

1. 7:00 P.M. Historic District Commission Regular Meeting

Documents:

03-629 N RIVER.PDF
04-400 N RIVER.PDF
05-218-209 WASHTENAW.PDF
06-302 E CROSS.PDF
07-WINDOW FACT SHEET UPDATES.PDF
08-HDC ANNUAL REPORT 2019-DRAFT.PDF
09-CERTIFIED LOCAL GOVERNMENT REPORT_DRAFT.PDF
10-SECTION 106 CONSULTIN PARTY_301 N HAMILTON.PDF
11-SECTION 106 CONSULTIN PARTY_401 N ADAMS.PDF
12-HISTORIC DISTRICT 12-10-19 FULL MINUTES.PDF
HDC FULL PACKET_01.14.2020.PDF
MEETING LOCATION CHANGE YHS-PUBLIC NOTICE.PDF
00-HDC JANUARY 14, 2020 AGENDA.PDF
01-307 N RIVER.PDF
02-318 MAPLE.PDF



HDC Work Permit Staff Review

Property address: 629 N River

Property History: The property includes a small vernacular house with a ca.1900 front porch. The house was briefly connected to the Hutchison family, built the mansion across the street at 600 N River. The house sheltered Mrs. Clara Hutchinson and their three children while she was negotiating a divorce with her husband, Shelley Hutchinson, ca.1909-1910.ⁱ

Date of Application: January 3, 2020

Date of Review: January 7, 2020

Date of Meeting: January 14, 2020

Proposed work: Installation of a small fence and accessory building (shed).

Materials: Iron fence and metal-clad shed.

Staff review:

1. This application is for work already completed without permits, including a fence and accessory building.

Fence

2. The applicant installed a fence along the north property boundary to discourage their dog and adjacent temporary renters from interacting.
 - a. The fence is 3' tall black painted metal. According to the applicant it is iron, however in staff opinion, it looks lighter than iron, possibly aluminum.
 - b. The fence appears to meet the requirements of the fence fact sheet.
 - c. The applicant expressed that the fence is temporary and intended to be removed once the dog is used to the property boundaries.

Accessory Building

3. The applicant installed a 6'x8' garden shed in the northwest quadrant of the property.
 - a. The shed is clad in metal.

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

- b. In staff opinion, a wood-clad shed would be more appropriate to meet Design Criteria 8 and 9. However, numerous other metal-clad sheds are in the district and some have been recently approved by the HDC. The presence of this shed does not diminish the historic integrity of the property or district as a whole and therefore may be approved.
4. For both the fence and accessory building, staff has notified the applicant that zoning permits are also required.

Recommended Motions:

Move to issue a Notice to Proceed for the work already completed at 629 N River, as submitted in the application dated January 3, 2020, for installation of a 3' tall black metal fence parallel to the north property boundary, and a metal clad-garden shed.

Relevant Secretary of the Interior's Standards:

#9, #10

Prepared by:

Scott E. Slagor, Preservation Planner

ⁱ Janice Anschuetz, "River Street Neighbors' Gossip and the Hutchinson Marriage," *Ypsilanti Gleanings* (Ypsilanti Historical Society, Fall 2010), 15.



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JAN 03 2020

CITY OF YPSILANTI
BUILDING DEPARTMENT

City of Ypsilanti

Historic District Commission

Work Permit Application

One South Huron • Ypsilanti, MI 48197

Phone: (734) 483-9646 • Fax: (734) 483-7260

www.cityofypsilanti.com

26702
MC

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA

Property

Address

629 N. River St

Applicant

**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

Elizabeth & Christopher Mclell

Address

[Redacted]

City

Ypsilanti

State

MI

Zip

48198

Phone / Fax

[Redacted]

E-Mail

Contractor

Contractor Name & Contact Info

N/A

Type of work

- ☐ Roofing
☐ Window/Door Replacement

- ☐ Porches
☐ Sign
☒ Fence (or other sitework)

- ☐ Painting
☒ Other - shed
☐ Application Amendment

Complete Description of Proposed Work:

We have placed a temporary, Removable fence along the North side of our backyard. It is 3ft high, black wrought iron. (See pictures included). The purpose of the fence is to keep the Air BNB renters (Corner of River & Forest) from interacting with my deaf/limited vision dog as this became a problem. The fence also helps him understand the boundaries when he is in the yard and Reduces unwanted barking.

We also placed a small, 6x8, beige shed at the Rear of our property, in the parking area for our lawn and garden equipment. Picture enclosed.

Materials (for paint include color chips or samples with application):

- Fence = Black Iron
- Shed = Beige Steel

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. *An additional fee of \$50 applies to HDC work started without the applicable permit.*

Construction Cost:

7500

Permit fee:

\$45 + _____ = \$45

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature

Date:

12/16/19

Print Name

Elizabeth McCall

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.



Facing northwest to facade and south elevation.



Facing southwest to facade and north elevation- fence and shed at right.



Facing southwest to fence and shed from River Street.



Facing southeast to fence and shed from alley.



HDC Work Permit Staff Review

Property address: 400 N River

Property History: The property includes the Thompson Block, a landmark building of the Depot Town commercial district that can tie its construction to the railroad. Originally known as the Norris Block, the building was erected by Mark Norris in 1860 using bricks from his demolished Western Hotel- which was in the path of a railroad expansion. In 1862 and 1863 the building housed barracks for the Fourteenth and Twenty-Seventh Michigan Infantry Regiments. Reputedly, the building is the only Michigan barracks facility used in 1862 that is still extant.

In 1869, the southwest corner unit of the building became occupied by a paint and wagon shop, owned by Oliver E. Thompson, for whom the building is now named. Over time the store expanded to half of the building; selling agricultural implements, bicycles, and various home/hardware goods. In the 1910s, Oliver's grandson, Joseph Thompson, opened a dodge dealership in the north half of the building, operating it a short while before moving it across Cross Street. In 1927 The Thompson family sold the business to a Detroit firm that retained the name: O. E. Thompson and Sons, which remained in the building until 1950.

Various businesses occupied the building throughout the second half of the twentieth century, however it slowly fell into disrepair and was determined a case of demolition by neglect in 2002. Repairs were made to the building, but it was unfortunately gutted by a fire in 2009. The exterior walls were preserved and the building is currently undergoing rehabilitation.ⁱ

Date of Application: January 6, 2020

Date of Review: January 7, 2020

Date of Meeting: January 14, 2020

Proposed work: Installation of a carport with a solar roof.

Materials: Galvanized steel and aluminum-framed solar panels.

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

Staff review:

1. This application is part of the ongoing rehabilitation of the Thompson Block. The application includes a free-standing carport structure with a solar-powered roof.
2. The structure will be placed on the western-most bay of parking spaces on the rear lot, covering an area of 78' (north-south) and 25' (east-west).
3. The carport structure will be constructed of galvanized steel.
4. The carport roof will be comprised of 96 solar panels with aluminum frames in a natural finish.
5. There will be some vegetative screening on the east side of the property, which will diminish the view from the adjacent historic property.
 - a. Screening will be accomplished with a combination of Hick's Yew and Arctic Fire Red Twig Dogwood. They will not be tall enough to block the solar panels themselves, but they will obscure view to cars and the support structure for the panels.
 - b. There are plantings on the south side of the property, including Crimson Point Plums, and Snowcloud Serviceberry, but they are not designed to screen views.
6. The structure will be visible from East Cross Street.
 - a. According to the guidelines of the Alternative Energy Fact Sheet, if the location of solar panels can be seen from the street, then solar panels would not be approved in that location.
 - b. The HDC may consider that there are some properties in the district with panels visible from the street on secondary elevations, such as City Hall, 1 S Huron, and Arbor Brewing Company, 720 Norris.
 - c. The HDC may also consider that the structure is detached from the historic building, is free-standing, and does not imitate earlier architectural styles.

Recommended Motions:

Move to approve and issue a certificate of appropriateness for the work at 400 N River, as submitted in the application, dated January 6, 2020, for installation of a solar paneled carport. The carport is to be built to specifications including a structure of galvanized steel and solar panels framed in aluminum.

Relevant Secretary of the Interior's Standards:

#3, #9, #10

Prepared by:

Scott E. Slagor, Preservation Planner

ⁱ Historical facts lifted from: James Mann "The Thompson Block- Then and Now!" Ypsilanti Gleanings, (Winter 2009), 1-4.



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JAN 06 2020

CITY OF YPSILANTI
BUILDING DEPARTMENT

**City of Ypsilanti
Historic District Commission
Work Permit Application**

One South Huron • Ypsilanti, MI 48197
Phone: (734) 483-9646 • Fax: (734) 483-7260
www.cityofypsilanti.com

R. 26708
#12743
PHDC 20-0003

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA

Property

Address

400 RIVER STREET, YPSILANTI, MI, 48197

Applicant

**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

JON CARLSON

Address

THE ORIGINAL AND ONLY THOMPSON BLOCK, L.L.C.

City

GRAND RAPIDS

State

MI.

Zip

49546

Phone / Fax

E-Mail

Contractor

Contractor Name & Contact Info

KINCAID BUILDING GROUP, INC., 1515 TURFLANE #200, E. LANSING, MI.

Type of work

- ☐ Roofing
☐ Window/Door Replacement

- ☐ Porches
☐ Sign
☐ Fence (or other sitework)

- ☐ Painting
☒ Other
☐ Application Amendment

Complete Description of Proposed Work:

THIS PROJECT IS THE INSTALLATION OF 96 SOLAR PANELS TO BE MOUNTED TO A STRUCTURAL STEEL FRAME OVER EIGHT PARKING SPACES OF THE EAST ROW OF PARKING ON THE EAST SIDE OF THE THOMPSON BLOCK BUILDING. CARS WILL BE ABLE TO PARK UNDER THE PANEL ARRAY. THE TOTAL FRAME SIZE IS APPROXIMATELY 78' (NORTH-SOUTH) X 25' (EAST-WEST). SEE ATTACHED DRAWINGS:

- SITE PLAN (MIDWESTERN CONSULTING)
- ELEVATION SKETCH (SINCLAIR DESIGNS & ENGINEERING).
- FRAME CUT SHEET (MID-AMERICA SOLAR)
- SOLAR PANEL CUT SHEET (2) (CSUN)

Materials (for paint include color chips or samples with application):

COLUMNS, TRUSSER AND PURLINS ARE GALVANIZED STEEL. SOLAR PANELS ARE FRAMED IN ALUMINUM W/ NATURAL FINISH.

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. *An additional fee of \$50 applies to HDC work started without the applicable permit.*

Construction Cost:

\$120,000

Permit fee:

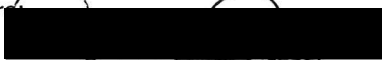
\$45 + 195 = \$240.

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature:



Date:

1/6/2020

Print Name:

JON CARLSON

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.

PHDC-20-0003



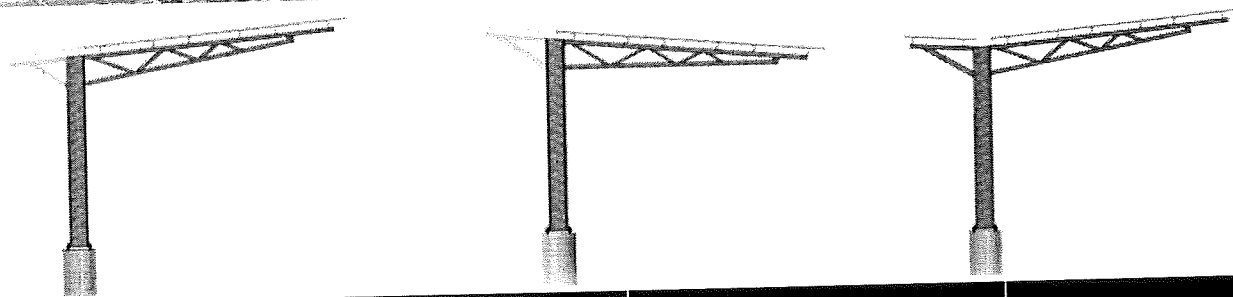
LEGEND	
①	NUMBER OF STANDARD PARKING SPACES IN ROW
②	NUMBER OF ALL CAR PARKING SPACES IN ROW
③	NUMBER OF BARRIER FREE PARKING SPACES IN ROW
④	BARRIER FREE PARKING SIGN
⑤	MAN ACCESSIBLE BARRIER FREE PARKING SIGN
⑥	BARRIER FREE SIDEWALK RAMP
⑦	PROVIDE CURB & SPILL-OUT OUTLET
⑧	PROVIDE BITUMINOUS PAVEMENT
⑨	PROVIDE CONCRETE PAVEMENT
⑩	SIGN
⑪	PROVIDE SHADE LIGHT POLE



**MIDWESTERN
CONSULTING**
3515 Plaza Drive Ann Arbor, Michigan 48108
(734) 995-1200 • www.midwesternconsulting.com
2nd Development • Land Survey • Institutional • Municipal
• Mass Communications • Transportation • Landfill Service



L-Canopy Carport System



Application	Parking Area & Sidewalks		
Tilt Angle	7 Degrees	Modules Per Section	18 - 24
Module Orientation	Portrait	Ground Clearance	Site Specific
Wind Load	125 MPH	Foundation	Reinforced Concrete
Snow Load	50 PSF	Purlin Length	236 Inches
Post Spacing	236 Inches	Manufacturing	Made in Michigan, USA

HIGHLIGHT: All structural components are fabricated from USA Steel. All material certifications available upon request.

Minimal Components For Easy Installation

1. FOUNDATION KIT-120

Custom Welded Rebar Foundation Kit with J-Bolts

2. I-BEAM

Site Specific Lengths 50lb/FT Beams

3 & 4. CP-TRUSS-3P

7 Degree angle

5. C-PURLIN

12 Gage Grade 50 - G90 - Chem Treated Steel

6. STRONGBACKS

Optional Components

7. GUTTERS

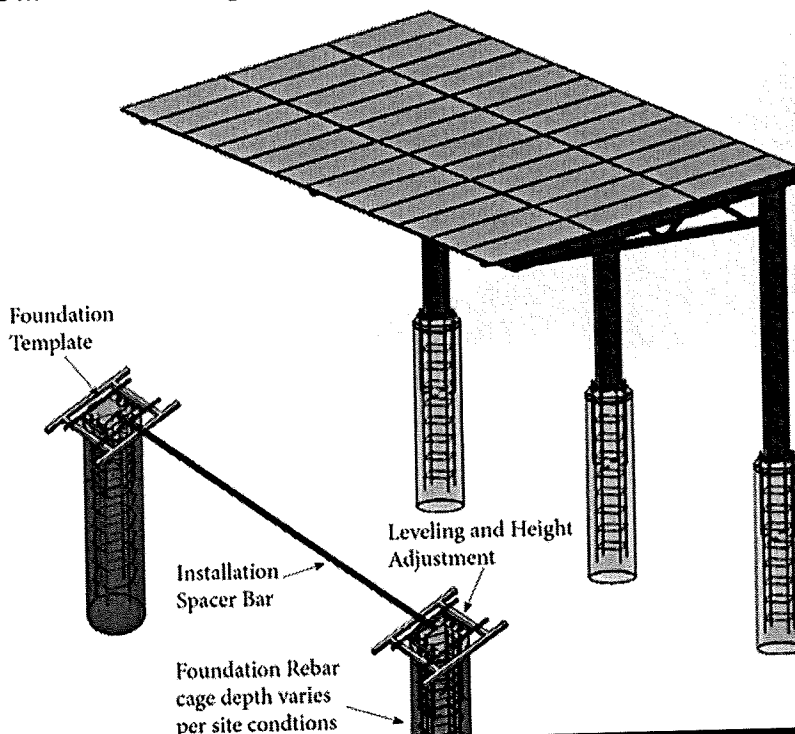
12 Gage Grade 50 - G90 - Chem Treated Steel

8. CANTILEVERS (1 or 2 Panel Adders)

9. CLOSE-OUTS

10. END CAPS

HIGHLIGHT: C-Purlins have stamped holes for direct tie in of hardware to modules with UL grounding lock washers. ****NO CLAMPS!****



Designed & Manufactured in Michigan, USA

Foundation Kits



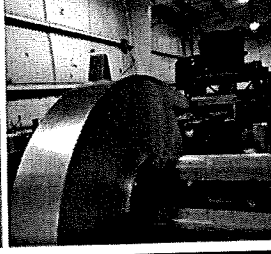
Structural I-Beams



Structural Trusses

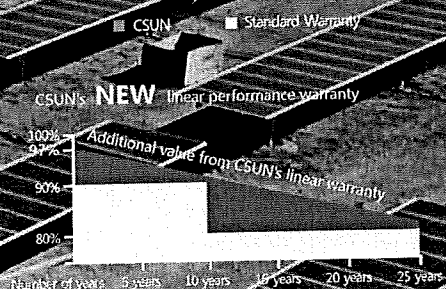


C-Purlin Manufacturing



MONO

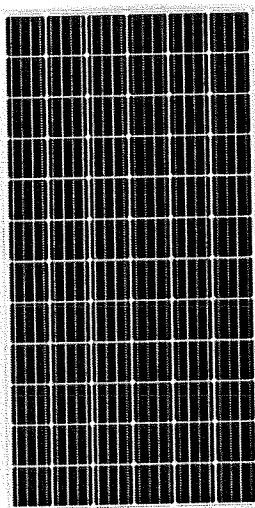
Munich RE
Munich RE Insurance
Global Coverage



The power output shall not be less than 97% of the minimum power output stated in the product data sheet in the first year of the product's life cycle. The loss of power output shall not exceed 0.68% per year thereafter, ending with 80.68% in the 25th year.



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CSUN370-72MH

The Large Scale Project Solution

CSUN370-72MH CSUN365-72MH
CSUN360-72MH CSUN355-72MH

19.11%

Module efficiency

370W

Highest power output

10years

Material & Workmanship warranty

25years

Liner power output warranty



PID-free



World class mono efficiency



Tighter product performance distribution and current sorting reduces the mismatch power loss in system operation



Positive tolerance offer



Good temperature coefficient enables higher output in high temperature regions



Excellent performance under low light conditions



Certified for salt/ammonia corrosion resistance



Load certificates: wind to 2400Pa and snow to 5400Pa

- CSUN designs, manufactures and delivers high efficient solar cells and modules to the world from its production centers based in China, USA, Turkey, South Korea and Vietnam.
- Founded in 2004, CSUN is well known for its advanced solar cell technology, reliable product quality, and excellent customer service.
- As one of leading PV enterprises, CSUN has delivered more than 8 GW of solar products to residential, commercial, utility and off-grid projects all around the world.



4741 Urbani Ave,
McClellan CA
95652



Electrical characteristics at Standard Test Conditions(STC)

Module Type	CSUN370-72MH	CSUN365-72MH	CSUN360-72MH	CSUN355-72MH
Maximum Power - Pmax (W)	370	365	360	355
Open Circuit Voltage - Voc (V)	47.6	47.5	47.3	47.1
Short Circuit Current - Isc (A)	9.99	9.89	9.78	9.7
Maximum Power Voltage - Vmpp (V)	39.4	39.2	39.1	38.8
Maximum Power Current - Impp (A)	9.4	9.32	9.22	9.16
Module Efficiency	19.11%	18.85%	18.59%	18.33%

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1.5; module temperature 25°C. Tolerance of P_{mp}: 0~+3%. Measuring uncertainty of power: ±3%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Electrical Characteristics at Normal Operating Cell Temperature(NOCT)

Module Type	CSUN370-72MH	CSUN365-72MH	CSUN360-72MH	CSUN355-72MH
Maximum Power - Pmax (W)	274	270	267	263
Open Circuit Voltage - Voc (V)	44.0	43.9	43.8	43.6
Short Circuit Current - Isc (A)	7.98	7.89	7.8	7.72
Maximum Power Voltage - Vmpp (V)	36.4	36.3	36.3	36.1
Maximum Power Current - Impp (A)	7.51	7.41	7.36	7.29

Normal Operating Cell Temperature (NOCT): irradiance 800W/m²; wind speed 1 m/s; cell temperature 45°C; ambient temperature 20°C.

Measuring uncertainty of power: ±3%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Temperature Characteristics

NOCT	45°C (±2°C)	Maximum System Voltage [V]	1500
Voltage Temperature Coefficient	-0.29%/K	Series Fuse Rating [A]	20
Current Temperature Coefficient	+0.05%/K	Fire Rating	Class C
Power Temperature Coefficient	-0.39%/K	Module Fire Performance	Type 1

Material Characteristics

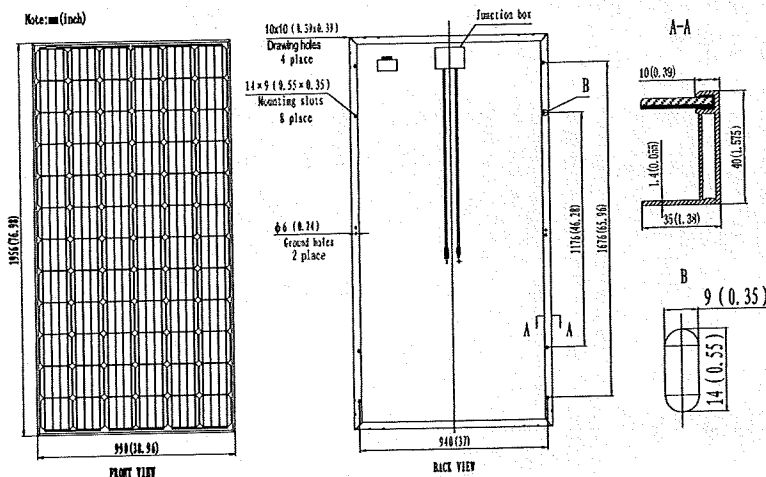
Dimensions	1956×990×40mm (L×W×H)
Weight	22.0kg
Frame	Anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Composite film
Cells	6×12 pieces monocrystalline solar cells series strings (156.75×156.75mm)
Junction Box	Rated current≥13A, IP≥67, TUV&UL
Cable&Connector	Length 900 mm, 1×4 mm ² , compatible film MC4

Packaging

Dimensions(LÖWÖH)	1990×1120×1120mm	Temperature Range	-40 °C to + 85 °C
Container20'	260	Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 ms ⁻¹
Container40'	624	Maximum Surface Load	5,400 Pa
Container40'HC	684	Application class	class A
		Safety class	class II

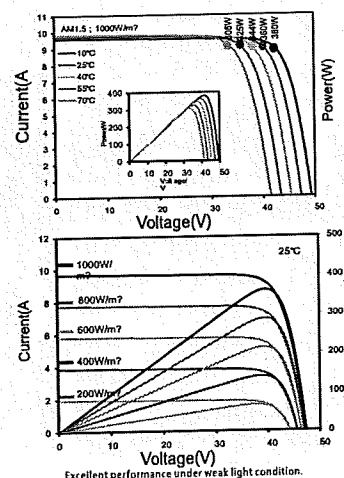
System Design

Dimensions



Note: Frame color and cable length can be customized on demand.

IV-Curves





City of Ypsilanti

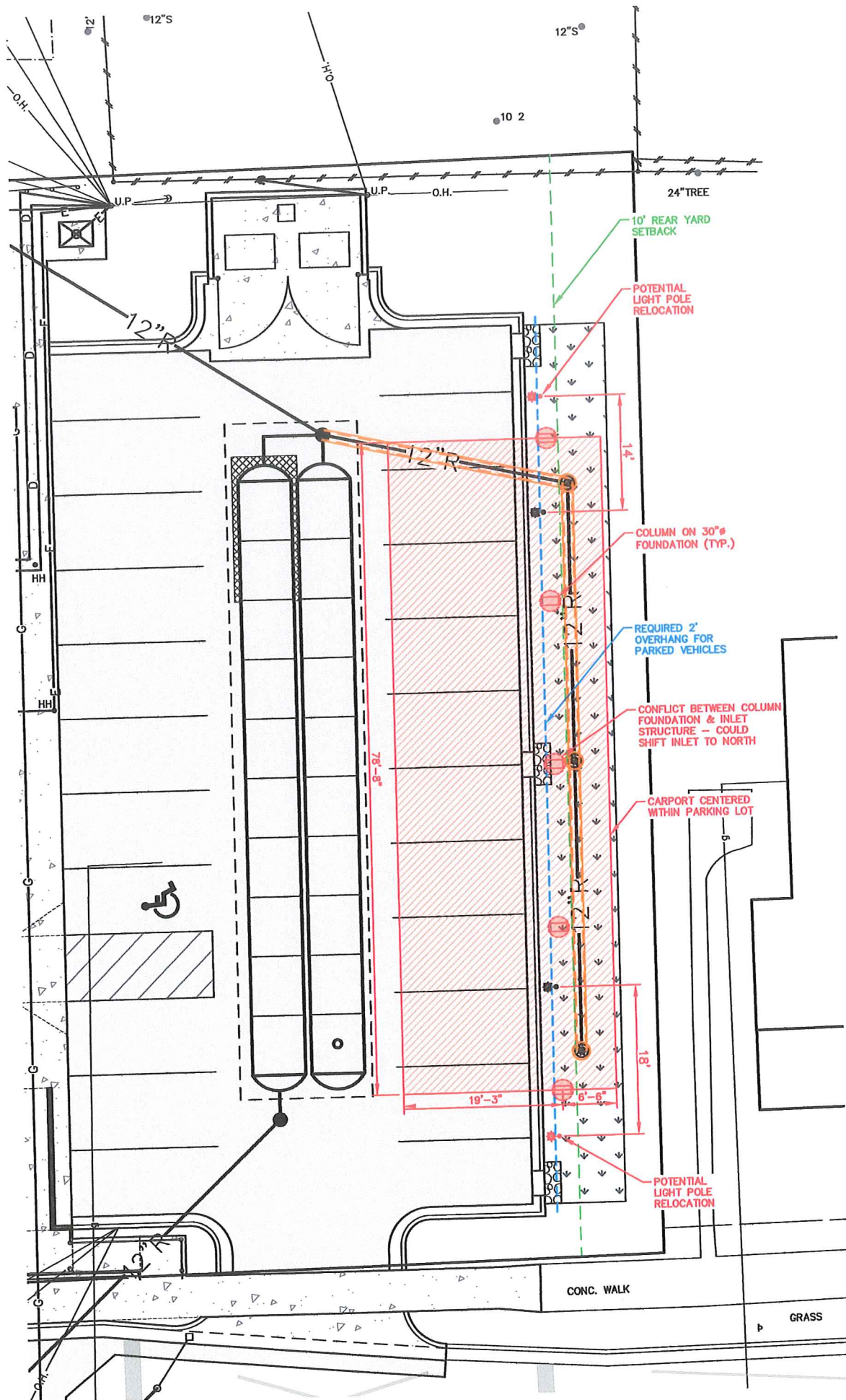
Tuesday, January 7, 2020

We are giving permission for Mid America Solar to place solar panels and structure on our property.

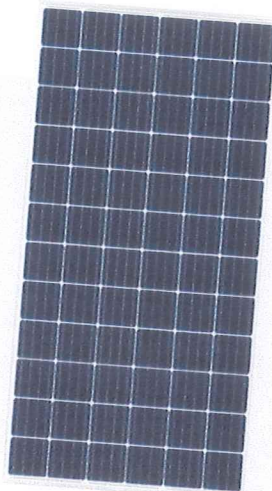
Thank you and take care

A handwritten signature in black ink, appearing to read "JAC", is written over the printed name.

Jon A. Carlson



MONO



CSUN370-72MH

The Large Scale Project Solution

CSUN370-72MH CSUN365-72MH
CSUN360-72MH CSUN355-72MH

19.11%

Module efficiency

370W

Highest power output

10years

Material & Workmanship warranty

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Liner power output warranty



PID-free



World class mono efficiency



Tighter product performance distribution and current sorting reduces the mismatch power loss in system operation



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Certified for salt/ammonia corrosion resistance



Load certificates: wind to 2400Pa and snow to 5400Pa

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Munich RE

Munich RE Insurance
Global Coverage



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95652



Electrical characteristics at Standard Test Conditions(STC)

Module Type	CSUN370-72MH	CSUN365-72MH	CSUN360-72MH	CSUN355-72MH
Maximum Power - Pmax (W)	370	365	360	355
Open Circuit Voltage - Voc (V)	47.6	47.5	47.3	47.1
Short Circuit Current - Isc (A)	9.99	9.89	9.78	9.7
Maximum Power Voltage - Vmpp (V)	39.4	39.2	39.1	38.8
Maximum Power Current - Imp (A)	9.4	9.32	9.22	9.16
Module Efficiency	19.11%	18.85%	18.59%	18.33%

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1.5; module temperature 25°C. Tolerance of P_{mp}: 0~+3%. Measuring uncertainty of power: ±3%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Electrical Characteristics at Normal Operating Cell Temperature(NOCT)

Module Type	CSUN370-72MH	CSUN365-72MH	CSUN360-72MH	CSUN355-72MH
Maximum Power - Pmax (W)	274	270	267	263
Open Circuit Voltage - Voc (V)	44.0	43.9	43.8	43.6
Short Circuit Current - Isc (A)	7.98	7.89	7.8	7.72
Maximum Power Voltage - Vmpp (V)	36.4	36.3	36.3	36.1
Maximum Power Current - Imp (A)	7.51	7.41	7.36	7.29

Normal Operating Cell Temperature (NOCT): irradiance 800W/m²; wind speed 1 m/s; cell temperature 45°C; ambient temperature 20°C. Measuring uncertainty of power: ±3%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Temperature Characteristics

NOCT	45°C (±2°C)	Maximum System Voltage [V]	1500
Voltage Temperature Coefficient	-0.29%/K	Series Fuse Rating [A]	20
Current Temperature Coefficient	+0.05%/K	Fire Rating	Class C
Power Temperature Coefficient	-0.39%/K	Module Fire Performance	Type 1

Material Characteristics

Dimensions	1956×990×40mm (L×W×H)
Weight	22.0kg
Frame	Anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Composite film
Cells	6×12 pieces monocrystalline solar cells series strings (156.75×156.75mm)
Junction Box	Rated current ≥13A, IP≥67, TUV&UL
Cable&Connector	Length 900 mm, 1×4 mm ² , compatible film MC4

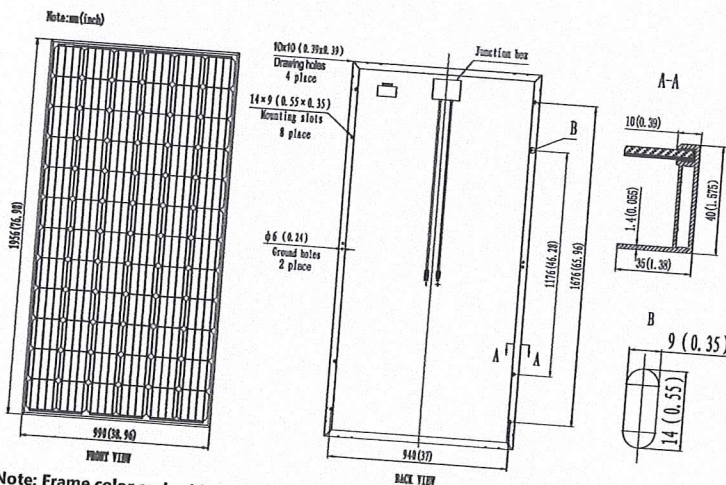
Packaging

Dimensions(L×W×H)	1990×1120×1120mm
Container20'	260
Container40'	624
Container40'HC	684

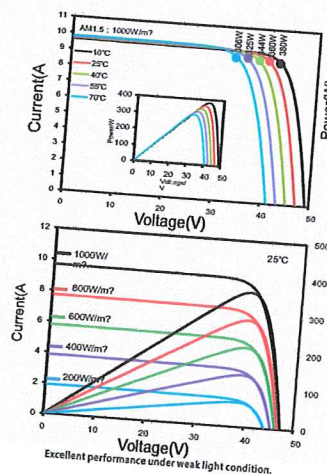
System Design

Temperature Range	-40 °C to + 85 °C
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 ms ⁻¹
Maximum Surface Load	5,400 Pa
Application class	class A
Safety class	class II

Dimensions



IV-Curves



/ Perfect Welding / Solar Energy / Perfect Charging



FRONIUS PRIMO

/ Solutions for a brighter tomorrow.



/ PC board replacement process



/ SnapINverter mounting system



/ Wi-Fi® interface



/ Design Flexibility



/ Smart Grid Ready



/ Arc Fault Circuit Interruption



/ With power categories ranging from 3.8 kW to 15.0 kW, the transformerless Fronius Primo is the ideal compact single-phase inverter for residential applications. The sleek design is equipped with the SnapINverter hinge mounting system which allows for lightweight, secure and convenient installation. The Fronius Primo has several integrated features that set it apart from competitors including dual powerpoint trackers, high system voltage, a wide input voltage range, Wi-Fi* and SunSpec Modbus interface, and Fronius' online and mobile monitoring platform Fronius Solar.web. The Fronius Primo also works seamlessly with the Fronius Rapid Shutdown Box as a reliable rapid shutdown solution outside the PV Array boundary.

TECHNICAL DATA FRONIUS PRIMO

GENERAL DATA	FRONIUS PRIMO 3.8 - 8.2	FRONIUS PRIMO 10.0-15.0
Dimensions (width x height x depth)	16.9 x 24.7 x 8.1 in.	20.1 x 28.5 x 8.9 in.
Weight	47.29 lb.	82.5 lbs.
Protection Class	NEMA 4X	
Night time consumption	< 1 W	
Inverter topology	Transformerless	
Cooling	Variable speed fan	
Installation	Indoor and outdoor installation	
Ambient operating temperature range	-40 - 131°F (-40 - 55°C)	-40 - 140°F (-40 - 60°C)
Permitted humidity	0 - 100 %	
Elevation	4000m (13123 ft)	
DC connection terminals	4x DC+ and 4x DC- screw terminals for copper (solid / stranded / fine stranded) or aluminum (solid / stranded)	4x DC+1, 2x DC+2 and 6x DC- screw terminals for copper (solid / stranded / fine stranded) or aluminum (solid / stranded)
AC connection terminals	Screw terminals 12 - 6 AWG	
Revenue Grade Metering	Optional (ANSI C12.1 accuracy)	
Certificates and compliance with standards	UL 1741-2010 Second Edition (incl. UL1741 Supplement SA 2016-09 for California Rule 21 and Hawaiian Electric Code Rule 14H), UL1998 (for functions: AFCI, RCMU and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC 2017 Article 690, C22. 2 No. 107.1-16, UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 - 2013	UL 1741-2010 Second Edition (incl. UL1741 Supplement SA 2016-09 for California Rule 21 and Hawaiian Electric Code Rule 14H), UL1998 (for functions: AFCI, RCMU and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC 2017 Article 690, C22. 2 No. 107.1-16, UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 -2013
PROTECTIVE DEVICES	STANDARD WITH ALL PRIMO MODELS	
DC reverse polarity protection	Yes	
Anti Islanding	Internal; in accordance with UL 1741-2016-09, IEEE 1547-2003 and NEC 2017	
Over temperature protection	Output power derating/ Active cooling	
AFCI	Yes	
Rapid shutdown compliant	Per Sect. 690.12 of 2014 (of NEC 2017 prior to Jan 2019)	
Ground Fault Protection with Isolation Monitor	Yes	
Interrupter	Yes	
DC disconnect	Yes	
INTERFACES	STANDARD WITH ALL PRIMO MODELS	
USB (A socket)	Datalogging and inverter update possible via USB	
2x RS422 (RJ45 socket)	Fronius Solar Net, interface protocol	
Wi-Fi®/Ethernet LAN	Wireless standard 802.11 b/g/n/Fronius Solar.web, SunSpec Modbus TCP, JSON	
Datalogger and Webserver	Included	
Serial RS485	SunSpec Modbus RTU or meter connection	
6 inputs or 4 digital inputs/outputs	Load management; signaling, multipurpose I/O	

*The term Wi-Fi® is a registered trademark of the Wi-Fi Alliance.

TECHNICAL DATA FRONIUS PRIMO

INPUT DATA	PRIMO 3.8-1	PRIMO 5.0-1	PRIMO 6.0-1	PRIMO 7.6-1	PRIMO 8.2-1
Recommended PV power (kWp)	3.0 - 6.0 kW	4.0 - 7.8 kW	4.8 - 9.3 kW	6.1 - 11.7 kW	6.6 - 12.7 kW
Max. usable input current (MPPT 1/MPPT 2)			18 A / 18 A		
Max. usable input current (MPPT 1+MPPT 2)			36 A		
Max. array short circuit current (1.5 * I _{max}) (MPPT1/MPPT2)			27 A / 27 A		
Nominal input voltage	410 V	420 V	420 V	420V	420 V
Operating voltage range			80 V - 600 V		
DC startup voltage			80 V		
MPP Voltage Range	200-480 V	200-400 V	240-480 V	250-480 V	270-480 V
Max. input voltage	600 V (1000 V optional ¹)				
Admissible conductor size DC	AWG 14 - AWG 6 copper (solid / stranded / fine stranded)(AWG 10 copper or AWG 8 aluminium for overcurrent protective devices up to 60A, from 61 to 100A minimum AWG 8 for copper or AWG 6 aluminium has to be used) , AWG 6 - AWG 2 copper(solid / stranded) MultiContactWiringable with AWG 12				
Number of MPPT	2				

OUTPUT DATA	PRIMO 3.8-1	PRIMO 5.0-1	PRIMO 6.0-1	PRIMO 7.6-1	PRIMO 8.2-1
Max. output power	208 V/240 V	3800 VA/3800 VA	5000 VA/5000 VA	6000 VA/6000 VA	7600 VA/7600 VA
Output configuration	208/240 V				
Frequency range (adjustable)	45.0 - 55.0 Hz / 50 - 66 Hz				
Operating frequency range default for CAL setups	- / 58.5 - 60.5 Hz				
Operating frequency range default for HI setups	- / 57.0 - 63.0 Hz				
Nominal operating frequency	60 Hz				
Admissible conductor size AC	AWG 14 - AWG 6				
Total harmonic distortion	< 5.0 %				
Power factor range	0.85-1 ind./cap				
Max. continuous output current	208 V	18.3 A	24.0 A	28.8 A	36.5 A
	240 V	15.8 A	20.8 A	25.0 A	31.7 A
OCPD/AC breaker size	208V	25 A	30 A	40 A	50 A
	240 V	20 A	30 A	35 A	45 A
Max. Efficiency	96.7 %				
CEC Efficiency	95.0 %				

INPUT DATA	PRIMO 10.0-1	PRIMO 11.4-1	PRIMO 12.5-1	PRIMO 15.0-1
Recommended PV power (kWp)	8.0 - 12.0 kW	9.1 - 13.7 kW	10.0 - 15.0 kW	12.0 - 18.0 kW
Max. usable input current (MPPT 1/MPPT 2)	33.0 / 18.0 A			
Max. usable input current (MPPT 1+MPPT 2)	51 A			
Max. array short circuit current (1.5 * Imax)	49.5 A/ 27.0			
Nominal input voltage	655 V	660 V	665 V	680 V
Operating voltage range	80 V - 1,000 V			
DC startup voltage	80 V			
MPP Voltage Range	220-800 V	240-800 V	260-800 V	320-800 V
Max. input voltage	1000 V			
Admissible conductor size DC	AWG 14 - AWG 6 copper direct, AWG 6 aluminium direct (AWG 10 copper or AWG 8 aluminium for overcurrent protective devices up to 60A, from 61 to 100A minimum AWG 8 for copper or AWG 6 aluminium has to be used), AWG 4 - AWG 2 copper or aluminium with optional input combiner			
Number of MPPT	2			
Integrated DC string fuse holders	4- and 4+ for MPPT 1 / no fusing required on MPPT 2			

OUTPUT DATA	PRIMO 10.0-1	PRIMO 11.4-1	PRIMO 12.5-1	PRIMO 15.0-1
Max. output power	208 V/240 V	9995 VA/9995 VA	11400 VA/11400 VA	12500 VA/12500 VA
Output configuration	1-NPE 208/240 V			
Frequency range (adjustable)	45-55 Hz / 50-66 Hz			
Operating frequency range default for CAL setups	- / 58.5 - 60.5 Hz			
Operating frequency range default for HI setups	- / 57.0 - 63.0 Hz			
Nominal operating frequency	60 Hz			
Admissible conductor size AC	AWG 10- AWG 2 copper (solid/stranded/fine stranded)(AWG 10 copper or AWG 8 aluminium for overcurrent protective devices up to 60 A, from 61 to 100A minimum AWG 6 aluminium has to be used), AWG 6-AWG 2 copper (solid/stranded) Multi Contact Wiring able with AWG 12			
Total harmonic distortion	< 2.5 %			
Power factor range	0-1 ind./cap.			
Max. continuous output current	208 V	48.1 A	54.8 A	60.1 A
	240 V	41.6 A	47.5 A	52.1 A
OCPD/AC breaker size	208 V	70 A	70 A	80 A
	240 V	60 A	60 A	70 A
Max. Efficiency	96.7 %			
CEC Efficiency 600 V/ 1000 V	240 V	96.0 % / 96.5 %		96.5 % / 97.0 %

¹ inverter rated for up to 1000 V open circuit. Nominal, Operating, and MPP voltages based on 600 V system design. Actual DC system voltage is dependent on PV string-sizing, not inverter input capacity.

/ Perfect Welding / Solar Energy / Perfect Charging

THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 3,800 employees worldwide and 1,242 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at www.fronius.com

v08 Aug 2017 EN

Fronius USA LLC

6797 Fronius Drive

Portage, IN 46368 USA

pv-support-usa@fronius.com

www.fronius-usa.com



PATRIOT SOLAR GROUP
1007 INDUSTRIAL AVENUE
ALBION, MI 49424

PSG.18.032
ISSUED FOR CONSTRUCTION 7/16/18

SITE LOCATION:
WILLOW CREEK APARTMENTS
501 GRANBY STREET
HARTFORD, CT 06112
HARTFORD COUNTY

INDEX OF DRAWINGS
C-1 COVER SHEET, INDEX, ELEV.
& SPECIFICATIONS

S-1 SOLAR PANEL PLAN
S-2 PANEL ARRAY PROFILE
S-3 I-BEAM DETAILS
S-4 Z-CHANNEL DETAILS
S-5 TRUSS DETAIL

SPECIFICATIONS
39.4'x78.9" PANELS, 7' TILT
SOLAR CARPORT SYSTEM - REC. TWINPEAK
25 72 SERIES, 350 WATT PANELS

STRUCTURAL STEEL

1. POSTS: W16X40 G90 HOT-DIPPED GALVANIZED STEEL POSTS, BEAMS, AND RAILS
2. STRUCTURAL BOLTS - A325 OR GR5
3. GALVANIZED
3. WELDS - E70XX ELECTRODES, AWS D1.1
4. HOLES $\frac{1}{8}$ " LARGER THAN BOLT SIZE
5. ALL STEEL FABRICATED & GALV. PER ASTM A123

CONCRETE
1. 3000 PSI @ 28 DAYS

SOIL BEARING CAPACITY
1. 2000 VERTICAL
2. 333 PSF/FT LATERAL

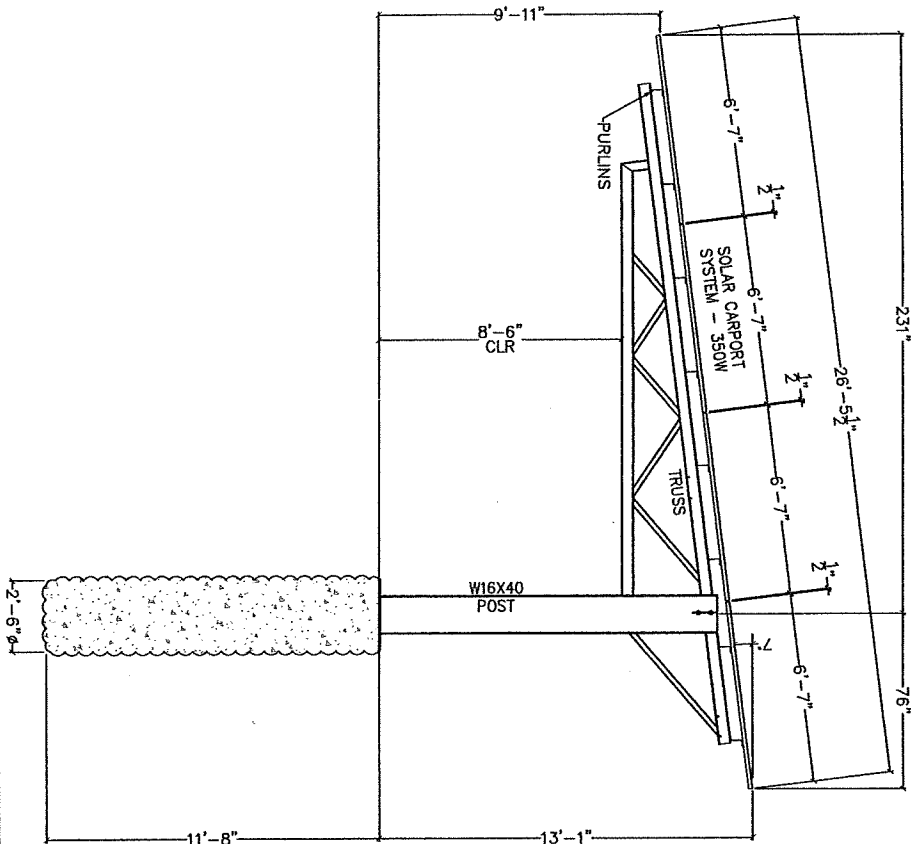
BEFORE YOU DIG CALL:
CT UNDERGROUND PLANT
PROTECTION
1-800-412-9195

STRUCTURAL DESIGN LOADS

EPA = 21.6 SF @ 39.4' x 78.9" PANELS
WEIGHT = 48.5 LBS/PANEL
4-PANELS HIGH, 144 MODULES:
TOTAL EPA = 21.6sf x 24 PANELS= 518 SF
IBC 2015
WIND SPEED 112 MPH, WIND EXPOSURE C
ASCE 7-10 RISK CATEGORY I, LOW HAZARD
K2 = 0.85 VELOCITY PRESSURE EXPOSURE
Kd = 0.85
Kzt=1 FLAT TERRAIN
Cf = 1.4 NET FORCE COEFFICIENT
G = 0.85 GUST FACTOR
q = 23.2 psf
Pg = 30 psf
Ce = 0.9
Ct = 1.2
Is = 0.8
Pf = 18.1 psf
4-PANELS HIGH, 24 PANEL ARRAY
UP/LIFT = 4.1k LBS
DOWN = 12.6k
HORIZONTAL = 0.8k LBS
M = 62.5 k

CERTIFYING ENGINEER OF RECORD IS NOT
RESPONSIBLE FOR SOLAR PANEL DESIGN.

CONTACT ENGINEER FOR PLACEMENT OF
SOLAR PANELS OTHER THAN 7 DEGREES ±.



REVISIONS			
BY	REV	DESCRIPTION	DATE
	0	ISSUED FOR CONSTRUCTION	7/16/18



Bernmark Engineering PLLC
Consulting Structural Engineers
mark@bernmarkeng.com
280 Douglas Ave
Holland, MI 49424-6915
(616) 726-1281
Fax (616) 726-0281

PATRIOT SOLAR GROUP
1007 INDUSTRIAL DRIVE
ALBION, MI 49224

COVER SHEET, INDEX, ELEV. & SPECIFICATIONS

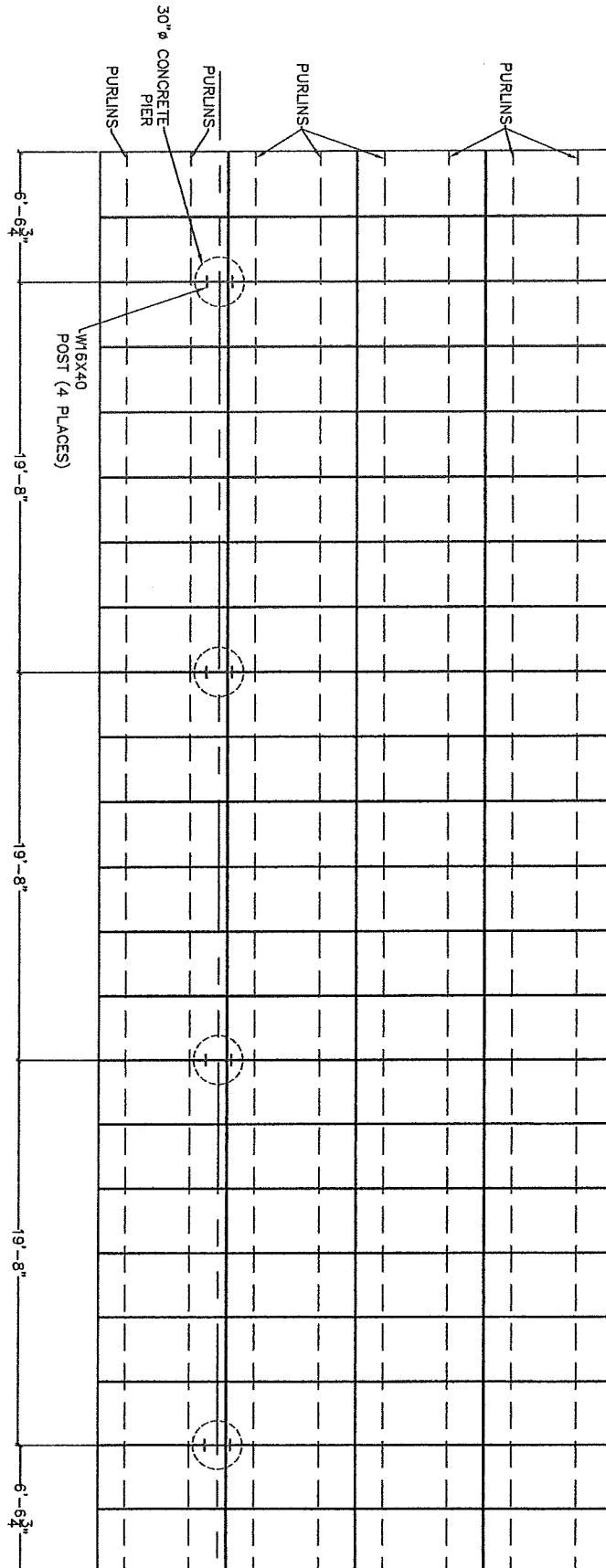
SOLAR PANEL ARRAY

HARTFORD, CT 06112

SHEET B SCALE 1/4"=1'-0" DWG PSG.18.032

SHEET NO. C-1





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BY	REV	DESCRIPTION	DATE
BOF	0	ISSUED FOR CONSTRUCTION	7/9/18
			MS



SERVINSKY ENGINEERING PLLC
Consulting Structural Engineers
 MOCKS@servinskyeng.com
 280 Dundas Ave.
 Hudson, MI 48224-4515
 Tel: (416) 736-1281 Fax: (416) 736-6281

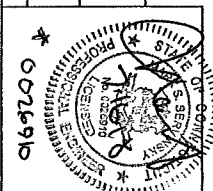
PATRIOT SOLAR GROUP
 1007 INDUSTRIAL DRIVE
 ALBION, MI 48224

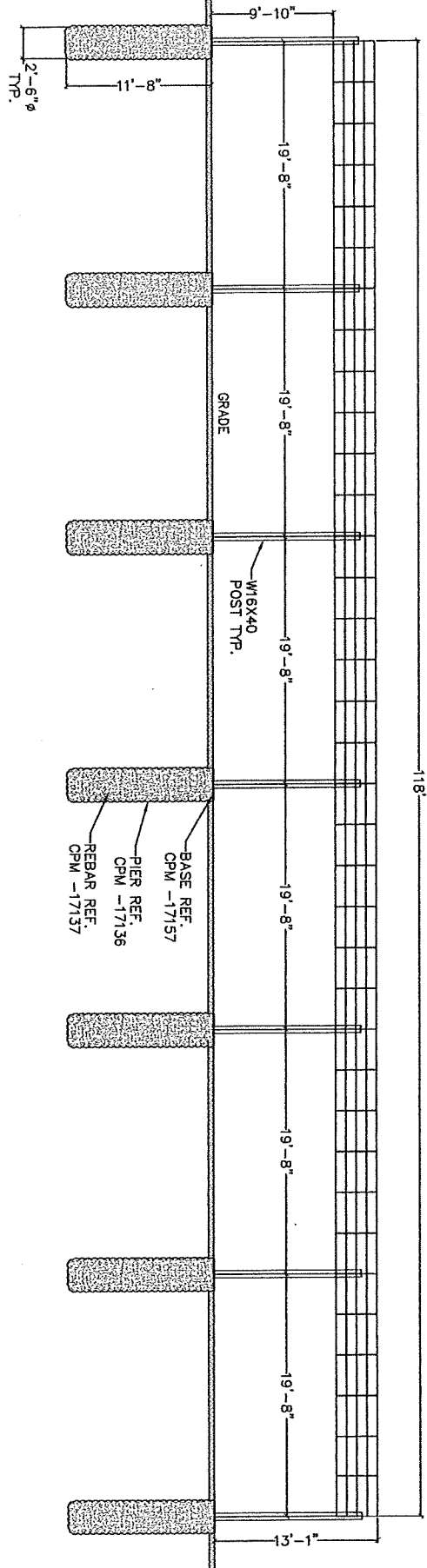
SOLAR CANOPY PLAN

SOLAR PANEL ARRAY

HARTFORD, CT 06112

SHEET B SCALE 3/16"=1'-0" DATE PSG.18.032 SHEET S-1





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MSB 0	ISSUED FOR CONSTRUCTION	7/16/18	MSB



BERNISKY ENGINEERING PLLC
Consulting Structural Engineers
 MUDKS@SERVINSKYENG.COM
 280 Douglas Ave
 Holland, MI 48424-8515
 Tel: (616) 738-1281 Fax: (616) 738-6281

PATRIOT SOLAR GROUP
 1007 INDUSTRIAL DRIVE
 ALBION, MI 48224

PANEL ARRAY PROFILE

SOLAR PANEL ARRAY

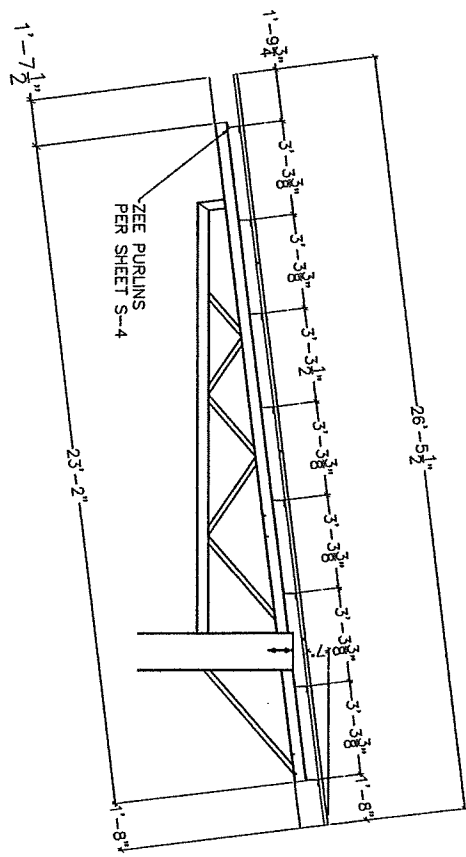
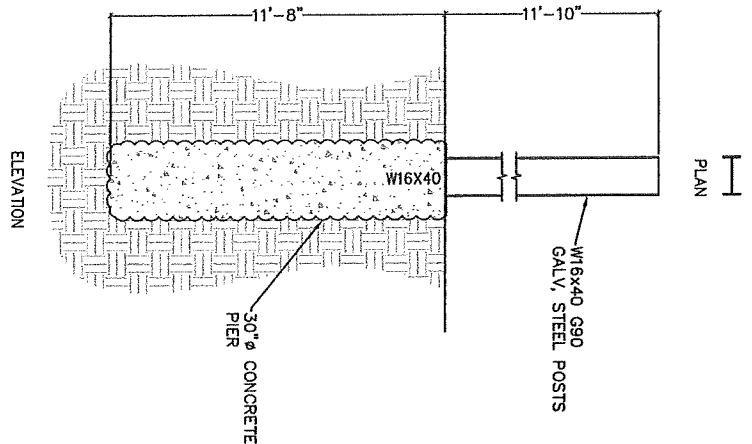
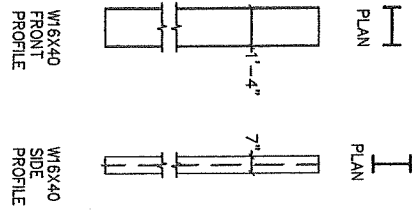
HARTFORD, CT 06112

SHEET B SCALE 1/8"=1'-0"

DWG PSG.18.032

SHEET S-2

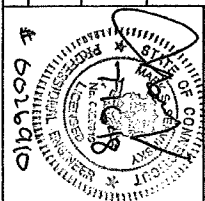




S-3 23'-6" I-BEAM DETAILS
SCALE: 1/4"=1'-0"

S-3 PURLIN LAYOUT
SCALE: 1/4"=1'-0"

REVISIONS			
BY / REV	DESCRIPTION	DATE	APPROVED
MSB 0	ISSUED FOR CONSTRUCTION	7/18/18	MSB
SERVINSKY ENGINEERING PLLC Consulting Structural Engineers 280 Dundee Ave. Holland, MI 49424-4515 (616) 738-1281 Fax: (616) 738-6251 mofrks@servinskyeng.com			
PATRIOT SOLAR GROUP 1007 INDUSTRIAL DRIVE ALBION, MI 49224		SOLAR PANEL ARRAY	
SHEET B		HARTFORD, CT 06112	
SCALE: 1/4"=1'-0"		SHEET S-3	



7/9/18

0.08

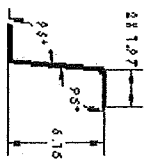
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001 / 0	ISSUED FOR CONSTRUCTION	7/13/18	MS



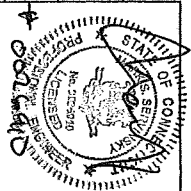
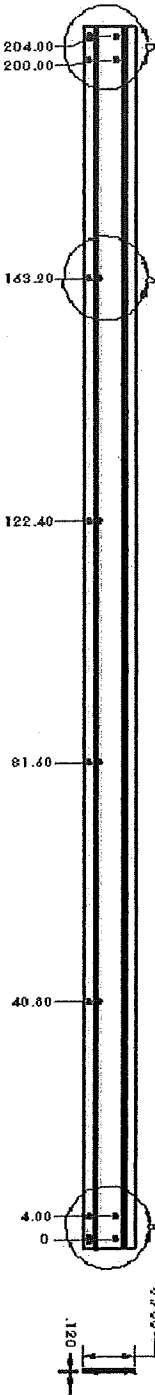
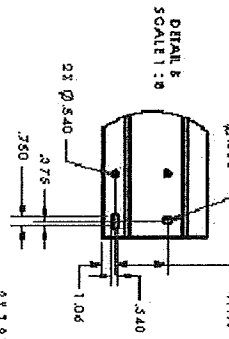
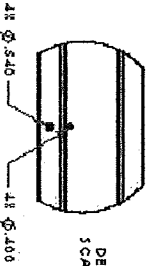
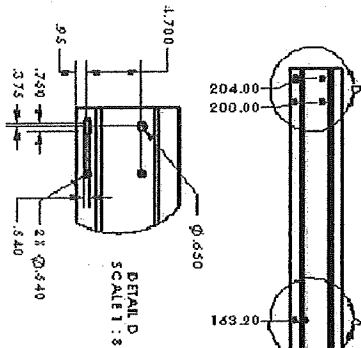
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Consulting Structural Engineers
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Hoboken, NJ 07030-1281
(201) 738-1281
Fax (201) 738-9281

PATNOT SOLAR GROUP
1007 INDUSTRIAL DRIVE
ALBION, NJ 08824

Z-CHANNEL DETAILS			
SHEET B	SCALE NO SCALE	SHEET S-4	HARTFORD, CT 06112
NO.	NO.	NO.	NO.



DETAIL A



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			MS

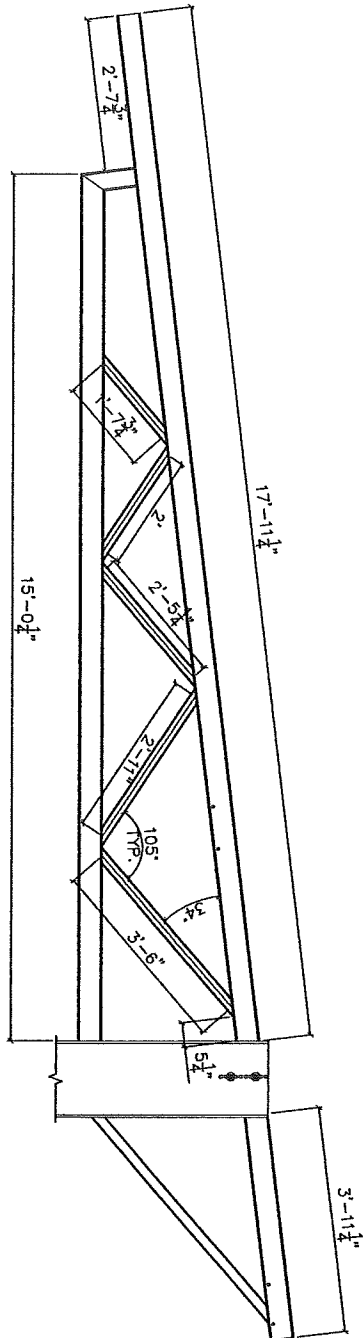
SERVASKY ENGINEERING PLLC
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 7701 S. SERVASKY AVE.
 HOLLAND, MI 49424-4515
 (616) 736-1251
 Fax: (616) 736-6251
 msb@servaskyeng.com

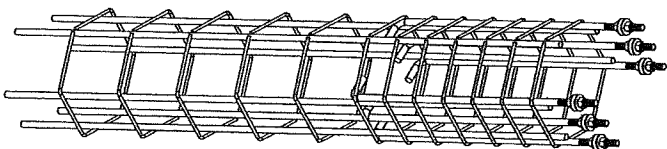
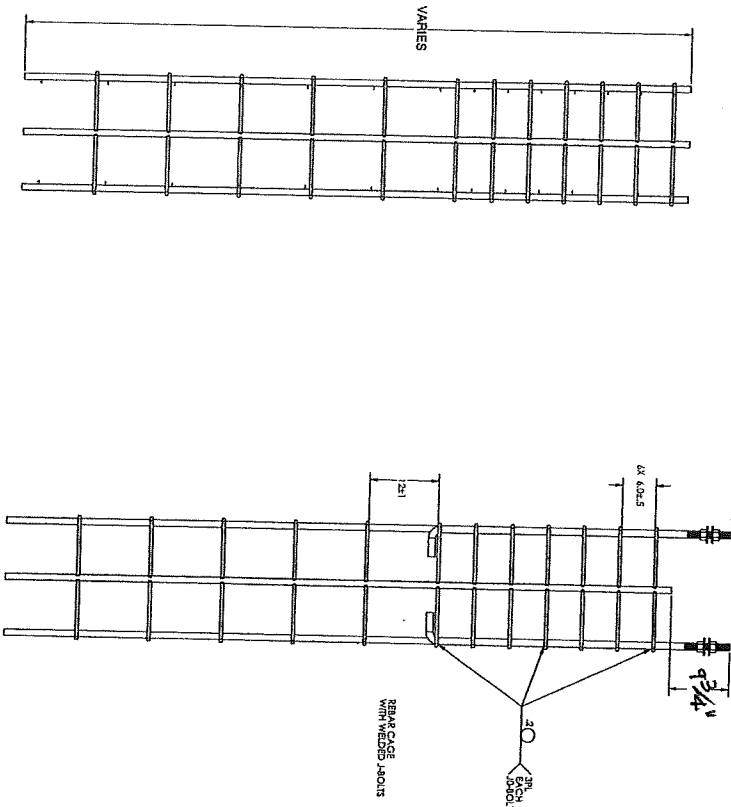
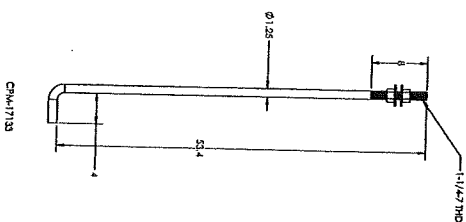
TRUSS DETAIL

SOLAR PANEL ARRAY

HARTFORD, CT 06112

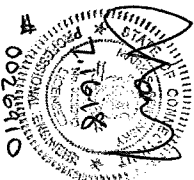
SHEET B SCALE: 1/2"=1'-0" **PSG.18.032** **SHEET S-5**



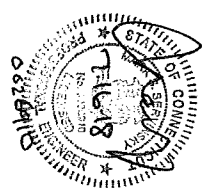
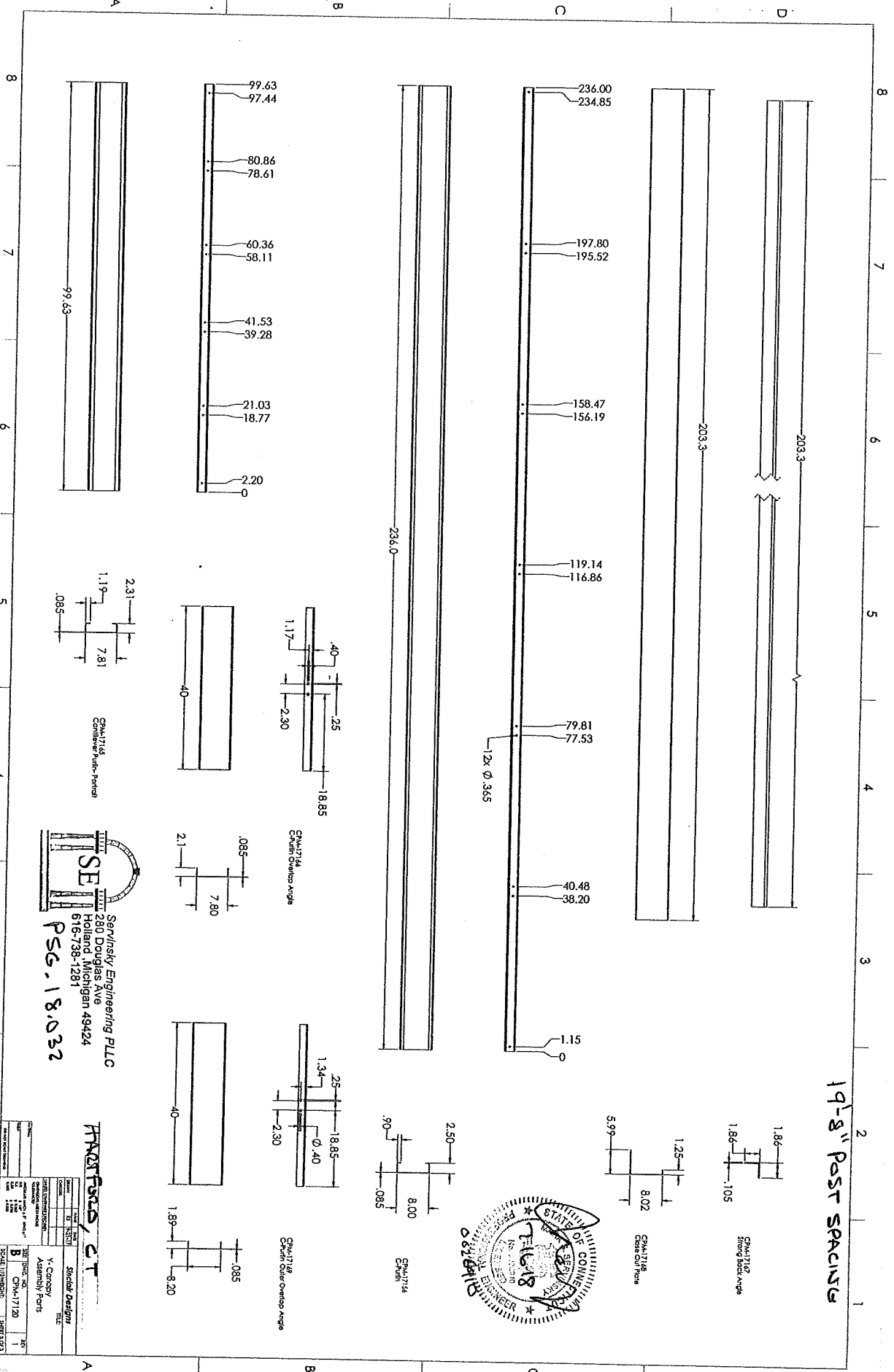
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Servinsky Engineering PLLC
1280 Douglas Ave
Holland, Michigan 49424
616-738-1281
PSG-18,032

HARTFORD, CT

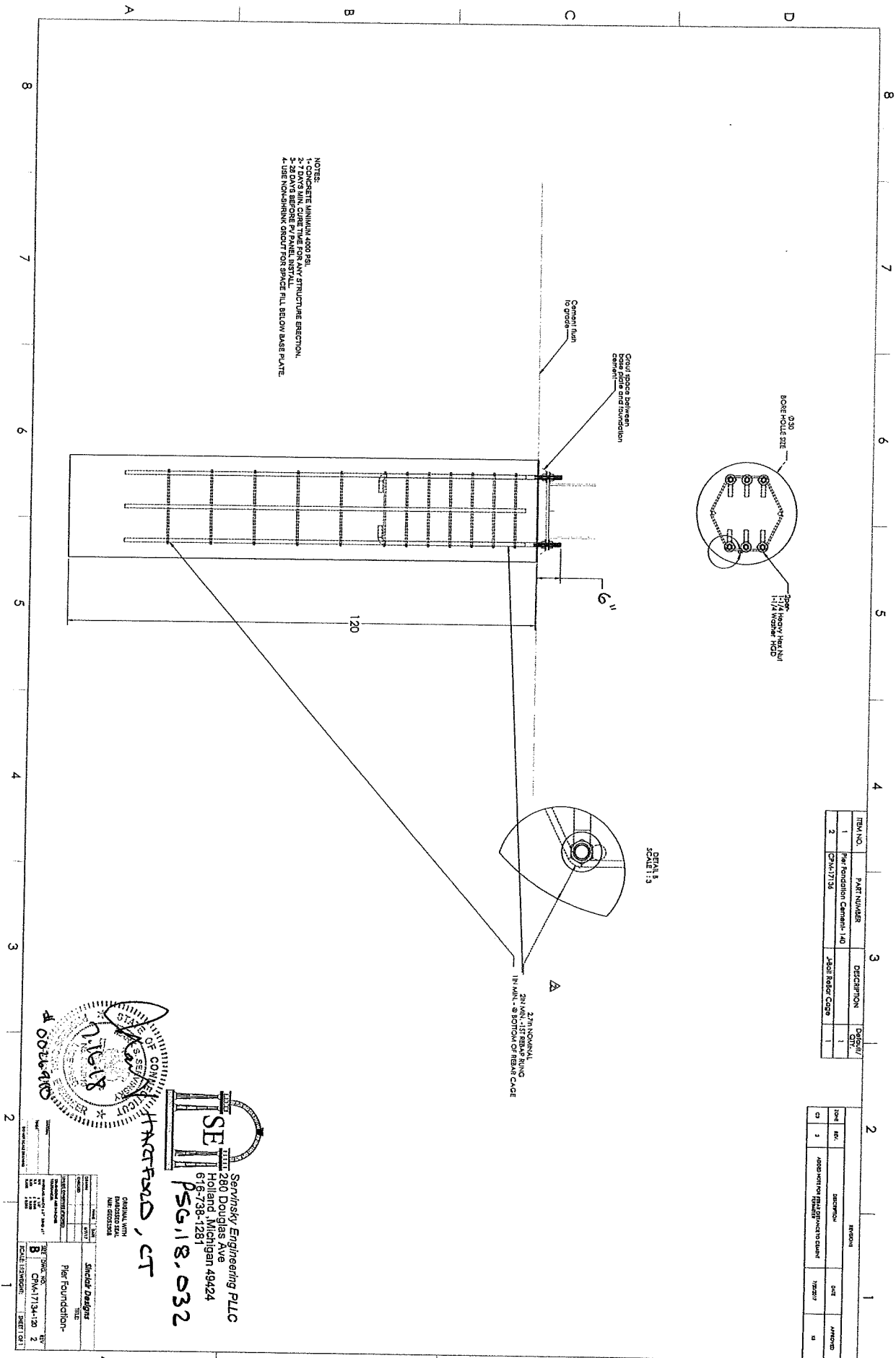


19'-8" POST SPACING



SE
 Servinsky Engineering PLLC
 280 Douglas Ave
 Holland, Michigan 49424
 616-738-1281
 PS6.18.032

PROFILES/CT Steel Design Y. Cheng Assembly/Port B CHS 17.120 12x12x1/2 12x12x1/2	
Date: 10/10/10 Drawn: Y. Cheng Checked: Y. Cheng Title: Steel Design Project: PS6.18.032	Date: 10/10/10 Drawn: Y. Cheng Checked: Y. Cheng Title: Steel Design Project: PS6.18.032



NOTES:
 1. CONCRETE MINIMUM 4000 PSI
 2. CONCRETE MINIMUM 28 DAYS CURE
 3. 28 DAYS BEFORE PLY PANEL INSTALL
 4. USE NON-SHRINK GROUT FOR SPACE FILL BELOW BASE PLATE.

ITEM NO.	PART NUMBER	DESCRIPTION	DETAIL
1	Pier Foundation Capable 140		1
2	CPA1713	4400 RIGID COSE	1

DATE	REV.	DESCRIPTION	DATE	APPROVED
11/20/17	1	4400 RIGID COSE	11/20/17	1

STEVEN J. HARTZFELD, CT

SE

 Servinsky Engineering PLLC

 280 Douglas Ave

 Holland, Michigan 48424

 616-738-1281

 PSC 18, 032

PROJECT: Pier Foundation-

 TITLE:

 DATE: 11/20/17

 DRAWN BY: B

 CHECKED BY: B

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

 SHEET: 1 OF 1



La Grange Park Center
1515 W. Ogden Avenue
La Grange Park, IL 60526

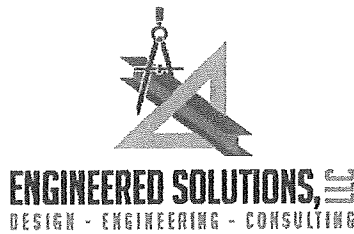
Solar Panel Canopy
Structural Calculations



Prepared for:

Patriot Solar Group
1007 Industrial Avenue
Albion, MI 49224

Project # 18.268
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December 2018



Design Criteria:

1999 BOCA
2015 IBC
25 psf Ground Snow Load
Snow Importance Factor: 1.0
112 mph Wind Speed, 3 second gust, Wind Exposure C
Soil Bearing Capacity: 2000 psf

System Criteria:

Canopy Carport – Portrait – 3 panels
Tilt Angle – 7 degrees

Reactions:

Up = 4.1k
Down = 12.6k
Lateral = 0.8k
M = 62.5 ft-k

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG

Steel Code Check

Report: Comprehensive

Members: Hot-rolled

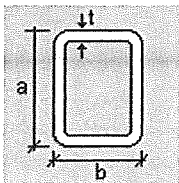
Design code: AISC 360-2005 ASD

Member : 15 (Top Chord)
Design status : OK

Section information

Section name: HSS 5x5x7ga (US)

Dimensions



a = 5.000 [in] Height
b = 5.000 [in] Width
T = 0.180 [in] Thickness

Properties

Section properties	Unit	Major axis	Minor axis
Gross area of the section. (Ag)	[in2]	3.391	
Moment of Inertia (local axes) (I)	[in4]	12.961	12.961
Moment of Inertia (principal axes) (I')	[in4]	12.961	12.961
Bending constant for moments (principal axis) (J')	[in]	0.000	0.000
Radius of gyration (local axes) (r)	[in]	1.955	1.955
Radius of gyration (principal axes) (r')	[in]	1.955	1.955
Saint-Venant torsion constant. (J)	[in4]	20.514	
Section warping constant. (Cw)	[in6]	0.054	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.000	0.000
Top elastic section modulus of the section (local axis) (Ssup)	[in3]	5.185	5.185
Bottom elastic section modulus of the section (local axis) (Sinf)	[in3]	5.185	5.185
Top elastic section modulus of the section (principal axis) (S'sup)	[in3]	5.185	5.185
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in3]	5.185	5.185
Plastic section modulus (local axis) (Z)	[in3]	6.077	6.077
Plastic section modulus (principal axis) (Z')	[in3]	6.077	6.077
Polar radius of gyration. (ro)	[in]	2.765	
Area for shear (Aw)	[in2]	1.606	1.606
Torsional constant. (C)	[in3]	8.341	

Material : A500 GrC rectangular

Properties	Unit	Value
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Yield stress (Fy):	[Kip/in2]	50.00
Tensile strength (Fu):	[Kip/in2]	62.00
Elasticity Modulus (E):	[Kip/in2]	29000.00
Shear modulus for steel (G):	[Kip/in2]	11153.85

DESIGN CRITERIA

Description	Unit	Value
Length for tension slenderness ratio (L)	[ft]	1.34

Distance between member lateral bracing points

Length (Lb) [ft]	
Top	Bottom
1.34	1.34

Laterally unbraced length

Major axis(L33)	Length [ft]		Torsional axis(Lt)	Major axis(K33)	Effective length factor		Torsional axis(Kt)
	Minor axis(L22)				Minor axis(K22)		
1.34	1.34		1.34	1.0	1.0		1.0

Additional assumptions

Continuous lateral torsional restraint	No
Tension field action	No
Continuous flexural torsional restraint	No
Effective length factor value type	None
Major axis frame type	Sway
Minor axis frame type	Sway

DESIGN CHECKS

AXIAL TENSION DESIGN

Axial tension

Ratio	:	0.27	Reference	:	Eq. Sec. D2
Capacity	:	101.53 [Kip]	Ctrl Eq.	:	C35 at 100.00%
Demand	:	26.97 [Kip]			

Intermediate results	Unit	Value	Reference
Factored axial tension capacity(P_n/ϕ_t)	[Kip]	101.53	Eq. Sec. D2
Nominal axial tension capacity (P_n)	[Kip]	169.55	Eq. D2-1

AXIAL COMPRESSION DESIGN

Compression in the major axis 33

Ratio	:	0.13	Reference	:	Sec. E1
Capacity	:	101.03 [Kip]	Ctrl Eq.	:	C22 at 0.00%
Demand	:	13.05 [Kip]			

Intermediate results	Unit	Value	Reference
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<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	24.78	
Unstiffened element limiting slenderness (λ_r)	--	33.72	
Stiffened element classification	--	Non slender	
Stiffened element slenderness (λ)	--	24.78	
Stiffened element limiting slenderness (λ_r)	--	33.72	
<u>Factored flexural buckling strength</u> (Pn33/ Ω)	[Kip]	101.03	Sec. E1
Effective length factor (K33)	--	1.00	
Unbraced length (L33)	[ft]	1.34	
Effective slenderness ((KL/r)33)	--	8.20	Eq. E3-4
Elastic critical buckling stress (Fe33)	[Kip/in2]	4252.66	Eq. E3-4
Reduction factor for slender unstiffened elements (Qs33)	--	1.00	
Effective area of the cross section based on the effective width (A...	[in2]	3.39	Eq. E3-2
Reduction factor for slender stiffened elements (Qa33)	--	1.00	
Full reduction factor for slender elements (Q33)	--	1.00	Sec. E7
Critical stress for flexural buckling (Fcr33)	[Kip/in2]	49.75	Eq. E3-2
Nominal flexural buckling strength (Pn33)	[Kip]	168.72	Eq. E3-1

Compression in the minor axis 22

Ratio	:	0.13		
Capacity	:	101.03 [Kip]	Reference	: Sec. E1
Demand	:	13.05 [Kip]	Ctrl Eq.	: C22 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	24.78	
Unstiffened element limiting slenderness (λ_r)	--	33.72	
Stiffened element classification	--	Non slender	
Stiffened element slenderness (λ)	--	24.78	
Stiffened element limiting slenderness (λ_r)	--	33.72	
<u>Factored flexural buckling strength</u> (Pn22/ Ω)	[Kip]	101.03	Sec. E1
Effective length factor (K22)	--	1.00	
Unbraced length (L22)	[ft]	1.34	
Effective slenderness ((KL/r)22)	--	8.20	Eq. E3-4
Elastic critical buckling stress (Fe22)	[Kip/in2]	4252.66	Eq. E3-4
Reduction factor for slender unstiffened elements (Qs22)	--	1.00	
Effective area of the cross section based on the effective width (A...	[in2]	3.39	Eq. E3-2
Reduction factor for slender stiffened elements (Qa22)	--	1.00	
Full reduction factor for slender elements (Q22)	--	1.00	Sec. E7
Critical stress for flexural buckling (Fcr22)	[Kip/in2]	49.75	Eq. E3-2
Nominal flexural buckling strength (Pn22)	[Kip]	168.72	Eq. E3-1

FLEXURAL DESIGN

Bending about major axis, M33

Ratio	:	0.43		
Capacity	:	15.16 [Kip*ft]	Reference	: Sec. F1
Demand	:	-6.53 [Kip*ft]	Ctrl Eq.	: C35 at 100.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	24.78	

Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
<u>Factored yielding strength</u> (M_n/Ω)	[Kip*ft]	15.16	Sec. F1
Yielding (Mn)	[Kip*ft]	25.32	Eq. F7-1

Bending about minor axis, M22

Ratio	:	0.00		
Capacity	:	15.16 [Kip*ft]	Reference	: Sec. F1
Demand	:	0.00 [Kip*ft]	Ctrl Eq.	: C1 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
<u>Factored yielding strength</u> (M_n/Ω)	[Kip*ft]	15.16	Sec. F1
Yielding (Mn)	[Kip*ft]	25.32	Eq. F7-1

DESIGN FOR SHEAR

Shear in major axis 33

Ratio	:	0.00		
Capacity	:	28.84 [Kip]		
Demand	:	0.00 [Kip]	Ctrl Eq.	: C1 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	28.84	
Web slenderness (λ_w)	--	24.78	Sec. G2
Shear area (A_w)	[in ²]	1.61	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	48.17	Eq. G2-1

Shear in minor axis 22

Ratio	:	0.17		
Capacity	:	28.84 [Kip]		
Demand	:	-4.99 [Kip]	Ctrl Eq.	: C35 at 100.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	28.84	
Web slenderness (λ_w)	--	24.78	Sec. G2

Shear area (Aw)	[in ²]	1.61	
Web buckling coefficient (kv)	—	5.00	Sec. G5
Web buckling coefficient (Cv)	—	1.00	Eq. G2-3
Nominal shear strength (Vn)	[Kip]	48.17	Eq. G2-1

TORSION DESIGN

Torsion

Ratio	:	0.00		
Capacity	:	12.49 [Kip*ft]		
Demand	:	0.00 [Kip*ft]	Ctrl Eq.	: C1 at 0.00%

Intermediate results	Unit	Value	Reference
Factored torsion capacity (Tn/Ω2)	[Kip*ft]	12.49	
Critical torsional buckling stress (Fcr)	[Kip/in ²]	30.00	Eq. H3-3
Nominal torsion capacity (Tn)	[Kip*ft]	20.85	Eq. H3-1

COMBINED ACTIONS DESIGN

Combined flexure and axial compression

Ratio	:	0.43		
Ctrl Eq.	:	C35 at 100.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
Interaction of flexure and axial force	—	0.43	Eq. H1-1b
Required flexural strength about strong axis (Mr33)	[Kip*ft]	-6.53	
Available flexural strength about strong axis (Mc33)	[Kip*ft]	15.16	Sec. F1
Required flexural strength about weak axis (Mr22)	[Kip*ft]	0.00	
Available flexural strength about weak axis (Mc22)	[Kip*ft]	15.16	Sec. F1
Required axial compressive strength (Pr)	[Kip]	0.00	
Available axial compressive strength (Pc)	[Kip]	101.03	Sec. E1

Combined flexure and axial tension

Ratio	:	0.65		
Ctrl Eq.	:	C35 at 100.00%	Reference	: Eq. H1-1a

Intermediate results	Unit	Value	Reference
Required flexural strength about strong axis (Mr33)	[Kip*ft]	-6.53	
Available flexural strength about strong axis (Mc33)	[Kip*ft]	15.16	Sec. F1
Required flexural strength about weak axis (Mr22)	[Kip*ft]	0.00	
Available flexural strength about weak axis (Mc22)	[Kip*ft]	15.16	Sec. F1
Required axial tensile strength (Pr)	[Kip]	26.97	
Available axial tensile strength (Pc)	[Kip]	101.53	Eq. Sec. D2

Combined flexure and axial compression about local axis

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined flexure and axial tension about local axis

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined torsion, flexure, shear and axial compression

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined torsion, flexure, shear and axial tension

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG

Steel Code Check

Report: Comprehensive

Members: Hot-rolled

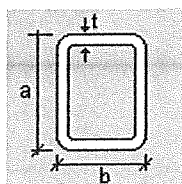
Design code: AISC 360-2005 ASD

Member : 3 (Bottom Chord)
Design status : OK

Section information

Section name: HSS 5x5x7ga (US)

Dimensions



a = 5.000 [in] Height
b = 5.000 [in] Width
T = 0.180 [in] Thickness

Properties

Section properties	Unit	Major axis	Minor axis
Gross area of the section. (Ag)	[in2]	3.391	
Moment of Inertia (local axes) (I)	[in4]	12.961	12.961
Moment of Inertia (principal axes) (I')	[in4]	12.961	12.961
Bending constant for moments (principal axis) (J')	[in]	0.000	0.000
Radius of gyration (local axes) (r)	[in]	1.955	1.955
Radius of gyration (principal axes) (r')	[in]	1.955	1.955
Saint-Venant torsion constant. (J)	[in4]	20.514	
Section warping constant. (Cw)	[in6]	0.054	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.000	0.000
Top elastic section modulus of the section (local axis) (Ssup)	[in3]	5.185	5.185
Bottom elastic section modulus of the section (local axis) (Sinf)	[in3]	5.185	5.185
Top elastic section modulus of the section (principal axis) (S'sup)	[in3]	5.185	5.185
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in3]	5.185	5.185
Plastic section modulus (local axis) (Z)	[in3]	6.077	6.077
Plastic section modulus (principal axis) (Z')	[in3]	6.077	6.077
Polar radius of gyration. (ro)	[in]	2.765	
Area for shear (Aw)	[in2]	1.606	1.606
Torsional constant. (C)	[in3]	8.341	

Material : A500 GrC rectangular

Properties	Unit	Value
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Yield stress (Fy):	[Kip/in2]	50.00
Tensile strength (Fu):	[Kip/in2]	62.00
Elasticity Modulus (E):	[Kip/in2]	29000.00
Shear modulus for steel (G):	[Kip/in2]	11153.85

DESIGN CRITERIA

Description	Unit	Value
Length for tension slenderness ratio (L)	[ft]	3.86
Distance between member lateral bracing points		
Length (Lb) [ft]		
Top	Bottom	
3.86	3.86	
Laterally unbraced length		
Major axis(L33)	Length [ft] Minor axis(L22)	Torsional axis(Lt)
Major axis(K33)	Effective length factor Minor axis(K22)	Torsional axis(Kt)
3.86	3.86	3.86
1.0	1.0	1.0
Additional assumptions		
Continuous lateral torsional restraint		No
Tension field action		No
Continuous flexural torsional restraint		No
Effective length factor value type		None
Major axis frame type		Sway
Minor axis frame type		Sway

DESIGN CHECKS

AXIAL TENSION DESIGN

Axial tension

Ratio	:	0.13	Reference	:	Eq. Sec. D2
Capacity	:	101.53 [Kip]	Ctrl Eq.	:	C22 at 0.00%
Demand	:	13.33 [Kip]			

Intermediate results	Unit	Value	Reference
Factored axial tension capacity(P_n/Ω)	[Kip]	101.53	Eq. Sec. D2
Nominal axial tension capacity (P_n)	[Kip]	169.55	Eq. D2-1

AXIAL COMPRESSION DESIGN

Compression in the major axis 33

Ratio	:	0.27	Reference	:	Sec. E1
Capacity	:	97.44 [Kip]	Ctrl Eq.	:	C35 at 0.00%
Demand	:	26.60 [Kip]			

Intermediate results	Unit	Value	Reference
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<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	24.78	
Unstiffened element limiting slenderness (λ_r)	--	33.72	
Stiffened element classification	--	Non slender	
Stiffened element slenderness (λ)	--	24.78	
Stiffened element limiting slenderness (λ_r)	--	33.72	
<u>Factored flexural buckling strength</u> (P_{n33}/Ω)	[Kip]	97.44	Sec. E1
Effective length factor (K33)	--	1.00	
Unbraced length (L33)	[ft]	3.86	
Effective slenderness ($(KL/r)_{33}$)	--	23.71	Eq. E3-4
Elastic critical buckling stress (F_{e33})	[Kip/in ²]	509.22	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s33})	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	3.39	Eq. E3-2
Reduction factor for slender stiffened elements (Q_{a33})	--	1.00	
Full reduction factor for slender elements (Q_{33})	--	1.00	Sec. E7
Critical stress for flexural buckling (F_{cr33})	[Kip/in ²]	47.99	Eq. E3-2
Nominal flexural buckling strength (P_{n33})	[Kip]	162.73	Eq. E3-1

Compression in the minor axis 22

Ratio	:	0.27		
Capacity	:	97.44 [Kip]	Reference	: Sec. E1
Demand	:	26.60 [Kip]	Ctrl Eq.	: C35 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	24.78	
Unstiffened element limiting slenderness (λ_r)	--	33.72	
Stiffened element classification	--	Non slender	
Stiffened element slenderness (λ)	--	24.78	
Stiffened element limiting slenderness (λ_r)	--	33.72	
<u>Factored flexural buckling strength</u> (P_{n22}/Ω)	[Kip]	97.44	Sec. E1
Effective length factor (K22)	--	1.00	
Unbraced length (L22)	[ft]	3.86	
Effective slenderness ($(KL/r)_{22}$)	--	23.71	Eq. E3-4
Elastic critical buckling stress (F_{e22})	[Kip/in ²]	509.22	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s22})	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	3.39	Eq. E3-2
Reduction factor for slender stiffened elements (Q_{a22})	--	1.00	
Full reduction factor for slender elements (Q_{22})	--	1.00	Sec. E7
Critical stress for flexural buckling (F_{cr22})	[Kip/in ²]	47.99	Eq. E3-2
Nominal flexural buckling strength (P_{n22})	[Kip]	162.73	Eq. E3-1

FLEXURAL DESIGN

Bending about major axis, M33

Ratio	:	0.25		
Capacity	:	15.16 [Kip*ft]	Reference	: Sec. F1
Demand	:	-3.75 [Kip*ft]	Ctrl Eq.	: C35 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	24.78	

Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
Factored yielding strength (M_n/Ω)	[Kip*ft]	15.16	Sec. F1
Yielding (M_n)	[Kip*ft]	25.32	Eq. F7-1

Bending about minor axis, M22

Ratio	:	0.00	Reference	:	Sec. F1
Capacity	:	15.16 [Kip*ft]	Ctrl Eq.	:	C1 at 0.00%
Demand	:	0.00 [Kip*ft]			

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
Factored yielding strength (M_n/Ω)	[Kip*ft]	15.16	Sec. F1
Yielding (M_n)	[Kip*ft]	25.32	Eq. F7-1

DESIGN FOR SHEAR

Shear in major axis 33

Ratio	:	0.00		
Capacity	:	28.84 [Kip]	Ctrl Eq.	:
Demand	:	0.00 [Kip]		C1 at 0.00%

Intermediate results	Unit	Value	Reference
Factored shear capacity (V_n/Ω)	[Kip]	28.84	
Web slenderness (λ_w)	--	24.78	Sec. G2
Shear area (A_w)	[in ²]	1.61	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	48.17	Eq. G2-1

Shear in minor axis 22

Ratio	:	0.04		
Capacity	:	28.84 [Kip]	Ctrl Eq.	:
Demand	:	1.02 [Kip]		C35 at 0.00%

Intermediate results	Unit	Value	Reference
Factored shear capacity (V_n/Ω)	[Kip]	28.84	
Web slenderness (λ_w)	--	24.78	Sec. G2

Shear area (A_w)	[in ²]	1.61	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	48.17	Eq. G2-1

TORSION DESIGN

Torsion

Ratio	:	0.00	
Capacity	:	12.49 [Kip*ft]	
Demand	:	0.00 [Kip*ft]	
Ctrl Eq.	:	C1 at 0.00%	

Intermediate results	Unit	Value	Reference
<u>Factored torsion capacity (T_n/Ω)</u>	[Kip*ft]	12.49	
Critical torsional buckling stress (F_{cr})	[Kip/in ²]	30.00	Eq. H3-3
Nominal torsion capacity (T_n)	[Kip*ft]	20.85	Eq. H3-1

COMBINED ACTIONS DESIGN

Combined flexure and axial compression

Ratio	:	0.49	
Ctrl Eq.	:	C35 at 0.00%	Reference : Eq. H1-1a

Intermediate results	Unit	Value	Reference
<u>Interaction of flexure and axial force</u>	--	0.49	Eq. H1-1a
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	-3.75	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	15.16	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	15.16	Sec. F1
Required axial compressive strength (P_r)	[Kip]	26.60	
Available axial compressive strength (P_c)	[Kip]	97.44	Sec. E1

Combined flexure and axial tension

Ratio	:	0.25	
Ctrl Eq.	:	C35 at 0.00%	Reference : Eq. H1-1b

Intermediate results	Unit	Value	Reference
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	-3.75	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	15.16	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	15.16	Sec. F1
Required axial tensile strength (P_r)	[Kip]	0.00	
Available axial tensile strength (P_c)	[Kip]	101.53	Eq. Sec. D2

Combined flexure and axial compression about local axis

Ratio	:	N/A	
Ctrl Eq.	:	--	Reference : Eq. H1-1a

Combined flexure and axial tension about local axis

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined torsion, flexure, shear and axial compression

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined torsion, flexure, shear and axial tension

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG

Steel Code Check

Report: Comprehensive

Members: Hot-rolled

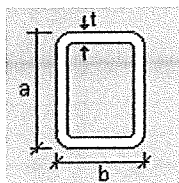
Design code: AISC 360-2005 ASD

Member : 19 (Web)
Design status : OK

Section information

Section name: HSS 4x4x11GA (US)

Dimensions



a = 4.000 [in] Height
b = 4.000 [in] Width
T = 0.120 [in] Thickness

Properties

Section properties	Unit	Major axis	Minor axis
Gross area of the section. (Ag)	[in2]	1.827	
Moment of Inertia (local axes) (I)	[in4]	4.536	4.536
Moment of Inertia (principal axes) (I')	[in4]	4.536	4.536
Bending constant for moments (principal axis) (J')	[in]	0.000	0.000
Radius of gyration (local axes) (r)	[in]	1.576	1.576
Radius of gyration (principal axes) (r')	[in]	1.576	1.576
Saint-Venant torsion constant. (J)	[in4]	7.118	
Section warping constant. (Cw)	[in6]	0.009	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.000	0.000
Top elastic section modulus of the section (local axis) (Ssup)	[in3]	2.268	2.268
Bottom elastic section modulus of the section (local axis) (Sinf)	[in3]	2.268	2.268
Top elastic section modulus of the section (principal axis) (S'sup)	[in3]	2.268	2.268
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in3]	2.268	2.268
Plastic section modulus (local axis) (Z)	[in3]	2.640	2.640
Plastic section modulus (principal axis) (Z')	[in3]	2.640	2.640
Polar radius of gyration. (ro)	[in]	2.228	
Area for shear (Aw)	[in2]	0.874	0.874
Torsional constant. (C)	[in3]	3.606	

Material : A500 GrC rectangular

Properties	Unit	Value
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Yield stress (Fy):	[Kip/in2]	50.00
Tensile strength (Fu):	[Kip/in2]	62.00
Elasticity Modulus (E):	[Kip/in2]	29000.00
Shear modulus for steel (G):	[Kip/in2]	11153.85

DESIGN CRITERIA

Description	Unit	Value
Length for tension slenderness ratio (L)	[ft]	2.27
Distance between member lateral bracing points		
Length (Lb) [ft]		
Top	Bottom	
2.27	2.27	
Laterally unbraced length		
Major axis(L33)	Length [ft] Minor axis(L22)	Torsional axis(Lt)
	Effective length factor Minor axis(K22)	Major axis(K33)
2.27	2.27	2.27
	1.0	1.0
	1.0	1.0
Additional assumptions		
Continuous lateral torsional restraint		No
Tension field action		No
Continuous flexural torsional restraint		No
Effective length factor value type		None
Major axis frame type		Sway
Minor axis frame type		Sway

DESIGN CHECKS

AXIAL TENSION DESIGN

Axial tension

Ratio	:	0.11	Reference	:	Eq. Sec. D2
Capacity	:	54.70 [Kip]	Ctrl Eq.	:	C22 at 100.00%
Demand	:	5.78 [Kip]			

Intermediate results	Unit	Value	Reference
Factored axial tension capacity(P_n/ϕ)	[Kip]	54.70	Eq. Sec. D2
Nominal axial tension capacity (P_n)	[Kip]	91.36	Eq. D2-1

AXIAL COMPRESSION DESIGN

Compression in the major axis 33

Ratio	:	0.19	Reference	:	Sec. E1
Capacity	:	53.52 [Kip]	Ctrl Eq.	:	C35 at 0.00%
Demand	:	10.29 [Kip]			

Intermediate results	Unit	Value	Reference
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Section classification

Unstiffened element classification	—	Non slender	
Unstiffened element slenderness (λ)	—	30.33	
Unstiffened element limiting slenderness (λ_r)	—	33.72	
Stiffened element classification	—	Non slender	
Stiffened element slenderness (λ)	—	30.33	
Stiffened element limiting slenderness (λ_r)	—	33.72	
Factored flexural buckling strength (P_{n33}/Ω)	[Kip]	53.52	Sec. E1
Effective length factor (K33)	—	1.00	
Unbraced length (L33)	[ft]	2.27	
Effective slenderness ($(KL/r)_{33}$)	—	17.30	Eq. E3-4
Elastic critical buckling stress (F_{e33})	[Kip/in ²]	956.05	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s33})	—	1.00	
Effective area of the cross section based on the effective width (A...)	[in ²]	1.83	Eq. E3-2
Reduction factor for slender stiffened elements (Q_{a33})	—	1.00	
Full reduction factor for slender elements (Q33)	—	1.00	Sec. E7
Critical stress for flexural buckling (F_{cr33})	[Kip/in ²]	48.92	Eq. E3-2
Nominal flexural buckling strength (P_{n33})	[Kip]	89.38	Eq. E3-1

Compression in the minor axis 22

Ratio	:	0.19		
Capacity	:	53.52 [Kip]	Reference	: Sec. E1
Demand	:	10.29 [Kip]	Ctrl Eq.	: C35 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	—	Non slender	
Unstiffened element slenderness (λ)	—	30.33	
Unstiffened element limiting slenderness (λ_r)	—	33.72	
Stiffened element classification	—	Non slender	
Stiffened element slenderness (λ)	—	30.33	
Stiffened element limiting slenderness (λ_r)	—	33.72	
Factored flexural buckling strength (P_{n22}/Ω)	[Kip]	53.52	Sec. E1
Effective length factor (K22)	—	1.00	
Unbraced length (L22)	[ft]	2.27	
Effective slenderness ($(KL/r)_{22}$)	—	17.30	Eq. E3-4
Elastic critical buckling stress (F_{e22})	[Kip/in ²]	956.05	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s22})	—	1.00	
Effective area of the cross section based on the effective width (A...)	[in ²]	1.83	Eq. E3-2
Reduction factor for slender stiffened elements (Q_{a22})	—	1.00	
Full reduction factor for slender elements (Q22)	—	1.00	Sec. E7
Critical stress for flexural buckling (F_{cr22})	[Kip/in ²]	48.92	Eq. E3-2
Nominal flexural buckling strength (P_{n22})	[Kip]	89.38	Eq. E3-1

FLEXURAL DESIGNBending about major axis, M33

Ratio	:	0.00		
Capacity	:	6.13 [Kip*ft]	Reference	: Sec. F1
Demand	:	0.00 [Kip*ft]	Ctrl Eq.	: C1 at 50.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	—	Noncompact	
Unstiffened element slenderness (λ)	—	30.33	

Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	30.33	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
<u>Factored yielding strength</u> (M_n/Ω)	[Kip*ft]	6.59	Sec. F1
Yielding (Mn)	[Kip*ft]	11.00	Eq. F7-1
<u>Factored compression flange local buckling strength</u> (M_n/Ω)	[Kip*ft]	6.13	Sec. F1
Flange local buckling (Mn)	[Kip*ft]	10.23	Eq. F7-2

Bending about minor axis, M22

Ratio	:	0.00	Reference	:	Sec. F1
Capacity	:	6.13 [Kip*ft]	Ctrl Eq.	:	C1 at 0.00%
Demand	:	0.00 [Kip*ft]			

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Noncompact	
Unstiffened element slenderness (λ)	--	30.33	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	30.33	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
<u>Factored yielding strength</u> (M_n/Ω)	[Kip*ft]	6.59	Sec. F1
Yielding (Mn)	[Kip*ft]	11.00	Eq. F7-1
<u>Factored compression flange local buckling strength</u> (M_n/Ω)	[Kip*ft]	6.13	Sec. F1
Flange local buckling (Mn)	[Kip*ft]	10.23	Eq. F7-2

DESIGN FOR SHEAR

Shear in major axis 33

Ratio	:	0.00		
Capacity	:	15.69 [Kip]	Ctrl Eq.	:
Demand	:	0.00 [Kip]		C1 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	15.69	
Web slenderness (λ_w)	--	30.33	Sec. G2
Shear area (A_w)	[in ²]	0.87	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	26.21	Eq. G2-1

Shear in minor axis 22

Ratio	:	0.00		
Capacity	:	15.69 [Kip]	Ctrl Eq.	:
Demand	:	-0.01 [Kip]		C1 at 100.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	15.69	
Web slenderness (λ_w)	--	30.33	Sec. G2
Shear area (A_w)	[in ²]	0.87	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	26.21	Eq. G2-1

TORSION DESIGN

Torsion

Ratio	:	0.00		
Capacity	:	5.40 [Kip*ft]		
Demand	:	0.00 [Kip*ft]	Ctrl Eq.	: C1 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Factored torsion capacity</u> (T_n/Ω)	[Kip*ft]	5.40	
Critical torsional buckling stress (F_{cr})	[Kip/in ²]	30.00	Eq. H3-3
Nominal torsion capacity (T_n)	[Kip*ft]	9.02	Eq. H3-1

COMBINED ACTIONS DESIGN

Combined flexure and axial compression

Ratio	:	0.10		
Ctrl Eq.	:	C35 at 50.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
<u>Interaction of flexure and axial force</u>	--	0.10	Eq. H1-1b
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	0.00	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	6.13	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	6.13	Sec. F1
Required axial compressive strength (P_r)	[Kip]	10.29	
Available axial compressive strength (P_c)	[Kip]	53.52	Sec. E1

Combined flexure and axial tension

Ratio	:	0.05		
Ctrl Eq.	:	C22 at 50.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	0.00	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	6.13	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	6.13	Sec. F1
Required axial tensile strength (P_r)	[Kip]	5.77	
Available axial tensile strength (P_c)	[Kip]	54.70	Eq. Sec. D2

Combined flexure and axial compression about local axis

Ratio	:	N/A		
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Ctrl Eq. : --

Reference :

Combined flexure and axial tension about local axis

Ratio : N/A

Ctrl Eq. : --

Reference :

Combined torsion, flexure, shear and axial compression

Ratio : N/A

Ctrl Eq. : --

Reference :

Combined torsion, flexure, shear and axial tension

Ratio : N/A

Ctrl Eq. : --

Reference :

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG

Steel Code Check

Report: Comprehensive

Members: Hot-rolled

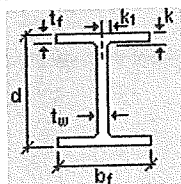
Design code: AISC 360-2005 ASD

Member : 1 (Column)
Design status : OK

Section information

Section name: W 16X40 (US)

Dimensions



bf	=	7.000	[in]	Width
d	=	16.000	[in]	Depth
k	=	0.907	[in]	Distance k
k1	=	0.813	[in]	Distance k1
tf	=	0.505	[in]	Flange thickness
tw	=	0.305	[in]	Web thickness

Properties

Section properties	Unit	Major axis	Minor axis
Gross area of the section. (Ag)	[in2]	11.800	
Moment of Inertia (local axes) (I)	[in4]	518.000	28.900
Moment of Inertia (principal axes) (I')	[in4]	518.000	28.900
Bending constant for moments (principal axis) (J')	[in]	0.000	0.000
Radius of gyration (local axes) (r)	[in]	6.626	1.565
Radius of gyration (principal axes) (r')	[in]	6.626	1.565
Saint-Venant torsion constant. (J)	[in4]	0.794	
Section warping constant. (Cw)	[in6]	1730.000	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.000	0.000
Top elastic section modulus of the section (local axis) (Ssup)	[in3]	64.700	8.250
Bottom elastic section modulus of the section (local axis) (Sinf)	[in3]	64.700	8.250
Top elastic section modulus of the section (principal axis) (S'sup)	[in3]	64.700	8.250
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in3]	64.700	8.250
Plastic section modulus (local axis) (Z)	[in3]	73.000	12.700
Plastic section modulus (principal axis) (Z')	[in3]	73.000	12.700
Polar radius of gyration. (ro)	[in]	6.808	
Area for shear (Aw)	[in2]	7.070	4.880
Torsional constant. (C)	[in3]	1.480	

Material : A992 Gr50

Properties	Unit	Value
Yield stress (Fy):	[Kip/in2]	50.00
Tensile strength (Fu):	[Kip/in2]	65.00
Elasticity Modulus (E):	[Kip/in2]	29000.00
Shear modulus for steel (G):	[Kip/in2]	11153.85

DESIGN CRITERIA

Description	Unit	Value
Length for tension slenderness ratio (L)	[ft]	8.50

Distance between member lateral bracing points

Length (Lb) [ft]	
Top	Bottom
8.50	8.50

Laterally unbraced length

Major axis(L33)	Length [ft]		Torsional axis(Lt)	Major axis(K33)	Effective length factor		Torsional axis(Kt)
	Minor axis(L22)				Minor axis(K22)		
8.50	8.50		8.50	1.0	1.0		1.0

Additional assumptions

Continuous lateral torsional restraint	No
Tension field action	No
Continuous flexural torsional restraint	No
Effective length factor value type	None
Major axis frame type	Sway
Minor axis frame type	Sway

DESIGN CHECKS

AXIAL TENSION DESIGN

Axial tension

Ratio	:	0.01	Reference	:	Eq. Sec. D2
Capacity	:	353.29 [Kip]	Ctrl Eq.	:	C22 at 100.00%
Demand	:	4.44 [Kip]			

Intermediate results	Unit	Value	Reference
Factored axial tension capacity(P_n/Ω)	[Kip]	353.29	Eq. Sec. D2
Nominal axial tension capacity (P_n)	[Kip]	590.00	Eq. D2-1

AXIAL COMPRESSION DESIGN

Compression in the major axis 33

Ratio	:	0.04	Reference	:	Sec. E1
Capacity	:	325.27 [Kip]	Ctrl Eq.	:	C35 at 0.00%
Demand	:	12.63 [Kip]			

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	6.93	
Unstiffened element limiting slenderness (λ_r)	--	13.49	
Stiffened element classification	--	Slender	
Stiffened element slenderness (λ)	--	46.51	
Stiffened element limiting slenderness (λ_r)	--	35.88	
<u>Factored flexural buckling strength</u> (P_n33/Ω)	[Kip]	325.27	Sec. E1
Effective length factor (K33)	--	1.00	
Unbraced length (L33)	[ft]	8.50	
Effective slenderness ($(KL/r)33$)	--	15.39	Eq. E3-4
Elastic critical buckling stress (F_{e33})	[Kip/in ²]	1207.66	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_s33)	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	11.04	Eq. E7-2
Reduction factor for slender stiffened elements (Q_a33)	--	0.94	Eq. E7-16
Full reduction factor for slender elements ($Q33$)	--	0.94	Sec. E7
Critical stress for flexural buckling (F_{cr33})	[Kip/in ²]	46.03	Eq. E7-2
Nominal flexural buckling strength (P_n33)	[Kip]	543.20	Eq. E7-1

Compression in the minor axis 22

Ratio	:	0.05		
Capacity	:	253.83 [Kip]	Reference	: Sec. E1
Demand	:	12.63 [Kip]	Ctrl Eq.	: C35 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	6.93	
Unstiffened element limiting slenderness (λ_r)	--	13.49	
Stiffened element classification	--	Slender	
Stiffened element slenderness (λ)	--	46.51	
Stiffened element limiting slenderness (λ_r)	--	35.88	
<u>Factored flexural buckling strength</u> (P_n22/Ω)	[Kip]	253.83	Sec. E1
Effective length factor (K22)	--	1.00	
Unbraced length (L22)	[ft]	8.50	
Effective slenderness ($(KL/r)22$)	--	65.18	Eq. E3-4
Elastic critical buckling stress (F_{e22})	[Kip/in ²]	67.38	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_s22)	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	11.46	Eq. E7-2
Reduction factor for slender stiffened elements (Q_a22)	--	0.97	Eq. E7-16
Full reduction factor for slender elements ($Q22$)	--	0.97	Sec. E7
Critical stress for flexural buckling (F_{cr22})	[Kip/in ²]	35.92	Eq. E7-2
Nominal flexural buckling strength (P_n22)	[Kip]	423.90	Eq. E7-1
<u>Factored torsional or flexural-torsional buckling strength</u> (P_n11/Ω)	[Kip]	278.74	Sec. E4
Effective length factor (K11)	--	1.00	
Unbraced length (L11)	[ft]	8.50	
Flexural constant (H)	--	1.00	Eq. E4-8
Torsional or flexural-torsional elastic buckling stress (F_{e11})	[Kip/in ²]	103.22	Eq. E4-4
Elastic torsional buckling stress ($F_{e\tau}$)	[Kip/in ²]	103.22	Eq. E4-11
Reduction factor for slender unstiffened elements (Q_s11)	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	11.31	Eq. E7-2
Reduction factor for slender stiffened elements (Q_a11)	--	0.96	Eq. E7-16
Full reduction factor for slender elements ($Q11$)	--	0.96	Sec. E7
Critical stress for torsional or flexural-torsional buckling (F_{cr11})	[Kip/in ²]	39.45	Eq. E7-2
Nominal torsional or flexural-torsional buckling strength (P_n11)	[Kip]	465.50	Eq. E7-1

FLEXURAL DESIGN

Bending about major axis, M33

Ratio	:	0.40	Reference	:	Sec. F1
Capacity	:	167.24 [Kip*ft]	Ctrl Eq.	:	C35 at 100.00%
Demand	:	67.44 [Kip*ft]			

Intermediate results	Unit	Value	Reference
Section classification			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	6.93	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	24.08	
Limiting slenderness for compact unstiffened element (λ_p)	--	9.15	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	46.51	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	90.55	
Factored yielding strength (M_n/Ω)	[Kip*ft]	182.14	Sec. F1
Yielding (M_n)	[Kip*ft]	304.17	Eq. F2-1
Factored lateral-torsional buckling strength (M_n/Ω)	[Kip*ft]	167.24	Sec. F1
Limiting laterally unbraced length for yielding (L_p)	[ft]	5.53	Eq. F2-5
Effective radius of gyration used in the determination of L_r (r_{ts})	[in]	1.86	Eq. F2-7
Lateral-torsional factor (c)	--	1.00	Eq. F2-8a
Limiting laterally unbraced length for inelastic lateral-torsional buckling...	[ft]	15.89	Eq. F2-6
Lateral-torsional buckling modification factor (C_b)	--	1.03	Eq. F1-1
Critical stress (F_{cr})	[Kip/in ²]	106.69	Eq. F2-4
Lateral-torsional buckling (M_n)	[Kip*ft]	279.30	Eq. F2-2

Bending about minor axis, M22

Ratio	:	0.00	Reference	:	Sec. F1
Capacity	:	31.69 [Kip*ft]	Ctrl Eq.	:	C1 at 0.00%
Demand	:	0.00 [Kip*ft]			

Intermediate results	Unit	Value	Reference
Section classification			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	6.93	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	24.08	
Limiting slenderness for compact unstiffened element (λ_p)	--	9.15	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	46.51	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	90.55	
Factored yielding strength (M_n/Ω)	[Kip*ft]	31.69	Sec. F1
Yielding (M_n)	[Kip*ft]	52.92	Eq. F6-1

DESIGN FOR SHEAR

Shear in major axis 33

Ratio	:	0.00	Ctrl Eq.	:	C1 at 0.00%
Capacity	:	127.01 [Kip]			
Demand	:	0.00 [Kip]			

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity (V_n/Ω)</u>	[Kip]	127.01	
Web slenderness (λ_w)	--	6.93	Sec. G2
Shear area (A_w)	[in ²]	7.07	
Web buckling coefficient (k_v)	--	1.20	Sec. G7
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	212.10	Eq. G2-1

Shear in minor axis 22

Ratio	:	0.01		
Capacity	:	97.60 [Kip]	Reference	: Sec. G2.1(a)
Demand	:	0.78 [Kip]	Ctrl Eq.	: C27 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity (V_n/Ω)</u>	[Kip]	97.60	Sec. G2.1(a)
Web slenderness (λ_w)	--	46.51	Sec. G2
Shear area (A_w)	[in ²]	4.88	
Web buckling coefficient (C_v)	--	1.00	Eq. G2-2
Nominal shear strength (V_n)	[Kip]	146.40	Eq. G2-1

COMBINED ACTIONS DESIGN

Combined flexure and axial compression

Ratio	:	0.42		
Ctrl Eq.	:	C35 at 100.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
<u>Interaction for doubly symmetric members for in-plane bending</u>	--	0.42	Eq. H1-1b
In-plane required flexural strength (M_{r33})	[Kip*ft]	67.44	
In-plane available flexural strength (M_{c33})	[Kip*ft]	167.24	Sec. F1
In-plane required axial compressive strength (P_r)	[Kip]	12.29	
In-plane available axial compressive strength (P_c)	[Kip]	325.27	Sec. E1
<u>Interaction for doubly symmetric members for out-of-plane bending</u>	--	0.21	Eq. H1-2
Out-of-plane required flexural strength (M_{r33})	[Kip*ft]	67.44	
Out-of-plane available flexural-torsional strength (M_{c33})	[Kip*ft]	167.24	Sec. F1
Out-of-plane required axial compressive strength (P_r)	[Kip]	12.29	
Out-of-plane available axial compressive strength (P_{co})	[Kip]	253.83	Sec. E1

Combined flexure and axial tension

Ratio	:	0.40		
Ctrl Eq.	:	C35 at 100.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	67.44	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	167.24	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	31.69	Sec. F1
Required axial tensile strength (P_r)	[Kip]	0.00	
Available axial tensile strength (P_c)	[Kip]	353.29	Eq. Sec. D2

Combined flexure and axial compression about local axis

Ratio	:	N/A		
Ctrl Eq.	:	--	Reference	:

Combined flexure and axial tension about local axis

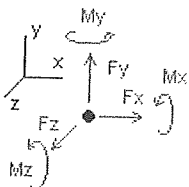
Ratio	:	N/A		
Ctrl Eq.	:	--	Reference	:

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG)

Analysis result

Envelope for nodal reactions

Note.- I_c is the controlling load condition



Direction of positive forces and moments

Envelope of nodal reactions for :

C1=DL+CL+LLr
 C2=DL+CL+SLb
 C3=DL+CL+SLu
 C4=DL+CL+0.6WLper+0.6WLpin
 C5=DL+CL+0.6WLper+0.6WLnin
 C6=DL+CL+0.6WLupa+0.6WLpin
 C7=DL+CL+0.6WLupa+0.6WLnin
 C8=DL+CL+0.75LLr+0.45WLper+0.45WLpin
 C9=DL+0.75LLr+0.45WLper+0.45WLnin
 C10=DL+CL+0.75LLr+0.45WLupa+0.45WLpin
 C11=DL+CL+0.75LLr+0.45WLupa+0.45WLnin
 C12=DL+CL+0.75SLb+0.45WLper+0.45WLpin
 C13=DL+CL+0.75SLb+0.45WLper+0.45WLnin
 C14=DL+CL+0.75SLb+0.45WLupa+0.45WLpin
 C15=DL+CL+0.75SLb+0.45WLupa+0.45WLnin
 C16=DL+CL+0.75SLu+0.45WLper+0.45WLpin
 C17=DL+CL+0.75SLu+0.45WLper+0.45WLnin
 C18=DL+0.6CL+0.6WLper+0.6WLpin
 C19=DL+0.6CL+0.6WLper+0.6WLnin
 C20=DL+0.6CL+0.6WLupa+0.6WLpin
 C21=DL+0.6CL+0.6WLupa+0.6WLnin
 C22=DL+0.6CL+0.45WLper+0.45WLupa+0.45WLpin
 C23=DL+0.6CL+0.45WLper+0.45WLupa+0.45WLnin
 C24=DL+CL+LLr
 C25=DL+CL+SLb
 C26=DL+CL+SLu
 C27=DL+CL+0.6WLpr2+0.6WLpin
 C28=DL+CL+0.6WLpr2+0.6WLnin
 C29=DL+CL+0.6WLupa+0.6WLpin
 C30=DL+CL+0.6WLupa+0.6WLnin
 C31=DL+CL+0.75LLr+0.45WLpr2+0.45WLpin
 C32=DL+0.75LLr+0.45WLpr2+0.45WLnin
 C33=DL+CL+0.75LLr+0.45WLupa+0.45WLpin
 C34=DL+CL+0.75LLr+0.45WLupa+0.45WLnin
 C35=DL+CL+0.75SLb+0.45WLpr2+0.45WLpin
 C36=DL+CL+0.75SLb+0.45WLpr2+0.45WLnin
 C37=DL+CL+0.75SLb+0.45WLupa+0.45WLpin
 C38=DL+CL+0.75SLb+0.45WLupa+0.45WLnin
 C39=DL+CL+0.75SLu+0.45WLpr2+0.45WLpin
 C40=DL+CL+0.75SLu+0.45WLpr2+0.45WLnin
 C41=DL+0.6CL+0.6WLpr2+0.6WLpin
 C42=DL+0.6CL+0.6WLpr2+0.6WLnin
 C43=DL+0.6CL+0.6WLupa+0.6WLpin
 C44=DL+0.6CL+0.6WLupa+0.6WLnin
 C45=DL+0.6CL+0.45WLpr2+0.45WLupa+0.45WLpin
 C46=DL+0.6CL+0.45WLpr2+0.45WLupa+0.45WLnin

Node		Forces						Moments					
		Fx [Kip]	Ic	Fy [Kip]	Ic	Fz [Kip]	Ic	Mx [Kip*ft]	Ic	My [Kip*ft]	Ic	Mz [Kip*ft]	Ic
1	Max	0.725	C22	12.633	C35	0.000	C1	0.00000	C1	0.00000	C1	27.25066	C22
	Min	-0.782	C27	-4.099	C22	0.000	C1	0.00000	C1	0.00000	C1	-62.45242	C35

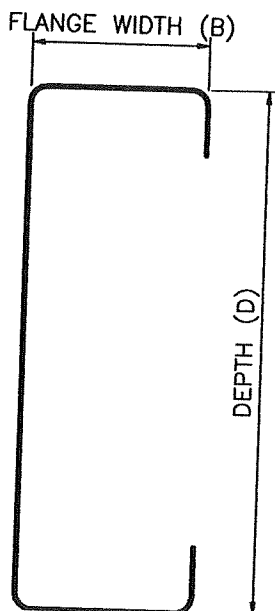


PRODUCT AND ENGINEERING MANUAL

4.3 SECONDARY FRAMING

SF0030PE - "C" SECTION PROPERTIES

SECTION	D (in.)	B (in.)	DESIGN t (in.)	DESIGN t Wt. (plf)	GROSS Ix (in ⁴)	Sx (in ³)	Ma (in-kip)
8 C 060	8.00	2.750	0.0600	2.95	8.39	1.75	57.72
8 C 071	8.00	2.750	0.0710	3.49	9.89	2.47	71.31
8 C 076	8.00	2.750	0.0760	3.73	10.58	2.30	75.77
8 C 086	8.00	2.750	0.0860	4.22	11.92	2.98	90.35
8 C 098	8.00	2.750	0.0980	4.81	13.53	3.27	107.92
8 C 105	8.00	2.750	0.1050	5.15	14.47	3.55	117.11
10 C 060	10.00	2.750	0.0600	3.35	14.21	2.16	71.43
10 C 071	10.00	2.750	0.0710	3.97	16.77	3.35	93.88
10 C 076	10.00	2.750	0.0760	4.25	17.94	3.12	103.08
10 C 0856	10.00	2.750	0.0860	4.81	20.24	4.05	123.36
10 C 098	10.00	2.750	0.0980	5.48	23.00	4.45	146.87
10 C 105	10.00	2.750	0.1050	5.87	24.61	4.83	159.38



$$M_{max} = \frac{w l^2}{8} = \frac{36(3.5)(17.67^2)}{8}$$

6097 ft-lb

= 78.13 in-k

1.9035 ok

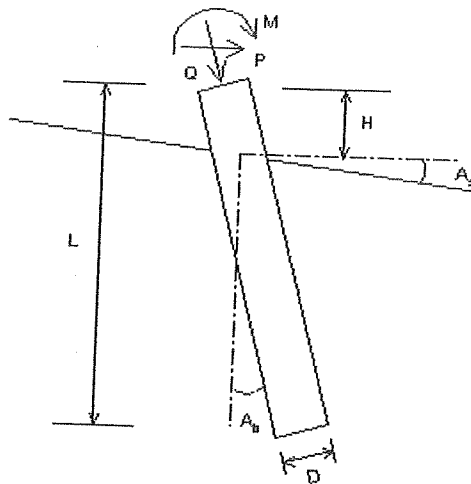
LAST REVISION
DATE: 02/09/01
BY: CDM CHK: RJF

DETAIL NAME IF APPLICABLE
SF0030PE.DWG

4.3.4

VERTICAL ANALYSIS

Figure 1



Loads:

Load Factor for Vertical Loads= 1.0
 Load Factor for Lateral Loads= 1.0
 Loads Supported by Pile Cap= 0 %
 Shear Condition: Cyclic
 Number of Cycles: 2

(with Load Factor)
 Vertical Load, $Q = 12.6$ -kp

Profile:

Pile Length, $L = 11.7$ -ft
 Top Height, $H = 0$ -ft
 Slope Angle, $A_s = 0$
 Batter Angle, $A_b = 0$

Drilled Shaft (dia >24 in. or 61 cm)

Soil Data:

Depth -ft	Gamma -lb/f3	Phi	C -kp/f2	K -lb/i3	e50 or Dr %	Nspt
0	129.2	0.0	1.25	136.2	0.87	10
12	129.2	0.0	1.25	136.2	0.87	10

Pile Data:

Depth -ft	Width -in	Area -in2	Per. -in	I -in4	E -kp/i2	Weight -kp/f
0.0	30	452.4	75.4	16286.0	3000	0.471
11.0	30	452.4	75.4	16286.0	3000	0.471
11.7						

Vertical Capacity:

Weight above Ground= 0.00 Total Weight= 5.50-kp *Soil Weight is not included
 Side Resistance (Down)= 91.659-kp Side Resistance (Up)= 91.659-kp
 Tip Resistance (Down)= 35.344-kp Tip Resistance (Up)= 0.000-kp
 Total Ultimate Capacity (Down) $Q_{ult} = 127.003$ -kp Total Ultimate Capacity (Up)= 97.155-kp
 Total Allowable Capacity (Down) $Q_{allow} = 57.729$ -kp Total Allowable Capacity (Up) $Q_{allow} = 47.770$ -kp
 OK! $Q_{allow} > Q$

Settlement Calculation:

At $Q = 12.60$ -kp Settlement= 0.00632-in
 At $X_{allow} = 1.00$ -in $Q = 107.22920$ -kp

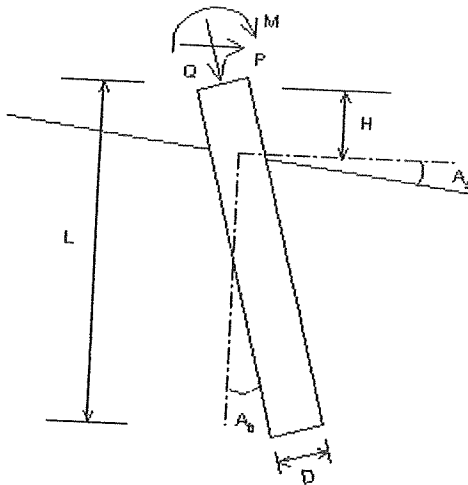
Note: If the program cannot find a result or the result exceeds the upper limit. The result will be displayed as 99999.



