NOTICE OF PUBLIC MEETING

CITY OF CHIPPEWA FALLS, WISCONSIN

IN ACCORDANCE with the provisions of Chapter 19, Subchapter IV of the Statutes of the State of Wisconsin, notice is hereby given that a public meeting of the:

Plan Commission XXX **(Reasonable accommodations for participation by individuals with disabilities will be made upon request. Please call 726-2736)**

Will be held on **Monday, September 11, 2023** at **6:30 P.M.** in the City Hall **Council Chambers,** Chippewa Falls, Wisconsin. Items of business to be discussed or acted upon at this meeting are shown on the attached Agenda or listed below:

NOTE: If unable to attend the meeting, please notify the Engineering Dept. by calling 726-2736.

1. Approve the minutes of the August 7, 2023 Plan Commission Meeting. *(Attachment)*

2. Consider Certified Survey Map Submitted by Scheffler Land Surveying on Behalf of GT Ventures and Enterprises for parcels located in part of the SE ¼ of the SW ¼, Section 8, T28N, R8W. Make recommendation to the Common Council. *(Attachment)*

3. Consider petition from Jon Kemper, Karen Knight and Jean Kellogg for a Conditional Use Permit to create a substandard lot at 727 and 733 Maple Street on parcels 22808-0744-62470103 and 22808-0744-62470104. *(Attachment)*

4. Consider petition from KYMA Battery for a conditional use permit for a battery assembly and repurposing facility at 14587 CTH S, parcel #22908-2943-73878001A. *(Attachment)*

5. Adjournment

NOTICE IS HEREBY GIVEN THAT A MAJORITY OF THE CITY COUNCIL MAY BE PRESENT AT THIS MEETING TO GATHER INFORMATION ABOUT A SUBJECT OVER WHICH THEY HAVE DECISION MAKING RESPONSIBILITY.

Please note that attachments to this agenda may not be final and are subject to change.
This agenda may be amended as it is reviewed.

CERTIFICATION

I hereby certify that a copy of this agenda was emailed to the Chippewa Herald and posted on the City Hall Bulletin Board on Tuesday, September 6, 2023 at 2:00 P.M. by Bill McElroy.

MINUTES OF THE PLAN COMMISSION MEETING
CITY OF CHIPPEWA FALLS
MONDAY, AUGUST 7, 2023-6:30 PM

The Plan Commission met in City Hall on Monday, August 7, 2023 at 6:30P.M. Present were Commissioners Greg Misfeldt, Ross Wilson, Mike Tzanakis, Dan Varga, Beth Arneberg, Chad Trowbridge, Alderperson Jason Hiess, Acting Secretary Bill McElroy and Mayor Greg Hoffman. Absent were Commissioner Dave Cihasky and Vice-Chairperson Tom Hubbard. Also attending were City Inspector Paul Lasiewicz and those on the attached attendance sheet.

1. **Motion** by Hiess, seconded by Misfeldt to approve the minutes of the July 10, 2023 Plan Commission meeting with a change to edit "Loke" to "Loken" in item #5. **All present voting aye. Motion carried.**

2. The Plan Commission considered the Certified Survey Map submitted by Real Land Surveying LLC on behalf of Crossroads Church Inc. for parcels located in the NE ¼ of the NE ¼, Section 18, T28N, R8W, City of Chippewa Falls. City Engineer McElroy provided background that the two minor revisions requested by County Surveyor Wenz have already been completed and reviewed. Jerry Annis representing Crossroads Church indicated that the new lot has an accepted offer on it. The lot would retain the current P-1 Public zoning until a rezoning petition was received and approved. The lot size conforms to the R-1C Single Family Residential zoning surrounding it.
   Motion by Hiess, seconded by Varga to recommend the Common Council approve the attached 2 lot Certified Survey Map located in the NE ¼ of the NE ¼, Section 18, T28N, R8W, City of Chippewa Falls submitted by Real Land Surveying LLC on behalf of Crossroads Church Inc. Said approval contingent upon;
   1) The receipt of the Certified Survey Map review fees
   2) The revisions from County Surveyor Sam Wenz are completed
   3) Recording of the approved Certified Survey Map with signatures and a copy provided to the City of Chippewa Falls Engineering Department

   All present voting aye. Motion carried.

3. The Plan Commission considered and discussed the request from Robert and Anneliese Fish to rezone parcel #22808-0612-75756002, Lot #2, CSM #5756, located at 12 East Elm Street from R-1C Single Family Residential to C-3 Central Business District. City Engineer McElroy provided background on the existing property indicating that a root beer stand existed at the site several years ago under a special use permit, now expired. At that time a special use permit was needed due to a residence and business sharing the same lot. The lot was recently split so that only the business will be on Lot #2. A rezone will give the owners more flexibility in the future to make changes to their business without having to amend a special use permit. The property is bordered by O-1 Office, R-1C Single Family Residential to the east, and C-3 Central Business District to the south. McElroy noted a C-3 Central Business District zoning was consistent with other areas due to it being a corner lot.
   Motion by Tzanakis, seconded by Varga to recommend the Common Council conduct a public hearing to consider a petition from Robert and Anneliese Fish to rezone parcel #22808-0612-75756002, Lot #2, CSM #5756, located at 12 East Elm Street from R-1C Single Family Residential to C-3 Central Business District. Said public hearing to be scheduled after receipt of the $300 administration and publication fees, proper notification of adjacent property owners and publication in the Chippewa Herald. **All present voting aye. Motion carried**.

4. **Motion** by Hiess, seconded by Misfeldt to adjourn. **All present voting aye. Motion carried.** The Plan Commission adjourned at 6:40 P.M.

William McElroy, P.E.,
Acting Secretary Plan Commission

Please note, these are draft minutes and may be amended until approved by the Common Council.

PLAN COMMISSION ATTENDANCE SHEET

DATE: 8/7/23

NAME	COMPANY REPRESENTING	ADDRESS	PHONE #	EMAIL
JERRY ANNIS	CROSSROADS CHURCH	1720 HANDING AVE EC WI 54701	715 892 2042	jerrya@ecdre.com
ROBERT & ANA FISH	DAVE'S DRIVE-IN	12. E ETNA ST	218 730 7477	a.fish.218@gmail.com

