

Dane County Conditional Use Permit Application

Application Date	C.U.P Number
04/29/2022	DCPCUP-2022-02569
Public Hearing Date	
07/26/2022	

OWNER INFORMATION	AGENT INFORMATION
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OWNER NAME WISCONSIN POWER & LIGHT CO	Phone with Area Code (608) 458-6221	AGENT NAME JEROME LUND	Phone with Area Code (608) 458-6221
BILLING ADDRESS (Number, Street) 4902 NORTH BILTMORE LN STE 1000		ADDRESS (Number, Street) 4902 N BILTMORE LANE	
(City, State, Zip) MADISON, WI 53718-2148		(City, State, Zip) Madison, WI 53718	
E-MAIL ADDRESS jeromelund@alliantenergy.com		E-MAIL ADDRESS jeromelund@alliantenergy.com	

ADDRESS/LOCATION 1	ADDRESS/LOCATION 2	ADDRESS/LOCATION 3
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ADDRESS OR LOCATION OF CUP	ADDRESS OR LOCATION OF CUP	ADDRESS OR LOCATION OF CUP
4017 Timber Lane		
TOWNSHIP CROSS PLAINS	SECTION 13	TOWNSHIP
		SECTION
		TOWNSHIP
		SECTION
PARCEL NUMBERS INVOLVED	PARCEL NUMBERS INVOLVED	PARCEL NUMBERS INVOLVED
0707-134-9850-5	---	---

CUP DESCRIPTION

Electrical Distribution Substation

DANE COUNTY CODE OF ORDINANCE SECTION	ACRES
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10.221(3) utility use	0.5
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DEED RESTRICTION REQUIRED? <input type="checkbox"/> Yes <input type="checkbox"/> No Applicant Initials _____	Inspectors Initials RWL1	SIGNATURE:(Owner or Agent) <hr/> PRINT NAME: <hr/> DATE: <hr/>
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Legend

- | | | |
|--|------------|---|
|  | Wetland | Significant Soils |
|  | Floodplain |  Class 1 |
| | |  Class 2 |



CUP 02569
WISCONSIN POWER & LIGHT CO



Alliant Energy
4902 North Biltmore Lane
P.O. Box 77007
Madison, WI 53707-1007

1-800-ALLIANT (800-255-4268)
alliantenergy.com

April 25, 2022

Shawn Widish, Zoning Inspector
Dane County Planning and Development
City County Building Room 116
210 Martin Luther King Jr. Blvd.
Madison, WI 53703

RE: Conditional Use Permit Application
Wisconsin Power and Light
Timber Lane Substation Rebuild – Town of Cross Plains

Shawn,

Wisconsin Power and Light Company (WP&L) respectfully requests the review and approval of a conditional use permit application for the rebuild of an existing electric distribution substation in the Town of Cross Plains located along 4017 Timber Lane.

I have included the following:

- Completed Conditional Use Application Form
- Scaled drawings and plans for the substation rebuild
- Map showing neighboring land uses and zoning
- Operations Plan

FYI: The Town of Cross Plains has approved a new driveway permit for the relocation of the existing driveway to the north part of the site.

I can be reached at the number or email address below if you have questions about the conditional use application.

Thank you,

A handwritten signature in blue ink that reads "Jerry Lund".

Jerry Lund, Real Estate and ROW Consultant
Alliant Energy – Wisconsin Power and Light Company
4902 North Biltmore Lane
Madison, WI 53718
Office. 608-458-6221
Cell. 608-695-0427
Email. jeromelund@alliantenergy.com

Enclosures



Dane County
Department of Planning and Development
 Zoning Division
 Room 116, City-County Building
 210 Martin Luther King Jr. Blvd.
 Madison, Wisconsin 53703
 (608) 266-4266

Application Fees	
General:	\$495
Mineral Extraction:	\$1145
Communication Tower:	\$1145 (+\$3000 RF eng review fee)
PERMIT FEES DOUBLE FOR VIOLATIONS OR WHEN WORK HAS STARTED PRIOR TO ISSUANCE OF PERMIT	

CONDITIONAL USE PERMIT APPLICATION

APPLICANT INFORMATION			
Property Owner Name:	Wisconsin Power and Light Co	Agent Name:	Jerome Lund
Address (Number & Street):	4902 N Biltmore Lane	Address (Number & Street):	4902 N Biltmore Lane
Address (City, State, Zip):	Madison, WI 53718	Address (City, State, Zip):	Madison, WI 53718
Email Address:	jeromelund@alliantenergy.com	Email Address:	jeromelund@alliantenergy.com
Phone#:	608-458-6221	Phone#:	608-458-6221

SITE INFORMATION			
Township:	Cross Plains	Parcel Number(s):	020/0707-134-9850-5
Section:	SE1/4 SE1/4 Section 13	Property Address or Location:	4017 Timber Lane
Existing Zoning:	FP-1	Proposed Zoning:	FP-1
CUP Code Section(s):	10.221(3) Electric Generating Facility		

DESCRIPTION OF PROPOSED CONDITIONAL USE

Type of conditional use permit (for example: limited family business, animal boarding, mineral extraction, or any other listed conditional use): Electrical Distribution Substation	Is this application being submitted to correct a violation? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Provide a short but detailed description of the proposed conditional use: Wisconsin Power and Light requests permission to rebuild/update an existing substation located at 4017 Timber Lane. The existing station was built in 1973. WP&L needs to update the existing equipment to provide increased capacity, more reliability, and support of the electric service to the surrounding area. The upgrades would include a new transformer, control enclosure, security fence and driveway relocation.	