**CivilTech
Software**

LATERAL ANALYSIS

Figure 2



Loads:

Load Factor for Vertical Loads= 1.0
 Load Factor for Lateral Loads= 1.0
 Loads Supported by Pile Cap= 0 %
 Shear Condition: Cyclic
 Number of Cycles: 2

(with Load Factor)

Vertical Load, Q= 12.6 -kp
 Shear Load, P= 0.8 -kp
 Moment, M= 62.5 -kp-f

Profile:

Pile Length, L= 11.7 -ft
 Top Height, H= 0 -ft
 Slope Angle, As= 0
 Batter Angle, Ab= 0

Drilled Shaft (dia >24 in. or 61 cm)

Soil Data:

Depth -ft	Gamma -lb/f3	Phi	C -kp/f2	K -lb/i3	e50 or Dr %	Nspt
0	129.2	0.0	1.25	136.2	0.87	10
12	129.2	0.0	1.25	136.2	0.87	10

Pile Data:

Depth -ft	Width -in	Area -in2	Per. -in	I -in4	E -kp/i2	Weight -kp/f
0.0	30	452.4	75.4	16286.0	3000	0.471
11.0	30	452.4	75.4	16286.0	3000	0.471
11.7						

Single Pile Lateral Analysis:

Top Deflection, yt= 0.08500-in

Max. Moment, M= 63.08-kp-f

Top Deflection Slope, St= -0.00161

OK! Top Deflection, 0.0850-in is less than the Allowable Deflection= 1.00-in

Note: If the program cannot find a result or the result exceeds the upper limit. The result will be displayed as 99999.
 The Max. Moment calculated by program is an internal force from the applied load conditions. Structural engineer has to check whether the pile has enough capacity to resist the moment with adequate factor of safety. If not, the pile may fail under the load conditions.



CivilTech
Software

Title :
Dsgnr:
Description :

Job #
Date: 12:09PM, 29 NOV 18

Scope :

Rev: 580002
User: KW-0603478, Ver 5.8.0, 1-Dec-2003
(c)1983-2003 ENERCALC Engineering Software

Pole Embedment in Soil

Page 1

Description Circular pole with Point & Uniform Loads

General Information

Allow Passive	250.00 pcf	Applied Loads...	
Max Passive	1,500.00 psf	Point Load	5,200.00 lbs
Load duration factor	1.000	distance from base	13.500 ft
Pole is Circular			
Diameter	30.000 in	Distributed Load	0.00 #/ft
No Surface Restraint		distance to top	0.000 ft
		distance to bottom	0.000 ft

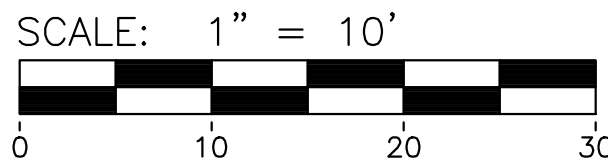
Summary

Moments @ Surface...

Point load	70,200.00 ft-#	Total Moment	70,200.00 ft-#
Distributed load	0.00	Total Lateral	5,200.00 lbs

Without Surface Restraint...

Required Depth	11.625 ft
Press @ 1/3 Embed...	
Actual	960.06 psf
Allowable	961.36 psf



EXISTING TREE TO REMAIN

PROVIDE CANOPY TREE (INTERIOR VUA)

PROVIDE CANOPY TREE (RIGHT-OF-WAY SCREEN)

PROVIDE EVERGREEN TREE (CONFLICTING LAND USE BUFFER)

PROVIDE DECIDUOUS SHRUBS
PROVIDE EVERGREEN SHRUBS

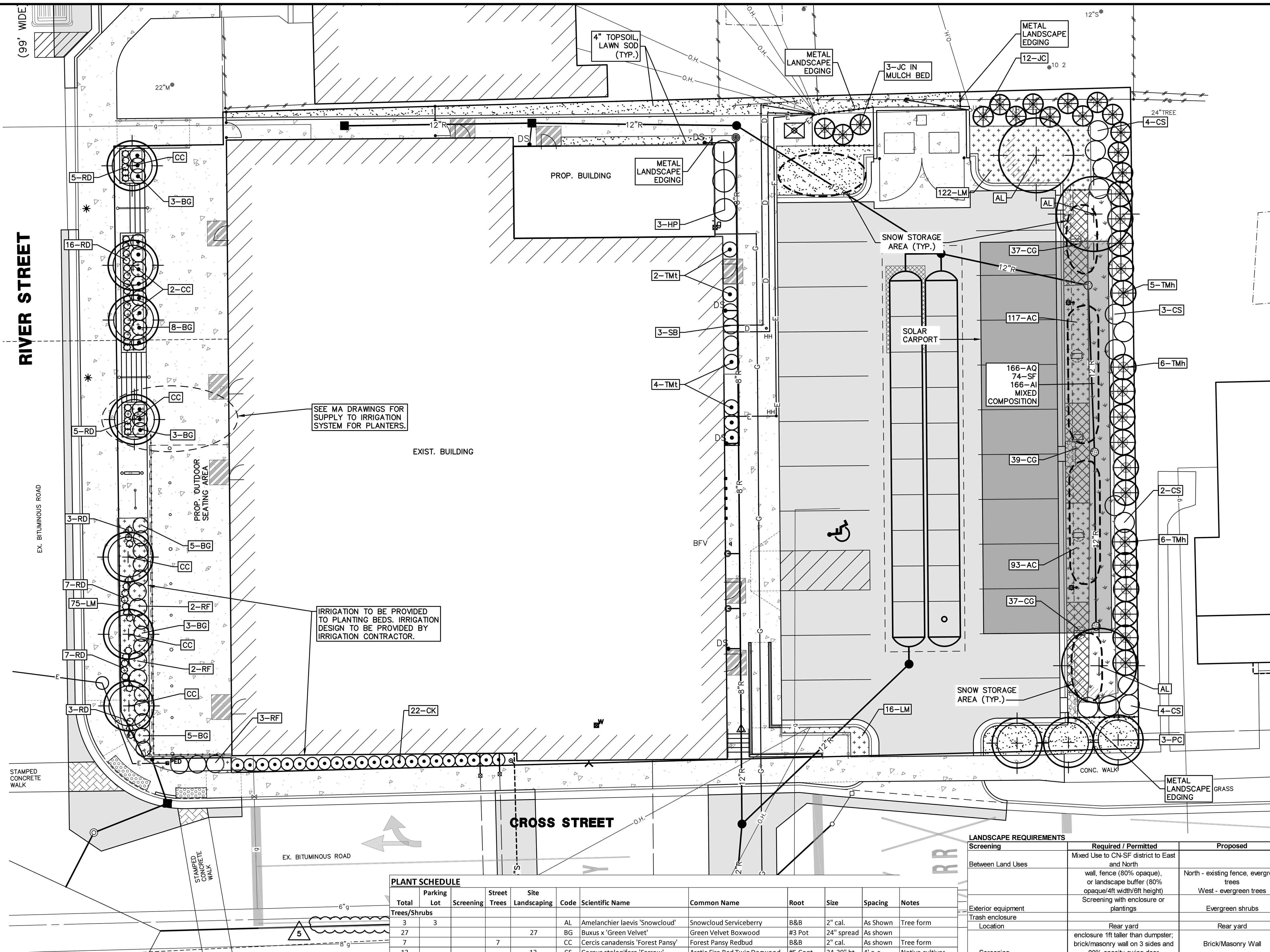
PROVIDE ORNAMENTAL GRASSES/PERENNIALS

PROVIDE LAWN AREA

PROVIDE EDGING

1. Plant materials shall be selected and installed in accordance with standards established by the City of Ypsilanti.
2. All landscaping and landscape elements shall be planted, and earth moving or grading performed, in a sound workmanlike manner, according to accepted planting or grading procedures.
3. All plant material shall be maintained in good condition so as to present a healthy, neat and orderly appearance and must be trimmed or pruned in such a manner as to not alter their natural growth potential.
4. Water outlets shall be provided within 150 feet of all required plantings.
5. The owner of property shall maintain required landscaping in a strong and healthy condition, free from physical damage or injury arising from lack of water, chemical damage, insects, disease, blight, or other causes. All diseased, damaged or dead material shown on the site plan as proposed plantings shall be replaced within six months of damage or death or the next appropriate planting period, whichever comes first.
6. Restore disturbed areas with a minimum of four (4) inches of topsoil and then sod/seed/fertilize/mulch.
7. All disturbed areas not to be planting beds shall be lawn areas planted with sod. Sod shall consist of a sun and partial shade mix with Kentucky bluegrass, minimum of three cultivars. Sod shall be Certified, Number 1 Quality/Premium, including limitations on thatch, weeds, diseases, nematodes, and insects, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture, strongly rooted, and capable of vigorous growth and development when planted.
8. Sod shall be harvested, delivered, stored, and handled according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" in Turfgrass Producers International's "Guideline Specifications to Turfgrass Sodding." Deliver sod in time for planting within 24 hours of harvesting. Protect sod from breakage and drying. Landscape contractor is responsible to keep newly installed sod watered. Install sod per sod manufacturers' recommendations.
9. After the first growing season, only fertilizers that contain NO phosphorus shall be used on the site.
10. Deciduous plants shall be planted between March 1 and May 15 and from October 1 until the prepared soil becomes frozen. Evergreen plants shall be planted between March 1 and June 1 and from August 15 to September 15.
11. Bioswale plantings (plugs) shall be installed as specified on the Landscape Plan. Native plugs shall be planted between March 1 and June 1 or mid-September through mid-October. If planted outside specified time period, irrigation is required for plant establishment. Contractor shall contact nursery early in construction process to allow necessary time for nursery to grow/stock appropriate quantities of plants.
12. All planting beds are to receive four (4) inches of shredded bark mulch. Bioswale planting area to receive two (2) inches of shredded bark mulch.
13. All trees to be located a minimum of 10 feet from public utilities.
14. All single trunk, deciduous trees shall have a straight and a symmetrical crown with a central leader. One sided trees or those with thin or open crowns shall not be accepted.
15. All evergreen trees shall be branched free to the ground, symmetrical in shape and have not been sheared in the last three (3) growing seasons.
16. All compacted subgrade soils in proposed landscape areas shall be tilled to a minimum 12-inch depth prior to placement of topsoil, geotextile fabric, or other planting media as specified.
17. Proposed trees will be planted a minimum of 15 feet apart.
18. Planting Soil: Existing, in-place or stockpiled topsoil. Supplement with imported topsoil as needed. Verify suitability of existing surface soil to produce viable planting soil. Remove stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth. Mix surface soil with the following soil amendments to produce planting soil:
 - a. Ratio of Loose Compost to Topsoil by Volume: 1:4.
 - b. Weight of Lime per 1000 Sq. Ft.: Amend with lime only on recommendation of soil test to adjust soil pH.
 - c. Weight of Sulfur or Aluminum Sulfate per 1,000 Sq. Ft.: Amend with sulfur or aluminum sulfate only on recommendation of soil test to adjust soil pH.
 - d. Volume of Sand: Amend with sand only on recommendation of Landscape Architect to adjust soil texture.
 - e. Weight of Slow-Release Fertilizer per 1,000 Sq. Ft.: Amend with fertilizer only on recommendation of soil test to adjust soil fertility.

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.



PLANT SCHEDULE											
Total	Parking Lot	Screening	Street Trees	Site Landscaping	Code	Scientific Name	Common Name	Root	Size	Spacing	Notes
Trees/Shrubs											
3	3				AL	Amelanchier laevis 'Snowcloud'	Snowcloud Serviceberry	B&B	2" cal.	As Shown	Tree form
27				27	BG	Buxus x 'Green Velvet'	Green Velvet Boxwood	#3 Pot	24" spread	As shown	
7			7		CC	Cercis canadensis 'Forest Pansy'	Forest Pansy Redbud	B&B	2" cal.	As shown	Tree form
13				13	CS	Cornus stolonifera 'Farrow'	Arctic Fire Red Twig Dogwood	#5 Cont	24-30" ht	4' o.c.	Native cultivar
3				3	HP	Hydrangea paniculata 'Jane'	Little Lime Hydrangea	#3 Pot	24-30" ht	4.5' o.c.	
15		15			JC	Juniperus chinensis 'Spearmint'	Chinese Juniper 'Spearmint'	B&B	24" spread	4' o.c.	Full
3			3		PC	Prunus cerasifera 'Cripiozam'	Crimson Pointe Plum	B&B	2" cal.	12" o.c.	
46				46	RD	Rosa x 'Scarlet Flower Carpet'	Red Carpet Rose	#3 Cont		As shown	
7				7	RF	Rhamnus frangula 'Fine Line'	Treeleaf Buckthorn	#7 Cont		As shown	
3				3	SB	Spiraea betuliflora 'Tor'	Tor Birchleaf Spirea	#3 Pot	18-24" ht	3' o.c.	
17		17			TMH	Taxus x media 'Hicksii'	Hick's Yew	B&B	24-30" ht	5' o.c.	
6				6	TMT	Taxus x media 'Tauntonii'	Taunton's Yew	B&B	18-24" ht	3' o.c.	
Herbaceous / Ornamental Grasses											
166				166	AI	Asclepias incarnata	Swamp Milkweed	plug		12" o.c.	
166				166	AQ	Aquilegia canadensis	Columbine	plug		12" o.c.	
210				210	AC	Asarum canadensis	Wild Ginger	plug		12" o.c.	
22				22	CK	Calamagrostis x a. 'Karl Foerster'	Karl Foerster Fountain Grass	#3 Cont		As shown	
113				113	CG	Carex grayii	Gray's Sedge	plug		18" o.c.	
230				213	LM	Liriope muscari 'Silverly Sunproof'	Silverly Sunproof Lilyturf	#1 Cont		18" o.c.	
74				74	SF	Solidago flexicaulis	Zigzag Goldenrod	plug		18" o.c.	

LANDSCAPE REQUIREMENTS		
Screening	Required / Permitted	Proposed
Between Land Uses	Mixed Use to CN-SF district to East and North	
	wall, fence (80% opaque), or landscape buffer (80% opaque/4ft width/6ft height)	North - existing fence, evergreen trees West - evergreen trees
Exterior equipment	Screening with enclosure or plantings	Evergreen shrubs
Trash enclosure		
Location	Rear yard	Rear yard
Screening	enclosure 1ft taller than dumpster; brick/masonry wall on 3 sides and 80% opacity swing door	Brick/Masonry Wall
Street Trees	1 per 30 linear feet	
	129lf River Street = 5 trees; 182.5lf Cross Street= 7 trees	River Street - 3 trees; Cross Street - 3 trees; Waiver Requested
	1 tree per 8 spaces = 3 trees 1 island per 16 spaces in row	3 trees
Parking Lot Landscaping		
Site Landscaping	10% of the site = 2,369sf	2,707 sf (11.4%)
	min. 0.3fc where to be illuminated; 0.5fc average over entire area 5 ft above surface	See Photometric Plan
Lighting		
	not to exceed 0.5fc at lot line dark sky compliant fixtures not to exceed 30 ft ht	



Facing northeast from East Cross Street.



Facing northwest from East Cross Street.



HDC Work Permit Staff Review

Property address: 218 Washtenaw

Property History: The property includes a surface parking lot owned by the United Methodist Church (209 Washtenaw). City records simply label the property "N Adams Lot," however the historical address is 218 Washtenaw.

Date of Application: January 6, 2020

Date of Review: January 7, 2020

Date of Meeting: January 14, 2020

Proposed work: Installation of two new signs.

Materials: Semi-gloss paint, Wood posts, plywood, finials, brackets, and hardware.

Staff review:

1. This application is for work already completed without permits.
2. The project includes replacement of two signs, one on N Adams that was free-standing, and one on Washtenaw that was mounted to a utility pole. Both appear to have been non-historic.
3. The replacement signs are identical, two four-by-four posts with a signboard in-between.
 - a. The synthetic signboards have plywood backing.
 - b. The sign structures feature finials and brackets.
4. In staff opinion, the finials and brackets are conjectural elements that imitate earlier styles, and are not recommended. However, the small scale of the signs makes the impact to the district's integrity setting minimal.

Recommended Motions:

Move to issue a Notice to Proceed for the work already completed at the North Adams Lot (218 Washtenaw), as submitted in the application dated January 6, 2020, for installation two new signs, as constructed.

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

Relevant Secretary of the Interior's Standards:
#9, #10

Move to deny the work already completed at the North Adams Lot (218 Washtenaw), as submitted in the application dated January 6, 2020, as the signs feature inappropriate conjectural features.

Relevant Secretary of the Interior's Standards:
#3

Prepared by:
Scott E. Slagor, Preservation Planner



RECEIVED

JAN 06 2020

CITY OF YPSILANTI
BUILDING DEPARTMENT

**City of Ypsilanti
Historic District Commission
Work Permit Application**

One South Huron • Ypsilanti, MI 48197
Phone: (734) 483-9646 • Fax: (734) 483-7260
www.cityofypsilanti.com

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA

Property

Address

209 WASHTENAW AVENUE, YPSILANTI, MI 48197

Applicant

**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

FIRST UNITED METHODIST CHURCH

Address

209 WASHTENAW AVENUE

City

YPSILANTI

State

MI

Zip

48197

Phone / Fax

(734)482-8374 / (734)482-8379

E-Mail

FUMCYPSI@FUMCYPSI.ORG

Contractor

Contractor Name & Contact Info

BOB MOSES

Type of work

☐ Roofing

☐ Window/Door
Replacement

☐ Porches

☒ Sign

☐ Fence (or other sitework)

☐ Painting

☐ Other

☐ Application Amendment

Complete Description of Proposed Work:

REPAIR/REFURBISH WASHTENAW AVENUE PARKING SIGN:

- REMOVE OLD SIGN CENTER SECTION FROM POSTS
- REBUILD SIGN FRAME AND ATTACH TO EXISTING POSTS W/1/2" LAG BOLTS
- INSERT PARKING SIGN (FROM SIGNS BY TOMORROW) INTO FRAME
- ADD FINIALS AND CORNER BRACKETS FOR VISUAL APPEAL
- PAINT FRAME, FINIALS, BRACKETS AND POSTS WITH SEMI-GLOSS WHITE PAINT

CREATE NEW ADAMS STREET PARKING SIGN

- DIG POST HOLES INTO PARKING LOT AT ADAMS ST. ENTRANCE.
- SET POSTS WITH POST MIX, ADD FRAME TO HOLD SIGN (FROM SIGNS BY TOMORROW), SECURE TO POSTS WITH 1/2" LAG BOLTS
- ADD FINIALS AND CORNER BRACKETS FOR VISUAL APPEAL.
- PAINT FRAME, POSTS, FINIALS, AND POSTS W/SEMI-GLOSS WHITE PAINT

Materials (for paint include color chips or samples with application):

GLIDDEN EXTENSION SEMI-GLOSS PAINT, 1/2" X 2' WOOD SCREWS
PT, (2) 1/2" X 4 POSTS, (4) 2" X 4" X 8, 1/2" PT PLYWOOD (WASHTENAW), (4) FINIALS (CEDAR)
(4) CORNER BRACKETS (CEDAR), 1/2" X 5" LAG BOLTS (10), WASHTENAW (10)

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. An additional fee of \$50 applies to HDC work started without the applicable permit.

Construction Cost:

\$153,96

Permit fee:

\$45 + 0 = \$45⁰⁰

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature:

[Redacted Signature]

Date:

12/19/19

Print Name:

ROBERT L. MOSES

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.

PHDC-20-0004

First United Methodist Church of Ypsilanti Adams Street Parking Lot Sign 209 Washtenaw Avenue, Ypsilanti

Previous Sign



New Sign



First United Methodist Church of Ypsilanti Washtenaw Avenue Parking Lot Sign 209 Washtenaw Avenue, Ypsilanti

Previous Sign

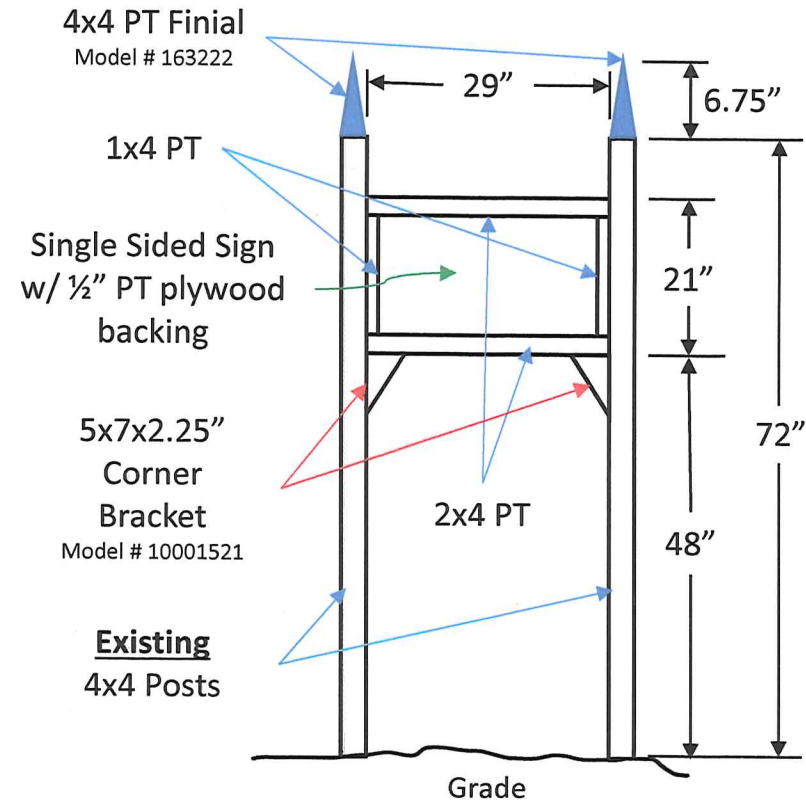


New Sign



209 Washtenaw Avenue, Ypsilanti

Washtenaw Avenue Sign



R. Moses 12-18-2019

Staff photo of 218 Washtenaw- 1/8/2020. Facing northeast to overview of lot.





City of Ypsilanti

Community and Economic Development

December 11, 2019



RE: Demolition by Neglect Study Items for 302 E Cross

Dear MR. ZIEBARTH,

On Tuesday, December 10, 2019 the Historic District Commission (HDC) discussed progress on the Demolition by Neglect case at the above named property. It was determined that additional information is needed about the proposed window repairs and replacements, and that a study item should be presented at the next regularly scheduled meeting. Specifically, the HDC moved to:

Have a progress update and study item at the January 14, 2020 Historic District Commission meeting for the property at 302 E Cross. The owner is to provide the HDC with a plan for windows, including which need to be replaced, and how; and documentation of the final closing of exterior of the building; and an update on foundation work at the meeting on January 14, 2020.

You are required to attend the above mentioned meeting to present the requested study items. The meeting will be held at 7:00 pm at Ypsilanti City Hall, 1 S Huron Street, Ypsilanti, MI 48197. However, please know that an application must be submitted as an action item, and approved by the HDC, before work can begin.

Applications and further information about the HDC are available online at www.cityofypsilanti.com/hdc. Please contact me at (734) 483-9646 or via email at sslagor@cityofypsilanti.com with any questions.



Conservation Planner
Community & Economic Development Department

CC: File; Building Department



Facing southwest to facade and east elevation.



Facing south to facade.



Facing northeast to west and south elevations.



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Historic District Fact Sheet

Windows & Weatherization

This Fact Sheet is not a substitute for the ordinance, but addresses common questions about City ordinances. For further information, please contact the Historic District Assistant.

All permit applications are available from the Building Department and at cityofypsilanti.com/permits.

Completed applications may be dropped off at the Building Department.

City Hall

One South Huron
Ypsilanti, MI 48197

Building

3rd Floor, City Hall
Phone: (734) 482-1025
cityofypsilanti.com/157

Planning

3rd Floor, City Hall
Phone: (734) 483-9646
cityofypsilanti.com/planning

Historic District

3rd Floor, City Hall
Phone: (734) 483-9646
cityofypsilanti.com/hd

All permits, fees, and factsheets can be found at cityofypsilanti.com/permits.

Repairing and Re-glazing Historic Windows

Window repair often results in considerable energy cost savings while at the same time preserving original architectural materials. Epoxy wood-consolidating materials and polyurethane glues make it possible to repair even badly deteriorated wood windows.

Repair Process

- Remove the sash and lay it on a flat surface.
- Examine the exterior window frame, especially the sill, for rot or other deterioration.
- Dig out and replace bad sections with new wood or epoxy repair material. The epoxy works like auto body filler or spackle. Mix it up and pack it tightly into any depression or hollow in the wood. When hardened, it can be sanded, primed and painted.
- Then remove paint or varnish on both interior and exterior of the sash, re-glue where necessary, replace cracked glass and loose or missing glazing putty.
- Sand, apply a coat of linseed oil, prime with old-based primer, and paint the sash with latex paint.
- Replace sash cord if windows are counterweighted.
- Return sash to window.
- Nail stops back into place.

For more information on wood window repair, see NPS Preservation Brief 9: The Repair of Historic Wooden Windows, available at <http://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>.

Creating New Windows or Doors

New openings transform a building's character, often threatening historic integrity, and are not generally allowed.

Screen Windows and Storm Windows

Any new screen or storm must be compatible with the window it is covering.

Metal combination screen/storms are permitted, although wood screens and storms are encouraged for better appearance and more efficient energy conservation. If a metal-framed screen/storm is installed, it must fit within the exterior trim and rest upon the blind stop. The metal frame must be either painted or factory-finished, not mill (raw metal) finish. Re-caulking and weather stripping are required and will improve the thermal efficiency.

Shutters

Wood shutters are permitted as a way to close off an unnecessary window. They must be properly hinged, fit within the window frame and painted. Non-functioning shutters may be permitted on a case-by-case basis, if they are considered appropriate for the structure and must appear to match the opening size of the window.

Replacement Windows

In some cases, replacement windows are approved by the Historic District Commission. In all cases, the Commission will require an installation which does not reduce the glass area of any window.

Wood replacement windows are preferred. Wood windows clad in aluminum may be approved in some cases. Solid vinyl and vinyl clad windows are considered inappropriate.

The new window shall be the same configuration as the window it is replacing. For example, three panes over one, one over one, etc. Panes of glass in the replacement must match the size and shape of the original. The exterior trim installed after replacement must match the original. In cases of replacement windows where the glass is not physically divided into panes by muntins, the Commission will require that muntins be permanently adhered to the exterior of the window to replicate the appearance of the original windows.

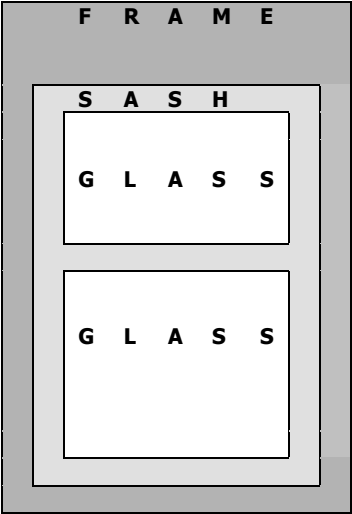
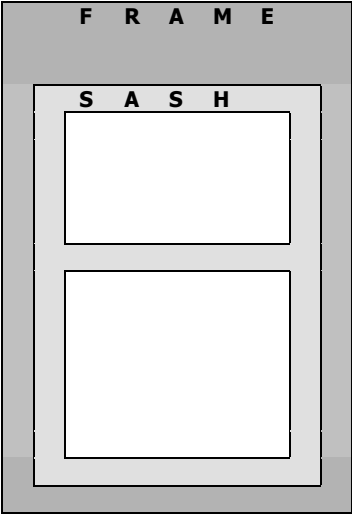
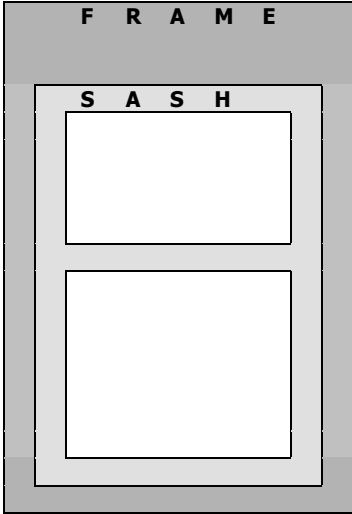
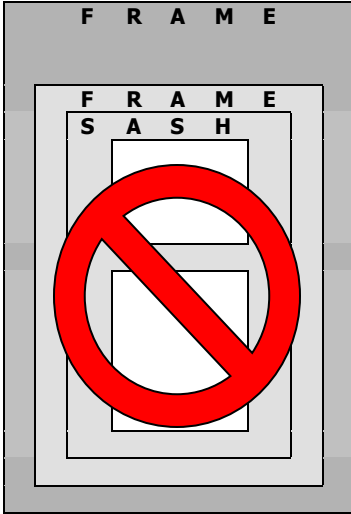
Clear glass is considered appropriate for the district; smoked or tinted glass may be approved on a case-by-case basis.

Types of Replacement Windows

Sash kits consist of sash only. The sash is the part of the window that holds the glass and moves up and down within the frame. Sash kits are installed by removing the old sash, leaving the old frame in place, and inserting the new sash in the old frame. The glass area is not reduced (see illustration #2). This installation is appropriate and can be approved.

Full-frame replacements consist of sash and frame. Full-frame replacements are installed in one of two ways:

1. The old sash and the old frame are removed. The replacement window is inserted in the rough opening. The glass area is not reduced (see illustration #3). This installation is appropriate and can be approved.
2. The old sash is removed, but the old frame is left in place. The replacement window (sash and frame) is inserted in the old frame. This results in two frames, the old frame and the replacement frame. The glass area is reduced (see illustration #4). This installation is not appropriate and is not permitted.

			
#1 ORIGINAL WINDOW	#2 SASH KIT installed in OLD FRAME	#3 FULL-FRAME REPLACEMENT installed in ROUGH OPENING	#4 FULL-FRAME REPLACEMENT installed in OLD FRAME
Original frame and sash intact.	Old frame is retained, old sash is removed, new sash kit is inserted in old frame.	Old frame is removed, old sash is removed, full-frame replacement is inserted in rough opening.	Old sash is removed, old frame is retained, full-frame replacement is inserted in old frame.
	Result - no reduction in glass area.	Result - no reduction in glass area.	Result – two frames and reduction in glass area.
	YES	YES	NO



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Historic District Fact Sheet

Windows

This Fact Sheet is not a substitute for the ordinance, but addresses common questions about City ordinances. For further information, please contact the Preservation Planner.

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Phone: (734) 483-9646
cityofypsilanti.com/hd

All permits, fees, and factsheets can be found at cityofypsilanti.com/permits.

The Importance of Historic Windows

Windows are the “eyes” of a building. Even the simplest of windows can be considered character-defining elements of a building. Historic windows are often unique in their size, dimension, and design; and therefore are not easily replicated. Additionally, historic windows are made from components that can be individually replaced, while if a component breaks on a replacement window, generally the whole unit must be replaced again. Preserving historic windows makes sense economically and environmentally. The Historic District Commission encourages rehabilitation or repair of historic windows and reviews replica or replacement windows on a case-by-case basis. This fact sheet provides guidance for common window questions.

CONTACT THE PRESERVATION PLANNER BEFORE YOUR WINDOW PROJECT.

Rehabilitation and Re-glazing Historic Windows

Window rehabilitation often results in considerable energy cost savings while at the same time preserving original architectural materials. Epoxy wood-consolidating materials and polyurethane glues make it possible to repair even badly deteriorated wood windows.

Repair Process

- Remove the sash and lay it on a flat surface.
- Examine the exterior window frame, especially the sill, for rot or other deterioration.
- Dig out and replace bad sections with new wood or epoxy repair material. The epoxy works like auto body filler or spackle. Mix it up and pack it tightly into any depression or hollow in the wood. When hardened, it can be sanded, primed and painted.
- Then remove paint or varnish on both interior and exterior of the sash, re-glue where necessary, replace cracked glass and loose or missing glazing putty.
- Sand, apply a coat of linseed oil, prime with oil-based primer, and paint the sash with latex paint.
- Replace sash cord if windows are counterweighted.
- Return sash to window.
- Nail stops back into place.

For more information on wood window rehabilitation, see NPS Preservation Brief 9: The Repair of Historic Wooden Windows, available at <http://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>.

Energy Efficiency and Historic Windows

In most cases, home energy loss from window openings is 10-15% of the total loss. The often promised savings of modern replacement windows seldom outweigh the cost of installation. Before undertaking the expense of window replacement, check first that the attic is well insulated. Often, air loss through windows can be mitigated by simple nonintrusive measures, such as interior or exterior storm windows; curtains; or reglazing.

Screen Windows and Storm Windows

Any new screen or storm must be compatible with the window it is covering.

Metal combination screen/storms are permitted, although wood screens and storms are encouraged for better appearance and more efficient energy conservation. If a metal-framed screen/storm is installed, it must fit within the exterior trim and rest upon the blind stop. The metal frame must be either painted or factory-finished, not mill (raw metal) finish. Re-caulking and weather stripping are required and will improve the thermal efficiency.

Shutters

Wood shutters are permitted as a way to close off an unnecessary window. They must be hinged, fit within the window frame and painted. Non-functioning shutters may be permitted on a case-by-case basis, if they are considered appropriate for the structure and must match the opening size of the window.

Creating New Windows or Doors

New openings transform a building's character, often threatening historic integrity, and are not generally allowed.

Requirements for a Window Replacement Application

In some cases, replacement windows are approved by the Historic District Commission. *In order for the commission to approve replacement windows, the applicant must provide detailed information and meet certain conditions.*

1. If the existing windows are historic to the building, i.e. over 50 years old, every effort should be made to preserve them. If the applicant is citing poor condition as a reason for replacement, then they must provide documentation to that extent. At minimum, this should include detailed photos of each window proposed for replacement. Close-up shots showing the damage should be provided.
2. Large projects, particularly for commercial rehabilitation, may require a third party condition assessment of windows.
 - a. This assessment should be made by an unbiased professional, such a tradesperson, or historic architect, who will provide a report on the condition and reparability of windows.
 - b. The assessment cannot be made by a replacement window company or contractor.
3. If the applicant claims keeping historic windows will cause undue financial hardship, a cost comparison of replacement windows vs. repairing the originals by qualified tradespersons must be submitted as well.

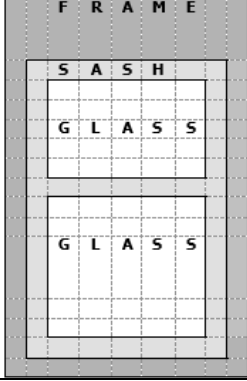
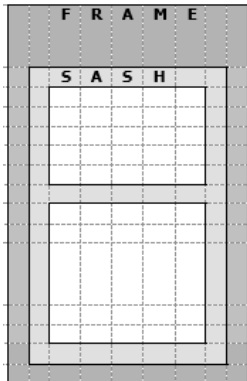
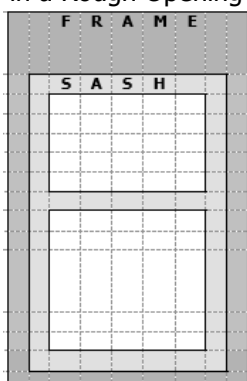
Requirements for Appropriate Window Replacements

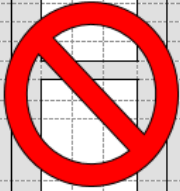
Approval for replacement windows will be granted on a case by case basis. In all cases, the Commission will require an installation which does not reduce the glass area of any window. Wood replacement windows are preferred. Wood windows clad in aluminum or fiberglass may be approved in some cases. If the applicant is proposing a new material, they are encouraged to include photos of it in use and bring a sample. *Solid vinyl and vinyl clad windows will not be approved.*

The new window shall be the same configuration as the window it is replacing. For example, three panes over one, one over one, etc. Panes of glass in the replacement must match the size and shape of the original. The exterior trim installed after replacement must match the original. In cases of replacement windows where the glass is not physically divided into panes by muntins, the Commission will require that muntins be permanently adhered to the exterior of the window to replicate the appearance of the original windows.

Clear glass is considered appropriate for the district; smoked or tinted glass may be approved on a case-by-case basis.

Breakdown of Window Rehabilitation and Replacement Methods

Frame Type	Description	Result	Can it be Permitted?
#1 Original Window  The diagram shows a rectangular window frame. Inside the frame, there is a sash that holds two glass panes. The frame is labeled 'FRAME', the sash is labeled 'SASH', and the glass panes are labeled 'GLASS'.	Original frame and sash are intact. Routine maintenance is done to preserve the window, including regular painting and infilling damage wood with such materials as epoxy.	The building retains its historic character-defining elements and there is no loss to historic integrity.	YES- General repairs to the window may not require a permit, however full rehabilitations may be reviewed by the HDC. Contact the Preservation Planner to find out if your project requires a permit.
#2 Sash Kit installed in Old Frame  The diagram shows a rectangular window frame. Inside the frame, there is a sash that holds two glass panes. The frame is labeled 'FRAME', the sash is labeled 'SASH', and the glass panes are labeled 'GLASS'.	Sash kits consist of a sash replacement only. The sash is the part of the window that holds the glass and moves up and down within the frame. Sash kits are installed by removing the old sash, leaving the old frame in place, and inserting the new sash in the old frame.	The windows retain some of their historic fabric and the original glass area is preserved.	YES- This installation is appropriate and can be approved on a case-by-case basis.
#3 Full Frame Replica installed in a Rough Opening  The diagram shows a rectangular window frame. Inside the frame, there is a sash that holds two glass panes. The frame is labeled 'FRAME', the sash is labeled 'SASH', and the glass panes are labeled 'GLASS'.	The old sash and the old frame are removed. The replacement window, ideally designed to replicate the historic window is inserted in the <u>rough opening</u>. The <u>glass area is not reduced</u>	Although the historic fabric of the windows is lost, the overall historic integrity of the building is retained because the replacements match the original.	YES- This installation is appropriate and can be approved on a case-by-case basis.
#4 Full Frame Replacement Installed in Old Frame	The old sash is removed, but the old frame is left in place. The replacement window (sash and frame) is inserted in the old frame. This results in two frames, the old frame and the replacement frame. The glass area is reduced	Although some historic fabric remains, the reduction of glass area substantially alters the historic character of the building.	NO- This installation diminishes the historic integrity of the building and is not generally permitted.

FRAME FRAME SASH 			
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DRAFT



2019 Annual Report Historic District Commission Ypsilanti, Michigan

INTRODUCTION

The Historic District Commission of the City of Ypsilanti is governed by the Michigan Local Historic Districts Act, State of Michigan Public Act 169 of 1970, and by Chapter 54 of the City of Ypsilanti Code of Ordinances.

MEMBERSHIP

Anne Stevenson, Vice Chair (November – December)
Hank Prebys
Amy Swift

Alex Pettit Vice-Chair (January – September), Interim Chair (September – December)
Erika Lindsay
Ronald Rupert

COMMISSION AND STAFF

According to Sec. 54-32, Historic preservation is declared to be a public purpose with numerous community benefits. The Historic District Commission (HDC) has several responsibilities, but chiefly, it serves as the quasi-judicial body that ensures exterior alterations of historic properties meet the Secretary of the Interior Standards for Rehabilitation; thereby protecting the historic integrity of the district for future generations.

Throughout 2019, the Historic District Commission (HDC) continued meeting on the second and fourth Tuesdays of each month at 7:00 p.m. The HDC was staffed by a Preservation Planner during this time. Cynthia Kochanek held the position in January and was succeeded by Scott Slagor on February 25. Staff performed various administrative tasks and technical assistance to enable the HDC to fulfill its responsibilities under the Historical Preservation Ordinance. Staff responsibilities included reviewing Historic District Work Permit Applications prior to meetings; corresponding with applicants; providing technical assistance to property-owners; preparing meeting agendas, commission packets, minutes and various reports; property monitoring; webpage maintenance; Facebook updates; and other support, as needed.

The HDC continued to provide prompt review of applications. Applications are collected from the Building Department and reviewed by staff for completeness. Incomplete applications are addressed through email or phone correspondence with the applicant. Staff works with the applicants to get their application to a point of compliance that is likely to be approved by the commission. Staff reviews are completed for each application. The reviews include a brief history of the property, a breakdown of application items, recommended motions from staff, and the appropriate Secretary of

the Interior Standards for Rehabilitation to cite with each decision. Staff reviews are included in the meeting packets that are posted on the City's website and emailed to the Commission prior to each meeting.

On August 26, the HDC had a special meeting with the staff of the Community and Economic Development Department, including the Preservation Planner, Scott Slagor; Community Development Manager, Christopher Jacobs; and Director of Economic Development, Joe Meyers. The meeting gave an opportunity for the commissioners to discuss what they think is working well, what additional information they need to do their jobs effectively, additional sites in the city that could be designated historic, and an expansion of the work staff could approve administratively. The expanded administrative approvals were approved and have since helped to shorten meeting time and streamlined the process for applicants.

The Preservation Planner attends each HDC meeting to provide staffing support. The HDC is also supported by a recording secretary, Nancy Hare-Dickerson. The recording secretary is responsible for drafting full minutes for each meeting.

The turnaround time for applications averages about two weeks. Potential applicants are encouraged to bring projects to the Commission as study items before formal submission of an application. This allows the Commission to provide feedback to property owners at a conceptual stage, clarifying expectations and allowing for a more predictable final review.

Changes in HDC Membership

In 2019 the HDC lost two members and gained one new member. First, Mike Davis, Jr., former chair, resigned on September 4 to take a position on the Planning Commission.

Jane Schmiedke, co-author of the original 1972 Historic District Study Committee Report and long-time chair, resigned from the HDC on November 12 after 40 years of service. City Council and Staff thanked her for her years of service with flowers.

The commission gained a new member, Amy Swift, in October. Swift is a building tradesperson, specializing in historic window restoration. She owns the Detroit-based restoration company, Building Hugger, and is active in the Michigan Young Preservationists organization.

The HDC anticipates the addition of another new member in early 2020.

INITIATIVES

HDC Demolition by Neglect

In 2018, the HDC reviewed and made the determination that three properties in the historic district were in danger of demolition by neglect; 302 E Cross, 206-210 N Washington and 401 E Forest. Work to resolve the condition issues of those properties continued in 2019. The HDC and staff are working with the owner of 302 E Cross to have the building repaired and secured. The property at 206-210 N Washington was acquired by the City through foreclosure. The City is working on a Request for Proposal for its redevelopment, which will ultimately resolve the case of demolition by neglect.

The property owners at 401 E Forest have been non-responsive and further enforcement is being undertaken. Once the issues are resolved, the demolition by neglect status will be removed for each property.

Additionally, the HDC reviewed the condition of a carriage barn at 422 N Hamilton. The owner made necessary repairs and the HDC determined it was no longer in danger of demolition by neglect.

Rules and Regulations Update

In 2018, staff worked on a Baseline Certified Local Government (CLG) Evaluation for the Michigan State Historic Preservation Office (SHPO) to address how the City is meeting its obligations as a CLG. The SHPO asked that the HDC update its rules and regulations, specifically its conflict of interest policy. This was completed and approved by City Council in April 16, 2019.

CLG Grant

The City obtained a CLG grant from SHPO at the end of 2018 in order to host a National Alliance of Preservation Commissions training in March 2019. The training was attended by all staff in the Community and Economic Development Department and three HDC members. In total there were 90 participants from HDCs around Michigan and SHPO staff. The training focused on interpreting the historic district ordinances, infill construction, and alternative materials.

New Owner Outreach

"New Owner" mailings occurred quarterly in March, June, September, and December. Post cards were sent regularly to realtors who list properties in the Historic District.

Facebook updates

Staff continued utilizing the commission's Facebook page to do weekly "Throwback Thursday" posts utilizing old photos from City files and surveys as well as photos from the archives at the Ypsilanti Historical Society. Staff has also been utilizing the page more regularly for meeting updates, relevant preservation related topics as well as posts in May to celebrate Preservation Month.

Historic Walking Tours

HDC Staff, Scott Slagor, led walking tours of Downtown and Depot Town in October. The tours done in partnership with the DDA to highlight historic resources in Ypsilanti and the community's story. Staff intend on conducting the tours regularly April through October of 2020.

APPLICATIONS

The number of applications received in 2019 was about the same as the number received in 2018. The number of study items was slightly less than the amount for the previous four years. Administrative approvals have nearly doubled from 2018, partly due to the HDC expanding the type of work that can be approved administratively. Staff also attributes the increase to the rainy spring that necessitated a large number of roof replacements; which are generally administratively approved. The ambitious scope of many of the approved projects reflects the commitment of residents and businesses to

the improvement of the community. The number of applications and actions taken is depicted in the table below.

Historic District Commission Actions, 2015-2019

	2015	2016	2017	2018	2019
Approved as submitted	79	69	73	68	60
Approved with modifications	15	14	22	11	13
Approved administratively	11	13	36	27	44
Amended approvals	1	4	4	5	3
Denied: lack of information	3	1	1	1	0
Denied: inappropriate	0	5	6	3	3
Pending at year end	0	0	2	1	0
Notice to Proceed	0	0	0	5	7
Total Applications	109	106	144	124	125
Study Items	40	42	43	41	35

MAJOR PROJECTS

The Historic District continued to benefit from investment over the past year. Some of the significant projects are summarized here:

- **New Construction**

No new buildings were approved in 2019, however 217 N River was approved for a major rear addition as the new owner substantially invests in the property.

- **Solar Panels**

Solar energy continues to be prominent in Ypsilanti. The HDC approved five solar installations in 2019.

- **100 W Michigan**

One of the most notable changes to the district was the removal of metal cladding from 100 W Michigan (formerly Dalat Restaurant). The HDC approved its removal, revealing original brick, storefront elements, windows, and hand-painted signs. The HDC also approved infilling non-historic windows on the north

elevation; some window infill on the east elevation, and masonry repairs. The project is ongoing with more applications expected in early 2020.

- **101 W Michigan**

Work has continued on the façade rehabilitation of 101 W Michigan. The original historic windows have been fully rehabilitated and work is currently underway on the storefront and new rear stairwell. Substantial progress is expected in 2020.

- **116-118 W Michigan**

Work has continued on the façade rehabilitation of 116-118 W Michigan. Several study items were discussed with the building. Additional applications are expected in early 2020.

- **400 N River**

Work has continued on the rehabilitation of the Thompson Block at 400 N River. Applications were approved in 2018 and the HDC and staff has watched as the historic features of the building are restored. Continued work and potentially some modifications to applications are expected in 2020.

Demolitions

No demolitions were completed in 2019.

Appeals

No appeals were filed with the State Historic Preservation Review Board in 2019.

Looking Forward

2020 should be an exciting and eventful year for the historic district and the commission. Visible changes should continue to take place at the major building projects as work moves to completion. The Michigan Historic Preservation tax credit bill is expected to be introduced and staff plans to keep tabs on the tax credit and introduce new resolutions in support of the credit to the HDC and City Council, if changes are made.

In the upcoming year, staff will continue to process updates and revisions to the commission forms, fact sheets. Staff will continue the Facebook updates for community outreach and will look to streamline and perfect the commissions' processes. Staff will further develop historic walking tours, with individual tours for the Downtown, Depot Town, and West Cross historic business districts. Staff and the commission will continue to work toward the goals established by SHPO in their 2018 CLG evaluation; including new design guidelines as applicable, continued survey of undesignated historic resources, and education opportunities. Staff will also investigate the creation of a historic district study committee to update the current district, addressing: boundaries that do not conform to parcel lines, an updated period of significance, and updated contributing/non-contributing resources list.

SUMMARY

Although of varied scope and scale, the projects completed throughout 2019 are excellent examples of the continued preservation efforts of property owners within the Ypsilanti Historic District. Commendation by the City is due to these owners for their substantial contribution to the community as they continue to support the efforts of the Historic District to beautify the district and preserve the heritage of Ypsilanti's built environment. Preservation is one of the means that makes Ypsilanti an authentic, vibrant, and diverse community.

This report was adopted at the January 14, 2019 regular meeting of the Historic District Commission and respectfully submitted to Ypsilanti City Council.

DRAFT



CERTIFIED LOCAL GOVERNMENT ANNUAL REPORT FY2019 (OCTOBER 1, 2018 - SEPTEMBER 30, 2019)

The Michigan State Historic Preservation Office (SHPO) requires that each Certified Local Government (CLG) submit an annual report of its activities upon the completion of each fiscal year (October 1 - September 30). SHPO uses the provided information to stay up to date on historic preservation activities across the state, identify ways that SHPO can be more responsive to the needs of CLGs, and evaluate local CLG programs.

SHPO has developed a standard template for use by all CLGs in order to streamline the collection/presentation of information and supporting documentation. Each CLG will receive a fillable digital (PDF) copy of the template. Hardcopies can be mailed upon request.

INSTRUCTIONS

Use the annual report template to describe your CLG's program during the last fiscal year.

The reporting period for this report is: **October 1, 2018 - September 30, 2019.**

A complete report consists of:

- Completed annual report checklist
- Completed annual report template
- Applicable attachments and supporting documents

SUBMISSION

CLGs can complete their report electronically or by hand. CLGs completing the digital report can save and email their report and supporting documentation to Alan Higgins, Certified Local Government Coordinator, at higginsS3@michigan.gov.

CLGs completing their report by hand can scan the completed documents and email them as indicated above, or they can mail the hardcopy and supporting documentation to SHPO at the following address:

Attn: Alan Higgins
Michigan State Historic Preservation Office
Michigan Economic Development Corporation
300 N. Washington Square
Lansing, Michigan 48913

DUE DATE

Annual reports are due from each CLG by: **March 1, 2020.**

QUESTIONS?

Have questions or need clarification on assembling your report? Contact Alan Higgins, Certified Local Government Coordinator, at higginsS3@michigan.gov or 517.335.2719.



CERTIFIED LOCAL GOVERNMENT ANNUAL REPORT FY2019 (OCTOBER 1, 2018 - SEPTEMBER 30, 2019)

Community: City of Ypsilanti

CLG Representative: Scott E. Slagor, Preservation Planner

Title/Organization: Ypsilanti Historic District Commission

Mailing Address: 1 S. Huron Street Phone: 794-482-9709
Ypsilanti, MI Email: sslagor@cityofypsilanti.com
48197

CLG/HDC Website: <https://www.cityofypsilanti.com/254/Historic-District-Commission>

CHECKLIST

Please indicate below those items that you have included with your submission.

REQUIRED

- ☒ 1. Completed Annual Report
- ☐ 2. Minutes from two HDC meetings (if not available on website)

SUPPORTING DOCUMENTATION, IF APPLICABLE

- ☐ 3. Amended or revised ordinances, by-laws, or other regulations with changes highlighted
- ☐ 4. Study reports and/or survey data
- ☐ 5. Attachment A: New Commissioner Resume Form
- ☐ 6. Attachment B: HDC and Staff Training Record Supplement
- ☐ 7. Attachment C: Completed Surveys Supplement
- ☐ 8. Attachment D: Public Education Activities Supplement

SIGNATURE

I hereby certify that the information in this report is accurate and correct to the best of my knowledge.

CLG Contact

Date

SHPO USE

Received: _____

Reviewed: _____

Signature: _____



CERTIFIED LOCAL GOVERNMENT ANNUAL REPORT FY2019 (OCTOBER 1, 2018 – SEPTEMBER 30, 2019)

1. DESIGNATION AND PROTECTION OF HISTORIC PROPERTIES

A. Did the CLG keep its ordinance in effect for the entire fiscal year?

☒ Yes ☐ No

If **no**, briefly explain.

B. Did the CLG amend, revise, or suspend its historic preservation ordinance, by-laws, or other regulations or procedures during the fiscal year?

☒ Yes ☐ No

If **yes**, briefly explain and submit a copy of the document(s) with changes highlighted.

The Historic District Commission Rules and Regulations were revised and updated to include an appropriate conflict of interest policy, as was requested by SHPO in the review of our 2018 annual report evaluation.

C. Did the CLG have historic district design guidelines in place during the fiscal year?

☒ Yes ☐ No If **yes**, what year were the guidelines last updated? Unknown.

D. Were any National Register-listed or locally designated contributing properties relocated or demolished during the fiscal year?

☐ Yes ☒ No

If **yes**, identify the properties, including name/address, associated district or National Register property, and a brief explanation.

- E. Identify study report and district designation activities during the fiscal year. If associated reports were not previously provided to SHPO, submit a copy with this report.

STUDY REPORTS CONSIDERED DURING THE FISCAL YEAR	
DISTRICT NAME	DRAFT REPORT PROVIDED TO SHPO?
	☐
	☐
	☐
	☐
	☐
	☐
	☐
	☐
	☐

NEW DISTRICTS OFFICIALLY ESTABLISHED DURING THE FISCAL YEAR	
DISTRICT NAME	FINAL REPORT PROVIDED TO SHPO?
	☐
	☐
	☐
	☐
	☐
	☐
	☐
	☐

LOCAL DISTRICTS MODIFIED OR DE-DESIGNATED DURING THE FISCAL YEAR	
DISTRICT NAME AND BRIEF EXPLANATION FOR CHANGE	FINAL REPORT PROVIDED TO SHPO?
	☐
	☐
	☐
	☐

☒ The CLG had no such activities during the fiscal year.

2. ADEQUATE AND QUALIFIED HISTORIC PRESERVATION COMMISSION

- A. Identify active historic district commission (HDC) members. Submit a resume or Attachment A for any new commissioner appointed during the fiscal year.

NAME	ROLE ON COMMISSION*	DATE APPOINTED	TERM ENDS
Alex Pettit	Vice Chair/Interim Chair- Architect	02/1/2019	12/31/2022
Erika Lindsay	Architect	02/01/2018	01/31/2021
Henry Prebys	Local History Organization/District Res	02/7/2017	01/31/2020
Ronald Rupert	Building Tradesperson/District Res	02/01/2018	01/31/2021
Anne Stevenson-Less	Architectural Historian	02/01/2017	01/31/2020
Amy Swift	Building Tradesperson	10/1/2019	12/31/2022

*(e.g., architect, archaeologist, historian, district resident, etc.)

Identify how the CLG sought federally qualified professionals (architects, historians, and archaeologists) to fill vacancies during the fiscal year. Submit a copy of announcements, advertisements, and other means used to seek qualified HDC members.

Are there presently any HDC vacancies?

☒ Yes ☐ No If yes, how many? 1

Did new HDC members receive training materials and information on local districts?

☒ Yes ☐ No ☐ Not Applicable

B. Provide information on regularly scheduled HDC meetings held during the fiscal year.

MONTH	MEETING HELD?	QUORUM PRESENT?	MINUTES ON WEBSITE?
January	☒	☒	☒
February	☒	☒	☒
March	☒	☒	☒
April	☒	☒	☒
May	☒	☒	☒
June	☒	☒	☒
July	☒	☒	☒
August	☒	☒	☒
September	☒	☒	☒
October	☒	☒	☒
November	☒	☒	☒
December	☒	☒	☒

C. If not available on your website, submit minutes for two meetings.

D. Provide information on applications received for review during the fiscal year.

APPLICATION TOTALS	
# of applications received:	
# of applications reviewed by staff only:	
# of applications reviewed by the HDC:	

APPLICATIONS REVIEWED BY THE HDC	
# of applications that received a final decision during the first review:	
# of applications that came before the HDC more than once:	

RESULTS OF REVIEWS	
# of COAs issued:	
# of Denials issued:	
# of Notices to Proceed issued:	

APPEALS	
# of HDC decisions appealed:	0
# of decisions overturned by State Review Board:	0
# of decisions affirmed by State Review Board:	0

E. Did any HDC members and/or HDC staff receive formal training during the fiscal year?

☒ Yes ☐ No

If **yes**, identify the training. Use **Attachment B** for additional training if necessary.

TRAINING SESSION:	2019 STATEWIDE HISTORIC PRESERVATION CONFERENCE
Sponsoring Organization:	Michigan Historic Preservation Network
Location:	Holland
Date:	May 2019
Names and positions of participants:	Scott Slagor, HDC staff, attended the 2019 MHPN Conference.

TRAINING SESSION:	
Sponsoring Organization:	National Alliance of Preservation Commissions
Location:	Ypsilanti, MI
Date:	March 2019
Names and positions of participants:	Anne Stevenson, HDC Member Alex Pettit, HDC Member Mike Davis, Jr., Former HDC Member (resigned summer 2019). All City Planning and Development staff.

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

If **no**, explain why no one participated in training during the fiscal year and identify any preliminary plans to participate in training next year.

3. SURVEY AND INVENTORY OF HISTORIC PROPERTIES

- A. Identify new survey plans, progress on existing plans, and/or changes to existing survey plans, including changes in priorities or processes, implemented during the fiscal year.

No formal survey was completed during the fiscal year, however action was taken toward establishing future survey goals. Staff has kept a list/file of undesignated resources with known historic significance; and retrieved copies of the property files on record at SHPO. In August, 2019, staff called a special planning meeting with the HDC to discuss future goals and administrative approvals. One of the talking points included future designations and surveys. The Commission agreed that there are certainly a great deal of undesignated historic properties in Ypsilanti, and discussed some with staff.

- B. Did the CLG complete historic resource surveys (windshield, reconnaissance, or intensive) during the fiscal year?

☐ Yes ☒ No

If **yes**, identify them. If the survey data and reports were not previously provided to SHPO, submit a copy with this report. Use **Attachment C** for additional surveys if necessary.

NAME OF SURVEY	HOW MANY RESOURCES?	SURVEY PROVIDED TO SHPO?
		☐
		☐
		☐
		☐
		☐
		☐

If no surveys were completed during the fiscal year, please explain the reasons.

C. Do you have any historic resource surveys tentatively planned for next fiscal year?

☐ Yes ☒ No

If **yes**, identify the survey(s) below.

NAME OF SURVEY	REASON FOR ANTICIPATED SURVEY (E.G., PART OF WORK PLAN, DEVELOPMENT PRESSURE, CONSIDERING DESIGNATION, ETC.)

D. Was any archaeological survey undertaken during the fiscal year?

☐ Yes ☒ No

If **yes**, identify the survey(s) below.

NAME OF SURVEY	SHPO CONTACTED PRIOR TO WORK?	FOLLOWED STATE ARCHAEOLOGIST'S SURVEY STANDARDS?
	☐	☐
	☐	☐
	☐	☐

4. PUBLIC PARTICIPATION IN THE LOCAL HISTORIC PRESERVATION PROGRAM

- A. Identify how the HDC worked with property owners to remind them of their responsibilities and the process for obtaining Certificates of Appropriateness and/or to provide technical assistance on historic preservation issues or projects.

The HDC communicates to property owners through a number of means:

1. New owner letters are sent quarterly.
2. Post cards are sent to realtors who list properties in the district.
3. The Historic District website and facebook page are maintained.
4. Applicants are encouraged to come as study items before filing an official permit.

- B. Did the community provide public educational activities (e.g., walking tours, lectures, Preservation Month activities, historical marker programs, etc.) or formal training on historic preservation?

☒ Yes ☐ No

If **yes**, identify the activities. Use **Attachment D** for additional items if necessary.

ACTIVITY		SPONSORING ORGANIZATION	
Historic Walking Tour of Downtown and Depot Town		City of Ypsilanti/Ypsilanti Downtown Development Authority	
Date	10/26/2019	Do you consider the activity a success?	☒ Yes ☐ No
Brief description	City Preservation Planner, Scott Slagor led a historic walking tour of Downtown and Depot Town neighborhoods. The walking tour was attended by over 40 people and generated a lot of online interest. Will be working on regular tours in the warm months.		
ACTIVITY		SPONSORING ORGANIZATION	
Preservation Month social media engagement		City of Ypsilanti- via Historic District Commission Facebook page	
Date	May 2019	Do you consider the activity a success?	☐ Yes ☒ No
Brief description	Staff posted weekly facts and engaging questions about historic preservation. There was very little response, however Staff will continue this effort next year to help further foster social media engagement.		
ACTIVITY		SPONSORING ORGANIZATION	
#ThrowbackThursday Photos on Social Media		City of Ypsilanti- via Historic District Commission Facebook Page	
Date	Weekly- 2019	Do you consider the activity a success?	☒ Yes ☐ No
Brief description	Weekly historical photos posted of the community. Usually generates discussion and activity on Social Media. Is often in coordination with Downtown Development Authority.		

C. Were all HDC meetings publicly announced and held in accordance with the Open Meetings Law, P.A. 267 of 1976?

☒ Yes ☐ No

D. Was information about the HDC, its procedures, and meeting activities actively maintained on the local government's website during the last fiscal year?

☒ Yes ☐ No

E. Beyond a website, how does the HDC provide information about meetings and project activities (agendas, public notices, etc.) to the public?

☐ Mailings ☐ Newspapers ☒ Postings at municipal building ☐ On-site project signs
☒ Email ☐ Electronic listserv or bulletin board ☐ Local access channel
☐ Other, as described:

F. Beyond a website, how does the HDC provide information procedures, guidance, documents (design guidelines, COA applications, etc.) to the public?

☐ Mailings ☐ Postings at municipal building ☐ Email
☐ Electronic listserv or bulletin board ☐ Door-to-door fliers/conversations
☐ Community events ☐ Working with other municipal departments
☒ Other, as described:

Ypsilanti HDC has a series of Fact Sheets to answer common questions. Staff regularly meets with potential applicants and gives them hard copies of information, as well as directs them to the website.

F. Did the CLG review any National Register of Historic Places nominations during the fiscal year?

☒ Yes ☐ No

If **yes**, identify the nominations below.

PROPERTY NAME/ADDRESS	COMMENTS SUBMITTED TO SHPO?
Highland Cemetery- 943 N River Street	☒
	☐
	☐
	☐
	☐
	☐
	☐

5. CLG PROGRAM GOALS

A. Describe how you have met the goals you had for the last fiscal year.

GOAL 1: Create a new Design Guideline Booklet	
Did you meet this goal?	☐ Yes ☒ No
If yes , describe how it was met. If no , describe why it was not met.	Three-year goal established in 2018 CLG Evaluation. The HDC continually updates its Fact Sheets for areas of work. Minor changes were updated in 2019.
GOAL 2: Continue to study the potential for the establishment of additional local districts and expansion of the current district.	
Did you meet this goal?	☒ Yes ☐ No
If yes , describe how it was met. If no , describe why it was not met.	Ongoing goal set in 2018 CLG Evaluation. Staff met with the Commission and discussed potential areas that could be nominated or expanded.
GOAL 3: Continue to engage and promote National Register nominations.	
Did you meet this goal?	☒ Yes ☐ No
If yes , describe how it was met. If no , describe why it was not met.	Ongoing. One Ypsilanti property was listed in the NRHP in 2019. Staff has been working to educate other departments on the difference between National and Local districts, and how they can be beneficial.
GOAL 4: Continue to work on communication and education with current property owners and prospective buyers	
Did you meet this goal?	☒ Yes ☐ No
If yes , describe how it was met. If no , describe why it was not met.	-Ongoing goal established in 2018 CLG Evaluation. The City mails letters to new property owners quarterly with information on the historic district. The city also mails post card to the responsible realtor when a property is listed for sale. The website and social media continue to be a too for current property owners.

☐ The CLG did not have specific goals for the last fiscal year.

B. What are your top goals for next fiscal year?

GOAL 1: Create a new Design Guideline Booklet	
Do you intend to complete this during FY2020 or is it part of an ongoing project?	☐ FY20 ☒ Ongoing
Do you need technical assistance in meeting this goal? If so, describe.	Possibly. The formal Design Criteria established in the ordinance may need to be revisited.

GOAL 2: Continue to survey, establish new NRHP/Local districts, and update existing.	
Do you intend to complete this during FY2020 or is it part of an ongoing project?	☐ FY20 ☒ Ongoing
Do you need technical assistance in meeting this goal? If so, describe.	This was also a goal in 2018 CLG evaluation. We absolutely need to update our existing district listing before we can begin nominating other resources. The boundaries are inappropriate and the listing is lacking in context, contributing/non-contributing resources, and a period of significance. This is not something

GOAL 3: Increase staffing levels in order to work to update existing surveys.	
Do you intend to complete this during FY2020 or is it part of an ongoing project?	☐ FY20 ☒ Ongoing
Do you need technical assistance in meeting this goal? If so, describe.	Goal established in 2018 CLG Evaluation. As stated previously, survey funding will rely on grants. Staff is also looking at funding mechanisms to support student interns to work on special projects.

GOAL 4:	
Do you intend to complete this during FY2020 or is it part of an ongoing project?	☐ FY20 ☐ Ongoing
Do you need technical assistance in meeting this goal? If so, describe.	

ADDITIONAL ITEMS OF INTEREST TO SHPO

- A. Did your CLG program/HDC have a work plan for FY2019? ☐ Yes ☒ No
- B. Does your HDC have an annual budget allocation? ☒ Yes ☐ No
- C. Does your community charge a fee for COA applications? ☒ Yes ☐ No
- D. Does your community regulate the removal of mature trees or other important landscaping associated with designated properties? ☐ Yes ☒ No
- E. Does your community proactively work with local real estate agencies/agents to discuss the role of historic preservation and local designation? ☒ Yes ☐ No
- F. Does your community have an active preservation plan, or has it incorporated preservation planning into its master/comprehensive plan?
- ☐ Yes, and a copy is available at this link: _____
 - ☐ Yes, and a copy is available in hardcopy from the city.
 - ☒ We are currently working toward such planning tools.
 - ☐ No, and we currently have no plans for such tools.
- G. Does your community include historic resources in its GIS? ☐ Yes ☐ No ☒ Unsure
- H. Does your community have local incentives for preservation (e.g., tax incentives, façade improvement programs, loan programs, zoning variance allowances)? ☒ Yes ☐ No

If **yes**, please describe:

Facade improvement program in our historic commercial areas- funded through MEDC grants.

There is zoning consideration for historic resources when a property applies for a variance. One was granted a few years ago to allow reconstruction of a porch that existed historically, but did not meet today's required setbacks.

- I. Describe any issues or challenges your community needs assistance within in FY2020, or anything else you would like to share with SHPO.

It may not happen in 2020 but we need an updated Study Committee report to 1. tighten up our local historic district boundaries, and 2. expand our period of significance and identify contributing/non-contributing buildings.

ATTACHMENT A. HDC COMMISSIONER RESUME FORM

CONTACT INFORMATION

Name: See attached.

Address: _____

Phone: _____

Email: _____

EDUCATION

Degree	Field	University	Year
--------	-------	------------	------

_____	_____	_____	_____
-------	-------	-------	-------

_____	_____	_____	_____
-------	-------	-------	-------

RELATED WORK EXPERIENCE

Position: _____

Organization: _____

Dates: _____

Work Description: _____

Position: _____

Organization: _____

Dates: _____

Work Description: _____

OTHER EXPERIENCE/DEMONSTRATED INTEREST IN HISTORIC PRESERVATION

Meets NPS Qualifications (https://www.nps.gov/history/local-law/arch_stnds 9.htm) for:

☐ History ☐ Architectural History ☐ Architecture ☐ Historic Architecture ☐ Archaeology

ATTACHMENT B. HDC AND STAFF TRAINING SUPPLEMENT

Identify formal training completed by HDC members and/or HDC staff during the fiscal year.

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

ATTACHMENT C. COMPLETED SURVEYS SUPPLEMENT

Identify any above-ground historic resource surveys completed during the last fiscal year. If the survey data and reports were not previously provided to SHPO, submit a copy with your submission.

NAME OF SURVEY	HOW MANY RESOURCES?	SURVEY PROVIDED TO SHPO?
1. [illegible]	[illegible]	☒
2. [illegible]	[illegible]	☐
3. [illegible]	[illegible]	☐
4. [illegible]	[illegible]	☐
5. [illegible]	[illegible]	☐
6. [illegible]	[illegible]	☐
7. [illegible]	[illegible]	☐
8. [illegible]	[illegible]	☐
9. [illegible]	[illegible]	☐
10. [illegible]	[illegible]	☐
11. [illegible]	[illegible]	☐
12. [illegible]	[illegible]	☐
13. [illegible]	[illegible]	☐
14. [illegible]	[illegible]	☐
15. [illegible]	[illegible]	☐

ATTACHMENT D. PUBLIC EDUCATION ACTIVITIES SUPPLEMENT

Identify public education activities (e.g., walking tours, lectures, Preservation Month activities, historical marker programs, etc.) or formal training sessions that the community provided for historic district property owners or the general public.

ACTIVITY		SPONSORING ORGANIZATION	
Date		Do you consider the activity a success?	☐ Yes ☐ No
Brief description			
ACTIVITY		SPONSORING ORGANIZATION	
Date		Do you consider the activity a success?	☐ Yes ☐ No
Brief description			
ACTIVITY		SPONSORING ORGANIZATION	
Date		Do you consider the activity a success?	☐ Yes ☐ No
Brief description			
ACTIVITY		SPONSORING ORGANIZATION	
Date		Do you consider the activity a success?	☐ Yes ☐ No
Brief description			

PROJECT SUMMARY

SITE NAME:	40213
SITE ADDRESS: (ESTIMATED)	301 N HAMILTON ST YPSILANTI, MI 48197
COUNTY:	WASHTENAW COUNTY
<u>SITE COORDINATES:</u>	
LATITUDE:	42° 14' 41.424" N (NAD 83)
LATITUDE:	42.24484°
LONGITUDE:	83° 37' 3.432" W (NAD 83)
LONGITUDE:	-83.61762°
ELEVATION:	±738'-3"
PROPERTY DEFINITION:	R.O.W.
FUZE PROJECT ID:	15487099
PSLC CODE:	544753
EXISTING POLE NUMBER:	N/A
EXISTING POLE HEIGHT:	38'-6"
EXISTING POLE CLASS:	N/A

verizon

SITE NAME: 40213

PROPOSED SMALL CELL EQUIPMENT
ON AN EXISTING DTE POLE

VICINITY MAP



LOCATION MAP



SHEET SCALE FACTOR:
PLOT SIZE:
11" x 17": TO SCALE

[illegible]

SCOPE OF WORK

- INSTALLING EQUIPMENT
 - CFIT BOX
 - DISCONNECT
- CONNECTING ON SITE UTILITIES TO WIRELESS EQUIPMENT

STATE COUNTY MAP



0

GENERAL NOTES

1. THESE NOTES SHALL BE CONSIDERED A PART OF THE WRITTEN SPECIFICATIONS.
2. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED IN THE CONTRACT DOCUMENTS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTOR(S) SHALL VISIT THE JOB SITE(S) AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED PER THE CONTRACT DOCUMENTS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER.
4. THE CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED ON ANY WORK NOT CLEARLY DEFINED OR IDENTIFIED IN THE CONSTRUCTION DOCUMENTS BEFORE STARTING ANY WORK.
5. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES INCLUDING APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. IF THESE RECOMMENDATIONS ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS AND/OR APPLICABLE CODES OR REGULATIONS, REVIEW THE CONFLICT FOR DIRECTION WITH THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES AND FOR COORDINATION OF ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION TEAM AND WITH THE AUTHORIZED REPRESENTATIVE OF ANY OUTSIDE POLE OR PROPERTY OWNER. (BASE COMMANDER OR AUTHORIZED AGENT)
8. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, VEGETATION, GALVANIZED SURFACE OR OTHER EXISTING ELEMENTS AND UPON COMPLETION OF THE WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF EXTENT.
9. KEEP THE GENERAL AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION DAILY.
10. PLANS ARE INTENDED TO BE DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED UNLESS OTHERWISE NOTED. RELY ONLY ON ANNOTATED DIMENSIONS AND REQUEST INFORMATION IF ADDITIONAL DIMENSIONS ARE REQUIRED.
11. THE EXISTENCE AND LOCATION OF UTILITIES AND OTHER AGENCY'S FACILITIES ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. OTHER FACILITIES MAY EXIST BEYOND WHAT IS NOTED. CONTRACTOR SHALL VERIFY LOCATIONS PRIOR TO START OF CONSTRUCTION AND USE EXTREME CARE AND PROTECTIVE MEASURES TO PREVENT DAMAGE TO THESE FACILITIES. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF UTILITIES OR OTHER AGENCY'S FACILITIES WITHIN THE LIMITS OF THE WORK, WHETHER THEY ARE IDENTIFIED IN THE CONTRACT DOCUMENTS OR NOT.
12. ALL MOUNTING HARDWARE SUCH AS BOLTS, NUTS, LAG SCREWS, CLEVIS, CONDUIT STRAPS, STAPLES, (ANYTHING EXPOSED AND CONNECTING EQUIPMENT TO THE POLE SHALL BE HOT DIPPED GALVANIZED, UNLESS OTHERWISE STATED)

DEFINITIONS

1. "TYPICAL" OR "TYP." MEANS THAT THIS ITEM IS VIRTUALLY IDENTICAL ACROSS SIMILAR CONDITIONS. "TYP." SHALL BE UNDERSTOOD TO MEAN "TYPICAL WHERE OCCURS" AND SHALL NOT BE CONSIDERED AS WITHOUT EXCEPTION OR CONSIDERATION OF SPECIFIC CONDITIONS.
2. "SIMILAR" MEANS COMPARABLE TO CHARACTERISTICS FOR CONDITION NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLAN.
3. "AS REQUIRED" MEANS AS REQUIRED BY REGULATORY REQUIREMENTS BY REFERENCED STANDARDS, BY EXISTING CONDITIONS, BY GENERALLY ACCEPTED CONSTRUCTION PRACTICE OR BY THE CONTRACT DOCUMENTS.
4. "ALIGN" MEANS ACCURATELY LOCATE FINISH FACES OF MATERIALS IN THE SAME PLANE.
5. THE TERM "VERIFY" OR "V.I.F" SHALL BE UNDERSTOOD TO MEAN VERIFY IN FIELD WITH ARCHITECT AND REQUIRES THAT THE CONTRACTOR CONFIRM INTENTION REGARDING NOTED CONDITION AND PROCEED ONLY AFTER RECEIVING DIRECTION.
6. WHERE THE WORDS "OR EQUAL" OR WORDS OF SIMILAR INTENT FOLLOW A MATERIAL SPECIFICATION, THEY SHALL BE UNDERSTOOD TO REQUIRE SIGNED APPROVAL OF ANY DEVIATION TO SAID SPECIFICATION PRIOR TO CONTRACTOR'S ORDERING OR INSTALLATION OF SUCH PROPOSED EQUAL PRODUCT.
7. FURNISH: SUPPLY ONLY, OTHERS TO INSTALL. INSTALL: INSTALL ITEMS FURNISHED BY OTHERS. PROVIDE: FURNISH AND INSTALL.

PROJECT SPECIFIC NOTES

1. THIS SET IS PROVIDED TO ILLUSTRATE THE EXPECTED SCOPE OF DRAWINGS, QUALITY OF DRAWINGS AND EXTENT GRAPHIC STANDARDS. NOTES ARE FOR A&E CONTRACTOR REFERENCE TO HELP CLARIFY THE SCOPE. ADDITIONAL DRAWINGS MAY BE REQUIRED TO MEET THE REQUIREMENTS OF A GIVEN BASE. ALL EXAMPLES SHOWN ARE FOR REFERENCE ONLY AND ANY NOTES, DETAILS, CALCULATIONS OR OTHER WORK NEEDS TO BE COMPLETED OR CONFIRMED BY THE CONTRACTOR GENERATING THE DRAWINGS IN CONSTRUCTION DOCUMENTS.
2. THIS SET IS TO BE PRINTED AT 11" x 17". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THIS SIZE IS ACCEPTABLE BY THE BASE AND TO PROVIDE A LARGER STANDARD SIZE IF REQUIRED.
3. IT IS THE RESPONSIBILITY OF THE ENGINEER TO CONFIRM ALL WORK SHOWN IS IN COMPLIANCE WITH BASE AND FEDERAL CODES. DRAWINGS SHOWN WITHIN THIS SET ARE SAMPLES AND MAY NOT REFLECT ALL OF THE REQUIRED ELEMENTS, CLEARANCES OR OTHER ITEMS OF ASSEMBLIES NEEDED TO BE CODE COMPLIANT IN THE PARTICULAR MUNICIPALITY THE NODE IS LOCATED WITHIN.

GROUND CONSTRUCTION NOTES:

1. 120/240V POWER REQUIRED FOR 3-WIRE SERVICE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH FEDERAL STANDARDS AND REGULATIONS AS WELL AS NEC.
3. CALL MICHIGAN ONE CALL 72 HOURS PRIOR TO EXCAVATING AT (800) 482-7171.
4. ALL LANDSCAPING TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
5. ALL EQUIPMENT TO BE BONDED.
6. METERING CABINET (IF INSTALLED) REQUIRES 3' CLEARANCE AT DOOR OPENING.

STANDARD GROUNDING NOTES:

1. GROUND TESTED AT 25 OHMS OR LESS.
2. 5/8" x 8' RODS, CAD WELD OR UL LISTED DIRECT BURY CLAMP BELOW GRADE.
3. #6 GROUND AND BOND WIRE.
4. MOLDING, STAPLED EVERY 1' AND AT EACH END.
5. GROUND RODS 18" FROM POLE.

STANDARD CONDUIT NOTES:

1. FOR UNDERGROUND CONDUIT AND ABOVE GRADE RISERS USE SCHEDULE 40.
2. IF DIRECTIONAL BORING PLACE 1-1/4" SDR-11 GRAY CONDUIT FOR UNDERGROUND POWER APPLICATIONS.
3. IF TRENCHING, PLACE PVC SCH 40 CONDUIT PER TABLE ON SHEET E1 FOR UNDERGROUND POWER APPLICATIONS.
4. RISERS TO BE ATTACHED TO POLE WITH STANDARD STRAPS AND LAG SCREWS.
5. RISER STRAPS TO BE INSTALLED EVERY 5'.
6. CONDUIT UNDER 1" MAY BE ATTACHED WITH GROUND WIRE MOLDING STAPLES.
7. ALL CONDUIT WILL BE PROOFED WITH A MANDREL AND EQUIPPED WITH PULL ROPE OR MULE TAPE.

STANDARD TRENCHING NOTES:

1. MAINTAIN 36" MINIMUM COVER FOR ELECTRICAL CONDUIT.
2. MAINTAIN 36" MINIMUM COVER FOR COMMUNICATION CONDUIT.
3. IN STREET SLURRY TO GRADE AND MILL DOWN 1-1/2" FOR AC CAP.
4. IN DIRT SLURRY 18" FROM GRADE AND FILL WITH 95% COMPACTION NATIVE SOIL FOR BALANCE.
5. PLACE WARNING TAPE IN TRENCH 12" ABOVE ALL CONDUITS AND #18 WARNING TAPE ABOVE GROUND EQUIPMENT.

UTILITY POLE CONSTRUCTION NOTES:

1. NO BOLT THREADS TO PROTRUDE MORE THAN 1/2".
2. FILL ALL HOLES LEFT IN POLE FROM REARRANGEMENT OF CLIMBERS.
3. ALL CLIMB STEPS NEXT TO CONDUIT SHALL HAVE EXTENDED STEPS.
4. CABLE NOT TO IMPEDE 15" CLEAR SPACE OFF POLE FACE.
5. 90° SHORT SWEEP UNDER ANTENNA ARM. ALL CABLES MUST ONLY TRANSITION ON THE INSIDE OR BOTTOM OF ARMS (NO CABLE ON TOP OF ARMS).
6. USE CABLE CLAMPS TO SECURE CABLE TO ARMS; PLACE 2" CARRIER ID TAGS ON BOTH SIDE OF ARMS.
7. USE 90° CONNECTOR AT CABLE CONNECTION TO ANTENNAS.
8. USE 1/2" CABLE ON ANTENNAS UNLESS OTHERWISE SPECIFIED.
9. FILL VOID AROUND CABLES AT CONDUIT OPENING WITH FOAM SEALANT TO PREVENT WATER INTRUSION.

VERIZON WIRELESS CONSTRUCTION NOTES:

1. CONTRACTOR IS TO FOLLOW THE MOST CURRENT VZW STANDARDS DOCUMENTS PROVIDED TO COMPLETE THIS INSTALLATION.
2. CONTRACTOR SHALL COMPLETE VZW PROVIDED "SMALL CELL SWEEP REPORT" WITH ALL INFORMATION FILLED IN ACCURATELY AND COMPLETELY.
3. CONTRACTOR TO REFER TO THE MOST CURRENT VZW STANDARDS FOR APPROVED "PIM" TEST EQUIPMENT AND GUIDELINES.
4. CONTRACTOR IS TO USE BATTERY POWERED "PIM" EQUIPMENT TO VALIDATE THE FINAL LOCATION OF THE JUMPER AND ANTENNA ARE FREE OF INTERNAL AND EXTERNAL "PIM" SOURCES.
5. CONTRACTOR SHALL PROVIDE AT LEAST ONE TECHNICAL LEAD THAT IS CERTIFIED AND PROFICIENT IN EXECUTING, INTERPRETING AND RECORDING "PIM" MEASUREMENTS.

PREPARED FOR:



PREPARED BY:

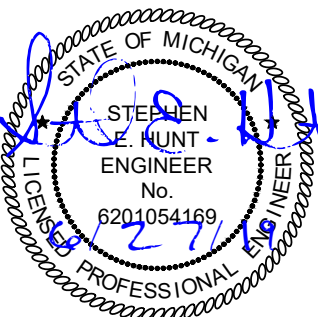


1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

DRAWING NOTICE:
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DRAWN BY:	AJD
CHECKED BY:	CTD

REVISIONS			
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	AJD	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION

ENGINEER'S STAMP:


NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:

40213

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 41.424" N

LONGITUDE:

83° 37' 3.432" W

DESIGN TYPE:

COLOCATION

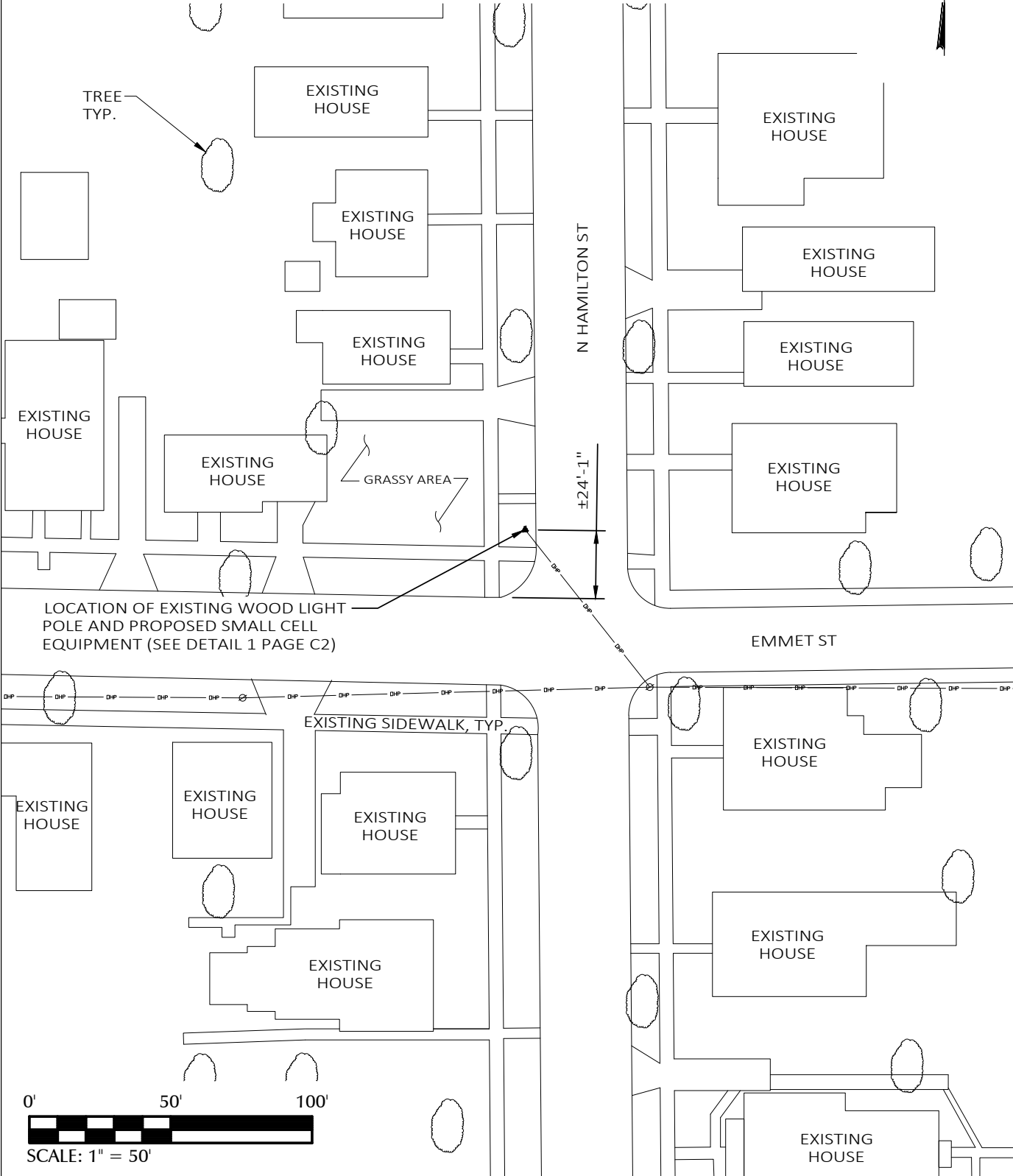
SHEET TITLE:

GENERAL NOTES

DRAWING NO. GN1	REVISION: 0
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NOTES:

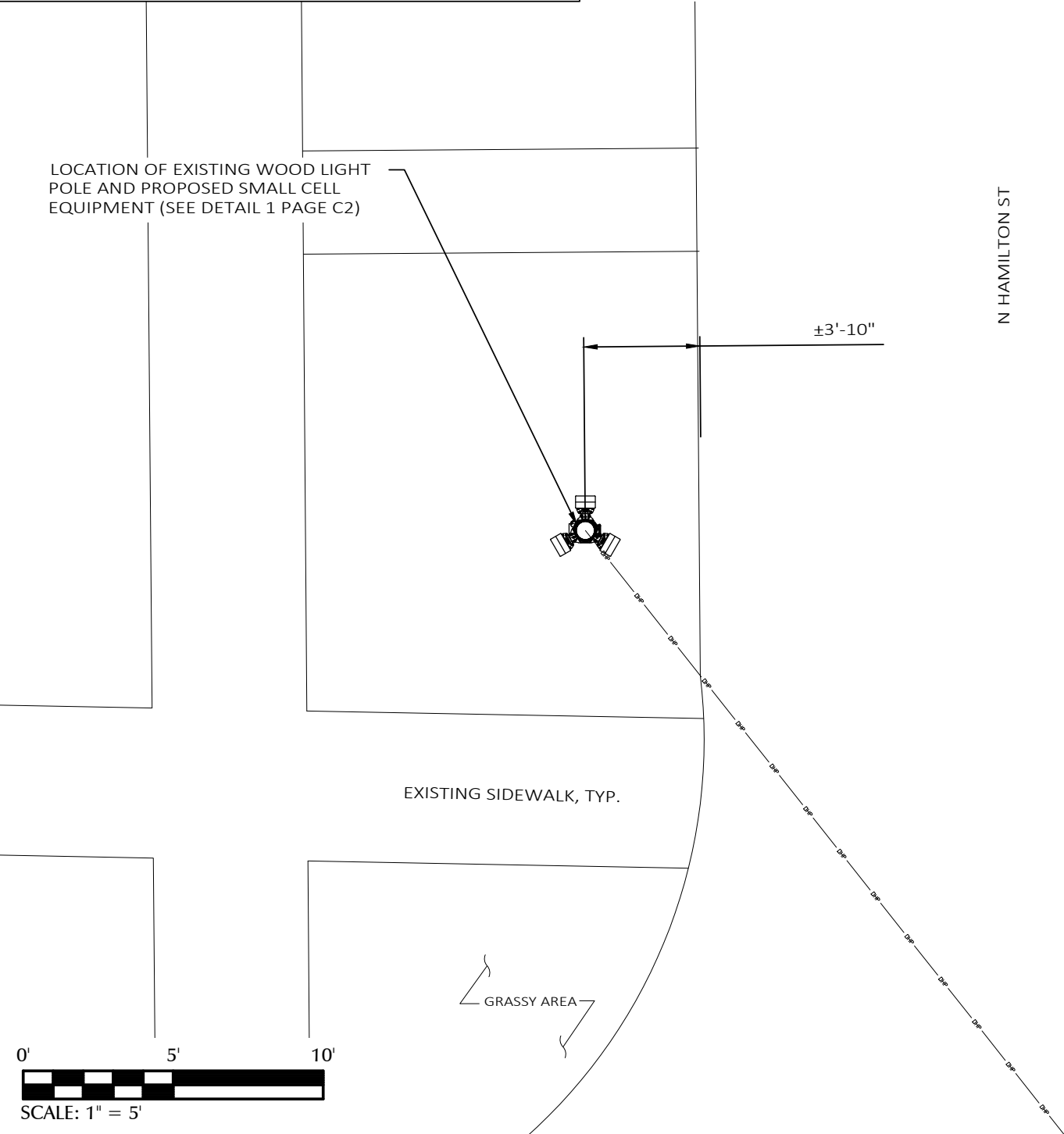
1. THIS DRAWING IS BASED ON AERIAL IMAGERY AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE PROPOSED USE DOES NOT REQUIRE FULL OR PART TIME EMPLOYEES AT THE SITE.
3. FOR GENERAL SITE WORK NOTES, SEE SHEET GN1.
4. ALL NORTH ARROWS ON SITE PLANS ARE TRUE NORTH, UNLESS OTHERWISE SPECIFIED.
5. OPEN CUT CONSTRUCTION THROUGH EXISTING PAVEMENT, I.E. ROADWAYS, PARKING AREAS, SIDEWALKS WILL NOT BE ALLOWED. CONSTRUCTION UNDER EXISTING PAVEMENTS WILL BE REQUIRED TO BE INSTALLED WITH DIRECTIONAL BORING TECHNIQUE.



1 OVERALL SITE LAYOUT

LEGEND

UNDERGROUND POWER	UGP	UGP	CATCH BASIN	CB
OVERHEAD POWER	OP	OP	IRON PIN SET (IPF) 5/8" REBAR	IPF
OVERHEAD UTILITIES	OHU	OHU	IRON PIN FOUND (IPF)	IPF
UNDERGROUND TELCO	UGT	UGT	BENCHMARK	B
OVERHEAD TELCO	OHT	OHT	CONCRETE MON. FOUND	CMF
GAS LINE	GAS	GAS	CONCRETE MON. SET	CMS
FENCE	X	X	UTILITY POLE	UP
SEWER LINE	SVR	SVR	LIGHT POLE	LP
WATER LINE	VTR	VTR	WATER VALVE	WV
COAX CABLE	C	C	MANHOLE	M
HYBRID CABLE	HYB	HYB	GAS VALVE	GV
HIGH VOLTAGE POWER	HVP	HVP	FIRE HYDRANT	FH
FIBER	FBR	FBR	TELCO PEDESTAL	TP
RIGHT-OF-WAY	RDW	RDW	ELECTRICAL PULL BOX	EPB
PROPERTY LINE	PL	PL		
EDGE OF PAVEMENT	EDP	EDP		



2 ENLARGED SITE LAYOUT

PREPARED FOR:



PREPARED BY:

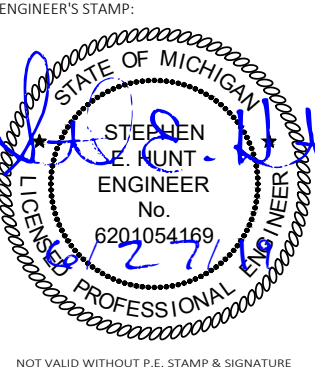


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HIXSON, TN 37343
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CHECKED BY:	CTD

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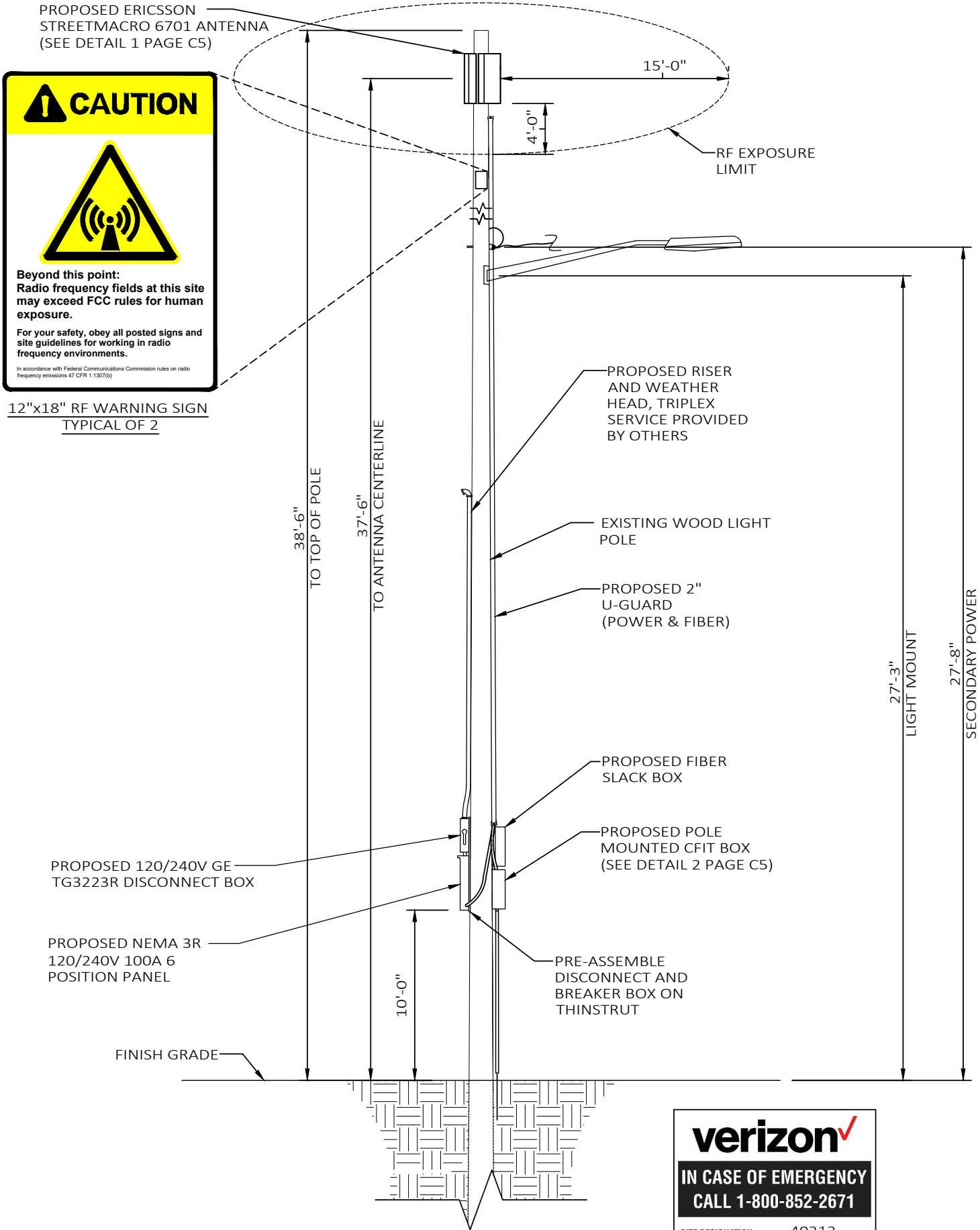


SITE NAME:
40213
COUNTY:
WASHTENAW
LATITUDE:
42° 14' 41.424" N
LONGITUDE:
83° 37' 3.432" W
DESIGN TYPE:
COLOCATION

SHEET TITLE:
SITE LAYOUTS

DRAWING NO.	REVISION:
C1	0

CONTRACTOR TO OBTAIN
LATEST RFDS FROM VERIZON
PRIOR TO CONSTRUCTION.



