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LISA SMITH, COUNTY RECORDER
MADISON COUNTY IOWA

CHEK



Courthouse at Winterset
Madison County, Iowa
Built in 1876 of native limestone.

Prepared by: Madison County Zoning Office
Return to: Madison County Zoning Office

Madison County Zoning Department

C.J. (Jeff) Nicholl, Zoning Administrator

CONDITIONAL USE PERMIT

PERMIT NO: 060-22

DATE: May 3, 2022

After a properly held Public Hearing on May 3, 2022, the Madison County Board of Adjustment hereby grants a Conditional Use Permit & Height Authorization to Hollingsworth Family Trust & Rob Viera-Buell Consulting c/o Verizon Wireless on the following described real estate: **SE NW EX 4.6A SW COR, Walnut Township Section 2 T74 R27** for the following:

To erect a cellular tower to a height of 250' with a lightning rod extending an additional 9' for a total height request of 259' for the use of land by a public or private utility service company for public utility purpose.

A Conditional Use permit is granted as required by the Madison County Zoning Ordinance under Sections: 14C (1) & 14-E (12).

C.J. Nicholl, Zoning Administrator
Secretary to the Madison County Board of Adjustment

MADISON COUNTY BOARD OF ADJUSTMENT

Application for Special Use & Height Authorization
Hollingsworth Family Trust & Rob Viera-Buell Consulting c/o Verizon Wireless
Date: May 3, 2022

DECISION

On May 3, 2022 at 7:00 p.m., pursuant to the rules of procedure of the Madison County Board of Adjustment, a public hearing was held and conducted on the Application for a Conditional Use Permit & Height Authorization to erect a cellular tower to a height of 250' with a lightning rod extending an additional 9' for a total height request of 259' in Walnut Township Section 2 in Madison County Iowa. At the hearing the Board of Adjustment, reviewed the completed application form(s), relevant provisions of the Madison County Ordinances, all documents constituting the record from the Zoning Administrator, documents received from the applicant, heard the statements, remarks and comments by the Zoning Administrator, the applicant, as well as statements, remarks and comments by others in attendance. After all the information was received and all interest parties were heard by the Board of Adjustment, the hearing was closed pursuant to the rules of procedure of the Board of Adjustment.

Following the close of the hearing a motion was made by Fred to approve deny the application with a second by DAVE.

A roll call vote was conducted on the motion:

Mike Bobst	X Aye	<input type="checkbox"/> Nay
Fred Howell	X Aye	<input type="checkbox"/> Nay
Mary Katherine Bigelow	X Aye	<input type="checkbox"/> Nay
Mindy Nelson	X Aye	<input type="checkbox"/> Nay
David Morford	X Aye	<input type="checkbox"/> Nay

The motion was therefore Passed Denied

Accordingly, the "Board of Adjustment Findings of Fact and Legal Principles Upon Which the Board Acts" has been approved as written and approved and adopted by the Board of Adjustment.

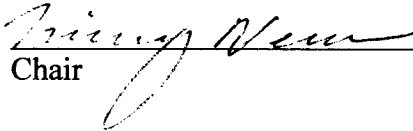
DECISION:

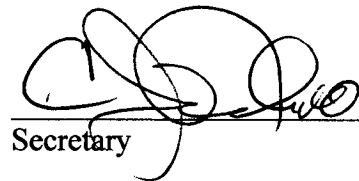
The Application for Conditional Use Permit & Height Authorization is hereby

Approved – Denied

Dated this 3rd day of May 2022

Acknowledged as to Accuracy:


Chair


Secretary

Original Filed with the Secretary of the Board of Adjustment on May 3rd, 2022.

BOARD OF ADJUSTMENT FINDINGS OF FACT AND LEGAL PRINCIPLES UPON WHICH THE BOARD ACTS:

The terms Special Use and Conditional Use are synonymous. Zoning has two use categories, permitted uses are those listed by the ordinance as being allowed by right in a zoning district. Special Use or Conditional Use are terms used to describe those uses listed by the ordinance as being permissible at the discretion of the Board of Adjustment.

Section 14 of the Madison County Zoning Ordinance defines the Exceptions, Modifications, Interpretations and Conditional Uses that are permitted when authorized by the granting of a conditional use permit by the Board of Adjustment.

Section 14 Exceptions, Modifications, Interpretations and Conditional Uses

E. Conditional Uses.

The development and administration of a comprehensive zoning ordinance is based upon the division of the County into zoning districts with uniform regulations defining permitted uses of land and structures within each district. It is recognized, however, that there are occasions when in addition to the principal permitted uses, conditional uses may be allowed after careful consideration of the impact of the particular uses upon the neighborhood and public facilities therein. The following uses may be authorized by a conditional use permit granted by the Board of Adjustment. Under no conditions shall the sum or any part thereof be refunded for failure of said application to be approved.

Section 6-2(a) of the Madison County Zoning Ordinance states the following regarding height:

SECTION 6 – APPLICATION OF DISTRICT REGULATIONS

The regulations set by this Ordinance within each district shall be minimum regulations and shall apply uniformly to each class or kind of structure or land, as hereinafter provided:

1. No building, structure or land shall hereafter be used or occupied and no building or structure or part thereof shall hereafter be erected, constructed, reconstructed, moved, or structurally altered unless in conformity with all of the regulations herein specified for the district in which it is located except agricultural uses are exempt.
2. ***No building or other structure shall hereafter be erected or altered:***
 - a. ***To exceed the height;***
 - b. To accommodate or house a greater number of families;
 - c. To occupy a greater percentage of lot area;
 - d. To have narrower or smaller rear yards, front yards, side yards, or other open spaces;
 - e. In any other manner contrary to the provisions of this Ordinance.

Section 9-(C) of the Madison County Zoning Ordinance states the following regarding height:

SECTION 9 – AGRICULTURAL DISTRICT REGULATIONS

C. Height Regulations.

No building shall exceed two, and one-half (2 ½) stories or thirty-five (35) feet in height, except as provided in Section 14.

Section 14 of the Madison County Zoning Ordinance contains the listed exceptions, modifications, interpretations and conditional uses that are authorized after approval of the Madison County Board of Adjustment.

SECTION 14 EXCEPTIONS, MODIFICATIONS, INTERPRETATIONS AND CONDITIONAL USES

C. Structures Permitted Above Height Limits

The building height limitations of this Ordinance shall be modified as follows:

12. Chimneys, cooling towers, elevator bulkheads, fire towers, grain elevators, monuments, penthouses, stacks, silos, tanks, water towers, ornamental towers and spires, radio or television tower or necessary mechanical appurtenances may be erected to a height approved by the Board of Adjustment.

E. Conditional Uses.

The development and administration of a comprehensive zoning ordinance is based upon the division of the County into zoning districts with uniform regulations defining permitted uses of land and structures within each district. It is recognized, however, that there are occasions when in addition to the principal permitted uses, conditional uses may be allowed after careful consideration of the impact of the particular uses upon the neighborhood and public facilities therein. The following uses may be authorized by a conditional use permit granted by the Board of Adjustment Under no conditions shall the sum or any part thereof be refunded for failure of said application to be approved.

12. Any structure or land used by public or private utility service company or corporation for public utility purpose, including sewage lagoons, or for purposes of public communication may be permitted in any district. The basis for such permit shall be public convenience.

F. General Requirements and Conditions Applicable to All Special Use Permits.

In granting any special use permit, the Board of Adjustment may prescribe such restrictions and conditions with respect to the permitted use as the Board deems reasonable to further the objectives of this Ordinance. The following general requirements are applicable to all special use permits that may be granted by the Board:

- a. Required Findings. No special use permit shall be granted by the Board of Adjustment unless the Board first finds that all of the following conditions exist:
 - i. Surrounding Area. The value and qualities of the area (or neighborhood) surrounding the conditional use are not substantially injured, and the establishment of a special use will not impede the normal and orderly development and improvement of surrounding undeveloped property for uses predominant in the area. In reviewing and acting upon each application for a special use permit, the Board shall each give due consideration to the proximity of the proposed use to public parks, schools, licensed day care facilities, dwellings and residential districts.
 - ii. Infrastructure. Adequate utilities, access roads, drainage, and other necessary facilities have been or are being provided.
 - iii. Intent of Ordinance. The special use is consistent with the intent and purpose of this Ordinance to promote public health, safety, and general welfare.
 - iv Nuisance Factors. Adequate measures have been or will be taken to prevent or control offensive odor, fumes, dust, noise, and vibration, so that none of these will constitute a nuisance and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.

- v. **Comprehensive Plan.** The special use is not inconsistent with the comprehensive plan and land use policies of the County.
 - vi. **Cumulative Impact.** The Board shall make a determination that the proposed use would not cause a significant adverse cumulative impact when considered together with other uses previously permitted by special use permit. While the impact of a single use permitted by conditional use permit may be deemed acceptable by the Board, the location of more than one conditional use in close proximity to another conditional use may have the potential of causing a significant adverse cumulative impact in the neighborhood.
- b. **Conditions on Use.** In granting any special use permit, the Board of Adjustment may set minimum requirements, and/or specify conditions and restrictions on the proposed use. Violations of such conditions and requirements, when made a part of the terms under which the special use is granted, shall be deemed a violation of this Ordinance and punishable under Section 16 of this Ordinance. In addition, the Board is authorized to revoke any special use permit under circumstances where the special use is being conducted in violation of the conditions and restrictions of the permit or of any other applicable legal requirements.
 - c. **Time.** The Board shall determine whether or not the conditional use shall be limited in duration and/or hours of operation. The terms of the conditional use permit shall specify any such limitation.
 - d. **Landscaping.** Appropriate landscaping berms and buffers are included if necessary to minimize the impact of the conditional use on adjacent property.
 - e. **Financial Guarantees.** The Board shall determine whether or not the special use permit applicant should be required to submit a plan to rehabilitate the subject tract once the special use has terminated and provide for the funding of said restoration. If the Board requires such a plan, then the special use permit may not be granted until such time as the plan as the plan has been submitted to the Board and approved.
 - f. **Review by County Zoning Commission.** All applications for special use permit shall be submitted to the County Zoning Commission for its review prior to the public hearing before the Board of Adjustment. Each application shall be considered by the Zoning Commission at a public hearing. After the public hearing, the Zoning Commission promptly shall submit a report to the Board of Adjustment on its findings and recommendations regarding the application. No final action shall be taken by the Board of Adjustment on any application for special use permit until such time as the Board has received and reviewed the report of the Zoning Commission.
 - g. **Report by Conservation Department.** All applications for conditional use permit shall be submitted to the Conservation Department for review. The Conservation Department shall submit a report on the impact of the proposed use on the environment and on conservation issues prior to the public hearings before the County Zoning Commission and Board of Adjustment. The Board shall consider all recommendations included in the report before determining appropriate environmental protections. The Board shall require reasonable measures to control noise, odor, and dust adequately and to prevent the operation from posing an environmental risk for neighboring properties or waterways. The terms of the conditional use permit shall specify any such required measures.

- h. Report by County Engineer. All applications for conditional use permit shall be submitted to the County Engineer for review. The County Engineer shall submit a report on the impact of the proposed use on roads and other infrastructure matters prior to the public hearings before the County Zoning Commission and Board of Adjustment. The Board may require reasonable measures to be taken by the applicant to address the impact on roads and other infrastructure matters. The terms of the conditional use permit shall specify any such required measures.
- i. Proximity to City Limits. In determining whether to allow or deny a conditional use permit, the Board of Adjustment shall consider the proximity of the subject property to the corporate limits of any city or town.

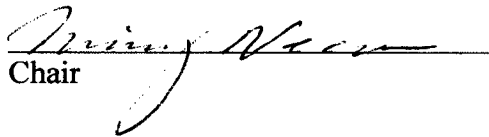
SECTION 17 D JURISDICTION AND POWERS OF THE BOARD OF ADJUSTMENT

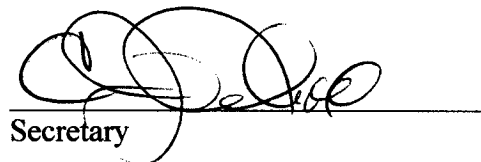
D. Jurisdiction and Powers of the Board of Adjustment.

- 1. The Board of Adjustment shall have the following powers and duties.
 - b. To hear and decide applications for conditional use permits and exceptions upon which the Board is required to address by other sections of this Ordinance.

After careful consideration of all the information that has been presented, and for the factual reasons set forth in the above noted Sections 14 & 17 both of which are incorporated by this reference herein, the Board of Adjustment hereby finds:

The applicant Hollingsworth Family Trust & Rob Viera-Buell Consulting c/o Verizon Wireless request for Conditional Use Permit and Height Authorization has X / has not met the requirements of the Madison County Zoning Ordinance.


Chair


Secretary

Original Filed with the Secretary of the Board of Adjustment on May 3, 2022.

**BOARD OF ADJUSTMENT
SPECIAL EXCEPTION, SPECIAL USE, CONDITIONAL USE
DECISION MAKING WORKSHEET**

APPLICANT NAME: Hollingsworth Family Trust & Rob Viera-Buell Consulting c/o Verizon Wireless

DATE: 05-03-22

The terms Special Use and Conditional Use are synonymous. Zoning has two use categories, permitted uses are those listed by the ordinance as being allowed by right in a zoning district. Special Use or Conditional Use are terms used to describe those uses listed by the ordinance as being permissible at the discretion of the Board of Adjustment. The Madison County Zoning Ordinance references this below.

SECTION 14 – EXCEPTIONS, MODIFICATIONS, INTERPRETATIONS AND CONDITIONAL USES

E. Conditional Uses. The development and administration of a comprehensive zoning ordinance is based upon the division of the County into zoning districts with uniform regulations defining permitted uses of land and structures within each district. It is recognized, however, that there are occasions when in addition to the principal permitted uses, conditional uses may be allowed after careful consideration of the impact of the uses upon the neighborhood and public facilities therein. The following uses may be authorized by a conditional use permit granted by the Board of Adjustment Under no conditions shall the sum or any part thereof be refunded for failure of said application to be approved.

The above section of the ordinance states that conditional uses are allowed only by specific approval of the Board of Adjustment and only in the zone in which they are listed.

The Board of Adjustment may approve or deny any applications for a conditional use permit. If it approves the issuance of a conditional use permit, it may attach conditions to the approval such as time limitations, requirements that one or more things be done before construction can be initiated, or conditions of a continuing nature. Any such condition shall be recorded in the board's minutes and on the conditional use permit, along with a reference to the specific section of the zoning regulations, or any other applicable ordinance of the County listing the conditional use under consideration.

1. Is the request a use that may be authorized by a conditional use permit granted by the Board of Adjustment?
 Yes No
2. Does the request meet all the requirements of the Zoning Ordinance and if approved will it be compliant with the Zoning Ordinance? Yes No
3. Departmental reviews required by Zoning Ordinance.

Complete Waived

- | | | |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Review by County Zoning Commission.</u> All applications for special use permit shall be submitted to the County Zoning Commission for its review prior to the public hearing before the Board of Adjustment. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Report by Conservation Department.</u> All applications for conditional use permit shall be submitted to the Conservation Department for review. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Report by County Engineer.</u> All applications for conditional use permit shall be submitted to the County Engineer for review. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Report by the County Environmental Health Officer.</u> All applications for conditional use shall be submitted to Environmental Health for review. |

Individual comments or concerns regarding the required departmental reviews:

4. Required Findings. No special use permit shall be granted by the Board of Adjustment unless the Board first finds that the following conditions in the ordinance exist. By marking yes, you are stating that the required finding has been met:

- **Surrounding Area:** The value and qualities of the area (or neighborhood) surrounding the conditional will not be substantially injured, and the establishment of a special use will not impede the normal and orderly development and improvement of surrounding undeveloped property for uses predominant in the area. *In reviewing and acting upon each application for a special use permit, the Board should give due consideration to the proximity of the proposed use to public parks, schools, licensed day care facilities, dwellings, and residential districts.*

This request meets the above expectation: Yes No

- **Infrastructure.** Adequate utilities, access roads, drainage, and other necessary facilities have been or are being provided.