GENERAL APPLICATION REQUIREMENTS

Applications will not be accepted until the applicant has met with department staff to review the application and determined that all necessary information has been provided. Only complete applications will be accepted. All information from the checklist below must be included. Note that additional application submittal requirements apply for particular uses or as may be required by the Zoning Administrator. Applicants for significant and/or potentially controversial conditional uses are strongly encouraged to meet with staff prior to submittal.

<input checked="" type="checkbox"/> Complete attached information sheet for standards	<input checked="" type="checkbox"/> Site Plan drawn to scale	<input checked="" type="checkbox"/> Detailed operational plan	<input checked="" type="checkbox"/> Written legal description of boundaries	<input checked="" type="checkbox"/> Detailed written statement of intent	<input checked="" type="checkbox"/> Application fee (non-refundable), payable to Dane County Treasurer
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I certify by my signature that all information presented herein is true and correct to the best of my knowledge. I hereby give permission for staff of the Dane County Department of Planning and Development to enter my property for the purpose of collecting information to be used as part of the review of this application. I acknowledge that submittal of false or incorrect information may be grounds for denial of this application.

Owner/Agent Signature: Jerome Lund
Digitally signed by Jerome Lund
 DN: cn=Jerome Lund, o, ou,
 email=jeromelund@alliantenergy.com, c=US
 Date: 2022.04.19 11:05:37 -0500

Date: 4/25/2022

WP&L TIMBER LANE ELECTRIC SUBSTATION
OPERATIONS PLAN

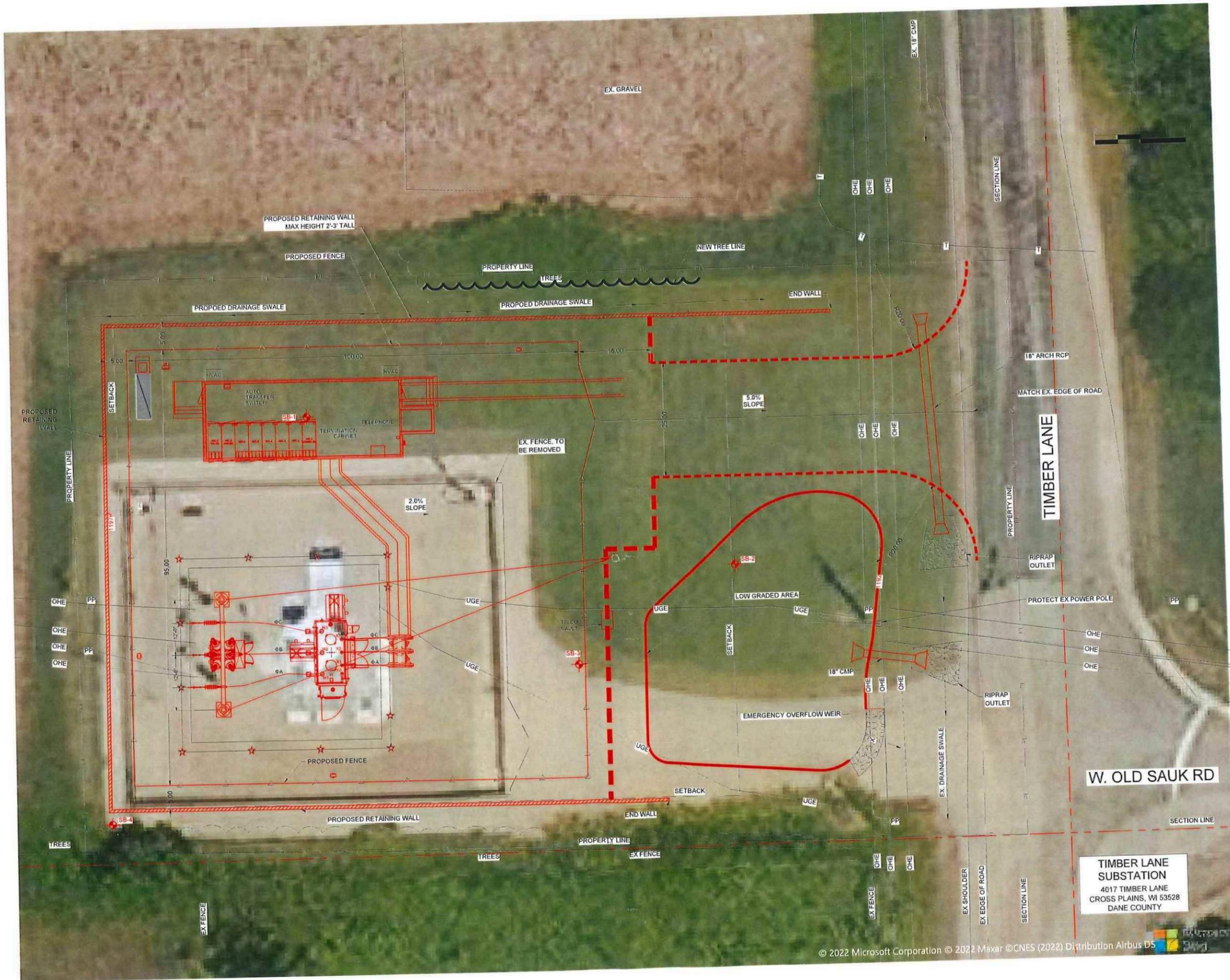
Electric Substation Operations Plan

1. Type of Activity Proposed
 - a. Alliant Energy is proposing to rebuild an existing distribution substation that will provide additional electric capacity and a contingency option for the surrounding areas.
2. Hours of operation:
 - a. 24/7
3. Number of employees
 - a. 0 when in operation
4. Outside Storage
 - a. Distribution poles, conductors, transformers for local engineering crews
5. Outdoor activities
 - a. Occasional substation inspections and maintenance. Local engineering crews will visit the site on occasion for pick up and drop off of electrical equipment located in the outdoor storage area. WP&L vehicles limited to pick-up style trucks and occasional bucket trucks.
6. Outdoor lighting
 - a. One (1) dusk to dawn building mounted light with occupancy sensor to reduce light levels when the site is unoccupied.
 - b. Four (4) pedestal mounted floodlights to be used when emergency maintenance and/or emergency operations is required. These are normally off.
7. Outside loudspeakers
 - a. None
8. Proposed signs
 - a. Small, fence mounted identification and warning signs.
9. Trash removal
 - a. Not normally required. Alliant Energy will remove trash as needed for activities that require it.