INSTALL ON BREAKER PANEL

PREPARED FOR:

verizon

PREPARED BY:

**TeleCAD
Wireless**

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
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ENGINEER'S STAMP:

STATE OF MICHIGAN

STEPHEN
E. HUNT
ENGINEER
No.
6201054169

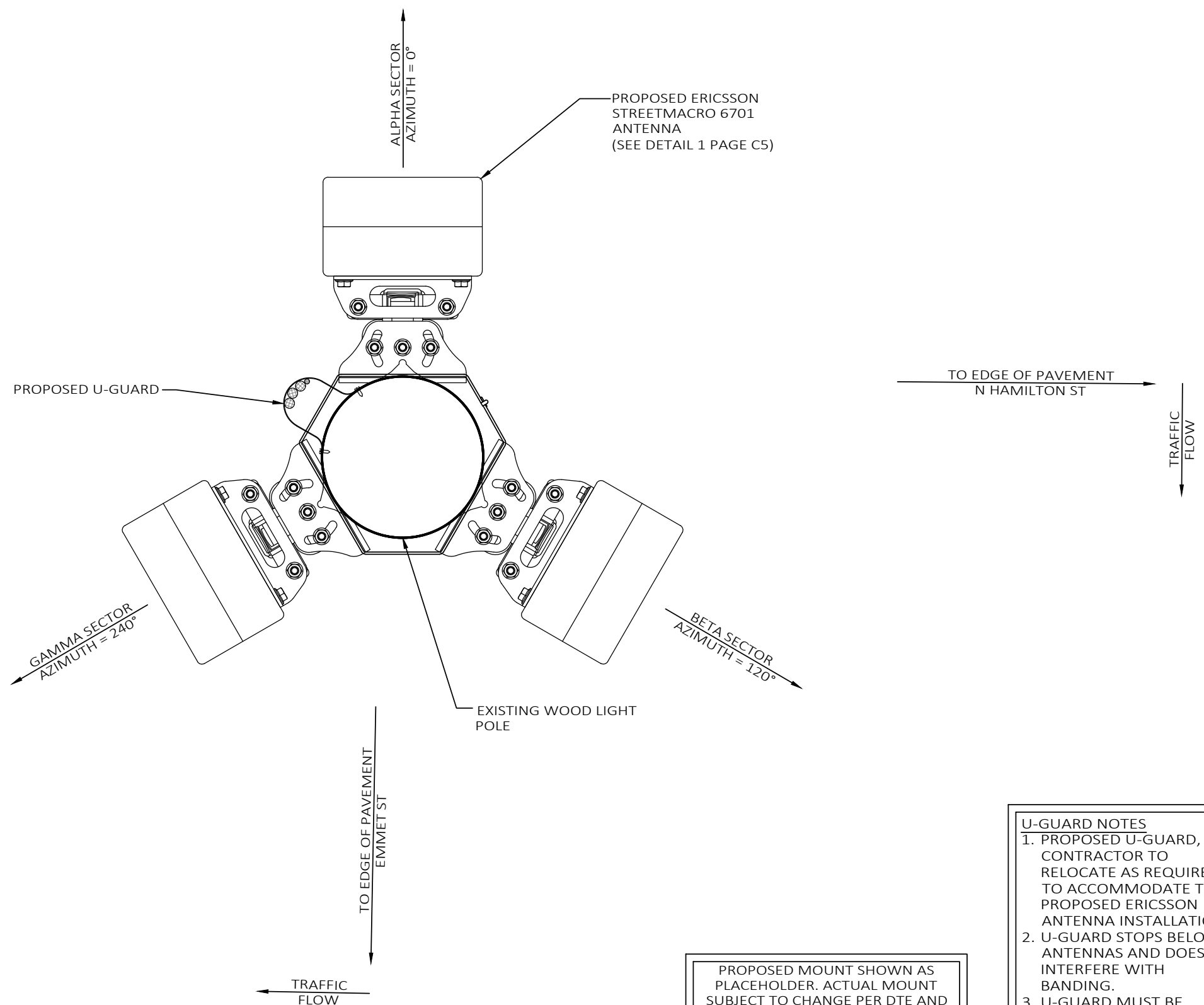
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SITE NAME:	
40213	
COUNTY:	
WASHTENAW	
LATITUDE:	
42° 14' 41.424" N	
LONGITUDE:	
83° 37' 3.432" W	
DESIGN TYPE:	
COLOCATION	
SHEET TITLE:	
POLE ELEVATION	
DRAWING NO.	REVISION:
C2	0

AZIMUTHS ARE SUBJECT TO CHANGE. CONTRACTOR TO VERIFY AZIMUTHS FROM FINAL RFDS FROM VZW. ANTENNA MOUNT TO BE SUPPLIED BY ERICSSON OR VERIZON. ANTENNA TO BE INSTALLED BY VERIZON CONTRACTOR.

CONTRACTOR TO OBTAIN LATEST RFDS FROM VERIZON PRIOR TO CONSTRUCTION.

INSTALL STRAIN RELIEF FOR POWER & FIBER CABLES AT OR NEAR ANTENNAS



PROPOSED MOUNT SHOWN AS PLACEHOLDER. ACTUAL MOUNT SUBJECT TO CHANGE PER DTE AND VERIZON FUTURE DISCUSSIONS

U-GUARD NOTES
1. PROPOSED U-GUARD, CONTRACTOR TO RELOCATE AS REQUIRED TO ACCOMMODATE THE PROPOSED ERICSSON ANTENNA INSTALLATION.
2. U-GUARD STOPS BELOW ANTENNAS AND DOES NOT INTERFERE WITH BANDING.
3. U-GUARD MUST BE RACEWAY CAPABLE.

PREPARED FOR:

PREPARED BY:

1961 NORTHPOINT BLVD, SUITE 130
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CTD

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SITE NAME:

40213

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 41.424" N

LONGITUDE:

83° 37' 3.432" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

ANTENNA LAYOUT

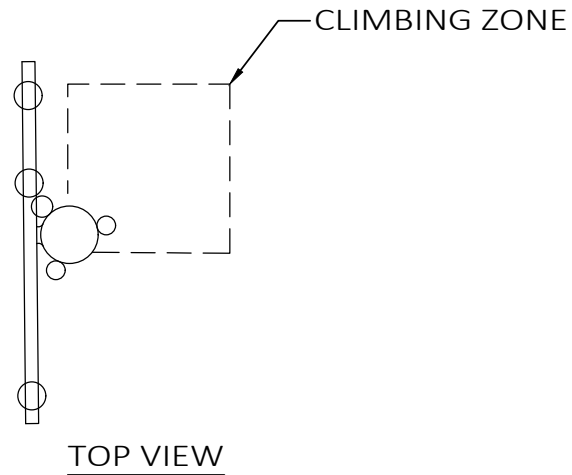
DRAWING NO.

C2A

REVISION:

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POLE ATTACHED EQUIPMENT	
EQUIPMENT	VOLUME (CU-FT)
STREET MACRO 6701 ANTENNA	0.46
STREET MACRO 6701 ANTENNA	0.46
STREET MACRO 6701 ANTENNA	0.46
TOTAL IN CU-FT	1.38



- NOTES:
1. WORKING CLEARANCE FROM ENERGIZED ANTENNA MUST BE GREATER THAN 4 FT, OTHERWISE SHUT DOWN RADIO AND ANTENNA PER INSTRUCTIONS ON PLACARD OR BY OPENING DISCONNECT SWITCH TO RADIO EQUIPMENT ON POLE.
 2. ANTENNA AND MOUNTING BRACKETS INSTALLED ABOVE DTE WIRES MUST BE INSTALLED AND MAINTAINED BY DTE OR DTE'S DESIGNATED CONTRACTOR.
 3. VERTICAL CLIMBING ZONE MUST BE MAINTAINED ON ALL POLES. (SEE TOP VIEW)
 4. BASE CABINET TO BE CLEARLY LABELED WITH OWNER'S NAME AND 1-800 PHONE NUMBER WITH 3/4" TALL LETTERING.
 5. SHUTDOWN PLACARD TO BE PLACED ON THE POLE NEAR BASE CABINET AND DISCONNECT SWITCH BOX.
 6. 5' FT MIN. CLEARANCE ABOVE ANY DTE EQUIPMENT.
 7. ANTENNA POLE TOP CLEARANCES APPLY TO ANY DTE EQUIPMENT OR WIRES INSTALLED UNDER THE ANTENNA.

REFERENCE DTE ENERGY
CELLULAR ANTENNA SMALL CELL SITE CONSTRUCTION
LINE CONSTRUCTION STANDARDS 4-JOINT USE 1-4-26.1
DATED 11/1/2017

PREPARED FOR:



PREPARED BY:

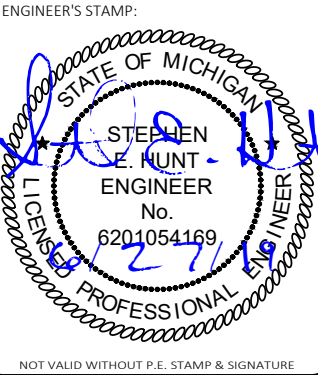


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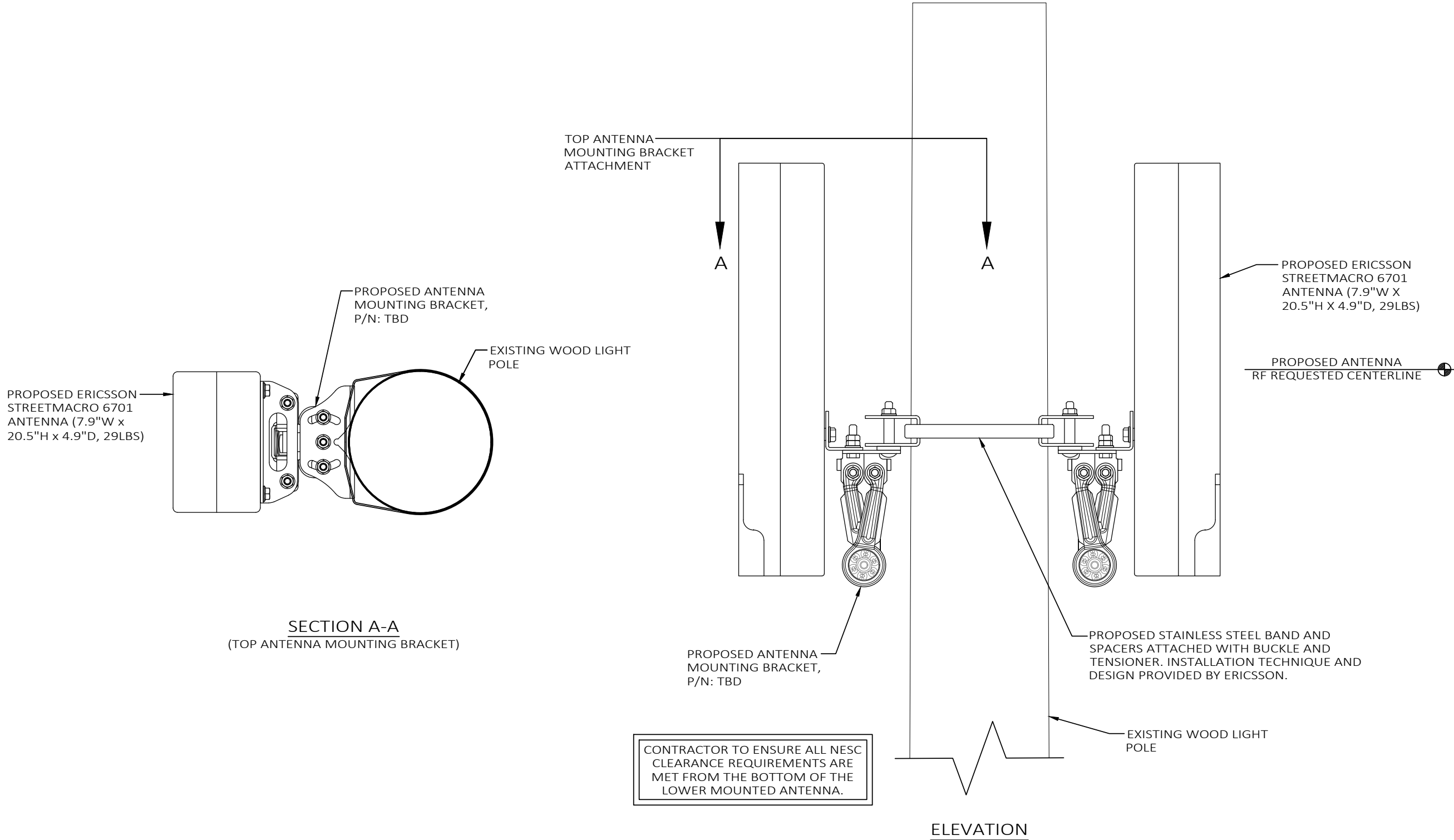
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CHECKED BY:	CTD

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NO.	DATE	BY	DESCRIPTION



SITE NAME:	40213
COUNTY:	WASHTENAW
LATITUDE:	42° 14' 41.424" N
LONGITUDE:	83° 37' 3.432" W
DESIGN TYPE:	COLOCATION
SHEET TITLE:	DTE NOTES
DRAWING NO.	REVISION:
C3	0



PREPARED FOR:



PREPARED BY:



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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NO.	DATE	BY	DESCRIPTION	

ENGINEER'S STAMP:

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SITE NAME:
40213

COUNTY:
WASHTENAW

LATITUDE:
42° 14' 41.424" N

LONGITUDE:
83° 37' 3.432" W

DESIGN TYPE:
COLOCATION

SHEET TITLE:
SITE DETAILS

DRAWING NO. C4	REVISION: 0
-------------------	----------------

Spectrum:

IBW

OBW

EIRP

28 GHz

Full band

800 MHz

~ 55 dBm

of Users:

Total Antenna BW:

Throughput:

RI ports:

TN/IDLports:

Misc:

2,000+

1600 MHz

5 Gbps DL/ 1 Gbps UL

2

2

4xExternal Alarms, USB connector
PoE, GPS, 1588 Synch

Weight:

Size:

Operational conditions:

Cooling:

Power:

IP Class:

~ 13 kg (29 lbs)

20,5"x4,9"x7,9" (13 l)

-40 to +55 degrees

Active

AC, <300W Max

IP 65

Ericsson Confidential | 2018-03-15



20,5"x5"x8" Not to Exceed Dimensions

CFIT BOX

PART CODE: CFIT-C48D4LHXVZ

DESIGNED BY CHARLES INDUSTRIES



PRODUCT SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
HEIGHT (PANEL ONLY)	15 in.
DEPTH, BASE (FRONT TO BACK)	5.5 in.
WIDTH	12 in.
WEIGHT	4 lbs.
CONSTRUCTION	RUGGED UL94-5VA GRAY POLYCARBONATE
SUPPORTED FIBER CONNECTOR TYPES	SC, LC or MPO
COMPLIANCE	DESIGNED TO MEET GR-950, GR2898, NEMA 4, IP66
SPLICING CAPACITY	UP TO THREE (3) 4"x6" HINGED SPLICE TRAYS ON FEED FIBER SIDE.
BULKHEAD CAPACITY	24 SC ADAPTERS

PREPARED FOR:



PREPARED BY:

TeleCAD
Wireless

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
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ENGINEER'S STAMP:

STATE OF MICHIGAN

STEPHEN E. HUNT
ENGINEER
No. 6201054169

LICENSED PROFESSIONAL ENGINEER

NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:

40213

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 41.424" N

LONGITUDE:

83° 37' 3.432" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

EQUIPMENT DETAILS

DRAWING NO.

C5

REVISION:

0

ELECTRICAL NOTES:

- 1. PROVIDE AND INSTALL WARNING TAPE FOR ELECTRIC SERVICE CONDUIT 12" BELOW GRADE.
- 2. CONTRACTOR TO PAY FOR THE SERVICE AS DIRECTED BY THE MUNICIPALITY.
- 3. CONTRACTOR TO USE PVC SCH 40 CONDUIT WHERE CONDUITS CROSS ACCESS ROADS.
- 4. CONTRACTOR SHALL COORDINATE WITH ELECTRIC AND TELEPHONE UTILITY COMPANIES FOR SERVICES.
- 5. CONTRACTOR TO PAY ALL FEES FOR SERVICES REQUIRED.
- 6. CONTRACTOR TO BE ADVISED THAT EXISTING UNDERGROUND CONDUITS, GROUND CABLES EXIST. DIG WITH CAUTION.
- 7. CONTRACTOR TO VERIFY POWER AND TELCO LB LOCATIONS AND FLEX CONDUIT SIZE AND ROUTING TO THE EQUIPMENT SHELTER WITH MANUFACTURER'S DRAWINGS.
- 8. OPEN CUT CONSTRUCTION THROUGH EXISTING PAVEMENT, I.E. ROADWAYS, PARKING AREAS, SIDEWALKS WILL NOT BE ALLOWED. CONSTRUCTION UNDER EXISTING PAVEMENTS WILL BE REQUIRED TO BE INSTALLED WITH DIRECTIONAL BORING TECHNIQUE.

UTILITY NOTES:

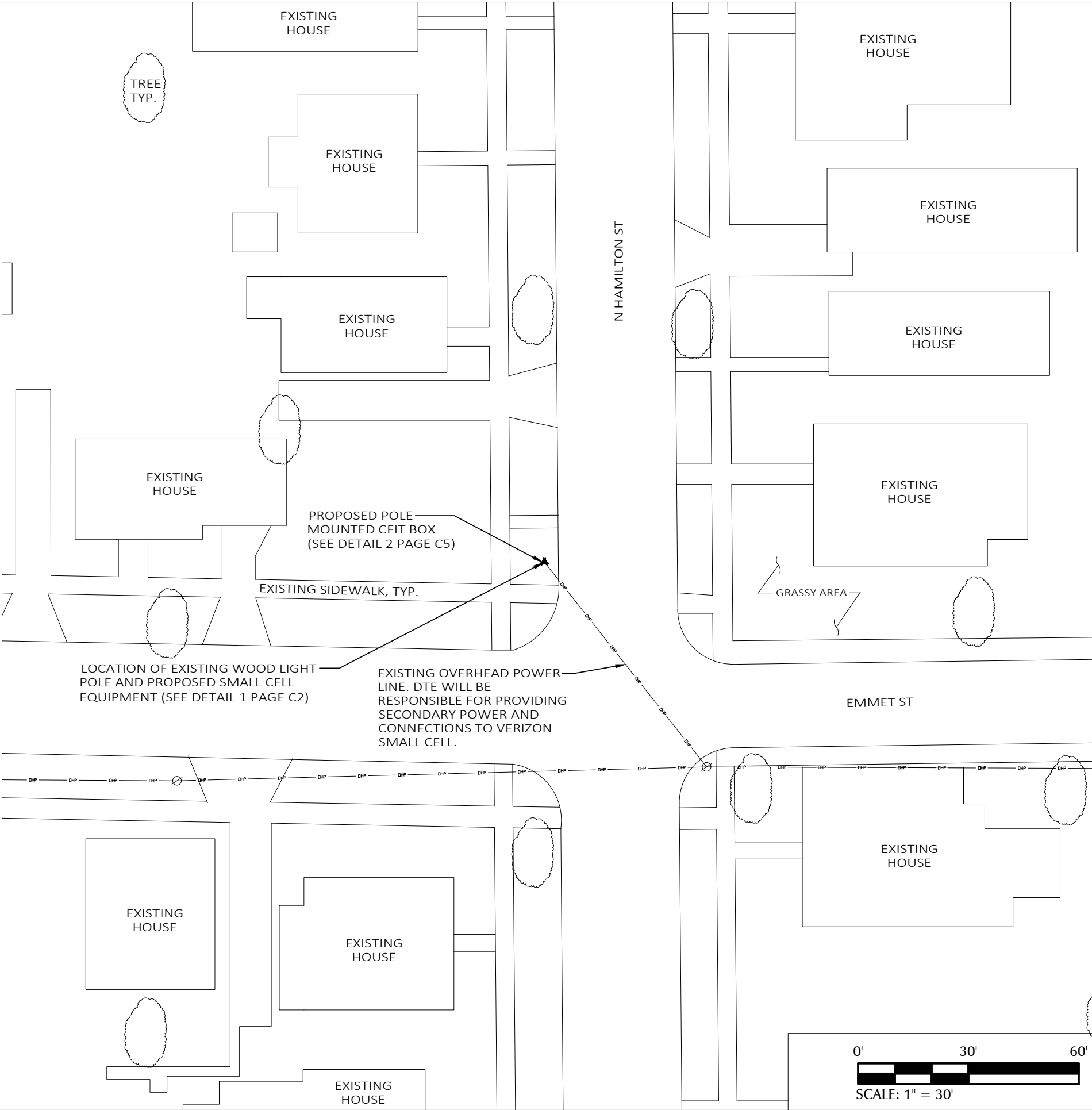
- 1. ALL POWER CONDUITS ABOVE GRADE, SWEEPS, & ELBOWS TO BE PVC SCH 40.
- 2. INSTALL PULL STRING IN TELCO CONDUIT.

STANDARD POWER SUPPLY FOR THE SMALL CELL NODES IS A 100 AMP 120/240 VOLT SINGLE PHASE SERVICE

SERVICE CONDUCTOR MAXIMUM DISTANCE CHART (BASED ON 80 AMP MAX. CONTINUOUS LOAD)			
WIRE SIZE	ALUMINUM 120V	COPPER 120V	CONDUIT SIZE
3 AWG	55'	90'	3/4" MIN
2 AWG	70'	115'	3/4" MIN
1 AWG	85'	145'	3/4" MIN
1/0 AWG	110'	180'	1" MIN
2/0 AWG	140'	230'	1" MIN
3/0 AWG	175'	290'	1 1/4" MIN
4/0 AWG	220'	365'	1 1/4" MIN
250 KCMIL	265'	435'	1 1/4" MIN
300 KCMIL	315'	520'	1 1/2" MIN
350 KCMIL	370'	610'	1 1/2" MIN
400 KCMIL	420'	695'	2" MIN
500 KCMIL	530'	870'	2" MIN

LEGEND

UNDERGROUND POWER	USP	CATCH BASIN	
OVERHEAD POWER	DHP	IRON PIN SET (IPF) 3/8" REBAR	
OVERHEAD UTILITIES	DHU	IRON PIN FOUND (IPF)	
UNDERGROUND TELCO	UGT	BENCHMARK	
OVERHEAD TELCO	DHT	CONCRETE MON. FOUND	
GAS LINE	GAS	CONCRETE MON. SET	
FENCE	X	UTILITY POLE	
SEWER LINE	SVR	LIGHT POLE	
WATER LINE	VTR	WATER VALVE	
COAX CABLE	C	MANHOLE	
HYBRID CABLE	HYB	GAS VALVE	
HIGH VOLTAGE POWER	HVP	FIRE HYDRANT	
FIBER	FBR	TELCO PEDESTAL	
RIGHT-OF-WAY	RDW	ELECTRICAL PULL BOX	
PROPERTY LINE	PL		
EDGE OF PAVEMENT	EDP		



PREPARED FOR:



PREPARED BY:

TeleCAD Wireless
1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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CHECKED BY:	CTD

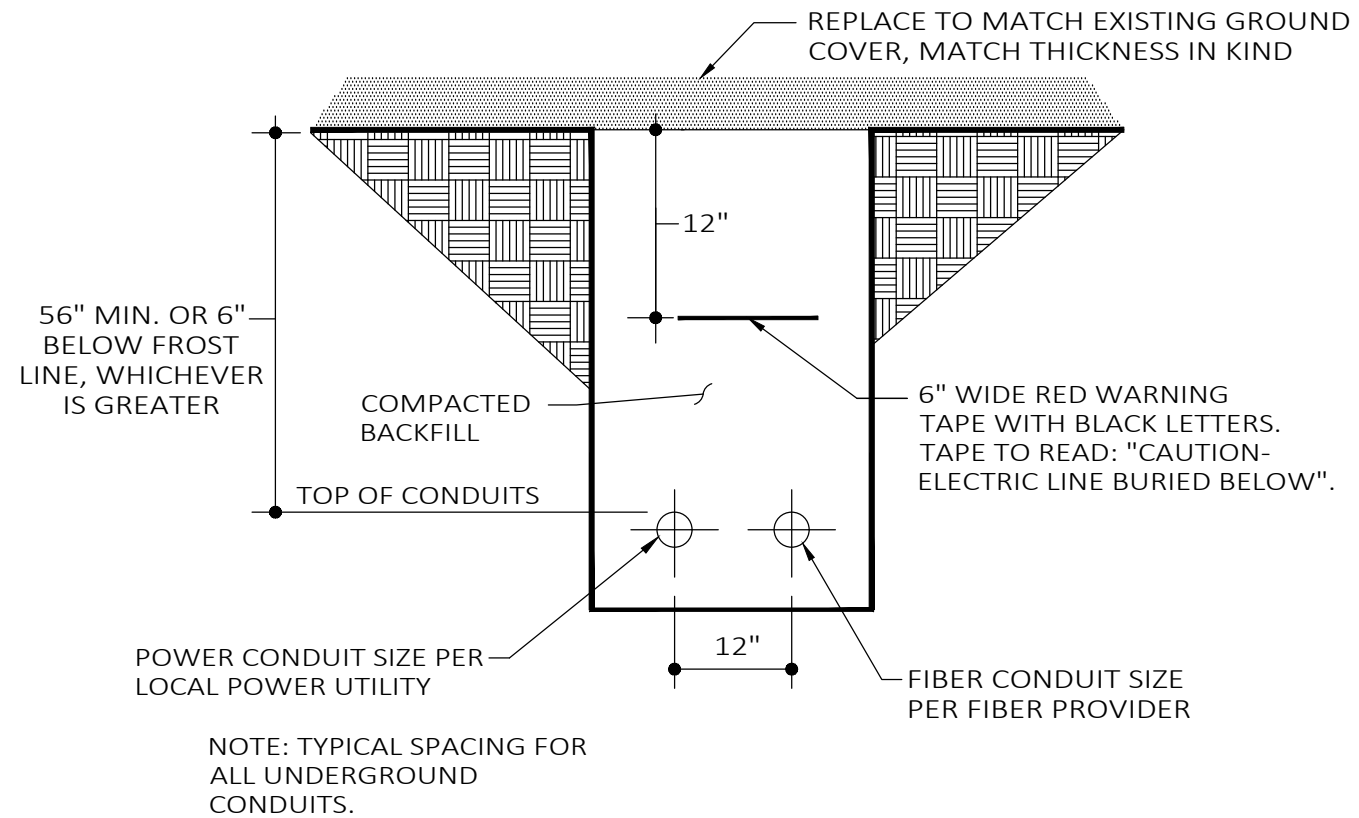
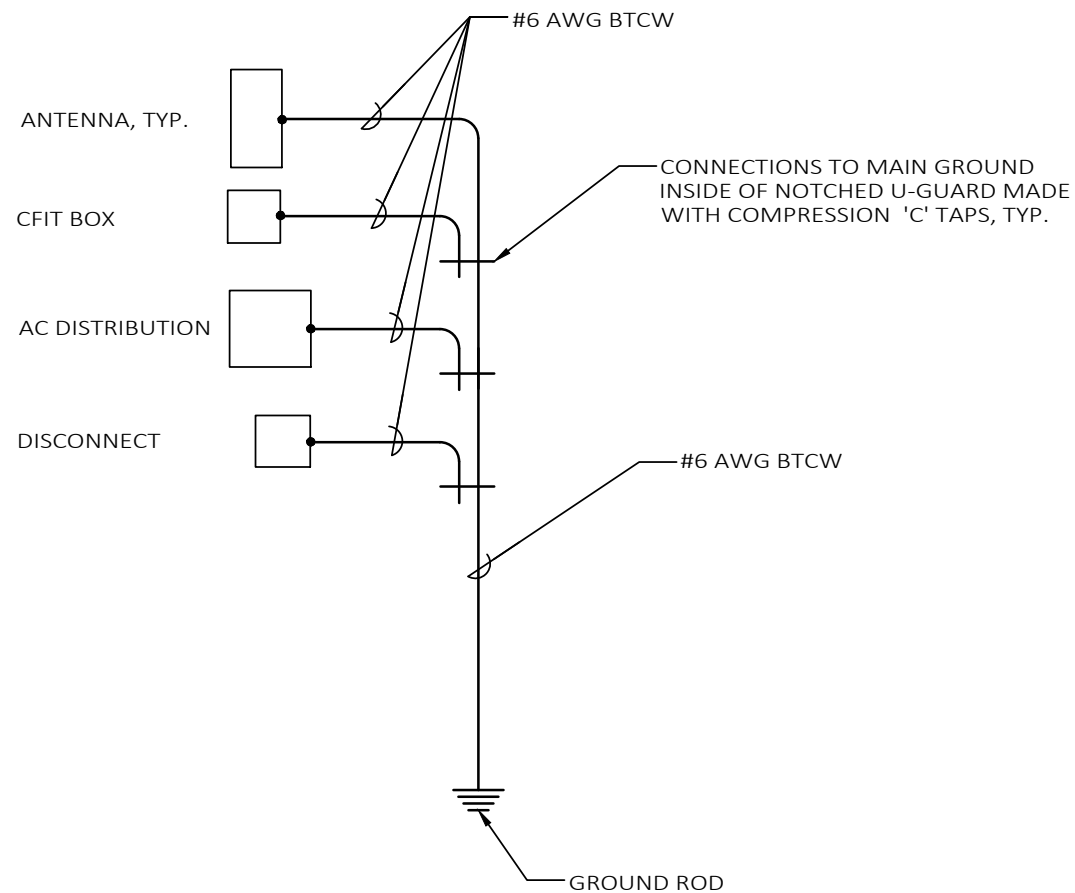
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A	06/19/19	AJD	PRELIMINARY REVIEW
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ENGINEER'S STAMP:
STATE OF MICHIGAN
STEPHEN E. HUNT
ENGINEER
No. 6201054169
LICENSED PROFESSIONAL ENGINEER
NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME: 40213
COUNTY: WASHTENAW
LATITUDE: 42° 14' 41.424" N
LONGITUDE: 83° 37' 3.432" W
DESIGN TYPE: COLOCATION

SHEET TITLE: UTILITY SITE PLAN

DRAWING NO. E1
REVISION: 0



PREPARED FOR:

verizon

PREPARED BY:

TeleCAD Wireless

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

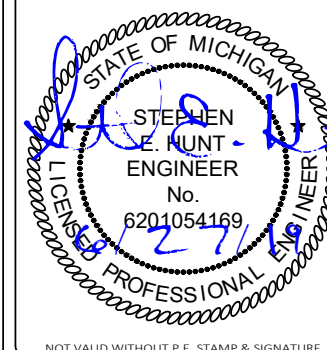
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DRAWN BY: AJD
CHECKED BY: CTD

REVISIONS

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LONGITUDE:
83° 37' 3.432" W
DESIGN TYPE:
COLOCATION

SHEET TITLE:
ELECTRICAL DETAILS

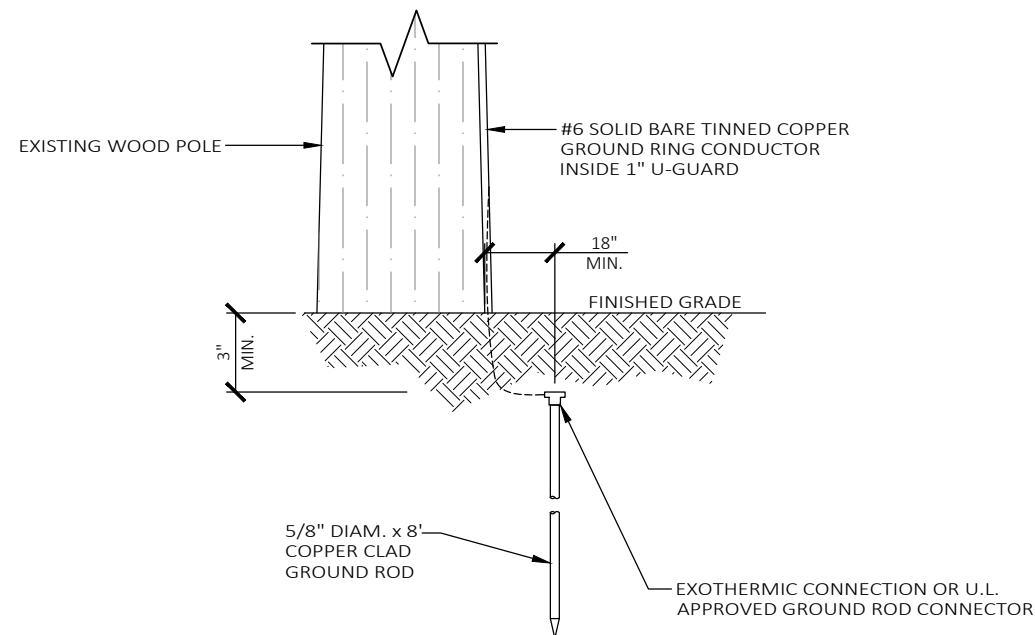
DRAWING NO. E2
REVISION: 0

1 SINGLE POINT RADIAL GROUND DETAIL

N.T.S.

2 TRENCH DETAIL (IF REQUIRED)

N.T.S.



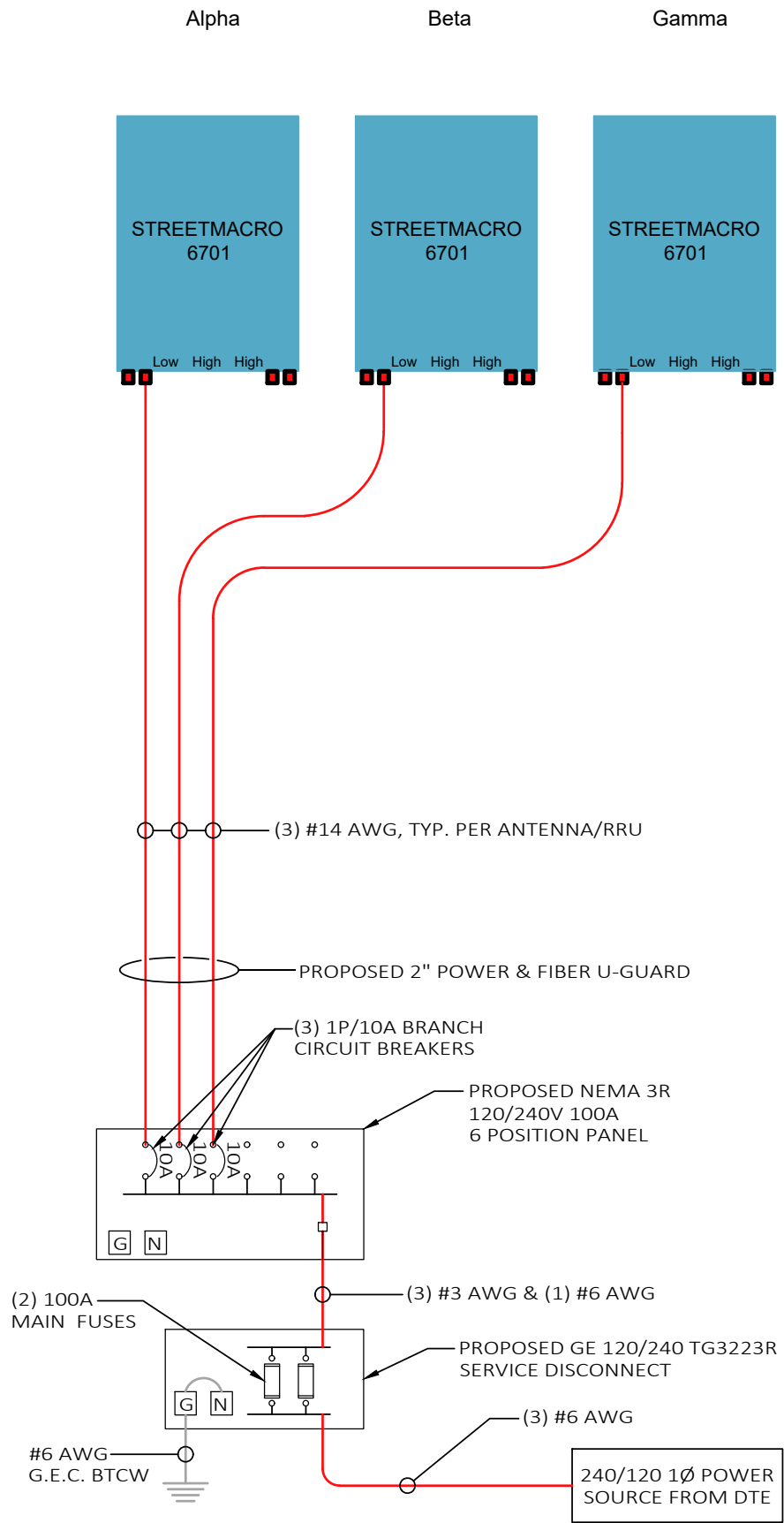
3 GROUND ROD DETAIL

N.T.S.

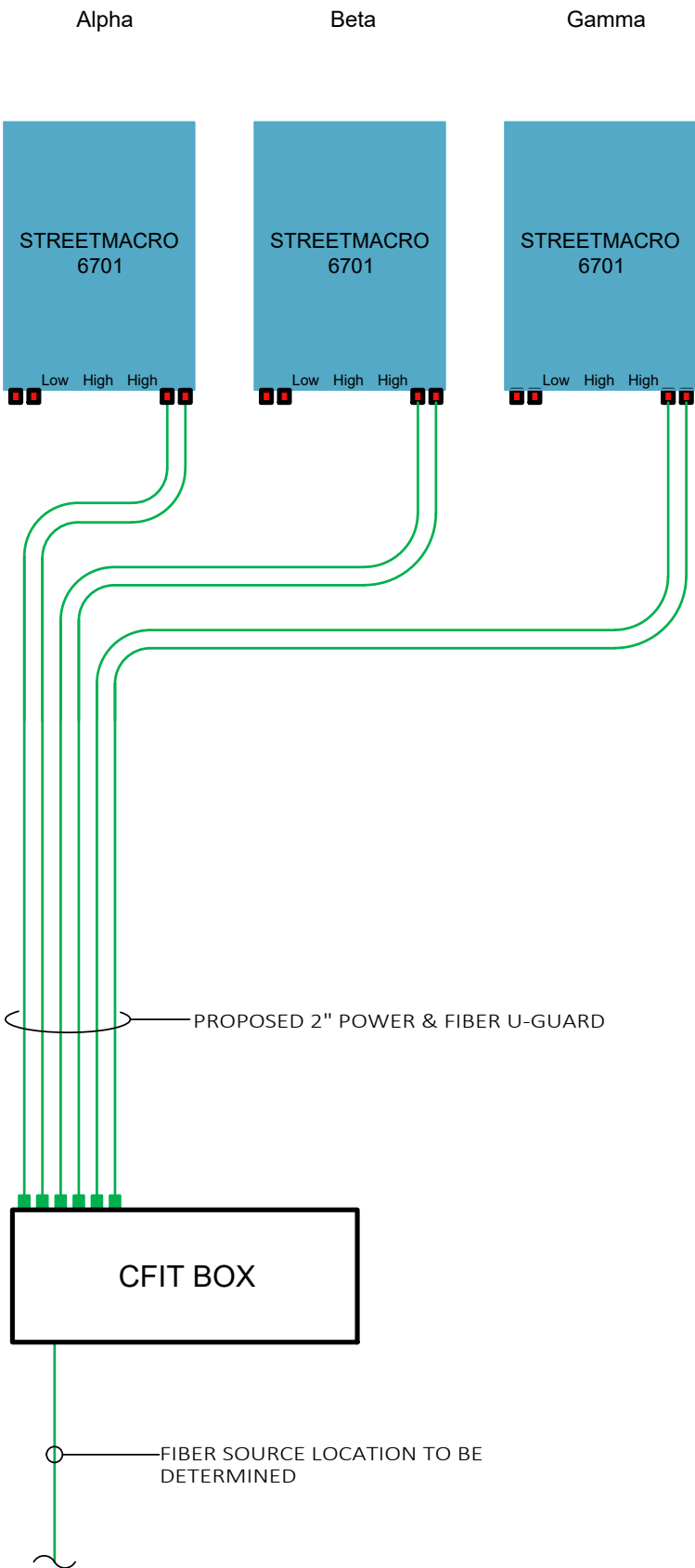
4 DETAIL NOT IN USE

N.T.S.

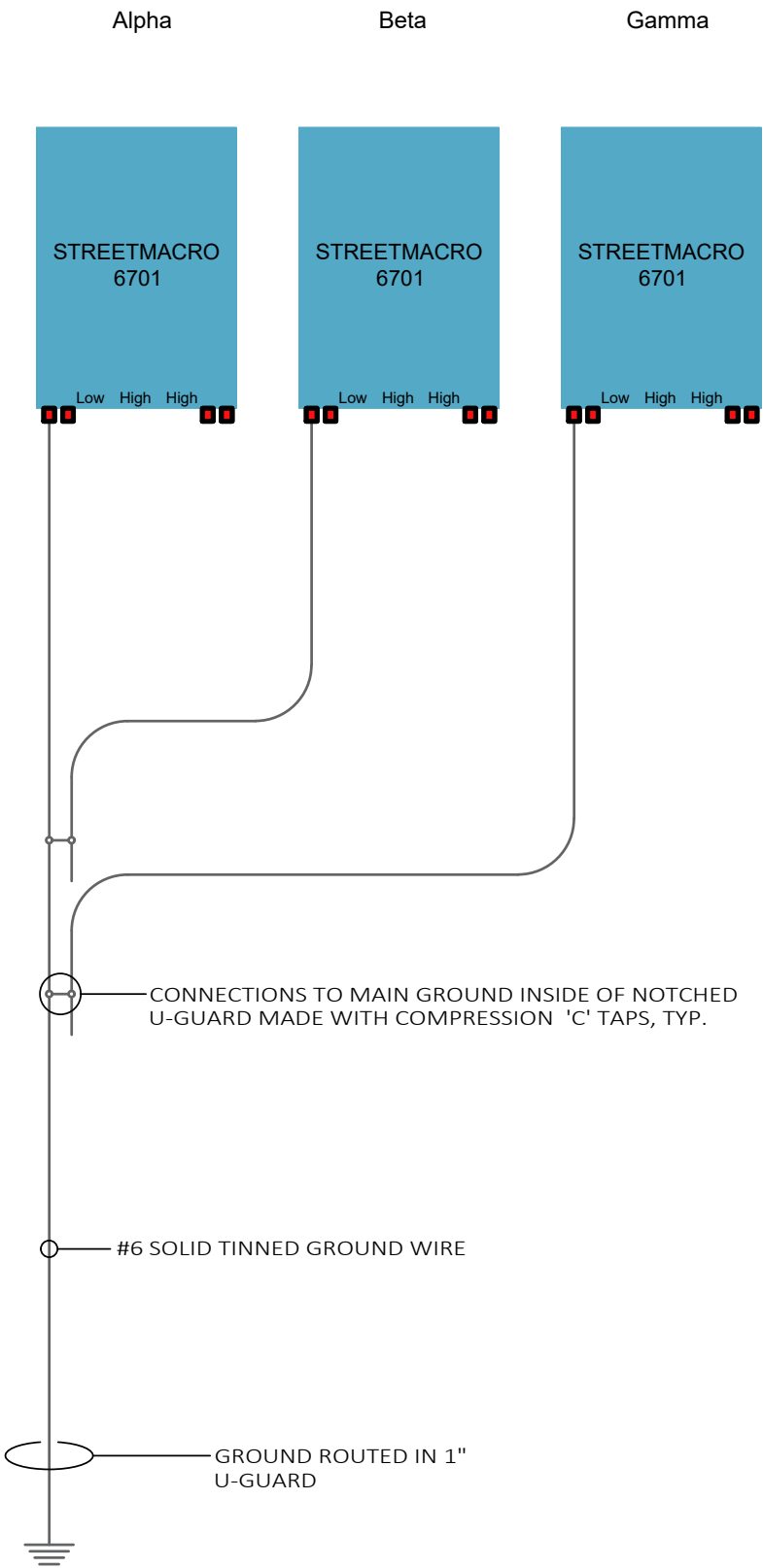
POWER ROUTING



FIBER ROUTING



GROUND ROUTING



PREPARED FOR:



PREPARED BY:



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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DRAWN BY:

AJD

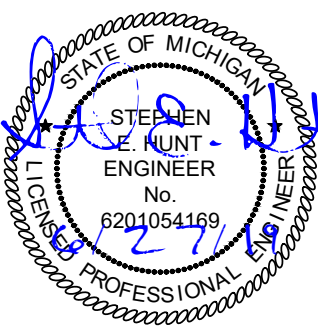
CHECKED BY:

CTD

REVISIONS

NO.	DATE	BY	DESCRIPTION
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	AJD	PRELIMINARY REVIEW

ENGINEER'S STAMP:



NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:

40213

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 41.424" N

LONGITUDE:

83° 37' 3.432" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

SINGLE LINE DIAGRAM

DRAWING NO.

E3

REVISION:

0



10845 Olive Boulevard, Suite 260, Saint Louis, Missouri 63141 - 314.997.6111 - www.trileaf.com

January 6, 2020

Economic & Community Development

Attn: Mr. Scott Slagor - Preservation Planner
1 South Huron Street, 3rd Floor
Ypsilanti, MI 48197
Phone: 734-483-9646
Email: sslagor@cityofypsilanti.com

RE: **Cellco Partnership and its controlled affiliates doing business as Verizon Wireless (Verizon Wireless) – 40214_ANN ARBOR EAST_5G - A/ Client #616381842 – Trileaf Project #658947**
401 North Adams Street, Ypsilanti, MI 48197
Washtenaw County, Ypsilanti East Quadrangle (USGS)
Latitude: 42° 14' 45.2436" N, Longitude: 83° 36' 58.1436" W

Dear Mr. Slagor:

Trileaf Corporation is in the process of completing a Section 106 review at the referenced property. Our client proposes to construct a 38.5-foot tall utility pole communications tower, which will support three (3) small cell antennas and associated equipment. The proposed development is located within a maintained grass public right-of-way. The antenna will be licensed by the Federal Communications Commission (FCC).

Our investigation includes determining if the site is contained in, on or within the viewshed of a building, site, district, structure or object, significant in American history, architecture, archaeology, engineering or culture, that is listed, or eligible for listing on the State or National Registers of Historic Places, or located in or on an Indian Religious Site.

Trileaf is requesting information regarding this tower's potential effect on Historic Properties. All information received will be forwarded to the State Historic Preservation Office (SHPO) as part of the Section 106 review process. *Additionally, this invitation to comment is separate from any local planning/zoning process that may apply to this project.*

If you wish to comment or be considered a consulting party, please respond within thirty (30) days of the date of this letter. If a response is not received within thirty (30) days, it will be assumed that you have no objections to this undertaking. A site topography map and aerial photograph are enclosed for your reference.

Please call me at (314) 997-6111 or email c.unnerstall@trileaf.com if you need additional information or have any questions. Thank you for your assistance in this regard.

Sincerely,

Colleen Unnerstall
Project Scientist II

Ypsilanti East Quadrangle, Michigan (2019)

Contour Interval = 5 Feet

Latitude: 42° 14' 45.2436" N, Longitude: 83° 36' 58.1436" W

Township: T3S Range: R7E Section: S4



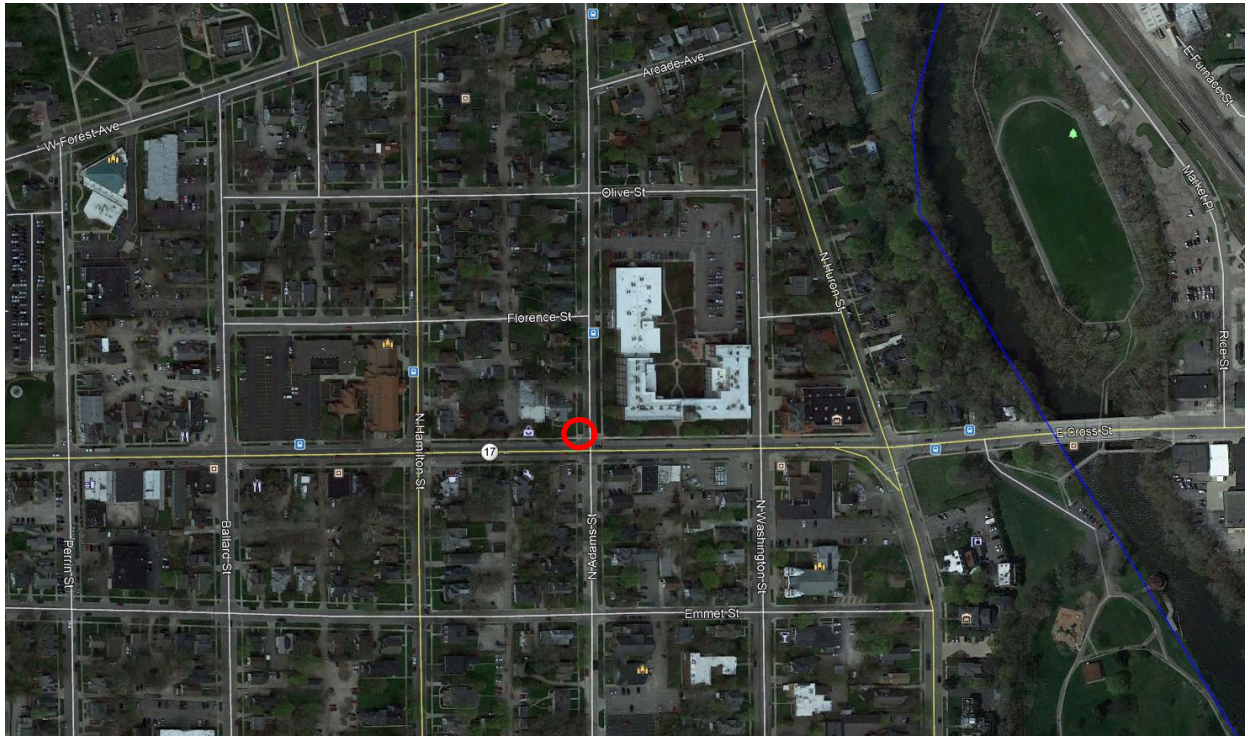
North



Site Vicinity Map

Verizon Wireless – 40214_ANN ARBOR EAST_5G - A
401 North Adams Street
Ypsilanti, MI 48197





Site Location & Surrounding Properties



Site Location

Aerial Photographs (2019)

Verizon Wireless – 40214_ANN ARBOR EAST_5G - A
 401 North Adams Street
 Ypsilanti, MI 48197



GENERAL NOTES

1. THESE NOTES SHALL BE CONSIDERED A PART OF THE WRITTEN SPECIFICATIONS.
2. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED IN THE CONTRACT DOCUMENTS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTOR(S) SHALL VISIT THE JOB SITE(S) AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED PER THE CONTRACT DOCUMENTS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER.
4. THE CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED ON ANY WORK NOT CLEARLY DEFINED OR IDENTIFIED IN THE CONSTRUCTION DOCUMENTS BEFORE STARTING ANY WORK.
5. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES INCLUDING APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. IF THESE RECOMMENDATIONS ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS AND/OR APPLICABLE CODES OR REGULATIONS, REVIEW THE CONFLICT FOR DIRECTION WITH THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES AND FOR COORDINATION OF ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION TEAM AND WITH THE AUTHORIZED REPRESENTATIVE OF ANY OUTSIDE POLE OR PROPERTY OWNER. (BASE COMMANDER OR AUTHORIZED AGENT)
8. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, VEGETATION, GALVANIZED SURFACE OR OTHER EXISTING ELEMENTS AND UPON COMPLETION OF THE WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF EXTENT.
9. KEEP THE GENERAL AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION DAILY.
10. PLANS ARE INTENDED TO BE DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED UNLESS OTHERWISE NOTED. RELY ONLY ON ANNOTATED DIMENSIONS AND REQUEST INFORMATION IF ADDITIONAL DIMENSIONS ARE REQUIRED.
11. THE EXISTENCE AND LOCATION OF UTILITIES AND OTHER AGENCY'S FACILITIES ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. OTHER FACILITIES MAY EXIST BEYOND WHAT IS NOTED. CONTRACTOR SHALL VERIFY LOCATIONS PRIOR TO START OF CONSTRUCTION AND USE EXTREME CARE AND PROTECTIVE MEASURES TO PREVENT DAMAGE TO THESE FACILITIES. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF UTILITIES OR OTHER AGENCY'S FACILITIES WITHIN THE LIMITS OF THE WORK, WHETHER THEY ARE IDENTIFIED IN THE CONTRACT DOCUMENTS OR NOT.
12. ALL MOUNTING HARDWARE SUCH AS BOLTS, NUTS, LAG SCREWS, CLEVIS, CONDUIT STRAPS, STAPLES, (ANYTHING EXPOSED AND CONNECTING EQUIPMENT TO THE POLE SHALL BE HOT DIPPED GALVANIZED, UNLESS OTHERWISE STATED)

DEFINITIONS

1. "TYPICAL" OR "TYP." MEANS THAT THIS ITEM IS VIRTUALLY IDENTICAL ACROSS SIMILAR CONDITIONS. "TYP." SHALL BE UNDERSTOOD TO MEAN "TYPICAL WHERE OCCURS" AND SHALL NOT BE CONSIDERED AS WITHOUT EXCEPTION OR CONSIDERATION OF SPECIFIC CONDITIONS.
2. "SIMILAR" MEANS COMPARABLE TO CHARACTERISTICS FOR CONDITION NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLAN.
3. "AS REQUIRED" MEANS AS REQUIRED BY REGULATORY REQUIREMENTS BY REFERENCED STANDARDS, BY EXISTING CONDITIONS, BY GENERALLY ACCEPTED CONSTRUCTION PRACTICE OR BY THE CONTRACT DOCUMENTS.
4. "ALIGN" MEANS ACCURATELY LOCATE FINISH FACES OF MATERIALS IN THE SAME PLANE.
5. THE TERM "VERIFY" OR "V.I.F" SHALL BE UNDERSTOOD TO MEAN VERIFY IN FIELD WITH ARCHITECT AND REQUIRES THAT THE CONTRACTOR CONFIRM INTENTION REGARDING NOTED CONDITION AND PROCEED ONLY AFTER RECEIVING DIRECTION.
6. WHERE THE WORDS "OR EQUAL" OR WORDS OF SIMILAR INTENT FOLLOW A MATERIAL SPECIFICATION, THEY SHALL BE UNDERSTOOD TO REQUIRE SIGNED APPROVAL OF ANY DEVIATION TO SAID SPECIFICATION PRIOR TO CONTRACTOR'S ORDERING OR INSTALLATION OF SUCH PROPOSED EQUAL PRODUCT.
7. FURNISH: SUPPLY ONLY, OTHERS TO INSTALL. INSTALL: INSTALL ITEMS FURNISHED BY OTHERS. PROVIDE: FURNISH AND INSTALL.

PROJECT SPECIFIC NOTES

1. THIS SET IS PROVIDED TO ILLUSTRATE THE EXPECTED SCOPE OF DRAWINGS, QUALITY OF DRAWINGS AND EXTENT GRAPHIC STANDARDS. NOTES ARE FOR A&E CONTRACTOR REFERENCE TO HELP CLARIFY THE SCOPE. ADDITIONAL DRAWINGS MAY BE REQUIRED TO MEET THE REQUIREMENTS OF A GIVEN BASE. ALL EXAMPLES SHOWN ARE FOR REFERENCE ONLY AND ANY NOTES, DETAILS, CALCULATIONS OR OTHER WORK NEEDS TO BE COMPLETED OR CONFIRMED BY THE CONTRACTOR GENERATING THE DRAWINGS IN CONSTRUCTION DOCUMENTS.
2. THIS SET IS TO BE PRINTED AT 11" x 17". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THIS SIZE IS ACCEPTABLE BY THE BASE AND TO PROVIDE A LARGER STANDARD SIZE IF REQUIRED.
3. IT IS THE RESPONSIBILITY OF THE ENGINEER TO CONFIRM ALL WORK SHOWN IS IN COMPLIANCE WITH BASE AND FEDERAL CODES. DRAWINGS SHOWN WITHIN THIS SET ARE SAMPLES AND MAY NOT REFLECT ALL OF THE REQUIRED ELEMENTS, CLEARANCES OR OTHER ITEMS OF ASSEMBLIES NEEDED TO BE CODE COMPLIANT IN THE PARTICULAR MUNICIPALITY THE NODE IS LOCATED WITHIN.

GROUND CONSTRUCTION NOTES:

1. 120/240V POWER REQUIRED FOR 3-WIRE SERVICE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH FEDERAL STANDARDS AND REGULATIONS AS WELL AS NEC.
3. CALL MICHIGAN ONE CALL 72 HOURS PRIOR TO EXCAVATING AT (800) 482-7171.
4. ALL LANDSCAPING TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
5. ALL EQUIPMENT TO BE BONDED.
6. METERING CABINET (IF INSTALLED) REQUIRES 3' CLEARANCE AT DOOR OPENING.

STANDARD GROUNDING NOTES:

1. GROUND TESTED AT 25 OHMS OR LESS.
2. 5/8" x 8' RODS, CAD WELD OR UL LISTED DIRECT BURY CLAMP BELOW GRADE.
3. #6 GROUND AND BOND WIRE.
4. MOLDING, STAPLED EVERY 1' AND AT EACH END.
5. GROUND RODS 18" FROM POLE.

STANDARD CONDUIT NOTES:

1. FOR UNDERGROUND CONDUIT AND ABOVE GRADE RISERS USE SCHEDULE 40.
2. IF DIRECTIONAL BORING PLACE 1-1/4" SDR-11 GRAY CONDUIT FOR UNDERGROUND POWER APPLICATIONS.
3. IF TRENCHING, PLACE PVC SCH 40 CONDUIT PER TABLE ON SHEET E1 FOR UNDERGROUND POWER APPLICATIONS.
4. RISERS TO BE ATTACHED TO POLE WITH STANDARD STRAPS AND LAG SCREWS.
5. RISER STRAPS TO BE INSTALLED EVERY 5'.
6. CONDUIT UNDER 1" MAY BE ATTACHED WITH GROUND WIRE MOLDING STAPLES.
7. ALL CONDUIT WILL BE PROOFED WITH A MANDREL AND EQUIPPED WITH PULL ROPE OR MULE TAPE.

STANDARD TRENCHING NOTES:

1. MAINTAIN 36" MINIMUM COVER FOR ELECTRICAL CONDUIT.
2. MAINTAIN 36" MINIMUM COVER FOR COMMUNICATION CONDUIT.
3. IN STREET SLURRY TO GRADE AND MILL DOWN 1-1/2" FOR AC CAP.
4. IN DIRT SLURRY 18" FROM GRADE AND FILL WITH 95% COMPACTION NATIVE SOIL FOR BALANCE.
5. PLACE WARNING TAPE IN TRENCH 12" ABOVE ALL CONDUITS AND #18 WARNING TAPE ABOVE GROUND EQUIPMENT.

UTILITY POLE CONSTRUCTION NOTES:

1. NO BOLT THREADS TO PROTRUDE MORE THAN 1/2".
2. FILL ALL HOLES LEFT IN POLE FROM REARRANGEMENT OF CLIMBERS.
3. ALL CLIMB STEPS NEXT TO CONDUIT SHALL HAVE EXTENDED STEPS.
4. CABLE NOT TO IMPEDE 15" CLEAR SPACE OFF POLE FACE.
5. 90° SHORT SWEEP UNDER ANTENNA ARM. ALL CABLES MUST ONLY TRANSITION ON THE INSIDE OR BOTTOM OF ARMS (NO CABLE ON TOP OF ARMS).
6. USE CABLE CLAMPS TO SECURE CABLE TO ARMS; PLACE 2" CARRIER ID TAGS ON BOTH SIDE OF ARMS.
7. USE 90° CONNECTOR AT CABLE CONNECTION TO ANTENNAS.
8. USE 1/2" CABLE ON ANTENNAS UNLESS OTHERWISE SPECIFIED.
9. FILL VOID AROUND CABLES AT CONDUIT OPENING WITH FOAM SEALANT TO PREVENT WATER INTRUSION.

VERIZON WIRELESS CONSTRUCTION NOTES:

1. CONTRACTOR IS TO FOLLOW THE MOST CURRENT VZW STANDARDS DOCUMENTS PROVIDED TO COMPLETE THIS INSTALLATION.
2. CONTRACTOR SHALL COMPLETE VZW PROVIDED "SMALL CELL SWEEP REPORT" WITH ALL INFORMATION FILLED IN ACCURATELY AND COMPLETELY.
3. CONTRACTOR TO REFER TO THE MOST CURRENT VZW STANDARDS FOR APPROVED "PIM" TEST EQUIPMENT AND GUIDELINES.
4. CONTRACTOR IS TO USE BATTERY POWERED "PIM" EQUIPMENT TO VALIDATE THE FINAL LOCATION OF THE JUMPER AND ANTENNA ARE FREE OF INTERNAL AND EXTERNAL "PIM" SOURCES.
5. CONTRACTOR SHALL PROVIDE AT LEAST ONE TECHNICAL LEAD THAT IS CERTIFIED AND PROFICIENT IN EXECUTING, INTERPRETING AND RECORDING "PIM" MEASUREMENTS.

PREPARED FOR:



PREPARED BY:

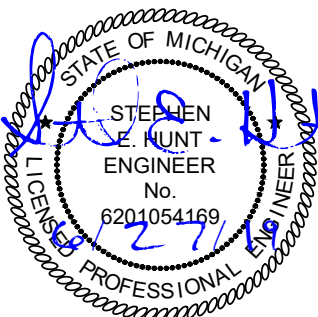


1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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DRAWN BY:	LA
CHECKED BY:	CTD

REVISIONS			
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	LA	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION

ENGINEER'S STAMP:


NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:

40214

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 45.24" N

LONGITUDE:

83° 36' 58.14" W

DESIGN TYPE:

COLOCATION

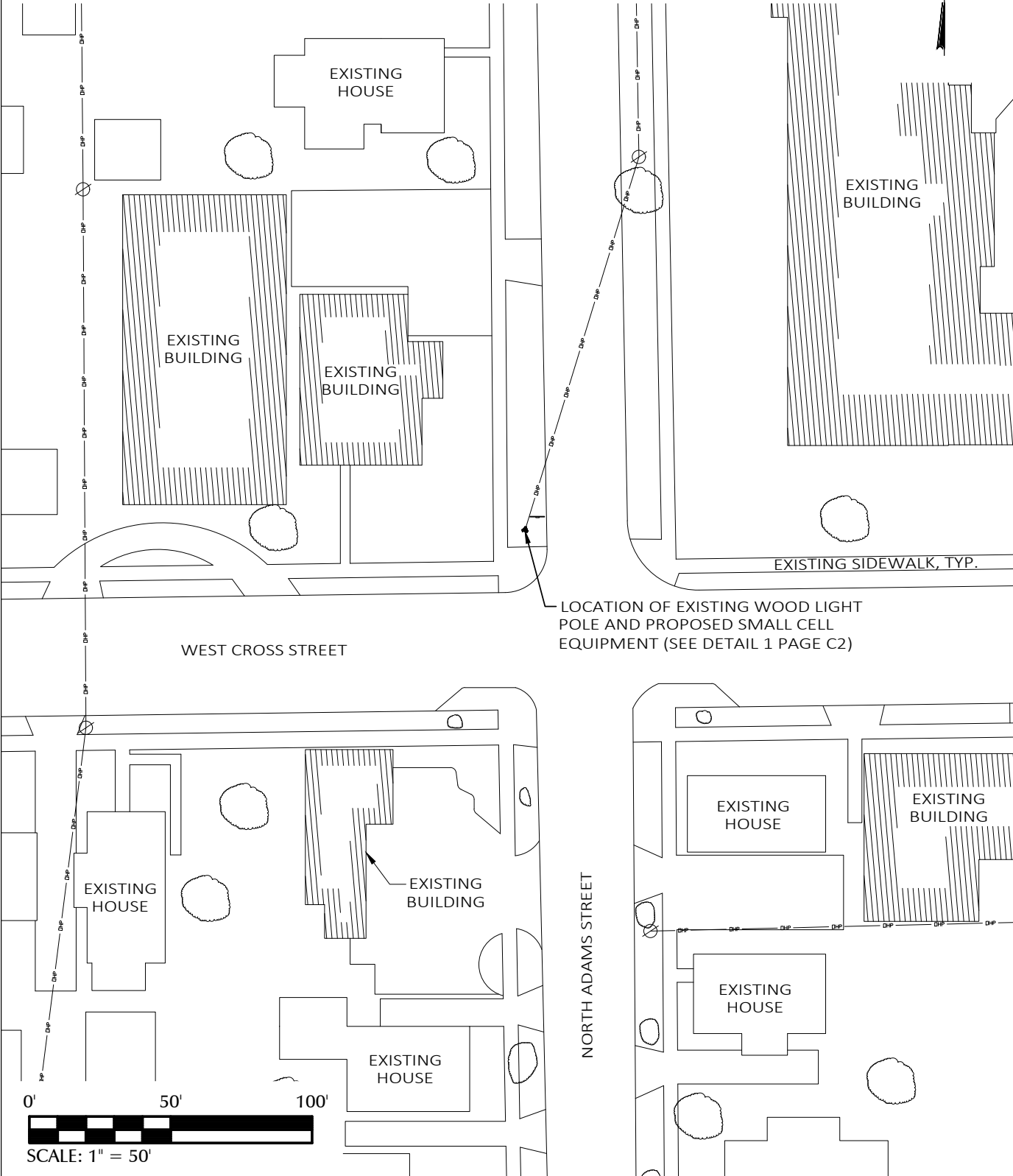
SHEET TITLE:

GENERAL NOTES

DRAWING NO. GN1	REVISION: 0
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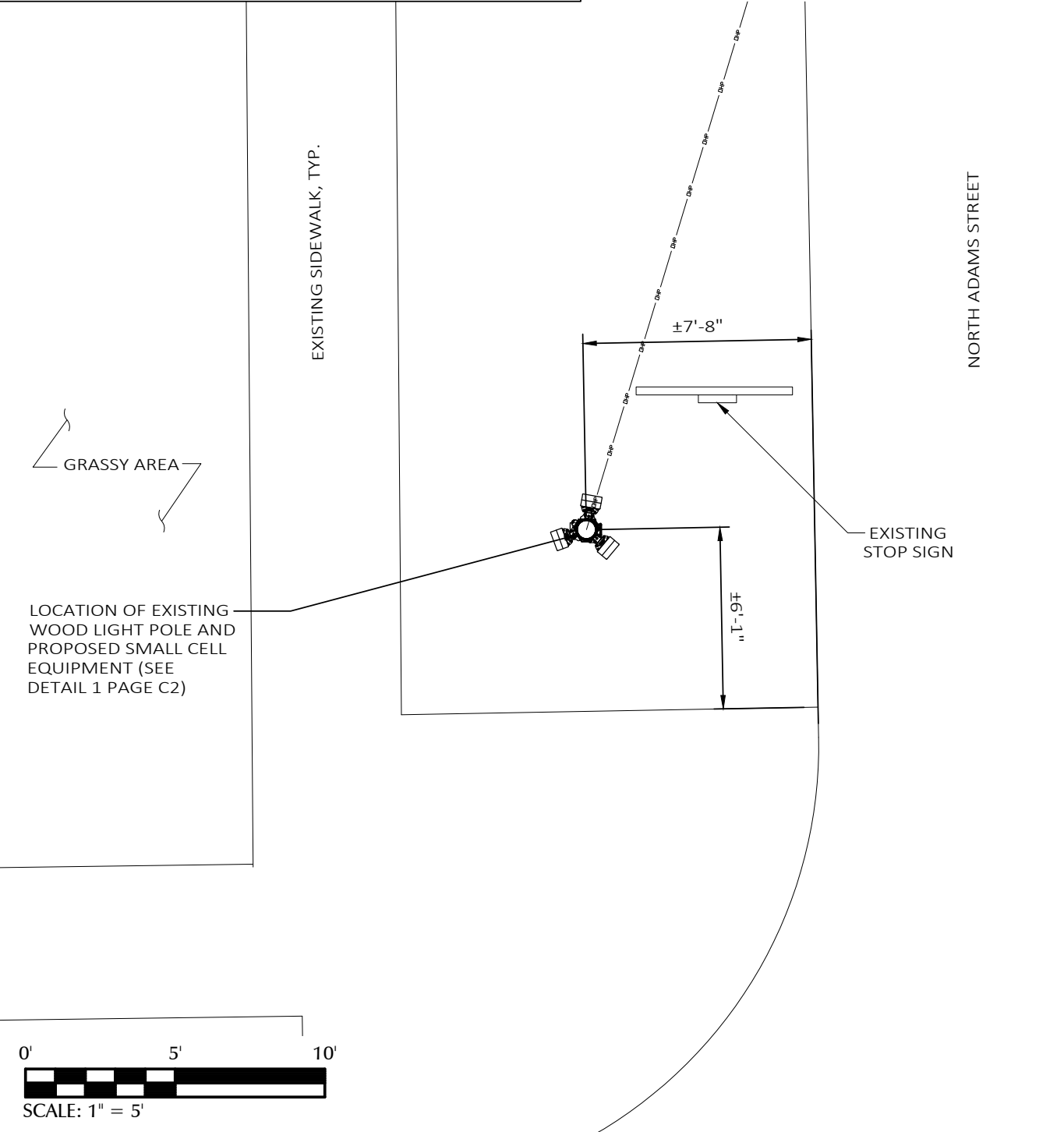
NOTES:

- 1. THIS DRAWING IS BASED ON AERIAL IMAGERY AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2. THE PROPOSED USE DOES NOT REQUIRE FULL OR PART TIME EMPLOYEES AT THE SITE.
- 3. FOR GENERAL SITE WORK NOTES, SEE SHEET GN1.
- 4. ALL NORTH ARROWS ON SITE PLANS ARE TRUE NORTH, UNLESS OTHERWISE SPECIFIED.
- 5. OPEN CUT CONSTRUCTION THROUGH EXISTING PAVEMENT, I.E. ROADWAYS, PARKING AREAS, SIDEWALKS WILL NOT BE ALLOWED. CONSTRUCTION UNDER EXISTING PAVEMENTS WILL BE REQUIRED TO BE INSTALLED WITH DIRECTIONAL BORING TECHNIQUE.



1 OVERALL SITE LAYOUT

LEGEND			
UNDERGROUND POWER	UGP	UGP	
OVERHEAD POWER	DHP	DHP	
OVERHEAD UTILITIES	DHU	DHU	
UNDERGROUND TELCO	UGT	UGT	
OVERHEAD TELCO	DHT	DHT	
GAS LINE	GAS	GAS	
FENCE	X	X	
SEWER LINE	SVR	SVR	
WATER LINE	VTR	VTR	
COAX CABLE	C	C	
HYBRID CABLE	HYB	HYB	
HIGH VOLTAGE POWER	HVP	HVP	
FIBER	FBR	FBR	
RIGHT-OF-WAY	RDW	RDW	
PROPERTY LINE	PL	PL	
EDGE OF PAVEMENT	EDP	EDP	
CATCH BASIN			
IRON PIN SET (IPF) 5/8" REBAR			
IRON PIN FOUND (IPF)			
BENCHMARK			
CONCRETE MON. FOUND			
CONCRETE MON. SET			
UTILITY POLE			
LIGHT POLE			
WATER VALVE			
MANHOLE			
GAS VALVE			
FIRE HYDRANT			
TELCO PEDESTAL			
ELECTRICAL PULL BOX			



2 ENLARGED SITE LAYOUT

PREPARED FOR:



PREPARED BY:



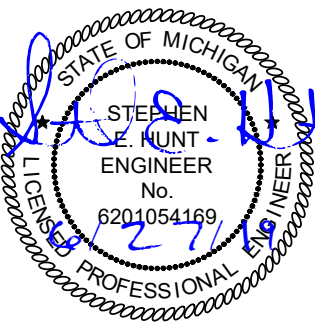
1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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DRAWN BY:	LA
CHECKED BY:	CTD

REVISIONS			
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NO.	DATE	BY	DESCRIPTION

ENGINEER'S STAMP:



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SITE NAME:	40214
COUNTY:	WASHTENAW
LATITUDE:	42° 14' 45.24" N
LONGITUDE:	83° 36' 58.14" W
DESIGN TYPE:	COLOCATION
SHEET TITLE:	SITE LAYOUTS
DRAWING NO.	C1
REVISION:	0

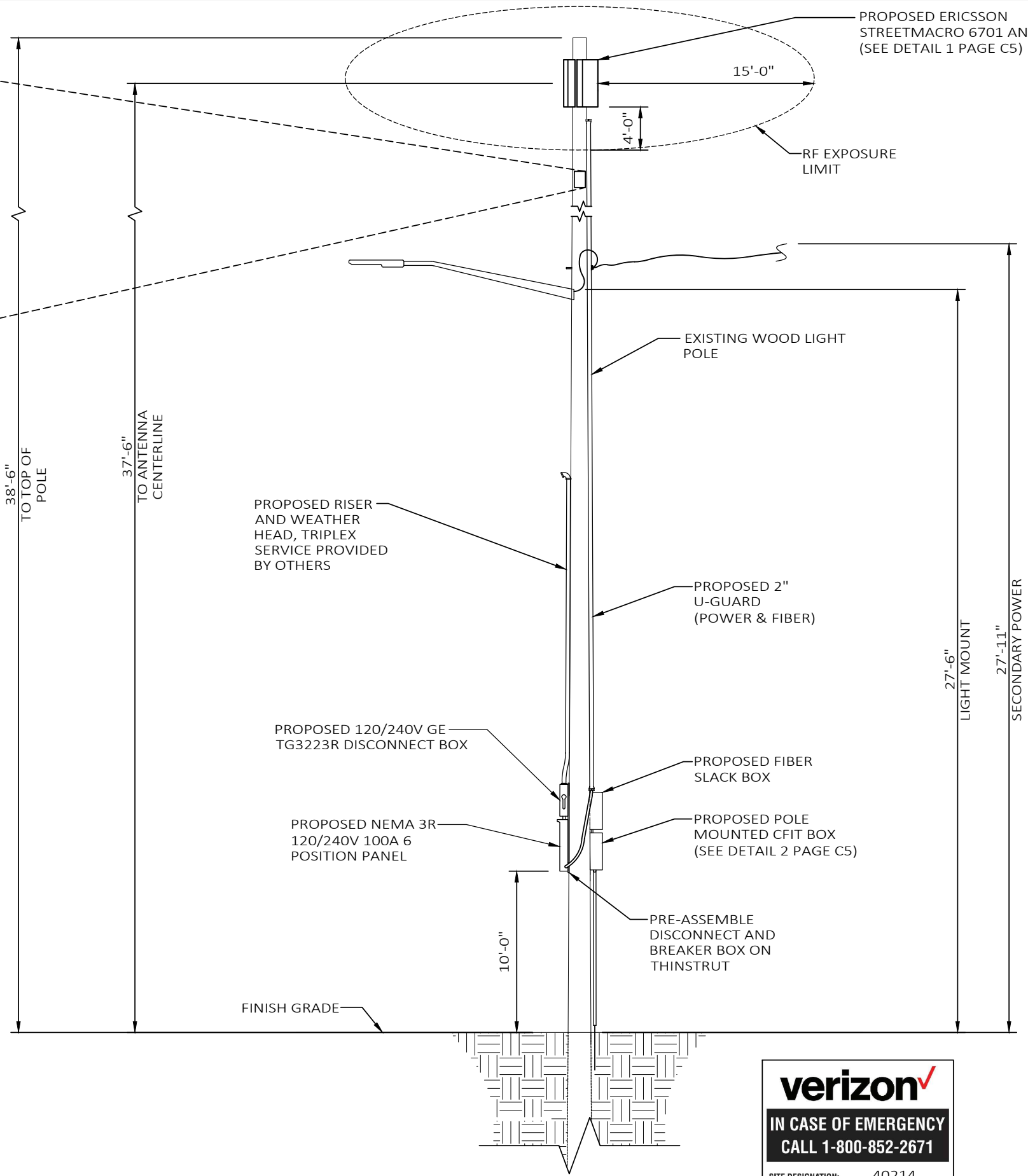


12"x18" RF WARNING SIGN
TYPICAL OF 2

CONTRACTOR TO OBTAIN
LATEST RFDS FROM VERIZON
PRIOR TO CONSTRUCTION.

40" MIN. CLEARANCE
BELOW NEW TRIPLEX
SERVICE

5'-0" MIN. CLEARANCE
ABOVE ANY DTE EQUIPMENT
TO BOTTOM OF ANTENNA



**IN CASE OF EMERGENCY
CALL 1-800-852-2671**

SITE DESIGNATION: 40214

INSTALL ON BREAKER PANEL

PREPARED FOR:



PREPARED BY:



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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SITE NAME:

40214

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 45.24" N

LONGITUDE:

83° 36' 58.14" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

POLE ELEVATION

DRAWING NO.

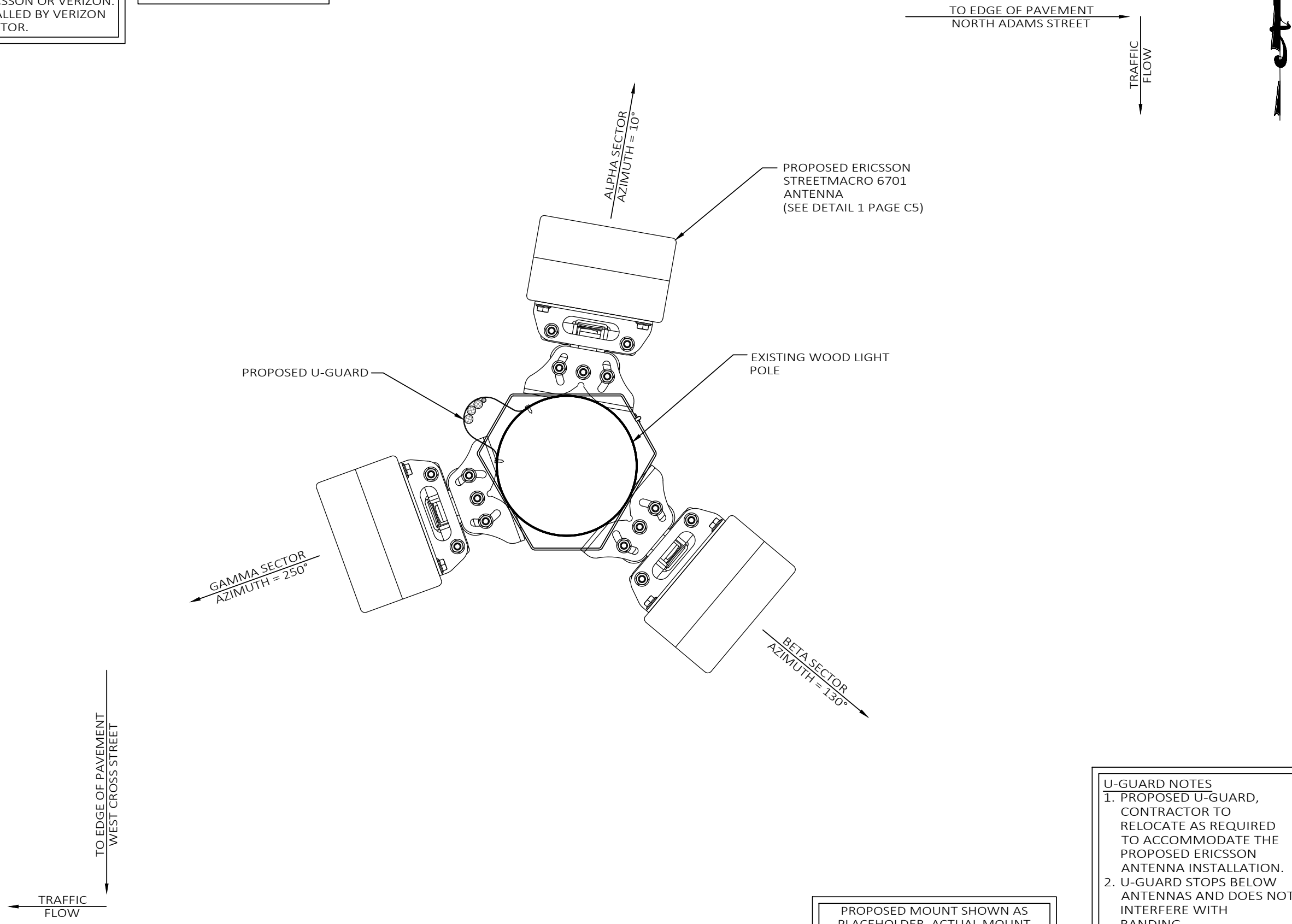
C2

REVISION:

0

AZIMUTHS ARE SUBJECT TO CHANGE. CONTRACTOR TO VERIFY AZIMUTHS FROM FINAL RFDS FROM VZW. ANTENNA MOUNT TO BE SUPPLIED BY ERICSSON OR VERIZON. ANTENNA TO BE INSTALLED BY VERIZON CONTRACTOR.

INSTALL STRAIN RELIEF FOR POWER & FIBER CABLES AT OR NEAR ANTENNAS



PROPOSED MOUNT SHOWN AS PLACEHOLDER. ACTUAL MOUNT SUBJECT TO CHANGE PER DTE AND VERIZON FUTURE DISCUSSIONS

- U-GUARD NOTES
1. PROPOSED U-GUARD, CONTRACTOR TO RELOCATE AS REQUIRED TO ACCOMMODATE THE PROPOSED ERICSSON ANTENNA INSTALLATION.
 2. U-GUARD STOPS BELOW ANTENNAS AND DOES NOT INTERFERE WITH BANDING.
 3. U-GUARD MUST BE RACEWAY CAPABLE.

PREPARED FOR:

PREPARED BY:

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
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LATITUDE:

42° 14' 45.24" N

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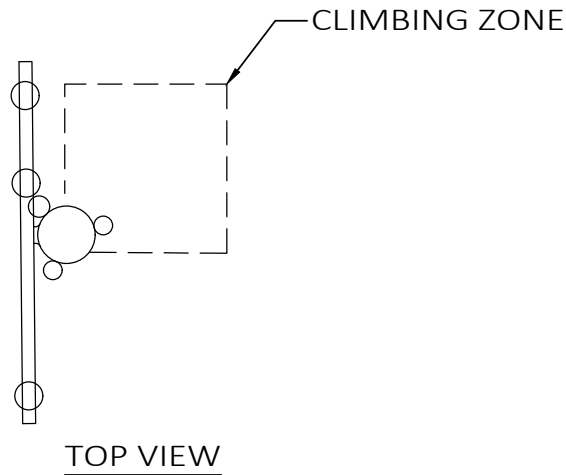
COLOCATION

SHEET TITLE:

ANTENNA LAYOUT

DRAWING NO.	REVISION:
C2A	0

POLE ATTACHED EQUIPMENT	
EQUIPMENT	VOLUME (CU-FT)
STREET MACRO 6701 ANTENNA	0.46
STREET MACRO 6701 ANTENNA	0.46
STREET MACRO 6701 ANTENNA	0.46
TOTAL IN CU-FT	1.38



- NOTES:
1. WORKING CLEARANCE FROM ENERGIZED ANTENNA MUST BE GREATER THAN 4 FT, OTHERWISE SHUT DOWN RADIO AND ANTENNA PER INSTRUCTIONS ON PLACARD OR BY OPENING DISCONNECT SWITCH TO RADIO EQUIPMENT ON POLE.
 2. ANTENNA AND MOUNTING BRACKETS INSTALLED ABOVE DTE WIRES MUST BE INSTALLED AND MAINTAINED BY DTE OR DTE'S DESIGNATED CONTRACTOR.
 3. VERTICAL CLIMBING ZONE MUST BE MAINTAINED ON ALL POLES. (SEE TOP VIEW)
 4. BASE CABINET TO BE CLEARLY LABELED WITH OWNER'S NAME AND 1-800 PHONE NUMBER WITH 3/4" TALL LETTERING.
 5. SHUTDOWN PLACARD TO BE PLACED ON THE POLE NEAR BASE CABINET AND DISCONNECT SWITCH BOX.
 6. 5' FT MIN. CLEARANCE ABOVE ANY DTE EQUIPMENT.
 7. ANTENNA POLE TOP CLEARANCES APPLY TO ANY DTE EQUIPMENT OR WIRES INSTALLED UNDER THE ANTENNA.

REFERENCE DTE ENERGY
CELLULAR ANTENNA SMALL CELL SITE CONSTRUCTION
LINE CONSTRUCTION STANDARDS 4-JOINT USE 1-4-26.1
DATED 11/1/2017

PREPARED FOR:



PREPARED BY:

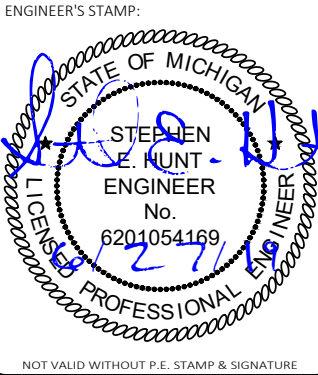


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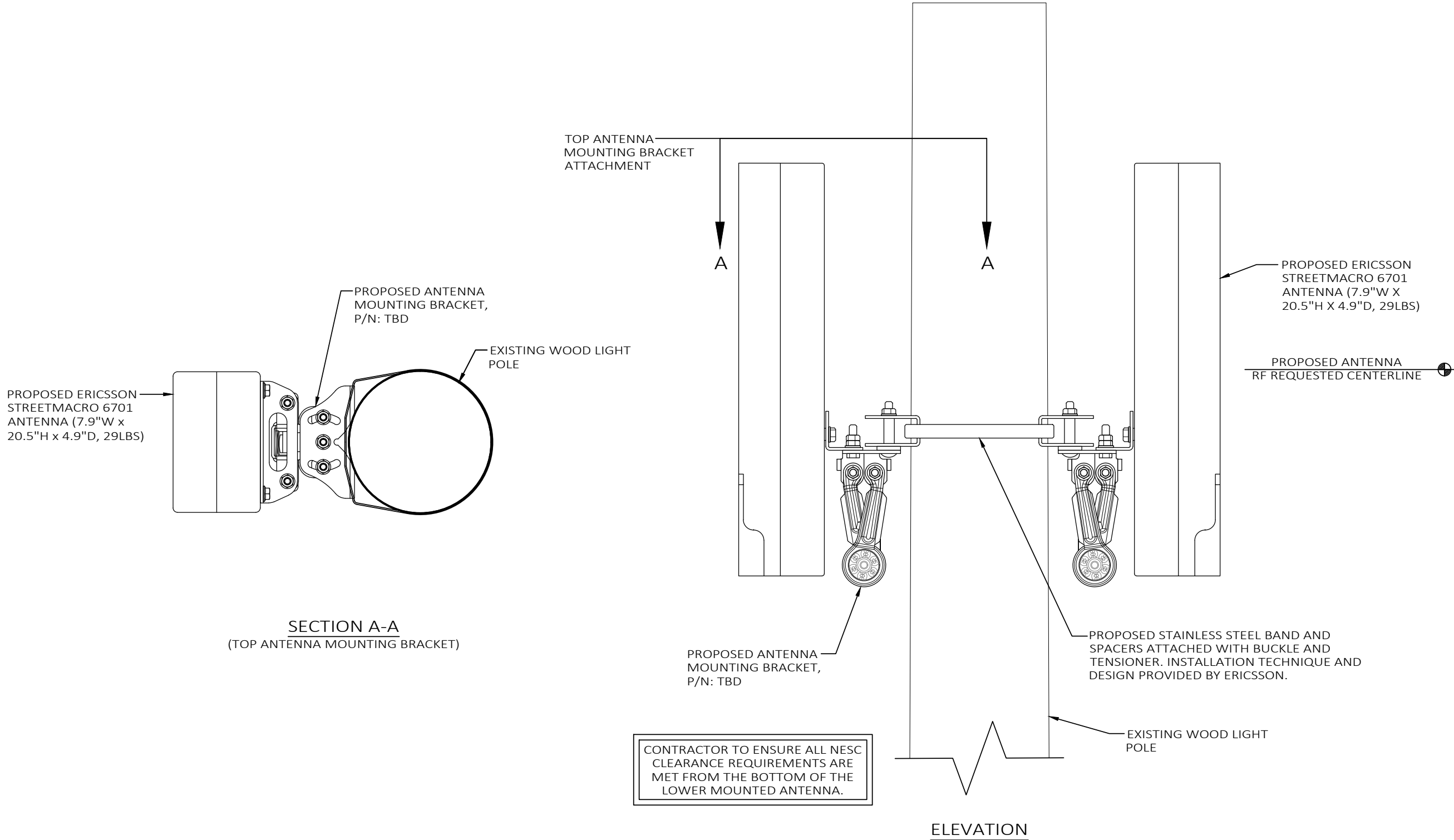
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REVISIONS			
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	LA	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION



SITE NAME:	40214
COUNTY:	WASHTENAW
LATITUDE:	42° 14' 45.24" N
LONGITUDE:	83° 36' 58.14" W
DESIGN TYPE:	COLOCATION
SHEET TITLE:	DTE NOTES
DRAWING NO.	REVISION:
C3	0



PREPARED FOR:



PREPARED BY:



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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SITE NAME:
40214

COUNTY:
WASHTENAW

LATITUDE:
42° 14' 45.24" N

LONGITUDE:
83° 36' 58.14" W

DESIGN TYPE:
COLOCATION

SHEET TITLE:
SITE DETAILS

DRAWING NO. C4	REVISION: 0
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Spectrum:

IBW

OBW

EIRP

28 GHz

Full band

800 MHz

~ 55 dBm

of Users:

Total Antenna BW:

Throughput:

RI ports:

TN/IDLports:

Misc:

2,000+

1600 MHz

5 Gbps DL/ 1 Gbps UL

2

2

4xExternal Alarms, USB connector
PoE, GPS, 1588 Synch

Weight:

Size:

Operational conditions:

Cooling:

Power:

IP Class:

~ 13 kg (29 lbs)

20,5"x4,9"x7,9" (13 l)

-40 to +55 degrees

Active

AC, <300W Max

IP 65

Ericsson Confidential | 2018-03-15



20,5"x5"x8" Not to Exceed Dimensions

CFIT BOX

PART CODE: CFIT-C48D4LHXVZ

DESIGNED BY CHARLES INDUSTRIES



PRODUCT SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
HEIGHT (PANEL ONLY)	15 in.
DEPTH, BASE (FRONT TO BACK)	5.5 in.
WIDTH	12 in.
WEIGHT	4 lbs.
CONSTRUCTION	RUGGED UL94-5VA GRAY POLYCARBONATE
SUPPORTED FIBER CONNECTOR TYPES	SC, LC or MPO
COMPLIANCE	DESIGNED TO MEET GR-950, GR2898, NEMA 4, IP66
SPLICING CAPACITY	UP TO THREE (3) 4"x6" HINGED SPLICE TRAYS ON FEED FIBER SIDE.
BULKHEAD CAPACITY	24 SC ADAPTERS

PREPARED FOR:



PREPARED BY:

TeleCAD
Wireless

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HIXSON, TN 37343
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ENGINEER'S STAMP:

STATE OF MICHIGAN

STEPHEN E. HUNT
ENGINEER
No. 6201054169

LICENSED PROFESSIONAL ENGINEER

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SITE NAME:

40214

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 45.24" N

LONGITUDE:

83° 36' 58.14" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:
EQUIPMENT DETAILS

DRAWING NO.	REVISION:
C5	0

ELECTRICAL NOTES:

1. PROVIDE AND INSTALL WARNING TAPE FOR ELECTRIC SERVICE CONDUIT 12" BELOW GRADE.
2. CONTRACTOR TO PAY FOR THE SERVICE AS DIRECTED BY THE MUNICIPALITY.
3. CONTRACTOR TO USE PVC SCH 40 CONDUIT WHERE CONDUITS CROSS ACCESS ROADS.
4. CONTRACTOR SHALL COORDINATE WITH ELECTRIC AND TELEPHONE UTILITY COMPANIES FOR SERVICES.
5. CONTRACTOR TO PAY ALL FEES FOR SERVICES REQUIRED.
6. CONTRACTOR TO BE ADVISED THAT EXISTING UNDERGROUND CONDUITS, GROUND CABLES EXIST. DIG WITH CAUTION.
7. CONTRACTOR TO VERIFY POWER AND TELCO LB LOCATIONS AND FLEX CONDUIT SIZE AND ROUTING TO THE EQUIPMENT SHELTER WITH MANUFACTURER'S DRAWINGS.
8. OPEN CUT CONSTRUCTION THROUGH EXISTING PAVEMENT, I.E. ROADWAYS, PARKING AREAS, SIDEWALKS WILL NOT BE ALLOWED. CONSTRUCTION UNDER EXISTING PAVEMENTS WILL BE REQUIRED TO BE INSTALLED WITH DIRECTIONAL BORING TECHNIQUE.

UTILITY NOTES:

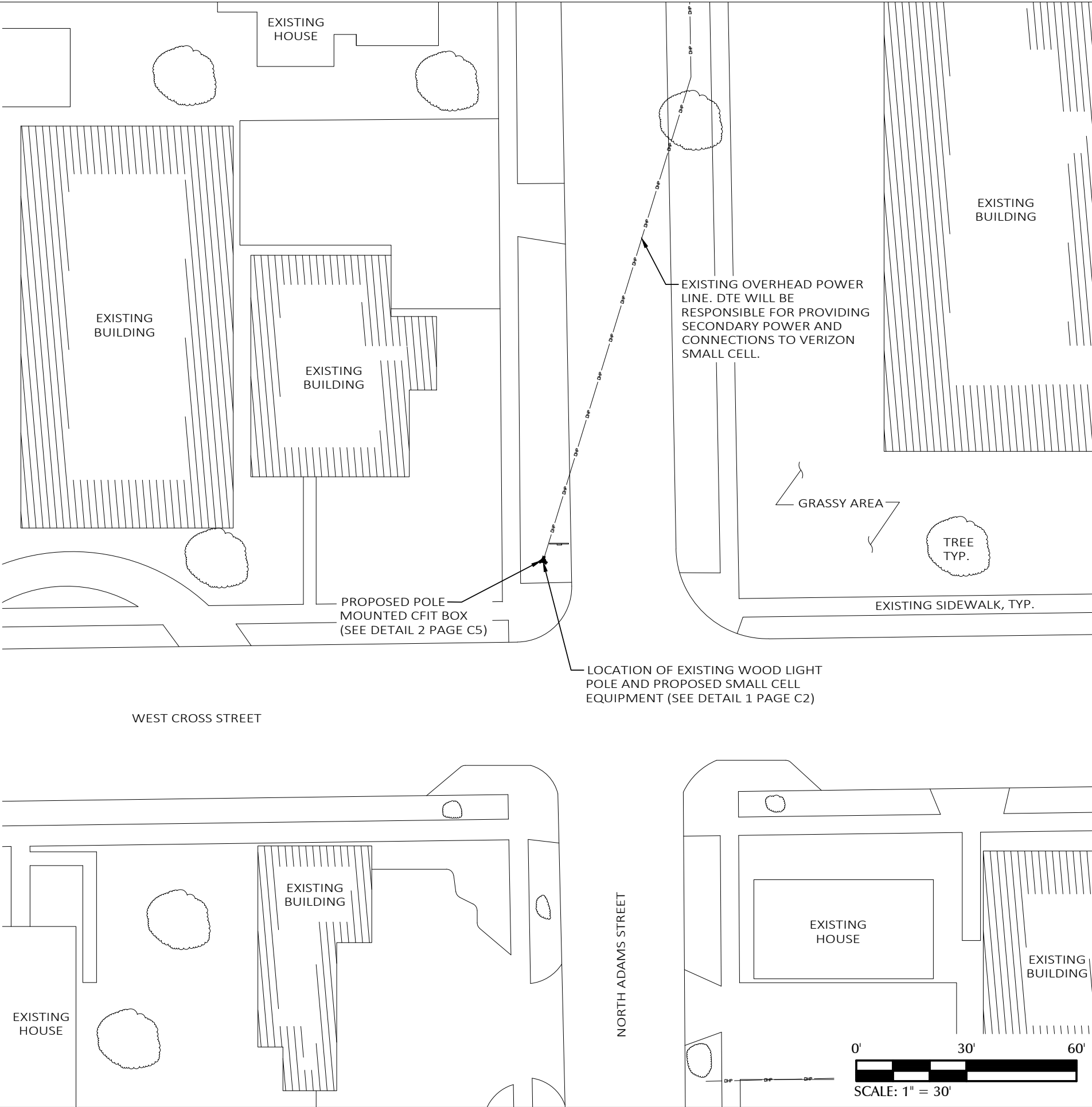
1. ALL POWER CONDUITS ABOVE GRADE, SWEEPS, & ELBOWS TO BE PVC SCH 40.
2. INSTALL PULL STRING IN TELCO CONDUIT.

STANDARD POWER SUPPLY FOR THE SMALL CELL NODES IS A 100 AMP 120/240 VOLT SINGLE PHASE SERVICE

SERVICE CONDUCTOR MAXIMUM DISTANCE CHART (BASED ON 80 AMP MAX. CONTINUOUS LOAD)			
WIRE SIZE	ALUMINUM 120V	COPPER 120V	CONDUIT SIZE
3 AWG	55'	90'	3/4" MIN
2 AWG	70'	115'	3/4" MIN
1 AWG	85'	145'	3/4" MIN
1/0 AWG	110'	180'	1" MIN
2/0 AWG	140'	230'	1" MIN
3/0 AWG	175'	290'	1 1/4" MIN
4/0 AWG	220'	365'	1 1/4" MIN
250 KCMIL	265'	435'	1 1/4" MIN
300 KCMIL	315'	520'	1 1/2" MIN
350 KCMIL	370'	610'	1 1/2" MIN
400 KCMIL	420'	695'	2" MIN
500 KCMIL	530'	870'	2" MIN

LEGEND

UNDERGROUND POWER	USP	CATCH BASIN	CB
OVERHEAD POWER	DHP	IRON PIN SET (IPF) 3/8" REBAR	IPF
OVERHEAD UTILITIES	DHU	IRON PIN FOUND (IPF)	IPF
UNDERGROUND TELCO	UGT	BENCHMARK	BM
OVERHEAD TELCO	DHT	CONCRETE MON. FOUND	CMF
GAS LINE	GAS	CONCRETE MON. SET	CMS
FENCE	X	UTILITY POLE	UP
SEWER LINE	SVR	LIGHT POLE	LP
WATER LINE	VTR	WATER VALVE	WV
COAX CABLE	C	MANHOLE	M
HYBRID CABLE	HYB	GAS VALVE	GV
HIGH VOLTAGE POWER	HVP	FIRE HYDRANT	FH
FIBER	FBR	TELCO PEDESTAL	TP
RIGHT-OF-WAY	RDW	ELECTRICAL PULL BOX	EPB
PROPERTY LINE	PL		
EDGE OF PAVEMENT	EDP		



PREPARED FOR:



PREPARED BY:

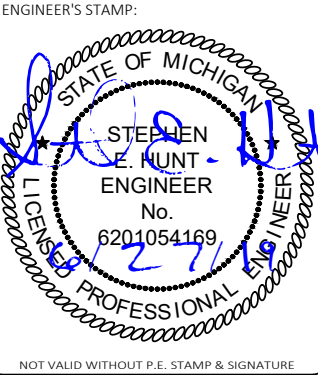


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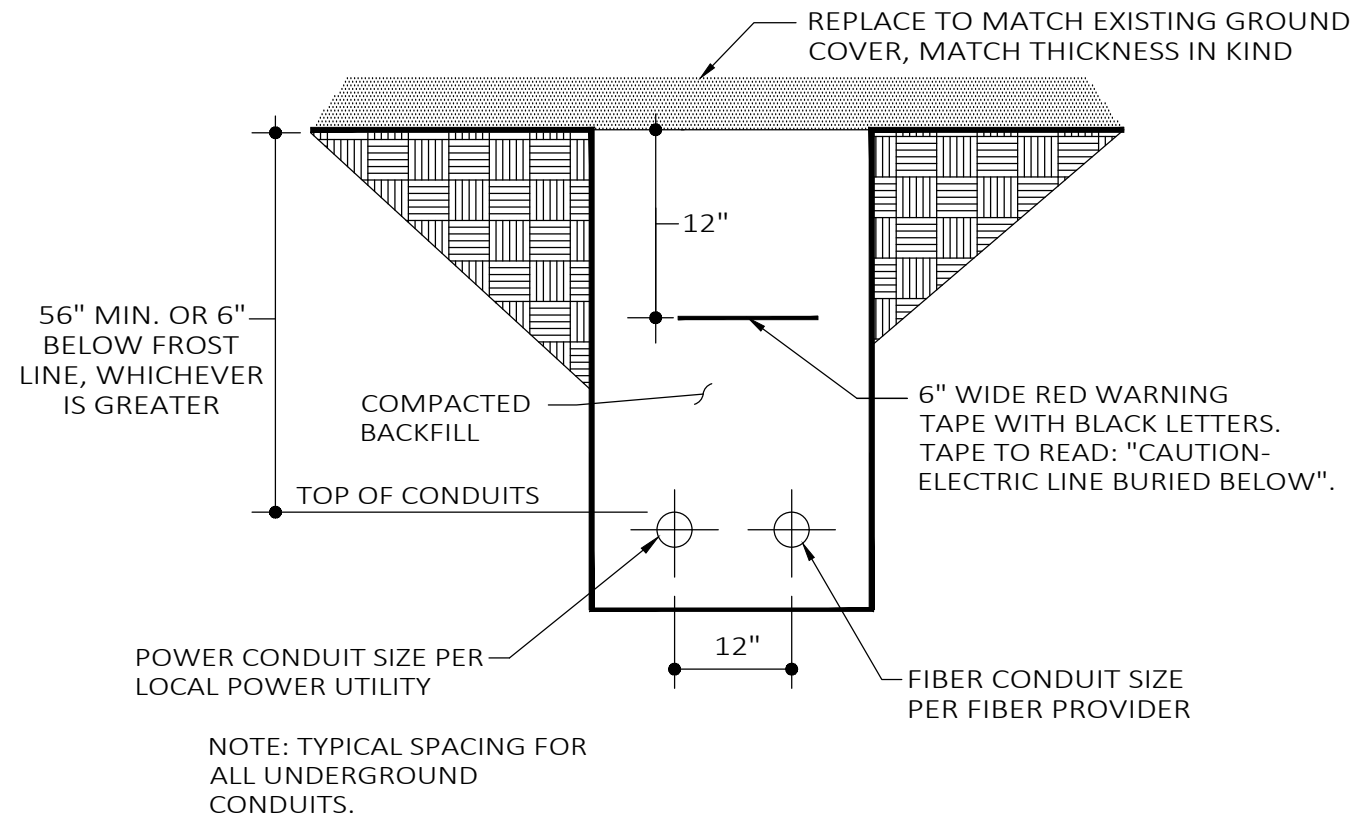
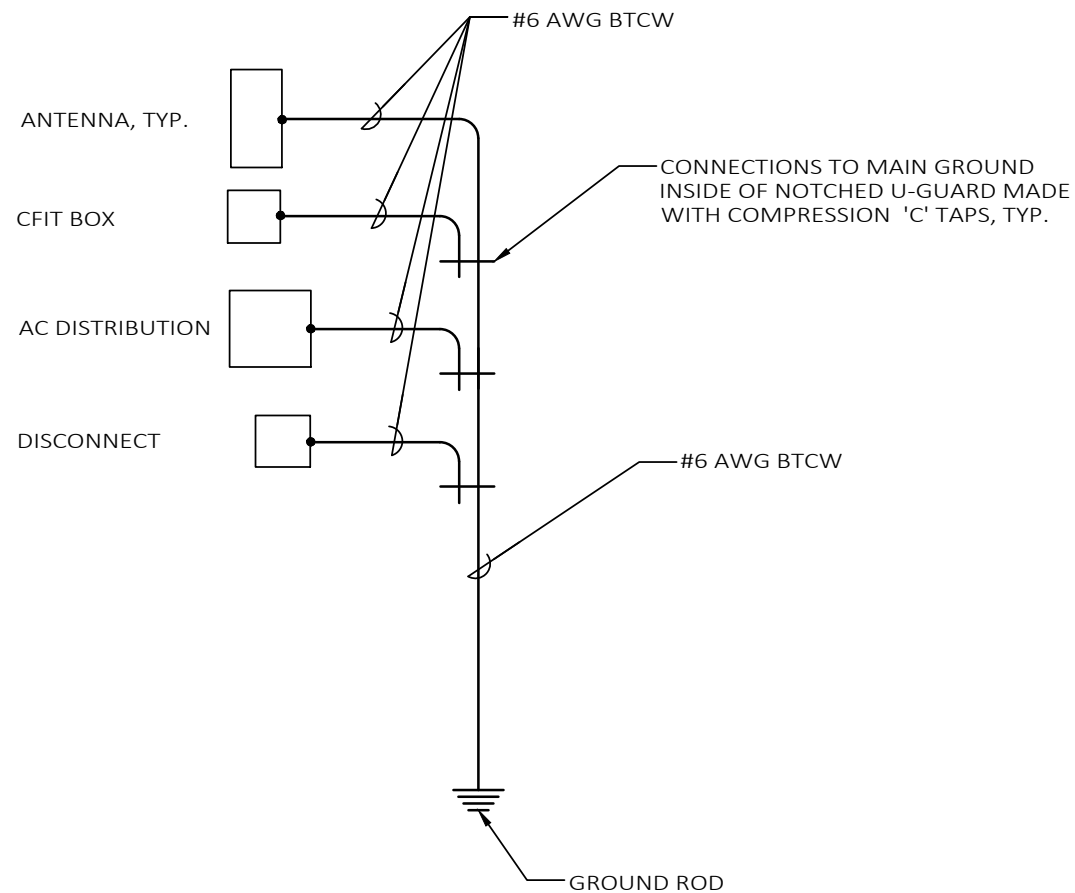
REVISIONS			
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	LA	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION



SITE NAME:	40214
COUNTY:	WASHTENAW
LATITUDE:	42° 14' 45.24" N
LONGITUDE:	83° 36' 58.14" W
DESIGN TYPE:	COLOCATION

SHEET TITLE:
UTILITY SITE PLAN

DRAWING NO. E1	REVISION: 0
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PREPARED BY:

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40214

COUNTY:
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COLOCATION

SHEET TITLE:
ELECTRICAL DETAILS

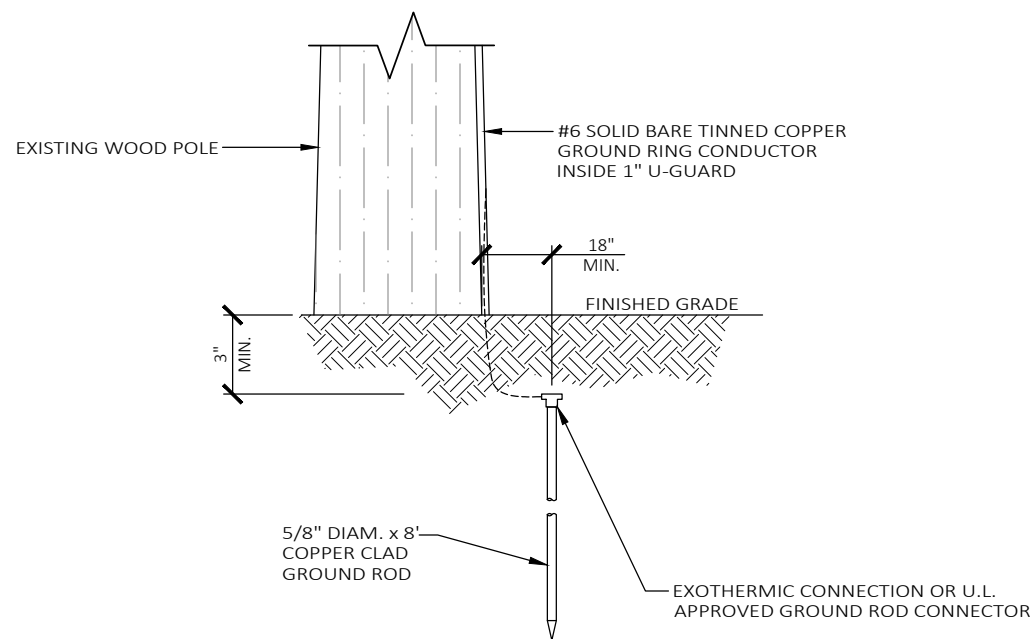
DRAWING NO. E2	REVISION: 0
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1 SINGLE POINT RADIAL GROUND DETAIL

N.T.S.

2 TRENCH DETAIL (IF REQUIRED)

N.T.S.



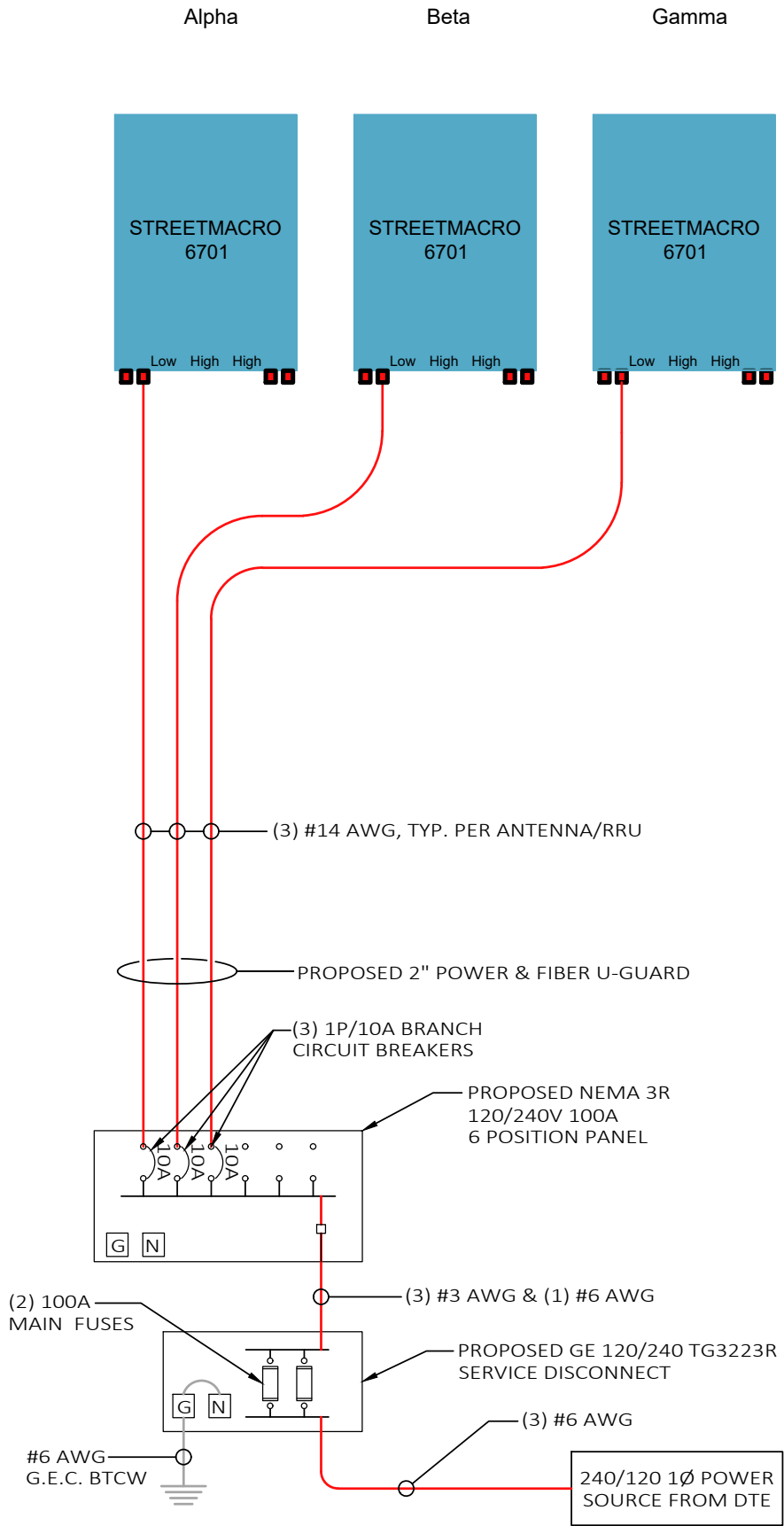
3 GROUND ROD DETAIL

N.T.S.