This request meets the above expectation: Yes No

- **Intent of Ordinance.** The special use is consistent with the intent and purpose to promote public health, safety, and general welfare.

This request meets the above expectation: Yes No

- **Nuisance Factors.** Adequate measures have been or will be taken to prevent or control offensive odor, fumes, dust, noise, and vibration, so that none of these will constitute a nuisance and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.

This request meets the above expectation: Yes No

- **Comprehensive Plan.** The special use is consistent with the comprehensive plan and land use policies of Madison County.

This request meets the above expectation: Yes No

- **Cumulative Impact.** The Board shall make a determination that the proposed use would not cause a significant adverse cumulative impact when considered together with other uses previously permitted by special use permit.

This request meets the above expectation: Yes No

It is my determination this request meets the Required Findings as listed in the ordinance.

Yes No

List any areas that do not meet the Required Findings: _____

5. In granting any special use permit, the Board of Adjustment may set minimum requirements, and/or specify conditions and restrictions on the proposed use.

Examples of conditions and/or restrictions that may be placed on a permit:

- a) Time-The Board may determine whether or not the conditional use shall be limited in duration and/or hours of operation.
- b) Landscaping-The Board may determine if appropriate landscaping berms and buffers should be included to minimize the impact of the conditional use on adjacent property
- c) Financial Guarantees-The Board may determine whether or not the special use permit applicant should be required to provide any financial guarantees for any portion of the project such as bonding for road completion, installation of any of the project landscaping berms or buffers etc.
- d) At Completion Plan and Profile-The Board may require "at completion" plan and profiles of any of the proposed construction related to the permit such as an at completion plan and profile for the construction of a road.
- e) Height approval for any uses, or like and similar use specified in Section 14 (C)
- f) Other conditions and/or restrictions

List any conditions you feel should be included: _____

After consideration of the information presented, and for the factual reasons set forth in this worksheet, I will cast my

vote to: APPROVE DENY this request.

Signature *Christy Hester* Date 5/3/22

**BOARD OF ADJUSTMENT
SPECIAL EXCEPTION, SPECIAL USE, CONDITIONAL USE
DECISION MAKING WORKSHEET**

APPLICANT NAME: Hollingsworth Family Trust & Rob Viera-Buell Consulting c/o Verizon Wireless

DATE: 05-03-22

The terms Special Use and Conditional Use are synonymous. Zoning has two use categories, permitted uses are those listed by the ordinance as being allowed by right in a zoning district. Special Use or Conditional Use are terms used to describe those uses listed by the ordinance as being permissible at the discretion of the Board of Adjustment. The Madison County Zoning Ordinance references this below.

SECTION 14 – EXCEPTIONS, MODIFICATIONS, INTERPRETATIONS AND CONDITIONAL USES

E. Conditional Uses. The development and administration of a comprehensive zoning ordinance is based upon the division of the County into zoning districts with uniform regulations defining permitted uses of land and structures within each district. It is recognized, however, that there are occasions when in addition to the principal permitted uses, conditional uses may be allowed after careful consideration of the impact of the uses upon the neighborhood and public facilities therein. The following uses may be authorized by a conditional use permit granted by the Board of Adjustment Under no conditions shall the sum or any part thereof be refunded for failure of said application to be approved.

The above section of the ordinance states that conditional uses are allowed only by specific approval of the Board of Adjustment and only in the zone in which they are listed.

The Board of Adjustment may approve or deny any applications for a conditional use permit. If it approves the issuance of a conditional use permit, it may attach conditions to the approval such as time limitations, requirements that one or more things be done before construction can be initiated, or conditions of a continuing nature. Any such condition shall be recorded in the board's minutes and on the conditional use permit, along with a reference to the specific section of the zoning regulations, or any other applicable ordinance of the County listing the conditional use under consideration.

1. Is the request a use that may be authorized by a conditional use permit granted by the Board of Adjustment?
 Yes No
2. Does the request meet all the requirements of the Zoning Ordinance and if approved will it be compliant with the Zoning Ordinance? Yes No
3. Departmental reviews required by Zoning Ordinance.

Complete Waived

- | | | |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Review by County Zoning Commission.</u> All applications for special use permit shall be submitted to the County Zoning Commission for its review prior to the public hearing before the Board of Adjustment. |
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| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Report by the County Environmental Health Officer.</u> All applications for conditional use shall be submitted to Environmental Health for review. |

Individual comments or concerns regarding the required departmental reviews:

4. Required Findings. No special use permit shall be granted by the Board of Adjustment unless the Board first finds that the following conditions in the ordinance exist. By marking yes, you are stating that the required finding has been met:

- Surrounding Area: The value and qualities of the area (or neighborhood) surrounding the conditional will not be substantially injured, and the establishment of a special use will not impede the normal and orderly development and improvement of surrounding undeveloped property for uses predominant in the area. *In reviewing and acting upon each application for a special use permit, the Board should give due consideration to the proximity of the proposed use to public parks, schools, licensed day care facilities, dwellings, and residential districts.*

This request meets the above expectation: Yes No

- Infrastructure. Adequate utilities, access roads, drainage, and other necessary facilities have been or are being provided.

This request meets the above expectation: Yes No

- Intent of Ordinance. The special use is consistent with the intent and purpose to promote public health, safety, and general welfare.

This request meets the above expectation: Yes No

- Nuisance Factors. Adequate measures have been or will be taken to prevent or control offensive odor, fumes, dust, noise, and vibration, so that none of these will constitute a nuisance and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.

This request meets the above expectation: Yes No

- Comprehensive Plan. The special use is consistent with the comprehensive plan and land use policies of Madison County.

This request meets the above expectation: Yes No

- Cumulative Impact. The Board shall make a determination that the proposed use would not cause a significant adverse cumulative impact when considered together with other uses previously permitted by special use permit.

This request meets the above expectation: Yes No

It is my determination this request meets the Required Findings as listed in the ordinance.

Yes No

List any areas that do not meet the Required Findings: _____

5. In granting any special use permit, the Board of Adjustment may set minimum requirements, and/or specify conditions and restrictions on the proposed use.

Examples of conditions and/or restrictions that may be placed on a permit:

- a) Time-The Board may determine whether or not the conditional use shall be limited in duration and/or hours of operation.
- b) Landscaping-The Board may determine if appropriate landscaping berms and buffers should be included to minimize the impact of the conditional use on adjacent property
- c) Financial Guarantees-The Board may determine whether or not the special use permit applicant should be required to provide any financial guarantees for any portion of the project such as bonding for road completion, installation of any of the project landscaping berms or buffers etc.
- d) At Completion Plan and Profile-The Board may require "at completion" plan and profiles of any of the proposed construction related to the permit such as an at completion plan and profile for the construction of a road.
- e) Height approval for any uses, or like and similar use specified in Section 14 (C)
- f) Other conditions and/or restrictions

List any conditions you feel should be included: _____

After consideration of the information presented, and for the factual reasons set forth in this worksheet, I will cast my

vote to: APPROVE DENY this request.

Signature Mary Kathryn Bigelow Date 5-3-2022

**BOARD OF ADJUSTMENT
SPECIAL EXCEPTION, SPECIAL USE, CONDITIONAL USE
DECISION MAKING WORKSHEET**

APPLICANT NAME: Hollingsworth Family Trust & Rob Viera-Buell Consulting c/o Verizon Wireless

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1. Is the request a use that may be authorized by a conditional use permit granted by the Board of Adjustment?
 Yes No
2. Does the request meet all the requirements of the Zoning Ordinance and if approved will it be compliant with the Zoning Ordinance? Yes No
3. Departmental reviews required by Zoning Ordinance.

Complete Waived

- | | | |
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4. Required Findings. No special use permit shall be granted by the Board of Adjustment unless the Board first finds that the following conditions in the ordinance exist. By marking yes, you are stating that the required finding has been met:

- **Surrounding Area:** The value and qualities of the area (or neighborhood) surrounding the conditional will not be substantially injured, and the establishment of a special use will not impede the normal and orderly development and improvement of surrounding undeveloped property for uses predominant in the area. *In reviewing and acting upon each application for a special use permit, the Board should give due consideration to the proximity of the proposed use to public parks, schools, licensed day care facilities, dwellings, and residential districts.*

This request meets the above expectation: Yes No

- **Infrastructure.** Adequate utilities, access roads, drainage, and other necessary facilities have been or are being provided.

This request meets the above expectation: Yes No

- **Intent of Ordinance.** The special use is consistent with the intent and purpose to promote public health, safety, and general welfare.

This request meets the above expectation: Yes No

- **Nuisance Factors.** Adequate measures have been or will be taken to prevent or control offensive odor, fumes, dust, noise, and vibration, so that none of these will constitute a nuisance and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.

This request meets the above expectation: Yes No

- **Comprehensive Plan.** The special use is consistent with the comprehensive plan and land use policies of Madison County.

This request meets the above expectation: Yes No

- **Cumulative Impact.** The Board shall make a determination that the proposed use would not cause a significant adverse cumulative impact when considered together with other uses previously permitted by special use permit.

This request meets the above expectation: Yes No

It is my determination this request meets the Required Findings as listed in the ordinance.

Yes No

List any areas that do not meet the Required Findings: _____

5. In granting any special use permit, the Board of Adjustment may set minimum requirements, and/or specify conditions and restrictions on the proposed use.

Examples of conditions and/or restrictions that may be placed on a permit:

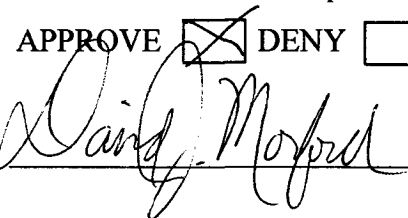
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- e) Height approval for any uses, or like and similar use specified in Section 14 (C)
- f) Other conditions and/or restrictions

List any conditions you feel should be included: _____

After consideration of the information presented, and for the factual reasons set forth in this worksheet, I will cast my

vote to: APPROVE DENY this request.

Signature



Date

5-3-2022

**BOARD OF ADJUSTMENT
SPECIAL EXCEPTION, SPECIAL USE, CONDITIONAL USE
DECISION MAKING WORKSHEET**

APPLICANT NAME: Hollingsworth Family Trust & Rob Viera-Buell Consulting c/o Verizon Wireless

DATE: 05-03-22

The terms Special Use and Conditional Use are synonymous. Zoning has two use categories, permitted uses are those listed by the ordinance as being allowed by right in a zoning district. Special Use or Conditional Use are terms used to describe those uses listed by the ordinance as being permissible at the discretion of the Board of Adjustment. The Madison County Zoning Ordinance references this below.

SECTION 14 – EXCEPTIONS, MODIFICATIONS, INTERPRETATIONS AND CONDITIONAL USES

E. Conditional Uses. The development and administration of a comprehensive zoning ordinance is based upon the division of the County into zoning districts with uniform regulations defining permitted uses of land and structures within each district. It is recognized, however, that there are occasions when in addition to the principal permitted uses, conditional uses may be allowed after careful consideration of the impact of the uses upon the neighborhood and public facilities therein. The following uses may be authorized by a conditional use permit granted by the Board of Adjustment Under no conditions shall the sum or any part thereof be refunded for failure of said application to be approved.

The above section of the ordinance states that conditional uses are allowed only by specific approval of the Board of Adjustment and only in the zone in which they are listed.

The Board of Adjustment may approve or deny any applications for a conditional use permit. If it approves the issuance of a conditional use permit, it may attach conditions to the approval such as time limitations, requirements that one or more things be done before construction can be initiated, or conditions of a continuing nature. Any such condition shall be recorded in the board's minutes and on the conditional use permit, along with a reference to the specific section of the zoning regulations, or any other applicable ordinance of the County listing the conditional use under consideration.

1. Is the request a use that may be authorized by a conditional use permit granted by the Board of Adjustment?
 Yes No
2. Does the request meet all the requirements of the Zoning Ordinance and if approved will it be compliant with the Zoning Ordinance? Yes No
3. Departmental reviews required by Zoning Ordinance.

Complete Waived

- | | | |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Review by County Zoning Commission.</u> All applications for special use permit shall be submitted to the County Zoning Commission for its review prior to the public hearing before the Board of Adjustment. |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Report by Conservation Department.</u> All applications for conditional use permit shall be submitted to the Conservation Department for review. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Report by County Engineer.</u> All applications for conditional use permit shall be submitted to the County Engineer for review. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Report by the County Environmental Health Officer.</u> All applications for conditional use shall be submitted to Environmental Health for review. |

Information Sent

Individual comments or concerns regarding the required departmental reviews:

4. Required Findings. No special use permit shall be granted by the Board of Adjustment unless the Board first finds that the following conditions in the ordinance exist. By marking yes, you are stating that the required finding has been met:

- **Surrounding Area:** The value and qualities of the area (or neighborhood) surrounding the conditional will not be substantially injured, and the establishment of a special use will not impede the normal and orderly development and improvement of surrounding undeveloped property for uses predominant in the area. *In reviewing and acting upon each application for a special use permit, the Board should give due consideration to the proximity of the proposed use to public parks, schools, licensed day care facilities, dwellings, and residential districts.*

This request meets the above expectation: Yes No

- **Infrastructure.** Adequate utilities, access roads, drainage, and other necessary facilities have been or are being provided.

This request meets the above expectation: Yes No

- **Intent of Ordinance.** The special use is consistent with the intent and purpose to promote public health, safety, and general welfare.

This request meets the above expectation: Yes No

- **Nuisance Factors.** Adequate measures have been or will be taken to prevent or control offensive odor, fumes, dust, noise, and vibration, so that none of these will constitute a nuisance and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.

This request meets the above expectation: Yes No

- **Comprehensive Plan.** The special use is consistent with the comprehensive plan and land use policies of Madison County.

This request meets the above expectation: Yes No

- **Cumulative Impact.** The Board shall make a determination that the proposed use would not cause a significant adverse cumulative impact when considered together with other uses previously permitted by special use permit.

This request meets the above expectation: Yes No

It is my determination this request meets the Required Findings as listed in the ordinance.

Yes No

List any areas that do not meet the Required Findings: _____

5. In granting any special use permit, the Board of Adjustment may set minimum requirements, and/or specify conditions and restrictions on the proposed use.

Examples of conditions and/or restrictions that may be placed on a permit:

- a) Time-The Board may determine whether or not the conditional use shall be limited in duration and/or hours of operation.
- b) Landscaping-The Board may determine if appropriate landscaping berms and buffers should be included to minimize the impact of the conditional use on adjacent property
- c) Financial Guarantees-The Board may determine whether or not the special use permit applicant should be required to provide any financial guarantees for any portion of the project such as bonding for road completion, installation of any of the project landscaping berms or buffers etc.
- d) At Completion Plan and Profile-The Board may require "at completion" plan and profiles of any of the proposed construction related to the permit such as an at completion plan and profile for the construction of a road.
- e) Height approval for any uses, or like and similar use specified in Section 14 (C)
- f) Other conditions and/or restrictions

List any conditions you feel should be included: _____

After consideration of the information presented, and for the factual reasons set forth in this worksheet, I will cast my

vote to: APPROVE DENY this request.

