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**CITY OF WATERLOO COUNCIL AGENDA**  
**COUNCIL CHAMBER OF THE MUNICIPAL BUILDING – 136 N. MONROE STREET**  
**Thursday June 6, 2019 – 7:00 p.m.**

Pursuant to Section 19.84 Wisconsin Statutes, notice is hereby given to the public and news media, that a public meeting will be held to consider the following:

1. CALL TO ORDER, PLEDGE OF ALLEGIANCE AND ROLL CALL
2. MEETING MINUTES APPROVAL: May 16, 2019 Open & Closed Session; May 9, 2019 Closed Session
3. PUBLIC COMMENT
4. MEETING SUMMARIES - SINCE LAST COUNCIL MEETING
  - a. [2019-05-29 Board of Review Agenda](#)
  - b. [2019-05-28 Plan Commission Meeting Agenda](#)
  - c. [2019-05-23 Board of Zoning Appeals Agenda](#)
  - d. [2019-05-21 Community Development Authority Agenda](#)
  - e. [2019-05-20 Karl Junginger Memorial Library Board Agenda](#)
5. RECOMMENDATIONS OF BOARDS, COMMITTEES & COMMISSIONS
  - a. Utility Commission
    - i. Resolution #2019-15 Review Of The Annual Wastewater Treatment Plant Compliance Maintenance Report
  - b. Finance, Insurance & Personnel Committee
    - i. Resolution #2019-16 Waiving Impact Fees For The 2019 Waterloo School District Facility Improvements
  - c. Plan Commission
    - i. Application For Conditional Use Permit, SAC Wireless On Behalf Of AT&T (Owner – City Of Waterloo), Property Located At 333 Portland Road To Allow For The Construction Of A 260' Self Support Telecommunications Tower To Increase The Service In The Area
6. NEW BUSINESS
  - a. Amending An Existing Ground Lease Agreement Between The City of Waterloo And New Cingular Wireless PCS, LLC For A Telecommunications Tower At 333 Portland Road
  - b. Resolution #2019-17 Authorizing Tax Incremental District #3 Expenses For Wetland Delineation And Geotechnical Analysis Relating To Reuse And Redevelopment Of 333 Portland Road
  - c. Class A & B Beer, Liquor & Cider License Applications For The License Period 7/1/2019 – 6/30/2020
  - d. Cigarette License Applications For the License Period From 7/1/2019 – 6/30/2020
  - e. Annual Mobile Home Park Licenses For The License Period From 7/1/2019 – 6/30/2020 (2)
  - f. Council Confirmation Of Mayoral Appointments
    - i. Community Development Authority – Jeanette Petts and Jason Schoenwetter
    - ii. Waterloo CATV Regulatory Board – Eric Rhynes
    - iii. Administrative Review Appeals Board – James Setz
    - iv. Board of Zoning Appeals – James Setz
7. FUTURE AGENDA ITEMS AND ANNOUNCEMENTS
  - a. Thank You Letter To Businesses For Not Selling Tobacco To Minors
8. ADJOURNMENT

  
Mo Hansen  
Clerk/Treasurer

PLEASE NOTE: It is possible that members of and possibly a quorum of members of other governmental bodies of the municipality may be in attendance at the above meeting(s) to gather information. No action will be taken by any governmental body other than that specifically noticed. Also, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request such services please contact the clerk's office at the above location.

**CITY OF WATERLOO COMMON COUNCIL**  
**MEETING MINUTES: May 16, 2019**

Digital audio files are archived with these written minutes additionally serving as the official record.

CALL TO ORDER, PLEDGE OF ALLEGIANCE AND ROLL CALL. Mayor Quimby called the meeting to order at 7:00 p.m. Alderpersons present: Schoenwetter, Kuhl, Griffin, Thomas and Petts by phone. Absent: Stinnett with one vacancy. Others present: WLOO videographers; Diane Graff, the Courier; Library Director Kelli Mountford; Parks Coordinator Gabe Haberkorn; Public Works Director Chad Yerges; Police Chief Denis Sorenson; Assistant Public Works Director Jeff Robbins; Eric Rhynes; Nathan Novak and Clerk/Treasurer Mo Hansen. The pledge of allegiance was recited.

MEETING MINUTES APPROVAL: May 9, 2019. MOTION: Moved by Griffin, seconded by Thomas to approve the minutes as presented. VOICE VOTE: Motion carried.

CITIZEN INPUT / PUBLIC COMMENT. None.

PUBLISHED NOTICES (1) Board Of Zoning Appeals Public Hearing, Use Variance Request, 808 North Monroe Street, Allowing Warehousing In A Commercial District. Noted.

**CONSENT AGENDA ITEMS**

- a. April Reports Of City Officials And Contract Service Providers. MOTION: Moved by Thomas, seconded by Schoenwetter to approve the consent agenda items. VOICE VOTE. Motion carried.
  - i. Parks Coordinator
  - ii. Fire & EMS
  - iii. Building Inspection - Building, Plumbing, & Electrical Permits
  - iv. Public Works
  - v. Police
  - vi. Karl Junginger Memorial Library
  - vii. Waterloo Water & Light Commission Minutes
  - viii. Watertown Humane Society

MEETING SUMMARIES SINCE LAST COUNCIL MEETING. Thomas said the Finance Committee met earlier reviewing auditor comments about Impact Fees. A review of Tax Incremental Finance Districts would take place in June.

**RECOMMENDATION OF BOARDS, COMMITTEES AND COMMISSIONS**

- a. Parks Commission
  - i. Resolution #2019-14 Increasing Park Rental Rates. DISCUSSION: Haberkorn provided cost of comparable facilities in Columbus and Mayville as request by Schoenwetter. MOTION: Moved by Thomas, seconded by Kuhl to approve the resolution as presented. ROLL CALL VOTE: Ayes: Schoenwetter, Kuhl, Griffin, Thomas and Petts. Noes: none with Stinnett absent and one vacancy.
  - i.
- b. Finance, Insurance & Personnel Committee
  - i. General Disbursements, April 2019 - \$225,088.08. MOTION: Moved by Thomas, seconded by Schoenwetter to approve disbursements in the stated amount. ROLL CALL VOTE: Ayes: Schoenwetter, Kuhl, Griffin, Thomas and Petts. Noes: none with Stinnett absent and one vacancy.
  - ii. Payroll, April 2019 - \$67,901.80. MOTION: Moved by Thomas, seconded by Griffin to approve payroll in the stated amount. ROLL CALL VOTE: Ayes: Schoenwetter, Kuhl, Griffin, Thomas and Petts. Noes: none with Stinnett absent and one vacancy.
  - iii. Treasurer's Report & Budget Report, April. MOTION: Moved by Thomas, seconded by Griffin to approve disbursement in the stated amount. ROLL CALL VOTE: Ayes: Schoenwetter, Kuhl, Griffin, Thomas and Petts. Noes: none Stinnett absent and one vacancy.
  - iv. Authorizing A \$523,000 Bank Note To Fund 2019 Street Improvements. DISCUSSION: Hansen said 11 financial institutions were asked for quotes. Three submittals were received. He recommended the Bank of Sun Prairie proposal consisting of the lowest interest rate of 1.958% for the 17 months bank note, with all other variables the same across submittals. MOTION: Moved by Thomas, seconded by Schoenwetter to authorize a \$523,000 bank note with the Bank of Sun Prairie meeting the terms set forth by the City as described in the May 9,

2019 Bank of Sun Prairie letter and corresponding debt service repayment schedule. ROLL CALL VOTE: Ayes: Schoenwetter, Kuhl, Griffin, Thomas and Petts. Noes: none Stinnett absent and one vacancy.

#### NEW BUSINESS

- a. Ordinance #2019-03 Amending Section 30-6 Of The Municipal Code Eliminating The Community Development Committee As A Standing Committee And Amending Section 35-2 Community Development Authority Composition And Procedures. DISCUSSION: The Mayor described the Community Development Committee as duplicative and reviewed proposed changes to the Community Development Authority composition, procedures and authority. Quimby described the drafted amendment relating to budgetary responsibilities presented to the Council members on a separate sheet. Thomas called for an amendment to add "or designee" to describe powers to sign documents under section, 3 number 4 relating to authority power to purchase and sell property. MOTION: Moved by Thomas, seconded by Petts to approve Ordinance #2019-03 with the written amendment and Thomas verbal amendment included. VOICE VOTE: Motion carried.
- b. Council Aldermanic Vacancy, Considering Ward #2 Appointment Applications
  - i. Nate Novak
  - ii. Eric RhynesDISCUSSION: Without objection the Mayor called for a process whereby votes would be cast by paper ballot. Having submitted written applicants, Novak and Rhynes further introduced themselves. In accordance with §19.85(1)(c), Wis. Stats., and with unanimous consent, at this time the City Council met in closed session. Upon conclusion of the closed session the City Council reconvened in open session. By a 3-2 vote (Petts casting a ballot over the phone), Rhynes was appointed as Ward #2 Alder to fill the vacancy.
- c. Council Confirmation Of Mayoral Appointment, Jim Setz, Parks Commission (School Board Representative completing an unexpired term ending 2021). MOTION: Moved by Kuhl, seconded by Griffin to confirm the Mayoral appointment. VOICE VOTE: Motion carried.
- d. Council Confirmation of Mayoral Standing Committee Appointments
  - i. Finance, Insurance & Personnel Committee – Kuhl
  - ii. Public Works & Property Committee – Ward #2 Appointee (Eric Rhynes)MOTION: Moved by Thomas, seconded by Petts to confirm the Mayoral appointments. VOICE VOTE: Motion carried.

FUTURE AGENDA ITEMS AND ANNOUNCEMENTS. # Schoenwetter invited all to the Fire/EMS Sunday Pancake Breakfast. # Quimby invited all to participate in a June 6<sup>th</sup> Farm to Feast dinner at Crave Brothers Farm. # Haberkorn invited all to the May 30<sup>th</sup> Community Night in the Park.

ADJOURNMENT. Moved by Griffin, seconded by Schoenwetter to adjourn. Motion carried. Time: 7:35 p.m.



Attest:  
Mo Hansen, Clerk/Treasurer



136 North Monroe Street  
Waterloo, WI 53594  
Phone: (920) 478-3025  
Fax: (920) 478-2021  
[www.waterloowi.us](http://www.waterloowi.us)

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**RESOLUTION #2019-15**

**REVIEW OF THE ANNUAL WASTEWATER TREATMENT PLANT  
COMPLIANCE MAINTENANCE REPORT**

The Common Council of the City of Waterloo, Wisconsin does hereby resolve as follows:

**WHEREAS**, the Waterloo Water & Light Commission and the City of Waterloo Common Council has reviewed the annual Wastewater Treatment Plant Compliance Maintenance Report, which accompanies this resolution;

**THEREFORE, BE IT RESOLVED**, that the City of Waterloo Common Council informs the Wisconsin Department of Natural Resources that appropriate actions will continue to be taken to maintain and exceed compliance measures.

**PASSED AND ADOPTED** this \_\_\_\_ day of June 2019.

**City of Waterloo**

Signed: \_\_\_\_\_  
Jenifer Quimby, Mayor

Attest:

\_\_\_\_\_  
Morton J. Hansen  
Clerk/Treasurer

SPONSOR(S) – Utility Superintendent & Utility Commission  
FISCAL NOTE – none provided

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:  
5/31/2019 2018

## Resolution or Owner's Statement

Name of Governing Body or Owner:	<input type="text" value="City of Waterloo"/>
Date of Resolution or Action Taken:	<input type="text" value="06/06/2019"/>
Resolution Number:	<input type="text" value="2019-15"/>
Date of Submittal:	<input type="text"/>

### ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO SPECIFIC CMAR SECTIONS (Optional for grade A or B. Required for grade C, D, or F):

Influent Flow and Loadings: Grade = B

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: Grade = A

Effluent Quality: Ammonia: Grade = A

Effluent Quality: Phosphorus: Grade = A

Biosolids Quality and Management: Grade = A

Staffing: Grade = A

Operator Certification: Grade = A

Financial Management: Grade = A

Collection Systems: Grade = A

(Regardless of grade, response required for Collection Systems if SSOs were reported)

### ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS

(Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00)

**G.P.A. = 3.92**

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:

5/31/2019

2018

## Influent Flow and Loading

### 1. Monthly Average Flows and (C)BOD Loadings

1.1 Verify the following monthly flows and (C)BOD loadings to your facility.

Influent No. 701	Influent Monthly Average Flow, MGD	x	Influent Monthly Average (C)BOD Concentration mg/L	x	8.34	=	Influent Monthly Average (C)BOD Loading, lbs/day
January	0.3431	x	425	x	8.34	=	1,216
February	0.3952	x	384	x	8.34	=	1,266
March	0.3928	x	390	x	8.34	=	1,278
April	0.4369	x	364	x	8.34	=	1,328
May	0.6073	x	297	x	8.34	=	1,502
June	0.5344	x	386	x	8.34	=	1,721
July	0.4541	x	348	x	8.34	=	1,319
August	0.6239	x	303	x	8.34	=	1,577
September	0.6387	x	227	x	8.34	=	1,211
October	0.6593	x	237	x	8.34	=	1,302
November	0.4754	x	312	x	8.34	=	1,236
December	0.4695	x	339	x	8.34	=	1,326

### 2. Maximum Monthly Design Flow and Design (C)BOD Loading

2.1 Verify the design flow and loading for your facility.

Design	Design Factor	x	%	=	% of Design
Max Month Design Flow, MGD	.509	x	90	=	0.4581
		x	100	=	.509
Design (C)BOD, lbs/day	1967	x	90	=	1770.3
		x	100	=	1967

2.2 Verify the number of times the flow and (C)BOD exceeded 90% or 100% of design, points earned, and score:

	Months of Influent	Number of times flow was greater than 90% of	Number of times flow was greater than 100% of	Number of times (C)BOD was greater than 90% of design	Number of times (C)BOD was greater than 100% of design
January	1	0	0	0	0
February	1	0	0	0	0
March	1	0	0	0	0
April	1	0	0	0	0
May	1	1	1	0	0
June	1	1	1	0	0
July	1	0	0	0	0
August	1	1	1	0	0
September	1	1	1	0	0
October	1	1	1	0	0
November	1	1	0	0	0
December	1	1	0	0	0
Points per each		2	1	3	2
Exceedances		7	5	0	0
Points		14	5	0	0
<b>Total Number of Points</b>					<b>19</b>

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:  
5/31/2019 2018

## 3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?

- Yes Enter last calibration date (MM/DD/YYYY)

No

If No, please explain:

## 4. Sewer Use Ordinance

4.1 Did your community have a sewer use ordinance that limited or prohibited the discharge of excessive conventional pollutants ((C)BOD, SS, or pH) or toxic substances to the sewer from industries, commercial users, hauled waste, or residences?

Yes

No

If No, please explain:

4.2 Was it necessary to enforce the ordinance?

Yes

No

If Yes, please explain:

## 5. Septage Receiving

5.1 Did you have requests to receive septage at your facility?

Septic Tanks                      Holding Tanks                      Grease Traps

Yes

Yes

Yes

No

No

No

5.2 Did you receive septage at your facility? If yes, indicate volume in gallons.

Septic Tanks

Yes  gallons

No

Holding Tanks

Yes  gallons

No

Grease Traps

Yes  gallons

No

5.2.1 If yes to any of the above, please explain if plant performance is affected when receiving any of these wastes.

## 6. Pretreatment

6.1 Did your facility experience operational problems, permit violations, biosolids quality concerns, or hazardous situations in the sewer system or treatment plant that were attributable to commercial or industrial discharges in the last year?

Yes

No

If yes, describe the situation and your community's response.

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:  
5/31/2019 **2018**

<p>6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.?</p> <p><input type="radio"/> Yes</p> <p><input checked="" type="radio"/> No</p> <p>If yes, describe the types of wastes received and any procedures or other restrictions that were in place to protect the facility from the discharge of hauled industrial wastes.</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
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<b>Total Points Generated</b>	19
<b>Score (100 - Total Points Generated)</b>	81
<b>Section Grade</b>	<b>B</b>

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:  
5/31/2019 **2018**

## Effluent Quality and Plant Performance (BOD/CBOD)

### 1. Effluent (C)BOD Results

1.1 Verify the following monthly average effluent values, exceedances, and points for BOD or CBOD

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit > 10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	24	21.6	0	1	0	0
February	24	21.6	1	1	0	0
March	24	21.6	1	1	0	0
April	24	21.6	0	1	0	0
May	12	10.8	1	1	0	0
June	12	10.8	0	1	0	0
July	12	10.8	1	1	0	0
August	12	10.8	0	1	0	0
September	12	10.8	0	1	0	0
October	12	10.8	0	1	0	0
November	24	21.6	0	1	0	0
December	24	21.6	1	1	0	0

\* Equals limit if limit is <= 10

Months of discharge/yr	12		
Points per each exceedance with 12 months of discharge		7	3
Exceedances		0	0
Points		0	0
<b>Total number of points</b>			<b>0</b>

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge. Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is  $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

NONE

### 2. Flow Meter Calibration

2.1 Was the effluent flow meter calibrated in the last year?

- Yes

Enter last calibration date (MM/DD/YYYY)

10/23/2018

- No

If No, please explain:

### 3. Treatment Problems

3.1 What problems, if any, were experienced over the last year that threatened treatment?

NONE

### 4. Other Monitoring and Limits

4.1 At any time in the past year was there an exceedance of a permit limit for any other pollutants such as chlorides, pH, residual chlorine, fecal coliform, or metals?

- Yes
- No

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:

5/31/2019

**2018**

If Yes, please explain:

PRODUCER OF INDIVIDUALLY PACKAGED PICKLES. WASTE STREAMS GENERATED FROM DISCHARGE OF PICKLING BRINE AND DE-SALTING OF PICKLES.

4.2 At any time in the past year was there a failure of an effluent acute or chronic whole effluent toxicity (WET) test?

Yes

No

If Yes, please explain:

4.3 If the biomonitoring (WET) test did not pass, were steps taken to identify and/or reduce source(s) of toxicity?

Yes

No

N/A

Please explain unless not applicable:

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:

5/31/2019

2018

## Effluent Quality and Plant Performance (Total Suspended Solids)

### 1. Effluent Total Suspended Solids Results

1.1 Verify the following monthly average effluent values, exceedances, and points for TSS:

Outfall No. 001	Monthly Average Limit (mg/L)	90% of Permit Limit >10 (mg/L)	Effluent Monthly Average (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance	90% Permit Limit Exceedance
January	24	21.6	0	1	0	0
February	24	21.6	0	1	0	0
March	24	21.6	2	1	0	0
April	24	21.6	1	1	0	0
May	12	10.8	1	1	0	0
June	12	10.8	0	1	0	0
July	12	10.8	0	1	0	0
August	12	10.8	0	1	0	0
September	12	10.8	0	1	0	0
October	12	10.8	0	1	0	0
November	24	21.6	0	1	0	0
December	24	21.6	2	1	0	0
* Equals limit if limit is <= 10						
Months of Discharge/yr				12		
<b>Points per each exceedance with 12 months of discharge:</b>					<b>7</b>	<b>3</b>
Exceedances					0	0
Points					0	0
<b>Total Number of Points</b>						<b>0</b>

0

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is  $12/6 = 2.0$

1.2 If any violations occurred, what action was taken to regain compliance?

NONE

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:

5/31/2019

2018

## Effluent Quality and Plant Performance (Ammonia - NH3)

### 1. Effluent Ammonia Results

1.1 Verify the following monthly and weekly average effluent values, exceedances and points for ammonia

Outfall No. 001	Monthly Average NH3 Limit (mg/L)	Weekly Average NH3 Limit (mg/L)	Effluent Monthly Average NH3 (mg/L)	Monthly Permit Exceedance	Effluent Weekly Average for Week 1	Effluent Weekly Average for Week 2	Effluent Weekly Average for Week 3	Effluent Weekly Average for Week 4	Weekly Permit Exceedance
January	11		.046428571	0					
February	11		.054166667	0					
March	11		.071538462	0					
April	6.9		.036666667	0					
May	7.8		.036	0					
June	7.8		.031666667	0					
July	7.8		.037692308	0					
August	7.8		.037142857	0					
September	7.8		.034166667	0					
October	11		.078571429	0					
November	11		.11	0					
December	11		.150833333	0					

0

Points per each exceedance of Monthly average: 10

Exceedances, Monthly: 0

Points: 0

Points per each exceedance of weekly average (when there is no monthly average): 2.5

Exceedances, Weekly: 0

Points: 0

**Total Number of Points 0**

NOTE: Limit exceedances are considered for monthly OR weekly averages but not both. When a monthly average limit exists it will be used to determine exceedances and generate points. This will be true even if a weekly limit also exists. When a weekly average limit exists and a monthly limit does not exist, the weekly limit will be used to determine exceedances and generate points.

1.2 If any violations occurred, what action was taken to regain compliance?

NONE

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:  
5/31/2019 **2018**

## Effluent Quality and Plant Performance (Phosphorus)

### 1. Effluent Phosphorus Results

#### 1.1 Verify the following monthly average effluent values, exceedances, and points for Phosphorus

Outfall No. 001	Monthly Average phosphorus Limit (mg/L)	Effluent Monthly Average phosphorus (mg/L)	Months of Discharge with a Limit	Permit Limit Exceedance
January	1	0.638	1	0
February	1	0.398	1	0
March	1	0.187	1	0
April	1	0.123	1	0
May	1	0.245	1	0
June	1	0.720	1	0
July	1	0.485	1	0
August	1	0.584	1	0
September	1	0.229	1	0
October	1	0.157	1	0
November	1	0.168	1	0
December	1	0.271	1	0
Months of Discharge/yr			12	
<b>Points per each exceedance with 12 months of discharge:</b>				<b>10</b>
Exceedances				0
<b>Total Number of Points</b>				<b>0</b>

0

NOTE: For systems that discharge intermittently to waters of the state, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is  $12/6 = 2.0$

#### 1.2 If any violations occurred, what action was taken to regain compliance?

NONE

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:  
5/31/2019 **2018**

## Biosolids Quality and Management

### 1. Biosolids Use/Disposal

1.1 How did you use or dispose of your biosolids? (Check all that apply)

- Land applied under your permit
- Publicly Distributed Exceptional Quality Biosolids
- Hauled to another permitted facility
- Landfilled
- Incinerated
- Other

NOTE: If you did not remove biosolids from your system, please describe your system type such as lagoons, reed beds, recirculating sand filters, etc.

1.1.1 If you checked Other, please describe:

### 3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

3.1 For each outfall tested, verify the biosolids metal quality values for your facility during the last calendar year.

#### Outfall No. 002 - LIQUID SLUDGE

Parameter	80% of Limit	H.Q. Limit	Ceiling Limit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	80% Value	High Quality	Ceiling
Arsenic		41	75	.0011													0	0
Cadmium		39	85	.00018													0	0
Copper		1500	4300	.0043													0	0
Lead		300	840	.0031													0	0
Mercury		17	57	.21													0	0
Molybdenum	60		75	.00097												0		0
Nickel	336		420	.0039												0		0
Selenium	80		100	.00047												0		0
Zinc		2800	7500	.018													0	0

3.1.1 Number of times any of the metals exceeded the high quality limits OR 80% of the limit for molybdenum, nickel, or selenium = 0

Exceedence Points

- 0 (0 Points)
- 1-2 (10 Points)
- > 2 (15 Points)

3.1.2 If you exceeded the high quality limits, did you cumulatively track the metals loading at each land application site? (check applicable box)

- Yes
- No (10 points)
- N/A - Did not exceed limits or no HQ limit applies (0 points)
- N/A - Did not land apply biosolids until limit was met (0 points)

3.1.3 Number of times any of the metals exceeded the ceiling limits = 0

Exceedence Points

- 0 (0 Points)
- 1 (10 Points)
- > 1 (15 Points)

3.1.4 Were biosolids land applied which exceeded the ceiling limit?

- Yes (20 Points)
- No (0 Points)

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:

5/31/2019

**2018**

<p>3.1.5 If any metal limit (high quality or ceiling) was exceeded at any time, what action was taken? Has the source of the metals been identified?</p> <p>NONE</p>	<b>0</b>
<p>6. Biosolids Storage</p> <p>6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site?</p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> &gt;= 180 days (0 Points)</li> <li><input type="radio"/> 150 - 179 days (10 Points)</li> <li><input type="radio"/> 120 - 149 days (20 Points)</li> <li><input type="radio"/> 90 - 119 days (30 Points)</li> <li><input type="radio"/> &lt; 90 days (40 Points)</li> <li><input type="radio"/> N/A (0 Points)</li> </ul> <p>6.2 If you checked N/A above, explain why.</p> <p></p>	<b>0</b>
<p>7. Issues</p> <p>7.1 Describe any outstanding biosolids issues with treatment, use or overall management:</p> <p>NONE NEEDED</p>	

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

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## Staffing and Preventative Maintenance (All Treatment Plants)

<p>1. Plant Staffing</p> <p>1.1 Was your wastewater treatment plant adequately staffed last year?</p> <ul style="list-style-type: none"><li>● Yes</li><li>○ No</li></ul> <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Could use more help/staff for:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping?</p> <ul style="list-style-type: none"><li>● Yes</li><li>○ No</li></ul> <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
<p>2. Preventative Maintenance</p> <p>2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items?</p> <ul style="list-style-type: none"><li>● Yes (Continue with question 2) <input type="checkbox"/><input type="checkbox"/></li><li>○ No (40 points) <input type="checkbox"/><input type="checkbox"/></li></ul> <p>If No, please explain, then go to question 3:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment?</p> <ul style="list-style-type: none"><li>● Yes</li><li>○ No (10 points)</li></ul> <p>2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly?</p> <ul style="list-style-type: none"><li>● Yes</li><li>○ Paper file system</li><li>● Computer system</li><li>○ Both paper and computer system</li><li>○ No (10 points)</li></ul>	<b>0</b>
<p>3. O&amp;M Manual</p> <p>3.1 Does your plant have a detailed O&amp;M and Manufacturer Equipment Manuals that can be used as a reference when needed?</p> <ul style="list-style-type: none"><li>● Yes</li><li>○ No</li></ul>	
<p>4. Overall Maintenance /Repairs</p> <p>4.1 Rate the overall maintenance of your wastewater plant.</p> <ul style="list-style-type: none"><li>○ Excellent</li><li>● Very good</li><li>○ Good</li><li>○ Fair</li><li>○ Poor</li></ul> <p>Describe your rating:</p>	

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BUILDINGS WITH PLANT EQUIPMENT IN THEM ARE CHECKED EVERYDAY VOLTS AND AMPS ARE CHECKED ON ELECTRICAL MOTORS PERIODICALLY.
---

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

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## Operator Certification and Education

<p>1. Operator-In-Charge</p> <p>1.1 Did you have a designated operator-in-charge during the report year?</p> <ul style="list-style-type: none"> <li>● Yes (0 points)</li> <li>○ No (20 points)</li> </ul> <p>Name: <input style="width: 300px;" type="text" value="MICHAEL W KITELINGER"/></p> <p>Certification No: <input style="width: 150px;" type="text" value="33696"/></p>	0																																																																																							
<p>2. Certification Requirements</p> <p>2.1 In accordance with Chapter NR 114.56 and 114.57, Wisconsin Administrative Code, what level and subclass(es) were required for the operator-in-charge (OIC) to operate the wastewater treatment plant and what level and subclass(es) were held by the operator-in-charge?</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Sub Class</th> <th rowspan="2">SubClass Description</th> <th>WWTP</th> <th colspan="2">OIC</th> </tr> <tr> <th>Advanced</th> <th>OIT</th> <th>Basic</th> <th>Advanced</th> </tr> </thead> <tbody> <tr><td>A1</td><td>Suspended Growth Processes</td><td>X</td><td></td><td></td><td>X</td></tr> <tr><td>A2</td><td>Attached Growth Processes</td><td></td><td></td><td></td><td></td></tr> <tr><td>A3</td><td>Recirculating Media Filters</td><td></td><td></td><td></td><td></td></tr> <tr><td>A4</td><td>Ponds, Lagoons and Natural</td><td></td><td></td><td></td><td></td></tr> <tr><td>A5</td><td>Anaerobic Treatment Of Liquid</td><td></td><td></td><td></td><td></td></tr> <tr><td>B</td><td>Solids Separation</td><td>X</td><td></td><td></td><td>X</td></tr> <tr><td>C</td><td>Biological Solids/Sludges</td><td>X</td><td></td><td></td><td>X</td></tr> <tr><td>P</td><td>Total Phosphorus</td><td>X</td><td></td><td></td><td>X</td></tr> <tr><td>N</td><td>Total Nitrogen</td><td></td><td></td><td></td><td></td></tr> <tr><td>D</td><td>Disinfection</td><td>X</td><td></td><td></td><td>X</td></tr> <tr><td>L</td><td>Laboratory</td><td>X</td><td></td><td></td><td>X</td></tr> <tr><td>U</td><td>Unique Treatment Systems</td><td></td><td></td><td></td><td></td></tr> <tr><td>SS</td><td>Sanitary Sewage Collection</td><td>X</td><td>NA</td><td>NA</td><td>NA</td></tr> </tbody> </table> <p>2.2 Was the operator-in-charge certified at the appropriate level and subclass(es) to operate this plant? (Note: Certification in subclass SS, N and A5 not required in 2018; subclass SS is basic level only.)</p> <ul style="list-style-type: none"> <li>● Yes (0 points)</li> <li>○ No (20 points)</li> </ul>	Sub Class	SubClass Description	WWTP	OIC		Advanced	OIT	Basic	Advanced	A1	Suspended Growth Processes	X			X	A2	Attached Growth Processes					A3	Recirculating Media Filters					A4	Ponds, Lagoons and Natural					A5	Anaerobic Treatment Of Liquid					B	Solids Separation	X			X	C	Biological Solids/Sludges	X			X	P	Total Phosphorus	X			X	N	Total Nitrogen					D	Disinfection	X			X	L	Laboratory	X			X	U	Unique Treatment Systems					SS	Sanitary Sewage Collection	X	NA	NA	NA	0
Sub Class			SubClass Description	WWTP	OIC																																																																																			
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<p>3. Succession Planning</p> <p>3.1 In the event of the loss of your designated operator-in-charge, did you have a contingency plan to ensure the continued proper operation and maintenance of the plant that includes one or more of the following options (check all that apply)?</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> One or more additional certified operators on staff</li> <li><input type="checkbox"/> An arrangement with another certified operator</li> <li><input type="checkbox"/> An arrangement with another community with a certified operator</li> <li><input type="checkbox"/> An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year</li> <li><input type="checkbox"/> A consultant to serve as your certified operator</li> <li><input type="checkbox"/> None of the above (20 points)</li> </ul> <p>If "None of the above" is selected, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	0																																																																																							
<p>4. Continuing Education Credits</p>																																																																																								

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4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates?

OIT and Basic Certification:

- Averaging 6 or more CECs per year.
- Averaging less than 6 CECs per year.

Advanced Certification:

- Averaging 8 or more CECs per year.
- Averaging less than 8 CECs per year.

<b>Total Points Generated</b>	0
<b>Score (100 - Total Points Generated)</b>	100
<b>Section Grade</b>	<b>A</b>

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## Financial Management

<p>1. Provider of Financial Information</p> <p>Name: <input style="width: 150px;" type="text" value="Joy Bisco"/></p> <p>Telephone: <input style="width: 150px;" type="text" value="920-478-2260"/> (XXX) XXX-XXXX</p> <p>E-Mail Address (optional): <input style="width: 300px;" type="text" value="jbiscoe@wppienergy.org"/></p>													
<p>2. Treatment Works Operating Revenues</p> <p>2.1 Are User Charges or other revenues sufficient to cover O&amp;M expenses for your wastewater treatment plant AND/OR collection system ?</p> <p>● Yes (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ No (40 points)</p> <p>If No, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised?</p> <p>Year: <input style="width: 100px;" type="text" value="2018"/></p> <p>● 0-2 years ago (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ 3 or more years ago (20 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ N/A (private facility)</p> <p>2.3 Did you have a special account (e.g., CWF required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?</p> <p>● Yes (0 points)</p> <p>○ No (40 points)</p>	0												
<p>REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]</p>													
<p>3. Equipment Replacement Funds</p> <p>3.1 When was the Equipment Replacement Fund last reviewed and/or revised?</p> <p>Year: <input style="width: 100px;" type="text" value="2018"/></p> <p>● 1-2 years ago (0 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ 3 or more years ago (20 points) <input type="checkbox"/><input type="checkbox"/></p> <p>○ N/A</p> <p>If N/A, please explain:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>3.2 Equipment Replacement Fund Activity</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"><b>3.2.1 Ending Balance Reported on Last Year's CMAR</b></td> <td style="width: 5%; text-align: right;">\$</td> <td style="width: 35%; text-align: center;"><input style="width: 100%;" type="text" value="841,035.13"/></td> </tr> <tr> <td>3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)</td> <td style="text-align: right;">\$</td> <td style="text-align: center;"><input style="width: 100%;" type="text" value="0.00"/></td> </tr> <tr> <td>3.2.3 Adjusted January 1st Beginning Balance</td> <td style="text-align: right;">\$</td> <td style="text-align: center;"><input style="width: 100%;" type="text" value="841,035.13"/></td> </tr> <tr> <td>3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)</td> <td style="text-align: right;">\$</td> <td style="text-align: center;"><input style="width: 100%;" type="text" value="27,200.34"/></td> </tr> </table>	<b>3.2.1 Ending Balance Reported on Last Year's CMAR</b>	\$	<input style="width: 100%;" type="text" value="841,035.13"/>	3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)	\$	<input style="width: 100%;" type="text" value="0.00"/>	3.2.3 Adjusted January 1st Beginning Balance	\$	<input style="width: 100%;" type="text" value="841,035.13"/>	3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	\$	<input style="width: 100%;" type="text" value="27,200.34"/>	
<b>3.2.1 Ending Balance Reported on Last Year's CMAR</b>	\$	<input style="width: 100%;" type="text" value="841,035.13"/>											
3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.)	\$	<input style="width: 100%;" type="text" value="0.00"/>											
3.2.3 Adjusted January 1st Beginning Balance	\$	<input style="width: 100%;" type="text" value="841,035.13"/>											
3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.)	\$	<input style="width: 100%;" type="text" value="27,200.34"/>											

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3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below\*) -

\$ 100,168.66

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year

\$ 768,066.81

All Sources: This ending balance should include all Equipment Replacement Funds whether held in a bank account(s), certificate(s) of deposit, etc.

3.2.6.1 Indicate adjustments, equipment purchases, and/or major repairs from 3.2.5 above.

Clarifier rehab

3.3 What amount should be in your Replacement Fund?

\$ 895,996.00

0

Please note: If you had a CFWP loan, this amount was originally based on the Financial Assistance Agreement (FAA) and should be regularly updated as needed. Further calculation instructions and an example can be found by clicking the SectionInstructions link under Info header in the left-side menu.

3.3.1 Is the December 31 Ending Balance in your Replacement Fund above, (#3.2.6) equal to, or greater than the amount that should be in it (#3.3)?

Yes

No

If No, please explain.

Using the DNR alternate method in our 2018 sewer rate study with a three year funding plan.

## 4. Future Planning

4.1 During the next ten years, will you be involved in formal planning for upgrading, rehabilitating, or new construction of your treatment facility or collection system?

Yes - If Yes, please provide major project information, if not already listed below.

