PRE-BID ADDENDUM NO. 1
TO SPECIFICATION 28172.01

OWNER: Lansing Public School District
519 West Kalamazoo Street
Lansing, Michigan 48911

PROJECT: Four Battery Energy Storage Systems & EV Chargers Project
North Environmental Science Magnet School
Pattengill Biotechnical Magnet School
Wexford Montessori Academy
Cavanaugh STEAM Elementary School

CONTRACT FOR: Construction

ENGINEER: CTC Engineering, LLC
3915 Research Park Dr., Ste. A-8
Ann Arbor, Michigan 48108

INTENT: The following is intended to be a clarification to the Contract Documents based upon the questions asked in review of the documents.

DRAWINGS: The following drawings accompany this Addendum:

- Sheet 28172.01, E-1 through E-8

PROJECT MANUAL: -No sections are reissued with this Addendum-

CLARIFICATIONS:

A. The following questions and associated clarifications are made part of and binding to the Contract documents:

1. **Accepted equivalent BESS: Section 26 3326 names Piller systems or accepted equal. What is the approval process and deadline for an alternate manufacturer, including Uptime's PBS/PCS? Please identify required comparison data, certification evidence and any restrictions on charging architecture or skid/container configurations.**

   Response [gtk]: The proposed substitute, complete with cut sheets and submittals, must be sent to the Owner for their acceptance before the close of business November 5, 2026. The acceptance or rejection shall be made before the close of business, November 9, 2026.

2. **Capacity and operating requirements: For the specified 240 kW/982.4 kWh and 120 kW/491.2 kWh systems, are energy ratings nominal or usable? Please provide the required operating sequence, demand-limit settings, load profiles and reserve state of charge, and clarify whether backup, islanding, black start or export is required beyond peak shaving and time-of-use operation.**

   Response [gtk]: The energy ratings are the nominal values.

3. **Final design and pricing basis: Drawing E-1 is labeled preliminary/not for construction and includes placeholder transformer and CT values. Will complete bid-level drawings, equipment ratings, conductor sizes, protection settings and site details be issued before bids? Please define contractor versus engineer responsibility for final design and changes after award.**

   Response [gtk]: More complete project documents have been made available as part of this response. Any final design and changes after award shall be by the Engineer of Record.

4. **Owner-furnished charger configuration: Section 26 3323 names Zerova DS60 and Heliox/Siemens 60 kW equipment but describes 30 kW output and 33 kVA input. Please provide the final model, quantity per site, connectors, input requirements, certified installation drawings and delivery schedule, and clarify unloading, storage and damage responsibility.**

   Response [gtk]: The bus chargers are by the Owner and the most up-to-date information is attached.

5. **Controls and bidirectional integration: Please clarify the charger language allowing power from connected buses to the source. Is bidirectional operation required, and which vehicles and equipment support it? Please define the BESS, charger, existing solar and building-control interfaces, communications protocols, network access, software licenses and party responsible for integration.**

   Response [gtk]: Bidirectional operation is a requirement. Any interfaces between the new and existing equipment shall be by the Engineer of Record.

6. **Utility and permitting status: Under Section 26 3326, what LBWL interconnection, LARA and fire-marshal approvals are already secured? Please provide utility requirements, fees, study results and utility-owned work, and clarify responsibility for protection studies, metering, service upgrades and approval-related schedule impacts.**

   Response [gtk]: The submission to the LARA and fire marshal shall be by the Engineer of Record. There are no utility requirements for this project. Protection studies shall be by the Engineer of Record. Any fees that are the responsibility of the Contractor are listed in the Project Documents.

7. **Enclosures and site construction: Section 26 3326 references NEMA 1 enclosures. Please confirm indoor/outdoor location and required environmental ratings at each site, including heating/cooling and fire protection. Please also define pad/structural design, trenching, restoration, bollards, access and school shutdown restrictions.**

   Response [gtk]: The battery equipment shall be in a NEMA 1 environment and the chargers are in a NEMA 3R enclosure.

8. **Commissioning and maintenance pricing: Please provide acceptance tests and performance criteria for BESS and chargers, required OEM attendance, training and warranty start date. For the included first year and optional years 2–5 of BESS service, please define PM frequency, response times, monitoring, software, parts, labor, battery coverage and any required capacity guarantee.**

   Response [gtk]: This information shall be by the supplier.

9. **Funding and contractor obligations: Please identify each funding source and provide all applicable award conditions and contractor flow-downs, including the governing wage determination, certified payroll, domestic-content requirements or waivers, reporting and completion deadlines. Please clarify whether grant-related responsibilities extend beyond the published construction scope.**

   Response [gtk]: Not applicable.

10. **Bid terms and schedule corrections: Please confirm November 12, 2026 at 2:00 p.m. local time as the deadline, correcting the timeline's Wednesday/EDT references, and reconcile the 90-day bid-hold requirement with the proposal's 60-day language. Please confirm award timing, the mid-August 2027 completion requirement, whether site-specific awards are permitted, and availability of pre-bid minutes and a site walkthrough.**

    Response [gtk]: The dates above are confirmed. The award of separate site contracts is spelled out in the specifications. There are no "walk through" minutes.

11. **Reference: Official SO-1862 package, PDF pp. 1, 4–6, 132–137 and drawing E-1 (p. 138). Please address any superseding addenda in the responses.**

    Response [gtk]: There was no other addenda with this project.