Signature Michael R. Bobet Date 5/3/2022

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SPECIAL EXCEPTION, SPECIAL USE, CONDITIONAL USE
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Individual comments or concerns regarding the required departmental reviews:

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This request meets the above expectation: Yes No

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Yes No

List any areas that do not meet the Required Findings: none

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- f) Other conditions and/or restrictions

List any conditions you feel should be included: _____

After consideration of the information presented, and for the factual reasons set forth in this worksheet, I will cast my

vote to: APPROVE DENY this request.

Signature *Steve Howell* Date 5-3-22

INDEX
ANNO
SCAN
CHECK



IA07 EAST PERU NEW BUILD

PROJECT INFORMATION	
SITE NAME:	IA07 EAST PERU
SITE ADDRESS:	285TH LN EAST PERU, IA 50222
COUNTY:	MADISON
LATITUDE:	N 41° 14' 13.35" (NAD83)
LONGITUDE:	W 93° 56' 07.46" (NAD83)
DRAWING BASED ON	11-01-21
SITE DATA FORM DATED:	
CONSTRUCTION TYPE:	IIB
SITE AREA:	75' X 75' = 5,625 S.F.

SHEET INDEX	
SHEET	SHEET DESCRIPTION
T-1	PROJECT INFORMATION, TOWER ELEVATION, & SHEET INDEX
A-1	SITE PLAN & DETAIL INDEX
A-2	ENLARGED SITE PLAN
A-3	ANTENNA AND COAX KEY, CABLE BRIDGE PLAN, & NOTES
A-4	OUTLINE SPECIFICATIONS
G-1	GROUNDING NOTES
G-2	GROUNDING PLAN & GROUNDING DETAIL INDEX
U-1	SITE UTILITY PLANS & NOTES
U-2	H-FRAME DETAIL
-	SURVEY

JOSHUA HERZOG
20456
IOWA

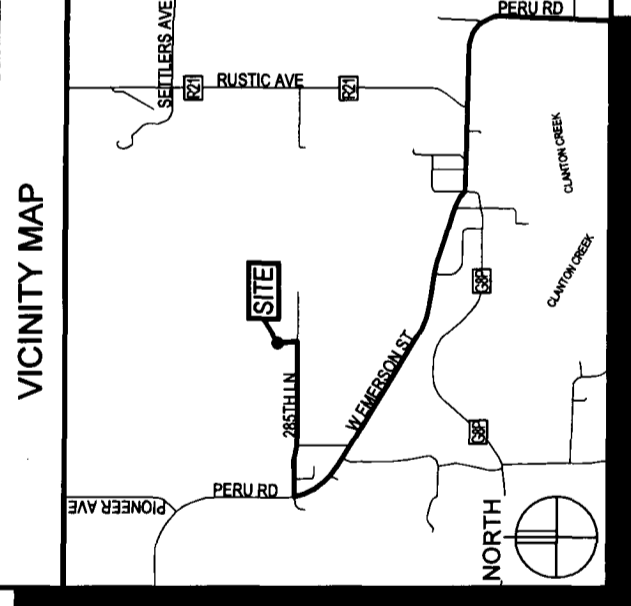
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly-licensed Professional Engineer under the laws of the State of Iowa.

Joshua Herzog
(Signature)

Printed or typed name: Joshua Herzog
License number: 20456
My license renewal date is December 31, 2022

01/17/2022
(date)

Pages or sheets covered by this seal:
T-1, A-1, A-2, A-3, A-4, G-1, G-2, U-1, U-2



LOCATION SCAN

ISSUE SUMMARY		
REV	DESCRIPTION	SHEET/DETAIL
A	ISSUED FOR REVIEW 12-13-21	ALL
B	ISSUED FOR OWNER SIGNOFF 01-17-22	ALL

DEPARTMENTAL APPROVALS		
JOB TITLE	NAME	DATE
RF ENGINEER	JUSTIN RUCH	12-15-21
OPERATIONS MANAGER		
CONSTRUCTION ENGINEER	PETER SHANNON	12-27-21

LESSOR / LICENSOR APPROVAL	
SIGNATURE	PRINTED NAME
LESSOR / LICENSOR: PLEASE CHECK THE APPROPRIATE BOX BELOW	
<input type="checkbox"/> NO CHANGES.	<input type="checkbox"/> CHANGES NEEDED. SEE COMMENTS.

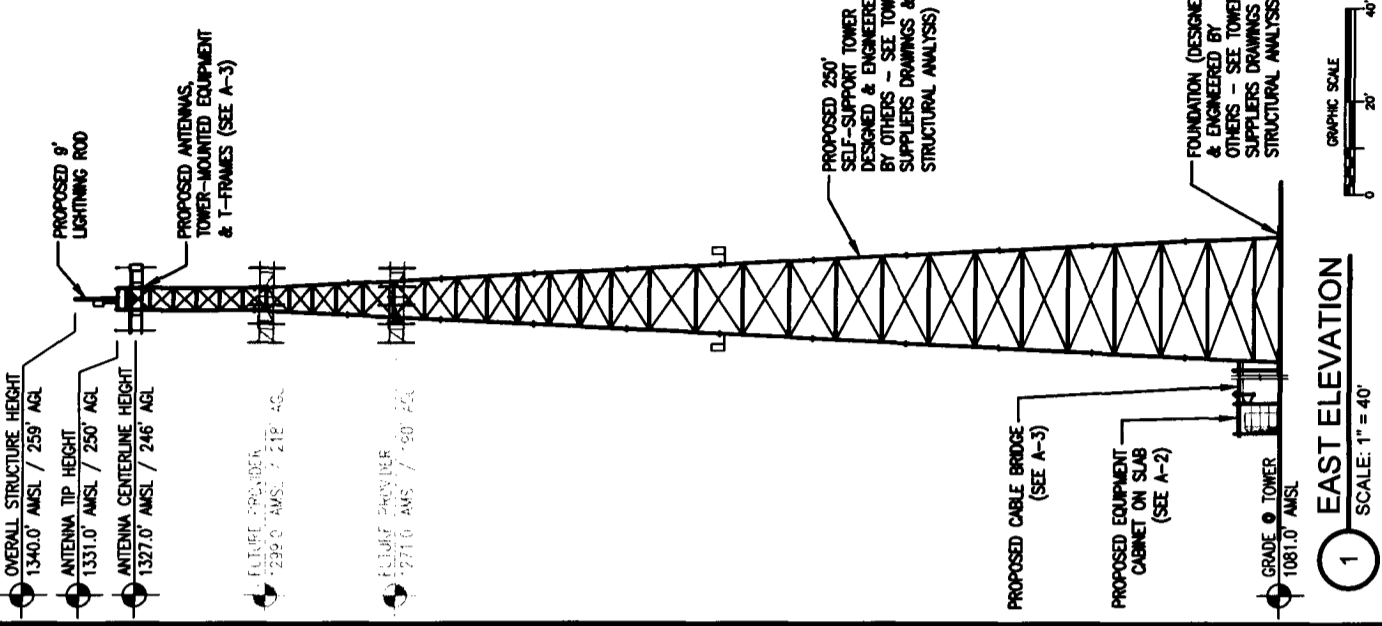
CONTACTS	
LESSOR / LICENSOR:	HOLLINGSWORTH FAMILY TRUST PAUL HOLLINGSWORTH (515) 468 1385
LESSEE:	VERIZON WIRELESS 10801 BUSH LAKE ROAD BLOOMINGTON, MN 55438 CONSTRUCTION DEPT (952) 946-4700
POWER UTILITY COMPANY CONTACT:	ALLIANT ENERGY 1001 SHAVER RD NE CEDAR RAPIDS, IA 52402 CHRIS DEVORE (641) 342-8814
TELCO UTILITY COMPANY CONTACT:	T.B.D.
DESIGNER:	DESIGN 1 OF EDEN PRAIRIE, LLC 9873 VALLEY VIEW ROAD EDEN PRAIRIE, MN 55344 (952) 903-9289
SURVEYOR:	WIDSETH 610 FILLMORE STREET - PO BOX 1028 ALEXANDRIA, MN 56308-1028 320-762-8149
STRUCTURAL ENGINEER:	N/A
GEOTECHNICAL ENGINEER:	T.B.D.

NOTE:

- NO STRUCTURAL DESIGN FOR THE POLE, MOUNTS OR FOUNDATION HAVE BEEN PERFORMED AS PART OF THESE DRAWINGS. THE STRUCTURAL DESIGN FOR THE POLE, MOUNT AND FOUNDATION ARE BY THE TOWER SUPPLIER AND SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT.
- THE STRUCTURAL DESIGN FOR THE MOUNTS SHALL BE PER THE VERIZON NETWORK STANDARD NSD-445. ALL LOADING AND DESIGN SHALL BE PER THE IA-222-H STANDARD.
- THE DESIGNER/FOR MAKES NO WARRANTY, EXPRESSED OR IMPLIED, OF THE ACCURACY OF THE STRUCTURAL DESIGN AND THE PERFORMANCE OF THE COMPLETED CONSTRUCTION AS SHOWN ON THESE DOCUMENTS AND THE STRUCTURAL DESIGN.

TOWER ELEVATION

- NOTE:**
- TOWER TO BE ERRECTED AND INSTALLED IN ACCORDANCE WITH TOWER MANUFACTURER'S DRAWINGS NOT INCLUDED WITH THIS PACKAGE. DISCREPANCIES BETWEEN TOWER DRAWINGS AND DESIGNER DRAWINGS TO BE REPORTED TO VERIZON WIRELESS AND THE DESIGNER IMMEDIATELY.
 - TOWER FOUNDATION, EQUIPMENT SLAB FOUNDATION, GENERATOR FOUNDATION, AND THE ACCESS DRIVE TO BE EXCAVATED AND CONSTRUCTED IN ACCORDANCE WITH RECOMMENDATIONS AND SPECIFICATIONS OF THE GEOTECHNICAL REPORT WHICH IS NOT INCLUDED IN THIS PACKAGE. DISCREPANCIES BETWEEN THE REPORT AND THE OTHER DOCUMENTS TO BE IMMEDIATELY REPORTED TO VERIZON WIRELESS AND THE DESIGNER.
 - CONTRACTOR TO ENSURE TIP OF ANTENNAS DO NOT EXCEED TOWER HEIGHT.
 - ELEVATION IS SHOWN FOR DIAGRAMMATIC PURPOSES ONLY. DO NOT SCALE



HERZOG
ENGINEERING LLC
530 North 3rd Street, Suite 230
Minneapolis, MN 55401
(612) 844-1234

JOSHUA HERZOG
20456
IOWA

01/17/2022

STRUCTURAL #. 221009

DESIGN 1
9873 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
(952) 903-9289
WWW.DESIGN1EP.COM

verizon
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT
20202126631
LOC. CODE: 629598

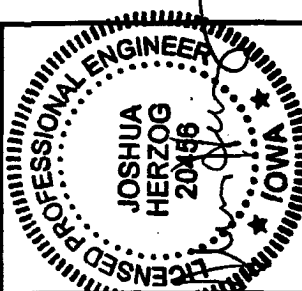
IA07
EAST PERU
285TH LN
EAST PERU, IA 50222

SHEET CONTENTS:	
CONTACTS	
ISSUE SUMMARY	
SHEET INDEX	
DEPARTMENTAL APPROVALS	
LESSOR APPROVAL	
PROJECT INFORMATION	
AREA & VICINITY MAPS	
GENERAL NOTES	
DRAWN BY:	CJW
DATE:	12-06-21
CHECKED BY:	TRB
REV. A	12-13-21
REV. B	01-17-22

T-1



HERZOG
ENGINEERING LLC
530 North 3rd Street, Suite 230
Minneapolis, MN 55401
(612) 944-1234



01/17/2022

STRUCTURAL #: 221009



9973 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
(952) 903-9299
WWW.DESIGNEP.COM



10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT
20202126631
LOC. CODE: 629598

IA07
EAST PERU

285TH LN
EAST PERU, IA 50222

SHEET CONTENTS:
SITE PLAN
DETAIL INDEX

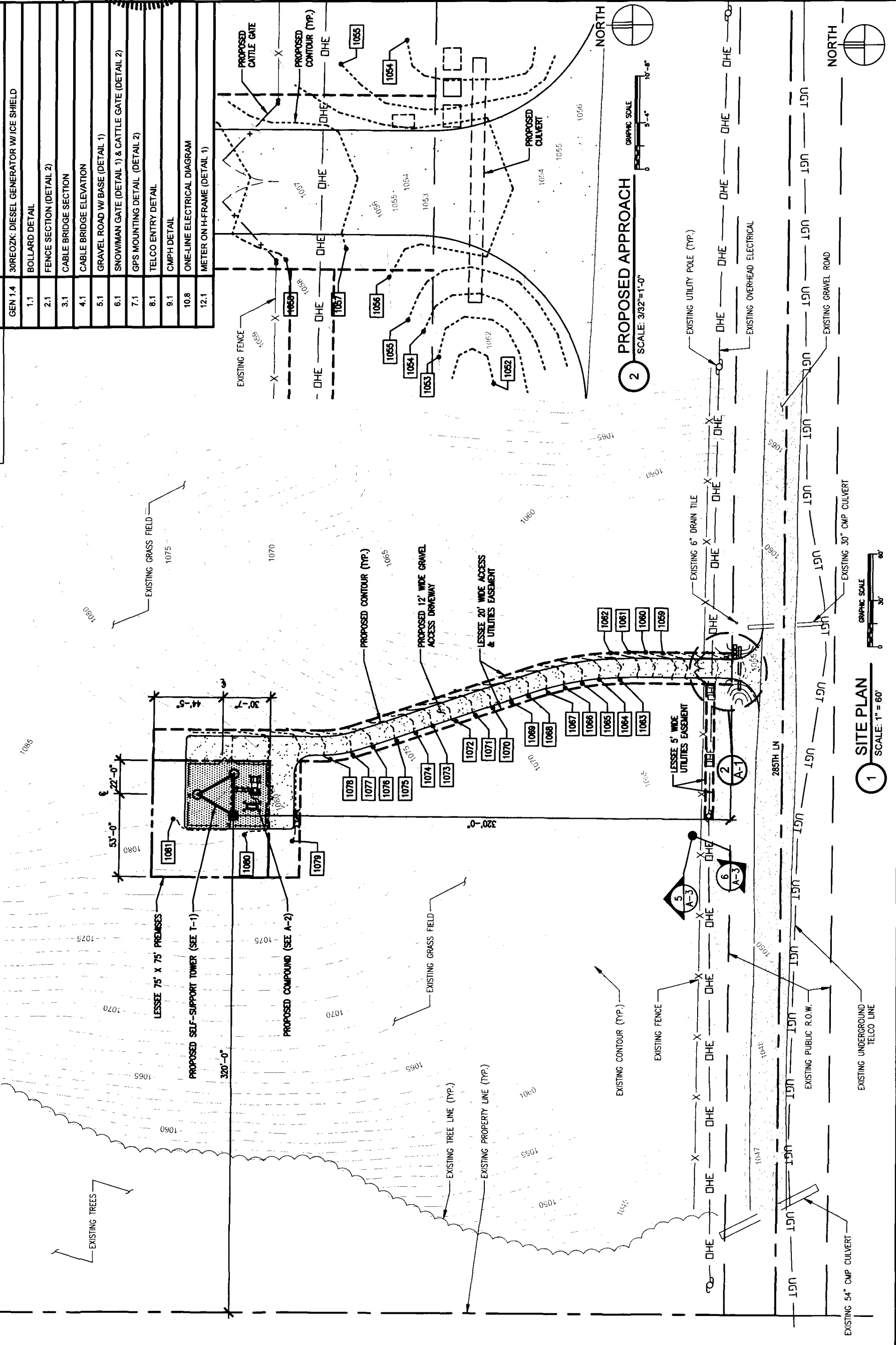
DRAWN BY:	CJW
DATE:	12-08-21
CHECKED BY:	TRB
REV. A	12-13-21
REV. B	01-17-22

A-1

DETAIL INDEX

DETAIL	DETAIL DESCRIPTION
SLAB	SLAB WITH 3 CABINETS
GEN 1.4	30REOZK: DIESEL GENERATOR W/ICE SHIELD
1.1	BOLLARD DETAIL
2.1	FENCE SECTION (DETAIL 2)
3.1	CABLE BRIDGE SECTION
4.1	CABLE BRIDGE ELEVATION
5.1	GRAVEL ROAD W/ BASE (DETAIL 1)
6.1	SNOWMAN GATE (DETAIL 1) & CATTLE GATE (DETAIL 2)
7.1	GPS MOUNTING DETAIL (DETAIL 2)
8.1	TELCO ENTRY DETAIL
9.1	CMPH DETAIL
10.8	ONE-LINE ELECTRICAL DIAGRAM
12.1	METER ON H-FRAME (DETAIL 1)