No

Project #	Project Description	Estimated Cost	Approximate Construction Year
1	Edison and Franklin	211000	2019
2	Clarifier #1 Rehab	100000.00	2020
3	Mixing station for Phosphorus removal	225000.00	2020
4	Adams St. project	174000.00	2021
5	Jefferson St. project sewer replacement.	232000.00	2022
6	Replacing sandfilters with Disk filtration system Phosphorus Upgrade	1900000.00	2022

## 5. Financial Management General Comments

### ENERGY EFFICIENCY AND USE

## 6. Collection System

### 6.1 Energy Usage

6.1.1 Enter the monthly energy usage from the different energy sources:

#### **COLLECTION SYSTEM PUMPAGE: Total Power Consumed**

Number of Municipally Owned Pump/Lift Stations:

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	Electricity Consumed (kWh)	Natural Gas Consumed (therms)
January	3,718	
February	3,442	
March	1,758	
April	1,868	
May	1,901	
June	1,773	
July	1,755	
August	1,977	
September	2,035	
October	2,586	
November	3,087	
December	3,090	
<b>Total</b>	<b>28,990</b>	<b>0</b>
<b>Average</b>	<b>2,416</b>	<b>0</b>

6.1.2 Comments:

## 6.2 Energy Related Processes and Equipment

6.2.1 Indicate equipment and practices utilized at your pump/lift stations (Check all that apply):

- Comminution or Screening
- Extended Shaft Pumps
- Flow Metering and Recording
- Pneumatic Pumping
- SCADA System
- Self-Priming Pumps
- Submersible Pumps
- Variable Speed Drives
- Other:

6.2.2 Comments:

6.3 Has an Energy Study been performed for your pump/lift stations?

- No
- Yes

Year:

By Whom:

Describe and Comment:

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## 6.4 Future Energy Related Equipment

6.4.1 What energy efficient equipment or practices do you have planned for the future for your pump/lift stations?

None

## 7. Treatment Facility

### 7.1 Energy Usage

7.1.1 Enter the monthly energy usage from the different energy sources:

#### TREATMENT PLANT: Total Power Consumed/Month

	Electricity Consumed (kWh)	Total Influent Flow (MG)	Electricity Consumed/Flow (kWh/MG)	Total Influent BOD (1000 lbs)	Electricity Consumed/Total Influent BOD (kWh/1000lbs)	Natural Gas Consumed (therms)
January	53,464	10.64	5,025	37.70	1,418	1,129
February	48,097	11.07	4,345	35.45	1,357	1,939
March	53,637	12.18	4,404	39.62	1,354	1,461
April	67,027	13.11	5,113	39.84	1,682	1,124
May	62,714	18.83	3,331	46.56	1,347	115
June	60,727	16.03	3,788	51.63	1,176	
July	62,159	14.08	4,415	40.89	1,520	
August	68,469	19.34	3,540	48.89	1,400	
September	54,674	19.16	2,854	36.33	1,505	
October	57,082	20.44	2,793	40.36	1,414	125
November	56,895	14.26	3,990	37.08	1,534	671
December	59,118	14.55	4,063	41.11	1,438	1,215
<b>Total</b>	<b>704,063</b>	<b>183.69</b>		<b>495.46</b>		<b>7,779</b>
<b>Average</b>	<b>58,672</b>	<b>15.31</b>	<b>3,972</b>	<b>41.29</b>	<b>1,429</b>	<b>972</b>

7.1.2 Comments:

### 7.2 Energy Related Processes and Equipment

7.2.1 Indicate equipment and practices utilized at your treatment facility (Check all that apply):

- Aerobic Digestion
- Anaerobic Digestion
- Biological Phosphorus Removal
- Coarse Bubble Diffusers
- Dissolved O2 Monitoring and Aeration Control
- Effluent Pumping
- Fine Bubble Diffusers
- Influent Pumping
- Mechanical Sludge Processing
- Nitrification
- SCADA System
- UV Disinfection
- Variable Speed Drives
- Other:

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7.2.2 Comments:

## 7.3 Future Energy Related Equipment

7.3.1 What energy efficient equipment or practices do you have planned for the future for your treatment facility?

None

## 8. Biogas Generation

8.1 Do you generate/produce biogas at your facility?

No

Yes

If Yes, how is the biogas used (Check all that apply):

Flared Off

Building Heat

Process Heat

Generate Electricity

Other:

## 9. Energy Efficiency Study

9.1 Has an Energy Study been performed for your treatment facility?

No

Yes

Entire facility

Year:

By Whom:

Describe and Comment:

Part of the facility

Year:

2017

By Whom:

Cory Nuly

Describe and Comment:

New lighting can see better.

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<b>Total Points Generated</b>	<b>0</b>
<b>Score (100 - Total Points Generated)</b>	<b>100</b>
<b>Section Grade</b>	<b>A</b>

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## Sanitary Sewer Collection Systems

### 1. Capacity, Management, Operation, and Maintenance (CMOM) Program

#### 1.1 Do you have a CMOM program that is being implemented?

- Yes
- No

If No, explain:

#### 1.2 Do you have a CMOM program that contains all the applicable components and items according to Wisc. Adm Code NR 210.23 (4)?

- Yes
- No (30 points)
- N/A

If No or N/A, explain:

#### 1.3 Does your CMOM program contain the following components and items? (check the components and items that apply)

##### Goals [NR 210.23 (4)(a)]

Describe the major goals you had for your collection system last year:

To have 25% of the collection system cleaned

Did you accomplish them?

- Yes
- No

If No, explain:

##### Organization [NR 210.23 (4) (b)]

Does this chapter of your CMOM include:

- Organizational structure and positions (eg. organizational chart and position descriptions)
- Internal and external lines of communication responsibilities
- Person(s) responsible for reporting overflow events to the department and the public

##### Legal Authority [NR 210.23 (4) (c)]

What is the legally binding document that regulates the use of your sewer system?

Sewer use Ordinance

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 6/28/2007

Does your sewer use ordinance or other legally binding document address the following:

- Private property inflow and infiltration
  - New sewer and building sewer design, construction, installation, testing and inspection
  - Rehabilitated sewer and lift station installation, testing and inspection
  - Sewage flows satellite system and large private users are monitored and controlled, as necessary
  - Fat, oil and grease control
  - Enforcement procedures for sewer use non-compliance
  - Operation and Maintenance [NR 210.23 (4) (d)]
- Does your operation and maintenance program and equipment include the following:
- Equipment and replacement part inventories
  - Up-to-date sewer system map
  - A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation

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A description of routine operation and maintenance activities (see question 2 below)  
 Capacity assessment program  
 Basement back assessment and correction  
 Regular O&M training  
 Design and Performance Provisions [NR 210.23 (4) (e)]  
 What standards and procedures are established for the design, construction, and inspection of the sewer collection system, including building sewers and interceptor sewers on private property?  
 State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements  
 Construction, Inspection, and Testing  
 Others:

Overflow Emergency Response Plan [NR 210.23 (4) (f)]  
 Does your emergency response capability include:  
 Responsible personnel communication procedures  
 Response order, timing and clean-up  
 Public notification protocols  
 Training  
 Emergency operation protocols and implementation procedures  
 Annual Self-Auditing of your CMOM Program [NR 210.23 (5)]  
 Special Studies Last Year (check only those that apply):  
 Infiltration/Inflow (I/I) Analysis  
 Sewer System Evaluation Survey (SSES)  
 Sewer Evaluation and Capacity Management Plan (SECAP)  
 Lift Station Evaluation Report  
 Others:

0

2. Operation and Maintenance

2.1 Did your sanitary sewer collection system maintenance program include the following maintenance activities? Complete all that apply and indicate the amount maintained.

Cleaning	<input type="text" value="25"/>	% of system/year
Root removal	<input type="text" value="0"/>	% of system/year
Flow monitoring	<input type="text" value="0"/>	% of system/year
Smoke testing	<input type="text" value="0"/>	% of system/year
Sewer line televising	<input type="text" value="1.9"/>	% of system/year
Manhole inspections	<input type="text" value="20"/>	% of system/year
Lift station O&M	<input type="text" value="4"/>	# per L.S./year
Manhole rehabilitation	<input type="text" value="9"/>	% of manholes rehabbed
Mainline rehabilitation	<input type="text" value="0"/>	% of sewer lines rehabbed
Private sewer inspections	<input type="text" value="0"/>	% of system/year
Private sewer I/I removal	<input type="text" value="0"/>	% of private services

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River or water crossings  % of pipe crossings evaluated or maintained

Please include additional comments about your sanitary sewer collection system below:

On the Cleveland st. project one siphon was removed because the direction of flow was changed.

### 3. Performance Indicators

3.1 Provide the following collection system and flow information for the past year.

<input type="text" value="52.11"/>	Total actual amount of precipitation last year in inches
<input type="text" value="30.9"/>	Annual average precipitation (for your location)
<input type="text" value="13.5"/>	Miles of sanitary sewer
<input type="text" value="4"/>	Number of lift stations
<input type="text" value="0"/>	Number of lift station failures
<input type="text" value="0"/>	Number of sewer pipe failures
<input type="text" value="0"/>	Number of basement backup occurrences
<input type="text" value="0"/>	Number of complaints
<input type="text" value=".5025"/>	Average daily flow in MGD (if available)
<input type="text" value=".6593"/>	Peak monthly flow in MGD (if available)
<input type="text" value=".04087"/>	Peak hourly flow in MGD (if available)

3.2 Performance ratios for the past year:

<input type="text" value="0.00"/>	Lift station failures (failures/year)
<input type="text" value="0.00"/>	Sewer pipe failures (pipe failures/sewer mile/yr)
<input type="text" value="0.00"/>	Sanitary sewer overflows (number/sewer mile/yr)
<input type="text" value="0.00"/>	Basement backups (number/sewer mile)
<input type="text" value="0.00"/>	Complaints (number/sewer mile)
<input type="text" value="1.3"/>	Peaking factor ratio (Peak Monthly:Annual Daily Avg)
<input type="text" value="0.1"/>	Peaking factor ratio (Peak Hourly:Annual Daily Avg)

### 4. Overflows

#### LIST OF SANITARY SEWER (SSO) AND TREATMENT FACILITY (TFO) OFERFLOWS REPORTED \*\*

Date	Location	Cause	Estimated Volume (MG)
None reported			

\*\* If there were any SSOs or TFOs that are not listed above, please contact the DNR and stop work on this section until corrected.

### 5. Infiltration / Inflow (I/I)

5.1 Was infiltration/inflow (I/I) significant in your community last year?

- Yes
- No

If Yes, please describe:

5.2 Has infiltration/inflow and resultant high flows affected performance or created problems in your collection system, lift stations, or treatment plant at any time in the past year?

- Yes
- No

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:  
5/31/2019 **2018**

If Yes, please describe: <input type="text"/>
5.3 Explain any infiltration/inflow (I/I) changes this year from previous years: <input type="text" value="All depends on rain and snow amounts."/>
5.4 What is being done to address infiltration/inflow in your collection system? <input type="text" value="We have new sewer pipe put in when street projects are done. Also checking manholes for leaking and repaired as needed."/>

<b>Total Points Generated</b>	<b>0</b>
<b>Score (100 - Total Points Generated)</b>	<b>100</b>
<b>Section Grade</b>	<b>A</b>

# Compliance Maintenance Annual Report

Waterloo Wastewater Treatment Facility

Last Updated: Reporting For:

5/31/2019

**2018**

## Grading Summary

WPDES No: 0030881

SECTIONS	LETTER GRADE	GRADE POINTS	WEIGHTING FACTORS	SECTION POINTS
Influent	B	3	3	9
BOD/CBOD	A	4	10	40
TSS	A	4	5	20
Ammonia	A	4	5	20
Phosphorus	A	4	3	12
Biosolids	A	4	5	20
Staffing/PM	A	4	1	4
OpCert	A	4	1	4
Financial	A	4	1	4
Collection	A	4	3	12
<b>TOTALS</b>			<b>37</b>	<b>145</b>
<b>GRADE POINT AVERAGE (GPA) = 3.92</b>				

### Notes:

- A = Voluntary Range (Response Optional)
- B = Voluntary Range (Response Optional)
- C = Recommendation Range (Response Required)
- D = Action Range (Response Required)
- F = Action Range (Response Required)



136 North Monroe Street  
Waterloo, WI 53594  
Phone: (920) 478-3025  
Fax: (920) 478-2021  
[www.waterloowi.us](http://www.waterloowi.us)

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**RESOLUTION #2019-16**

**WAIVING IMPACT FEES FOR THE 2019 WATERLOO SCHOOL DISTRICT FACILITY IMPROVEMENTS**

The Common Council of the City of Waterloo, Wisconsin does hereby resolve as follows:

**WHEREAS**, impact fees are fees that are collected in order to pay for the capital costs to construct, expand or improve public facilities which are necessary to accommodate land development in Waterloo. The imposition of impact fees is intended to ensure that public facilities are adequate to meet the development needs of the City and that new development pays a proportionate share of new, expanded or improved facilities required by such development. Impact fees are determined at the time of development approval and are generally payable in full, at the annually adjusted rate then in effect, at the time of issuance of any building permit, and;

**WHEREAS**, at its May meeting the Finance, Insurance & Personnel Committee recommended to the City Council that it waive impact fees, estimated at \$22,238, as requested by the Waterloo School District for the District's 2019 facility improvements.

**THEREFORE, BE IT RESOLVED**, the City of Waterloo Common Council agrees with the recommendation and waives all impact fees for the District's 2019 facility improvements.

**PASSED AND ADOPTED** this \_\_\_\_ day of June 2019.

**City of Waterloo**

Signed: \_\_\_\_\_  
Jenifer Quimby, Mayor

Attest:

\_\_\_\_\_  
Morton J. Hansen  
Clerk/Treasurer

SPONSOR(S) – Finance, Insurance & Personnel Committee

FISCAL NOTE – a loss of \$22,238 in impact fee revenue for current and future qualifying municipal public facility expenditures.



# WATERLOO SCHOOL DISTRICT

"Preparing today's students for tomorrow's challenges"

813 N. Monroe St.  
Waterloo, WI 53594  
Phone (920) 478-3633  
Fax (920) 478-3821

Waterloo High School  
Phone (920) 478-2171  
Fax (920) 478-9539

Waterloo Intermediate/Middle School  
Phone (920) 478-2696  
Fax (920) 478-3987

Waterloo Elementary School  
Phone (920) 478-2168  
Fax (920) 478-9589

Dear Mr. Mo Hansen and the City of Waterloo,

On behalf of the Waterloo School District and the Waterloo School Board, I would like to propose that the City of Waterloo support several requests that relate to our referendum projects occurring now until the fall of 2020.

1. The Waterloo School District proposes that the City of Waterloo allow the school to tie into the city storm sewer with a drainpipe. This pipe would be located directly north of the Karl Junginger Memorial Library and East of the school bus lane and would divert water from the parking lot and prevent excess water from flowing towards the public library.
2. The Waterloo School District proposes that the District purchase and install solar powered pedestrian crossing signs to be installed near Anna and Henry streets. These signs have been identified as an important means to improve safety for anyone crossing Monroe Street. In addition, the District would purchase and install two solar speed indicator signs. These signs would warn traffic coming from the north and south on Monroe Street of the impending school zone and help forewarn drivers of the need to proceed with caution. After installation, the signs would be turned over to the City of Waterloo for ongoing maintenance.
3. The Waterloo Fire Department has identified a fire hydrant project that will provide improved water availability for the west side of the school building in the event of a fire. The District would need to tie into the city water lines so that a fire hydrant and supporting pipe can be run across the school property and then the hydrant installed on the backside of the building to allow for closer water service for the Fire Department.
4. The Waterloo School District is requesting that all city impact fees, approximately \$20,000, be waived for the School District's referendum building projects. The District is a non-profit agency and each of the above mentioned projects were not in our original project list or budget when the referendum was approved. The District is committed to improving the school and the surrounding community and would like to be able to find a way to complete these extra projects while other work is being completed in the District. Waiving the city impact fees will go a long way towards making these projects possible from a budgetary standpoint.

I know resources are scarce, and there are many factors that must be considered when projects of this size and scope are undertaken. I appreciate everyone's willingness to find solutions that better the community of Waterloo. Thank you for your time and consideration.

Sincerely,

Brian C. Henning

# Waterloo Schools - Building Permit Calculations

<u>Commercial</u>	<u>Rate</u>	<u>Unit</u>	<u>Quantity</u>	<u>Cost</u>
New Structure/Addition	\$ 0.21	/Square Foot	36,400	\$ 7,644.00
Erosion Control - First Acre	\$ 350.00	/First Acre	1.0	\$ 350.00
Erosion Control - Each Acre Thereafter	\$ 150.00	/Acre thereafter	3.5	\$ 525.00
Remodel - Figured the same as new	\$ 0.21	/Square Foot	8,000	\$ 1,680.00
Occupancy	\$ 70.00	/Unit		\$ -
Temp Occupancy	\$ 70.00	/Unit		\$ -
Early Start Permit	\$ 165.00	for Ftg's/Fndn's	1	\$ 165.00
<b>Plumbing</b>				
New Bldg./Add'n/Alteration - \$50 +	\$ 0.065	/Square Foot	36,400	\$ 2,416.00
Remodel - Figured the same as new	\$ 0.065	/Square Foot	8,000	\$ 570.00
Outside Sewer & Water Laterals	\$ 100.00	/First 100'	1	\$ 100.00
Outside Sewer & Water Laterals	\$ 0.50	/Lineal Foot	340	\$ 120.00
<b>Electrical</b>				
New Bldg./Add'n/Alteration - \$50 +	\$ 0.065	/Square Foot	36,400	\$ 2,416.00
Remodel - Figured the same as new	\$ 0.065	/Square Foot	8,000	\$ 570.00
<b>HVAC</b>				
New Bldg./Add'n/Alteration	\$ 0.065	/Square Foot	36,400	\$ 2,416.00
Remodel - Figured the same as new	\$ 0.065	/Square Foot	8,000	\$ 570.00
			<b>Building Permits</b>	<b>TOTAL:</b>
				<u>\$ 19,542.00</u>

# Waterloo Schools - Connection/Impact Fees

	<u>Rate</u>	<u>Unit</u>	<u>Quantity</u>	<u>Cost</u>
<b>Connection &amp; Impact Fees: (5,000 square feet per REU) (36,400/5000=7.28 REUs)</b>				
Sanitary Sewer Connection	\$ 853.97	/REU	7.28	\$ 6,216.90
Park & Rec Impact Fee	\$ 354.00	/REU	7.28	\$ 2,577.12
Public Works Impact Fee	\$ 512.00	/REU	7.28	\$ 3,727.36
Sanitary Sewer Impact Fee	\$ 827.00	/REU	7.28	\$ 6,020.56
Storm Water Impact Fee	\$ 233.00	/REU	7.28	\$ 1,696.24
			<b>Connect/Impact</b>	<b>TOTAL:</b>
				<u>\$ 20,238.18</u>



136 NORTH MONROE STREET, WATERLOO, WISCONSIN 53594-1198  
Phone (920) 478-3025  
Fax (920) 478-2021

**APPLICATION FOR CONDITIONAL USE PERMIT**

(Review and Action by City Plan Commission/Common Council)

Number: \_\_\_\_\_ Date Filed: \_\_\_\_\_ Fee Paid: \_\_\_\_\_

Location of Property: 333 Portland Rd, Waterloo, WI 53594

Applicant: SAC Wireless on behalf of AT&T

Address: 510 W Madison, 9th floor, Chicago, IL 60601 Telephone: 815-343-0845

Owner of Property: City of Waterloo

Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

Contractor: TBD

Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

Architect or Professional Engineer: Nestor Popowych, A.I.A

Address: 510 W Madison, 9th floor, Chicago, IL 60601 Telephone: \_\_\_\_\_

Legal Description of Property: \_\_\_\_\_

Land Parcel Size: \_\_\_\_\_ Present Use: \_\_\_\_\_ Zoning District: \_\_\_\_\_

Type of Existing Structure (if any): \_\_\_\_\_

Proposed Use of the Structure or Site: 260' self support tower Number of Employees: N/A  
(overall height of 264')

**TERMS OF MUNICIPAL CODE**

**CONDITIONAL USE REQUESTED**

\_\_\_\_\_ Construction/Placement of cell tower

Specify Reason(s) for Application: (for example, insufficient lot area, setback, etc.)

AT&T is proposing to construct a 260' self support tower (with an overall height of 264') on Parcel 290-0813-0531-001 to increase service in the area.

**ATTACH THE FOLLOWING:**

1. Adjoining owners, all names and addresses of all abutting and opposite property owners within 200 feet.
2. Site plan showing the area involved, its location, dimensions, elevations, drainage, parking, etc., and location of adjacent structures within 200 feet.

Date: 20 May 2019

Erin McConaughy SAC on behalf of AT&T  
Signature of Applicant



**SITE PHOTO**

**PROJECT :** NSB- RAW LANDS  
**SITE # :** WI0385  
**FA # :** 10587459  
**PTN # :**  
**PACE # :**  
**JURISDICTION :** CITY OF WATERLOO

**SITE NAME :** WATERLOO  
**ADDRESS :** 333 PORTLAND ROAD  
 WATERLOO, WI 53594



**AT&T  
MOBILITY**

**PROJECT INFORMATION**

**SITE NAME:** WATERLOO  
**COUNTY:** JEFFERSON  
**ADDRESS:** 333 PORTLAND ROAD  
 WATERLOO, WI 53594

**ZONING DISTRICT:** AGRICULTURAL

**SITE NUMBER:** WI0385  
**FA NUMBER:** 10587459  
**PTN #:**  
**PACE #:**  
**USID:**

**LATITUDE:** 43° 11' 16.52" N  
**LONGITUDE:** 88° 58' 41.42" W

**GROUND OWNER:**

**LANDLORD CONTACT:**

**APPLICANT:** AT&T WIRELESS  
 930 NATIONAL PARKWAY  
 SCHAUMBURG, IL 60173

**SCOPE OF WORK**

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

NO RFDS, PROPOSED EQUIPMENT ON TOWER WILL CHANGE PER NEW RFDS

INSTALL (12) PROPOSED AT&T PANEL ANTENNAS, INSTALL (12) PROPOSED AT&T RRUS, INSTALL (2) PROPOSED RAYCAP DC6-48-60-18-8F, INSTALL PROPOSED AT&T SITE PRO 1 ANTENNA PLATFORM #VFA14-HD, INSTALL PROPOSED AT&T VERTIVCO WIC 8'-10" X 6'-8" CABINET & BASE, WITH VERTIVCO HELICAL ANCHORS, INSTALL PROPOSED 15KW POLAR GENERATOR, WITH 5'-0 X 3'-0" VERTIVCO STEEL PLATFORM, WITH VERTIVCO HELICAL ANCHORS, INSTALL PROPOSED AT&T ICE BRIDGE, INSTALL PROPOSED AT&T H-FRAME W/(1) PROPOSED AT&T OUTDOOR 3931 CIENNA, INSTALL PROPOSED BOLLARDS, INSTALL (4) PROPOSED AT&T DC TRUNK LINES, INSTALL (2) PROPOSED AT&T 18 PAIR FIBER LINE, INSTALL PROPOSED DC/FIBER JUMPERS, PER PLANS. VERIFY WITH LOCAL UTILITY COMPANY.

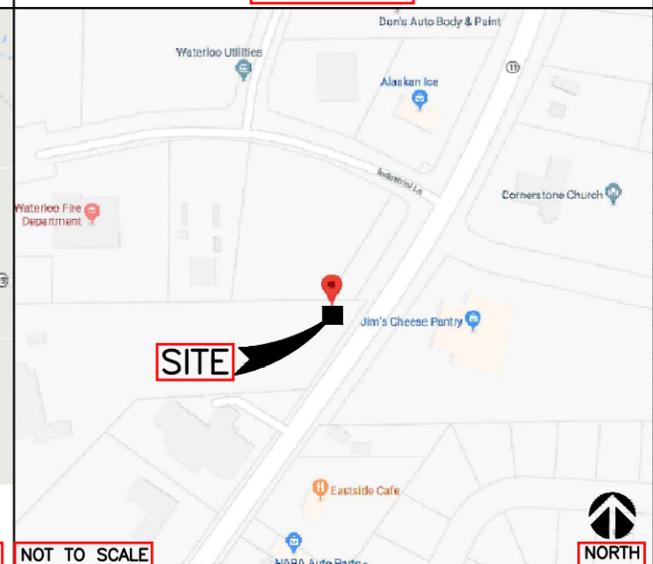
**DRAWING INDEX**

T1	TITLE SHEET
SP1	NOTES & SPECIFICATIONS
SP2	NOTES & SPECIFICATIONS
SP3	NOTES & SPECIFICATIONS
SP4	NOTES & SPECIFICATIONS
A1	SITE PLAN
A2	COMPOUND PLAN & LEGEND
A3	TOWER ELEVATION & ANTENNA PLAN
A4	SCHEDULE & CABLE NOTES
A5	ANTENNA, RRH, RRUS, RAYCAP DETAILS
A5.1	DETAILS
A6	WIC (WALK IN CABINET) PLAN & ELEVATIONS
A7	FENCE DETAILS
A8	SITE DETAILS
A9	GENERATOR PLAN AND ELEVATIONS
E1	UTILITY PLAN
E2	LEGEND AND DETAILS
E3	ELECTRICAL SLD AND PANEL SCHEDULE
E4	SHELTER GROUNDING PLAN & DETAILS
E5	ANTENNA GROUNDING - SLD
E6	GROUNDING DETAILS
E7	GROUNDING DETAILS
RF	RFDS PLUMBING DIAGRAM
SIGNAGE	SIGNAGE REQUIREMENTS

**VICINITY MAP**



**LOCAL MAP**



**PROJECT CONSULTANTS**

**PROJECT** SAC WIRELESS  
 540 W. MADISON ST.  
 CHICAGO, ILLINOIS 60661  
 CONTACT: TIM CLEMENT  
 EMAIL: TIMOTHY.CLEMENT@SACW.COM

**LAND SURVEYOR:** WT GROUP  
 2675 PRATUM AVENUE  
 HOFFMAN ESTATES, IL 60192  
 PHONE: (224)-293-6333

**ARCHITECT:** NESTOR POPOWYCH, A.I.A.  
 SAC AE DESIGN GROUP, INC.  
 540 W. MADISON ST.  
 CHICAGO, ILLINOIS 60661  
 CONTACT: GREG PHASSOS  
 PHONE: (312)-971-7884  
 EMAIL: GREG.PHASSOS@SACW.COM

**AT&T CONSTRUCTION MANAGER:** RYAN WOLLENBERG  
 PHONE: (847)-330-7559  
 EMAIL: RW8363@ATT.COM

**DRIVING DIRECTIONS**

DIRECTIONS FROM: GENERAL MITCHELL INTERNATIONAL AIRPORT,

TURN LEFT (NORTH) ONTO CR-V [S 13TH ST], TURN LEFT (WEST) ONTO CR-ZZ [W COLLEGE AVE], IMMEDIATELY BEAR RIGHT (NORTH-WEST) ONTO RAMP, MERGE ONTO I-94 [US-41], AT EXIT 316 TAKE RAMP (LEFT) ONTO I-43 [I-894], KEEP LEFT ONTO I-894 [ZOO FWY], AT EXIT 1B TAKE RAMP (LEFT) ONTO I-94, AT EXIT 259 TURN RIGHT ONTO RAMP, TURN RIGHT (NORTH) ONTO SR-89 [CR-G], KEEP STRAIGHT ONTO SR-89, BEAR LEFT (NORTH-WEST) ONTO SR-89 [EDGEWOOD RD], KEEP STRAIGHT ONTO SR-89, KEEP STRAIGHT ONTO SR-89 [E MADISON ST], TURN RIGHT (NORTH) ONTO GROVE ST, THEN IMMEDIATELY TURN RIGHT (NORTH-EAST) ONTO SR-19 [PORTLAND RD] TURN LEFT (NORTH-WEST) ONTO LOCAL ROAD(S), ARRIVE AT DESTINATION

**CODE COMPLIANCE**

- 2015 INTERNATIONAL BUILDING CODE.
- 2017 NATIONAL ELECTRICAL CODE
- TIA/EIA-222-G
- WISCONSIN STATE BUILDING CODE
- WISCONSIN STATE ELECTRICAL CODE

**REFERENCE MATERIALS**

- CONTRACTOR TO USE LATEST VERSION OF THE RFDS DATED XX/XX/2016 WITH THE CD'S PER SCOPE OF WORK.

**SPECIAL NOTES**

- ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH CURRENT AT&T CONSTRUCTION INSTALLATION GUIDE.
- EXISTING CONDITIONS WILL BE CHANGED & VERIFIED IN FIELD. IF SIGNIFICANT DEVIATIONS OR DETERIORATION ARE ENCOUNTERED AT THE TIME OF CONSTRUCTION, A REPAIR PERMIT WILL BE OBTAINED & CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
- THESE DRAWINGS ARE FULL SIZE & SCALEABLE ON 11"x17" SHEET SIZE.
- STATEMENT THAT COMPLIANCE WITH THE ENERGY CODE IS NOT REQUIRED. -SCOPE OF WORK DOES NOT INVOLVE MODIFICATIONS TO EXTERIOR ENVELOPE OF BUILDING, HVAC SYSTEMS OR ELECTRICAL LIGHTING.

**DO NOT SCALE DRAWINGS**

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



NSB- RAW LANDS  
 10587459  
 WATERLOO  
 333 PORTLAND ROAD  
 WATERLOO, WI 53594

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	05/09/19	ISSUED FOR REVIEW	BN

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

DATE: XX/XX/16

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF WISCONSIN

**SHEET TITLE**

TITLE SHEET

**SHEET NUMBER**

T1

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

**GENERAL NOTES:**

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:  
 CONTRACTOR / CM – SAC WIRELESS  
 SUB-CONTRACTOR – PER TRADE  
 OWNER – AT&T WIRELESS
2. SITE WORK (IF APPLICABLE) SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
3. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO DEPICT THE DESIGN INTENT OF THE INSTALLATION.
4. ANY MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
5. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
6. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL DOCUMENT & PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
7. CONTRACTOR / SUBCONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION.
8. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING BURIED AND OVERHEAD UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL REPAIR ANY UTILITIES DAMAGED DURING THE COURSE OF CONSTRUCTION AND COORDINATE ANY REPAIRS WITH UTILITY COMPANY.
9. N /A
10. N/A
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.

**SITE PREPARATION:**

SUB-CONTRACTOR'S SCOPE OF WORK

1. PROTECTION OF EXISTING TREES, VEGETATION AND LANDSCAPING MATERIALS WHICH MIGHT BE DAMAGED BY CONSTRUCTION ACTIVITIES.
2. CLEARING AND GRUBBING OF STUMPS, VEGETATION, DEBRIS, RUBBISH, DESIGNATED TREES, AND SITE IMPROVEMENTS.
3. TOPSOIL STRIPPING AND STOCKPILING.
4. TEMPORARY PROTECTION OF ADJACENT PROPERTY, STRUCTURES, BENCHMARKS, AND MONUMENTS.

SUB-CONTRACTORS QUALITY ASSURANCE

1. SUB-CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR CONTAINMENT OF SEDIMENT AND CONTROL OF EROSION ON SITE, ANY DAMAGE TO ADJACENT OR DOWNSTREAM PROPERTIES WILL BE CORRECTED BY THE SUB-CONTRACTOR AT NO EXPENSE TO THE OWNER.
2. SUB-CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES. DO NOT ALLOW WATER TO STAND OR POND. ANY DAMAGE TO STRUCTURES OR WORK ON SITE CAUSED BY INADEQUATE MAINTENANCE OF DRAINAGE WILL BE THE RESPONSIBILITY OF THE SUB-CONTRACTOR AND COST ASSOCIATED WITH REPAIRS FOR SUCH DAMAGE WILL BE AT THE SUB-CONTRACTORS EXPENSE.

**SITE WORK:**

EARTHWORK AND DRAINAGE

PART 1 – GENERAL

1. WORK INCLUDED: SEE SITE PLAN.
2. DESCRIPTIONS

ACCESS DRIVE W/ TURNAROUND AREA, LEASE AREA, AND IF APPLICABLE UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR MATERIAL AND EQUIPMENT DELIVERIES AND MAINTENANCE PERSONNEL ACCESS.

3. QUALITY ASSURANCE

- A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).
- B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (IF REQUIRED).
- C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.

4. SEQUENCING

- A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION.
- B. COMPLETELY GRUB THE ACCESS DRIVE W/ TURNAROUND, UNDERGROUND UTILITY EASEMENTS, (IF APPLICABLE) AND LEASE AREA PRIOR TO FOUNDATION CONSTRUCTION. PLACE OF BACKFILL AND SUB-BASE MATERIAL.
- C. CONSTRUCT TEMPORARY CONSTRUCTION AREA ALONG ACCESS DRIVE.
- D. BRING THE LEASE AREA AND ACCESS DRIVE W/ TURNAROUND TO BASE COURSE ELEVATION PRIOR TO INSTALLING FOUNDATION.
- E. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS.
- F. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA AND ACCESS DRIVE W/ TURNAROUND TO BASE COURSE ELEVATION, WATER TO ENSURE GROWTH.
- G. REMOVE GRAVEL FROM TEMPORARY CONSTRUCTION ZONE TO AN AUTHORIZED AREA OR AS DIRECTED BY PROJECT MANAGER.
- H. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO STONE SURFACES.

5. SUBMITTALS

- A. BEFORE CONSTRUCTION IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPE PLAN UNDER NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD (REFER TO PLANS FOR LANDSCAPING REQUIREMENTS).
- B. AFTER CONSTRUCTION
  1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZED.
  2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER
  3. LANDSCAPING WARRANTY STATEMENT.
6. WARRANTY
  - A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND SURROUNDINGS.
  - B. SOIL STERILIZATION APPLICATION TO GUARANTEE VEGETATION FREE ROAD AND SITE AREAS FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
  - C. DISTURBED AREAS WILL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
  - D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

PART 2 – PRODUCTS

1. MATERIALS
  - A. SOIL STERILIZER SHALL BE EPA-REGISTERED, PRE-EMERGENCE LIQUID:  
 TOTAL KILL PRODUCT 910 EPA 10292-7  
 PHASAR CORPORATION P.O. BOX 5123 DEARBORN, MI 48128 (313) 563-8000  
 AMBUSH HERBICIDE EPA REGISTERED  
 FRAMAR INDUSTRIAL PRODUCTS 1435 MORRIS AVE. UNION, NJ 07083 (800) 526-4924
  - B. ROAD AND SITE MATERIALS SHALL CONFORM TO TDOT SPECIFICATIONS FILL MATERIAL (UNLESS OTHERWISE NOTED) – ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.
  - C. SOIL STABILIZER FABRIC SHALL BE MIRAFI – 500X.

PART 3 – EXECUTION

1. INSPECTIONS  
 LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION.
2. PREPARATION
  - A. CLEAR TREES, BRUSH AND DEBRIS FROM LEASE AREA, ACCESS DRIVE W/ TURN-AROUND AND UNDER GROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.
  - B. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION, GRUB ORGANIC MATERIAL TO A MINIMUM OF SIX (6) INCHES BELOW GRADE.
  - C. UNLESS OTHERWISE INSTRUCTED BY AT&T, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
  - D. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.
  - E. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.

3. INSTALLATION

- A. GRADE OR FILL THE LEASE AREA AND ACCESS DRIVE W/ TURNAROUND AS REQUIRED IN ORDER THAT UPON DISTRIBUTION OF SPOILS, RESULTING FROM EXCAVATIONS, THE RESULTING GRADE WILL CORRESPOND WITH SAID SUB-BASE COURSE. ELEVATIONS ARE TO BE CALCULATED FROM BENCHMARK, FINISHED GRADES, OR INDICATED SLOPES.
- B. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
- C. BRING THE ACCESS DRIVE W/ TURNAROUND TO BASE COURSE ELEVATION TO FACILITATE CONSTRUCTION AND OBSERVATION DURING CONSTRUCTION OF THE SITE.
- D. AVOID CREATING DEPRESSIONS WHERE WATER MAY POND.
- E. THE CONTRACT SHALL INCLUDE GRADING, BANKING, AND DITCHING, UNLESS OTHERWISE INDICATED.
- F. WHEN IMPROVING AN EXISTING ACCESS DRIVE, GRADE THE EXISTING DRIVE TO REMOVE ANY ORGANIC MATTER AND SMOOTH THE SURFACE BEFORE PLACING FILL OR STONE.
- G. PLACE FILL OR STONE IN SIX (6) INCH MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
- H. THE TOP SURFACE COURSE, SHALL EXTEND A MINIMUM OF ONE (1) FOOT BEYOND THE SITE FENCE (UNLESS OTHERWISE NOTED) AND SHALL COVER THE AREA AS INDICATED.
- I. APPLY RIPRAP TO THE SIDE SLOPES OF ALL FENCED SITE AREAS, PARKING AREAS, AND ALL OTHER SLOPES GREATER THAN 2:1.
- J. APPLY RIPRAP TO THE SIDES OF DITCHES OR DRAINAGE SWALES.
- K. RIPRAP ENTIRE DITCH FOR SIX (6) FEET IN ALL DIRECTIONS AT CULVERT OPENINGS.
- L. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAPPED.
- M. UNDER NO CIRCUMSTANCES WILL DITCHES, SWALES, OR CULVERTS BE PLACED SO THAT THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SHELTER OR EQUIPMENT. IF DESIGNS OR ELEVATIONS ARE IN CONFLICT WITH THIS, ADVISE CONSTRUCTION MANAGER IMMEDIATELY.
- N. IN DITCHES WITH SLOPES GREATER THAN 10%, MOUND DIVERSIONARY HEADWALLS IN THE DITCH AT CULVERT ENTRANCES. POSITION THE HEADWALL AT AN ANGLE NO GREATER THAN 60 DEGREES OFF THE DITCH LINE. RIPRAP THE UPSTREAM SIDE OF THE HEADWALL AS WELL AS THE DITCH FOR SIX (6) FEET ABOVE THE CULVERT ENTRANCE.
- O. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
- P. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.