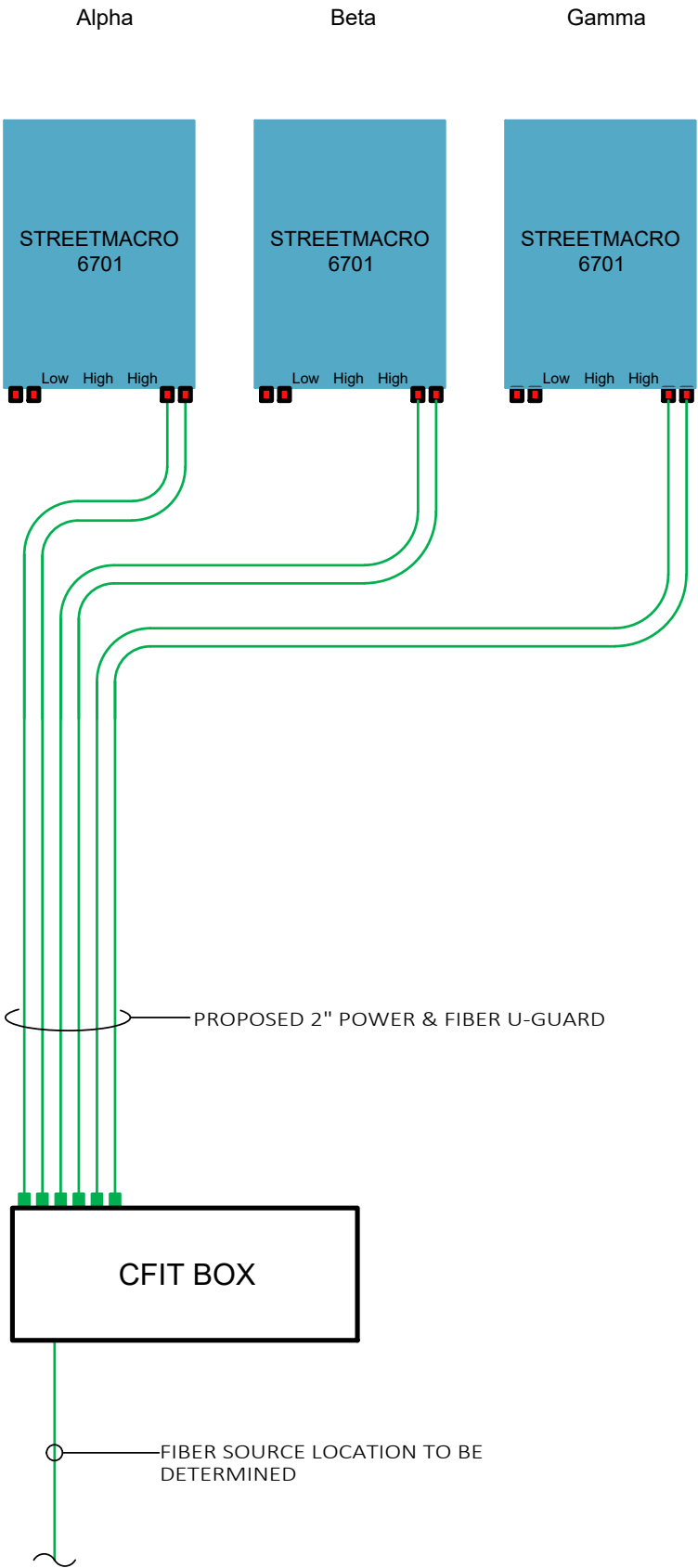
4 DETAIL NOT IN USE

N.T.S.

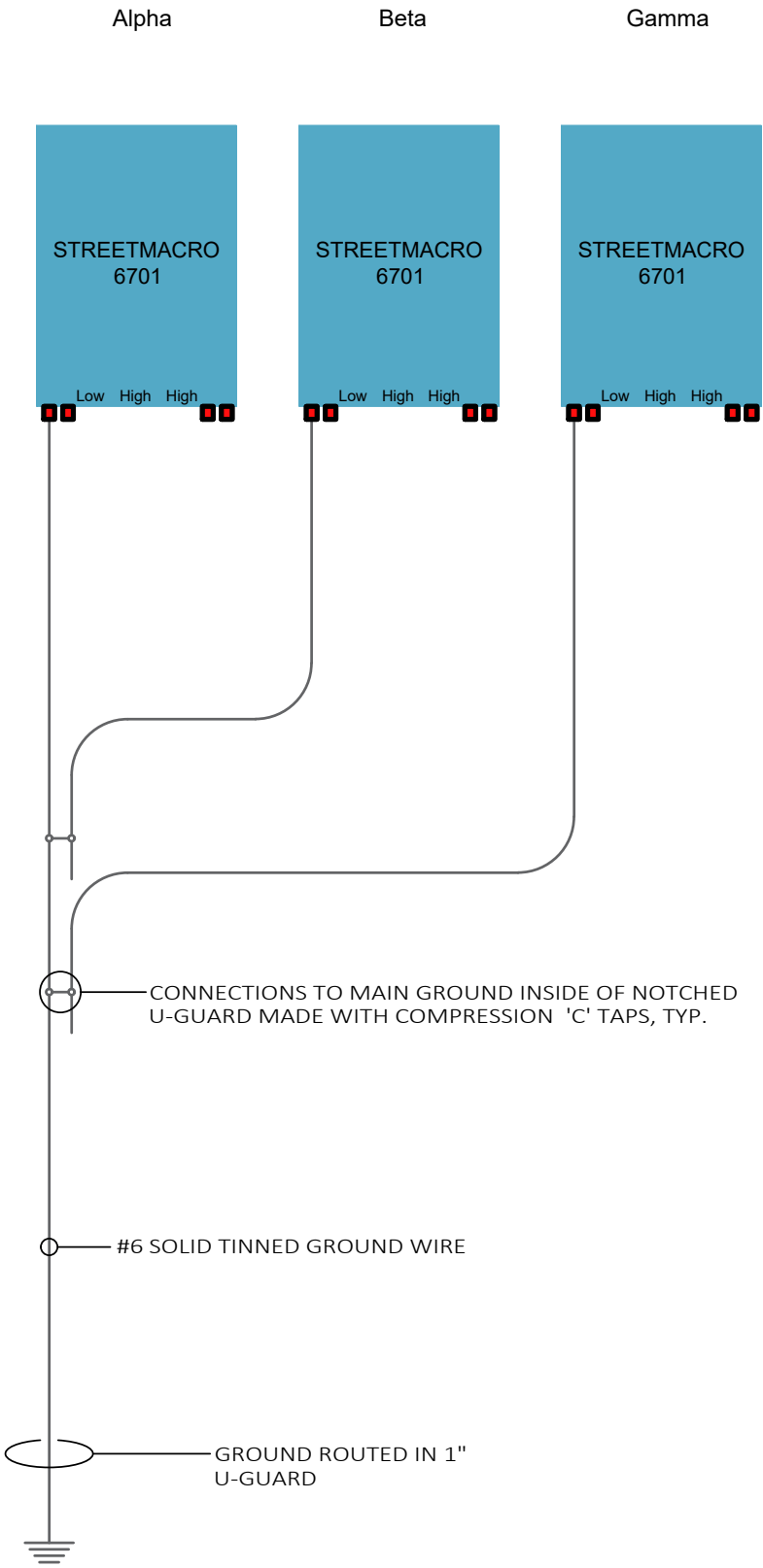
POWER ROUTING



FIBER ROUTING



GROUND ROUTING



PREPARED FOR:



PREPARED BY:



1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
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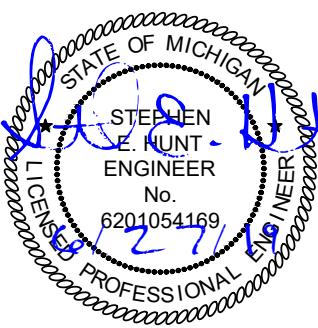
CHECKED BY:

CTD

REVISIONS

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LATITUDE:

42° 14' 45.24" N

LONGITUDE:

83° 36' 58.14" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

SINGLE LINE DIAGRAM

DRAWING NO.

E3

REVISION:

0



MINUTES

City of Ypsilanti
HISTORIC DISTRICT COMMISSION MEETING
Ypsilanti Historical Society – 220 N Huron Street
Ypsilanti, Michigan 48197

Tuesday, December 10, 2019
7:00 P.M.

CALL TO ORDER AND ROLL CALL

Alex Pettit Interim Chair 7:00 PM

Commissioners Present: Alex Pettit, Hank Prebys, Ron Rupert, Amy Swift

Commissioners Absent: Anne Stevenson, Erika Lindsay

Staff Present: Scott Slagor, Preservation Planner

APPROVAL OF AGENDA

Motion: Rupert (second: Prebys) moved to approve the agenda as submitted.

Approval: Unanimous. Motion carried.

PUBLIC COMMENT ON AGENDA ITEMS- none

PUBLIC HEARING—none

OLD BUSINESS

422 N Hamilton

**Demolition by Neglect Consideration*

Owner: Karl Staffeld, present.

Staffeld: Summarized HDC approvals from November 26, 2019. Stated that the necessary permits were released by the Building Department and they have started work. Stated that the vegetation outside of the building was removed. Interior work included straightening the building using chains and showed photos. Stated that one corner has been straightened and another is still out of plumb; but will be fully corrected when the king truss is installed. Has a quote to re-roof the building and permits are in-place. Indicated he is planning on continuing work over the next two weeks

Swift: Asked what the roof material will be.

Staffeld: Indicated the outbuilding roof will match the roof of the house, a dimensional shingle that was approved on November 26, 2019.

Prebys: Stated he is pleased to hear activity that has taken place, which is a step in the right direction.

Prebys: Asked how to proceed.

[Discussion of appropriate motion]

Swift: Asked the applicant when they planned to have the work completed.

Staffeld: Replied a month to month and a half.

Swift: Asked the commission if there should be a checkup after the work is complete?

[Monitoring Discussion}

Motion: Prebys (second: Rupert) Move to state that the outbuilding at 422 N Hamilton appears to no longer in danger of Demolition by Neglect, however the commission wishes to maintain review of the building and asks the owner to revisit the commission at first meeting in February.

Approval: Unanimous. Motion carried.

NEW BUSINESS

32-42 N Huron

**Boulder Retaining Wall.*

Applicant: Lary Yapp, owner- present.

Discussion: Yapp: Indicated this is an after the fact application, as there were some questions as to where a permit was required. Now that he knows a permit is required, he is submitting for approval. The goal was to make the appearance similar to what was there before, green and unruly, but that was not possible economically and because of the borings taken revealed it was not going to be possible to sink either steel pilings or build a concrete retaining wall. Either of those options would have been destructive to parking lot, requiring installation of dead men, which would have taken out parking lot and had years of settling. He opted for boulder stones and to do the best he could with landscaping.

Prebys: asked how the drainage is dealt with.

Yapp: Indicated the drainage did not change at all. There is drainage in the center of the parking lot, French drains that have pipes going in multiple direction. If they fill up, there is a spillway that comes out of a pipe.

Pettit: Asked if any of the new grading is toward the wall.

Yapp: Stated the grading is toward the drainage.

Prebys and Rupert: [Complimentary discussion on the appearance]

Motion: Prebys (second: Rupert) Move to issue a Notice to Proceed for work already completed at 32-42 N Huron, as submitted in the application dated November 18, 2019, for construction of a boulder retaining wall with landscaping.

Secretary of the Interior Standards:

#9 – Contemporary designs shall be compatible and not destroy significant original material.

Approval: Unanimous. Motion carried.

209 Pearl

**Awning and gate.*

Applicant: Mark Maynard, owner, present.
Daniel Kelnotic, business owner, present

Discussion: Maynard: Stated he had come to the HDC on two other occasions regarding renovation of the property, including redoing historic windows and installing doors into the alley, which was approved. The HDC also approved cement removal with guidance on stamping. To-date the historic windows had been rebuilt and reinstalled, and the cement has been cut. The subject application revisits a study item from a year ago, including a fabric awning and a gate at the front of the alley space, behind the front door. Stated he will eventually come back to the HDC discuss signage.

Swift: Asked if the gate will be operable or static.

Maynard: Indicated it will be movable per Fire Department request that it be on hinges so they could get through if they had to. The Fire Department would like to have access, even though the space it is too narrow for a truck. The Fire Department will have a key in case they need access.

Swift: Asked for clarification of the awning in the photo.

Maynard: Confirmed and stated that the awning has a square front panel and will be angled behind. [References other photos].

Rupert: Asked to confirm that the awning is canvas.

Maynard: Confirmed.

[Awning material discussion]

Rupert: Asked to confirm that the framework will be secured to the building.

Maynard: Confirmed. Awning will secured to the building in the mortar, not the brick. Will be freestanding and not touching the next-door building.

Petit: Asked if the structure cantilevers.

Maynard: Stated there are posts supporting the awning.

Pettit: Asked the color of the fabric.

Maynard: Stated it is off-white.

Kelnotic: Confirmed canvas brand and model number.

Pettit: Asked to confirm where sign will go on awning.

Maynard: Confirmed the schematic- on face of awning.

Swift: Asked about lighting.

Maynard: Indicated they will return with an application for awning lighting.

[Discussion of timeline]

Swift: Asked to clarify awning height in relation to second story windows.

Maynard: Aim to miss the windows, believes the height is 10 to 13 feet.

Swift: Asked to confirm sill to awning.

Maynard: Indicated that he does not believe the awning is higher than 13 feet, but knows the second story windows are taller than that.

Swift: Asked to make sure the awning does not interact with upper story windows.

Maynard: Does not think it would be, and there is a lot of clearance.

Motion: Prebys (second: Rupert) Move to approve and issue a Certificate of Appropriateness for the work proposed at 209 Pearl, as submitted in the application dated November 19, 2019, for installation of a boxed awning and gate at the east elevation of the building. The awning and gate structures shall be mounted to the building's mortar joints to the greatest extent possible. The awning is to be of a white canvas material.

Secretary of the Interior Standards:

#9 – Contemporary designs shall be compatible and not destroy significant original material.

#10 – New work shall be removable.

Approval: Unanimous. Motion carried

[Discussion of restaurant plans]

100 W Michigan

**Applicant amended application to include only masonry work and window infill.*

Applicant: Conor Doran, project manager –present.

[Commissioners commented on the improved appearance of the building.]

Discussion: Doran: Suggested leading with the drawing submitted with the application in the packet.
[Passed out photos to show current condition of some of the windows].

Swift: Asked if the original jambs were altered by the vinyl windows.

Doran: Stated that the problem with the vinyl windows is they are sticking out at the level of the former cladding. Inquired if economically -they can be saved for now, but jambs on all windows are rotted and in bad shape.

Staff: suggested going item by item on the staff review.

[Discuss windows first]

Doran: Indicated that the shop-front at 100 W Michigan has to be removed because of the work in the corner on the foundation. There is a single beam across the shop front that is sagging and needs to be replaced. Hoping to replace the exterior facing with dark bronze aluminum. Will probably do 102 W Michigan side of the building as well, which is not necessary structurally but would be better aesthetically. Also hoping to replace façade vinyl windows with matching dark bronze aluminum-framed standard rectangular windows with no great detail.

Prebys: Asked if the windows would be double-hung.

Doran: Stated that no, the windows would be solid glass.

Rupert: Asked if the windows would be casement.

Swift: Asked if the windows would be fixed with divided lights or one single pane.

Doran: Confirmed the windows will be one single fixed light.

Swift: Inquired about original windows.

Slagor: Confirmed from photos that the original windows were similar to extant windows on the east elevation.

[Discussion of original arched openings]

Doran: The façade windows have rebuilt jambs to be square within the arch. Indicated that the goal is to keep the arch but recess the window within the arch, so the arch is still visible.

[Continued discussion of original arched openings and jambs, and original window glazing pattern]

Swift: Interpreted that there are two scenarios of the extant windows: a scenario where the original windows have been encased and although existing, are in poor condition; and a scenario on the front where there are non-original windows in altered jambs that need structural work because they were built out to the façade that had been removed. There are two approaches that need to be discussed, first the condition of the vinyl windows with a new jambs and what to do. Second is the original/existing windows in their original construction.

Rupert: Asked to discuss vinyl windows first. Indicated his feeling was there was an opportunity to replicate what was originally there.

Doran: Stated that replication windows are not economical. If they are forced to replicate wood windows or windows with divided lights, it will stop the project because they do not have the money to do that.

Swift: Indicated that there is a fair level of leeway for existing non-compliant material already in place, as opposed to new work that is not in compliance. The HDC cannot give authority to recreate work that is not in compliance, while grandfathered work is easier to approve. For the applicant to put new windows in and with the amount of work needed to put new windows in, they need to be in compliance with the Secretary of the Interior Standards. Asked applicant if that made sense.

Doran: Replied, that they need to know what they [the standards] are. Indicated they originally priced something more appropriate but came in over \$200,000, which would blow them out of the water. What they are proposing, with the storefronts, is coming in closer to \$65-70,000.

Swift: Asked if that quote was just for the front façade windows.

Doran: Asked to discuss the elevations separately.

Pettit: Indicated he does not have a clear picture of what was being proposed for the south elevation (façade). Asked for clarification.

Doran: Referenced color-coded drawing [staff provided original and referenced the packet]. On east elevation, they would replicate what they're doing on the façade for the first two bays (south to north). The third and fourth bays masonry need to be demolished and rebuilt. Trying to replicate the openings on those bays would be extremely costly. Stated they would like to brick the whole bays.

Swift: Asked to clarify that the entire four openings would go away.

Doran: Confirmed. [Referenced yellow/orange area on drawing.]

Doran: Indicated bays 5 and 6 would replicate façade windows and remaining bays would be bricked up as they do not provide light into the building. They are going into stairways, bathrooms, closets, etc. Stated the HDC approved something similar on the north of the building when the elevator shaft was completed. [Referenced brick sample]. Stated eventually everything would be painted.

Rupert: Asked to confirm the openings that would be retained vs. the openings that will be infilled.

Doran: Confirmed.

Swift: Stated her concern was that the proposed window changes are on main facades, while the previously approved infill was on the alley façade; and the proposed changes affects a lot of windows.

Doran: Asked the commission to consider that before the cladding was removed, there was only two windows on that side of the building.

Swift/Prebys: Acknowledged.

Prebys: Asked about the arched openings on east elevations.

Doran: Stated they could replicate a wood or brick infill.

[Discussed arched openings on east elevation]

Doran: [Reviewed the photos and drawings with the commission]

Swift: Asked to confirm that there are a variety of conditions present.

Doran: Confirmed.

[Continued review of photos]

Doran: Indicated another issue with the windows is the building's interior framing. The wood frame inside the building is on a new foundation that supports the building. The masonry is no longer the structural support. In order to reveal a window in the masonry, they must work around the internal wood framing. It is very involved, which is why they do not want to do that for the rooms that do not need windows.

Rupert: Indicated he had no problem bricking up windows, recessing the brick, and leaving the arch as it matches the back. It shows that in the past there were windows or doors present.

Doran: There has been some patchwork brick infill already.

Rupert: Referenced drawing and suggested to retain door opening reveal in brick.

Rupert: Indicated the commission may be in agreement on infill, but need to come to an agreement on how to treat the windows.

Swift: Disagreed. Stated that they needed to discuss more the number of windows to be infilled. Confirmed that brick recess is appropriate, but needed to discuss the amount of windows that will not be reopened.

Rupert: Indicated that the windows could be unbricked and reopened in the future.

Swift: Asked to discuss the visual impact and acknowledged that there has not been windows on that elevation for many years, however it would impact more than 50% of the façade, so it should be discussed.

Pettit: Indicated that the changes to the inside may affect exterior considerations. The windows uncovered have not seen the light of day in decades, and if not for this work, they would not be having the conversation. Stated that the applicant was not required to remove the cladding. Indicated understanding that the pattern would change.

Swift: Indicated concern that there is extant original material that they would be authorizing the removal of in order to brick in.

Pettit: Stated that some windows are altered.

Swift: Affirmed. Stated that the ones that they do have, she would like to think very clearly about the decision to approve when they are the only remaining windows in that structure that could be used as a template for future work. Once they are gone, there would be no template to redo.

[Discussion removal of original windows]

Doran: Stated there would be no way to preserve them and make them function.

Rupert: Stated that preserving original windows was achieved across the street [101 W Michigan]. They were even worse as they were exposed.

Swift: Stated that where there is evidence of original windows that they think through the choices.

Doran: Stated they could try and keep the windows for future reference.

Swift: Asked to see the photo.

Doran: Stated that the interior photos are challenging to take because of the framing.

[Review of photos provided in engineering and staff reports].

Swift: Marked her copy of the reports with what she believed to be original window fabric.

[Discussion of window infill and visual balance and photos].

Swift: Indicated that in her opinion, in the instances where there are rebuilt jambs, they can give some leeway if they discuss areas where there is original windows and original visual design. Acknowledged higher cost. Asked if there was a middle ground that could be reached.

Doran: Stated that they asked three glazers and was not able to find anyone who would even consider working on the original windows. Stated he is happy to get that in writing.

Swift: Asked about the contractor who worked on 101 W Michigan.

Doran: Stated they asked the mason but not the glazer.

Slagor: Asked Doran to elaborate on discussions they had regarding the structural compromises to the original windows because of the structural instability of the masonry.

Doran: Confirmed. The closer to the side [corner] it is, the greater the structural compromises and is probably why many windows are broken because of settling.

Rupert: Stated it was the same problem with the Thompson Building [400 N River].

Swift: Indicated she does not believe that the proposed solution for the windows meets the Secretary of the Interior Standards and is trying to find a trade-off so the commission has some of what they need- a compliant window solution, so they can preserve some of the character of the structure.

Doran: Affirmed that he understood. Stated that windows present are beyond salvageable. Indicated he would not like a patchwork solution where some are replaced but not others.

Swift: Stated the proposed solution is a patchwork of replacement and infill. Not saying that they need to preserve existing windows materially, but need to visually.

Slagor: Asked HDC if the same visual rhythm could be achieved through painting the infilled openings.

Swift: Stated that the double jamb of the original windows have shadow lines and a different visual affect than even one-over-one windows with muntins. Indicated concern for retaining that affect. Stated there is an opportunity to honor some of the character that was discovered.

Doran: Stated that they were hoping to unveil something pristine, but that did not happen. Stated that they are spending a lot of money to restore original lead-framed shop front window on the façade. Also going to preserve "Landy's Furniture" sign in a neutral color. They are looking to keep as much character as possible, but it went from a \$600,000 project to a \$1.6 million. The bank is only willing to lend \$1.1 million. Is hoping the commission will factor in economic concerns.

Swift: Stated that for the HDC to factor in economic concerns, they would need to see the bids, identify the costs of certain solutions, and what the barriers are to doing certain approaches.

Pettit: Stated the HDC needs to provide better guidance, as it is possible to identify some better options.

Swift: Asked Doran who they had review the windows.

Doran: Stated he did not know off-hand but could get that information.

Swift: Asked if they were looked at by someone who does not just sell new windows.

Doran: Asked the glazer who was doing the shop front window, with the intention to have him repair. The glazer determined that it was not feasible. Stated he could get bids from others.

Swift: Stated she would like to see a specific contractor come and look at the windows.

Slagor: Stated that the HDC is not allowed to recommend or ask for specific professionals.

[Discussion of the importance of historic windows]

Doran: Stated they are under a huge time crunch. There is a mason lined up for tomorrow-pending approval. There is potential that if they cannot work within budget, the project will stop.

Swift: Reaffirmed the HDC would like to find a solution within the Secretary of the Interior Standards.

Doran: Asked what those standards are in regards to this project.

Pettit: Stated that preserve original materials paramount. The HDC includes professionals who are familiar with preserving damaged materials and have done site visits in past. There are times when those materials can be repaired. Farther down the list is to replace like-with-like.

Prebys: Expressed concern for precedent setting with this building.

Swift: Indicated that the HDC has to make sure there is due cause for replacement of historic materials that are existing. The building has lots of openings that has cause for replacements, but ultimately they do generally need to be like-for-like. Since there are openings where there are unoriginal materials, there is nothing you're replacing that is like the original.

Doran: Expressed that he feels the HDC is not trying to compromise and is not factoring in the whole vision of the project to rehab a cornerstone downtown building and the money that is going into it. Understands that the HDC must look beyond the cost of preservation but it is just not economical and if something is not done the building will just sit.

Swift: Stated that with the uncovering of original elements, the HDC must discuss what was there as it was part of the original design theory.

Pettit: Expressed that he does not have a clear picture of what the final product would look like and that an image would aid the HDC with making a decision. There is no rendering as to what the windows and treatment of the entire façade will look like. The cut sheets are not enough to show the rhythm of the façade. A rendering is typical from applicants. Asked if a rendering was possible to produce.

Doran: Stated he is not sure if a rendering would be possible. There is a timing issue and he is not sure if that can be put together.

Swift: Asked to propose options to price out so the HDC can understand ramifications. Would like to see bids.

Prebys: Said cost has never been a concern of the commission.

Rupert: Affirmed that the commission must understand what is going to happen to each opening.

Pettit: Asked to go back to the original drawing and go over the front step by step.

Doran: Referenced the engineering drawing. Stated that the front façade will be tuck-pointed and cracks repaired. There are small areas along the top that need to be rebuilt. Referenced where the old cornice was- needs some work. Area where the hoods were torn of needs work because they are uneven. In future, would love to do something similar to Thompson Block [400 N River] with details that are period appropriate but for now will just be tuck-pointing and repairing the masonry and a solid coat of paint.

Prebys: Asked to confirm that the areas where the hoods were removed would stay rough.

Doran: Confirmed. Stated they hoped to replace window decorative elements in two years when the building is earning money.

Doran: [Referenced the drawing] Stated that the historic window on the 102 W Michigan shop front will be repaired, and a new shop front added. The 100 W Michigan shop front with the steel beam needs to be completely rebuilt. A lot of structural work will go in to support that corner.

Prebys: Asked to confirm that both the shop fronts would be at the front level and not recessed.

Doran: Confirmed, they would remain as they are.

Doran: Referenced replacement windows. Could do wood-framed windows divided into four lights.

Swift: Stated that the windows on the south elevation and those that wrap the building corner on the east elevation are the most important.

[Discussion of infilled and retained window openings]

Swift: Indicated that she would be open to allowed infill if the windows being replaced or kept are more in line with the original.

Doran: Stated that the window would have to be wood-framed and a rectangular window.

Swift: indicated that if that is the option, would like to discuss how center jamb is given the weight it needs. Could be a thicker muntin to replicate rhythm, or be two double hung windows placed together.

Rupert: Clarified the central jamb as a mullion.

Swift: Stated that the central jamb is key to the visual weight and exterior lines of the building.

Prebys: Indicated the commission would be supportive of having that appearance applied over the windows.

Staff: Clarified that a single light could have a mullion and muntin applied over.

Swift: Stated that there should be a sketch with dimensions.

Rupert: Stated that there is one on Pearl Street, next to Ace Hardware, there is one similar.

[Discussion of muntin and mullion composition]

Pettit: Asked if HDC would be willing to work with a single pane fixed piece of glass with the appropriate dividing elements applied over it.

Swift: Indicated this may be appropriate if it were a central jamb solution with two fixed pieces and some muntins. Would also be open to operable sashes with a thick muntin.

Pettit: Affirmed that it is possible the HDC would be willing to work with a fixed window but with a grille pattern.

Doran: Stated he had pushed for a design that would divide the window into four.

Swift: Asked for clarification that this would be one piece of glass.

Doran: Confirmed. One piece of glass with faux dividers.

Swift: Stated that if there is going to be fixed windows, the jamb should replicate the center jamb posts with two pieces of fixed glass. Asked applicant to investigate and see if it is feasible. Could be squared or arched.

Rupert: Stated the windows do not have to be wood or metal.

[Discussion of window cladding]

Doran: Stated he would prefer wood windows, however replication is where it gets expensive. The one he suggested looking into is a single pane with four divided panels.

Pettit: Indicated that simple of a pattern is something the HDC would struggle with.

Doran: Asked if that applied even to the front of the building.

HDC members confirmed.

Doran: Asked the HDC to consider that the façade windows are currently vinyl and not historic.

Pettit: Asked if the arches are different between the 100 and 102 W Michigan facades.

Doran: [Referred to drawings and described that some appear to have wood and others masonry].

Pettit: Stated that the (façade) windows appear as though they were treated differently. Asked the HDC if they would ask the applicant to reopen the arches.

Swift: Stated that the HDC had been discussing square windows, and the details of the frames.

Pettit [Reviewed window details]. Stated that the HDC has not asked folks to replace windows based on a guess of what might have been there. Cannot think of a precedent.

Prebys: Asked Doran for clarification on replacements.

Doran: Reaffirmed that the original proposal was to replace windows with a solid fixed aluminum-framed window. In order to compromise at the meeting, said he would do solid wood-framed windows. Stated that the only viable option is a wood window with four dividers.

Swift: Asked to revisit Pettit's comment regarding window replacements.

[Discussion of precedent, and appropriate period to go back to].

Swift: Stated this is an opportunity to get to the original architectural intent as much as possible.

Pettit: Stated that is not consistent with other buildings downtown.

Slagor: Clarified period of significance. The local historic district ordinance is so old that it does not identify contributing and non-contributing buildings. When possible, staff defers to the National Register nomination, which is also 40 years old. The nomination has the building as non-contributing because of the paneling, but also has a caveat that buildings could be made contributing if restored. In his opinion, this makes interpretation tricky. He also clarified that the period of significance for the National Register district is 1832-1932.

[Discussion of contributing vs. non-contributing].

Swift: This is an opportunity to weigh in on decisions made to a building that was non-contributing because of alterations that were removed. This is different than a non-contributing building that was identified because of a newer construction date.

Doran: Stated that different kinds of windows have been approved up and down Michigan Avenue. Exceptions appear to have been made. Not asking for something that will stand out and look out-of place, and want to preserve some of the details. Recognizes that the HDC sees this as an opportunity to fix problems with the building. The existing vinyl windows were installed in 2012.

Prebys: Stated that the windows were installed without approval.

Doran: Stated that is likely the vinyl windows will be left in.

Swift: Stated that the proposed new windows would not be appropriate. [Sketched window-using historical photos as a guide]

Prebys: Asked to consider side elevation windows to be a full panel of glass.

[Discussion of infill windows vs. open]

Prebys: Asked about front façade and first four on the east elevation having a historic appearance with greater flexibility on the other windows.

Swift: Affirmed that may be an approach.

Rupert: Suggested Marvin windows. [Discussion]

Doran: Stated that they hoped to use Pella windows, but it was too costly.

Prebys: Asked applicant what he needed to have accomplished at the meeting to continue.

Doran: Indicated that any one of the issues could be addressed, including masonry/brickwork, tuck-pointing, and rebuilding.

Swift: Asked if the brick Doran brought in will be used.

Doran: Confirmed, used on the rear elevation.

Rupert: Stated they cannot approve applications in sections.

Slagor: The applicant must voluntarily modify the application at the meeting to include one thing and strike another.

Pettit: Confirmed.

Swift: Stated that the HDC cannot approve windows this evening.

Pettit: Stated that more details are needed. But masonry can probably be address.

Doran: Asked about approval of infill.

[Review infill plans]

Rupert: Indicated he has no problem with the infill as proposed.

Swift: Indicated that she would find it appropriate if they can be sure the window solution would be more appropriate and matching some of the original details.

Rupert: Asked if the HDC could request the applicant to store and preserve original window.

Swift: Stated that should be a caveat for approval of removal of original materials. Stated that this is more part of the window approval. If they are going to approve masonry infill, that they will need compromise that the remaining windows are more appropriate. To be discussed on the next meeting.

Pettit: Stated that is a nonspecific condition and would not be appropriate. The HDC needs a more specific answer if it is going to interfere with masonry.

Swift: Indicated the HDC could outline important architectural elements of the windows that they would like to see introduced into the design of the new windows. The central jamb is an important factor. The window can be square with appropriate trim to reflect the original arched

opening. Reiterated that the central jamb needs to be replicated. Can be operable or fixed. Central muntin for two sashes should be thicker. Muntins can be an exterior application.

Prebys: Does that have to be on the motion? Based on discussion, it should just be for repairing and replacing brick.

Slagor: Said that the applicant would need to amend the application for just masonry approval. The windows could be discussed as a study item. Conditions for window approval would be a good idea for future window applications.

Swift: Asked if there would be an opportunity to review windows if there is something in the motion.

Doran: Said they would not commit to a specific design.

Slagor: Stated, you would put requests in tabling.

Doran: Asked to amend the application to include only masonry work.

Rupert: Asked to clarify masonry work- brick infill of some openings, and reconstruction of part of the exterior. Items [4]C and [4]D of the staff review.

[Discussion of finer points of the motion]

Swift: Asked if painting was part of this application.

Rupert: Stated it was amended to only include masonry.

Prebys stated a color sample for the future painting would be helpful.

Pettit: Asked for clarification on metal coping of the roof.

Doran: Stated that coping would not be done until after masonry. Goal is to do anything now with masonry as it has been a struggle to get folks committed to the work and there is someone lined up for tomorrow.

[Discussion working through appropriate motion]

Motion: Swift (second: Rupert) Move to approve and issue a certificate of appropriateness for work proposed at 100 W Michigan as amended at the Dec. 10, 2019 Historic District Commission meeting. Approval is conditioned on the items discussed at the meeting. Specifically application details 4C and 4D, [from the staff review] brick infill of some openings and reconstruction of part of the exterior. Some of the window openings on the east elevation are to be removed, including third and fourth bays north from the southwest corner, which are in sections that need to be reconstructed, totaling four windows. This infill shall be setback a minimum of one inch from face of façade to indicate original openings. As well as the northern five bays on the same elevation, totaling 10 windows. They will have the same infill treatment as the other infill windows, with a setback of at least one inch to match windows in bays three and four; all matching the approved north elevation details infill details. The Commission would recommend that efforts be taken to preserve and store any existing original windows that are in sound enough condition to store and preserve.

Secretary of the Interior Standards:
#5 – Preserve distinctive features.

Approval: Unanimous. Motion carried

Pettit: Stated to the applicant that they are not trying to create additional challenges, but are trying to execute their mission while promoting development in the city.

Slagor: Stated he will compile a summary of what HDC is looking for, will send it to the HDC for review and then on to the applicant. Wants to ensure a complete application.

STUDY ITEMS

302 E Cross

**Windows and siding update.*

Applicant: Maxwell Ziebarth, owner- present.

Discussion: Pettit: Asked to update siding.

Ziebarth: Provided a sample of original and replacement siding. Indicated that the new siding had gone up on the west elevation, facing to Park Street, where the porch was removed. Stated he is also working on closing in foundation basement well.

Pettit: Indicated there was concern for open holes on the façade.

Ziebarth: Stated that was addressed yesterday, with OSB protecting openings.

Pettit: Asked about the foundation.

[Discussed details of interior foundation work]. Ziebarth stated most work is taking place inside with no change to the exterior.

Pettit: Asked about siding.

Ziebarth: Indicated he will continue working on the west elevation porch to get the porch back up.

Pettit: Asked the completion date for the siding.

Ziebarth: Stated he will work through December.

Pettit: Asked if an update can be provided in January.

Ziebarth: Confirmed.

Rupert: Asked about the porch roof rafters on the west elevation.

Ziebarth: Stated the porch roof was never appropriately attached because it was added later.

[Discussion of incorporating porch roof into the structure].

Swift: Stated there was concern to have the wall sided before winter weather.

Ziebarth: Stated he can work on the porch ceiling joists outward.

[Discussion of porch dimension and closing off the open areas]

Pettit: Confirmed that work can continue, just have it buttoned-up as soon as possible.

Pettit: Asked about the windows.

Ziebarth: Stated he is looking into Jeld-Wen Sash packs, aluminum-clad wood with muntins.

Prebys: Stated that the windows are historically one-over-one with no muntins and should not be added.

Ziebarth: Stated he did not need muntins. However there is more detail on the bay windows on the east elevation, and front window. Would like to preserve those.

Rupert: Suggested storm widows on the bays.

Swift: Asked if it was established that replacement windows are appropriate.

Rupert: Stated that they had established issues with sashes and not the jambs.

Slagor: Stated that the HDC asked for a proposal for windows but has not explicitly asked for a window-by-window assessment.

[Discussion of window features, which should be replaced and which should be preserved]

Prebys: Stated the HDC needs an itemized list of windows, showing condition and specific window it would be replaced with.

Pettit: Stated that a lot of windows look repairable and will want to see details as to why it is or is not possible.

[Discussion of windows in photos].

Swift: Indicated it would be easy to make a case for replacement of missing windows or non-historic replacements, or rot.

Ziebarth: Stated he understands that he is trying to keep continuity of preservation and is factoring in windows that are there in replacements. Stated that the bay on east elevation is in great shape and just needs some work. Same for north elevation bay.

Swift: Reaffirmed that features of architectural importance and street-facing facades are of chief concern for the HDC.

Discussion [Date of the next meeting discussed, and study items to be addressed]

Pettit: Asked about doors.

Ziebarth: Stated door on east elevation has deteriorated and was added in the 60s. Would like the two front doors repaired as they are solid.

Pettit: Stated that after door and window discussion there will be discussion of porch.

Ziebarth: [Brief discussion of skirting].

[Discussion of appropriate motion]

Swift: Asked about foundation work.

Slagor: Stated that foundation work has been approved and the applicant is just providing updates. The exterior holes are filled in, but work is ongoing on the interior.

[Discussion of next meeting]

Motion: Prebys (second: Rupert) Move to have progress update and study item at the January 14, 2020 Historic District Commission meeting for the property at 302 E Cross. The owner is to provide the HDC with a plan for windows, including which need to be replaced, and how; and documentation of the final closing of exterior of the building; and an update on foundation work at the meeting on January 14, 2020.

Approval: Unanimous. Motion carried

ADMINISTRATIVE APPROVALS

- | | |
|-------------------|-------------|
| 1. 305 E Forest | Roof |
| 2. 301 N Adams | Garage roof |
| 3. 201 W Michigan | Roof |
| 4. 314 Pearl | Garage roof |

Motion: Prebys (second: Rupert) moved to approve the administrative approvals for 305 E Forest, 301 N Adams, 201 W Michigan, 314 Pearl.

Approval: Unanimous. Motion carried.

OTHER BUSINESS

1. Small Cell Colocation at 301 N Hamilton

Slagor: Reviewed what Section 106 is and the proposed project. Affirmed that a permit would be required, but asked HDC to have an opportunity to comment.

Rupert: Stated that there is precedent for HDC permits for small cell towers at 124 Pearl.

Pettit: Biggest question is what the tower will look like.

[Discussion of tower colocation and necessary visual]

Pettit: Asked about junction box.

Swift: Asked about landscaping.

[Discussion of small cell tower continued]

Slagor: Summarized that the HDC is concerned about how the tower will affect the integrity of setting of the district as it relates to the surrounding contributing buildings.

HDC: Affirmed Slagor's statement.

2. Property monitoring

General discussion of doors and unapproved work in the district; and potential for door fact sheets.

3. Commissioner comments

General discussion of doors and unapproved work in the district.

Swift: Asked about Window Fact Sheet.

Slagor: Has a draft completed.

Swift: Asked for that to be up at the next meeting.

Swift: Officially wished everyone a happy holiday season.

AUDIENCE PARTICIPATION ON NON-AGENDA ITEMS- none

HOUSEKEEPING BUSINESS

1. HDC 2020 Schedule

Motion: Rupert (second: Swift) moved to approve the 2020 Historic District Commission schedule as presented.

Approval: Unanimous. Motion carried.

2. Approval of the minutes of November 12, 2019

Motion: Rupert (second: Prebys) moved to approve the minutes of November 12, 2019, as drafted.

Approval: Unanimous. Motion carried.

ADJOURNMENT

Interim Chairperson Pettit adjourned the meeting, citing the end of the agenda with no further items to discuss.

MEETING ADJOURNED at 9:36 p.m.

Full Minutes Prepared By: Scott Slagor

DRAFT

YOUNG & ULRICH ENGINEERING, INC

1745 Indian Wood Circle
Suite 125
Maumee, Ohio 43537
Phone; (419) 214-0505
Fax: (419) 214-0506

December 10, 2019

O'Neal Construction Company
Attn. Tim Stout
525 West William St.
Ann Arbor, MI 48103

Mr. Stout,

A crew has been on site monitoring the demolition of the building at 100 West Michigan Ave. in Ypsilanti, Michigan. Following the demolition, preliminary inspections and assessments have been made on the current condition of the exterior walls of the building. We have developed a plan for the repair of the building which consists of the following:

- All brick along the three exposed sides of the building (North, South and East) will need to be power cleaned by a method chosen by the contractor. It must be ensured that the method chosen does not further disturb any of the existing brick or grout. Once all repair work is complete, we recommend that an epoxy paint/coating be applied to the three exposed walls of the building.
- There are a few areas where all of the brick will need to be removed and replaced. We have highlighted these areas on the following pages.
- There are some areas which will need to be tuck pointed and injected with adhesive or repaired using helical stitching. We have determined that this will be required at any crack, gap or shift less than 3/4" that is not going to be replaced or at any crack that is near the floor bearing elevation or a window. Once this has been completed, grout can be added to the exterior and interior wythes to fill in cracks and the damaged/missing grout. The mason and GC should determine these locations in the field per the criteria above.
- All cracks that are not near a window or the floor bearing elevation, and are not being replaced or injected, need to be tuck pointed.

YOUNG & ULRICH ENGINEERING, INC

1745 Indian Wood Circle

Suite 125

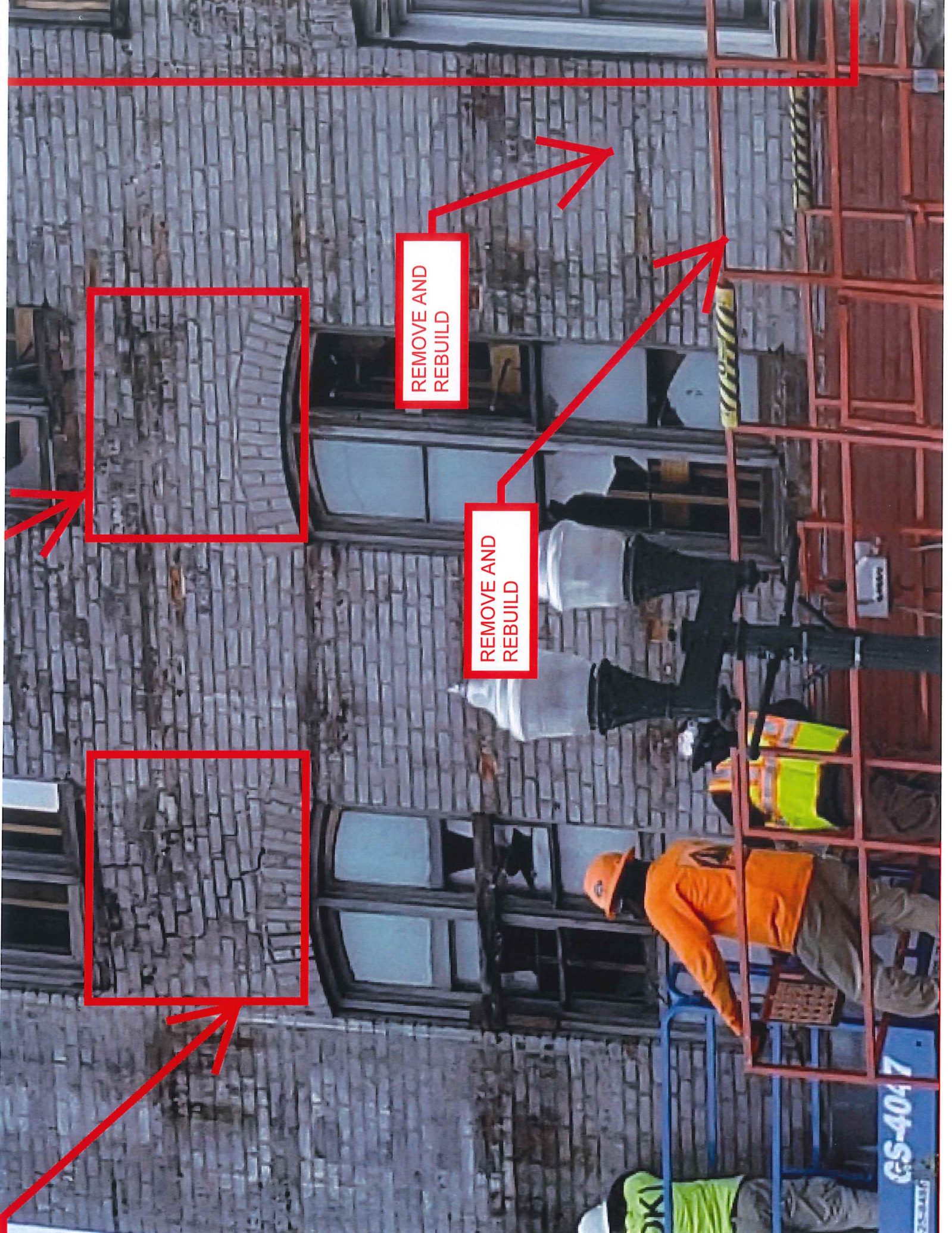
Maumee, Ohio 43537

Phone; (419) 214-0505

Fax: (419) 214-0506

- At the Southeast corner of the building, the rotten wood lintels will need to be replaced. This will require shoring of the structure until replacement lintels are installed.
- At the (2) storefront locations that are to remain and the location of where the storefront will be filled with block, further inspection of the steel lintels needs to be completed. We suspect that these lintels have failed and will need to be replaced. This will also require shoring of the structure until replacement lintels are installed.
- Any area where there is a shift, settlement or gap of 3/4" or more will need to be replaced. This will be in areas where there is a vertical or horizontal deviation in the brick pattern. Note that al (3) wythes of brick will need to be replaced in these areas.

On the following (3) pages, we have marked up the areas of the wall with specific instructions on repair work. Any areas not marked up, should be repaired per the criteria on Page 1 and above.



REMOVE AND
REBUILD

REMOVE AND
REBUILD

GS-4047





YOUNG & ULRICH ENGINEERING, INC.

1745 Indian Wood Circle

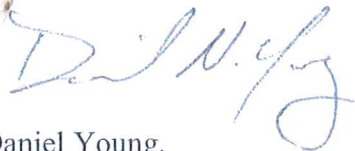
Suite 125

Maumee, Ohio 43537

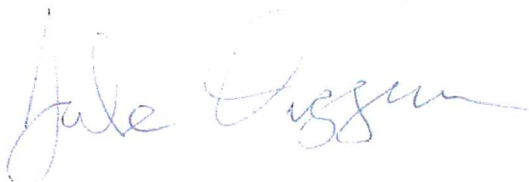
Phone; (419) 214-0505

Fax: (419) 214-0506

Thank You,

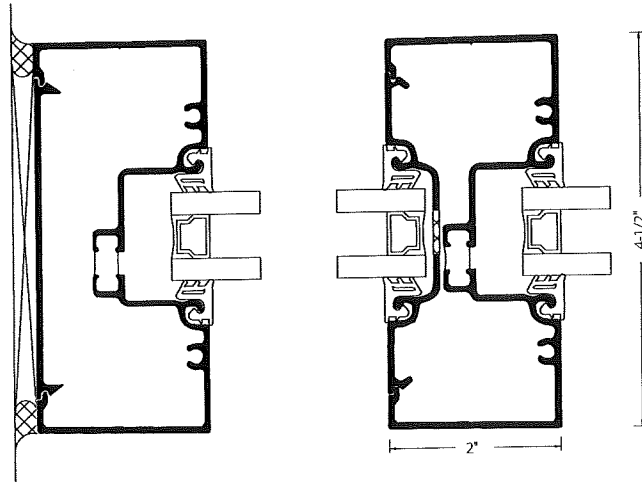
A handwritten signature in blue ink, appearing to read "D. Young".

Daniel Young,
President

A handwritten signature in blue ink, appearing to read "Jake Duggan".

Jake Duggan,
Associate Engineer

14000 Series Storefront Framing

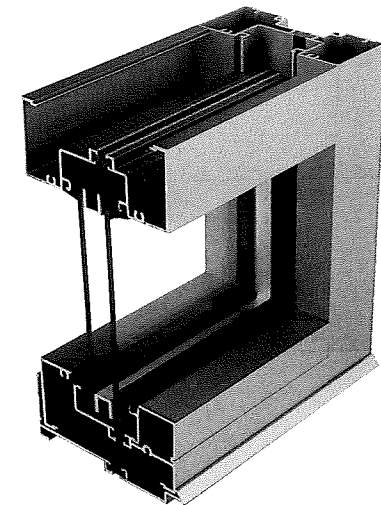


System Features:

- Standard 2" (50.8mm) sight-line on verticals and horizontals
- 4-1/2" (114.3mm) system depth
- Single Pour & Debridge thermal break with Azon's Lancer® mechanical lock
- EPDM wedge type gaskets for 1" glass or panel thickness
- Glass centered in the system depth

Optional Features:

- Screw-spline or shear block connections
- Steel reinforcing if required
- Easily integrates with standard or thermal doors, operable vent windows & sun shades
- 7 anodized and 19 painted standard finishes
- Curved Headers
- Non-thermal Framing



14000 Series Product Specifications

See Tubelite's Test Reports for mock up sizes and test conditions.

Application: Low-rise commercial buildings: retail, office, healthcare, schools, etc.

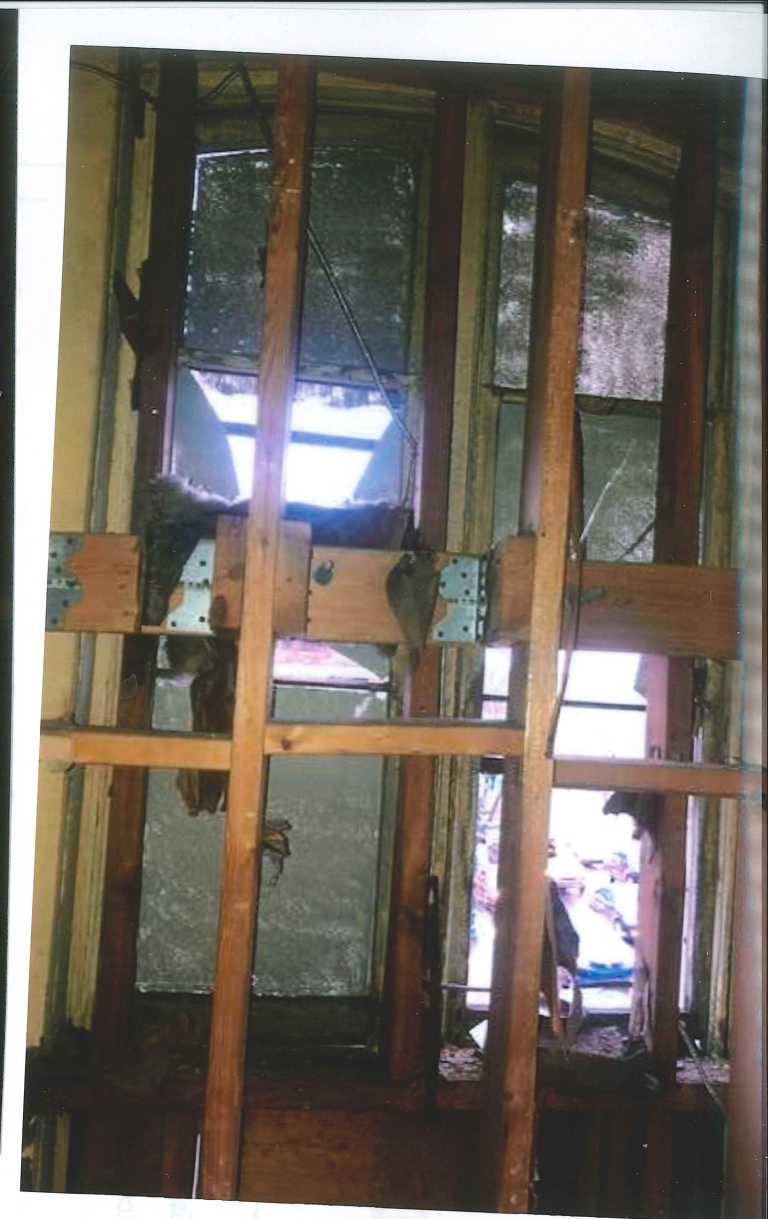
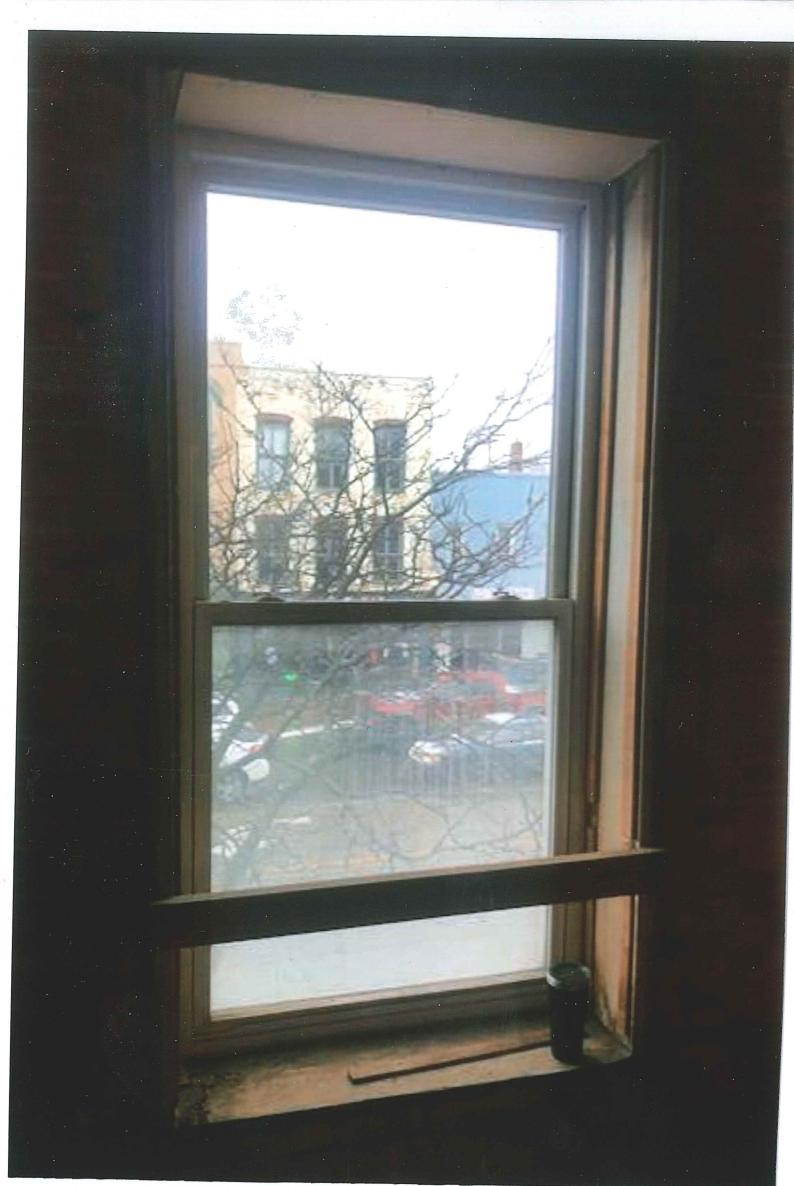
Description: 2" x 4-1/2" center set, outside or inside flush glazed storefront

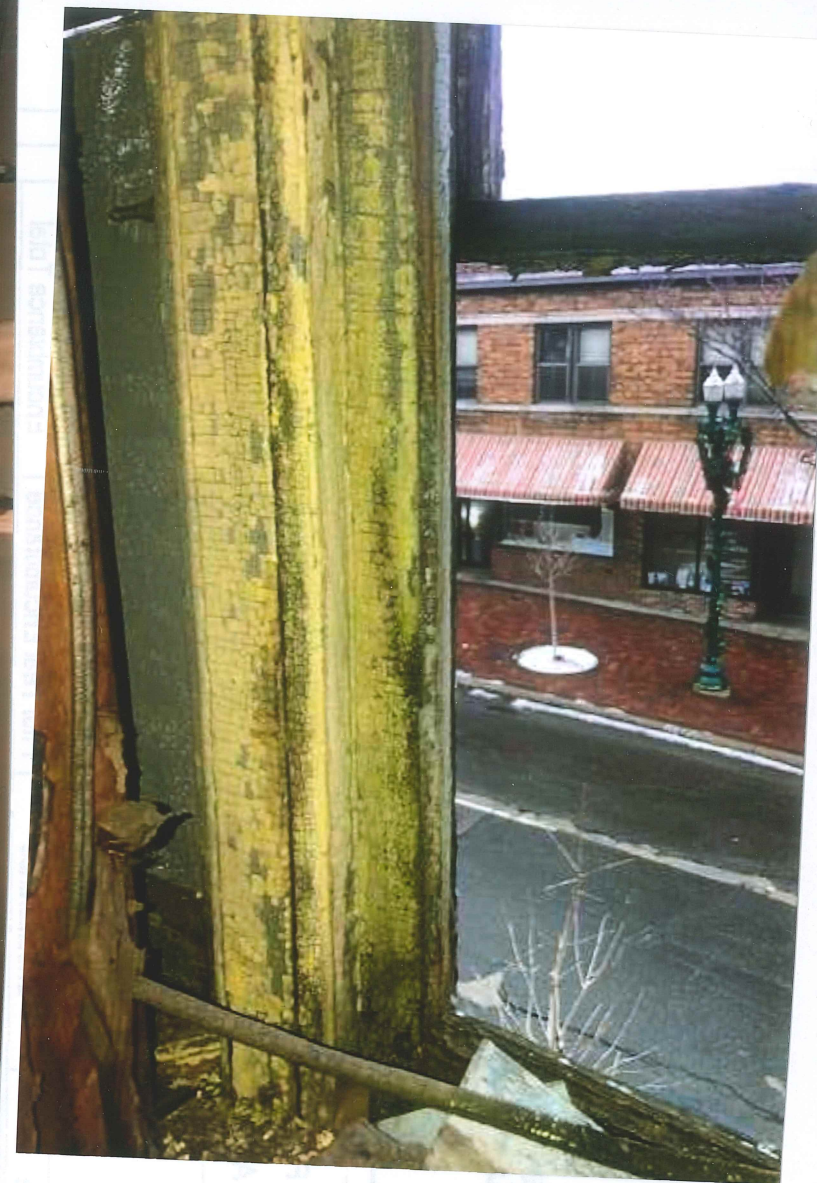
Face Width:	System Depth:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	CRF:	U-Value:	Acoustic:
2"	4-1/2"	1" std (1/8" – 1-1/8")	0.06 CFM/Ft.2 @ 6.24 PSF	10 PSF – Static 10 PSF – Dynamic	30 PSF – Design 45 PSF – Overload	T (Thermal) 62 ₆ 68 ₆	E (Non-thermal) 0.47 T (Thermal) 0.33	STC 32 OTC 26

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CITY OF YPSILANTI
Agenda
Historic District Commission
Tuesday, January 14, 2020 - 7:00 p.m.
Ypsilanti Historical Society, 220 N Huron St.
Ypsilanti, MI 48197

The Ypsilanti Historic District Commission works to safeguard Ypsilanti's built heritage by guiding development and renovation within the Historic District. Enabled by federal, state, and local legislation, the HDC seeks to stabilize and improve property values, to promote preservation education, and to develop the Ypsilanti Historic District as a vital living area.

An audio recording of the meeting will be made for the purpose of assisting in the preparation of official minutes only. Once the official minutes are approved the audio recording will be destroyed.

I. CALL TO ORDER AND ROLL CALL

Alex Pettit, Interim-Chair	P	A
Anne Stevenson, Vice Chair	P	A
Erika Lindsay	P	A
Hank Prebys	P	A
Ron Rupert	P	A
Amy Swift	P	A
James Chesnut	P	A

II. APPROVAL OF AGENDA

III. PUBLIC COMMENTS ON AGENDA ITEMS

IV. PUBLIC HEARING—none

V. BUSINESS SESSION

A. OLD BUSINESS- none

B. NEW BUSINESS —none

1. 307 N River	Site plan- various features included
2. 318 Maple	Window replacements
3. 629 N River	Shed and fence
4. 400 N River	Solar carport
5. 218 (209) Washtenaw	New parking lot signage

C. STUDY ITEMS

1. 302 E Cross	Progress update and window proposal
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D. ADMINISTRATIVE APPROVALS—none

E. OTHER BUSINESS

- 1. Windows Fact Sheet Update**
- 2. 2019 HDC Annual Report, for Council**
- 3. 2019 HDC Annual Report, for State Historic Preservation Office**
- 4. Section 106 consulting party- 301 N Hamilton Update and 401 N Adams**
- 5. Property monitoring**
- 6. Commissioner comments**

VI. AUDIENCE PARTICIPATION ON NON-AGENDA ITEMS

VII. HOUSEKEEPING BUSINESS

- 1. Approval of meeting minutes, December 10, 2019**

VIII. ADJOURNMENT

Secretary of the Interior's Standards for the Rehabilitation of Historic Structures

Developed by the U.S. Department of the Interior, the Standards provide a framework that guides protective decisions regarding historic structures. The Historic District Commission is required to cite applicable Standards with each formal decision it renders. It may also cite HDC Fact Sheets as part of its decision-making process.

1. Use property for original purpose or provide compatible use with minimal alteration.

A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. Do not destroy original character. Do not remove or alter historic material or features.

The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Do not imitate earlier styles.

Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Preserve significant changes acquired over time.

Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Preserve distinctive features.

Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Repair, don't replace. Replacements shall match original.

Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Clean building gently—no sandblasting.

Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Preserve archaeological resources.

Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New work shall be removable.

New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.



HDC Work Permit Staff Review

Property address: 307 N River

Property History: The property includes a former automotive service station that was known as "Ted's Auto Electric," which was converted to a restaurant, known as "Cultivate" in 2015. Staff estimates that the original concrete block section of the building; with two garage bays; was erected ca.1964.ⁱ The bricked section of the building appears to have been completed in 1968.ⁱⁱ The building was considered modern at the time of the National Register listing, and therefore is noted as non-contributing.

Date of Application: December 19, 2019

Date of Review: January 8, 2020

Date of Meeting: January 14, 2020

Proposed work: Multiple project related to the approved site plan, including: a three-season porch, deck, fences, sign, dumpster enclosure, lighting, mural, and repainting.

Materials: Multiple- see step-by-step review.

Staff review:

1. This application is for work to fulfill a site plan that was conditionally approved by the Planning Commission in August 21, 2019. Aspects of the plan were first presented to the HDC as a Study Item on April 23, 2019.
2. The approval is for multiple elements on the site plan and building. These elements are broken down item by item below.

Three Seasons Porch

3. The applicant proposes installing a three-season porch on the north elevation.
 - a. The porch will cover an area of approximately 24'x48', and match its roofline to the bricked section of the building.
 - b. The porch walls and awning roof will be constructed by Marygrove Awning.

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

- c. The applicant's first choice for a porch roof will have a louvered roof system.
- d. The second choice is a non-louvered commercial grade metal roof system.
- e. The porch will have a roll-up PVC-coated fiberglass screen enclosure to open and close the space depending on the weather.
- f. The screens will rest on metal-framed knee-walls.
- g. The applicant has been advised to provide the specific information on the enclosure.

Deck

- 4. A small deck to function as a stage will be constructed on the east elevation.
 - a. The cedar plank deck will be 8' deep and extend the length of the elevation.
 - b. It will be stained in "700 Sierra" opaque.

Fences

- 5. Two fences are proposed for the property.
 - a. A black steel fence will enclose the beer garden and encircling the building on the north, east, and west sides; partially extending on the southern elevation.
 - b. For screening, a 6' cedar fence will extend on the south property boundary, similar to what is there currently; which is a dog-eared wood fence.
 - c. The wood fence will be stained in "700 Sierra" opaque.

Dumpster Enclosure

- 6. One of the key points of the site plan was design and placement of the dumpster enclosure.
 - a. The enclosure will be constructed of concrete block with a metal coping.
 - b. It will be accessed by stained wood slat gates with galvanized steel posts.

Sign

- 7. The current sign on the north elevation will be moved to replace the sign on the east elevation.

Lighting

- 8. The lighting plan for the site includes installation of new light poles to illuminate the parking lot.
 - a. The metal light poles will be 13'6" tall.
 - b. The light fixtures will be D-Series Size 1 LED Area Luminaire.
 - c. The fixtures are flat lenses and appear to meet the guidelines of the Lighting Fact Sheet.
 - d. However, the light temperature is at 5,000k, which is too strong. The HDC Lighting Fact Sheet states that lighting over 3,000k is inappropriate.
 - e. The applicant has committed to using the version of the light fixture that offers a lower color temperature.

Repaint the exterior

- 9. The painted concrete block section of the building will be repainted.
 - a. The walls will be painted Sherwin-Williams "Pure White."
 - b. The trim that wraps the building will be painted Sherwin-Williams "Tricorn Black."

Mural

- 10. The concrete block section of the building will feature a black and white floral mural.

Site Plan Landscape Features

- 11. The remaining site plan features include a redesigned parking area and vegetative landscaping.
- 12. The existing hedge will be retained along Photo Street.

Recommended Motions:

Move to approve and issue a Certificate of Appropriateness for the work at 307 N River as presented in the application dated December 19, 2019, the exterior work described in the submitted site plan, and repainting the exterior concrete block section in black and white with a mural; and staining the wood deck and fence in "700 Sierra" opaque. The approval is conditioned that the selected light fixtures have a temperature of 3,000k or less.

Relevant Secretary of the Interior's Standards:

#9

Move to table action on the proposed work at 307 N River so the applicant may provide additional information regarding [INSERT ANY AREA OF THE SITE PLAN THAT WAS LACKING].

Prepared by:

Scott E. Slagor, Preservation Planner

ⁱ City of Ypsilanti Assessor; Sanborn Map Co., *City of Ypsilanti, Washtenaw County* (New York: Sanborn Map Company, 1927, revised. 1964), 18.

ⁱⁱ City of Ypsilanti Planning and Development.



RECEIVED

DEC 19 2019

CITY OF YPSILANTI
BUILDING DEPARTMENT

City of Ypsilanti Historic District Commission Work Permit Application

One South Huron • Ypsilanti, MI 48197
Phone: (734) 483-9646 • Fax: (734) 483-7260
www.cityofypsilanti.com

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

*Paid under study item
PHDC-19-0017*

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA**Property**

Address

307 W. River St. / Ypsilanti

Applicant**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

RYAN WALLACE

Address

City

Ypsilanti

State

MI

Zip

48197

Phone / Fax

E-Mail

Contractor

Contractor Name & Contact Info

CALO & SONS

Tim O'Donnell

excavator King 99@yahoo.com

+

ourselves.

Type of work☐ Roofing☐ Window/Door
Replacement☒ Porches☒ Sign☒ Fence (or other sitework)☒ Painting☐ Other☐ Application Amendment

Complete Description of Proposed Work:

porch - 3 season porch - covered roof system of something similar (Black color)
deck - small out front - cedar wood
Fence(s) Black rod iron under 6ft. around property - cedar behind it,
Paint - Repaint white parts of building w/ fresh coat.
= Repaint Green strip black
Sign - move to front of building. (existing one)
mural - Black on white mural of flowers, similar to ones in our shop

Also site plan details - SES 1-7-2020

Materials (for paint include color chips or samples with application):

Already paid Early this year.

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. *An additional fee of \$50 applies to HDC work started without the applicable permit.*

Construction Cost:

Permit fee:

\$45 + _____ =

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature

Date:

12/18/19

Print Name:

Ryan Wallace

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.

CULTIVATE COFFEE & TAP HOUSE

SITE IMPROVEMENTS

307 N. RIVER STREET
YPSILANTI, MI 48198

OWNER/DEVELOPER

307 PROPERTY LLC | RYAN WALLACE
307 N RIVER ST
YPSILANTI, MI 48198
T: 616.502.3525

ARCHITECT

BOWERS + ASSOCIATES, INC.
2400 S. HURON PARKWAY
ANN ARBOR, MI 48104
T: 734.975.2400
F: 734.975.2410

CIVIL ENGINEER

NOWAK + FRAUS
46777 WOODWARD AVENUE
PONTIAC, MI 48342
T: 248.332.7931
F: 248.332.8257

PROJECT DESCRIPTION

SITE IMPROVEMENTS TO EXISTING PROPERTY
TO BRING UP TO CITY STANDARDS

SHEET INDEX

ARCHITECTURAL

T1.00 TITLE SHEET
SP1.00 SITE PLAN
SP2.00 SITE DETAILS

CIVIL

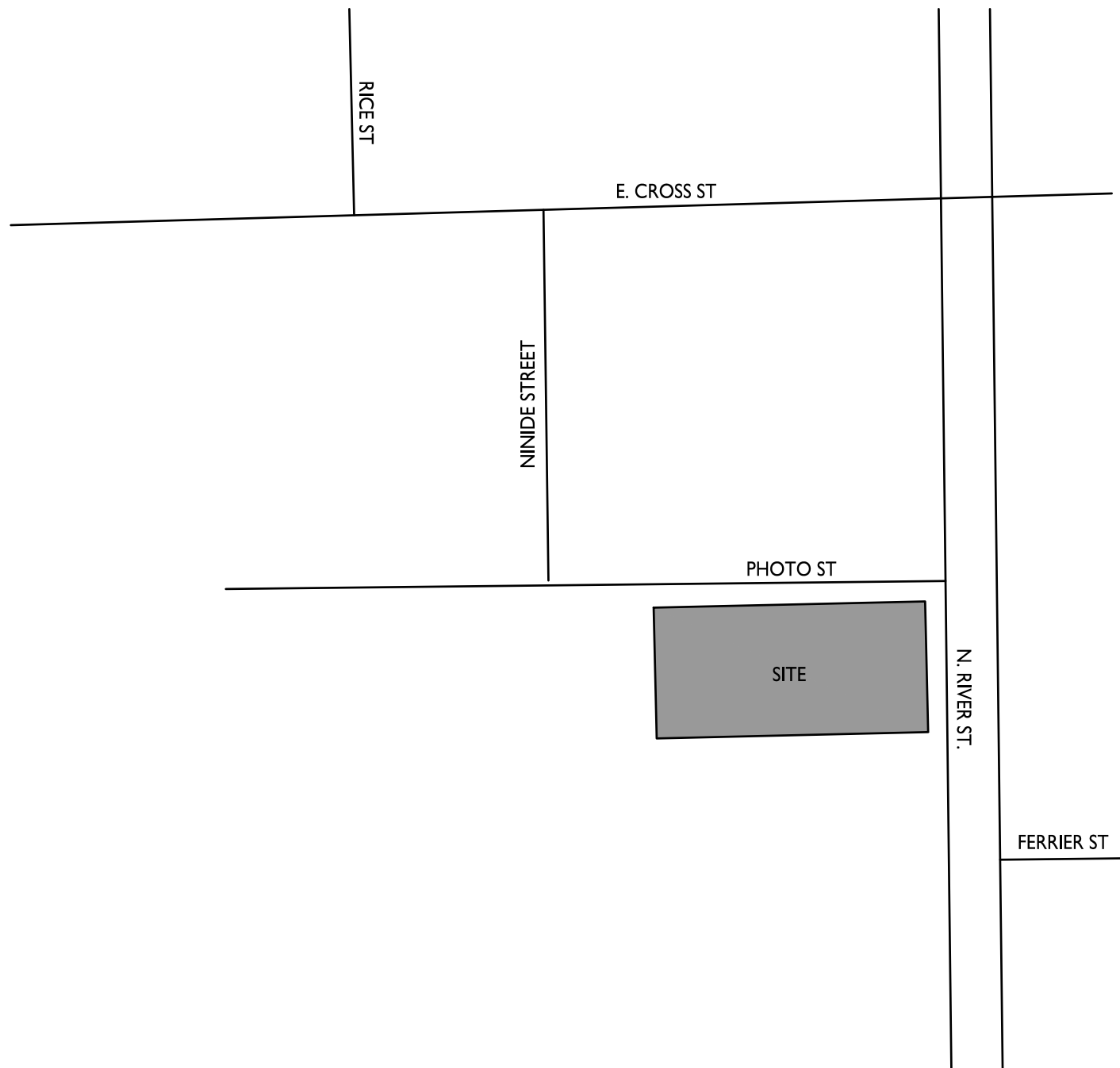
C1 BOUNDARY / TOPOGRAPHIC SURVEY
C2 PAVING / GRADING PLAN

ABBREVIATIONS:

ABV.	ABOVE
AFF	ABOVE FINISH FLOOR
ADJ.	ADJUSTABLE
AL.	ALUMINUM
ALUM.	ALUMINUM
ANOD.	ANODIZED
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX.	APPROXIMATE
ARCH.	ARCHITECT
BD.	BOARD
BDRM	BEDROOM
B.F.	BARRIER FREE
B.F.F.	BELOW FINISH FLOOR
BIT	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
B.O.	BOTTOM OF
BOTT.	BOTTOM
BTWN.	BETWEEN
CAB.	CABINET
CJ	CONTROL JOINT
CL	CLOSET
CLOS.	CLOSET
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
CPT.	CARPET
C.T.	CERAMIC TILE
D.F.	DRINKING FOUNTAIN
DIA.	DIAMETER
DN.	DOWN
DPFG	DAMP PROOFING
DR.	DOOR
DS	DOWNSPOUT
DWG	DRAWING
EA.	EACH
EJ	EXPANSION JOINT
ELECT.	ELECTRICAL
ELEV.	ELEVATION
EQ.	EQUAL
EW	EACH WAY
E.W.C.	ELECTRIC WATER COOLER
EXP	EXPOSED
EX	EXISTING
EXT	EXTERIOR
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN.	FINISH
FIXT.	FIXTURE
FLASH.	FLASHING
FLK.	FLOOR
FRP	FIBERGLASS REINFORCED PANEL
FRPFG	FIREPROOFING
FT.	FOOT, FEET
FTG.	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GYP SUM BOARD
GFI	GROUND FAULT INTERRUPTER
GL.	GLASS, GLAZING
GYP.	GYP SUM
HD	HARDWOOD
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ.	HORIZONTAL
H.P.	HIGH POINT
IN.	INCHES
INC.	INCLUDE, INCLUDING
INSUL	INSULATION, INSULATED
INT.	INTERIOR
ISOL.	ISOLATION
J.C.	JANITOR'S CLOSET
KIT	KITCHEN
L	LENGTH
LAV.	LAVATORY
LBS.	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
MANUF.	MANUFACTURER
MAR.	MARBLE
MAS.	MASONRY
MATL.	MATERIAL
MAX.	MAXIMUM

ABBREVIATIONS CONT.:

MECH.	MECHANICAL
MEMB.	MEMBRANE
MET.	METAL
MEZZ.	MEZZANINE
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTL	METAL
NATL	NATIONAL
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
O.F.	OVERFLOW
O.H.D.R	OVERHEAD DOOR
OPG	OPENING
OPP.	OPPOSITE
P.E.	PRE-ENGINEERED
PERIM	PERIMETER
PL	PLATE
PLAM.	PLASTIC LAMINATE
PLYWD	PLYWOOD
P.P.T.	PRESERVATIVE PRESSURE TREATED
PR	PAIR
PRE-ENG.	PRE-ENGINEERED
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PROJ.	PROJECT, PROJECTION
PROP.	PROPOSED/PROPERTY
PRTN	PARTITION
P	PAINT
PT	PORCELAIN TILE
QT	QUARRY TILE
R&S	ROD AND SHELF
R.C.	ROOF CONDUCTOR
R.D.	ROOF DRAIN
REFRIG.	REFRIGERATION, REFRIGERATOR
REINF.	REINFORCED
REINF'G	REINFORCING
REQ'D	REQUIRED
RET.	RETARDER
RF	RESILIENT FLOORING
RM.	ROOM
R.T.	RESILIENT TILE
RTNG	RETAINING
S.A.C.	SUSPENDED ACOUSTICAL CEILING
S.A.F.	SPRAY APPLIED FIREPROOFING
S.C.	SEALED CONCRETE
SCHED.	SCHEDULE
SCWD	SOLID CORE WOOD
SH	SHELF
SHW	SHOWER
SHT.	SHEET
SIM	SIMILAR
SPEC.	SPECIFICATION
SQ.	SQUARE
SS	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
ST. STL.	STAINLESS STEEL
STRUCT.	STRUCTURE
SUPP.	SUPPORT, SUPPORTED
SUSP.	SUSPENDED
SV.	SHEET VINYL
T&G	TONGUE AND GROOVE
TH.	THRESHOLD
TEL	TELEPHONE
THK	THICKNESS, THICK
T.O.	TOP OF
T.O.S.	TOP OF STEEL
TRANSF.	TRANSFORMER
TYP.	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
V.	VERTICAL
VB	VINYL BASE
VCT	VINYL COMPOSITE TILE
VERT.	VERTICAL
VVC	VINYL WALL COVERING
W.C.	WATER CLOSET
WD	WOOD
W.W.F.	WELDED WIRE FABRIC
W.W.M.	WELDED WIRE MESH



LOCATION MAP

NO SCALE

BOWERS+ASSOCIATES
ARCHITECTURE DESIGN
2400 SOUTH HURON PARKWAY • ANN ARBOR, MI 48104
P: 734.975.2400 • F: 734.975.2410
WWW.BOWERSARCH.COM

CONSULTANT + NAME

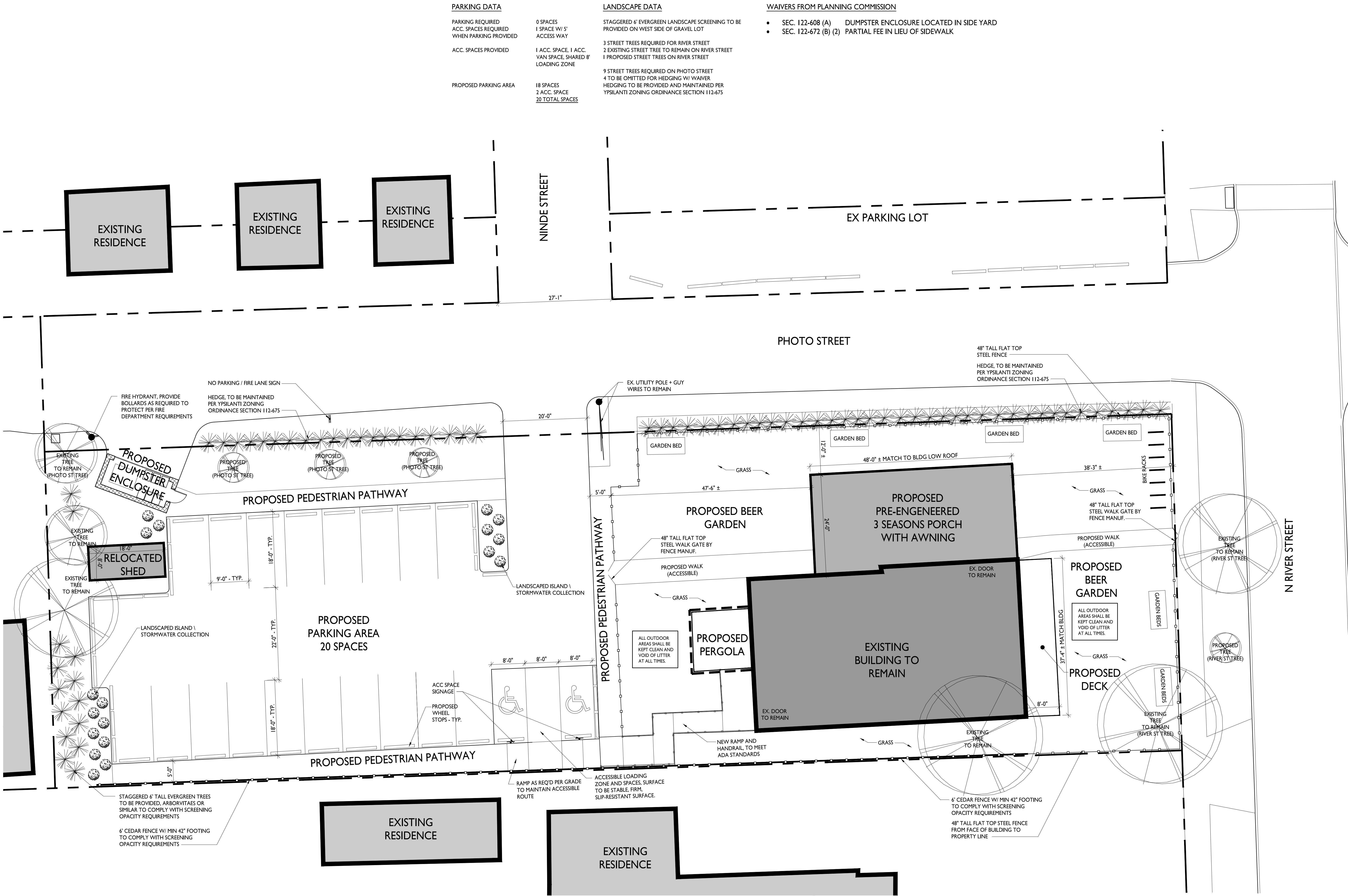
PROJECT + INFORMATION
**CULTIVATE
COFFEE & TAP HOUSE**
307 N RIVER ST
YPSILANTI, MI 48198

PROJECT + NUMBER
17-306

ISSUE + DATE
03 NOV 2017
26 JAN 2018 OWN REV
12 MAR 2018 SITE
25 JUNE 2018 OWN. REV.
23 AUG 2018
17 SEPT 2018 OWN REV
19 OCT 2018 ZBA
13 JUNE 2019 SITE PLAN
07 JAN 2020 OWN REV

SHEET + TITLE
TITLE
SHEET
17306SP100S.dwg

SHEET + NUMBER
T1.00



PARKING DATA

PARKING REQUIRED	0 SPACES
ACC. SPACES REQUIRED WHEN PARKING PROVIDED	1 SPACE W/ 5' ACCESS WAY
ACC. SPACES PROVIDED	1 ACC. SPACE, 1 ACC. VAN SPACE, SHARED 8' LOADING ZONE
PROPOSED PARKING AREA	18 SPACES 2 ACC. SPACE 20 TOTAL SPACES

LANDSCAPE DATA

STAGGERED 6' EVERGREEN LANDSCAPE SCREENING TO BE PROVIDED ON WEST SIDE OF GRAVEL LOT

3 STREET TREES REQUIRED FOR RIVER STREET
2 EXISTING STREET TREE TO REMAIN ON RIVER STREET
1 PROPOSED STREET TREES ON RIVER STREET

9 STREET TREES REQUIRED ON PHOTO STREET
4 TO BE OMITTED FOR HEDGING W/ WAIVER
HEDGING TO BE PROVIDED AND MAINTAINED PER YPSILANTI ZONING ORDINANCE SECTION 112-675

WAIVERS FROM PLANNING COMMISSION

- SEC. 122-608 (A) DUMPSTER ENCLOSURE LOCATED IN SIDE YARD
- SEC. 122-672 (B) (2) PARTIAL FEE IN LIEU OF SIDEWALK

BOWERS+ASSOCIATES
ARCHITECTURE DESIGN
2400 SOUTH HURON PARKWAY • ANN ARBOR, MI 48104
P: 734.975.2400 • F: 734.975.2410
WWW.BOWERSARCH.COM

CONSULTANT + NAME

PROJECT + INFORMATION
**CULTIVATE
COFFEE & TAP HOUSE**
307 N RIVER ST
YPSILANTI, MI 48198

PROJECT + NUMBER
17-306

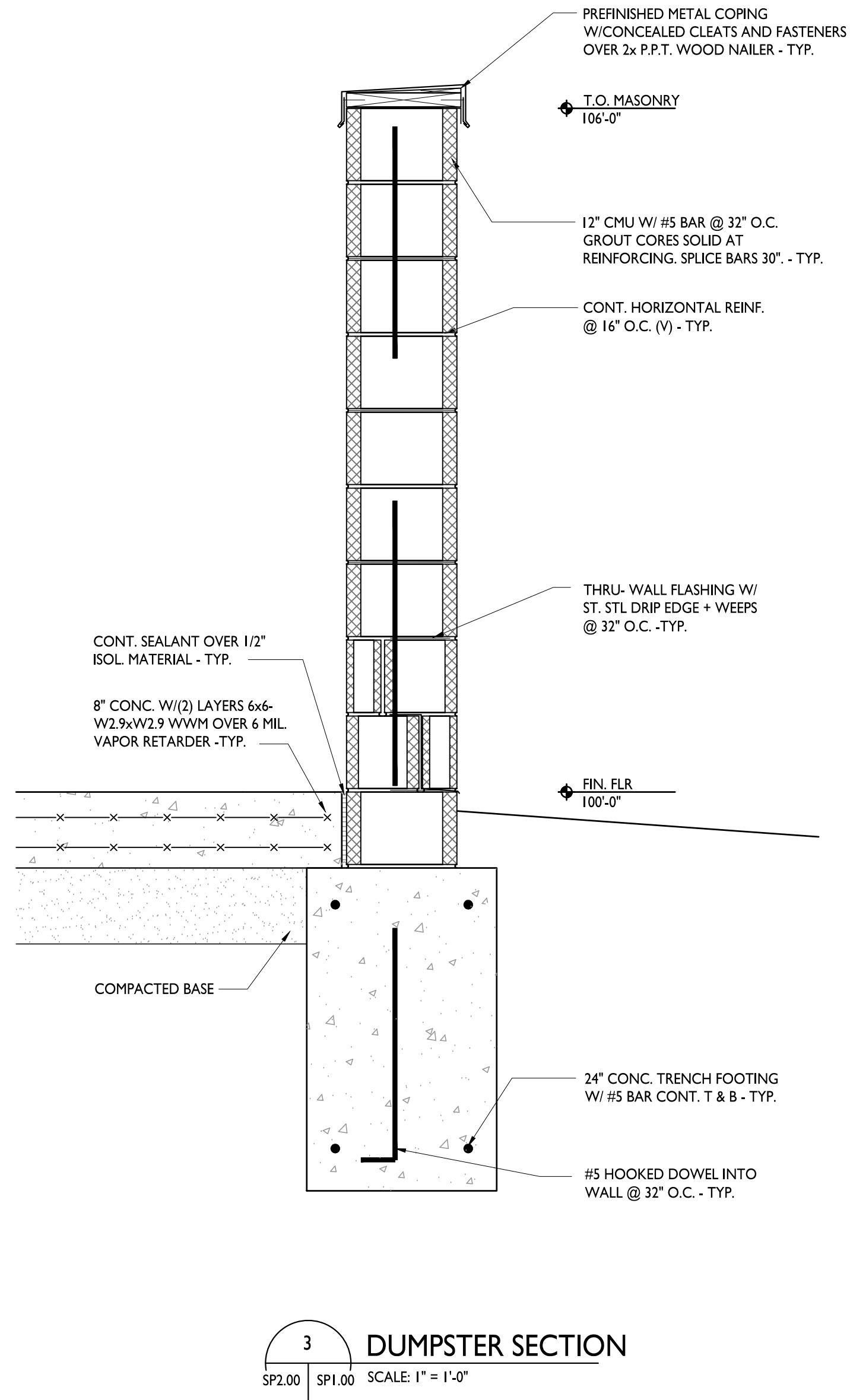
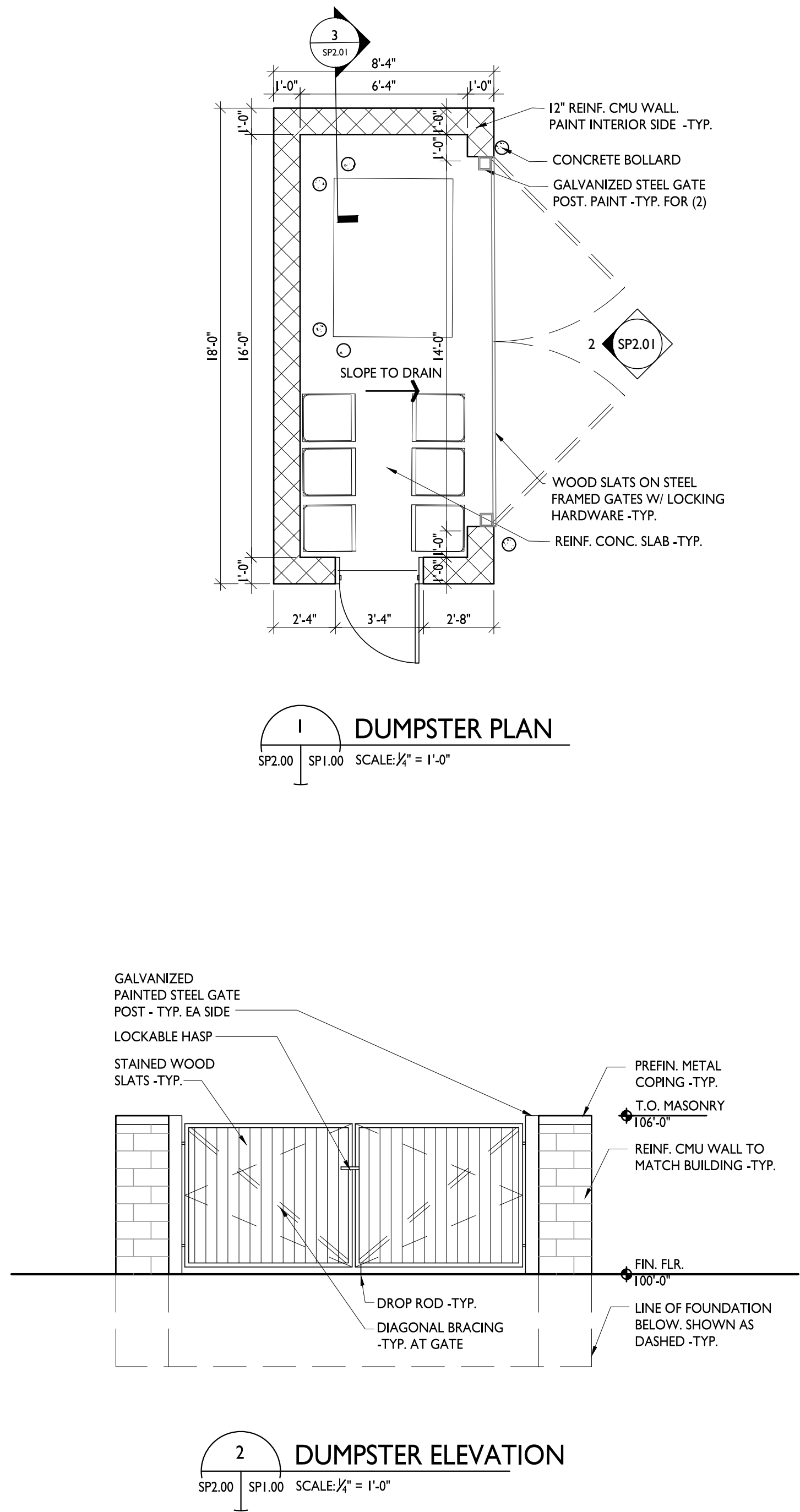
ISSUE + DATE
19 FEB 2019 OWN REV
05 MAR 2019 OWN REV
08 MAR 2019 OWN REV
22 MAR 2019 CITY
20 MAY 2019 OWN REV
13 JUN 2019 OWN REV
19 DEC 2019 OWN REV
07 JAN 2020 OWN REV

SHEET + TITLE
SITE PLAN
17306SP100S.dwg

SHEET + NUMBER
SP1.00

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PRELIMINARY SITE PLAN
SCALE: 1" = 10'



[\(https://www.marygrove.com/\)](https://www.marygrove.com/)

734-250-9069 (tel:734-250-9069)

[SPECIAL OFFERS \(/SPECIAL-OFFERS\)](#)[FREE IN-HOME ESTIMATE \(HTTPS://WWW.MARYGROVE.COM/FREE-ESTIMATE/\)](https://www.marygrove.com/free-estimate/)[Retractable Awnings \(https://www.marygrove.com/retractable-awnings/\)](https://www.marygrove.com/retractable-awnings/)[Residential Awnings \(https://www.marygrove.com/residential-awnings/\)](https://www.marygrove.com/residential-awnings/)[Commercial Awnings \(https://www.marygrove.com/commercial-and-storefront-awnings/\)](https://www.marygrove.com/commercial-and-storefront-awnings/)[Adjustable Pergola \(https://www.marygrove.com/retractable-pergola-canopy/\)](https://www.marygrove.com/retractable-pergola-canopy/)[Service Areas](#)[Resources Center \(https://www.marygrove.com/resources-center/\)](https://www.marygrove.com/resources-center/)[Contact Us \(https://www.marygrove.com/contact-us/\)](https://www.marygrove.com/contact-us/)

Outdoor Seating Awnings

Select a point of interest to learn more.

About Our Outdoor Seating Awnings

Marygrove's awnings for outdoor seating are an excellent way to expand your business. Outdoor seating has become the standard among restaurants. Adding covered seating will allow you to increase the number of tables and chairs you have. Patio seating is also an affordable way to extend your business to include early spring and late fall, especially if you use our rolling screens.



FREE IN-HOME Estimate!

Get \$500 off! We offer 0% Financing on all Retractable Awnings

I'd like to learn about your promotions & understand you may use an automatic phone system and text messages to reach me at the number provided above.

Rolling Screens

Our outdoor awnings are compatible with our multifunctional rolling screens. These screens can be used in the summer to protect customers from direct sunlight or in the fall to prevent heat from escaping. Since we use PVC-coated fiberglass properties, the screens are easy to see through and have excellent ventilation.



Expand Your Business's Seating Area

Adding one of Marygrove's outdoor awnings is a cost-effective way to increase your restaurant's seating. Whether you are on a limited budget or your location is landlocked, outdoor seating will increase your curb appeal and can help bring in customers who want to enjoy sitting outside while they dine.

Expand Your Outside Seating Season

Generate more income from your outdoor seating area with a covered enclosure and Marygrove roll screens. An enclosed patio allows you to better control the temperature by rolling the screens up or down. Keep your customers comfortable no matter what the weather and they'll keep coming back.



Financing Available!

Speak with a representative for affordable monthly payment options.

APPLY NOW! (/FINANCING)



(<https://www.marygrove.com/>)

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[SPECIAL OFFERS \(/SPECIAL-OFFERS\)](#)

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[Retractable Awnings \(https://www.marygrove.com/retractable-awnings/\)](https://www.marygrove.com/retractable-awnings/)

[Residential Awnings \(https://www.marygrove.com/residential-awnings/\)](https://www.marygrove.com/residential-awnings/)

[Commercial Awnings \(https://www.marygrove.com/commercial-and-storefront-awnings/\)](https://www.marygrove.com/commercial-and-storefront-awnings/)

[Adjustable Pergola \(https://www.marygrove.com/retractable-pergola-canopy/\)](https://www.marygrove.com/retractable-pergola-canopy/)

[Service Areas](#)

[Resources Center \(https://www.marygrove.com/resources-center/\)](https://www.marygrove.com/resources-center/)

[Contact Us \(https://www.marygrove.com/contact-us/\)](https://www.marygrove.com/contact-us/)

Louvered Roof Systems

Louvered Roof Systems

Louvered roofs open a world of possibilities for your outdoor seating area. A series of horizontal slats (louvers) angled in a way to admit air and light while keeping out rain, the concept of louvered systems has been around for ages. It encompasses everything from the classic window shutters to modernized motor-operated louvered roof systems.

Whether you run a restaurant or are looking for a patio cover for your home, an Arcadia Louvered Roof System can revolutionize how you use your outdoor space.

- + **What's the Difference Between a Louvered Roof and a Retractable Awning?**
- + **Why Should I Add A Louvered Roof to My Home?**
- + **Commercial Louvered Roofs for Restaurants**
- + **Will a Louvered Roof Increase Risk of Workers Comp Claims?**
- + **When is the Best Time to Install a Louvered Roof System?**
- + **How do I Clean a Louvered Roof**
- + **Should I Buy a Louvered Roof System From a Dealer or Manufacturer?**
- + **Why Marygrove Awnings®?**



FREE IN-HOME Estimate!

Get \$500 off! We offer 0% Financing on all Retractable Awnings

First Name		Last Name	
Email Address	Mobile #	Zip code	
For Home or Business? ▼			

SUBMIT

I'd like to learn about your promotions & understand you may use an automatic phone system and text messages to reach me at the number provided above.

Increased Visibility

Adding patio covers can increase your establishment's visibility and make it draw in more passersby. Louvered roof system makes it easy to create a climate- and light-controlled environment that will please any guest.



Investment Quickly Returned

Louvered roof seating is a smart decision for many businesses and usually provides a quick return on investment. Not only are you adding a new revenue area but outdoor dining is generally more comfortable and relaxed.

Financing Available!

Speak with a representative for affordable monthly payment options.

APPLY NOW! (/FINANCING)

[\(https://www.marygrove.com/\)](https://www.marygrove.com/)

734-250-9069 (tel:734-250-9069)

[SPECIAL OFFERS \(/SPECIAL-OFFERS\)](#)[FREE IN-HOME ESTIMATE \(HTTPS://WWW.MARYGROVE.COM/FREE-ESTIMATE/\)](https://www.marygrove.com/free-estimate/)[Retractable Awnings \(https://www.marygrove.com/retractable-awnings/\)](https://www.marygrove.com/retractable-awnings/)[Residential Awnings \(https://www.marygrove.com/residential-awnings/\)](https://www.marygrove.com/residential-awnings/)[Commercial Awnings \(https://www.marygrove.com/commercial-and-storefront-awnings/\)](https://www.marygrove.com/commercial-and-storefront-awnings/)[Adjustable Pergola \(https://www.marygrove.com/retractable-pergola-canopy/\)](https://www.marygrove.com/retractable-pergola-canopy/)[Service Areas](#)[Resources Center \(https://www.marygrove.com/resources-center/\)](https://www.marygrove.com/resources-center/)[Contact Us \(https://www.marygrove.com/contact-us/\)](https://www.marygrove.com/contact-us/)

Metal Standing Seam Awnings

Select a point of interest to learn more.

About Our Metal Standing Seam Awnings

Marygrove standing seam awnings are designed to enhance any structure for years to come. Built to last, our metal awnings use substructures with durable finishes that require very little maintenance. Our standing seam metal panels come in a variety of different widths, gauges and colors and are coated with specialty metals. This means we are able to color-match your design and color schemes and create a custom design to incomparably suit your business's needs.



FREE IN-HOME Estimate!

Get \$500 off! We offer 0% Financing on all Retractable Awnings

I'd like to learn about your promotions & understand you may use an automatic phone system and text messages to reach me at the number provided above.

Low Maintenance

Nothing lasts longer than metal awnings. Awnings from Marygrove are designed for longevity since they require very little maintenance. All awning components are sealed and finished to ensure they can withstand the elements. Our factory finishes see to the uninterrupted maintenance and continued beauty of your business's fixed awning.



Customization Available

Marygrove metal awnings can be customized to meet the needs of your business. Our design experts will work with you to create a structure that not only enhances your business but will also last. We are able to create unique designs to coordinate with the facade of your building. Marygrove also uses specialty coatings on the metal framework of fixed awnings that can be matched to any color scheme.

Financing Available!

Speak with a representative for affordable monthly payment options.

APPLY NOW! (/FINANCING)

Sample of awning proposed from HOMES Brewery in Ann Arbor



700 Sierra

Semi-Transparent

700 Sierra

Semi-Opaque



4 ft. H x 6 ft. W Texas Metal Fencing

By Wayside - State Line of Aluminum Fence

\$177.99 ~~\$192.99~~

FREE Shipping Ships by Tue, Jan 14 ⓘ

Add to Cart

[See Full Details](#)



HDC Work Permit Staff Review

Property address: 318 Maple

Property History: The property includes a vernacular house erected in 1876. The National Register nomination form lists the building as non-contributing because of its replacement siding. In staff opinion, if the nomination were up-to-date, the building would be listed as contributing.

Date of Application: January 3, 2020

Date of Review: January 7, 2020

Date of Meeting: January 14, 2020

Proposed work: Replace three windows.

Materials: Marvin Elevate double-hung fiberglass-clad wood windows.

Staff review:

1. The application is to replace three windows on a rear second story enclosed porch.
 - a. Based on Sanborn Maps, the porch was added sometime after 1964, and appears to be non-historic.
 - b. The extant windows are one-over-one awning windows that also appear to be non-historic.
2. The applicant proposed to replace these three windows with Marvin Elevate fiberglass-clad wood windows; one-over-one, double-hung sashes. The project is for a full frame replacement and is consistent with the HDC requirements noted in the Windows Fact Sheet.
3. The new windows would be consistent with the other windows on the house, which all appear to be one-over-one double-hung wood sashes.

Recommended Motions:

Move to approve and issue a Certificate of Appropriateness for the work at 318 Maple, as submitted in the application dated January 3, 2020, for the replacement of three awning-style

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

windows on the rear second story enclosed porch. The new windows shall be full-frame replacements with Marvin Elevate one-over-one double-hung sashes.

Relevant Secretary of the Interior's Standards:
#9

Prepared by:
Scott E. Slagor, Preservation Planner



City of Ypsilanti
Historic District Commission
Work Permit Application
One South Huron • Ypsilanti, MI 48197
Phone: (734) 483-9646 • Fax: (734) 483-7260
www.cityofypsilanti.com

PHDC-20-0001

26663
c1375

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA

Property

Address

318 Maple St. Ypsilanti, MI 48198

Applicant

**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

Judy Weinburger

Address

City

Ypsilanti

State

MI

Zip

48198

Phone / Fax

E-Mail

Contractor

Contractor Name & Contact Info

Window Pro Marvin Windows Tim Baetz

Type of work

☐ Roofing

☒ Window/Door
Replacement

☐ Porches

☐ Sign

☐ Fence (or other sitework)

☐ Painting

☐ Other

☐ Application Amendment

Complete Description of Proposed Work:

Two upper windows on the back (south) side of the house and one window on the east side have deteriorated beyond repair. The wood no longer holds the glass pane in place. I would like to replace them with similar style double hung windows in wood thermopane in white. Exterior capped back to the siding in white to match house.

Materials (for paint include color chips or samples with application):

See attached information Marvin windows and white paint

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. *An additional fee of \$50 applies to HDC work started without the applicable permit.*

Construction Cost:

\$4892

Permit fee:

\$45 + 5 = 50

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature:

Date:

12/17/2019

Print Name:

Judy Weinburger

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.

16900 Bagley Road • Middleburg Heights, OH 44130 | 400-1 Lazelle Road • Columbus, OH 43240 | 47705 West Road #B-106 • Wixom, MI 48393
windowpro.com | Ph. 888.529.5624 | Fax 440.243.4669

SALES AND INSTALLATION AGREEMENT

Appointment Date: 12/13/19 Customer: JUDITH WEINBURGER NS Job #: _____

Address: 318 MAPLE ST. City: YPSILANTI Zip: 48198

Phone: (Home) _____ (Work/Cel) _____ Email: _____

Windows: _____ # Replacing: 3 # Entry Doors: _____ # Replacing: _____ # Specialty Windows: _____ # Replacing: _____
Storm Doors: _____ # Replacing: _____ # Patio Doors: _____ # Replacing: _____ Siding Interest: _____

Window/Door Description (CHECK ALL THAT APPLY)

- ☐ Infinity From Marvin ☒ Marvin Entry Doors ☐ ProVia Entry Doors. ☐ Thermo-Tru Doors
☐ Marvin ☒ Integrity from Marvin ☐ ProVia Storm Doors ☐ Other Products _____

Quantity	Grids & Style		Quantity	Grids & Style	
3	-	DOUBLE HUNG INT COLOR <u>WH</u> HDWR FINISH <u>WH</u>			TRIPLE ASSEMBLY INT COLOR _____ HDWR FINISH _____
		2 LITE GLIDER INT COLOR _____ HDWR FINISH _____			AWNING INT COLOR _____ HDWR FINISH _____
		PICTURE WINDOW INT COLOR _____ HDWR FINISH _____			BAY WINDOW 10° ☐ 30° ☐ 45° ☐ 0TH ☐ INT COLOR _____ HDWR FINISH _____
		CN _____ INT COLOR _____ HDWR FINISH _____			PRODUCT _____ INT COLOR _____ EXT COLOR _____

Additional Information/Products

INCLUDES INSTALLATION AND REMOVAL/DISPOSAL OF EXISTING FULL FRAME "NEW CONSTRUCTION" WINDOW. ALL NEW INTERIOR CASING. CUSTOMER RESPONSIBLE FOR PAINTING OF NEW INTERIOR CASING. DUAL PANE LOWE GLASS TEMP GLASS ON OH NEXT TO DOOR. EXTERIOR CAPED BACK TO SIDING AND CAULKED. \$1,000 DOWN + \$1,446 ONCE CITY APPROVES BEFORE ORDERING WINDOWS. DEPOSIT REFUNDABLE IF CITY DOESN'T APPROVE PROJECT. 20% OFF PLUS ADDITIONAL 20%

PERMIT \$104 INCLUDED IN TOTAL

Window Removal Type WOOD AWAY Exterior Color STONE WHITE Exterior Trim Type ALUM /Color WH
#Windows Stained/Painted _____ #Patio Doors Stained/Painted _____ #Entry Doors Stained/Painted _____

Project List Price: \$ 7,389
Total Discounts: \$ -2,497
Proposal Total: \$ 4,892
Deposit: \$ 1,000 + 1,446 @ approval
Balance Due: \$ 2,446
(upon installation)

PAYMENT METHOD

Finance ☐ Credit Card ☐ Check ☒
CC# _____ Exp. Date: _____
Check Number: 1369-

Please See Reverse Side For Terms And Conditions Of Sale.
Note: This Agreement Is Not Binding Without Windowpro Management Approval.

ALL IMAGES VIEWED FROM OUTSIDE

X-Operating PN-EverWood
O-Stationary TP-Satin Taupe
SW-Stone White BB-Bright Brass
SA-Sierra SN-Satin Nickel
BZ-Bronze ORBZ-Oil Rubbed Bronze
CS-Cashmere S/P-Stain/Paint
PB-Pebble Gray

X _____ (Date) 12-13-19 X _____ (Date) _____

Accepted By Customer _____
X _____ (Date) 12/13/19 X _____ (Date) _____
Accepted By WindowPRO Sales Consultant _____ Accepted By WindowPRO Management _____

UNIT SUMMARY

The following is a schedule of the windows and doors for this project. For additional unit details, please see Line Item Quotes.

Additional charges, tax or Terms and Conditions may apply. Detail pricing is per unit.

NUMBER OF LINES: 3

TOTAL UNIT QTY: 3

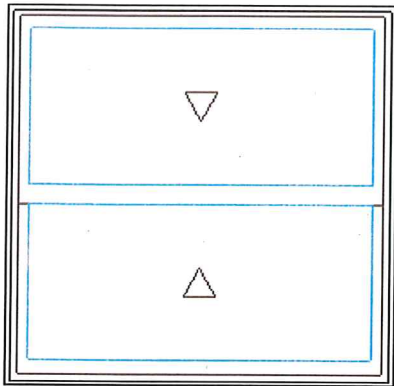
LINE	MARK UNIT	PRODUCT LINE	ITEM	QTY
1	201 Rear Porch	Elevate	Double Hung RO 50" X 47" Entered as RO 50" X 47"	1
2	202 Rear Porch	Elevate	Double Hung RO 50" X 47" Entered as RO 50" X 47"	1
3	203 Porch Side	Elevate	Double Hung RO 32" X 47" Entered as RO 32" X 47"	1

LINE ITEM QUOTES

The following is a schedule of the windows and doors for this project. For additional unit details, please see Line Item Quotes. Additional charges, tax or Terms and Conditions may apply. Detail pricing is per unit.

Line #1	Mark Unit: 201 Rear Porch			
Qty: 1				

MARVIN 



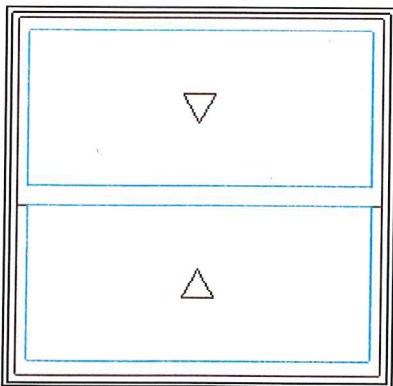
As Viewed From The Exterior

Entered As: RO
FS 49" X 46 1/2"
RO 50" X 47"

Stone White Exterior
White Interior
Elevate Double Hung
Rough Opening 50" X 47"
Top Sash
Stone White Exterior
White Interior
IG - 1 Lite
Low E2 w/Argon
Stainless Perimeter Bar
Bottom Sash
Stone White Exterior
White Interior
IG - 1 Lite
Low E2 w/Argon
Stainless Perimeter Bar
White Weather Strip Package
White Sash Lock
Exterior Aluminum Screen
Stone White Surround
Charcoal Fiberglass Mesh
4 9/16" Jambs
Nailing Fin
***Note: Unit Availability and Price is Subject to Change

Line #2	Mark Unit: 202 Rear Porch			
Qty: 1				

MARVIN 



As Viewed From The Exterior

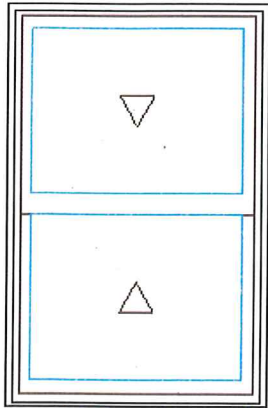
Entered As: RO
FS 49" X 46 1/2"
RO 50" X 47"

Stone White Exterior
White Interior
Elevate Double Hung
Rough Opening 50" X 47"
Top Sash
Stone White Exterior
White Interior
IG - 1 Lite
Low E2 w/Argon
Stainless Perimeter Bar
Bottom Sash
Stone White Exterior
White Interior
IG - 1 Lite
Low E2 w/Argon
Stainless Perimeter Bar
White Weather Strip Package
White Sash Lock
Exterior Aluminum Screen
Stone White Surround
Charcoal Fiberglass Mesh
4 9/16" Jambs
Nailing Fin
***Note: Unit Availability and Price is Subject to Change

Line #3	Mark Unit: 203 Porch Side			
Qty: 1				

MARVIN 

Stone White Exterior
White Interior
Elevate Double Hung
Rough Opening 32" X 47"



As Viewed From The Exterior

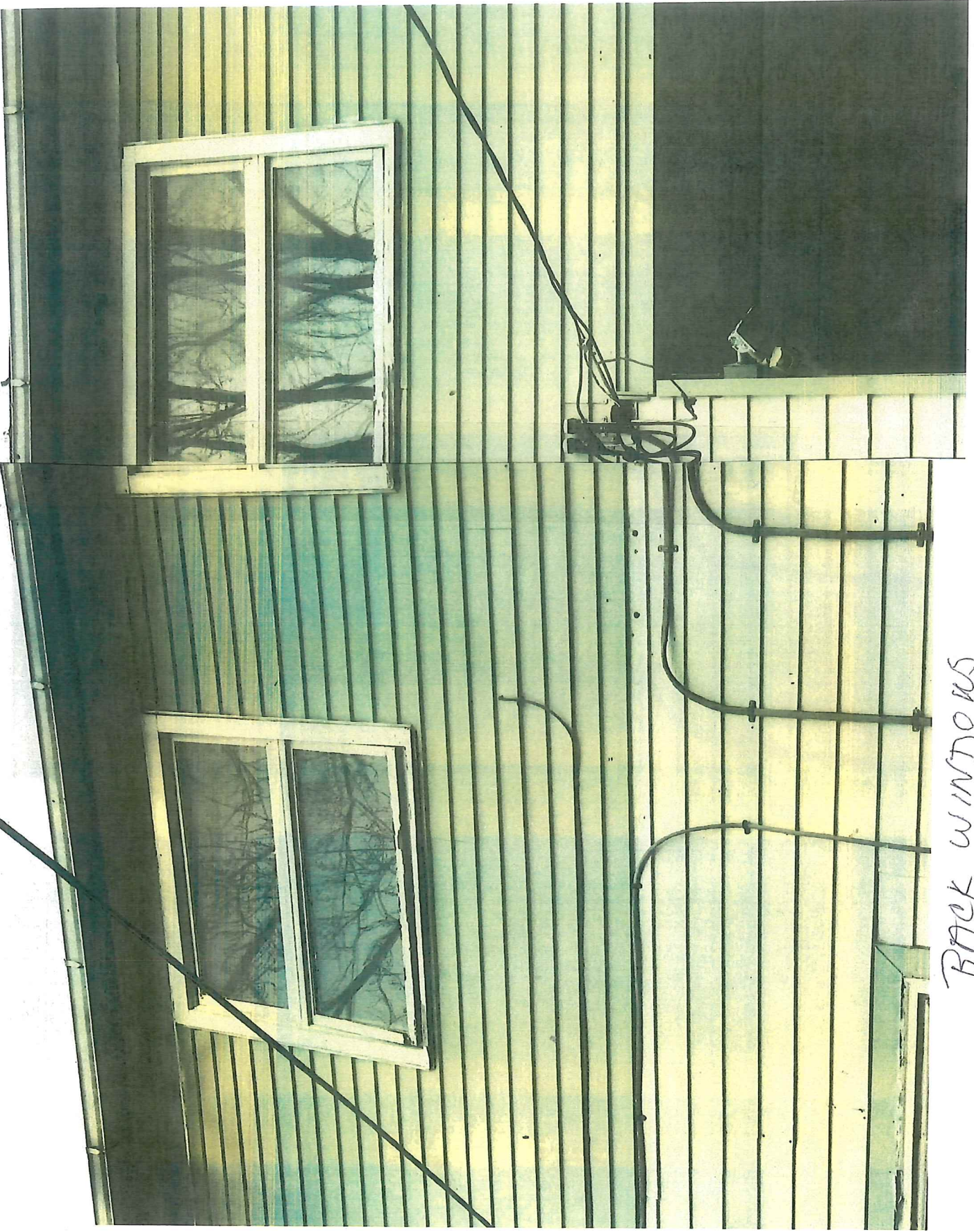
Entered As: RO
FS 31" X 46 1/2"
RO 32" X 47"

Glass Add For All Sash
Top Sash
Stone White Exterior
White Interior
IG - 1 Lite
Tempered Low E2 w/Argon
Stainless Perimeter Bar
Bottom Sash
Stone White Exterior
White Interior
IG - 1 Lite
Tempered Low E2 w/Argon
Stainless Perimeter Bar
White Weather Strip Package
White Sash Lock
Exterior Aluminum Screen
Stone White Surround
Charcoal Fiberglass Mesh

4 9/16" Jambs

Nailing Fin

***Note: Unit Availability and Price is Subject to Change



BACK WINDOWS



SIDE WINDOW



INSIDE VIEW OF BACK WINDOW



Facing southeast to facade and west elevation



Facing southwest to facade and east elevation



Facing northwest to east and south elevations



Detail of windows to be replaced.