GENERATOR TYPE:
DIESEL
FROST DEPTH
DESIGN = 3'-6"



2 PROPOSED APPROACH
SCALE: 3/32"=1'-0"

1 SITE PLAN
SCALE: 1"=60'

HERZOG
ENGINEERING LLC
530 North 3rd Street, Suite 230
Minneapolis, MN 55401
(612) 844-1234

JOSHUA HERZOG
20456
IOWA
LICENSED PROFESSIONAL ENGINEER

STRUCTURAL # 221009
01/17/2022

DESIGN 1
8973 VALLEY VIEW RD.
EDEN PRARIE, MN 55344
(612) 903-9288
WWW.DESIGN1EP.COM

10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(612) 946-4700

PROJECT
20202126631
LOC. CODE: 629598

IA07
EAST PERU
285TH LN
EAST PERU, IA 50222

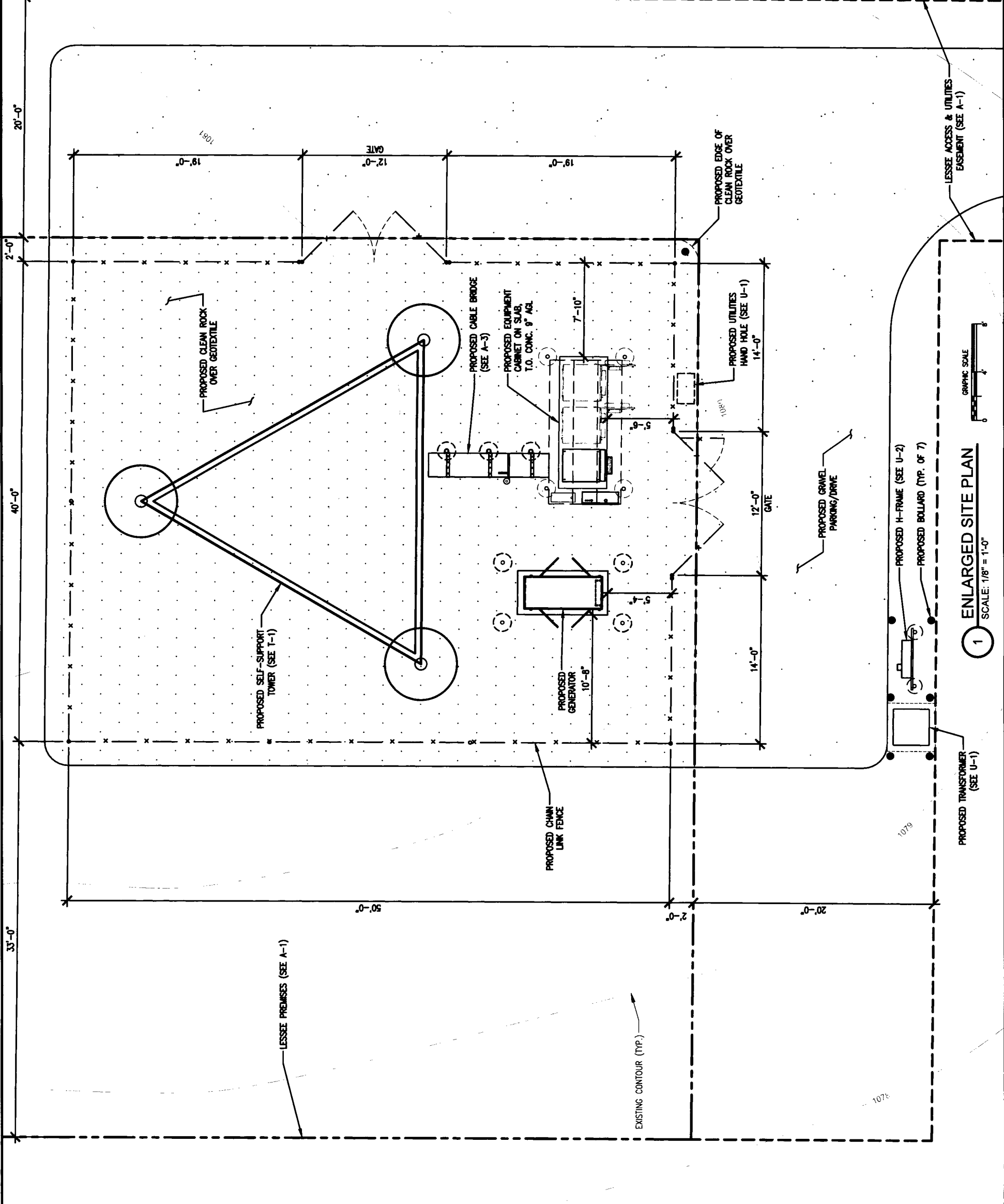
SHEET CONTENTS:
ENLARGED SITE PLAN

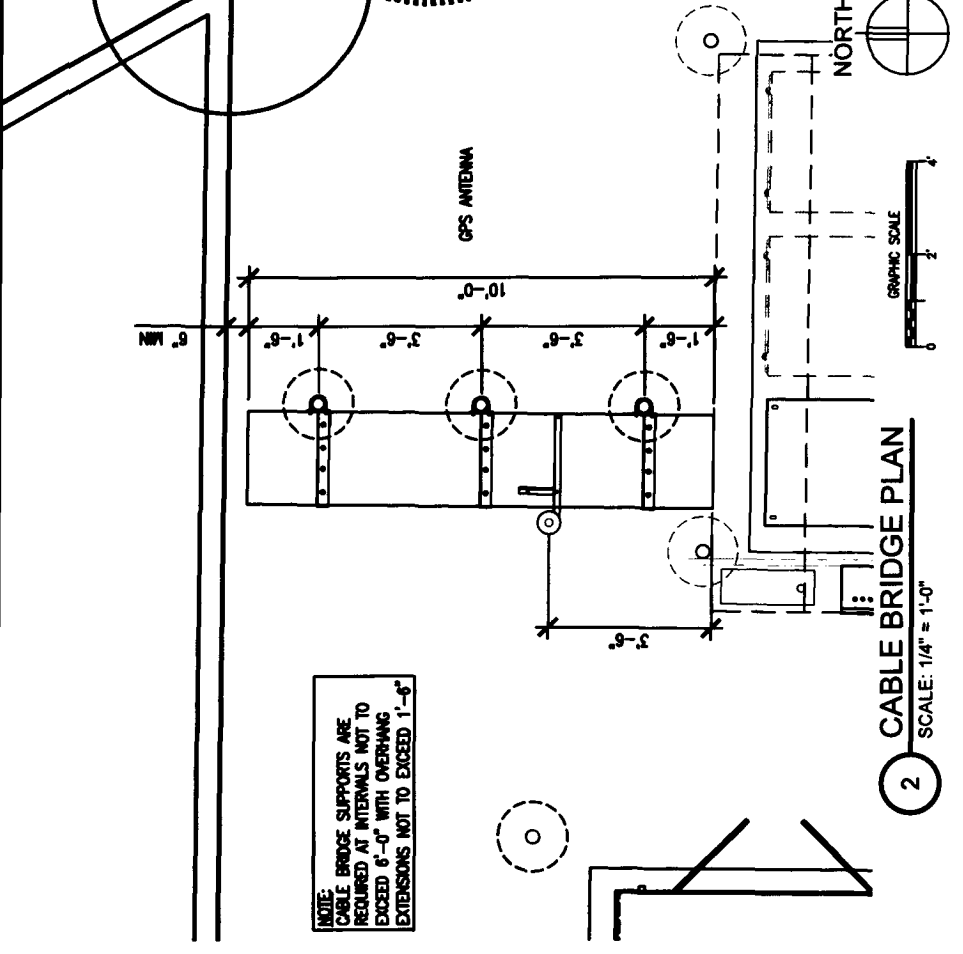
DRAWN BY:	CJW
DATE:	12-06-21
CHECKED BY:	TRB
REV. A	12-13-21
REV. B	01-17-22

A-2

NOTE:
CONTRACTOR TO COORDINATE PUBLIC & PRIVATE UTILITY LOCATIONS PER STATE LAW PRIOR TO EXCAVATION. EXISTING UTILITY LINES DEVIATING FROM THAT SHOWN HEREIN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER & VZW CONSTRUCTION ENGINEER.

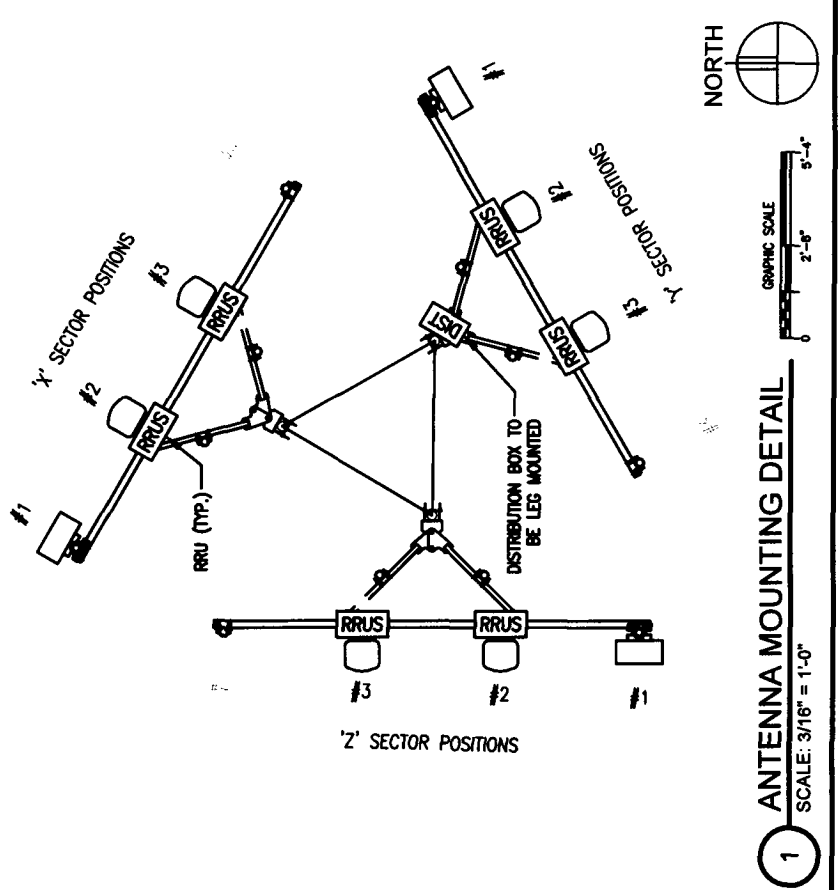
NOTE:
SEE A-1 FOR CONTOUR PLAN





NOTE:
 CABLE BRIDGE SUPPORTS ARE
 REQUIRED AT INTERVALS NOT TO
 EXCEED 6'-0" WITH OVERHANG
 EXTENSIONS NOT TO EXCEED 1'-6"

NOTE:
 ANTENNA FRAME MAKE AND MODEL T.B.D.
 CONTRACTOR TO SUPPLY:
 (12) 2.5" x 8.5" LONG SCHEDULE
 40 GALVANIZED MOUNTING PIPES

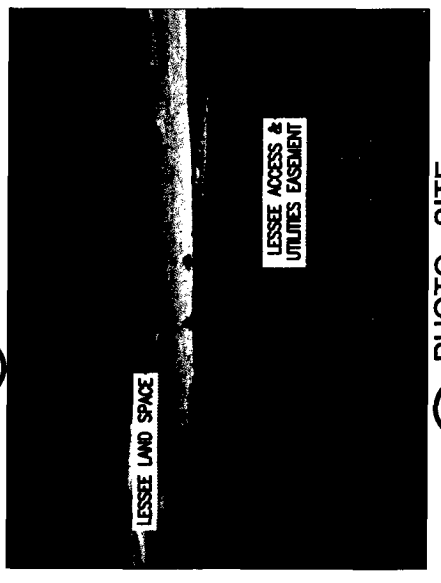


ANTENNA KEY				EQUIPMENT KEY								
AZIMUTH	POSITION	FUNCTION	QTY	MANUFACTURER	MODEL	MOD TYPE	ANTENNA LENGTH	ANTENNA TIP	ANTENNA CENTER	ELEC DOWN	MECH DOWN	RRU PORT
30°	1.1	TX/RX1	1	ERICSSON	AR6449	C-BAND	30.4'	247.3'	246'	6'	0'	-
	1.2	TX/RX2	-	-	-	C-BAND	-	-	-	-	-	-
	2.1	TX/RX1	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	1
	2.2	TX/RX2	-	-	-	700/850	-	-	-	-	-	2
	2.3	TX/RX1	-	-	-	AWS/AWS3	-	-	-	-	-	1
	2.4	TX/RX2	-	-	-	AWS/AWS3	-	-	-	-	-	2
30°	2.5	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	3
	2.6	TX/RX4	-	-	-	AWS/AWS3	-	-	-	-	-	4
	3.1	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	3
	3.2	TX/RX4	-	-	-	700/850	-	-	-	-	-	4
	3.3	TX/RX1	-	-	-	PCS	-	-	-	-	-	5
	3.4	TX/RX2	-	-	-	PCS	-	-	-	-	-	6
150°	3.5	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	7
	3.6	TX/RX4	-	-	-	PCS	-	-	-	-	-	8
	1.1	TX/RX1	1	ERICSSON	AR6449	C-BAND	30.4'	247.3'	246'	6'	0'	-
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150°	2.3	TX/RX1	-	-	-	AWS/AWS3	-	-	-	-	-	1
	2.4	TX/RX2	-	-	-	AWS/AWS3	-	-	-	-	-	2
	2.5	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	6'	3'	3
	2.6	TX/RX4	-	-	-	AWS/AWS3	-	-	-	-	-	4
	3.1	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	6'	3'	3
	3.2	TX/RX4	-	-	-	700/850	-	-	-	-	-	4
270°	3.3	TX/RX1	-	-	-	PCS	-	-	-	-	-	5
	3.4	TX/RX2	-	-	-	PCS	-	-	-	-	-	6
	3.5	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	7
	3.6	TX/RX4	-	-	-	PCS	-	-	-	-	-	8
	1.1	TX/RX1	1	ERICSSON	AR6449	C-BAND	30.4'	247.3'	246'	6'	0'	-
	1.2	TX/RX2	-	-	-	C-BAND	-	-	-	-	-	-
270°	2.1	TX/RX1	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	1
	2.2	TX/RX2	-	-	-	700/850	-	-	-	-	-	2
	2.3	TX/RX1	-	-	-	AWS/AWS3	-	-	-	-	-	2
	2.4	TX/RX2	-	-	-	AWS/AWS3	-	-	-	-	-	2
	2.5	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	3
	2.6	TX/RX4	-	-	-	AWS/AWS3	-	-	-	-	-	4
270°	3.1	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	3
	3.2	TX/RX4	-	-	-	700/850	-	-	-	-	-	4
	3.3	TX/RX1	-	-	-	PCS	-	-	-	-	-	4
	3.4	TX/RX2	-	-	-	PCS	-	-	-	-	-	5
	3.5	TX/RX3	1	JMA WIRELESS	MX08FTB85-02	700/850	96"	250'	246'	2'	0'	6
	3.6	TX/RX4	-	-	-	PCS	-	-	-	-	-	7
<p>4 ANTENNA KEY</p> <p>1) DISTRIBUTION BOX, MODEL RVZDC-6627-PF-48 (ON TOWER) 2) DISTRIBUTION BOX, MODEL RVZDC-4520-RM-48 (IN CABINET) 3) COMMSCOPE HYBRID JUMPER, MODEL HFT1206-24SV2-270 (DIST BOX IN CABINET TO DIST BOX ON TOWER) 4) COMMSCOPE HYBRID JUMPER, MODEL HFT1410-4SHY-15 (DIST. BOX TO RRU) 5) COMMSCOPE HYBRID JUMPER, MODEL HFT1410-3SBJ1-15 (DIST. BOX TO ANTENNA) 6) ANDREW COAX JUMPER, MODEL LDF4-50A, 1/2" FOAM DIELECTRIC, 10' EACH (RRU TO ANTENNA) 7) DC-DC UP-CONVERTER 8) UP-CONVERTER MODULES</p>												