NSB- RAW LANDS  
 10587459  
 WATERLOO  
 333 PORTLAND ROAD  
 WATERLOO, WI 53594

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	05/09/19	ISSUED FOR REVIEW	BN
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET			

DATE: xx/xx/16  
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF WISCONSIN

SHEET TITLE  
**NOTES & SPECIFICATIONS**

SHEET NUMBER  
**SP1**

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

Q. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS, BY WATERING, UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.

4. FIELD QUALITY CONTROL

COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.

5. PROTECTION

A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATE. B. ALL TREES PLACED IN CONJUNCTION WITH A LANDSCAPE CONTRACT WILL BE WRAPPED, TIED WITH HOSE PROTECTED WIRE, AND SECURED TO 2" X 2" X 4'-0" WOODEN STAKES EXTENDING TWO- FEET INTO THE GROUND ON FOUR SIDES OF THE TREE. C. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELEVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PREVENT CONTAMINATION OF THE RAIL BALLAST. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

TRENCHING:

MATERIALS SUB-CONTRACTOR SHALL:

1. FILL MATERIAL SHALL BE OBTAINED TO THE MAXIMUM EXTENT POSSIBLE FROM EXCAVATIONS ON SITE. THE STRUCTURAL FILL SHOULD BE SAND AND SHALL BE APPROVED BY THE CONSTRUCTION MANAGER AND SHALL CONFORM TO LOCAL GOVERNING JURISDICTION AND UTILITY COMPANY REQUIREMENTS. THE FILL MATERIAL SHALL CONTAIN NO ORGANIC MATERIAL, ROCKS, OR OBJECTIONABLE MATERIALS AND/OR MATERIALS DESIGNATED AS HAZARDOUS OR INDUSTRIAL BY THE EPA. THE FILL MATERIAL SHALL CONTAIN FINES SUFFICIENT TO FILL ALL VOIDS IN THE MATERIAL. BACKFILL OR BORROW SOIL SHALL BE PLACED IN 6" LOOSE LIFTS.

PIPE DETECTION AND IDENTIFICATION SUB-CONTRACTOR SHALL:

1. UTILIZE WARNING TAPE. ALL UTILITY SERVICE TRENCHES SHALL BE MARKED WITH WARNING TAPE.

TRENCH EXCAVATION SUB-CONTRACTOR SHALL:

1. DIG TRENCH TO LINES AND GRADES SHOWN ON THE PLANS OR AS DIRECTED BY THE CONSTRUCTION MANAGER. 2. TRENCH LENGTH SHALL BE SUFFICIENT TO ALLOW FOR SATISFACTORY CONSTRUCTION AND INSPECTION OF THE PROJECT WITHOUT ENDANGERING OTHER CONSTRUCTION WORK OR ADJACENT FACILITIES. 3. DISPOSAL OF EXCESS AND UNSUITABLE EXCAVATION MATERIAL PROPERLY AS DIRECTED BY THE CONSTRUCTION MANAGER. 4. USE HAND TRENCHING METHODS FOR EXCAVATION THAT CANNOT BE ACCOMPLISHED WITHOUT ENDANGERING EXISTING OR NEW STRUCTURES AND OTHER FACILITIES.

TRENCH PROTECTION SUB-CONTRACTOR SHALL:

1. PROVIDE MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO PROTECT TRENCHES AT ALL TIMES. 2. SHEETING AND BRACING TO MEET OR EXCEED OSHA REQUIREMENTS.

BACKFILLING SUB-CONTRACTOR SHALL:

1. NOTIFY THE CONSTRUCTION MANAGER AT LEAST 24 HOURS IN ADVANCE OF BACKFILLING. 2. BACKFILL TRENCH WITH LIFTS UP TO 6" LOOSE MEASURE. 3. PROTECT CONDUIT FROM LATERAL MOVEMENT AND DAMAGE FROM IMPACT OR UNBALANCED LOADING TO AVOID DISPLACEMENT OF CONDUIT AND/OR STRUCTURES. DO NOT FREE FALL BACKFILL INTO TRENCH UNTIL AT LEAST 6" OF COVER IS OVER CONDUIT.

COMPACTION SUB-CONTRACTOR SHALL:

1. COMPACT BACKFILL TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 WITH PLUS OR MINUS 3% OF OPTIMUM MOISTURE CONTENT. 2. IF REQUIRED COMPACTION DENSITY HAS NOT BEEN OBTAINED REMOVE THE BACKFILL FROM THE TRENCH OR STRUCTURE, REPLACE WITH APPROVED BACKFILL AND RE-COMPACT AS SPECIFIED.

3. ANY SUBSEQUENT SETTLEMENT OF TRENCH OR STRUCTURE BACKFILL DURING THE MAINTENANCE PERIOD SHALL BE CONSIDERED THE RESULT OF IMPROPER COMPACTION AND SHALL PROMPTLY CORRECTED.

FENCING AND GATE(S)

PART 1 - GENERAL

1. WORK INCLUDED SEE PLAN FOR SITE AND LOCATION OF FENCE AND GATE(S). 2. QUALITY ASSURANCE ALL STEEL MATERIALS UTILIZED IN CONJUNCTION WITH THIS SPECIFICATION WILL BE GALVANIZED OR STAINLESS STEEL. WEIGHT OF ZINC COATING ON THE FABRIC SHALL NOT BE LESS THAN 12 OUNCES PER SQUARE FOOT OF MATERIAL COVERED. POSTS SHALL BE HOT-DIPPED IN GRADE 'E' ZINC, 18 OUNCES PER SQUARE FOOT. 3. SEQUENCING IF THE SITE AREA HAS BEEN BROUGHT UP TO SURFACE COURSE ELEVATION (PRIOR TO THE FENCE CONSTRUCTION), FENCE POST EXCAVATION SPOILS MUST BE CONTROLLED TO PRECLUDE CONTAMINATION OF SAID SURFACE COURSE. 4. SUBMITTALS A. MANUFACTURER'S DESCRIPTIVE LITERATURE. B. CERTIFICATE OR STATEMENT OF COMPLIANCE WITH THE SPECIFICATIONS.

PART 2 - PRODUCTS

1. FENCE MATERIAL A. ALL FABRIC WIRE, RAILS, HARDWARE, AND OTHER STEEL MATERIALS SHALL BE HOT-DIPPED GALVANIZED. B. FABRIC SHALL BE SIX-FOOT HIGH TWO-INCH CHAIN LINK MESH OF NO. 9 GAUGE (0.148") WIRE. THE FABRIC SHALL HAVE A KNUCKLED FINISH FOR THE TOP SELVAGES. FABRIC SHALL CONFORM TO THE SPECIFICATIONS OF ASTM A-392 CLASS 1. C. BARBED WIRE SHALL BE DOUBLE-STRAND, 12-1/2 GAUGE TWISTED WIRE, WITH 14-GAUGE, 4-POINT ROUND BARBS SPACED ON FIVE-INCH CENTERS. D. ALL POSTS SHALL BE SCHEDULE - 40 MECHANICAL SERVICE PIPE AND SHALL BE TYPE 1 ASTM A-128 AND OF THE FOLLOWING DIAMETER POST 2" SCHEDULE 40 (2 3/8" O.D.) CORNER 3" SCHEDULE 40 (3 1/2" O.D.) GATE 3" SCHEDULE 40 (3 1/2" O.D.) E. GATE POSTS SHALL BE EXTENDED 12 INCHES, INCLUDING DOME CAP, TO PROVIDE FOR ATTACHMENT OF BARBED WIRE. F. ALL TOP AND BRACE RAILS SHALL BE 1 1/2" DIAMETER SCHEDULE - 40 MECHANICAL-SERVICE PIPE. G. GATE FRAMES AND BRACES SHALL BE 1.90 INCH DIAMETER SCHEDULE 40 MECHANICAL-SERVICE PIPE. FRAMES SHALL HAVE WELDED CORNERS. H. GATE FRAMES SHALL HAVE A FULL-HEIGHT VERTICAL BRACE, AND A FULL-WIDTH HORIZONTAL BRACE, SECURED IN PLACE BY USE OF GATE BRACE CLAMPS. I. GATE HINGES SHALL BE MERCHANTS METAL MODEL 64386 HINGE ADAPTER WITH MODEL 6409, 188-DEGREE ATTACHMENT. J. THE GUIDE (LATCH ASSEMBLY) SHALL BE HEAVY INDUSTRIAL DOUBLE GATE LATCH. SEE DETAIL. K. LATCHES AND STOPS SHALL BE PROVIDED FOR ALL GATES. L. PLUNGER ROD COMPLETE WITH RECEPTOR TO BE PROVIDED AT THE INACTIVE LEAF OF ALL DOUBLE GATE INSTALLATIONS. M. ALL STOPS SHALL HAVE KEEPERS CAPABLE OF HOLDING THE GATE LEAF IN THE OPEN POSITION. N. A NO. 7 GAUGE ZINC COATED TENSION WIRE SHALL BE USED AT THE BOTTOM OF THE FABRIC, TERMINATED WITH BAND CLIPS AT CORNER AND GATE POSTS. ATOP EACH LINE/CORNER POST. O. A SIX-INCH BY 1/2-INCH DIAMETER EYEBOLT TO HOLD TENSION WIRE SHALL BE PLACED AT LINE POSTS. P. STRETCHER BARS SHALL BE 3/16-INCH BY 3/4-INCH OR HAVE EQUIVALENT CROSS-SECTIONAL AREA. Q. ALL CORNER GATE AND PANELS SHALL HAVE A 3/8-INCH TRUSS ROD WITH TURNBUCKLES. R. ALL POSTS EXCEPT GATE POSTS SHALL HAVE A COMBINATION CAP AND BARBED WIRE SUPPORTING ARM. GATE POSTS SHALL HAVE A DOME CAP. S. OTHER HARDWARE INCLUDES BUT MAY NOT BE LIMITED TO THE CLIPS, BAND CLIPS AND TENSION BAND CLIPS. T. BARBED WIRE GATE GUARDS SHALL BE FITTED WITH DOME CAPS. U. BARBED WIRE SUPPORT ARMS SHALL BE PRESSED STEEL COMPLETE WITH SET BOLT AND LOCK WIRE IN THE ARM. V. ALL CAPS SHALL BE MALLEABLE IRON, DOME OR ACORN SHAPED AS REQUIRED BY PIPE SIZE. W. WHERE THE USE OF CONCERTINA HAS BEEN SPECIFIED, 24-INCH DIAMETERS COIL. BARBED TAPE, STAINLESS STEEL, CYCLONE FENCE MODEL G8P TO TYPE III SHALL BE FURNISHED. IT SHALL BE SUPPORTED ABOVE THE TOP RAIL BY USE OF SIX(6) WIRE BARBED WIRE ARMS POSITIONED ATOP EACH LINE/CORNER POST.

PART 3 - EXECUTION

1. INSPECTION

TO CONFIRM PROPER DEPTH AND DIAMETER OF POST HOLE EXCAVATIONS. ALL POST HOLES WILL BE EXCAVATED AS PER CONSTRUCTION DOCUMENTS.

2. INSTALLATION

A. FOUNDATIONS SHALL HAVE A MINIMUM SIX (6) INCH CONCRETE COVER UNDER POST. B. ALL FENCE POSTS SHALL BE VERTICALLY PLUMB ; ONE QUARTER (1/4) INCH C. AT CORNER POSTS, GATE POSTS, AND SIDES OF GATE FRAME, FABRIC SHALL BE ATTACHED WITH STRETCHER AND TENSION BAND-CLIPS AT FIFTEEN(15) INCH INTERVALS. D. AT LINE POSTS, FABRIC SHALL BE ATTACHED WITH BAND-CLIPS AT FIFTEEN (15) INCH INTERVALS. E. FABRIC SHALL BE ATTACHED TO BRACE RAILS, TENSION WIRE AND TRUSS RODS WITH TIE-CLIPS AT TWO (2) FOOT INTERVALS. F. A MAXIMUM GAP OF ONE INCH WILL BE PERMITTED BETWEEN TIE CHAIN LINE FABRIC AND THE FINAL GRADE. G. GATE SHALL BE INSTALLED SO LOCKS ARE ACCESSIBLE FROM BOTH SIDES. H. GATE HINGE BOLTS SHALL HAVE THEIR THREADS PEENED OR WELDED TO PREVENT UNAUTHORIZED REMOVAL. I. CONCRETE TO BE A MINIMUM OF 3,000 PSI.

3. PROTECTION

UPON COMPLETION OF ERECTION, INSPECT FENCE MATERIAL AND PAINT FIELD CUTS OR GALVANIZING BREAKS WITH ZINC-BASED PAINT, COLOR TO MATCH THE GALVANIZED METAL.

APPLICABLE STANDARDS

Table with 2 columns: Standard Number, Specification Description. Includes ASTM-A120, ASTM-A123, ASTM-A153, ASTM-A392, ASTM-A491, ASTM-A525, ASTM-A570, ASTM-A535.

FEDERAL SPECIFICATION RR-F-191- FENCING, WIRE AND POST METAL (AND GATES, CHAIN LINK FENCE FABRIC, AND ACCESSORIES)

METALS

PART 1 - GENERAL

SECTION INCLUDES:

1. STRUCTURAL STEEL FRAMING MEMBERS, BASE PLATES, PLATES, BARS, THREADED STRUCTURAL FASTENERS, ANTENNA SUPPORT ASSEMBLIES, GRATING, STEEL PLATFORMS AND PEDESTAL SUPPORTS, AND GROUTING UNDER BASE PLATES.

QUALITY ASSURANCE

1. FABRICATE STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS. 2. PERFORM DESIGN UNDER DIRECT SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE.

PART 2 - PRODUCTS

1. MATERIALS:

Table with 2 columns: Material Name, Specification. Includes ASTM A572, GRADE 50; ASTM A500, GRADE B; ASTM A53, TYPE E OR S, GRADE B; ASTM A325; ASTM A307; AWS D1.1, TYPE REQUIRED FOR MATERIALS BEING WELDED.



NSB- RAW LANDS 10587459 WATERLOO 333 PORTLAND ROAD WATERLOO, WI 53594

REVISIONS table with columns: REV., DATE, DESCRIPTION, INITIALS. Row 1: A, 05/09/19, ISSUED FOR REVIEW, BN.

DATE: xx/xx/16 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF WISCONSIN

SHEET TITLE NOTES & SPECIFICATIONS

SHEET NUMBER SP2

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**METALS CONTINUED**

- G. GROUT: NON-SHRINK TYPE, PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZER ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7000 psi AT 28 DAYS.
  - H. SHOP AND TOUCH-UP PRIMER: SSPC 15, TYPE 1, RED OXIDE
  - I. TOUCH-UP PRIMER FOR GALV. SURFACES: ZINC RICH TYPE
2. FABRICATION: CONTINUOUSLY SEAL JOINTED MEMBERS BY CONTINUOUS WELDS. GRIND EXPOSED WELDS SMOOTH.
3. FINISH:
- A. PREPARE STRUCTURAL COMPONENT SURFACES IN ACCORDANCE WITH SSPC SP-1 TO SP-10 PROCEDURES.
  - B. STRUCTURAL STEEL MEMBERS SHALL BE HOT DIPPED GALVANIZED.

**PART 3 - EXECUTION**

- EXAMINATION AND PREPARATION:
1. VERIFY THAT THE FIELD CONDITIONS ARE ACCEPTABLE TO PERFORM THE WORK.
- ERECTION:
1. ALLOW FOR ERECTION LOADS. PROVIDE TEMPORARY BRACING TO MAINTAIN FRAMING IN ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRIDGING AND BRACING.
  2. NO UNAUTHORIZED WELDING SHALL BE PERFORMED ON CROWN CASTLE USA, INC TOWERS. ALL OTHER WELDING SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY AWS 01.1 STRUCTURAL STEEL WELDING CODE-STEEL WELD ELECTRODES SHALL BE E70XX.
  3. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER.
  4. AFTER ERECTION, TOUCH-UP WELDS, ABRASIONS, AND SURFACES NOT SHOP PRIMED OR GALVANIZED WITH ZINC RICH PAINT (ALL EXISTING AND NEW AREAS).
- FIELD QUALITY CONTROL:
1. FIELD INSPECTION OF MEMBERS, CONNECTIONS, WELDS AND BOLT / NUT TORQUE .

**CONCRETE:**

**PART 1 - GENERAL**

1. WORK INCLUDES FORMWORK, REINFORCEMENT, ACCESSORIES, CAST-IN-PLACE CONCRETE, FINISHING, AND CURING.
2. INSPECTIONS
  - A. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING BUILDING DEPARTMENT INSPECTIONS REQUIRED FOR THE SCOPE OF WORK BEING PERFORMED.
  - B. ALL REINFORCING STEEL SHALL BE INSPECTED AND APPROVED BY THE AT&TWIRELESS CONSTRUCTION MANAGER PRIOR TO PLACEMENT OF CONCRETE.
  - C. THE AT&TWIRELESS CONSTRUCTION MANAGER SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS.
3. QUALITY ASSURANCE
  - A. CONSTRUCT AND ERECT CONCRETE FORM WORK IN ACCORDANCE WITH ACI 301 AND ACI 318.
  - B. PERFORM CONCRETE REINFORCING WORK IN ACCORDANCE WITH ACI 301, ACI 318, AND ASTM A184.
  - C. PERFORM CAST-IN-PLACE CONCRETE WORK IN ACCORDANCE WITH ACI 301, ACI 318, AND ACI 117-90.
4. SUBMITTALS
 

SUBMIT CONCRETE MIX DESIGN AND REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL BY AT&TWIRELESS CONSTRUCTION MANAGER/ENGINEER. THE SHOP DRAWINGS SHALL BE SUBMITTED IN EH FORM OF TWO (2) CONCRETE MIX DESIGN INFORMATION SHEETS AND TWO (2) BLUELINE DRAWINGS FOR REINFORCING STEEL.

**PART 2 - PRODUCTS**

1. REINFORCEMENT MATERIALS
  - A. REINFORCEMENT STEEL, ASTM A615, 60KSI YIELD GRADE, REINFORCING STEEL RODS, PLAIN FINISH.
  - B. WELDED STEEL WIRE FABRIC ASTM A185 PLAIN TYPE, IN FLAT SHEETS, PLAIN FINISH.
  - C. CHAIRS, BOLSTERS, BAR SUPPORTS, SPACERS, SIZED AND SHAPED FOR SUPPORTS OF REINFORCING.
  - D. FABRICATE CONCRETE REINFORCING IN ACCORDANCE WITH ACI 315, AND ACI 318, AND ASTM A184.
2. CONCRETE MATERIALS
  - A. CEMENT: ASTM C150, PORTLAND TYPE.
  - B. FINE AND COURSE AGGREGATES: ASTM C33 - MAXIMUM SIZE OF CONCRETE AGGREGATE SHALL NOT EXCEED ONE (1) INCH SIZE SUTABLE FOR INSTALLATION METHOS UTILIZED FOR ONE-THIRD CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING.
  - C. WATER: CLEAN AND NOT DETRIMENTAL TO CONCRETE.
  - D. AIR ENTRAINING ADMIZTURE: ASTM C260.
  - E. BONDING AGENT: LATEX EMULSION FOR BONDING NEW TO OLD CONCRETE AS MANUFACTURED BY DAYTON SUPERIOR.
  - F. NON-SHRINK GROUT: PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICISING AGENTS.
3. CONCRETE MIX
  - A. CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE A.C.I. REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE.
  - B. MIX AND DELIVER CONCRETE IN ACCORDANCE WITH ASTM C94, ALT, 3.
  - C. PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR LOCAL ANTICIPATED AGGRESSIVE ACTIONS. THE DURABILITY REQUIREMENTS OF ACI 318 CHAPTER F4 SHALL BE SATASFIED BASED ON THE CONDITIONS EXPECTED AT THE SITE. PROVIDE CONCRETE AS FOLLOWS:
    1. COMPRESSIVE STRENGTH 4000 PSI AT 28 DAYS.
    2. SLUMP : 3 INCHES.

**EXECUTION:**

1. INSERTS, EMBEDDED COMPONENTS AND OPENINGS
  - A. THE CONTRACTOR SHALL COORDINATE AND CROSS CHECK ARCHITECTURAL, BUILDING AND ELECTRICAL DRAWINGS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, AND OTHER ITEMS RELATED TO CONCRETE WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THE PROPER LOCATION BEFORE PLACING CONCRETE.
  - B. PROVIDE FORMED OPENINGS WHERE REQUIRED FOR WORK TO BE EMBEDDED IN AND PASSING THROUGH CONCRETE MEMBERS.
  - C. COORDINATE WORK OF OTHER SECTIONS IN FORMING AND SETTING OPENINGS, SLOTS, RECESSES, CHASES, SLEEVES, BOLTS, ANCHORS, AND OTHER INSERTS.
  - D. INSTALL CONCRETE ACCESSORIES STRAIGHT, LEVEL ND PLUMB.
2. REINFORCEMENT PLACEMENT
  - A. PLACE REINFORCEMENT, SUPPORTED AND SECURED AGAINST DISPLACEMENT.
  - B. ENSURE REINFORCING IS CLEAN, FREE OF LOOSE SCALE, DIRT, OR OTHER FOREIGN COATINGS.
  - C. WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.
  - D. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE 3 INCHES UNLESS NOTED OTHERWISE.
  - E. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED 3 INCHES OR BE LESS THAN 2 INCHES.

**3. PLACING CONCRETE**

- A. VIBRATE ALL CONCRETE.
  - B. ALL CONCRETE WORK SHALL ADHERE TO THE LATEST A.C.I. STANDARDS FOR WINTER POURING AND CURING PROCEDURES IF SEASONAL CONDITIONS APPLY.
4. CURING
- A. AFTER PLACEMENT, PROTECT CONCRETE FROM PREMATURE DRYING.
  - B. MAINTAIN CONCRETE WITH MINIMAL MOISTURE LOSS AT RELATIVELY CONSISTENT TEMPERATURE FOR A PERIOD NECESSARY FOR HYDRATION OF CEMENT AND HARDENING OF CONCRETE.
5. PROVIDE HAND RUBBED SMOOTH FINISH TO ALL EXPOSED VERTIACAL FORMED CONCRETE SURFACES.
6. FIELD QUALITY CONTROL
- A. SUBMIT THREE (3) CONCRETE TEST CYLINDERS - TAKEN EVERY 15 CUBIC YARDS OR LESS. SUBMIT CONCRETE TESTS TO THE PROJECT MANAGER IN ACCORDANCE TO ASTM C-31 AND C-39.
  - B. SUBMIT ONE (1) ADDITIONAL TEST CYLINDER - TAKEN DURING COLD WEATHER POURS, AND CURED ON JOB SITE UNDER THE SAME CONDITIONS AS THE CONCRETE IT REPRESENTS.
  - C. SUBMIT ONE (1) SLUMP TEST - TAKEN FOR EACH SET OF TEST CYLINDERS TAKEN.
7. DEFECTIVE CONCRETE
- MODIFY OR REPLACE CONCRETE NOT CONFORMING TO REQUIRED SPECIFICATIONS, DETAILS OR ELEVATIONS AS DIRECTED BY THE AT&TWIRELESS CONSTRUCTION MANAGER.

**GENERAL ELECTRICAL NOTES:**

1. ALL ELECTRICAL MATERIALS, EQUIPMENT AND INSTALLATION PROCEDURES TO CONFORM WITH AT&TWIRELESS SPECIFICATIONS.
2. CONTRACTOR SHALL PERFORM ALL VERIFICATION TESTS AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ENGINEER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
3. ALL MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NFPA, AND 'UL' LISTED.
4. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED PER THE NEC, AND ALL APPLICABLE LOCAL CODES.
5. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE A MINIMUM INTERRUPTING RATING OF 42,000 AIC.
6. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO VENDOR PRINTS PROVIDED BY AT&TWIRELESS FOR BTS CABINET.
7. PATCH, REPAIR, AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
8. PROVIDE AT&TWIRELESS WITH ONE SET OF COMPLETE ELECTRICAL 'AS-BUILT' DRAWINGS AT THE COMPLETION OF THE JOB SHOWING ACTUAL ROUTINGS AND WIRING CONNECTIONS.
9. ALL SINGLE-PHASE SELF CONTAINED METER CONNECTION DEVICES MUST INCLUDE HORN TYPE BY-PASS PROVISION SO THAT SERVICES WILL NOT BE INTERRUPTED WHEN A METER IS REMOVED FROM THE SOCKET.
10. ALL EQUIPMENT PUNCH OUTS AND CONDUITS (USED AND SPARE) TO BE RODENT PROOFED WITH CAPS, STEEL MESH, AND/OR FOAM FILL BY CONTRACTOR AS NEEDED.
11. NO SPOILS TO BE LEFT ON SITE WITHOUT THE WRITTEN CONSENT OF THE LANDOWNER.
12. CONTRACTOR TO PROVIDE 2 PHENOLIC LABELS AT METER ONE TO IDENTIFY 'AT&TWIRELESS DISCONNECT' AND THE OTHER TO GIVE THE SITE ADDRESS.
13. ALL CONTRACTOR FURNISHED MATERIALS AND EQUIPMENT SPECIFIED ON THE PROJECT SHALL BE NEW AND UNUSED, OF CURRENT MANUFACTURE AND OF THE HIGHEST GRADE.



NSB- RAW LANDS  
10587459  
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333 PORTLAND ROAD  
WATERLOO, WI 53594

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	05/09/19	ISSUED FOR REVIEW	BN
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET			

DATE: xx/xx/16

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF WISCONSIN

SHEET TITLE  
**NOTES & SPECIFICATIONS**

SHEET NUMBER  
**SP3**

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**GENERAL ELECTRICAL NOTES (CONTINUED):**

14. ALL EQUIPMENT, MATERIAL AND THE INSTALLATION METHODS SPECIFIED ON THE PROJECT DRAWINGS SHALL BE DESIGNED AND FABRICATED IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS, AND APPROPRIATE INDUSTRIAL CONSENSUS STANDARDS AND CODES INCLUDING ANSI, IEEE, NEMA, NFPA AND UL, ALL AS REVISED AS OF THE DATE OF THIS WORK PACKAGE.
15. ALL ELECTRICAL ITEMS BOTH CONTRACTOR AND OWNER FURNISHED SHALL BE CHECKED FOR AGREEMENT WITH THE PROJECT DRAWINGS AND SPECIFICATIONS AND SHALL BE VISUALLY INSPECTED TO ENSURE THAT EQUIPMENT IS UNDAMAGED AND IS IN PROPER ALIGNMENT, INSTALLED PER MANUFACTURER'S INSTRUCTIONS, ELECTRICAL CONNECTIONS ARE TIGHT AND PROPERLY INSULATED WHERE REQUIRED, FUSES ARE OF THE PROPER TYPE AND SIZE, AND ELECTRICAL ENCLOSURES ARE OF THE PROPER NEMA TYPE.
16. NOTIFY OWNER IN WRITING OF ALL DISCREPANCIES BETWEEN DRAWINGS / SPECIFICATIONS AND FIELD INSTALLATIONS, OR IF THE VISUAL INSPECTIONS SHOW DAMAGE OR IMPROPER INSTALLATION.
17. THE EQUIPMENT AND MATERIALS SHALL BE FURNISHED AND INSTALLED TO OPERATE SAFELY AND CONTINUOUSLY WITH NO PROTECTION FROM THE WEATHER.
18. ELECTRICAL WORK REPRESENTED ON THE PROJECT DRAWINGS IS SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS AND ELEVATIONS OF ELECTRICAL EQUIPMENT SHALL BE DETERMINED IN THE FIELD AND VERIFIED WITH THE OWNER'S REPRESENTATIVE.
19. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF TEMPORARY, IF REQUIRED, AND PERMANENT POWER WITH THE LOCAL UTILITY COMPANY. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
20. PROVIDE MOLDED CASE, BOLT ON, THERMAL MAGNETIC TRIP, SINGLE TWO OR THREE POLE CIRCUIT BREAKERS. MULTIPLE POLE CIRCUIT BREAKERS SHALL BE SINGLE HANDLE COMMON TRIP. SHORT CIRCUIT INTERRUPTING RATING SHALL BE AS REQUIRED FOR AVAILABLE FAULT CURRENTS. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE A SHORT CIRCUIT INTERRUPTING RATING EQUAL TO OR GREATER THAN THAT SHOWN ON THE PROJECT DRAWINGS.
21. CONTRACTOR SHALL PERFORM ALL EXCAVATION, TRENCHING, BACKFILLING, AND REMOVAL OF DEBRIS IN CONNECTION WITH THE ELECTRICAL WORK IN ACCORDANCE WITH THE PROJECT DRAWINGS. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF UNDERGROUND UTILITIES AND GROUND WITH THE FOUNDATION INSTALLATION. HAND DIGGING WILL BE REQUIRED IN THE COMPOUND ONLY.
22. CONTRACTOR SHALL PROVIDE ALL NECESSARY SUPPORTS FOR EQUIPMENT INSTALLED AS PART OF THIS PROJECT. SUPPORTS SHALL CONSIST OF GALVANIZED STEEL FRAMES, PLATES, BRACKETS, RACKS AND OTHER SHAPES OF ADEQUATE SIZE AND FASTENED WITH BOLTS, SCREWS OR BY WELDING TO PROVIDE RIGID SUPPORT.
23. CONTRACTOR SHALL CALL THE APPROPRIATE UTILITIES PROTECTION SERVICE BEFORE ANY UNDERGROUND WORK IS PERFORMED, SUCH AS TRENCHING, EXCAVATING, AND DRIVING GROUNDING RODS.
24. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENTLY ENGRAVED LAMINATED PHENOLIC NAMEPLATES. (MINIMUM LETTER HEIGHT SHALL BE 1/2") NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS AND AS PER AT&TWIRELESS SPECIFICATIONS.

**GENERAL RACEWAY NOTES:**

1. CONDUIT AND CONDUIT FITTINGS SHALL MEET ANSI AND NEC STANDARDS FOR MATERIAL AND WORKMANSHIP AND SHALL BE UL LISTED.
  - A. RIGID STEEL CONDUIT SHALL CONFORM TO ANSI C801 AND REQUIREMENTS OF NEC, PARAGRAPH 346 AND BE STANDARD WEIGHT, MILD RIGID STEEL, HOT DIP GALVANIZED WITH INSIDE AND OUTSIDE FINISHED WITH A PROTECTIVE ZINC COATING. COUPLING ELBOWS AND BENDS SHALL MEET THESE SAME REQUIREMENTS. FITTINGS SHALL BE OF THE GALVANIZED IRON OR STEEL THREADED TYPE.
  - B. PVC CONDUIT SHALL CONFORM TO UL STANDARD 651-89 AND THE REQUIREMENTS OF NEC, PARAGRAPH 347. CONDUIT SHALL BE HEAVY WALL TYPE, SCHEDULE 40 OR 80, AND SUNLIGHT RESISTANT. FITTINGS SHALL BE OF THE UNTHREADED SOLVENT CEMENT TYPE.
  - C. EMT CONDUIT (FOR USE BEHIND WALLS OR ABOVE SUSPENDED CEILINGS ONLY). ELECTRIC METALLIC TUBING SHALL CONFORM TO ANSI C803 AND THE REQUIREMENTS OF NEC, PARAGRAPH 348 AND BE PROTECTED ON EXTERIOR WITH A ZINC COATING AND ON INTERIOR SURFACES WITH EITHER A ZINC COATING OR LACQUER ENAMEL. FITTINGS SHALL BE ZINC COATED STEEL.
2. MINIMUM CONDUIT SIZE SHALL BE 3/4", SIZES NOT SHOWN ON DRAWINGS SHALL BE PER NEC.

3. ALL SPARE CONDUITS SHALL HAVE A METALLIC PULL WIRE.
4. CONDUIT SUPPORTS SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AND IN ACCORDANCE WITH THE NEC.
5. UNDERGROUND CONDUITS.
  - A. INSTALL A WARNING TAPE TWELVE INCHES ABOVE EACH CONDUIT OR SET OF CONDUITS.
  - B. IDENTIFY EACH CONDUIT AT BOTH ENDS. INSTALL MINIMUM OF 3'-0" BELOW THE FINISHED GRADE, OR DEEPER IF NOTED ON PLAN DRAWINGS.
  - C. SLOPE A MINIMUM OF 4" PER 100'-0" TO DRAIN AWAY FROM BUILDINGS AND EQUIPMENT.
  - D. USE MANUFACTURED ELECTRICAL ELBOWS AND FITTINGS FOR BELOW GRADE BENDS.
  - E. MAKE JOINTS AND FITTINGS WATERTIGHT ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
  - F. INSTALL A COUPLING BEFORE EACH WALL PENETRATION.
  - G. RESTORE SURFACE FEATURES DISTURBED BY EXCAVATION (AND TRENCHING) IN ALL AREAS.

**GENERAL CONDUCTOR NOTES:**

1. ALL POWER, CONTROL AND COMMUNICATION WIRING SHALL MEET NEMA-WC, ASTM, UL, AND NEC STANDARDS FOR MATERIAL AND WORKMANSHIP UNLESS OTHERWISE SPECIFIED.
  - A. SERVICE ENTRANCE CONDUCTORS SHALL BE COPPER, 600 VOLT, SUNLIGHT RESISTANT, SUITABLE FOR WET LOCATIONS, TYPE USE-2. THE GROUNDED NEUTRAL CONDUCTOR SHALL BE IDENTIFIED WITH A WHITE MARKING AT EACH TERMINATION.
  - B. CONDUCTORS FOR FEEDER AND BRANCH CIRCUITS SHALL BE COPPER 600 VOLT, TYPE THHN / THWN WITH A MINIMUM SIZE OF #12 AWG.
2. ALL CONDUCTOR ACCESSORIES INCLUDING CONNECTORS, TERMINATIONS, INSULATING MATERIALS, SUPPORT GRIPS, MARKER AND CABLE TIES SHALL BE FURNISHED AND INSTALLED SUPPLIER'S INSTALLATION INSTRUCTIONS SHALL BE OBTAINED FOR CABLE ACCESSORIES. THESE INSTRUCTIONS SHALL BE IN THE POSSESSION OF THE CRAFTSMAN WHILE INSTALLING THE ACCESSORIES AND SHALL BE AVAILABLE TO THE COMPANY FOR REFERENCE.
3. WHERE POSSIBLE, NO. 6 AWG AND SMALLER WIRE SHALL BE COLORED CODED BY THE COLOR OF THE INSULATION COVERING. COLOR CODING OF WIRE LARGER THAN NO. 6 AWG MAY BE BY MEANS OF SELF-ADHESIVE WRAP AROUND TYPE MARKERS, PER NEC.
4. TERMINAL CONNECTOR FOR CONDUCTORS 8 AWG AND LARGER SHALL BE PRESSURE OR BOLTED CLAMP TYPE BURNDY QUIKLUK, VARILUG OR ACCEPTABLE EQUAL: OR COMPRESSION TYPE, BURNDY TYPE YAV OR YA (LONG BARREL), PANDUIT TYPE LCA OR LCC, OR ACCEPTABLE EQUAL. ACCEPTABLE CONNECTORS INCLUDED WITH COMPANY-FURNISHED EQUIPMENT MAY BE USED.
5. TERMINATION PROVISIONS OF EQUIPMENT FOR CIRCUITS RATED 100 AMPERES OR LESS OR MARKED FOR NOS. 14 THROUGH 1 CONDUCTORS, SHALL BE USED ONLY FOR CONDUCTORS RATED 66°C (140°F). CONDUCTORS WITH HIGHER TEMPERATURE RATINGS SHALL BE PERMITTED, PROVIDED THE AMPACITY OR THE CONDUCTOR SIZE USED.
6. TERMINATION PROVISIONS OF EQUIPMENT FOR CIRCUITS RATED OVER 100 AMPERES, OR MARKED FOR CONDUCTORS LARGER THAN NO.1 SHALL BE USED ONLY FOR CONDUCTORS RATED 75°C (167°F) CONDUCTORS WITH HIGHER TEMPERATURE RATINGS SHALL BE PERMITTED, PROVIDED THE AMPACITY OF EACH CONDUCTOR IS DETERMINED BASED UPON THE 75°C (167°F) AMPACITY OF THE CONDUCTOR SIZE USED.
7. ALL 600 VOLT OR LESS WIRING, WHERE COMPRESSION TYPE CONNECTORS ARE USED, SHALL BE INSULATED WITH AT LEAST ONE TURN OF 'SCOTCHFILL' ELECTRICAL INSULATING PUTTY AND THEN COVERED WITH TWO HALF TURNS OF TAPE SIMILAR TO 3M COMPANY'S '33 PLUS (33+) PLASTIC TAPE OR 88 OUTDOOR TAPE.
8. TERMINAL CONNECTORS FOR CONDUCTORS SMALLER THAN 8 AWG SHALL BE COMPRESSION TYPE CONNECTORS SIZED FOR THE CONDUCTOR AND THE TERMINAL. THE CONNECTORS SHALL BE CONSTRUCTED OF FINE GRADE HIGH CONDUCTIVITY COPPER IN ACCORDANCE WITH QQ-C-516 AND SHALL BE TIN-PLATED IN ACCORDANCE WITH MIL-T-10727. THE INTERIOR SURFACE OF THE CONNECTOR WIRE BARREL SHALL BE SERRATED AND THE EXTERIOR SURFACE OF THE CONNECTOR WIRE BARREL SHALL BE PROVIDED WITH CRIMP GUIDES.