HDC Work Permit Staff Review

Property address: 629 N River

Property History: The property includes a small vernacular house with a ca.1900 front porch. The house was briefly connected to the Hutchison family, built the mansion across the street at 600 N River. The house sheltered Mrs. Clara Hutchinson and their three children while she was negotiating a divorce with her husband, Shelley Hutchinson, ca.1909-1910.ⁱ

Date of Application: January 3, 2020

Date of Review: January 7, 2020

Date of Meeting: January 14, 2020

Proposed work: Installation of a small fence and accessory building (shed).

Materials: Iron fence and metal-clad shed.

Staff review:

1. This application is for work already completed without permits, including a fence and accessory building.

Fence

2. The applicant installed a fence along the north property boundary to discourage their dog and adjacent temporary renters from interacting.
 - a. The fence is 3' tall black painted metal. According to the applicant it is iron, however in staff opinion, it looks lighter than iron, possibly aluminum.
 - b. The fence appears to meet the requirements of the fence fact sheet.
 - c. The applicant expressed that the fence is temporary and intended to be removed once the dog is used to the property boundaries.

Accessory Building

3. The applicant installed a 6'x8' garden shed in the northwest quadrant of the property.
 - a. The shed is clad in metal.

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

- b. In staff opinion, a wood-clad shed would be more appropriate to meet Design Criteria 8 and 9. However, numerous other metal-clad sheds are in the district and some have been recently approved by the HDC. The presence of this shed does not diminish the historic integrity of the property or district as a whole and therefore may be approved.
4. For both the fence and accessory building, staff has notified the applicant that zoning permits are also required.

Recommended Motions:

Move to issue a Notice to Proceed for the work already completed at 629 N River, as submitted in the application dated January 3, 2020, for installation of a 3' tall black metal fence parallel to the north property boundary, and a metal clad-garden shed.

Relevant Secretary of the Interior's Standards:

#9, #10

Prepared by:

Scott E. Slagor, Preservation Planner

ⁱ Janice Anschuetz, "River Street Neighbors' Gossip and the Hutchinson Marriage," *Ypsilanti Gleanings* (Ypsilanti Historical Society, Fall 2010), 15.



RECEIVED

JAN 03 2020

CITY OF YPSILANTI
BUILDING DEPARTMENT

City of Ypsilanti

Historic District Commission

Work Permit Application

One South Huron • Ypsilanti, MI 48197

Phone: (734) 483-9646 • Fax: (734) 483-7260

www.cityofypsilanti.com

26702
MC

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA

Property

Address

629 N. River St

Applicant

**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

Elizabeth & Christopher Mclell

Address

[Redacted]

City

Ypsilanti

State

MI

Zip

48198

Phone / Fax

[Redacted]

E-Mail

Contractor

Contractor Name & Contact Info

N/A

Type of work

☐ Roofing

☐ Window/Door
Replacement

☐ Porches

☐ Sign

☒ Fence (or other sitework)

☐ Painting

☒ Other - shed

☐ Application Amendment

Complete Description of Proposed Work:

We have placed a temporary, Removable fence along the North side of our backyard. It is 3ft high, black wrought iron. (See pictures included). The purpose of the fence is to keep the Air BNB renters (Corner of River & Forest) from interacting with my deaf/limited vision dog as this became a problem. The fence also helps him understand the boundaries when he is in the yard and Reduces unwanted barking.

We also placed a small, 6x8, beige shed at the Rear of our property, in the parking area for our lawn and garden equipment. Picture enclosed.

Materials (for paint include color chips or samples with application):

- Fence = Black Iron
- Shed = Beige Steel

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. *An additional fee of \$50 applies to HDC work started without the applicable permit.*

Construction Cost:

7500

Permit fee:

\$45 + _____ = \$45

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature

Date:

12/16/19

Print Name

Elizabeth McCall

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.



Facing northwest to facade and south elevation.



Facing southwest to facade and north elevation- fence and shed at right.



Facing southwest to fence and shed from River Street.



Facing southeast to fence and shed from alley.



HDC Work Permit Staff Review

Property address: 400 N River

Property History: The property includes the Thompson Block, a landmark building of the Depot Town commercial district that can tie its construction to the railroad. Originally known as the Norris Block, the building was erected by Mark Norris in 1860 using bricks from his demolished Western Hotel- which was in the path of a railroad expansion. In 1862 and 1863 the building housed barracks for the Fourteenth and Twenty-Seventh Michigan Infantry Regiments. Reputedly, the building is the only Michigan barracks facility used in 1862 that is still extant.

In 1869, the southwest corner unit of the building became occupied by a paint and wagon shop, owned by Oliver E. Thompson, for whom the building is now named. Over time the store expanded to half of the building; selling agricultural implements, bicycles, and various home/hardware goods. In the 1910s, Oliver's grandson, Joseph Thompson, opened a dodge dealership in the north half of the building, operating it a short while before moving it across Cross Street. In 1927 The Thompson family sold the business to a Detroit firm that retained the name: O. E. Thompson and Sons, which remained in the building until 1950.

Various businesses occupied the building throughout the second half of the twentieth century, however it slowly fell into disrepair and was determined a case of demolition by neglect in 2002. Repairs were made to the building, but it was unfortunately gutted by a fire in 2009. The exterior walls were preserved and the building is currently undergoing rehabilitation.ⁱ

Date of Application: January 6, 2020

Date of Review: January 7, 2020

Date of Meeting: January 14, 2020

Proposed work: Installation of a carport with a solar roof.

Materials: Galvanized steel and aluminum-framed solar panels.

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

Staff review:

1. This application is part of the ongoing rehabilitation of the Thompson Block. The application includes a free-standing carport structure with a solar-powered roof.
2. The structure will be placed on the western-most bay of parking spaces on the rear lot, covering an area of 78' (north-south) and 25' (east-west).
3. The carport structure will be constructed of galvanized steel.
4. The carport roof will be comprised of 96 solar panels with aluminum frames in a natural finish.
5. There will be some vegetative screening on the east side of the property, which will diminish the view from the adjacent historic property.
 - a. Screening will be accomplished with a combination of Hick's Yew and Arctic Fire Red Twig Dogwood. They will not be tall enough to block the solar panels themselves, but they will obscure view to cars and the support structure for the panels.
 - b. There are plantings on the south side of the property, including Crimson Point Plums, and Snowcloud Serviceberry, but they are not designed to screen views.
6. The structure will be visible from East Cross Street.
 - a. According to the guidelines of the Alternative Energy Fact Sheet, if the location of solar panels can be seen from the street, then solar panels would not be approved in that location.
 - b. The HDC may consider that there are some properties in the district with panels visible from the street on secondary elevations, such as City Hall, 1 S Huron, and Arbor Brewing Company, 720 Norris.
 - c. The HDC may also consider that the structure is detached from the historic building, is free-standing, and does not imitate earlier architectural styles.

Recommended Motions:

Move to approve and issue a certificate of appropriateness for the work at 400 N River, as submitted in the application, dated January 6, 2020, for installation of a solar paneled carport. The carport is to be built to specifications including a structure of galvanized steel and solar panels framed in aluminum.

Relevant Secretary of the Interior's Standards:

#3, #9, #10

Prepared by:

Scott E. Slagor, Preservation Planner

ⁱ Historical facts lifted from: James Mann "The Thompson Block- Then and Now!" Ypsilanti Gleanings, (Winter 2009), 1-4.



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JAN 06 2020

CITY OF YPSILANTI
BUILDING DEPARTMENT

**City of Ypsilanti
Historic District Commission
Work Permit Application**

One South Huron • Ypsilanti, MI 48197
Phone: (734) 483-9646 • Fax: (734) 483-7260
www.cityofypsilanti.com

R. 26708
#12743
PHDC 20-0003

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA

Property

Address

400 RIVER STREET, YPSILANTI, MI, 48197

Applicant

**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

JON CARLSON

Address

THE ORIGINAL AND ONLY THOMPSON BLOCK, L.L.C.

City

GRAND RAPIDS

State

MI.

Zip

49546

Phone / Fax

E-Mail

Contractor

Contractor Name & Contact Info

KINCAID BUILDING GROUP, INC., 1515 TURFLANE #200, E. LANSING, MI.

Type of work

- ☐ Roofing
☐ Window/Door Replacement

- ☐ Porches
☐ Sign
☐ Fence (or other sitework)

- ☐ Painting
☒ Other
☐ Application Amendment

Complete Description of Proposed Work:

THIS PROJECT IS THE INSTALLATION OF 96 SOLAR PANELS TO BE MOUNTED TO A STRUCTURAL STEEL FRAME OVER EIGHT PARKING SPACES OF THE EAST ROW OF PARKING ON THE EAST SIDE OF THE THOMPSON BLOCK BUILDING. CARS WILL BE ABLE TO PARK UNDER THE PANEL ARRAY. THE TOTAL FRAME SIZE IS APPROXIMATELY 78' (NORTH-SOUTH) X 25' (EAST-WEST). SEE ATTACHED DRAWINGS:

- SITE PLAN (MIDWESTERN CONSULTING)
- ELEVATION SKETCH (SINCLAIR DESIGNS & ENGINEERING).
- FRAME CUT SHEET (MID-AMERICA SOLAR)
- SOLAR PANEL CUT SHEET (2) (CSUN)

Materials (for paint include color chips or samples with application):

COLUMNS, TRUSSER AND PURLINS ARE GALVANIZED STEEL. SOLAR PANELS ARE FRAMED IN ALUMINUM W/ NATURAL FINISH.

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. *An additional fee of \$50 applies to HDC work started without the applicable permit.*

Construction Cost:

\$120,000

Permit fee:

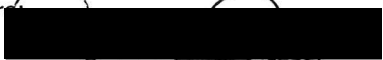
\$45 + 195 = \$240.

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature:



Date:

1/6/2020

Print Name:

JON CARLSON

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

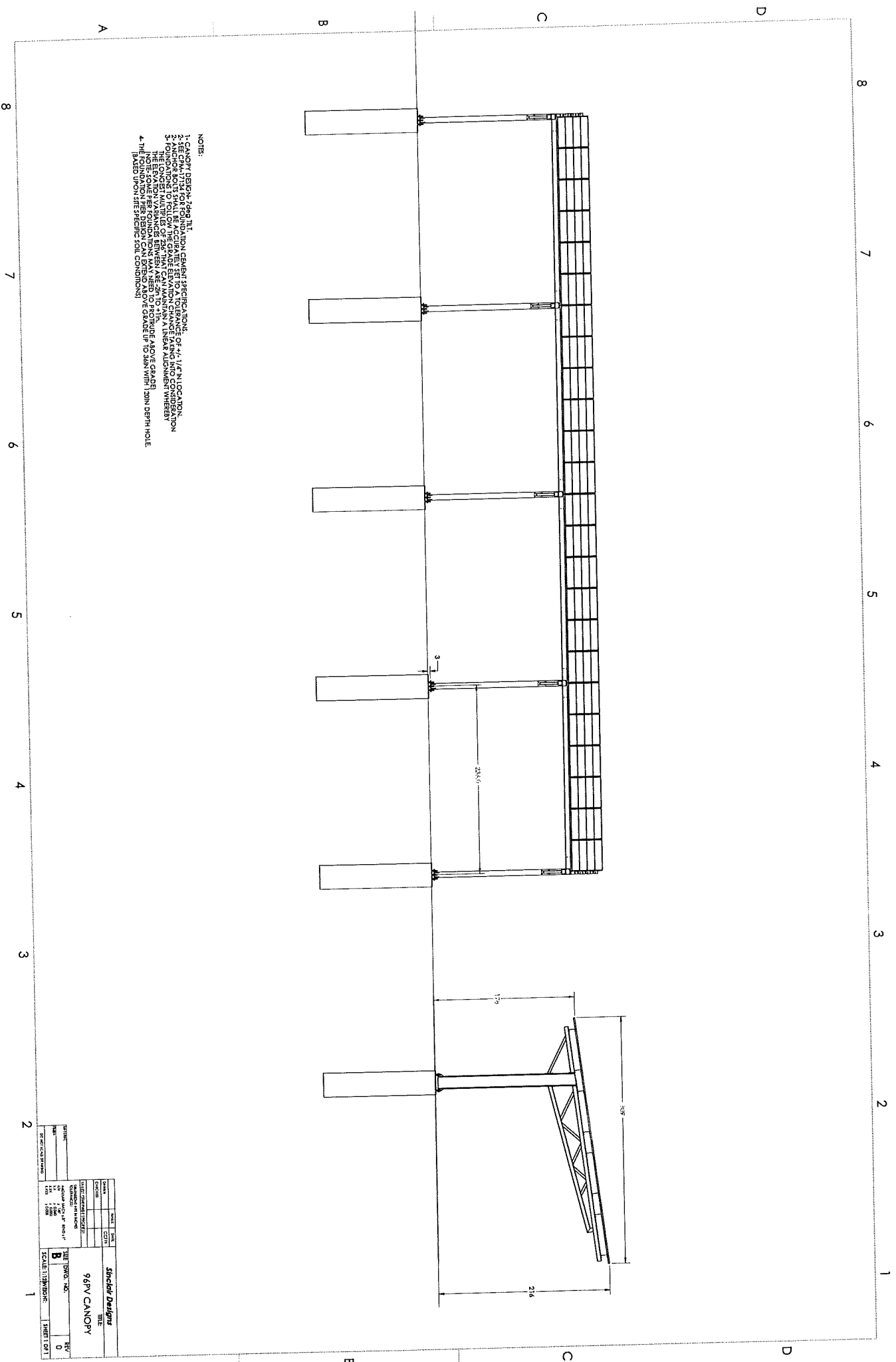
All other necessary approvals and permits must be acquired before beginning work.

PHDC-20-0003



LEGEND	
①	NUMBER OF STANDARD PARKING SPACES IN ROW
②	NUMBER OF ALL CAR PARKING SPACES IN ROW
③	NUMBER OF BARRIER FREE PARKING SPACES IN ROW
④	BARRIER FREE PARKING SIGN
⑤	WALL ACCESSIBLE BARRIER FREE PARKING SIGN
⑥	BARRIER FREE SIDEWALK RAMP
⑦	PROVIDE CURB & SLOPE-OUT OUTLET
⑧	PROVIDE BILUMINOUS PAVEMENT
⑨	PROVIDE CONCRETE PAVEMENT
⑩	SIGN
⑪	PROVIDE SHADE LIGHT POLE

MIDWESTERN
CONSULTING
3835 Plaza Drive Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesternconsulting.com
and Development • Land Survey • Institutional • Municipal
• Mass Communications • Transportation • Landfill Service

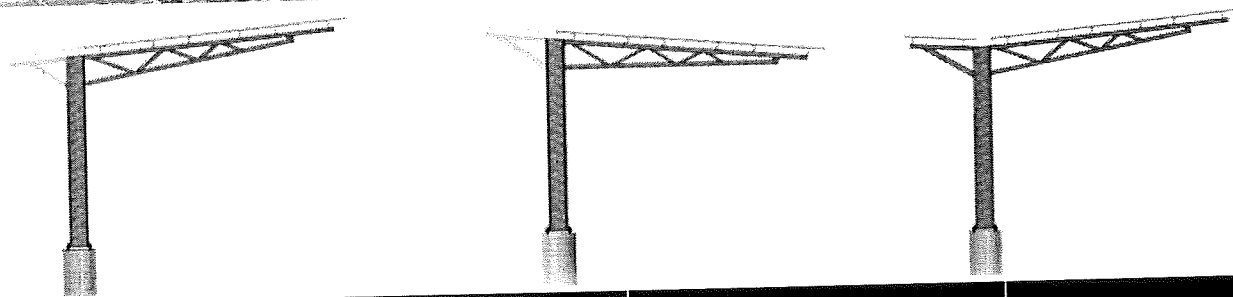


- NOTE:
1. CANOPY DESIGN SHALL BE BASED ON THE FOLLOWING SPECIFICATIONS:
 2. THE CANOPY SHALL BE ACCURATELY SET TO A GRADE LOCATION.
 3. ANCHOR BOLTS SHALL BE INSTALLED TO A GRADE LOCATION AND CONSIDERATION SHALL BE GIVEN TO THE SOIL TYPE AND ANCHOR BOLT TYPE AND LENGTH.
 4. THE FOUNDATION PIER DESIGN CAN BE BUILT ABOVE GRADE UP TO 36IN WITH 12IN DEPTH HOLE (BASED UPON SITE SPECIFIC SOIL CONDITIONS).

SHEET NO.		SHEET NO.		SHEET NO.	
96PV CANOPY		96PV CANOPY		96PV CANOPY	
SHEET NO.		SHEET NO.		SHEET NO.	
8		8		8	
REV		REV		REV	
0		0		0	
SCALE: 1/8"=1'-0"		SCALE: 1/8"=1'-0"		SCALE: 1/8"=1'-0"	
SHEET 1 OF 1		SHEET 1 OF 1		SHEET 1 OF 1	



L-Canopy Carport System



Application	Parking Area & Sidewalks		
Tilt Angle	7 Degrees	Modules Per Section	18 - 24
Module Orientation	Portrait	Ground Clearance	Site Specific
Wind Load	125 MPH	Foundation	Reinforced Concrete
Snow Load	50 PSF	Purlin Length	236 Inches
Post Spacing	236 Inches	Manufacturing	Made in Michigan, USA

HIGHLIGHT: All structural components are fabricated from USA Steel. All material certifications available upon request.

Minimal Components For Easy Installation

1. FOUNDATION KIT-120

Custom Welded Rebar Foundation Kit with J-Bolts

2. I-BEAM

Site Specific Lengths 50lb/FT Beams

3 & 4. CP-TRUSS-3P

7 Degree angle

5. C-PURLIN

12 Gage Grade 50 – G90 – Chem Treated Steel

6. STRONGBACKS

Optional Components

7. GUTTERS

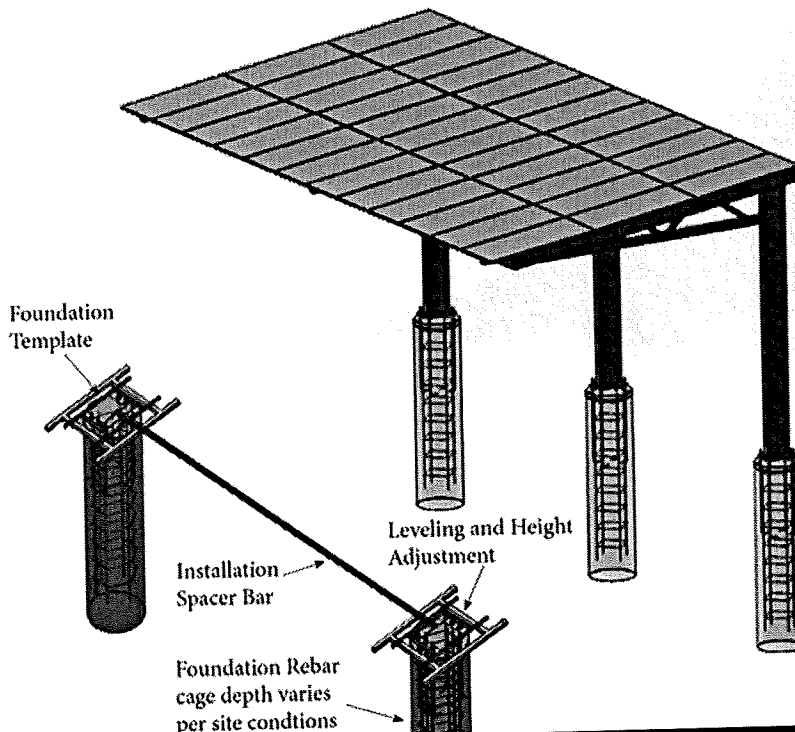
12 Gage Grade 50 – G90 – Chem Treated Steel

8. CANTILEVERS (1 or 2 Panel Adders)

9. CLOSE-OUTS

10. END CAPS

HIGHLIGHT: C-Purlins have stamped holes for direct tie in of hardware to modules with UL grounding lock washers. ****NO CLAMPS!****



Designed & Manufactured in Michigan, USA

Foundation Kits



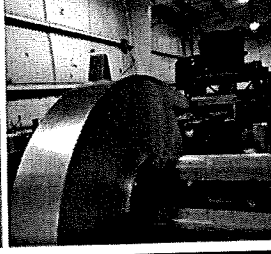
Structural I-Beams



Structural Trusses

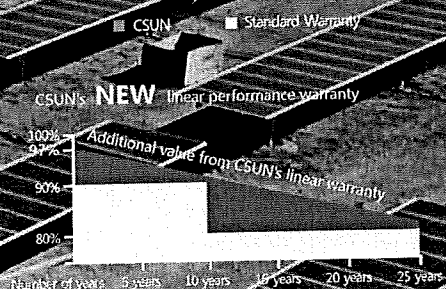


C-Purlin Manufacturing



MONO

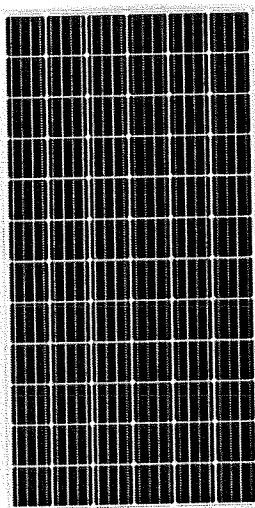
Munich RE
Munich RE Insurance
Global Coverage



The power output shall not be less than 97% of the minimum power output stated in the product data sheet in the first year of the product's life cycle. The loss of power output shall not exceed 0.68% per year thereafter, ending with 80.68% in the 25th year.



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CSUN370-72MH

The Large Scale Project Solution

CSUN370-72MH CSUN365-72MH
CSUN360-72MH CSUN355-72MH

19.11%

Module efficiency

370W

Highest power output

10years

Material & Workmanship warranty

25years

Liner power output warranty



PID-free



World class mono efficiency



Tighter product performance distribution and current sorting reduces the mismatch power loss in system operation



Positive tolerance offer



Good temperature coefficient enables higher output in high temperature regions



Excellent performance under low light conditions



Certified for salt/ammonia corrosion resistance



Load certificates: wind to 2400Pa and snow to 5400Pa

- CSUN designs, manufactures and delivers high efficient solar cells and modules to the world from its production centers based in China, USA, Turkey, South Korea and Vietnam.
- Founded in 2004, CSUN is well known for its advanced solar cell technology, reliable product quality, and excellent customer service.
- As one of leading PV enterprises, CSUN has delivered more than 8 GW of solar products to residential, commercial, utility and off-grid projects all around the world.



4741 Urbani Ave,
McClellan CA
95652



Electrical characteristics at Standard Test Conditions(STC)

Module Type	CSUN370-72MH	CSUN365-72MH	CSUN360-72MH	CSUN355-72MH
Maximum Power - Pmax (W)	370	365	360	355
Open Circuit Voltage - Voc (V)	47.6	47.5	47.3	47.1
Short Circuit Current - Isc (A)	9.99	9.89	9.78	9.7
Maximum Power Voltage - Vmpp (V)	39.4	39.2	39.1	38.8
Maximum Power Current - Imp (A)	9.4	9.32	9.22	9.16
Module Efficiency	19.11%	18.85%	18.59%	18.33%

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1.5; module temperature 25°C. Tolerance of P_{mp}: 0~+3%. Measuring uncertainty of power: ±3%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Electrical Characteristics at Normal Operating Cell Temperature(NOCT)

Module Type	CSUN370-72MH	CSUN365-72MH	CSUN360-72MH	CSUN355-72MH
Maximum Power - Pmax (W)	274	270	267	263
Open Circuit Voltage - Voc (V)	44.0	43.9	43.8	43.6
Short Circuit Current - Isc (A)	7.98	7.89	7.8	7.72
Maximum Power Voltage - Vmpp (V)	36.4	36.3	36.3	36.1
Maximum Power Current - Imp (A)	7.51	7.41	7.36	7.29

Normal Operating Cell Temperature (NOCT): irradiance 800W/m²; wind speed 1 m/s; cell temperature 45°C; ambient temperature 20°C.

Measuring uncertainty of power: ±3%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Temperature Characteristics

NOCT	45°C (±2°C)	Maximum System Voltage [V]	1500
Voltage Temperature Coefficient	-0.29%/K	Series Fuse Rating [A]	20
Current Temperature Coefficient	+0.05%/K	Fire Rating	Class C
Power Temperature Coefficient	-0.39%/K	Module Fire Performance	Type 1

Material Characteristics

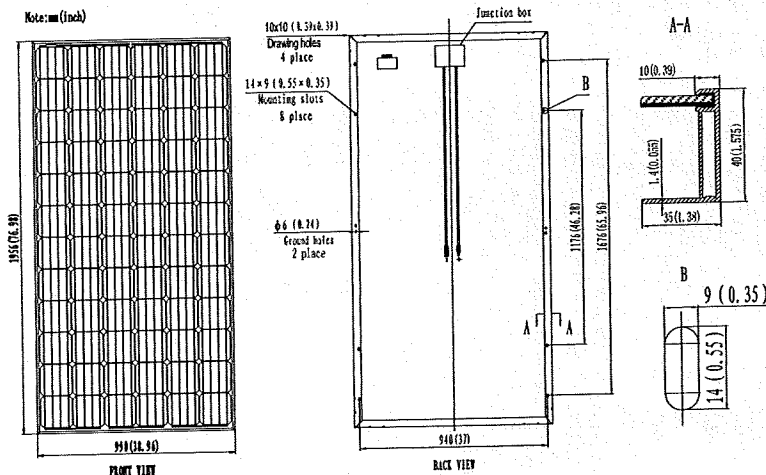
Dimensions	1956×990×40mm (L×W×H)
Weight	22.0kg
Frame	Anodized aluminum profile
Front Glass	White toughened safety glass, 3.2 mm
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Sheet	Composite film
Cells	6×12 pieces monocrystalline solar cells series strings (156.75×156.75mm)
Junction Box	Rated current≥13A, IP≥67, TUV&UL
Cable&Connector	Length 900 mm, 1×4 mm ² , compatible film MC4

Packaging

Dimensions(LÖWÖH)	1990×1120×1120mm	Temperature Range	-40 °C to + 85 °C
Container20'	260	Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 ms ⁻¹
Container40'	624	Maximum Surface Load	5,400 Pa
Container40'HC	684	Application class	class A
		Safety class	class II

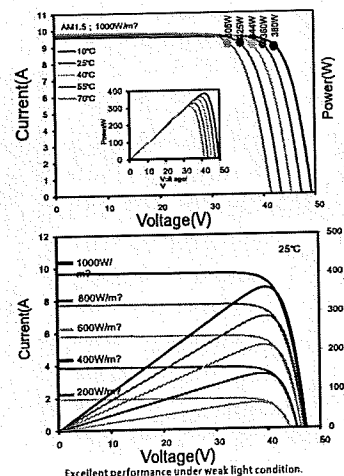
System Design

Dimensions



Note: Frame color and cable length can be customized on demand.

IV-Curves





City of Ypsilanti

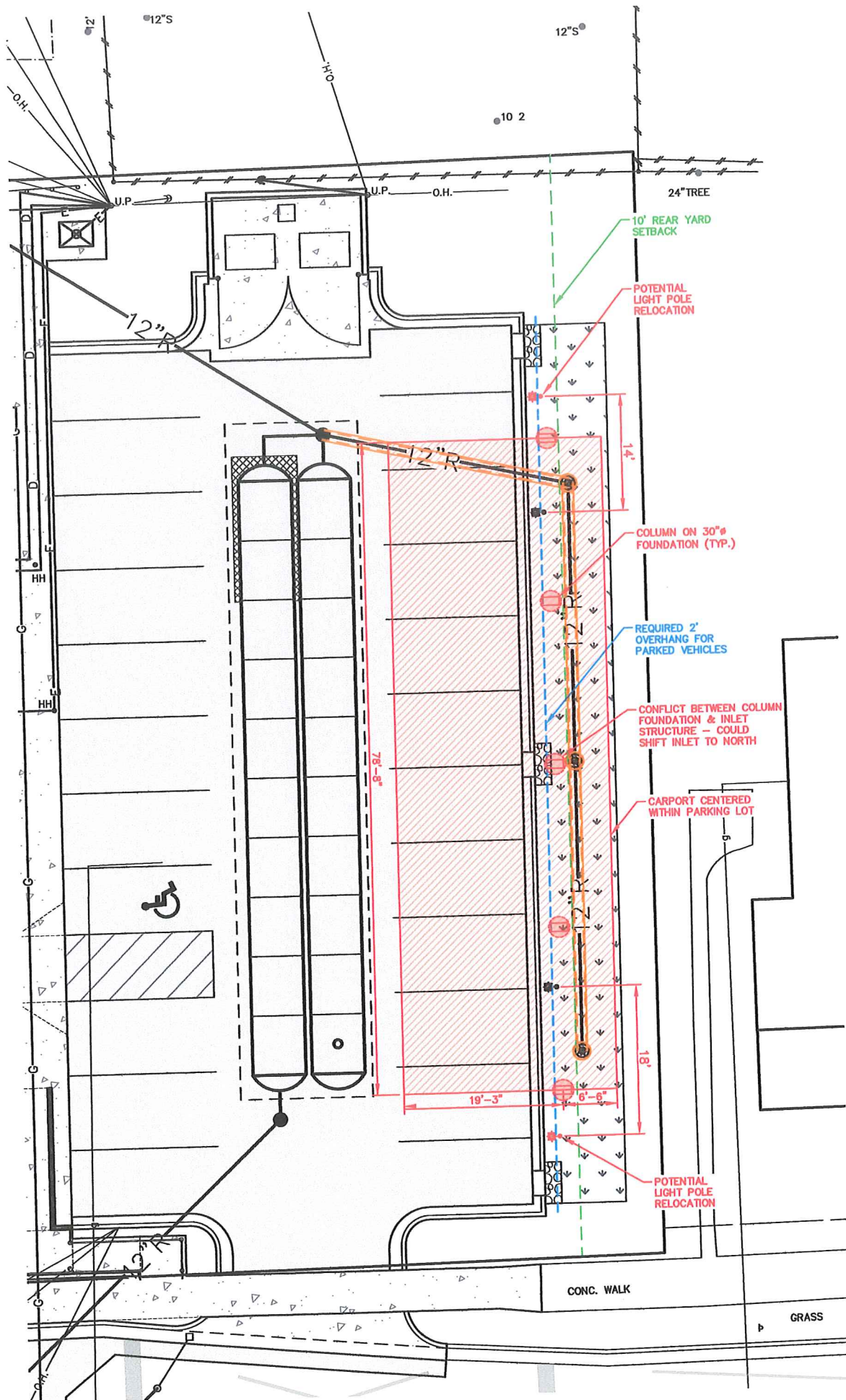
Tuesday, January 7, 2020

We are giving permission for Mid America Solar to place solar panels and structure on our property.

Thank you and take care

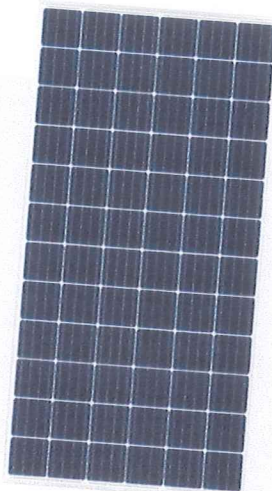
A handwritten signature in black ink, appearing to read "JAC", is written over the printed name.

Jon A. Carlson





MONO



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Cable&Connector	Length 900 mm, 1×4 mm ² , compatible film MC4

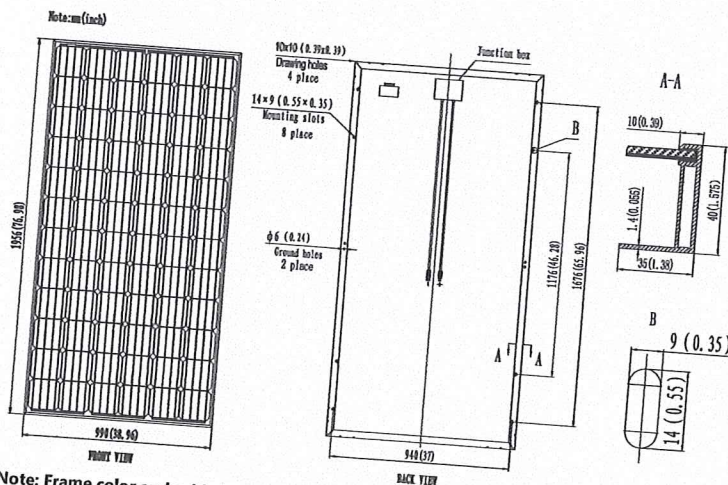
Packaging

Dimensions(L×W×H)	1990×1120×1120mm
Container20'	260
Container40'	624
Container40'HC	684

System Design

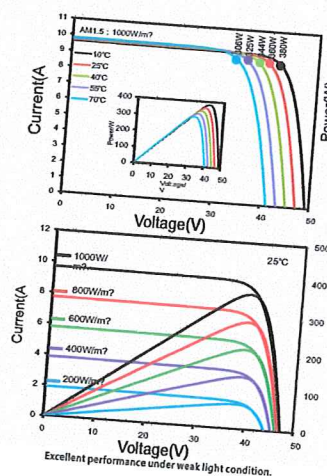
Temperature Range	-40 °C to + 85 °C
Withstanding Hail	Maximum diameter of 25 mm with impact speed of 23 ms ⁻¹
Maximum Surface Load	5,400 Pa
Application class	class A
Safety class	class II

Dimensions



Note: Frame color and cable length can be customized on demand.

IV-Curves



/ Perfect Welding / Solar Energy / Perfect Charging



FRONIUS PRIMO

/ Solutions for a brighter tomorrow.



/ PC board replacement process



/ SnapINverter mounting system



/ Wi-Fi® interface



/ Design Flexibility



/ Smart Grid Ready



/ Arc Fault Circuit Interruption



/ With power categories ranging from 3.8 kW to 15.0 kW, the transformerless Fronius Primo is the ideal compact single-phase inverter for residential applications. The sleek design is equipped with the SnapINverter hinge mounting system which allows for lightweight, secure and convenient installation. The Fronius Primo has several integrated features that set it apart from competitors including dual powerpoint trackers, high system voltage, a wide input voltage range, Wi-Fi* and SunSpec Modbus interface, and Fronius' online and mobile monitoring platform Fronius Solar.web. The Fronius Primo also works seamlessly with the Fronius Rapid Shutdown Box as a reliable rapid shutdown solution outside the PV Array boundary.

TECHNICAL DATA FRONIUS PRIMO

GENERAL DATA	FRONIUS PRIMO 3.8 - 8.2	FRONIUS PRIMO 10.0-15.0
Dimensions (width x height x depth)	16.9 x 24.7 x 8.1 in.	20.1 x 28.5 x 8.9 in.
Weight	47.29 lb.	82.5 lbs.
Protection Class	NEMA 4X	
Night time consumption	< 1 W	
Inverter topology	Transformerless	
Cooling	Variable speed fan	
Installation	Indoor and outdoor installation	
Ambient operating temperature range	-40 - 131°F (-40 - 55°C)	-40 - 140°F (-40 - 60°C)
Permitted humidity	0 - 100 %	
Elevation	4000m (13123 ft)	
DC connection terminals	4x DC+ and 4x DC- screw terminals for copper (solid / stranded / fine stranded) or aluminum (solid / stranded)	4x DC+1, 2x DC+2 and 6x DC- screw terminals for copper (solid / stranded / fine stranded) or aluminum (solid / stranded)
AC connection terminals	Screw terminals 12 - 6 AWG	
Revenue Grade Metering	Optional (ANSI C12.1 accuracy)	
Certificates and compliance with standards	UL 1741-2010 Second Edition (incl. UL1741 Supplement SA 2016-09 for California Rule 21 and Hawaiian Electric Code Rule 14H), UL1998 (for functions: AFCI, RCMU and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC 2017 Article 690, C22. 2 No. 107.1-16, UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 - 2013	UL 1741-2010 Second Edition (incl. UL1741 Supplement SA 2016-09 for California Rule 21 and Hawaiian Electric Code Rule 14H), UL1998 (for functions: AFCI, RCMU and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC 2017 Article 690, C22. 2 No. 107.1-16, UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 -2013
PROTECTIVE DEVICES	STANDARD WITH ALL PRIMO MODELS	
DC reverse polarity protection	Yes	
Anti Islanding	Internal; in accordance with UL 1741-2016-09, IEEE 1547-2003 and NEC 2017	
Over temperature protection	Output power derating/ Active cooling	
AFCI	Yes	
Rapid shutdown compliant	Per Sect. 690.12 of 2014 (of NEC 2017 prior to Jan 2019)	
Ground Fault Protection with Isolation Monitor	Yes	
Interrupter	Yes	
DC disconnect	Yes	
INTERFACES	STANDARD WITH ALL PRIMO MODELS	
USB (A socket)	Datalogging and inverter update possible via USB	
2x RS422 (RJ45 socket)	Fronius Solar Net, interface protocol	
Wi-Fi®/Ethernet LAN	Wireless standard 802.11 b/g/n/Fronius Solar.web, SunSpec Modbus TCP, JSON	
Datalogger and Webserver	Included	
Serial RS485	SunSpec Modbus RTU or meter connection	
6 inputs or 4 digital inputs/outputs	Load management; signaling, multipurpose I/O	

*The term Wi-Fi® is a registered trademark of the Wi-Fi Alliance.

TECHNICAL DATA FRONIUS PRIMO

INPUT DATA	PRIMO 3.8-1	PRIMO 5.0-1	PRIMO 6.0-1	PRIMO 7.6-1	PRIMO 8.2-1
Recommended PV power (kWp)	3.0 - 6.0 kW	4.0 - 7.8 kW	4.8 - 9.3 kW	6.1 - 11.7 kW	6.6 - 12.7 kW
Max. usable input current (MPPT 1/MPPT 2)			18 A / 18 A		
Max. usable input current (MPPT 1+MPPT 2)			36 A		
Max. array short circuit current (1.5 * I _{max}) (MPPT1/MPPT2)			27 A / 27 A		
Nominal input voltage	410 V	420 V	420 V	420V	420 V
Operating voltage range			80 V - 600 V		
DC startup voltage			80 V		
MPP Voltage Range	200-480 V	200-400 V	240-480 V	250-480 V	270-480 V
Max. input voltage	600 V (1000 V optional ¹)				
Admissible conductor size DC	AWG 14 - AWG 6 copper (solid / stranded / fine stranded)(AWG 10 copper or AWG 8 aluminium for overcurrent protective devices up to 60A, from 61 to 100A minimum AWG 8 for copper or AWG 6 aluminium has to be used) , AWG 6 - AWG 2 copper(solid / stranded) MultiContactWiringable with AWG 12				
Number of MPPT	2				

OUTPUT DATA	PRIMO 3.8-1	PRIMO 5.0-1	PRIMO 6.0-1	PRIMO 7.6-1	PRIMO 8.2-1
Max. output power	208 V/240 V	3800 VA/3800 VA	5000 VA/5000 VA	6000 VA/6000 VA	7600 VA/7600 VA
Output configuration	208/240 V				
Frequency range (adjustable)	45.0 - 55.0 Hz / 50 - 66 Hz				
Operating frequency range default for CAL setups	-/ 58.5 - 60.5 Hz				
Operating frequency range default for HI setups	-/ 57.0 - 63.0 Hz				
Nominal operating frequency	60 Hz				
Admissible conductor size AC	AWG 14 - AWG 6				
Total harmonic distortion	< 5.0 %				
Power factor range	0.85-1 ind./cap				
Max. continuous output current	208 V	18.3 A	24.0 A	28.8 A	36.5 A
	240 V	15.8 A	20.8 A	25.0 A	31.7 A
OCPD/AC breaker size	208V	25 A	30 A	40 A	50 A
	240 V	20 A	30 A	35 A	45 A
Max. Efficiency	96.7 %				
CEC Efficiency	95.0 %				

INPUT DATA	PRIMO 10.0-1	PRIMO 11.4-1	PRIMO 12.5-1	PRIMO 15.0-1
Recommended PV power (kWp)	8.0 - 12.0 kW	9.1 - 13.7 kW	10.0 - 15.0 kW	12.0 - 18.0 kW
Max. usable input current (MPPT 1/MPPT 2)	33.0 / 18.0 A			
Max. usable input current (MPPT 1+MPPT 2)	51 A			
Max. array short circuit current (1.5 * Imax)	49.5 A/ 27.0			
Nominal input voltage	655 V	660 V	665 V	680 V
Operating voltage range	80 V - 1,000 V			
DC startup voltage	80 V			
MPP Voltage Range	220-800 V	240-800 V	260-800 V	320-800 V
Max. input voltage	1000 V			
Admissible conductor size DC	AWG 14 - AWG 6 copper direct, AWG 6 aluminium direct (AWG 10 copper or AWG 8 aluminium for overcurrent protective devices up to 60A, from 61 to 100A minimum AWG 8 for copper or AWG 6 aluminium has to be used), AWG 4 - AWG 2 copper or aluminium with optional input combiner			
Number of MPPT	2			
Integrated DC string fuse holders	4- and 4+ for MPPT 1 / no fusing required on MPPT 2			

OUTPUT DATA	PRIMO 10.0-1	PRIMO 11.4-1	PRIMO 12.5-1	PRIMO 15.0-1
Max. output power	208 V/240 V	9995 VA/9995 VA	11400 VA/11400 VA	12500 VA/12500 VA
Output configuration	1-NPE 208/240 V			
Frequency range (adjustable)	45-55 Hz / 50-66 Hz			
Operating frequency range default for CAL setups	-/ 58.5 - 60.5 Hz			
Operating frequency range default for HI setups	-/ 57.0 - 63.0 Hz			
Nominal operating frequency	60 Hz			
Admissible conductor size AC	AWG 10- AWG 2 copper (solid/stranded/fine stranded)(AWG 10 copper or AWG 8 aluminium for overcurrent protective devices up to 60 A, from 61 to 100A minimum AWG 6 aluminium has to be used), AWG 6-AWG 2 copper (solid/stranded) Multi Contact Wiring able with AWG 12			
Total harmonic distortion	< 2.5 %			
Power factor range	0-1 ind./cap.			
Max. continuous output current	208 V	48.1 A	54.8 A	60.1 A
	240 V	41.6 A	47.5 A	52.1 A
OCPD/AC breaker size	208 V	70 A	70 A	80 A
	240 V	60 A	60 A	70 A
Max. Efficiency	96.7 %			
CEC Efficiency 600 V/ 1000 V	240 V	96.0 % / 96.5 %		96.5 % / 97.0 %

¹ inverter rated for up to 1000 V open circuit. Nominal, Operating, and MPP voltages based on 600 V system design. Actual DC system voltage is dependent on PV string-sizing, not inverter input capacity.

/ Perfect Welding / Solar Energy / Perfect Charging

THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 3,800 employees worldwide and 1,242 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at www.fronius.com

v08 Aug 2017 EN

Fronius USA LLC

6797 Fronius Drive

Portage, IN 46368 USA

pv-support-usa@fronius.com

www.fronius-usa.com



PATRIOT SOLAR GROUP
1007 INDUSTRIAL AVENUE
ALBION, MI 49424

PSG.18.032
ISSUED FOR CONSTRUCTION 7/16/18

SITE LOCATION:
WILLOW CREEK APARTMENTS
501 GRANBY STREET
HARTFORD, CT 06112
HARTFORD COUNTY

INDEX OF DRAWINGS
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& SPECIFICATIONS

S-1 SOLAR PANEL PLAN
S-2 PANEL ARRAY PROFILE
S-3 I-BEAM DETAILS
S-4 Z-CHANNEL DETAILS
S-5 TRUSS DETAIL

SPECIFICATIONS
39.4'x78.9" PANELS, 7' TILT
SOLAR CARPORT SYSTEM - REC. TWINPEAK
25 72 SERIES, 350 WATT PANELS

STRUCTURAL STEEL

1. POSTS: W16X40 G90 HOT-DIPPED GALVANIZED STEEL POSTS, BEAMS, AND RAILS
2. STRUCTURAL BOLTS - A325 OR GR5
3. GALVANIZED
3. WELDS - E70XX ELECTRODES, AWS D1.1
4. HOLES $\frac{1}{8}$ " LARGER THAN BOLT SIZE
5. ALL STEEL FABRICATED & GALV. PER ASTM A1123

CONCRETE
1. 3000 PSI @ 28 DAYS

SOIL BEARING CAPACITY
1. 2000 VERTICAL
2. 333 PSF/FT LATERAL

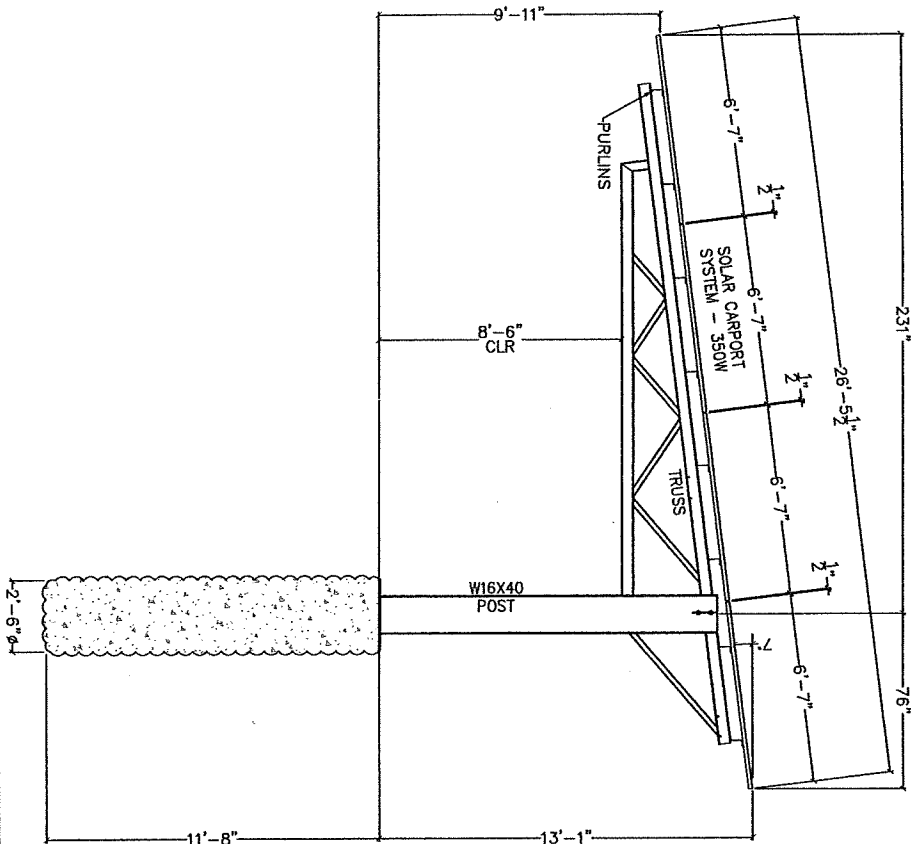
BEFORE YOU DIG CALL:
CT UNDERGROUND PLANT
PROTECTION
1-800-412-9195

STRUCTURAL DESIGN LOADS

EPA = 21.6 SF @ 39.4' x 78.9" PANELS
WEIGHT = 48.5 LBS/PANEL
4-PANELS HIGH, 144 MODULES:
TOTAL EPA = 21.6sf x 24 PANELS= 518 SF
IBC 2015
WIND SPEED 112 MPH, WIND EXPOSURE C
ASCE 7-10 RISK CATEGORY I, LOW HAZARD
K2 = 0.85 VELOCITY PRESSURE EXPOSURE
Kd = 0.85
Kzt=1 FLAT TERRAIN
Cf = 1.4 NET FORCE COEFFICIENT
G = 0.85 GUST FACTOR
q = 23.2 psf
Pg = 30 psf
Ce = 0.9
Ct = 1.2
Is = 0.8
Pf = 18.1 psf
4-PANELS HIGH, 24 PANEL ARRAY
UP/LIFT = 4.1k LBS
DOWN = 12.6k
HORIZONTAL = 0.8k LBS
M = 62.5 k

CERTIFYING ENGINEER OF RECORD IS NOT
RESPONSIBLE FOR SOLAR PANEL DESIGN.

CONTACT ENGINEER FOR PLACEMENT OF
SOLAR PANELS OTHER THAN 7 DEGREES ±.



REVISIONS			
BY	REV	DESCRIPTION	DATE
	0	ISSUED FOR CONSTRUCTION	7/16/18

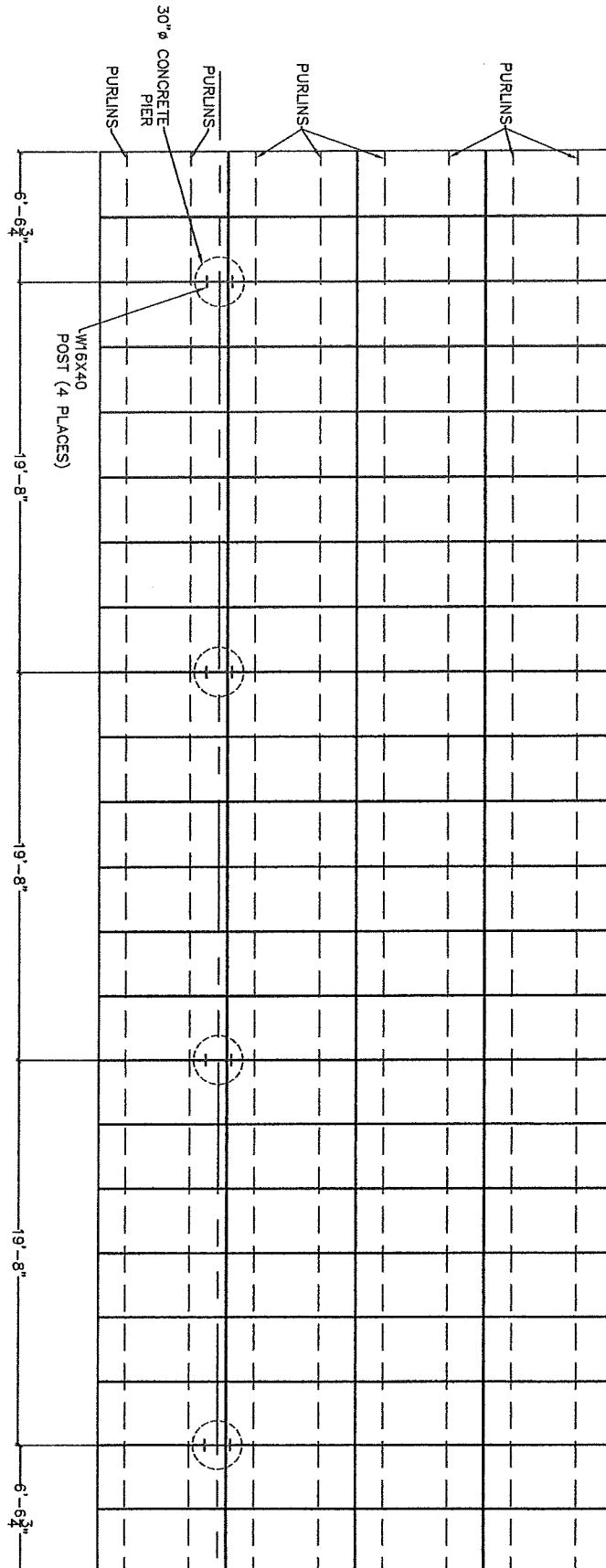


BERNARDY ENGINEERING PLLC
Consulting Structural Engineers
mark@bernardyseng.com
280 Douglas Ave
Hartford, CT 06112
(860) 726-1281
Fax (860) 726-0281

PATRIOT SOLAR GROUP
1007 INDUSTRIAL DRIVE
ALBION, MI 49224

COVER SHEET, INDEX, ELEV. & SPECIFICATIONS
SOLAR PANEL ARRAY
HARTFORD, CT 06112
SHEET B SCALE 1/4"=1'-0"
DWG PSG.18.032
SHEET NO. C-1





REVISIONS			
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BOF	0	ISSUED FOR CONSTRUCTION	7/9/18
			MS



SERVINSKY ENGINEERING PLLC
Consulting Structural Engineers
 MOCKS@servinskyeng.com
 280 Dundas Ave.
 Hudson, MI 48224-4515
 Tel: (416) 736-1281 Fax: (416) 736-6281

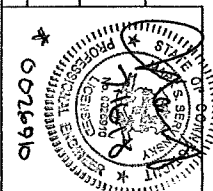
PATRIOT SOLAR GROUP
 1007 INDUSTRIAL DRIVE
 ALBION, MI 48224

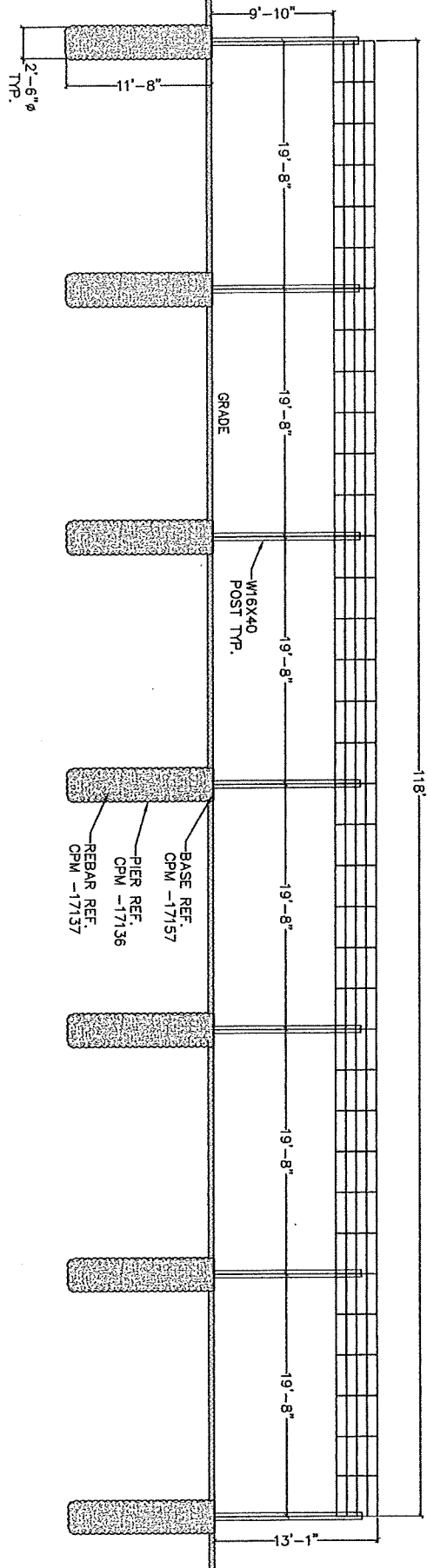
SOLAR CANOPY PLAN

SOLAR PANEL ARRAY

HARTFORD, CT 06112

SHEET B SCALE 3/16"=1'-0" NO. PSG.18.032 SHEET S-1





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MSB 0	ISSUED FOR CONSTRUCTION	7/16/18	MSB



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 1007 INDUSTRIAL DRIVE
 ALBION, MI 48224

PANEL ARRAY PROFILE

SOLAR PANEL ARRAY

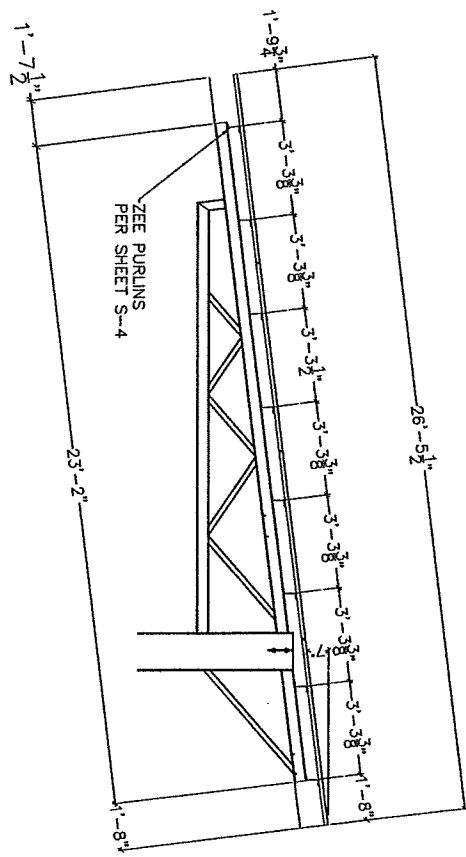
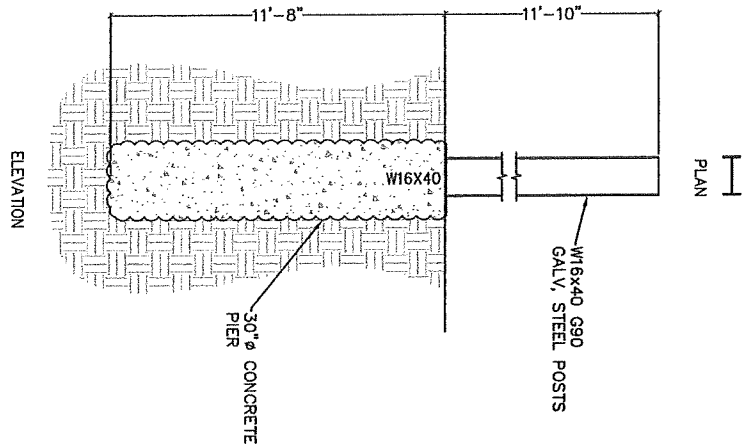
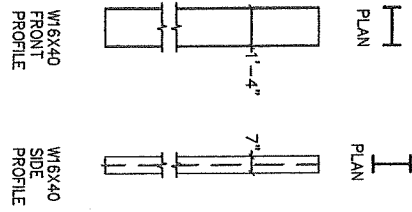
HARTFORD, CT 06112

SHEET B SCALE 1/8"=1'-0"

DWG PSG.18.032

SHEET S-2

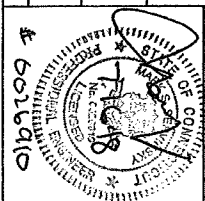




S-3 23'-6" I-BEAM DETAILS
SCALE: 1/4"=1'-0"

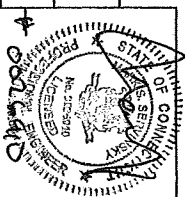
S-3 PURLIN LAYOUT
SCALE: 1/4"=1'-0"

REVISIONS			
BY / REV	DESCRIPTION	DATE	APPROVED
MSB 0	ISSUED FOR CONSTRUCTION	7/18/18	MSB
SERVINSKY ENGINEERING PLLC Consulting Structural Engineers 280 Dundee Ave. Holland, MI 49424-4915 (616) 738-1281 Fax: (616) 738-6261 mofrks@servinskyeng.com			
PATRIOT SOLAR GROUP 1007 INDUSTRIAL DRIVE ALBION, MI 49224		SOLAR PANEL ARRAY	
SHEET B		HARTFORD, CT 06112	
SCALE: 1/4"=1'-0"		SHEET S-3	





DETAILS



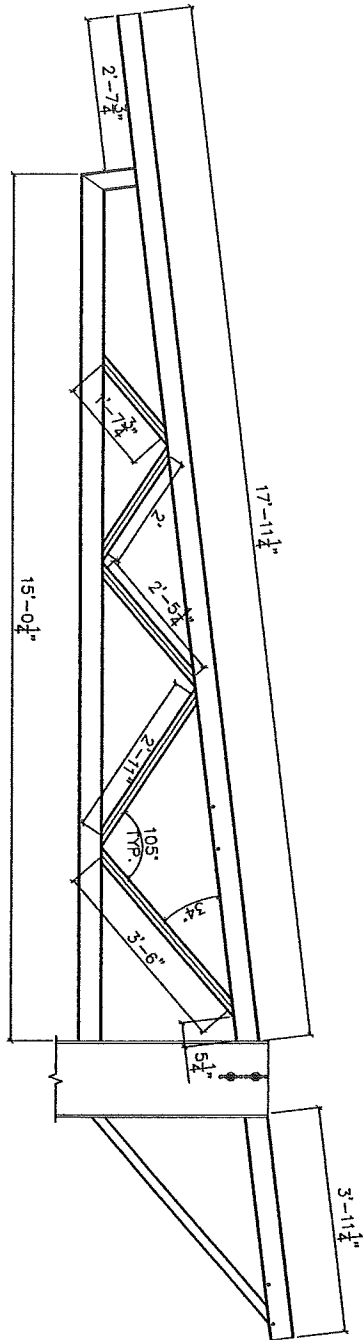
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BY	REV	DESCRIPTION	DATE
MSB	0	ISSUED FOR CONSTRUCTION	7/9/18
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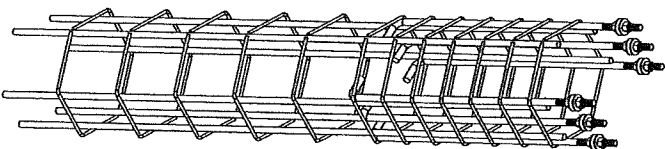
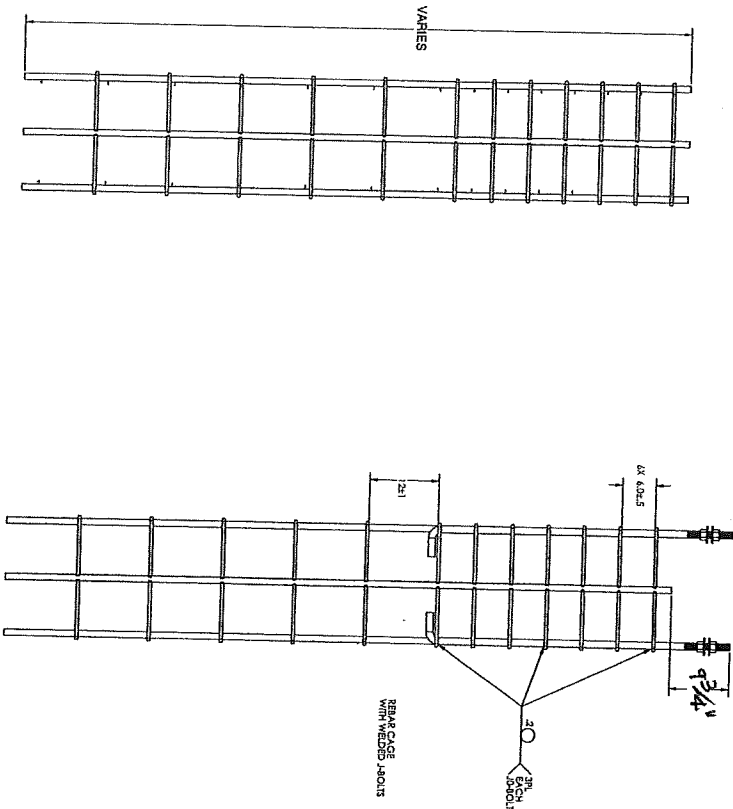
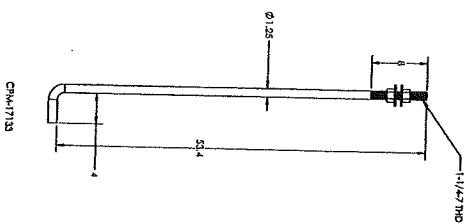
TRUSS DETAIL

SOLAR PANEL ARRAY

HARTFORD, CT 06112

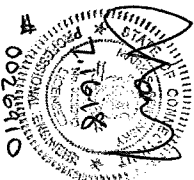


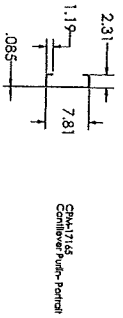
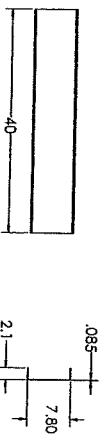
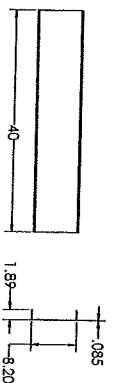
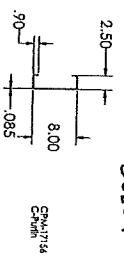
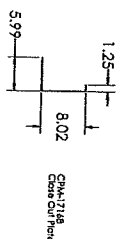
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DO NOT WRITE ON THIS SIDE	
VOLUMES	
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NL 6.00	
SLM 5.00	
TOTAL 2.00	
DATE REC'D NO.	REV
B	1
CPN-17136	
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Holland, Michigan 49424
616-738-1281
P56.18.032

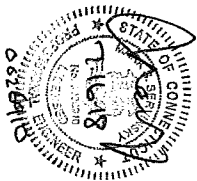
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HAAS FORD, C.T.

[illegible]



La Grange Park Center
1515 W. Ogden Avenue
La Grange Park, IL 60526

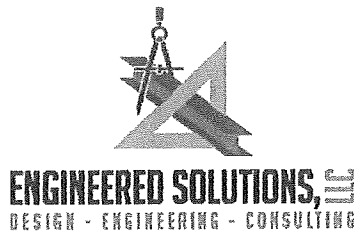
Solar Panel Canopy
Structural Calculations



Prepared for:

Patriot Solar Group
1007 Industrial Avenue
Albion, MI 49224

Project # 18.268
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December 2018



Design Criteria:

1999 BOCA
2015 IBC
25 psf Ground Snow Load
Snow Importance Factor: 1.0
112 mph Wind Speed, 3 second gust, Wind Exposure C
Soil Bearing Capacity: 2000 psf

System Criteria:

Canopy Carport – Portrait – 3 panels
Tilt Angle – 7 degrees

Reactions:

Up = 4.1k
Down = 12.6k
Lateral = 0.8k
M = 62.5 ft-k

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG

Steel Code Check

Report: Comprehensive

Members: Hot-rolled

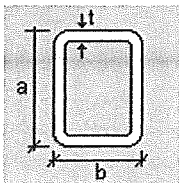
Design code: AISC 360-2005 ASD

Member : 15 (Top Chord)
Design status : OK

Section information

Section name: HSS 5x5x7ga (US)

Dimensions



a = 5.000 [in] Height
b = 5.000 [in] Width
T = 0.180 [in] Thickness

Properties

Section properties	Unit	Major axis	Minor axis
Gross area of the section. (Ag)	[in ²]	3.391	
Moment of Inertia (local axes) (I)	[in ⁴]	12.961	12.961
Moment of Inertia (principal axes) (I')	[in ⁴]	12.961	12.961
Bending constant for moments (principal axis) (J')	[in]	0.000	0.000
Radius of gyration (local axes) (r)	[in]	1.955	1.955
Radius of gyration (principal axes) (r')	[in]	1.955	1.955
Saint-Venant torsion constant. (J)	[in ⁴]	20.514	
Section warping constant. (Cw)	[in ⁶]	0.054	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.000	0.000
Top elastic section modulus of the section (local axis) (Ssup)	[in ³]	5.185	5.185
Bottom elastic section modulus of the section (local axis) (Sinf)	[in ³]	5.185	5.185
Top elastic section modulus of the section (principal axis) (S'sup)	[in ³]	5.185	5.185
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in ³]	5.185	5.185
Plastic section modulus (local axis) (Z)	[in ³]	6.077	6.077
Plastic section modulus (principal axis) (Z')	[in ³]	6.077	6.077
Polar radius of gyration. (ro)	[in]	2.765	
Area for shear (Aw)	[in ²]	1.606	1.606
Torsional constant. (C)	[in ³]	8.341	

Material : A500 GrC rectangular

Properties	Unit	Value
------------	------	-------

Yield stress (Fy):	[Kip/in2]	50.00
Tensile strength (Fu):	[Kip/in2]	62.00
Elasticity Modulus (E):	[Kip/in2]	29000.00
Shear modulus for steel (G):	[Kip/in2]	11153.85

DESIGN CRITERIA

Description	Unit	Value
Length for tension slenderness ratio (L)	[ft]	1.34

Distance between member lateral bracing points

Length (Lb) [ft]	
Top	Bottom
1.34	1.34

Laterally unbraced length

Major axis(L33)	Length [ft]		Torsional axis(Lt)	Major axis(K33)	Effective length factor	
	Minor axis(L22)				Minor axis(K22)	Torsional axis(Kt)
1.34	1.34		1.34	1.0	1.0	1.0

Additional assumptions

Continuous lateral torsional restraint	No
Tension field action	No
Continuous flexural torsional restraint	No
Effective length factor value type	None
Major axis frame type	Sway
Minor axis frame type	Sway

DESIGN CHECKS

AXIAL TENSION DESIGN

Axial tension

Ratio	:	0.27	Reference	:	Eq. Sec. D2
Capacity	:	101.53 [Kip]	Ctrl Eq.	:	C35 at 100.00%
Demand	:	26.97 [Kip]			

Intermediate results	Unit	Value	Reference
Factored axial tension capacity(P_n/ϕ_t)	[Kip]	101.53	Eq. Sec. D2
Nominal axial tension capacity (P_n)	[Kip]	169.55	Eq. D2-1

AXIAL COMPRESSION DESIGN

Compression in the major axis 33

Ratio	:	0.13	Reference	:	Sec. E1
Capacity	:	101.03 [Kip]	Ctrl Eq.	:	C22 at 0.00%
Demand	:	13.05 [Kip]			

Intermediate results	Unit	Value	Reference
----------------------	------	-------	-----------

<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	24.78	
Unstiffened element limiting slenderness (λ_r)	--	33.72	
Stiffened element classification	--	Non slender	
Stiffened element slenderness (λ)	--	24.78	
Stiffened element limiting slenderness (λ_r)	--	33.72	
<u>Factored flexural buckling strength</u> (Pn33/ Ω)	[Kip]	101.03	Sec. E1
Effective length factor (K33)	--	1.00	
Unbraced length (L33)	[ft]	1.34	
Effective slenderness ((KL/r)33)	--	8.20	Eq. E3-4
Elastic critical buckling stress (Fe33)	[Kip/in2]	4252.66	Eq. E3-4
Reduction factor for slender unstiffened elements (Qs33)	--	1.00	
Effective area of the cross section based on the effective width (A...	[in2]	3.39	Eq. E3-2
Reduction factor for slender stiffened elements (Qa33)	--	1.00	
Full reduction factor for slender elements (Q33)	--	1.00	Sec. E7
Critical stress for flexural buckling (Fcr33)	[Kip/in2]	49.75	Eq. E3-2
Nominal flexural buckling strength (Pn33)	[Kip]	168.72	Eq. E3-1

Compression in the minor axis 22

Ratio	:	0.13		
Capacity	:	101.03 [Kip]	Reference	: Sec. E1
Demand	:	13.05 [Kip]	Ctrl Eq.	: C22 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	24.78	
Unstiffened element limiting slenderness (λ_r)	--	33.72	
Stiffened element classification	--	Non slender	
Stiffened element slenderness (λ)	--	24.78	
Stiffened element limiting slenderness (λ_r)	--	33.72	
<u>Factored flexural buckling strength</u> (Pn22/ Ω)	[Kip]	101.03	Sec. E1
Effective length factor (K22)	--	1.00	
Unbraced length (L22)	[ft]	1.34	
Effective slenderness ((KL/r)22)	--	8.20	Eq. E3-4
Elastic critical buckling stress (Fe22)	[Kip/in2]	4252.66	Eq. E3-4
Reduction factor for slender unstiffened elements (Qs22)	--	1.00	
Effective area of the cross section based on the effective width (A...	[in2]	3.39	Eq. E3-2
Reduction factor for slender stiffened elements (Qa22)	--	1.00	
Full reduction factor for slender elements (Q22)	--	1.00	Sec. E7
Critical stress for flexural buckling (Fcr22)	[Kip/in2]	49.75	Eq. E3-2
Nominal flexural buckling strength (Pn22)	[Kip]	168.72	Eq. E3-1

FLEXURAL DESIGN

Bending about major axis, M33

Ratio	:	0.43		
Capacity	:	15.16 [Kip*ft]	Reference	: Sec. F1
Demand	:	-6.53 [Kip*ft]	Ctrl Eq.	: C35 at 100.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	24.78	

Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
<u>Factored yielding strength</u> (M_n/Ω)	[Kip*ft]	15.16	Sec. F1
Yielding (Mn)	[Kip*ft]	25.32	Eq. F7-1

Bending about minor axis, M22

Ratio	:	0.00		
Capacity	:	15.16 [Kip*ft]	Reference	: Sec. F1
Demand	:	0.00 [Kip*ft]	Ctrl Eq.	: C1 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
<u>Factored yielding strength</u> (M_n/Ω)	[Kip*ft]	15.16	Sec. F1
Yielding (Mn)	[Kip*ft]	25.32	Eq. F7-1

DESIGN FOR SHEAR

Shear in major axis 33

Ratio	:	0.00		
Capacity	:	28.84 [Kip]		
Demand	:	0.00 [Kip]	Ctrl Eq.	: C1 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	28.84	
Web slenderness (λ_w)	--	24.78	Sec. G2
Shear area (A_w)	[in ²]	1.61	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	48.17	Eq. G2-1

Shear in minor axis 22

Ratio	:	0.17		
Capacity	:	28.84 [Kip]		
Demand	:	-4.99 [Kip]	Ctrl Eq.	: C35 at 100.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	28.84	
Web slenderness (λ_w)	--	24.78	Sec. G2

Shear area (Aw)	[in ²]	1.61	
Web buckling coefficient (kv)	—	5.00	Sec. G5
Web buckling coefficient (Cv)	—	1.00	Eq. G2-3
Nominal shear strength (Vn)	[Kip]	48.17	Eq. G2-1

TORSION DESIGN

Torsion

Ratio	:	0.00		
Capacity	:	12.49 [Kip*ft]		
Demand	:	0.00 [Kip*ft]	Ctrl Eq.	: C1 at 0.00%

Intermediate results	Unit	Value	Reference
Factored torsion capacity (Tn/Ω2)	[Kip*ft]	12.49	
Critical torsional buckling stress (Fcr)	[Kip/in ²]	30.00	Eq. H3-3
Nominal torsion capacity (Tn)	[Kip*ft]	20.85	Eq. H3-1

COMBINED ACTIONS DESIGN

Combined flexure and axial compression

Ratio	:	0.43		
Ctrl Eq.	:	C35 at 100.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
Interaction of flexure and axial force	—	0.43	Eq. H1-1b
Required flexural strength about strong axis (Mr33)	[Kip*ft]	-6.53	
Available flexural strength about strong axis (Mc33)	[Kip*ft]	15.16	Sec. F1
Required flexural strength about weak axis (Mr22)	[Kip*ft]	0.00	
Available flexural strength about weak axis (Mc22)	[Kip*ft]	15.16	Sec. F1
Required axial compressive strength (Pr)	[Kip]	0.00	
Available axial compressive strength (Pc)	[Kip]	101.03	Sec. E1

Combined flexure and axial tension

Ratio	:	0.65		
Ctrl Eq.	:	C35 at 100.00%	Reference	: Eq. H1-1a

Intermediate results	Unit	Value	Reference
Required flexural strength about strong axis (Mr33)	[Kip*ft]	-6.53	
Available flexural strength about strong axis (Mc33)	[Kip*ft]	15.16	Sec. F1
Required flexural strength about weak axis (Mr22)	[Kip*ft]	0.00	
Available flexural strength about weak axis (Mc22)	[Kip*ft]	15.16	Sec. F1
Required axial tensile strength (Pr)	[Kip]	26.97	
Available axial tensile strength (Pc)	[Kip]	101.53	Eq. Sec. D2

Combined flexure and axial compression about local axis

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined flexure and axial tension about local axis

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined torsion, flexure, shear and axial compression

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined torsion, flexure, shear and axial tension

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG

Steel Code Check

Report: Comprehensive

Members: Hot-rolled

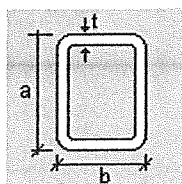
Design code: AISC 360-2005 ASD

Member : 3 (Bottom Chord)
Design status : OK

Section information

Section name: HSS 5x5x7ga (US)

Dimensions



a = 5.000 [in] Height
b = 5.000 [in] Width
T = 0.180 [in] Thickness

Properties

Section properties	Unit	Major axis	Minor axis
Gross area of the section. (Ag)	[in2]	3.391	
Moment of Inertia (local axes) (I)	[in4]	12.961	12.961
Moment of Inertia (principal axes) (I')	[in4]	12.961	12.961
Bending constant for moments (principal axis) (J')	[in]	0.000	0.000
Radius of gyration (local axes) (r)	[in]	1.955	1.955
Radius of gyration (principal axes) (r')	[in]	1.955	1.955
Saint-Venant torsion constant. (J)	[in4]	20.514	
Section warping constant. (Cw)	[in6]	0.054	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.000	0.000
Top elastic section modulus of the section (local axis) (Ssup)	[in3]	5.185	5.185
Bottom elastic section modulus of the section (local axis) (Sinf)	[in3]	5.185	5.185
Top elastic section modulus of the section (principal axis) (S'sup)	[in3]	5.185	5.185
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in3]	5.185	5.185
Plastic section modulus (local axis) (Z)	[in3]	6.077	6.077
Plastic section modulus (principal axis) (Z')	[in3]	6.077	6.077
Polar radius of gyration. (ro)	[in]	2.765	
Area for shear (Aw)	[in2]	1.606	1.606
Torsional constant. (C)	[in3]	8.341	

Material : A500 GrC rectangular

Properties	Unit	Value
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Yield stress (Fy):	[Kip/in2]	50.00
Tensile strength (Fu):	[Kip/in2]	62.00
Elasticity Modulus (E):	[Kip/in2]	29000.00
Shear modulus for steel (G):	[Kip/in2]	11153.85

DESIGN CRITERIA

Description	Unit	Value
Length for tension slenderness ratio (L)	[ft]	3.86
Distance between member lateral bracing points		
Length (Lb) [ft]		
Top	Bottom	
3.86	3.86	
Laterally unbraced length		
Major axis(L33)	Length [ft] Minor axis(L22)	Torsional axis(Lt)
Major axis(K33)	Effective length factor Minor axis(K22)	Torsional axis(Kt)
3.86	3.86	3.86
1.0	1.0	1.0
Additional assumptions		
Continuous lateral torsional restraint		No
Tension field action		No
Continuous flexural torsional restraint		No
Effective length factor value type		None
Major axis frame type		Sway
Minor axis frame type		Sway

DESIGN CHECKS

AXIAL TENSION DESIGN

Axial tension

Ratio	:	0.13	Reference	:	Eq. Sec. D2
Capacity	:	101.53 [Kip]	Ctrl Eq.	:	C22 at 0.00%
Demand	:	13.33 [Kip]			

Intermediate results	Unit	Value	Reference
Factored axial tension capacity(P_n/Ω)	[Kip]	101.53	Eq. Sec. D2
Nominal axial tension capacity (P_n)	[Kip]	169.55	Eq. D2-1

AXIAL COMPRESSION DESIGN

Compression in the major axis 33

Ratio	:	0.27	Reference	:	Sec. E1
Capacity	:	97.44 [Kip]	Ctrl Eq.	:	C35 at 0.00%
Demand	:	26.60 [Kip]			

Intermediate results	Unit	Value	Reference
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<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	24.78	
Unstiffened element limiting slenderness (λ_r)	--	33.72	
Stiffened element classification	--	Non slender	
Stiffened element slenderness (λ)	--	24.78	
Stiffened element limiting slenderness (λ_r)	--	33.72	
<u>Factored flexural buckling strength</u> (P_{n33}/Ω)	[Kip]	97.44	Sec. E1
Effective length factor (K33)	--	1.00	
Unbraced length (L33)	[ft]	3.86	
Effective slenderness ($(KL/r)_{33}$)	--	23.71	Eq. E3-4
Elastic critical buckling stress (F_{e33})	[Kip/in ²]	509.22	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s33})	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	3.39	Eq. E3-2
Reduction factor for slender stiffened elements (Q_{a33})	--	1.00	
Full reduction factor for slender elements (Q_{33})	--	1.00	Sec. E7
Critical stress for flexural buckling (F_{cr33})	[Kip/in ²]	47.99	Eq. E3-2
Nominal flexural buckling strength (P_{n33})	[Kip]	162.73	Eq. E3-1

Compression in the minor axis 22

Ratio	:	0.27		
Capacity	:	97.44 [Kip]	Reference	: Sec. E1
Demand	:	26.60 [Kip]	Ctrl Eq.	: C35 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	24.78	
Unstiffened element limiting slenderness (λ_r)	--	33.72	
Stiffened element classification	--	Non slender	
Stiffened element slenderness (λ)	--	24.78	
Stiffened element limiting slenderness (λ_r)	--	33.72	
<u>Factored flexural buckling strength</u> (P_{n22}/Ω)	[Kip]	97.44	Sec. E1
Effective length factor (K22)	--	1.00	
Unbraced length (L22)	[ft]	3.86	
Effective slenderness ($(KL/r)_{22}$)	--	23.71	Eq. E3-4
Elastic critical buckling stress (F_{e22})	[Kip/in ²]	509.22	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s22})	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	3.39	Eq. E3-2
Reduction factor for slender stiffened elements (Q_{a22})	--	1.00	
Full reduction factor for slender elements (Q_{22})	--	1.00	Sec. E7
Critical stress for flexural buckling (F_{cr22})	[Kip/in ²]	47.99	Eq. E3-2
Nominal flexural buckling strength (P_{n22})	[Kip]	162.73	Eq. E3-1

FLEXURAL DESIGN

Bending about major axis, M33

Ratio	:	0.25		
Capacity	:	15.16 [Kip*ft]	Reference	: Sec. F1
Demand	:	-3.75 [Kip*ft]	Ctrl Eq.	: C35 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	24.78	

Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
Factored yielding strength (M_n/Ω)	[Kip*ft]	15.16	Sec. F1
Yielding (M_n)	[Kip*ft]	25.32	Eq. F7-1

Bending about minor axis, M22

Ratio	:	0.00	Reference	:	Sec. F1
Capacity	:	15.16 [Kip*ft]	Ctrl Eq.	:	C1 at 0.00%
Demand	:	0.00 [Kip*ft]			

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	24.78	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
Factored yielding strength (M_n/Ω)	[Kip*ft]	15.16	Sec. F1
Yielding (M_n)	[Kip*ft]	25.32	Eq. F7-1

DESIGN FOR SHEAR

Shear in major axis 33

Ratio	:	0.00		
Capacity	:	28.84 [Kip]	Ctrl Eq.	:
Demand	:	0.00 [Kip]		C1 at 0.00%

Intermediate results	Unit	Value	Reference
Factored shear capacity (V_n/Ω)	[Kip]	28.84	
Web slenderness (λ_w)	--	24.78	Sec. G2
Shear area (A_w)	[in ²]	1.61	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	48.17	Eq. G2-1

Shear in minor axis 22

Ratio	:	0.04		
Capacity	:	28.84 [Kip]	Ctrl Eq.	:
Demand	:	1.02 [Kip]		C35 at 0.00%

Intermediate results	Unit	Value	Reference
Factored shear capacity (V_n/Ω)	[Kip]	28.84	
Web slenderness (λ_w)	--	24.78	Sec. G2

Shear area (A_w)	[in ²]	1.61	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	48.17	Eq. G2-1

TORSION DESIGN

Torsion

Ratio	:	0.00	
Capacity	:	12.49 [Kip*ft]	
Demand	:	0.00 [Kip*ft]	
Ctrl Eq.	:	C1 at 0.00%	

Intermediate results	Unit	Value	Reference
<u>Factored torsion capacity</u> (T_n/Ω)	[Kip*ft]	12.49	
Critical torsional buckling stress (F_{cr})	[Kip/in ²]	30.00	Eq. H3-3
Nominal torsion capacity (T_n)	[Kip*ft]	20.85	Eq. H3-1

COMBINED ACTIONS DESIGN

Combined flexure and axial compression

Ratio	:	0.49	
Ctrl Eq.	:	C35 at 0.00%	Reference : Eq. H1-1a

Intermediate results	Unit	Value	Reference
<u>Interaction of flexure and axial force</u>	--	0.49	Eq. H1-1a
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	-3.75	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	15.16	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	15.16	Sec. F1
Required axial compressive strength (P_r)	[Kip]	26.60	
Available axial compressive strength (P_c)	[Kip]	97.44	Sec. E1

Combined flexure and axial tension

Ratio	:	0.25	
Ctrl Eq.	:	C35 at 0.00%	Reference : Eq. H1-1b

Intermediate results	Unit	Value	Reference
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	-3.75	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	15.16	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	15.16	Sec. F1
Required axial tensile strength (P_r)	[Kip]	0.00	
Available axial tensile strength (P_c)	[Kip]	101.53	Eq. Sec. D2

Combined flexure and axial compression about local axis

Ratio	:	N/A	
Ctrl Eq.	:	--	Reference : Eq. H1-1a

Combined flexure and axial tension about local axis

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined torsion, flexure, shear and axial compression

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

Combined torsion, flexure, shear and axial tension

Ratio	:	N/A		
Ctrl Eq.	:	—	Reference	:

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG

Steel Code Check

Report: Comprehensive

Members: Hot-rolled

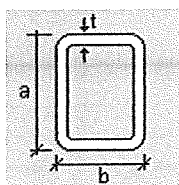
Design code: AISC 360-2005 ASD

Member : 19 (Web)
Design status : OK

Section information

Section name: HSS 4x4x11GA (US)

Dimensions



a = 4.000 [in] Height
b = 4.000 [in] Width
T = 0.120 [in] Thickness

Properties

Section properties	Unit	Major axis	Minor axis
Gross area of the section. (Ag)	[in2]	1.827	
Moment of Inertia (local axes) (I)	[in4]	4.536	4.536
Moment of Inertia (principal axes) (I')	[in4]	4.536	4.536
Bending constant for moments (principal axis) (J')	[in]	0.000	0.000
Radius of gyration (local axes) (r)	[in]	1.576	1.576
Radius of gyration (principal axes) (r')	[in]	1.576	1.576
Saint-Venant torsion constant. (J)	[in4]	7.118	
Section warping constant. (Cw)	[in6]	0.009	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.000	0.000
Top elastic section modulus of the section (local axis) (Ssup)	[in3]	2.268	2.268
Bottom elastic section modulus of the section (local axis) (Sinf)	[in3]	2.268	2.268
Top elastic section modulus of the section (principal axis) (S'sup)	[in3]	2.268	2.268
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in3]	2.268	2.268
Plastic section modulus (local axis) (Z)	[in3]	2.640	2.640
Plastic section modulus (principal axis) (Z')	[in3]	2.640	2.640
Polar radius of gyration. (ro)	[in]	2.228	
Area for shear (Aw)	[in2]	0.874	0.874
Torsional constant. (C)	[in3]	3.606	

Material : A500 GrC rectangular

Properties	Unit	Value
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Yield stress (Fy):	[Kip/in2]	50.00
Tensile strength (Fu):	[Kip/in2]	62.00
Elasticity Modulus (E):	[Kip/in2]	29000.00
Shear modulus for steel (G):	[Kip/in2]	11153.85

DESIGN CRITERIA

Description	Unit	Value
Length for tension slenderness ratio (L)	[ft]	2.27
Distance between member lateral bracing points		
Length (Lb) [ft]		
Top	Bottom	
2.27	2.27	
Laterally unbraced length		
Major axis(L33)	Length [ft] Minor axis(L22)	Torsional axis(Lt)
	Effective length factor Minor axis(K22)	Major axis(K33)
2.27	2.27	2.27
	1.0	1.0
	1.0	1.0
Additional assumptions		
Continuous lateral torsional restraint		No
Tension field action		No
Continuous flexural torsional restraint		No
Effective length factor value type		None
Major axis frame type		Sway
Minor axis frame type		Sway

DESIGN CHECKS

AXIAL TENSION DESIGN

Axial tension

Ratio	:	0.11	Reference	:	Eq. Sec. D2
Capacity	:	54.70 [Kip]	Ctrl Eq.	:	C22 at 100.00%
Demand	:	5.78 [Kip]			

Intermediate results	Unit	Value	Reference
Factored axial tension capacity(P_n/Ω)	[Kip]	54.70	Eq. Sec. D2
Nominal axial tension capacity (P_n)	[Kip]	91.36	Eq. D2-1

AXIAL COMPRESSION DESIGN

Compression in the major axis 33

Ratio	:	0.19	Reference	:	Sec. E1
Capacity	:	53.52 [Kip]	Ctrl Eq.	:	C35 at 0.00%
Demand	:	10.29 [Kip]			

Intermediate results	Unit	Value	Reference
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Section classification

Unstiffened element classification	—	Non slender	
Unstiffened element slenderness (λ)	—	30.33	
Unstiffened element limiting slenderness (λ_r)	—	33.72	
Stiffened element classification	—	Non slender	
Stiffened element slenderness (λ)	—	30.33	
Stiffened element limiting slenderness (λ_r)	—	33.72	
Factored flexural buckling strength (P_{n33}/Ω)	[Kip]	53.52	Sec. E1
Effective length factor (K33)	—	1.00	
Unbraced length (L33)	[ft]	2.27	
Effective slenderness ($(KL/r)_{33}$)	—	17.30	Eq. E3-4
Elastic critical buckling stress (F_{e33})	[Kip/in ²]	956.05	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s33})	—	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	1.83	Eq. E3-2
Reduction factor for slender stiffened elements (Q_{a33})	—	1.00	
Full reduction factor for slender elements (Q_{33})	—	1.00	Sec. E7
Critical stress for flexural buckling (F_{cr33})	[Kip/in ²]	48.92	Eq. E3-2
Nominal flexural buckling strength (P_{n33})	[Kip]	89.38	Eq. E3-1

Compression in the minor axis 22

Ratio	:	0.19		
Capacity	:	53.52 [Kip]	Reference	: Sec. E1
Demand	:	10.29 [Kip]	Ctrl Eq.	: C35 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	—	Non slender	
Unstiffened element slenderness (λ)	—	30.33	
Unstiffened element limiting slenderness (λ_r)	—	33.72	
Stiffened element classification	—	Non slender	
Stiffened element slenderness (λ)	—	30.33	
Stiffened element limiting slenderness (λ_r)	—	33.72	
Factored flexural buckling strength (P_{n22}/Ω)	[Kip]	53.52	Sec. E1
Effective length factor (K22)	—	1.00	
Unbraced length (L22)	[ft]	2.27	
Effective slenderness ($(KL/r)_{22}$)	—	17.30	Eq. E3-4
Elastic critical buckling stress (F_{e22})	[Kip/in ²]	956.05	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s22})	—	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	1.83	Eq. E3-2
Reduction factor for slender stiffened elements (Q_{a22})	—	1.00	
Full reduction factor for slender elements (Q_{22})	—	1.00	Sec. E7
Critical stress for flexural buckling (F_{cr22})	[Kip/in ²]	48.92	Eq. E3-2
Nominal flexural buckling strength (P_{n22})	[Kip]	89.38	Eq. E3-1

FLEXURAL DESIGNBending about major axis, M33

Ratio	:	0.00		
Capacity	:	6.13 [Kip*ft]	Reference	: Sec. F1
Demand	:	0.00 [Kip*ft]	Ctrl Eq.	: C1 at 50.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	—	Noncompact	
Unstiffened element slenderness (λ)	—	30.33	

Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	30.33	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
<u>Factored yielding strength</u> (M_n/Ω)	[Kip*ft]	6.59	Sec. F1
Yielding (Mn)	[Kip*ft]	11.00	Eq. F7-1
<u>Factored compression flange local buckling strength</u> (M_n/Ω)	[Kip*ft]	6.13	Sec. F1
Flange local buckling (Mn)	[Kip*ft]	10.23	Eq. F7-2

Bending about minor axis, M22

Ratio	:	0.00	Reference	:	Sec. F1
Capacity	:	6.13 [Kip*ft]	Ctrl Eq.	:	C1 at 0.00%
Demand	:	0.00 [Kip*ft]			

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Noncompact	
Unstiffened element slenderness (λ)	--	30.33	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	33.72	
Limiting slenderness for compact unstiffened element (λ_p)	--	26.97	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	30.33	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	58.28	
<u>Factored yielding strength</u> (M_n/Ω)	[Kip*ft]	6.59	Sec. F1
Yielding (Mn)	[Kip*ft]	11.00	Eq. F7-1
<u>Factored compression flange local buckling strength</u> (M_n/Ω)	[Kip*ft]	6.13	Sec. F1
Flange local buckling (Mn)	[Kip*ft]	10.23	Eq. F7-2

DESIGN FOR SHEAR

Shear in major axis 33

Ratio	:	0.00		
Capacity	:	15.69 [Kip]	Ctrl Eq.	:
Demand	:	0.00 [Kip]		C1 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	15.69	
Web slenderness (λ_w)	--	30.33	Sec. G2
Shear area (A_w)	[in ²]	0.87	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	26.21	Eq. G2-1

Shear in minor axis 22

Ratio	:	0.00		
Capacity	:	15.69 [Kip]	Ctrl Eq.	:
Demand	:	-0.01 [Kip]		C1 at 100.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	15.69	
Web slenderness (λ_w)	--	30.33	Sec. G2
Shear area (A_w)	[in ²]	0.87	
Web buckling coefficient (k_v)	--	5.00	Sec. G5
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	26.21	Eq. G2-1

TORSION DESIGN

Torsion

Ratio	:	0.00		
Capacity	:	5.40 [Kip*ft]		
Demand	:	0.00 [Kip*ft]	Ctrl Eq.	: C1 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Factored torsion capacity</u> (T_n/Ω)	[Kip*ft]	5.40	
Critical torsional buckling stress (F_{cr})	[Kip/in ²]	30.00	Eq. H3-3
Nominal torsion capacity (T_n)	[Kip*ft]	9.02	Eq. H3-1

COMBINED ACTIONS DESIGN

Combined flexure and axial compression

Ratio	:	0.10		
Ctrl Eq.	:	C35 at 50.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
<u>Interaction of flexure and axial force</u>	--	0.10	Eq. H1-1b
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	0.00	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	6.13	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	6.13	Sec. F1
Required axial compressive strength (P_r)	[Kip]	10.29	
Available axial compressive strength (P_c)	[Kip]	53.52	Sec. E1

Combined flexure and axial tension

Ratio	:	0.05		
Ctrl Eq.	:	C22 at 50.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	0.00	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	6.13	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	6.13	Sec. F1
Required axial tensile strength (P_r)	[Kip]	5.77	
Available axial tensile strength (P_c)	[Kip]	54.70	Eq. Sec. D2

Combined flexure and axial compression about local axis

Ratio	:	N/A		
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Ctrl Eq. : --

Reference :

Combined flexure and axial tension about local axis

Ratio : N/A

Ctrl Eq. : --

Reference :

Combined torsion, flexure, shear and axial compression

Ratio : N/A

Ctrl Eq. : --

Reference :

Combined torsion, flexure, shear and axial tension

Ratio : N/A

Ctrl Eq. : --

Reference :

File name: S:\Client Projects and Contacts\2018\Patriot Solar Group (PSG)

Steel Code Check

Report: Comprehensive

Members: Hot-rolled

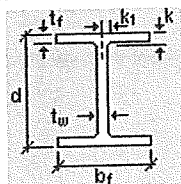
Design code: AISC 360-2005 ASD

Member : 1 (Column)
Design status : OK

Section information

Section name: W 16X40 (US)

Dimensions



bf	=	7.000	[in]	Width
d	=	16.000	[in]	Depth
k	=	0.907	[in]	Distance k
k1	=	0.813	[in]	Distance k1
tf	=	0.505	[in]	Flange thickness
tw	=	0.305	[in]	Web thickness

Properties

Section properties	Unit	Major axis	Minor axis
Gross area of the section. (Ag)	[in2]	11.800	
Moment of Inertia (local axes) (I)	[in4]	518.000	28.900
Moment of Inertia (principal axes) (I')	[in4]	518.000	28.900
Bending constant for moments (principal axis) (J')	[in]	0.000	0.000
Radius of gyration (local axes) (r)	[in]	6.626	1.565
Radius of gyration (principal axes) (r')	[in]	6.626	1.565
Saint-Venant torsion constant. (J)	[in4]	0.794	
Section warping constant. (Cw)	[in6]	1730.000	
Distance from centroid to shear center (principal axis) (xo,yo)	[in]	0.000	0.000
Top elastic section modulus of the section (local axis) (Ssup)	[in3]	64.700	8.250
Bottom elastic section modulus of the section (local axis) (Sinf)	[in3]	64.700	8.250
Top elastic section modulus of the section (principal axis) (S'sup)	[in3]	64.700	8.250
Bottom elastic section modulus of the section (principal axis) (S'inf)	[in3]	64.700	8.250
Plastic section modulus (local axis) (Z)	[in3]	73.000	12.700
Plastic section modulus (principal axis) (Z')	[in3]	73.000	12.700
Polar radius of gyration. (ro)	[in]	6.808	
Area for shear (Aw)	[in2]	7.070	4.880
Torsional constant. (C)	[in3]	1.480	

Material : A992 Gr50

Properties	Unit	Value
Yield stress (Fy):	[Kip/in2]	50.00
Tensile strength (Fu):	[Kip/in2]	65.00
Elasticity Modulus (E):	[Kip/in2]	29000.00
Shear modulus for steel (G):	[Kip/in2]	11153.85

DESIGN CRITERIA

Description	Unit	Value
Length for tension slenderness ratio (L)	[ft]	8.50

Distance between member lateral bracing points

Length (Lb) [ft]	
Top	Bottom
8.50	8.50

Laterally unbraced length

Major axis(L33)	Length [ft]		Torsional axis(Lt)	Major axis(K33)	Effective length factor		Torsional axis(Kt)
	Minor axis(L22)				Minor axis(K22)		
8.50	8.50		8.50	1.0	1.0		1.0

Additional assumptions

Continuous lateral torsional restraint	No
Tension field action	No
Continuous flexural torsional restraint	No
Effective length factor value type	None
Major axis frame type	Sway
Minor axis frame type	Sway

DESIGN CHECKS

AXIAL TENSION DESIGN

Axial tension

Ratio	:	0.01	Reference	:	Eq. Sec. D2
Capacity	:	353.29 [Kip]	Ctrl Eq.	:	C22 at 100.00%
Demand	:	4.44 [Kip]			

Intermediate results	Unit	Value	Reference
Factored axial tension capacity(P_n/Ω)	[Kip]	353.29	Eq. Sec. D2
Nominal axial tension capacity (P_n)	[Kip]	590.00	Eq. D2-1

AXIAL COMPRESSION DESIGN

Compression in the major axis 33

Ratio	:	0.04	Reference	:	Sec. E1
Capacity	:	325.27 [Kip]	Ctrl Eq.	:	C35 at 0.00%
Demand	:	12.63 [Kip]			

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	6.93	
Unstiffened element limiting slenderness (λ_r)	--	13.49	
Stiffened element classification	--	Slender	
Stiffened element slenderness (λ)	--	46.51	
Stiffened element limiting slenderness (λ_r)	--	35.88	
<u>Factored flexural buckling strength</u> (P_n33/Ω)	[Kip]	325.27	Sec. E1
Effective length factor (K33)	--	1.00	
Unbraced length (L33)	[ft]	8.50	
Effective slenderness ($(KL/r)33$)	--	15.39	Eq. E3-4
Elastic critical buckling stress (F_{e33})	[Kip/in ²]	1207.66	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s33})	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	11.04	Eq. E7-2
Reduction factor for slender stiffened elements (Q_{a33})	--	0.94	Eq. E7-16
Full reduction factor for slender elements (Q_{33})	--	0.94	Sec. E7
Critical stress for flexural buckling (F_{cr33})	[Kip/in ²]	46.03	Eq. E7-2
Nominal flexural buckling strength (P_n33)	[Kip]	543.20	Eq. E7-1

Compression in the minor axis 22

Ratio	:	0.05		
Capacity	:	253.83 [Kip]	Reference	: Sec. E1
Demand	:	12.63 [Kip]	Ctrl Eq.	: C35 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Section classification</u>			
Unstiffened element classification	--	Non slender	
Unstiffened element slenderness (λ)	--	6.93	
Unstiffened element limiting slenderness (λ_r)	--	13.49	
Stiffened element classification	--	Slender	
Stiffened element slenderness (λ)	--	46.51	
Stiffened element limiting slenderness (λ_r)	--	35.88	
<u>Factored flexural buckling strength</u> (P_n22/Ω)	[Kip]	253.83	Sec. E1
Effective length factor (K22)	--	1.00	
Unbraced length (L22)	[ft]	8.50	
Effective slenderness ($(KL/r)22$)	--	65.18	Eq. E3-4
Elastic critical buckling stress (F_{e22})	[Kip/in ²]	67.38	Eq. E3-4
Reduction factor for slender unstiffened elements (Q_{s22})	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	11.46	Eq. E7-2
Reduction factor for slender stiffened elements (Q_{a22})	--	0.97	Eq. E7-16
Full reduction factor for slender elements (Q_{22})	--	0.97	Sec. E7
Critical stress for flexural buckling (F_{cr22})	[Kip/in ²]	35.92	Eq. E7-2
Nominal flexural buckling strength (P_n22)	[Kip]	423.90	Eq. E7-1
<u>Factored torsional or flexural-torsional buckling strength</u> (P_n11/Ω)	[Kip]	278.74	Sec. E4
Effective length factor (K11)	--	1.00	
Unbraced length (L11)	[ft]	8.50	
Flexural constant (H)	--	1.00	Eq. E4-8
Torsional or flexural-torsional elastic buckling stress (F_{e11})	[Kip/in ²]	103.22	Eq. E4-4
Elastic torsional buckling stress ($F_{e\tau}$)	[Kip/in ²]	103.22	Eq. E4-11
Reduction factor for slender unstiffened elements (Q_{s11})	--	1.00	
Effective area of the cross section based on the effective width (A...	[in ²]	11.31	Eq. E7-2
Reduction factor for slender stiffened elements (Q_{a11})	--	0.96	Eq. E7-16
Full reduction factor for slender elements (Q_{11})	--	0.96	Sec. E7
Critical stress for torsional or flexural-torsional buckling (F_{cr11})	[Kip/in ²]	39.45	Eq. E7-2
Nominal torsional or flexural-torsional buckling strength (P_n11)	[Kip]	465.50	Eq. E7-1

FLEXURAL DESIGN

Bending about major axis, M33

Ratio	:	0.40	Reference	:	Sec. F1
Capacity	:	167.24 [Kip*ft]	Ctrl Eq.	:	C35 at 100.00%
Demand	:	67.44 [Kip*ft]			

Intermediate results	Unit	Value	Reference
Section classification			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	6.93	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	24.08	
Limiting slenderness for compact unstiffened element (λ_p)	--	9.15	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	46.51	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	90.55	
Factored yielding strength (M_n/Ω)	[Kip*ft]	182.14	Sec. F1
Yielding (M_n)	[Kip*ft]	304.17	Eq. F2-1
Factored lateral-torsional buckling strength (M_n/Ω)	[Kip*ft]	167.24	Sec. F1
Limiting laterally unbraced length for yielding (L_p)	[ft]	5.53	Eq. F2-5
Effective radius of gyration used in the determination of L_r (r_{ts})	[in]	1.86	Eq. F2-7
Lateral-torsional factor (c)	--	1.00	Eq. F2-8a
Limiting laterally unbraced length for inelastic lateral-torsional buckling...	[ft]	15.89	Eq. F2-6
Lateral-torsional buckling modification factor (C_b)	--	1.03	Eq. F1-1
Critical stress (F_{cr})	[Kip/in ²]	106.69	Eq. F2-4
Lateral-torsional buckling (M_n)	[Kip*ft]	279.30	Eq. F2-2

Bending about minor axis, M22

Ratio	:	0.00	Reference	:	Sec. F1
Capacity	:	31.69 [Kip*ft]	Ctrl Eq.	:	C1 at 0.00%
Demand	:	0.00 [Kip*ft]			

Intermediate results	Unit	Value	Reference
Section classification			
Unstiffened element classification	--	Compact	
Unstiffened element slenderness (λ)	--	6.93	
Limiting slenderness for noncompact unstiffened element (λ_r)	--	24.08	
Limiting slenderness for compact unstiffened element (λ_p)	--	9.15	
Stiffened element classification	--	Compact	
Stiffened element slenderness (λ)	--	46.51	
Limiting slenderness for noncompact stiffened element (λ_r)	--	137.27	
Limiting slenderness for compact stiffened element (λ_p)	--	90.55	
Factored yielding strength (M_n/Ω)	[Kip*ft]	31.69	Sec. F1
Yielding (M_n)	[Kip*ft]	52.92	Eq. F6-1

DESIGN FOR SHEAR

Shear in major axis 33

Ratio	:	0.00	Ctrl Eq.	:	C1 at 0.00%
Capacity	:	127.01 [Kip]			
Demand	:	0.00 [Kip]			

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	127.01	
Web slenderness (λ_w)	--	6.93	Sec. G2
Shear area (A_w)	[in ²]	7.07	
Web buckling coefficient (k_v)	--	1.20	Sec. G7
Web buckling coefficient (C_v)	--	1.00	Eq. G2-3
Nominal shear strength (V_n)	[Kip]	212.10	Eq. G2-1

Shear in minor axis 22

Ratio	:	0.01		
Capacity	:	97.60 [Kip]	Reference	: Sec. G2.1(a)
Demand	:	0.78 [Kip]	Ctrl Eq.	: C27 at 0.00%

Intermediate results	Unit	Value	Reference
<u>Factored shear capacity</u> (V_n/Ω)	[Kip]	97.60	Sec. G2.1(a)
Web slenderness (λ_w)	--	46.51	Sec. G2
Shear area (A_w)	[in ²]	4.88	
Web buckling coefficient (C_v)	--	1.00	Eq. G2-2
Nominal shear strength (V_n)	[Kip]	146.40	Eq. G2-1

COMBINED ACTIONS DESIGN

Combined flexure and axial compression

Ratio	:	0.42		
Ctrl Eq.	:	C35 at 100.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
<u>Interaction for doubly symmetric members for in-plane bending</u>	--	0.42	Eq. H1-1b
In-plane required flexural strength (M_{r33})	[Kip*ft]	67.44	
In-plane available flexural strength (M_{c33})	[Kip*ft]	167.24	Sec. F1
In-plane required axial compressive strength (P_r)	[Kip]	12.29	
In-plane available axial compressive strength (P_c)	[Kip]	325.27	Sec. E1
<u>Interaction for doubly symmetric members for out-of-plane bending</u>	--	0.21	Eq. H1-2
Out-of-plane required flexural strength (M_{r33})	[Kip*ft]	67.44	
Out-of-plane available flexural-torsional strength (M_{c33})	[Kip*ft]	167.24	Sec. F1
Out-of-plane required axial compressive strength (P_r)	[Kip]	12.29	
Out-of-plane available axial compressive strength (P_{co})	[Kip]	253.83	Sec. E1

Combined flexure and axial tension

Ratio	:	0.40		
Ctrl Eq.	:	C35 at 100.00%	Reference	: Eq. H1-1b

Intermediate results	Unit	Value	Reference
Required flexural strength about strong axis (M_{r33})	[Kip*ft]	67.44	
Available flexural strength about strong axis (M_{c33})	[Kip*ft]	167.24	Sec. F1
Required flexural strength about weak axis (M_{r22})	[Kip*ft]	0.00	
Available flexural strength about weak axis (M_{c22})	[Kip*ft]	31.69	Sec. F1
Required axial tensile strength (P_r)	[Kip]	0.00	
Available axial tensile strength (P_c)	[Kip]	353.29	Eq. Sec. D2

Combined flexure and axial compression about local axis

Ratio	:	N/A		
Ctrl Eq.	:	--	Reference	:

Combined flexure and axial tension about local axis

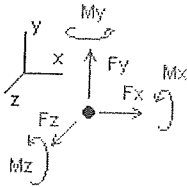
Ratio	:	N/A		
Ctrl Eq.	:	--	Reference	:

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Analysis result

Envelope for nodal reactions

Note.- Ic is the controlling load condition



Direction of positive forces and moments

Envelope of nodal reactions for :

C1=DL+CL+LLr
 C2=DL+CL+SLb
 C3=DL+CL+SLu
 C4=DL+CL+0.6WLper+0.6WLpin
 C5=DL+CL+0.6WLper+0.6WLnin
 C6=DL+CL+0.6WLupa+0.6WLpin
 C7=DL+CL+0.6WLupa+0.6WLnin
 C8=DL+CL+0.75LLr+0.45WLper+0.45WLpin
 C9=DL+0.75LLr+0.45WLper+0.45WLnin
 C10=DL+CL+0.75LLr+0.45WLupa+0.45WLpin
 C11=DL+CL+0.75LLr+0.45WLupa+0.45WLnin
 C12=DL+CL+0.75SLb+0.45WLper+0.45WLpin
 C13=DL+CL+0.75SLb+0.45WLper+0.45WLnin
 C14=DL+CL+0.75SLb+0.45WLupa+0.45WLpin
 C15=DL+CL+0.75SLb+0.45WLupa+0.45WLnin
 C16=DL+CL+0.75SLu+0.45WLper+0.45WLpin
 C17=DL+CL+0.75SLu+0.45WLper+0.45WLnin
 C18=DL+0.6CL+0.6WLper+0.6WLpin
 C19=DL+0.6CL+0.6WLper+0.6WLnin
 C20=DL+0.6CL+0.6WLupa+0.6WLpin
 C21=DL+0.6CL+0.6WLupa+0.6WLnin
 C22=DL+0.6CL+0.45WLper+0.45WLupa+0.45WLpin
 C23=DL+0.6CL+0.45WLper+0.45WLupa+0.45WLnin
 C24=DL+CL+LLr
 C25=DL+CL+SLb
 C26=DL+CL+SLu
 C27=DL+CL+0.6WLpr2+0.6WLpin
 C28=DL+CL+0.6WLpr2+0.6WLnin
 C29=DL+CL+0.6WLupa+0.6WLpin
 C30=DL+CL+0.6WLupa+0.6WLnin
 C31=DL+CL+0.75LLr+0.45WLpr2+0.45WLpin
 C32=DL+0.75LLr+0.45WLpr2+0.45WLnin
 C33=DL+CL+0.75LLr+0.45WLupa+0.45WLpin
 C34=DL+CL+0.75LLr+0.45WLupa+0.45WLnin
 C35=DL+CL+0.75SLb+0.45WLpr2+0.45WLpin
 C36=DL+CL+0.75SLb+0.45WLpr2+0.45WLnin
 C37=DL+CL+0.75SLb+0.45WLupa+0.45WLpin
 C38=DL+CL+0.75SLb+0.45WLupa+0.45WLnin
 C39=DL+CL+0.75SLu+0.45WLpr2+0.45WLpin
 C40=DL+CL+0.75SLu+0.45WLpr2+0.45WLnin
 C41=DL+0.6CL+0.6WLpr2+0.6WLpin
 C42=DL+0.6CL+0.6WLpr2+0.6WLnin
 C43=DL+0.6CL+0.6WLupa+0.6WLpin
 C44=DL+0.6CL+0.6WLupa+0.6WLnin
 C45=DL+0.6CL+0.45WLpr2+0.45WLupa+0.45WLpin
 C46=DL+0.6CL+0.45WLpr2+0.45WLupa+0.45WLnin

Node		Forces						Moments					
		Fx	Ic	Fy	Ic	Fz	Ic	Mx	Ic	My	Ic	Mz	Ic
		[Kip]		[Kip]		[Kip]		[Kip*ft]		[Kip*ft]		[Kip*ft]	
1	Max	0.725	C22	12.633	C35	0.000	C1	0.00000	C1	0.00000	C1	27.25066	C22
	Min	-0.782	C27	-4.099	C22	0.000	C1	0.00000	C1	0.00000	C1	-62.45242	C35

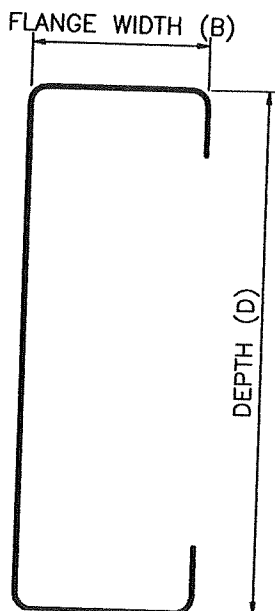


PRODUCT AND ENGINEERING MANUAL

4.3 SECONDARY FRAMING

SF0030PE - "C" SECTION PROPERTIES

SECTION	D (in.)	B (in.)	DESIGN t (in.)	DESIGN t Wt. (plf)	GROSS Ix (in^4)	Sx (in ^3)	Ma (in-kip)
8 C 060	8.00	2.750	0.0600	2.95	8.39	1.75	57.72
8 C 071	8.00	2.750	0.0710	3.49	9.89	2.47	71.31
8 C 076	8.00	2.750	0.0760	3.73	10.58	2.30	75.77
8 C 086	8.00	2.750	0.0860	4.22	11.92	2.98	90.35
8 C 098	8.00	2.750	0.0980	4.81	13.53	3.27	107.92
8 C 105	8.00	2.750	0.1050	5.15	14.47	3.55	117.11
10 C 060	10.00	2.750	0.0600	3.35	14.21	2.16	71.43
10 C 071	10.00	2.750	0.0710	3.97	16.77	3.35	93.88
10 C 076	10.00	2.750	0.0760	4.25	17.94	3.12	103.08
10 C 0856	10.00	2.750	0.0860	4.81	20.24	4.05	123.36
10 C 098	10.00	2.750	0.0980	5.48	23.00	4.45	146.87
10 C 105	10.00	2.750	0.1050	5.87	24.61	4.83	159.38



$$M_{max} = \frac{w l^2}{8} = \frac{36(3.5)(17.67^2)}{8}$$

6097 ft-lb

= 78.13 in-k

1.9035 ok

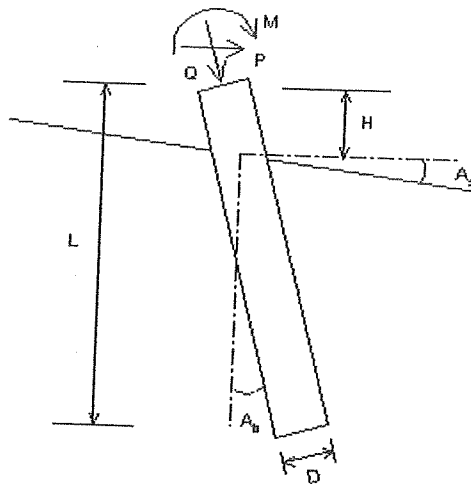
LAST REVISION
DATE: 02/09/01
BY: CDM CHK: RJF

DETAIL NAME IF APPLICABLE
SF0030PE.DWG

4.3.4

VERTICAL ANALYSIS

Figure 1



Loads:

Load Factor for Vertical Loads= 1.0
 Load Factor for Lateral Loads= 1.0
 Loads Supported by Pile Cap= 0 %
 Shear Condition: Cyclic
 Number of Cycles: 2

(with Load Factor)
 Vertical Load, $Q = 12.6$ -kp

Profile:

Pile Length, $L = 11.7$ -ft
 Top Height, $H = 0$ -ft
 Slope Angle, $A_s = 0$
 Batter Angle, $A_b = 0$

Drilled Shaft (dia >24 in. or 61 cm)

Soil Data:

Depth -ft	Gamma -lb/f3	Phi	C -kp/f2	K -lb/i3	e50 or Dr %	Nspt
0	129.2	0.0	1.25	136.2	0.87	10
12	129.2	0.0	1.25	136.2	0.87	10

Pile Data:

Depth -ft	Width -in	Area -in2	Per. -in	I -in4	E -kp/i2	Weight -kp/f
0.0	30	452.4	75.4	16286.0	3000	0.471
11.0	30	452.4	75.4	16286.0	3000	0.471
11.7						

Vertical Capacity:

Weight above Ground= 0.00 Total Weight= 5.50-kp *Soil Weight is not included
 Side Resistance (Down)= 91.659-kp Side Resistance (Up)= 91.659-kp
 Tip Resistance (Down)= 35.344-kp Tip Resistance (Up)= 0.000-kp
 Total Ultimate Capacity (Down) $Q_{ult} = 127.003$ -kp Total Ultimate Capacity (Up)= 97.155-kp
 Total Allowable Capacity (Down) $Q_{allow} = 57.729$ -kp Total Allowable Capacity (Up) $Q_{allow} = 47.770$ -kp
 OK! $Q_{allow} > Q$

Settlement Calculation:

At $Q = 12.60$ -kp Settlement= 0.00632-in
 At $Q_{allow} = 1.00$ -in $Q = 107.22920$ -kp

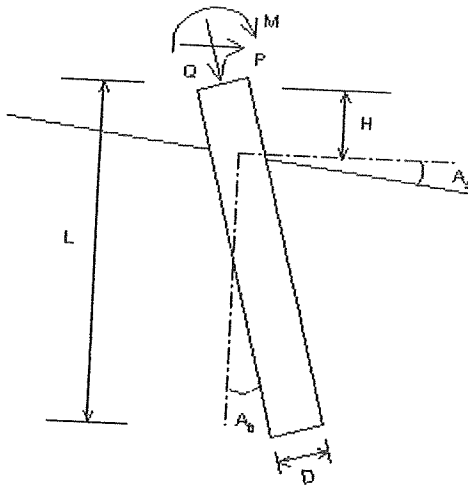
Note: If the program cannot find a result or the result exceeds the upper limit. The result will be displayed as 99999.