12. Can you share the contact for the BESS that you mentioned at the pre-bid meeting.

Response [gtk]: The contacts for the BESS's are as follows:

- Ms. Karolyn Busch, Enterprise Account Executive
  TX: 617/865-2653
  CL: 603/674-2192
  EM: kbusch@sanalife.io

- Mr. Mike Leary, Product Solutions Specialist
  Medi-Products
  281 Fields Lane Suite 2B
  Brewster, NY 10509
  EM: **mike@mediproducts.net**
  TX: 203/487-7423

- *END OF PRE-BID ADDENDEM #1* -

CHARGER

Heliox 60 kW

Smart. Efficient. Reliable.



Convenient charging; anytime and anywhere

Heliox's most adaptative and compact solution. The Heliox 60 kW charger is a versatile, user-friendly solution suitable for a wide range of vehicles, including cars, buses, and trucks. It offers seamless plug-and-play functionality, making it an ideal choice for various charging needs, regardless of location or time.

- **Adaptative design:** It can adapt and expand as needed, offering options for hardwired or portable setups, networked or standalone operation, and the ability to deploy a single charger or multiple units, providing you with full control over your charging solution.
- **Plug and play experience:** Charging starts automatically after plug in. With 30A (25 kW), 60A (50 kW), and Max (60 kW) input current selections, the Heliox 60 kW charger offers flexibility to match your charging needs.
- **Reliability on-the-go:** Experience fast DC charging wherever you need it. In workshops, depots or testing environment; this charger provides charging capabilities anywhere, anytime. It is an ideal solution to start your electrification journey.

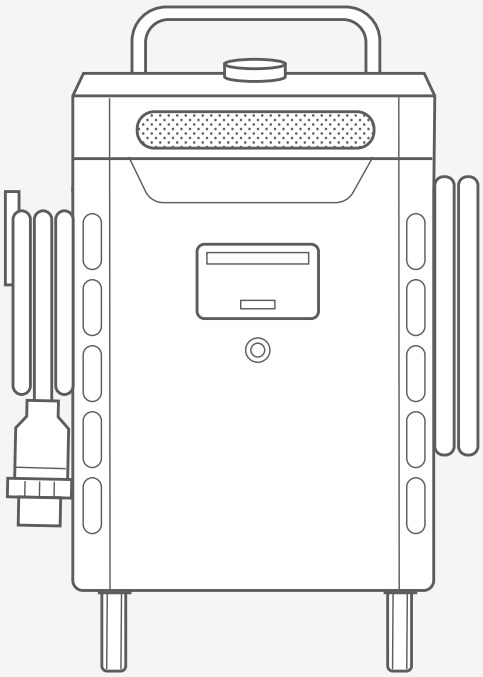
Power Options
60 kW

Number of dispensers in the system
1

heliox
A Siemens Business

Versatile in
charging power options

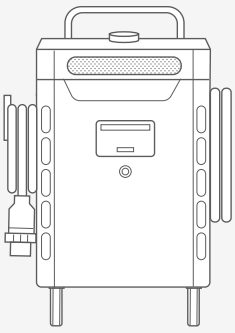
- The Heliox 60 kW stands up to daily wear and tear in ways other portable chargers simply cannot.
- With a NEMA 3R-rated enclosure, the charger can be safely operated indoors and outdoors.
- Adjust your charger AC input situations where your power supply may be limited.
- The Heliox 60 kW is the perfect EV charging companion, now and in the future.
- Options for hardwired or portable setups, networked or standalone operation.



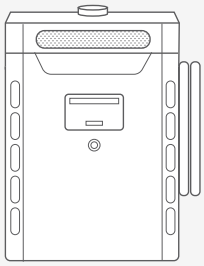
Versatile in
mounting

Designed with scalability and convenience in mind, the Heliox 60's form factor allows for low-profile installations, complemented by a range of accessories including both wall-mount and floor-mounted pedestal options, or a mobile cart configuration.

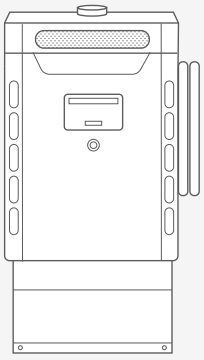
On wheels



Wall mounted



Pedestal



Versatile in
charging settings

Adjust your charger AC input with the turn of a dial, enabling you to activate sessions in situations where your power supply may be limited.

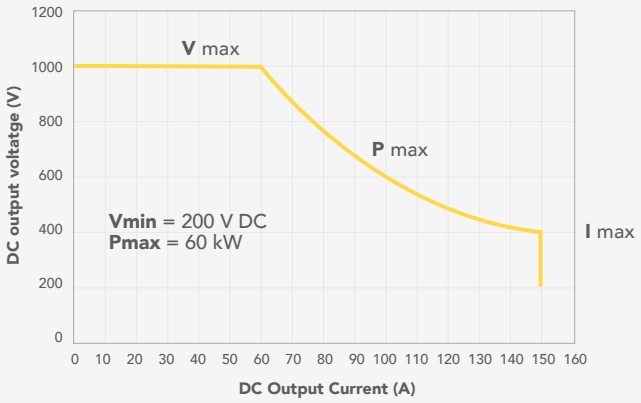


heliox
A Siemens Business

General	Heliox 60 kW HE9823005-01-XXX
Charging standard	SAE J1772 (CCS type-1)
Communication standard	DIN 70121 ISO15118-1/2/3 ed1
Compliance and safety	UL2202, UL2231, CSA C22.2 No. 346, Energy Star
Power factor above 50% rated	> 0.98
Peak efficiency	≥ 95%
Dielectric withstand	3,000 V
Network cellular	4G modem or Ethernet
Back office	OCCP 1.6J / OCPP 2.0 ready
Temperature range	-22 °F to +113 °F [1]
Operational noise level (at 77F)	< 60 dB(A) @ 45"
System weight	230 lbs
Protection rating	NEMA 3R
Mounting options	Mobile chassis, wall mount, pedestal
Display	7" LCD
Charging status indicator	LED light stack, LCD display
Cable length	5 m and 7 m [2]
Warranty	24 months