**GENERAL GROUNDING NOTES:**

1. ALL WORK SHALL COMPLY WITH THE LATEST AT&TWIRELESS GROUNDING SPECIFICATIONS AND REQUIREMENTS.
2. ALL METALLIC COMPONENTS ON THE SITE MUST BE GROUNDED TO THE GROUND RING. THIS INCLUDES STEEL CONDUITS USED TO DELIVER THE TELCO AND POWER UTILITY LINES TO THE SITE OR USED TO PROVIDE ACCESS BY UTILITIES OR CONTRACTORS TO THE VARIOUS CABINETS.
3. ALL GROUND LEADS ABOVE GRADE SHALL BE INSTALLED IN 1/2" SEAL TIGHT.
4. WHEN EARTH RESISTANCE TEST INDICATES THAT THE SOIL IS ABOVE MINIMUM ALLOWABLE RESISTANCE, THAN THE CONTRACTOR SHALL ESTIMATE THE TYPE, NUMBER AND ARRANGEMENT OF EARTH ELECTRODES. CONTRACTOR SHALL ALSO CONSIDER COMPANY'S SITE SPECIFIC APPROACHES FOR IMPROVING EARTH RESISTANCE AT THE SITE BY METHODS INDICATED BELOW:
 

RAW LAND

  - A. USE MULTIPLE RODS
  - B. LENGTHEN THE EARTH ELECTRODE
  - C. TREAT THE SOIL
  - D. USE CHEMICAL RODS
5. THE CONTRACTOR MUST VERIFY THAT NEW GROUNDING SYSTEM RESISTANCE IS EQUAL TO OR LESS THAN FIVE (5) OHMS PER AT&TWIRELESS SPECIFICATIONS.
6. RUN ALL GROUND WIRES IN AN ORGANIZED MANNER, AVOID CROSSING OF WIRES WHEREVER POSSIBLE. DO NOT RUN WIRES OVER CONCRETE SLAB.
7. INSTALL ALL GROUND WIRES IN A DOWNWARD SLOPE FOR MAXIMUM LIGHTNING PROTECTION.
8. MAINTAIN ALL MINIMUM BENDING RADII OF THE GROUNDING WIRES.
9. DO NOT REMOVE MORE INSULATION FROM THE GROUND WIRES THAN NECESSARY WHEN CADWELDING OR CRIMPING IF EXCESS INSULATION IS REMOVED, THE CONNECTION WILL BE CONSIDERED UNACCEPTABLE AND WILL BE CORRECTED PER THE AT&TWIRELESS REPRESENTATIVES'S DIRECTION.
10. DOWN LEAD FOR ANTENNA SECTORS MUST BE CONNECTED DIRECTLY TO THE GROUND RING.
11. ALL BASE TRANSCEIVER SITE EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE INTERNATIONAL ELECTRICAL CODE (NEC), AND THE LATEST EDITION OF LIGHTNING PROTECTION CODE NFPA 780 AND AT&TWIRELESS STANDARDS.
12. THE ELECTRICAL SERVICE TO THE SITE SHALL BE GROUNDED AT THE SERVICE DISCONNECTING MEANS REQUIRED IN ARTICLE 250 OF THE NATIONAL ELECTRIC CODE, IN ACCORDANCE WITH ANY LOCAL CODE.
13. ALL UNDERGROUND (BELOW GRADE) GROUNDING CONNECTIONS SHALL BE MADE BY THE CADWELD PROCESS (MECHANICAL LUG ATTACHMENTS BELOW GRADE ARE NOT ACCEPTABLE). CONNECTIONS SHALL INCLUDE ALL CABLE SPLICES (TEES, X'S, ETC.) ALL CABLE CONNECTIONS TO GROUND RODS, GROUND ROD SPLICES, AND LIGHTING PROTECTION SYSTEM AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METALS, TOOLS, ETC.) SHALL BE BY CADWELD AND INSTALLED PER MANUFACTURERS RECOMMENDATION AND PROCEDURES.
14. ALL GROUNDING AND BONDING CONDUCTORS THAT ARE CONNECTED ABOVE GRADE INTERIOR TO A BUILDING SHALL BE CONNECTED USING TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTORS FOR #2 AND #6 AWG INSULATED COPPER CONDUCTOR.
15. ALL GROUNDING CONNECTIONS, INTERIOR AND EXTERIOR, MADE THROUGHOUT THIS DOCUMENT SHALL BE MADE USING AN ANTI-OXIDATION COMPOUND, THE ANTI-OXIDATION COMPOUND SHALL BE 'THOMAS AND BETTS' KOPR-SHIELD (TIM OF JET LUBE, INC.) THERE IS NO EQUIVALENT FOR THIS PRODUCT: NO OTHER COMPOUND WILL BE ACCEPTED. COAT ALL WIRES BEFORE LUGGING. COAT ALL SURFACES BEFORE CONNECTING.
16. ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT PRIOR TO CADWELD, GALVANIZING SHALL BE REMOVED BY GRINDING SURFACE TO BARE METAL 'SLAG' FROM CADWELD MUST BE REMOVED AND WELD SHALL BE SPRAYED WITH COLD GALVANIZE AFTER COMPLETION.

**GENERAL GROUNDING NOTES CONTINUED:**

17. FERROUS METAL CLIPS WHICH COMPLETELY SURROUND THE GROUNDING CONDUCTOR SHALL NOT BE USED. CLIPS OF THE FOLLOWING MATERIALS AND TYPES MAY BE USED TO SUPPORT GROUNDING CONDUCTORS.
  - PLASTIC CLIPS
  - STAINLESS STEEL CLIPS WHICH DO NOT COMPLETELY SURROUND THE GROUNDING CONDUCTOR.
  - FERROUS METAL CLIPS WHICH DO NOT COMPLETELY SURROUND THE GROUNDING CONDUCTOR.
18. ALL BELOW GRADE GROUNDING CONDUCTORS SHALL BE BARE SOLID COPPER WIRE. ABOVE-GRADE GROUNDING CONDUCTORS MAY BE EITHER OR AS INDICATED ON THE DRAWINGS:
  - BARE TINNED SOLID COPPER WIRE
  - THWN-INSULATED, CONTINUOUS GREEN COLOR, SOLID COPPER WIRE
  - THWN-INSULATED, CONTINUOUS GREEN COLOR STRANDED COPPER WIRE
  - A. THE UNDERGROUND GROUND RING SHALL HAVE A #2 AWG BARE TINNED SOLID COPPER WIRE.
  - B. #2 THWN SHALL BE STRANDED COPPER WITH GREEN THWN INSULATION SUITABLE FOR WET INSTALLATION (OR SOME ABOVE GROUND APPLICATIONS, I.E. INDOOR GROUNDING RING)
  - C. #2 BARE TINNED COPPER SHALL BE SOLID. ALL BURIED WIRE SHALL MEET THIS CRITERIA INCLUDING CABLE TRAY GROUNDING WIRES AND WIRES INDICATED ON THE DRAWINGS.
 

(THE MINIMUM BEND RADIUS IS 8" FOR #6 AWG AND SMALLER, AND 12 INCHES FOR WIRE LARGER THAN #6 AWG)
19. ALL HARDWARE, BOLTS, NUTS, WASHERS, AND LOCK WASHERS SHALL BE 18-8 STAINLESS STEEL. EVERY CONNECTION SHALL BE (BOLT-FLATWASHER-BUSS-LUG-FLATWASHER-LOCKWASHER-NUT), IN THAT EXACT ORDER WITH NUT FACING OUTWARD, BACK TO BACK LUGGING SHALL BE (BOLT-FLATWASHER-LUG-FLATWASHER-LUG-BUSS-LUG-FLATWASHER-LOCK WASHER-NUT), IN THAT EXACT ORDER IS ACCEPTED WHERE NECESSARY TO CONNECT MANY LUGS TO A BUSS BAR. STACKING OF LUGS, BUS-LUG-LUG, IS NOT ACCEPTABLE.
20. THE COMPRESSION GROUND LUG FOR #2 AWG BARE SOLID GROUNDING CONDUCTORS SHALL BE BURNDY TYPE YA3C-2TC.
21. THE ANTENNA CABLES SHALL BE GROUNDED AT THE TOP AND BOTTOM OF THE VERTICAL RUN. THE ANTENNA CABLE SHIELD SHALL BE BONDED TO A COPPER GROUND BUS AT THE LOWEST POINT OF THE VERTICAL RUN. THE ANTENNA CABLE SHIELD SHALL BE GROUNDED JUST BEFORE ENTERING THE BTS. GROUNDING KITS ON COAX CABLE SHALL HAVE A MINIMUM BEND OF 6" AND SHALL BE KEPT AS CLOSE TO VERTICAL AS POSSIBLE. FLAT WASHER SUPPLIED WITH GROUND KITS MUST BE REPLACED WITH SMALLER STAINLESS STEEL FLAT WASHERS, WASHERS MUST REMAIN FLAT AGAINST GROUND BAR, ALL FASTENERS MUST BE STAINLESS STEEL AND KOPR-SHIELD MUST BE USED ON BOTH SIDES OF THE GROUND BAR.



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**WATERLOO**  
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**WATERLOO, WI 53594**

REVISIONS			
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DATE: xx/xx/16

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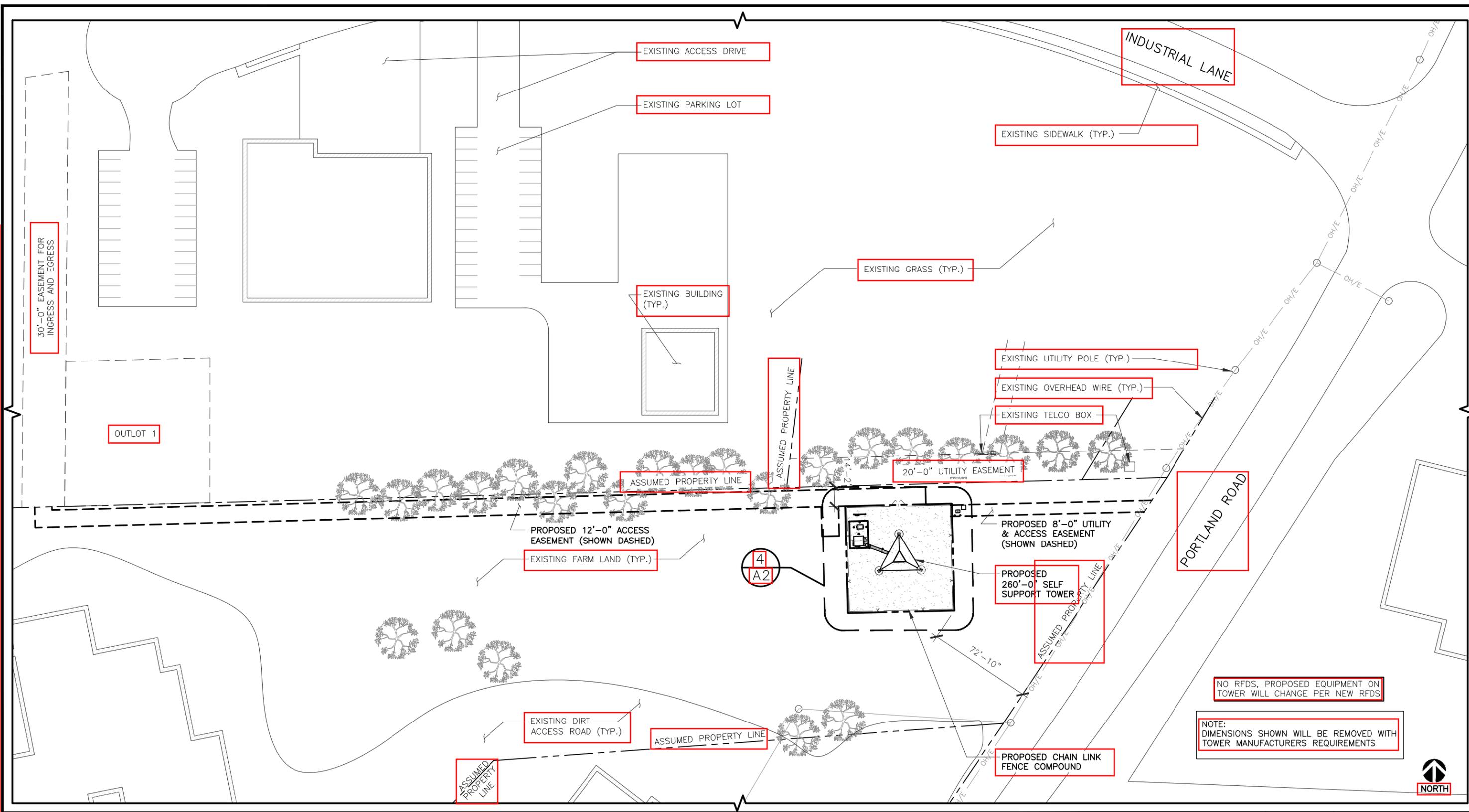
**SHEET TITLE**

**NOTES & SPECIFICATIONS**

**SHEET NUMBER**

**SP4**

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NO RFDS, PROPOSED EQUIPMENT ON TOWER WILL CHANGE PER NEW RFDS

NOTE: DIMENSIONS SHOWN WILL BE REMOVED WITH TOWER MANUFACTURERS REQUIREMENTS

**SITE PLAN** SCALE: 1/32" = 1'-0" (24x36)  
(OR) 1/64" = 1'-0" (11x17) 1

930 NATIONAL PARKWAY  
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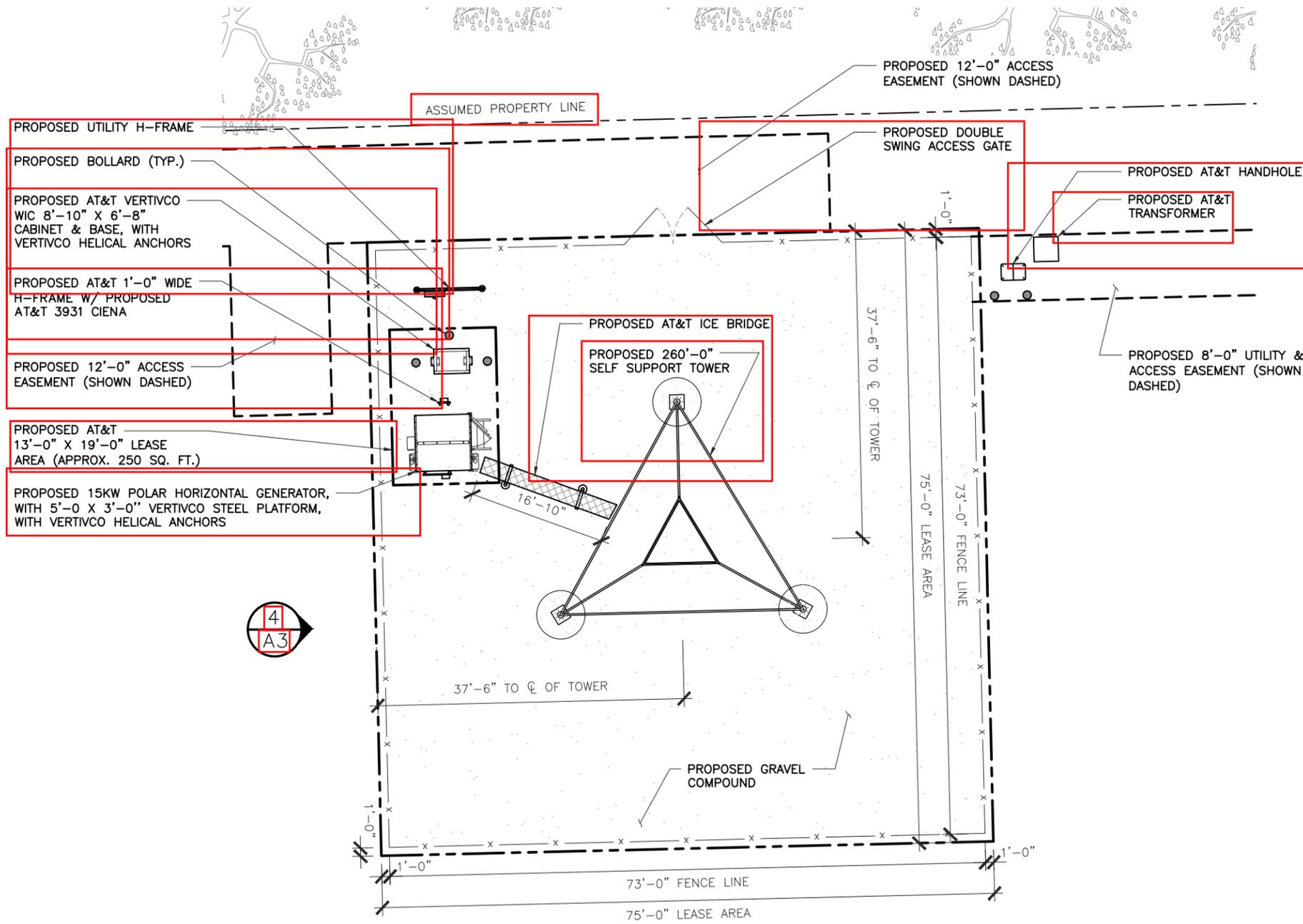
DATE: xx/xx/16

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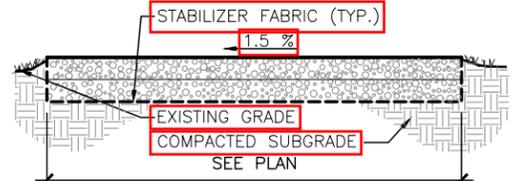
SHEET TITLE  
**SITE PLAN**

SHEET NUMBER  
**A1**

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<b>SITE AREA</b>	<b>ACCESS DRIVE</b>
BASE COURSE: 4" MIN. OF COMPACTED CA-6 COARSE AGGREGATE.	BASE COURSE: 6" MIN. OF COMPACTED CA-3 COARSE AGGREGATE.
TOP COURSE: 4" MIN. OF COMPACTED CA-7 COARSE AGGREGATE.	TOP COURSE: 3" MIN. OF COMPACTED CA-6 COARSE AGGREGATE.



**GRAVEL PAVING DETAIL** 3

- ELEVATIONS ARE ABOVE MEAN SEA LEVEL.
- DO NOT SCALE DIMENSIONS FROM THIS DRAWING.
- ALL EXISTING RECORDED EASEMENTS ARE INDICATED ON THIS DRAWING TO THE BEST OF THE ARCHITECT'S KNOWLEDGE PER VISUAL INSPECTION, SURVEY DRAWINGS, AND INFORMATION RECEIVED FROM AT&T WIRELESS.
- REFER TO SP1 AND SP2 FOR EROSION CONTROL AND SOIL STABILIZATION METHODS

**GENERAL NOTES** 2

LOCATION: BASE OF TOWER  
 ELEVATION: 822.00' A.M.S.L. (@ BASE GUY TOWER)  
 LATITUDE: 43° 11' 16.52"  
 LONGITUDE: -88° 58' 41.42"

HORIZONTAL DATUM: NAD83  
 VERTICAL DATUM: NAVD88

**SURVEY BENCHMARK/PROJECT DATUM**

EXISTING	NEW	NEW
SAS	SANITARY SEWER	SAS
STS	STORM SEWER	STS
W	WATER MAIN	W
SM	SANITARY MANHOLE ELEVATIONS	SM
SS	STORM STRUCTURE ELEVATIONS	SS
PL	PROPERTY LINE & R.O.W.	PL
SD	SURFACE DRAINAGE	SD
LS	LIGHT STANDARD	LS
SL	STREET LIGHT	SL
SE	SPOT ELEVATION	SE
C	CONTOUR	C
CR	CONTOUR TO BE REGRADED	CR
GM	GAS MAIN	GM
M	MANHOLE	M
CB	CATCH BASIN	CB
FH	FIRE HYDRANT	FH
EL	EASEMENT LINE	EL
F	FENCE	F
BU	BURIED UTILITY LINE	BU
UP	UTILITY POLE	UP
OH	OVERHEAD UTILITY LINE	OH
B	BUILDING	B



**COMPOUND PLAN**

SCALE: 1/8" = 1'-0" (24x36)  
 (OR) 1/16" = 1'-0" (11x17)

**LEGEND** 1



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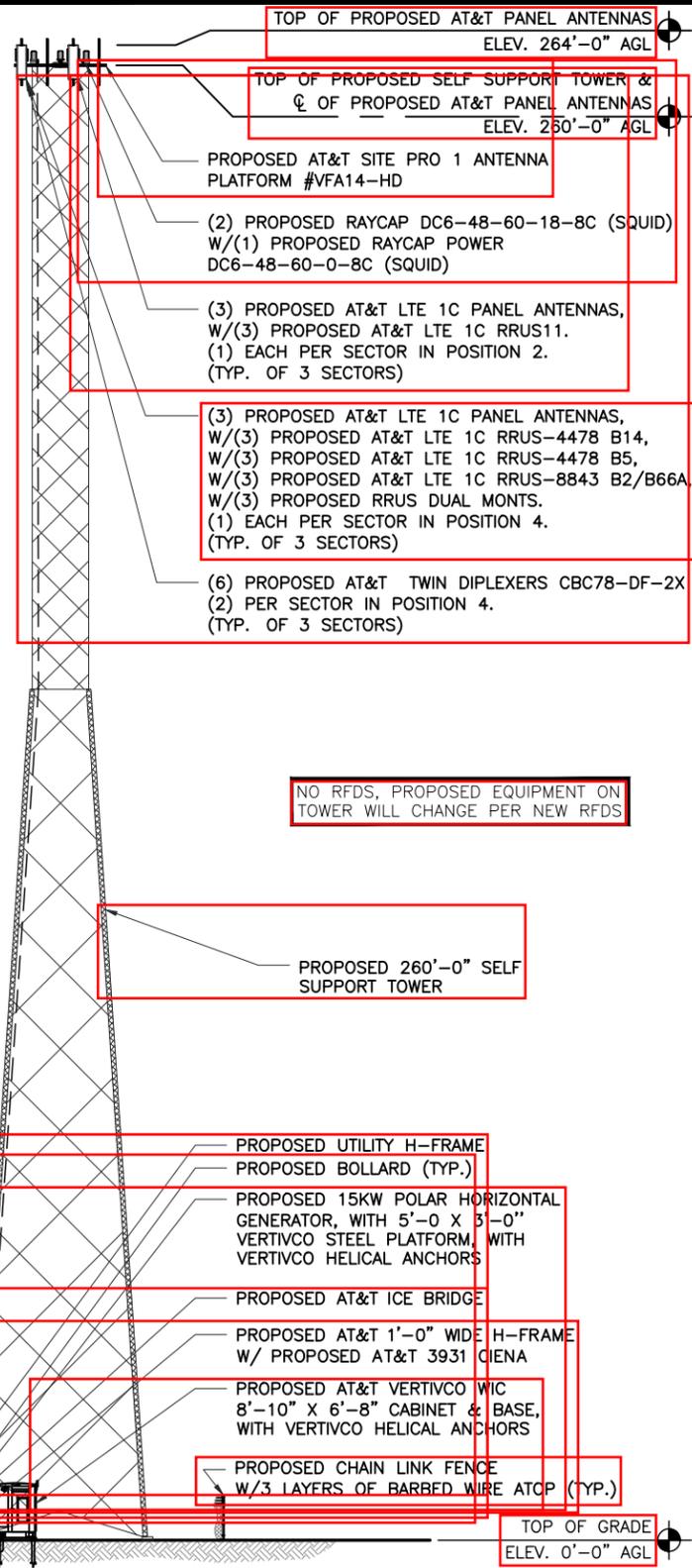
**SHEET TITLE**  
 COMPOUND PLAN & LEGEND

**SHEET NUMBER**  
 A2

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- ANTENNA NOTES:**
1. THE SIZE, HEIGHT, AND DIRECTION OF THE ANTENNAS SHALL BE ADJUSTED TO ACHIEVE THE AZIMUTHS SPECIFIED AND LIMIT SHADOWING AND TO MEET THE SYSTEM REQUIREMENTS.
  2. CONTRACTOR SHALL VERIFY THE HEIGHT OF THE ANTENNA WITH THE AT&T WIRELESS PROJECT MANAGER.
  3. VERIFY TYPE AND SIZE OF TOWER LEG PRIOR TO ORDERING ANY ANTENNA MOUNT.
  4. UNLESS NOTED OTHERWISE THE CONTRACTOR MUST PROVIDE ALL MATERIAL NECESSARY.
  5. ANTENNA AZIMUTHS ARE DEGREES OFF OF TRUE NORTH, BEARING CLOCKWISE, IN WHICH ANTENNA FACE IS DIRECTED. ALL ANTENNAS (AND SUPPORTING STRUCTURES AS PRACTICAL) SHALL BE ACCURATELY ORIENTED IN THE SPECIFIED DIRECTION.
  6. CONTRACTOR SHALL VERIFY ALL RF INFORMATION PRIOR TO CONSTRUCTION.
  7. SWEEP TEST SHALL BE PERFORMED BY GENERAL CONTRACTOR AND SUBMITTED TO AT&T WIRELESS CONSTRUCTION SPECIALIST. TEST SHALL BE PERFORMED PER AT&T WIRELESS STANDARDS.

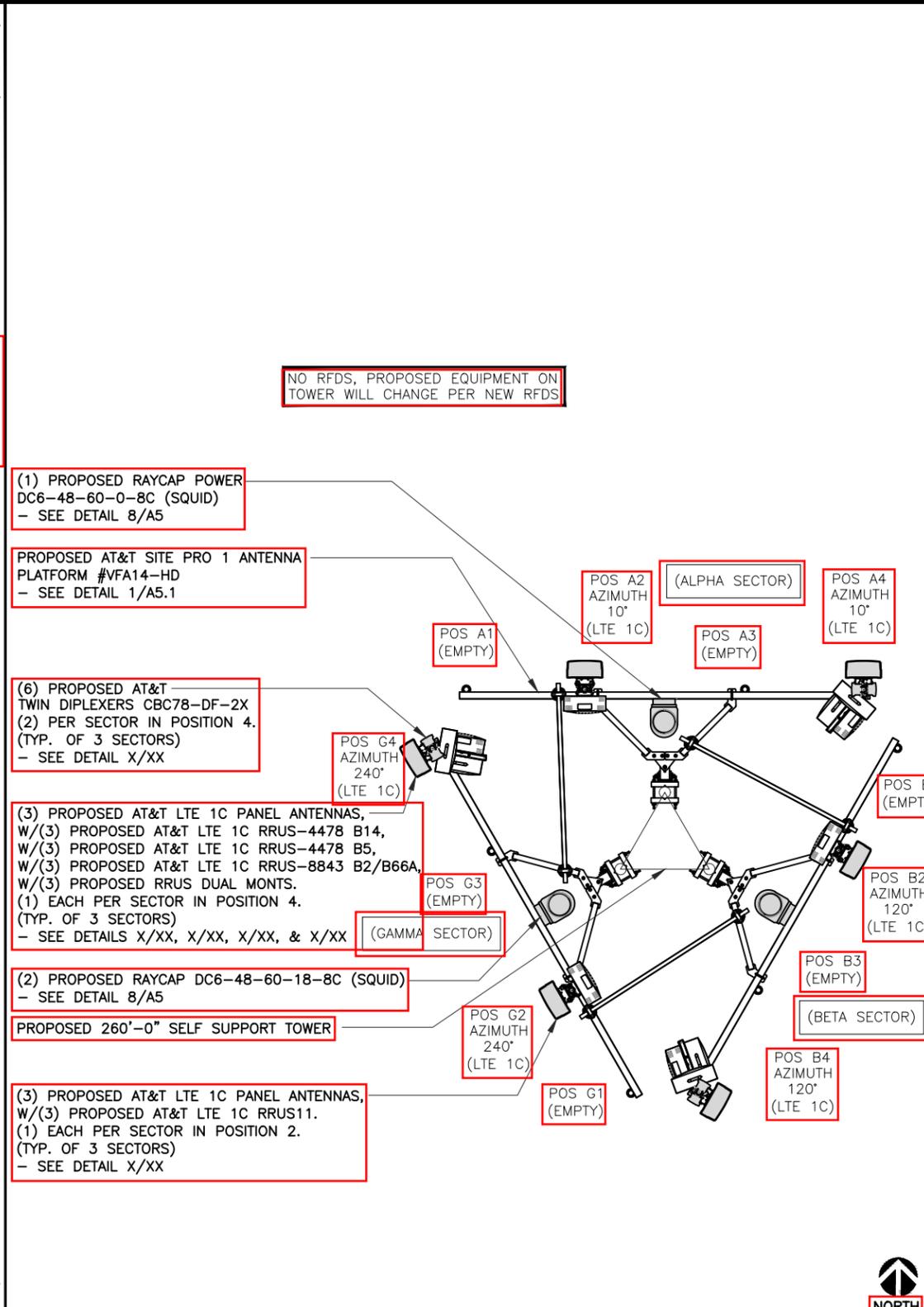
- STRUCTURAL NOTES:**
1. TOWER STRUCTURAL CALCULATIONS PREPARED BY OTHERS. CONTRACTOR TO VERIFY WITH PROJECT MANAGER TO OBTAIN A COPY
  2. CONTRACTOR TO REFER TO TOWER STRUCTURAL CALCULATIONS FOR ADDITIONAL LOADS. NO ERECTION OR MODIFICATION OF TOWER SHALL BE MADE WITHOUT APPROVAL OF STRUCTURAL ENGINEER.



PROPOSED TOWER ELEVATION

SCALE: 1/16" = 1'-0" (24x36)  
(OR) 1/32" = 1'-0" (11x17)

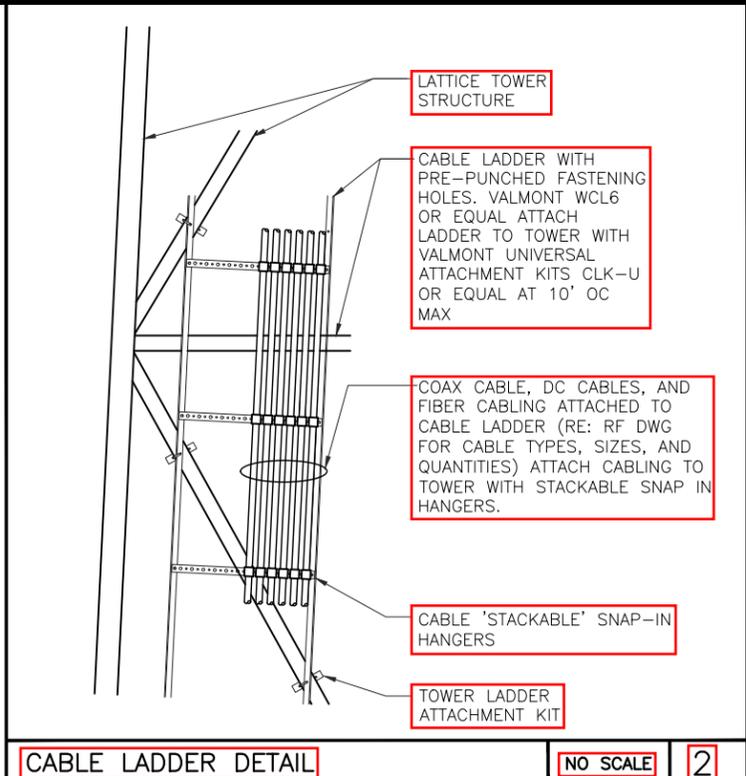
4



PROPOSED ANTENNA PLAN

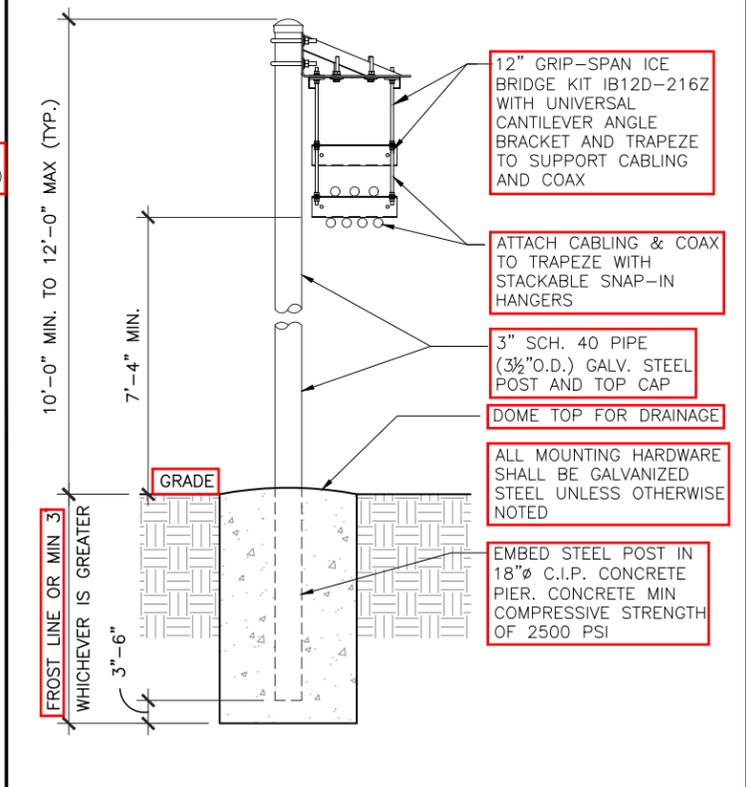
SCALE: 3/8" = 1'-0" (24x36)  
(OR) 3/16" = 1'-0" (11x17)

3



CABLE LADDER DETAIL

NO SCALE 2



ICE BRIDGE DETAIL

NO SCALE 1



NSB- RAW LANDS  
10587459  
WATERLOO  
333 PORTLAND ROAD  
WATERLOO, WI 53594

REVISIONS			
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DATE: xx/xx/16  
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF WISCONSIN

SHEET TITLE  
**TOWER ELEVATION & ANTENNA PLAN**

SHEET NUMBER  
**A3**

- CONTRACTOR IS TO REFER TO AT&T'S MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION.
- CABLE LENGTHS WERE DETERMINED BASED ON THE DESIGN DRAWING. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK.
- CONTRACTOR TO USE ROSENBERGER FIBER LINE HANGER COMPONENTS (OR ENGINEER APPROVED EQUAL).

NO RFDS, PROPOSED EQUIPMENT ON TOWER WILL CHANGE PER NEW RFDS

NOTES NO SCALE 3

CABLE MARKING LOCATIONS TABLE

NO	LOCATIONS
1	EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS.
2	EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP-JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
3	CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER.
4	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.
5	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.