Legal Description of Conditional Use Permit Boundaries – WP&L Property Town of Cross Plains

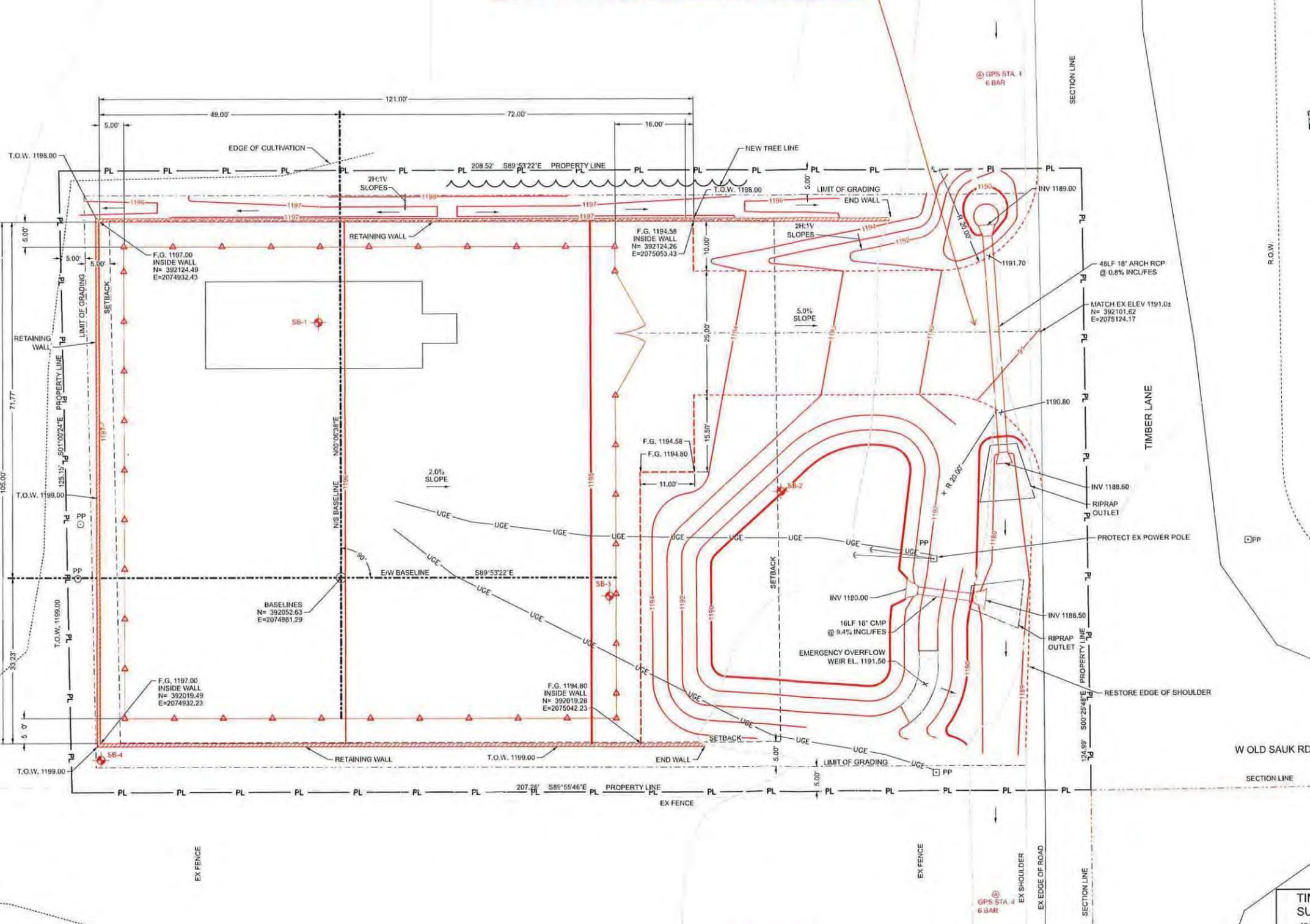
A part of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) of Section 13, Township 7 North, Range 7 East, 4th Principle Median, Town of Christiana, Dane County, Wisconsin, more particularly described as follows:

Certified Survey Map Number 1402, as recorded on March 26, 1974 in Volume 6, page 70-71 of Certified Survey Maps as Document No. 139230, in the Dane County Registers Office, Dane County, Wisconsin.