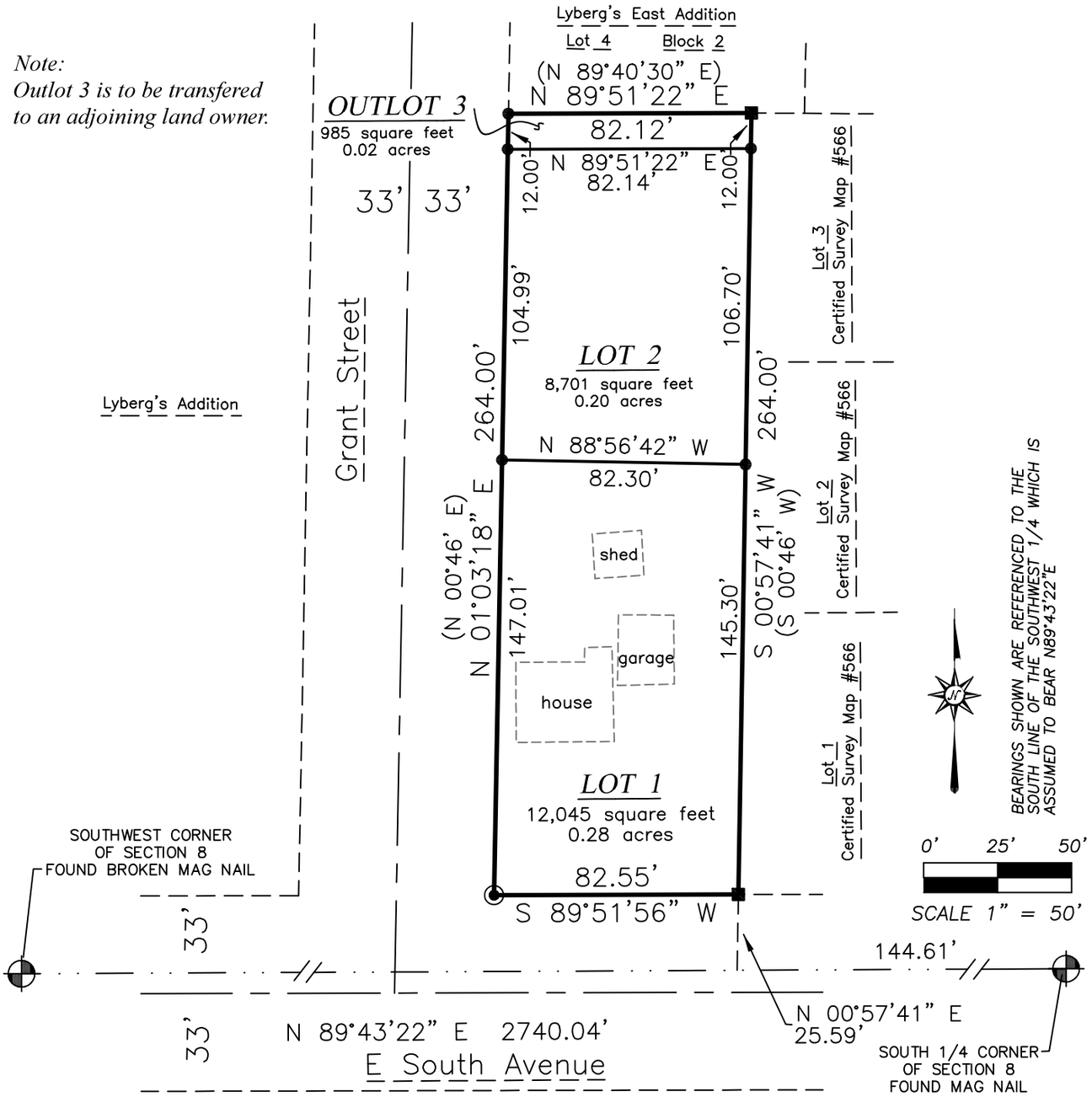
CHIPPEWA CO. CERTIFIED SURVEY
MAP NO._____

RECORDED IN VOL. _____OF THE
CERTIFIED SURVEY MAPS PAGE
_____
_____

REGISTER

Located in part of the Southeast 1/4 of the Southwest 1/4, Section 8, Town 28 North, Range 8 West, City of Chippewa Falls, Chippewa County, Wisconsin

Note:
Outlot 3 is to be transfered to an adjoining land owner.



PREPARED BY:

SCHEFFLER LAND SURVEYING
17681 120TH AVENUE
CHIPPEWA FALLS, WISCONSIN 54729
PHONE: (715) 308-3010

OWNER:

GT VENTURES AND ENTERPRISES LLC
5137 SHEEDER RD
EAU CLAIRE WI 54701

The field work was completed on 9-5-2023
Section corner ties were verified unless noted

LEGEND

● = Set 1" outside diameter X 18" iron pipe weighing 1.13 pounds per linear foot
■ = Found 1.25" outside diameter iron pipe
◉ = Found 1.25" diameter iron bar
(xx) = Recorded as

CHIPPEWA CO. CERTIFIED SURVEY
MAP NO._____

RECORDED IN VOL. _____OF THE
CERTIFIED SURVEY MAPS PAGE
_____

_____

REGISTER

Located in part of the Southeast 1/4 of the Southwest 1/4, Section 8, Town 28 North, Range 8 West, City of Chippewa Falls, Chippewa County, Wisconsin

SURVEYOR'S CERTIFICATE:

I, James M. Scheffler, Professional Land Surveyor in the State of Wisconsin, do hereby certify that by the order of Greg Arneson, I have surveyed part of the Southeast 1/4 of the Southwest 1/4 of Section 8, Township 28 North, Range 8 West, City of Chippewa Falls, Chippewa County, Wisconsin. The parcel is more particularly described as follows:

COMMENCING** at the South 1/4 corner of said Section 8; thence, S.89°43'22"W. along the south line of the Southwest 1/4, 144.61 feet; thence, N00°57'41"E, 25.59 feet to a found iron pipe at the Southwest corner of Lot 1 of Certified Survey Map number 566 and to the **POINT OF BEGINNING**; thence, S.89°51'56"W. along the north right of way line of E South Avenue, 82.55 feet to a found 1.25" iron bar*; thence, N.01°03'18"E. along the east right of way line of Grant Street, 264.00 feet; thence, N.89°51'22"E. along the south line of Lot 4, Block 2, Lyberg's East Addition, 82.12 feet to a found iron pipe at the northwest corner of Lot 3 of Certified Survey Map number 566; S.00°57'41"W. along the west line of Lots1-3 of Certified Survey Map number 566, 264.00 feet to the ***POINT OF BEGINNING.

Said parcel contains 21,731 square feet or 0.50 acres, more or less. The bearings are orientated to the south line of the Southwest 1/4 of Section 8, which bears S.89°43'22"W.

I also certify that I have complied with the provisions of Chapter A-E 7 of the Wisconsin Administrative Code and Chapter 236.34 of the Wisconsin Statutes and the Dunn County Subdivision Ordinance. I further certify to the best of my knowledge and belief that the accompanying map is a true and correct representation of the exterior boundaries of the land surveyed and the division thereof made.

Dated this_____ day of _____, 2023.

_____
James M. Scheffler, Wisconsin Professional Land Surveyor, S-2897

CITY COUNCIL APPROVAL

Resolved that this Certified Survey Map in the City of Chippewa Falls is hereby approved.

_____
Gregory Hoffman, Mayor Date

_____
Bridget Givins, City Clerk Date

Date Filed: Aug 31, 2023

Fee Paid: 25.00 Date: 8-31-2023 TR#: 670 40

Fee Paid:_____ Date:_____ TR#:_____

PETITION FOR A CONDITIONAL USE PERMIT

TO THE CITY OF CHIPPEWA FALLS, WISCONSIN:

I/We, the undersigned, hereby petition the Plan Commission of the City of Chippewa Falls, WI, for a Conditional Use Permit as authorized by the Chippewa Falls Zoning Code, Section 17.47, for the following described property:

Address of Property: 727 & 733 Maple Street

Lot#: 3 & 4 Block#: 1 Subdivision: Willette Addition Parcel# 3953, 3954

Legal Description:_____

_____

_____

Zoning classification of property: R-1-C Single Family Zoning District

Purpose for which this Permit is being requested: Permit is requested in order to create a lot that is less than the minimum 66' frontage in an R-1-C single family zoning district. The permit would be conditioned on an access agreement for the shared driveway between the adjoining property owners and a maintenance agreement regarding the carport that extends over the new property line.