- THE ANTENNA SYSTEM COAX SHALL BE LABELED WITH VINYL TAPE.
- THE STANDARD IS BASED ON EIGHT COLORED TAPES-RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE, AND VIOLET. THESE TAPES MUST BE 3/4" WIDE & UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR CONTRACTOR ON SITE.
- USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR AND CABLE NUMBER AS SHOWN ON "CABLE COLOR CHART".
- WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN TECHNOLOGIES IS ENCOUNTERED, THE CONTRACTOR SHALL REMOVE THE EXISTING COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING STANDARD. IN THE ABSENCE OF AN EXISTING COLOR CODING AND TAGGING SCHEME, OR WHEN INSTALLING PROPOSED COAXIAL CABLES, THIS GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
- ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) THREE WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
- ALL COLOR BANDS INSTALLED AT THE TOP OF THE TOWER SHALL BE A MINIMUM OF 3" WIDE, AND SHALL HAVE A MINIMUM OF 3/4" OF SPACE BETWEEN EACH COLOR.
- ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE-TO-SIDE.
- IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE NEW TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

PROPOSED ANTENNA CONFIGURATION AND CABLE SCHEDULE

SECTOR	POS	TECH	ANTENNA	ANTENNA Ht HEIGHT	AZ	TMA/RRU	DC SURGE AND DISTRIBUTION	CABLE TYPE	CABLE LENGTH	DOWN TILTS
A	1	EMPTY								
	2	LTE 1C	COMMSCOPE NNH4-65B-R6 (N)	190' AGL	10°	(1)RRUS-11 (N)		(2) DC TRUNK (N) (1) FIBER (N)	260'	0
	3	EMPTY								
	4	LTE 1C	COMMSCOPE NNH4-65B-R6 (N)	190' AGL	10°	(2) TWIN DPLX CBC78-DF-2X (N) (1)RRUS-4478 B14 (N) (1)RRUS-4478 B5 (N) (1)RRUS-8843 B2/B66A (N)		(4) DC TRUNK (N) (1) FIBER (N)	260'	0
B	1	EMPTY								
	2	LTE 1C	COMMSCOPE NNH4-65B-R6 (N)	190' AGL	120°	(1)RRUS-11 (N)	(2) RAYCAP (N) DC6-48-60-18-8C (1) POWER RAYCAP (N) DC6-48-60-0-8C	DC TRUNK (SHARED W/A2) FIBER (SHARED W/A2)	260'	0
	3	EMPTY								
	4	LTE 1C	COMMSCOPE NNH4-65B-R6 (N)	190' AGL	120°	(2) TWIN DPLX CBC78-DF-2X (N) (1)RRUS-4478 B14 (N) (1)RRUS-4478 B5 (N) (1)RRUS-8843 B2/B66A (N)		DC TRUNK (SHARED W/A4) FIBER (SHARED W/A4)	260'	0
C	1	EMPTY								
	2	LTE 1C	COMMSCOPE NNH4-65B-R6 (N)	190' AGL	240°	(1)RRUS-11 (N)		DC TRUNK (SHARED W/A2) FIBER (SHARED W/A2)	260'	0
	3	EMPTY								
	4	LTE 1C	COMMSCOPE NNH4-65B-R6 (N)	190' AGL	240°	(2) TWIN DPLX CBC78-DF-2X (N) (1)RRUS-4478 B14 (N) (1)RRUS-4478 B5 (N) (1)RRUS-8843 B2/B66A (N)		DC TRUNK (SHARED W/A4) FIBER (SHARED W/A4)	260'	0

\* INCLUDES SAFETY FACTOR OF 20' FT. (10 FT. AT BOTH ENDS OF CABLE RUN). CONTRACTOR TO VERIFY RF DATA WITH AT&T WIRELESS CONSTRUCTION MANAGER AND/OR RF ENGINEER PRIOR TO INSTALLATION

(N) = NEW  
(X) = EXISTING  
(XR) = EXISTING/RELOCATED  
(E) = ELECTRICAL  
(M) = MECHANICAL

ANTENNA AND CABLING INFORMATION NO SCALE 2

SCHEDULE SCHEDULE NO SCALE 1



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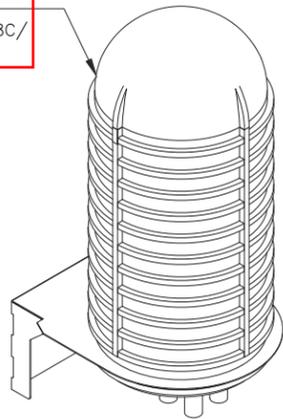
SHEET TITLE  
SCHEDULE & CABLE NOTES

SHEET NUMBER  
A4

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SURGE PROTECTION UNIT  
(RAYCAP DC6-48-60-0-8C/  
DC6-48-60-18-8C)



RAYCAP DC6 DETAIL

NOT TO SCALE

8

NOT TO SCALE

6

NOT TO SCALE

4

NOT TO SCALE

2

NOT TO SCALE

7

NOT TO SCALE

5

NOT TO SCALE

3

NOT TO SCALE

1



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CHICAGO, IL 60661  
www.sacw.com  
312.895.4977



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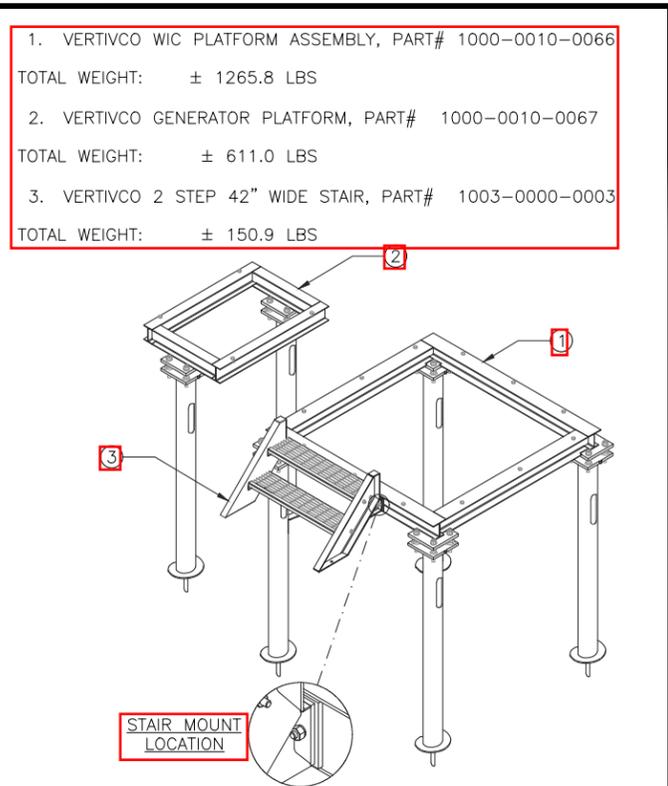
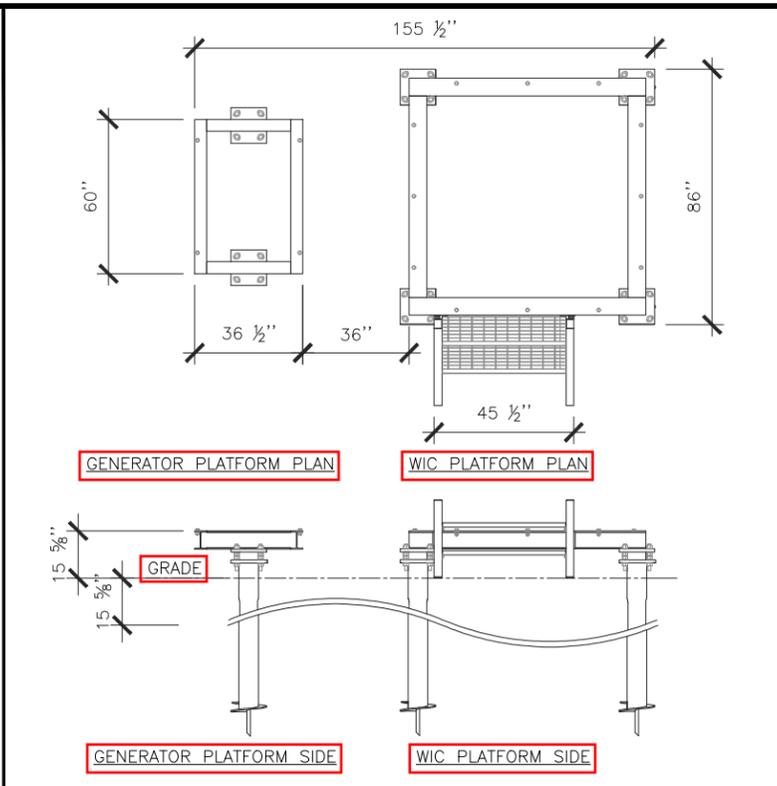
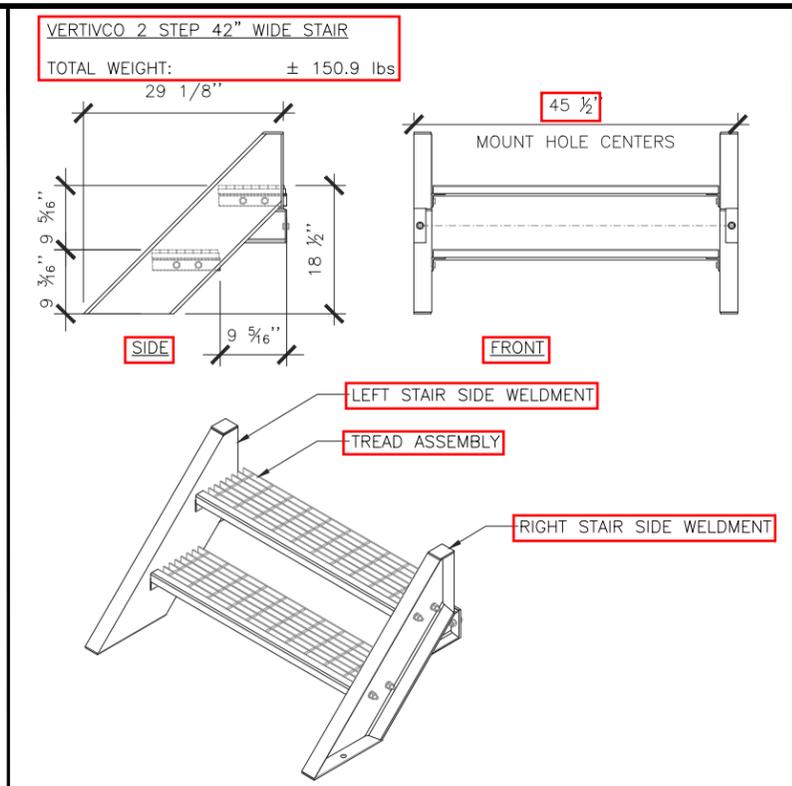
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SHEET TITLE  
ANTENNA, RRUS & RAYCAP DETAILS

SHEET NUMBER  
A5

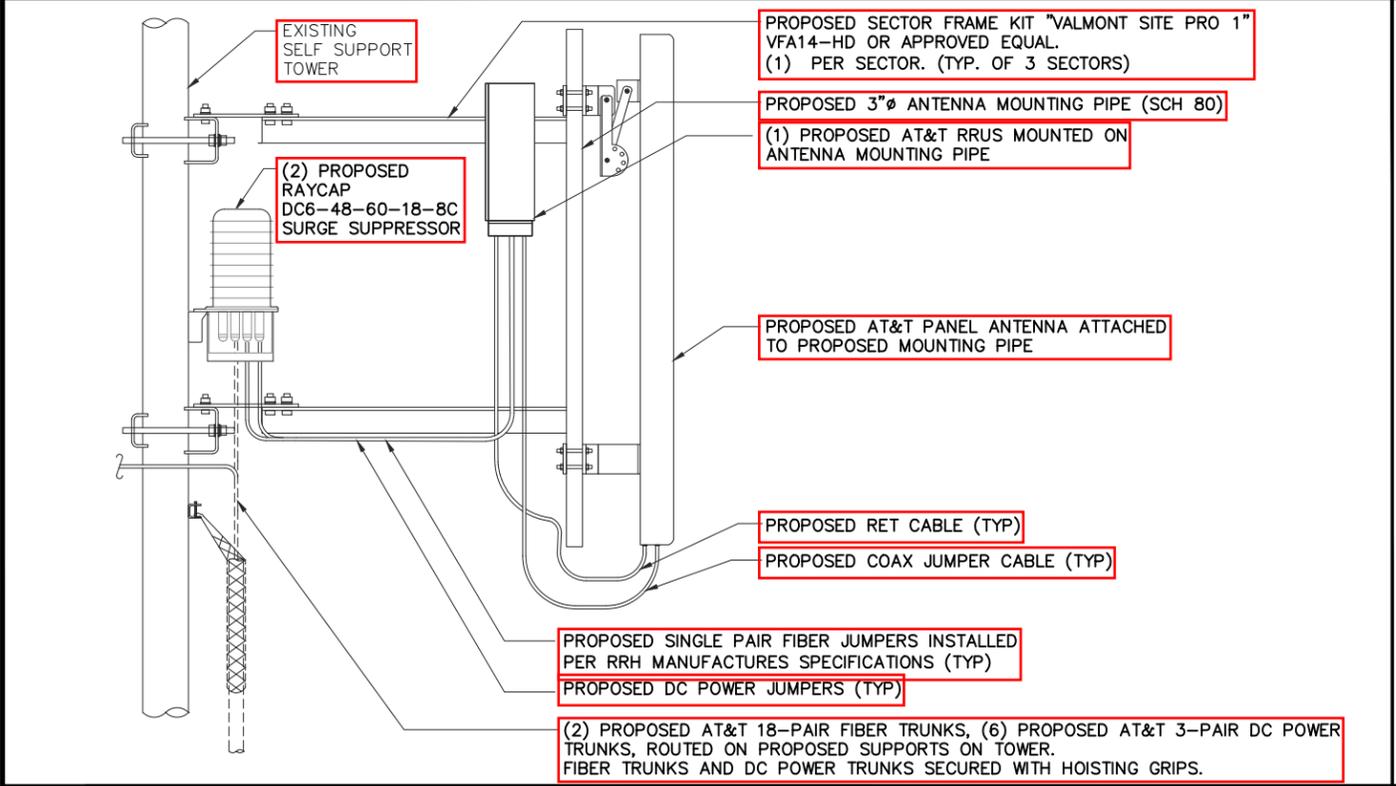
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- 1. VERTIVCO WIC PLATFORM ASSEMBLY, PART# 1000-0010-0066  
TOTAL WEIGHT: ± 1265.8 LBS
- 2. VERTIVCO GENERATOR PLATFORM, PART# 1000-0010-0067  
TOTAL WEIGHT: ± 611.0 LBS
- 3. VERTIVCO 2 STEP 42" WIDE STAIR, PART# 1003-0000-0003  
TOTAL WEIGHT: ± 150.9 LBS

NOT TO SCALE 6 VERTIVCO 2 STEP 42" WIDE STAIR

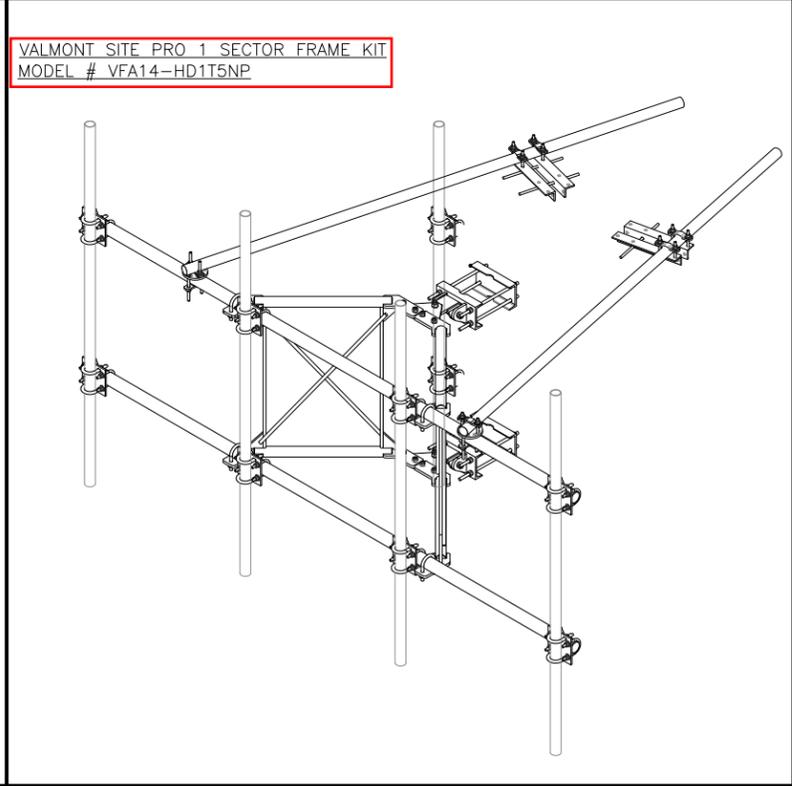
NOT TO SCALE 4 VERTIVCO WIC PLATFORM WITH GEN PLATFORM



TYPICAL ANTENNA, RRU, RRH & RAYCAP DC6 MOUNTING DETAIL NOT TO SCALE 5



NOT TO SCALE 3 VFA14 SECTOR FRAME DETAIL NOT TO SCALE 1



NOT TO SCALE 1



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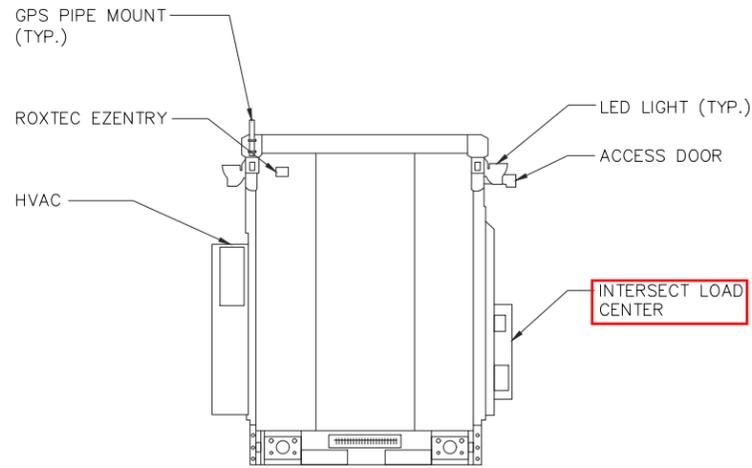
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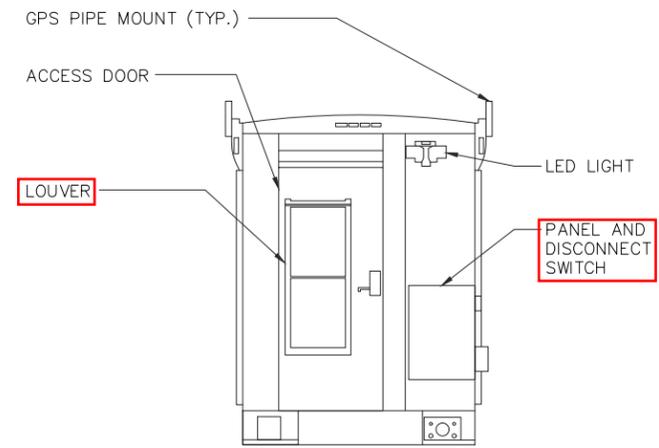
SHEET TITLE  
**DETAILS**

SHEET NUMBER  
**A5.1**

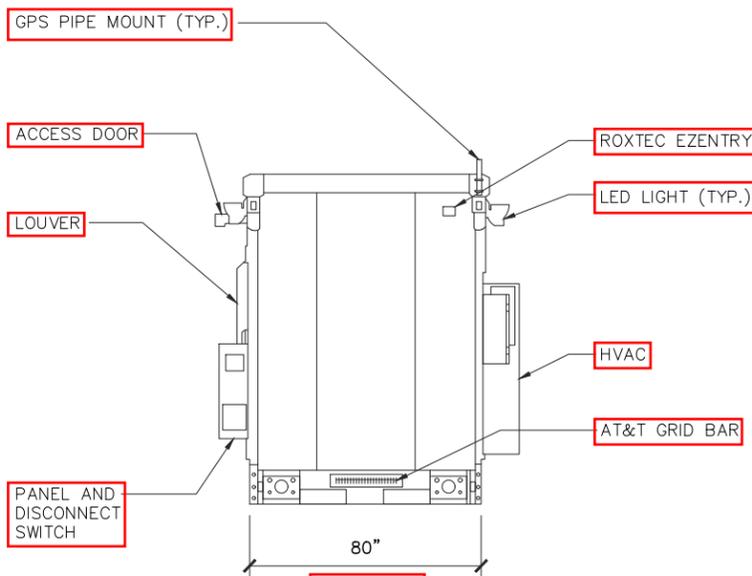
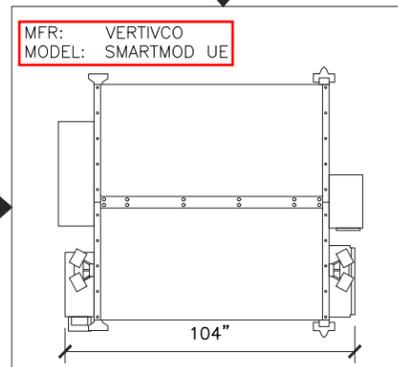
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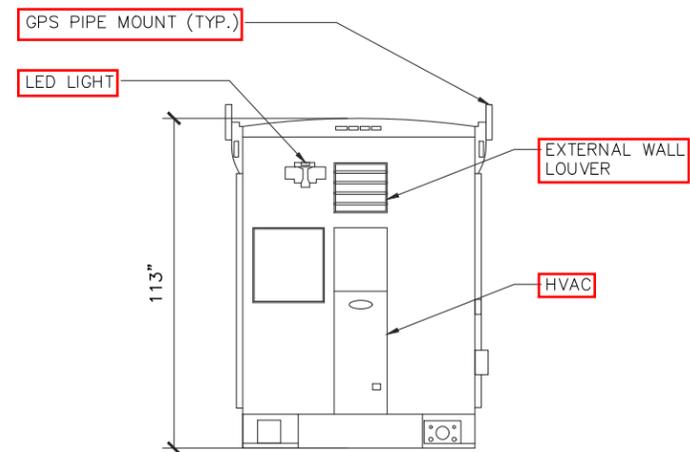
ELEVATION "A"



ELEVATION "D"



ELEVATION "C"



ELEVATION "B"

VERTIVCO WIC CABINET DETAILS

SCALE  
N.T.S. 1



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SHEET TITLE  
WIC (WALK IN CABINET) PLAN & ELEVATIONS

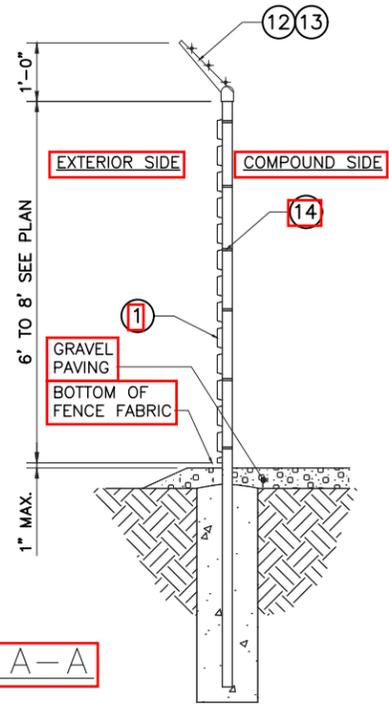
SHEET NUMBER  
A6

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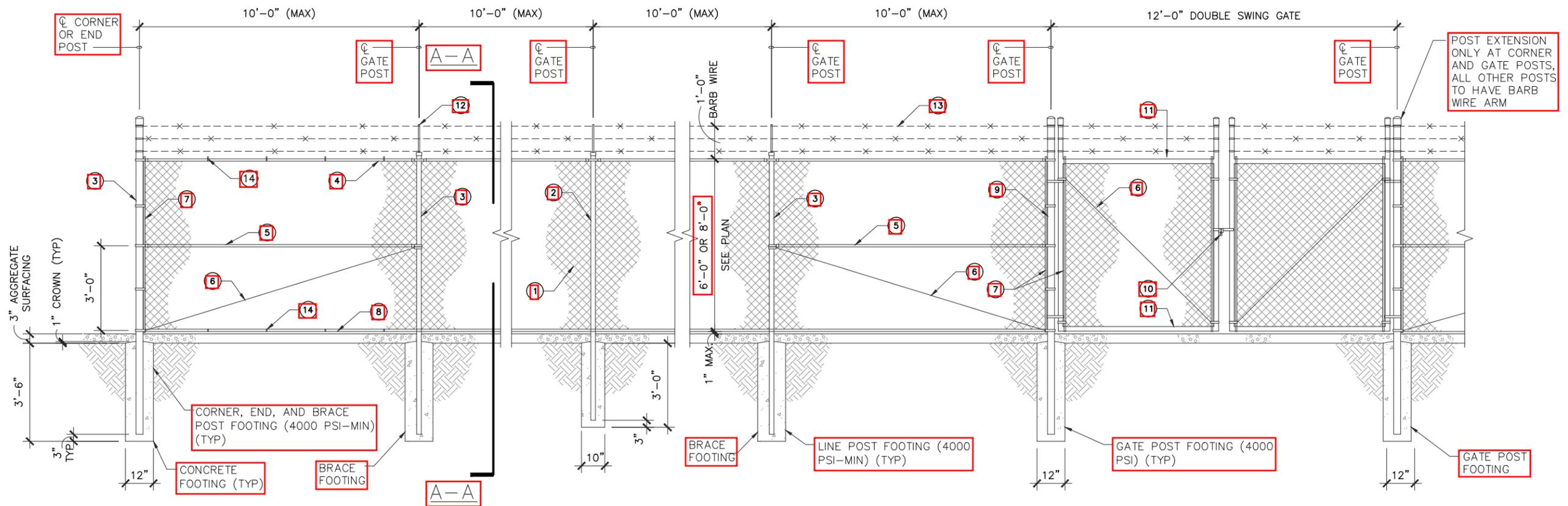
**MATERIAL DESCRIPTION**

- 1 CHAIN LINK RESIDENTIAL FABRIC: 11-1/2 GAUGE, 2-1/4" MESH; GALVANIZED ASTM-A392, CLASS 2; TWISTED SELVAGE ON TOP, KNUCKLED ON BOTTOM.
- 2 LINE POSTS: 2-1/2" O.D. PIPE, 16 GAUGE (GALVANIZED) PER ASTM-F1083.
- 3 CORNER, END AND BRACE POSTS: 2-7/8" O.D. PIPE, SCHEDULE 40 (GALVANIZED).
- 4 TOP RAIL: 1-5/8" O.D. 17 GAUGE PIPE (GALVANIZED) PER ASTM-F1083.
- 5 BRACE RAIL: 1-5/8" O.D. 17 GAUGE PIPE (GALVANIZED).
- 6 DIAGONAL TRUSS ROD: 3/8" GALVANIZED ROD WITH TURNBUCKLE.
- 7 TENSION BAR: 3/16" X 3/4" GALVANIZED FLAT BAR.
- 8 BOTTOM TENSION WIRE: GALVANIZED OR ALUMINUM COATED COIL SPRING WIRE, 7 GAUGE.
- 9 GATE POSTS: 2-7/8" O.D. SCHEDULE 40 PIPE (GALVANIZED).
- 10 COMBINATION PADLOCK ACCORDING TO AT&T REQUIREMENTS.
- 11 GATE FRAMES: 1-7/8" O.D. SCHEDULE 40 PIPE (GALVANIZED).
- 12 BARBED WIRE SUPPORT ARM: SINGLE ARM TYPE (GALVANIZED). ARM SHALL BE INCLINED OUTWARD AT AN ANGLE OF 45 DEGREES.
- 13 BARBED WIRE: GALVANIZED, ASTM A121 CLASS 3; THREE 14 GAUGE MINIMUM STEEL WIRES WITH 4 POINT ROUND 14 GAUGE BARBS SPACED 4" APART.
- 14 FABRIC TIES: ALUMINUM BANDS OR WIRES. FABRIC SHALL BE ATTACHED TO THE TOP RAIL AND BOTTOM TENSION WIRE AT 24" CENTERS AND TO THE POSTS AT 15" CENTERS, ALL ON THE COMPOUND SIDE OF THE FENCE.

- 15 MISCELLANEOUS:
- A. RAIL COUPLINGS: SLEEVE TYPE, 6" LONG EXPANSION SPRING EVERY FIFTH COUPLING.
  - B. POST TOPS: PRESSED STEEL, MALLEABLE IRON WITH PRESSED STEEL EXTENSION ARM, OR ONE-PIECE ALUMINUM CASTING; WITH HOLE FOR TOP, ALL DESIGNED TO FIT OVER THE OUTSIDE OF THE POSTS AND TO PREVENT ENTRY OF MOISTURE INTO TUBULAR POSTS.
  - C. LATCHES SHALL BE FORKED TYPE AND SHALL BE ARRANGED FOR PADLOCKING WITH THE PADLOCK ACCESSIBLE FROM BOTH SIDES OF THE GATE.
  - D. KEEPERS SHALL CONSIST OF MECHANICAL DEVICES FOR SECURING AND SUPPORTING THE FREE END OF THE GATES WHEN IN THE FULL OPEN POSITION. KEEPERS SHALL BE MOUNTED ON 2-7/8" O.D. PIPE POSTS FILLED WITH CONCRETE AND SET IN CONCRETE FOUNDATIONS.
  - E. INSTALL FENCING PER ASTM-F567.
  - F. INSTALL SWING GATES PER ASTM-F900.
  - G. LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENT SHALL BE COMPLETED IF REQUIRED.
  - H. USE GALVANIZED HIG-RING WIRE TO MOUNT ALL SIGNS.
  - I. ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE.
  - J. ALL POSTS SHALL HAVE "MUSHROOM" SLEEVE EMBEDDED IN CONCRETE.



**SECTION A-A**



**CHAIN LINK FENCE DETAILS**

NO SCALE 1



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**SHEET TITLE**  
FENCE DETAILS

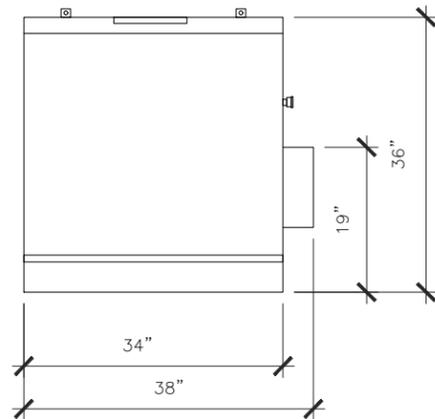
**SHEET NUMBER**  
A7



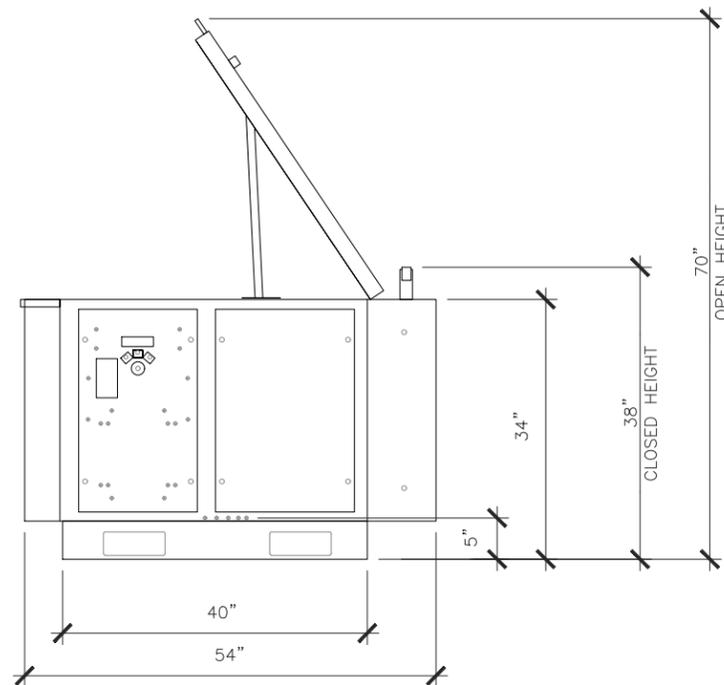
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**POLAR POWER INC.**  
 22520 AVALON BLVD, CARSON, CA 90745

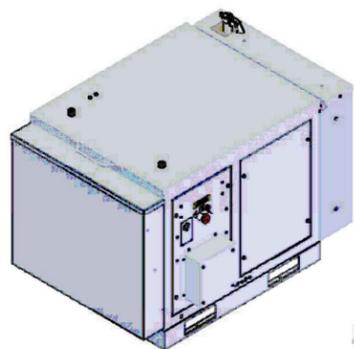
POLAR 15KW HORIZONTAL GENERATOR  
 MODEL # 8220-100-D-15-02 - DIESEL 15 KW -48 VDC  
 DRY WEIGHT: - 759/345 (LB/KG)  
 OVERALL DIMENSIONS: 54 X 38 X 38 inc  
 137 X 97 X 97 cm



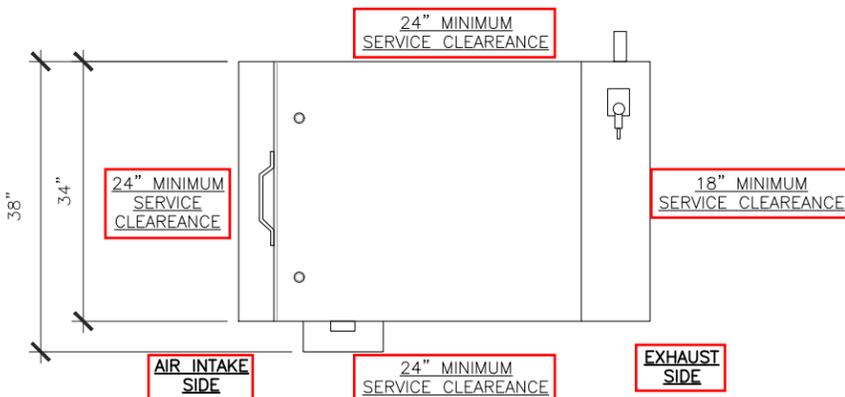
SIDE



FRONT



ISOMETRIC VIEW (NO SCALE)



AIR INTAKE SIDE

24" MINIMUM SERVICE CLEARANCE

EXHAUST SIDE

TOP

15KW HORIZONTAL POLAR GENERATOR, PLAN AND ELEVATIONS

NO SCALE

1



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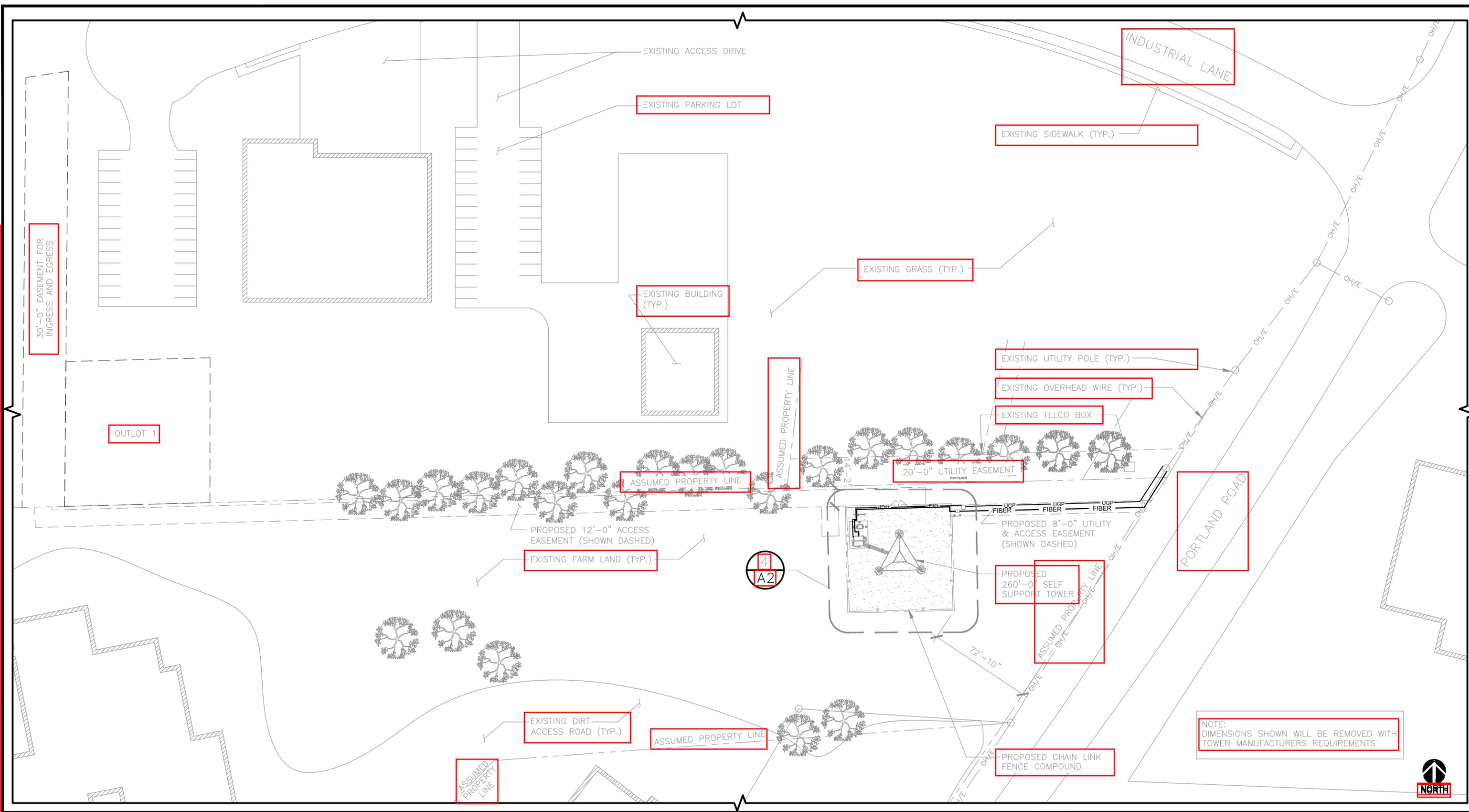
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SHEET TITLE  
**GENERATOR  
 PLAN AND  
 ELEVATIONS**

SHEET NUMBER  
**A9**

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**UTILITY PLAN** SCALE: 1/32" = 1'-0" (24x36)  
(OR) 1/64" = 1'-0" (11x17) 1

930 NATIONAL PARKWAY  
SCHAUMBURG, IL 60173

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**SHEET TITLE**  
UTILITY PLAN

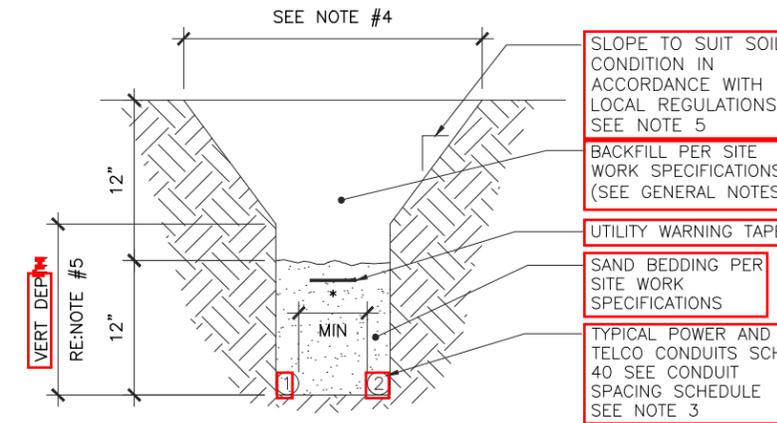
**SHEET NUMBER**  
E1

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OVERHEAD POWER	— OHP — OHP — OHP — OHP —
UNDERGROUND POWER	— UGP — UGP — UGP — UGP —
OVERHEAD UTILITIES	— OHU — OHU — OHU — OHU —
UNDERGROUND TELCO	— UGT — UGT — UGT — UGT —
UNDERGROUND POWER AND TELCO	— UGP/UGT — UGP/UGT — UGP/UGT —
ABOVE GROUND POWER (PROPOSED DC POWER CABLE)	— AGP — AGP — AGP — AGP — AGP —
ABOVE GROUND TELCO (PROPOSED FIBER OPTIC CABLE)	— AGT — AGT — AGT — AGT — AGT —

1. ALL UNDERGROUND CONDUITS SHALL BE SCH 40 PVC. EXCEPT THAT ELBOWS AND RISERS SHALL BE RMC ALL UNDERGROUND ELBOWS SHALL BE SWEEPING BENDS. 2'-0" MINIMUM SHALL BE REQUIRED.
2. THE TELEPHONE SERVICE CABLES SHOULD BE INSTALLED IN RIGID METAL CONDUIT, (10'-0") TEN FEET IN LENGTH BEFORE ENTERING A SHELTER OR BUILDING PER AT&T STANDARD ATT-TP 26416.
3. TWO CONDUITS ARE SHOWN IN DETAIL 2, ALTHOUGH MULTIPLE CONDUITS CAN BE PLACED IN THE SAME TRENCH. A MINIMUM SEPARATION IS REQUIRED PER THE LOCAL JURISDICTIONS AND UTILITY COMPANIES. IN ALL OTHER CASES, USE THE CONDUIT SPACING SCHEDULE TO MAINTAIN MINIMUM SPACING BETWEEN THE EXTERIOR WALL TO EXTERIOR WALL SEPARATION OF CONDUITS.
4. CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION.
5. TRENCHING SAFETY; INCLUDING, BUT NOT LIMITED TO SOIL CLASSIFICATION, SLOPING, AND SHORING, SHALL BE GOVERNED BY THE CURRENT OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
6. ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION.

