

# MEETING AGENDA



## Planning and Zoning Commission

Village of Homewood

August 10, 2023

Meeting Start Time: 7:00 PM

Village Hall Board Room

2020 Chestnut Road, Homewood, IL

*Commission Meetings will be held as in-person meetings. In addition to in-person public comment during the meeting, members of the public may submit written comments by email to [pzc@homewoodil.gov](mailto:pzc@homewoodil.gov) or by placing written comments in the drop box outside Village Hall. Comments submitted before 4:00 p.m. on the meeting date will be distributed to all Commission members prior to the meeting.*

*Please see last page of agenda for virtual meeting information.*

1. Call to Order

2. Roll Call

3. Minutes:

Approve minutes from the June 8, 2023 Planning and Zoning Commission meeting.

4. Public Comments

5. Regular Business:

A. Case 23-22: Special Use for a Crematorium at 17803 Bretz Drive

B. Case 23-23: Special Use Permit and Zoning Variance to locate a ground-mount solar energy collection system at 1000 Maple Avenue

6. Old Business:

7. New Business:

8. Adjourn

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The public is invited to the meeting using the link below to join Webinar:

<https://us06web.zoom.us/j/99184811606?pwd=UkU5TjBQc0QXkxektpaGRYdz09>

To listen to the Meeting via phone: Dial: 1-312-626-6799  
Webinar ID: 991 8481 1606 Passcode: 573812

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# VILLAGE OF HOMEWOOD



## MEETING MINUTES

DATE OF MEETING:

June 8, 2023

## PLANNING AND ZONING COMMISSION

7:00 pm

Village Hall Board Room  
2020 Chestnut Street  
Homewood, IL 60430

### CALL TO ORDER:

Chair Sierzega called the meeting to order at 7:01 pm.

### ROLL CALL:

All members of the commission were present. Present from the Village were Staff Liaison Angela Mesaros and Village Planner Valerie Berstene. There was one person in the audience. The public was able to watch and listen to the meeting via Zoom webinar.

### APPROVAL OF MEETING MINUTES:

Chair Sierzega asked if there were any changes or corrections to the minutes of May 25, 2023. Member O'Brien corrected the word *posited* to *posed*.

Member O'Brien moved to approve the minutes; seconded by Member Bransky.

AYES: Members Alfonso, Bransky, Cap, O'Brien, Johnson

NAYS: None

ABSTENTIONS: Member Castaneda, Chair Sierzega

ABSENT: None

### REGULAR BUSINESS:

#### CASE 23-18 – Public Hearing for a Variance for a Parking Pad

Chair Sierzega read aloud a description of the case and materials provided, then swore in the applicant, Chris Kalvig. Mr. Kalvig presented his case, highlighting the facts provided in his application.

Chair Sierzega asked how long the applicant has been in the house, and what will be replaced by the proposed parking pad. Mr. Kalvig replied since 2018, existing landscaping and grass, respectively.

Member Castaneda stated that her concerns in regards to stormwater were addressed in the report, noting there are no known flooding issues and the applicant employs rain barrels.

Member Johnson echoed the same statement as Member Castaneda and asked the applicant to describe other parking pads in the neighborhood. Mr. Kalvig described that most other homes have wider driveways, many with attached garages fronting the street.

Member O'Brien stated he had no questions.

Member Cap asked if the applicant had any recent conversations with Village Staff about stormwater flooding concerns. Mr. Kalvig stated that he had not had conversations with Staff more recently than the discussions at the public hearing for the proposed rezoning. He noted that someone had come by the house and asked about the proposed work. The Commission surmised that this was Mr. John Schafer, Director of Public Works. Mr. Kalvig said they did not discuss stormwater, and that he does not know of any flooding problems. Staff Liaison Mesaros confirmed that Mr. Schafer stated there are no known problems with stormwater flooding in this area.

Member Bransky stated that his only concern is the potential to increase stormwater run-off, which has been discussed. He noted that the driveway appears to be flat, not crowned nor sloping one way or the other. He inquired which way it typically drains. Mr. Kalvig replied that it mostly slopes to the street and any standing puddles evaporate. Member Bransky stated that the proposed use of pavers and landscaping will be a positive visual appearance.

Member Alfonso echoed the same sentiments about the use of pavers.

Chair Sierzega asked Mr. Kalvig if he had spoken to his neighbors. Mr. Kalvig replied that he spoke only to the neighbors directly adjacent to the north and south. Both seemed indifferent to his proposed work.

Member Bransky moved to recommend approval of Case 23-18 to grant a variance for 17915 Riedle Court to allow impervious lot coverage up to 51% and to allow a parking pad of the dimensions shown on the plan submitted and incorporate the findings of fact into the record. Seconded by Member Castaneda.

AYES: Members Alfonso, Bransky, Cap, O'Brien, Johnson, Castaneda, and Chair Sierzega

NAYS: None

ABSTENTIONS: None

ABSENT: None

### **OLD BUSINESS:**

Members Bransky and Castaneda provided a summary of the recent Focus Group meeting for the Downtown Transit-Oriented Development Master Plan.

Chair Sierzega asked for updates on the progress of the Hartford Building. Staff Liaison Mesaros stated that the apartments will be ready for move in mid-July and there is a list of 130 applicants for 32 units. The restaurant is anticipated to open in October 2023.

Member Johnson recognized the contributions of Village Planner Berstene as she moves on from her position at the Village. Commission members and Village Planner Berstene expressed their mutual gratitude and well wishes.

### **ADJOURN:**

Member Cap moved to adjourn the meeting; Member Alfonso seconded. All members voted in favor. The meeting adjourned at 7:30 pm.

Respectfully submitted,

**Angela Mesaros**  
Director of Economic and Community Development



## William G. O'Brien

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**From:** William G. O'Brien <70879806181@comcast.net>  
**Sent:** Thursday, May 11, 2023 9:52 AM  
**To:** 'Schaefer, John'  
**Subject:** RE: Zone Board Meeting

John – Thank you for your response and the information.

**From:** Schaefer, John <jschaefer@homewoodil.gov>  
**Sent:** Thursday, May 11, 2023 9:47 AM  
**To:** 70879806181@comcast.net  
**Subject:** Zone Board Meeting

Bill,  
The Village Engineer and I are not aware of any PW storm water projects in that area regarding flooding other than 1 rear yard drainage project we designed for the dentist at 18040 Park and the resident at 2156 Oak. That drainage system has not been installed by them. We also looked and found no records of street flooding that may have happened in the past 10 years.

*John D. Schaefer*  
Director of Public Works  
Village of Homewood  
[jschaefer@homewoodil.gov](mailto:jschaefer@homewoodil.gov)  
Ph. (708) 206-2901

# VILLAGE OF HOMEWOOD



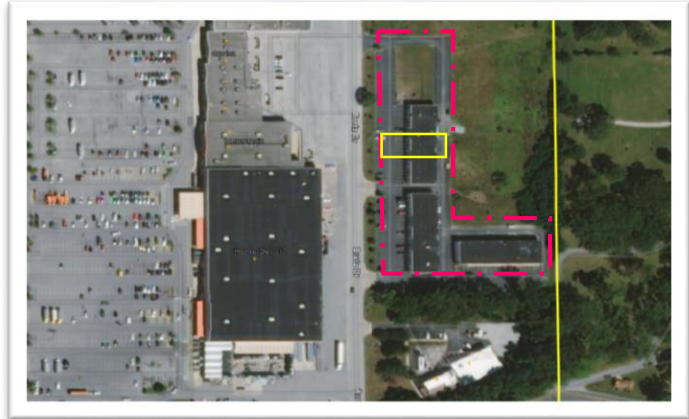
**MEMORANDUM**

**DATE OF MEETING:** August 10, 2023

**To:** Planning and Zoning Commission

**From:** Angela Mesaros, Director of Economic and Community Development

**Topic:** Case 23-22



**APPLICATION INFORMATION**

APPLICANT	Jeffrey N Sachs, Manna Crematory
ACTION REQUESTED	Special use permit for Crematorium
ADDRESS	17803 Bretz Drive
PIN	29-33-100-067-1012

**ZONING & LAND USE**

SUBJECT PROPERTY	ZONING	LAND USE
CURRENT	M-1 Limited Manufacturing	Commercial condominium
PROPOSED	<b>M-1 (no change)</b>	<b>Crematory</b>
SURROUNDING	N: M-1 Limited Manufacturing	Commercial condominium (R & R Plumbing)
	E: M-1 Limited Manufacturing	Vacant land (& Cemetery that is not in Homewood)
	S: B-4 Shopping Center Commercial	Comcast
	W: B-4 Shopping Center Commercial	National retailers (Home Depot)

**LEGAL NOTICE** Legal notice was published in *Daily Southtown* on Friday, July 21, 2023 letters were sent to property owners and residents within 250’.

**DOCUMENTS FOR REVIEW**

Title	Pages	Prepared by	Date
Applications & Statement for proposed use	5	Jeffery N Sachs, Manna Crematory	07/14/2023
Commercial Lease Agreement	13	Genral Brooks (Landlord)	06/20/2023
Phase I Environmental Assessment	38	Advanced Environmental Corp	09/21/2015

## BACKGROUND

Manna Crematory has submitted an application to operate a crematorium in a vacant commercial condominium in Building C of the Homewood Business Park Condominium, 1,800 sq. ft., at 17803 Bretz Drive. The proposed location is one unit within a multi-tenant commercial business park with three buildings. Other uses within the buildings include plumbing contractor, baseball academy, a crematorium, brewery and taproom, and a baseball bat manufacturer (Homewood Bat).

## DISCUSSION

A crematorium is allowed as a special use in the M-1 Limited Manufacturing District. Special Uses are required for those uses that have a unique character that must be individually evaluated for potential impact on adjacent properties and the perceived public need for the particular use at the proposed location.

The desired space is currently vacant; it was most recently leased as an automobile repair service.

The Zoning Ordinance was amended in 2008, to allow a crematorium as a special use permit in the M-1 District. The Village granted a special use permit to the Cremation Society of Illinois to operate in the southeast corner building of the Homewood Business Park on Bretz Drive (17859 Bretz Drive). The crematorium is in operation and has recently expanded.

The zoning ordinance requires 1 parking space for 500 square feet of area of office or sales space + 1/1,000 square feet of other floor area. Manna Crematory has 330 square feet of office/sales space; therefore, 2 parking spaces would be required  $(0.66 (330/500) + 1.47 (1470/1000) = 2.13)$ . Eight parking spaces are available in front of the unit, which includes one accessible space. A total of 58 spaces are available for the building. The proposed use meets the parking requirements.

The proposed crematory will operate six days a week, Monday to Saturday, 8:00 AM to 5:00 PM. Anticipated demand is evenly throughout the week. The facility will allow three individuals at one time to be present for services.

Section 44-04-10 (b) of the Village of Homewood Zoning Ordinance requires the following standards for all Crematoriums:

- (1) Any crematorium shall be a minimum 500 feet from:
  - a. Any residential district and any lot or parcel upon which one or more residences are the primary use at the time of initial application for a special use permit for a crematorium;
  - b. Any school or public playground, park, or recreational area.
- (2) Exterior doors of the crematorium shall remain closed so that the cremator/retort shall not be visible from any public right-of-way.
- (3) Except when vehicles are entering or exiting the crematorium, all business vehicles containing human remains and associated with the crematorium shall not be visible from any public right-of-way.
- (4) The crematorium shall comply with all applicable state and federal laws and regulations.

**STAFF COMMENTS**

The proposed crematorium meets the required minimum distances from residential districts, schools and parks. The applicant must comply with all other standards of the Zoning Ordinance.

**FINDINGS OF FACT**

The staff has prepared the **draft** findings of fact in accordance with the standards set forth in Section 44-07-12.D of the Zoning Ordinance Standards for a Variance. **The draft findings are provided for the convenience of the Commission. The Commission may make any changes to reflect the findings determined through the process of the hearing.** The findings of fact, as proposed or as amended, may be entered into the record.

- The subject property is located at 17803 Bretz Drive;
- The property is leased by the Manna Crematory, LLC of Burns Harbor, Indiana;
- The property is zoned M-1 Limited Manufacturing;
- The proposed use is regulated by State and Federal guidelines;
- The applicants must abide by the standards in Section 44-04-10b of the Village of Homewood Zoning Ordinance; and
- The proposed use is compatible with the adjacent uses.

**RECOMMENDED PLANNING & ZONING COMMISSION ACTION**

The Planning and Zoning Commission may wish to consider the following motion, written in the affirmative:

**Recommend approval of Case 23-22 granting a special use for a crematorium Manna Crematory at 17803 Bretz Drive, subject to the requirements of Section 44-04-10 b of the Village of Homewood Zoning Ordinance. The Findings of Fact shall be included as part of the record and recommendation to the Village Board of Trustees.**











VILLAGE OF HOMEWOOD MUNICIPAL ATLAS





# VILLAGE OF HOMEWOOD

## NON-RESIDENTIAL ZONING REVIEW

2020 Chestnut Road, Homewood, IL 60430

### PROPERTY INFORMATION

**Street Address:** 17803 Bretz Drive Homewood, IL 60430

**Property Index Number(s):** 29-33-100-067-1012

**Lot Size:** 155,934 sq. ft. 3.58 acres  
*If the subject property is multiple lots, provide the combined area.*

**Zoning District:**  
 R-1  R-2  R-3  R-4  B-1  B-2  B-3  B-4  M-1  M-2  PL-1  PL-2

Complete this section to determine your required review(s):

Is the subject property more than one lot held in common ownership?

yes  no

→ If yes, lots held in common ownership should be consolidated

A Planned Development is required for development of lots >25,000 sf or located in the B-1 or B-2 Zoning Districts.

### REQUESTED USE

**Requested Use:** To be used as a crematory.

**Gross Floor Area:** 1800 sq. ft. **Parking Provided:** Yes

**Existing Use:** Vacant

The requested use is:

- Permitted
- Limited
- Special
- Other:

### SITE OR BUILDING CHANGES

**Existing Development:** None

**Proposed Development** *Check all that apply. Provide a description and metrics below.*

New Construction  Addition  Site Alterations  Exterior Building Alterations

Development Metrics	Existing	Proposed
Gross Floor Area (sq. ft.):	_____	_____
Parking Spaces	_____	_____
Lot Coverage	_____	_____
Impervious Area (sq. ft.)	_____	_____
Impervious Coverage (%)	0.0%	0.0%

New construction?

yes  no

→ If yes, requires Site Plan Review

Floor area increase is 20% or more?

yes  no

→ If yes, requires Site Plan Review

Does the applicant elect to proceed as a Planned Development?

yes  no

Is site circulation or parking impacted?

yes  no

→ If yes, requires Site Plan Review

Is site landscaping impacted?

yes  no

→ If yes, requires Site Plan Review

Exterior building alterations?

yes  no

→ If yes, requires Appearance Review

### ZONING RELIEF OR CHANGES

**Zoning Variance or Amendment** *Describe any requested zoning relief or changes below.*

The applicant requests:

- Variance
- Administrative Exception
- Zoning Text Amendment
- Zoning Map Amendment

APPLICANT

Name Jeffery N Sachs  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 Phone \_\_\_\_\_  
 Email \_\_\_\_\_  
 Role Leasor

PROPERTY OWNER

Name General Brooks  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 Phone \_\_\_\_\_  
 Email \_\_\_\_\_  
 Check box if the applicant is the property owner

I acknowledge and attest that:

- » All the information and exhibits submitted with this application are true and accurate to the best of my knowledge;
- » Village representatives are permitted to make reasonable inspections of the subject property necessary to process this application;
- » I agree to pay all required fees;
- » No work may be done without first obtaining a Building Permit. All work shall be completed in accordance with Village Codes and Ordinances.

Jeffery N. Sachs  
 Applicant Name

[Signature]  
 Applicant Signature

7-14-2023  
 Date

Staff Notes

*Do not write below this line.*

Fee: \_\_\_\_\_  Paid

Date Received: 7/14/23

CASE NO: 23-22 REQUEST: Special Use Permit

Comments/Conditions:  Approved  Approved with Conditions  Denied Date: \_\_\_\_\_

CASE NO: \_\_\_\_\_ REQUEST: \_\_\_\_\_

Comments/Conditions:  Approved  Approved with Conditions  Denied Date: \_\_\_\_\_

CASE NO: \_\_\_\_\_ REQUEST: \_\_\_\_\_

Comments/Conditions:  Approved  Approved with Conditions  Denied Date: \_\_\_\_\_

This application has zoning approvals and may proceed to obtain Building Permits or a Certificate of Occupancy.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**Street Address:** 17803 Bretz Drive \_\_\_\_\_ Homewood, IL 60430

**Requested Use:** Crematory \_\_\_\_\_ Area: 1800 sq. ft.

**Business Name:** Manna Crematory \_\_\_\_\_

**Applicant Name:** Jeffery N Sachs \_\_\_\_\_ Date: 7-14-2023

Provide responses to each question below using complete sentences and specific to the proposed business and selected location.

The Planning and Zoning Commission and Village Board shall consider the following responses to the Standards for a Special Use in evaluating the application. No one is controlling.

1. Is the special use deemed necessary for the public convenience at this location?

*Describe why this location is best-suited for your business to serve the community.*

This location is best suited for our business to serve the community for several reasons. Firstly, it is easily accessible from Halsted Street. Secondly, there is a high demand for the type of services we offer in this area. Thirdly, the site is large enough to accommodate the size of the building we require and provides ample space for parking. Overall, we believe that this location is the best choice for our business to serve the community effectively.

2. Is the special use detrimental to the economic welfare of the community?

*Will the business have a negative impact on other businesses?*

Based on our assessment, the special use is not detrimental to the economic welfare of the community. On the contrary, it will create jobs, generate tax revenue, and provide a valuable service to the area. The proposed use will also attract customers to the area and may lead to increased economic activity in the surrounding businesses.

3. Will the special use be consistent with the goals and policies of the Comprehensive Plan?

*Describe how your business fits with the goals and policies summarized on the attached sheet.*

The comprehensive plan dated 1999 mostly contains development for the downtown area. From what I can see 1.1 and 1.7 under the objectives would pertain to our business.

4. Is the special use so designed, located, and proposed to be operated, that the public health, safety, and welfare will be protected?