Existing use of property within 300 feet of subject property: (List or attach map)
Residential

Recite any facts indicating that the proposed use will not be detrimental to the general public's interest, the purposes of this Chapter and the general area in which it is located: None – the property was previously operated in this fashion under one property owner. It will continued to be operated as a residence

Operational plans of the proposed use:

Hours of Operation: N/A
Days of Operation: N/A
Number of Employees: N/A (Part-time) N/A (Full-time)

Capacity: N/A

Number of Units:_____

Size:_____

Number of Residents/Children:_____

Ages:_____

Other:_____

Building plans:

Existing buildings: Existing Buildings will remain – 2 single family residences with carport between

Proposed buildings: N/A

Use of part of building: N/A

Proposed additions: N/A

Future additions: N/A

Change in use: N/A

Outside appearance: To remain unchanged

Number of buildings: 2

Planting & Landscaping: N/A

Type:_____

Timetable:_____

Screening: N/A

Type:_____

_____

_____

Fences:_____

_____

Type:_____

Height:_____

Location:_____

_____

Earth Bank: N/A

Planting:_____

_____

Maintenance:_____

_____

Other:_____

_____

Lights: N/A

Number of lights:_____

_____

_____

Location:_____

_____

Hours:_____

_____

Type:_____

_____

Signs: N/A

Type:_____

Lighted:_____

Size:_____

Location:_____

Setbacks:_____

Drives:

Number of: 2 – 1 driveway to 733 Maple, 1 shared driveway to 727 and 733 Maple with access easement

Location: Same as existing

Width: Same as existing

Parking: Same as existing

Number of stalls:_____

Location of stalls:_____

Setbacks:_____

Surfacing:_____

Screening:_____

Drainage: Same as existing

Storm sewer:_____

Rock beds:_____

Detention pond:_____

Retention pond:_____

Submit site plan showing property line, buildings and other structures.

List any additional information being submitted with this permit application: Both properties were previously owned by single owner. Conditional use permit required so that current owners (heirs) can split the ownership on the two homes.

IN ORDER FOR THIS PETITION TO BE CONSIDERED, THE OWNER(S) OF THE PROPERTY MUST SIGN BELOW:

Owner(s)/Address(es):

Karen Knight
2019 Hatch St.
Eau Claire, WI 54701
Phone #: 715 491 5075
Email: oota13@yahoo.com

executer of Charles Kemper estate
Jon C Kemper
614 Division ST
Eau Claire Wis. 54703
Phone #: 715 864 3789
Email: Jon.Charles.Kemper@gmail.com

Jean Kelley
727 Mayville St.
Chippewa Falls, WI 54729
Phone #: ~~715-723~~ 720-319-6067
Email: jeank14@yahoo.com

Petitioner(s)/Address(es):

Phone #:
Email:

Phone #:
Email:

The owner of 727 Maple St., Chippewa Falls, Wisconsin agrees to grant the owner of 733 Maple St., Chippewa Falls, Wisconsin easement to the driveway between the houses as long as there is a carport connecting the two properties. The easement will cease once the 733 side of the carport is removed or the driveway is widened to a full driveway on the 733 property.

Both the owners of the 727 and 733 sides shall share the maintenance of the common driveway and carport equally until the half of the carport on the 733 side is removed.

Jean Kellogg — Date: 8/30/23

Jon Kemper — Date: 8/30/23

Karen Knight — Date: 8/30/23

Date Filed:_____

Fee Paid:_____ Date:_____ TR#:_____

Fee Paid:_____ Date:_____ TR#:_____

PETITION FOR A CONDITIONAL USE PERMIT

TO THE CITY OF CHIPPEWA FALLS, WISCONSIN:

I, the undersigned, hereby petition the Plan Commission of the City of Chippewa Falls, WI, for a Conditional Use Permit as authorized by the Chippewa Falls Zoning Code, Section 17.47, for the following described property:

Address of Property: 1400 Halbleib Rd, Chippewa Falls, WI. 54729

Lot#: 1 Block#:_____ Subdivision:_____ Parcel# 22908-2943-73878001A

Legal Description: W ½ SE & SE of SEC.29 LOT 1 CERT SUR MAP #3875 IN V17 P298 DOC# 798570 (COMP # 4760.4400, 4760.4501 4760.4502, 4760. ALL COMBINED INTO ONE PCL) & PART OF LOT 2 of CSM# 4243 DESCR AS @ THE SW COR OF SD LOT 2, N 40', S 89 D E 514.60 to E LN

Zoning Classification Of Property:

Heavy Industrial

Purpose For Which This Permit Is Being Requested:

KYMA Battery Technologies is initially leasing the Office Building and Building 11 for Phase One of their battery assembly and repurposing facility. The company will take lithium-ion battery modules and cells and assemble them into battery packs for energy storage applications. It is understood that this CUP will cover the entire site however for the purposes of this permit only these two buildings will be operational in 2023-2024. Phase Two expansion will be dependent on construction costs and has been planned for Areas 4-6 as outlined on the plan.

A company presentation outlining the process, target market and business plan can be found at Appendix 1 to this document pack.

Existing Use Of Property Within 300 Feet Of Subject Property:

Within 300ft of the property listed above, there are currently Agricultural Fields, General Warehousing, Wooded Forest, Bulk Propane Storage, Bulk Fertilizer Storage, Brass & Aluminum Foundry, Plating Facility, Fire Apparatus Manufacturing and R-1 & R-2 Residential.

Recite any facts indicating that the proposed use will not be detrimental to the general public's interest, the purposes of this Chapter and the general area in which it is located:

KYMA Battery Technologies understands that there are concerns over the proposed operations on site and therefore we have put together a presentation to cover the risks and the mitigation strategies that will be used in handling lithium-ion battery packs. This is attached at Appendix 2 to this application.

Lithium batteries come in a variety of shapes, sizes, designs, materials, and chemical compositions. KYMA Battery Technologies are focusing on the use of battery cell chemistries for use in energy storage. The two lithium-ion cell types are Lithium Iron Phosphate battery chemistry (also known as LFP or LiFePO4) lithium-titanate or lithium-titanium-oxide (LTO). We will also use battery modules from Nissan Leaf electric vehicles to create energy storage systems.

The safety of the assembly of energy storage systems is covered by an internationally recognized standard. KYMA Battery Technologies will be working to this standard for the production of all of the energy storage systems. UL 9540 is the safety standard for an energy storage system (ESS) and equipment intended for connection to a local utility grid or standalone application. It designates key issues associated with ESS. These include:

- Safety of the battery system
- Functional safety
- Fire detection & Suppression
- Containment
- Environmental Performance

KYMA Battery Technologies will work to all health & safety and environmental standards to ensure that our workforce is well trained, has the appropriate personal protective equipment and understands all the risk associated with the safe day to day operation of the site. We will work towards quality standards ISO 9001:2015, ISO 14001:2014, ISO 27001:2013 to ensure high quality in all our products.