CABLE BRIDGE = 10'
 RAD CENTER = 246'
 CANOPY = 14'
 TOTAL = 270'

3 EQUIPMENT KEY

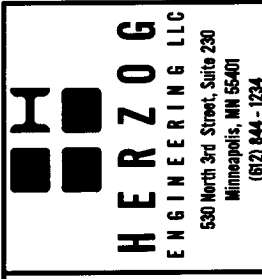
5 PHOTO - SITE
 VIEW: LOOKING NORTH



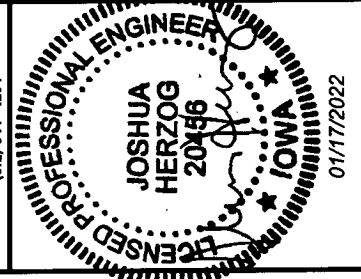
4 ANTENNA KEY



6 PHOTO - APPROACH
 VIEW: LOOKING SOUTHEAST



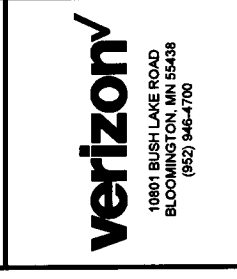
HERZOG
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JOSHUA HERZOG
20146
IOWA
LICENSED PROFESSIONAL ENGINEER
01/17/2022



DESIGN 1
9873 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
(852) 903-8299
WWW.DESIGN1EP.COM



verizon
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(952) 946-4700

PROJECT
20202126631
LOC. CODE: 629598

IA07
EAST PERU

285TH LN
EAST PERU, IA 50222

SHEET CONTENTS:
OUTLINE SPECIFICATIONS

DRAWN BY:	CJW
DATE:	12-06-21
CHECKED BY:	TRB
REV. A	12-13-21
REV. B	01-17-22

A-4

OWNER-FURNISHED EQUIPMENT & FEES

- GENERATOR
- SELF-SUPPORT TOWER
- ANTENNA FRAMES
- CABINETS
- COAX AND/OR CABLES
- ANTENNAS & DOWNTILT BRACKETS
- GPS & GPS MOUNTING
- BUILDING PERMIT FEES
- MATERIALS TESTING FEES
- SPECIAL INSPECTIONS FEES

CONTRACTOR-FURNISHED EQUIPMENT

- POWER TO SITE
- TELECOM TO SITE
- CABLE BRIDGE & ICE SHIELDS
- GROUNDING MATERIALS
- FENCING
- CONNECTORS, BOOTS, & RELATED HARDWARE

SCOPE OF WORK:

CONTRACTOR SHALL PROVIDE MATERIALS, LABOR, TOOLS, TRANSPORTATION, SUPERVISION, ETC. TO FULLY EXECUTE WORK. WORK REQUIREMENTS ARE DETAILED ON THE DRAWINGS AND SPECIFICATIONS AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

SITE PREPARATION

- EQUIPMENT SLAB, GENERATOR, & TOWER FOUNDATIONS
- SET EQUIPMENT CABINETS, SET GENERATOR, & ERECT TOWER
- ROUTING OF GROUND, POWER, FIBER & ALARM
- SITE GROUNDING
- ELECTRICAL & TELEPHONE SERVICES
- INSTALL ANTENNAS & CABLES
- CABLE BRIDGE & ICE SHIELDS
- GRAVEL SURFACING & FENCING

Contractor to compare drawings against Owner's "Request for Quote", (RFQ). If discrepancies arise, Contractor shall verify with Owner that the RFQ supersedes the drawings.

METALS

- 05 0000 METALS
Contractor will furnish and install steel shapes and fabricated steel items not specifically furnished by Owner, and install Owner-furnished materials. Fabrication and erection of steel items per AISC standards. Welding shall conform to AWS standards. Fabrications shall be shop welded and galvanized before delivery to site unless noted otherwise.
Steel shapes shall meet ASTM A36 and steel pipe ASTM A53 Grade B. Steel shapes and fabrications shall be hot-dip galvanized per ASTM A123 with minimum coating thickness Grade 55 (2.2 mil). Bolts shall meet ASTM F3125 and U-bolts SAE J429 Grade 5 minimum. Bolts and hardware to be hot-dip galvanized per ASTM A153. Field repair of galvanized coatings shall be per ASTM A780.

WOOD & PLASTICS

N/A

THERMAL & MOISTURE

N/A

DOORS AND HARDWARE

N/A

FINISHES

- 09 9000 PAINTING
Contractor shall provide materials and labor for oil painting indicated in the architectural documents and shall touch-up construction related scrapes & scratches with appropriate paint.

SPECIAL CONSTRUCTION

- 13 1260 CABLE BRIDGE, CANOPY, & ICE SHIELDS
Contractor shall furnish & install materials for the Cable Bridge as indicated on the drawings and Verizon Wireless Standard Details.
Contractor shall furnish & install materials for the Ice Shields as indicated on the Drawings & Verizon Wireless Standard Details.

13 1400 ANTENNA INSTALL

Contractor shall install Owner's antennas and feed lines during erecting. Contractor shall test and certify feed lines per current VZW standards.

13 3423 TRANSPORT AND SET EQUIPMENT CABINETS/GENERATOR

Contractor shall provide crane(s) and/or truck for transporting, setting and erecting Equipment Cabinets/Generator per RFQ. Contractor shall install items shipped loose with the Equipment Cabinets/Generator including, but not limited to, the following: anchoring plates; stair assemblies; exterior lighting; canopies; guardrails; and buss bar.

13 3613 TRANSPORT AND ERECT TOWER/ANTENNA MOUNTS

Contractor shall schedule delivery of Owner-furnished Tower, and provide cranes for unloading and erecting. Contractor to install antenna mounts. Contractor shall ensure the existence of a 3/8" cable safety climb (DBI/Sala or equid) on the Tower.

MECHANICAL

15 4000 PLUMBING

N/A

15 5000 HVAC

N/A

ELECTRIC

16 5000 LIGHTING AND ELECTRICAL

Contractor shall provide labor and materials as necessary to complete the work shown on Drawings including items shipped loose with the Equipment Cabinets/Generator assembly.

16 6000 GROUNDING

Contractor shall make themselves familiar with and follow the current GROUNDING STANDARDS OF VERIZON WIRELESS. Contractor shall perform work as shown on Grounding Plans. Any site-specific grounding issues not covered by the GROUNDING STANDARDS are to be addressed by the Contractor to the Owner.

02 7800 POWER TO SITE
Contractor shall coordinate the electrical service to the building with the Utility Provider. Conducts shall include pull strings. Underground conduits shall be 2-1/2" Schedule 40 PVC. (schedule 80 PVC under roads and drives) Cable to be 3/0 THWN CU. Trenches shall be backfilled in a timely fashion, using a compactor, and including two (2) detectable ribbons; one each at 3" and 15" above conduit. Service shall be 200 amp, single phase, 120/240 volt. Service type shall be "General Time-Of-Day" if available, and meter base shall be approved by utility provider.
Contractor to provide and install expansion joint sleeve connections to prevent differential movement at utility connections.

02 7900 TELCO TO SITE

Contractor shall provide 2" SDR-11 HDPE conduit for fiber conduit as noted on Drawings when directional boring is utilized. Contractor shall provide 2" schedule 40 PVC conduit, and 2" schedule 80 PVC conduit under roadways with large-sweep elbows for fiber conduit as noted on Drawings when hand trenched. Trenches shall be as in 02 7800.

Contractor to provide and install handholes as noted in the Drawings. Additional handholes shall be provided and installed at a maximum of 500 feet on center; at 90° bends if directional boring; and every third bend if hand trenched. Handholes size per Drawings and traffic-rated in roadways.
Contractor to provide and install expansion joint sleeve connections to prevent differential movement at utility connections.

02 8000 SITE IMPROVEMENTS

Areas bounded by fence and adjacent to Equipment Cabinets shall receive polyethylene geotextile, 200 mesh woven, topped with 3" deep 3/4" to 1 1/2" clean rock (no fines), raked smooth.

02 8001 FENCING

All fence materials and fittings shall be galvanized steel. Fence shall be 6'-0" high x 9 ga. X 2" chain link fabric, w/ 7 ga. bottom tension wire. Corner and Gate posts shall be 2 7/8" O.D. sch 40 steel pipe, driven 54" below grade. Line posts shall be 2 3/8" O.D. sch 40 steel pipe. Top Rails shall be 1 5/8" O.D. steel pipe. Gate frames shall be 1 5/8" O.D. welded pipe. Fence top shall be three (3) strands barbed wire to 7'-0" above grade, canted outward. Bracing shall be 3/8" truss rods and 1 5/8" O.D. pipe mid-rails at corners. Gate latch shall be commercial grade, "Cargo" or equal. Fabric shall extend to within 1" of finish grade. Fence enclosures shall be completed within 7 days of tower erecting and Contractor shall provide for temporary security fence at base of Tower. Existing fences shall be protected against damage during this work, and any damage that may occur shall be repaired or replaced to equal existing pre-construction condition. Galvanized cattle gate to be provided and installed per drawings and in accordance with the manufacturing recommendations and specifications.

02 8500 IRRIGATION SYSTEMS

N/A

02 9000 LANDSCAPING

N/A

CONCRETE

03 1000 CONCRETE FORMWORK

Concrete forms shall be dimensional lumber, modular, or steel.

03 8000 TOWER FOUNDATION

Contractor shall arrange for delivery of anchors, and shall furnish and install materials per Tower Manufacturer Plans. Tower foundation concrete and reinforcing to be per lower manufacturer's specification. Contractor shall comply with the Owner's Standard CONSTRUCTION SPECIFICATIONS MINIMUM CONCRETE STANDARDS.

03 8001 CATHODIC PROTECTION

N/A

03 9000 EQUIPMENT CABINETS/GENERATOR FOUNDATION

Contractor shall furnish & install materials for Equipment Cabinets/Generator foundation. Concrete shall be 6% ±1% air entrained, and 4,000 psi at 28 days. All reinforcing steel is to be Grade 60 (ASTM 615). Anchor bolts are furnished by Contractor. Contractor shall comply with the Owner's Standard CONSTRUCTION SPECIFICATIONS MINIMUM CONCRETE STANDARDS.

MASONRY

N/A

GENERAL CONDITIONS
00 0001 PERMITS
Construction Permit shall be acquired by, or in the name of, Verizon Wireless, to be hereinafter referred to as the OWNER. Other permits shall be acquired by the Contractor.
00 0002 SURVEY FEES
Survey shall be furnished by the Designer. Layout Staking shall be coordinated with the Surveyor per "Request For Quote", (RFQ).

01 0010 INSURANCE & BONDS
Contractor is to furnish insurance certificates for themselves and subcontractors. Contractor will provide any required Bonding. Contractor agrees to warranty the project for (1) one year after completion.

01 0400 SUPERVISION & COORDINATION
Contractor shall provide supervision throughout the Project, coordinating the work of the Subcontractors, and delivery & installation of Owner-furnished items. Contractor's responsibilities include arranging & conducting of Underground Utilities Locates. Contractor shall comply with municipal, county, state and/or federal codes, including OSHA.

01 0600 TESTING
Contractor is responsible for providing Agencies with sufficient notice to arrange for Test Samples (i.e.: Concrete Cylinders), and for Special Inspections.

01 2000 MEETINGS
Contractor shall make themselves aware of, and attend, meetings with the Owner and/or Designer. Contractor is to attend a Pre-Construction Meeting of all parties involved, prior to the start of construction.

01 5100 TEMPORARY UTILITIES
Contractor shall maintain the job site in a clean and orderly fashion, providing temporary sanitary facilities, waste disposal, and security (fence area or trailer module).

01 5300 EQUIPMENT RENTAL
Contractor shall furnish equipment necessary to expedite work.

01 5900 FIELD OFFICES & SHEDS
Contractor shall provide security (fence area or trailer module) for tools and materials that remain overnight on site.

01 7000 CLEAN UP & CLOSE OUT
Contractor shall clean up the Site to the satisfaction of Owner. Contractor shall complete the items listed on the Owner's Punch List, and shall sign and return the List to the Owner. Contractor shall maintain a set of drawings during the job, on which changes shall be noted in red ink. A full set of redlined drawings (As-Builts) are to be given to the Designer at job completion and submit "construction work complete memo" to Construction Engineer.

01 8000 TRUCKS & MILEAGE
Contractor shall provide transportation for their own personnel.

01 8300 TRAVEL TIME & PER DIEM
Contractor shall provide room and board for their own personnel, and reasonable time for traveling to & from job site.

01 9200 TAXES
Contractor shall pay sales and/or use tax on materials and taxable services.

SITING
02 1000 SITE PREPARATION
Contractor is to mobilize within 7 calendar days of the Owner issuing a 'START' document. Contractor will immediately report to Designer if any environmental considerations arise. Site shall be scraped to a depth of 3" minimum to remove vegetative matter, and scrapings shall be stockpiled on site. Excess material to be disposed of in accordance with RFQ.

02 1100 ROAD IMPROVEMENT & CONSTRUCTION
Contractor shall furnish materials for, and install, a twelve foot (12') wide gravel roadway from the road access to the work area, for truck and crane access to site. Base course shall be 6" deep, 3" + crushed rock, topped with 3" deep, 1 1/2" crushed rock, topped with 3" deep IA Class A 13 Aggregate, (3/4" minus with binder) or Driveway Mix. Contractor shall furnish & install culverts as necessary to prevent ponding or washing-out from normal surface runoff. Contractor shall obtain city, county, state and/or federal approvals for road approach and culvert work within or adjacent to right-of ways. Road shall be graded smooth, and edges dressed, at job completion.

02 2000 EARTHWORK & EXCAVATION
Excavation material shall be used for surface grading as necessary; excess to be stockpiled on site. Excess material to be disposed of in accordance with RFQ. For dewatering excavated areas, contractor shall utilize sock or sediment filter for filtering of water discharge.

02 5000 PAVING & SURFACING
Gravel paving shall be as described in 02 1100.