*Describe any negative impacts, external to your business, that may result from it operating at this location.*

With all the regulations for a crematory in the state of Illinois, I cannot for see any negative impact to the public health, safety, and the welfare of the area. There are strict guidelines and mandates that come from the state of Illinois, the federal government, and the EPA in regards to regulation of a crematory. with these regulations in place a crematory will have much oversight.

5. Is the special use a suitable use of the property, and will the property will be substantially diminished in value without the special use?

*Describe why your business is best-suited for your this property.*

This property is suitable for all needs pertaining to Crematory. As the property sits currently, it is set up for all needs for the crematory. The front office and warehouse space are laid out to where no addition changes need to be made to the space. As far as substantially diminishing the value of the property I can only say that without the special use the property may sit empty.



- 6. Will the special use cause substantial injury to the value of other property in the neighborhood in which it is located?

*Will your business decrease the value of other properties?*

I do not believe that operating at crematory out of that property that it will decrease the value of the surrounding properties. In the other adjacent warehouse, Cremation Society Of Illinois operates their crematory and I believe it has it increase the value of both their spaces.

- 7. Will the special use be consistent with the uses and community character of the neighborhood surrounding the property?

*Describe how your business is compatible with its neighbors.*

Just as Cremation Society Of Illinois operates out of 17859 Bretz Drive and the adjacent space, it has operated it has been compatible with their neighboring businesses. I believe our crematory well operate in the same manner.

- 8. Will the special use be injurious to the use or enjoyment of other property in the neighborhood for the purposes permitted in the zoning district?

*Describe any negative impacts, external to your business, that may result from it operating at this location.*

The special use will not be injurious to the use or enjoyment of other property in the neighborhood for the purpose permitted in the zoning district. The proposed use will not create excessive noise, light pollution, or traffic congestion that would disrupt the surrounding properties. In fact, the proposed use is compatible with the surrounding land uses and will provide a valuable service to the community.

- 9. Will the special use impede the normal and orderly development and improvement of surrounding properties for uses permitted in the zoning district?

*Describe any negative impacts, external to your business, that may result from it operating at this location.*

The proposed use is consistent with the zoning regulations and will not interfere with the surrounding land uses. In fact, the proposed use may enhance the development of the surrounding properties by attracting customers to the area and creating economic opportunities. Therefore, we do not believe that the special use will impede the normal and orderly development of the surrounding properties.

- 10. Does the special use provide adequate measures of ingress and egress in a manner that minimizes traffic congestion in the public streets?

*Describe how will customers get to and from your business.*

Yes, the special use provides adequate measures of ingress and egress in a manner that minimizes traffic congestion in the public streets. Customers will arrive at the business by the way of halsted Street to Ridge Road and from there to Bretz Drive. Traffic and occupancy as it relates to the property will be greatly reduced by which most of the business will be contacted via the Internet.

- 11. Is the special use served by adequate utilities, drainage, road access, public safety and other necessary facilities?

*A new business going into an existing development, may answer 'no.'*

No

- 12. Will the special use substantially adversely affect one or more historical, archaeological, cultural, natural or scenic resources located on the parcel or surrounding properties?

*A new business going into an existing development, may answer 'no.'*

No

## **Proposed Use and Operation of Our New Crematory Facility**

### **Introduction:**

Our new crematory facility seeks to provide respectful and dignified cremation services to the local community and local funeral homes, catering to diverse cultural, religious, and personal preferences. We aim to offer compassionate care and assistance during a time of loss, ensuring every family feels supported and understood.

### **Service Provided:**

Our crematory will offer a range of services, including direct cremation, witnessed cremation. We will also provide urn selection assistance, guidance on disposition of ashes. Our professional and empathetic team will be on hand to guide families through the process, addressing any concerns or questions they may have.

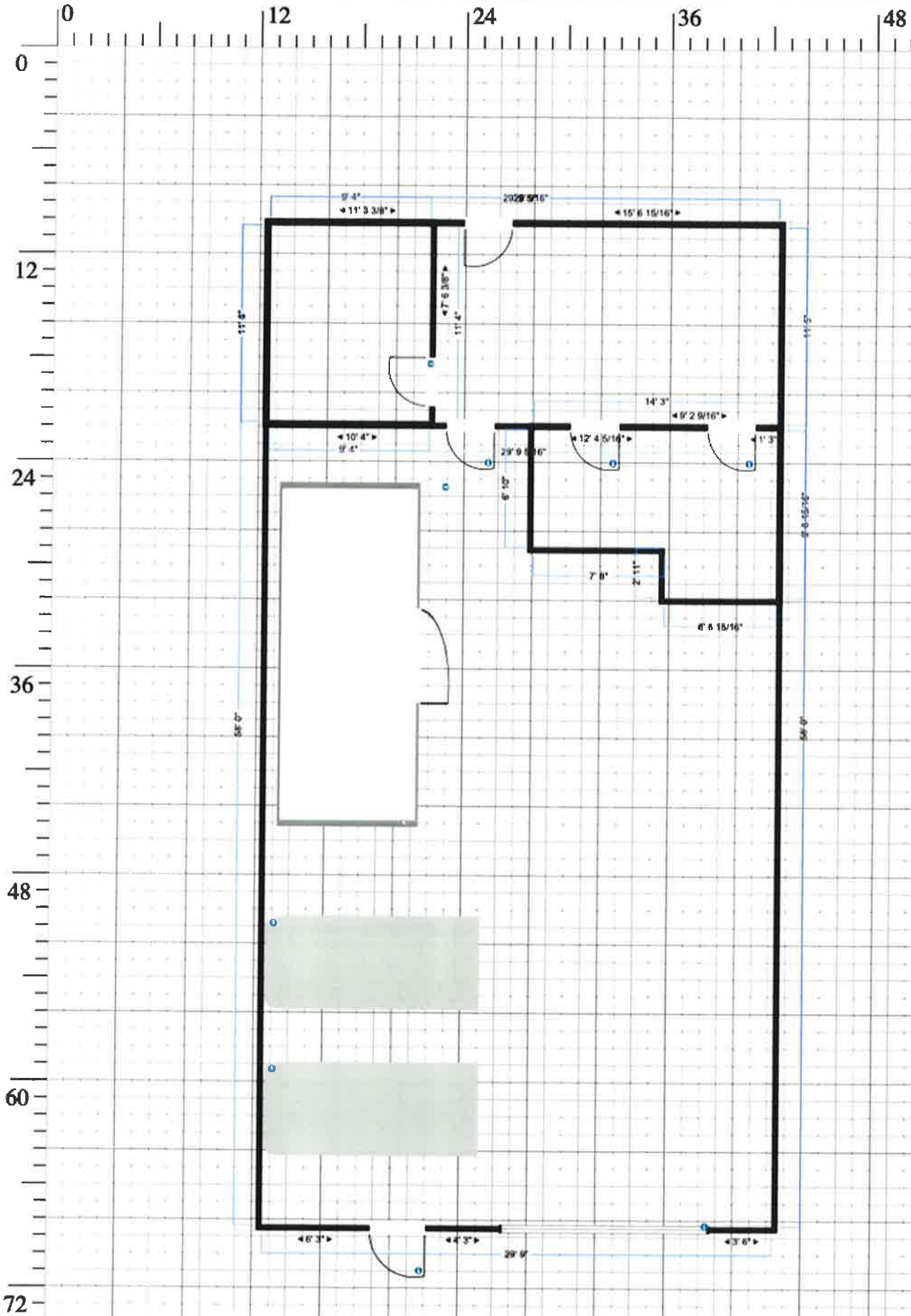
### **Hours of Operation:**

The crematory will operate six days a week, from Monday to Saturday. Our proposed hours of operation are 8:00 AM to 5:00 PM. This schedule allows us to cater to the needs of the community while ensuring our staff can provide the highest level of service.

### **Anticipated Average Peak Capacity:**

We anticipate the demand for our services to be distributed fairly evenly throughout the week. Most of our arranging will be conducted online in order to decrease the traffic during office hours. We will allow three individuals from each family to be present for the arrangement process. We also anticipate meeting up to four families per day. This estimate allows us to appropriately schedule our staff and ensure that each family receives the attention and care they deserve.

In conclusion, our new crematory facility is dedicated to providing respectful, compassionate, and comprehensive cremation services to our community and local funeral homes. We strive to honor the wishes of each family, ensuring their loved one's memory is treated with the utmost dignity and respect.



**COMMERCIAL LEASE AGREEMENT**

**THIS LEASE (this "Lease") dated this 20th day of June, 2023**

**BETWEEN:**

**General Brooks of [REDACTED] Chicago, IL 60652, USA**

**[REDACTED]  
(the "Landlord")**

**OF THE FIRST PART**

**- AND -**

**Manna Crematory, LLC of [REDACTED] Burns Harbor, IN 46304, USA**

**[REDACTED]  
(the "Tenant")**

**OF THE SECOND PART**

**IN CONSIDERATION OF** the Landlord leasing certain premises to the Tenant, the Tenant leasing those premises from the Landlord and the mutual benefits and obligations set forth in this Lease, the receipt and sufficiency of which consideration is hereby acknowledged, the Parties to this Lease (the "Parties") agree as follows:

**Definitions**

1. When used in this Lease, the following expressions will have the meanings indicated:
  - a. "Additional Rent" means all amounts payable by the Tenant under this Lease except Base Rent, whether or not specifically designated as Additional Rent elsewhere in this Lease;
  - b. "Building" means all buildings, improvements, equipment, fixtures, property and facilities from time to time located at 17803 Bretz Dr, Homewood, IL 60430, USA, as from time to time altered, expanded or reduced by the Landlord in its sole discretion;
  - c. "Common Areas and Facilities" mean:
    - i. those portions of the Building areas, buildings, improvements, facilities, utilities, equipment and installations in or forming part of the Building which from time to time are not designated or intended by the Landlord to be leased to tenants of the Building including, without limitation, exterior weather walls, roofs, entrances and exits,



- parking areas, driveways, loading docks and area, storage, mechanical and electrical rooms, areas above and below leasable premises and not included within leasable premises, security and alarm equipment, grassed and landscaped areas, retaining walls and maintenance, cleaning and operating equipment serving the Building; and
- ii. those lands, areas, buildings, improvements, facilities, utilities, equipment and installations which serve or are for the useful benefit of the Building, the tenants of the Building or the Landlord and those having business with them, whether or not located within, adjacent to or near the Building and which are designated from time to time by the Landlord as part of the Common Areas and Facilities;
- d. "Leasable Area" means with respect to any rentable premises, the area expressed in square feet of all floor space including floor space of mezzanines, if any, determined, calculated and certified by the Landlord and measured from the exterior face of all exterior walls, doors and windows, including walls, doors and windows separating the rentable premises from enclosed Common Areas and Facilities, if any, and from the center line of all interior walls separating the rentable premises from adjoining rentable premises. There will be no deduction or exclusion for any space occupied by or used for columns, ducts or other structural elements;
- e. "Premises" means the warehouse space at 17803 Bretz Dr, Homewood, IL 60430, USA and comprises a Leasable Area of 1,800.00 square feet.
- f. "Rent" means the total of Base Rent and Additional Rent.

### Intent of Lease

2. It is the intent of this Lease and agreed to by the Parties to this Lease that rent for this Lease will be on a gross rent basis meaning the Tenant will pay the Base Rent and any Additional Rent and the Landlord will be responsible for all other service charges related to the Premises and the operation of the Building save as specifically provided in this Lease to the contrary.

### Leased Premises

3. The Landlord agrees to rent to the Tenant the warehouse space municipally described as 17803 Bretz Dr, Homewood, IL 60430, USA (the "Premises") and comprises a Leasable Area of 1,800.00 square feet.





4. The Premises will be used for only the following permitted use: Crematory (the "Permitted Use").
5. While the Tenant, or an assignee or subtenant approved by the Landlord, is using and occupying the Premises for the Permitted Use and is not in default under the Lease, the Landlord agrees not to Lease space in the Building to any tenant who will be conducting in such premises as its principal business, the services of: Crematory.
6. No pets or animals are allowed to be kept in or about the Premises or in any common areas in the Building containing the Premises.
7. Subject to the provisions of this Lease, the Tenant is entitled to the use of parking (the "Parking") on or about the Premises. Only properly insured motor vehicles may be parked in the Tenant's Parking.
8. The Premises are provided to the Tenant without any fixtures, chattels or leasehold improvements.

### Term

9. The term of the Lease commences at 12:00 noon on July 1, 2023 and ends at 12:00 noon on June 30, 2026 (the "Term").
10. Notwithstanding that the Term commences on July 1, 2023, the Tenant is entitled to possession of the Premises at 12:00 noon on June 25, 2023.
11. Should the Tenant remain in possession of the Premises with the consent of the Landlord after the natural expiration of this Lease, a new tenancy from month to month will be created between the Landlord and the Tenant which will be subject to all the terms and conditions of this Lease but will be terminable upon either party giving one month's notice to the other party.
12. Upon 30 days notice, the Landlord may terminate the tenancy under this Lease if the Tenant has defaulted in the payment of any portion of the Rent when due.
13. Upon 60 days notice, the Landlord may terminate the tenancy under this Lease if the Tenant fails to observe, perform and keep each and every of the covenants, agreements, stipulations, obligations, conditions and other provisions of this Lease to be observed, performed and kept by the Tenant and the Tenant persists in such default beyond the said 60 days notice.

### Rent

14. Subject to the provisions of this Lease, the Tenant will pay a base rent of \$16.00 per square foot (approximately \$28,800.00), payable per month, for the Premises (the "Base

- Rent"), without setoff, abatement or deduction. In addition to the Base Rent, the Tenant will pay for any fees or taxes arising from the Tenant's business.
15. The Tenant will pay the Base Rent on or before the first of each and every month of the Term to the Landlord.
  16. The Base Rent for the Premises will increase over the Term of the Lease as follows: 1st year-16.00 per sq ft, 2nd year - 20.00 per sq ft, 3rd year - 24.00 sq ft.
  17. The Tenant will be charged an additional amount of \$35.00 for any late payment of Rent.
  18. The Tenant will be given a grace period of 5 days to pay Rent before late payment fees are charged.
  19. No acceptance by the Landlord of any amount less than the full amount owed will be taken to operate as a waiver by the Landlord for the full amount or in any way to defeat or affect the rights and remedies of the Landlord to pursue the full amount.

### Use and Occupation

20. The Tenant will continuously occupy and utilize the entire Premises in the active conduct of its business in a reputable manner on such days and during such hours of business as may be determined from time to time by the Landlord.
21. The Tenant covenants that the Tenant will carry on and conduct its business from time to time carried on upon the Premises in such manner as to comply with all statutes, bylaws, rules and regulations of any federal, state, municipal or other competent authority and will not do anything on or in the Premises in contravention of any of them.
22. The Tenant covenants that the Tenant will carry on and conduct its business from time to time carried on upon the Premises in such manner as to comply with any statute, including any subordinate legislation, which is in force now or in the future and taking into account any amendment or re-enactment, or any government department, local authority, other public or competent authority or court of competent jurisdiction and of the insurers in relation to the use, occupation and enjoyment of the Building (including in relation to health and safety compliance with the proper practice recommended by all appropriate authorities).

### Security Deposit

23. On execution of this Lease, the Tenant will pay the Landlord a security deposit equal to the amount of \$4,800.00 (the "Security Deposit") to be held by the Landlord without interest. The Landlord will return the Security Deposit to the Tenant at the end of this

tenancy, less such deductions as provided in this Lease but no deduction will be made for damage due to reasonable wear and tear.

24. The Tenant may not use the Security Deposit as payment for the Rent.
25. Within 30 days after the termination of this tenancy, the Landlord will deliver or mail the Security Deposit less any proper deductions or with further demand for payment to: [REDACTED] Burns Harbor, IN 46304, USA, or at such other place as the Tenant may advise.


### Option to Purchase

26. Provided the Tenant is not currently in default in the performance of any term of this Lease, the Tenant will have the option to purchase (the "Option") the leased premises (the "Purchase Property") and/or other property and chattels at fair market value as determined by the average of three independent appraisals made within 15 days of exercising the Option (the "Purchase Price"). The Landlord and Tenant will each select their own appraiser. If this option has been exercised, the Parties to this Lease may enter into a separate agreement to purchase the Purchase Property. This agreement will incorporate all the key points provided in this option.
27. This Option may be exercised at any time after May 31, 2026 and prior to the end of the original term of this Lease. Upon expiration of the Option, the Landlord will be released from all obligations to sell the Purchase Property to the Tenant. If the Tenant does not exercise the Option prior to its expiration, all rents and other charges paid under this Lease will be retained by the Landlord, and neither party will have any further rights or claims against each other concerning the Option.
28. The Option will be exercised by mailing or delivering written notice to the Landlord prior to the expiration of this Option. Notice, if mailed will be by certified mail, postage prepaid, to the Landlord at the following address:

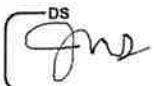
General Brooks, [REDACTED] Chicago, IL 60652, USA, (773) 495-3555

The written notice will be deemed to have been given on the date shown on the postmark of the envelope in which such notice is mailed.

29. The Tenant may not assign any rights under this Option separately from all of the Tenant's other rights under this Lease. No assignment may be made without the Landlord's prior written consent.
30. The Landlord warrants to the Tenant that the Landlord is the legal owner of the Purchase Property and has the legal right to sell the Purchase Property under the terms and conditions of this Lease.