1 Derating may apply at extremes
2 Added cost for 7m

Power curves



Input	
Connections, frequency	3P + G 480 VAC, 47 - 63 Hz
Current limit values	30A / 60A / Max (user selected)
Full load / idle power	65 kVA / 100 VA
Line-line voltage range	480 VAC +6/-13%, 60 Hz
Max. AC phase current	90A, inrush current limited

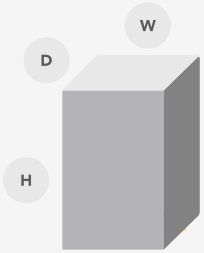
Output	
DC voltage range	200 - 1,000 V
Rated DC power	60 kW
Power limits	25 kW (@ 30A AC input current) 50 kW (@ 60A AC input current) 60 kW (@ Max. input current)
Max. DC current	150A

Status indicators

Provides real-time information about the state of charge. Blue charging lights display approximate SOC.



Dimensions



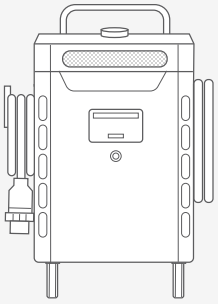
Mounted	Mobile
H: 35"	**H:** 41.1"
W: 26.4"	**W:** 29.4"
D: 17"	**D:** 18.6"