GENERAL GROUNDING NOTES:

An external buried ground ring (Lead 1) shall be established around the equipment cabinets and tower foundations. Lead 1 shall be kept 24" from foundations; if foundations are less than 48" apart, keep Lead 1 centered between them. If the tower base is over 20'-0" from the equipment cabinets, a separate Lead 1 shall be established around each foundation, and the two Lead 1s shall be bonded with two parallel leads at least 6 feet apart horizontally. Connections between the two Lead 1s shall be bi-directional.

All subgrade connections shall be by exothermic weld, brazed weld, or gas-tight UL467-listed compression fittings pre-filled with anti-oxidant compound. Subgrade connections shall not be 'cold galvanize', coated.

Lead 1 shall be #2 solid bare tin-clad (SBTC) copper wire buried at local frost depth. Lead 1 bends shall be minimum 24" radius. 'Whip' lead bends may be of 12" radius.

Ground rods shall be galvanized steel, 5/8", spaced twenty feet apart, or as shown. Rods shall be kept min. 24 inches from foundations. Ground rods are required to be installed at their full specified length. Depth shall be as shown in Detail 11.1 in the Verizon Wireless Standard Detail Booklet.

SPECIAL CONSIDERATIONS FOR GROUND RODS:

When ground rods are not specified to be backfilled w/ Bentonite Slurry; if boulders, bedrock, or other obstructions prevent driving of ground rods, the Contractor will need to have drilling equipment bore a hole for ground rod placement. Hole to be backfilled w/ Bentonite Slurry.

When specified with slurried Bentonite encasement, drilling equipment will be used to be used to be bore a hole for ground rod placement. Slurry shall be made from pelletized material ("Grounding Gravel"); powdered Bentonite is not allowed. If boulders, bedrock, or other obstructions are found, Contractor shall drill to the specified depth and provide Bentonite encasements.

Above-grade connections shall be by lugs w/ two-hole tongues unless noted otherwise, joined to solid leads by welding (T&B 5-4856BE "BROWN"), self-threading (RECOGNIZED, EM 2522DH.75.312), or 10,000psi crimping (BURNDY YA3C 2TC 14E2). Surfaces that are galvanized or coated shall have coating(s) removed prior to bolting. Bolts shall be stainless steel with flat washers on each side of the connection and a lock washer beneath the fastening nut. Star-tooth washers shall be used between lug & dissimilar metal (copper-to-steel, etc) but are not required between tin-clad CU lugs & tin-clad CU bus bars. Lug tongues shall be coated with anti-oxidant compound, and excess compound wiped clean after bolting. The connection shall then be coated with cold-galvanizing compound, or with color-matching paint.

Ground bars exposed to weather shall be tin-clad copper, and shall be clean of any oxidation prior to lug bolting.

Galvanized items shall have zinc removed within 1" of weld area, and below lug surface contact area. After welding or bolting, the joint shall be coated with cold galvanizing compound.

Ground Bar leads

Ground bars are isolated electrically from tower bottoms and equipment cabinets by their standoff mounts. Leads from each ground bar to the ground ring shall be a pair of #2 SBTC, each connected to Lead 1 bi-directionally with #2 SBTC jumpers. Pairs of #2 SBTC may be required between ground bars. Leads shall be routed to ground bars as follows:

- The Main Ground Bar (MGB), typically mounted adjacent to the ILC (location varies).
 - The Port Ground Bars (PGB), mounted inside and outside on the equipment shelter walls beneath the transmission line port.
 - Note: Transmission line grounds also attach to the PGBs.
 - The Tower Ground Bar (TGB) mounted at the base of the tower. Note: Transmission line grounds also attach to the TGBs.
- NOTE: Contractor shall confirm that TGBs exist at 75-foot vertical intervals on any guyed or self-support tower, and that transmission lines are grounded to each TGB. Only the bottom-most TGB is isolated from the tower steel frame; upper TGBs may use the tower steel frame as common ground, requiring no copper leads between TGBs.

#2 SBTC Whip leads

'Whip' leads shall connect the buried external ground ring to the following items:

Monopole Towers:
 * Three whips to flanges on the monopole base, at least 90° apart. If none are provided, attach to the baseplate or consult tower manufacturer.

Self-Support Towers:
 * Two whips to flange(s) on each tower leg base. If none are provided, attach to the baseplate or consult tower manufacturer.

Guyed Towers:
 * Two whips to flange(s) on the tower base. If none are provided, attach to the baseplate or consult tower manufacturer.
 * Establish a Lead 1 within the fence enclosure of each guy anchor, at least 40 foot perimeter and having 4 ground rods.
 * #2 SBTC leads shall extend up, and be clamped (brass clamsheel or equal), to any two guy wires. NEVER weld leads to the guy wires. The lead to the guy anchor 'hand' plate may be welded.

Fences:
 Metallic fence within 25 feet of tower Lead 1, or within 6 feet of shelter lead 1, shall have whip leads as follows:
 * Each corner post.
 * Any line post over 20'-0" from a grounded post.
 * Each gate leaf to its respective gatepost using braided strap (3/4", tin-clad copper w/ lug ends).
 * Fences around guy anchors shall be grounded in similar fashion.

Fuel Tanks:
 NEVER WELD to any fuel enclosure. NEVER penetrate the fuel containment. Metal tanks shall have one whip lead attached. Use an approved clamp or two-hole lug on an available flange.

Equipment Shelter/Platform and Other General Requirements (including but not limited to):

- Extend new Lead 21B up to shelter halo, remaining two-way connections as needed. Generator-equipped shelters have 6 such connections. Connections within the shelter shall be by compression; NEVER weld inside the shelter.
- Each vertical support pipe of the exterior cable bridge. Bridge end shall be kept at least 6" from the tower structure. The cable bridge shall be jumpered to the vertical support pipes with #2 SBTC at each vertical support pipe.
- Opposite corners of the steel equipment platform.
- Opposite corners of the roof shield over the equipment shelter.
- Each HVAC unit shield, if separate (may be 'jumpered' to main roof shield).
- Each HVAC package unit.
- Commercial electric meter box.
- Generator receptacle, if present.
- Steel building skid, if shelter is metal frame.
- Each air intake or exhaust fan vent louver.
- Each generator vent hood or louver.
- Generator exhaust stack, external.
- Opposite corners of generator support frame, if separate from shelter.
- Generator fuel tank, if separate from generator unit.
- Host building rain gutter, downspouts, and roof flashings within 25 feet.
- Telco MPOP (Main Point of Presence), if external to equipment shelter.
- Within cable vaults, one each to the ladder and to the manhole rim.

Note: The door frame is connected to the interior ground halo, and need no separate connection to the external ground ring.

Inspection & Testing

Test lead #1 and ground rods after installation but before backfilling or connecting to any other grounding. Contractor using the 3-point fall of potential method. Contractor to notify Verizon Wireless senior construction engineer at least 48 hours prior to testing. Document installation and test results with photographs.

SYMBOL AND NOTE LEGEND

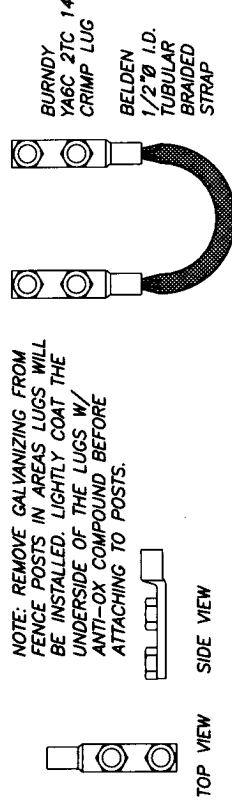
- ① #2 SBTC AROUND EQUIPMENT CABINETS, TOWER, OR GUY ANCHOR
- ② 5/8" X 10'-0" GALVANIZED STEEL GROUND ROD
- ③ TEST WELL PREFERRED LOCATION
- ④ #2 SBTC 'WHIP' LEAD
- ⑤ (2) #2 SBTC FROM MGB, PGB, OR TGB TO LEAD 1
- ⑥ HVAC UNIT
- ⑦ BUILDING CORNER
- ⑧ BOLLARD
- ⑨ CABLE BRIDGE SUPPORT POST
- ⑩ ELECTRICAL SERVICE GROUND
- ⑪ COMMERCIAL ELECTRICAL METER
- ⑫ GUY ANCHOR PLATE
- ⑬ FENCE POST
- ⑭ GENERATOR
- ⑮ GEN
- ⑯ GPS UNIT
- ⑰ GUY WIRE, MECH. CLAMP ONLY - NO WELDS
- ⑱ HOOD OR LOUVER
- ⑲ OUTSIDE OF HOFFMAN BOX
- ⑳ INTEGRATED LOAD CENTER
- ㉑ MAIN GROUND BAR
- ㉒ GENERATOR MUFFLER
- ㉓ PORT GROUND BAR
- ㉔ FOUNDATION REINFORCING
- ㉕ ROOF SHIELD
- ㉖ STEEL BEAM
- ㉗ STEEL POST
- ㉘ STEEL PLATFORM
- ㉙ HOFFMAN BOX
- ㉚ TOWER GROUND BAR
- ㉛ TOWER BASE
- ㉜ DIESEL FUEL VENT PIPE

Contractor to provide #2 solid bare tin-clad (SBTC) copper wire lead from #1 ground ring to air conditioner & ice shield if provided by VZW.

LEAD IDENTIFICATION & DESCRIPTION:

- 1 RING, EXTERNAL BURIED w/ ROADS #2 SBTC
- 1A RING, CONCRETE ENCASED #2 SBTC
- 2 DEEP ANODE (TO IMPROVE OHMS) ROD OR PIPE
- 3 RING TO BLDG STL FRAME #2 SBTC
- 4 MAIN AC PANEL NEUTRAL BUS TO (2) GROUND
- 5 ROADS, ISOLATED FROM LEAD #1 NEC 250.66
- 6 RING TO GROUND BAR (2) #2 SBTC
- 7 RING TO EXT MTL OBJECT #2 SBTC
- 8 DEEP ANODE TO MGB NSTD33-9
- 9 AC PANEL TO WATER METER NEC 250.66
- 10 EXT WATER TO INT WATER PIPES NSTD33-9
- 11-12 INT WATER PIPE TO MGB NSTD33-9
- 13 AC PANEL TO MGB NSTD33-9
- 14 MGB/FGB TO BLDG STL FRAME #2/0 I-STR
- 15 MGB/FGB TO ROOF/WALL MTL PNL #1/0 I-STR
- 16 MGB/FGB TO FGB-HE SAME FLOOR #2/0 I-STR
- 17 NOT USED
- 18 EPOB TO CABLE ENTRY RACK #1/0 I-STR
- 19 MGB TO CABLE SHIELDING #6 I-STR
- 17A EPOB TO CABLE SHIELDING #6 I-STR
- 17B EPOB TO F-0 SPLICE SHELF #1 I-STR
- 18 LOWEST MGB/FGB TO HIGHEST FGB #2/0 I-STR
- 19 LEAD 18 TO OTHER FGBs, <6' #2/0 I-STR
- 20 MGB/FGB TO BRANCH AC PNL #6 I-STR
- 20A NEAREST GROUND TO DISCONNECT PNL NEC 250.66
- 20B GNB TO AC DISTR PNL #6 I-STR
- 21 MGB/FGB TO INT HALO #2 I-STR
- 21A INTERIOR 'GREEN' HALO #2 SBTC
- 21B INT HALO TO EXT RING #2 SBTC
- 22 ROOF TOWER RING TO ROOF GRND NFPA 780
- 23 MGB/FGB TO ECPGB, SAME FLOOR #1 I-STR
- 23A MGB/FGB TO CXR-HF LNR PROT #6 I-STR
- 24 ECPGB TO EACH PROTECTOR ASSEMBLY #6 I-STR
- 24A LOWER PROT ASSY TO UPPER #6 I-STR
- 25 RING TO NEAREST LIGHTNING ROD #2 SBTC
- 26 LIGHTING ROD SYS TO NEARBY MTL NFPA 780
- 27 RING TO TOWER RING (2) #2 SBTC
- 28 RING TO SHELTER RING (2) #2 SBTC
- 29 BRANCH AC PNL TO BITTY CHG FRM NSTD33-11
- 30 BRANCH AC PNL TO OUTLETS NSTD33-11
- 31 MGB/FGB TO PWR, BITTY FRAMES #2/0 I-STR
- 32 #31 TO BATTERY CHARGER FRAME #6 I-STR
- 33 #31 TO BATTERY RACK FRAME #6 I-STR
- 34 #31 TO PCU FRAME #6 I-STR
- 35 #31 TO DSU FRAME #6 I-STR
- 36 #31 TO PDU FRAME #6 I-STR
- 37 MGB/FGB TO RTN TERM CARR SUPP NSTD33-14.5
- 38 FGB TO PDU GB #750MCM I-STR
- 38A FGB TO PDU GB CARRIER SUPPLY #2/0 I-STR
- 39 DC BUS DUCT TO NEXT SECTION #6 I-STR
- 40 DC BUS DUCT TO MGB/FGB #6 I-STR
- 41A MGB/FGB TO #58 #2/0 I-STR
- 42-44 NOT USED
- 45 MAIN AC PNL TO BRANCH AC PNL NSTD33-11
- 46 BRANCH AC PNL TO DED OUTLET NSTD33-11
- 47 FGB TO INTEG FRM #2 I-STR
- 48 LEAD #31 TO INTEG FRM #6 I-STR
- 49 INTEG FRM TO EQUIP SHELF BY FASTENERS #2/0 I-STR
- 50 PDU BITTY RET TO #51 #6 I-STR
- 51 #50 TO TRANS FRM ISO DC PWR #6 I-STR
- 52 TRANS FRM FUSE TO FRM OR BAR #8 I-STR
- 53A MGB/FGB TO PDF/BDPB NSTD33-22
- 54 MGB/FGB TO STATIC DEVICES #6 I-STR
- 55 MGB/FGB TO CABLE AT ENTRY #6 I-STR
- 56 MGB/FGB TO AC PWR RADIO XMTR #2/0 I-STR
- 57A MGB/FGB TO CBL GRID/RUNWAY #2/0 I-STR
- 58A #41A TO ASLE FRAME #2 I-STR
- 59A #58A TO EACH SGL FRAME GRND #6 I-STR
- 60-69 NOT USED
- 90 GENERATOR FRAME TO EXT RING #2 SBTC

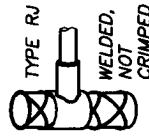
NOTE: GENERAL CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THAT THE INSTALLATION OF ALL GROUNDING MEETS THE VERIZON NETWORK STANDARD NUMBER "NSTD46" DOCUMENT TITLED "CELL SITE AND MICROWAVE RADIO STATION PROTECTION - ENGINEERING CONSIDERATIONS"



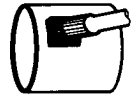
NOTE: REMOVE GALVANIZING FROM FENCE POSTS IN AREAS LUGS WILL BE INSTALLED. LIGHTLY COAT THE UNDERSIDE OF THE LUGS W/ ANTI-OX COMPOUND BEFORE ATTACHING TO POSTS.