**TIMBER LANE
SUBSTATION**
4017 TIMBER LANE
CROSS PLAINS, WI 53528
DANE COUNTY

New Driveway Location



CONTROL
 HORIZONTAL DATUM - HARN/WLW-SF
 HPGN (HARN) WISCONSIN STATE PLANE,
 SOUTH ZONE, US FOOT

VERTICAL DATUM - UNKNOWN
 BENCHMARKS MUST BE ESTABLISHED
 BEFORE COMMENCING CONSTRUCTION ACTIVITIES

LEGEND

- SECTION LINE
- RIGHT OF WAY (R.O.W.)
- PROPERTY LINE
- BUILDING SETBACK
- EX OVERHEAD POWER
- UGE --- EX UNDERGROUND POWER
- [PP] --- EX POWER POLE & GUY WIRE
- EX TELEPHONE LINE
- EX TREE LINE
- EX FENCE
- EX GRAVEL LINE
- EX PAVEMENT LINE
- EX CONTOUR
- [Red Solid Line] --- PROPOSED CONTOUR
- [Red Dashed Line] --- PROPOSED SUBSTATION PAD
- [Red Dotted Line] --- PROPOSED DRIVE GRAVEL
- [Red Hatched Line] --- PROPOSED RETAINING WALL
- [Red Dash-dot Line] --- PROPOSED GRADING LIMIT
- [Red Star] --- APPROX. SOIL BORING LOCATION

- GENERAL NOTES**
- ALL GRADE ELEVATIONS AND PROPOSED CONTOURS ARE AT FINAL GRADE (F.G.).
 - REMOVE ALL STONE & GRAVEL TO A DEPTH OF 18" FROM SURFACE OF SUBSITE.
 - ALL SLOPES 3:1 MAXIMUM UNLESS NOTED.
 - TOPSOIL WILL BE PLACED AROUND SUBSITE PERIMETER AND AREAS WHERE SHRUBS WILL BE PLANTED TO BRING UP TO FINAL GRADE AND EXCESS PURCHASED AND REMOVED FROM SITE BY THE CONTRACTOR.
 - EXCESS MATERIAL SHALL BE HAULED OFF AND DISPOSED OFF SITE.
 - BRING ENTIRE SUBSITE TO WITHIN 6" TO 8" OF FINAL GRADE WITH APPROVED FILL (AS PER WPL SPECIFICATION #0065).
 - ENTIRE SITE MUST BE PROOF-ROLLED WITH A FULLY LOADED DUMP TRUCK OR SCRAPER. IF SOFT AREAS ARE DETECTED AND NOT IMPROVED WITH REPEATED PROOF-ROLLING THE SUBGRADE SHOULD BE STABILIZED AND/OR UNDERCUT AND SUBGRADE RE-ESTABLISHED PRIOR TO PLACEMENT OF APPROVED FILL. SUBGRADE MAY BE STABILIZED WITH INDIVIDUAL THIN LAYERS OF CLEAN COARSE STONE (2'-3" DIAMETER) WORKED INTO THE SUBGRADE.
 - CONTRACTOR SHALL FILL SUBSTATION UP TO FINAL GRADE WITH A 6" TO 8" LAYER OF COMPACTED 3/4" CRUSHED LIMESTONE.
 - REMOVE EXISTING SUBSTATION FENCE AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE SOLID WASTE DISPOSAL REGULATIONS.
 - THE CONTRACTOR SHALL COMPLY WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION HIGHWAY PERMIT OBTAINED BY WISCONSIN POWER AND LIGHT CO. THE CONTRACTOR SHALL HAVE A COPY OF THIS PERMIT ON THE CONSTRUCTION SITE AT ALL TIMES WHEN CONSTRUCTION IS IN PROGRESS.

- CONSTRUCTION NOTES**
- THE METHODS OF SITE PREPARATION WILL DEPEND ON THE WEATHER CONDITIONS BEFORE AND DURING CONSTRUCTION. CONTRACTOR MUST FOLLOW THE RECOMMENDATIONS FROM GEOTECHNICAL ENGINEERING EXPLORATION AND ANALYSIS, TIMBER LANE SUBSTATION REBUILD, 4017 TIMBER LANE, CROSS PLAINS, WISCONSIN, PREPARED BY XXXX, DATED X-X-22, PROJECT NO. XXXXXXXXXX. THE FOLLOWING ARE GENERAL RECOMMENDATIONS.
- THE SITE TOPSOIL SHALL BE STRIPPED OF VEGETATION TO A DEPTH OF 6 INCHES OR TO SUCH GREATER DEPTH AS MAY BE NECESSARY TO REMOVE ROOTS AND OTHER ORGANIC MATTER. (SEE GEOTECHNICAL REPORT)
 - PRIOR TO PLACEMENT OF FILL, THE SUBGRADE SHALL BE PROOF-ROLLED WITH A FULLY LOADED TANDEM-AXLE DUMP TRUCK WITH A MINIMUM GROSS WEIGHT OF 25 TONS. UNSUITABLE AREAS OBSERVED SHALL BE IMPROVED BY COMPACTION, BY REPLACEMENT WITH SUITABLE COMPACTED FILL MATERIAL OR OTHER METHODS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
 - ANY MATERIAL IN THE SUBGRADE INCAPABLE OF COMPACTION TO DENSITIES SPECIFIED SHALL BE REMOVED/REPLACED WITH ACCEPTABLE MATERIAL.
 - ENGINEER FILL SHALL CONSIST OF A GRANULAR MATERIAL WHICH CONTAINS LESS THAN 8% PASSING #200 SIEVE AND LESS THAN 40% PASSING THE #40 SIEVE. MATERIAL OF THIS TYPE IS LOW IN FROST SUSCEPTIBILITY AND IS RELATIVELY FREE DRAINING.
 - FILLS AND EMBANKMENTS SHALL BE CONSTRUCTED IN UNIFORM LIFTS OR LAYERS NOT EXCEEDING 9 INCHES OF LOOSE FILL AND LAID PARALLEL TO THE FINISHED SURFACE.
 - COMPACT FILL MATERIAL IN LIFTS NOT EXCEEDING 9 INCHES UNCOMPACTED THICKNESS TO 95% OF STANDARD PROCTOR DENSITY (ASTM D698), MAINTAIN MOISTURE CONTENT WITHIN PLUS OR MINUS 2% OF THE OPTIMUM DETERMINED FOR MAXIMUM DENSITY. DO NOT PLACE, SPREAD OR COMPACT FILL MATERIAL DURING WET OR UNFAVORABLE WEATHER CONDITIONS. WET GRANULAR MATERIALS THOROUGHLY DURING OR IMMEDIATELY PRIOR TO COMPACTION.
 - FINISH FILL EXCAVATED, AND OTHER DISTURBED AREAS TO UNIFORM GRADE AND SECTION NORMALLY OBTAINABLE WITH A BLADE GRADER FINISH GRADE TO A NEAT APPEARANCE AND PROVIDE POSITIVE DRAINAGE. ALLOWABLE TEMPLATE TOLERANCE: + 0.10 FT.