Operational Plans Of The Proposed Use:

Capacity:	N/A
Number of Units:	No Change.
Size:	No Change
Number of Residents:	N/A
Children Ages:	N/A
Other:	N/A

Building Plans:

Type	Manufacturing & Assembly Facility
Timetable	See Appendix 1
Existing Buildings	Yes
Proposed Buildings	None
Use Part of Buildings	TBD in Phase Two
Proposed Additions	None
Future Additions	None
Change in Use	No
Outside Appearance	No Change
Number of Buildings	11

Planting & Landscaping:

Type:	The property currently is landscaped with trees and bushes. There are areas of gravel, grass and hard standing.

Screening:

Type:	The property is fenced around the perimeter.
Fences:	Yes
Type:	Chain-Link
Height:	6ft
Location:	Perimeter of property

Earth Bank:

Planting:	Natural screening bushes and trees

Maintenance:	Regular maintenance carried out by site team.
Other:	None

Lights:

Number of lights:	75
Location:	Building Perimeter
Hours:	Dusk to Dawn
Type:	Wall Pack

Signs:

Type:	Pylon sign with marquee
Lighted:	Yes
Size:	5 x 10
Location:	Halbleib Road Entrance and Hwy S entrance
Setbacks	10ft from Property line

Drives:

Number:	2
Location:	North and south side of property
Width:	24ft

Parking:

Number of Stalls	75
Location of Stalls	Southside of main office
Setbacks	N/A
Surfacing	Tarmac
Screening	None

Drainage:

Storm Sewer:	N/A
Rock Beds:	N/A
Detention Pond	N/A
Retention Pond	Pond located on southside of property

Submit site plan showing property line, buildings, and other structures.

See attached.

List any additional information being submitted with this permit application:

Appendix 1 – Company Information

Appendix 2 – Operational Safety

IN ORDER FOR THIS PETITION TO BE CONSIDERED, THE OWNER(S) OF THE PROPERTY MUST SIGN BELOW:

Owner(s)/Address(es): Petitioner(s)/Address(es):

DAVID J. DURRETT	LESLEY BLAINE
Phone #: 903-944-7121	Phone #: 715-215-2176
Email: Durrett@hs4200.com	Email: lesley@kymabatteries.com

KYMA
BATTERY TECHNOLOGIES

APPENDIX 1

Company Overview

Each day one of us gets the chance to start an adventure……

September 4, 2023

Version 1.0

MISSION STATEMENT

American made batteries that promote reuse of materials, reduce the carbon footprint, and save critical materials being recycled.

WHO ARE WE?

- We are a startup company that was formed from an idea that Collaborative Engineering Services had to build a battery assembly and repurposing company in the US.
- Our landlord is Independence Wisconsin who own and manage the site in Chippewa Falls.
- Our plan is to work with other startup battery technology companies to grow our technology portfolio and introduce incubator companies to the Chippewa Valley.

INDEPENDENCE

CES COLLABORATIVE ENGINEERING SERVICES

KYMA BATTERY TECHNOLOGIES

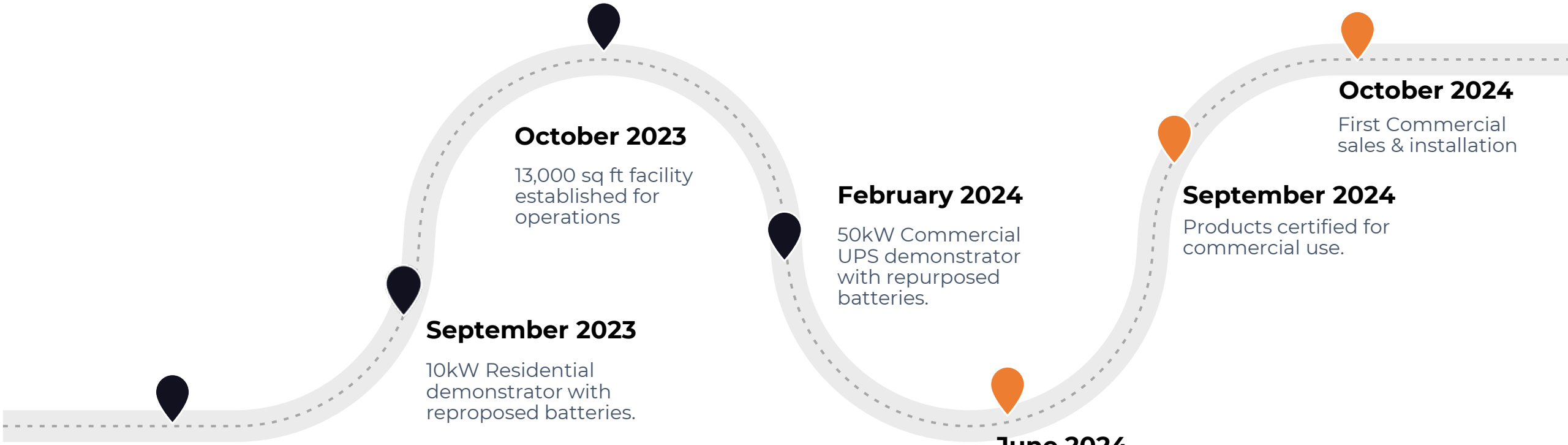
UNIQUE VISION

- We are a new company formed to deliver repurposed and new batteries to the US.
- We are combining battery pack assembly and repurposing in the same facility.
- We are creating a new facility that will have a flexible approach to service provision for assembly of modules and battery packs for electric vehicles, heavy goods vehicles, rail and sport utility customers enabling USA made batteries to be sold across the globe.
- Our initial focus will be repurposing electric vehicle batteries for energy storage applications. Where appropriate we will reuse critical components and materials.
- We will carry out R&D with a collaborative approach to working with partners and start-up companies to invest in new technology.

FACILITY & PRODUCTION

- The battery assembly and recycling facility will initially operate from Building 11 after refurbishment has taken place.
- Planned completion ready for full operation is end of October 2024.
- The engineering team and collaborative partners are working on designs and prototypes to take to test and market during 2023 and into 2024.
- The layout of the facility is unique in that it is an arrangement that includes both assembly and repurposing bought together around a central services area.
- Attention is focused on safety and a high-quality service for our customers.

KYMA ROADMAP



August 2022

KYMA formed with seed funding.

September 2023

10kW Residential demonstrator with reproposed batteries.

October 2023

13,000 sq ft facility established for operations

February 2024

50kW Commercial UPS demonstrator with repurposed batteries.

June 2024

First 1MW containerized grid system on test in Wisconsin.

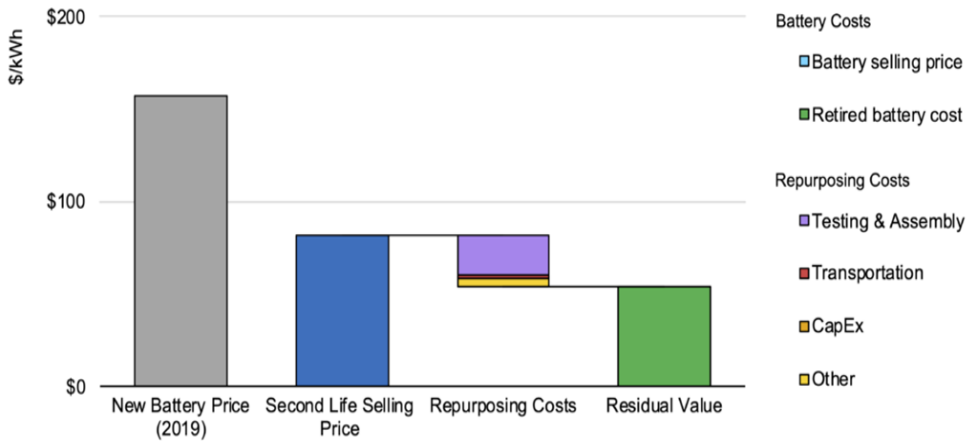
September 2024

Products certified for commercial use.