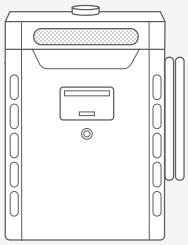
heliox
A Siemens Business

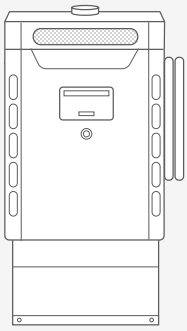
CHARGER

Heliox 60 kW

Ordering Guide



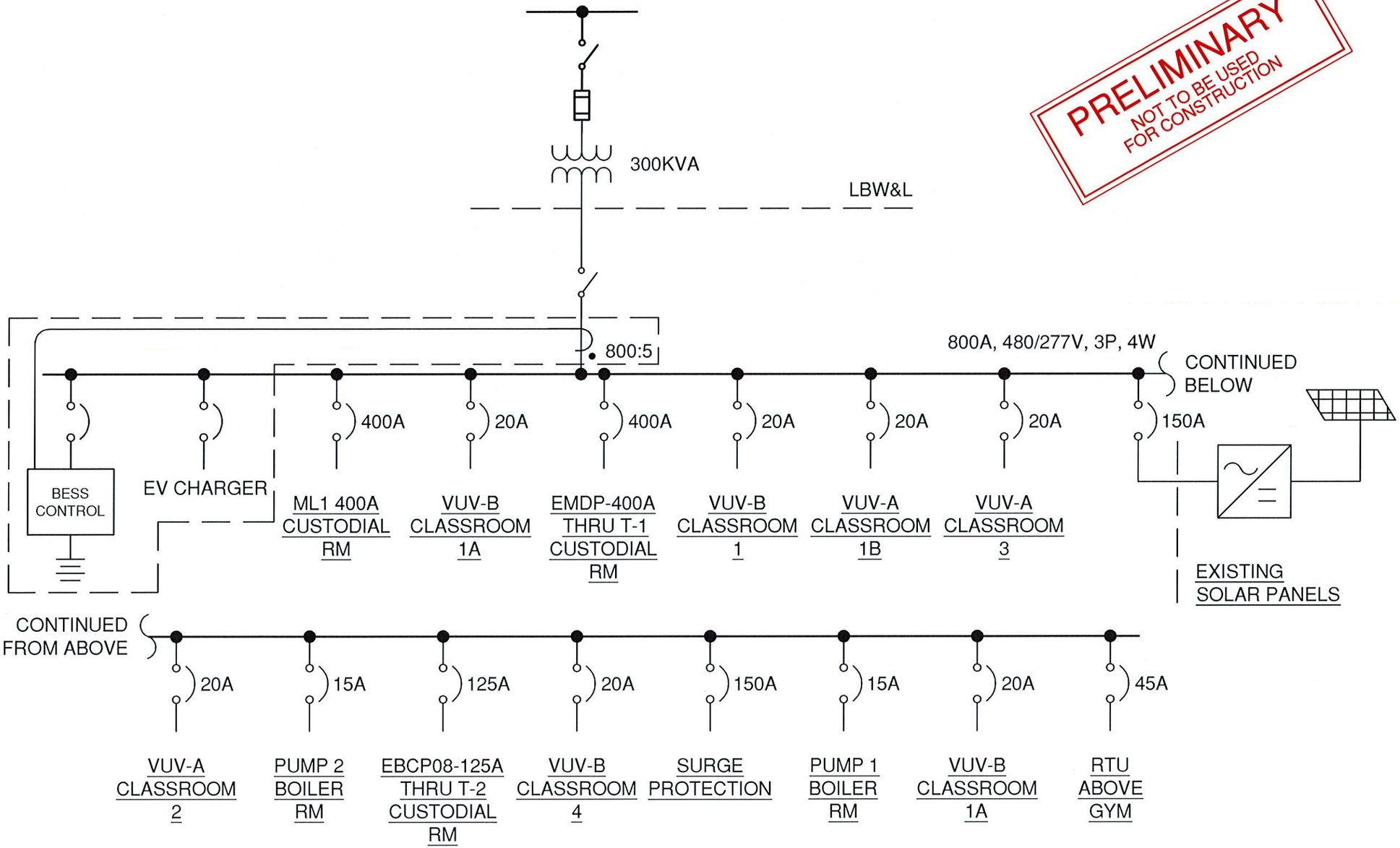




	Heliox 60 kW Mobile	Heliox 60 kW Wall Mounted	Heliox 60 kW Pedestal
UL Buy America-Compliant 5 m	HE9823005-01-BMA	HE9823005-01-BAA	HE9823005-01-BAA
UL Buy America-Compliant 7 m	HE9823005-01-BAC	HE9823005-01-BDA	HE9823005-01-BDA
Accessory Pedestal Mount	----	----	HN810222

Preventative maintenance is available. For details, please contact your local Siemens or Heliox Business Development Manager/Distributor.

gavin.shaller 10/30/2026 8:25:40 AM



PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

BATTERY ENERGY STORAGE SYSTEM/EV CHARGER ONE-LINE DIAGRAM
CAVANAUGH ELEMENTARY SCHOOL

Lansing School District

CAVANAUGH ELEMENTARY SCHOOL
300 W CAVANAUGH RD
LANSING, MI 48910

BATTERY ENERGY STORAGE SYSTEM/ BUS EV CHARGER

CTC Engineering
3915 Research Park Drive, Suite A-8
Ann Arbor, MI 48108
Office (734) 222-9951 - Fax (734) 222-9957

ONE-LINE DIAGRAM

DRAWN	GRS
CHECKED	....
APPROVED	....
SCALE	....
PLOT SIZE	ANSI B - 11" X 17"
PROJECT NUMBER	28172.01

REV.	DESCRIPTION	DATE
5	....	....
4	....	....
3	....	....
2	....	....
1	FOR REVIEW	10/29/2026
0	FOR REVIEW	10/14/2026

This drawing as an instrument of service, remains the property of CTC Engineering. Any changes, publications, or unauthorized use is prohibited unless expressly approved.

REV. 1 10/29/2026

DRAWING NO. E-1

P:\A_AAProjects\28172 - Lansing Public School District SD-18432\91720116_DWG\E-1 - Cavanaugh One-Line.dwg

gavin.shaller 10/29/2026 5:47:22 PM

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

TOP OF GRADE

3' MIN.

A
E-2

A
E-2

CAVANAUGH ELEMENTARY SITE PLAN

0 30' 60'

1" = 30'

N

Lansing School District

CAVANAUGH ELEMENTARY SCHOOL

300 W CAVANAUGH RD
LANSING, MI 48910

BATTERY ENERGY STORAGE SYSTEM/ BUS EV CHARGER

CT Engineering
3915 Research Park Drive, Suite A-8
Ann Arbor, MI 48108
Office (734) 222-9951 - Fax (734) 222-9957