2 COMPRESSION CONNECTOR DETAILS

SCALE: NTS



TYPE RR REINF. BAR



TYPE VS FLAT SURFACE



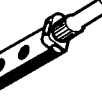
TYPE VS ROUND SURFACE



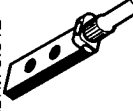
TYPE HS



TYPE GT



TYPE PT



TYPE GL LUG

WELD: THOMAS & BETTS, 54856BE "BROWN33"
 CRIMP: BURNDY, YA3C 2TC 14E2, 10,000 PSI
 SCREW: RECOGNIZED, EM 2522DH.75.312

1 EXOTHERMIC WELD DETAILS

SCALE: NTS

HERZOG ENGINEERING LLC
 530 North 3rd Street, Suite 230
 Minneapolis, MN 55401
 (612) 844-1234

JOSHUA HERZOG
 20156
 IOWA
 LICENSED PROFESSIONAL ENGINEER
 STRUCTURAL #: 221009
 01/17/2022

DESIGN
 9873 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
 (952) 903-8298
 WWW.DESIGN1EP.COM

verizon
 10801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-4700

PROJECT
 20202126631
 LOC. CODE: 629598

IA07 EAST PERU
 285TH LN
 EAST PERU, IA 50222

SHEET CONTENTS:
 GROUNDING NOTES

DRAWN BY:	CJW
DATE:	12-06-21
CHECKED BY:	TRB
REV. A	12-13-21
REV. B	01-17-22

HERZOG
ENGINEERING LLC
530 North 3rd Street, Suite 230
Minneapolis, MN 55401
(612) 844-1234

JOSHUA HERZOG
20456
IOWA
LICENSED PROFESSIONAL ENGINEER
01/17/2022
STRUCTURAL #: 221009

DESIGN
9873 VALLEY VIEW RD.
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10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(652) 946-4700

PROJECT
20202126631
LOC. CODE: 629598

IA07
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EAST PERU, IA 50222

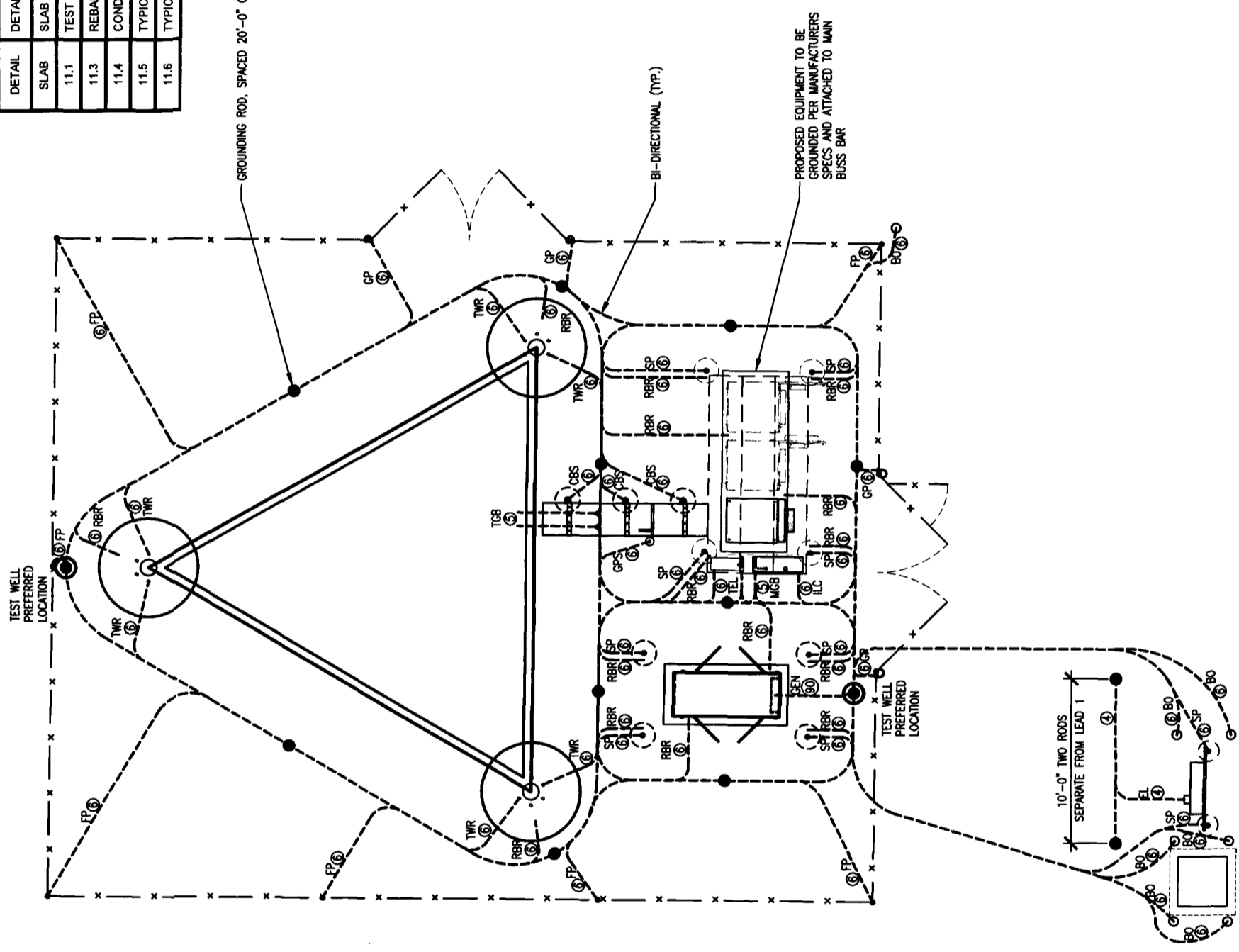
SHEET CONTENTS:
GROUNDING PLAN
GROUNDING DETAIL INDEX

DRAWN BY:	CJW
DATE:	12-06-21
CHECKED BY:	TRB
REV. A	12-13-21
REV. B	01-17-22

GROUNDING DETAIL INDEX

DETAIL	DETAIL DESCRIPTION
SLAB	SLAB ON GRADE GROUNDING
11.1	TEST WELL DETAIL, GROUND RING & ROD DETAIL
11.3	REBAR GROUNDING DETAIL
11.4	CONDUIT DETAIL
11.5	TYPICAL GROUNDING CABLE BRIDGE DETAIL
11.6	TYPICAL TOWER GROUNDING DETAIL

GROUNDING ROD, SPACED 20'-0" O.C. OR AS SHOWN (TYP.)



GROUNDING PLAN
SCALE: NTS

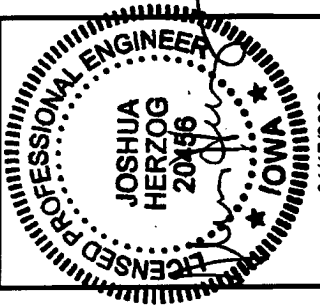
NOTE:
GENERAL CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THAT THE INSTALLATION OF ALL GROUNDING MEETS THE VERIZON NETWORK STANDARD NUMBER "NSTD46" DOCUMENT TITLED "CELL SITE AND MICROWAVE RADIO STATION PROTECTION - ENGINEERING CONSIDERATIONS"

NOTE:
CONTRACTOR TO COORDINATE PUBLIC & PRIVATE UTILITY LOCATES PER STATE LAW PRIOR TO EXCAVATION. EXISTING UTILITY LINES DEVIATING FROM THAT SHOWN HEREIN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER & VZW CONSTRUCTION ENGINEER.

NOTE:
CONTRACTOR SHALL ENSURE THAT EACH WHIP IS ROUTED TO LEAD 1 BY THE SHORTEST PATH, AND BENDS SHALL NOT BE LESS THAN 12" RADIUS



HERZOG ENGINEERING LLC
 530 North 3rd Street, Suite 230
 Minneapolis, MN 55401
 (612) 844-1234



DESIGN
 9973 VALLEY VIEW RD.
 EDEN PRAIRIE, MN 55344
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 WWW.DESIGNIEP.COM

verizon
 1801 BUSH LAKE ROAD
 BLOOMINGTON, MN 55438
 (952) 946-1700

PROJECT
 20202126631
 LOC. CODE: 629598

EA07
 EAST PERU

285TH LN
 EAST PERU, IA 50222

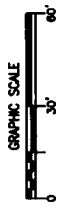
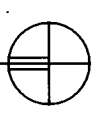
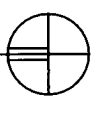
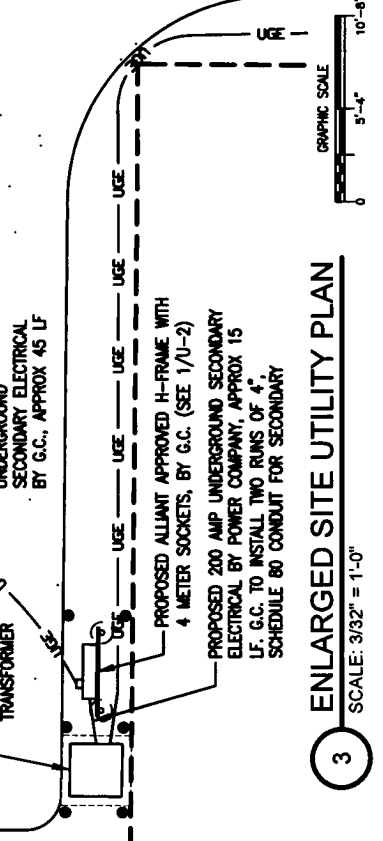
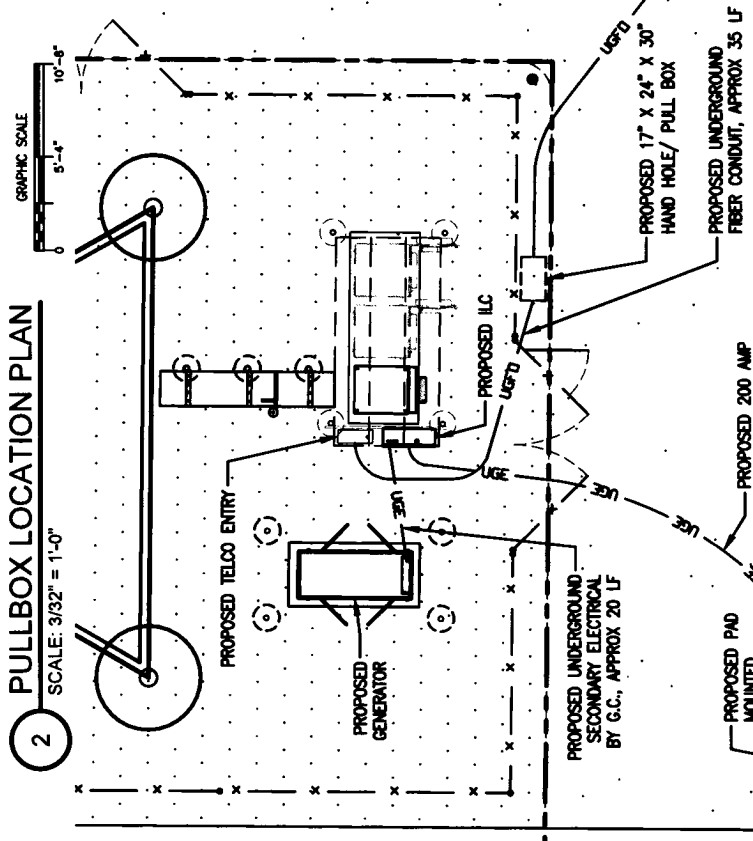
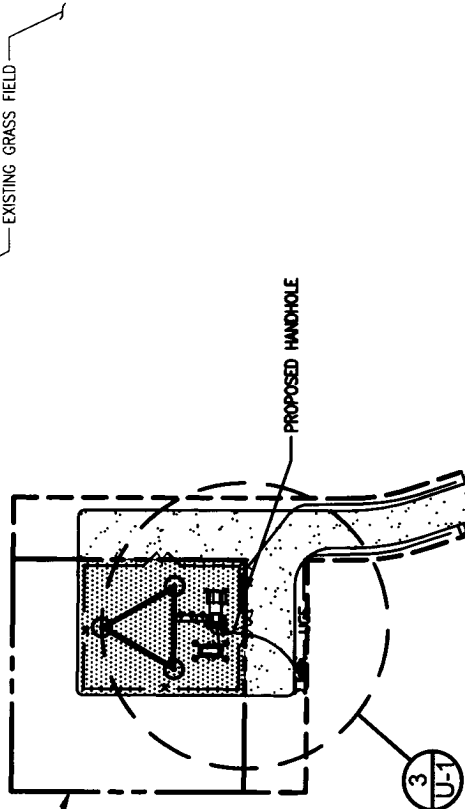
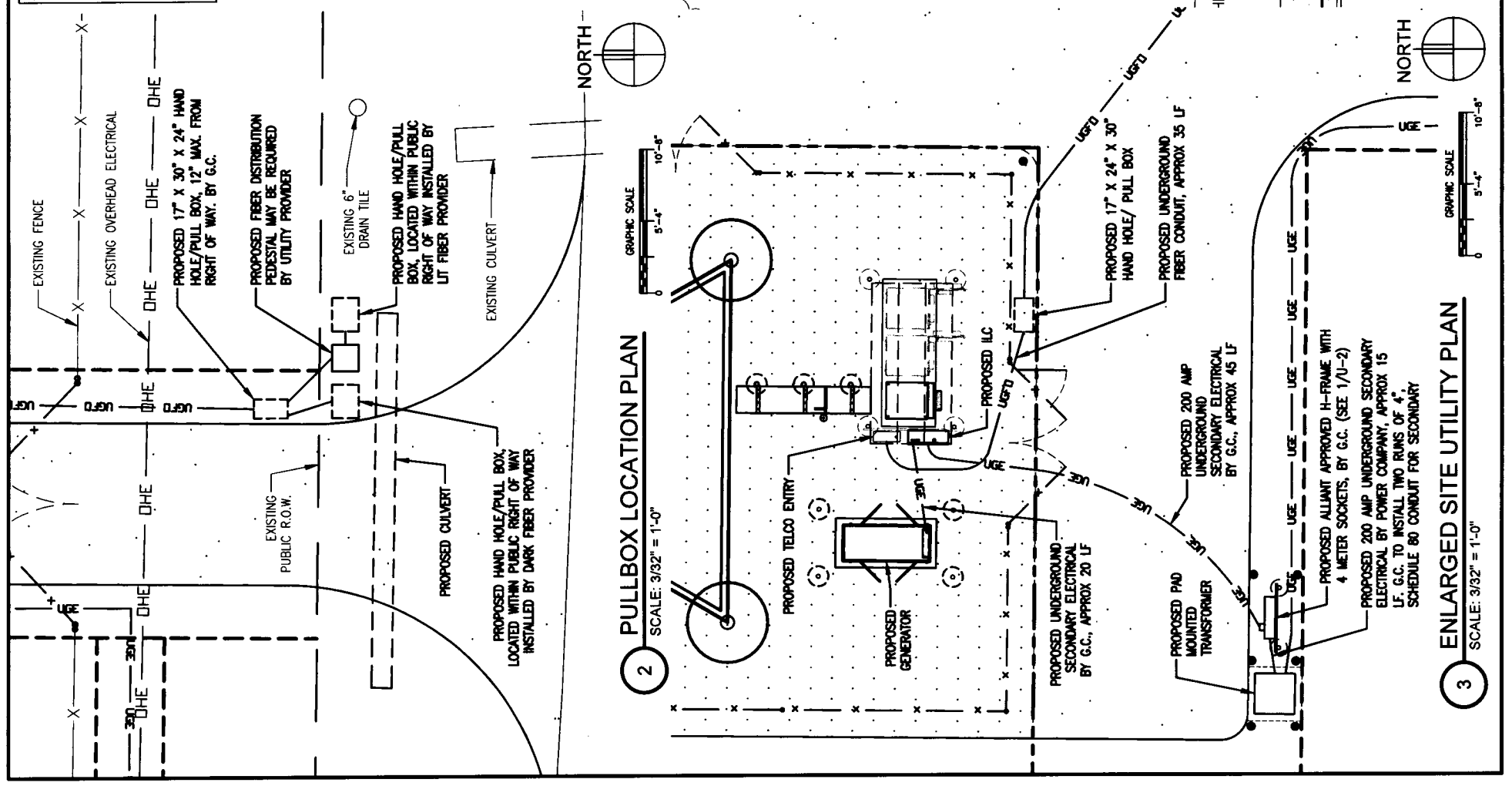
SHEET CONTENTS:
 SITE UTILITY PLAN
 PULLBOX LOCATION PLAN

DRAWN BY:	CJM
DATE:	12-06-21
CHECKED BY:	TRB
REV. A	12-13-21
REV. B	01-17-22

U-1

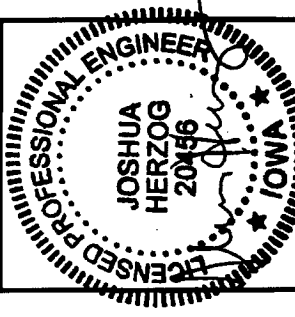
POWER TYPE:
 120/240V, SINGLE
 PHASE, 200 AMPS

- GENERAL NOTES:**
- CONTRACTOR TO COORDINATE PUBLIC & PRIVATE UTILITY LOCATES PER STATE LAW PRIOR TO EXCAVATION. EXISTING UTILITY LINES DEVIATING FROM THAT SHOWN HEREIN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER & VZW CONSTRUCTION ENGINEER.
 - PRIMARY ELECTRICAL - DEPTH AND SPECIFICATION BY POWER UTILITY COMPANY.
 - SECONDARY ELECTRICAL -
 - INSTALL CONDUIT 32" BELOW GRADE WITH TWO (2) DETECTABLE RIBBONS. FIBER OPTIC -
 - INSTALL CONDUIT 42" BELOW GRADE WITH PULL STRING, TRACEABLE WIRE AND TWO (2) DETECTABLE RIBBONS.





