year/Per Bus
Total Annual Costs:	\$16,800.00*	Per Year
Quoted Vehicle FMV at end of 10-year term:	TBD**	Per vehicle

*Fleet Electrification Service should include vehicles, all maintenance (or reimbursement of maintenance costs), electricity costs/reimbursements, software licenses; and equipment and training

OPTION C: Fleet Electrification Services utilizing District-owned buses [10-Year Term]

Description	Quote (\$)	U/M
Setup/Implementation Fees/Costs:	\$0	N/A
Fleet Electrification Service** Fees:	\$22,250.00	Per Year/Per Bus
Total Annual Costs:	\$22,250.00*	Per Year

*Fleet Electrification Service should include all maintenance (or reimbursement of maintenance costs), electricity costs/reimbursements, software licenses; and equipment and training

** FMV cannot be determined at contract start date. The FMV will be determined at the contract conclusion in line with industry standards.