SITE PLAN

DRAWN	GRS
CHECKED	....
APPROVED	....
SCALE	....
PLOT SIZE	ANSI B - 11" X 17"
PROJECT NUMBER	28172.01

REV.	DESCRIPTION	DATE
5	....	....
4	....	....
3	....	....
2	....	....
1	....	....
0	FOR REVIEW	10/14/2026

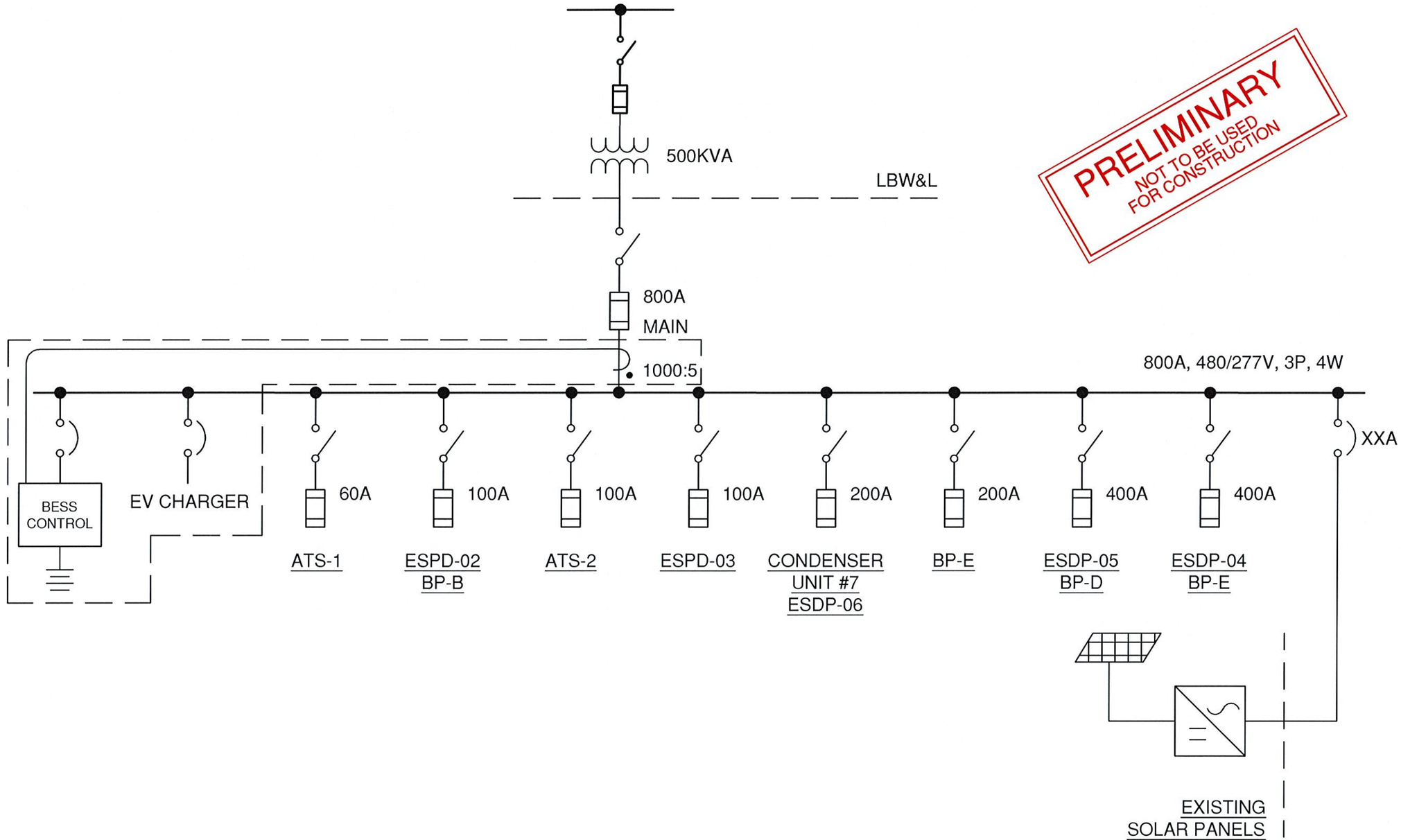
This drawing as an instrument of service, remains the property of CTC Engineering. Any changes, publications, or unauthorized use is prohibited unless expressly approved.

REV. 0 10/14/2026

DRAWING NO. E-2

P:\A_AAProjects\28172 - Lansing Public School District SO-18432917\20\16_DWG\E-2 - Cavanaugh Site Plan.dwg

gavin.shafer 10/30/2025, 8:25:39 AM



PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

BATTERY ENERGY STORAGE SYSTEM/EV CHARGER ONE-LINE DIAGRAM
NORTH ELEMENTARY SCHOOL

REV.	DESCRIPTION	DATE
5	----	----
4	----	----
3	----	----
2	----	----
1	FOR REVIEW	10/29/2026
0	FOR REVIEW	10/14/2026

Lansing School District

NORTH ELEMENTARY SCHOOL
333 E MILLER RD
LANSING, MI 48911

BATTERY ENERGY STORAGE SYSTEM/ BUS EV CHARGER

CTC Engineering
3915 Research Park Drive, Suite A-8
Ann Arbor, MI 48108
Office (734) 222-9951 - Fax (734) 222-9957

ONE-LINE DIAGRAM

DRAWN	GRS
CHECKED	----
APPROVED	----
SCALE	----
PLOT SIZE	ANSI B - 11" X 17"
PROJECT NUMBER	28172.01

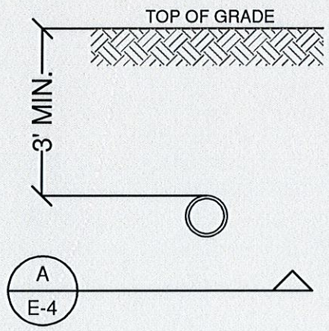
This drawing as an instrument of service, remains the property of CTC Engineering. Any changes, publications, or unauthorized use is prohibited unless expressly approved.

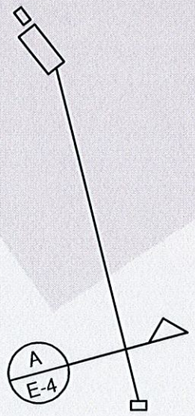
REV. 1 10/29/2026

DRAWING NO. E-3

P:\A_AAProjects\28172 - Lansing Public School District SO-18432\917\2016_DWG\E3 - North One-Line.dwg

PRELIMINARY
NOT TO BE USED
FOR CONSTRUCTION





NORTH ELEMENTARY SITE PLAN

0 30' 60'

1" = 30'

N

REV.	DESCRIPTION	DATE
5	----	----
4	----	----
3	----	----
2	----	----
1	----	----
0	FOR REVIEW	10/14/2026

Lansing School District

NORTH ELEMENTARY SCHOOL

333 E MILLER RD

LANSING, MI 48911

BATTERY ENERGY STORAGE SYSTEM/ BUS EV CHARGER

CTC Engineering
3915 Research Park Drive, Suite A-8
Ann Arbor, MI 48108
Office (734) 222-9951 - Fax (734) 222-9957