**LEGEND** **NOT TO SCALE** **2**



CONDUIT #1	MINIMUM CONDUIT SEPARATION	CONDUIT #2
POWER	* = 6 INCHES	POWER
POWER	* = 12 INCHES	TELCO, COMMUNICATIONS & CONTROL CIRCUITS
TELCO, COMMUNICATIONS & CONTROL CIRCUITS	* = 6 INCHES	TELCO, COMMUNICATIONS & CONTROL CIRCUITS

NOT USED

SCALE N.T.S. **3**

**TRENCH DETAIL** **NOT TO SCALE** **1**



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REVISIONS			
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SHEET TITLE  
**LEGEND AND DETAILS**

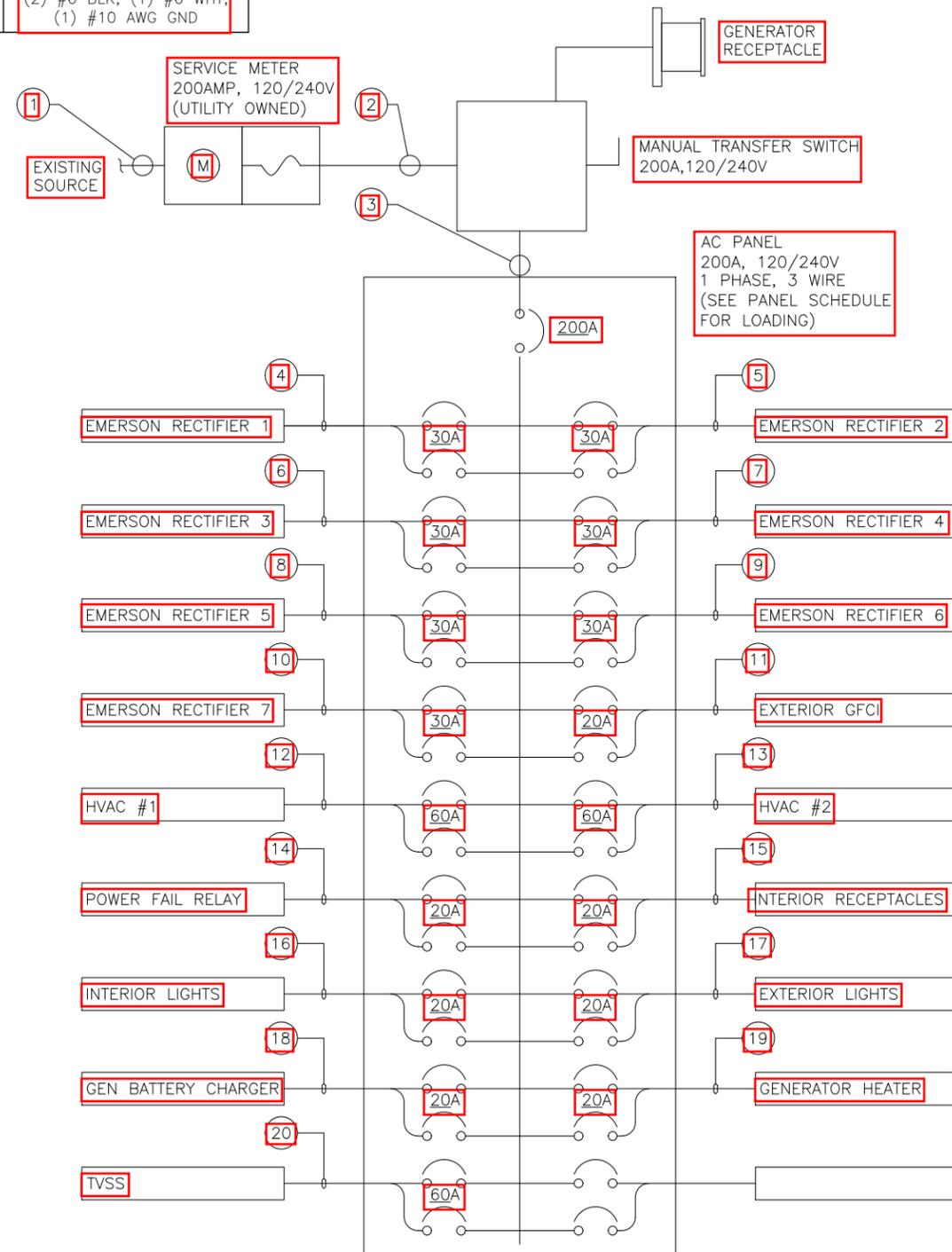
SHEET NUMBER  
**E2**

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NO	FROM	TO	CONFIGURATION
1	TRANSFORMER	UTILITY METER	(3) 3/0, (1) #4 AWG GND
2	SERVICE DISCONNECT	TRANSFER SWITCH	(3) 3/0, (1) #4 AWG GND
3	TRANSFER SWITCH	AC LOAD CENTER	(3) 3/0, (1) #4 AWG GND
4	AC LOAD CENTER	EMERSON RECTIFIER #1	(2) #10, (1) #10 AWG GND
5	AC LOAD CENTER	EMERSON RECTIFIER #2	(2) #10, (1) #10 AWG GND
6	AC LOAD CENTER	EMERSON RECTIFIER #3	(2) #10, (1) #10 AWG GND
7	AC LOAD CENTER	EMERSON RECTIFIER #4	(2) #10, (1) #10 AWG GND
8	AC LOAD CENTER	EMERSON RECTIFIER #5	(2) #10, (1) #10 AWG GND
9	AC LOAD CENTER	EMERSON RECTIFIER #6	(2) #10, (1) #10 AWG GND
10	AC LOAD CENTER	EMERSON RECTIFIER #7	(2) #10, (1) #10 AWG GND
11	AC LOAD CENTER	EXTERIOR GFCI	(1) #12 BLK, (1) #12 WHT, (1) #12 GND
12	AC LOAD CENTER	HVAC #1	(1) #6 THHN/THWN, (1) #10 AWG GND
13	AC LOAD CENTER	HVAC #2	(1) #6 THHN/THWN, (1) #10 AWG GND
14	AC LOAD CENTER	POWER FAIL RELAY	(2) #12 THHN/THWN, (1) #12 NUET, (1) #12 AWG GND
15	AC LOAD CENTER	INTERIOR RECEPTACLES	(1) #12 BLK, (1) #12 WHT, (1) #12 AWG GND
16	AC LOAD CENTER	INTERIOR LIGHTS	(1) #12 BLK, (1) #12 WHT, (1) #12 AWG GND
17	AC LOAD CENTER	EXTERIOR LIGHTS	(1) #12 BLK, (1) #12 WHT, (1) #12 AWG GND

NO	FROM	TO	CONFIGURATION
18	AC LOAD CENTER	GEN BATTERY CHARGER	(1) #12 BLK, (1) #12 WHT, (1) #12 AWG GND
19	AC LOAD CENTER	GENERATOR HEATER	(1) #12 BLK, (1) #12 WHT, (1) #12 AWG GND
20	AC LOAD CENTER	TVSS	(2) #6 BLK, (1) #6 WHT, (1) #10 AWG GND

REFERENCE SHELTER SHOP DRAWINGS FOR PANEL LOAD CENTER SCHEDULE



- CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL STATE AND LOCAL CODES, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
- LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL EQUIPMENT CONTRACTOR AND COMPLY AS REQUIRED.
- CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETE SYSTEM.
- CONTRACTOR SHALL PROVIDE PULL BOXES AND JUNCTION BOXES AS REQUIRED BY THE NEC ARTICLE 314.
- CONTRACTOR SHALL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATION EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.
- INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC 250. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, AND EQUIPMENT CABINETS.
- ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
- PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENTS REFLECT POST-CONSTRUCTION EQUIPMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT PANEL SCHEDULE AND SITE DRAWINGS.
- DC POWER WIRING SHALL BE COLOR CODED AT EACH END FOR IDENTIFYING +24V AND -48V CONDUCTOR WIRING. RED MARKINGS SHALL IDENTIFY +24V. BLUE MARKINGS SHALL IDENTIFY -48V. REFER TO ATT-002-290-701.
- DC POWER WIRING SIZE 14 AWG TO 10 AWG SHALL BE TELCOFLEX III. DC POWER WIRING 8 AWG AND LARGER SHALL BE TELCOFLEX IV. REFER TO ATT-002-290-701.
- LTE POWER WIRING SHALL BE ACCORDANCE WITH ATT-002-290-531.

ELECTRIC SLD AND PANEL SCHEDULE

NOT TO SCALE 1



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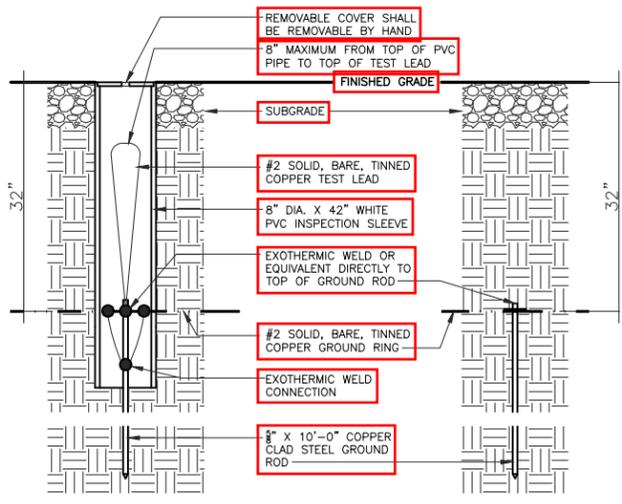
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SHEET TITLE  
ELECTRIC SLD AND PANEL SCHEDULE

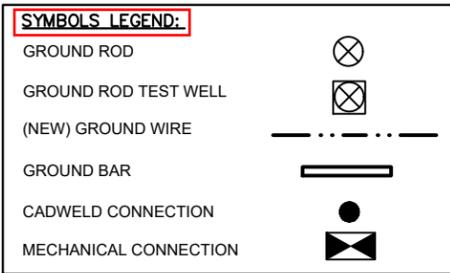
SHEET NUMBER  
E3

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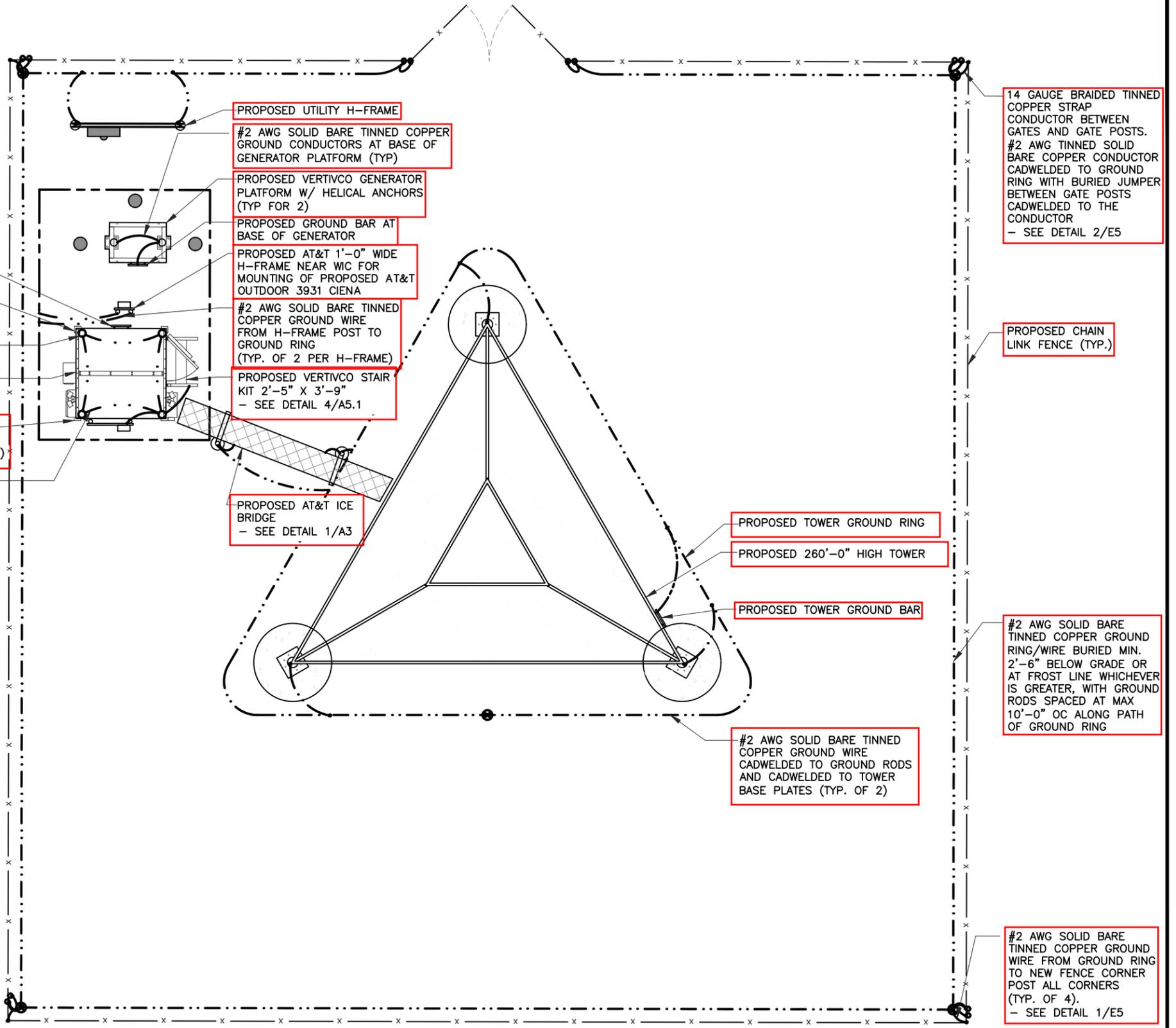


**GROUND WELL, ROD, AND TEST WELL DETAIL**

SCALE  
N.T.S. **2**



- PROPOSED GROUND BAR AT BASE OF WIC CABINET
- PROPOSED AT&T VERTIVCO STEEL PLATFORM AT BASE OF WIC - SEE DETAIL 2/A5.1
- PROPOSED HELICAL ANCHORS (TYP FOR 4)
- PROPOSED AT&T VERTIVCO WIC (WALK IN CABINET) - SEE DETAIL 1/A6
- #2 AWG SOLID BARE TINNED COPPER GROUND CONDUCTORS T BASE OF WIC STEEL PLATFORM (TYP)
- #2 AWG SOLID BARE TINNED COPPER GROUND CONDUCTOR
- USE 1/2" SEAL TIGHT COPPER GOING TO GROUND RING.



- PROPOSED UTILITY H-FRAME
- #2 AWG SOLID BARE TINNED COPPER GROUND CONDUCTORS AT BASE OF GENERATOR PLATFORM (TYP)
- PROPOSED VERTIVCO GENERATOR PLATFORM W/ HELICAL ANCHORS (TYP FOR 2)
- PROPOSED GROUND BAR AT BASE OF GENERATOR
- PROPOSED AT&T 1'-0" WIDE H-FRAME NEAR WIC FOR MOUNTING OF PROPOSED AT&T OUTDOOR 3931 CIENA
- #2 AWG SOLID BARE TINNED COPPER GROUND WIRE FROM H-FRAME POST TO GROUND RING (TYP. OF 2 PER H-FRAME)
- PROPOSED VERTIVCO STAIR KIT 2'-5" X 3'-9" - SEE DETAIL 4/A5.1
- PROPOSED AT&T ICE BRIDGE - SEE DETAIL 1/A3
- PROPOSED TOWER GROUND RING
- PROPOSED 260'-0" HIGH TOWER
- PROPOSED TOWER GROUND BAR
- #2 AWG SOLID BARE TINNED COPPER GROUND RING/WIRE BURIED MIN. 2'-6" BELOW GRADE OR AT FROST LINE WHICHEVER IS GREATER, WITH GROUND RODS SPACED AT MAX 10'-0" OC ALONG PATH OF GROUND RING
- #2 AWG SOLID BARE TINNED COPPER GROUND WIRE CADWELDED TO GROUND RODS AND CADWELDED TO TOWER BASE PLATES (TYP. OF 2)
- 14 GAUGE BRAIDED TINNED COPPER STRAP CONDUCTOR BETWEEN GATES AND GATE POSTS. #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO GROUND RING WITH BURIED JUMPER BETWEEN GATE POSTS CADWELDED TO THE CONDUCTOR - SEE DETAIL 2/E5
- PROPOSED CHAIN LINK FENCE (TYP.)
- #2 AWG SOLID BARE TINNED COPPER GROUND WIRE FROM GROUND RING TO NEW FENCE CORNER POST ALL CORNERS (TYP. OF 4). - SEE DETAIL 1/E5

**GENERIC TYPICAL GROUNDING PLAN**

NOT TO SCALE **1**



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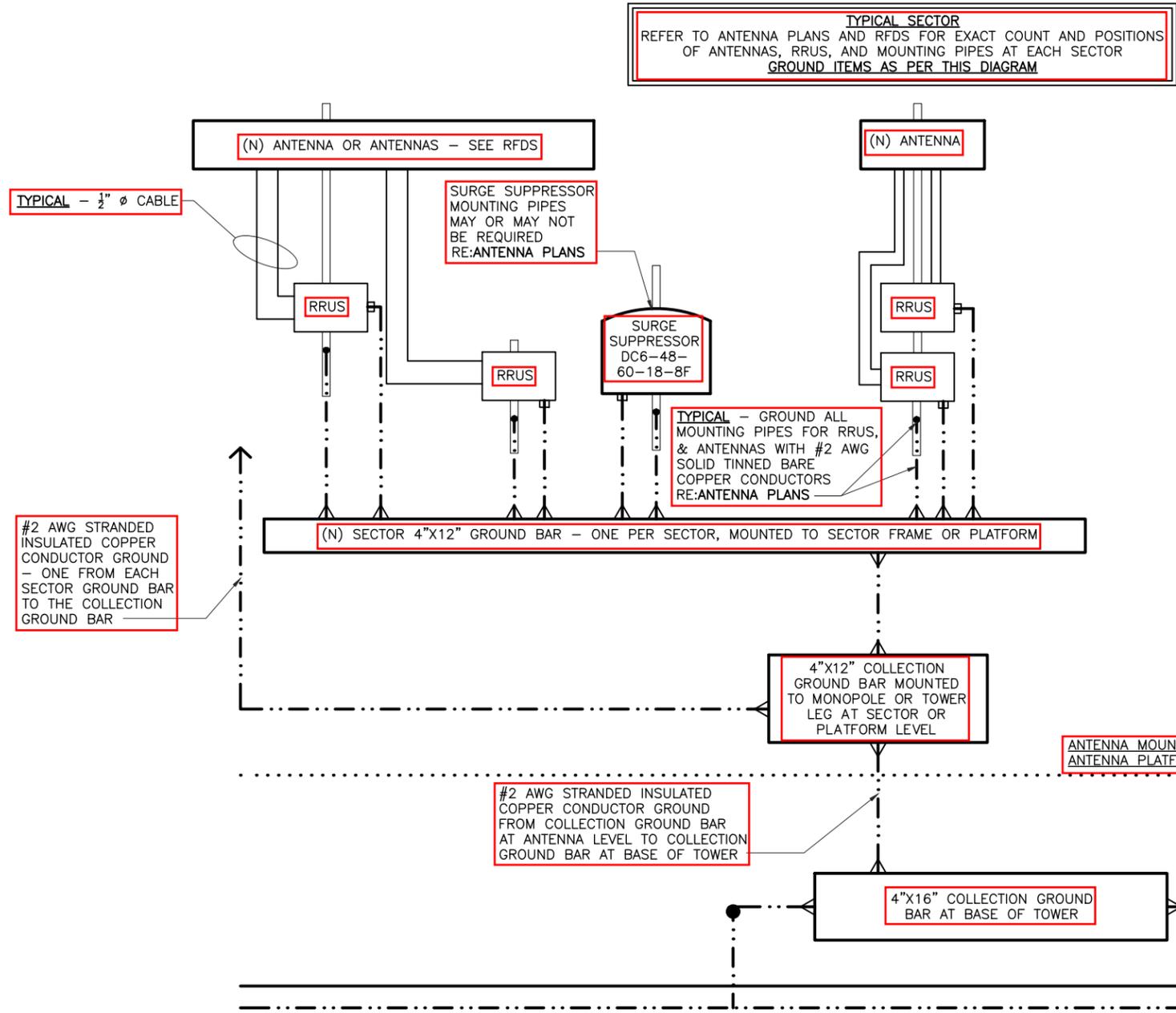
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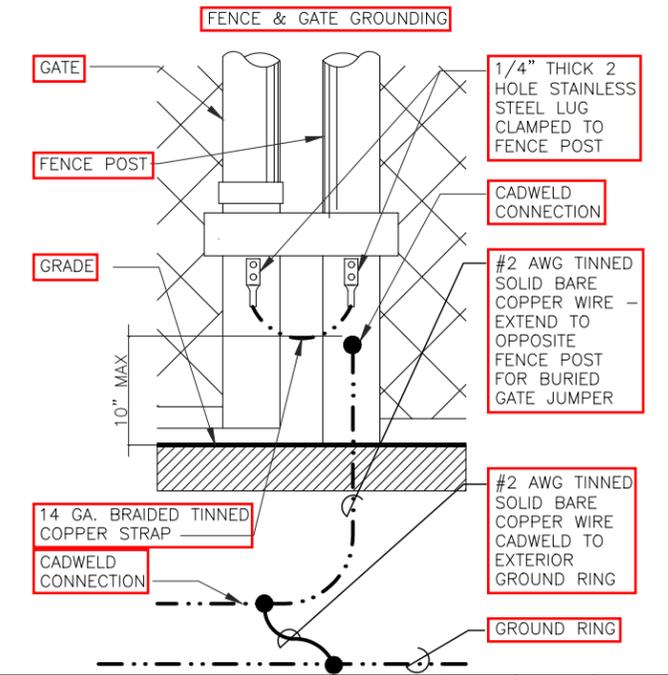
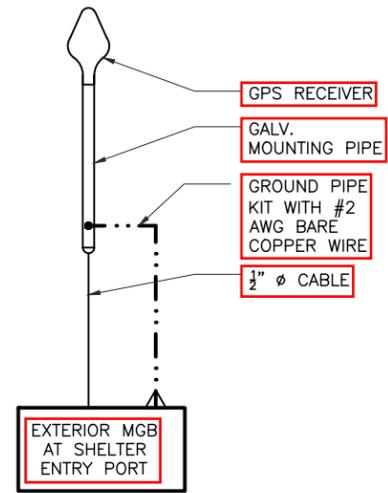
**SHEET TITLE**  
SHELTER  
GROUNDING PLAN  
& DETAILS

**SHEET NUMBER**  
**E4**

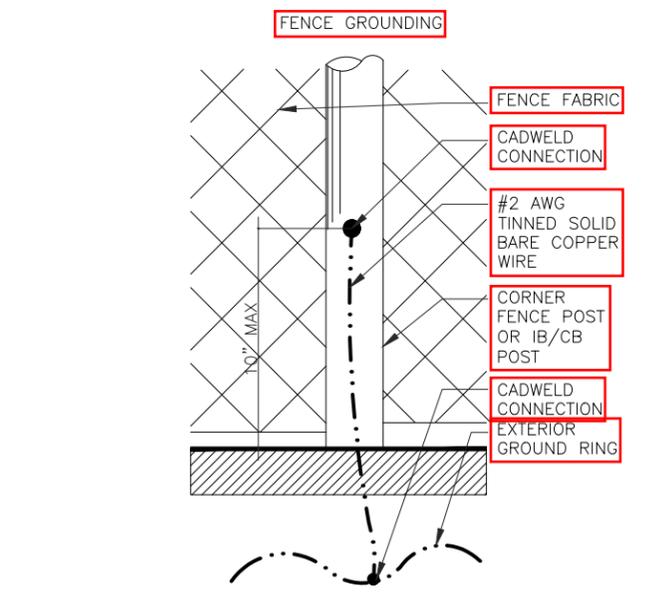
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LEGEND	
•	CADWELD
△	LUG CONNECTION
---	GROUND CONDUCTOR



FENCE & GATE GROUNDING SCALE N.T.S. 2



FENCE GROUND SCALE N.T.S. 1

GENERIC ANTENNA GROUNDING SINGLE LINE DIAGRAM SCALE N.T.S. 3



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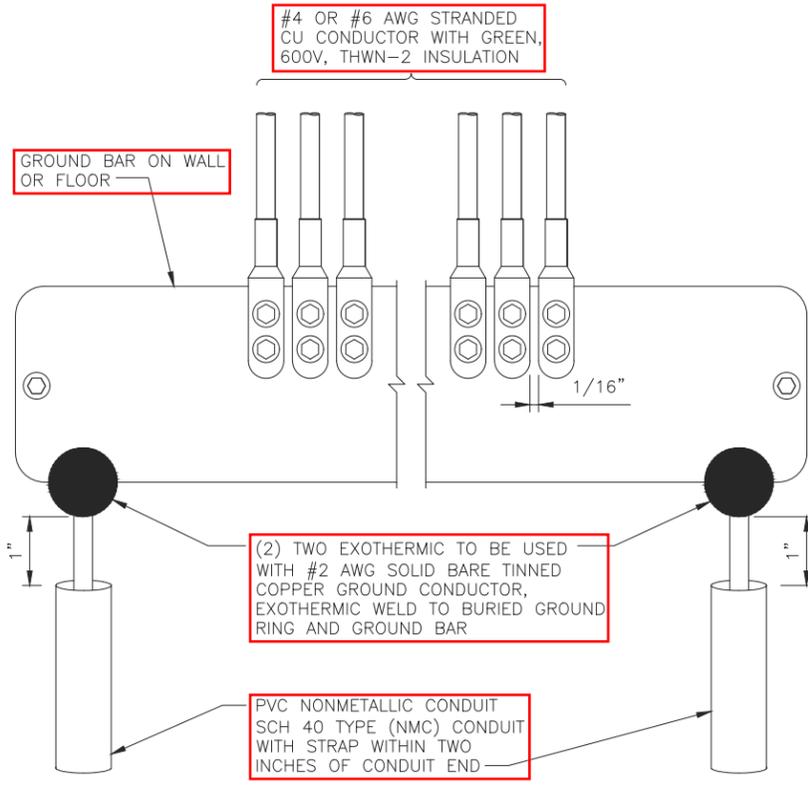
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SHEET TITLE  
GENERIC ANTENNA GROUNDING SLD

SHEET NUMBER  
E5

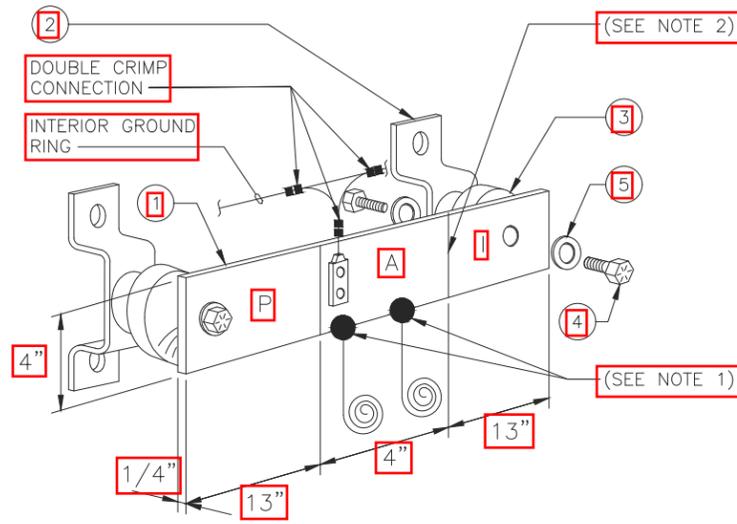
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**GROUND BAR DETAIL**

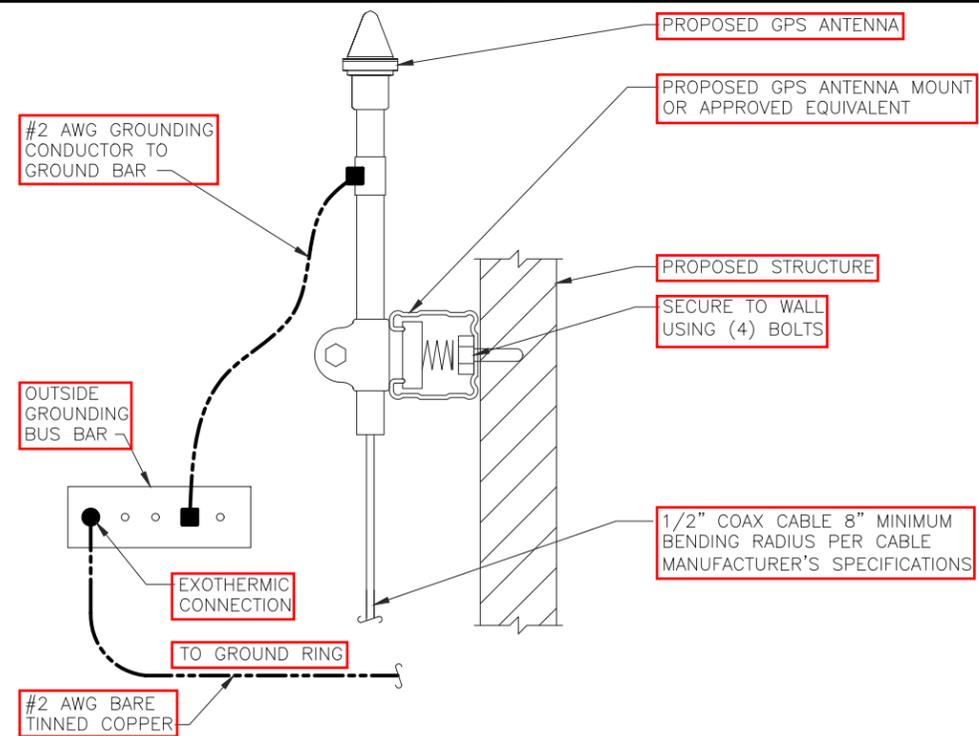
SCALE  
N.T.S. **4**

NEWTON INSTRUMENT COMPANY, INC. BUTNER, N.C.			
NO	REQUIRED	PART NUMBER	DESCRIPTION
1	1	1/4"x4"x30"	SOLID GROUND BAR
2	2	A-6056	WALL MOUNTING BRACKET
3	2	3061-4	INSULATORS
4	4	3012-1	5/8"-11x1" H.H.C.S.
5	4	3015-8	5/8" LOCKWASHER