31. If the Option is exercised, the following provisions will be applicable:
- a. The Tenant will take title to the Purchase Property subject to any of the following exceptions (the "Permitted Exceptions"):
    - i. real estate taxes not yet due at the time of closing;
    - ii. covenants, conditions, zoning laws and ordinances, reservations, rights, public and private easements then on record, if any; and
    - iii. liens or encumbrances involving an ascertainable amount that will be paid off or removed by the Landlord upon the closing of this purchase.
  - b. Unless otherwise extended by other terms of this Lease, the closing will be held within the latter of 60 days from exercise of the Option or the removal of any exceptions, outside of the Permitted Exceptions, to the title by the Landlord.
  - c. Rents, real estate taxes and other expenses of the Purchase Property will be prorated as of the date of the closing date. Security deposits, advance rentals or considerations involving future lease credits will be credited to the Tenant.
  - d. The Parties acknowledge that the availability of financing and purchase costs cannot be guaranteed. The Parties agree that these items will not be conditions of performance of this Lease or this Option and the Parties agree they have not relied upon any other representations or warranties by brokers, sellers or any other parties which are not set out in this Lease.
  - e. No later than 30 days from the exercise of this Option, the Landlord will provide the Tenant the following documents (the "Seller Disclosure"):
    - i. a property condition disclosure, signed and dated by the Landlord;
    - ii. a commitment for the policy of title insurance; and
    - iii. written notice of any claims and/or conditions known to the Landlord relating to environmental problems or building or zoning code violations.
  - f. The Tenant has 45 days from the date of receipt of the Seller Disclosure to examine the title to the Purchase Property and to report, in writing, any valid objections. Any exceptions to the title which would be disclosed by examination of the records will be deemed to have been accepted unless reported in writing within 45 days. If the Tenant objects to any exceptions to the title, the Landlord will use all due diligence to remove such exceptions at



the Landlord's own expense within 60 days. But if such exceptions cannot be removed within the 60 days allowed, all rights and obligations under this Option may, at the election of the Tenant, terminate and end unless the Tenant elects to purchase the Purchase Property subject to such exceptions.

- g. Upon the completion of the closing, all rights and obligations under the Lease (other than the Option) will cease to exist and the Parties will have no further rights or claims against each other concerning the Lease.

### Quiet Enjoyment

32. The Landlord covenants that on paying the Rent and performing the covenants contained in this Lease, the Tenant will peacefully and quietly have, hold, and enjoy the Premises for the agreed term.

### Distress

33. If and whenever the Tenant is in default in payment of any money, whether hereby expressly reserved or deemed as Rent, or any part of the Rent, the Landlord may, without notice or any form of legal process, enter upon the Premises and seize, remove and sell the Tenant's goods, chattels and equipment from the Premises or seize, remove and sell any goods, chattels and equipment at any place to which the Tenant or any other person may have removed them, in the same manner as if they had remained and been distrained upon the Premises, all notwithstanding any rule of law or equity to the contrary, and the Tenant hereby waives and renounces the benefit of any present or future statute or law limiting or eliminating the Landlord's right of distress.

### Overholding

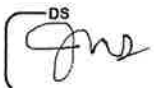
34. If the Tenant continues to occupy the Premises without the written consent of the Landlord after the expiration or other termination of the Term, then, without any further written agreement, the Tenant will be a month-to-month tenant at a minimum monthly rental equal to twice the Base Rent and subject always to all of the other provisions of this Lease insofar as the same are applicable to a month-to-month tenancy and a tenancy from year to year will not be created by implication of law.

### Additional Rights on Reentry

35. If the Landlord reenters the Premises or terminates this Lease, then:
- a. notwithstanding any such termination or the Term thereby becoming forfeited and void, the provisions of this Lease relating to the consequences of termination will survive;
  - b. the Landlord may use such reasonable force as it may deem necessary for the purpose of gaining admittance to and retaking possession of the Premises and



- the Tenant hereby releases the Landlord from all actions, proceedings, claims and demands whatsoever for and in respect of any such forcible entry or any loss or damage in connection therewith or consequential thereupon;
- c. the Landlord may expel and remove, forcibly, if necessary, the Tenant, those claiming under the Tenant, and their effects, as allowed by law, without being taken or deemed to be guilty of any manner of trespass;
  - d. in the event that the Landlord has removed the property of the Tenant, the Landlord may store such property in a public warehouse or at a place selected by the Landlord, at the expense of the Tenant. If the Landlord feels that it is not worth storing such property given its value and the cost to store it, then the Landlord may dispose of such property in its sole discretion and use such funds, if any, towards any indebtedness of the Tenant to the Landlord. The Landlord will not be responsible to the Tenant for the disposal of such property other than to provide any balance of the proceeds to the Tenant after paying any storage costs and any amounts owed by the Tenant to the Landlord;
  - e. the Landlord may relet the Premises or any part of the Premises for a term or terms which may be less or greater than the balance of the Term remaining and may grant reasonable concessions in connection with such reletting including any alterations and improvements to the Premises;
  - f. after reentry, the Landlord may procure the appointment of a receiver to take possession and collect rents and profits of the business of the Tenant, and, if necessary to collect the rents and profits the receiver may carry on the business of the Tenant and take possession of the personal property used in the business of the Tenant, including inventory, trade fixtures, and furnishings, and use them in the business without compensating the Tenant;
  - g. after reentry, the Landlord may terminate the Lease on giving 5 days' written notice of termination to the Tenant. Without this notice, reentry of the Premises by the Landlord or its agents will not terminate this Lease;
  - h. the Tenant will pay to the Landlord on demand:
    - i. all rent, Additional Rent and other amounts payable under this Lease up to the time of reentry or termination, whichever is later;
    - ii. reasonable expenses as the Landlord incurs or has incurred in connection with the reentering, terminating, reletting, collecting sums due or payable by the Tenant, realizing upon assets seized;



- including without limitation, brokerage, fees and expenses and legal fees and disbursements and the expenses of keeping the Premises in good order, repairing the same and preparing them for reletting; and
- iii. as liquidated damages for the loss of rent and other income of the Landlord expected to be derived from this Lease during the period which would have constituted the unexpired portion of the Term had it not been terminated, at the option of the Landlord, either:
1. an amount determined by reducing to present worth at an assumed interest rate of twelve percent (12%) per annum all Base Rent and estimated Additional Rent to become payable during the period which would have constituted the unexpired portion of the Term, such determination to be made by the Landlord, who may make reasonable estimates of when any such other amounts would have become payable and may make such other assumptions of the facts as may be reasonable in the circumstances; or
  2. an amount equal to the Base Rent and estimated Additional Rent for a period of six (6) months.

### Inspections and Landlord's Right to Enter

36. Tenant acknowledges that it inspected the Premises, including the grounds and all buildings and improvements, and that they are, at the time of the execution of this Lease, in good order, good repair, safe, clean and in tenantable condition.
37. During the Term and any renewal of this Lease, the Landlord and its agents may enter the Premises to make inspections or repairs. Except where the Landlord or its agents consider it an emergency, the Landlord will provide the Tenant with written notice 24 hours prior to entering.

### Renewal of Lease

38. Upon giving written notice no later than 60 days before the expiration of the Term, the Tenant may renew this Lease for an additional term. All terms of the renewed lease will be the same except for any signing incentives/inducements and this renewal clause and the amount of the rent. If the Landlord and the Tenant cannot agree as to the amount of the Rent, the amount of the Rent will be determined by mediation. The Rent should be determined taking into consideration the market rent of similarly improved premises in the market, as well as the location, use, age, and size of premises.

### Landlord Chattels



39. The Landlord will not supply any chattels.

### Tenant Improvements

- \* 40. The Tenant may make the following improvements to the Premises:
- a. Cosmetics
  - b. As a Crematory

### Utilities and Other Costs

41. The Landlord is responsible for the payment of the following utilities and other charges in relation to the Premises: sewer.
42. The Tenant is responsible for the direct payment of the following utilities and other charges in relation to the Premises: electricity, natural gas, water, telephone and internet.

### Insurance

43. The Tenant is hereby advised and understands that the personal property of the Tenant is not insured by the Landlord for either damage or loss, and the Landlord assumes no liability for any such loss. The Tenant is advised that, if insurance coverage is desired by the Tenant, the Tenant should inquire of Tenant's insurance agent regarding a Tenant's policy of insurance.
44. The Tenant is not responsible for insuring the Premises for either damage and loss to the structure, mechanical or improvements to the Building on the Premises, and the Tenant assumes no liability for any such loss.
45. The Tenant is responsible for insuring the Premises for liability insurance for the benefit of the Tenant and the Landlord.
46. The Tenant will provide proof of such insurance to the Landlord upon request.

### Abandonment

47. If at any time during the Term, the Tenant abandons the Premises or any part of the Premises, the Landlord may, at its option, enter the Premises by any means without being liable for any prosecution for such entering, and without becoming liable to the Tenant for damages or for any payment of any kind whatever, and may, at the Landlord's discretion, as agent for the Tenant, relet the Premises, or any part of the Premises, for the whole or any part of the then unexpired Term, and may receive and collect all rent payable by virtue of such reletting, and, at the Landlord's option, hold the Tenant liable for any difference between the Rent that would have been payable under this Lease during the balance of the unexpired Term, if this Lease had continued in force, and the net rent for such period realized by the Landlord by means of the





reletting. If the Landlord's right of reentry is exercised following abandonment of the premises by the Tenant, then the Landlord may consider any personal property belonging to the Tenant and left on the Premises to also have been abandoned, in which case the Landlord may dispose of all such personal property in any manner the Landlord will deem proper and is relieved of all liability for doing so.

### **Attorney Fees**

48. All costs, expenses and expenditures including and without limitation, complete legal costs incurred by the Landlord on a solicitor/client basis as a result of unlawful detainer of the Premises, the recovery of any rent due under the Lease, or any breach by the Tenant of any other condition contained in the Lease, will forthwith upon demand be paid by the Tenant as Additional Rent. All rents including the Base Rent and Additional Rent will bear interest at the rate of twelve (12%) per cent per annum from the due date until paid.

### **Governing Law**

49. It is the intention of the Parties to this Lease that the tenancy created by this Lease and the performance under this Lease, and all suits and special proceedings under this Lease, be construed in accordance with and governed, to the exclusion of the law of any other forum, by the laws of the State of Illinois, without regard to the jurisdiction in which any action or special proceeding may be instituted.

### **Severability**

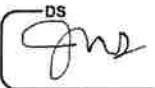
50. If there is a conflict between any provision of this Lease and the applicable legislation of the State of Illinois (the 'Act'), the Act will prevail and such provisions of the Lease will be amended or deleted as necessary in order to comply with the Act. Further, any provisions that are required by the Act are incorporated into this Lease.

### **Assignment and Subletting**

51. The Tenant will not assign this Lease, or sublet or grant any concession or license to use the Premises or any part of the Premises. An assignment, subletting, concession, or license, whether by operation of law or otherwise, will be void and will, at Landlord's option, terminate this Lease.

### **Bulk Sale**

52. No bulk sale of goods and assets of the Tenant may take place without first obtaining the written consent of the Landlord, which consent will not be unreasonably withheld so long as the Tenant and the Purchaser are able to provide the Landlord with assurances, in a form satisfactory to the Landlord, that the Tenant's obligations in this Lease will continue to be performed and respected, in the manner satisfactory to the Landlord, after completion of the said bulk sale.



## Maintenance

53. The Tenant will, at its sole expense, keep and maintain the Premises and appurtenances in good and sanitary condition and repair during the Term and any renewal of this Lease.
54. In particular, the Tenant will keep the fixtures in the Premises in good order and repair. The Tenant will, at Tenant's sole expense, make all required repairs to the plumbing, range, heating apparatus, and electric and gas fixtures whenever damage to such items will have resulted from the Tenant's misuse, waste, or neglect or that of the Tenant's employee, family, agent, or visitor.
55. The Tenant will be responsible at its own expense to replace all electric light bulbs, tubes, ballasts or fixtures serving the Premises.

## Care and Use of Premises

56. The Tenant will promptly notify the Landlord of any damage, or of any situation that may significantly interfere with the normal use of the Premises.
57. Vehicles which the Landlord reasonably considers unsightly, noisy, dangerous, improperly insured, inoperable or unlicensed are not permitted in the Tenant's parking stall(s), and such vehicles may be towed away at the Tenant's expense. Parking facilities are provided at the Tenant's own risk. The Tenant is required to park in only the space allotted to them.
58. The Tenant will not make (or allow to be made) any noise or nuisance which, in the reasonable opinion of the Landlord, disturbs the comfort or convenience of other tenants.
59. The Tenant will not engage in any illegal trade or activity on or about the Premises.
60. The Landlord and Tenant will comply with standards of health, sanitation, fire, housing and safety as required by law.

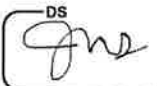
## Surrender of Premises

61. At the expiration of the lease term, the Tenant will quit and surrender the Premises in as good a state and condition as they were at the commencement of this Lease, reasonable use and wear and damages by the elements excepted.

## Hazardous Materials

### Rules and Regulations

62. The Tenant will obey all rules and regulations posted by the Landlord regarding the use and care of the Building, parking lot and other common facilities that are provided for the use of the Tenant in and around the Building on the Premises.

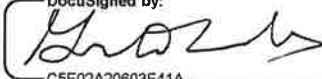


**General Provisions**

- 63. Any waiver by the Landlord of any failure by the Tenant to perform or observe the provisions of this Lease will not operate as a waiver of the Landlord's rights under this Lease in respect of any subsequent defaults, breaches or nonperformance and will not defeat or affect in any way the Landlord's rights in respect of any subsequent default or breach.
- 64. This Lease will extend to and be binding upon and inure to the benefit of the respective heirs, executors, administrators, successors and assigns, as the case may be, of each party to this Lease. All covenants are to be construed as conditions of this Lease.
- 65. All sums payable by the Tenant to the Landlord pursuant to any provision of this Lease will be deemed to be Additional Rent and will be recoverable by the Landlord as rental arrears.
- 66. Where there is more than one Tenant executing this Lease, all Tenants are jointly and severally liable for each other's acts, omissions and liabilities pursuant to this Lease.
- 67. Time is of the essence in this Lease.
- 68. This Lease will constitute the entire agreement between the Landlord and the Tenant. Any prior understanding or representation of any kind preceding the date of this Lease will not be binding on either party to this Lease except to the extent incorporated in this Lease. In particular, no warranties of the Landlord not expressed in this Lease are to be implied.

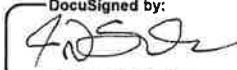
**IN WITNESS WHEREOF** the Parties to this Lease have duly affixed their signatures under hand and seal, or by a duly authorized officer under seal, on this 20th day of June, 2023.

\_\_\_\_\_  
(Witness)

DocuSigned by:  
  
C5E02A20603E41A  
 \_\_\_\_\_  
 General Brooks (Landlord)

Manna Crematory, LLC (Tenant)

\_\_\_\_\_  
(Witness)

DocuSigned by:  
  
D0A0A17CEA014EB...  
 Per: \_\_\_\_\_ (SEAL)

**Advanced  
Environmental  
Corporation**

630-837-7529 - Office  
630-837-8390 - Fax  
rayaec@aol.com - Email  
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*Environmental Services*

September 21, 2015

Mr. Michael Sperling  
Republic Bank  
2221 Camden Court  
Oak Brook, Illinois 60103

**PROJECT SUMMARY**

Re: Phase I Environmental Site Assessment for 17759 through 17811 and 17847-17851 Bretz Drive, Homewood, Illinois 60430, AEC Project: 15.3418082

Environmental concerns were evaluated to determine if any rise to the level of *recognized environmental conditions* (REC's) which are defined by ASTM E1527-13 as:

*"Recognized Environmental Conditions" (RECs) are defined by ASTM E1527-13 as the presence or likely presence of any hazardous substance or petroleum products on a PROPERTY under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the PROPERTY or into the ground, ground water, or surface water of the PROPERTY. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include "de minimis" conditions that generally do not present a threat to human health or the environment and that generally would not be subject to an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be "de minimis" are not "recognized environmental conditions".*

The following table summarizes our findings as a result of the Phase I Assessment.

Investigated Area	Acceptable	Unacceptable	Further Action Recommended	Comments
<i>Historical Use of the PROPERTY</i>	X			
<i>Current Use of the PROPERTY</i>	X			
<i>Operational Activities</i>	X			
<i>Adjoining Properties</i>	X			
<i>Regulatory Investigation</i>	X			
<i>Title Investigation</i>	X			
<i>Environmental Liens</i>	None			
<i>Land Use Restrictions</i>	X			

PO Box 8292 ♦ Bartlett, Illinois ♦ 60103-8292

Investigated Area	Acceptable	Unacceptable	Further Action Recommended	Comments
<i>Aerial Photographs</i>	X			
<i>Sauborn® maps</i>	None			
<i>Underground Storage Tanks (USTs)</i>	None			
<i>Above Ground Storage Tanks (ASTs)</i>	None			
<i>Hazardous Substances / Regulated Material</i>	None			
<i>Petroleum Products</i>	None			
<i>Vapor Encroachment</i>	X			
<i>Waste Generated</i>	X			
<i>Staining Interior/Exterior</i>	None			
<i>Distressed Vegetation</i>	None			
<i>Questionable Debris</i>	None			
<i>Other Reports</i>	X			

This assessment has not revealed evidence of environmental concern or *recognized environmental conditions* relative to the PROPERTY.

*This PROJECT OVERVIEW does not include all the investigated areas and is only intended to summarize the findings and recommendations of our Environmental Phase I Site Assessment dated September 21, 2015. AEC Project # 15.3418082, and is to be used with the entire Report.*

Thank You,



Raymond H. Deyne  
 President  
 Advanced Environmental Corp.





**PHASE I  
ENVIRONMENTAL  
SITE ASSESSMENT**

**FOR THE PROPERTY LOCATED AT:**

**17759 THROUGH 17811 AND 17847-17851 BRETZ DRIVE  
HOMWOOD, ILLINOIS 60430**



**PREPARED FOR:**

**MR. NASSER MURAD  
MACK INDUSTRIES, LTD**

**PREPARED FOR THE BENEFIT OF:**

**MR. MICHAEL SPERLING  
REPUBLIC BANK  
2221 CAMDEN COURT  
OAK BROOK, ILLINOIS 60103**

**PREPARED BY:**

**ADVANCED ENVIRONMENTAL CORPORATION**

**PROJECT NO. 15.3418082  
P.O. BOX 8292  
BARTLETT, ILLINOIS 60103  
[www.advancedenvirocorp.com](http://www.advancedenvirocorp.com)**

**SEPTEMBER 21, 2015  
D.L. 630-837-7529  
FAX 630-837-8390  
[rayaec@aol.com](mailto:rayaec@aol.com)**

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PHASE I  
ENVIRONMENTAL SITE  
ASSESSMENT

FOR THE PROPERTY KNOWN AS:

**17759 THROUGH 17811 BRETZ DRIVE  
and  
17847-17851 BRETZ DRIVE  
HOMewood, ILLINOIS 60430**

**1.0 EXECUTIVE SUMMARY**

*Advanced Environmental Corporation has performed this Phase I Environmental Site Assessment (ESA) to be in conformance with the scope and limitation of the American Society of Testing Materials (ASTM) Practice E1527-13 and All Appropriate Inquiry (AAI).*

Advanced Environmental Corporation (AEC) was retained by Mr. Nasser Murad for the benefit of Republic Bank, "user", and for the purpose of conducting a Phase I Environmental Site Assessment (ESA) of the above referenced PROPERTY. This Phase I Environmental Site Assessment is intended to identify, to the extent feasible, "recognized environmental conditions" (RECs) in connection with the PROPERTY.