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LATERAL ANALYSIS

Figure 2



Loads:

Load Factor for Vertical Loads= 1.0
 Load Factor for Lateral Loads= 1.0
 Loads Supported by Pile Cap= 0 %
 Shear Condition: Cyclic
 Number of Cycles: 2

(with Load Factor)

Vertical Load, Q= 12.6 -kp
 Shear Load, P= 0.8 -kp
 Moment, M= 62.5 -kp-f

Profile:

Pile Length, L= 11.7 -ft
 Top Height, H= 0 -ft
 Slope Angle, As= 0
 Batter Angle, Ab= 0

Drilled Shaft (dia >24 in. or 61 cm)

Soil Data:

Depth -ft	Gamma -lb/f3	Phi	C -kp/f2	K -lb/i3	e50 or Dr %	Nspt
0	129.2	0.0	1.25	136.2	0.87	10
12	129.2	0.0	1.25	136.2	0.87	10

Pile Data:

Depth -ft	Width -in	Area -in2	Per. -in	I -in4	E -kp/i2	Weight -kp/f
0.0	30	452.4	75.4	16286.0	3000	0.471
11.0	30	452.4	75.4	16286.0	3000	0.471
11.7						

Single Pile Lateral Analysis:

Top Deflection, yt= 0.08500-in

Max. Moment, M= 63.08-kp-f

Top Deflection Slope, St= -0.00161

OK! Top Deflection, 0.0850-in is less than the Allowable Deflection= 1.00-in

Note: If the program cannot find a result or the result exceeds the upper limit. The result will be displayed as 99999.
 The Max. Moment calculated by program is an internal force from the applied load conditions. Structural engineer has to check whether the pile has enough capacity to resist the moment with adequate factor of safety. If not, the pile may fail under the load conditions.



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Title :
Dsgnr:
Description :

Job #
Date: 12:09PM, 29 NOV 18

Scope :

Rev: 580002
User: KW-0603478, Ver 5.8.0, 1-Dec-2003
(c)1983-2003 ENERCALC Engineering Software

Pole Embedment in Soil

Page 1

Description Circular pole with Point & Uniform Loads

General Information

Allow Passive	250.00 pcf	Applied Loads...	
Max Passive	1,500.00 psf	Point Load	5,200.00 lbs
Load duration factor	1.000	distance from base	13.500 ft
Pole is Circular			
Diameter	30.000 in	Distributed Load	0.00 #/ft
No Surface Restraint		distance to top	0.000 ft
		distance to bottom	0.000 ft

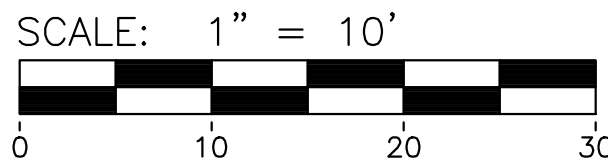
Summary

Moments @ Surface...

Point load	70,200.00 ft-#	Total Moment	70,200.00 ft-#
Distributed load	0.00	Total Lateral	5,200.00 lbs

Without Surface Restraint...

Required Depth	11.625 ft
Press @ 1/3 Embed...	
Actual	960.06 psf
Allowable	961.36 psf



EXISTING TREE TO REMAIN

PROVIDE CANOPY TREE (INTERIOR VUA)

PROVIDE CANOPY TREE (RIGHT-OF-WAY SCREEN)

PROVIDE EVERGREEN TREE (CONFLICTING LAND USE BUFFER)

PROVIDE DECIDUOUS SHRUBS
PROVIDE EVERGREEN SHRUBS

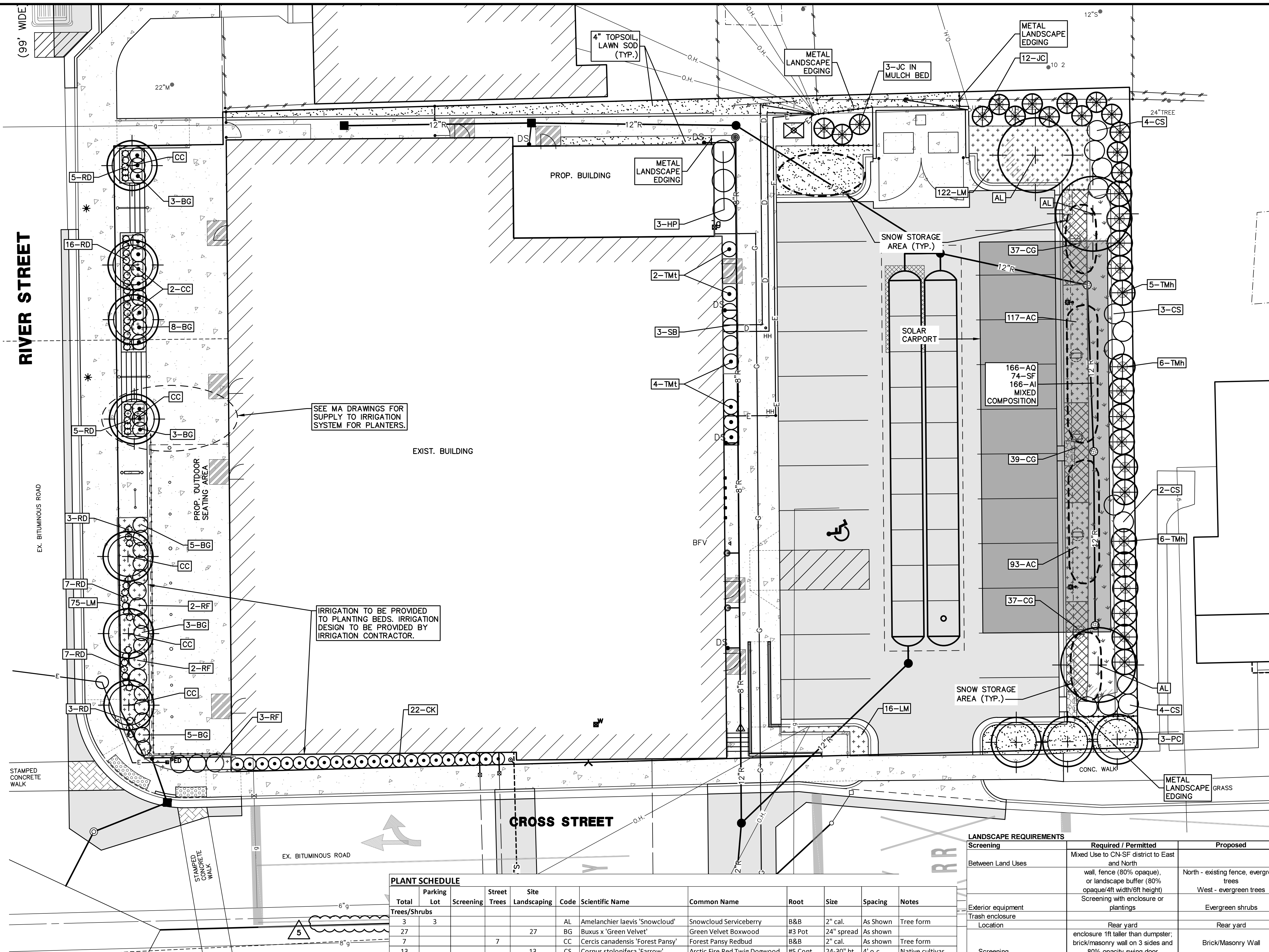
PROVIDE ORNAMENTAL GRASSES/PERENNIALS

PROVIDE LAWN AREA

PROVIDE EDGING

1. Plant materials shall be selected and installed in accordance with standards established by the City of Ypsilanti.
2. All landscaping and landscape elements shall be planted, and earth moving or grading performed, in a sound workmanlike manner, according to accepted planting and grading procedures.
3. All plant material shall be maintained in good condition so as to present a healthy, neat and orderly appearance and must be trimmed or pruned in such a manner as to not alter their natural growth potential.
4. Water outlets shall be provided within 150 feet of all required plantings.
5. The owner of property shall maintain required landscaping in a strong and healthy condition, free from physical damage or injury arising from lack of water, chemical damage, insects, disease, blight, or other causes. All diseased, damaged or dead material shown on the site plan as proposed plantings shall be replaced within six months of damage or death or the next appropriate planting period, whichever comes first.
6. Restore disturbed areas with a minimum of four (4) inches of topsoil and then sod/seed/fertilize/mulch.
7. All disturbed areas not to be planting beds shall be lawn areas planted with sod. Sod shall consist of a sun and partial shade mix with Kentucky bluegrass, minimum of three cultivars. Sod shall be Certified, Number 1 Quality/Premium, including limitations on thatch, weeds, diseases, nematodes, and insects, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture, strongly rooted, and capable of vigorous growth and development when planted.
8. Sod shall be harvested, delivered, stored, and handled according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" in Turfgrass Producers International's "Guideline Specifications to Turfgrass Sodding." Deliver sod in time for planting within 24 hours of harvesting. Protect sod from breakage and drying. Landscape contractor is responsible to keep newly installed sod watered. Install sod per sod manufacturers' recommendations.
9. After the first growing season, only fertilizers that contain NO phosphorus shall be used on the site.
10. Deciduous plants shall be planted between March 1 and May 15 and from October 1 until the prepared soil becomes frozen. Evergreen plants shall be planted between March 1 and June 1 and from August 15 to September 15.
11. Bioswale plantings (plugs) shall be installed as specified on the Landscape Plan. Native plugs shall be planted between March 1 and June 1 or mid-September through mid-October. If planted outside specified time period, irrigation is required for plant establishment. Contractor shall contact nursery early in construction process to allow necessary time for nursery to grow/stock appropriate quantities of plants.
12. All planting beds are to receive four (4) inches of shredded bark mulch. Bioswale planting area to receive two (2) inches of shredded bark mulch.
13. All trees to be located a minimum of 10 feet from public utilities.
14. All single trunk, deciduous trees shall have a straight and a symmetrical crown with a central leader. One sided trees or those with thin or open crowns shall not be accepted.
15. All evergreen trees shall be branched fully to the ground, symmetrical in shape and have not been sheared in the last three (3) growing seasons.
16. All compacted subgrade soils in proposed landscape areas shall be tilled to a minimum 12-inch depth prior to placement of topsoil, geotextile fabric, or other planting media as specified.
17. Proposed trees will be planted a minimum of 15 feet apart.
18. Planting Soil: Existing, in-place or stockpiled topsoil. Supplement with imported topsoil as needed. Verify suitability of existing surface soil to produce viable planting soil. Remove stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth. Mix surface soil with the following soil amendments to produce planting soil:
 - a. Ratio of Loose Compost to Topsoil by Volume: 1:4.
 - b. Weight of Lime per 1000 Sq. Ft.: Amend with lime only on recommendation of soil test to adjust soil pH.
 - c. Weight of Sulfur or Aluminum Sulfate per 1,000 Sq. Ft.: Amend with sulfur or aluminum sulfate only on recommendation of soil test to adjust soil pH.
 - d. Volume of Sand: Amend with sand only on recommendation of Landscape Architect to adjust soil texture.
 - e. Weight of Slow-Release Fertilizer per 1,000 Sq. Ft.: Amend with fertilizer only on recommendation of soil test to adjust soil fertility.

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.



PLANT SCHEDULE											
Total	Parking Lot	Screening	Street Trees	Site Landscaping	Code	Scientific Name	Common Name	Root	Size	Spacing	Notes
Trees/Shrubs											
3	3				AL	Amelanchier laevis 'Snowcloud'	Snowcloud Serviceberry	B&B	2" cal.	As Shown	Tree form
27				27	BG	Buxus x 'Green Velvet'	Green Velvet Boxwood	#3 Pot	24" spread	As shown	
7			7		CC	Cercis canadensis 'Forest Pansy'	Forest Pansy Redbud	B&B	2" cal.	As shown	Tree form
13				13	CS	Cornus stolonifera 'Farrow'	Arctic Fire Red Twig Dogwood	#5 Cont	24-30" ht	4' o.c.	Native cultivar
3				3	HP	Hydrangea paniculata 'Jane'	Little Lime Hydrangea	#3 Pot	24-30" ht	4.5' o.c.	
15		15			JC	Juniperus chinensis 'Spearmint'	Chinese Juniper 'Spearmint'	B&B	24" spread	4' o.c.	Full
3			3		PC	Prunus cerasifera 'Cripiozam'	Crimson Pointe Plum	B&B	2" cal.	12" o.c.	
46				46	RD	Rosa x 'Scarlet Flower Carpet'	Red Carpet Rose	#3 Cont		As shown	
7				7	RF	Rhamnus frangula 'Fine Line'	Treeleaf Buckthorn	#7 Cont		As shown	
3				3	SB	Spiraea betuliflora 'Tor'	Tor Birchleaf Spirea	#3 Pot	18-24" ht	3' o.c.	
17		17			TMH	Taxus x media 'Hicksii'	Hick's Yew	B&B	24-30" ht	5' o.c.	
6				6	TMT	Taxus x media 'Tauntonii'	Taunton's Yew	B&B	18-24" ht	3' o.c.	
Herbaceous / Ornamental Grasses											
166				166	AI	Asclepias incarnata	Swamp Milkweed	plug		12" o.c.	
166				166	AQ	Aquilegia canadensis	Columbine	plug		12" o.c.	
210				210	AC	Asarum canadensis	Wild Ginger	plug		12" o.c.	
22				22	CK	Calamagrostis x a. 'Karl Foerster'	Karl Foerster Fountain Grass	#3 Cont		As shown	
113				113	CG	Carex grayii	Gray's Sedge	plug		18" o.c.	
230				213	LM	Liriope muscari 'Silverly Sunproof'	Silverly Sunproof Lilyturf	#1 Cont		18" o.c.	
74				74	SF	Solidago flexicaulis	Zigzag Goldenrod	plug		18" o.c.	

LANDSCAPE REQUIREMENTS		
Screening	Required / Permitted	Proposed
Between Land Uses	Mixed Use to CN-SF district to East and North	
	wall, fence (80% opaque), or landscape buffer (80% opaque/4ft width/6ft height)	North - existing fence, evergreen trees West - evergreen trees
Exterior equipment	Screening with enclosure or plantings	Evergreen shrubs
Trash enclosure		
Location	Rear yard	Rear yard
Screening	enclosure 1ft taller than dumpster; brick/masonry wall on 3 sides and 80% opacity swing door	Brick/Masonry Wall
Street Trees	1 per 30 linear feet	
	129lf River Street = 5 trees; 182.5lf Cross Street= 7 trees	River Street - 3 trees; Cross Street - 3 trees; Waiver Requested
	1 tree per 8 spaces = 3 trees 1 island per 16 spaces in row	3 trees
Parking Lot Landscaping		
Site Landscaping	10% of the site = 2,369sf	2,707 sf (11.4%)
	min. 0.3fc where to be illuminated; 0.5fc average over entire area 5 ft above surface	
Lighting		See Photometric Plan
	not to exceed 0.5fc at lot line dark sky compliant fixtures not to exceed 30 ft ht	



Facing northeast from East Cross Street.



Facing northwest from East Cross Street.



HDC Work Permit Staff Review

Property address: 218 Washtenaw

Property History: The property includes a surface parking lot owned by the United Methodist Church (209 Washtenaw). City records simply label the property "N Adams Lot," however the historical address is 218 Washtenaw.

Date of Application: January 6, 2020

Date of Review: January 7, 2020

Date of Meeting: January 14, 2020

Proposed work: Installation of two new signs.

Materials: Semi-gloss paint, Wood posts, plywood, finials, brackets, and hardware.

Staff review:

1. This application is for work already completed without permits.
2. The project includes replacement of two signs, one on N Adams that was free-standing, and one on Washtenaw that was mounted to a utility pole. Both appear to have been non-historic.
3. The replacement signs are identical, two four-by-four posts with a signboard in-between.
 - a. The synthetic signboards have plywood backing.
 - b. The sign structures feature finials and brackets.
4. In staff opinion, the finials and brackets are conjectural elements that imitate earlier styles, and are not recommended. However, the small scale of the signs makes the impact to the district's integrity setting minimal.

Recommended Motions:

Move to issue a Notice to Proceed for the work already completed at the North Adams Lot (218 Washtenaw), as submitted in the application dated January 6, 2020, for installation two new signs, as constructed.

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

Relevant Secretary of the Interior's Standards:
#9, #10

Move to deny the work already completed at the North Adams Lot (218 Washtenaw), as submitted in the application dated January 6, 2020, as the signs feature inappropriate conjectural features.

Relevant Secretary of the Interior's Standards:
#3

Prepared by:
Scott E. Slagor, Preservation Planner



RECEIVED

JAN 06 2020

CITY OF YPSILANTI
BUILDING DEPARTMENT

**City of Ypsilanti
Historic District Commission
Work Permit Application**

One South Huron • Ypsilanti, MI 48197
Phone: (734) 483-9646 • Fax: (734) 483-7260
www.cityofypsilanti.com

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA

Property

Address

209 WASHTENAW AVENUE, YPSILANTI, MI 48197

Applicant

**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

FIRST UNITED METHODIST CHURCH

Address

209 WASHTENAW AVENUE

City

YPSILANTI

State

MI

Zip

48197

Phone / Fax

(734)482-8374 / (734)482-8379

E-Mail

FUMCYPSI@FUMCYPSI.ORG

Contractor

Contractor Name & Contact Info

BOB MOSES

Type of work

☐ Roofing

☐ Window/Door
Replacement

☐ Porches

☒ Sign

☐ Fence (or other sitework)

☐ Painting

☐ Other

☐ Application Amendment

Complete Description of Proposed Work:

REPAIR/REFURBISH WASHTENAW AVENUE PARKING SIGN:

- REMOVE OLD SIGN CENTER SECTION FROM POSTS
- REBUILD SIGN FRAME AND ATTACH TO EXISTING POSTS W/LAG BOLTS
- INSERT PARKING SIGN (FROM SIGNS BY TOMORROW) INTO FRAME
- ADD FINIALS AND CORNER BRACKETS FOR VISUAL APPEAL
- PAINT FRAME, FINIALS, BRACKETS AND POSTS WITH SEMI-GLOSS WHITE PAINT

CREATE NEW ADAMS STREET PARKING SIGN

- DIG POST HOLES INTO PARKING LOT AT ADAMS ST. ENTRANCE.
- SET POSTS WITH POST MIX, ADD FRAME TO HOLD SIGN (FROM SIGNS BY TOMORROW), SECURE TO POSTS WITH LAG BOLTS
- ADD FINIALS AND CORNER BRACKETS FOR VISUAL APPEAL.
- PAINT FRAME, POSTS, FINIALS, AND POSTS W/SEMI-GLOSS WHITE PAINT

Materials (for paint include color chips or samples with application):

GLIDDEN EXTENSION SEMI-GLOSS PAINT, 1/2 PT. 1/2" WOOD SCREWS
PT, (2) 4X4 POSTS, (4) 2X4X8, 1/2 PT PLYWOOD (WASHTENAW), (4) FINIALS (CEDAR)
(4) CORNER BRACKETS (CEDAR), 1/4 X 5" LAG BOLTS (10), WASHTENAW (10)

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. An additional fee of \$50 applies to HDC work started without the applicable permit.

Construction Cost:

\$153,96

Permit fee:

\$45 + 0 = \$45⁰⁰

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature:

[Redacted Signature]

Date:

12/19/19

Print Name:

ROBERT L. MOSES

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.

PHDC-20-0004

First United Methodist Church of Ypsilanti Adams Street Parking Lot Sign 209 Washtenaw Avenue, Ypsilanti

Previous Sign



New Sign



First United Methodist Church of Ypsilanti Washtenaw Avenue Parking Lot Sign 209 Washtenaw Avenue, Ypsilanti

Previous Sign

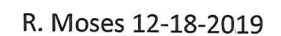
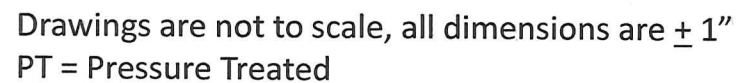


New Sign



209 Washtenaw Avenue, Ypsilanti

Washtenaw Avenue Sign



Staff photo of 218 Washtenaw- 1/8/2020. Facing northeast to overview of lot.





City of Ypsilanti

Community and Economic Development

December 11, 2019

[REDACTED]

RE: Demolition by Neglect Study Items for 302 E Cross

Dear MR. ZIEBARTH,

On Tuesday, December 10, 2019 the Historic District Commission (HDC) discussed progress on the Demolition by Neglect case at the above named property. It was determined that additional information is needed about the proposed window repairs and replacements, and that a study item should be presented at the next regularly scheduled meeting. Specifically, the HDC moved to:

Have a progress update and study item at the January 14, 2020 Historic District Commission meeting for the property at 302 E Cross. The owner is to provide the HDC with a plan for windows, including which need to be replaced, and how; and documentation of the final closing of exterior of the building; and an update on foundation work at the meeting on January 14, 2020.

You are required to attend the above mentioned meeting to present the requested study items. The meeting will be held at 7:00 pm at Ypsilanti City Hall, 1 S Huron Street, Ypsilanti, MI 48197. However, please know that an application must be submitted as an action item, and approved by the HDC, before work can begin.

Applications and further information about the HDC are available online at www.cityofypsilanti.com/hdc. Please contact me at (734) 483-9646 or via email at sslagor@cityofypsilanti.com with any questions.

[REDACTED]

Conservation Planner
Community & Economic Development Department

CC: File; Building Department



Facing southwest to facade and east elevation.



Facing south to facade.



Facing northeast to west and south elevations.



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Historic District Fact Sheet

Windows & Weatherization

This Fact Sheet is not a substitute for the ordinance, but addresses common questions about City ordinances. For further information, please contact the Historic District Assistant.

All permit applications are available from the Building Department and at cityofypsilanti.com/permits.

Completed applications may be dropped off at the Building Department.

City Hall

One South Huron
Ypsilanti, MI 48197

Building

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Phone: (734) 482-1025
cityofypsilanti.com/157

Planning

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Historic District

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All permits, fees, and factsheets can be found at cityofypsilanti.com/permits.

Repairing and Re-glazing Historic Windows

Window repair often results in considerable energy cost savings while at the same time preserving original architectural materials. Epoxy wood-consolidating materials and polyurethane glues make it possible to repair even badly deteriorated wood windows.

Repair Process

- Remove the sash and lay it on a flat surface.
- Examine the exterior window frame, especially the sill, for rot or other deterioration.
- Dig out and replace bad sections with new wood or epoxy repair material. The epoxy works like auto body filler or spackle. Mix it up and pack it tightly into any depression or hollow in the wood. When hardened, it can be sanded, primed and painted.
- Then remove paint or varnish on both interior and exterior of the sash, re-glue where necessary, replace cracked glass and loose or missing glazing putty.
- Sand, apply a coat of linseed oil, prime with old-based primer, and paint the sash with latex paint.
- Replace sash cord if windows are counterweighted.
- Return sash to window.
- Nail stops back into place.

For more information on wood window repair, see NPS Preservation Brief 9: The Repair of Historic Wooden Windows, available at <http://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>.

Creating New Windows or Doors

New openings transform a building's character, often threatening historic integrity, and are not generally allowed.

Screen Windows and Storm Windows

Any new screen or storm must be compatible with the window it is covering.

Metal combination screen/storms are permitted, although wood screens and storms are encouraged for better appearance and more efficient energy conservation. If a metal-framed screen/storm is installed, it must fit within the exterior trim and rest upon the blind stop. The metal frame must be either painted or factory-finished, not mill (raw metal) finish. Re-caulking and weather stripping are required and will improve the thermal efficiency.

Shutters

Wood shutters are permitted as a way to close off an unnecessary window. They must be properly hinged, fit within the window frame and painted. Non-functioning shutters may be permitted on a case-by-case basis, if they are considered appropriate for the structure and must appear to match the opening size of the window.

Replacement Windows

In some cases, replacement windows are approved by the Historic District Commission. In all cases, the Commission will require an installation which does not reduce the glass area of any window.

Wood replacement windows are preferred. Wood windows clad in aluminum may be approved in some cases. Solid vinyl and vinyl clad windows are considered inappropriate.

The new window shall be the same configuration as the window it is replacing. For example, three panes over one, one over one, etc. Panes of glass in the replacement must match the size and shape of the original. The exterior trim installed after replacement must match the original. In cases of replacement windows where the glass is not physically divided into panes by muntins, the Commission will require that muntins be permanently adhered to the exterior of the window to replicate the appearance of the original windows.

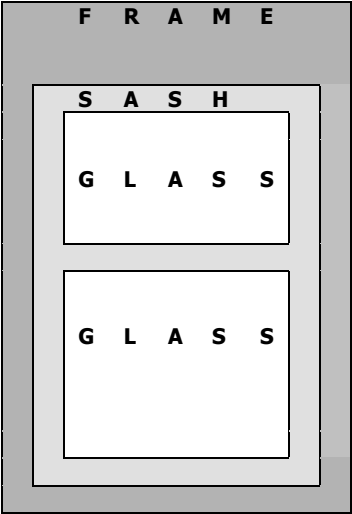
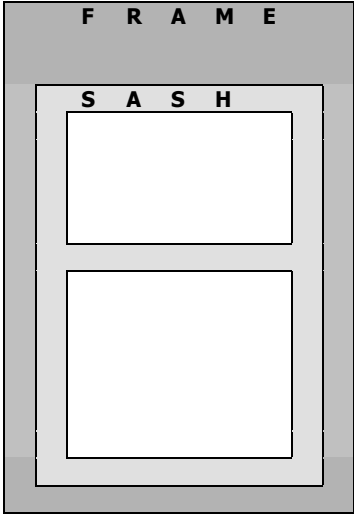
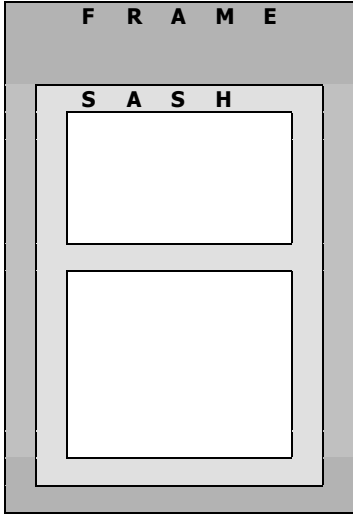
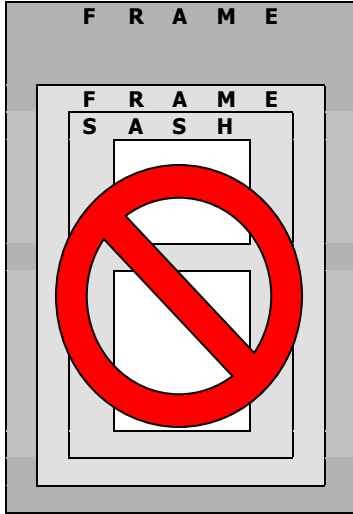
Clear glass is considered appropriate for the district; smoked or tinted glass may be approved on a case-by-case basis.

Types of Replacement Windows

Sash kits consist of sash only. The sash is the part of the window that holds the glass and moves up and down within the frame. Sash kits are installed by removing the old sash, leaving the old frame in place, and inserting the new sash in the old frame. The glass area is not reduced (see illustration #2). This installation is appropriate and can be approved.

Full-frame replacements consist of sash and frame. Full-frame replacements are installed in one of two ways:

1. The old sash and the old frame are removed. The replacement window is inserted in the rough opening. The glass area is not reduced (see illustration #3). This installation is appropriate and can be approved.
2. The old sash is removed, but the old frame is left in place. The replacement window (sash and frame) is inserted in the old frame. This results in two frames, the old frame and the replacement frame. The glass area is reduced (see illustration #4). This installation is not appropriate and is not permitted.

			
#1 ORIGINAL WINDOW	#2 SASH KIT installed in OLD FRAME	#3 FULL-FRAME REPLACEMENT installed in ROUGH OPENING	#4 FULL-FRAME REPLACEMENT installed in OLD FRAME
Original frame and sash intact.	Old frame is retained, old sash is removed, new sash kit is inserted in old frame.	Old frame is removed, old sash is removed, full-frame replacement is inserted in rough opening.	Old sash is removed, old frame is retained, full-frame replacement is inserted in old frame.
	Result - no reduction in glass area.	Result - no reduction in glass area.	Result – two frames and reduction in glass area.
	YES	YES	NO



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Historic District Fact Sheet

Windows

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The Importance of Historic Windows

Windows are the “eyes” of a building. Even the simplest of windows can be considered character-defining elements of a building. Historic windows are often unique in their size, dimension, and design; and therefore are not easily replicated. Additionally, historic windows are made from components that can be individually replaced, while if a component breaks on a replacement window, generally the whole unit must be replaced again. Preserving historic windows makes sense economically and environmentally. The Historic District Commission encourages rehabilitation or repair of historic windows and reviews replica or replacement windows on a case-by-case basis. This fact sheet provides guidance for common window questions.

CONTACT THE PRESERVATION PLANNER BEFORE YOUR WINDOW PROJECT.

Rehabilitation and Re-glazing Historic Windows

Window rehabilitation often results in considerable energy cost savings while at the same time preserving original architectural materials. Epoxy wood-consolidating materials and polyurethane glues make it possible to repair even badly deteriorated wood windows.

Repair Process

- Remove the sash and lay it on a flat surface.
- Examine the exterior window frame, especially the sill, for rot or other deterioration.
- Dig out and replace bad sections with new wood or epoxy repair material. The epoxy works like auto body filler or spackle. Mix it up and pack it tightly into any depression or hollow in the wood. When hardened, it can be sanded, primed and painted.
- Then remove paint or varnish on both interior and exterior of the sash, re-glue where necessary, replace cracked glass and loose or missing glazing putty.
- Sand, apply a coat of linseed oil, prime with oil-based primer, and paint the sash with latex paint.
- Replace sash cord if windows are counterweighted.
- Return sash to window.
- Nail stops back into place.

For more information on wood window rehabilitation, see NPS Preservation Brief 9: The Repair of Historic Wooden Windows, available at <http://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>.

Energy Efficiency and Historic Windows

In most cases, home energy loss from window openings is 10-15% of the total loss. The often promised savings of modern replacement windows seldom outweigh the cost of installation. Before undertaking the expense of window replacement, check first that the attic is well insulated. Often, air loss through windows can be mitigated by simple nonintrusive measures, such as interior or exterior storm windows; curtains; or reglazing.

Screen Windows and Storm Windows

Any new screen or storm must be compatible with the window it is covering.

Metal combination screen/storms are permitted, although wood screens and storms are encouraged for better appearance and more efficient energy conservation. If a metal-framed screen/storm is installed, it must fit within the exterior trim and rest upon the blind stop. The metal frame must be either painted or factory-finished, not mill (raw metal) finish. Re-caulking and weather stripping are required and will improve the thermal efficiency.

Shutters

Wood shutters are permitted as a way to close off an unnecessary window. They must be hinged, fit within the window frame and painted. Non-functioning shutters may be permitted on a case-by-case basis, if they are considered appropriate for the structure and must match the opening size of the window.

Creating New Windows or Doors

New openings transform a building's character, often threatening historic integrity, and are not generally allowed.

Requirements for a Window Replacement Application

In some cases, replacement windows are approved by the Historic District Commission. *In order for the commission to approve replacement windows, the applicant must provide detailed information and meet certain conditions.*

1. If the existing windows are historic to the building, i.e. over 50 years old, every effort should be made to preserve them. If the applicant is citing poor condition as a reason for replacement, then they must provide documentation to that extent. At minimum, this should include detailed photos of each window proposed for replacement. Close-up shots showing the damage should be provided.
2. Large projects, particularly for commercial rehabilitation, may require a third party condition assessment of windows.
 - a. This assessment should be made by an unbiased professional, such a tradesperson, or historic architect, who will provide a report on the condition and reparability of windows.
 - b. The assessment cannot be made by a replacement window company or contractor.
3. If the applicant claims keeping historic windows will cause undue financial hardship, a cost comparison of replacement windows vs. repairing the originals by qualified tradespersons must be submitted as well.

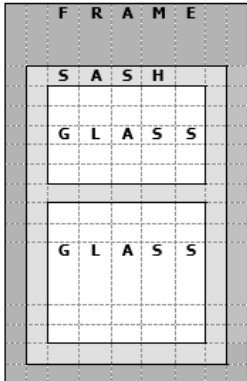
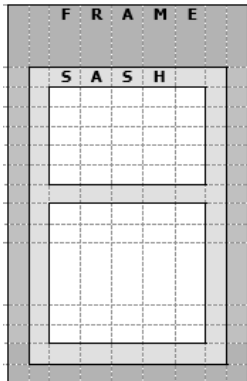
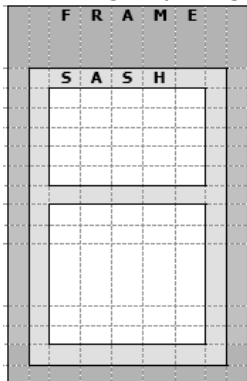
Requirements for Appropriate Window Replacements

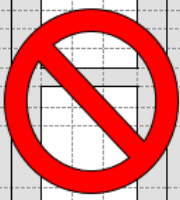
Approval for replacement windows will be granted on a case by case basis. In all cases, the Commission will require an installation which does not reduce the glass area of any window. Wood replacement windows are preferred. Wood windows clad in aluminum or fiberglass may be approved in some cases. If the applicant is proposing a new material, they are encouraged to include photos of it in use and bring a sample. *Solid vinyl and vinyl clad windows will not be approved.*

The new window shall be the same configuration as the window it is replacing. For example, three panes over one, one over one, etc. Panes of glass in the replacement must match the size and shape of the original. The exterior trim installed after replacement must match the original. In cases of replacement windows where the glass is not physically divided into panes by muntins, the Commission will require that muntins be permanently adhered to the exterior of the window to replicate the appearance of the original windows.

Clear glass is considered appropriate for the district; smoked or tinted glass may be approved on a case-by-case basis.

Breakdown of Window Rehabilitation and Replacement Methods

Frame Type	Description	Result	Can it be Permitted?
#1 Original Window  The diagram shows a rectangular window frame. Inside the frame, there is a sash that holds two glass panes. The frame is labeled 'FRAME', the sash is labeled 'SASH', and the glass panes are labeled 'GLASS'.	Original frame and sash are intact. Routine maintenance is done to preserve the window, including regular painting and infilling damage wood with such materials as epoxy.	The building retains its historic character-defining elements and there is no loss to historic integrity.	YES- General repairs to the window may not require a permit, however full rehabilitations may be reviewed by the HDC. Contact the Preservation Planner to find out if your project requires a permit.
#2 Sash Kit installed in Old Frame  The diagram shows a rectangular window frame. Inside the frame, there is a sash that holds two glass panes. The frame is labeled 'FRAME', the sash is labeled 'SASH', and the glass panes are labeled 'GLASS'.	Sash kits consist of a sash replacement only. The sash is the part of the window that holds the glass and moves up and down within the frame. Sash kits are installed by removing the old sash, leaving the old frame in place, and inserting the new sash in the old frame.	The windows retain some of their historic fabric and the original glass area is preserved.	YES- This installation is appropriate and can be approved on a case-by-case basis.
#3 Full Frame Replica installed in a Rough Opening  The diagram shows a rectangular window frame. Inside the frame, there is a sash that holds two glass panes. The frame is labeled 'FRAME', the sash is labeled 'SASH', and the glass panes are labeled 'GLASS'.	The old sash and the old frame are removed. The replacement window, ideally designed to replicate the historic window is inserted in the <u>rough opening</u>. The <u>glass area is not reduced</u>	Although the historic fabric of the windows is lost, the overall historic integrity of the building is retained because the replacements match the original.	YES- This installation is appropriate and can be approved on a case-by-case basis.
#4 Full Frame Replacement Installed in Old Frame	The old sash is removed, but the old frame is left in place. The replacement window (sash and frame) is inserted in the old frame. This results in two frames, the old frame and the replacement frame. The glass area is reduced	Although some historic fabric remains, the reduction of glass area substantially alters the historic character of the building.	NO- This installation diminishes the historic integrity of the building and is not generally permitted.

FRAME FRAME SASH 			
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DRAFT



2019 Annual Report Historic District Commission Ypsilanti, Michigan

INTRODUCTION

The Historic District Commission of the City of Ypsilanti is governed by the Michigan Local Historic Districts Act, State of Michigan Public Act 169 of 1970, and by Chapter 54 of the City of Ypsilanti Code of Ordinances.

MEMBERSHIP

Anne Stevenson, Vice Chair (November – December)
Hank Prebys
Amy Swift

Alex Pettit Vice-Chair (January – September), Interim Chair (September – December)
Erika Lindsay
Ronald Rupert

COMMISSION AND STAFF

According to Sec. 54-32, Historic preservation is declared to be a public purpose with numerous community benefits. The Historic District Commission (HDC) has several responsibilities, but chiefly, it serves as the quasi-judicial body that ensures exterior alterations of historic properties meet the Secretary of the Interior Standards for Rehabilitation; thereby protecting the historic integrity of the district for future generations.

Throughout 2019, the Historic District Commission (HDC) continued meeting on the second and fourth Tuesdays of each month at 7:00 p.m. The HDC was staffed by a Preservation Planner during this time. Cynthia Kochanek held the position in January and was succeeded by Scott Slagor on February 25. Staff performed various administrative tasks and technical assistance to enable the HDC to fulfill its responsibilities under the Historical Preservation Ordinance. Staff responsibilities included reviewing Historic District Work Permit Applications prior to meetings; corresponding with applicants; providing technical assistance to property-owners; preparing meeting agendas, commission packets, minutes and various reports; property monitoring; webpage maintenance; Facebook updates; and other support, as needed.

The HDC continued to provide prompt review of applications. Applications are collected from the Building Department and reviewed by staff for completeness. Incomplete applications are addressed through email or phone correspondence with the applicant. Staff works with the applicants to get their application to a point of compliance that is likely to be approved by the commission. Staff reviews are completed for each application. The reviews include a brief history of the property, a breakdown of application items, recommended motions from staff, and the appropriate Secretary of

the Interior Standards for Rehabilitation to cite with each decision. Staff reviews are included in the meeting packets that are posted on the City's website and emailed to the Commission prior to each meeting.

On August 26, the HDC had a special meeting with the staff of the Community and Economic Development Department, including the Preservation Planner, Scott Slagor; Community Development Manager, Christopher Jacobs; and Director of Economic Development, Joe Meyers. The meeting gave an opportunity for the commissioners to discuss what they think is working well, what additional information they need to do their jobs effectively, additional sites in the city that could be designated historic, and an expansion of the work staff could approve administratively. The expanded administrative approvals were approved and have since helped to shorten meeting time and streamlined the process for applicants.

The Preservation Planner attends each HDC meeting to provide staffing support. The HDC is also supported by a recording secretary, Nancy Hare-Dickerson. The recording secretary is responsible for drafting full minutes for each meeting.

The turnaround time for applications averages about two weeks. Potential applicants are encouraged to bring projects to the Commission as study items before formal submission of an application. This allows the Commission to provide feedback to property owners at a conceptual stage, clarifying expectations and allowing for a more predictable final review.

Changes in HDC Membership

In 2019 the HDC lost two members and gained one new member. First, Mike Davis, Jr., former chair, resigned on September 4 to take a position on the Planning Commission.

Jane Schmiedke, co-author of the original 1972 Historic District Study Committee Report and long-time chair, resigned from the HDC on November 12 after 40 years of service. City Council and Staff thanked her for her years of service with flowers.

The commission gained a new member, Amy Swift, in October. Swift is a building tradesperson, specializing in historic window restoration. She owns the Detroit-based restoration company, Building Hugger, and is active in the Michigan Young Preservationists organization.

The HDC anticipates the addition of another new member in early 2020.

INITIATIVES

HDC Demolition by Neglect

In 2018, the HDC reviewed and made the determination that three properties in the historic district were in danger of demolition by neglect; 302 E Cross, 206-210 N Washington and 401 E Forest. Work to resolve the condition issues of those properties continued in 2019. The HDC and staff are working with the owner of 302 E Cross to have the building repaired and secured. The property at 206-210 N Washington was acquired by the City through foreclosure. The City is working on a Request for Proposal for its redevelopment, which will ultimately resolve the case of demolition by neglect.

The property owners at 401 E Forest have been non-responsive and further enforcement is being undertaken. Once the issues are resolved, the demolition by neglect status will be removed for each property.

Additionally, the HDC reviewed the condition of a carriage barn at 422 N Hamilton. The owner made necessary repairs and the HDC determined it was no longer in danger of demolition by neglect.

Rules and Regulations Update

In 2018, staff worked on a Baseline Certified Local Government (CLG) Evaluation for the Michigan State Historic Preservation Office (SHPO) to address how the City is meeting its obligations as a CLG. The SHPO asked that the HDC update its rules and regulations, specifically its conflict of interest policy. This was completed and approved by City Council in April 16, 2019.

CLG Grant

The City obtained a CLG grant from SHPO at the end of 2018 in order to host a National Alliance of Preservation Commissions training in March 2019. The training was attended by all staff in the Community and Economic Development Department and three HDC members. In total there were 90 participants from HDCs around Michigan and SHPO staff. The training focused on interpreting the historic district ordinances, infill construction, and alternative materials.

New Owner Outreach

"New Owner" mailings occurred quarterly in March, June, September, and December. Post cards were sent regularly to realtors who list properties in the Historic District.

Facebook updates

Staff continued utilizing the commission's Facebook page to do weekly "Throwback Thursday" posts utilizing old photos from City files and surveys as well as photos from the archives at the Ypsilanti Historical Society. Staff has also been utilizing the page more regularly for meeting updates, relevant preservation related topics as well as posts in May to celebrate Preservation Month.

Historic Walking Tours

HDC Staff, Scott Slagor, led walking tours of Downtown and Depot Town in October. The tours done in partnership with the DDA to highlight historic resources in Ypsilanti and the community's story. Staff intend on conducting the tours regularly April through October of 2020.

APPLICATIONS

The number of applications received in 2019 was about the same as the number received in 2018. The number of study items was slightly less than the amount for the previous four years. Administrative approvals have nearly doubled from 2018, partly due to the HDC expanding the type of work that can be approved administratively. Staff also attributes the increase to the rainy spring that necessitated a large number of roof replacements; which are generally administratively approved. The ambitious scope of many of the approved projects reflects the commitment of residents and businesses to

the improvement of the community. The number of applications and actions taken is depicted in the table below.

Historic District Commission Actions, 2015-2019

	2015	2016	2017	2018	2019
Approved as submitted	79	69	73	68	60
Approved with modifications	15	14	22	11	13
Approved administratively	11	13	36	27	44
Amended approvals	1	4	4	5	3
Denied: lack of information	3	1	1	1	0
Denied: inappropriate	0	5	6	3	3
Pending at year end	0	0	2	1	0
Notice to Proceed	0	0	0	5	7
Total Applications	109	106	144	124	125
Study Items	40	42	43	41	35

MAJOR PROJECTS

The Historic District continued to benefit from investment over the past year. Some of the significant projects are summarized here:

- **New Construction**

No new buildings were approved in 2019, however 217 N River was approved for a major rear addition as the new owner substantially invests in the property.

- **Solar Panels**

Solar energy continues to be prominent in Ypsilanti. The HDC approved five solar installations in 2019.

- **100 W Michigan**

One of the most notable changes to the district was the removal of metal cladding from 100 W Michigan (formerly Dalat Restaurant). The HDC approved its removal, revealing original brick, storefront elements, windows, and hand-painted signs. The HDC also approved infilling non-historic windows on the north

elevation; some window infill on the east elevation, and masonry repairs. The project is ongoing with more applications expected in early 2020.

- **101 W Michigan**

Work has continued on the façade rehabilitation of 101 W Michigan. The original historic windows have been fully rehabilitated and work is currently underway on the storefront and new rear stairwell. Substantial progress is expected in 2020.

- **116-118 W Michigan**

Work has continued on the façade rehabilitation of 116-118 W Michigan. Several study items were discussed with the building. Additional applications are expected in early 2020.

- **400 N River**

Work has continued on the rehabilitation of the Thompson Block at 400 N River. Applications were approved in 2018 and the HDC and staff has watched as the historic features of the building are restored. Continued work and potentially some modifications to applications are expected in 2020.

Demolitions

No demolitions were completed in 2019.

Appeals

No appeals were filed with the State Historic Preservation Review Board in 2019.

Looking Forward

2020 should be an exciting and eventful year for the historic district and the commission. Visible changes should continue to take place at the major building projects as work moves to completion. The Michigan Historic Preservation tax credit bill is expected to be introduced and staff plans to keep tabs on the tax credit and introduce new resolutions in support of the credit to the HDC and City Council, if changes are made.

In the upcoming year, staff will continue to process updates and revisions to the commission forms, fact sheets. Staff will continue the Facebook updates for community outreach and will look to streamline and perfect the commissions' processes. Staff will further develop historic walking tours, with individual tours for the Downtown, Depot Town, and West Cross historic business districts. Staff and the commission will continue to work toward the goals established by SHPO in their 2018 CLG evaluation; including new design guidelines as applicable, continued survey of undesignated historic resources, and education opportunities. Staff will also investigate the creation of a historic district study committee to update the current district, addressing: boundaries that do not conform to parcel lines, an updated period of significance, and updated contributing/non-contributing resources list.

SUMMARY

Although of varied scope and scale, the projects completed throughout 2019 are excellent examples of the continued preservation efforts of property owners within the Ypsilanti Historic District. Commendation by the City is due to these owners for their substantial contribution to the community as they continue to support the efforts of the Historic District to beautify the district and preserve the heritage of Ypsilanti's built environment. Preservation is one of the means that makes Ypsilanti an authentic, vibrant, and diverse community.

This report was adopted at the January 14, 2019 regular meeting of the Historic District Commission and respectfully submitted to Ypsilanti City Council.

DRAFT



CERTIFIED LOCAL GOVERNMENT ANNUAL REPORT FY2019 (OCTOBER 1, 2018 - SEPTEMBER 30, 2019)

The Michigan State Historic Preservation Office (SHPO) requires that each Certified Local Government (CLG) submit an annual report of its activities upon the completion of each fiscal year (October 1 - September 30). SHPO uses the provided information to stay up to date on historic preservation activities across the state, identify ways that SHPO can be more responsive to the needs of CLGs, and evaluate local CLG programs.

SHPO has developed a standard template for use by all CLGs in order to streamline the collection/presentation of information and supporting documentation. Each CLG will receive a fillable digital (PDF) copy of the template. Hardcopies can be mailed upon request.

INSTRUCTIONS

Use the annual report template to describe your CLG's program during the last fiscal year.

The reporting period for this report is: **October 1, 2018 - September 30, 2019.**

A complete report consists of:

- Completed annual report checklist
- Completed annual report template
- Applicable attachments and supporting documents

SUBMISSION

CLGs can complete their report electronically or by hand. CLGs completing the digital report can save and email their report and supporting documentation to Alan Higgins, Certified Local Government Coordinator, at higginsS3@michigan.gov.

CLGs completing their report by hand can scan the completed documents and email them as indicated above, or they can mail the hardcopy and supporting documentation to SHPO at the following address:

Attn: Alan Higgins
Michigan State Historic Preservation Office
Michigan Economic Development Corporation
300 N. Washington Square
Lansing, Michigan 48913

DUE DATE

Annual reports are due from each CLG by: **March 1, 2020.**

QUESTIONS?

Have questions or need clarification on assembling your report? Contact Alan Higgins, Certified Local Government Coordinator, at higginsS3@michigan.gov or 517.335.2719.



CERTIFIED LOCAL GOVERNMENT ANNUAL REPORT FY2019 (OCTOBER 1, 2018 - SEPTEMBER 30, 2019)

Community: City of Ypsilanti

CLG Representative: Scott E. Slagor, Preservation Planner

Title/Organization: Ypsilanti Historic District Commission

Mailing Address: 1 S. Huron Street Phone: 794-482-9709
Ypsilanti, MI Email: sslagor@cityofypsilanti.com
48197

CLG/HDC Website: <https://www.cityofypsilanti.com/254/Historic-District-Commission>

CHECKLIST

Please indicate below those items that you have included with your submission.

REQUIRED

- ☒ 1. Completed Annual Report
- ☐ 2. Minutes from two HDC meetings (if not available on website)

SUPPORTING DOCUMENTATION, IF APPLICABLE

- ☐ 3. Amended or revised ordinances, by-laws, or other regulations with changes highlighted
- ☐ 4. Study reports and/or survey data
- ☐ 5. Attachment A: New Commissioner Resume Form
- ☐ 6. Attachment B: HDC and Staff Training Record Supplement
- ☐ 7. Attachment C: Completed Surveys Supplement
- ☐ 8. Attachment D: Public Education Activities Supplement

SIGNATURE

I hereby certify that the information in this report is accurate and correct to the best of my knowledge.

CLG Contact

Date

SHPO USE

Received: _____

Reviewed: _____

Signature: _____



CERTIFIED LOCAL GOVERNMENT ANNUAL REPORT FY2019 (OCTOBER 1, 2018 – SEPTEMBER 30, 2019)

1. DESIGNATION AND PROTECTION OF HISTORIC PROPERTIES

A. Did the CLG keep its ordinance in effect for the entire fiscal year?

☒ Yes ☐ No

If **no**, briefly explain.

B. Did the CLG amend, revise, or suspend its historic preservation ordinance, by-laws, or other regulations or procedures during the fiscal year?

☒ Yes ☐ No

If **yes**, briefly explain and submit a copy of the document(s) with changes highlighted.

The Historic District Commission Rules and Regulations were revised and updated to include an appropriate conflict of interest policy, as was requested by SHPO in the review of our 2018 annual report evaluation.

C. Did the CLG have historic district design guidelines in place during the fiscal year?

☒ Yes ☐ No If **yes**, what year were the guidelines last updated? Unknown.

D. Were any National Register-listed or locally designated contributing properties relocated or demolished during the fiscal year?

☐ Yes ☒ No

If **yes**, identify the properties, including name/address, associated district or National Register property, and a brief explanation.

- E. Identify study report and district designation activities during the fiscal year. If associated reports were not previously provided to SHPO, submit a copy with this report.

STUDY REPORTS CONSIDERED DURING THE FISCAL YEAR	
DISTRICT NAME	DRAFT REPORT PROVIDED TO SHPO?
	☐
	☐
	☐
	☐
	☐
	☐
	☐
	☐
	☐

NEW DISTRICTS OFFICIALLY ESTABLISHED DURING THE FISCAL YEAR	
DISTRICT NAME	FINAL REPORT PROVIDED TO SHPO?
	☐
	☐
	☐
	☐
	☐
	☐
	☐
	☐

LOCAL DISTRICTS MODIFIED OR DE-DESIGNATED DURING THE FISCAL YEAR	
DISTRICT NAME AND BRIEF EXPLANATION FOR CHANGE	FINAL REPORT PROVIDED TO SHPO?
	☐
	☐
	☐
	☐

☒ The CLG had no such activities during the fiscal year.

2. ADEQUATE AND QUALIFIED HISTORIC PRESERVATION COMMISSION

- A. Identify active historic district commission (HDC) members. Submit a resume or Attachment A for any new commissioner appointed during the fiscal year.

NAME	ROLE ON COMMISSION*	DATE APPOINTED	TERM ENDS
Alex Pettit	Vice Chair/Interim Chair- Architect	02/1/2019	12/31/2022
Erika Lindsay	Architect	02/01/2018	01/31/2021
Henry Prebys	Local History Organization/District Res	02/7/2017	01/31/2020
Ronald Rupert	Building Tradesperson/District Res	02/01/2018	01/31/2021
Anne Stevenson-Less	Architectural Historian	02/01/2017	01/31/2020
Amy Swift	Building Tradesperson	10/1/2019	12/31/2022

*(e.g., architect, archaeologist, historian, district resident, etc.)

Identify how the CLG sought federally qualified professionals (architects, historians, and archaeologists) to fill vacancies during the fiscal year. Submit a copy of announcements, advertisements, and other means used to seek qualified HDC members.

Are there presently any HDC vacancies?

☒ Yes ☐ No If yes, how many? 1

Did new HDC members receive training materials and information on local districts?

☒ Yes ☐ No ☐ Not Applicable

B. Provide information on regularly scheduled HDC meetings held during the fiscal year.

MONTH	MEETING HELD?	QUORUM PRESENT?	MINUTES ON WEBSITE?
January	☒	☒	☒
February	☒	☒	☒
March	☒	☒	☒
April	☒	☒	☒
May	☒	☒	☒
June	☒	☒	☒
July	☒	☒	☒
August	☒	☒	☒
September	☒	☒	☒
October	☒	☒	☒
November	☒	☒	☒
December	☒	☒	☒

C. If not available on your website, submit minutes for two meetings.

D. Provide information on applications received for review during the fiscal year.

APPLICATION TOTALS	
# of applications received:	
# of applications reviewed by staff only:	
# of applications reviewed by the HDC:	

APPLICATIONS REVIEWED BY THE HDC	
# of applications that received a final decision during the first review:	
# of applications that came before the HDC more than once:	

RESULTS OF REVIEWS	
# of COAs issued:	
# of Denials issued:	
# of Notices to Proceed issued:	

APPEALS	
# of HDC decisions appealed:	0
# of decisions overturned by State Review Board:	0
# of decisions affirmed by State Review Board:	0

E. Did any HDC members and/or HDC staff receive formal training during the fiscal year?

☒ Yes ☐ No

If **yes**, identify the training. Use **Attachment B** for additional training if necessary.

TRAINING SESSION:	2019 STATEWIDE HISTORIC PRESERVATION CONFERENCE
Sponsoring Organization:	Michigan Historic Preservation Network
Location:	Holland
Date:	May 2019
Names and positions of participants:	Scott Slagor, HDC staff, attended the 2019 MHPN Conference.

TRAINING SESSION:	
Sponsoring Organization:	National Alliance of Preservation Commissions
Location:	Ypsilanti, MI
Date:	March 2019
Names and positions of participants:	Anne Stevenson, HDC Member Alex Pettit, HDC Member Mike Davis, Jr., Former HDC Member (resigned summer 2019). All City Planning and Development staff.

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

If **no**, explain why no one participated in training during the fiscal year and identify any preliminary plans to participate in training next year.

3. SURVEY AND INVENTORY OF HISTORIC PROPERTIES

- A. Identify new survey plans, progress on existing plans, and/or changes to existing survey plans, including changes in priorities or processes, implemented during the fiscal year.

No formal survey was completed during the fiscal year, however action was taken toward establishing future survey goals. Staff has kept a list/file of undesignated resources with known historic significance; and retrieved copies of the property files on record at SHPO. In August, 2019, staff called a special planning meeting with the HDC to discuss future goals and administrative approvals. One of the talking points included future designations and surveys. The Commission agreed that there are certainly a great deal of undesignated historic properties in Ypsilanti, and discussed some with staff.

- B. Did the CLG complete historic resource surveys (windshield, reconnaissance, or intensive) during the fiscal year?

☐ Yes ☒ No

If **yes**, identify them. If the survey data and reports were not previously provided to SHPO, submit a copy with this report. Use **Attachment C** for additional surveys if necessary.

NAME OF SURVEY	HOW MANY RESOURCES?	SURVEY PROVIDED TO SHPO?
		☐
		☐
		☐
		☐
		☐
		☐

If no surveys were completed during the fiscal year, please explain the reasons.

C. Do you have any historic resource surveys tentatively planned for next fiscal year?

☐ Yes ☒ No

If **yes**, identify the survey(s) below.

NAME OF SURVEY	REASON FOR ANTICIPATED SURVEY (E.G., PART OF WORK PLAN, DEVELOPMENT PRESSURE, CONSIDERING DESIGNATION, ETC.)

D. Was any archaeological survey undertaken during the fiscal year?

☐ Yes ☒ No

If **yes**, identify the survey(s) below.

NAME OF SURVEY	SHPO CONTACTED PRIOR TO WORK?	FOLLOWED STATE ARCHAEOLOGIST'S SURVEY STANDARDS?
	☐	☐
	☐	☐
	☐	☐

4. PUBLIC PARTICIPATION IN THE LOCAL HISTORIC PRESERVATION PROGRAM

- A. Identify how the HDC worked with property owners to remind them of their responsibilities and the process for obtaining Certificates of Appropriateness and/or to provide technical assistance on historic preservation issues or projects.

The HDC communicates to property owners through a number of means:

1. New owner letters are sent quarterly.
2. Post cards are sent to realtors who list properties in the district.
3. The Historic District website and facebook page are maintained.
4. Applicants are encouraged to come as study items before filing an official permit.

- B. Did the community provide public educational activities (e.g., walking tours, lectures, Preservation Month activities, historical marker programs, etc.) or formal training on historic preservation?

☒ Yes ☐ No

If **yes**, identify the activities. Use **Attachment D** for additional items if necessary.

ACTIVITY		SPONSORING ORGANIZATION	
Historic Walking Tour of Downtown and Depot Town		City of Ypsilanti/Ypsilanti Downtown Development Authority	
Date	10/26/2019	Do you consider the activity a success?	☒ Yes ☐ No
Brief description	City Preservation Planner, Scott Slagor led a historic walking tour of Downtown and Depot Town neighborhoods. The walking tour was attended by over 40 people and generated a lot of online interest. Will be working on regular tours in the warm months.		
ACTIVITY		SPONSORING ORGANIZATION	
Preservation Month social media engagement		City of Ypsilanti- via Historic District Commission Facebook page	
Date	May 2019	Do you consider the activity a success?	☐ Yes ☒ No
Brief description	Staff posted weekly facts and engaging questions about historic preservation. There was very little response, however Staff will continue this effort next year to help further foster social media engagement.		
ACTIVITY		SPONSORING ORGANIZATION	
#ThrowbackThursday Photos on Social Media		City of Ypsilanti- via Historic District Commission Facebook Page	
Date	Weekly- 2019	Do you consider the activity a success?	☒ Yes ☐ No
Brief description	Weekly historical photos posted of the community. Usually generates discussion and activity on Social Media. Is often in coordination with Downtown Development Authority.		

C. Were all HDC meetings publicly announced and held in accordance with the Open Meetings Law, P.A. 267 of 1976?

☒ Yes ☐ No

D. Was information about the HDC, its procedures, and meeting activities actively maintained on the local government's website during the last fiscal year?

☒ Yes ☐ No

E. Beyond a website, how does the HDC provide information about meetings and project activities (agendas, public notices, etc.) to the public?

☐ Mailings ☐ Newspapers ☒ Postings at municipal building ☐ On-site project signs
☒ Email ☐ Electronic listserv or bulletin board ☐ Local access channel
☐ Other, as described:

F. Beyond a website, how does the HDC provide information procedures, guidance, documents (design guidelines, COA applications, etc.) to the public?

☐ Mailings ☐ Postings at municipal building ☐ Email
☐ Electronic listserv or bulletin board ☐ Door-to-door fliers/conversations
☐ Community events ☐ Working with other municipal departments
☒ Other, as described:

Ypsilanti HDC has a series of Fact Sheets to answer common questions. Staff regularly meets with potential applicants and gives them hard copies of information, as well as directs them to the website.

F. Did the CLG review any National Register of Historic Places nominations during the fiscal year?

☒ Yes ☐ No

If **yes**, identify the nominations below.

PROPERTY NAME/ADDRESS	COMMENTS SUBMITTED TO SHPO?
Highland Cemetery- 943 N River Street	☒
	☐
	☐
	☐
	☐
	☐
	☐

5. CLG PROGRAM GOALS

A. Describe how you have met the goals you had for the last fiscal year.

GOAL 1: Create a new Design Guideline Booklet	
Did you meet this goal?	☐ Yes ☒ No
If yes , describe how it was met. If no , describe why it was not met.	Three-year goal established in 2018 CLG Evaluation. The HDC continually updates its Fact Sheets for areas of work. Minor changes were updated in 2019.
GOAL 2: Continue to study the potential for the establishment of additional local districts and expansion of the current district.	
Did you meet this goal?	☒ Yes ☐ No
If yes , describe how it was met. If no , describe why it was not met.	Ongoing goal set in 2018 CLG Evaluation. Staff met with the Commission and discussed potential areas that could be nominated or expanded.
GOAL 3: Continue to engage and promote National Register nominations.	
Did you meet this goal?	☒ Yes ☐ No
If yes , describe how it was met. If no , describe why it was not met.	Ongoing. One Ypsilanti property was listed in the NRHP in 2019. Staff has been working to educate other departments on the difference between National and Local districts, and how they can be beneficial.
GOAL 4: Continue to work on communication and education with current property owners and prospective buyers	
Did you meet this goal?	☒ Yes ☐ No
If yes , describe how it was met. If no , describe why it was not met.	-Ongoing goal established in 2018 CLG Evaluation. The City mails letters to new property owners quarterly with information on the historic district. The city also mails post card to the responsible realtor when a property is listed for sale. The website and social media continue to be a too for current property owners.

☐ The CLG did not have specific goals for the last fiscal year.

B. What are your top goals for next fiscal year?

GOAL 1: Create a new Design Guideline Booklet	
Do you intend to complete this during FY2020 or is it part of an ongoing project?	☐ FY20 ☒ Ongoing
Do you need technical assistance in meeting this goal? If so, describe.	Possibly. The formal Design Criteria established in the ordinance may need to be revisited.

GOAL 2: Continue to survey, establish new NRHP/Local districts, and update existing.	
Do you intend to complete this during FY2020 or is it part of an ongoing project?	☐ FY20 ☒ Ongoing
Do you need technical assistance in meeting this goal? If so, describe.	This was also a goal in 2018 CLG evaluation. We absolutely need to update our existing district listing before we can begin nominating other resources. The boundaries are inappropriate and the listing is lacking in context, contributing/non-contributing resources, and a period of significance. This is not something

GOAL 3: Increase staffing levels in order to work to update existing surveys.	
Do you intend to complete this during FY2020 or is it part of an ongoing project?	☐ FY20 ☒ Ongoing
Do you need technical assistance in meeting this goal? If so, describe.	Goal established in 2018 CLG Evaluation. As stated previously, survey funding will rely on grants. Staff is also looking at funding mechanisms to support student interns to work on special projects.

GOAL 4:	
Do you intend to complete this during FY2020 or is it part of an ongoing project?	☐ FY20 ☐ Ongoing
Do you need technical assistance in meeting this goal? If so, describe.	

ADDITIONAL ITEMS OF INTEREST TO SHPO

- A. Did your CLG program/HDC have a work plan for FY2019? ☐ Yes ☒ No
- B. Does your HDC have an annual budget allocation? ☒ Yes ☐ No
- C. Does your community charge a fee for COA applications? ☒ Yes ☐ No
- D. Does your community regulate the removal of mature trees or other important landscaping associated with designated properties? ☐ Yes ☒ No
- E. Does your community proactively work with local real estate agencies/agents to discuss the role of historic preservation and local designation? ☒ Yes ☐ No
- F. Does your community have an active preservation plan, or has it incorporated preservation planning into its master/comprehensive plan?
- ☐ Yes, and a copy is available at this link: _____
 - ☐ Yes, and a copy is available in hardcopy from the city.
 - ☒ We are currently working toward such planning tools.
 - ☐ No, and we currently have no plans for such tools.
- G. Does your community include historic resources in its GIS? ☐ Yes ☐ No ☒ Unsure
- H. Does your community have local incentives for preservation (e.g., tax incentives, façade improvement programs, loan programs, zoning variance allowances)? ☒ Yes ☐ No

If **yes**, please describe:

Facade improvement program in our historic commercial areas- funded through MEDC grants.

There is zoning consideration for historic resources when a property applies for a variance. One was granted a few years ago to allow reconstruction of a porch that existed historically, but did not meet today's required setbacks.

- I. Describe any issues or challenges your community needs assistance within in FY2020, or anything else you would like to share with SHPO.

It may not happen in 2020 but we need an updated Study Committee report to 1. tighten up our local historic district boundaries, and 2. expand our period of significance and identify contributing/non-contributing buildings.

ATTACHMENT A. HDC COMMISSIONER RESUME FORM

CONTACT INFORMATION

Name: See attached.

Address: _____

Phone: _____

Email: _____

EDUCATION

Degree	Field	University	Year
--------	-------	------------	------

_____	_____	_____	_____
-------	-------	-------	-------

_____	_____	_____	_____
-------	-------	-------	-------

RELATED WORK EXPERIENCE

Position: _____

Organization: _____

Dates: _____

Work Description: _____

Position: _____

Organization: _____

Dates: _____

Work Description: _____

OTHER EXPERIENCE/DEMONSTRATED INTEREST IN HISTORIC PRESERVATION

Meets NPS Qualifications (https://www.nps.gov/history/local-law/arch_stnds 9.htm) for:

☐ History ☐ Architectural History ☐ Architecture ☐ Historic Architecture ☐ Archaeology

ATTACHMENT B. HDC AND STAFF TRAINING SUPPLEMENT

Identify formal training completed by HDC members and/or HDC staff during the fiscal year.

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

TRAINING SESSION:	
Sponsoring Organization:	
Location:	
Date:	
Names and positions of participants:	

ATTACHMENT C. COMPLETED SURVEYS SUPPLEMENT

Identify any above-ground historic resource surveys completed during the last fiscal year. If the survey data and reports were not previously provided to SHPO, submit a copy with your submission.

[illegible]

ATTACHMENT D. PUBLIC EDUCATION ACTIVITIES SUPPLEMENT

Identify public education activities (e.g., walking tours, lectures, Preservation Month activities, historical marker programs, etc.) or formal training sessions that the community provided for historic district property owners or the general public.

ACTIVITY		SPONSORING ORGANIZATION	
Date		Do you consider the activity a success?	☐ Yes ☐ No
Brief description			
ACTIVITY		SPONSORING ORGANIZATION	
Date		Do you consider the activity a success?	☐ Yes ☐ No
Brief description			
ACTIVITY		SPONSORING ORGANIZATION	
Date		Do you consider the activity a success?	☐ Yes ☐ No
Brief description			
ACTIVITY		SPONSORING ORGANIZATION	
Date		Do you consider the activity a success?	☐ Yes ☐ No
Brief description			

PROJECT SUMMARY

SITE NAME:	40213
SITE ADDRESS: (ESTIMATED)	301 N HAMILTON ST YPSILANTI, MI 48197
COUNTY:	WASHTENAW COUNTY
<u>SITE COORDINATES:</u>	
LATITUDE:	42° 14' 41.424" N (NAD 83)
LATITUDE:	42.24484°
LONGITUDE:	83° 37' 3.432" W (NAD 83)
LONGITUDE:	-83.61762°
ELEVATION:	±738'-3"
PROPERTY DEFINITION:	R.O.W.
FUZE PROJECT ID:	15487099
PSLC CODE:	544753
EXISTING POLE NUMBER:	N/A
EXISTING POLE HEIGHT:	38'-6"
EXISTING POLE CLASS:	N/A

verizon

SITE NAME: 40213

PROPOSED SMALL CELL EQUIPMENT
ON AN EXISTING DTE POLE

VICINITY MAP



LOCATION MAP



SHEET SCALE FACTOR:
PLOT SIZE:
11" x 17": TO SCALE

[illegible]

SCOPE OF WORK

- INSTALLING EQUIPMENT
 - CFIT BOX
 - DISCONNECT
- CONNECTING ON SITE UTILITIES TO WIRELESS EQUIPMENT

STATE COUNTY MAP



0

GENERAL NOTES

1. THESE NOTES SHALL BE CONSIDERED A PART OF THE WRITTEN SPECIFICATIONS.
2. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED IN THE CONTRACT DOCUMENTS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTOR(S) SHALL VISIT THE JOB SITE(S) AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED PER THE CONTRACT DOCUMENTS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER.
4. THE CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED ON ANY WORK NOT CLEARLY DEFINED OR IDENTIFIED IN THE CONSTRUCTION DOCUMENTS BEFORE STARTING ANY WORK.
5. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES INCLUDING APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. IF THESE RECOMMENDATIONS ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS AND/OR APPLICABLE CODES OR REGULATIONS, REVIEW THE CONFLICT FOR DIRECTION WITH THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES AND FOR COORDINATION OF ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION TEAM AND WITH THE AUTHORIZED REPRESENTATIVE OF ANY OUTSIDE POLE OR PROPERTY OWNER. (BASE COMMANDER OR AUTHORIZED AGENT)
8. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, VEGETATION, GALVANIZED SURFACE OR OTHER EXISTING ELEMENTS AND UPON COMPLETION OF THE WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF EXTENT.
9. KEEP THE GENERAL AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION DAILY.
10. PLANS ARE INTENDED TO BE DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED UNLESS OTHERWISE NOTED. RELY ONLY ON ANNOTATED DIMENSIONS AND REQUEST INFORMATION IF ADDITIONAL DIMENSIONS ARE REQUIRED.
11. THE EXISTENCE AND LOCATION OF UTILITIES AND OTHER AGENCY'S FACILITIES ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. OTHER FACILITIES MAY EXIST BEYOND WHAT IS NOTED. CONTRACTOR SHALL VERIFY LOCATIONS PRIOR TO START OF CONSTRUCTION AND USE EXTREME CARE AND PROTECTIVE MEASURES TO PREVENT DAMAGE TO THESE FACILITIES. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF UTILITIES OR OTHER AGENCY'S FACILITIES WITHIN THE LIMITS OF THE WORK, WHETHER THEY ARE IDENTIFIED IN THE CONTRACT DOCUMENTS OR NOT.
12. ALL MOUNTING HARDWARE SUCH AS BOLTS, NUTS, LAG SCREWS, CLEVIS, CONDUIT STRAPS, STAPLES, (ANYTHING EXPOSED AND CONNECTING EQUIPMENT TO THE POLE SHALL BE HOT DIPPED GALVANIZED, UNLESS OTHERWISE STATED)

DEFINITIONS

1. "TYPICAL" OR "TYP." MEANS THAT THIS ITEM IS VIRTUALLY IDENTICAL ACROSS SIMILAR CONDITIONS. "TYP." SHALL BE UNDERSTOOD TO MEAN "TYPICAL WHERE OCCURS" AND SHALL NOT BE CONSIDERED AS WITHOUT EXCEPTION OR CONSIDERATION OF SPECIFIC CONDITIONS.
2. "SIMILAR" MEANS COMPARABLE TO CHARACTERISTICS FOR CONDITION NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLAN.
3. "AS REQUIRED" MEANS AS REQUIRED BY REGULATORY REQUIREMENTS BY REFERENCED STANDARDS, BY EXISTING CONDITIONS, BY GENERALLY ACCEPTED CONSTRUCTION PRACTICE OR BY THE CONTRACT DOCUMENTS.
4. "ALIGN" MEANS ACCURATELY LOCATE FINISH FACES OF MATERIALS IN THE SAME PLANE.
5. THE TERM "VERIFY" OR "V.I.F" SHALL BE UNDERSTOOD TO MEAN VERIFY IN FIELD WITH ARCHITECT AND REQUIRES THAT THE CONTRACTOR CONFIRM INTENTION REGARDING NOTED CONDITION AND PROCEED ONLY AFTER RECEIVING DIRECTION.
6. WHERE THE WORDS "OR EQUAL" OR WORDS OF SIMILAR INTENT FOLLOW A MATERIAL SPECIFICATION, THEY SHALL BE UNDERSTOOD TO REQUIRE SIGNED APPROVAL OF ANY DEVIATION TO SAID SPECIFICATION PRIOR TO CONTRACTOR'S ORDERING OR INSTALLATION OF SUCH PROPOSED EQUAL PRODUCT.
7. FURNISH: SUPPLY ONLY, OTHERS TO INSTALL. INSTALL: INSTALL ITEMS FURNISHED BY OTHERS. PROVIDE: FURNISH AND INSTALL.

PROJECT SPECIFIC NOTES

1. THIS SET IS PROVIDED TO ILLUSTRATE THE EXPECTED SCOPE OF DRAWINGS, QUALITY OF DRAWINGS AND EXTENT GRAPHIC STANDARDS. NOTES ARE FOR A&E CONTRACTOR REFERENCE TO HELP CLARIFY THE SCOPE. ADDITIONAL DRAWINGS MAY BE REQUIRED TO MEET THE REQUIREMENTS OF A GIVEN BASE. ALL EXAMPLES SHOWN ARE FOR REFERENCE ONLY AND ANY NOTES, DETAILS, CALCULATIONS OR OTHER WORK NEEDS TO BE COMPLETED OR CONFIRMED BY THE CONTRACTOR GENERATING THE DRAWINGS IN CONSTRUCTION DOCUMENTS.
2. THIS SET IS TO BE PRINTED AT 11" x 17". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THIS SIZE IS ACCEPTABLE BY THE BASE AND TO PROVIDE A LARGER STANDARD SIZE IF REQUIRED.
3. IT IS THE RESPONSIBILITY OF THE ENGINEER TO CONFIRM ALL WORK SHOWN IS IN COMPLIANCE WITH BASE AND FEDERAL CODES. DRAWINGS SHOWN WITHIN THIS SET ARE SAMPLES AND MAY NOT REFLECT ALL OF THE REQUIRED ELEMENTS, CLEARANCES OR OTHER ITEMS OF ASSEMBLIES NEEDED TO BE CODE COMPLIANT IN THE PARTICULAR MUNICIPALITY THE NODE IS LOCATED WITHIN.

GROUND CONSTRUCTION NOTES:

1. 120/240V POWER REQUIRED FOR 3-WIRE SERVICE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH FEDERAL STANDARDS AND REGULATIONS AS WELL AS NEC.
3. CALL MICHIGAN ONE CALL 72 HOURS PRIOR TO EXCAVATING AT (800) 482-7171.
4. ALL LANDSCAPING TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
5. ALL EQUIPMENT TO BE BONDED.
6. METERING CABINET (IF INSTALLED) REQUIRES 3' CLEARANCE AT DOOR OPENING.

STANDARD GROUNDING NOTES:

1. GROUND TESTED AT 25 OHMS OR LESS.
2. 5/8" x 8' RODS, CAD WELD OR UL LISTED DIRECT BURY CLAMP BELOW GRADE.
3. #6 GROUND AND BOND WIRE.
4. MOLDING, STAPLED EVERY 1' AND AT EACH END.
5. GROUND RODS 18" FROM POLE.

STANDARD CONDUIT NOTES:

1. FOR UNDERGROUND CONDUIT AND ABOVE GRADE RISERS USE SCHEDULE 40.
2. IF DIRECTIONAL BORING PLACE 1-1/4" SDR-11 GRAY CONDUIT FOR UNDERGROUND POWER APPLICATIONS.
3. IF TRENCHING, PLACE PVC SCH 40 CONDUIT PER TABLE ON SHEET E1 FOR UNDERGROUND POWER APPLICATIONS.
4. RISERS TO BE ATTACHED TO POLE WITH STANDARD STRAPS AND LAG SCREWS.
5. RISER STRAPS TO BE INSTALLED EVERY 5'.
6. CONDUIT UNDER 1" MAY BE ATTACHED WITH GROUND WIRE MOLDING STAPLES.
7. ALL CONDUIT WILL BE PROOFED WITH A MANDREL AND EQUIPPED WITH PULL ROPE OR MULE TAPE.

STANDARD TRENCHING NOTES:

1. MAINTAIN 36" MINIMUM COVER FOR ELECTRICAL CONDUIT.
2. MAINTAIN 36" MINIMUM COVER FOR COMMUNICATION CONDUIT.
3. IN STREET SLURRY TO GRADE AND MILL DOWN 1-1/2" FOR AC CAP.
4. IN DIRT SLURRY 18" FROM GRADE AND FILL WITH 95% COMPACTION NATIVE SOIL FOR BALANCE.
5. PLACE WARNING TAPE IN TRENCH 12" ABOVE ALL CONDUITS AND #18 WARNING TAPE ABOVE GROUND EQUIPMENT.

UTILITY POLE CONSTRUCTION NOTES:

1. NO BOLT THREADS TO PROTRUDE MORE THAN 1/2".
2. FILL ALL HOLES LEFT IN POLE FROM REARRANGEMENT OF CLIMBERS.
3. ALL CLIMB STEPS NEXT TO CONDUIT SHALL HAVE EXTENDED STEPS.
4. CABLE NOT TO IMPEDE 15" CLEAR SPACE OFF POLE FACE.
5. 90° SHORT SWEEP UNDER ANTENNA ARM. ALL CABLES MUST ONLY TRANSITION ON THE INSIDE OR BOTTOM OF ARMS (NO CABLE ON TOP OF ARMS).
6. USE CABLE CLAMPS TO SECURE CABLE TO ARMS; PLACE 2" CARRIER ID TAGS ON BOTH SIDE OF ARMS.
7. USE 90° CONNECTOR AT CABLE CONNECTION TO ANTENNAS.
8. USE 1/2" CABLE ON ANTENNAS UNLESS OTHERWISE SPECIFIED.
9. FILL VOID AROUND CABLES AT CONDUIT OPENING WITH FOAM SEALANT TO PREVENT WATER INTRUSION.

VERIZON WIRELESS CONSTRUCTION NOTES:

1. CONTRACTOR IS TO FOLLOW THE MOST CURRENT VZW STANDARDS DOCUMENTS PROVIDED TO COMPLETE THIS INSTALLATION.
2. CONTRACTOR SHALL COMPLETE VZW PROVIDED "SMALL CELL SWEEP REPORT" WITH ALL INFORMATION FILLED IN ACCURATELY AND COMPLETELY.
3. CONTRACTOR TO REFER TO THE MOST CURRENT VZW STANDARDS FOR APPROVED "PIM" TEST EQUIPMENT AND GUIDELINES.
4. CONTRACTOR IS TO USE BATTERY POWERED "PIM" EQUIPMENT TO VALIDATE THE FINAL LOCATION OF THE JUMPER AND ANTENNA ARE FREE OF INTERNAL AND EXTERNAL "PIM" SOURCES.
5. CONTRACTOR SHALL PROVIDE AT LEAST ONE TECHNICAL LEAD THAT IS CERTIFIED AND PROFICIENT IN EXECUTING, INTERPRETING AND RECORDING "PIM" MEASUREMENTS.

PREPARED FOR:



PREPARED BY:

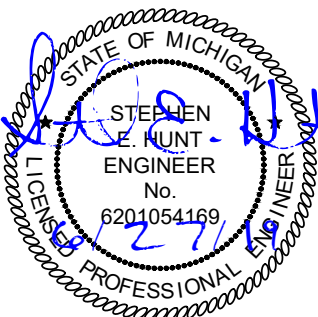


1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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DRAWN BY:	AJD
CHECKED BY:	CTD

REVISIONS			
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	AJD	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION

ENGINEER'S STAMP:


NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:

40213

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 41.424" N

LONGITUDE:

83° 37' 3.432" W

DESIGN TYPE:

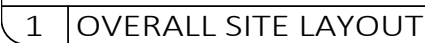
COLOCATION

SHEET TITLE:

GENERAL NOTES

DRAWING NO. GN1	REVISION: 0
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1. THIS DRAWING IS BASED ON AERIAL IMAGERY AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE PROPOSED USE DOES NOT REQUIRE FULL OR PART TIME EMPLOYEES AT THE SITE.
3. FOR GENERAL SITE WORK NOTES, SEE SHEET GN1.
4. ALL NORTH ARROWS ON SITE PLANS ARE TRUE NORTH, UNLESS OTHERWISE SPECIFIED.
5. OPEN CUT CONSTRUCTION THROUGH EXISTING PAVEMENT, I.E. ROADWAYS, PARKING AREAS, SIDEWALKS WILL NOT BE ALLOWED. CONSTRUCTION UNDER EXISTING PAVEMENTS WILL BE REQUIRED TO BE INSTALLED WITH DIRECTIONAL BORING TECHNIQUE.



UNDERGROUND POWER	— USP ——— USP ———	CATCH BASIN	
OVERHEAD POWER	— OHP ——— OHP ———	IRON PIN SET (IPF) $\frac{3}{8}$ " REBAR	
OVERHEAD UTILITIES	— OAU ——— OAU ———	IRON PIN FOUND (IPF)	
UNDERGROUND TELCO	— UGT ——— UGT ———	BENCHMARK	
OVERHEAD TELCO	— OHT ——— OHT ———	CONCRETE MON. FOUND	
GAS LINE	— GAS — GAS — GAS — GAS —	CONCRETE MON. SET	
FENCE	— X — X — X — X — X — X —	UTILITY POLE	
SEWER LINE	— SVR ——— SVR ——— SVR ——— SVR ———	LIGHT POLE	
WATER LINE	————— VTR ———	WATER VALVE	
COAX CABLE	— C ——— C ——— C ———	MANHOLE	
HYBRID CABLE	————— HYB ——— HYB ———	GAS VALVE	
HIGH VOLTAGE POWER	————— HVP ——— HVP ———	FIRE HYDRANT	
FIBER	————— FBR ——— FBR ———	TELCO PEDESTAL	
RIGHT-OF-WAY	————— ROW ——— ROW ———	ELECTRICAL PULL BOX	
PROPERTY LINE	————— PL ——— PL ———		
EDGE OF PAVEMENT	————— EOP ——— EOP ———		



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CHECKED BY:	CTD
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A	06/19/19	AJD	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION

NOT VALID WITHOUT P.E. STAMP & SIGNATURE

40213

WASHTENAW

2° 14' 41.424" N

3° 37' 3.432" W

LOCATION

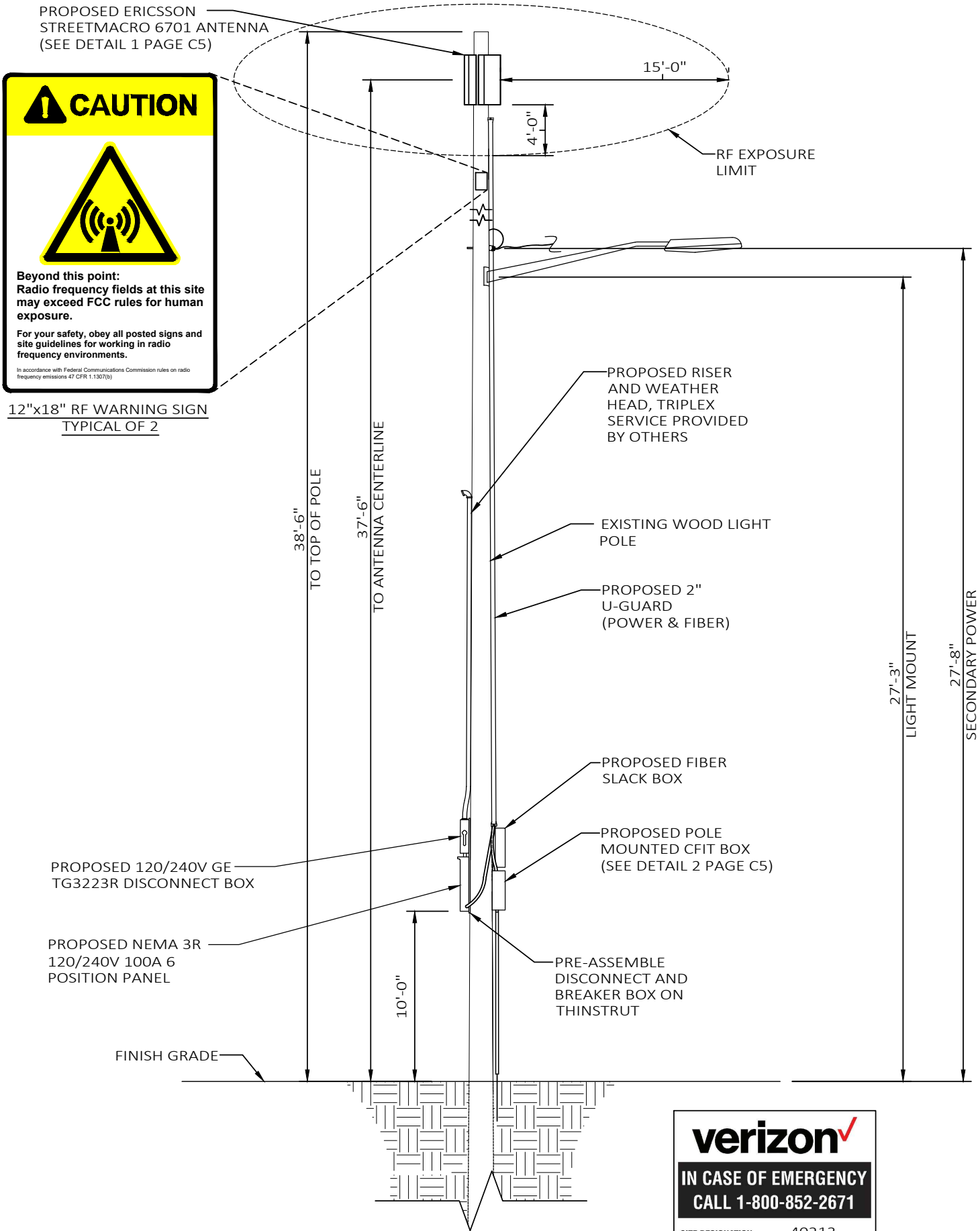
TE LAYOUTS

REVISION:

C1

O

CONTRACTOR TO OBTAIN
LATEST RFDS FROM VERIZON
PRIOR TO CONSTRUCTION.



PREPARED FOR:

verizon

PREPARED BY:

**TeleCAD
Wireless**

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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CLIENT IS STRICTLY PROHIBITED.

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CHECKED BY:	CTD

REVISIONS			
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	AJD	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION

ENGINEER'S STAMP:

STATE OF MICHIGAN

STEPHEN
E. HUNT
ENGINEER
No.
6201054169

LICENSED PROFESSIONAL ENGINEER

NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:
40213

COUNTY:
WASHTENAW

LATITUDE:
42° 14' 41.424" N

LONGITUDE:
83° 37' 3.432" W

DESIGN TYPE:
COLOCATION

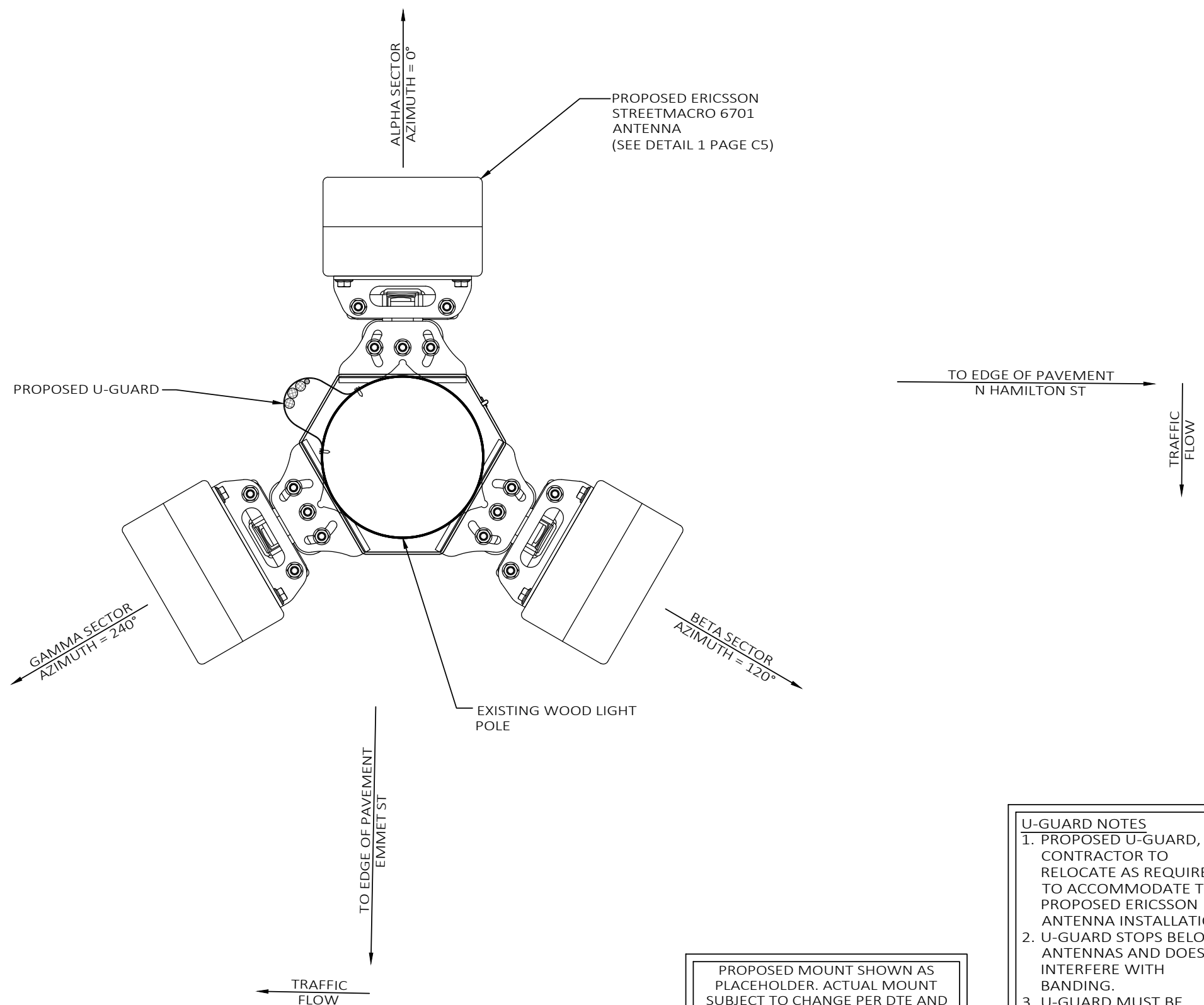
SHEET TITLE:
POLE ELEVATION

DRAWING NO. C2	REVISION: 0
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AZIMUTHS ARE SUBJECT TO CHANGE. CONTRACTOR TO VERIFY AZIMUTHS FROM FINAL RFDS FROM VZW. ANTENNA MOUNT TO BE SUPPLIED BY ERICSSON OR VERIZON. ANTENNA TO BE INSTALLED BY VERIZON CONTRACTOR.

INSTALL STRAIN RELIEF FOR POWER & FIBER CABLES AT OR NEAR ANTENNAS

CONTRACTOR TO OBTAIN LATEST RFDS FROM VERIZON PRIOR TO CONSTRUCTION.



PROPOSED MOUNT SHOWN AS PLACEHOLDER. ACTUAL MOUNT SUBJECT TO CHANGE PER DTE AND VERIZON FUTURE DISCUSSIONS

U-GUARD NOTES
1. PROPOSED U-GUARD, CONTRACTOR TO RELOCATE AS REQUIRED TO ACCOMMODATE THE PROPOSED ERICSSON ANTENNA INSTALLATION.
2. U-GUARD STOPS BELOW ANTENNAS AND DOES NOT INTERFERE WITH BANDING.
3. U-GUARD MUST BE RACEWAY CAPABLE.

PREPARED FOR:

verizon

PREPARED BY:

TeleCAD Wireless

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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DRAWN BY:	AJD
CHECKED BY:	CTD

REVISIONS			
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	AJD	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION

ENGINEER'S STAMP:

STATE OF MICHIGAN

STEPHEN E. HUNT
ENGINEER
No. 6201054169

NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:
40213

COUNTY:
WASHTENAW

LATITUDE:
42° 14' 41.424" N

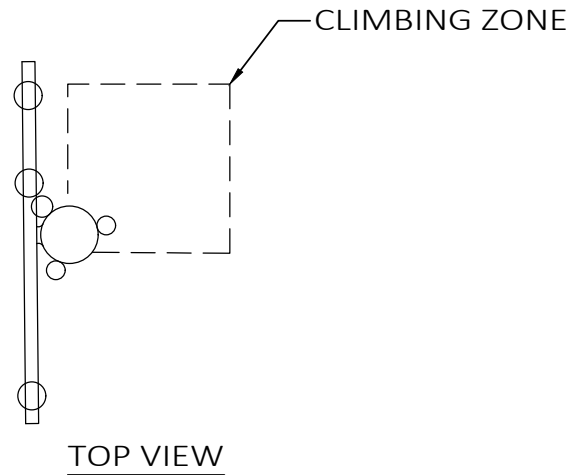
LONGITUDE:
83° 37' 3.432" W

DESIGN TYPE:
COLOCATION

SHEET TITLE:
ANTENNA LAYOUT

DRAWING NO. C2A	REVISION: 0
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POLE ATTACHED EQUIPMENT	
EQUIPMENT	VOLUME (CU-FT)
STREET MACRO 6701 ANTENNA	0.46
STREET MACRO 6701 ANTENNA	0.46
STREET MACRO 6701 ANTENNA	0.46
TOTAL IN CU-FT	1.38



- NOTES:
1. WORKING CLEARANCE FROM ENERGIZED ANTENNA MUST BE GREATER THAN 4 FT, OTHERWISE SHUT DOWN RADIO AND ANTENNA PER INSTRUCTIONS ON PLACARD OR BY OPENING DISCONNECT SWITCH TO RADIO EQUIPMENT ON POLE.
 2. ANTENNA AND MOUNTING BRACKETS INSTALLED ABOVE DTE WIRES MUST BE INSTALLED AND MAINTAINED BY DTE OR DTE'S DESIGNATED CONTRACTOR.
 3. VERTICAL CLIMBING ZONE MUST BE MAINTAINED ON ALL POLES. (SEE TOP VIEW)
 4. BASE CABINET TO BE CLEARLY LABELED WITH OWNER'S NAME AND 1-800 PHONE NUMBER WITH 3/4" TALL LETTERING.
 5. SHUTDOWN PLACARD TO BE PLACED ON THE POLE NEAR BASE CABINET AND DISCONNECT SWITCH BOX.
 6. 5' FT MIN. CLEARANCE ABOVE ANY DTE EQUIPMENT.
 7. ANTENNA POLE TOP CLEARANCES APPLY TO ANY DTE EQUIPMENT OR WIRES INSTALLED UNDER THE ANTENNA.

REFERENCE DTE ENERGY
CELLULAR ANTENNA SMALL CELL SITE CONSTRUCTION
LINE CONSTRUCTION STANDARDS 4-JOINT USE 1-4-26.1
DATED 11/1/2017

PREPARED FOR:



PREPARED BY:

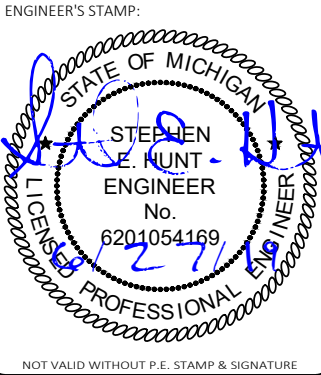


1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

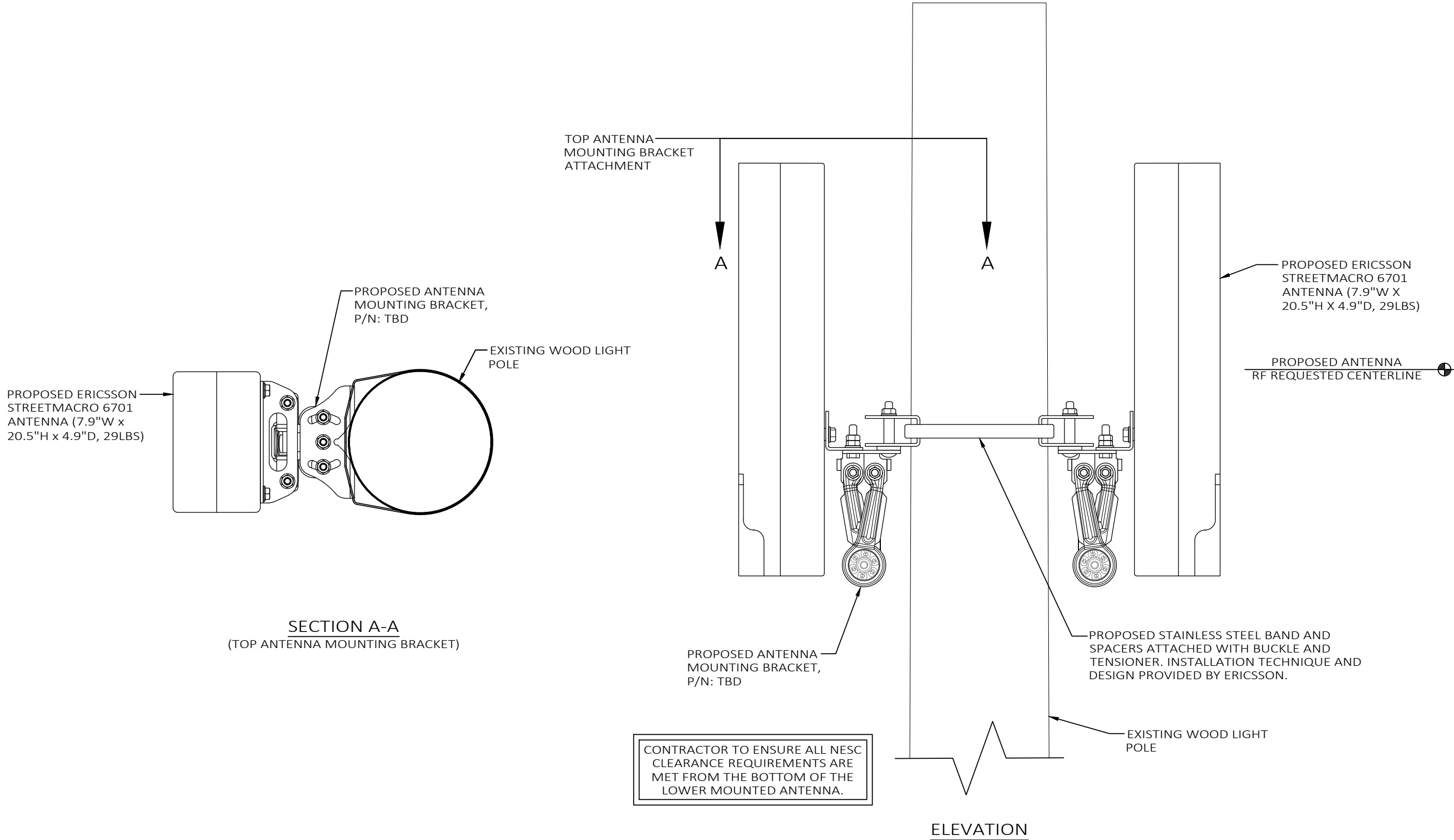
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DRAWN BY:	AJD
CHECKED BY:	CTD

REVISIONS			
O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	AJD	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION



SITE NAME:	40213
COUNTY:	WASHTENAW
LATITUDE:	42° 14' 41.424" N
LONGITUDE:	83° 37' 3.432" W
DESIGN TYPE:	COLOCATION
SHEET TITLE:	DTE NOTES
DRAWING NO.	C3
REVISION:	0



PREPARED FOR:



PREPARED BY:

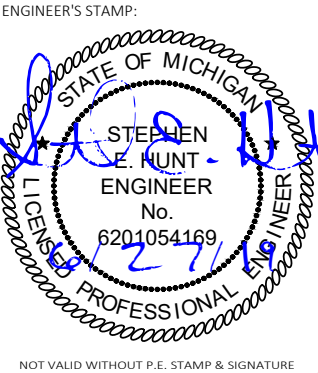


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COUNTY:	WASHTENAW
LATITUDE:	42° 14' 41.424" N
LONGITUDE:	83° 37' 3.432" W
DESIGN TYPE:	COLOCATION

SHEET TITLE:	SITE DETAILS
--------------	--------------

DRAWING NO.	REVISION:
C4	0

Spectrum:

IBW

OBW

EIRP

28 GHz

Full band

800 MHz

~ 55 dBm

of Users:

Total Antenna BW:

Throughput:

RI ports:

TN/IDLports:

Misc:

2,000+

1600 MHz

5 Gbps DL/ 1 Gbps UL

2

2

4xExternal Alarms, USB connector
PoE, GPS, 1588 Synch

Weight:

Size:

Operational conditions:

Cooling:

Power:

IP Class:

~ 13 kg (29 lbs)

20,5"x4,9"x7,9" (13 l)

-40 to +55 degrees

Active

AC, <300W Max

IP 65

Ericsson Confidential | 2018-03-15



20,5"x5"x8" Not to Exceed Dimensions

CFIT BOX

PART CODE: CFIT-C48D4LHXVZ

DESIGNED BY CHARLES INDUSTRIES



PRODUCT SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
HEIGHT (PANEL ONLY)	15 in.
DEPTH, BASE (FRONT TO BACK)	5.5 in.
WIDTH	12 in.
WEIGHT	4 lbs.
CONSTRUCTION	RUGGED UL94-5VA GRAY POLYCARBONATE
SUPPORTED FIBER CONNECTOR TYPES	SC, LC or MPO
COMPLIANCE	DESIGNED TO MEET GR-950, GR2898, NEMA 4, IP66
SPLICING CAPACITY	UP TO THREE (3) 4"x6" HINGED SPLICE TRAYS ON FEED FIBER SIDE.
BULKHEAD CAPACITY	24 SC ADAPTERS

PREPARED FOR:



PREPARED BY:

TeleCAD
Wireless

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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NO.	DATE	BY	DESCRIPTION

ENGINEER'S STAMP:

STATE OF MICHIGAN

STEPHEN E. HUNT
ENGINEER
No. 6201054169

LICENSED PROFESSIONAL ENGINEER

NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:

40213

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 41.424" N

LONGITUDE:

83° 37' 3.432" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

EQUIPMENT DETAILS

DRAWING NO.

C5

REVISION:

0

ELECTRICAL NOTES:

- 1. PROVIDE AND INSTALL WARNING TAPE FOR ELECTRIC SERVICE CONDUIT 12" BELOW GRADE.
- 2. CONTRACTOR TO PAY FOR THE SERVICE AS DIRECTED BY THE MUNICIPALITY.
- 3. CONTRACTOR TO USE PVC SCH 40 CONDUIT WHERE CONDUITS CROSS ACCESS ROADS.
- 4. CONTRACTOR SHALL COORDINATE WITH ELECTRIC AND TELEPHONE UTILITY COMPANIES FOR SERVICES.
- 5. CONTRACTOR TO PAY ALL FEES FOR SERVICES REQUIRED.
- 6. CONTRACTOR TO BE ADVISED THAT EXISTING UNDERGROUND CONDUITS, GROUND CABLES EXIST. DIG WITH CAUTION.
- 7. CONTRACTOR TO VERIFY POWER AND TELCO LB LOCATIONS AND FLEX CONDUIT SIZE AND ROUTING TO THE EQUIPMENT SHELTER WITH MANUFACTURER'S DRAWINGS.
- 8. OPEN CUT CONSTRUCTION THROUGH EXISTING PAVEMENT, I.E. ROADWAYS, PARKING AREAS, SIDEWALKS WILL NOT BE ALLOWED. CONSTRUCTION UNDER EXISTING PAVEMENTS WILL BE REQUIRED TO BE INSTALLED WITH DIRECTIONAL BORING TECHNIQUE.