SITE PLAN

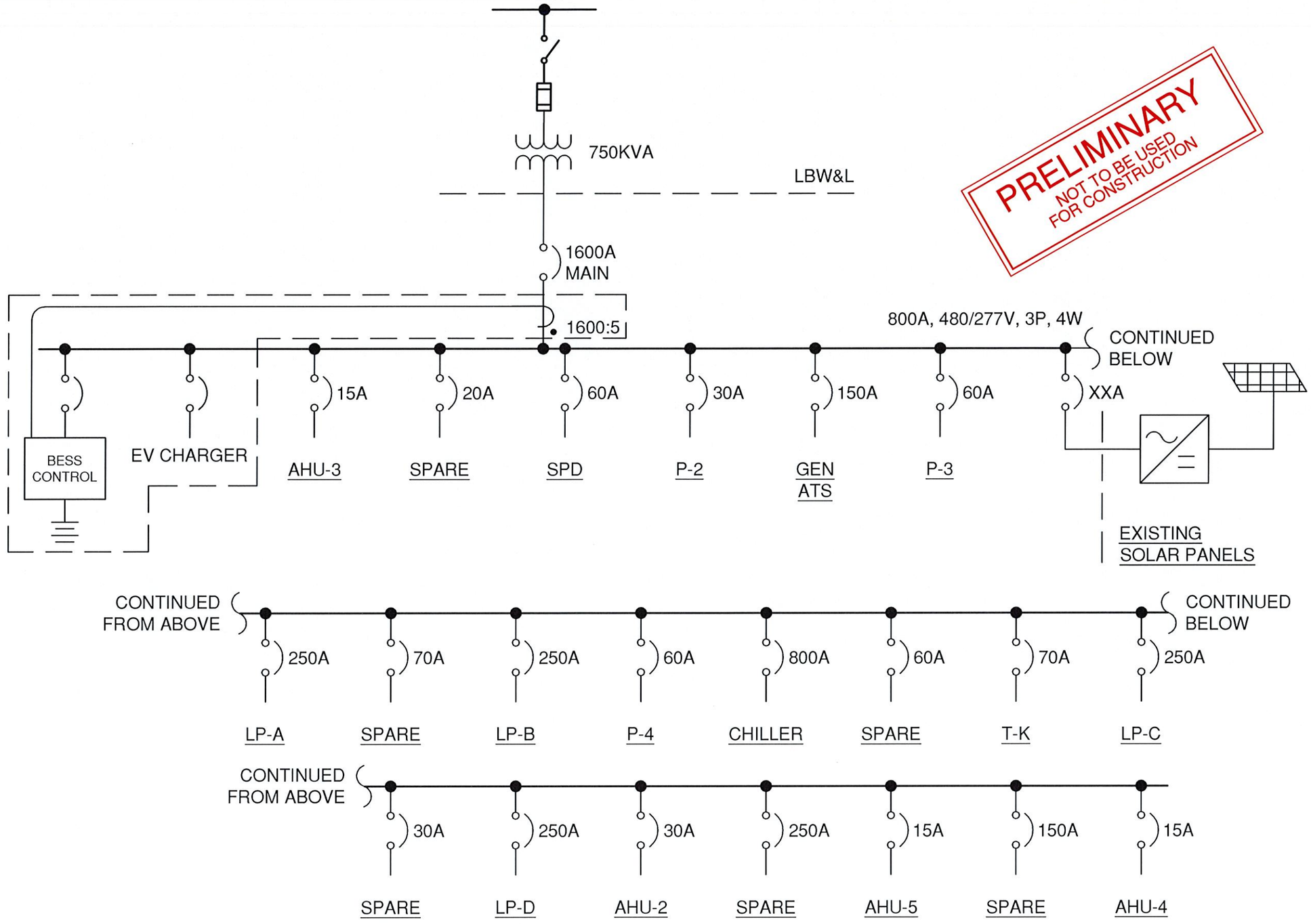
DRAWN	GRS
CHECKED	----
APPROVED	----
SCALE	----
PLOT SIZE	ANSI B - 11" X 17"
PROJECT NUMBER	28172.01

This drawing as an instrument of service, remains the property of CTC Engineering. Any changes, publications, or unauthorized use is prohibited unless expressly approved.

REV.	DRAWING NO.
0	E-4
10/14/2026	

gavin.shaller 10/29/2025 5:47:22 PM
P:\A_AllProjects\28172 - Lansing Public School District SO-1843\291720\16_DWG\E-4 - North Site Plan.dwg

gavin.shaller 10/30/2026 6:25:39 AM



PRELIMINARY
NOT TO BE USED
FOR CONSTRUCTION

BATTERY ENERGY STORAGE SYSTEM/EV CHARGER ONE-LINE DIAGRAM
PATTENGILL BIOTECHNICAL MAGNET SCHOOL

Lansing School District

PATTENGILL BIOTECHNICAL MAGNET SCHOOL
815 N FAIREVIEW AVE
LANSING, MI 48912

BATTERY ENERGY STORAGE SYSTEM/ BUS EV CHARGER

CTC Engineering
3915 Research Park Drive, Suite A-8
Ann Arbor, MI 48108
Office (734) 222-9951 - Fax (734) 222-9957

ONE-LINE DIAGRAM

DRAWN	GRS
CHECKED	....
APPROVED	....
SCALE	....
PLOT SIZE	ANSI B - 11" X 17"
PROJECT NUMBER	28172.01

REV.	DESCRIPTION	DATE
5	....	....
4	....	....
3	....	....
2	....	....
1	FOR REVIEW	10/29/2026
0	FOR REVIEW	10/14/2026

This drawing as an instrument of service, remains the property of CTC Engineering. Any changes, publications, or unauthorized use is prohibited unless expressly approved.

REV. 1 10/29/2026

DRAWING NO. E-5

P:\A_AAProjects\28172 - Lansing Public School District SD-184329\172016_DWG\E-5 - Pattengill One-Line.dwg

gavin.shaller 10/29/2026 5:47:21 PM

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

A
E-6

TOP OF GRADE

3' MIN.