TIMBER LANE
 SUBSTATION
 4017 TIMBER LANE
 CROSS PLAINS, WI 53528
 DANE COUNTY

WISCONSIN'S ONE-CALL CENTER 811 OR (800) 242-8511

DIGGERS HOTLINE

EMERGENCY ONLY: (262) 432-7910 OR (877) 500-9592

WISCONSIN POWER AND LIGHT COMPANY

NEW

FOR CLIENT REVIEW

Date: 03-25-2022

NO.	DATE	REVISION	BY	CHKD	APP'D



TIMBER LANE SUBSTATION CROSS PLAINS, WI

GRADING PLAN

SE 1/4 OF SE 1/4 OF SECTION 13, T7N, R7E

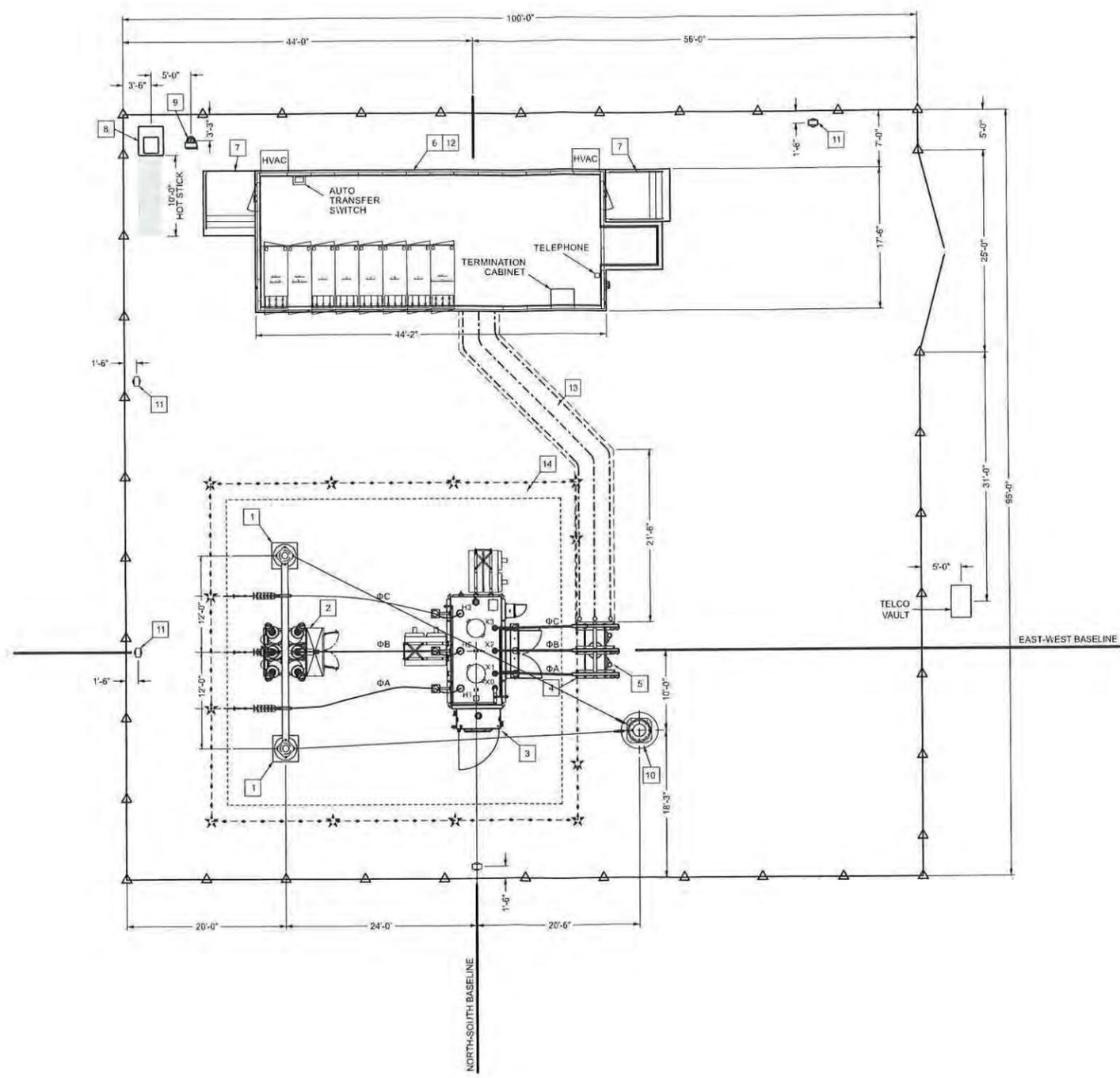
TOWN OF CROSS PLAINS, DANE COUNTY, WISCONSIN

SCALE: 1"=10'