October 2024

First Commercial sales & installation

KYMA ECONOMIC MODEL BENEFITS



- Reduce the number of EV batteries recycled using additional energy and resources to recover materials.
- Lower the total carbon footprint of batteries and the supply chain.
- Provide reserve capacity for grid infrastructure and community energy. Access to cheaper energy storage systems.
- Lower energy storage system costs for consumers
- Legislate to ensure OEM's have a path to repurpose and recycle all electric vehicle batteries.

WHY REPURPOSE LITHIUM-ION BATTERIES?

- Majority of electric vehicles on the road today will have between 15-20 years useful life left in the battery after the battery is deemed end of life by the OEM.
- Applications can be developed for energy storage systems from residential, community energy to large scale grid storage applications.
- We need to disrupt the supply chain to ensure healthy batteries are not scrapped and recycled to form black mass which in turn uses energy intense processes to reclaim metals.
- We need to incentivise OEM's to look at better ways of taking back batteries and to repurpose rather than recycle

KYMA
BATTERY TECHNOLOGIES

APPENDIX 2

Operational Considerations

Each day one of us gets the chance to start an adventure……

September 4, 2023

Version 1.0

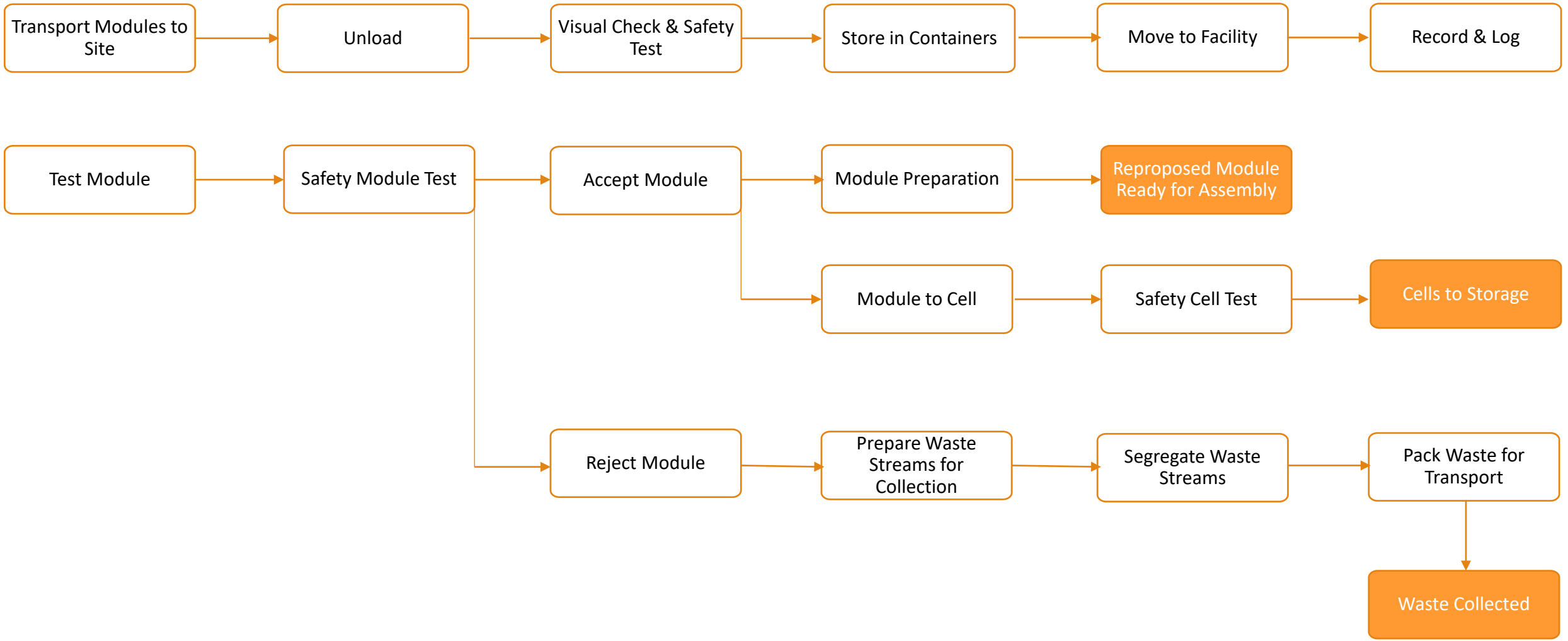
OPERATIONAL CONSIDERATIONS

KYMA Battery Technologies are focused on producing high quality, safe battery packs for energy storage applications. The following presentation outlines the production methodology and highlights operational safety aspects for the site. In addition to energy storage applications KYMA will be seeking to manufacture new battery packs for other applications such as rail, off highway and commercial applications. This presentation deals with:

- Operations
- Fire Safety
- Health & Safety
- Environmental
- Waste Management
- Transport

The following slides show the process flows for 1) repurposing battery modules from electric vehicles and 2) Assembly of new battery packs.

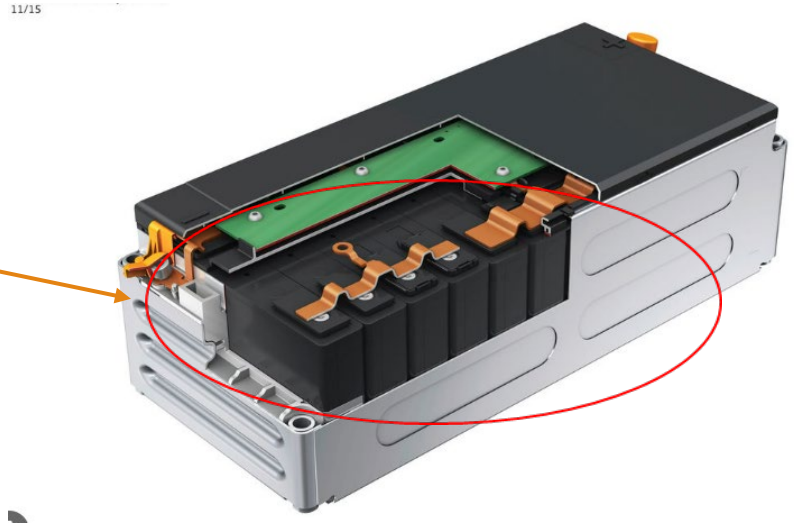
PROCESS FLOW FOR REPURPOSED PACKS



WHAT IS A BATTERY MODULE?