A
E-6

PATTENGILL BIOTECHNICAL MAGNET SCHOOL SITE PLAN

0 50' 100'

1" = 50'

N

Lansing School District

PATTENGILL BIOTECHNICAL MAGNET SCHOOL

815 N FAIRVIEW AVE

LANSING, MI 48912

BATTERY ENERGY STORAGE SYSTEM/ BUS EV CHARGER

CTC Engineering
3915 Research Park Drive, Suite A-8
Ann Arbor, MI 48108
Office (734) 222-9951 - Fax (734) 222-9957

SITE PLAN

DRAWN	GRS
CHECKED	....
APPROVED	....
SCALE	....
PLOT SIZE	ANSI B - 11" X 17"
PROJECT NUMBER	28172.01

REV.	DESCRIPTION	DATE
5	....	....
4	....	....
3	....	....
2	....	....
1	....	....
0	FOR REVIEW	10/14/2026

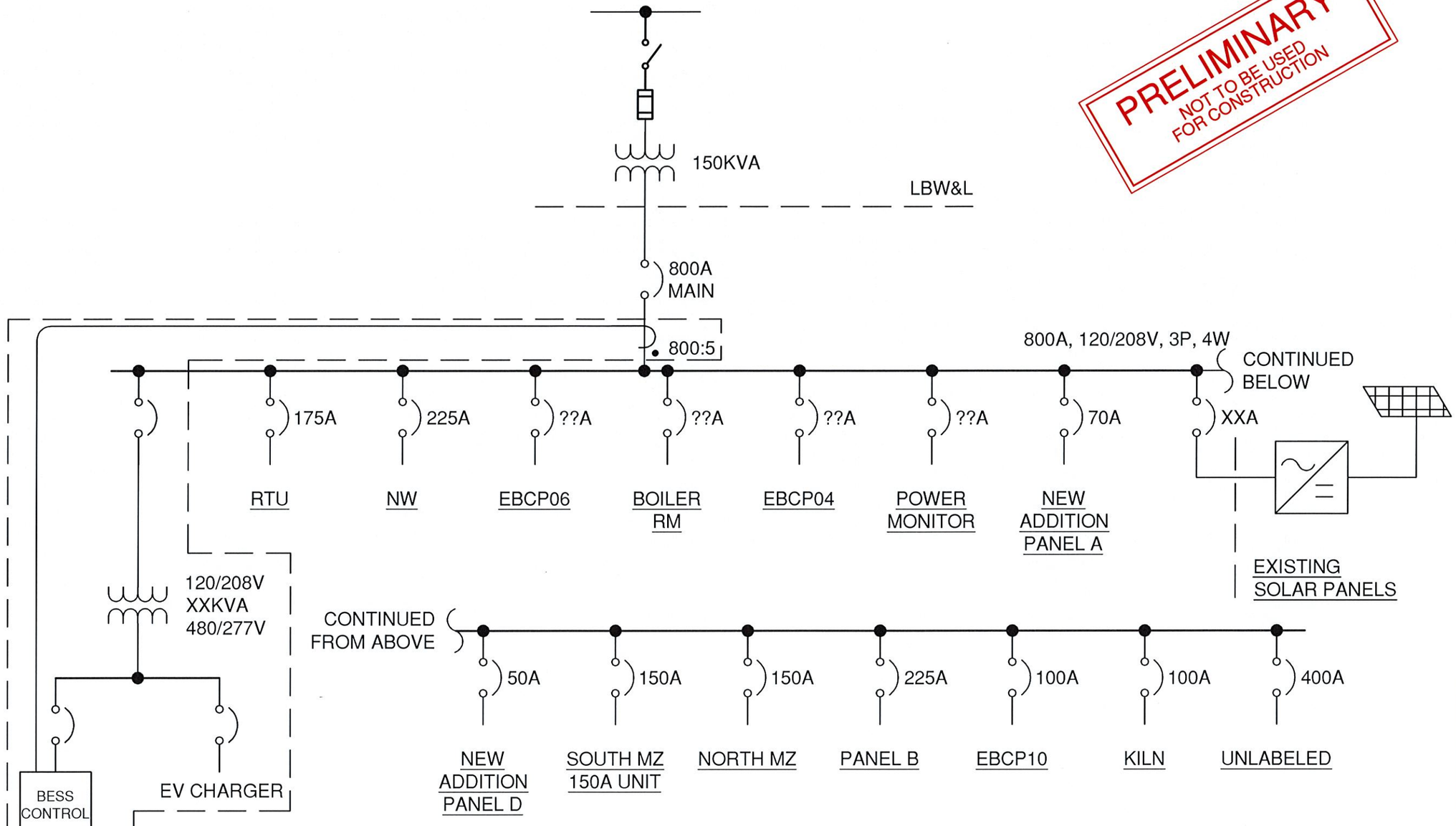
This drawing as an instrument of service, remains the property of CTC Engineering. Any changes, publications, or unauthorized use is prohibited unless expressly approved.