16097-02-02

Plotted: 25-MAR-2022
 File: \\uwl.com\ul\egs\Projects\2022\22.11104\Drawings\16097-02-02.dgn

EQUIPMENT SCHEDULE		
ITEM	DESCRIPTION	DRAWING
1	DEAD END STRUCTURE	08-01
2	HIGH SIDE CIRCUIT BREAKER	08-02
3	POWER TRANSFORMER	08-03
4	BUS TERMINATION STRUCTURE (2000A)	08-04
5	POWER CABLE ASSEMBLY	08-05
6	METALCLAD SWITCHGEAR	05-01
7	STAIRS	08-06
8	PADMOUNT TRANSFORMER	08-07
9	SAFETY SWITCH	08-07
10	STATIC POLE	08-08
11	MAINTENANCE FLOODLIGHT	08-09
12	TELEPHONE AND SUMP PUMP ASSEMBLY	08-13
13	DUCT BANK	03-??
14	OIL CONTAINMENT SYSTEM	03-??



- LEGEND:**
- △ FENCE POST
 - ☆ SAFETY MARKER
 - OIL CONTAINMENT BARRIER BOOM
 - - - OIL CONTAINMENT AGGREGATE EXTENTS

NEW

FOR PERMIT

Date: 03-25-2022

SEED FILE: SDS-09-01
REV: 10 DATE: 10-02-2020

NO	DATE	REVISION	BY	CHK'D	APP'D

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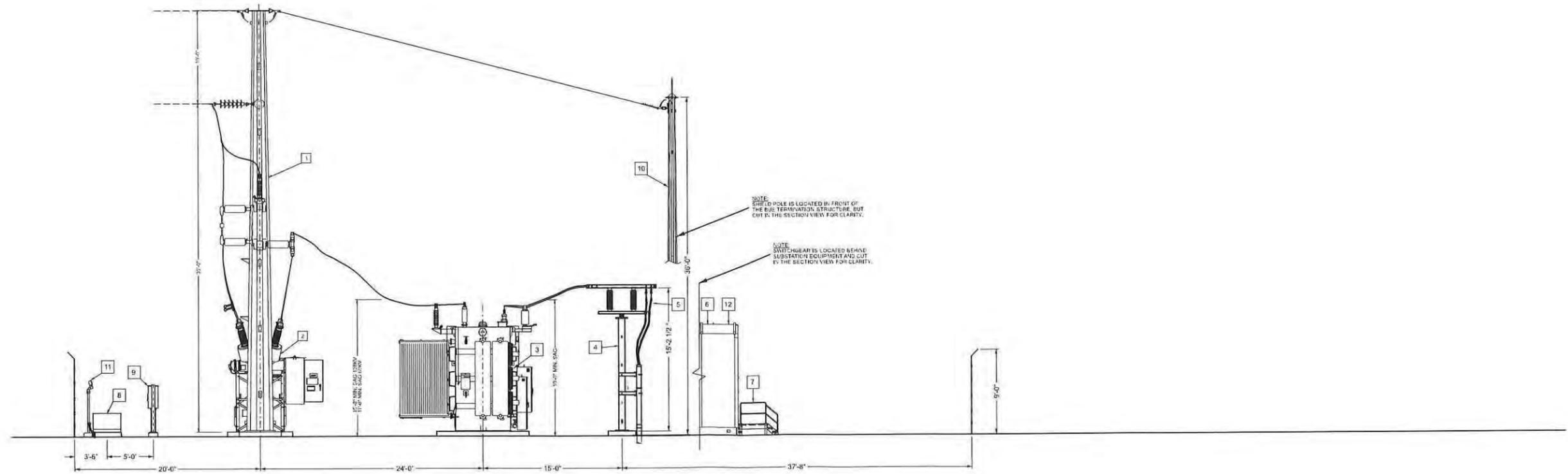
WISCONSIN POWER AND LIGHT COMPANY
TIMBER LANE SUBSTATION CROSS PLAINS, WI
SUBSTATION PLAN VIEW

SCALE: 1/8" = 1'-0"

16097-06-01

TR: 03/25/2022
 Project: 29-MAR-2022
 File: \\uic.com\utils\GIS\Projects\2022\22.11104\Drawings\16097-06-01.dgn

EQUIPMENT SCHEDULE		
ITEM	DESCRIPTION	DRAWING
1	DEAD END STRUCTURE	06-01
2	HIGH SIDE CIRCUIT BREAKER	06-02
3	POWER TRANSFORMER	06-03
4	BUS TERMINATION STRUCTURE (2000A)	06-04
5	POWER CABLE ASSEMBLY	06-05
6	METALCLAD SWITCHGEAR	05-01
7	STAIRS	06-06
8	PADMOUNT TRANSFORMER	06-07
9	SAFETY SWITCH	06-07
10	STATIC POLE	06-09
11	MAINTENANCE FLOODLIGHT	06-09
12	TELEPHONE AND SUMP PUMP ASSEMBLY	06-10
13	DUCT BANK	03-77
14	OIL CONTAINMENT SYSTEM	03-77