Nissan Leaf Battery Module contains 4 pouch lithium-ion cells

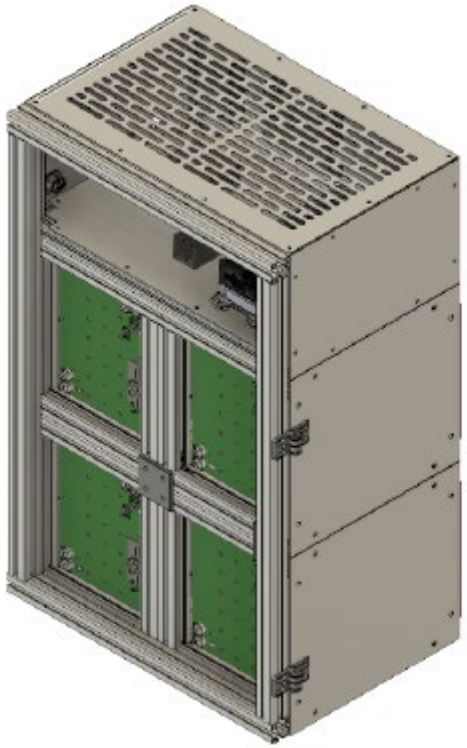
The Audi e-tron module contains 12 prismatic lithium-ion cells.



KYMA DEMONSTRATOR UNIT

Nissan Leaf Modules

Assembled with battery management and safety systems.

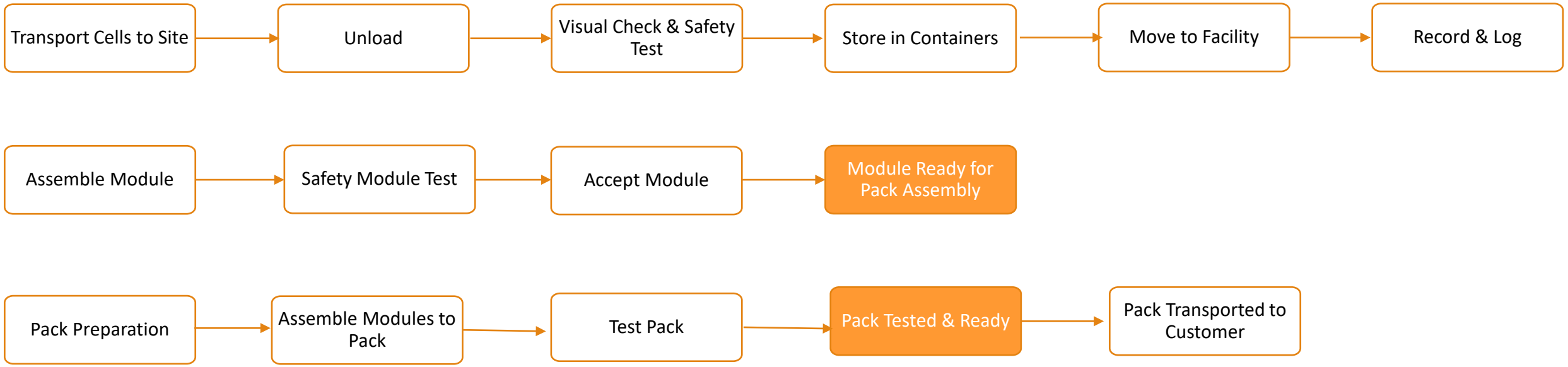


8kW Home energy storage unit.

SOURCE OF BATTERIES

State of Battery	Sources of Battery or Cells	Reason for Being a Source	State of Battery or Cell
In Service	- Vehicle Manufacturers and OEMs	Warranty Claim on Battery by Customer	Battery pack not working. Module removed from pack and tested.
End of Life	- Dealerships - Independent Repair Shops - Collision Centers - Vehicle Manufacturers - Waste Management Companies	Batteries Need Disposal	Battery pack not working. Module removed from pack and tested.
Stock	- OEM's - Suppliers	Excess or Cells Not Required	New unused
Stock	- OEM's - Suppliers	Technical Change and Upgrade	New Unused

PROCESS FLOW FOR NEW PACKS



SOURCE OF BATTERY CELLS

Lithium Titanate – Toshiba

- Due to the lower operating voltage of this technology, there are significant safety advantages for the consumer and the environment.
- As Lithium Titanate batteries are entirely free of carbon, they avoid thermal runaway or overheating which is a main cause of fires in traditional energy storage systems.

Lithium Iron Phosphate – CATL

- LiFePO4 batteries are superior with thermal and chemical stability, which provides better safety characteristics than Lithium-ion batteries with other cathode materials.
- LiFePO4 batteries are non-toxic, non-contaminating and contain no rare earth metals, making them an environmentally conscious choice.

Fire Safety

FIRE SAFETY – HOW DOES A LITHIUM-ION FIRE START?

Ways that a fire can start:

- Internal manufacturing defects (material defects, construction, contamination).
- Physical damage (during assembly, shipping, handling, waste disposal, accidental during product use).
- Electrical abuse (overcharging, over - discharging, short circuit).
- Thermal abuse (exposure to high temperatures).

There are many different types of lithium-ion batteries and not all are flammable or produce toxic gases. Cell failure results in a voltage drop and increasing heat release and signals the start of 'thermal runaway'. This typically develops through the following events:

1. Temperature increase
2. Venting/gassing off of electrolyte vapours
3. Flare
4. Steady burn
5. Flash fireball
6. Explosion

Thermal Runaway starts in a single cell before thermal propagation creates a domino effect through the adjacent cells. Defects and physical damage can create internal short circuits leading to cell failure. Other events which could lead to cell failure arise external to the cells and so may be detected.

PROTECTION

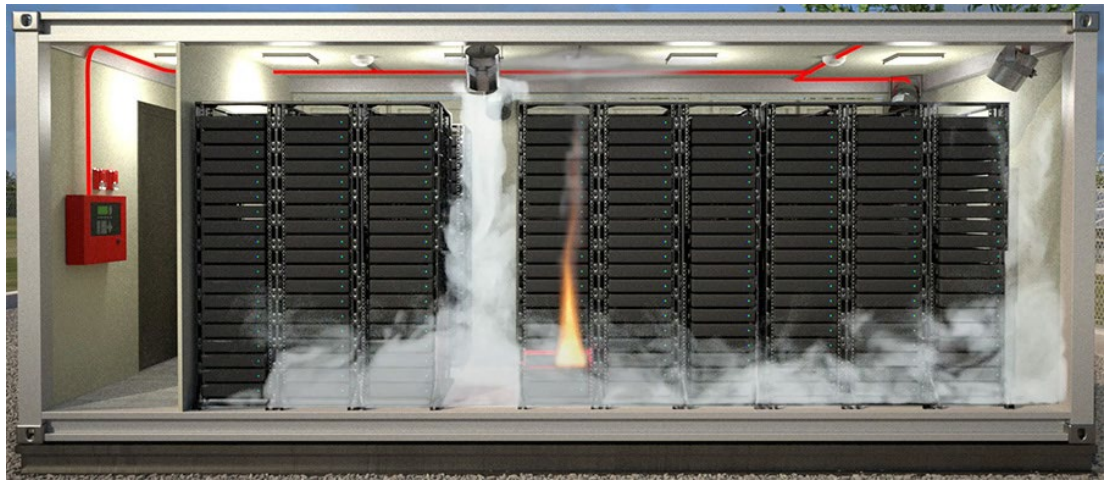
1. **Design**
   By designing packs that are intrinsically safe with high quality assembly and manufacturing techniques to reduce mechanical and electrical failures.
2. **Battery Management System**
   Using a high-quality battery management system that contains sensors to detect changes in the battery cells. The battery management system also isolates and prevents overcharging or electrical issues.
3. **Testing**
   Regular testing of modules and packs during the assembly process.
4. **Containment**
   Battery cells, modules and packs are stored appropriately in fireproof cabinets or containers that contain fire suppression systems. By storing lower quantities of lithium-ion in one place lowers the risk of fire.