REV. 0 10/14/2026

DRAWING NO. E-6

P:\A_AAProjects\28172 - Lansing Public School District SD-1843\28172016_DWG\E-6 - Pattengill Site Plan.dwg

PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION



BATTERY ENERGY STORAGE SYSTEM/EV CHARGER ONE-LINE DIAGRAM
WEXFORD MONTESSORI ACADEMY

Lansing School District

WEXFORD MONTESSORI ACADEMY
5217 WEXFORD RD
LANSING, MI 48911

BATTERY ENERGY STORAGE SYSTEM/ BUS EV CHARGER

CTC Engineering
3915 Research Park Drive, Suite A-8
Ann Arbor, MI 48108
Office (734) 222-9951 - Fax (734) 222-9957

ONE-LINE DIAGRAM

DRAWN	GRS
CHECKED	....
APPROVED	....
SCALE	....
PLOT SIZE	ANSI B - 11" X 17"
PROJECT NUMBER	28172.01

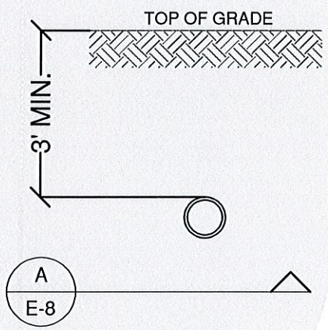
REV.	DESCRIPTION	DATE
5	....	....
4	....	....
3	....	....
2	....	....
1	FOR REVIEW	10/29/2026
0	FOR REVIEW	10/14/2026

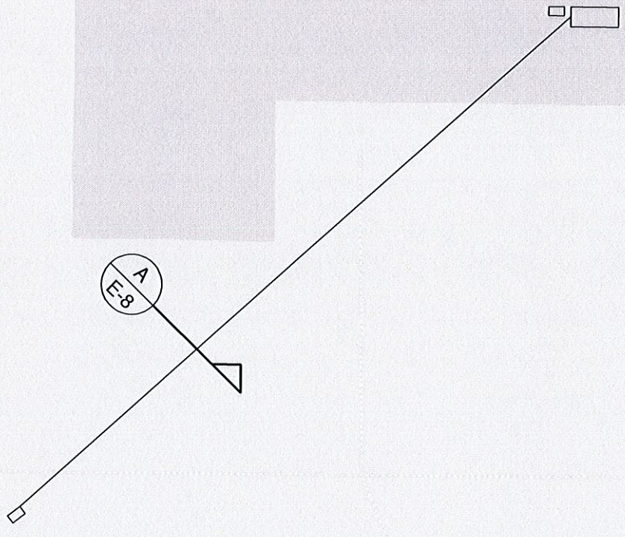
This drawing as an instrument of service, remains the property of CTC Engineering. Any changes, publications, or unauthorized use is prohibited unless expressly approved.

REV. 1 — 10/29/2026
DRAWING NO. E-7

gavin.shaller 10/30/2026 8:42:10 AM
P:\A_AAProjects\28172 - Lansing Public School District SD-184\28172016_DWG\E-7 - Wexford One-Line.dwg

gavin.shaller 10/29/2025 5:47:22 PM





PRELIMINARY
NOT TO BE USED
FOR CONSTRUCTION

WEXFORD MONTESSORI ACADEMY SITE PLAN

0 30' 60'

1" = 30'

N

Lansing School District

WEXFORD MONTESSORI ACADEMY

5217 WEXFORD RD

LANSING, MI 48911

BATTERY ENERGY STORAGE SYSTEM/ BUS EV CHARGER

CTC Engineering

3915 Research Park Drive, Suite A-8
Ann Arbor, MI 48108
Office (734) 222-9951 - Fax (734) 222-9957

SITE PLAN

DRAWN	GRS
CHECKED	....
APPROVED	....
SCALE	....
PLOT SIZE	ANSI B - 11" X 17"
PROJECT NUMBER	28172.01

REV.	DESCRIPTION	DATE
5	....	....
4	....	....
3	....	....
2	....	....
1	....	....
0	FOR REVIEW	10/14/2026

This drawing as an instrument of service, remains the property of CTC Engineering. Any changes, publications, or unauthorized use is prohibited unless expressly approved.

REV. 0 10/14/2026

DRAWING NO. E-8

P:\A_AAProjects\28172 - Lansing Public School District SO-18432917\20\16_DWG\E-8 - Wexford Site Plan.dwg

SO-1862 Virtual Pre-Bid Meeting Attendee List as captured on Google Meet

October 26, 2026 3:00PM

#	Name	Email	Company
1	Jonathan Laing	j.laing@lansingschools.net	LSD
2	Todd	todd.coe@lansingschools.net	LSD
3	Glenn Keates	glenn.keates@ctcengineer.com	CTC
4	Gavin Shafer	gavin.shafer@ctcengineer.com	CTC
5	Mike Bozung	mike@centennial-electric.com	Centennial Electric
6	Ryan Hull	Not captured	Superior Electric of Lansing
7	Mike H.	Not captured	Superior Electric of Lansing
8	Rick Shea	Not captured	RM Electric
9	Taylor Lotre	taylor.lotre@gmail.com	Consolidated Electrical Contractors
10	Bill Policastro	wjpolicastro@gmail.com	Uptime EV Charger Inc
11	Matt	mdwintjes@gmail.com	Windemuller
12	Caroline Brannock	mcbrannn@gmail.com	FENECON USA
13	LB Electric	Not captured	LB Electric
14	BMG Admin	contact@buildingmaterialgroup.com	Building Material Group
15	Claire Disch	claireedisch@gmail.com	Unknown
16	Andrew Dunn	Not captured	Unknown
17	Jason Mills	millsjas1@gmail.com	Unknown
18	Derek Smith	derekjacksonsmith@gmail.com	Unknown
19	Shane Wood	swlasthero@gmail.com	Unknown
20	Anthony DeGuzman	anthony@greenllink.education	GreenLink Education