AEC retained Environmental Record Search (ERS) to obtain available regulatory data within the search radius defined in ASTM Practice E1527-13. AEC has reviewed this information and has only reported information found in the ERS RecCheck Report. This investigation revealed the following:

Regarding the PROPERTY:

No information was found in the ERS RecCheck Report regarding the PROPERTY and it is our opinion that no further investigation is required at this time.

Regarding the other reporting Properties:

Although a number of reporting sites were found throughout the respective search areas, it is our opinion that based on the location of these sites in relationship to the PROPERTY no further investigation is required at this time.

Investigations were conducted through the IEPA web sites ([www.epa.state.il.us](http://www.epa.state.il.us)), (<http://tier2.iema.state.il.us/>) and the Office of the Illinois State Fire Marshal (<http://www.state.il.us/osfm/>) for information regarding environmental concerns or recognized environmental conditions relative to the PROPERTY. This investigation revealed the following:

**AGENCIES CONTACTED**

IEPA Bureau of Air	No Bureau of Air records were found.
IEPA Bureau of Land	No Bureau of Land records were found.
IEPA Bureau of Water	No Bureau of Water records were found.

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IEPA Office of Emergency Response	No Office of Emergency Response records were found.
Illinois State Fire Marshal (OSFM)	No OSFM records were found.

During the course of this investigation no evidence or information was found regarding environmental concerns or recognized environmental conditions relative to the PROPERTY.

Historical Topographic Maps for the Harvey Quadrangle 7.5-Minute Series were obtained from Historic Aerial ([www.historicaerials.com](http://www.historicaerials.com)). AEC reviewed topographical maps for the years 1974, 1984, 1993, 2002 and current. The purpose of this investigation was to determine site activities and environmental concerns or recognized environmental conditions which may impact the PROPERTY. This investigation revealed the following:

The topographical maps reviewed revealed elevations of approximately 625 feet and relatively flat. Topographic relief appears to be in a southeasterly direction. However, actual groundwater flow direction in the vicinity of the PROPERTY cannot be determined without groundwater monitoring well data. No areas of environmental concern or recognized environmental conditions were identified at the PROPERTY or the adjoining properties.

A Municipal investigation was conducted with the Village of Homewood, which consisted of correspondence in the form of Freedom of Information Act (FOIA) dated September 15, 2015. The purpose of this investigation was to determine current and previous activities and to determine environmental concerns or recognized environmental conditions which may impact the PROPERTY. This review revealed the following:

*As of the date of this Report the Village of Homewood has not responded to our FOIA request. When this information becomes available and is reviewed, any findings that may affect the opinions and conclusions stated in this Report AEC will immediately notify the "user" in writing.*

In an attempt to determine previous site activities and for environmental concerns or recognized environmental conditions which may impact the PROPERTY AEC retained Environmental Record Search (ERS) to obtain Sanborn® maps for the PROPERTY. This investigation revealed the following:

No Sanborn® map coverage for the PROPERTY was found.

Aerial photographs for the PROPERTY were obtained from Historic Aerial ([www.historicaerials.com](http://www.historicaerials.com)). AEC reviewed aerial photographs for the years 1938, 1952, 1961, 1962, 1973, 1974, 1977, 1988, 1999, 2002, 2005, 2007, 2009, 2010, 2011 and 2012. The purpose of this investigation was to determine site activities and environmental concerns or recognized environmental conditions which may impact the PROPERTY. This investigation revealed the following:

1938 through 2007 - The aerial photographs reveal the PROPERTY undeveloped and heavily wooded. The north adjoining properties also remain undeveloped and are heavily wooded. The adjoining property to the south, Comcast antenna tower and station first appears on the 1988 aerial. The east adjoining property, Homewood Memorial Gardens Cemetery, appears on all the aerials. The west adjoining property, Park Place Plaza first appears on the 1974 aerial.

2009 through 2012 - The aerial photographs reveal the PROPERTY and the adjoining properties fully developed and existing in their current configurations.

Aerial photographs revealed the PROPERTY was developed by 2009. No areas of environmental concern or recognized environmental conditions were identified at the PROPERTY or the adjoining properties on any of the aerial photographs reviewed.

*The quality imagery of the aerial photographs provided is entirely limited by the resolution of the camera with which it was originally taken.*

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Data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives have not been met. Data failure is not uncommon in trying to identify the use of the PROPERTY at five year intervals back to first use or 1940 (whichever is earlier). Notwithstanding a data failure, standard historical sources may be excluded if: (1) the sources are not ascertainable, or (2) if past experience indicates that the sources are not likely to be sufficiently useful, accurate, or complete in terms of satisfying the objectives, other historical sources may be used to satisfy the objectives, but are not required to comply with this practice.

It is our opinion that based on this investigation significant data gaps do not exist. Any data gaps identified herein, as defined by ASTM Practice E1527-13 §3.2.20, are not considered to have significantly affected the ability to identify *recognized environmental conditions* in connection with the PROPERTY and so not alter the conclusions of this Report.

An on-site reconnaissance, which consisted of interviews and visual observations, was conducted by AEC on September 11, 2015 for the purpose of reviewing and evaluating the PROPERTY for environmental concerns or *recognized environmental conditions* which may potentially influence the value of the PROPERTY. This investigation revealed the following:

Exterior Observations:

No areas of environmental concern or *recognized environmental conditions* were observed.

Interior Observations:

No areas of environmental concern or *recognized environmental conditions* were observed.

AEC personnel interviewed the Owner's Representative (Mr. Nasser Murad) of the PROPERTY. The purpose of this interview was to determine past and present use of the PROPERTY and for the purpose of completing the ASTM User Questionnaire E1527-13 and AEC's Questionnaire.

Responses to these questionnaires revealed no known environmental concerns or *recognized environmental conditions*. Also, during the interview process no known information was disclosed regarding past or present environmental concerns or *recognized environmental conditions*, i.e., environmental liens, pending litigation relative to environmental violations, or non-compliance of regulatory statutes. And at this time there is no known valuation reduction for environmental issues and in his opinion the purchase price reflects the fair market value and has not been devalued because of any contamination.

Based upon our investigations and in conclusion we submit the following opinion:

We have performed this Phase I Environmental Site Assessment for the PROPERTY located at 17759 through 17811 and 17847-17851 Bretz Drive, Homewood, Illinois 60430, in conformance with the scope and limitations of AAI and Practice E1527-13. Any exceptions to or deletions from these described practices are identified in sections 2.2, 2.3, 2.4, 2.5 and 11.0 of this Report.

This assessment has revealed no evidence of environmental concern or *recognized environmental conditions* (RECs) relative to the PROPERTY.

- No known "*Recognized Environmental Conditions*" (RECs) relative to the PROPERTY were found or identified.

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"Recognized Environmental Conditions" (RECs), are defined by ASTM E1527-13 as the presence or likely presence of any hazardous substance or petroleum products in, on or at the PROPERTY: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term is not intended to include "de minimis" conditions that generally do not present a threat to human health or the environment and that generally would not be subject to an enforcement action if brought to the attention of appropriate governmental agencies.

- No "Controlled Recognized Environmental Conditions" (CREC's) relative to the PROPERTY were found or identified.

"Controlled Recognized Environmental Conditions"(CREC's), are recognized environmental conditions resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, PROPERTY use restrictions, activity and use limitations, institutional controls, or engineering controls).

- No "Historical Recognized Environmental Conditions" (HREC's) relative to the PROPERTY were found or identified.

"Historical Recognized Environmental Conditions" (HREC's), are past releases of any hazardous substances or petroleum products that has occurred in connection with the PROPERTY and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjection the PROPERTY to any required controls (for example, PROPERTY use restrictions, activity and use limitation, institutional controls, or engineering controls).

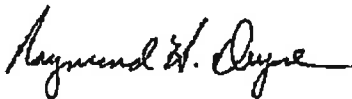
- No "De Minimis Conditions" relative to the PROPERTY were found or identified.

"De Minimis Conditions", are conditions that generally do not present a threat to human health or the environment and that generally would not be subject of an enforcement action if brought to the attention of appropriate governmental agencies. De minimis Conditions are not recognized environmental conditions or controlled recognized environmental conditions.

The use of this Phase I Environmental Site Assessment is not limited to CERCLA, but is designed to assist the user in developing information about the environmental condition of a property and as such has utility for a wide range of person, including those who may have no actual or potential CERCLA liability and/or may not be seeking the Landowner Liability Protections.

This Phase I Environmental Site Assessment is non-intrusive and non-destructive. An investigation for asbestos containing building materials, lead based paint, radon, mold, mildew or fungus, radioactivity, soil and groundwater contamination was not conducted by AEC or authorized by the "user". A focused investigation to determine whether or not any concern exists from these areas would require a separate study under a separate contract which is beyond the scope of this assignment.

Respectfully Submitted By:  
Advanced Environmental Corporation



Raymond H. Deyne  
President  
September 21, 2015

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## 2.0 INTRODUCTION

Advanced Environmental Corporation (AEC) was retained by Mr. Nasser Murad for the benefit of Republic Bank, "user", and for the purpose of conducting a Phase I Environmental Site Assessment (ESA) on the PROPERTY located at 17759 through 17811 and 17847-17851 Bretz Drive, Homewood, Illinois 60430.

Advanced Environmental Corporation has performed this Phase I Environmental Site Assessment (ESA) to be in conformance with the scope and limitation of the American Society of Testing Materials (ASTM) Practice E1527-13, All Appropriate Inquiry (AAI).

### 2.1 Purpose

The purpose of this Phase I Environmental Site Assessment is intended to identify, to the extent feasible, "*recognized environmental conditions*" (RECs) in connection with the PROPERTY, and to investigate all past and present ownership uses and operations at the PROPERTY with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. It is intended to permit the "user" to satisfy one of the requirements to qualify for the "*innocent landowners defense*" to CERCLA liability; that is, the practices that constitute "all appropriate inquiry" into the previous ownership and uses of the PROPERTY consistent with good commercial or customary practice" as defined in 42 USC 9601(35).

Also, this assessment is designed to assist the "user" in developing information about the environmental condition of the PROPERTY, and as such has utility for a wide range of persons, including those who may have no actual or potential CERCLA liability and/or may not be seeking the "*innocent landowner's defense*".

### 2.2 Scope of Services

AEC conducted the activities as stated in this following scope of work summary and was completed to identify areas of environmental concern or *recognized environmental conditions* associated with the PROPERTY consisting of (as required):

- Freedom of Information Act (FOIA) requests;
- Review of Topographical Maps;
- Review of available historical Sanborn® maps;
- Review of available historical Aerial Photographs;
- Municipal Investigation;
- Regulatory Database Investigation
- Interviews of persons knowledgeable about the PROPERTY;
- On-site reconnaissance;
- Photographic Documentation
- Opinion and Conclusions

#### 2.2.1. On-Site Inspection

1. AEC personnel conducted an on-site inspection of the PROPERTY. This walk-through inspection consisted of visual observations of the PROPERTY to identify readily apparent potential sources of environmental liability.
2. AEC personnel conducted an on-site inspection to visually identify transformers, capacitors or other electrical equipment likely to contain polychlorinated biphenyls (PCBs) and to determine the condition of such transformers/capacitors.
3. AEC personnel conducted an on-site inspection to visually identify aboveground storage tanks (ASTs), and underground storage tanks (USTs) and associated piping.

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4. AEC personnel reviewed available environmental documentation, historical information, and records to assist in identification of potential environmental liability of the PROPERTY.
5. AEC personnel provided photographic documentation of significant features and environmental concerns or *recognized environmental conditions* of the PROPERTY.

#### 2.2.2. Inspection of Surrounding Land

AEC personnel conducted a visual inspection of the contiguous properties to identify readily observable potential environmental threats by adjacent land use. AEC personnel conducted the inspection from the PROPERTY and did not enter other private properties.

#### 2.2.3. Historical Investigations

A historical review to ascertain environmental concerns and *recognized environmental conditions* affecting the PROPERTY was completed through: municipal records, topographical maps, aerial photographs and available Sanborn® maps. Emphasis was placed on identifying on-site and off-site environmental conditions most likely to:

1. adversely affect the future development and usage of the PROPERTY;
2. present environmental financial liabilities to the current or future PROPERTY owners and developers;
3. be of concern to the various regulatory agencies, in so far as site conditions are covered by current environmental regulations.

#### 2.2.4. Interviews

AEC personnel interviewed knowledgeable people, including current and previous owners/operators where feasible, to determine past and present use of PROPERTY.

#### 2.2.5. Regulatory Review

AEC retained Environmental Record Search (ERS) for regulatory databases reporting within the search radius defined in ASTM Practice E1527-13. AEC reviewed this information and rendered our opinion of reporting sites within the Regulatory section of this Report. AEC has reviewed this information and has only reported information found in the ERS Report.

AEC investigated regulatory databases through the IEPA web sites ([www.epa.state.il.us](http://www.epa.state.il.us)), (<http://tier2.icma.state.il.us/>) and the Office of the Illinois State Fire Marshal (<http://www.state.il.us/osfm/>) for information regarding environmental concerns or *recognized environmental conditions* relative to the PROPERTY.

#### 2.2.6. Data Evaluation and Report

Review of standard historical sources at less than approximately five year intervals is not required by this practice. If the specific use of the PROPERTY appears unchanged over a period longer than five years, then it is not required by this practice to research the use during that period.

AEC personnel evaluated and summarized background information obtained during the on-site inspection, historical review and regulatory review and prepared this Report, which discusses significant information and provides conclusions and recommendations.

### 2.2.7. Reasonable Time and Cost

Information that is obtainable within reasonable time and cost constraints means that the information will be provided by the source within 20 calendar days of receiving a written, telephone, or in-person request at no more than a minimal cost intended to cover the source's cost of retrieving and duplicating the information. Information that can only be reviewed by a visit to the source is reasonably ascertainable, if the visit is permitted by the source within 20 days of request.

## 2.3 Significant Assumptions

This Report is based on information obtained from reasonable ascertainable information and sources previously described in this Report and are assumed to be correct. This Report is based in part on information obtained from data sources and interviews. AEC assumes this information to be accurate throughout the course of this investigation.

## 2.4 Limitations and Exceptions of Assessment

### 2.4.1. Sample Collection

In keeping with protocol established for a Phase I Site Assessment (ASTM E1527-13, section 7.4), "this practice does not include any testing or sampling of materials (e.g., soil, water, air, or building materials)".

In addition, testing for the presence of suspect asbestos containing building materials, painted surfaces, PCBs, radioactivity, and radon were not conducted. Investigation, sampling or testing to determine potential existence of these materials would require a separate investigation, which is beyond the scope of this assignment and would require an investigation under a separate contract.

### 2.4.2. Outside Sources

AEC retained Environmental Record Search (ERS) to obtain available regulatory data within the search radius defined in ASTM Practice E1527-13 and to obtain available Sanborn® maps.

### 2.4.3. Physical Limitations

Throughout the course of the ESA, except where specifically stated in this report, it was not possible to investigate under floors, above ceilings, roof areas, behind walls, or under paved areas.

Contiguous properties were inspected to the extent possible from within the subject PROPERTY limits. Adjoining property usage was limited to the present, and based primarily on the visual inspection made from the subject property.



#### 2.4.4. Limiting Conditions and Methodology Used

In preparing this ESA, AEC has relied upon available and presumed accurate information (or the absence thereof) about the PROPERTY (i.e. property surveys, municipal review, regulatory database review, waste manifests, UST and AST inventory, Material Safety Data Sheets (MSD), waste disposal practices, and responses to AEC's questionnaire, etc.

Internally a representative number of areas were inspected. External evaluation of the PROPERTY was conducted by walking over the PROPERTY on a grid pattern. Any additional limiting conditions pertaining to this ESA are described in the associated sections.

#### 2.4.5. Continued Viability of the Environmental Site Assessment

An Environmental Site Assessment meeting or exceeding ASTM E1527-13 and completed less than 180 days prior to the date of acquisition of the PROPERTY or (for transactions not involving an acquisition) the date of the intended transaction is presumed to be valid. If within this period the assessment will be used by a different "user" than the "user" for whom the assessment was originally prepared, the subsequent "user" must also satisfy the "users" Responsibilities.

### 2.5 Special Terms and Conditions

No Environmental Site Assessment can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with the PROPERTY. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for *recognized environmental condition* in connection with a PROPERTY, and this practice recognizes reasonable limits of time and cost.

Achieving the study objectives stated in this report has required AEC to arrive at conclusions based upon the best information currently known to AEC. No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information; it can only reduce the possibility to an acceptable level. AEC has used reasonably ascertainable information in gathering and analyzing the information obtained. AEC does not act as absolute insurers of the conclusions and recommendations reached.

Based on our interpretation of current ASTM Standards AEC will only warrant this Report for six months from the date of this Report after which the Report should be updated. AEC will not be responsible or held accountable for reliance made by the "user" after that time or reliance at any time made by other parties not specifically identified in this Report.

#### 2.5.1. Confidentiality

This ESA has been prepared exclusively for Mr. Nasser Murad and Republic Bank, "user". AEC will hold this ESA, observations, related documents, etc., in strict confidence, and will only disclose information regarding this ESA at the direction of the "user" in writing. In addition, this ESA is not for the use or benefit of other parties.

### 2.6 User Reliance

It is understood that this ESA is prepared solely for the benefit of Mr. Nasser Murad and Republic Bank, "user", and it is intended that only the "user" will rely on the findings and conclusions presented in this ESA. Other parties may not rely upon this ESA, and AEC assumes no liability or responsibility for reliance made by other parties. The information presented in this ESA may not be quoted in whole or part without written consent of AEC and AEC is not responsible for the consequences from unauthorized third-party use of this Report.

### 3.0 User Provided Information

#### 3.1 Environmental Liens or Activity and Use Limitations

The "user" has no knowledge of any environmental liens or activity and use limitations.