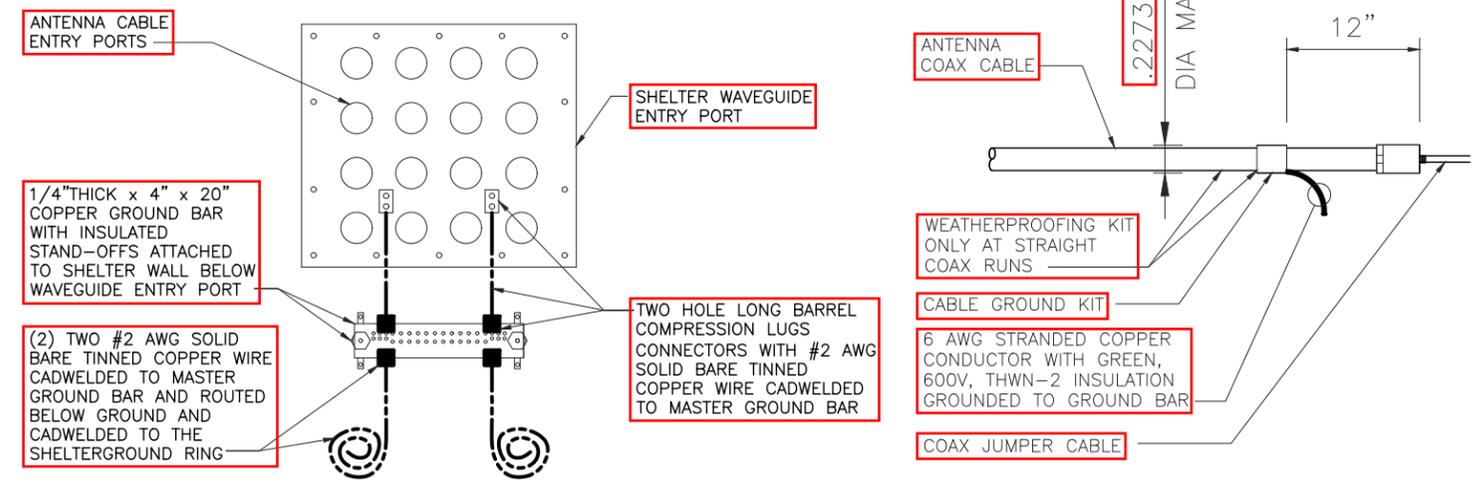
**MASTER GROUND BAR DETAIL**

SCALE  
N.T.S. **2**



**GPS ANTENNA GROUNDING**

SCALE  
N.T.S. **3**



**COAX GROUND KIT DETAIL**

SCALE  
N.T.S. **1**

EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION

**SECTION "P" - SURGE PROTECTORS**

- (EC) CELL REFERENCE GROUND BAR (IF COLLOCATED)
- (EC) GENERATOR FRAMEWORK (IF AVAILABLE) (#2 AWG)
- (EC) TELCO GROUND BAR (#2 AWG)
- (EC) COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (3/0)
- (EC) FIBER GROUND BAR (#2 AWG)
- (EC) POWER ROOM REFERENCE GROUND BAR (#2 AWG)
- (AT&T) RECTIFIER FRAMES

**SECTION "A" - SURGE ABSORBERS**

- (EC) INTERIOR GROUND RING (#2 AWG)
- (EC) EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2 AWG)
- (EC) METALLIC COLD WATER PIPE (IF AVAILABLE) (1/0 AWG)
- (EC) BUILDING STEEL (IF AVAILABLE) (1/0 AWG)

**SECTION "I" - ISOLATED GROUND ZONE**

- (AT&T) ALL ISOLATED GROUND REFERENCE
- (AT&T) GROUND WINDOW BAR

**DETAIL NOTES:**

1. EXOTHERMICALLY WELD #2 AWG BARE TINNED SOLID COPPER CONDUCTOR TO GROUND BAR. ROUTE CONDUCTOR TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. THE INSTALLER SHALL USE PERMANENT MARKER TO DRAW THE LIKE BETWEEN SECTION AND LABEL EACH SECTION ("P", "A", "I" WITH 1" HIGH LETTERS)



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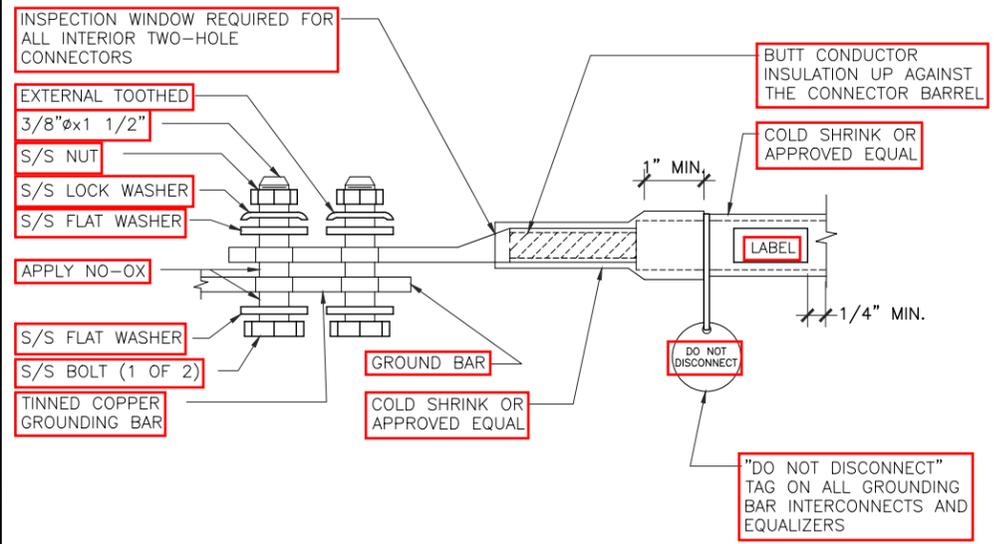
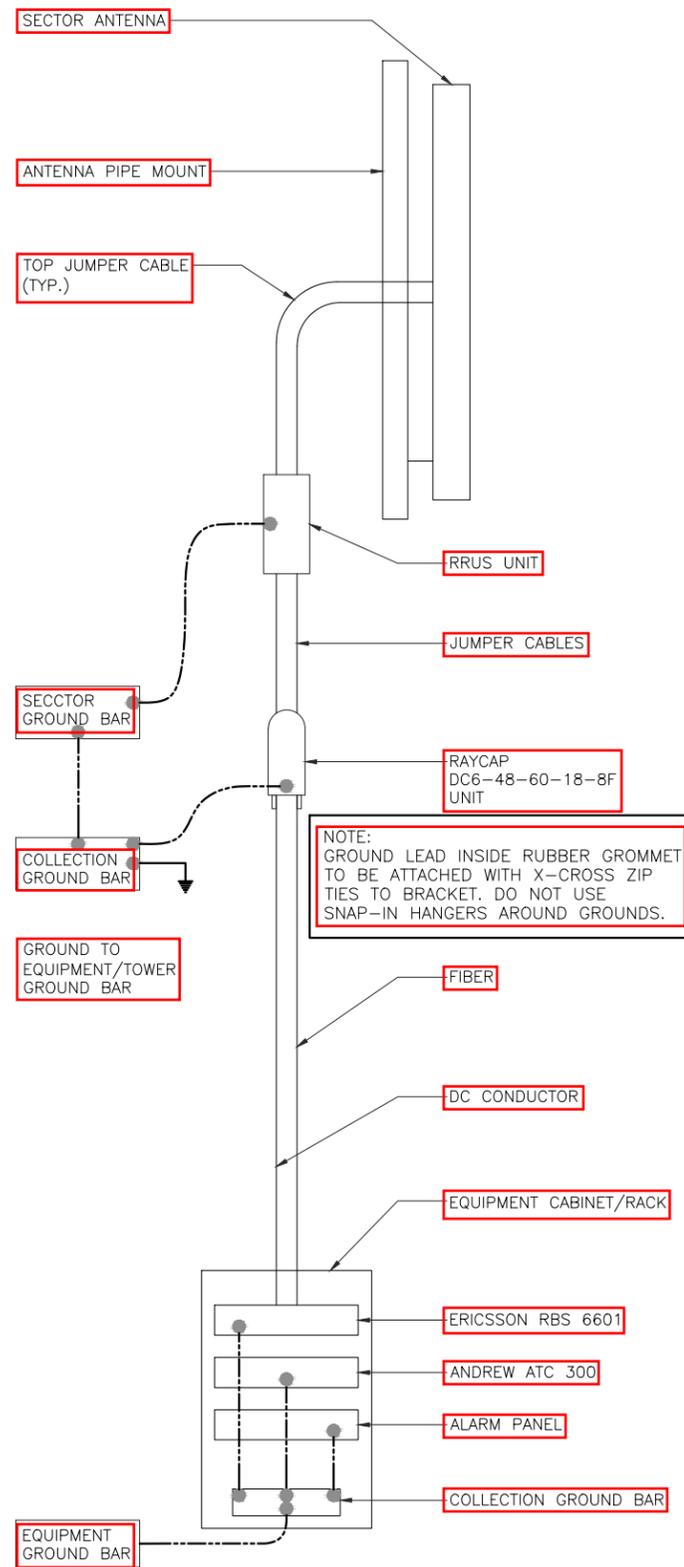
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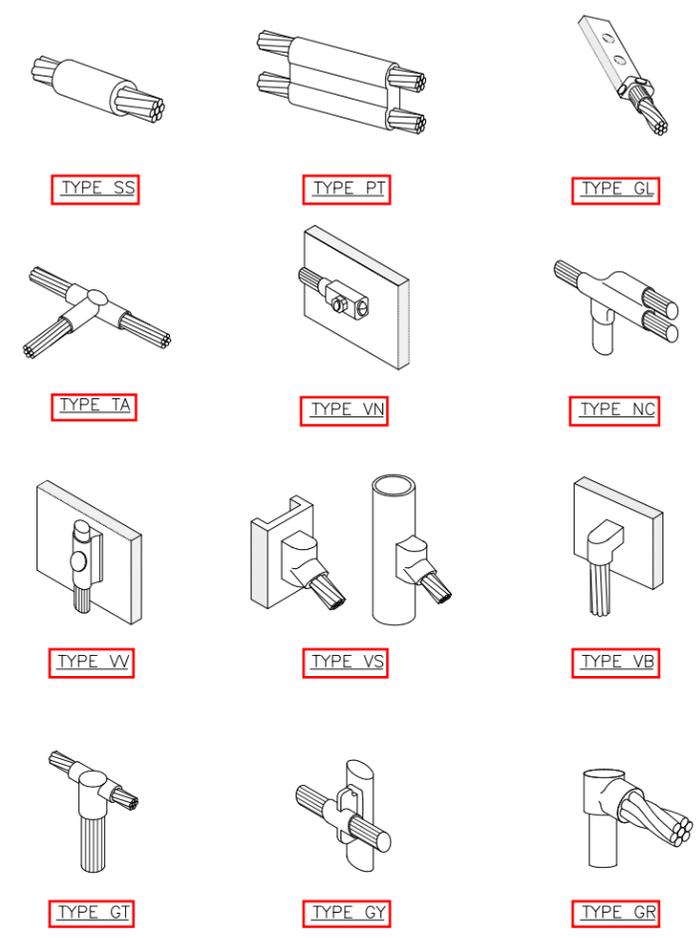
SHEET TITLE  
**GROUNDING DETAILS**

SHEET NUMBER  
**E6**

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EXTERIOR TWO HOLE LUG DETAIL NO SCALE 3



CABLE GROUNDING NO SCALE 4 NOT USED

NO SCALE 2 CADWELDED DETAILS

NO SCALE 1



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GROUNDING DETAILS

SHEET NUMBER  
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RFDS PLUMBING DIAGRAM

SCALE  
N.T.S. 1



**AT&T**  
930 NATIONAL PARKWAY  
SCHAUMBURG, IL 60173



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SHEET TITLE  
RFDS  
PLUMBING  
DIAGRAM

SHEET NUMBER  
RF

### NOTICE



**Beyond This Point** you are entering a controlled area where RF emissions *may exceed* the FCC General Population Exposure Limits.

Follow all posted signs and site guidelines for working in a RF environment.



Ref: 47CFR 1.1307(b)

### CAUTION



**Beyond This Point** you are entering a controlled area where RF emissions *may exceed* the FCC Occupational Exposure Limits.

Obey all posted signs and site guidelines for working in a RF environment.



Ref: 47CFR 1.1307(b)



ALERTING SIGN (FOR CELL SITE BATTERIES)



ALERTING SIGN (FOR DIESEL FUEL)



ALERTING SIGN (FOR PROPANE)

ALERTING SIGNS

### WARNING!

DANGER DO NOT TOUCH TOWER!  
SERIOUS "RF" BURN HAZARD!

MAINTAIN AN ADEQUATE CLEARANCE BETWEEN TOWER SUPPORTS AND GUY WIRES

FAILURE TO OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN A RADIO FREQUENCY ENVIRONMENT COULD RESULT IN SERIOUS INJURY. CONTACT CURRENT MAY EXCEED LIMITS PRESCRIBED IN ANSI/IEEE C95.1-1992 FOR CONTROLLED ENVIRONMENTS.



### PROPERTY OF AT&T



### AUTHORIZED PERSONNEL ONLY

IN CASE OF EMERGENCY, OR PRIOR TO PERFORMING MAINTENANCE ON THIS SITE, CALL 800-638-2822 AND REFERENCE CELL SITE NUMBER.

ALERTING SIGN

INFO SIGN #4

### INFORMATION

AT&T operates telecommunications antennas at this location. Remain at least 3 feet away from any antenna and obey all posted signs.

Contact the owner(s) of the antenna(s) before working closer than 3 feet from the antenna.

Contact AT&T at \_\_\_\_\_ prior to performing any maintenance or repairs near AT&T antennas. This is Site \_\_\_\_\_

Contact the management office if this door/batch/gate is found unlocked.

### INFORMACION

En esta propiedad se ubican antenas de telecomunicaciones operadas por AT&T. Favor mantener una distancia de no menos de 3 pies y obedecer todos los avisos.

Comuníquese con el propietario o los propietarios de las antenas antes de trabajar o caminar a una distancia de menos de 3 pies de la antena.

Comuníquese con AT&T \_\_\_\_\_ antes de realizar cualquier mantenimiento o reparaciones cerca de la antena de AT&T.

Esta es la estación base número \_\_\_\_\_

Favor comunicarse con la oficina de la administración del edificio si esta puerta o compuerta se encuentra sin candado.



INFO SIGN #1

### NOTICE

GUIDELINES FOR WORKING IN RADIOFREQUENCY ENVIRONMENTS

- All personnel should have electromagnetic energy (EME) awareness training.
- All personnel entering this site must be authorized.
- Obey all posted signs.
- Assume all antennas are active.
- Before working on antennas, notify owners and disable appropriate transmitters.
- Maintain minimum 3 feet clearance from all antennas.
- Do not step in front of antennas.
- Use personal RF monitors while working near antennas.
- Never operate transmitters without shields during normal operation.
- Do not operate base station antennas in equipment room.

INFO SIGN #5

### INFORMATION

ACTIVE ANTENNAS ARE MOUNTED

ON THE OUTSIDE OF THIS BUILDING

BEHIND THIS PANEL

ON THIS STRUCTURE

STAY BACK A MINIMUM OF 3 FEET FROM THESE ANTENNAS

Contact AT&T at \_\_\_\_\_ and follow their instructions prior to performing any maintenance or repairs closer than 3 feet from the antennas.

This is AT&T site \_\_\_\_\_



INFO SIGN #2

STAY BACK 3 FEET FROM ANTENNA



INFO SIGN #3

GENERAL SIGNAGE GUIDELINES

Structure Type	INFO SIGN #1	INFO SIGN #2	INFO SIGN #3	INFO SIGN #4	Striping	NOTICE SIGN	CAUTION SIGN
<b>Towers</b>							
Monopole/Monopine/Monopalm	entrance gates, shelter doors OR on the outdoor cabinets	climbing side of the Tower	On backside of Antennas	entrance gates, shelter doors OR on the outdoor cabinets			At the height of the first climbing step, min. 9ft above ground
SCE Towers / Towers with high voltage	entrance gates, shelter doors OR on the outdoor cabinets	climbing side of the Tower	On backside of Antennas	entrance gates, shelter doors OR on the outdoor cabinets			At the height of the first climbing step, min. 9ft above ground
Light Poles / Flag Poles	entrance gates, shelter doors OR on the outdoor cabinets	on the pole, no less than 3ft below the Antenna and no less than 9ft above ground	On backside of Antennas	entrance gates, shelter doors OR on the outdoor cabinets			
Utility Wood Poles (JPA)	entrance gates, shelter doors OR on the outdoor cabinets	on the pole, no less than 3ft below the Antenna and no less than 9ft above ground	On backside of Antennas	entrance gates, shelter doors OR on the outdoor cabinets		If GP max value of MPE at antenna level is: 0-99%: Notice sign; over 99%: Caution sign at no less than 3ft below antenna and 9ft above ground	
Microcells mounted on non-JPA poles	entrance gates, shelter doors OR on the outdoor cabinets	on the pole, no less than 3ft below the Antenna and no less than 9ft above ground	On backside of Antennas	entrance gates, shelter doors OR on the outdoor cabinets		Notice or Caution sign at no less than 9ft above ground; only if the exposure exceeds 90% of the General Public exposure at 6ft above ground or at outside surface of adjacent buildings	
<b>Roof Tops</b>							
At all access points to the roof	X			X			
On Antennas	X		X	X			
Concealed Antennas	X	X		X			
antennas mounted facing outside the building	X	X		X			
antennas on support structure	X	X		X			
Roofview Graph:							
Radiation area is within 3ft from antenna	X	adjacent to each antenna		X			
Radiation area is beyond 3ft from antenna	X	adjacent to each antenna		X	diagonal, yellow striping as to Roofview graph		either Notice or Caution sign (based on Roofview results) at antennas/barrier
<b>Church Steeples</b>							
Access to steeple		adjacent to antennas if antennas are concealed	On backside of Antennas	Access to steeple			Caution sign at the antennas
<b>Water Stations</b>							
Access to ladder		adjacent to antennas if antennas are concealed	On backside of Antennas	Access to ladder			Caution sign beside info sign #1, min. 9ft above ground

Notes for Rooftop sites:

- Either NOTICE or CAUTION signs need to be posted at each sector as close as possible to the outer edge of the striped off area or the outer antennas of the sector.
- If Roofview shows: only blue = Notice Sign, blue and yellow = Caution Sign, only yellow = Caution Sign to be installed.
- Should the required striping area interfere with any structures or equipment (A/C, vents, roof hatch, doors, other antennas, dishes, etc.), please notify AT&T to modify the striping area, prior to starting the work

SIGNAGE GUIDELINES CHART

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	05/09/19	ISSUED FOR REVIEW	BN

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

DATE: xx/xx/16

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF WISCONSIN

SHEET TITLE

## SIGNAGE REQUIREMENTS

SHEET NUMBER

## SIGNAGE



930 NATIONAL PARKWAY  
SCHAUMBURG, IL 60173



540 W. MADISON ST.  
CHICAGO, IL 60661  
www.s&cw.com  
312.895.4977



540 W. MADISON ST.  
CHICAGO, IL 60661  
www.s&cw.com  
312.895.4977

NSB- RAW LANDS  
10587459  
WATERLOO  
333 PORTLAND ROAD  
WATERLOO, WI 53594

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

Market: MIDWEST – ILLINOIS / WISCONSIN  
Cell Site Number: WI0385  
Cell Site Name: WIL00385  
Search Ring Name: WATERLOO - FirstNet  
Fixed Asset Number: 10587459

## **FIRST AMENDMENT TO OPTION AND LAND LEASE AGREEMENT**

THIS FIRST AMENDMENT TO OPTION AND LAND LEASE AGREEMENT (“**First Amendment**”), dated as of the latter of the signature dates below (the “**Effective Date**”), is by and between The City of Waterloo, a Wisconsin municipal corporation, having a mailing address of 136 North Monroe Street, Waterloo, Wisconsin 53594-1125 (“**Landlord**”) and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 1025 Lenox Park Blvd NE, 3<sup>rd</sup> Floor, Atlanta, GA 30319 (“**Tenant**”).

WHEREAS, Landlord and Tenant entered into an Option and Land Lease Agreement dated December 6, 2018 (“**Agreement**”) whereby Landlord leased to Tenant certain premises (“**Premises**”), therein described, that are a portion of the property (“**Property**”) located at 333 Portland Road, Waterloo, WI 53594 and

WHEREAS, Landlord and Tenant desire to amend the Agreement to modify the notice section thereof; and

WHEREAS, Landlord and Tenant desire to amend the Agreement to modify the location of the Premises; and

WHEREAS, Landlord and Tenant desire to adjust the rent in conjunction with the modifications to the Agreement contained herein; and

WHEREAS, Landlord and Tenant, in their mutual interest, further wish to amend the Agreement as set forth below accordingly.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree that the recitals set forth above are incorporated herein as if set forth in their entirety and further agree as follows:

**1. Lease of Premises.** Landlord agrees to modify the location of the Premises leased to Tenant to accommodate Tenant’s needs. Upon the execution of this Amendment, Landlord leases to Tenant the Premises as more completely described on attached Exhibit 1-A. Landlord’s execution of this Amendment will signify Landlord’s approval of Exhibit 1-A. Exhibit 1-A hereby replaces Exhibit 1 to the Agreement.

**2. Rent.**

(a) Commencing on the first day of the month following the date that Tenant commences construction of the modifications set forth in this Amendment, Rent shall be increased by Two Hundred Ten and No/100 Dollars (\$210.00) per month, subject to further adjustments as provided in the Agreement.

(b) In year two (2) of the Initial Term, and each year thereafter, including throughout any Extension Terms exercised, the monthly Rent will increase by two percent (2%) over the Rent paid during the previous year.

**3. Notices.** Section 17 of the Agreement is hereby deleted in its entirety and replaced with the following:

**NOTICES.** All notices, requests, and demands hereunder will be given by first class certified or registered mail, return receipt requested, or by a nationally recognized overnight courier, postage prepaid, to be effective when properly sent and received, refused or returned undelivered. Notices will be addressed to the parties as follows.

If to Tenant: New Cingular Wireless PCS, LLC  
Attn: Network Real Estate Administration  
Re: Cell Site #: WI0385; Cell Site Name: Waterloo (WI)  
FA No: 10587459  
025 Lenox Park Blvd NE, 3<sup>rd</sup> Floor  
Atlanta, GA 30319

With copy to: New Cingular Wireless PCS, LLC  
Attn: AT&T Legal Department  
Re: Cell Site #: WI3223 Cell Site Name: Waterloo (WI)  
FA No: 10587459  
208 S. Akard Street  
Dallas, TX 75202-4206

The copy sent to the Legal Department is an administrative step which alone does not constitute legal notice.

If to Landlord: City Administrator  
Waterloo Municipal Building  
136 North Monroe Street  
Waterloo, WI 53594-1125

Either party hereto may change the place for the giving of notice to it by thirty (30) days prior written notice to the other as provided herein.

**4. Memorandum of Lease.** Either party will, at any time upon fifteen (15) days prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum of Lease substantially in the form of the Attachment 1. Either party may record this memorandum at any time, in its absolute discretion.

**5. Acknowledgement.** Landlord acknowledges that: 1) this First Amendment is entered into of the Landlord's free will and volition; 2) Landlord has read and understands this First Amendment and the underlying Agreement and, prior to execution of this First Amendment, was free to consult with counsel of its choosing regarding Landlord's decision to enter into this First

Amendment and to have counsel review the terms and conditions of this First Amendment; 3) Landlord has been advised and is informed that should Landlord not enter into this First Amendment, the underlying Agreement between Landlord and Tenant, including any termination or non-renewal provision therein, would remain in full force and effect.

**6. Other Terms and Conditions Remain.** In the event of any inconsistencies between the Agreement and this First Amendment, the terms of this First Amendment shall control. Except as expressly set forth in this First Amendment, the Agreement otherwise is unmodified and remains in full force and effect. Each reference in the Agreement to itself shall be deemed also to refer to this First Amendment.

**7. Capitalized Terms.** All capitalized terms used but not defined herein shall have the same meanings as defined in the Agreement.

IN WITNESS WHEREOF, the parties have caused their properly authorized representatives to execute and seal this First Amendment on the dates set forth below.

**“LANDLORD”**

The City of Waterloo,  
A Wisconsin municipal corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**“TENANT”**

New Cingular Wireless PCS, LLC,  
a Delaware limited liability company

By: AT&T Mobility Corporation  
Its: Manager

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**[ACKNOWLEDGEMENTS APPEAR ON NEXT PAGE]**

**TENANT ACKNOWLEDGEMENT**

STATE OF \_\_\_\_\_ )  
 ) ss:  
COUNTY OF \_\_\_\_\_ )

On the \_\_\_\_ day of \_\_\_\_\_ in the year 20\_\_ before me, the undersigned, a notary public in and for said state, personally appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s) or the person upon behalf of which the individual(s) acted, executed the instrument.

\_\_\_\_\_  
Notary Public: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

**LANDLORD ACKNOWLEDGEMENT**

STATE OF \_\_\_\_\_ )  
 ) ss:  
COUNTY OF \_\_\_\_\_ )

BE IT REMEMBERED, that on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ before me, the subscriber, a person authorized to take oaths in the State of \_\_\_\_\_, personally appeared \_\_\_\_\_ who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument; and I, having first made known to him/her/them the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

\_\_\_\_\_  
Notary Public: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

**EXHIBIT 1-A**

**See attached exhibit comprised of 4 pages, last revision date February 14, 2019, prepared by SAC Wireless.**

The Property is legally described as follows:

To be inserted with legal description prior to execution

The Premises are described and/or depicted as follows:

To be inserted with legal description prior to execution



Notes:

1. THIS EXHIBIT MAY BE REPLACED BY A LAND SURVEY AND/OR CONSTRUCTION DRAWINGS OF THE PREMISES ONCE RECEIVED BY TENANT.
2. ANY SETBACK OF THE PREMISES FROM THE PROPERTY'S BOUNDARIES SHALL BE THE DISTANCE REQUIRED BY THE APPLICABLE GOVERNMENT AUTHORITIES.
3. WIDTH OF ACCESS ROAD SHALL BE THE WIDTH REQUIRED BY THE APPLICABLE GOVERNMENT AUTHORITIES, INCLUDING POLICE AND FIRE DEPARTMENTS.
4. THE TYPE, NUMBER AND MOUNTING POSITIONS AND LOCATIONS OF ANTENNAS AND TRANSMISSION LINES ARE ILLUSTRATIVE ONLY. ACTUAL TYPES, NUMBERS AND MOUNTING POSITIONS MAY VARY FROM WHAT IS SHOWN ABOVE.

**ATTACHMENT 1**  
**MEMORANDUM OF LEASE**

**Prepared by and when recorded, return to:**

**Timothy Clement**

**SAC Wireless**

**540 W Madison St, 9th Fl**

**Chicago, IL 60661**

Re: Cell Site # WI0385 Cell Site Name: Waterloo  
Fixed Asset Number: 10587459  
State: Wisconsin  
County: Jefferson

**MEMORANDUM OF LEASE**

This Memorandum of Lease is entered into on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between The City of Waterloo, a Wisconsin municipal corporation, having a mailing address of 136 North Monroe Street, Waterloo, Wisconsin 53594-1125 (“Landlord”) and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 1025 Lenox Park Blvd NE, 3rd Floor, Atlanta, GA 30319 (“Tenant”).

1. Landlord and Tenant entered into a certain Option and Land Lease Agreement on the 6<sup>th</sup> day of December, 2018, as amended by that certain First Amendment to \_\_\_\_\_ dated \_\_\_\_\_ (collectively, the “**Agreement**”) for the purpose of installing, operating and maintaining a communications facility and other improvements. All of the foregoing are set forth in the Agreement.
2. The Agreement provided for an initial term of five (5) years that commenced on \_\_\_\_\_ and was subject to seventeen (17) Extension Terms of five (5) years each.
3. The portion of the land being leased to Tenant (the “**Premises**”) is described in **Exhibit 1** annexed hereto.
4. This Memorandum of Lease is not intended to amend or modify, and shall not be deemed or construed as amending or modifying, any of the terms, conditions or provisions of the Agreement, all of which are hereby ratified and affirmed. In the event of a conflict between the provisions of this Memorandum of Lease and the provisions of the Agreement, the provisions of the Agreement shall control. The Agreement shall be binding upon and inure to the benefit

of the parties and their respective heirs, successors, and assigns, subject to the provisions of the Agreement.

**IN WITNESS WHEREOF**, the parties have executed this Memorandum of Lease as of the day and year first above written.

**“LANDLORD”**

The City of Waterloo,  
A Wisconsin municipal corporation

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**“TENANT”**

New Cingular Wireless PCS, LLC,  
a Delaware limited liability company

By: AT&T Mobility Corporation

Its: Manager

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**[ACKNOWLEDGEMENTS APPEAR ON NEXT PAGE]**



**EXHIBIT 1**

**DESCRIPTION OF PREMISES**

Page 1 of 4

to the Memorandum of Lease dated \_\_\_\_\_, 20\_\_\_\_, by and between The City of Waterloo, a Wisconsin municipal corporation, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Tenant.

The Property is legally described as follows:

To be inserted with legal description prior to execution

The Premises are described and/or depicted as follows:

To be inserted with legal description prior to execution



**Notes:**

1. THIS EXHIBIT MAY BE REPLACED BY A LAND SURVEY AND/OR CONSTRUCTION DRAWINGS OF THE PREMISES ONCE RECEIVED BY TENANT.
2. ANY SETBACK OF THE PREMISES FROM THE PROPERTY'S BOUNDARIES SHALL BE THE DISTANCE REQUIRED BY THE APPLICABLE GOVERNMENT AUTHORITIES.
3. WIDTH OF ACCESS ROAD SHALL BE THE WIDTH REQUIRED BY THE APPLICABLE GOVERNMENT AUTHORITIES, INCLUDING POLICE AND FIRE DEPARTMENTS.
4. THE TYPE, NUMBER AND MOUNTING POSITIONS AND LOCATIONS OF ANTENNAS AND TRANSMISSION LINES ARE ILLUSTRATIVE ONLY. ACTUAL TYPES, NUMBERS AND MOUNTING POSITIONS MAY VARY FROM WHAT IS SHOWN ABOVE.

## Schoenwetter Amendment

Security for Removal. The owner of any telecommunications tower shall provide to the City of Waterloo, prior to the issuance of the conditional use permit or the issuance of a zoning permit, a performance bond in an amount based on a written estimate of a qualified remover of said types of structures, or Twenty Thousand Dollars (\$20,000), whichever is less to guarantee that the telecommunications tower will be removed when no longer in operation. The City of Waterloo will be named as obligee in the bond. The City of Waterloo may require an increase in the bond amount after five (5) year intervals to reflect increases in the Consumer Price Index. The provider shall supply any increased bond within a reasonable time, not exceeding sixty (60) days, after the City of Waterloo's request. A permittee shall submit a letter of credit in the amount set forth above.



136 North Monroe Street  
Waterloo, WI 53594  
Phone: (920) 478-3025  
Fax: (920) 478-2021  
[www.waterloowi.us](http://www.waterloowi.us)

---

**RESOLUTION #2019-17**

**AUTHORIZING TAX INCREMENTAL DISTRICT #3 EXPENSES FOR  
WETLAND DELINEATION AND GEOTECHNICAL ANALYSIS RELATING  
TO REUSE AND REDEVELOPMENT OF 333 PORTLAND ROAD**

The Common Council of the City of Waterloo, Wisconsin does hereby resolve as follows:

**WHEREAS**, the City has as a redevelopment priority the beneficial reuse of the previously blighted and contaminated 17-acre 333 Portland Road industrial site, and:

**WHEREAS**, delineating wetlands and knowing with precision the total buildable area through geotechnical analysis will provide valuable information allowing for the parcel to be reused in a manner which maximizes the potential job creation and tax base growth, and;

**WHEREAS**, Clerk/Treasurer had obtained a service agreement with SCS Engineers for \$5,800 for geotechnical services described herein, and a service agreement with Heartland Ecological Group Inc. for wetland delineation services for \$3,800.

**THEREFORE, BE IT RESOLVED**, the City of Waterloo Common Council authorizes TID #3 expenditures identified above.

**PASSED AND ADOPTED** this \_\_\_\_ day of June 2019.

**City of Waterloo**

Signed: \_\_\_\_\_  
Jenifer Quimby, Mayor

Attest:

\_\_\_\_\_  
Morton J. Hansen  
Clerk/Treasurer

SPONSOR(S) – Mayor and Clerk/Treasurer

FISCAL NOTE – TID #3 expenditures to be recouped over time by one or more revenue sources including: cell tower lease revenue; land sale proceeds; and tax increment generated by future industrial property reuse.

May 29, 2019  
File No. 25218209.00

Mr. Mo Hansen  
City of Waterloo  
136 North Monroe Street  
Waterloo, WI 53594

Subject: Proposal for Preliminary Geotechnical Report  
Former Gauthier Property  
333 Portland Road, Waterloo, Wisconsin

Dear Mr. Hansen:

Thank you for your verbal authorization to proceed with the preliminary geotechnical investigation and report at the former Gauthier property. We understand that the property will likely be redeveloped and will likely include construction of a one-story, slab-on-grade building. Our scope of services is summarized below. Please sign and return the attached Agreement by May 31, 2019 so the drillers can proceed with the borings on June 3, 2019.

## **SCOPE OF SERVICES**

### **Task 1 – Preliminary Geotechnical Investigation and Report**

SCS will perform the following:

- Field locate and mark three boring locations.
- Drill two borings to 20 feet each and one boring to 30 feet. Drilling will be subcontracted to Badger State Drilling, Stoughton, Wisconsin.
- Perform laboratory soil testing to assess the engineering properties of the site soils, such as water content, Atterberg limits, grain size analysis, and organic content.
- Prepare a preliminary geotechnical letter report with preliminary building foundation design and construction recommendations.

#### **Deliverable**

- Preliminary geotechnical letter report including a boring location plan and boring logs.

#### **Assumption**

- Drilling will be performed with a truck-mounted drilling rig in one day with one mobilization of the drilling rig.



Mr. Mo Hansen  
May 29, 2019  
Page 2

## ESTIMATED COST

The total estimated cost for the above Scope of Services is \$5,800. We will not revise the scope of services or exceed this cost without your prior authorization.

## SCHEDULE

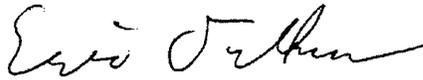
Drilling is scheduled for June 3, 2019, and will take one day. Laboratory soil testing will take about five days after drilling is completed. The preliminary geotechnical report will be completed within one week of completing the laboratory soil testing.

## AUTHORIZATION

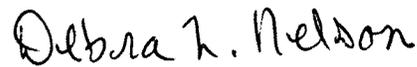
If this proposal is acceptable to you, please sign the Agreement and return a signed copy to Eric Oelkers via email (eoelkers@scsengineers.com) or fax (608-224-2839).

Please feel free to contact us at (608) 224-2830 if you have any questions or comments.

Sincerely,



Eric Oelkers, PG  
Senior Project Manager  
SCS Engineers



Debra Nelson, PE  
Senior Geotechnical Engineer  
SCS Engineers

DLN/jsn/EO/MRH

Encl. Agreement  
Fee Schedule

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SCS File No.: 25218209

**AGREEMENT BETWEEN SCS ENGINEERS AND CLIENT  
FOR PROFESSIONAL SERVICES**

This Agreement is made by and between City of Waterloo (hereafter "Client"), and Stearns, Conrad and Schmidt, Consulting Engineers, Inc. dba SCS Engineers (hereafter "SCS").

**WITNESSETH**

That for the considerations set forth below, the parties agree as follows:

- 1. Scope of Services:** SCS shall provide professional services (hereafter "Services") for the project (hereafter "Project") as set forth in the attached scope of services dated May 29, 2019 in accordance with the terms and conditions of this Agreement.
- 2. Basis of Compensation:** SCS will be compensated in the lump sum amount of \$5,800.
- 3. General Conditions:**
  - a. Payments for invoices prepared by SCS are due and payable upon receipt. Payments due SCS under this Agreement shall be subject to a service charge of one and one-half (1-1/2) percent per month for invoices not paid within thirty (30) days after the date of receipt of invoice.
  - b. Client agrees to pay all costs and expenses of SCS, including reasonable attorneys' fees, arising out of or in connection with collecting amounts for which Client is responsible pursuant to this Agreement
  - c. This Agreement may be terminated by either party upon 15 days' written notice to the other party. Upon termination, SCS shall be paid for all Services rendered to the date of termination together with any termination expenses incurred.
  - d. Any work in addition to that described in Article 1 above performed at the request of the Client shall be compensated on a time-and-materials basis at the rates contained in SCS' Standard Fee Schedule in effect at the time of performance of the Services. Unless expressly stated therein, the scope of work does not include testimony or responding to subpoenas or other legal orders requiring production of records or testimony. In the event SCS receives a subpoena or other legal order for the production of project records or testimony related to the Scope of Service or other work for Client, SCS will be compensated by client at current Fee Schedule rates.
  - e. The parties hereto shall each maintain in full force and effect Commercial General Liability insurance with coverage limits which are reasonable in light of the Services to be undertaken, and Workers' Compensation Insurance as required by law.