(A) EQUIPMENT ELEVATION

NEW
FOR CLIENT REVIEW
 Date: 03-25-2022

REV.	DATE	BY	CHKD.	APP'D.
0	03-25-2022			

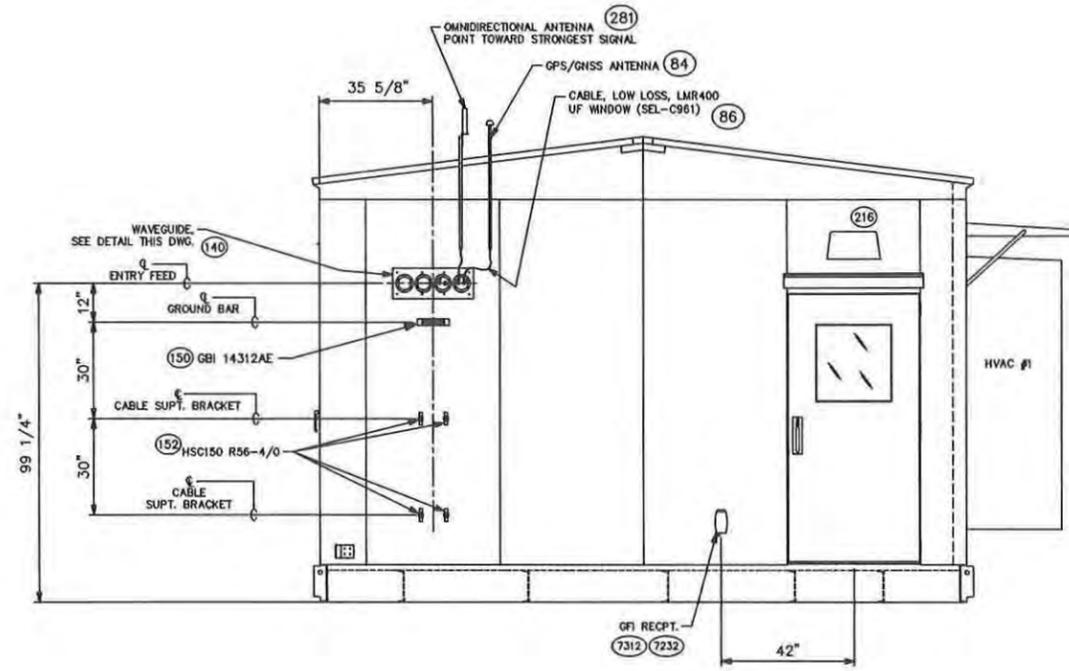
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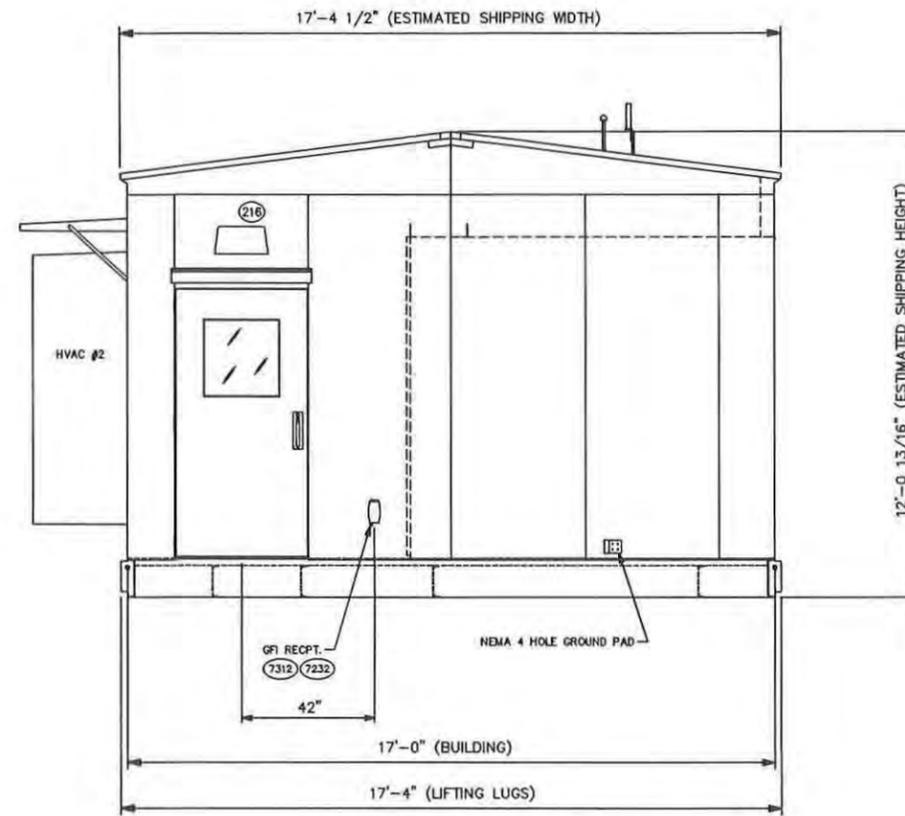
WISCONSIN POWER AND LIGHT COMPANY
 TIMBER LANE SUBSTATION
 CROSS PLAINS, WI
 SUBSTATION ELEVATION VIEW

SCALE: 3/16" = 1'-0" 16097-06-02

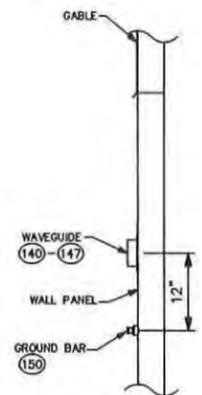
TRN: 01-03
 Plotted: 24-MAR-2022
 File: \\uel.com\allg\Projects\2022\22.11\04\Drawings\16097-06-02.dgn



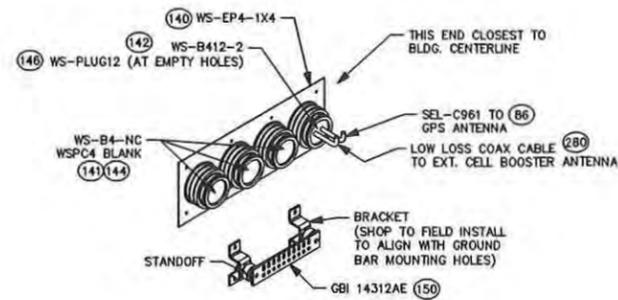
END VIEW "Y-Y"