#### 3.2 Specialized Knowledge

The "user" has not offered or revealed any specialized knowledge or experience that is material to *recognized environmental condition* in connection with the PROPERTY.

#### 3.3 Commonly Known or Reasonable Ascertainable Information

The "user" has not offered or revealed any commonly know or reasonable ascertainable information within the local community that is material to *recognized environmental condition* in connection with the PROPERTY.

#### 3.4 Valuation Reduction for Environmental Issues

Interviews conducted with the Owner's Representative (Mr. Nasser Murad) have revealed no known valuation reduction for environmental issues and it's believed the purchase price reflects the fair market value and has not been devalued because of any contamination.

#### 3.5 Owner, Property Manager, and Occupant Information

During the interview process with the Owner's Representative (Mr. Nasser Murad) no known information was disclosed regarding past or present environmental concerns or *recognized environmental conditions*, i.e., environmental liens, pending litigation relative to environmental violations, or non-compliance of regulatory statutes.

#### 3.6 Reason for Performing Phase I

The purpose of this practice (ASTM E1527-13) is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment* of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601) and *petroleum products*. As such, this investigation is intended to permit a "user" to satisfy one of the requirements to qualify for the *innocent land owner, contiguous property owner, or bona fide prospective purchaser* limitation of CERCLA liability (hereinafter, the "*landowner liability protection*" or "LLPS") that is, the practice that constitutes "*all appropriate inquiry*" in to the previous ownership and use of the PROPERTY consistent with good commercial or customary practice: as defined in 42 U.S.C. 9601(35)(B). In determining a standard of good commercial and customary practice for conducting an *environmental site assessment* of a parcel of PROPERTY, the goal of the processes established by this practice is to identify *recognized environmental conditions*.





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FEDERAL ASTM/AAI DATABASES							
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
BF-US	0.5	0	0	0	0	-	0
CERCLIS-ARCHIVED-US	0.5	0	0	0	0	-	0
CERCLIS-US	0.5	0	0	0	0	-	0
CONTROLS-RCRA-US	0.5	0	0	0	0	-	0
CONTROLS-US	0.5	0	0	0	0	-	0
DEBRIS-US	0.5	0	0	0	0	-	0
DELISTED-NPL-US	1	0	0	0	0	0	0
ERNS-US	0.0625	0	0	-	-	-	0
FEMA-UST-US	0.25	0	0	0	-	-	0
FITS-ENF-US	0.0625	0	0	-	-	-	0
HIST-DUMPS-US	0.5	0	0	0	0	-	0
HIST-US-EC	0.5	0	0	0	0	-	0
HIST-US-IC	0.5	0	0	0	0	-	0
HMS-US	0.0625	0	0	-	-	-	0
LIENS-US	0.0625	0	0	-	-	-	0
NPL-US	1	0	0	0	0	0	0
PADS-US	0.0625	0	0	-	-	-	0
PCB-US	0.25	0	0	0	-	-	0
RCRA-CESQG-US	0.25	0	0	0	-	-	0
RCRA-COR-US	1	0	0	0	0	0	0
RCRA-LOG-US	0.25	0	0	0	-	-	0
RCRA-NON-US	0.25	0	1	0	-	-	1
RCRA-SQG-US	0.25	0	0	3	-	-	3
RCRA-TSD-US	0.5	0	0	0	0	-	0
SAA-AGREEMENTS-US	1	0	0	0	0	0	0
TRIBAL-BF-US	0.5	0	0	0	0	-	0
TRIBAL-LUST-CLOSED-REG5	0.5	0	0	0	0	-	0
TRIBAL-LUST-OPEN-REG5	0.5	0	0	0	0	-	0
TRIBAL-ODI-US	0.5	0	0	0	0	-	0
TRIBAL-UST-REG5	0.25	0	0	0	-	-	0
TRIBAL-VCP-US	0.5	0	0	0	0	-	0

STATE ASTM/AAI DATABASES							
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
BF-IL	0.5	0	0	0	2	-	2
CITY-AST-IL	0.25	0	0	0	-	-	0
CITY-LUST-CLOSED-IL	0.5	0	0	0	0	-	0
CITY-OTHERS-IL	0.25	0	0	0	-	-	0
CITY-UST-IL	0.25	0	0	0	-	-	0
EC-IL	0.5	0	0	0	0	-	0
EW-CRR-IL	0.5	0	0	0	0	-	0
EW-RESI-IL	0.5	0	1	1	0	-	2
HIST-LF-IL	0.5	0	0	0	0	-	0
HVAR-IL	0.0625	0	0	-	-	-	0
IC-IL	0.5	0	0	0	2	-	2
LF-SPW-IL	0.5	0	0	0	0	-	0
LUST-CLOSED-IL	0.5	0	0	2	3	-	5
LUST-OPEN-IL	0.5	0	0	0	0	-	0
LUST-TRUST-IL	0.5	0	0	0	0	-	0
MANIFEST2-NY	0.0625	0	0	-	-	-	0
MANIFEST2-RJ	0.0625	0	0	-	-	-	0
SPILLS-IL	0.0625	0	0	-	-	-	0
SS-IL	0.5	0	0	0	0	-	0
STRIP-IL	0.5	0	0	0	0	-	0
SWF-IL	0.5	0	0	0	0	-	0
UECA-IL	0.5	0	0	0	0	-	0
UST-IL	0.25	0	0	0	-	-	0
VCP-CLOSED-IL	0.5	0	0	1	2	-	3
VCP-OPEN-IL	0.5	0	0	0	1	-	1

-----ADVANCED ENVIRONMENTAL CORPORATION-----

Regarding the PROPERTY:

No information was found in the ERS RecCheck/ Report regarding the PROPERTY and it is our opinion that no further investigation is required at this time.

Regarding the other reporting Properties:

Although a number of reporting sites were found throughout the respective search areas, it is our opinion that based on the location of these sites in relationship to the PROPERTY no further investigation is required at this time.

**4.2 Additional Environmental Records Sources**

Investigations were conducted through the IEPA web sites ([www.epa.state.il.us](http://www.epa.state.il.us)), (<http://tier2.icema.state.il.us/>) and the Office of the Illinois State Fire Marshal (<http://www.state.il.us/osfm/>) for information regarding environmental concerns or recognized environmental conditions relative to the PROPERTY. This investigation revealed the following:

**AGENCIES CONTACTED**

IEPA Bureau of Air	No Bureau of Air records were returned.
IEPA Bureau of Land	No Bureau of Land records were returned.
IEPA Bureau of Water	No Bureau of Water records were returned.
IEPA Office of Emergency Response	No Office of Emergency Response records were returned.
Illinois State Fire Marshal (OSFM)	No OSFM records were returned.

During the course of this investigation no evidence or information was found regarding environmental concerns or recognized environmental conditions relative to the PROPERTY.

**4.3 Physical Setting Sources(s)**

**4.3.1. Regional Groundwater Hydrogeology**

Four major aquifer systems are utilized in the Chicago metropolitan area. They are distinguished on the basis of hydrologic properties and source of recharge. The systems are:

1. The glacial drift aquifer system - consists mostly of sand and gravel deposits found in bedrock valleys and are recharged from precipitation and surface water.
2. The shallow bedrock aquifer system - consists mostly of Silurian dolomites, which directly yield water primarily from fractures and solution cavities; therefore, well yields show a wide variation depending upon location.

The glacial drift and shallow dolomite aquifers are hydro logically well connected in areas where sand and gravel deposits are present.

3. The Cambrian-Ordovician aquifer system - consists of the Galena-Platteville dolomited and the Ironton-Galeville sandstones.
4. The deeper Mt. Simon system consists of the lower portion of the Eau Claire and the Mt. Simon sandstones.



Recharge of both the Cambrian-Ordovician and the Mt. Simon comes from north and west of the Chicago area where some of the rock units outcrop or lie close to the surface. Some recharge of the deeper aquifers is contributed by leakage downward through the shallow aquifer system (Hughes, et al. 1966).

#### 4.3.2. Groundwater Conditions

The Illinois State Geological Survey Circular No. 532, Plate 1, Potential for Contamination of Shallow Aquifers from Land Burial of Municipal Wastes by Richard C. Berg, Dated 1984 was reviewed and revealed this area as being in Zone E. The Zone E indicates that there is uniform relatively impermeable silty or clayey till at least 50 feet thick separating the surface from the shallow aquifer with no evidence of inter-bedded sand or gravel. It is important to note that the map from which this information was derived is designed for regional evaluation, and the information would need to be verified for site specific purposes. These maps cannot be used as substitutes for site-specific evaluation because of local complexities in geologic materials. Other site-specific and seasonal factors that could not be included were slope variations, density of disposal sites, distance to nearby water wells, construction details of the wells, frost depth (for septic systems), and local land utilizations. All are beyond the scope of the project and/or the scale of the maps. Such factors must be determined on a site-by-site basis.

Ground water flow is generally influenced by such factors as geologic material, topography, relationship of nearby surface water bodies, nearby water supply wells and the presence of underground utilities (sewer lines, pipelines etc.).

#### 4.3.3. Topography and Hydrology

Historical Topographic Maps for the Harvey Quadrangle 7.5-Minute Series were obtained from Historic Aerial ([www.historicaerials.com](http://www.historicaerials.com)). AEC reviewed topographical maps for the years 1974, 1984, 1993, 2002 and current. The purpose of this investigation was to determine site activities and environmental concerns or *recognized environmental conditions* which may impact the PROPERTY. This investigation revealed the following:

The topographical maps reviewed revealed elevations of approximately 625 feet and relatively flat. Topographic relief appears to be in a southeasterly direction. However, actual groundwater flow direction in the vicinity of the PROPERTY cannot be determined without groundwater monitoring well data. No areas of environmental concern or *recognized environmental conditions* were identified at the PROPERTY or the adjoining properties.

It must be noted that in typical UST installations in the Chicago metro area, USTs are installed above a static groundwater table or aquifer, and there could be a considerable distance between the UST and groundwater. Unless the installation is on the side of a hill where there is radical topographic relief from the UST and from the adjacent property, a leaking UST could, and normally does, impact soils in any and all directions above groundwater. The impact could be relatively radial outward from the UST site, and until (and unless) the release impacts groundwater, its migration would be relatively independent of the direction of groundwater movement. Once the contamination encounters groundwater, further up gradient movement would basically stop, and the direction of migration in the groundwater would be consistent with the direction of groundwater flow, i.e. down gradient.

#### 4.4 Historical Use Information on the PROPERTY

##### 4.4.1. Investigations conducted with the Municipality and Assessor's Office

A Municipal investigation was conducted with the Village of Homewood, which consisted of correspondence in the form of Freedom of Information Act (FOIA) dated September 15, 2015. The purpose of this investigation was to determine current and previous activities and to determine environmental concerns or *recognized environmental conditions* which may impact the PROPERTY. This review revealed the following:

*As of the date of this Report the Village of Homewood has not responded to our FOIA request. When this information becomes available and is reviewed, any findings that may affect the opinions and conclusions stated in this Report AEC will immediately notify the "user" in writing.*

##### 4.4.2. Review of Sanborn® maps

In an attempt to determine previous site activities and for environmental concerns or *recognized environmental conditions* which may impact the PROPERTY AEC retained Environmental Record Search (ERS) to obtain Sanborn® maps for the PROPERTY. This investigation revealed the following:

No Sanborn® map coverage for the PROPERTY was found.

##### 4.4.3. Aerial Photographs

Aerial photographs for the PROPERTY were obtained from Historic Aerial ([www.historicaerials.com](http://www.historicaerials.com)). AEC reviewed aerial photographs for the years 1938, 1952, 1961, 1962, 1973, 1974, 1977, 1988, 1999, 2002, 2005, 2007, 2009, 2010, 2011 and 2012. The purpose of this investigation was to determine site activities and environmental concerns or *recognized environmental conditions* which may impact the PROPERTY. This investigation revealed the following:

1938 through 2007 - The aerial photographs reveal the PROPERTY undeveloped and heavily wooded. The north adjoining properties also remain undeveloped and are heavily wooded. The adjoining property to the south, Comcast antenna tower and station first appears on the 1988 aerial. The east adjoining property, Homewood Memorial Gardens Cemetery, appears on all the aerials. The west adjoining property, Park Place Plaza first appears on the 1974 aerial.

2009 through 2012 - The aerial photographs reveal the PROPERTY and the adjoining properties fully developed and existing in their current configurations.

Aerial photographs revealed the PROPERTY was developed by 2009. No areas of environmental concern or *recognized environmental conditions* were identified at the PROPERTY or the adjoining properties on any of the aerial photographs reviewed.

*The quality imagery of the aerial photographs provided is entirely limited by the resolution of the camera with which it was originally taken.*



#### 4.4.4. Data Failure

Data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives have not been met. Data failure is not uncommon in trying to identify the use of the PROPERTY at five year intervals back to first use or 1940 (whichever is earlier). Notwithstanding a data failure, standard historical sources may be excluded if: (1) the sources are not ascertainable, or (2) if past experience indicates that the sources are not likely to be sufficiently useful, accurate, or complete in terms of satisfying the objectives, other historical sources may be used to satisfy the objectives, but are not required to comply with this practice.

It is our opinion that based on this investigation significant data gaps do not exist. Any data gaps identified herein, as defined by ASTM Practice E1527-13 §3.2.20, are not considered to have significantly affected the ability to identify *recognized environmental conditions* in connection with the PROPERTY and so not alter the conclusions of this Report.

#### 4.5 Historical Use Information on Adjoining Properties

In an attempt to determine historical uses on the adjoining properties and for environmental concerns or *recognized environmental conditions* which may impact the PROPERTY, AEC reviewed aerial photographs for uses at the adjoining properties, refer to section 4.4.3. No areas of environmental concern or *recognized environmental conditions* were identified at the adjoining properties.

## 5.0 SITE DESCRIPTION

### 5.1 Location

The PROPERTY is located on the east side of Bretz Drive approximately 1/8 mile north of Ridge Road and is identified by PIN #'s 17759 Bretz Drive - 29-33-100-067-1010, 17801 Bretz Drive - 29-33-100-067-1011, 17803 Bretz Drive - 29-33-100-067-1012, 17807 Bretz Drive - 29-33-100-067-1013, 17811 Bretz Drive - 29-33-100-067-1014, 17847 Bretz Drive - 29-33-100-067-1006 and 17851 Bretz Drive - 29-33-100-067-1007.

### 5.2 Site and Vicinity General Characteristics

*Neither a Plat of Survey nor a site plan was furnished to AEC for the preparation of this ESA, all dimensions stated in this Report are estimated, and used for identification or inspection purposes only.*

The PROPERTY is located within the "M" zoning district of the Village of Homewood, defined as *Manufacturing Districts*.

#### 17759 through 17811 Bretz Drive:

The PROPERTY is boarded by vacant land to the north; an industrial condominium building to the south (17829-17845 Bretz Drive); vacant land to the east; and, Bretz Drive followed by the Washington Square Mall to the west.

#### 17847 & 17851 Bretz Drive:

The PROPERTY is boarded by vacant land to the north; a Comcast antenna tower and station to the south; the Homewood Memorial Gardens Cemetery to the east; and an industrial condominium building to the west (17829-17845 Bretz Drive).

### 5.3 Current Use(s) of the PROPERTY

#### Lease Holders:

17759 Bretz Drive - K. Yarborough  
17801 Bretz Drive - M. Marion  
17803 Bretz Drive - L. Clayton  
17807 Bretz Drive - Mack Companies  
17811 Bretz Drive - J. Berkley  
17847 Bretz Drive - D. Rycraw  
17851 Bretz Drive - Mark Landscapes

### 5.4 Past Use(s) of the PROPERTY

The 1938 through 2007 aerial photographs reveal the PROPERTY undeveloped and heavily wooded. The 2009 through 2012 aerial photographs reveal the PROPERTY fully developed and existing in their current configurations.

### 5.5 Description of Structures (summary)

#### 17759 through 17811 Bretz Drive:

A single story +/- 12,600 square foot industrial condominium building is constructed along the east side of Bretz Drive. The building has five rental units. The building is constructed on a concrete slab with a concrete block exterior. HVAC systems are roof mounted. In general, observed construction materials consist of: drywall partition walls, some painted surfaces, exposed ceilings, specialty and florescent lighting. The building is serviced by natural gas supplied by NiCor, electricity supplied by ComEd, and municipal sewer and water.

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17847 & 17851 Bretz Drive:

Unit 17847 encompasses 3,000 square feet, and unit 17851 encompasses 2,400 square feet, which are part of +/- 12,600 square foot industrial condominium building containing two other units singularly occupied by the Cremation Society of Illinois. The building is constructed on a concrete slab with a concrete block exterior. HVAC systems are roof mounted. In general, observed construction materials consist of: drywall partition walls, some painted surfaces, exposed ceilings, specialty and florescent lighting. The building is serviced by natural gas supplied by NiCor, electricity supplied by ComEd, and municipal sewer and water.

**5.6 Current Uses of the Adjoining Properties**17759 through 17811 Bretz Drive:

The PROPERTY is boarded by vacant land to the north; an industrial condominium building to the south (17829-17845 Bretz Dive); vacant land to the east; and, Bretz Drive followed by the Washington Square Mall to the west.

17847 & 17851 Bretz Drive:

The PROPERTY is boarded by vacant land to the north; a Comcast antenna tower and station to the south; the Homewood Memorial Gardens Cemetery to the east; and an industrial condominium building to the west (17829-17845 Bretz Dive).

A visual inspection of the adjoining properties was conducted from public thoroughfares and the PROPERTY perimeters. Our visual inspection did not reveal any obvious environmental concerns or recognized environmental conditions relative to the PROPERTY.

## 6.0 Site Reconnaissance

*Unless otherwise specified this section of the Report will apply to 17759 through 17811 Bretz Drive and units 17847 and 17851 Bretz Drive.*

An on-site reconnaissance, which consisted of interviews and visual observations, was conducted by AEC on September 11, 2015. The purpose of this reconnaissance was to review and evaluate the PROPERTY for existing and potential environmental concerns or *recognized environmental conditions* which may potentially influence the value. The conditions described herein are those which existed at that time. The Owner's Representative (Mr. Nasser Murad) accompanied AEC during this reconnaissance.