Agreement  
May 29, 2019

f. All reports, drawings, renderings, source and object code, software, data and other works and documents prepared by SCS under this Agreement, and all intellectual property rights in the same, shall be owned exclusively by SCS.

g. Neither party shall delegate its duties under this Agreement without the written consent of the other party. Each party binds itself to the successors, administrators and assigns of the other party in respect of all covenants of this Agreement.

h. The parties agree that the total liability of SCS under this Agreement and for the Project shall be limited to Fifty Thousand Dollars (\$50,000) or the amount of SCS's total fees hereunder (whichever is greater), unless Client pays for the assumption of additional liability by SCS as a separate line item in Article 2 above.

i. Unless otherwise expressly stated in the Scope of Services, SCS shall have no responsibility for site health and safety, except with respect to the activities of SCS and its subcontractors. In no event shall SCS be responsible for the means, methods or manner of performance of any persons other than SCS and SCS' subcontractors.

j. Client agrees that SCS will not be responsible for liability caused by the presence or release of hazardous substances or contaminants at the site, unless the release results from the sole negligence of SCS or its subcontractors. The Client will make others responsible for liabilities due to such conditions, or will indemnify, defend and save harmless SCS from such liabilities. At no time shall title to hazardous substances, solid wastes, petroleum contaminated soil or other regulated substances pass to SCS, nor shall any provision of this Agreement be interpreted to permit or obligate SCS to assume the status of a "generator," "owner," "operator," "transporter," "arranger" or "treatment, storage or disposal facility" under state or federal law. The provisions of this Article 3j shall survive any termination of this Agreement.

k. SCS shall be entitled to rely on information provided by Client. SCS shall be entitled to an equitable adjustment in the price and schedule if conditions differ materially from information provided by Client, or differ from what could reasonably be anticipated given the nature of the Services.

**IN WITNESS WHEREOF**, the parties have caused this Agreement to be executed by their duly authorized representatives as of the last date written below.

**SCS ENGINEERS**

BY: Mark R. Huber  
NAME: Mark R. Huber, PE  
TITLE: Vice President  
DATE: May 29, 2019

CLIENT: City of Waterloo  
BY: Mo Hansen  
NAME: MO HANSEN  
TITLE: CLERK / TREAS.  
DATE: MAY 29, 2019

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## Fee Schedule

### Personnel

<u>Category</u>	<u>Rate/Hour</u>
Project Director/Senior Project Adviser .....	\$ 200
Senior Project Manager/Senior Technical Adviser .....	\$ 158 – \$ 178
Project Manager/Senior Project Professional.....	\$ 125 – \$ 148
Project Professional .....	\$ 115
Staff Professional.....	\$ 111
Associate Professional.....	\$ 105
Field Professional.....	\$ 105
Senior Designer/CAD Technician.....	\$ 100
Senior Technician.....	\$ 95
Project Administrator .....	\$ 90
Designer/CAD Technician.....	\$ 87
Technician .....	\$ 72
Administrative Assistant .....	\$ 72

### Equipment and Expenses

<b>Groundwater Monitoring</b>	
Brass Well Locks .....	\$ 12/each
Chipped Bentonite .....	\$ 12/bag
Dedicated Bailers .....	\$ 65/each
Disposable Bailers .....	\$ 15/each
Dissolved Oxygen Meter.....	\$ 40/day
Field Filtering Apparatus .....	\$ 22/day
Field Filters.....	\$ 16/each
Ice.....	\$ 7/bag
Low-flow Sampling Compressor/ Controller.....	\$50/day
Petroleum Product Interface Probe .....	\$ 70/day
pH Meter.....	\$ 20/day
pH, Conductivity, Temp, TDS Meter .....	\$ 20/day
Pressure Trans. / Data Logger.....	\$ 125/day
Water Level Indicator .....	\$ 30/day
Well Caps.....	\$ 18.25/each
<b>Pumps</b>	
2" Gas Engine Pump .....	\$ 45/day
Explosion Proof Pump .....	\$ 100/day
Peristaltic Pump .....	\$ 30/day
Submersible Pump.....	\$ 100/day
Sump Pump.....	\$ 15/day
Well Development Pump.....	\$ 30/day

<b>PPE and Air and Gas Monitoring</b>	
Air Monitoring Detector Tubes.....	\$ 15/each
Four Gas Meter .....	\$ 65/day
Landfill Gas Meter.....	\$ 100/day
Level D PPE .....	\$ 5/day
Modified Level D PPE.....	\$ 15/day
Personal Air Sampling Pump .....	\$ 30/day
Respirator Cartridges.....	\$ 35/pair
Tyvek Suit.....	\$ 20/each
<b>Soil Sampling and Testing</b>	
Concrete Air/Slump .....	\$ 30/each
Concrete Core Drill.....	\$ 120/day
Concrete Cylinder Mold.....	\$ 3/each
FID/PID Rental .....	\$ 85/day
Hand Auger Kit.....	\$ 30/day
Nuclear Density Gauge .....	\$ 125/day
Soil Scale.....	\$ 25/day
Stainless Vapor Pin Cap .....	\$ 30/each
Vapor Pins .....	\$ 60/each
Vapor Sampling Kit.....	\$ 25/day
<b>Surveying</b>	
¾-inch Irons.....	\$ 4/each
GPS Unit/Total Station .....	\$ 50/day
Level/Laser Level.....	\$ 5/hour

Marking Paint .....	\$ 5/each
Survey Hubs.....	\$ 0.60/each
Survey Lath.....	\$ 0.75/each
<b>Miscellaneous</b>	
55-Gallon Drums .....	\$ 55/each
Air Compressor .....	\$ 40/day
Copies .....	\$ 0.07/each
Curlex Blanket .....	\$ 65/each
Curlex Staples.....	\$ 10/box
Digital Camera .....	\$ 10/day
Dump Trailer .....	\$ 175/day
Hard Boom (10") .....	\$ 1.80/foot
Metal Detector .....	\$ 35/day
Oil Absorbent Boom (5" x 10').....	\$ 70/each
Oil Absorbent Boom (8" x 10').....	\$ 90/each
Oil Absorbent Pad .....	\$ 1.00/each
Oil Dry Absorbent .....	\$ 8/bag
Orange Safety Fence .....	\$ 40/roll
Plastic Sheeting (20' x 100').....	\$ 80/roll
Portable Generator .....	\$ 45/day
Spill Response Trailer.....	\$ 200/day
Utility Trailer.....	\$ 40/day
Vehicle .....	\$ 0.58/mile
Water Storage Tank.....	\$ 75/day

Equipment and expense rates may be modified by SCS Engineers from time to time as new equipment is added or costs change. Client will be notified prior to any change in the personnel rates that will affect the project billings.

Outside services contracted through SCS Engineers will be billed at cost plus 10 percent. Outside services may include, but are not limited to, laboratory testing, drilling, or other subcontracted services.



# Heartland

ECOLOGICAL GROUP INC

506 Springdale Street, Mount Horeb, WI 53572

May 16, 2019

Mr. Mo Hansen, Clerk/Treasurer  
City of Waterloo  
136 North Monroe Street  
Waterloo, WI 53594-1125  
[cityhall@waterloowi.us](mailto:cityhall@waterloowi.us)  
(920) 478-3025

**RE: Proposal for Professional Consulting Services – 333 Portland Road, City of Waterloo, Jefferson County, Wisconsin**

Dear Mr. Hansen:

Heartland Ecological Group, Inc. (Heartland) is pleased to present this proposal for professional consulting services for the 333 Portland Road Site (the "Project"). The Project is in the City of Waterloo, Jefferson County, Wisconsin and is shown on the attached maps. This proposal includes the scope of services, cost estimate, assumptions, project schedule, extra services, and terms and conditions. Heartland will initiate this project upon receipt of an executed Agreement.

## **SCOPE OF SERVICES**

### **Wetland Determination and Delineation**

- Complete the wetland determination and delineation using methods and protocols per the U.S. Army Corps of Engineers (USACE) 1987 Wetland Delineation Manual, the appropriate Regional Supplement, and current guidance documents.
- Gather publicly available mapping resources (e.g. soils, topography, and wetland inventory) to complete an initial desktop assessment and guide the field wetland delineation.
- Field-locate the wetland boundary using a mapping-grade GPS capable of sub-meter accuracy (note that this is not a certified survey).
- Produce customized mapping that shows the investigation limits ("Study Area"), Heartland's wetland boundary, and the mapping resources utilized in the desktop assessment.
- Complete a wetland determination and delineation report that summarizes the methods, results, and wetland characteristics. Include in the report appropriate mapping figures and necessary data collected and analyzed (USACE wetland determination data sheets, photographs, and precipitation data).
- Heartland will submit the completed report to the Client following final payment.



### **WDNR Wetland Boundary Confirmation**

- Submit the report on-line to confirm Heartland's wetland boundaries;
- Obtain the confirmation fee check from Client;
- Meet WDNR staff on-site for their review of Heartland's determinations and delineation;
- Provide an electronic wetland shapefile to WDNR for their database, as required.

### **ASSUMPTIONS**

- Heartland's understanding of the Study Area limits is identified on the attached map.
- The Client is responsible for securing safe access onto the property and will inform Heartland of any required notifications prior to entering the property.
- Attendance and coordination of client, project team, and/or regulatory agency meetings are not included unless specified in the Scope of Services.
- Routine methodology is not sufficient for completing wetland determinations and delineations within the Study Area. Problem Areas, Atypical Situations, and Comprehensive Methods (as defined by the 1987 manual and regional supplement) require additional effort than routine methods. A historic aerial imagery analysis is necessary to assess historic conditions and determine wetlands based on the site conditions.
- This Scope of Services does not involve regulatory approvals that may be required by local, state, or federal government authorities. If the Client proceeds with land use activities without obtaining necessary reviews or authorizations by appropriate regulatory agencies, it will be at their own risk. Heartland will not be responsible or liable for resulting damages.
- Regulatory coordination and/or requests for additional information beyond that included in Heartland's standard wetland delineation report will be completed as authorized by the Client for an additional cost. Wetland determination and boundary reviews by regulatory agencies may result in modifications to the findings presented to the Client. These modifications may result from varying conditions between the time the wetland delineation was completed and the time of the review. Factors that may influence the findings include precipitation patterns, drainage modifications, changes or modification to vegetation, and the time of year.

### **COST & SCHEDULE**

- **\$3,800 fixed fee** including reimbursable expenses (GPS equipment and mileage). Regulatory agency review fees and/or permit application fees are not included with the cost estimate; Client shall pay any required agency fees which are expected to be \$300.00 (based on 17 acres) for their confirmation.
- Regulatory agency review fees and/or permit application fees are **not** included with the cost estimate; Client shall pay any required agency review fees directly.
- If services are not authorized within 60 days of the proposal date, the fee estimates may no longer be valid.



City of Waterloo  
333 Portland Road Site  
May 16, 2019

- Services performed on a time and material basis will be billed per the attached rate table and reimbursable expense schedule.
- If Heartland encounters unanticipated conditions or circumstances that result in exceeding the cost estimate or is requested to provide services that are not in the Scope of Services, Heartland will contact the Client for approval of the Extra Services and additional fees.
- Upon authorization and acceptance of a signed agreement, Heartland will initiate and schedule the project services. Fieldwork will be completed in May 2019. The mapping results will be provided within one (1) week following fieldwork completion. Heartland will coordinate the fieldwork and report schedule with you and communicate closely throughout the project so that our services are completed and delivered on-time and as expected.

#### **PAYMENT**

- All invoices are due for payment upon receipt and deliverables may be withheld until full payment is received. Additional payment conditions are identified in the attached Terms and Conditions. Payment should be mailed to the following address:

**Heartland Ecological Group, Inc.  
506 Springdale Street  
Mount Horeb, WI 53572**

#### **TERMS AND CONDITIONS**

Heartland's Professional Services Terms and Conditions are specified and included in the separate attachment.

Heartland thanks you for providing us the opportunity to offer this Proposal for Professional Services to you. We share your desire for a successful project. Please feel free to contact me if you want to discuss this further or need more information.

Regards,

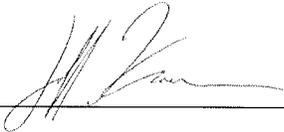
Eric C. Parker, Principal Scientist  
Heartland Ecological Group, Inc.  
[eric@heartlandecological.com](mailto:eric@heartlandecological.com)  
414.380.0269

Enclosures: Study Area Location Map; Hourly Rate Schedule; Terms & Conditions; Authorization Signature Page



City of Waterloo  
333 Portland Road Site  
May 16, 2019

**The Proposal and Terms and Conditions are agreed upon and authorized by signature below by an authorized representative of the Client and Heartland Ecological Group, Inc.**

**Heartland Signature:** 

**Date:** May 16, 2019      Jeff Kraemer, Principal  
Heartland Ecological Group, Inc.  
506 Springdale Street  
Mount Horeb, WI 53572

**Client Signature:** Mo Hene

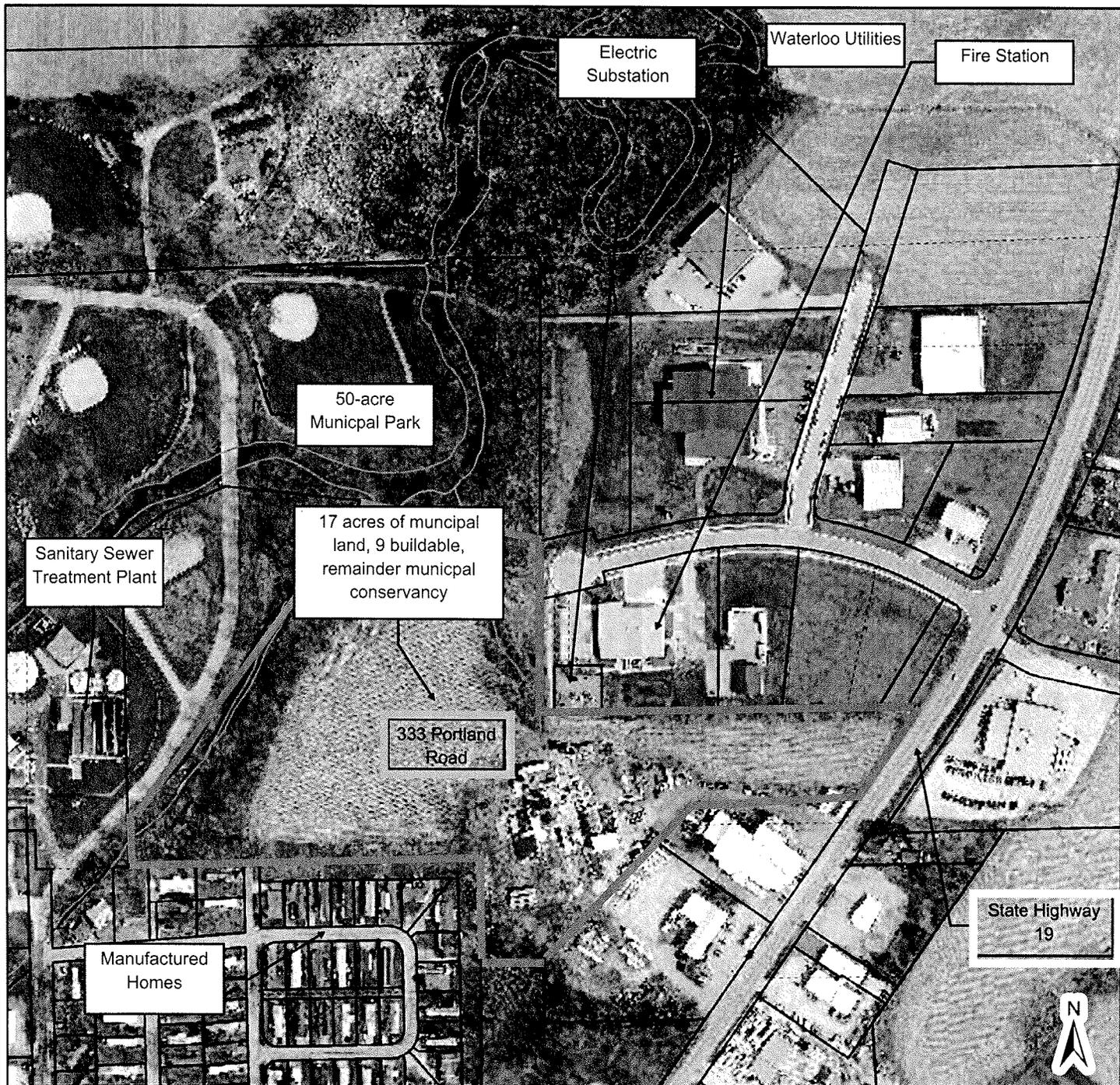
**Date:** 5/16/2019

**Client Representative:** n/A

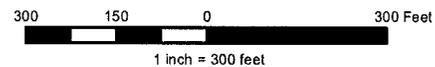
**Client Entity (if applicable):** CITY OF WATERLOO

**Client Address:** 136 North Monroe St  
Waterloo, WI 53594

# 333 Portland aerial



- |                           |                       |                 |
|---------------------------|-----------------------|-----------------|
| — Municipal Boundaries    | — Section Lines       | ■ Red: Band_1   |
| — Property Boundary       | — Surface Water       | ■ Green: Band_2 |
| --- Old Lot/Meander Lines | — Map Hooks           | ■ Blue: Band_3  |
| — Rail Right of Ways      | — Tax Parcels         |                 |
| — Road Right of Ways      | — Streams and Ditches |                 |



Jefferson County Geographic Information System

DISCLAIMER: This map is not a substitute for an actual field survey or onsite investigation. The accuracy of this map is limited to the quality of the records from which it was assembled. Other inherent inaccuracies occur during the compilation process. Jefferson County makes no warranty whatsoever concerning this information.

Printed on: June 24, 2017

Author: Public User



333 Portland Rd



Legend

- ◊ Wetland Identifications and Confirmations
- Wetland Class Points
  - Dammed pond
  - Excavated pond
  - Filled excavated pond
  - Filled/drained wetland
  - Wetland too small to delineate
- ▨ Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- ▣ Filled Areas
- Wetland Class Points
  - Dammed pond
  - Excavated pond
  - Filled excavated pond
  - Filled/drained wetland
  - Wetland too small to delineate
- ▨ Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- ▣ Filled Areas
- ✱ NRCS Wetspots
- ▣ Township
- Section
- ▣ Quarter-Quarter
- County Boundary
- Cities, Towns & Villages
  - City
  - Village
  - Civil Town
- Municipality
- ▣ State Boundary

Notes

0.1 0 0.03 0.1 Miles

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

# Heartland

ECOLOGICAL GROUP INC

506 Springdale Street, Mount Horeb, WI 53572

## Heartland Ecological Group - 2019 Rate Table

<b>Professional Billing Level</b>	<b>Billing Rate</b>
Principal II	\$165 / hour
Principal I	\$150 / hour
Senior Scientist II	\$130 / hour
Senior Scientist I	\$115 / hour
Environmental Scientist II	\$105 / hour
Environmental Scientist I	\$90 / hour
Environmental Technician III	\$75 / hour
Environmental Technician II	\$65 / hour
Environmental Technician I	\$50 / hour
Administration	\$50 / hour
GPS Unit	\$100 / day
Mileage	Current IRS Mileage Rate + 15%
Reimbursable Expenses	Cost + 15%

*\*All rates are subject to annual adjustments*

### Reimbursable Expenses

All reimbursable expenses shall have a standard mark-up of 15%, unless the mark-up is specified differently within the authorized contract for services. Reimbursable expenses shall include: Meals, lodging, mileage, rental equipment, subconsultants, and other external vendor services.

## TERMS AND CONDITIONS

1. **SERVICES:** Heartland Ecological Group, Inc., ("Heartland") shall provide the scope of Services (the "Services") set forth in the attached proposal only after it is accepted and signed by the client (the "Client"). The accepted and signed proposal and these Terms and Conditions are collectively referred to herein as the "Agreement". The Services shall include all Services provided by Heartland which are reasonably necessary and appropriate for the effective and prompt fulfillment of Heartland's obligations under the Agreement. It is understood that the Services are based on the information provided by Client. If the Client provides information that is incomplete or inaccurate, or if unexpected conditions are discovered, the Services may change, even as the work is in progress. In addition, Client may request additional Services which will constitute a change in the Services. When a change in the Services is necessary, a written amendment to the Agreement shall be executed by Client and Heartland prior to Heartland commencing the change in the work or Services. If Heartland believes an immediate change is necessary to protect human health or the environment, a written amendment incorporating the change shall be made as soon as is practicable, and Client's consent to such amendments shall not be unreasonably withheld.
2. **ACCEPTANCE:** If Heartland is given a verbal or written notification to proceed without first receiving a signed copy of the Agreement, it will be mutually understood that Client and Heartland will nonetheless be contractually bound by the Agreement, even in the absence of written acceptance by either party. Heartland may withhold a written report until it receives the Agreement signed by Client.
3. **ESTIMATED COSTS AND PAYMENT:**
  - a. In providing opinions of probable cost and project schedule, it is recognized that neither the Client nor Heartland has control over the costs of labor, equipment or materials. The opinions of probable cost or project duration are based on Heartland's reasonable professional judgment and experience and do not constitute a warranty, express or implied, that the actual cost or schedule will not vary from the estimated costs or schedule.
  - b. Invoices will be submitted by Heartland to Client monthly or upon completion of the Services with payment of the invoices being due upon receipt. Any unpaid and delinquent invoices shall bear interest at one and one-half percent per month, commencing thirty days from the date of invoice. Any attorneys' fees, court costs and other related expenses incurred by Heartland in the collection of delinquent invoice amounts shall be paid by Client. In the event any payment due Heartland under the terms is delinquent, Heartland may suspend all Services until all delinquent payments have been received. Fees charged do not include any state, federal or local applicable taxes, and taxes will be the responsibility of the Client.
4. **STANDARD OF CARE:** The Services performed by Heartland under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of Heartland's profession currently practicing in the area where the Services are being provided.
5. **RIGHT OF ENTRY:**
  - a. If the Services are to be performed on property controlled by Client, Client hereby grants Heartland and its subcontractors the right to enter from time to time for Heartland to fulfill the Services. Client understands that even though Heartland will take reasonable measures to return the property to the condition it was in before Heartland commenced its activities, the use of sampling and exploration equipment may cause some damage which cannot be fully corrected. Client also understands that the discovery of certain conditions may result in a reduction of the value of the property upon which the condition is found to exist. Accordingly, Client waives any claim against Heartland and its subcontractors and agrees to defend, indemnify and hold Heartland and its subcontractors harmless from any claim based upon the diminished value of real property allegedly arising from the discovery of a condition, unless such claim is based upon the negligent performance of Services under the Services.
  - b. If the Services are to be performed on property which is not controlled by Client, Client agrees to obtain permission from the party controlling the property to Heartland's entry and the performance of the Services.
  - c. Heartland shall, and shall cause its subcontractors, to abide by all of Client's facility rules and regulations regarding the protection of health and safety of employees and third parties, but it shall be



Client's obligation to make such rules and regulations known to the Heartland prior to Heartland commencing work at Client's facility, property or worksite.

## 6. CLIENT DISCLOSURES:

- a. Client shall make available to Heartland all relevant information and/or data which in any way relate to or affect the Services. Heartland shall have the right to rely on the accuracy and completeness of such Client-furnished information and data in its agreement to perform the Services. Heartland shall not be responsible to the Client for the consequences of any error or omission arising from the Client furnished information or data.
- b. The Client shall be responsible for securing a safe project site. If the presence of an unanticipated hazardous condition is discovered during the performance of the Services which could pose a safety risk to Heartland's employees, agents and subcontractors, Heartland may cease work and determine the necessary health and safety precautions to continue the Services. The cost of these necessary health and safety precautions shall be a change and shall be managed in accordance with Section 1.

**7. INSURANCE:** Heartland represents that it is protected by Worker's Compensation insurance and that Heartland has coverage under liability insurance policies that Heartland deems reasonable and adequate. Upon request, Heartland shall furnish certificates of insurance to the Client evidencing the risks insured against, and the limits of liability thereunder. In the event the Client requires specific inclusions of coverage in addition to that obtained by Heartland, or increased limits of liability in Heartland's liability policies, the cost of such inclusions or increased limits shall be borne by the Client.

**8. WAIVER OF CONSEQUENTIAL DAMAGE:** Heartland shall not be liable to Client for indirect, special, incidental, consequential, punitive, or exemplary damages arising out of or in connection with the Services or any acts or omissions associated therewith, including any acts or omissions by subcontractors of Heartland, or relating to any Services furnished, whether such claim is based on breach of warranty, contract, tort or any other legal theory regardless of the causes of such loss or damages or whether any other remedy provided herein fails.

## 9. CONSEQUENTIAL DAMAGES WAIVER / CAP ON LIABILITY

- a. In no event will Heartland be liable for any incidental, consequential, punitive, exemplary or special damages or losses including without limitation loss profits, loss of business opportunities or other similar damages resulting from or arising out of this Agreement, by statute, in tort or contract, under any indemnity provision or otherwise (except with respect to indemnity obligations for third-party claims and losses).
- b. Heartland's liability to Client under this Agreement (except with respect to indemnity obligations for third-party claims and losses) as a whole for any and all damages, including without limitation, claims for indemnification, shall be strictly limited to the lesser of the amount of fees actually paid by Client under this Agreement or \$250,000.

**10. INDEMNIFICATION:** Subject to the limitations set forth below, Heartland shall indemnify, defend, and hold harmless Client and its subsidiaries and affiliates, and their respective shareholders, directors, officers, employees, agents, and subcontractors ("Client's Indemnitees") from and against any and all claims, demands, losses, damages, fines, costs, and expenses of every nature, including reasonable attorneys' fees ("Claims"), incurred or suffered by any Heartland Indemnitee as a result of claims asserted by third parties unaffiliated with Client which arise from the negligent acts or willful misconduct of Heartland in performing Services under this Agreement, except to the extent such claims result from the negligent acts or omissions of Client, the inaccuracy or incompleteness of information provided by Client or any material breach by Client of its obligations under this Agreement. Heartland's indemnification obligations hereunder are limited to the limits of Heartland's insurance coverage applicable to the Claims.

**11.** Subject to the limitations set forth below, Client shall indemnify, defend, and hold harmless Heartland and its subsidiaries and affiliates, and their respective shareholders, directors, officers, employees, agents, and subcontractors ("Heartland Indemnitees") from and against any and all Claims incurred or suffered by any Heartland Indemnitee as a result of claims asserted by third parties unaffiliated with Client which arise from the negligent acts or willful misconduct of Client, except to the extent such claims result from the negligent acts or omissions of Heartland.

**12. CONSTRUCTION LIEN NOTICE:** As required by the Wisconsin Construction Lien Law, Heartland hereby notifies Client that persons or companies furnishing labor or materials for the construction, or Services



# Heartland

ECOLOGICAL GROUP INC

provided, on Client's land may have lien rights on Client's land and building if not paid. Those entitled to lien rights, in addition to the undersigned Heartland, are those who contract directly with Client or those who give Client notice within 60 days after they first furnish labor or materials for construction or performance of Services. Accordingly, Client probably will receive notices from those who furnish labor or materials for the construction or performance of Services, and should give a copy of each notice received to the mortgage lender, if any. Heartland agrees to cooperate with Client and Client's lender, if any, to see that all potential lien claimants are duly paid.

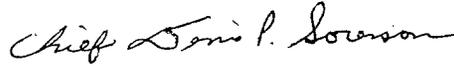
- 13. FORCE MAJEURE:** Neither party shall be deemed in default of this Agreement to the extent that any delay or failure in the performance of its obligations (other than the payment of money) results, without its fault or negligence, from any cause beyond its reasonable control, including, without limitation, acts of God, acts of civil or military authority, embargoes, epidemics, war, riots, insurrections, fires, explosions, earthquakes, floods, adverse weather conditions, acts of other contractors, strikes, or lock-outs.
- 14. ASSIGNMENT AND SUBCONTRACT:** Heartland may employ any other party it deems necessary or proper for any part of the Services required to be performed by Heartland under the terms of this Agreement. Client shall not assign this Agreement without prior written consent of Heartland, which consent will not be unreasonably withheld.
- 15. TERMINATION:** Either party may terminate this Agreement at any time upon written notice to the other sent to the address set forth on the Agreement. In the event of termination of the Agreement, Heartland will be compensated for Services performed under this Agreement to the termination date together with all costs arising out of such termination.
- 16. TIME LIMIT FOR CLAIMS:** Any claim brought by Client against Heartland will be brought not later than one year after the date of substantial completion of Heartland's Services for which the claim is made or the expiration of the appropriate statute of limitation, whichever is earlier.
- 17. USE OF DOCUMENTS:** All reports and documents (the "Documents") generated by Heartland pursuant to this Agreement are not intended or suitable for reuse by Client or any other party for any purpose other than set forth in this Agreement. Reuse of any reports or documents for any other purpose without written consent of Heartland shall be at Client's and the user's sole risk without any liability on Heartland's part. The Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless Heartland against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from any unauthorized use or reuse of the Documents. The provisions of this Paragraph shall survive the termination of this Agreement.
- 18. ATTORNEY FEES:** In the event of a dispute hereunder, the prevailing party is entitled to recover from the other party all costs incurred by the prevailing party in enforcing this Agreement and prosecuting the dispute, including reasonable attorneys' fees.
- 19. GOVERNING LAW:** This Agreement shall be governed by and interpreted pursuant to the laws of the State of Wisconsin.
- 20. ENTIRE AGREEMENT:** The terms and conditions set forth herein along with the Agreement (and any referenced attachments) constitute the entire understanding of the parties relating to the provision of Services by Heartland and supersede all prior or contemporaneous communications, representations or agreements, whether oral or written, between the parties. No alterations to or modifications of the terms and conditions of this Agreement shall be effective unless such alteration or such modification is reduced to writing and properly executed by the parties hereto.
- 21. SEVERABILITY:** The invalidity or unenforceability of any particular provision of this Agreement or any portion thereof shall not affect the other provisions hereof, and the Agreement shall be construed in all respects as if such invalid or unenforceable provision or any portion thereof were omitted.



Date: June 6, 2019

To: Common Council Members

From: Police Chief Denis P. Sorenson



Subject: Class A and B Intoxicating Liquor and Beer License Applications

The following Class A and B Intoxicating Liquor and Beer License applications have been reviewed and are in compliance with the regulations, ordinances and laws of the City of Waterloo Municipal Code.

NAME OF INDIVIDUAL/PARTNERSHIP/LLC AGENT NAME ADDRESS OF APPLICANT TRADE NAME PREMISE LOCATION PREMISE DESCRIPTION	"Class B" Intoxicating Liquor License	Class "B" Beer License	Class "A" Beer License	"Class A" Intoxicating Liquor License	"Class A" Intoxicating Liquor License (Cider Only)	"Class C" Wine License	Cigarette License
Kardenny's, LLC Karen Fredrick, Agent W8178 State Road 16/60, Lowell (The End Zone) 137 N. Monroe Street Main floor	X	X					
Coaches Alley, LLC Laurie Kay Gorder, Agent 204 Anna Street, Apt. 108, Waterloo (Coaches Alley, LLC) 151 N. Monroe Street Bar room & basement	X	X					
Peggy Hansen, LLC Peggy Hansen, Agent 112 Hickory Lane, Waterloo (The MT Bar) 120 E. Madison Street Main floor, basement & deck	X	X					
Ruthless, LLC Korby James Holzhueter, Agent 59 London Road, Cambridge (Madison Street Pub) 203 W. Madison Street All alcohol beverages and records stored at 203 W. Madison Street, first floor & basement	X	X					

NAME OF INDIVIDUAL/PARTNERSHIP/LLC AGENT NAME ADDRESS OF APPLICANT TRADE NAME PREMISE LOCATION PREMISE DESCRIPTION	"Class B" Intoxicating Liquor License	Class "B" Beer License	Class "A" Beer License	"Class A" Intoxicating Liquor License	"Class A" Intoxicating Liquor License (Cider Only)	"Class C" Wine License	Cigarette License
Blinky's Bowl, Inc./DBA Stubby's Bowl Van Stenberg, Agent 1317 Oak Street, Waterloo (Stubby's Bowl) 127 E. Madison Street Up & down bars, 2 coolers & booze storage(basement), office basement	X	X					
Krause Langer VFW Post 6614 Gary Jensen, Agent 401 Anna Street, Waterloo (VFW Krause Langer Post 6614) Entire main floor & basement		X					
Gregorio Ayala, Individual 104 E. Madison Street, Waterloo (Ayala's Market) 104 E. Madison Street 1st floor, basement of brick building	X	X					X
Kwik Trip, Inc. Judith A. Bunge, Agent 1323 Colonial Drive, Watertown (Kwik Trip #366) 115 Portland Road One story frame construction with storage in coolers, on sales floor & behind sales counter			X	X			X
Loeder Oil Co., Inc. Daniel Lee Loeder, Agent 4410 Buckley Ridge Cir., Cottage Grove (Loeder BP Waterloo) 300 W. Madison Street Walk in cooler, sales area, backroom			X		X		X
Dolgencorp, LLC Chris Engelhardt, Agent 3189 W 3rd Ave., Oxford (Dollar General Store #15975) 200 Anna Street 8195 Sq Ft stand alone store			X	X			X

NAME OF INDIVIDUAL/PARTNERSHIP/LLC AGENT NAME ADDRESS OF APPLICANT TRADE NAME PREMISE LOCATION PREMISE DESCRIPTION	"Class B" Intoxicating Liquor License	Class "B" Beer License	Class "A" Beer License	"Class A" Intoxicating Liquor License	"Class A" Intoxicating Liquor License (Cider Only)	"Class C" Wine License	Cigarette License
Waterloo Piggly Wiggly, LLC Jeffrey M. Tate, Agent W2146 Pond Road, Neosho (Piggly Wiggly) 810 N. Monroe Street Retail Supermarket			X	X			X
The Mode Venue, LLC Jeff Deegan, Agent (The Mode) 121 S. Monroe Street Ballroom, Green Room, Lobby, Backstage Area		X				X	
<b>TOTALS</b>	6	8	4	3	1	1	5

Council Approval: June 6, 2019



136 North Monroe Street  
Waterloo, WI 53594  
Phone: (920) 478-3025  
Fax: (920) 478-2021  
[www.waterloowi.us](http://www.waterloowi.us)

APPLICATION FOR ANNUAL MOBILE HOME PARK LICENSE

TO THE CLERK OF THE  
CITY OF WATERLOO  
COUNTY OF JEFFERSON

The undersigned hereby applies for an Annual Mobile Home Park License for the term beginning July 1, 2018 through June 30, 2019.

The applicant agrees to comply with and be bound by all the laws, ordinances, rules, regulations and penalties governing the Mobile Home Park for which this license is applied. His business name and address is:

Greeninghame Condominium LLC (Trade Name)

300 Hendricks St Waterloo (Address)

70 (Number of Parking Spaces)

A receipt is submitted herewith, showing the payment of the sum of \$2.00 for each space in the existing or proposed park, but not less than \$25.00 to the treasurer, in payment of this license.

Dated: 6 May 2019 Signed: [Signature]  
Parber Dow Morganne Seiner

TO BE COMPLETED BY CLERK

Date Paid: 5-8-19 Receipt Number: 34557

Date License Granted: \_\_\_\_\_

License Number Issued: \_\_\_\_\_ Date License Issued: \_\_\_\_\_



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Wil-Park

(Trade Name)

300 Hendricks St Waterloo

(Address)

17

(Number of Parking Spaces)

A receipt is submitted herewith, showing the payment of the sum of \$2.00 for each space in the existing or proposed park, but not less than \$25.00 to the treasurer, in payment of this license.

Dated: 6 May 2019 Signed: \_\_\_\_\_

Parker Dow

Morganne Seiner

-----  
TO BE COMPLETED BY CLERK

Date Paid: 5-8-19

Receipt Number: 34556

Date License Granted: \_\_\_\_\_

License Number Issued: \_\_\_\_\_

Date License Issued: \_\_\_\_\_

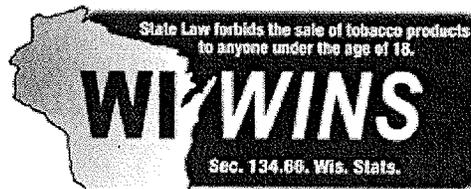


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The City of Waterloo would like to thank you and your employees for refusing the sale of tobacco to individuals under the age of 18.

We are glad to hear that you are helping Jefferson County do the *Right* thing...  
NOT selling tobacco products to minors.



Reducing youth tobacco use by targeting illegal sales of tobacco products

The Tobacco Free Community Partnership Dodge Jefferson Waukesha utilizes the Wisconsin WINS strategy of Recognition and Reminder, a science based approach proven to reduce youth access to tobacco products. We encourage and applaud merchants who refuse to sell tobacco to persons under the age of 18 years.

For more information about Wisconsin WINS go to [www.wiwins.org](http://www.wiwins.org)

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Mayor Jenifer Quimby

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Police Chief Denis Sorenson