DETECTION

1. **Gas Detection**
   Systems that can detect off-gases in low concentrations can provide an early warning of an impending thermal runaway and trigger shut down systems to electrically isolate the individual, or bank of, or rack of battery cells
2. **Thermal Detection**
   Where battery enclosures exist, detectors sensitive to the heat emitted by batteries may provide warning and be linked to battery management and fire protection systems. These may take the form of linear heat sensing cables or infra-red fire detectors.
3. **Smoke Detection**
   The smoke and off-gases may be sensed by ‘video’ cameras with smoke obscuration algorithms and able to link to battery management and fire protection systems.

Fire detection systems will be implemented post fire risk assessment for each operational area.

SUPRESSION & EXTINGUISHING



1. **Gaseous Fire Extinguishing Systems**
   A gaseous system comprises of one or more containers containing an extinguishing agent. When the system is operated it discharges the agent into an enclosure through one or more discharge nozzles. Systems may be activated manually or automatically through a connection to an appropriate fire detection system.
2. **Condensed Aerosol Systems**
   Condensed aerosol systems use similar control and monitoring equipment to gaseous fire suppression systems. They also flood the room with a fire suppression agent.
3. **Portable fire Extinguishers**
   Portable fire extinguishers should only be used on individual small fires as directed by the fire risk assessment or to prevent a non-lithium fire spreading.

Fire suppression & extinguishing systems will be implemented post fire risk assessment for each operational area.

Health Safety & The Environment

HEALTH & SAFETY

- Covered by OSHA Standards under the Occupational Safety and Health Act of 1970.
- Ensure employees are trained and competent to carry out their duties.
- Provide protective equipment for all employees.
- Carry out workplace risk assessments for all tasks.

KYMA will implement a safety and health program to:

- Prevent workplace injuries and illnesses
- Improve compliance with laws and regulations
- Engage workers
- Enhance social responsibility goals
- Increase productivity and enhance overall business operations

Our Health & Safety Program will cover:

- Management leadership
- Worker participation
- Hazard identification and assessment
- Hazard prevention and control
- Education and training
- Program evaluation and improvement
- Communication and coordination for host employers, contractors, and staffing agencies

ENVIRONMENTAL CONSIDERATIONS

KYMA Battery Technologies will demonstrate compliance with current statutory and regulatory requirements for the environment. KYMA understands that there is concerns regarding the environmental impact of setting up a battery assembly facility in Chippewa Falls.

There is often misinformation about the environmental impact of lithium-ion batteries. When handled, stored and disposed of correctly through a recognised hazardous waste carrier they do not pose an environmental risk to the site. Any lithium-ion batteries that are damaged or defective will be collected promptly by our recycling partners CIRBA solutions using approved waste routes as per the information listed on their site.

https://www.cirbasolutions.com/damaged-batteries/

KYMA Battery Technologies will not be recycling lithium-ion batteries or cells down to the component materials.

WASTE MANAGEMENT OF LITHIUM-ION BATTERIES

- KYMA Battery Technologies will employ an approved hazardous waste management company to dispose of any lithium-ion batteries that are damaged, defective or Recalled (DDR).
- The type of container used will be dependent on the battery cells in question. Typical recycling containers are:
  - UN-approved steel drum
  - 100 Anti-static bags
  - CellBlockEX
  - Transportation (DOT) labels

TRANSPORT OF LITHIUM-ION BATTERIES

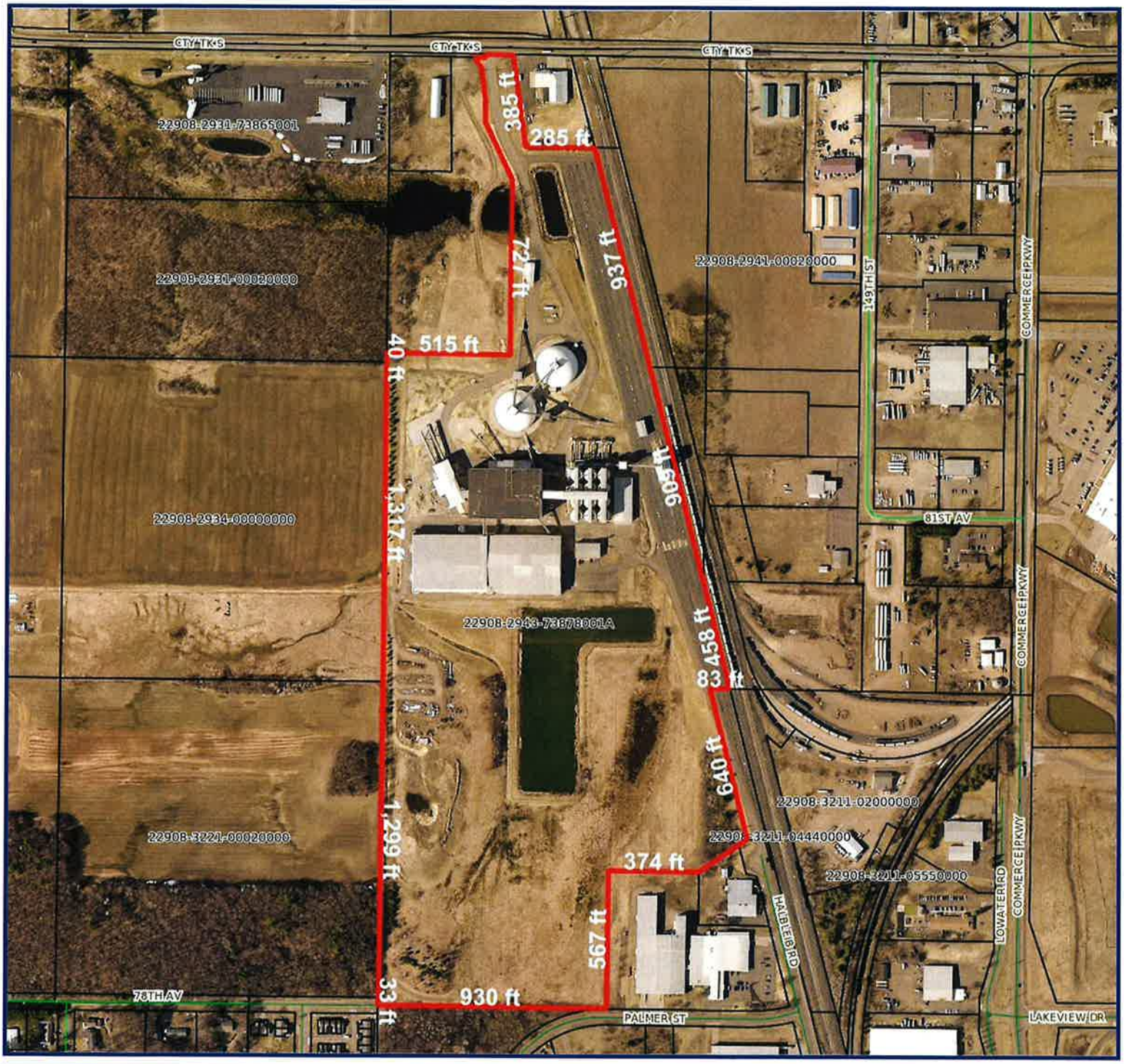
- The Department of Transportation (DOT) regulates the transport of lithium-ion batteries, including testing, documentation, packaging and hazard communication requirements.
- Lithium batteries are most commonly shipped by ground, in both palletized and non-palletized forms.
- DOTs regulations for transporting lithium batteries are located in Title 49 of the Code of Federal Regulations. Subpart 173.185 is where the specific regulations for lithium cells and batteries are located at.
- The responsibilities are highlighted in 173.185 of Title 49 of the CFR can be broken down into the following steps.
  - Testing requirements
  - Correct documentation
  - Packaging requirements
  - Hazard communication
- KYMA Battery Technologies will ensure that it conforms to all codes when shipping battery packs and will authorize approved shipping companies to transport any of its products in a safe and compliant manner.