### 6.1 Methodology and Limiting Conditions

In preparing this ESA, AEC has relied upon available and presumed accurate information about the PROPERTY and responses to AEC's questionnaire. Internally a representative number of areas were inspected. External evaluation of the PROPERTY was conducted by walking or driving over the PROPERTY. Any additional limiting conditions pertaining to this ESA are described in the associated sections.

### 6.2 General Site Setting

The PROPERTY is located within the "M" zoning district of the Village of Homewood, defined as *Manufacturing Districts*.

### 6.3 Exterior Observations

#### 6.3.1. Underground Storage Tanks (UST)

A UST is any tank, including underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground. Ancillary equipment usually associated tank placement consists of fill ports, man-ways, vents, pipes, valves, concrete pads, and fuel dispensers.

On-site reconnaissance revealed no evidence of USTs or ancillary equipment associated with USTs.

#### 6.3.2. Used and Waste Tire Activity

Any person who operates a tire storage site or a tire disposal site that contains more than fifty (50) used or waste tires must give notice to the Illinois Environmental Protection Agency. The IEPA also maintain an inventory of all tire retailers for compliance assistance purposes.

On-site reconnaissance revealed no evidence of used tires or waste tire activity.

#### 6.3.3. Solid Waste Disposal

Solid waste disposal appeared in the form of general commercial refuse consisting primarily of paper, plastic, cardboard, and food spoils. These materials are collected in dumpsters and removed from the site by a contract hauler to the local landfill. There was no visual evidence of improper disposal of any hazardous or regulated materials.



6.3.4. Odors

On-site reconnaissance revealed no unusual or noxious odors were noted emanating from the PROPERTY.

6.3.5. Pools of Liquid

On-site reconnaissance revealed no evidence of pools of liquid of environmentally regulated materials or petroleum products.

6.3.6. Pits, Ponds or Lagoons

Man-made or natural depression in a ground surface that is likely to hold liquids or sludge containing hazardous substances or petroleum products. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

On-site reconnaissance revealed no evidence of pits, ponds, or lagoons associated with the retention, disposal or storage of environmentally regulated materials or petroleum products at the PROPERTY or at the contiguous properties.

6.3.7. Stained Soil or Pavement

On site reconnaissance revealed no visible evidence of stained soil or pavement associated with dumping or leaking of environmentally regulated materials or petroleum products.

6.3.8. Stressed Vegetation

On-site reconnaissance revealed no evidence of dead or stressed vegetation, due to the improper or illegal dumping of environmentally regulated materials or petroleum products.

6.3.9. Backfill Materials

On-site reconnaissance revealed no evidence of areas filled or graded by non-natural causes (or fill of an unknown origin) suggesting trash or other solid waste disposal. It appears the PROPERTY and the structures developed on the site follow the natural topography.

6.4 Interior Observations

6.4.1. Aboveground Storage Tanks (ASTs)

Title 41 Illinois Administrative Code Part 180 (dispensing tanks) defines above ground storage tanks (ASTs) intended for liquids that will be used for fueling motor vehicles or dispensing into portable containers are deemed "dispensing" tanks by the Office of the State Fire Marshal (OSFM).

On site reconnaissance revealed no areas of present or former AST placement.

6.4.2. Petroleum Products

On site reconnaissance revealed no inventory, usage, treatment or disposal of petroleum products.



#### 6.4.3. Drums

A "drum" is defined by ASTM E1527-13 as a container (typically, but not necessarily, holding 55-gallons (208 L) of liquid) that may be used to store hazardous substances or petroleum products.

On-site reconnaissance revealed no evidence of existing or former drum storage.

#### 6.4.4. Unidentified Substance Containers

On-site reconnaissance revealed no open or damaged containers containing unidentified substances suspected of being hazardous substances or petroleum products.

#### 6.4.5. Hazardous Substances

A substance defined as a hazardous substance pursuant to CERCLA 42 U.S.C. §9601 (14), as interpreted by EPA regulation and the courts: (A) any substance designed pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Resource Conservation and Recovery Act of 1976 (RCRA, as amended, (42 U.S.C. §6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §§6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) and hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. §7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2602 of Title 15.

The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under sub paragraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied material gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)"

On-site reconnaissance revealed no evidence, in identified or unidentified containers, of hazardous substances present at the PROPERTY. Also, there was no evidence of hazardous substances, treated or disposed of at the PROPERTY.

#### 6.4.6. Hazardous Waste

Any hazardous having the characteristics identified under or listed pursuant to section 3001 of RCRA, as amended, (42 U.S.C. §6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §§6901-6992k) has been suspended by Act of Congress) RCRA is sometimes also identified as the Solid Waste Disposal Act. RCRA defines a hazardous waste, at 42 U.S.C. §6903, as: "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may; (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitation reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed".

On-site reconnaissance revealed no evidence of hazardous waste at the PROPERTY. Also, there was no evidence of hazardous waste, treated or disposed of at the PROPERTY.

#### 6.4.7. Polychlorinated Biphenyls (PCBs)

PCBs are controlled by the Toxic Substance Control Act (TSCA). TSCA regulates the manufacturing of substances considered toxic and harmful to health and the environment. Typically PCBs may be found in transformers, fluorescent light ballasts, hydraulic lifts, electrical capacitors, oils, coolants.

No labeled PCB transformers were observed around the perimeter of the PROPERTY. Fluorescent lights were observed within the building. No evidence of leaking light ballasts was observed. Also, no other evidence of equipment, which may contain PCBs was observed at the PROPERTY, and no evidence of stained or discolored soil or concrete relative to PCBs was observed.

#### 6.4.8. Hydraulic Lifts

Typically these tanks are less than 100 gallons and are therefore regulatory exempt. However, if hydraulic tanks are present the potential exists that if these tanks had a release the PROPERTY may have been impacted.

On-site reconnaissance revealed no evidence of existing or former underground hydraulic lifts or reservoir tanks.

#### 6.4.9. Stains or Corrosion

On-site reconnaissance revealed no evidence of stains or corrosion on floors, walls, or ceilings which are applicable to regulated materials.

#### 6.4.10. Drains and Sumps

On-site reconnaissance revealed no evidence of dumping, stains, corrosion, discolored concrete, pungent, or noxious odors in any floor drains, sumps (if existing), or surrounding storm sewers.

#### 6.4.11. Waste Water

Wastewater is predominately sanitary effluent, and is discharged into the municipal sanitary sewer system. Based on the current and prior use of the PROPERTY no regulatory permits are required.

#### 6.4.12. Wells and Septic

Wells and septic are not an issue, and were not identified during the course of this investigation.

#### 6.4.13. Potable Water Source

Potable Water is defined as any water used for human consumption, including, but not limited to water used for drinking, bathing, washing dishes, preparing foods and watering gardens in which produce intended for human consumption is grown. For the purposes of this study, potable water is supplied to the PROPERTY by the local governing agency and is assumed to be in compliance with all water standards of the Safe Water Drinking Act.

#### 6.4.14. Air Emission Sources

The Clean Air Act (CAA), enacted in 1970 and amended in 1977, seeks to protect the public health and welfare by safeguarding and improving the quality of our air. Under the CAA, the United States Environmental Protection Agency establishes air quality standards. While the CAA regulates both stationary and mobile sources of air pollution, the stationary source restrictions are of primary concern to business. All facilities must meet permit requirements, even if that requires new control technologies in new or expanded facilities.

On-site reconnaissance revealed no evidence of equipment requiring permitting was observed. No unusual or noxious odors were noted emanating from the PROPERTY. The only source of air emissions would be the natural gas furnace(s).

#### 6.4.15. Heating and Cooling

The current source of heating appeared as the natural gas furnace(s). On-site reconnaissance revealed no evidence of sources for heating and cooling relative to petroleum products.

The current source of heating appeared as the natural gas furnace(s). A/C units appeared as roof mounted units. No evidence of sources for heating and cooling relative to petroleum products was observed.

#### 6.4.16. Vapor Intrusion

AEC evaluated the PROPERTY and surrounding properties in an effort to determine the potential of Vapor Intrusion at the PROPERTY. The goal of conducting this Vapor Intrusion evaluation is to identify if Vapor Intrusion conditions are present or likely present from "Chemical(s) of Concern" (COC) vapors in the sub-surface caused by the release of vapors from contaminated soil or groundwater either on or near the PROPERTY.

There is no known information at this time that vapor intrusion is an issue.

## 7.0 Interviews

The object of interviews is to obtain information indicating *recognized environmental conditions* in connection with the PROPERTY.

### 7.1 Interview with Owner

*The Owner is defined by ASTM E1527-13 as the fee Owner of record of the PROPERTY.*

The Owner of the PROPERTY was not available for an interview.

### 7.2 Interviews with Site Manager

*The key site manager is defined by ASTM E1527-13 as the person identified by the Owner or Operator of a PROPERTY as having good knowledge of the uses and physical characteristics of the PROPERTY.*

AEC personnel interviewed the Owner's Representative (Mr. Nasser Murad) of the PROPERTY. The purpose of this interview was to determine past and present use of the PROPERTY and for the purpose of completing the ASTM User Questionnaire E1527-13 and AEC's Questionnaire.

Responses to these questionnaires revealed no known environmental concerns or *recognized environmental conditions*. Also, during the interview process no known information was disclosed regarding past or present environmental concerns or *recognized environmental conditions*, i.e., environmental liens, pending litigation relative to environmental violations, or non-compliance of regulatory statutes. And at this time there is no known valuation reduction for environmental issues and in his opinion the purchase price reflects the fair market value and has not been devalued because of any contamination.

### 7.3 Interviews with Occupants

The Occupants of the PROPERTY were not interviewed.

### 7.4 Interviews with Local Government Officials

No local government officials were interviewed.

### 7.5 Interviews with others

No other parties were interviewed.



## 8.0 Findings

No known "*Recognized Environmental Conditions*" (RECs) relative to the PROPERTY were found or identified.

No "*Controlled Recognized Environmental Conditions*" (CREC's) relative to the PROPERTY were found or identified.

No "*Historical Recognized Environmental Conditions*" (HREC's) relative to the PROPERTY were found or identified.

No "*De Minimis Conditions*" relative to the PROPERTY were found or identified.

## 9.0 Opinion

It is our opinion that based on the Findings of this Phase I Environmental Site Assessment no further investigation is required at this time.

## 10.0 Conclusions

We have performed this Phase I Environmental Site Assessment for the PROPERTY located at 17759 through 17811 and 17847-17851 Bretz Drive, Homewood, Illinois 60430 to be in conformance with the scope and limitations of Practice E1527-13. This assessment has revealed no evidence of recognized environmental conditions (RECs) relative to the PROPERTY.

"*Recognized Environmental Conditions*" (RECs), are defined by ASTM E1527-13 as the presence or likely presence of any hazardous substance or petroleum products in, on or at the PROPERTY: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term is not intended to include "de minimis" conditions that generally do not present a threat to human health or the environment and that generally would not be subject to an enforcement action if brought to the attention of appropriate governmental agencies.

"*Controlled Recognized Environmental Conditions*" (CREC's), are recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, PROPERTY use restrictions, activity and use limitations, institutional controls, or engineering controls).

"*Historical Recognized Environmental Conditions*" (HREC's), are past releases of any hazardous substances or petroleum products that has occurred in connection with the PROPERTY and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjection the PROPERTY to any required controls (for example, PROPERTY use restrictions, activity and use limitation, institutional controls, or engineering controls).

"*De Minimis Conditions*", are conditions that generally will not present a threat to human health or the environment and that generally would not be subject of an enforcement action if brought to the attention of appropriate governmental agencies. De minimis conditions are not *recognized environmental conditions* or *controlled recognized environmental conditions*.

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## 11.0 Deviations

This Phase I Environmental Site Assessment is non-intrusive and non-destructive. An investigation for asbestos containing building materials, lead based paint, radon, mold, mildew or fungus, radioactivity, soil and groundwater contamination was not conducted by AEC or authorized by the "user". A focused investigation to determine whether or not any concern exists from these areas would require a separate study under a separate contract which is beyond the scope of this assignment.

Throughout the course of the ESA, except where specifically stated in this report, it was not possible to investigate under floors, above ceilings, roof areas, behind walls, or under paved areas. Contiguous properties were inspected to the extent possible from within the subject PROPERTY limits. Adjoining property usage was limited to the present, and based primarily on the visual inspection made from the subject property.

## 12.0 Additional Services

None required at this time.

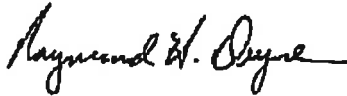
## 13.0 References

ASTM E1527-13  
Village of Homewood  
Advanced Searches  
Historical Aerial Photographs  
Historical Topographical Maps  
Historical Sanborn® maps  
Regulatory Databases  
Environmental Record Search (ERS)

## 14.0 Signature(s) of Environmental Professional(s)

To the best of any information and belief the facts stated in this Assessment are true and are made under a penalty of perjury as defined in Section 32-2 of the Criminal Code of 1961 (720 ILCS 5/32-2).

Submitted by:  
Advanced Environmental Corporation



Raymond H. Deyne  
President  
September 21, 2015

—ADVANCED ENVIRONMENTAL CORPORATION—

## 15.0 Qualifications(s) of Environmental Professional

I (we) declare that, to the best of my (our) professional knowledge and belief, I (we) meet the definition of *Environmental Professional* as defined in section 312 of 40 CFR 312, and I (we) have the specific qualifications based on education, training, and experience to assess a PROPERTY of the nature, history, and setting of the subject PROPERTY. I (we) have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

## 16.0 Appendices

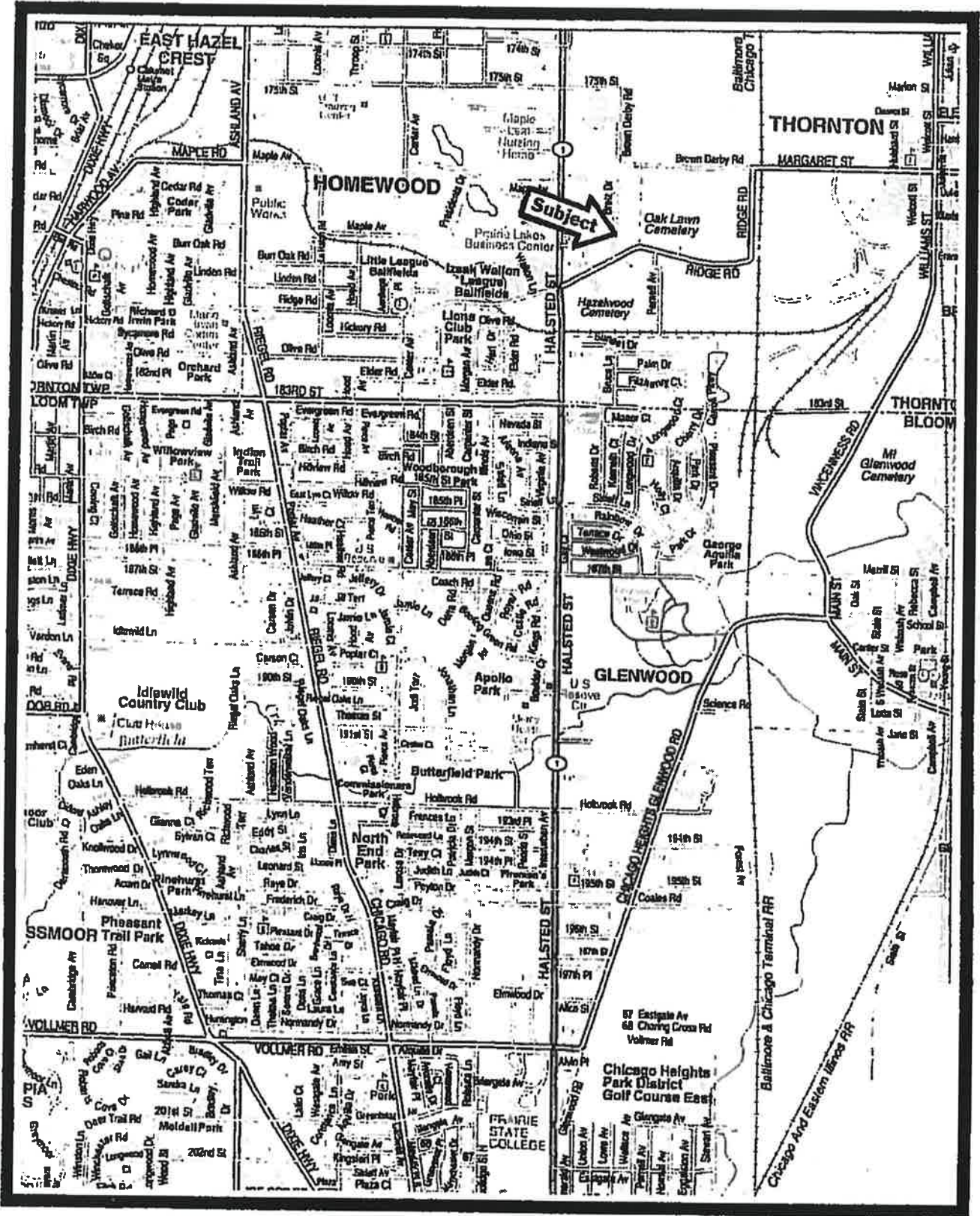
- Appendix A – Location, Zoning Map and/or Site Plan
- Appendix B - Site Photographs
- Appendix C – Municipal Investigation
- Appendix D – ASTM & AEC's Questionnaire
- Appendix E – Historical Topographical Maps
- Appendix F - Historical Aerial Photographs
- Appendix G – Historical Sanborn® Maps
- Appendix H – Regulatory Database Investigation
- Appendix I - General ASTM Definitions
- Appendix J – Qualification of Environmental Professional(s)
- Appendix K – ERS RecCheck<sup>✓</sup> Report