UTILITY NOTES:

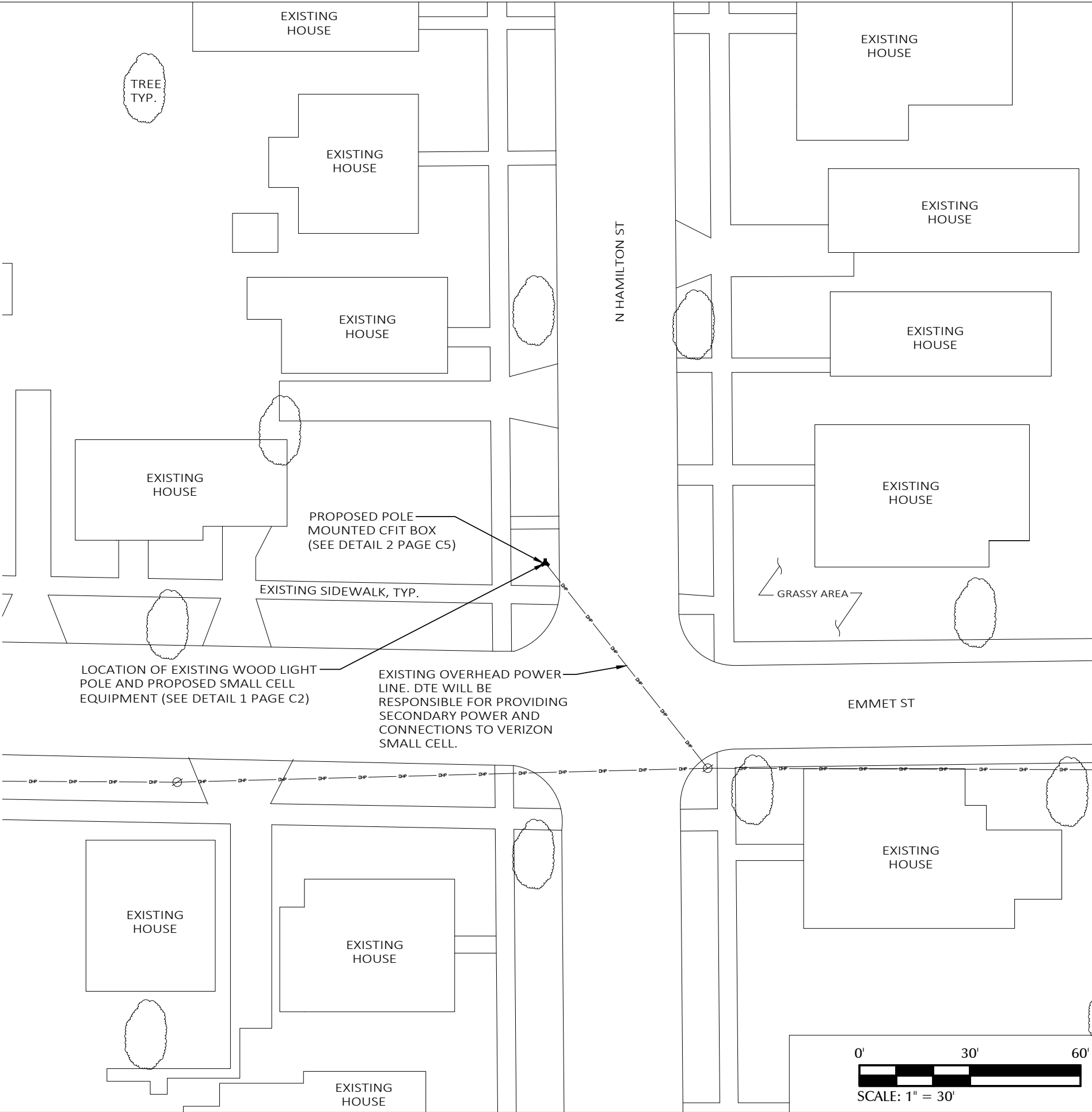
- 1. ALL POWER CONDUITS ABOVE GRADE, SWEEPS, & ELBOWS TO BE PVC SCH 40.
- 2. INSTALL PULL STRING IN TELCO CONDUIT.

STANDARD POWER SUPPLY FOR THE SMALL CELL NODES IS A 100 AMP 120/240 VOLT SINGLE PHASE SERVICE

SERVICE CONDUCTOR MAXIMUM DISTANCE CHART (BASED ON 80 AMP MAX. CONTINUOUS LOAD)			
WIRE SIZE	ALUMINUM 120V	COPPER 120V	CONDUIT SIZE
3 AWG	55'	90'	3/4" MIN
2 AWG	70'	115'	3/4" MIN
1 AWG	85'	145'	3/4" MIN
1/0 AWG	110'	180'	1" MIN
2/0 AWG	140'	230'	1" MIN
3/0 AWG	175'	290'	1 1/4" MIN
4/0 AWG	220'	365'	1 1/4" MIN
250 KCMIL	265'	435'	1 1/4" MIN
300 KCMIL	315'	520'	1 1/2" MIN
350 KCMIL	370'	610'	1 1/2" MIN
400 KCMIL	420'	695'	2" MIN
500 KCMIL	530'	870'	2" MIN

LEGEND

UNDERGROUND POWER	USP	CATCH BASIN	
OVERHEAD POWER	DHP	IRON PIN SET (IPF) 3/8" REBAR	
OVERHEAD UTILITIES	DHU	IRON PIN FOUND (IPF)	
UNDERGROUND TELCO	UGT	BENCHMARK	
OVERHEAD TELCO	DHT	CONCRETE MON. FOUND	
GAS LINE	GAS	CONCRETE MON. SET	
FENCE	X	UTILITY POLE	
SEWER LINE	SVR	LIGHT POLE	
WATER LINE	VTR	WATER VALVE	
COAX CABLE	C	MANHOLE	
HYBRID CABLE	HYB	GAS VALVE	
HIGH VOLTAGE POWER	HVP	FIRE HYDRANT	
FIBER	FBR	TELCO PEDESTAL	
RIGHT-OF-WAY	RDW	ELECTRICAL PULL BOX	
PROPERTY LINE	PL		
EDGE OF PAVEMENT	EDP		



PREPARED FOR:



PREPARED BY:

TeleCAD Wireless
1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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CHECKED BY:	CTD

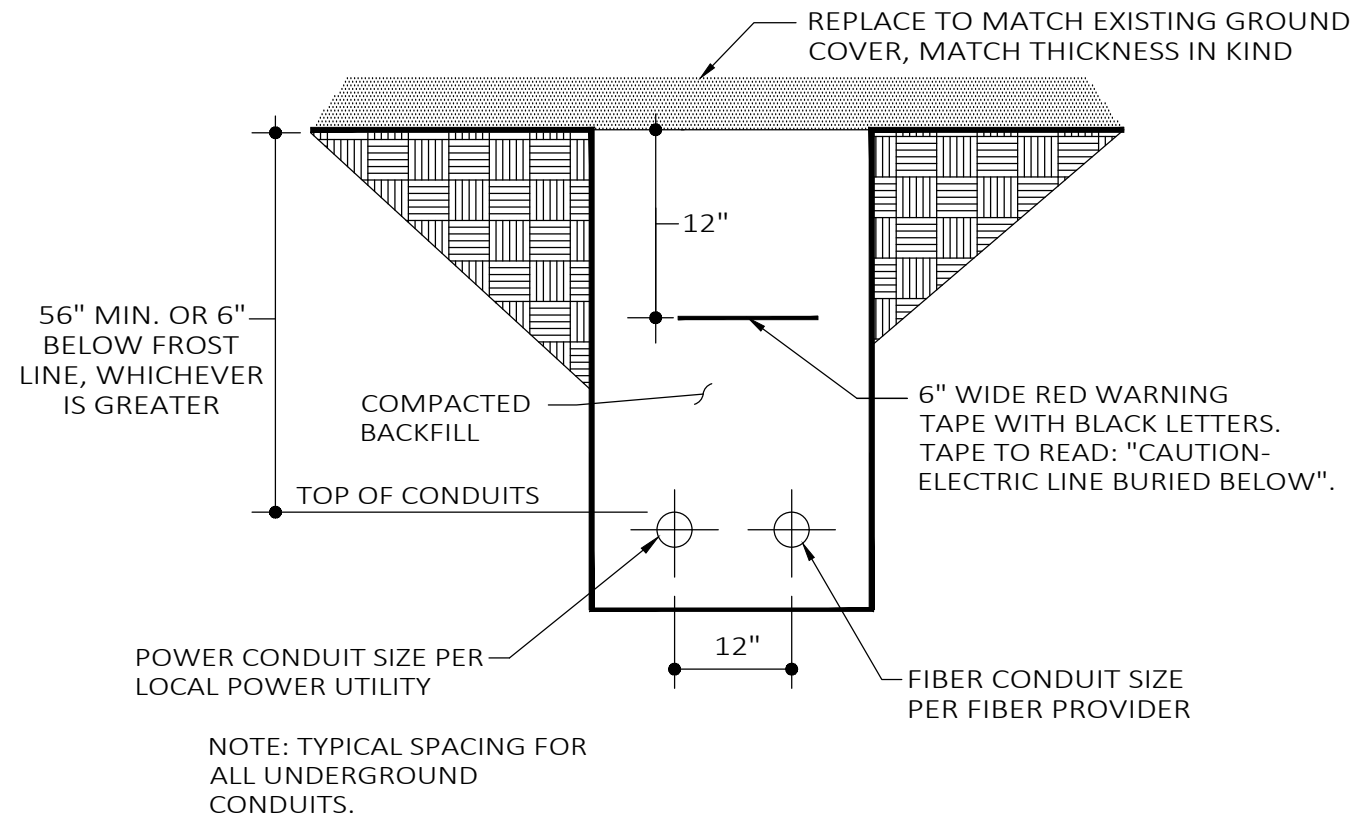
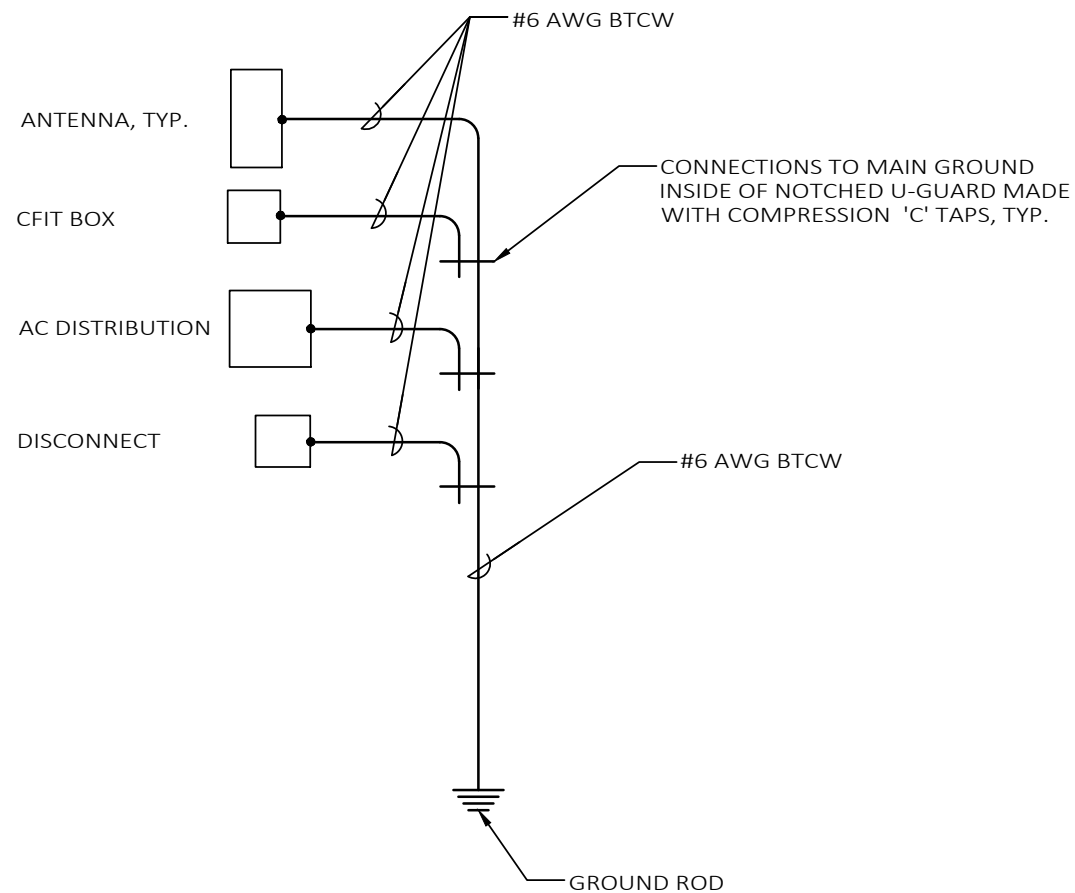
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STEPHEN E. HUNT
ENGINEER
No. 6201054169
LICENSED PROFESSIONAL ENGINEER
NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME: 40213
COUNTY: WASHTENAW
LATITUDE: 42° 14' 41.424" N
LONGITUDE: 83° 37' 3.432" W
DESIGN TYPE: COLOCATION

SHEET TITLE: UTILITY SITE PLAN

DRAWING NO. E1
REVISION: 0



PREPARED FOR:

verizon

PREPARED BY:

TeleCAD Wireless

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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DRAWN BY: AJD
CHECKED BY: CTD

REVISIONS			
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STEPHEN E. HUNT
ENGINEER
No. 6201054169
LICENSED PROFESSIONAL ENGINEER
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SITE NAME:
40213

COUNTY:
WASHTENAW

LATITUDE:
42° 14' 41.424" N

LONGITUDE:
83° 37' 3.432" W

DESIGN TYPE:
COLOCATION

SHEET TITLE:
ELECTRICAL DETAILS

DRAWING NO.
E2

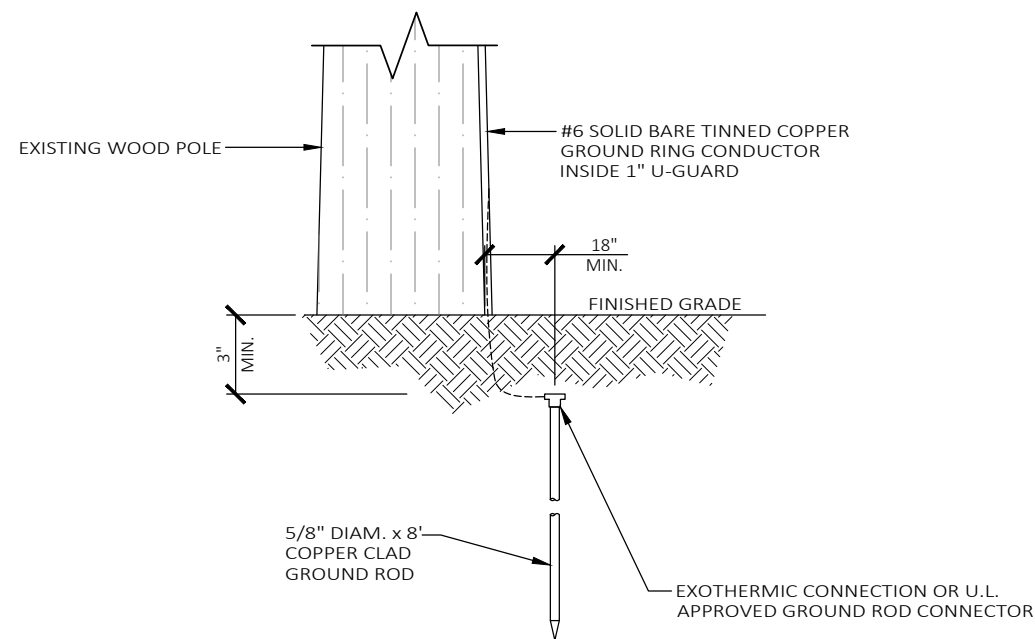
REVISION:
0

1 SINGLE POINT RADIAL GROUND DETAIL

N.T.S.

2 TRENCH DETAIL (IF REQUIRED)

N.T.S.



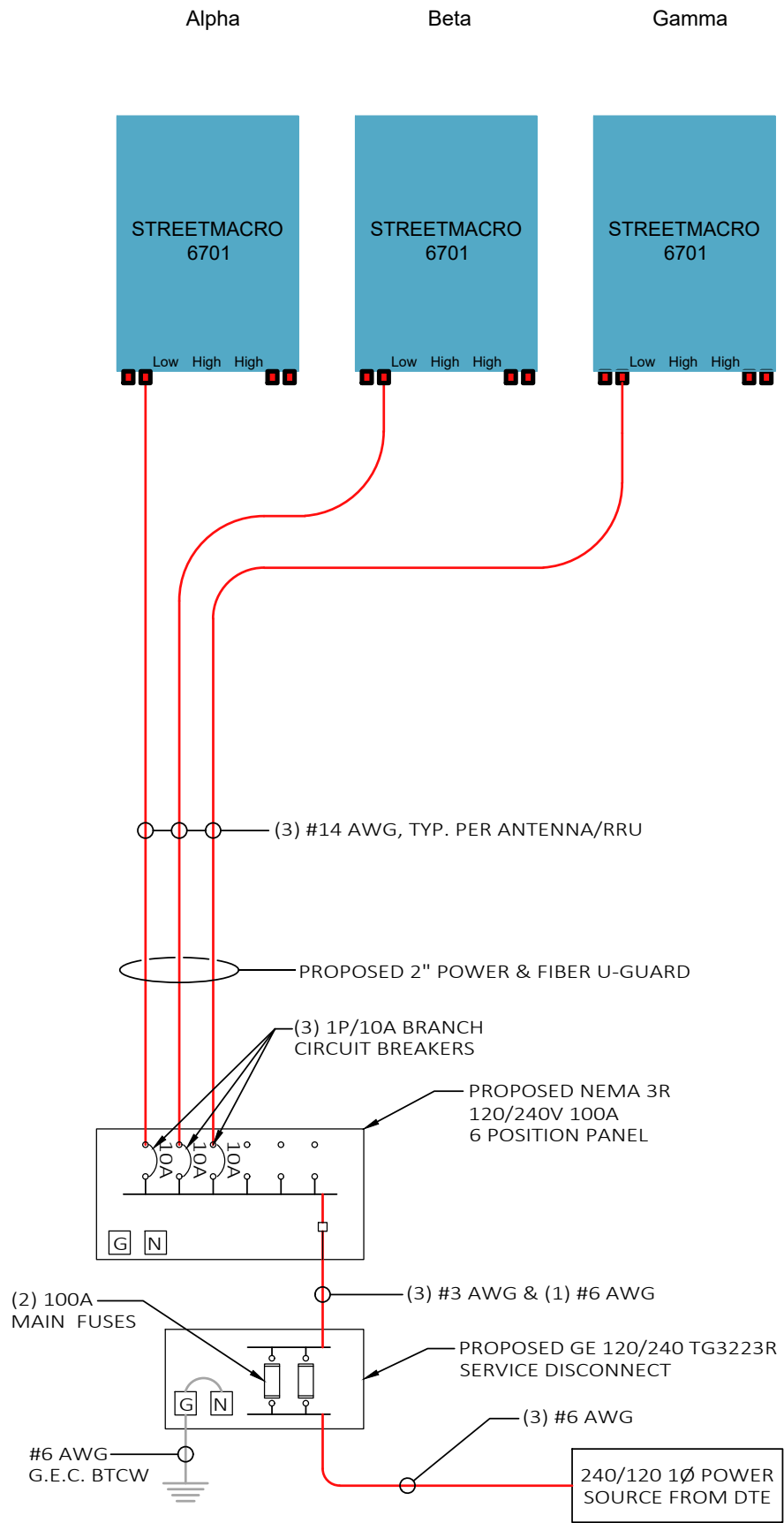
3 GROUND ROD DETAIL

N.T.S.

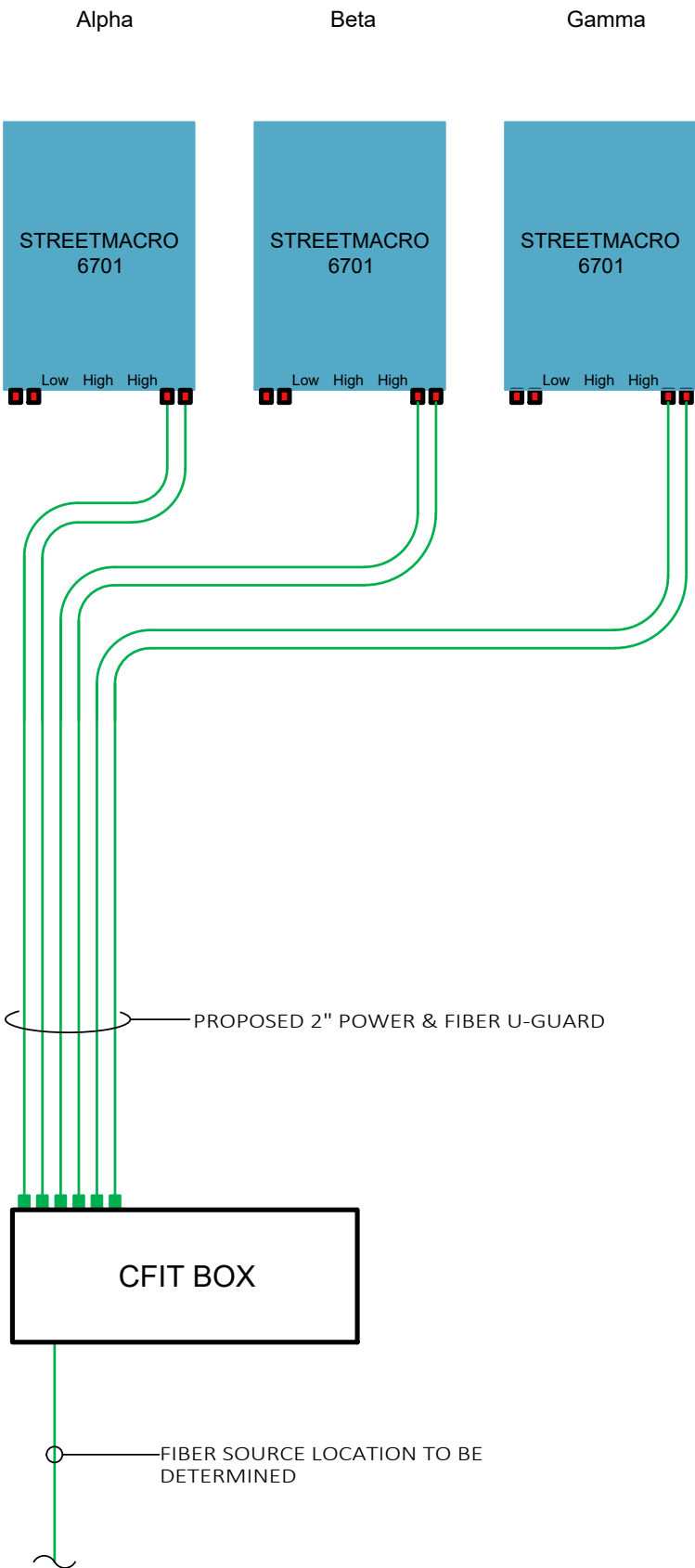
4 DETAIL NOT IN USE

N.T.S.

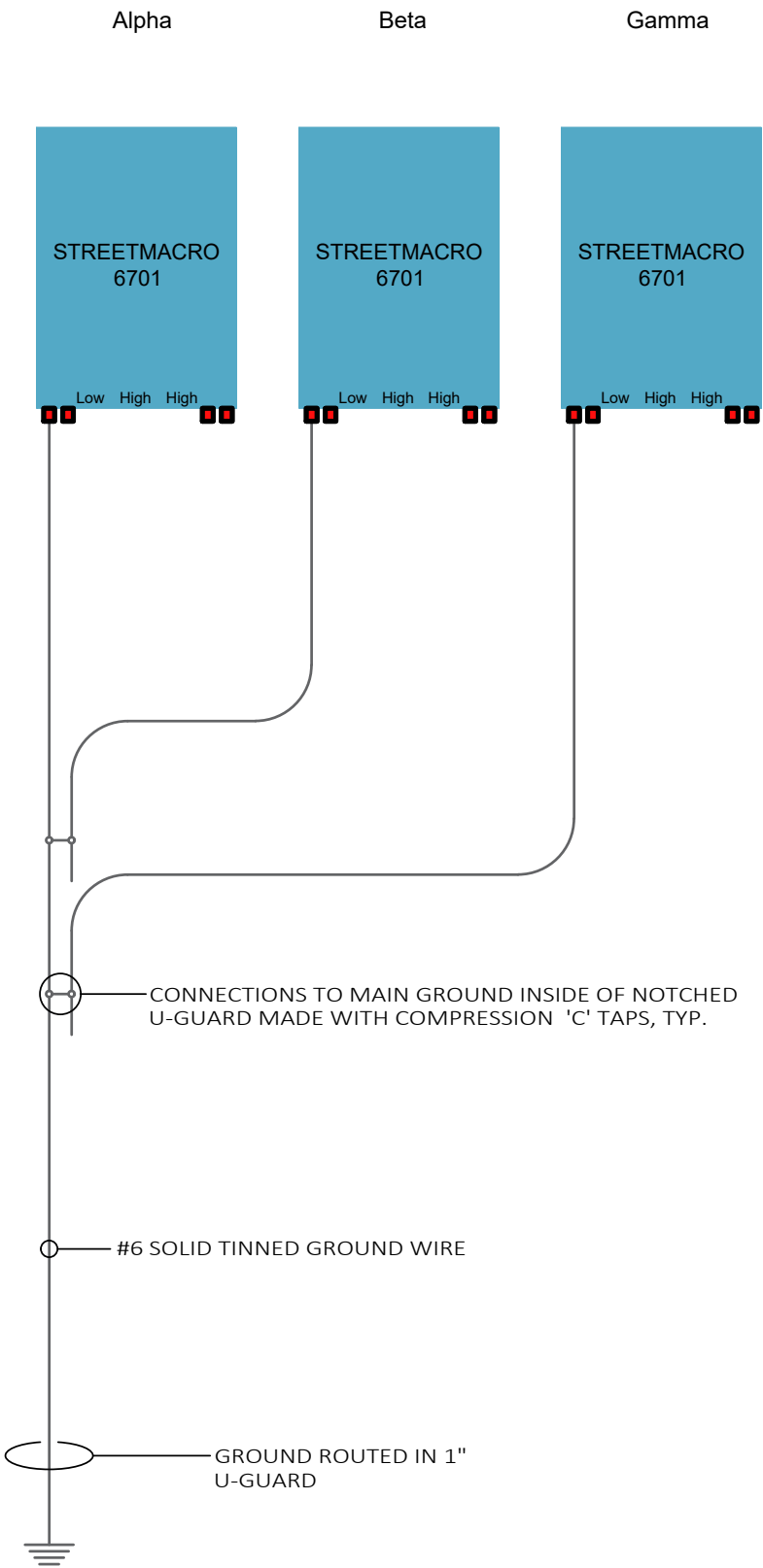
POWER ROUTING



FIBER ROUTING



GROUND ROUTING



PREPARED FOR:



PREPARED BY:

TeleCAD Wireless

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
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COUNTY:	WASHTENAW
LATITUDE:	42° 14' 41.424" N
LONGITUDE:	83° 37' 3.432" W
DESIGN TYPE:	COLOCATION

SHEET TITLE:
SINGLE LINE DIAGRAM

DRAWING NO. E3	REVISION: 0
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10845 Olive Boulevard, Suite 260, Saint Louis, Missouri 63141 - 314.997.6111 - www.trileaf.com

January 6, 2020

Economic & Community Development

Attn: Mr. Scott Slagor - Preservation Planner
1 South Huron Street, 3rd Floor
Ypsilanti, MI 48197
Phone: 734-483-9646
Email: sslagor@cityofypsilanti.com

RE: **Cellco Partnership and its controlled affiliates doing business as Verizon Wireless (Verizon Wireless) – 40214_ANN ARBOR EAST_5G - A/ Client #616381842 – Trileaf Project #658947**
401 North Adams Street, Ypsilanti, MI 48197
Washtenaw County, Ypsilanti East Quadrangle (USGS)
Latitude: 42° 14' 45.2436" N, Longitude: 83° 36' 58.1436" W

Dear Mr. Slagor:

Trileaf Corporation is in the process of completing a Section 106 review at the referenced property. Our client proposes to construct a 38.5-foot tall utility pole communications tower, which will support three (3) small cell antennas and associated equipment. The proposed development is located within a maintained grass public right-of-way. The antenna will be licensed by the Federal Communications Commission (FCC).

Our investigation includes determining if the site is contained in, on or within the viewshed of a building, site, district, structure or object, significant in American history, architecture, archaeology, engineering or culture, that is listed, or eligible for listing on the State or National Registers of Historic Places, or located in or on an Indian Religious Site.

Trileaf is requesting information regarding this tower's potential effect on Historic Properties. All information received will be forwarded to the State Historic Preservation Office (SHPO) as part of the Section 106 review process. *Additionally, this invitation to comment is separate from any local planning/zoning process that may apply to this project.*

If you wish to comment or be considered a consulting party, please respond within thirty (30) days of the date of this letter. If a response is not received within thirty (30) days, it will be assumed that you have no objections to this undertaking. A site topography map and aerial photograph are enclosed for your reference.

Please call me at (314) 997-6111 or email c.unnerstall@trileaf.com if you need additional information or have any questions. Thank you for your assistance in this regard.

Sincerely,

Colleen Unnerstall
Project Scientist II

Ypsilanti East Quadrangle, Michigan (2019)

Contour Interval = 5 Feet

Latitude: 42° 14' 45.2436" N, Longitude: 83° 36' 58.1436" W

Township: T3S Range: R7E Section: S4



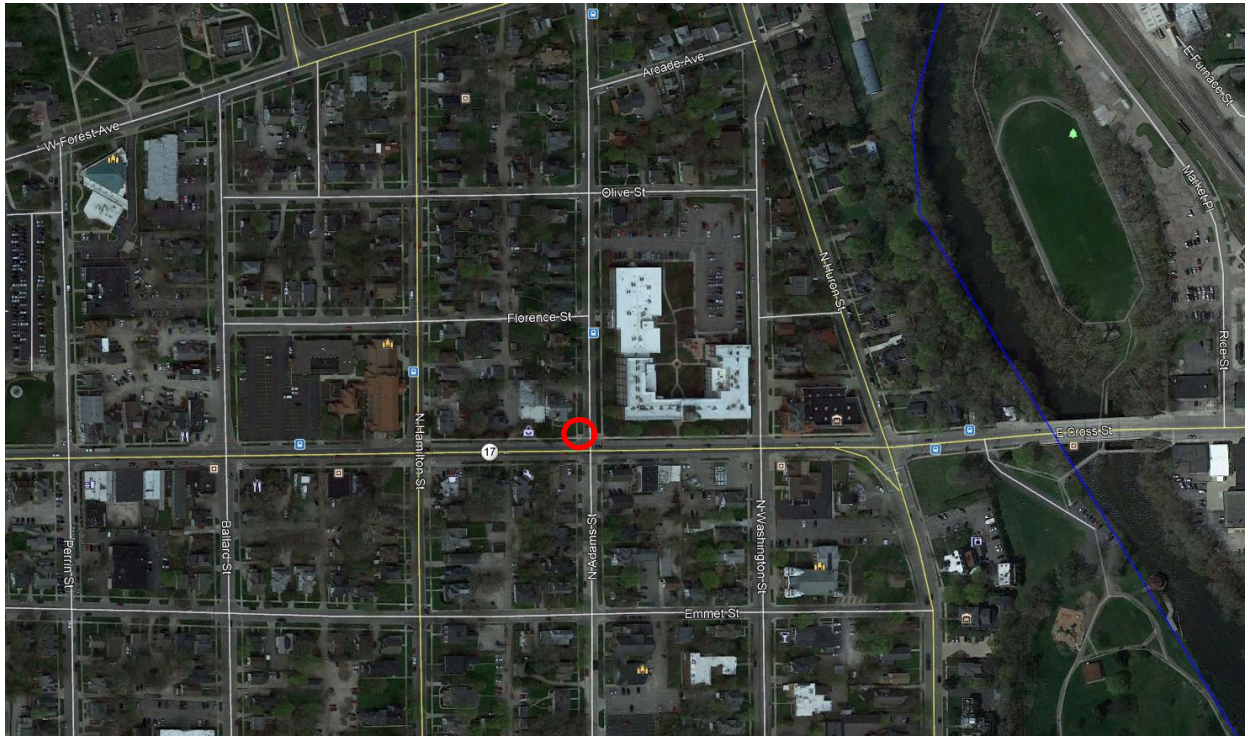
North



Site Vicinity Map

Verizon Wireless – 40214_ANN ARBOR EAST_5G - A
401 North Adams Street
Ypsilanti, MI 48197





Site Location & Surrounding Properties



Site Location

Aerial Photographs (2019)

Verizon Wireless – 40214_ANN ARBOR EAST_5G - A
 401 North Adams Street
 Ypsilanti, MI 48197



GENERAL NOTES

1. THESE NOTES SHALL BE CONSIDERED A PART OF THE WRITTEN SPECIFICATIONS.
2. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED IN THE CONTRACT DOCUMENTS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTOR(S) SHALL VISIT THE JOB SITE(S) AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED PER THE CONTRACT DOCUMENTS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER.
4. THE CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED ON ANY WORK NOT CLEARLY DEFINED OR IDENTIFIED IN THE CONSTRUCTION DOCUMENTS BEFORE STARTING ANY WORK.
5. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES INCLUDING APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. IF THESE RECOMMENDATIONS ARE IN CONFLICT WITH THE CONTRACT DOCUMENTS AND/OR APPLICABLE CODES OR REGULATIONS, REVIEW THE CONFLICT FOR DIRECTION WITH THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES AND FOR COORDINATION OF ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION TEAM AND WITH THE AUTHORIZED REPRESENTATIVE OF ANY OUTSIDE POLE OR PROPERTY OWNER. (BASE COMMANDER OR AUTHORIZED AGENT)
8. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, VEGETATION, GALVANIZED SURFACE OR OTHER EXISTING ELEMENTS AND UPON COMPLETION OF THE WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF EXTENT.
9. KEEP THE GENERAL AREA CLEAN, HAZARD FREE AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION DAILY.
10. PLANS ARE INTENDED TO BE DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED UNLESS OTHERWISE NOTED. RELY ONLY ON ANNOTATED DIMENSIONS AND REQUEST INFORMATION IF ADDITIONAL DIMENSIONS ARE REQUIRED.
11. THE EXISTENCE AND LOCATION OF UTILITIES AND OTHER AGENCY'S FACILITIES ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. OTHER FACILITIES MAY EXIST BEYOND WHAT IS NOTED. CONTRACTOR SHALL VERIFY LOCATIONS PRIOR TO START OF CONSTRUCTION AND USE EXTREME CARE AND PROTECTIVE MEASURES TO PREVENT DAMAGE TO THESE FACILITIES. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF UTILITIES OR OTHER AGENCY'S FACILITIES WITHIN THE LIMITS OF THE WORK, WHETHER THEY ARE IDENTIFIED IN THE CONTRACT DOCUMENTS OR NOT.
12. ALL MOUNTING HARDWARE SUCH AS BOLTS, NUTS, LAG SCREWS, CLEVIS, CONDUIT STRAPS, STAPLES, (ANYTHING EXPOSED AND CONNECTING EQUIPMENT TO THE POLE SHALL BE HOT DIPPED GALVANIZED, UNLESS OTHERWISE STATED)

DEFINITIONS

1. "TYPICAL" OR "TYP." MEANS THAT THIS ITEM IS VIRTUALLY IDENTICAL ACROSS SIMILAR CONDITIONS. "TYP." SHALL BE UNDERSTOOD TO MEAN "TYPICAL WHERE OCCURS" AND SHALL NOT BE CONSIDERED AS WITHOUT EXCEPTION OR CONSIDERATION OF SPECIFIC CONDITIONS.
2. "SIMILAR" MEANS COMPARABLE TO CHARACTERISTICS FOR CONDITION NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLAN.
3. "AS REQUIRED" MEANS AS REQUIRED BY REGULATORY REQUIREMENTS BY REFERENCED STANDARDS, BY EXISTING CONDITIONS, BY GENERALLY ACCEPTED CONSTRUCTION PRACTICE OR BY THE CONTRACT DOCUMENTS.
4. "ALIGN" MEANS ACCURATELY LOCATE FINISH FACES OF MATERIALS IN THE SAME PLANE.
5. THE TERM "VERIFY" OR "V.I.F" SHALL BE UNDERSTOOD TO MEAN VERIFY IN FIELD WITH ARCHITECT AND REQUIRES THAT THE CONTRACTOR CONFIRM INTENTION REGARDING NOTED CONDITION AND PROCEED ONLY AFTER RECEIVING DIRECTION.
6. WHERE THE WORDS "OR EQUAL" OR WORDS OF SIMILAR INTENT FOLLOW A MATERIAL SPECIFICATION, THEY SHALL BE UNDERSTOOD TO REQUIRE SIGNED APPROVAL OF ANY DEVIATION TO SAID SPECIFICATION PRIOR TO CONTRACTOR'S ORDERING OR INSTALLATION OF SUCH PROPOSED EQUAL PRODUCT.
7. FURNISH: SUPPLY ONLY, OTHERS TO INSTALL. INSTALL: INSTALL ITEMS FURNISHED BY OTHERS. PROVIDE: FURNISH AND INSTALL.

PROJECT SPECIFIC NOTES

1. THIS SET IS PROVIDED TO ILLUSTRATE THE EXPECTED SCOPE OF DRAWINGS, QUALITY OF DRAWINGS AND EXTENT GRAPHIC STANDARDS. NOTES ARE FOR A&E CONTRACTOR REFERENCE TO HELP CLARIFY THE SCOPE. ADDITIONAL DRAWINGS MAY BE REQUIRED TO MEET THE REQUIREMENTS OF A GIVEN BASE. ALL EXAMPLES SHOWN ARE FOR REFERENCE ONLY AND ANY NOTES, DETAILS, CALCULATIONS OR OTHER WORK NEEDS TO BE COMPLETED OR CONFIRMED BY THE CONTRACTOR GENERATING THE DRAWINGS IN CONSTRUCTION DOCUMENTS.
2. THIS SET IS TO BE PRINTED AT 11" x 17". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THIS SIZE IS ACCEPTABLE BY THE BASE AND TO PROVIDE A LARGER STANDARD SIZE IF REQUIRED.
3. IT IS THE RESPONSIBILITY OF THE ENGINEER TO CONFIRM ALL WORK SHOWN IS IN COMPLIANCE WITH BASE AND FEDERAL CODES. DRAWINGS SHOWN WITHIN THIS SET ARE SAMPLES AND MAY NOT REFLECT ALL OF THE REQUIRED ELEMENTS, CLEARANCES OR OTHER ITEMS OF ASSEMBLIES NEEDED TO BE CODE COMPLIANT IN THE PARTICULAR MUNICIPALITY THE NODE IS LOCATED WITHIN.

GROUND CONSTRUCTION NOTES:

1. 120/240V POWER REQUIRED FOR 3-WIRE SERVICE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH FEDERAL STANDARDS AND REGULATIONS AS WELL AS NEC.
3. CALL MICHIGAN ONE CALL 72 HOURS PRIOR TO EXCAVATING AT (800) 482-7171.
4. ALL LANDSCAPING TO BE RESTORED TO ORIGINAL CONDITION OR BETTER.
5. ALL EQUIPMENT TO BE BONDED.
6. METERING CABINET (IF INSTALLED) REQUIRES 3' CLEARANCE AT DOOR OPENING.

STANDARD GROUNDING NOTES:

1. GROUND TESTED AT 25 OHMS OR LESS.
2. 5/8" x 8' RODS, CAD WELD OR UL LISTED DIRECT BURY CLAMP BELOW GRADE.
3. #6 GROUND AND BOND WIRE.
4. MOLDING, STAPLED EVERY 1' AND AT EACH END.
5. GROUND RODS 18" FROM POLE.

STANDARD CONDUIT NOTES:

1. FOR UNDERGROUND CONDUIT AND ABOVE GRADE RISERS USE SCHEDULE 40.
2. IF DIRECTIONAL BORING PLACE 1-1/4" SDR-11 GRAY CONDUIT FOR UNDERGROUND POWER APPLICATIONS.
3. IF TRENCHING, PLACE PVC SCH 40 CONDUIT PER TABLE ON SHEET E1 FOR UNDERGROUND POWER APPLICATIONS.
4. RISERS TO BE ATTACHED TO POLE WITH STANDARD STRAPS AND LAG SCREWS.
5. RISER STRAPS TO BE INSTALLED EVERY 5'.
6. CONDUIT UNDER 1" MAY BE ATTACHED WITH GROUND WIRE MOLDING STAPLES.
7. ALL CONDUIT WILL BE PROOFED WITH A MANDREL AND EQUIPPED WITH PULL ROPE OR MULE TAPE.

STANDARD TRENCHING NOTES:

1. MAINTAIN 36" MINIMUM COVER FOR ELECTRICAL CONDUIT.
2. MAINTAIN 36" MINIMUM COVER FOR COMMUNICATION CONDUIT.
3. IN STREET SLURRY TO GRADE AND MILL DOWN 1-1/2" FOR AC CAP.
4. IN DIRT SLURRY 18" FROM GRADE AND FILL WITH 95% COMPACTION NATIVE SOIL FOR BALANCE.
5. PLACE WARNING TAPE IN TRENCH 12" ABOVE ALL CONDUITS AND #18 WARNING TAPE ABOVE GROUND EQUIPMENT.

UTILITY POLE CONSTRUCTION NOTES:

1. NO BOLT THREADS TO PROTRUDE MORE THAN 1/2".
2. FILL ALL HOLES LEFT IN POLE FROM REARRANGEMENT OF CLIMBERS.
3. ALL CLIMB STEPS NEXT TO CONDUIT SHALL HAVE EXTENDED STEPS.
4. CABLE NOT TO IMPEDE 15" CLEAR SPACE OFF POLE FACE.
5. 90° SHORT SWEEP UNDER ANTENNA ARM. ALL CABLES MUST ONLY TRANSITION ON THE INSIDE OR BOTTOM OF ARMS (NO CABLE ON TOP OF ARMS).
6. USE CABLE CLAMPS TO SECURE CABLE TO ARMS; PLACE 2" CARRIER ID TAGS ON BOTH SIDE OF ARMS.
7. USE 90° CONNECTOR AT CABLE CONNECTION TO ANTENNAS.
8. USE 1/2" CABLE ON ANTENNAS UNLESS OTHERWISE SPECIFIED.
9. FILL VOID AROUND CABLES AT CONDUIT OPENING WITH FOAM SEALANT TO PREVENT WATER INTRUSION.

VERIZON WIRELESS CONSTRUCTION NOTES:

1. CONTRACTOR IS TO FOLLOW THE MOST CURRENT VZW STANDARDS DOCUMENTS PROVIDED TO COMPLETE THIS INSTALLATION.
2. CONTRACTOR SHALL COMPLETE VZW PROVIDED "SMALL CELL SWEEP REPORT" WITH ALL INFORMATION FILLED IN ACCURATELY AND COMPLETELY.
3. CONTRACTOR TO REFER TO THE MOST CURRENT VZW STANDARDS FOR APPROVED "PIM" TEST EQUIPMENT AND GUIDELINES.
4. CONTRACTOR IS TO USE BATTERY POWERED "PIM" EQUIPMENT TO VALIDATE THE FINAL LOCATION OF THE JUMPER AND ANTENNA ARE FREE OF INTERNAL AND EXTERNAL "PIM" SOURCES.
5. CONTRACTOR SHALL PROVIDE AT LEAST ONE TECHNICAL LEAD THAT IS CERTIFIED AND PROFICIENT IN EXECUTING, INTERPRETING AND RECORDING "PIM" MEASUREMENTS.

PREPARED FOR:



PREPARED BY:

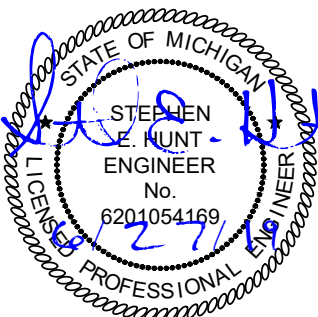


1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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CHECKED BY:	CTD

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O	06/27/19	DAJ	CONSTRUCTION ISSUE
A	06/19/19	LA	PRELIMINARY REVIEW
NO.	DATE	BY	DESCRIPTION

ENGINEER'S STAMP:

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SITE NAME:

40214

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 45.24" N

LONGITUDE:

83° 36' 58.14" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

GENERAL NOTES

DRAWING NO.

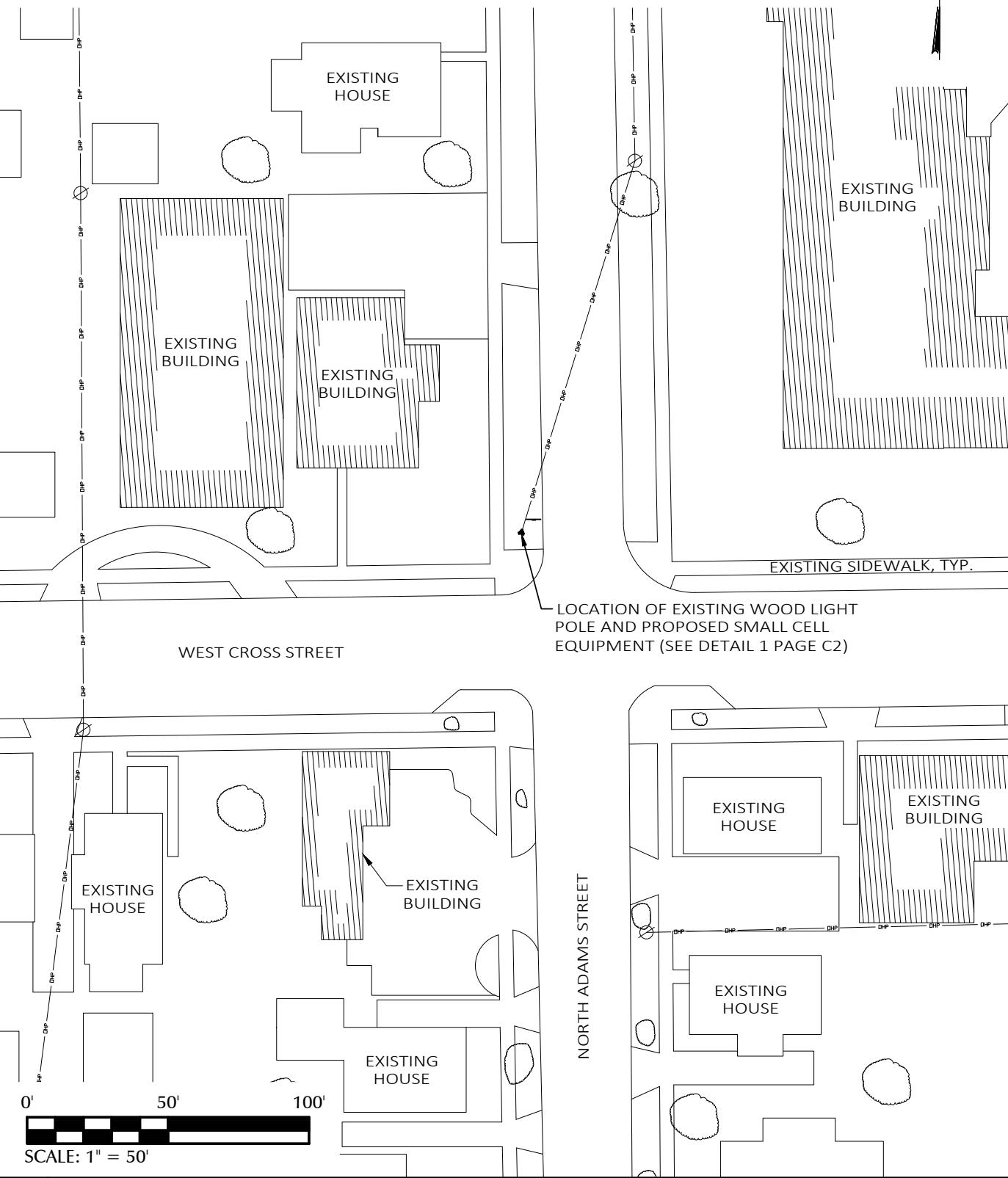
GN1

REVISION:

0

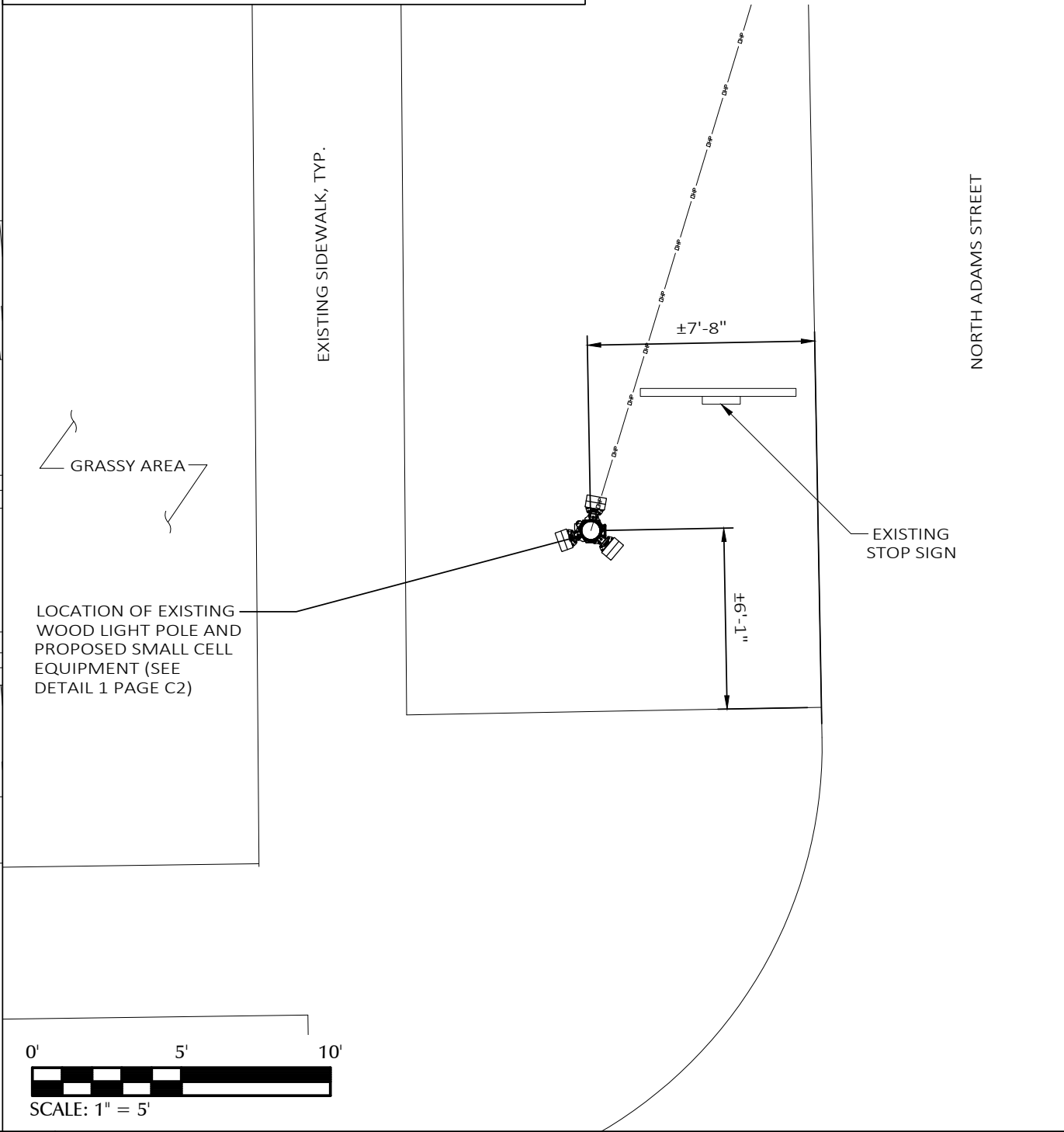
NOTES:

1. THIS DRAWING IS BASED ON AERIAL IMAGERY AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. THE PROPOSED USE DOES NOT REQUIRE FULL OR PART TIME EMPLOYEES AT THE SITE.
3. FOR GENERAL SITE WORK NOTES, SEE SHEET GN1.
4. ALL NORTH ARROWS ON SITE PLANS ARE TRUE NORTH, UNLESS OTHERWISE SPECIFIED.
5. OPEN CUT CONSTRUCTION THROUGH EXISTING PAVEMENT, I.E. ROADWAYS, PARKING AREAS, SIDEWALKS WILL NOT BE ALLOWED. CONSTRUCTION UNDER EXISTING PAVEMENTS WILL BE REQUIRED TO BE INSTALLED WITH DIRECTIONAL BORING TECHNIQUE.



LEGEND

UNDERGROUND POWER	UGP	UGP	CATCH BASIN		
OVERHEAD POWER	OPH	OPH	IRON PIN SET (IPF) 5/8" REBAR		
OVERHEAD UTILITIES	OHU	OHU	IRON PIN FOUND (IPF)		
UNDERGROUND TELCO	UGT	UGT	BENCHMARK		
OVERHEAD TELCO	OHT	OHT	CONCRETE MON. FOUND		
GAS LINE	GAS	GAS	GAS	CONCRETE MON. SET	
FENCE	X	X	X	UTILITY POLE	
SEWER LINE	SWR	SWR	SWR	LIGHT POLE	
WATER LINE	WTR	WTR	WATER VALVE		
COAX CABLE	C	C	C	MANHOLE	
HYBRID CABLE	HYB	HYB	GAS VALVE		
HIGH VOLTAGE POWER	HVP	HVP	FIRE HYDRANT		
FIBER	FBR	FBR	TELCO PEDESTAL		
RIGHT-OF-WAY	RDW	RDW	ELECTRICAL PULL BOX		
PROPERTY LINE	PL	PL			
EDGE OF PAVEMENT	EDP	EDP			



PREPARED FOR:



PREPARED BY:



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HIXSON, TN 37343
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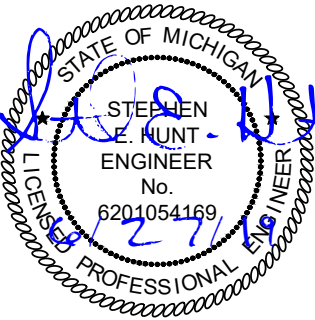
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CHECKED BY:	CTD

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SITE NAME:

40214

COUNTY:

WASHTENAW

LATITUDE:

42° 14' 45.24" N

LONGITUDE:

83° 36' 58.14" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

SITE LAYOUTS

DRAWING NO

C1

REVISION

0

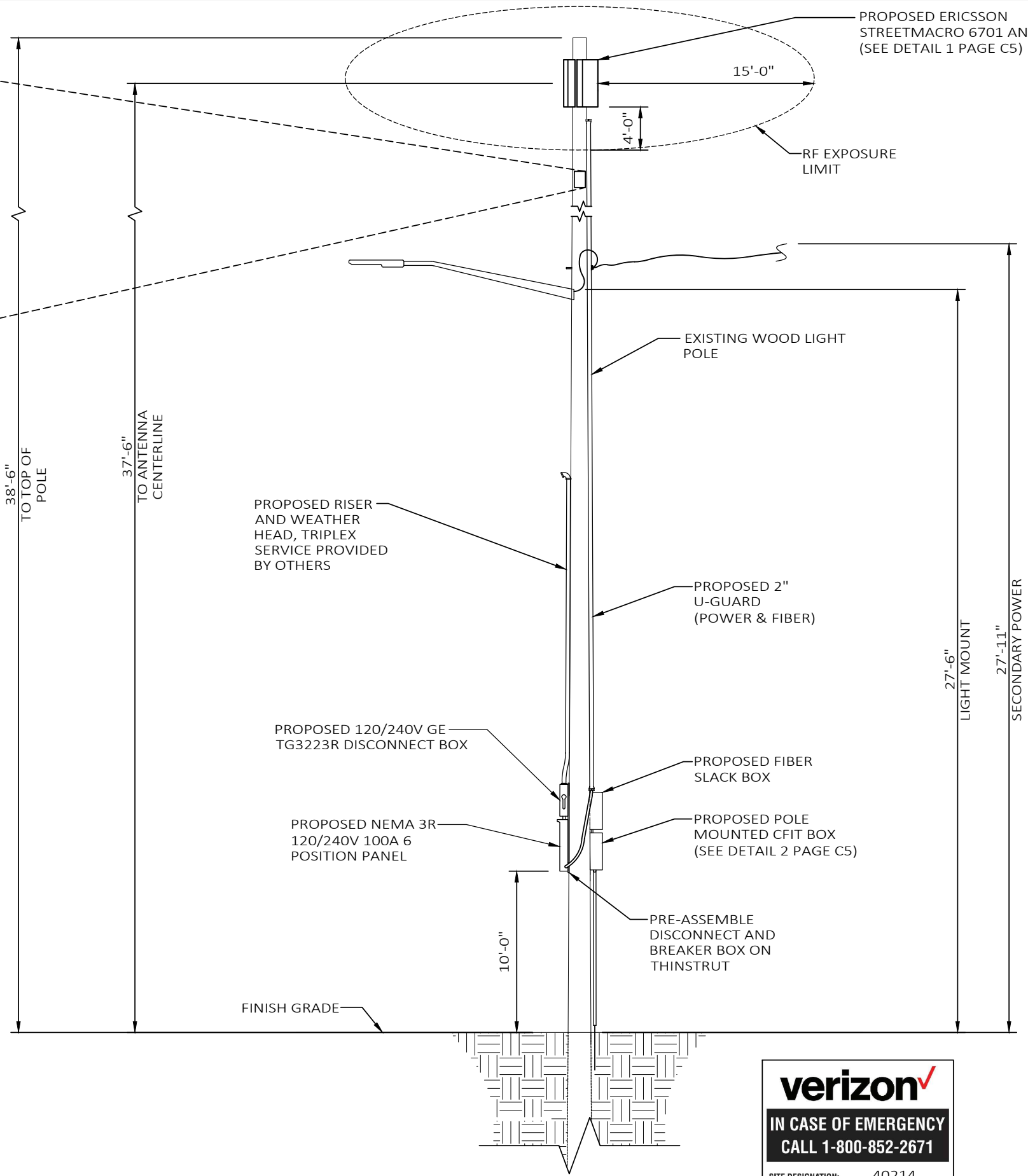


12"x18" RF WARNING SIGN
TYPICAL OF 2

CONTRACTOR TO OBTAIN
LATEST RFDS FROM VERIZON
PRIOR TO CONSTRUCTION.

40" MIN. CLEARANCE
BELOW NEW TRIPLEX
SERVICE

5'-0" MIN. CLEARANCE
ABOVE ANY DTE EQUIPMENT
TO BOTTOM OF ANTENNA



**IN CASE OF EMERGENCY
CALL 1-800-852-2671**

SITE DESIGNATION: 40214

INSTALL ON BREAKER PANEL

PREPARED FOR:



PREPARED BY:

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
FAX: 423-843-9509

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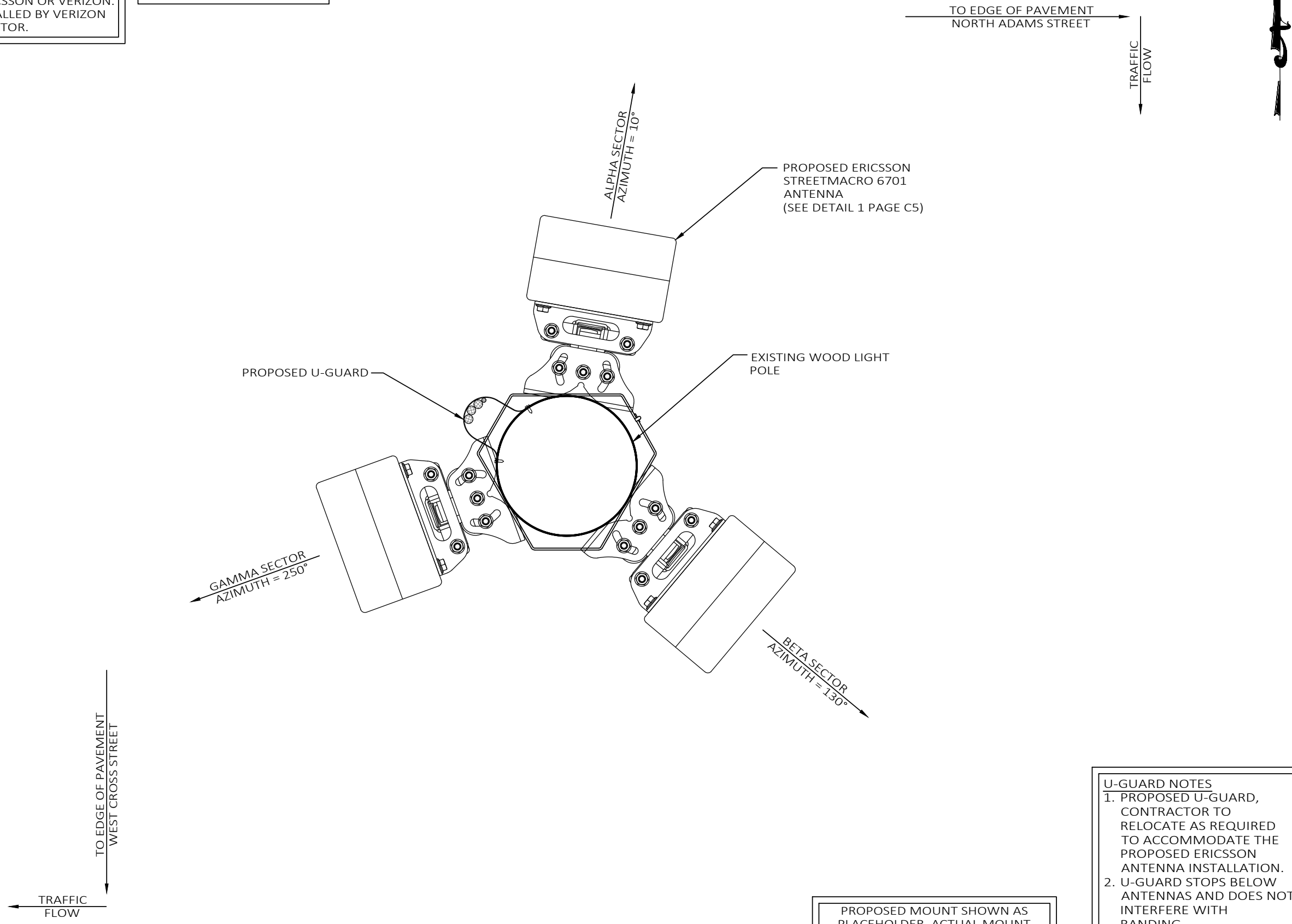
DESIGN TYPE:
COLOCATION

SHEET TITLE:
POLE ELEVATION

DRAWING NO. C2	REVISION: 0
-------------------	----------------

AZIMUTHS ARE SUBJECT TO CHANGE. CONTRACTOR TO VERIFY AZIMUTHS FROM FINAL RFDS FROM VZW. ANTENNA MOUNT TO BE SUPPLIED BY ERICSSON OR VERIZON. ANTENNA TO BE INSTALLED BY VERIZON CONTRACTOR.

INSTALL STRAIN RELIEF FOR POWER & FIBER CABLES AT OR NEAR ANTENNAS



PROPOSED MOUNT SHOWN AS PLACEHOLDER. ACTUAL MOUNT SUBJECT TO CHANGE PER DTE AND VERIZON FUTURE DISCUSSIONS

- U-GUARD NOTES
1. PROPOSED U-GUARD, CONTRACTOR TO RELOCATE AS REQUIRED TO ACCOMMODATE THE PROPOSED ERICSSON ANTENNA INSTALLATION.
 2. U-GUARD STOPS BELOW ANTENNAS AND DOES NOT INTERFERE WITH BANDING.
 3. U-GUARD MUST BE RACEWAY CAPABLE.

PREPARED FOR:



PREPARED BY:

TeleCAD Wireless

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ENGINEER'S STAMP:

STATE OF MICHIGAN

STEPHEN E. HUNT
ENGINEER
No. 6201054169

NOT VALID WITHOUT P.E. STAMP & SIGNATURE

SITE NAME:
40214

COUNTY:
WASHTENAW

LATITUDE:
42° 14' 45.24" N

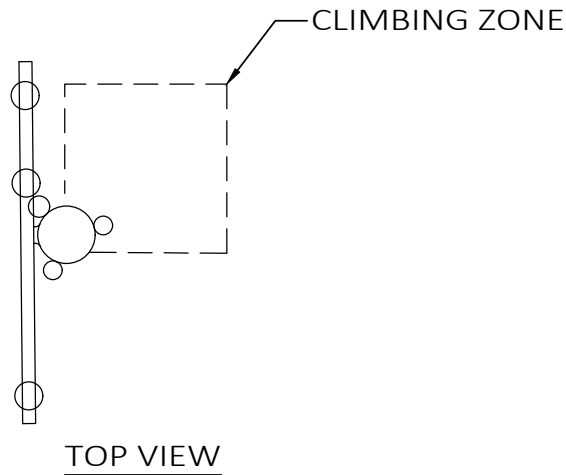
LONGITUDE:
83° 36' 58.14" W

DESIGN TYPE:
COLOCATION

SHEET TITLE:
ANTENNA LAYOUT

DRAWING NO. C2A	REVISION: 0
--------------------	----------------

POLE ATTACHED EQUIPMENT	
EQUIPMENT	VOLUME (CU-FT)
STREET MACRO 6701 ANTENNA	0.46
STREET MACRO 6701 ANTENNA	0.46
STREET MACRO 6701 ANTENNA	0.46
TOTAL IN CU-FT	1.38



- NOTES:
1. WORKING CLEARANCE FROM ENERGIZED ANTENNA MUST BE GREATER THAN 4 FT, OTHERWISE SHUT DOWN RADIO AND ANTENNA PER INSTRUCTIONS ON PLACARD OR BY OPENING DISCONNECT SWITCH TO RADIO EQUIPMENT ON POLE.
 2. ANTENNA AND MOUNTING BRACKETS INSTALLED ABOVE DTE WIRES MUST BE INSTALLED AND MAINTAINED BY DTE OR DTE'S DESIGNATED CONTRACTOR.
 3. VERTICAL CLIMBING ZONE MUST BE MAINTAINED ON ALL POLES. (SEE TOP VIEW)
 4. BASE CABINET TO BE CLEARLY LABELED WITH OWNER'S NAME AND 1-800 PHONE NUMBER WITH 3/4" TALL LETTERING.
 5. SHUTDOWN PLACARD TO BE PLACED ON THE POLE NEAR BASE CABINET AND DISCONNECT SWITCH BOX.
 6. 5' FT MIN. CLEARANCE ABOVE ANY DTE EQUIPMENT.
 7. ANTENNA POLE TOP CLEARANCES APPLY TO ANY DTE EQUIPMENT OR WIRES INSTALLED UNDER THE ANTENNA.

REFERENCE DTE ENERGY
CELLULAR ANTENNA SMALL CELL SITE CONSTRUCTION
LINE CONSTRUCTION STANDARDS 4-JOINT USE 1-4-26.1
DATED 11/1/2017

PREPARED FOR:



PREPARED BY:

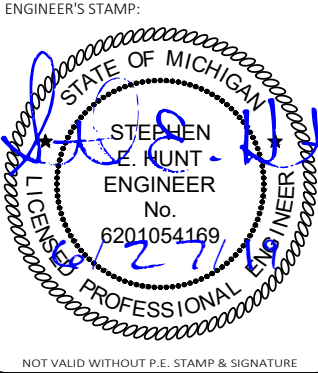


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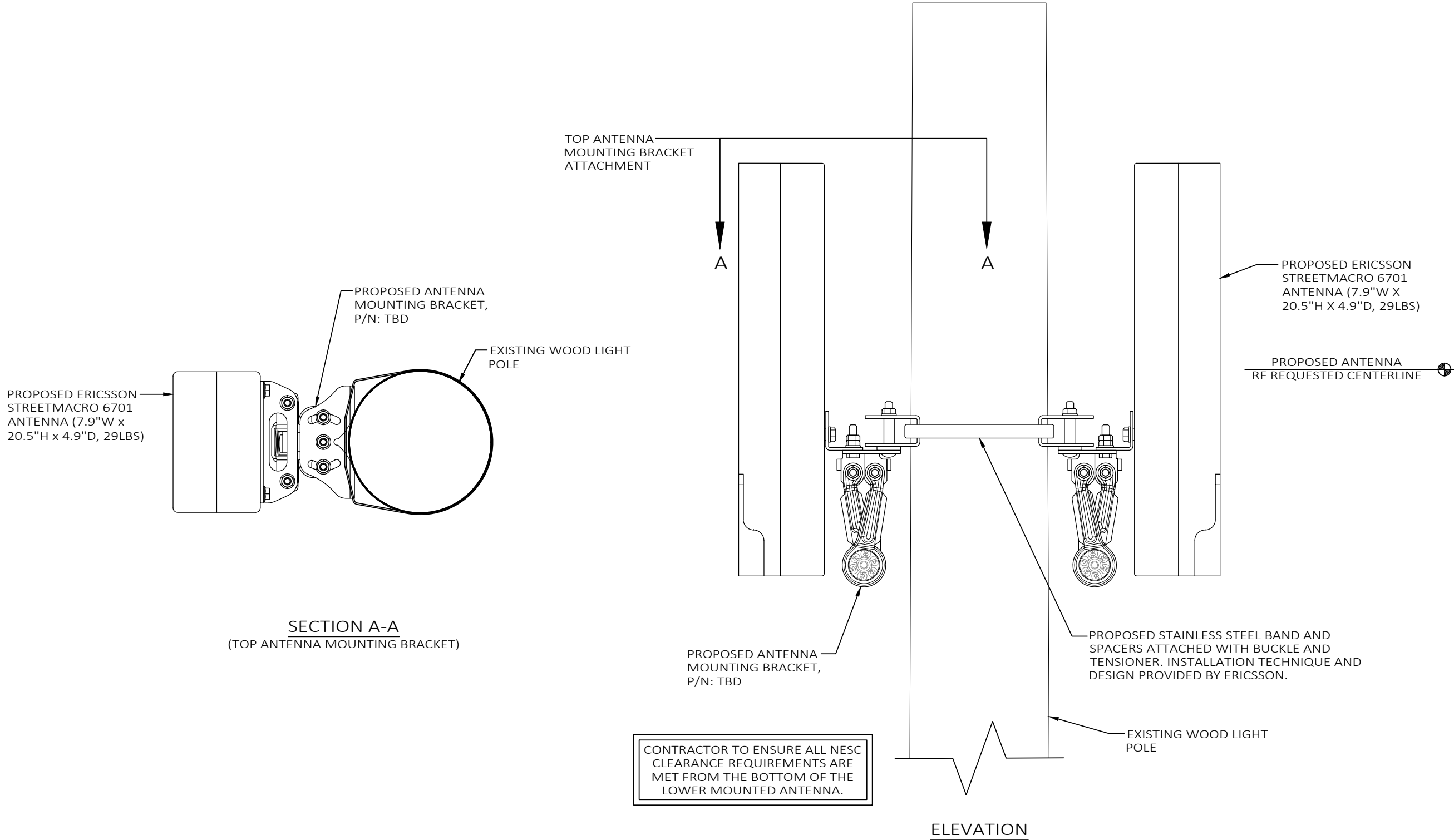
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SITE NAME:	40214
COUNTY:	WASHTENAW
LATITUDE:	42° 14' 45.24" N
LONGITUDE:	83° 36' 58.14" W
DESIGN TYPE:	COLOCATION
SHEET TITLE:	DTE NOTES
DRAWING NO.	REVISION:
C3	0



PREPARED FOR:



PREPARED BY:

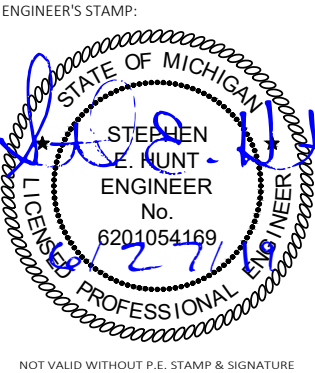


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COUNTY:	WASHTENAW
LATITUDE:	42° 14' 45.24" N
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DESIGN TYPE:	COLOCATION

SHEET TITLE:	SITE DETAILS
--------------	--------------

DRAWING NO.	REVISION:
C4	0

Spectrum:

IBW

OBW

EIRP

28 GHz

Full band

800 MHz

~ 55 dBm

of Users:

Total Antenna BW:

Throughput:

RI ports:

TN/IDLports:

Misc:

2,000+

1600 MHz

5 Gbps DL/ 1 Gbps UL

2

2

4xExternal Alarms, USB connector
PoE, GPS, 1588 Synch

Weight:

Size:

Operational conditions:

Cooling:

Power:

IP Class:

~ 13 kg (29 lbs)

20,5"x4,9"x7,9" (13 l)

-40 to +55 degrees

Active

AC, <300W Max

IP 65

Ericsson Confidential | 2018-03-15



20,5"x5"x8" Not to Exceed Dimensions

CFIT BOX

PART CODE: CFIT-C48D4LHXVZ
DESIGNED BY CHARLES INDUSTRIES



PRODUCT SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
HEIGHT (PANEL ONLY)	15 in.
DEPTH, BASE (FRONT TO BACK)	5.5 in.
WIDTH	12 in.
WEIGHT	4 lbs.
CONSTRUCTION	RUGGED UL94-5VA GRAY POLYCARBONATE
SUPPORTED FIBER CONNECTOR TYPES	SC, LC or MPO
COMPLIANCE	DESIGNED TO MEET GR-950, GR2898, NEMA 4, IP66
SPLICING CAPACITY	UP TO THREE (3) 4"x6" HINGED SPLICE TRAYS ON FEED FIBER SIDE.
BULKHEAD CAPACITY	24 SC ADAPTERS

PREPARED FOR:



PREPARED BY:

TeleCAD

Wireless

1961 NORTHPOINT BLVD, SUITE 130
HIXSON, TN 37343
PH: 423-843-9500
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SITE NAME:
40214

COUNTY:
WASHTENAW

LATITUDE:
42° 14' 45.24" N

LONGITUDE:
83° 36' 58.14" W

DESIGN TYPE:
COLOCATION

SHEET TITLE:
EQUIPMENT DETAILS

DRAWING NO. C5	REVISION: 0
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ELECTRICAL NOTES:

1. PROVIDE AND INSTALL WARNING TAPE FOR ELECTRIC SERVICE CONDUIT 12" BELOW GRADE.
2. CONTRACTOR TO PAY FOR THE SERVICE AS DIRECTED BY THE MUNICIPALITY.
3. CONTRACTOR TO USE PVC SCH 40 CONDUIT WHERE CONDUITS CROSS ACCESS ROADS.
4. CONTRACTOR SHALL COORDINATE WITH ELECTRIC AND TELEPHONE UTILITY COMPANIES FOR SERVICES.
5. CONTRACTOR TO PAY ALL FEES FOR SERVICES REQUIRED.
6. CONTRACTOR TO BE ADVISED THAT EXISTING UNDERGROUND CONDUITS, GROUND CABLES EXIST. DIG WITH CAUTION.
7. CONTRACTOR TO VERIFY POWER AND TELCO LB LOCATIONS AND FLEX CONDUIT SIZE AND ROUTING TO THE EQUIPMENT SHELTER WITH MANUFACTURER'S DRAWINGS.
8. OPEN CUT CONSTRUCTION THROUGH EXISTING PAVEMENT, I.E. ROADWAYS, PARKING AREAS, SIDEWALKS WILL NOT BE ALLOWED. CONSTRUCTION UNDER EXISTING PAVEMENTS WILL BE REQUIRED TO BE INSTALLED WITH DIRECTIONAL BORING TECHNIQUE.

UTILITY NOTES:

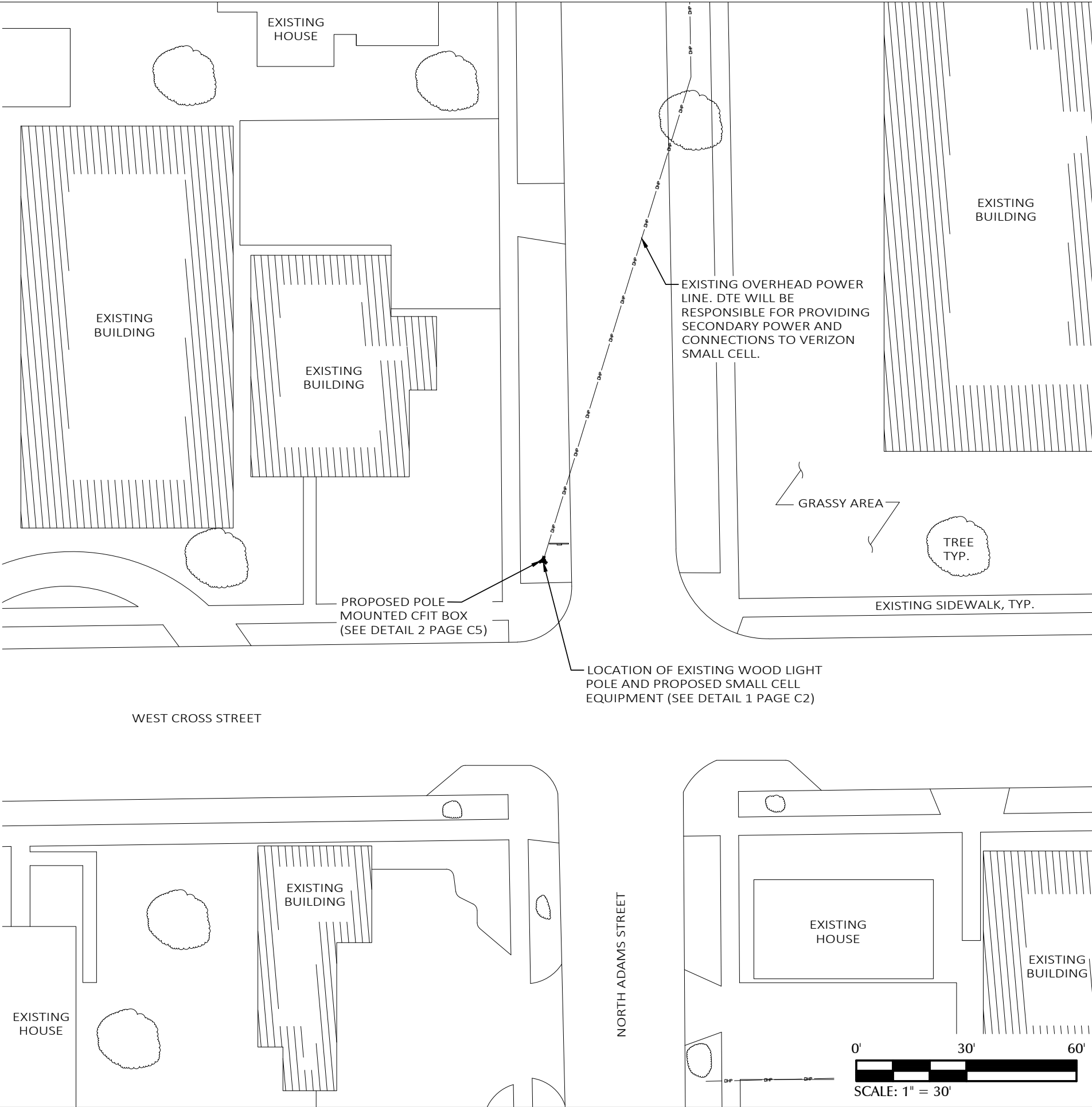
1. ALL POWER CONDUITS ABOVE GRADE, SWEEPS, & ELBOWS TO BE PVC SCH 40.
2. INSTALL PULL STRING IN TELCO CONDUIT.

STANDARD POWER SUPPLY FOR THE SMALL CELL NODES IS A 100 AMP 120/240 VOLT SINGLE PHASE SERVICE

SERVICE CONDUCTOR MAXIMUM DISTANCE CHART (BASED ON 80 AMP MAX. CONTINUOUS LOAD)			
WIRE SIZE	ALUMINUM 120V	COPPER 120V	CONDUIT SIZE
3 AWG	55'	90'	3/4" MIN
2 AWG	70'	115'	3/4" MIN
1 AWG	85'	145'	3/4" MIN
1/0 AWG	110'	180'	1" MIN
2/0 AWG	140'	230'	1" MIN
3/0 AWG	175'	290'	1 1/4" MIN
4/0 AWG	220'	365'	1 1/4" MIN
250 KCMIL	265'	435'	1 1/4" MIN
300 KCMIL	315'	520'	1 1/2" MIN
350 KCMIL	370'	610'	1 1/2" MIN
400 KCMIL	420'	695'	2" MIN
500 KCMIL	530'	870'	2" MIN

LEGEND

UNDERGROUND POWER	USP	CATCH BASIN	CB
OVERHEAD POWER	DHP	IRON PIN SET (IPF) 3/8" REBAR	IPF
OVERHEAD UTILITIES	DHU	IRON PIN FOUND (IPF)	IPF
UNDERGROUND TELCO	UGT	BENCHMARK	BM
OVERHEAD TELCO	DHT	CONCRETE MON. FOUND	CMF
GAS LINE	GAS	CONCRETE MON. SET	CMS
FENCE	X	UTILITY POLE	UP
SEWER LINE	SVR	LIGHT POLE	LP
WATER LINE	VTR	WATER VALVE	WV
COAX CABLE	C	MANHOLE	M
HYBRID CABLE	HYB	GAS VALVE	GV
HIGH VOLTAGE POWER	HVP	FIRE HYDRANT	FH
FIBER	FBR	TELCO PEDESTAL	TP
RIGHT-OF-WAY	RDW	ELECTRICAL PULL BOX	EPB
PROPERTY LINE	PL		
EDGE OF PAVEMENT	EDP		



PREPARED FOR:



PREPARED BY:

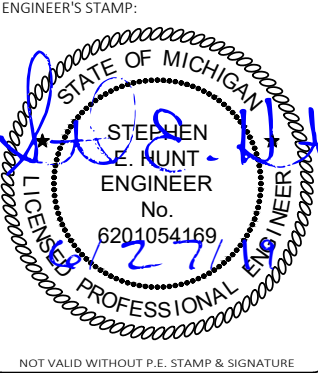


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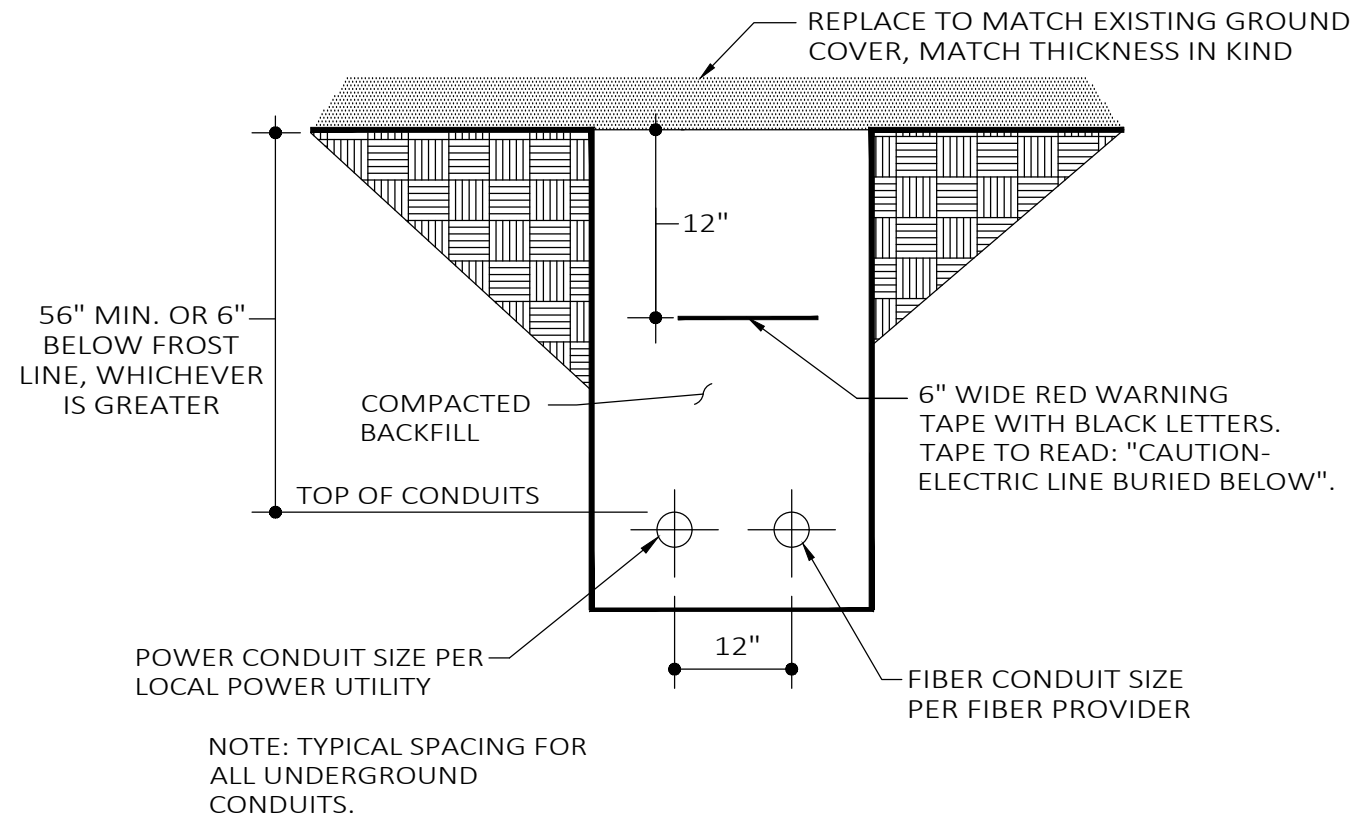
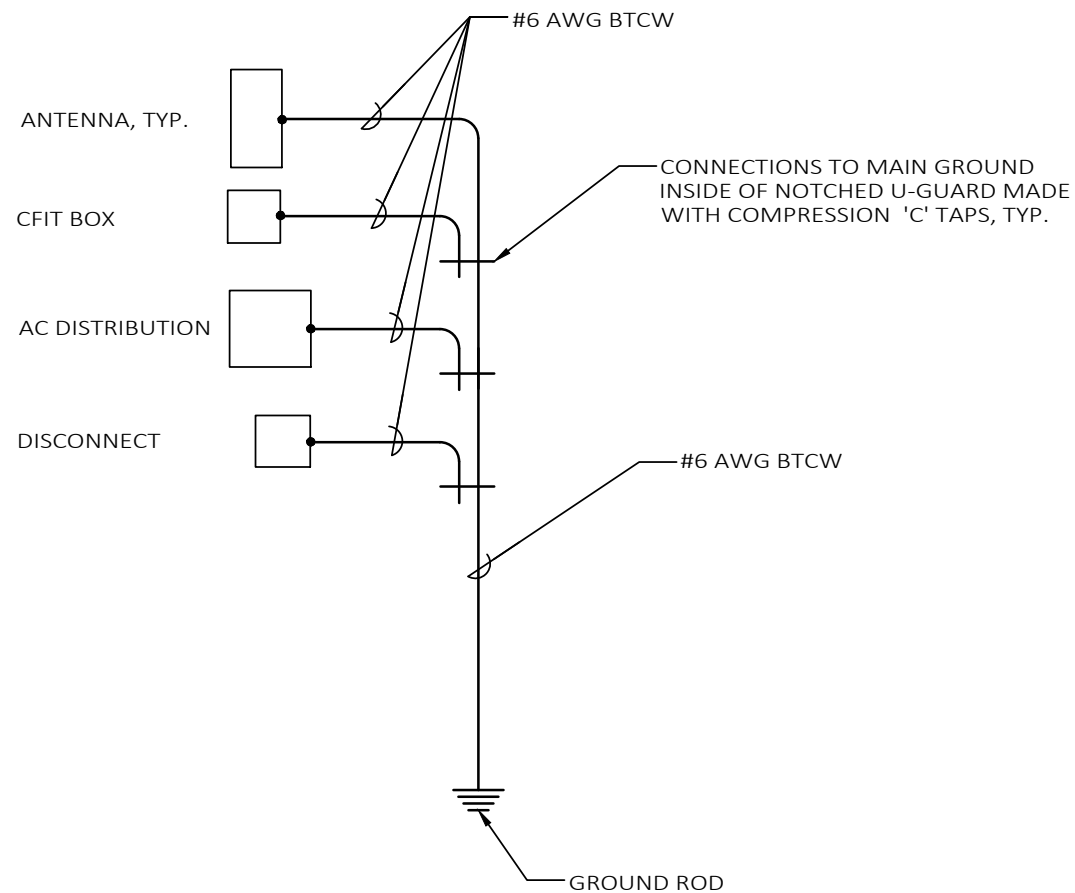
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SITE NAME:	40214
COUNTY:	WASHTENAW
LATITUDE:	42° 14' 45.24" N
LONGITUDE:	83° 36' 58.14" W
DESIGN TYPE:	COLOCATION

SHEET TITLE:
UTILITY SITE PLAN

DRAWING NO. E1	REVISION: 0
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PREPARED FOR:

verizon

PREPARED BY:

TeleCAD Wireless

1961 NORTHPOINT BLVD, SUITE 130
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ENGINEER'S STAMP:

STATE OF MICHIGAN

STEPHEN E. HUNT
ENGINEER
No. 6201054169

LICENSED PROFESSIONAL ENGINEER

NOT VALID WITHOUT P.E. STAMP & SIGNATURE

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40214

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WASHTENAW

LATITUDE:

42° 14' 45.24" N

LONGITUDE:

83° 36' 58.14" W

DESIGN TYPE:

COLOCATION

SHEET TITLE:

ELECTRICAL DETAILS

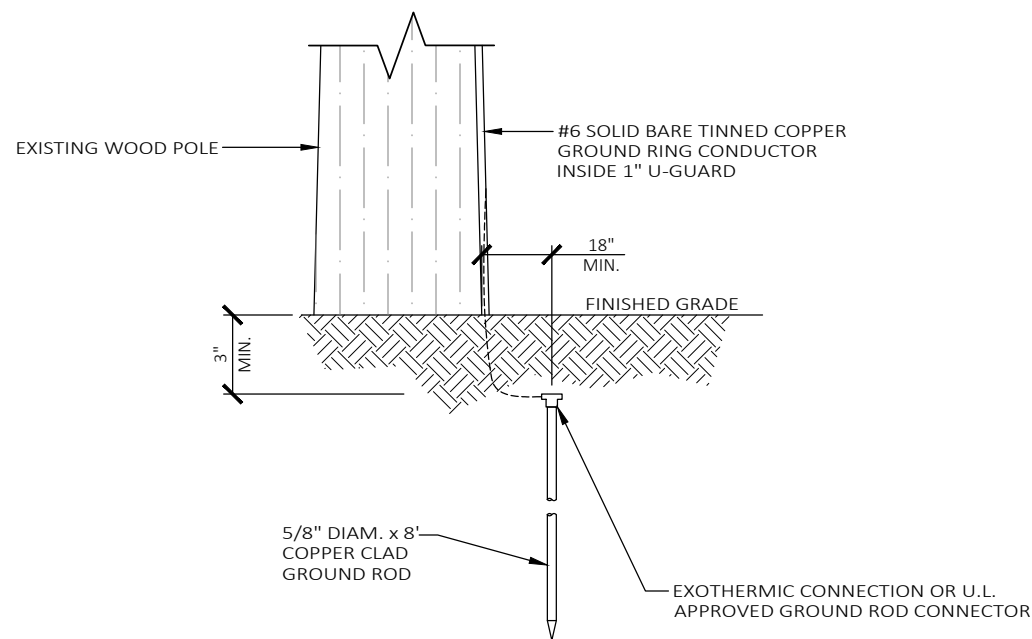
DRAWING NO.	REVISION:
E2	0

1 SINGLE POINT RADIAL GROUND DETAIL

N.T.S.

2 TRENCH DETAIL (IF REQUIRED)

N.T.S.



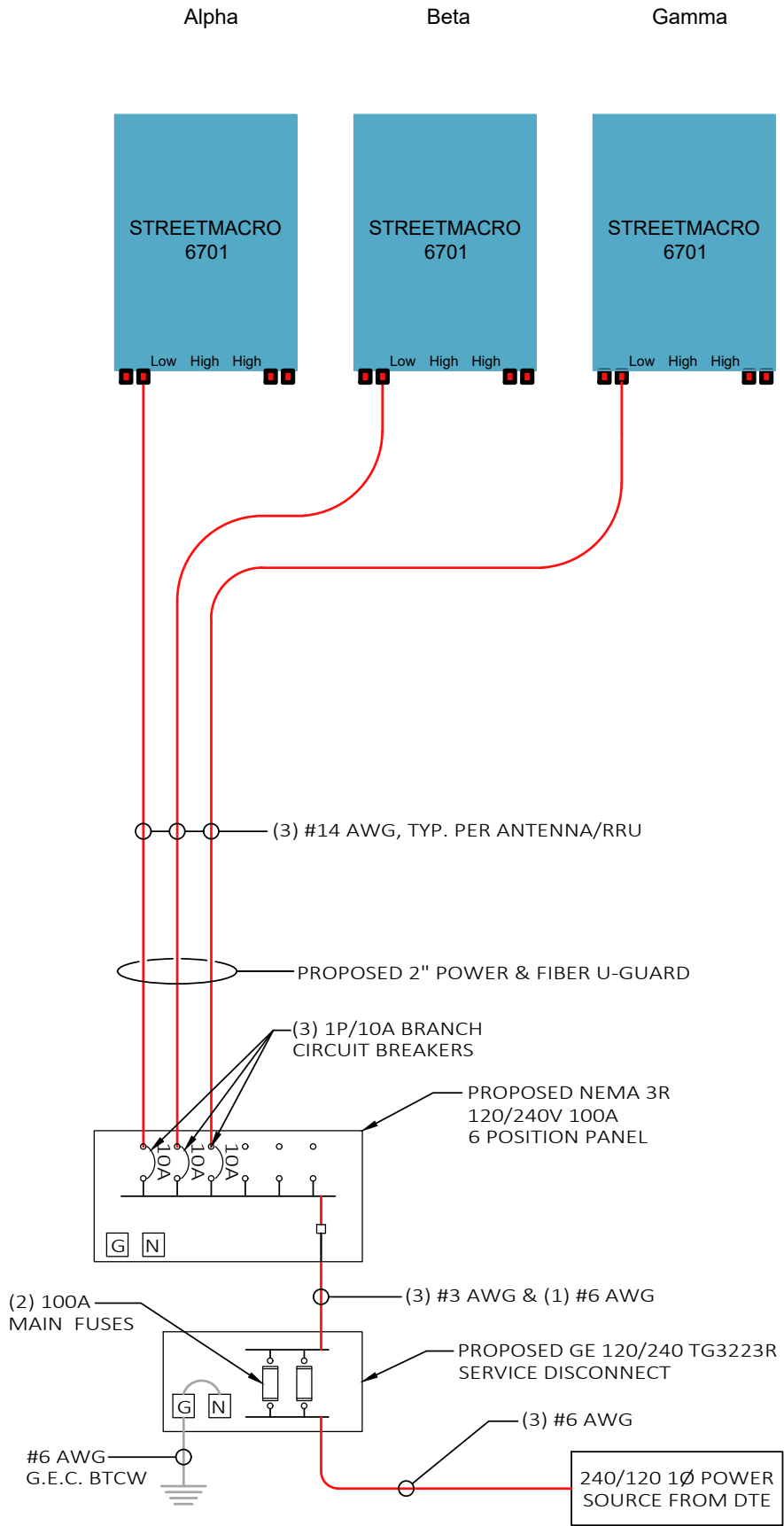
3 GROUND ROD DETAIL

N.T.S.

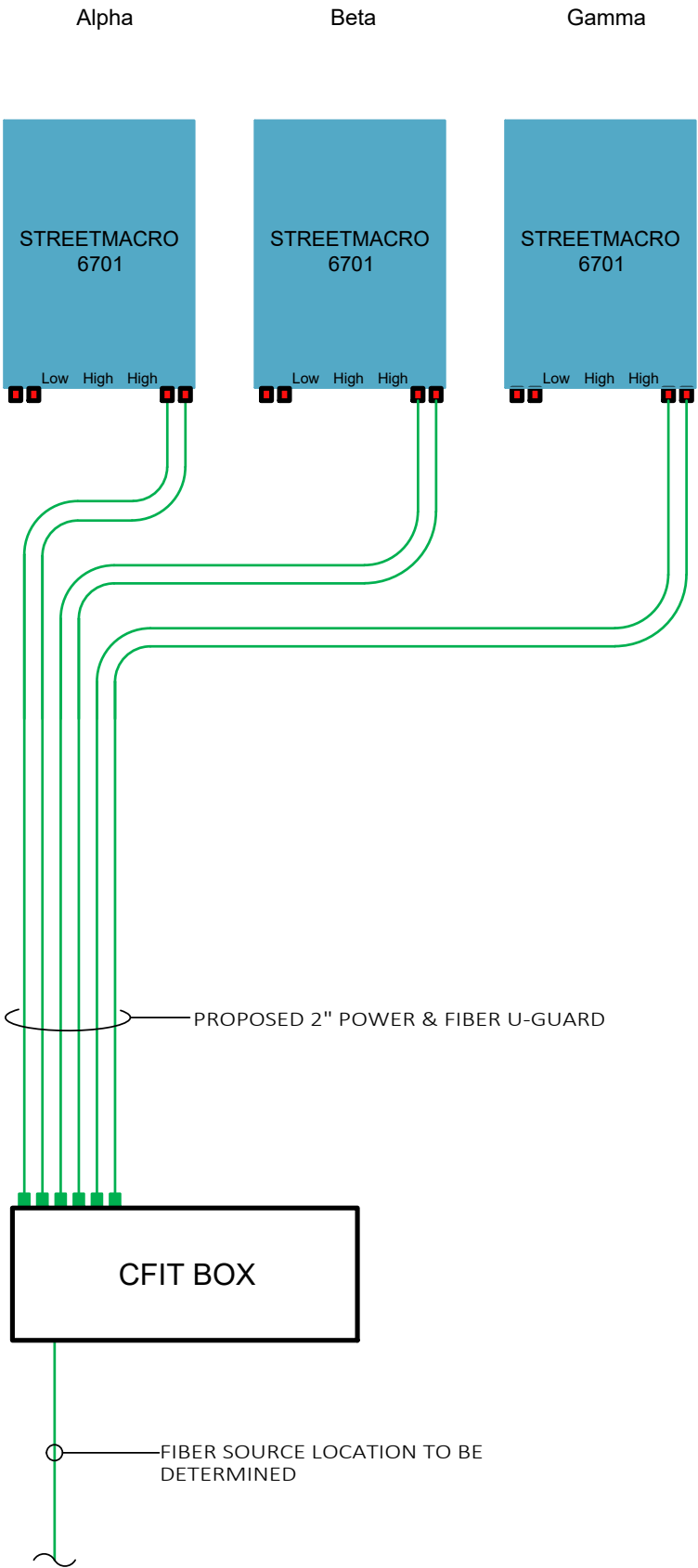
4 DETAIL NOT IN USE

N.T.S.

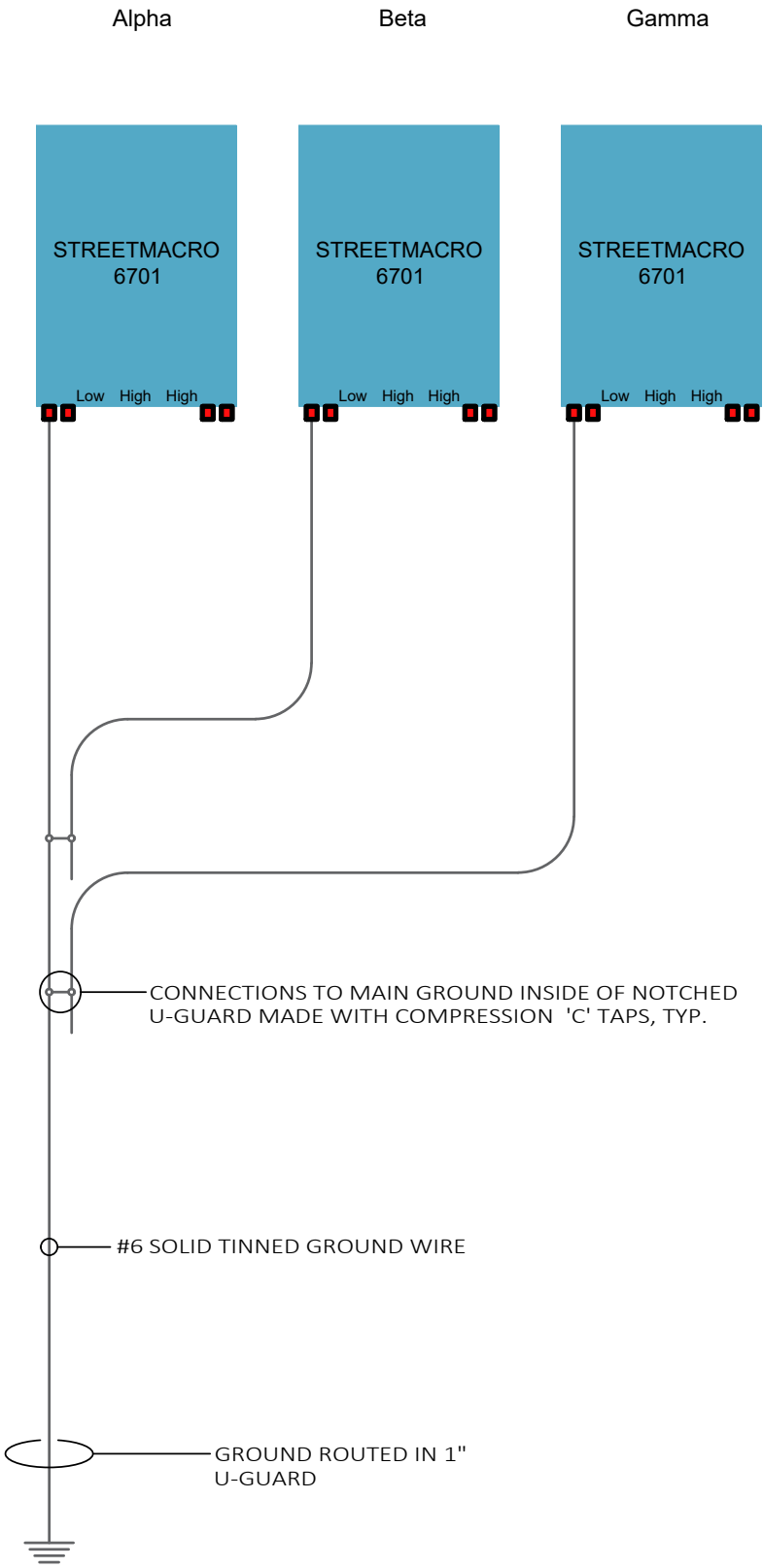
POWER ROUTING



FIBER ROUTING



GROUND ROUTING



PREPARED FOR:



PREPARED BY:

TeleCAD Wireless

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ENGINEER

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DESIGN TYPE:	COLOCATION

SHEET TITLE:
SINGLE LINE DIAGRAM

DRAWING NO.	REVISION:
E3	0



MINUTES

City of Ypsilanti
HISTORIC DISTRICT COMMISSION MEETING
Ypsilanti Historical Society – 220 N Huron Street
Ypsilanti, Michigan 48197

Tuesday, December 10, 2019
7:00 P.M.

CALL TO ORDER AND ROLL CALL

Alex Pettit Interim Chair 7:00 PM

Commissioners Present: Alex Pettit, Hank Prebys, Ron Rupert, Amy Swift

Commissioners Absent: Anne Stevenson, Erika Lindsay

Staff Present: Scott Slagor, Preservation Planner

APPROVAL OF AGENDA

Motion: Rupert (second: Prebys) moved to approve the agenda as submitted.

Approval: Unanimous. Motion carried.

PUBLIC COMMENT ON AGENDA ITEMS- none

PUBLIC HEARING—none

OLD BUSINESS

422 N Hamilton

**Demolition by Neglect Consideration*

Owner: Karl Staffeld, present.

Staffeld: Summarized HDC approvals from November 26, 2019. Stated that the necessary permits were released by the Building Department and they have started work. Stated that the vegetation outside of the building was removed. Interior work included straightening the building using chains and showed photos. Stated that one corner has been straightened and another is still out of plumb; but will be fully corrected when the king truss is installed. Has a quote to re-roof the building and permits are in-place. Indicated he is planning on continuing work over the next two weeks

Swift: Asked what the roof material will be.

Staffeld: Indicated the outbuilding roof will match the roof of the house, a dimensional shingle that was approved on November 26, 2019.

Prebys: Stated he is pleased to hear activity that has taken place, which is a step in the right direction.

Prebys: Asked how to proceed.

[Discussion of appropriate motion]

Swift: Asked the applicant when they planned to have the work completed.

Staffeld: Replied a month to month and a half.

Swift: Asked the commission if there should be a checkup after the work is complete?

[Monitoring Discussion}

Motion: Prebys (second: Rupert) Move to state that the outbuilding at 422 N Hamilton appears to no longer in danger of Demolition by Neglect, however the commission wishes to maintain review of the building and asks the owner to revisit the commission at first meeting in February.

Approval: Unanimous. Motion carried.

NEW BUSINESS

32-42 N Huron

**Boulder Retaining Wall.*

Applicant: Lary Yapp, owner- present.

Discussion: Yapp: Indicated this is an after the fact application, as there were some questions as to where a permit was required. Now that he knows a permit is required, he is submitting for approval. The goal was to make the appearance similar to what was there before, green and unruly, but that was not possible economically and because of the borings taken revealed it was not going to be possible to sink either steel pilings or build a concrete retaining wall. Either of those options would have been destructive to parking lot, requiring installation of dead men, which would have taken out parking lot and had years of settling. He opted for boulder stones and to do the best he could with landscaping.

Prebys: asked how the drainage is dealt with.

Yapp: Indicated the drainage did not change at all. There is drainage in the center of the parking lot, French drains that have pipes going in multiple direction. If they fill up, there is a spillway that comes out of a pipe.

Pettit: Asked if any of the new grading is toward the wall.

Yapp: Stated the grading is toward the drainage.

Prebys and Rupert: [Complimentary discussion on the appearance]

Motion: Prebys (second: Rupert) Move to issue a Notice to Proceed for work already completed at 32-42 N Huron, as submitted in the application dated November 18, 2019, for construction of a boulder retaining wall with landscaping.

Secretary of the Interior Standards:

#9 – Contemporary designs shall be compatible and not destroy significant original material.

Approval: Unanimous. Motion carried.

209 Pearl

**Awning and gate.*

Applicant: Mark Maynard, owner, present.
Daniel Kelnotic, business owner, present

Discussion: Maynard: Stated he had come to the HDC on two other occasions regarding renovation of the property, including redoing historic windows and installing doors into the alley, which was approved. The HDC also approved cement removal with guidance on stamping. To-date the historic windows had been rebuilt and reinstalled, and the cement has been cut. The subject application revisits a study item from a year ago, including a fabric awning and a gate at the front of the alley space, behind the front door. Stated he will eventually come back to the HDC discuss signage.

Swift: Asked if the gate will be operable or static.

Maynard: Indicated it will be movable per Fire Department request that it be on hinges so they could get through if they had to. The Fire Department would like to have access, even though the space it is too narrow for a truck. The Fire Department will have a key in case they need access.

Swift: Asked for clarification of the awning in the photo.

Maynard: Confirmed and stated that the awning has a square front panel and will be angled behind. [References other photos].

Rupert: Asked to confirm that the awning is canvas.

Maynard: Confirmed.

[Awning material discussion]

Rupert: Asked to confirm that the framework will be secured to the building.

Maynard: Confirmed. Awning will secured to the building in the mortar, not the brick. Will be freestanding and not touching the next-door building.

Petit: Asked if the structure cantilevers.

Maynard: Stated there are posts supporting the awning.

Pettit: Asked the color of the fabric.

Maynard: Stated it is off-white.

Kelnotic: Confirmed canvas brand and model number.

Pettit: Asked to confirm where sign will go on awning.

Maynard: Confirmed the schematic- on face of awning.

Swift: Asked about lighting.

Maynard: Indicated they will return with an application for awning lighting.

[Discussion of timeline]

Swift: Asked to clarify awning height in relation to second story windows.

Maynard: Aim to miss the windows, believes the height is 10 to 13 feet.

Swift: Asked to confirm sill to awning.

Maynard: Indicated that he does not believe the awning is higher than 13 feet, but knows the second story windows are taller than that.

Swift: Asked to make sure the awning does not interact with upper story windows.

Maynard: Does not think it would be, and there is a lot of clearance.

Motion: Prebys (second: Rupert) Move to approve and issue a Certificate of Appropriateness for the work proposed at 209 Pearl, as submitted in the application dated November 19, 2019, for installation of a boxed awning and gate at the east elevation of the building. The awning and gate structures shall be mounted to the building's mortar joints to the greatest extent possible. The awning is to be of a white canvas material.

Secretary of the Interior Standards:

#9 – Contemporary designs shall be compatible and not destroy significant original material.

#10 – New work shall be removable.

Approval: Unanimous. Motion carried

[Discussion of restaurant plans]

100 W Michigan

**Applicant amended application to include only masonry work and window infill.*

Applicant: Conor Doran, project manager –present.

[Commissioners commented on the improved appearance of the building.]

Discussion: Doran: Suggested leading with the drawing submitted with the application in the packet.
[Passed out photos to show current condition of some of the windows].

Swift: Asked if the original jambs were altered by the vinyl windows.

Doran: Stated that the problem with the vinyl windows is they are sticking out at the level of the former cladding. Inquired if economically -they can be saved for now, but jambs on all windows are rotted and in bad shape.

Staff: suggested going item by item on the staff review.

[Discuss windows first]

Doran: Indicated that the shop-front at 100 W Michigan has to be removed because of the work in the corner on the foundation. There is a single beam across the shop front that is sagging and needs to be replaced. Hoping to replace the exterior facing with dark bronze aluminum. Will probably do 102 W Michigan side of the building as well, which is not necessary structurally but would be better aesthetically. Also hoping to replace façade vinyl windows with matching dark bronze aluminum-framed standard rectangular windows with no great detail.

Prebys: Asked if the windows would be double-hung.

Doran: Stated that no, the windows would be solid glass.

Rupert: Asked if the windows would be casement.

Swift: Asked if the windows would be fixed with divided lights or one single pane.

Doran: Confirmed the windows will be one single fixed light.

Swift: Inquired about original windows.

Slagor: Confirmed from photos that the original windows were similar to extant windows on the east elevation.

[Discussion of original arched openings]

Doran: The façade windows have rebuilt jambs to be square within the arch. Indicated that the goal is to keep the arch but recess the window within the arch, so the arch is still visible.

[Continued discussion of original arched openings and jambs, and original window glazing pattern]

Swift: Interpreted that there are two scenarios of the extant windows: a scenario where the original windows have been encased and although existing, are in poor condition; and a scenario on the front where there are non-original windows in altered jambs that need structural work because they were built out to the façade that had been removed. There are two approaches that need to be discussed, first the condition of the vinyl windows with a new jambs and what to do. Second is the original/existing windows in their original construction.

Rupert: Asked to discuss vinyl windows first. Indicated his feeling was there was an opportunity to replicate what was originally there.

Doran: Stated that replication windows are not economical. If they are forced to replicate wood windows or windows with divided lights, it will stop the project because they do not have the money to do that.

Swift: Indicated that there is a fair level of leeway for existing non-compliant material already in place, as opposed to new work that is not in compliance. The HDC cannot give authority to recreate work that is not in compliance, while grandfathered work is easier to approve. For the applicant to put new windows in and with the amount of work needed to put new windows in, they need to be in compliance with the Secretary of the Interior Standards. Asked applicant if that made sense.

Doran: Replied, that they need to know what they [the standards] are. Indicated they originally priced something more appropriate but came in over \$200,000, which would blow them out of the water. What they are proposing, with the storefronts, is coming in closer to \$65-70,000.