Risk Assessment

HIGH LEVEL RISK ASSESSMENT KYMA BATTERY TECHNOLOGIES

KYMA Battery Technologies will carry out risk assessment for all activities in the operational environment.

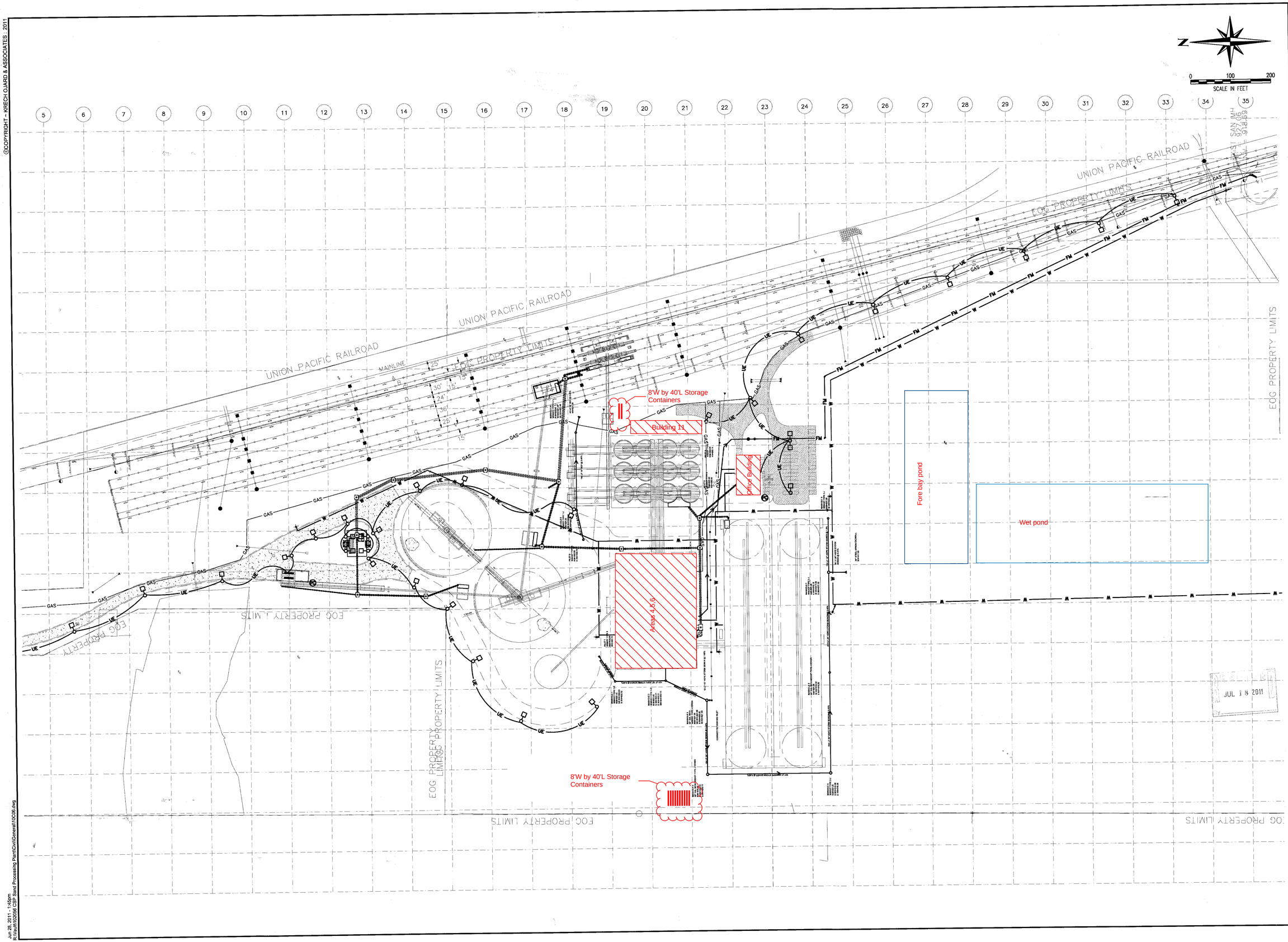
Hazard	Risks
Manual Handling Of Heavy Or Bulky Objects	Back Injury, Crush Injury, Entrapment, Damage To Goods Being Lifted Or Transported
Slips Trips And Falls	Strains, Bruising, Limb Breakages, Concussion, Laceration
Electrical Safety	Electric Shocks Or Burns From Using Electrical Equipment With Possible Electric Seizure Or Fatality.
Fire	Burns, Asphyxiation, Death
Working Environment	Temperature, Facilities, Hygiene, Equipment, Lack of Training
Workplace Stress	Prolonged Periods Of Excessive Demands Being Placed On And Experienced By Staff.
Working With Hazardous Substances	Chemicals, Oils, Greases, Gases.
Falling from height	Falling when working at height. Dropping items onto others when working at height



PIN: 22908-2943-73878001A Computer Number: 211-4760.4507
Owner Name: INDEPENDENCE WI LLC
Owner Address: 4719 FOREST LN
Owner Address: DALLAS TX, 75244
Physical Address: 14587 COUNTY HWY S CHIPPEWA FALLS 54729
GIS Acres: 86.8 Deed Acres: 88.1
School Code: 1092
Assessed Value: 27281700 Fair Market Value: 32145300
Description: W 1/2 SE & SE SE OF SEC.29 LOT 1 OF CERT SUR MAP #3878 IN V17 P298 DOC #798570 (COMP #4760.4400, 4760.4501 4760.4502, 4760. ALL COMBINED INTO ONE PCL) & PART OF LOT 2 OF CSM #4243 DESCR AS @ THE SW COR OF SD LOT 2, N 40', S 89 D E 514.60' TO E LN

N

Scale = 1":570'
Printed 08/23/2023



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www.krechojard.com

eog resources

CFBSI DESIGN BUILD GENERAL CONTRACTOR
CEDAR FALLS BUILDING SYSTEMS, INC
5455 Freitag Drive
Menomonie, WI 54751
(715) 235-5941 Phone
(715) 235-9180 Fax

REV.	DATE:	DESCRIPTION	REV. BY:
1	06/28/11	RELEASED FOR INFORMATION	KLG

CHIPPEWA FALLS SAND PLANT
CHIPPEWA FALLS, WI
AREA 10
UTILITIES

JOB No: 102056
DATE: 06/28/11
DRAWN BY: KLG
CHECKED BY: PJM

SHEET:
10CSK02

Jun 28, 2011 - 1:43pm
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