**APPENDIX A  
LOCATION & ZONING MAP**

ADVANCED ENVIRONMENTAL CORPORATION





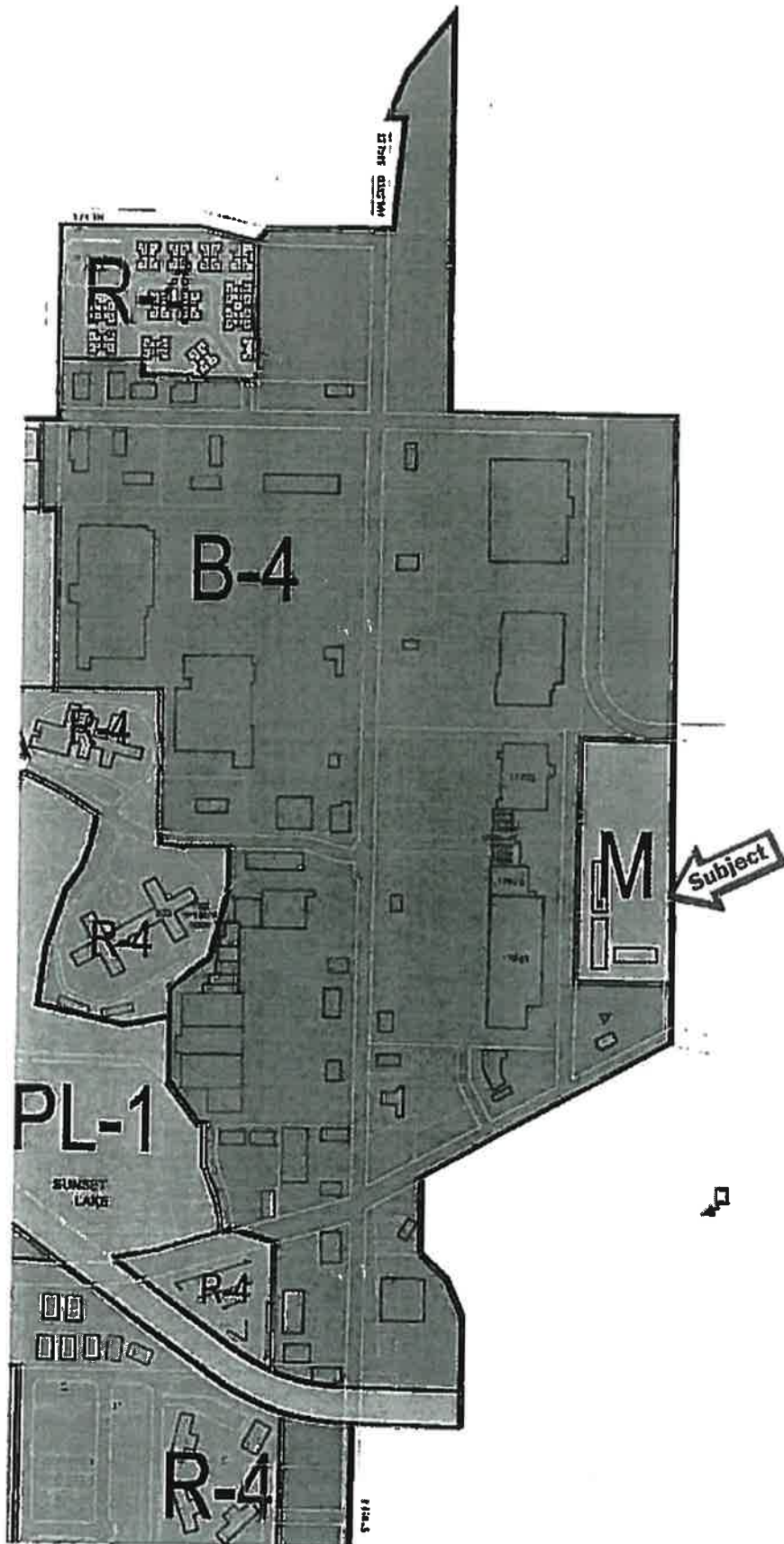
**Location Map**





**SITE LOCATION MAP**

Advanced Environmental Corp.	17759 Bretz Drive Homewood, IL	FIGURE: 2 JOB: 15.3418082 DATE: 8/21/2015
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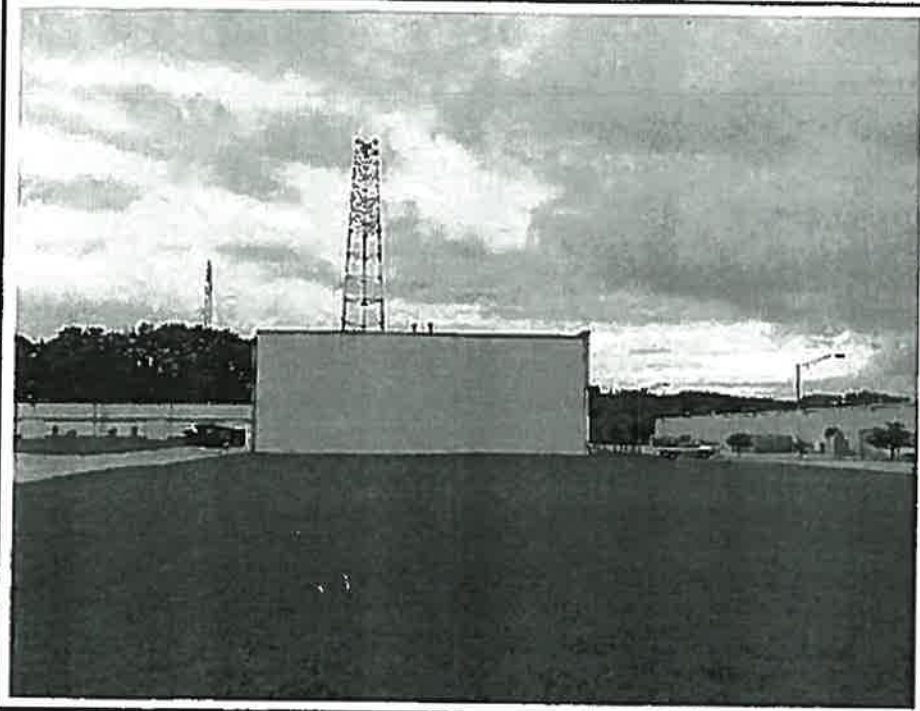
Monday, September 21, 2015 12:11:48 PM - ZONING MAP-1.pdf - Adobe Acrobat Pro



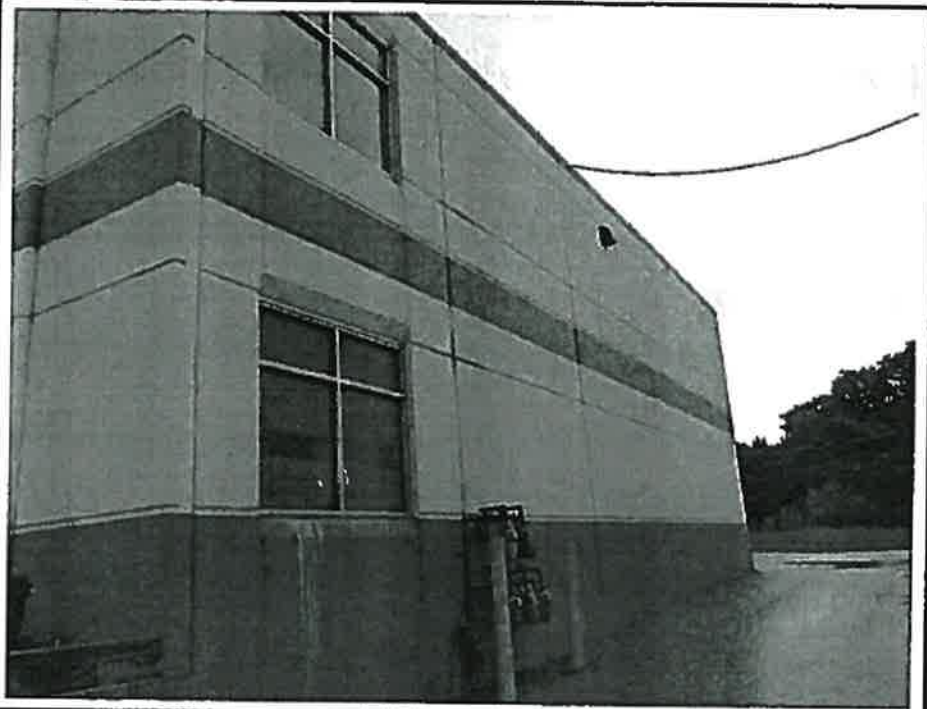
**APPENDIX B**  
**SITE PHOTOGRAPHS**



**ADVANCED ENVIRONMENTAL CORPORATION**



**Photograph 1 - PROPERTY View North Elevations, 17750-17851 Bretz Drive**

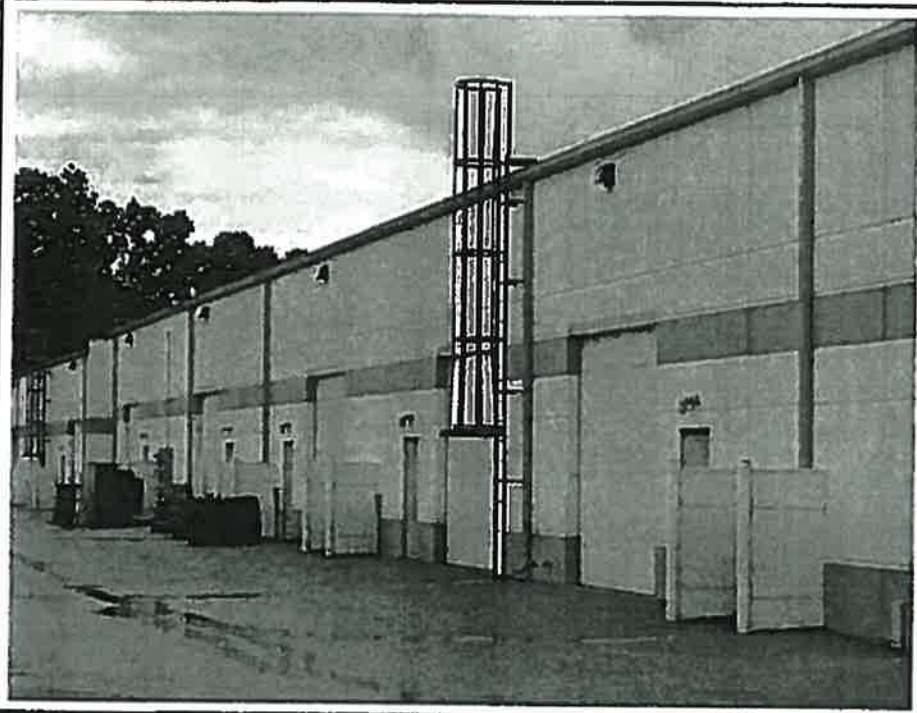


**Photograph 2 - PROPERTY View South Elevations, 17750-17851 Bretz Drive**

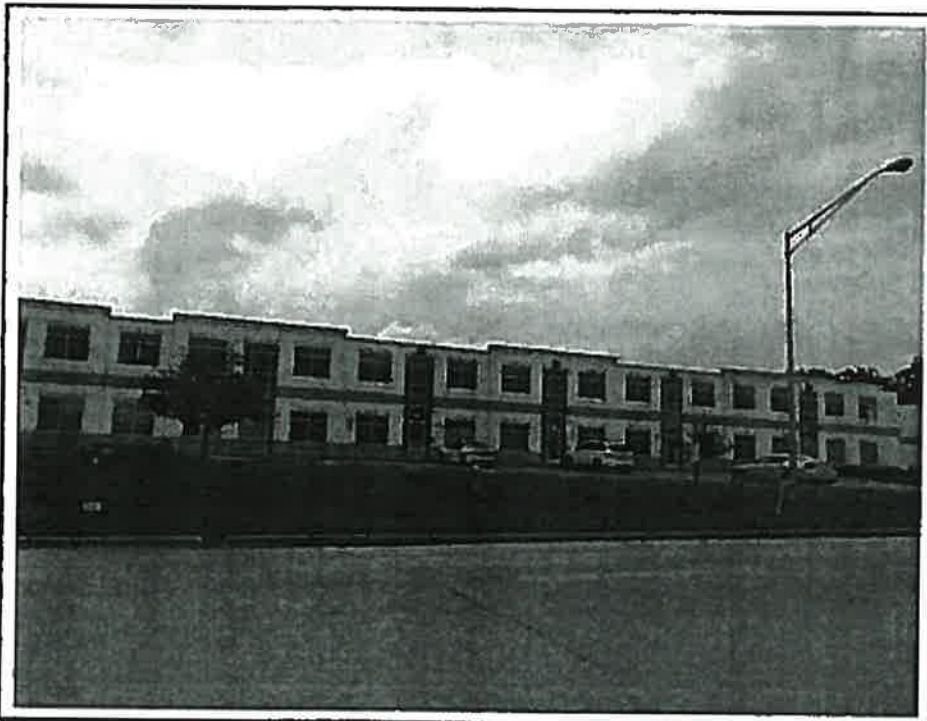
**PROJECT NO.: 15.3418082  
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**INDUSTRIAL UNITS, BRETZ DRIVE  
HOMEWOOD, ILLINOIS**

**ADVANCED ENVIRONMENTAL CORPORATION**



**Photograph 3 - PROPERTY View East Elevations, 17750-17851 Bretz Drive**



**Photograph 4 - PROPERTY View West Elevations, 17750-17851 Bretz Drive**

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SEPTEMBER 11, 2015**

**INDUSTRIAL UNITS, BRETZ DRIVE  
HOMEWOOD, ILLINOIS**



**Photograph 5 - North Contiguous Properties, 17750-17851 Bretz Drive**



**Photograph 6 - South Contiguous Properties, 17750-17851 Bretz Drive**

**PROJECT NO.: 15.3418082  
SEPTEMBER 11, 2015**

**INDUSTRIAL UNITS, BRETZ DRIVE  
HOMEWOOD, ILLINOIS**



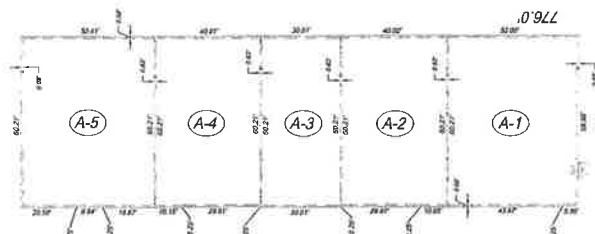
0923210013  
2 of 2

# EXHIBIT E TO DECLARATION OF INDUSTRIAL CONDOMINIUM OWNERSHIP FOR HOMEWOOD BUSINESS PARK CONDOMINIUMS



## Building A Data

Scale 1"=20'



**Notes:**  
 Finish Floor Elevation= 634.04  
 (Measured at the Front Entry Door)  
 Ceiling Height = 20.1' (Bottom Truss-Front)  
 = 17.9' (Bottom Truss-Rear)

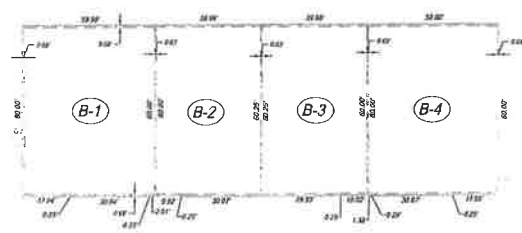
Unit Area : A-1 = 3,012 Sq. Ft.  
 A-2 = 2,407 Sq. Ft.  
 A-3 = 1,608 Sq. Ft.  
 A-4 = 2,408 Sq. Ft.  
 A-5 = 3,021 Sq. Ft.

Exterior Walls, Roofing, Interior Walls, Doors, Windows, Floor Interior Plumbing and Electrical appears to be Constructed at time of field measurements.



## Building B Data

Scale 1"=20'



**Notes:**  
 Proposed Finish Floor Elevation= 633.88  
 (Measured at the Front Entry Stilewalk)  
 Ceiling Height = 20.1' (Bottom Truss-Front)  
 = 17.9' (Bottom Truss-Rear)

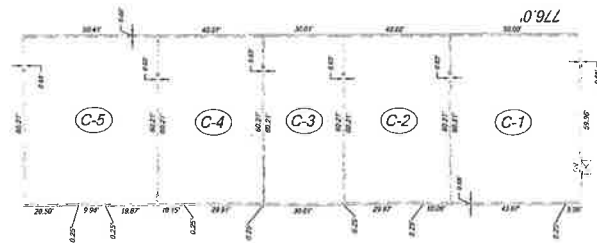
Unit Area : B-1 = 3,007 Sq. Ft.  
 B-2 = 2,406 Sq. Ft.  
 B-3 = 2,406 Sq. Ft.  
 B-4 = 3,007 Sq. Ft.

Exterior, Roofing and Interior Walls in place. No Doors, Windows or Floor Constructed at time of field measurements. Interior Plumbing and Electrical appears to be in progress.



## Building C Data

Scale 1"=20'



**Notes:**  
 Proposed Finish Floor Elevation= 634.04  
 (Measured at the Front Entry Stilewalk)  
 Ceiling Height = 20.1' (Bottom Truss-Front)  
 = 17.9' (Bottom Truss-Rear)

Unit Area : C-1 = 3,007 Sq. Ft.  
 C-2 = 2,402 Sq. Ft.  
 C-3 = 1,807 Sq. Ft.  
 C-4 = 2,403 Sq. Ft.  
 C-5 = 3,029 Sq. Ft.

Exterior, Roofing and Interior Walls in place. No Doors, Windows or Floor Constructed at time of field measurements. Interior Plumbing and Electrical appears to be in progress.

**Notes:**  
 Exterior Building measurements and building has as shown on Page 1 of 2 are taken at the outside of Precast Walls.  
 Interior Unit measurements taken from the center concrete block (interior Dwelling Wall) to the Outside Edge of the Center Wall. Unit area calculated on each.  
 Wall Thickness: Exterior (Precast Concrete) = 6.63"  
 Interior (Block) = 6.63"  
 Interior of all units are Precast or Block Wall Construction.  
 All the exterior site improvements, are to be considered Common Areas.  
 Distances are taken in U.S. Survey Feet and decimal parts thereof. No distance shall be assumed by scaling.  
 Site Improvements shown herein (i.e. sidewalk, parking areas and utility, etc.) are complete at time of field work.  
 Field Work Completed 03/26/09

**NOTE:**  
 Concrete Elements are all of the described property, except the individual units.  
 Exclusive Limited Common Elements are perimeter blocks and windows which serve the unit, the interior surface of perimeter walls, storage boxes which define the boundary planes of the unit, any system of component part thereof which serves the unit and exclusively to the extent that such system or component part is located outside the boundaries of the unit.