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PROJECT
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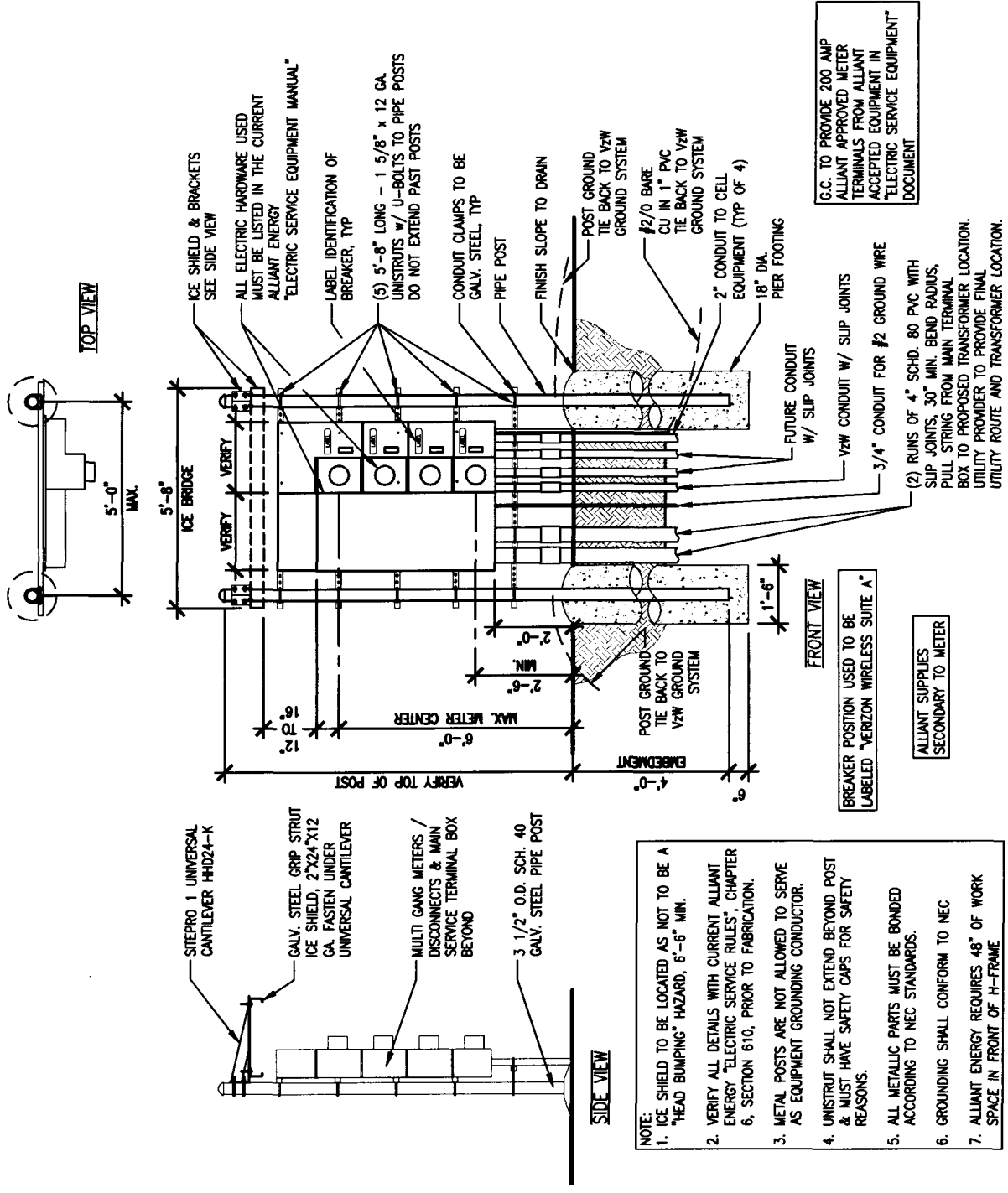
IA07
EAST PERU

285TH LN
EAST PERU, IA 50222

SHEET CONTENTS:
H-FRAME DETAIL

DRAWN BY:	CJW
DATE:	12-06-21
CHECKED BY:	TRB
REV. A	12-13-21
REV. B	01-17-22

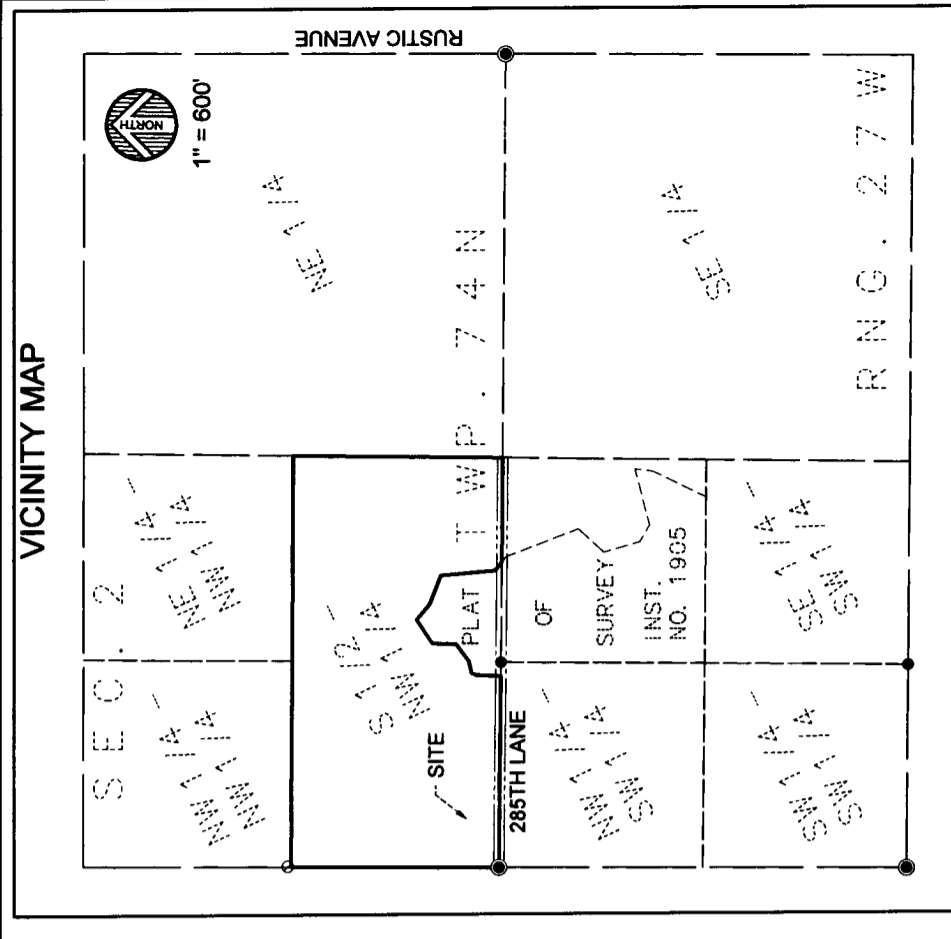
U-2



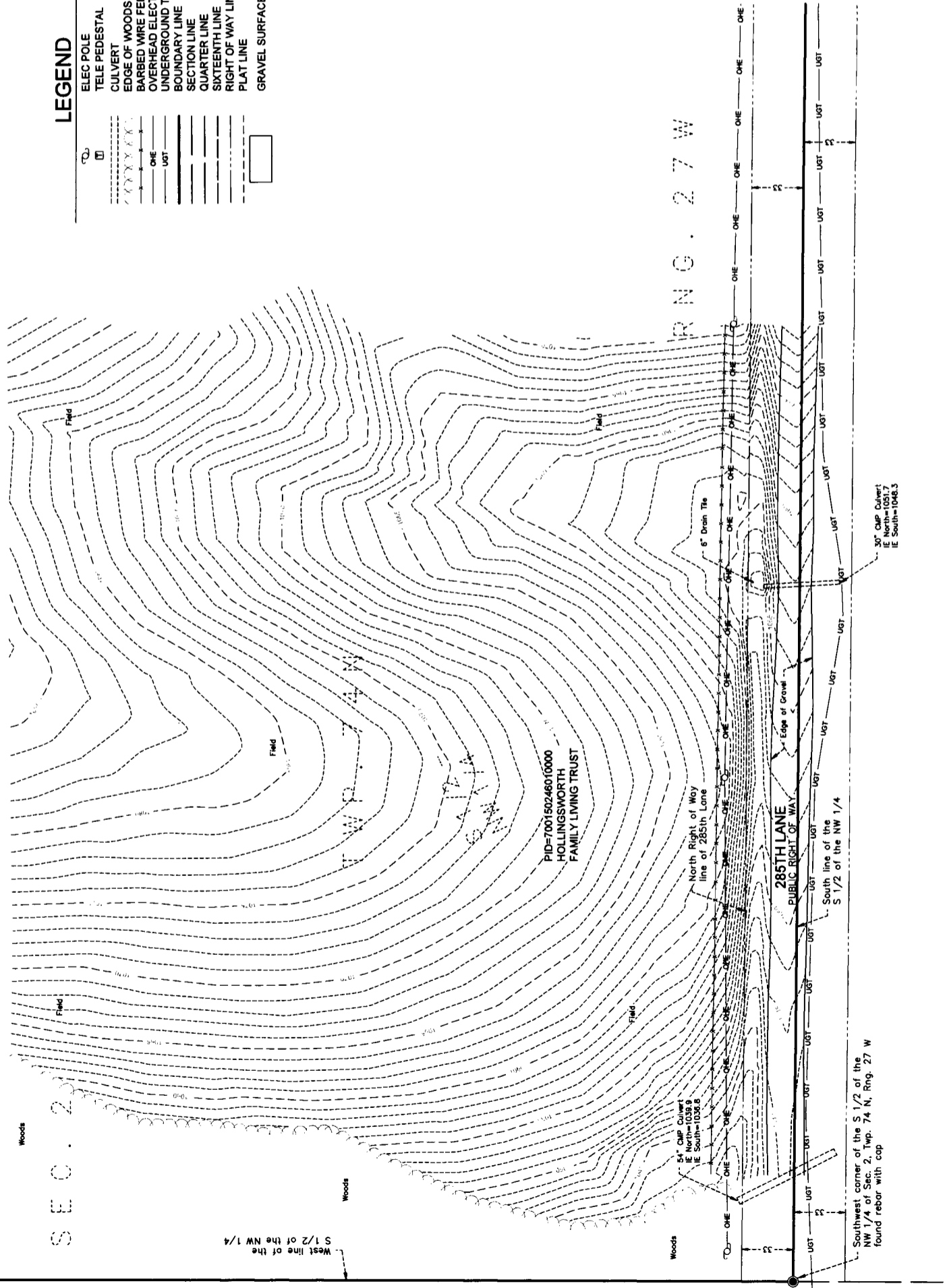
1 ALLIANT H-FRMAE
SCALE: 1/4" = 1'-0"

SITE SURVEY

VICINITY MAP



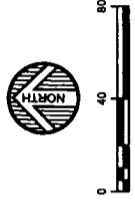
- LEGEND**
- ELEC POLE
 - TELE PEDESTAL
 - CULVERT
 - EDGE OF WOODS
 - BARBED WIRE FENCE
 - OVERHEAD ELECTRIC
 - UNDERGROUND TELEPHONE
 - BOUNDARY LINE
 - SECTION LINE
 - QUARTER LINE
 - SIXTEENTH LINE
 - RIGHT OF WAY LINE
 - PLAT LINE
 - GRAVEL SURFACE



PROPERTY DESCRIPTION:(per U.S. Title Solutions File No. 67370-IA2102-5030, effective date March 15, 2021.)
The South Half (1/2) of the Northwest Quarter (1/4) of Section Two (2), Township Seventy-four (74) North, Range Twenty-seven (27) West of the 5th P.M., Madison County, Iowa, (EXCEPT that tract of land located therein, as shown in Plat of Survey filed in Farm Plat Book 2, Page 26 on March 13, 1986, in the Office of the Recorder of Madison County, Iowa)

SCHEDULE "B" EXHIBITS:(per U.S. Title Solutions File No. 67370-IA2102-5030, effective date March 15, 2021.)
1-7) Not related to the survey.

8.) Plat of Survey made for Gary Shearer dated 2/19/1986 recorded 3/13/1986 in book 2 page 26 in Instrument No. 1905.
is shown on the survey in the vicinity map.



ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE IOWA STATE PLANE COORDINATE SYSTEM SOUTH ZONE INADJ (2011)

- DENOTES A FOUND IRON MONUMENT
- DENOTES A FOUND SECTION CORNER MONUMENT

SURVEYOR NOTES:

- 1.) Utilities are per observed evidence and from markings per IOWA ONE CALL Locate Request Ticket Nos. 552102317, dated April 21, 2021 and 552102152, dated April 14, 2021.
- 2.) This drawing has been scaled from Iowa State Plane Coordinate System South Zone grid distance to ground distance by a scale factor of 1.0000972290.

THESE CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEYING DATA IS THE PROPERTY AND WORK OF THE SURVEYOR UNDER THE SUPERVISION AND THAT I AM A LICENSED SURVEYOR UNDER THE CONSTITUTION AND LAWS OF THE STATE OF IOWA.

PRELIMINARY

SATURDAY, BRYAN T. BALCOMB, L.S.
DATE: 5/6/21 LICENSE # 17677
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2022

WIDSETH
ARCHITECTS • ENGINEERS • SCIENTISTS • SURVEYORS

TALE SCALE ON 27x37 1/2
TALE SCALE ON 11x17 1/2
2021-10598

SITE NAME:
IA07 EAST PERU
Madison County, IA



No.	Date	REVISIONS	By	CHK	APPD
	4/28/21		SMK	JMB	

FIELD WORK: 4/28/21
CHECKED BY: SMK
DRAWN BY: JMB