Swift: Asked if that quote was just for the front façade windows.

Doran: Asked to discuss the elevations separately.

Pettit: Indicated he does not have a clear picture of what was being proposed for the south elevation (façade). Asked for clarification.

Doran: Referenced color-coded drawing [staff provided original and referenced the packet]. On east elevation, they would replicate what they're doing on the façade for the first two bays (south to north). The third and fourth bays masonry need to be demolished and rebuilt. Trying to replicate the openings on those bays would be extremely costly. Stated they would like to brick the whole bays.

Swift: Asked to clarify that the entire four openings would go away.

Doran: Confirmed. [Referenced yellow/orange area on drawing.]

Doran: Indicated bays 5 and 6 would replicate façade windows and remaining bays would be bricked up as they do not provide light into the building. They are going into stairways, bathrooms, closets, etc. Stated the HDC approved something similar on the north of the building when the elevator shaft was completed. [Referenced brick sample]. Stated eventually everything would be painted.

Rupert: Asked to confirm the openings that would be retained vs. the openings that will be infilled.

Doran: Confirmed.

Swift: Stated her concern was that the proposed window changes are on main facades, while the previously approved infill was on the alley façade; and the proposed changes affects a lot of windows.

Doran: Asked the commission to consider that before the cladding was removed, there was only two windows on that side of the building.

Swift/Prebys: Acknowledged.

Prebys: Asked about the arched openings on east elevations.

Doran: Stated they could replicate a wood or brick infill.

[Discussed arched openings on east elevation]

Doran: [Reviewed the photos and drawings with the commission]

Swift: Asked to confirm that there are a variety of conditions present.

Doran: Confirmed.

[Continued review of photos]

Doran: Indicated another issue with the windows is the building's interior framing. The wood frame inside the building is on a new foundation that supports the building. The masonry is no longer the structural support. In order to reveal a window in the masonry, they must work around the internal wood framing. It is very involved, which is why they do not want to do that for the rooms that do not need windows.

Rupert: Indicated he had no problem bricking up windows, recessing the brick, and leaving the arch as it matches the back. It shows that in the past there were windows or doors present.

Doran: There has been some patchwork brick infill already.

Rupert: Referenced drawing and suggested to retain door opening reveal in brick.

Rupert: Indicated the commission may be in agreement on infill, but need to come to an agreement on how to treat the windows.

Swift: Disagreed. Stated that they needed to discuss more the number of windows to be infilled. Confirmed that brick recess is appropriate, but needed to discuss the amount of windows that will not be reopened.

Rupert: Indicated that the windows could be unbricked and reopened in the future.

Swift: Asked to discuss the visual impact and acknowledged that there has not been windows on that elevation for many years, however it would impact more than 50% of the façade, so it should be discussed.

Pettit: Indicated that the changes to the inside may affect exterior considerations. The windows uncovered have not seen the light of day in decades, and if not for this work, they would not be having the conversation. Stated that the applicant was not required to remove the cladding. Indicated understanding that the pattern would change.

Swift: Indicated concern that there is extant original material that they would be authorizing the removal of in order to brick in.

Pettit: Stated that some windows are altered.

Swift: Affirmed. Stated that the ones that they do have, she would like to think very clearly about the decision to approve when they are the only remaining windows in that structure that could be used as a template for future work. Once they are gone, there would be no template to redo.

[Discussion removal of original windows]

Doran: Stated there would be no way to preserve them and make them function.

Rupert: Stated that preserving original windows was achieved across the street [101 W Michigan]. They were even worse as they were exposed.

Swift: Stated that where there is evidence of original windows that they think through the choices.

Doran: Stated they could try and keep the windows for future reference.

Swift: Asked to see the photo.

Doran: Stated that the interior photos are challenging to take because of the framing.

[Review of photos provided in engineering and staff reports].

Swift: Marked her copy of the reports with what she believed to be original window fabric.

[Discussion of window infill and visual balance and photos].

Swift: Indicated that in her opinion, in the instances where there are rebuilt jambs, they can give some leeway if they discuss areas where there is original windows and original visual design. Acknowledged higher cost. Asked if there was a middle ground that could be reached.

Doran: Stated that they asked three glazers and was not able to find anyone who would even consider working on the original windows. Stated he is happy to get that in writing.

Swift: Asked about the contractor who worked on 101 W Michigan.

Doran: Stated they asked the mason but not the glazer.

Slagor: Asked Doran to elaborate on discussions they had regarding the structural compromises to the original windows because of the structural instability of the masonry.

Doran: Confirmed. The closer to the side [corner] it is, the greater the structural compromises and is probably why many windows are broken because of settling.

Rupert: Stated it was the same problem with the Thompson Building [400 N River].

Swift: Indicated she does not believe that the proposed solution for the windows meets the Secretary of the Interior Standards and is trying to find a trade-off so the commission has some of what they need- a compliant window solution, so they can preserve some of the character of the structure.

Doran: Affirmed that he understood. Stated that windows present are beyond salvageable. Indicated he would not like a patchwork solution where some are replaced but not others.

Swift: Stated the proposed solution is a patchwork of replacement and infill. Not saying that they need to preserve existing windows materially, but need to visually.

Slagor: Asked HDC if the same visual rhythm could be achieved through painting the infilled openings.

Swift: Stated that the double jamb of the original windows have shadow lines and a different visual affect than even one-over-one windows with muntins. Indicated concern for retaining that affect. Stated there is an opportunity to honor some of the character that was discovered.

Doran: Stated that they were hoping to unveil something pristine, but that did not happen. Stated that they are spending a lot of money to restore original lead-framed shop front window on the façade. Also going to preserve "Landy's Furniture" sign in a neutral color. They are looking to keep as much character as possible, but it went from a \$600,000 project to a \$1.6 million. The bank is only willing to lend \$1.1 million. Is hoping the commission will factor in economic concerns.

Swift: Stated that for the HDC to factor in economic concerns, they would need to see the bids, identify the costs of certain solutions, and what the barriers are to doing certain approaches.

Pettit: Stated the HDC needs to provide better guidance, as it is possible to identify some better options.

Swift: Asked Doran who they had review the windows.

Doran: Stated he did not know off-hand but could get that information.

Swift: Asked if they were looked at by someone who does not just sell new windows.

Doran: Asked the glazer who was doing the shop front window, with the intention to have him repair. The glazer determined that it was not feasible. Stated he could get bids from others.

Swift: Stated she would like to see a specific contractor come and look at the windows.

Slagor: Stated that the HDC is not allowed to recommend or ask for specific professionals.

[Discussion of the importance of historic windows]

Doran: Stated they are under a huge time crunch. There is a mason lined up for tomorrow-pending approval. There is potential that if they cannot work within budget, the project will stop.

Swift: Reaffirmed the HDC would like to find a solution within the Secretary of the Interior Standards.

Doran: Asked what those standards are in regards to this project.

Pettit: Stated that preserve original materials paramount. The HDC includes professionals who are familiar with preserving damaged materials and have done site visits in past. There are times when those materials can be repaired. Farther down the list is to replace like-with-like.

Prebys: Expressed concern for precedent setting with this building.

Swift: Indicated that the HDC has to make sure there is due cause for replacement of historic materials that are existing. The building has lots of openings that has cause for replacements, but ultimately they do generally need to be like-for-like. Since there are openings where there are unoriginal materials, there is nothing you're replacing that is like the original.

Doran: Expressed that he feels the HDC is not trying to compromise and is not factoring in the whole vision of the project to rehab a cornerstone downtown building and the money that is going into it. Understands that the HDC must look beyond the cost of preservation but it is just not economical and if something is not done the building will just sit.

Swift: Stated that with the uncovering of original elements, the HDC must discuss what was there as it was part of the original design theory.

Pettit: Expressed that he does not have a clear picture of what the final product would look like and that an image would aid the HDC with making a decision. There is no rendering as to what the windows and treatment of the entire façade will look like. The cut sheets are not enough to show the rhythm of the façade. A rendering is typical from applicants. Asked if a rendering was possible to produce.

Doran: Stated he is not sure if a rendering would be possible. There is a timing issue and he is not sure if that can be put together.

Swift: Asked to propose options to price out so the HDC can understand ramifications. Would like to see bids.

Prebys: Said cost has never been a concern of the commission.

Rupert: Affirmed that the commission must understand what is going to happen to each opening.

Pettit: Asked to go back to the original drawing and go over the front step by step.

Doran: Referenced the engineering drawing. Stated that the front façade will be tuck-pointed and cracks repaired. There are small areas along the top that need to be rebuilt. Referenced where the old cornice was- needs some work. Area where the hoods were torn of needs work because they are uneven. In future, would love to do something similar to Thompson Block [400 N River] with details that are period appropriate but for now will just be tuck-pointing and repairing the masonry and a solid coat of paint.

Prebys: Asked to confirm that the areas where the hoods were removed would stay rough.

Doran: Confirmed. Stated they hoped to replace window decorative elements in two years when the building is earning money.

Doran: [Referenced the drawing] Stated that the historic window on the 102 W Michigan shop front will be repaired, and a new shop front added. The 100 W Michigan shop front with the steel beam needs to be completely rebuilt. A lot of structural work will go in to support that corner.

Prebys: Asked to confirm that both the shop fronts would be at the front level and not recessed.

Doran: Confirmed, they would remain as they are.

Doran: Referenced replacement windows. Could do wood-framed windows divided into four lights.

Swift: Stated that the windows on the south elevation and those that wrap the building corner on the east elevation are the most important.

[Discussion of infilled and retained window openings]

Swift: Indicated that she would be open to allowed infill if the windows being replaced or kept are more in line with the original.

Doran: Stated that the window would have to be wood-framed and a rectangular window.

Swift: indicated that if that is the option, would like to discuss how center jamb is given the weight it needs. Could be a thicker muntin to replicate rhythm, or be two double hung windows placed together.

Rupert: Clarified the central jamb as a mullion.

Swift: Stated that the central jamb is key to the visual weight and exterior lines of the building.

Prebys: Indicated the commission would be supportive of having that appearance applied over the windows.

Staff: Clarified that a single light could have a mullion and muntin applied over.

Swift: Stated that there should be a sketch with dimensions.

Rupert: Stated that there is one on Pearl Street, next to Ace Hardware, there is one similar.

[Discussion of muntin and mullion composition]

Pettit: Asked if HDC would be willing to work with a single pane fixed piece of glass with the appropriate dividing elements applied over it.

Swift: Indicated this may be appropriate if it were a central jamb solution with two fixed pieces and some muntins. Would also be open to operable sashes with a thick muntin.

Pettit: Affirmed that it is possible the HDC would be willing to work with a fixed window but with a grille pattern.

Doran: Stated he had pushed for a design that would divide the window into four.

Swift: Asked for clarification that this would be one piece of glass.

Doran: Confirmed. One piece of glass with faux dividers.

Swift: Stated that if there is going to be fixed windows, the jamb should replicate the center jamb posts with two pieces of fixed glass. Asked applicant to investigate and see if it is feasible. Could be squared or arched.

Rupert: Stated the windows do not have to be wood or metal.

[Discussion of window cladding]

Doran: Stated he would prefer wood windows, however replication is where it gets expensive. The one he suggested looking into is a single pane with four divided panels.

Pettit: Indicated that simple of a pattern is something the HDC would struggle with.

Doran: Asked if that applied even to the front of the building.

HDC members confirmed.

Doran: Asked the HDC to consider that the façade windows are currently vinyl and not historic.

Pettit: Asked if the arches are different between the 100 and 102 W Michigan facades.

Doran: [Referred to drawings and described that some appear to have wood and others masonry].

Pettit: Stated that the (façade) windows appear as though they were treated differently. Asked the HDC if they would ask the applicant to reopen the arches.

Swift: Stated that the HDC had been discussing square windows, and the details of the frames.

Pettit [Reviewed window details]. Stated that the HDC has not asked folks to replace windows based on a guess of what might have been there. Cannot think of a precedent.

Prebys: Asked Doran for clarification on replacements.

Doran: Reaffirmed that the original proposal was to replace windows with a solid fixed aluminum-framed window. In order to compromise at the meeting, said he would do solid wood-framed windows. Stated that the only viable option is a wood window with four dividers.

Swift: Asked to revisit Pettit's comment regarding window replacements.

[Discussion of precedent, and appropriate period to go back to].

Swift: Stated this is an opportunity to get to the original architectural intent as much as possible.

Pettit: Stated that is not consistent with other buildings downtown.

Slagor: Clarified period of significance. The local historic district ordinance is so old that it does not identify contributing and non-contributing buildings. When possible, staff defers to the National Register nomination, which is also 40 years old. The nomination has the building as non-contributing because of the paneling, but also has a caveat that buildings could be made contributing if restored. In his opinion, this makes interpretation tricky. He also clarified that the period of significance for the National Register district is 1832-1932.

[Discussion of contributing vs. non-contributing].

Swift: This is an opportunity to weigh in on decisions made to a building that was non-contributing because of alterations that were removed. This is different than a non-contributing building that was identified because of a newer construction date.

Doran: Stated that different kinds of windows have been approved up and down Michigan Avenue. Exceptions appear to have been made. Not asking for something that will stand out and look out-of place, and want to preserve some of the details. Recognizes that the HDC sees this as an opportunity to fix problems with the building. The existing vinyl windows were installed in 2012.

Prebys: Stated that the windows were installed without approval.

Doran: Stated that is likely the vinyl windows will be left in.

Swift: Stated that the proposed new windows would not be appropriate. [Sketched window-using historical photos as a guide]

Prebys: Asked to consider side elevation windows to be a full panel of glass.

[Discussion of infill windows vs. open]

Prebys: Asked about front façade and first four on the east elevation having a historic appearance with greater flexibility on the other windows.

Swift: Affirmed that may be an approach.

Rupert: Suggested Marvin windows. [Discussion]

Doran: Stated that they hoped to use Pella windows, but it was too costly.

Prebys: Asked applicant what he needed to have accomplished at the meeting to continue.

Doran: Indicated that any one of the issues could be addressed, including masonry/brickwork, tuck-pointing, and rebuilding.

Swift: Asked if the brick Doran brought in will be used.

Doran: Confirmed, used on the rear elevation.

Rupert: Stated they cannot approve applications in sections.

Slagor: The applicant must voluntarily modify the application at the meeting to include one thing and strike another.

Pettit: Confirmed.

Swift: Stated that the HDC cannot approve windows this evening.

Pettit: Stated that more details are needed. But masonry can probably be address.

Doran: Asked about approval of infill.

[Review infill plans]

Rupert: Indicated he has no problem with the infill as proposed.

Swift: Indicated that she would find it appropriate if they can be sure the window solution would be more appropriate and matching some of the original details.

Rupert: Asked if the HDC could request the applicant to store and preserve original window.

Swift: Stated that should be a caveat for approval of removal of original materials. Stated that this is more part of the window approval. If they are going to approve masonry infill, that they will need compromise that the remaining windows are more appropriate. To be discussed on the next meeting.

Pettit: Stated that is a nonspecific condition and would not be appropriate. The HDC needs a more specific answer if it is going to interfere with masonry.

Swift: Indicated the HDC could outline important architectural elements of the windows that they would like to see introduced into the design of the new windows. The central jamb is an important factor. The window can be square with appropriate trim to reflect the original arched

opening. Reiterated that the central jamb needs to be replicated. Can be operable or fixed. Central muntin for two sashes should be thicker. Muntins can be an exterior application.

Prebys: Does that have to be on the motion? Based on discussion, it should just be for repairing and replacing brick.

Slagor: Said that the applicant would need to amend the application for just masonry approval. The windows could be discussed as a study item. Conditions for window approval would be a good idea for future window applications.

Swift: Asked if there would be an opportunity to review windows if there is something in the motion.

Doran: Said they would not commit to a specific design.

Slagor: Stated, you would put requests in tabling.

Doran: Asked to amend the application to include only masonry work.

Rupert: Asked to clarify masonry work- brick infill of some openings, and reconstruction of part of the exterior. Items [4]C and [4]D of the staff review.

[Discussion of finer points of the motion]

Swift: Asked if painting was part of this application.

Rupert: Stated it was amended to only include masonry.

Prebys stated a color sample for the future painting would be helpful.

Pettit: Asked for clarification on metal coping of the roof.

Doran: Stated that coping would not be done until after masonry. Goal is to do anything now with masonry as it has been a struggle to get folks committed to the work and there is someone lined up for tomorrow.

[Discussion working through appropriate motion]

Motion: Swift (second: Rupert) Move to approve and issue a certificate of appropriateness for work proposed at 100 W Michigan as amended at the Dec. 10, 2019 Historic District Commission meeting. Approval is conditioned on the items discussed at the meeting. Specifically application details 4C and 4D, [from the staff review] brick infill of some openings and reconstruction of part of the exterior. Some of the window openings on the east elevation are to be removed, including third and fourth bays north from the southwest corner, which are in sections that need to be reconstructed, totaling four windows. This infill shall be setback a minimum of one inch from face of façade to indicate original openings. As well as the northern five bays on the same elevation, totaling 10 windows. They will have the same infill treatment as the other infill windows, with a setback of at least one inch to match windows in bays three and four; all matching the approved north elevation details infill details. The Commission would recommend that efforts be taken to preserve and store any existing original windows that are in sound enough condition to store and preserve.

Secretary of the Interior Standards:
#5 – Preserve distinctive features.

Approval: Unanimous. Motion carried

Pettit: Stated to the applicant that they are not trying to create additional challenges, but are trying to execute their mission while promoting development in the city.

Slagor: Stated he will compile a summary of what HDC is looking for, will send it to the HDC for review and then on to the applicant. Wants to ensure a complete application.

STUDY ITEMS

302 E Cross

**Windows and siding update.*

Applicant: Maxwell Ziebarth, owner- present.

Discussion: Pettit: Asked to update siding.

Ziebarth: Provided a sample of original and replacement siding. Indicated that the new siding had gone up on the west elevation, facing to Park Street, where the porch was removed. Stated he is also working on closing in foundation basement well.

Pettit: Indicated there was concern for open holes on the façade.

Ziebarth: Stated that was addressed yesterday, with OSB protecting openings.

Pettit: Asked about the foundation.

[Discussed details of interior foundation work]. Ziebarth stated most work is taking place inside with no change to the exterior.

Pettit: Asked about siding.

Ziebarth: Indicated he will continue working on the west elevation porch to get the porch back up.

Pettit: Asked the completion date for the siding.

Ziebarth: Stated he will work through December.

Pettit: Asked if an update can be provided in January.

Ziebarth: Confirmed.

Rupert: Asked about the porch roof rafters on the west elevation.

Ziebarth: Stated the porch roof was never appropriately attached because it was added later.

[Discussion of incorporating porch roof into the structure].

Swift: Stated there was concern to have the wall sided before winter weather.

Ziebarth: Stated he can work on the porch ceiling joists outward.

[Discussion of porch dimension and closing off the open areas]

Pettit: Confirmed that work can continue, just have it buttoned-up as soon as possible.

Pettit: Asked about the windows.

Ziebarth: Stated he is looking into Jeld-Wen Sash packs, aluminum-clad wood with muntins.

Prebys: Stated that the windows are historically one-over-one with no muntins and should not be added.

Ziebarth: Stated he did not need muntins. However there is more detail on the bay windows on the east elevation, and front window. Would like to preserve those.

Rupert: Suggested storm widows on the bays.

Swift: Asked if it was established that replacement windows are appropriate.

Rupert: Stated that they had established issues with sashes and not the jambs.

Slagor: Stated that the HDC asked for a proposal for windows but has not explicitly asked for a window-by-window assessment.

[Discussion of window features, which should be replaced and which should be preserved]

Prebys: Stated the HDC needs an itemized list of windows, showing condition and specific window it would be replaced with.

Pettit: Stated that a lot of windows look repairable and will want to see details as to why it is or is not possible.

[Discussion of windows in photos].

Swift: Indicated it would be easy to make a case for replacement of missing windows or non-historic replacements, or rot.

Ziebarth: Stated he understands that he is trying to keep continuity of preservation and is factoring in windows that are there in replacements. Stated that the bay on east elevation is in great shape and just needs some work. Same for north elevation bay.

Swift: Reaffirmed that features of architectural importance and street-facing facades are of chief concern for the HDC.

Discussion [Date of the next meeting discussed, and study items to be addressed]

Pettit: Asked about doors.

Ziebarth: Stated door on east elevation has deteriorated and was added in the 60s. Would like the two front doors repaired as they are solid.

Pettit: Stated that after door and window discussion there will be discussion of porch.

Ziebarth: [Brief discussion of skirting].

[Discussion of appropriate motion]

Swift: Asked about foundation work.

Slagor: Stated that foundation work has been approved and the applicant is just providing updates. The exterior holes are filled in, but work is ongoing on the interior.

[Discussion of next meeting]

Motion: Prebys (second: Rupert) Move to have progress update and study item at the January 14, 2020 Historic District Commission meeting for the property at 302 E Cross. The owner is to provide the HDC with a plan for windows, including which need to be replaced, and how; and documentation of the final closing of exterior of the building; and an update on foundation work at the meeting on January 14, 2020.

Approval: Unanimous. Motion carried

ADMINISTRATIVE APPROVALS

- | | |
|-------------------|-------------|
| 1. 305 E Forest | Roof |
| 2. 301 N Adams | Garage roof |
| 3. 201 W Michigan | Roof |
| 4. 314 Pearl | Garage roof |

Motion: Prebys (second: Rupert) moved to approve the administrative approvals for 305 E Forest, 301 N Adams, 201 W Michigan, 314 Pearl.

Approval: Unanimous. Motion carried.

OTHER BUSINESS

1. Small Cell Colocation at 301 N Hamilton

Slagor: Reviewed what Section 106 is and the proposed project. Affirmed that a permit would be required, but asked HDC to have an opportunity to comment.

Rupert: Stated that there is precedent for HDC permits for small cell tours at 124 Pearl.

Pettit: Biggest question is what the tower will look like.

[Discussion of tower colocation and necessary visual]

Pettit: Asked about junction box.

Swift: Asked about landscaping.

[Discussion of small cell tower continued]

Slagor: Summarized that the HDC is concerned about how the tower will affect the integrity of setting of the district as it relates to the surrounding contributing buildings.

HDC: Affirmed Slagor's statement.

2. Property monitoring

General discussion of doors and unapproved work in the district; and potential for door fact sheets.

3. Commissioner comments

General discussion of doors and unapproved work in the district.

Swift: Asked about Window Fact Sheet.

Slagor: Has a draft completed.

Swift: Asked for that to be up at the next meeting.

Swift: Officially wished everyone a happy holiday season.

AUDIENCE PARTICIPATION ON NON-AGENDA ITEMS- none

HOUSEKEEPING BUSINESS

1. HDC 2020 Schedule

Motion: Rupert (second: Swift) moved to approve the 2020 Historic District Commission schedule as presented.

Approval: Unanimous. Motion carried.

2. Approval of the minutes of November 12, 2019

Motion: Rupert (second: Prebys) moved to approve the minutes of November 12, 2019, as drafted.

Approval: Unanimous. Motion carried.

ADJOURNMENT

Interim Chairperson Pettit adjourned the meeting, citing the end of the agenda with no further items to discuss.

MEETING ADJOURNED at 9:36 p.m.

Full Minutes Prepared By: Scott Slagor

DRAFT

YOUNG & ULRICH ENGINEERING, INC

1745 Indian Wood Circle
Suite 125
Maumee, Ohio 43537
Phone; (419) 214-0505
Fax: (419) 214-0506

December 10, 2019

O'Neal Construction Company
Attn. Tim Stout
525 West William St.
Ann Arbor, MI 48103

Mr. Stout,

A crew has been on site monitoring the demolition of the building at 100 West Michigan Ave. in Ypsilanti, Michigan. Following the demolition, preliminary inspections and assessments have been made on the current condition of the exterior walls of the building. We have developed a plan for the repair of the building which consists of the following:

- All brick along the three exposed sides of the building (North, South and East) will need to be power cleaned by a method chosen by the contractor. It must be ensured that the method chosen does not further disturb any of the existing brick or grout. Once all repair work is complete, we recommend that an epoxy paint/coating be applied to the three exposed walls of the building.
- There are a few areas where all of the brick will need to be removed and replaced. We have highlighted these areas on the following pages.
- There are some areas which will need to be tuck pointed and injected with adhesive or repaired using helical stitching. We have determined that this will be required at any crack, gap or shift less than 3/4" that is not going to be replaced or at any crack that is near the floor bearing elevation or a window. Once this has been completed, grout can be added to the exterior and interior wythes to fill in cracks and the damaged/missing grout. The mason and GC should determine these locations in the field per the criteria above.
- All cracks that are not near a window or the floor bearing elevation, and are not being replaced or injected, need to be tuck pointed.

YOUNG & ULRICH ENGINEERING, INC

1745 Indian Wood Circle

Suite 125

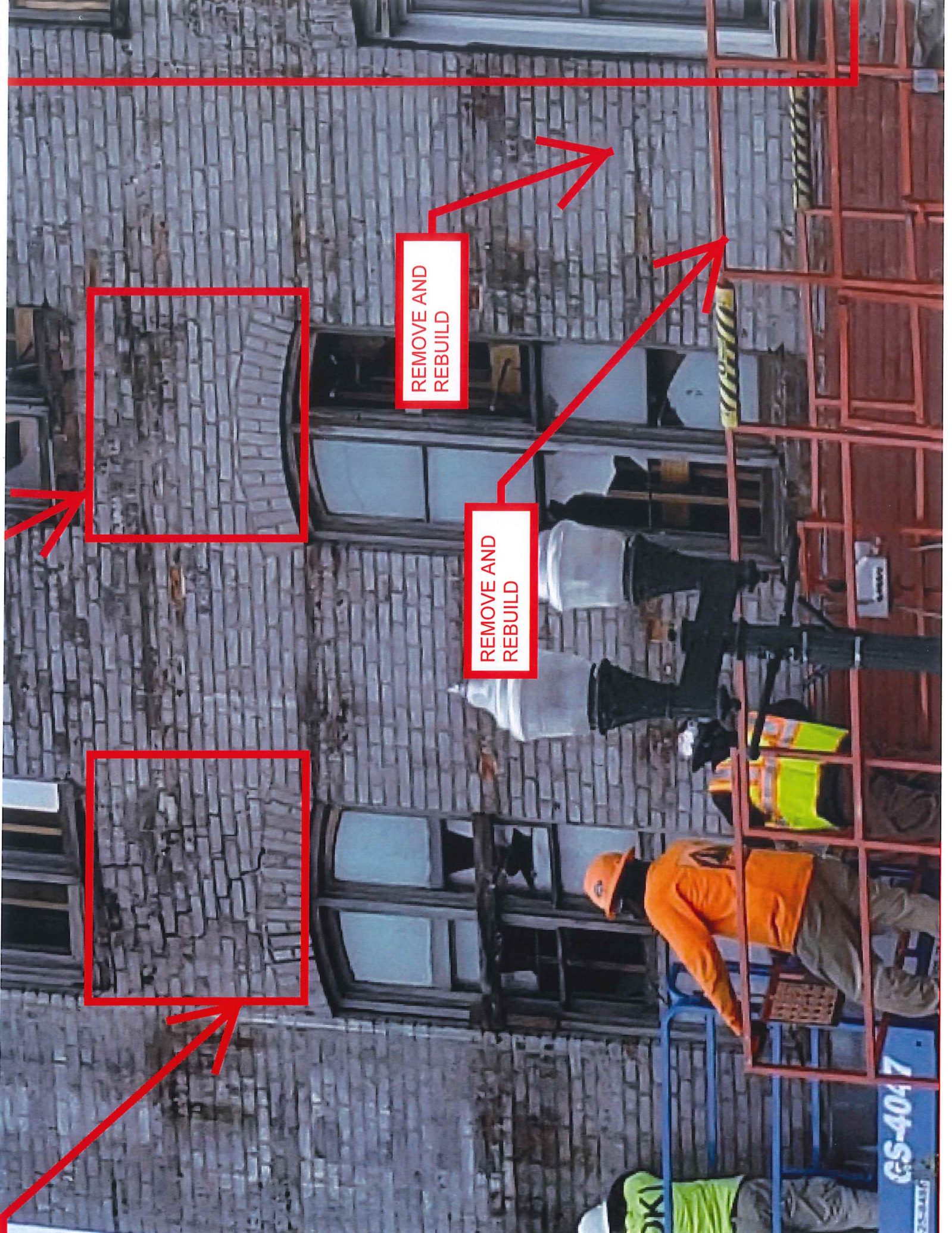
Maumee, Ohio 43537

Phone; (419) 214-0505

Fax: (419) 214-0506

- At the Southeast corner of the building, the rotten wood lintels will need to be replaced. This will require shoring of the structure until replacement lintels are installed.
- At the (2) storefront locations that are to remain and the location of where the storefront will be filled with block, further inspection of the steel lintels needs to be completed. We suspect that these lintels have failed and will need to be replaced. This will also require shoring of the structure until replacement lintels are installed.
- Any area where there is a shift, settlement or gap of 3/4" or more will need to be replaced. This will be in areas where there is a vertical or horizontal deviation in the brick pattern. Note that al (3) wythes of brick will need to be replaced in these areas.

On the following (3) pages, we have marked up the areas of the wall with specific instructions on repair work. Any areas not marked up, should be repaired per the criteria on Page 1 and above.



REMOVE AND
REBUILD

REMOVE AND
REBUILD

GS-4047





YOUNG & ULRICH ENGINEERING, INC.

1745 Indian Wood Circle

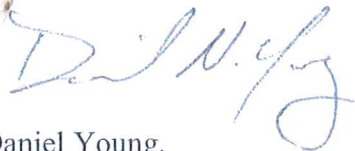
Suite 125

Maumee, Ohio 43537

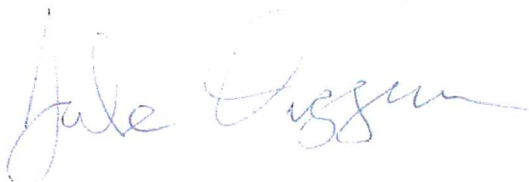
Phone; (419) 214-0505

Fax: (419) 214-0506

Thank You,

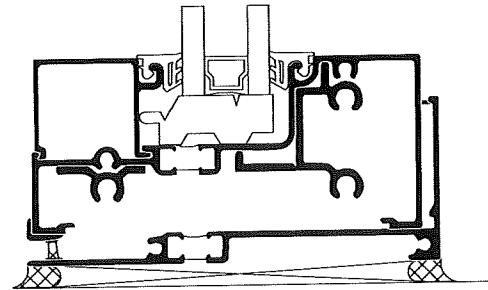
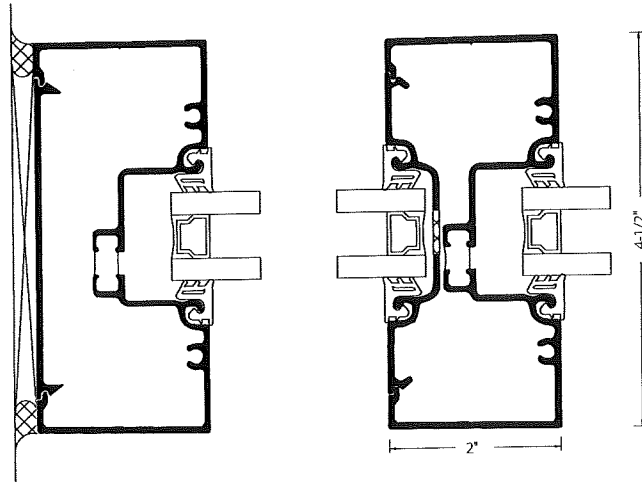
A handwritten signature in blue ink, appearing to read "D. Young", written over a faint horizontal line.

Daniel Young,
President

A handwritten signature in blue ink, appearing to read "Jake Duggan", written over a faint horizontal line.

Jake Duggan,
Associate Engineer

14000 Series Storefront Framing

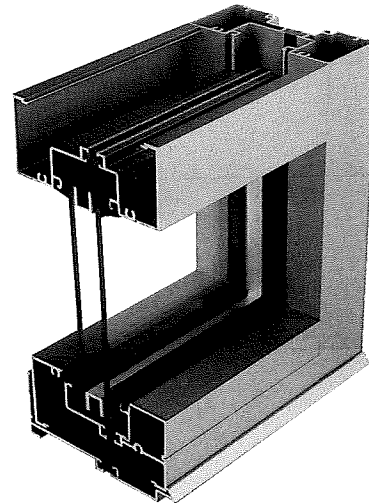


System Features:

- Standard 2" (50.8mm) sight-line on verticals and horizontals
- 4-1/2" (114.3mm) system depth
- Single Pour & Debridge thermal break with Azon's Lancer® mechanical lock
- EPDM wedge type gaskets for 1" glass or panel thickness
- Glass centered in the system depth

Optional Features:

- Screw-spline or shear block connections
- Steel reinforcing if required
- Easily integrates with standard or thermal doors, operable vent windows & sun shades
- 7 anodized and 19 painted standard finishes
- Curved Headers
- Non-thermal Framing



14000 Series Product Specifications

See Tubelite's Test Reports for mock up sizes and test conditions.

Application: Low-rise commercial buildings: retail, office, healthcare, schools, etc.

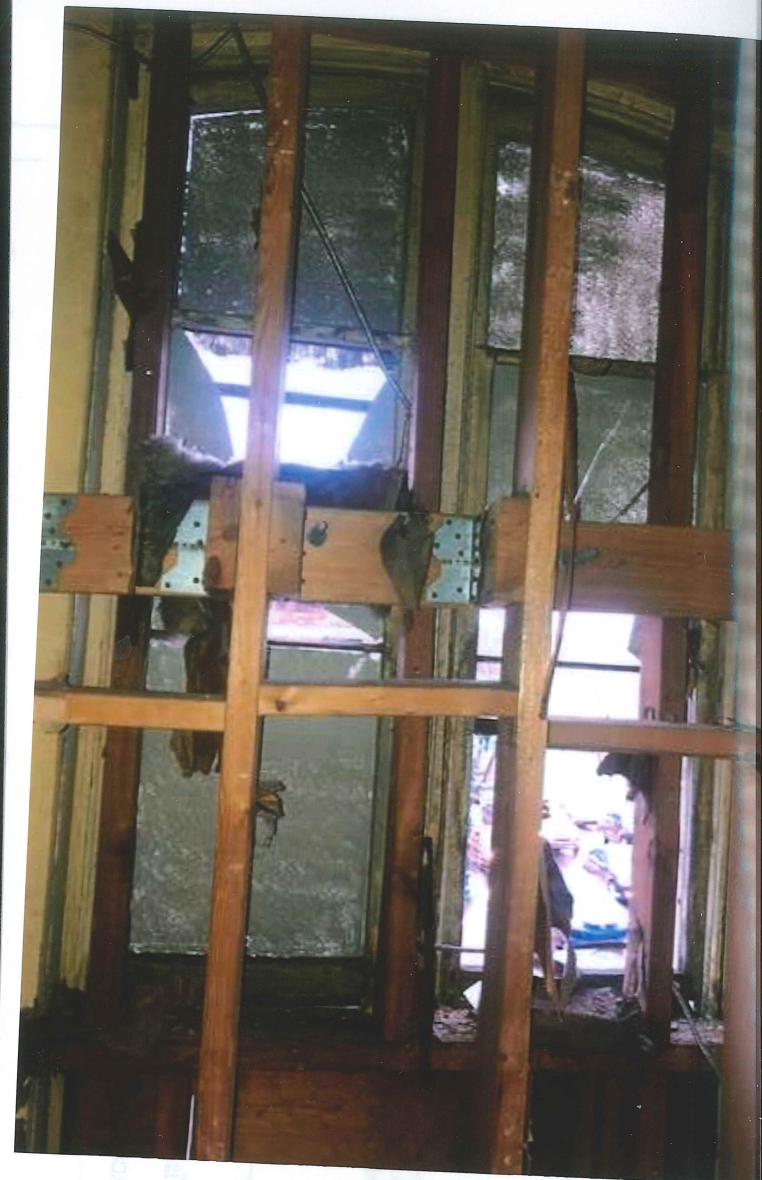
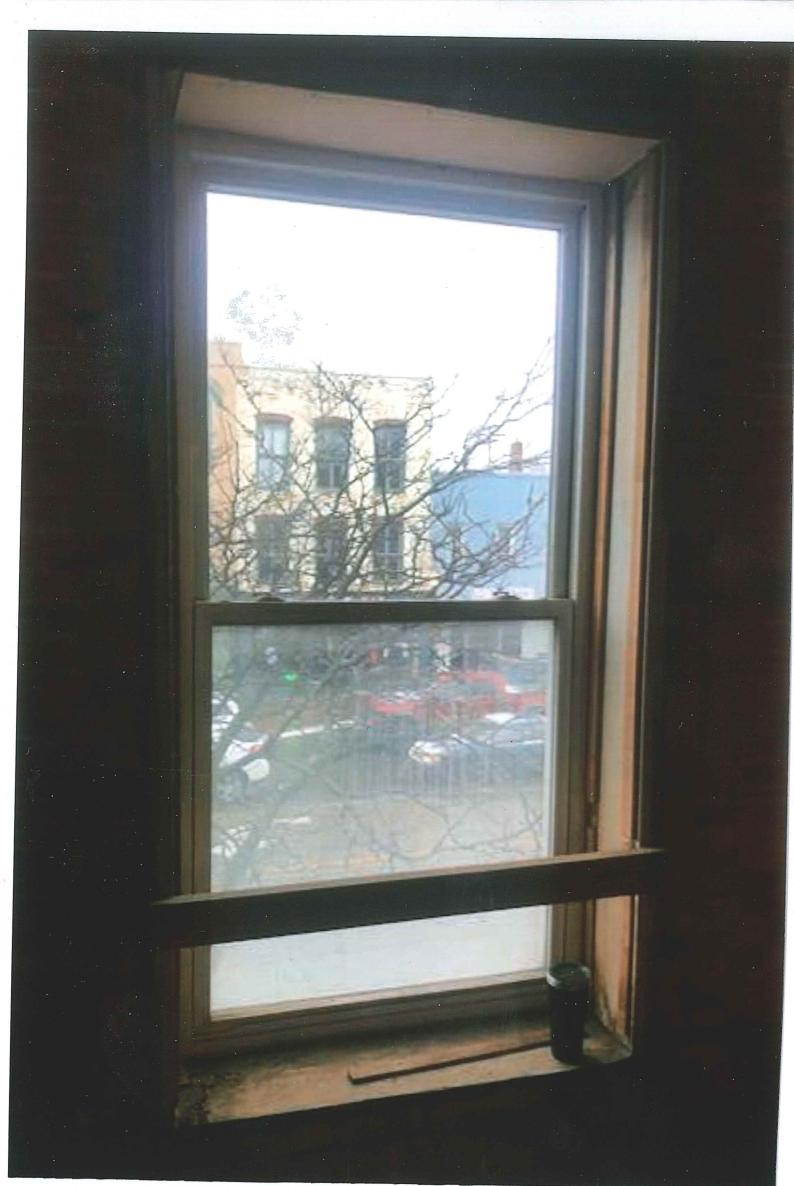
Description: 2" x 4-1/2" center set, outside or inside flush glazed storefront

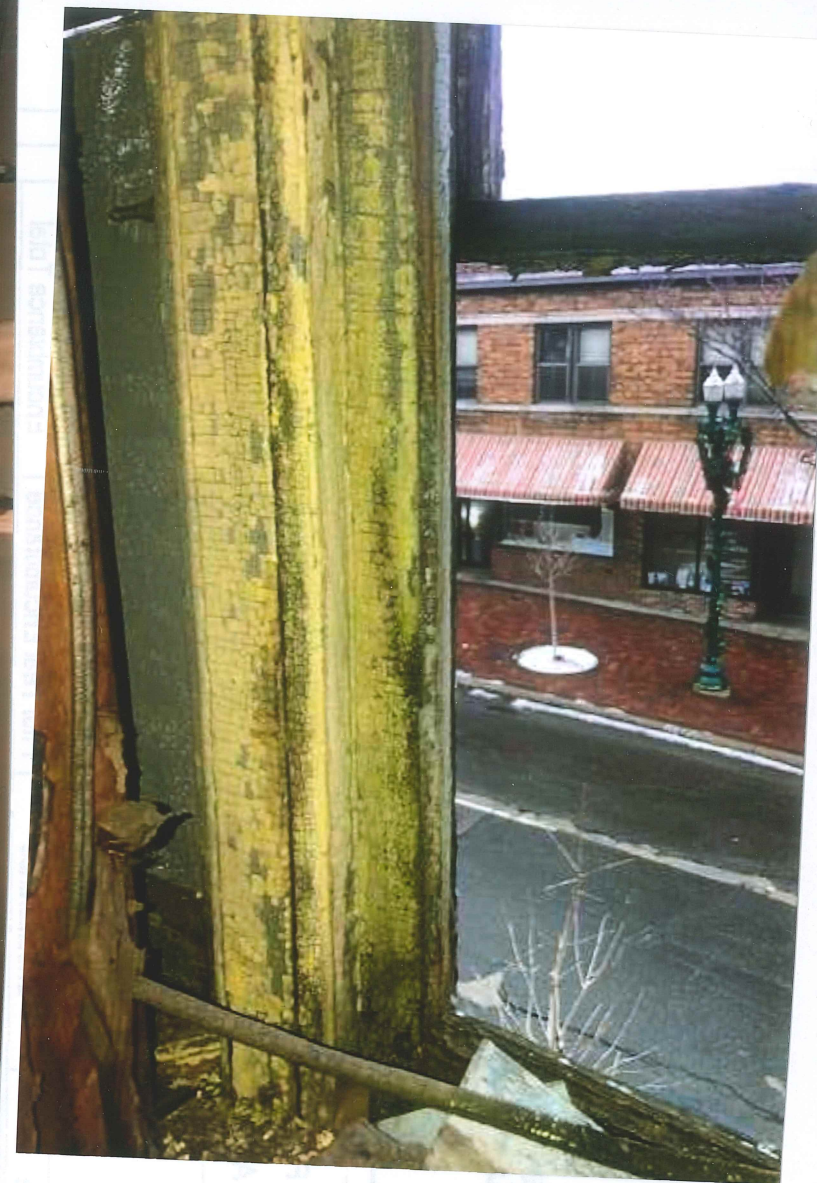
Face Width:	System Depth:	Glass:	Air Infiltration:	Water Infiltration:	Structural:	CRF:	U-Value:	Acoustic:
2"	4-1/2"	1" std (1/8" – 1-1/8")	0.06 CFM/Ft.2 @ 6.24 PSF	10 PSF – Static 10 PSF – Dynamic	30 PSF – Design 45 PSF – Overload	T (Thermal) 62 _f 68 _g	E (Non-thermal) 0.47 T (Thermal) 0.33	STC 32 OTC 26

DISCLAIMER: Tubelite takes no responsibility for product selection or application, including, but not limited to, compliance with building codes, safety codes, laws, merchantability or fitness for a particular purpose; and further disclaims all liability for the use, in whole or in part, of this Technical Guide in preparation of project specifications and/or other documents. Technical Guides are subject to change at any time, without notice, and at Tubelite's sole discretion. ©2017 Tubelite Inc.

TUBELITE®
DEPENDABLE

LEADERS IN ECO-EFFICIENT STOREFRONT,
CURTAINWALL AND ENTRANCE SYSTEMS







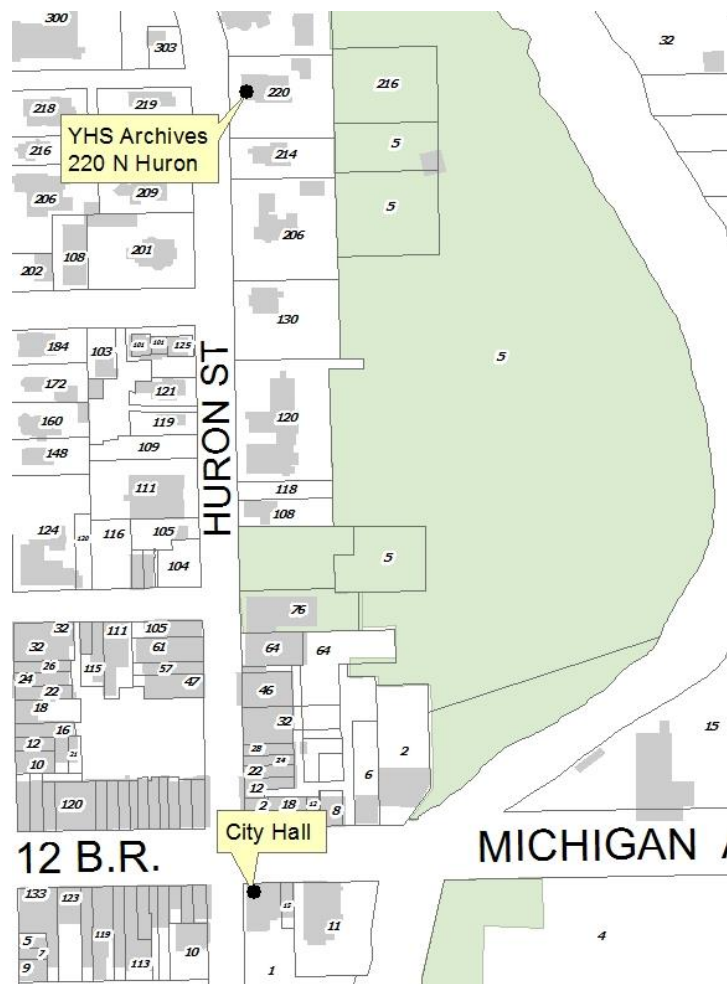
PUBLIC NOTICE City of Ypsilanti

Historic District Commission Meeting Location Change

The Ypsilanti Historic District Commission meeting scheduled for **Tuesday, January 14, 2020** at 7:00 p.m. has been **RELOCATED** to the Ypsilanti Historical Society Archives, 220 N. Huron, Ypsilanti, MI 48197.

Andrew Hellenga
City Clerk

Posted: January 10, 2019



CITY OF YPSILANTI
Agenda
Historic District Commission
Tuesday, January 14, 2020 - 7:00 p.m.
Ypsilanti Historical Society, 220 N Huron St.
Ypsilanti, MI 48197

The Ypsilanti Historic District Commission works to safeguard Ypsilanti's built heritage by guiding development and renovation within the Historic District. Enabled by federal, state, and local legislation, the HDC seeks to stabilize and improve property values, to promote preservation education, and to develop the Ypsilanti Historic District as a vital living area.

An audio recording of the meeting will be made for the purpose of assisting in the preparation of official minutes only. Once the official minutes are approved the audio recording will be destroyed.

I. CALL TO ORDER AND ROLL CALL

Alex Pettit, Interim-Chair	P	A
Anne Stevenson, Vice Chair	P	A
Erika Lindsay	P	A
Hank Prebys	P	A
Ron Rupert	P	A
Amy Swift	P	A
James Chesnut	P	A

II. APPROVAL OF AGENDA

III. PUBLIC COMMENTS ON AGENDA ITEMS

IV. PUBLIC HEARING—none

V. BUSINESS SESSION

A. OLD BUSINESS- none

B. NEW BUSINESS —none

1. 307 N River	Site plan- various features included
2. 318 Maple	Window replacements
3. 629 N River	Shed and fence
4. 400 N River	Solar carport
5. 218 (209) Washtenaw	New parking lot signage

C. STUDY ITEMS

1. 302 E Cross	Progress update and window proposal
-----------------------	--

D. ADMINISTRATIVE APPROVALS—none

E. OTHER BUSINESS

- 1. Windows Fact Sheet Update**
- 2. 2019 HDC Annual Report, for Council**
- 3. 2019 HDC Annual Report, for State Historic Preservation Office**
- 4. Section 106 consulting party- 301 N Hamilton Update and 401 N Adams**
- 5. Property monitoring**
- 6. Commissioner comments**

VI. AUDIENCE PARTICIPATION ON NON-AGENDA ITEMS

VII. HOUSEKEEPING BUSINESS

- 1. Approval of meeting minutes, December 10, 2019**

VIII. ADJOURNMENT

Secretary of the Interior's Standards for the Rehabilitation of Historic Structures

Developed by the U.S. Department of the Interior, the Standards provide a framework that guides protective decisions regarding historic structures. The Historic District Commission is required to cite applicable Standards with each formal decision it renders. It may also cite HDC Fact Sheets as part of its decision-making process.

1. Use property for original purpose or provide compatible use with minimal alteration.

A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. Do not destroy original character. Do not remove or alter historic material or features.

The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Do not imitate earlier styles.

Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Preserve significant changes acquired over time.

Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Preserve distinctive features.

Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Repair, don't replace. Replacements shall match original.

Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Clean building gently—no sandblasting.

Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Preserve archaeological resources.

Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New work shall be removable.

New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.



HDC Work Permit Staff Review

Property address: 307 N River

Property History: The property includes a former automotive service station that was known as "Ted's Auto Electric," which was converted to a restaurant, known as "Cultivate" in 2015. Staff estimates that the original concrete block section of the building; with two garage bays; was erected ca.1964.ⁱ The bricked section of the building appears to have been completed in 1968.ⁱⁱ The building was considered modern at the time of the National Register listing, and therefore is noted as non-contributing.

Date of Application: December 19, 2019

Date of Review: January 8, 2020

Date of Meeting: January 14, 2020

Proposed work: Multiple project related to the approved site plan, including: a three-season porch, deck, fences, sign, dumpster enclosure, lighting, mural, and repainting.

Materials: Multiple- see step-by-step review.

Staff review:

1. This application is for work to fulfill a site plan that was conditionally approved by the Planning Commission in August 21, 2019. Aspects of the plan were first presented to the HDC as a Study Item on April 23, 2019.
2. The approval is for multiple elements on the site plan and building. These elements are broken down item by item below.

Three Seasons Porch

3. The applicant proposes installing a three-season porch on the north elevation.
 - a. The porch will cover an area of approximately 24'x48', and match its roofline to the bricked section of the building.
 - b. The porch walls and awning roof will be constructed by Marygrove Awning.

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

- c. The applicant's first choice for a porch roof will have a louvered roof system.
- d. The second choice is a non-louvered commercial grade metal roof system.
- e. The porch will have a roll-up PVC-coated fiberglass screen enclosure to open and close the space depending on the weather.
- f. The screens will rest on metal-framed knee-walls.
- g. The applicant has been advised to provide the specific information on the enclosure.

Deck

- 4. A small deck to function as a stage will be constructed on the east elevation.
 - a. The cedar plank deck will be 8' deep and extend the length of the elevation.
 - b. It will be stained in "700 Sierra" opaque.

Fences

- 5. Two fences are proposed for the property.
 - a. A black steel fence will enclose the beer garden and encircling the building on the north, east, and west sides; partially extending on the southern elevation.
 - b. For screening, a 6' cedar fence will extend on the south property boundary, similar to what is there currently; which is a dog-eared wood fence.
 - c. The wood fence will be stained in "700 Sierra" opaque.

Dumpster Enclosure

- 6. One of the key points of the site plan was design and placement of the dumpster enclosure.
 - a. The enclosure will be constructed of concrete block with a metal coping.
 - b. It will be accessed by stained wood slat gates with galvanized steel posts.

Sign

- 7. The current sign on the north elevation will be moved to replace the sign on the east elevation.

Lighting

- 8. The lighting plan for the site includes installation of new light poles to illuminate the parking lot.
 - a. The metal light poles will be 13'6" tall.
 - b. The light fixtures will be D-Series Size 1 LED Area Luminaire.
 - c. The fixtures are flat lenses and appear to meet the guidelines of the Lighting Fact Sheet.
 - d. However, the light temperature is at 5,000k, which is too strong. The HDC Lighting Fact Sheet states that lighting over 3,000k is inappropriate.
 - e. The applicant has committed to using the version of the light fixture that offers a lower color temperature.

Repaint the exterior

- 9. The painted concrete block section of the building will be repainted.
 - a. The walls will be painted Sherwin-Williams "Pure White."
 - b. The trim that wraps the building will be painted Sherwin-Williams "Tricorn Black."

Mural

- 10. The concrete block section of the building will feature a black and white floral mural.

Site Plan Landscape Features

- 11. The remaining site plan features include a redesigned parking area and vegetative landscaping.
- 12. The existing hedge will be retained along Photo Street.

Recommended Motions:

Move to approve and issue a Certificate of Appropriateness for the work at 307 N River as presented in the application dated December 19, 2019, the exterior work described in the submitted site plan, and repainting the exterior concrete block section in black and white with a mural; and staining the wood deck and fence in "700 Sierra" opaque. The approval is conditioned that the selected light fixtures have a temperature of 3,000k or less.

Relevant Secretary of the Interior's Standards:

#9

Move to table action on the proposed work at 307 N River so the applicant may provide additional information regarding [INSERT ANY AREA OF THE SITE PLAN THAT WAS LACKING].

Prepared by:

Scott E. Slagor, Preservation Planner

ⁱ City of Ypsilanti Assessor; Sanborn Map Co., *City of Ypsilanti, Washtenaw County* (New York: Sanborn Map Company, 1927, revised. 1964), 18.

ⁱⁱ City of Ypsilanti Planning and Development.



RECEIVED

DEC 19 2019

CITY OF YPSILANTI
BUILDING DEPARTMENT

City of Ypsilanti Historic District Commission Work Permit Application

One South Huron • Ypsilanti, MI 48197
Phone: (734) 483-9646 • Fax: (734) 483-7260
www.cityofypsilanti.com

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

*Paid under study item
PHDC-19-0017*

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA**Property**

Address

307 W. River St. / Ypsilanti

Applicant**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name

RYAN WALLACE

Address

City

Ypsilanti

State

MI

Zip

48197

Phone / Fax

E-Mail

Contractor

Contractor Name & Contact Info

CALO & SONS

Tim O'Donnell

excavator King 99@yahoo.com

+

ourselves.

Type of work☐ Roofing☐ Window/Door
Replacement☒ Porches☒ Sign☒ Fence (or other sitework)☒ Painting☐ Other☐ Application Amendment

Complete Description of Proposed Work:

porch - 3 season porch - covered roof system of something similar (Black Color)
deck - small out front - cedar wood
Fence(s) Black rod iron under 6ft. around property - cedar behind it,
Paint - Repaint white parts of building w/ fresh coat.
= Repaint Green strip black
Sign - move to front of building. (existing one)
mural - Black on white mural of flowers, similar to ones in our shop

Also site plan details - SES 1-7-2020

Materials (for paint include color chips or samples with application):

Already paid Early this year.

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. *An additional fee of \$50 applies to HDC work started without the applicable permit.*

Construction Cost:

Permit fee:

\$45 + _____ =

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature

Date:

12/18/19

Print Name:

Ryan Wallace

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.

CULTIVATE COFFEE & TAP HOUSE

SITE IMPROVEMENTS

307 N. RIVER STREET
YPSILANTI, MI 48198

OWNER/DEVELOPER

307 PROPERTY LLC | RYAN WALLACE
307 N RIVER ST
YPSILANTI, MI 48198
T: 616.502.3525

ARCHITECT

BOWERS + ASSOCIATES, INC.
2400 S. HURON PARKWAY
ANN ARBOR, MI 48104
T: 734.975.2400
F: 734.975.2410

CIVIL ENGINEER

NOWAK + FRAUS
46777 WOODWARD AVENUE
PONTIAC, MI 48342
T: 248.332.7931
F: 248.332.8257

PROJECT DESCRIPTION

SITE IMPROVEMENTS TO EXISTING PROPERTY
TO BRING UP TO CITY STANDARDS

SHEET INDEX

ARCHITECTURAL

T1.00 TITLE SHEET
SP1.00 SITE PLAN
SP2.00 SITE DETAILS

CIVIL

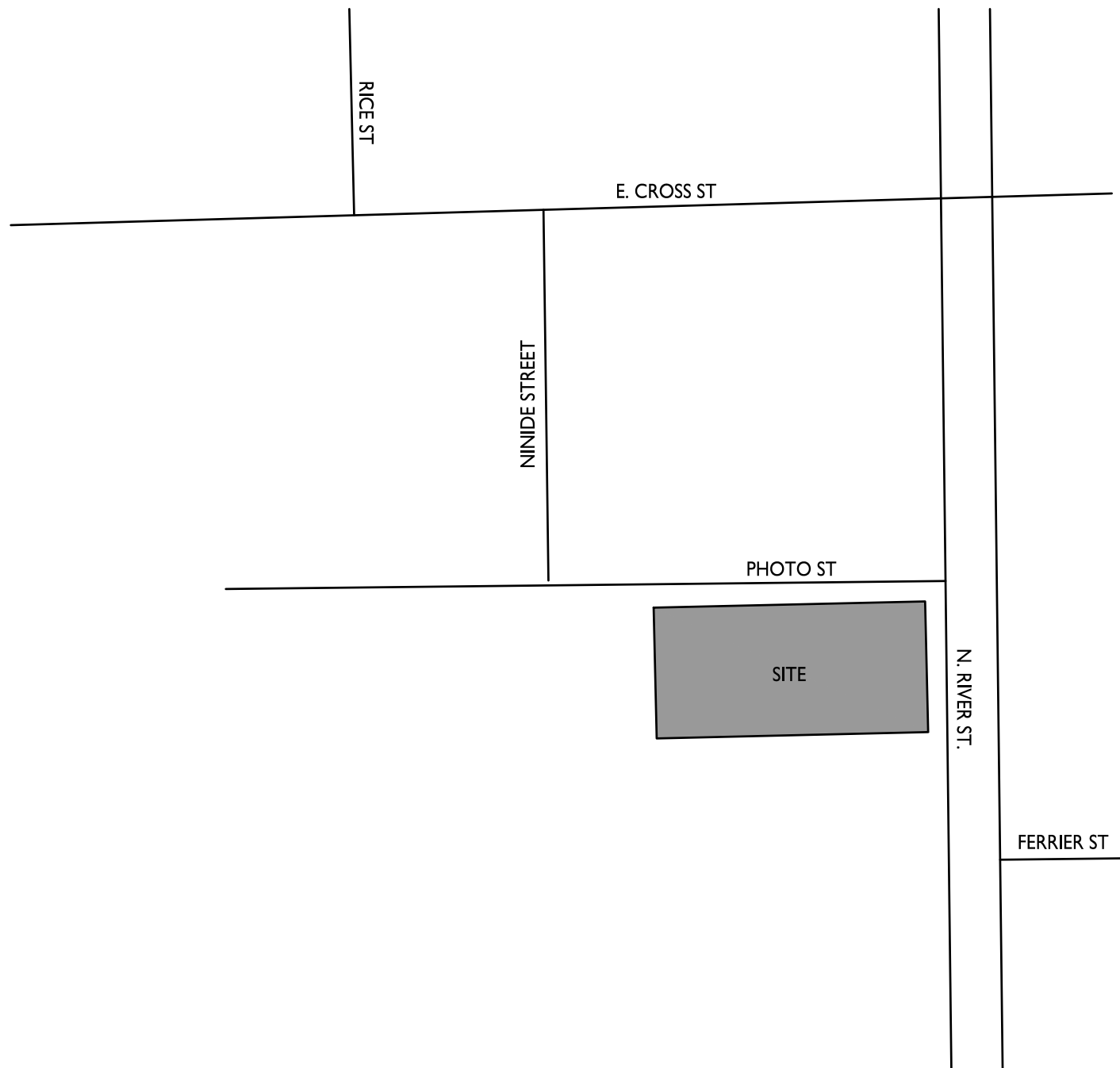
C1 BOUNDARY / TOPOGRAPHIC SURVEY
C2 PAVING / GRADING PLAN

ABBREVIATIONS:

ABV.	ABOVE
AFF	ABOVE FINISH FLOOR
ADJ.	ADJUSTABLE
AL.	ALUMINUM
ALUM.	ALUMINUM
ANOD.	ANODIZED
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX.	APPROXIMATE
ARCH.	ARCHITECT
BD.	BOARD
BDRM	BEDROOM
B.F.	BARRIER FREE
B.F.F.	BELOW FINISH FLOOR
BIT	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
B.O.	BOTTOM OF
BOTT.	BOTTOM
BTWN.	BETWEEN
CAB.	CABINET
CJ	CONTROL JOINT
CL	CLOSET
CLOS.	CLOSET
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
CPT.	CARPET
C.T.	CERAMIC TILE
D.F.	DRINKING FOUNTAIN
DIA.	DIAMETER
DN.	DOWN
DPFG	DAMP PROOFING
DR.	DOOR
DS	DOWNSPOUT
DWG	DRAWING
EA.	EACH
EJ	EXPANSION JOINT
ELECT.	ELECTRICAL
ELEV.	ELEVATION
EQ.	EQUAL
EW	EACH WAY
E.W.C.	ELECTRIC WATER COOLER
EXP	EXPOSED
EX	EXISTING
EXT	EXTERIOR
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN.	FINISH
FIXT.	FIXTURE
FLASH.	FLASHING
FLK.	FLOOR
FRP	FIBERGLASS REINFORCED PANEL
FRPFG	FIREPROOFING
FT.	FOOT, FEET
FTG.	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GYP SUM BOARD
GFI	GROUND FAULT INTERRUPTER
GL.	GLASS, GLAZING
GYP.	GYP SUM
HD	HARDWOOD
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ.	HORIZONTAL
H.P.	HIGH POINT
IN.	INCHES
INC.	INCLUDE, INCLUDING
INSUL	INSULATION, INSULATED
INT.	INTERIOR
ISOL.	ISOLATION
J.C.	JANITOR'S CLOSET
KIT	KITCHEN
L	LENGTH
LAV.	LAVATORY
LBS.	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
MANUF.	MANUFACTURER
MAR.	MARBLE
MAS.	MASONRY
MATL.	MATERIAL
MAX.	MAXIMUM

ABBREVIATIONS CONT.:

MECH.	MECHANICAL
MEMB.	MEMBRANE
MET.	METAL
MEZZ.	MEZZANINE
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTL	METAL
NATL	NATIONAL
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
O.F.	OVERFLOW
O.H.D.R	OVERHEAD DOOR
OPG	OPENING
OPP.	OPPOSITE
P.E.	PRE-ENGINEERED
PERIM	PERIMETER
PL	PLATE
PLAM.	PLASTIC LAMINATE
PLYWD	PLYWOOD
P.P.T.	PRESERVATIVE PRESSURE TREATED
PR	PAIR
PRE-ENG.	PRE-ENGINEERED
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PROJ.	PROJECT, PROJECTION
PROP.	PROPOSED/PROPERTY
PRTN	PARTITION
P	PAINT
PT	PORCELAIN TILE
QT	QUARRY TILE
R&S	ROD AND SHELF
R.C.	ROOF CONDUCTOR
R.D.	ROOF DRAIN
REFRIG.	REFRIGERATION, REFRIGERATOR
REINF.	REINFORCED
REINF'G	REINFORCING
REQ'D	REQUIRED
RET.	RETARDER
RF	RESILIENT FLOORING
RM.	ROOM
R.T.	RESILIENT TILE
RTNG	RETAINING
S.A.C.	SUSPENDED ACOUSTICAL CEILING
S.A.F.	SPRAY APPLIED FIREPROOFING
S.C.	SEALED CONCRETE
SCHED.	SCHEDULE
SCWD	SOLID CORE WOOD
SH	SHELF
SHW	SHOWER
SHT.	SHEET
SIM	SIMILAR
SPEC.	SPECIFICATION
SQ.	SQUARE
SS	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
ST. STL.	STAINLESS STEEL
STRUCT.	STRUCTURE
SUPP.	SUPPORT, SUPPORTED
SUSP.	SUSPENDED
SV.	SHEET VINYL
T&G	TONGUE AND GROOVE
TH.	THRESHOLD
TEL	TELEPHONE
THK	THICKNESS, THICK
T.O.	TOP OF
T.O.S.	TOP OF STEEL
TRANSF.	TRANSFORMER
TYP.	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
V.	VERTICAL
VB	VINYL BASE
VCT	VINYL COMPOSITE TILE
VERT.	VERTICAL
VVC	VINYL WALL COVERING
W.C.	WATER CLOSET
WD	WOOD
W.W.F.	WELDED WIRE FABRIC
W.W.M.	WELDED WIRE MESH



LOCATION MAP

NO SCALE

BOWERS+ASSOCIATES
ARCHITECTURE DESIGN
2400 SOUTH HURON PARKWAY • ANN ARBOR, MI 48104
P: 734.975.2400 • F: 734.975.2410
WWW.BOWERSARCH.COM

CONSULTANT + NAME

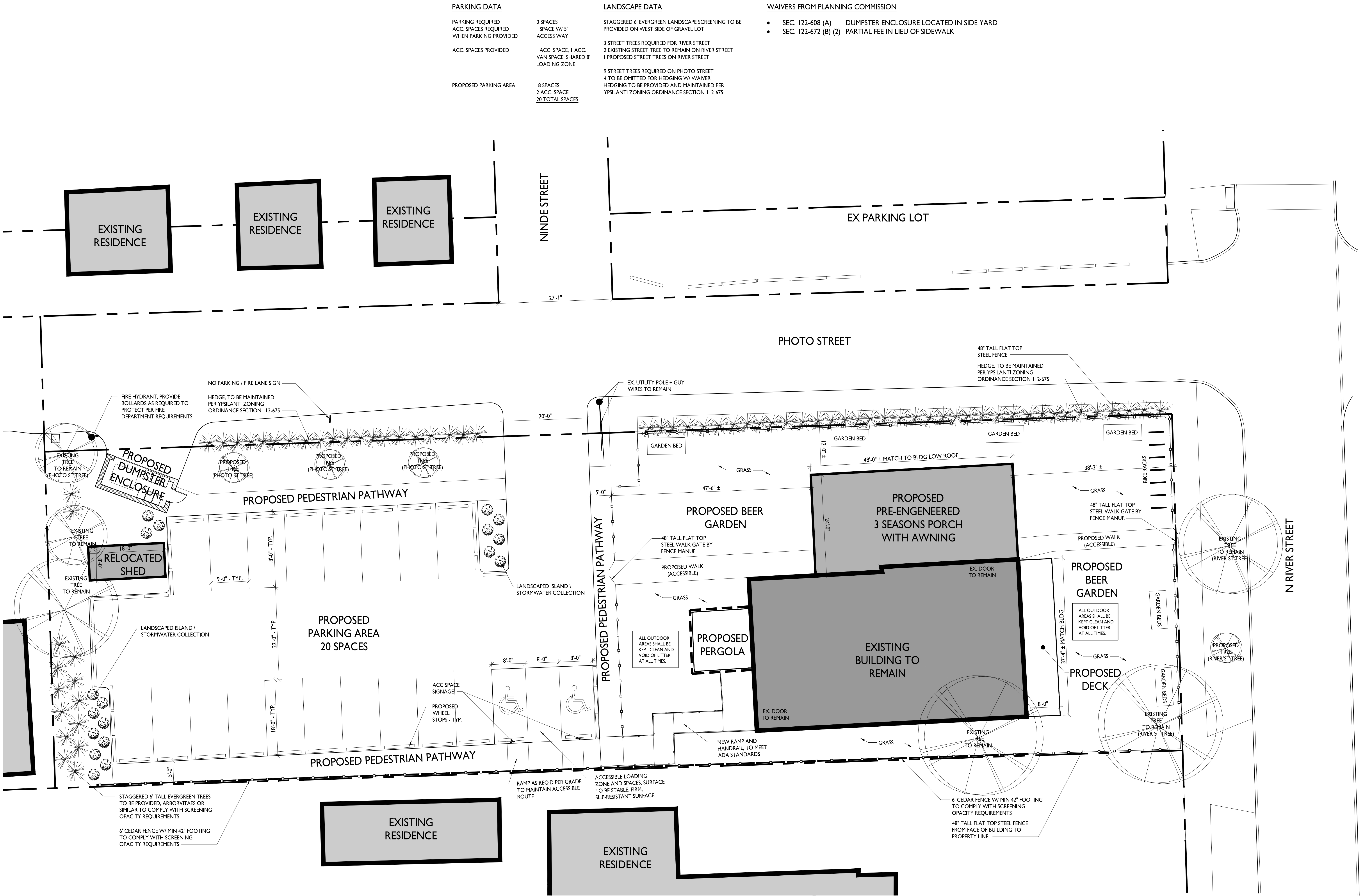
PROJECT + INFORMATION
CULTIVATE
COFFEE & TAP HOUSE
307 N RIVER ST
YPSILANTI, MI 48198

PROJECT + NUMBER
17-306

ISSUE + DATE
03 NOV 2017
26 JAN 2018 OWN REV
12 MAR 2018 SITE
25 JUNE 2018 OWN. REV.
23 AUG 2018
17 SEPT 2018 OWN REV
19 OCT 2018 ZBA
13 JUNE 2019 SITE PLAN
07 JAN 2020 OWN REV

SHEET + TITLE
TITLE
SHEET
17306SP100S.dwg

SHEET + NUMBER
T1.00



PARKING DATA

PARKING REQUIRED	0 SPACES
ACC. SPACES REQUIRED WHEN PARKING PROVIDED	1 SPACE W/ 5' ACCESS WAY
ACC. SPACES PROVIDED	1 ACC. SPACE, 1 ACC. VAN SPACE, SHARED 8' LOADING ZONE
PROPOSED PARKING AREA	18 SPACES 2 ACC. SPACE 20 TOTAL SPACES

LANDSCAPE DATA

STAGGERED 6' EVERGREEN LANDSCAPE SCREENING TO BE PROVIDED ON WEST SIDE OF GRAVEL LOT

3 STREET TREES REQUIRED FOR RIVER STREET
2 EXISTING STREET TREE TO REMAIN ON RIVER STREET
1 PROPOSED STREET TREES ON RIVER STREET

9 STREET TREES REQUIRED ON PHOTO STREET
4 TO BE OMITTED FOR HEDGING W/ WAIVER
HEDGING TO BE PROVIDED AND MAINTAINED PER YPSILANTI ZONING ORDINANCE SECTION 112-675

WAIVERS FROM PLANNING COMMISSION

- SEC. 122-608 (A) DUMPSTER ENCLOSURE LOCATED IN SIDE YARD
- SEC. 122-672 (B) (2) PARTIAL FEE IN LIEU OF SIDEWALK

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CONSULTANT + NAME

PROJECT + INFORMATION
**CULTIVATE
COFFEE & TAP HOUSE**
307 N RIVER ST
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PROJECT + NUMBER
17-306

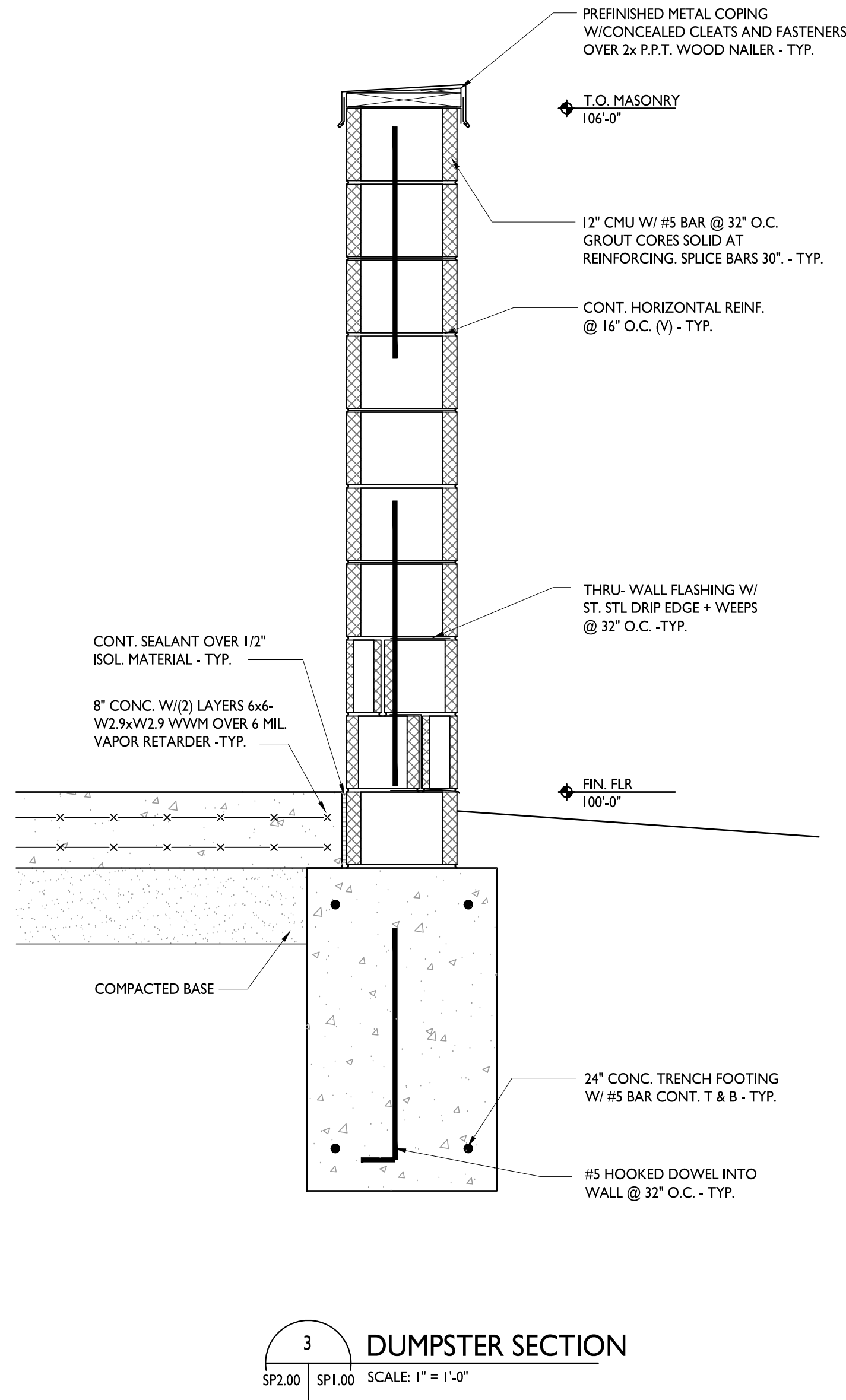
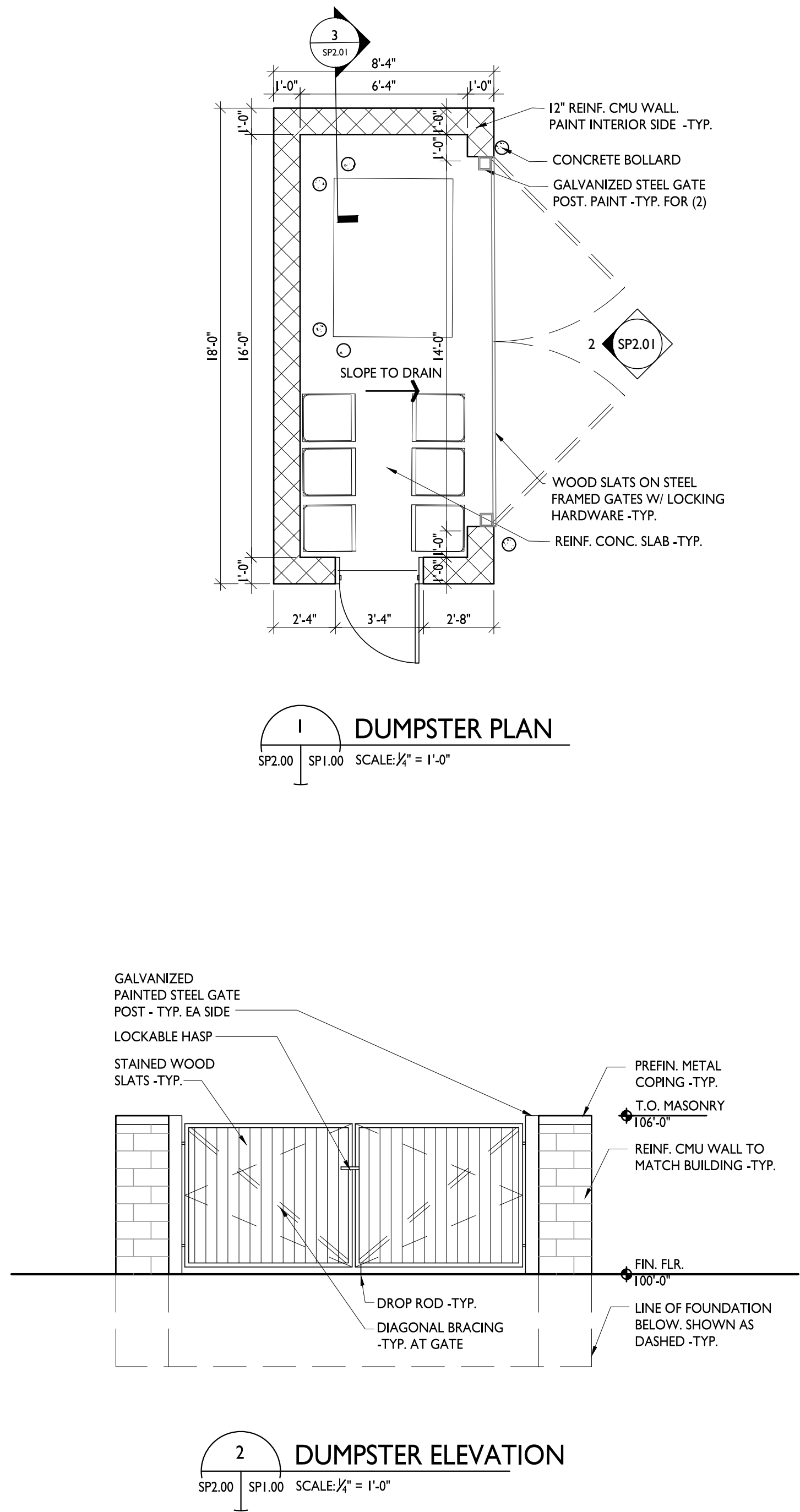
ISSUE + DATE
19 FEB 2019 OWN REV
05 MAR 2019 OWN REV
08 MAR 2019 OWN REV
22 MAR 2019 CITY
20 MAY 2019 OWN REV
13 JUN 2019 OWN REV
19 DEC 2019 OWN REV
07 JAN 2020 OWN REV

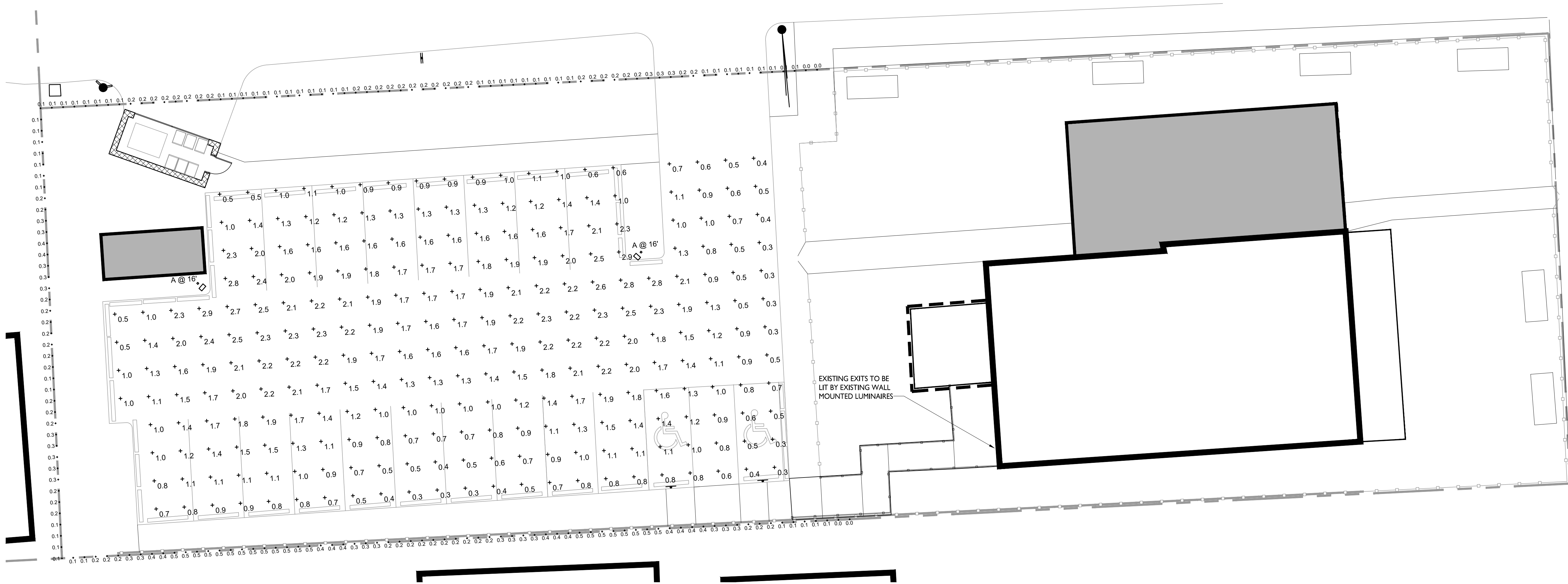
SHEET + TITLE
SITE PLAN
17306SP100S.dwg

SHEET + NUMBER
SP1.00

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PRELIMINARY SITE PLAN
SCALE: 1" = 10'

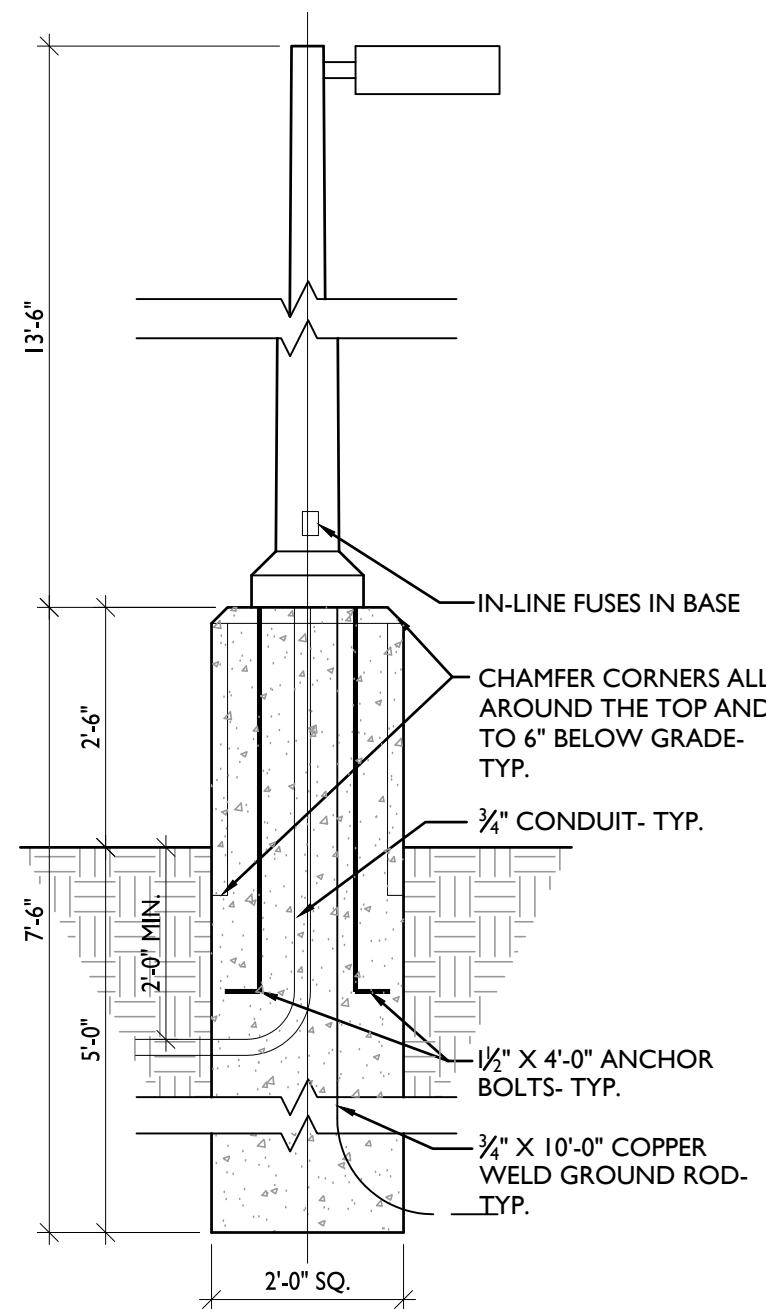




LIGHTING PLAN
SCALE: 1" = 10'

SCHEDULE										
SYMBOL	LABEL	QUANTITY	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP	NUMBER LAMPS	FILENAME	LUMENS PER LAMP	LIGHT LOSS FACTOR
	A	2	LITHONIA LIGHTING	DSX0 LED P2 50K TFTM MVOLT	DSX0 LED P2 50K TFTM MVOLT	LED	1	DSX0_LED_P2_50K_TFTM_MVOLT.LIES	6083	1

STATISTICS						
DESCRIPTION	SYMBOL	AVG	MAX	MIN	MAX/MIN	AVG/MIN
LOT LINE	+	0.2 FC	0.5 FC	0.0 FC	N/A	N/A
PARKING AREA @ 5' ABOVE GRADE	+	1.6 FC	5.7 FC	0.0 FC	N/A	N/A
PARKING AREA @ GRADE	+	1.3 FC	2.9 FC	0.3 FC	9.7:1	4.3:1



LIGHT POLE DETAIL
SCALE: 1/2" = 1'-0"

D-Series Size 1
LED Area Luminaire

Specifications

EPA: 1,01 ft² (9.39 m²)

Length: 33" (83.8 cm)

Width: 13" (33.0 cm)

Height H1: 7-1/2" (19.0 cm)

Height H2: 3-1/2" (9.1 cm)

Weight (max): 27 lbs (12.2 kg)

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAR2 PIRHN DDBXD

DSX1 LED	Series	LEDs	Color temperature	Distribution	Voltage	Mounting				
DSX1 LED	Forward optics	P1	30K	3000K	T1S	Type I short	TSVS	Type V very short	MVOLT ¹	Shipped included SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor ¹ RPMBA Round pole universal mounting adaptor ¹ Shipped separately KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ¹
		P4	40K	4000K	T2S	Type II short	T5S	Type V short	120 ⁴	
		P2	P5	P8	T2M	Type II medium	T5M	Type V medium	208 ⁴	
		P3	P6	P9	T3S	Type II short	T5W	Type V wide	240 ⁴	
		P10	P12	T3M	Type II medium	BLC	Backlight control ¹	277 ⁴		
	Rotated optics	P10	P12	T4M	Type IV medium	LCCO	Left corner cutoff ¹	340 ⁴	Shipped separately KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) ¹	
		P11	P13	TTM	Forward throw medium	RCCO	Right corner cutoff ¹	480 ⁴		
		Other options						Finish included		
		Shipped installed						DSX1 LED		
		Shipped separately						DSX1 LED		

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com

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DSX1 LED Rev. 12/09/19 Page 1 of 8

[\(https://www.marygrove.com/\)](https://www.marygrove.com/)

734-250-9069 (tel:734-250-9069)

[SPECIAL OFFERS \(/SPECIAL-OFFERS\)](#)[FREE IN-HOME ESTIMATE \(HTTPS://WWW.MARYGROVE.COM/FREE-ESTIMATE/\)](https://www.marygrove.com/free-estimate/)[Retractable Awnings \(https://www.marygrove.com/retractable-awnings/\)](https://www.marygrove.com/retractable-awnings/)[Residential Awnings \(https://www.marygrove.com/residential-awnings/\)](https://www.marygrove.com/residential-awnings/)[Commercial Awnings \(https://www.marygrove.com/commercial-and-storefront-awnings/\)](https://www.marygrove.com/commercial-and-storefront-awnings/)[Adjustable Pergola \(https://www.marygrove.com/retractable-pergola-canopy/\)](https://www.marygrove.com/retractable-pergola-canopy/)[Service Areas](#)[Resources Center \(https://www.marygrove.com/resources-center/\)](https://www.marygrove.com/resources-center/)[Contact Us \(https://www.marygrove.com/contact-us/\)](https://www.marygrove.com/contact-us/)

Outdoor Seating Awnings

Select a point of interest to learn more.

About Our Outdoor Seating Awnings

Marygrove's awnings for outdoor seating are an excellent way to expand your business. Outdoor seating has become the standard among restaurants. Adding covered seating will allow you to increase the number of tables and chairs you have. Patio seating is also an affordable way to extend your business to include early spring and late fall, especially if you use our rolling screens.



FREE IN-HOME Estimate!

Get \$500 off! We offer 0% Financing on all Retractable Awnings

I'd like to learn about your promotions & understand you may use an automatic phone system and text messages to reach me at the number provided above.

Rolling Screens

Our outdoor awnings are compatible with our multifunctional rolling screens. These screens can be used in the summer to protect customers from direct sunlight or in the fall to prevent heat from escaping. Since we use PVC-coated fiberglass properties, the screens are easy to see through and have excellent ventilation.



Expand Your Business's Seating Area

Adding one of Marygrove's outdoor awnings is a cost-effective way to increase your restaurant's seating. Whether you are on a limited budget or your location is landlocked, outdoor seating will increase your curb appeal and can help bring in customers who want to enjoy sitting outside while they dine.

Expand Your Outside Seating Season

Generate more income from your outdoor seating area with a covered enclosure and Marygrove roll screens. An enclosed patio allows you to better control the temperature by rolling the screens up or down. Keep your customers comfortable no matter what the weather and they'll keep coming back.



Financing Available!

Speak with a representative for affordable monthly payment options.

APPLY NOW! (/FINANCING)



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[Retractable Awnings \(https://www.marygrove.com/retractable-awnings/\)](https://www.marygrove.com/retractable-awnings/)

[Residential Awnings \(https://www.marygrove.com/residential-awnings/\)](https://www.marygrove.com/residential-awnings/)

[Commercial Awnings \(https://www.marygrove.com/commercial-and-storefront-awnings/\)](https://www.marygrove.com/commercial-and-storefront-awnings/)

[Adjustable Pergola \(https://www.marygrove.com/retractable-pergola-canopy/\)](https://www.marygrove.com/retractable-pergola-canopy/)

[Service Areas](#)

[Resources Center \(https://www.marygrove.com/resources-center/\)](https://www.marygrove.com/resources-center/)

[Contact Us \(https://www.marygrove.com/contact-us/\)](https://www.marygrove.com/contact-us/)

Louvered Roof Systems

Louvered Roof Systems

Louvered roofs open a world of possibilities for your outdoor seating area. A series of horizontal slats (louvers) angled in a way to admit air and light while keeping out rain, the concept of louvered systems has been around for ages. It encompasses everything from the classic window shutters to modernized motor-operated louvered roof systems.

Whether you run a restaurant or are looking for a patio cover for your home, an Arcadia Louvered Roof System can revolutionize how you use your outdoor space.



What's the Difference Between a Louvered Roof and a Retractable Awning?



Why Should I Add A Louvered Roof to My Home?



Commercial Louvered Roofs for Restaurants



Will a Louvered Roof Increase Risk of Workers Comp Claims?



When is the Best Time to Install a Louvered Roof System?



How do I Clean a Louvered Roof



Should I Buy a Louvered Roof System From a Dealer or Manufacturer?



Why Marygrove Awnings®?



FREE IN-HOME Estimate!

Get \$500 off! We offer 0% Financing on all Retractable Awnings

SUBMIT

I'd like to learn about your promotions & understand you may use an automatic phone system and text messages to reach me at the number provided above.

Increased Visibility

Adding patio covers can increase your establishment's visibility and make it draw in more passersby. Louvered roof system makes it easy to create a climate- and light-controlled environment that will please any guest.



Investment Quickly Returned

Louvered roof seating is a smart decision for many businesses and usually provides a quick return on investment. Not only are you adding a new revenue area but outdoor dining is generally more comfortable and relaxed.

Financing Available!

Speak with a representative for affordable monthly payment options.

APPLY NOW! (/FINANCING)

[\(https://www.marygrove.com/\)](https://www.marygrove.com/)

734-250-9069 (tel:734-250-9069)

[SPECIAL OFFERS \(/SPECIAL-OFFERS\)](#)[FREE IN-HOME ESTIMATE \(HTTPS://WWW.MARYGROVE.COM/FREE-ESTIMATE/\)](https://www.marygrove.com/free-estimate/)[Retractable Awnings \(https://www.marygrove.com/retractable-awnings/\)](https://www.marygrove.com/retractable-awnings/)[Residential Awnings \(https://www.marygrove.com/residential-awnings/\)](https://www.marygrove.com/residential-awnings/)[Commercial Awnings \(https://www.marygrove.com/commercial-and-storefront-awnings/\)](https://www.marygrove.com/commercial-and-storefront-awnings/)[Adjustable Pergola \(https://www.marygrove.com/retractable-pergola-canopy/\)](https://www.marygrove.com/retractable-pergola-canopy/)[Service Areas](#)[Resources Center \(https://www.marygrove.com/resources-center/\)](https://www.marygrove.com/resources-center/)[Contact Us \(https://www.marygrove.com/contact-us/\)](https://www.marygrove.com/contact-us/)

Metal Standing Seam Awnings

Select a point of interest to learn more.

About Our Metal Standing Seam Awnings

Marygrove standing seam awnings are designed to enhance any structure for years to come. Built to last, our metal awnings use substructures with durable finishes that require very little maintenance. Our standing seam metal panels come in a variety of different widths, gauges and colors and are coated with specialty metals. This means we are able to color-match your design and color schemes and create a custom design to incomparably suit your business's needs.



FREE IN-HOME Estimate!

Get \$500 off! We offer 0% Financing on all Retractable Awnings

I'd like to learn about your promotions & understand you may use an automatic phone system and text messages to reach me at the number provided above.

Low Maintenance

Nothing lasts longer than metal awnings. Awnings from Marygrove are designed for longevity since they require very little maintenance. All awning components are sealed and finished to ensure they can withstand the elements. Our factory finishes see to the uninterrupted maintenance and continued beauty of your business's fixed awning.



Customization Available

Marygrove metal awnings can be customized to meet the needs of your business. Our design experts will work with you to create a structure that not only enhances your business but will also last. We are able to create unique designs to coordinate with the facade of your building. Marygrove also uses specialty coatings on the metal framework of fixed awnings that can be matched to any color scheme.

Financing Available!

Speak with a representative for affordable monthly payment options.

APPLY NOW! (/FINANCING)

Sample of awning proposed from HOMES Brewery in Ann Arbor



700 Sierra

Semi-Transparent

700 Sierra

Semi-Opaque



4 ft. H x 6 ft. W Texas Metal Fencing

By Wayside - State Line of Aluminum Fence

\$177.99 ~~\$192.99~~

FREE Shipping Ships by Tue, Jan 14 ⓘ

Add to Cart

[See Full Details](#)



HDC Work Permit Staff Review

Property address: 318 Maple

Property History: The property includes a vernacular house erected in 1876. The National Register nomination form lists the building as non-contributing because of its replacement siding. In staff opinion, if the nomination were up-to-date, the building would be listed as contributing.

Date of Application: January 3, 2020

Date of Review: January 7, 2020

Date of Meeting: January 14, 2020

Proposed work: Replace three windows.

Materials: Marvin Elevate double-hung fiberglass-clad wood windows.

Staff review:

1. The application is to replace three windows on a rear second story enclosed porch.
 - a. Based on Sanborn Maps, the porch was added sometime after 1964, and appears to be non-historic.
 - b. The extant windows are one-over-one awning windows that also appear to be non-historic.
2. The applicant proposed to replace these three windows with Marvin Elevate fiberglass-clad wood windows; one-over-one, double-hung sashes. The project is for a full frame replacement and is consistent with the HDC requirements noted in the Windows Fact Sheet.
3. The new windows would be consistent with the other windows on the house, which all appear to be one-over-one double-hung wood sashes.

Recommended Motions:

Move to approve and issue a Certificate of Appropriateness for the work at 318 Maple, as submitted in the application dated January 3, 2020, for the replacement of three awning-style

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

10. New work shall be removable.

windows on the rear second story enclosed porch. The new windows shall be full-frame replacements with Marvin Elevate one-over-one double-hung sashes.

Relevant Secretary of the Interior's Standards:
#9

Prepared by:
Scott E. Slagor, Preservation Planner



City of Ypsilanti
Historic District Commission
Work Permit Application
One South Huron • Ypsilanti, MI 48197
Phone: (734) 483-9646 • Fax: (734) 483-7260
www.cityofypsilanti.com

PHDC-20-0001

26663
c1375

OFFICE USE ONLY

Date Filed:

Meeting Date:

Action Item/Study Item

To complete this application:

1. Complete this form.
2. Attach the following documents:
 - a. Photo(s) showing all locations where work is proposed (can be emailed).
 - b. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components—this includes information from catalogues, professional quotes, or websites (can be emailed).
 - c. Dimensioned drawings of any new construction or modifications to existing structures, including awnings and signs.
 - d. A sketch plan, if proposal is for work on the grounds and not just the main structure (e.g., installing a new driveway, fence, or shed). This can be drawn on a scaled copy of a mortgage survey.
3. Applications and materials must be received by the Building Department **no later** than 4pm on the Tuesday one week prior to the meeting.

INCOMPLETE APPLICATIONS WILL NOT BE PLACED ON THE AGENDA

Property

Address

318 Maple St. Ypsilanti, MI 48198

Applicant

**If applicant is not owner of property, a written statement from the owner authorizing this application must be included.*

Name Judy Weinburger		
Address [REDACTED]		
City Ypsilanti	State MI	Zip 48198
Phone / Fax [REDACTED]	E-Mail [REDACTED]	

Contractor

Contractor Name & Contact Info

Window Pro Marvin Windows Tim Baetz [REDACTED]

Type of work

- | | | |
|---|--|--|
| ☐ Roofing | ☐ Porches | ☐ Painting |
| ☒ Window/Door Replacement | ☐ Sign | ☐ Other |
| | ☐ Fence (or other sitework) | ☐ Application Amendment |

Complete Description of Proposed Work:

Two upper windows on the back (south) side of the house and one window on the east side have deteriorated beyond repair. The wood no longer holds the glass pane in place. I would like to replace them with similar style double hung windows in wood thermopane in white. Exterior capped back to the siding in white to match house.

Materials (for paint include color chips or samples with application):

See attached information Marvin windows and white paint

Permit Application Fee (action items only)

The fee is \$45 for the first \$3,000 in construction cost plus \$5 for every additional \$3,000 of construction cost. There is a flat fee of \$10 for painting only. *An additional fee of \$50 applies to HDC work started without the applicable permit.*

Construction Cost:

\$4892

Permit fee:

\$45 + 5 = 50

Signature

I hereby attest that the above information is accurate. I am authorized to and grant permission to the City of Ypsilanti staff to be on the subject property for the purposes of preparing staff reports and/or evaluating this application.

I further affirm that this property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.

Signature:

Date:

12/17/2019

Print Name:

Judy Weinburger

If you have questions about what the HDC generally permits or does not permit, or what they need to see in an application to render a decision, please call the office at 734-483-9646 or view our factsheets online at cityofypsilanti.com/hd.

All other necessary approvals and permits must be acquired before beginning work.

16900 Bagley Road • Middleburg Heights, OH 44130 | 400-1 Lazelle Road • Columbus, OH 43240 | 47705 West Road #B-106 • Wixom, MI 48393
windowpro.com | Ph. 888.529.5624 | Fax 440.243.4669

SALES AND INSTALLATION AGREEMENT

Appointment Date: 12/13/19 Customer: JUDITH WEINBURGER NS Job #: _____

Address: 318 MAPLE ST. City: YPSILANTI Zip: 48198

Phone: (Home) _____ (Work/Cel) _____ Email: _____

Windows: _____ # Replacing: 3 # Entry Doors: _____ # Replacing: _____ # Specialty Windows: _____ # Replacing: _____
Storm Doors: _____ # Replacing: _____ # Patio Doors: _____ # Replacing: _____ Siding Interest: _____

Window/Door Description (CHECK ALL THAT APPLY)

☐ Infinity From Marvin
☐ Marvin

☐ Marvin Entry Doors
☒ Integrity from Marvin

☐ ProVia Entry Doors.
☐ ProVia Storm Doors

☐ Thermo-Tru Doors
☐ Other Products _____

Quantity	Grids & Style		Quantity	Grids & Style	
3	-	DOUBLE HUNG INT COLOR <u>WH</u> HDWR FINISH <u>WH</u>			TRIPLE ASSEMBLY INT COLOR _____ HDWR FINISH _____
		2 LITE GLIDER INT COLOR _____ HDWR FINISH _____			AWNING INT COLOR _____ HDWR FINISH _____
		PICTURE WINDOW INT COLOR _____ HDWR FINISH _____			BAY WINDOW 10° ☐ 30° ☐ 45° ☐ 0TH ☐ INT COLOR _____ HDWR FINISH _____
		CN _____ INT COLOR _____ HDWR FINISH _____			PRODUCT _____ INT COLOR _____ EXT COLOR _____

Additional Information/Products

INCLUDES INSTALLATION AND REMOVAL/DISPOSAL OF EXISTING FULL FRAME "NEW CONSTRUCTION" WINDOW. ALL NEW INTERIOR CASING. CUSTOMER RESPONSIBLE FOR PAINTING OF NEW INTERIOR CASING. DUAL PANE LOWE GLASS TEMP GLASS ON OH NEXT TO DOOR. EXTERIOR CAPED BACK TO SIDING AND CAULKED. \$1,000 DOWN + \$1,446 ONCE CITY APPROVES BEFORE ORDERING WINDOWS. DEPOSIT REFUNDABLE IF CITY DOESN'T APPROVE PROJECT. 20% OFF PLUS ADDITIONAL 20%

PERMIT \$104 INCLUDED IN TOTAL

Window Removal Type WOOD AWAY

Exterior Color STONE WHITE

Exterior Trim Type ALUM /Color WH

#Windows Stained/Painted _____

#Patio Doors Stained/Painted _____

#Entry Doors Stained/Painted _____

Project List Price: \$ 7,389
Total Discounts: \$ -2,497
Proposal Total: \$ 4,892
Deposit: \$ 1,000 + 1,446 @ approval
Balance Due: \$ 2,446
(upon installation)

PAYMENT METHOD

Finance ☐ Credit Card ☐ Check ☒

CC# _____ Exp. Date: _____

Check Number: 1369-

Please See Reverse Side For Terms And Conditions Of Sale.
Note: This Agreement Is Not Binding Without Windowpro Management Approval.

ALL IMAGES VIEWED FROM OUTSIDE

X-Operating PN-EverWood
O-Stationary TP-Satin Taupe
SW-Stone White BB-Bright Brass
SA-Sierra SN-Satin Nickel
BZ-Bronze ORBZ-Oil Rubbed Bronze
CS-Cashmere
PB-Pebble Gray S/P-Stain/Paint

X _____ (Date) 12-13-19 X _____ (Date) _____

Accepted By Customer _____
X _____ (Date) 12/13/19 X _____ (Date) _____
Accepted By WindowPRO Sales Consultant _____ Accepted By WindowPRO Management _____

UNIT SUMMARY

The following is a schedule of the windows and doors for this project. For additional unit details, please see Line Item Quotes.

Additional charges, tax or Terms and Conditions may apply. Detail pricing is per unit.

NUMBER OF LINES: 3

TOTAL UNIT QTY: 3

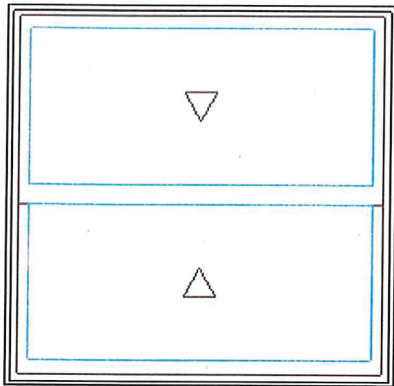
LINE	MARK UNIT	PRODUCT LINE	ITEM	QTY
1	201 Rear Porch	Elevate	Double Hung RO 50" X 47" Entered as RO 50" X 47"	1
2	202 Rear Porch	Elevate	Double Hung RO 50" X 47" Entered as RO 50" X 47"	1
3	203 Porch Side	Elevate	Double Hung RO 32" X 47" Entered as RO 32" X 47"	1

LINE ITEM QUOTES

The following is a schedule of the windows and doors for this project. For additional unit details, please see Line Item Quotes. Additional charges, tax or Terms and Conditions may apply. Detail pricing is per unit.

Line #1	Mark Unit: 201 Rear Porch			
Qty: 1				

MARVIN 



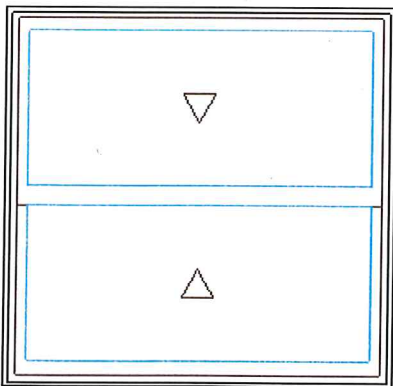
As Viewed From The Exterior

Entered As: RO
FS 49" X 46 1/2"
RO 50" X 47"

Stone White Exterior
White Interior
Elevate Double Hung
Rough Opening 50" X 47"
Top Sash
Stone White Exterior
White Interior
IG - 1 Lite
Low E2 w/Argon
Stainless Perimeter Bar
Bottom Sash
Stone White Exterior
White Interior
IG - 1 Lite
Low E2 w/Argon
Stainless Perimeter Bar
White Weather Strip Package
White Sash Lock
Exterior Aluminum Screen
Stone White Surround
Charcoal Fiberglass Mesh
4 9/16" Jambs
Nailing Fin
***Note: Unit Availability and Price is Subject to Change

Line #2	Mark Unit: 202 Rear Porch			
Qty: 1				

MARVIN 



As Viewed From The Exterior

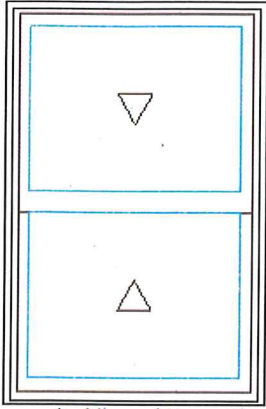
Entered As: RO
FS 49" X 46 1/2"
RO 50" X 47"

Stone White Exterior
White Interior
Elevate Double Hung
Rough Opening 50" X 47"
Top Sash
Stone White Exterior
White Interior
IG - 1 Lite
Low E2 w/Argon
Stainless Perimeter Bar
Bottom Sash
Stone White Exterior
White Interior
IG - 1 Lite
Low E2 w/Argon
Stainless Perimeter Bar
White Weather Strip Package
White Sash Lock
Exterior Aluminum Screen
Stone White Surround
Charcoal Fiberglass Mesh
4 9/16" Jambs
Nailing Fin
***Note: Unit Availability and Price is Subject to Change

Line #3	Mark Unit: 203 Porch Side			
Qty: 1				

MARVIN 

Stone White Exterior
White Interior
Elevate Double Hung
Rough Opening 32" X 47"



As Viewed From The Exterior

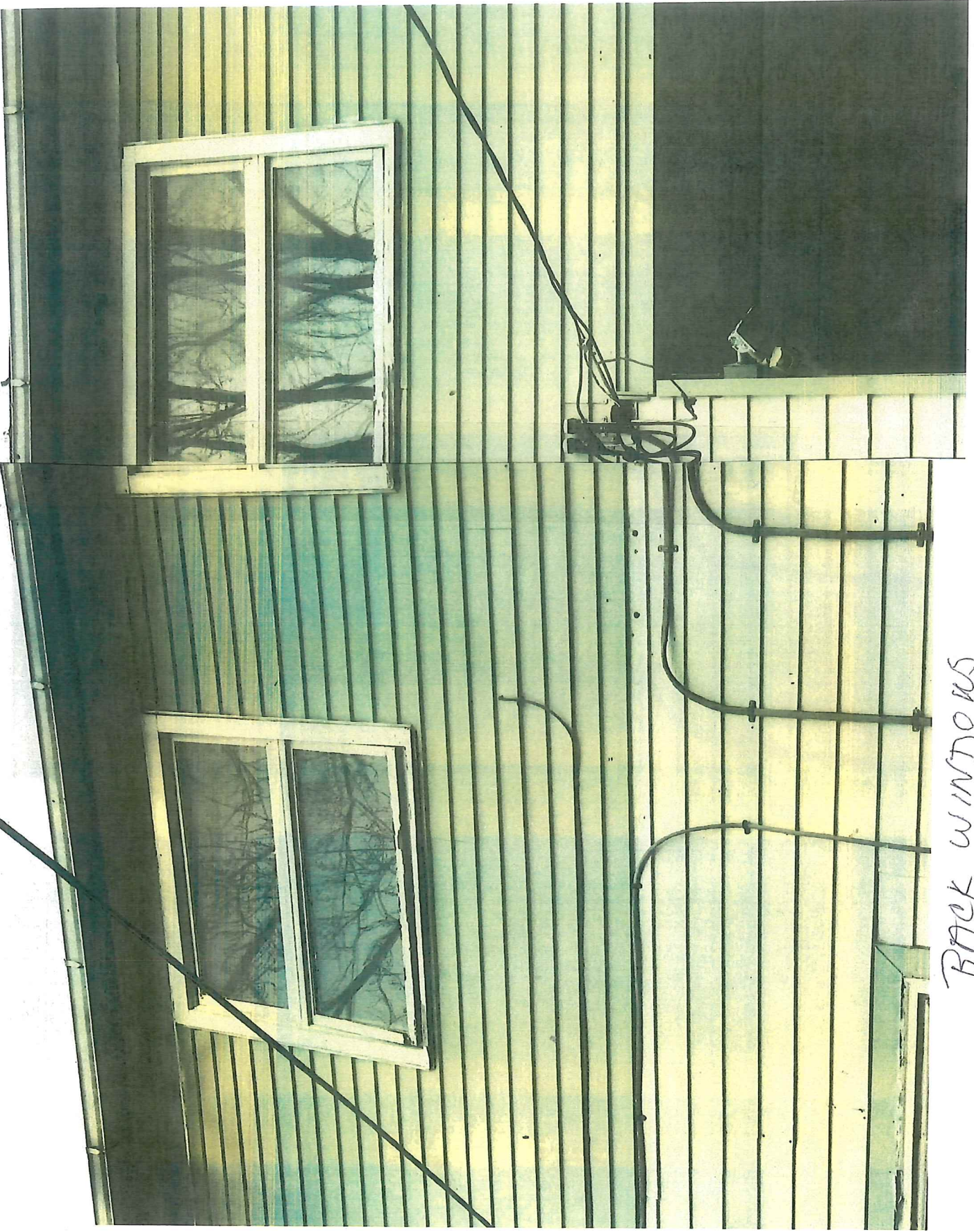
Entered As: RO
FS 31" X 46 1/2"
RO 32" X 47"

Glass Add For All Sash
Top Sash
Stone White Exterior
White Interior
IG - 1 Lite
Tempered Low E2 w/Argon
Stainless Perimeter Bar
Bottom Sash
Stone White Exterior
White Interior
IG - 1 Lite
Tempered Low E2 w/Argon
Stainless Perimeter Bar
White Weather Strip Package
White Sash Lock
Exterior Aluminum Screen
Stone White Surround
Charcoal Fiberglass Mesh

4 9/16" Jambs

Nailing Fin

***Note: Unit Availability and Price is Subject to Change



BACK WINDOWS



SIDE WINDOW



INSIDE VIEW OF BACK WINDOW



Facing southeast to facade and west elevation



Facing southwest to facade and east elevation



Facing northwest to east and south elevations



Detail of windows to be replaced.