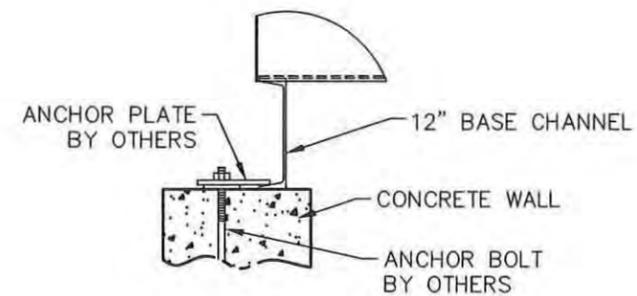
END VIEW "Z-Z"



SECTION VIEW F-E
SCALE 2:1



WAVEGUIDE: EXTERIOR DETAIL
(LEFT END OF BLDG.)



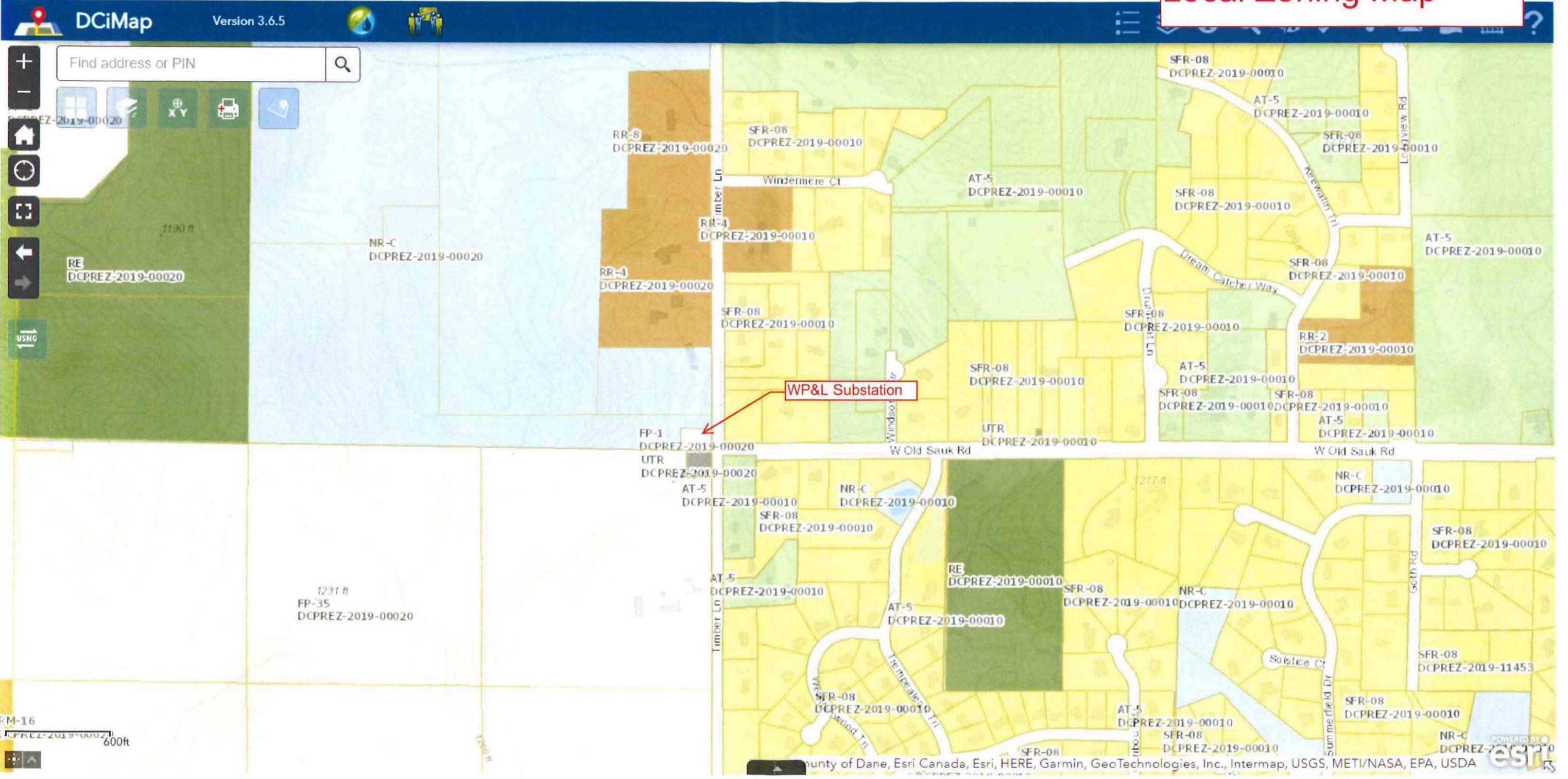
ANCHOR DETAIL
(N.T.S.)

REV			
SCALE	1/2" = 1'-0"		
DRAWN	JTC	02/25/22	
APPROVAL	BE	3/15/22	
ALLIANT ENERGY - WP&L TIMBER LAKE SUBSTATION 27KV OUTDOOR SWITCHGEAR END ELEVATIONS			
DRAWING NO. P4451-01B			

Omaha Power Center
3800 Calmar Avenue
Omaha, Nebraska 68107-1584
Telephone (402) 733-3950
Fax (402) 734-0622



Local Zoning Map



Neighboring Land Uses and Zoning