**NOTE:** Strip these Building Line Elevations of Elements shown in Attached Schedule. Plot any shown herein unless the recognition obtained by the surveyor is a proper description of the recorded building data or measurement.  
 No distance should be assumed by scaling.  
 Distances are taken in U.S. Survey Feet and decimal parts thereof.  
 No underground improvements have been located unless a sheet and notes.  
 All representations as to ownership, area, or perimeter should be taken as such.  
 This Survey and Plan of Survey are used without regard to any other survey, map or plat.  
 Changes and corrections and site markings with this plan and all ENCL. represent any discrepancies which may exist.

11. Encumbrance of 1/2 acre belonging to the cemetery located east of and adjoining over and onto the subject property is a distance of 2.5 feet, more or less. (Affects common elements).  
 12. Grant of easement by and between Homewood Business Park, LLC and Commonwealth Edison Company recorded May 4, 2009 as Document No. 09 0110018. (Affects common elements).

STATE OF ILLINOIS )  
 ) S.S.  
 COUNTY OF MCHENRY )  
 This is to certify that we have surveyed the premises above described, and that the plan herein is a representation of said survey. The Plan herein was prepared in accordance with the requirements under the Illinois Condominium Property Act (80 ILCS 605).  
 This professional service conforms to the current Illinois minimum standards for a boundary survey.  
 Date: at Homewood, Illinois, this 17<sup>th</sup> day of July, A.D. 2009  
 Civilian Consulting Engineers  
 J.S.R.  
 Illinois Professional and Surveyor No. 3316  
 (License expiration date: 11/02/2019)



Property Index No. 0900 29.31 100.017  
29.31 100.024

EXHIBIT E TO DECLARATION OF INDUSTRIAL CONDOMINIUM OWNERSHIP FOR HOMEWOOD BUSINESS PARK CONDOMINIUMS Homewood, IL

1	ACROSS	OWNER	DATE	PROJECT NO.
2	BY	REVISOR	DATE	STATION #
		CHECKED BY:	1-20'	2 of 2

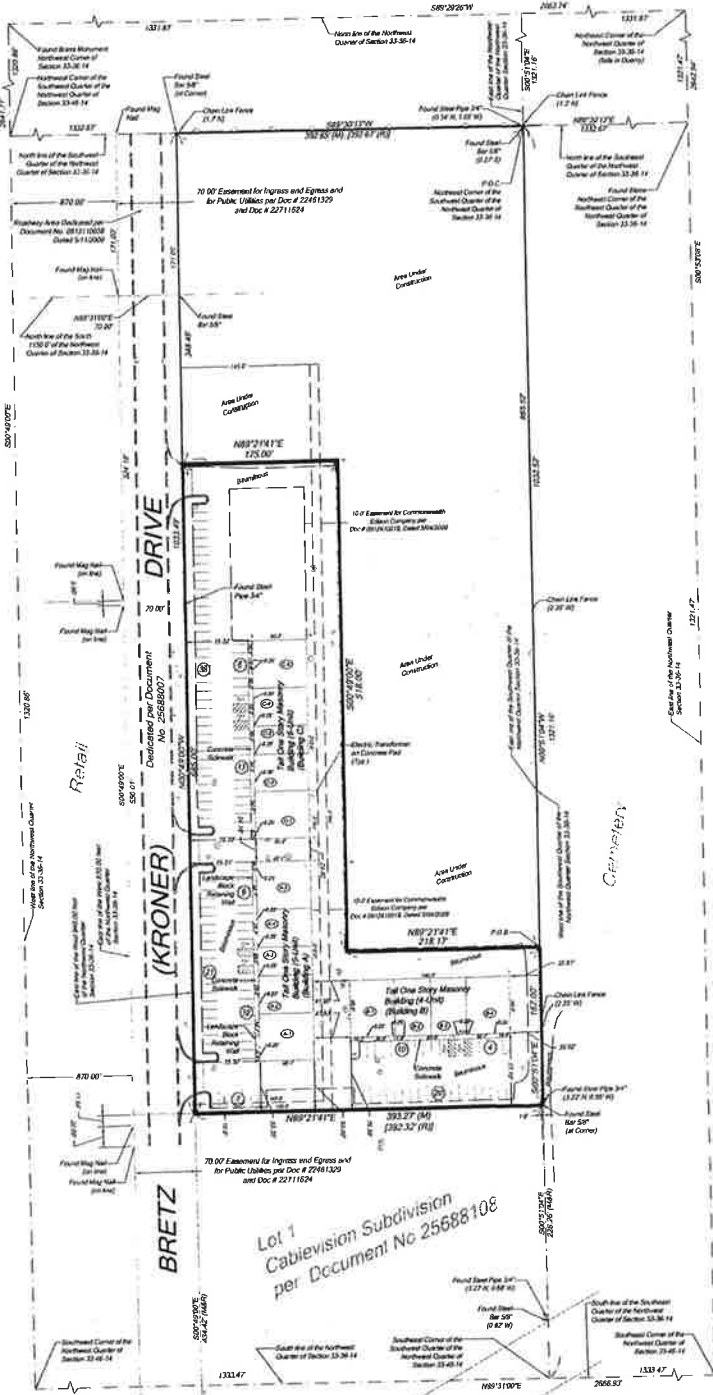


# EXHIBIT E TO DECLARATION OF INDUSTRIAL CONDOMINIUM OWNERSHIP FOR HOMEWOOD BUSINESS PARK CONDOMINIUMS

0923210013  
1 of 2



Date: 04/27/2011 Fee: \$150.00  
Project: HomeWood Business Park  
Cadastral Survey of Land  
Area: 0.00000000 ac (0.00000000 ha)



**Legal Description:**  
That part of the Southwest Quarter of the Northwest Quarter of Section 33, Township 36 North, Range 14 East of the Third Principal Meridian, being East of the West 843.00 feet road and being North of the North line of Colwell's Subdivision as recorded December 2, 1883 by Document No. 25688-01, described as follows:  
Commencing at the Southwest Corner of the Southwest Quarter of said Section 33, Township 36 North, Range 14 East of the Third Principal Meridian, thence South 00 degrees 01 minutes 04 seconds East 843.00 feet to the East line of the Third Principal Meridian, thence South 00 degrees 01 minutes 04 seconds East 843.00 feet to the East line of the Southwest Quarter of said Section 33, a distance of 800.00 feet to the point of beginning, thence containing South 00 degrees 01 minutes 04 seconds East along said East line a distance of 167.30 feet to the Northeast Corner of Colwell's Subdivision, as recorded December 2, 1883 by Document No. 25688-01, thence South 88 degrees 21 minutes 41 seconds West along the North line of said Colwell's Subdivision, a distance of 205.32 feet (237.7 feet measured) to the East line of said Platoned Area, as defined by Document No. 25688-01, thence North 00 degrees 01 minutes 04 seconds West along the East line of said Platoned Area, a distance of 823.00 feet, thence South 88 degrees 21 minutes 41 seconds East a distance of 175.00 feet, thence South 00 degrees 01 minutes 04 seconds East a distance of 114.00 feet, thence North 88 degrees 21 minutes 41 seconds East a distance of 218.17 feet to the point of beginning, all in Cook County Illinois Containing 3.558 Acres, more or less.

**Notes:**  
Exterior building measurements and building base as shown on Page 1 of 2 are taken at the outside of present walls.  
Interior line measurements taken from the center concrete block (placed directly HW) to the Outside Edge of the Exterior Wall. (All were checked for such).  
Wall Thickness: Exterior (Face of Concrete) = 0.00'; Interior (Block) = 0.03'.  
Interior of all units are Precast or Block Wall Construction.  
All the exterior side improvements, are to be constructed Common Area.

Distances are marked on U.S. Survey Feet and decimal parts thereof. No distance shall be assumed by setting.  
Site improvements shown (sewer, gas, electric, parking areas and HWY), will be complete at time of final work.  
Field Work Completed 03/26/09

This plat was prepared with the benefit of Title Commitment File No. MASTER R5472 DRIVE, an effective date of June 22, 2009, prepared by First Title Insurance Company. Survey was as follows:

1. The deed to the subject unit must contain the following language:  
"Owner also hereby grants to the parties, its successors and assigns, as rights and easements appurtenant to the subject unit described herein, the rights and easements for the benefit of said unit set forth in the Condominium Declaration, and grants, assigns to itself, its successors and assigns, the right and easements set forth in said declaration for the benefit of the remaining property described therein. This deed is subject to all rights, easements, covenants, restrictions and reservations contained in said declaration the same as though the provisions of said declaration were recited and stipulated at length herein."  
2. The mortgage to the subject unit must contain the following language:  
"Mortgagee also hereby grants to the mortgagee, its successors and assigns, as rights and easements appurtenant to the subject unit described herein, the rights and easements for the benefit of said unit set forth in the Declaration of Condominium. This mortgage is subject to all rights, easements and covenants, restrictions and reservations contained in said declaration the same as though the provisions of said declaration were recited and stipulated at length herein."  
3. Construction of Fence belonging to the unitary located east of and adjoining over and onto the subject property a distance of 2.5 feet, more or less. (Affects common elements).  
4. Grant of easement by and between HomeWood Business Park, LLC and Commonwealth Edison Company recorded May 4, 2008 as Document No. 0912410018. (Affects common area only).

**NOTE:**  
Common Elements are all of the described property, except the individual units.  
Exclusive Limited Common Elements are perimeter doors and windows which serve the unit, the interior surface of perimeter walls, ceilings, floors which define the boundary planes of the unit, any system or component part thereof which serves the unit exclusively by the nature that such system or component part is located outside the boundaries of the unit.

STATE OF ILLINOIS )  
COUNTY OF MAHESSETT ) S  
This is to certify that we have surveyed the premises above described, and that the plat herein is a representation of said survey. The Plat hereon was prepared in accordance with the requirements under the Illinois Condominium Property Act (90 ILCS 90).  
The professional services conform to the current Illinois minimum standards for a boundary survey.  
Signed and prepared this 17th day of July, A.D. 2009.  
Dated: 07/17/2009  
Professional Engineer No. 3328  
License expiration date: 11/03/2010



Site Data  
Scale 1"=100'

NOTE: Only those Building Line Restrictions or Easements shown as a Boundary Subdivision that are shown herein unless the description contained in the survey plat contains a proper description of the original plat to which it refers.  
1. No distance should be assumed by setting.  
2. Distances are marked on U.S. Survey Feet and decimal parts thereof.  
3. No underground easements or rights shown.  
4. Water courses shown are not shown.  
5. No representation as to ownership, title, or possession should be assumed.  
6. This survey and plat of survey are not valid unless signed and sealed and stamped as required.  
7. Compare your description and any markings with this plat and AT ONCE report any discrepancies which may exist.



Property Index No. (PIN) 29-33-100-017  
29-33-100-024

REVISION	DATE	BY	DESCRIPTION	SHEET NO.
1	07/17/09	3328	PREPARED BY	1 OF 2
2	07/06/09	3328	REVISION BY	1 OF 2
3			DATE	
4			CONTRACT	
5			BY	

# VILLAGE OF HOMEWOOD



**MEMORANDUM**

**DATE OF MEETING:** August 10, 2023

**To:** Planning and Zoning Commission

**From:** Angela Mesaros, Director of Economic and Community Development

**Topic:** Case 23-23

**APPLICATION INFORMATION**

APPLICANT	Tony Jaswal, General Energy Corporation
ACTION REQUESTED	Special use permit for ground-mount solar system Variance from rear yard requirement Variance from the minimum setback
ADDRESS	1000 Maple Avenue
PIN	29-32-200-086, 29-32-200-085, 29-32-200-099, and 29-32-200-098

**ZONING & LAND USE**

SUBJECT PROPERTY	ZONING	LAND USE
CURRENT	M-1 Limited Manufacturing	Vacant land
PROPOSED	<b>M-1 (no change)</b>	<b>Ground-mount solar system</b>
SURROUNDING N:	M-1 Limited Manufacturing	Prairie Lakes Business Park
E:	M-1 Limited Manufacturing	Prairie Lakes Business Park
S:	M-1 Limited Manufacturing	Prairie Lakes Business Park
W:	M-1 Limited Manufacturing	Prairie Lakes Business Park

**LEGAL NOTICE** Legal notice was published in *Daily Southtown* on Friday, July 21, 2023 letters were sent to property owners and residents within 250’.

**DOCUMENTS FOR REVIEW**

Title	Pages	Prepared by	Date
Zoning Applications	8	Tony Jaswal, General Energy Corporation	06/02/23
Alta Survey	1	Langan	06/30/23
PV Module Plans	6	Terrasmart	07/03/23
Terrasmart Ground Mount Layout	1	General Energy Corporation	05/23/23
Landscape Plan	2	Langan	07/18/23

**BACKGROUND**

INX International Ink Co., located at 1000 Maple Avenue, has hired General Energy Corporation as a general contractor to construct a ground-mount solar system on two acres of vacant land adjacent to their industrial building. The solar system is projected to reduce its total energy usage by 66%. Their parent company Sakata INX is exploring all areas of green energy and has set targets to lower their company’s GHG by 50% from their baseline year of 2005. The solar system commitment is for 25 years and will be owned by INX.

**DISCUSSION**

A ground-mount solar energy collection system on a one- to five-acre site is a special use in the M-1 Limited Manufacturing District. Special Uses are required for those uses that have a unique character that must be individually evaluated for potential impact on adjacent properties and the perceived public need for the particular use at the proposed location.

Section 44-04-14 (s) of the Village of Homewood Zoning Ordinance requires the following standards specific to (s) *Solar energy collection system ground, one-to-five-acre site*:

1. Ground-mounted solar energy collection systems shall be permitted in the rear setback only. The applicant has applied for a variance from this requirement. The proposed location is a separate lot that is technically the front yard for INX – no adequate space is available in the rear yard. The staff asked about the possibility of putting the solar system on the roof. The applicant stated that quotes for the roof were reviewed. However, there are a lot of openings on this roof which restricts the number of panels and causes a maintenance access issue. For this reason, they are only focusing on the open land.
2. The maximum height of ground-mounted solar energy collection systems shall be five feet in height, measured from the grade at the base of the pole to the highest edge of the system. The proposed height of the system is 5.7 feet. The applicant has applied for a variance from this requirement.
3. Minimum clearance between the lowest point of the system and the surface on which the system is mounted shall be 12 inches. The proposed system meets this requirement.
4. Ground-mounted solar energy collection systems shall be exempt from the impervious surface limits if the ground directly under the solar panel is plated with native plantings and ground cover. This is under review by the Village Arborist.
5. All parts of the freestanding system shall be set back five feet from the side and rear lot lines and shall not be located in a public utility easement. The proposed system meets this requirement.
6. Solar panels shall be screened from view from any public right-of-way unless otherwise approved by the director of economic and community development. As proposed, the screening is a five-foot high vinyl privacy fence. However, at the site plan review committee meeting, staff including the Police Chief expressed concerns about the safety of a privacy fence: if someone were to jump over it, the Police could not see them. According to the applicant, the issue with a taller fence (taller than 5ft) is that it would shadow the solar panels which will negatively impact solar energy production. But they are open to a metal decorative

fence with posts. For additional security, the fence and cameras would be tied to the current camera security system.

7. Information regarding the owner of the property and operator of the solar energy system shall be submitted to the village and updated with any change in the property owners or operators.
8. Decommissioning required. Any solar energy use that is not actively in use for 12 consecutive months the operator shall decommission the operator shall have six months to fully decommission the use, including all panels, structures, accessories, and appurtenances, shall be entirely removed from the lot.
9. Decommissioning plan. Prior to receiving approval, the applicant for any solar energy use shall submit a decommissioning plan to ensure that the project is properly decommissioned, which shall include:
  - a. Procedures for the removal of structures, debris, and cabling, including those below the soil surface;
  - b. Provisions for the restoration of the natural soil and vegetation;
  - c. A provision that the terms of the decommissioning plan shall be binding upon the owner or operator and any of their successors, assigns, or heirs.

The applicant has provided a decommissioning plan (attached).

## STAFF COMMENTS

The Staff Site Plan Review Committee reviewed the plan with the following comments questions and comments related to the plan:

- The applicant confirmed that no additional infrastructure is required besides the solar equipment.
- The applicant confirmed that the panels are not motorized and will be fixed facing south around a 10deg tilt. Therefore, this will not provide any reflection or light pollution to the Izaak Walton Preserve to the north and east.
- Staff has asked the applicant to confirm in writing that an MWRD permit is not required for this project.
- Fire Chief asked how to shut the system down in an emergency. The applicant will install a main disconnect switch that can shut down the entire solar system's electrical supply. This switch will be located near a designated point on the site. The details will be included when they submit the final electrical plans.
- The project will not generate any additional property taxes. This was confirmed with Mohammed Elahi (Planning and Development) at the Cook County office.

## FINDINGS OF FACT

The staff has prepared the **draft** findings of fact in accordance with the standards set forth in Section 44-07-12.D of the Zoning Ordinance Standards for a Variance. **The draft findings are provided for the convenience of the Commission. The Commission may make any changes to reflect the findings**



**determined through the process of the hearing.** The findings of fact, as proposed or as amended, may be entered into the record.

- The subject property is located at 1000 Maple Avenue;
- The property is owned by the INX International Ink Co;
- The property is zoned M-1 Limited Manufacturing;
- The applicant must abide by the standards in Section 44-04-14 (s) of the Village of Homewood Zoning Ordinance (with the exception of two variances: (1) & (2)); and
- The proposed use is compatible with the adjacent uses.

**RECOMMENDED PLANNING & ZONING COMMISSION ACTION**

The Planning and Zoning Commission may wish to consider the following motion, written in the affirmative:

**Recommend approval of Case 23-23 granting (1) a special use for a ground-mount solar collection system on a 1 to 5-acre site; (2) a variance from Subsection 44-04-14(s)1 to locate in the front yard; and (3) a variance from Subsection 44-04-14(s)2 for a maximum height of 5.7 feet, INX International Ink Co. at 1000 Maple Avenue, subject to all other requirements of Section 44-04-14 (s) of the Village of Homewood Zoning Ordinance.**

**The Findings of Fact shall be included as part of the record and recommendation to the Village Board of Trustees.**

PIN: 29-32-200-086, 29-32-200-085,  
29-32-200-099, 29-32-200-098

Case 23-23 PZC

August 10, 2023



1000 Maple Avenue

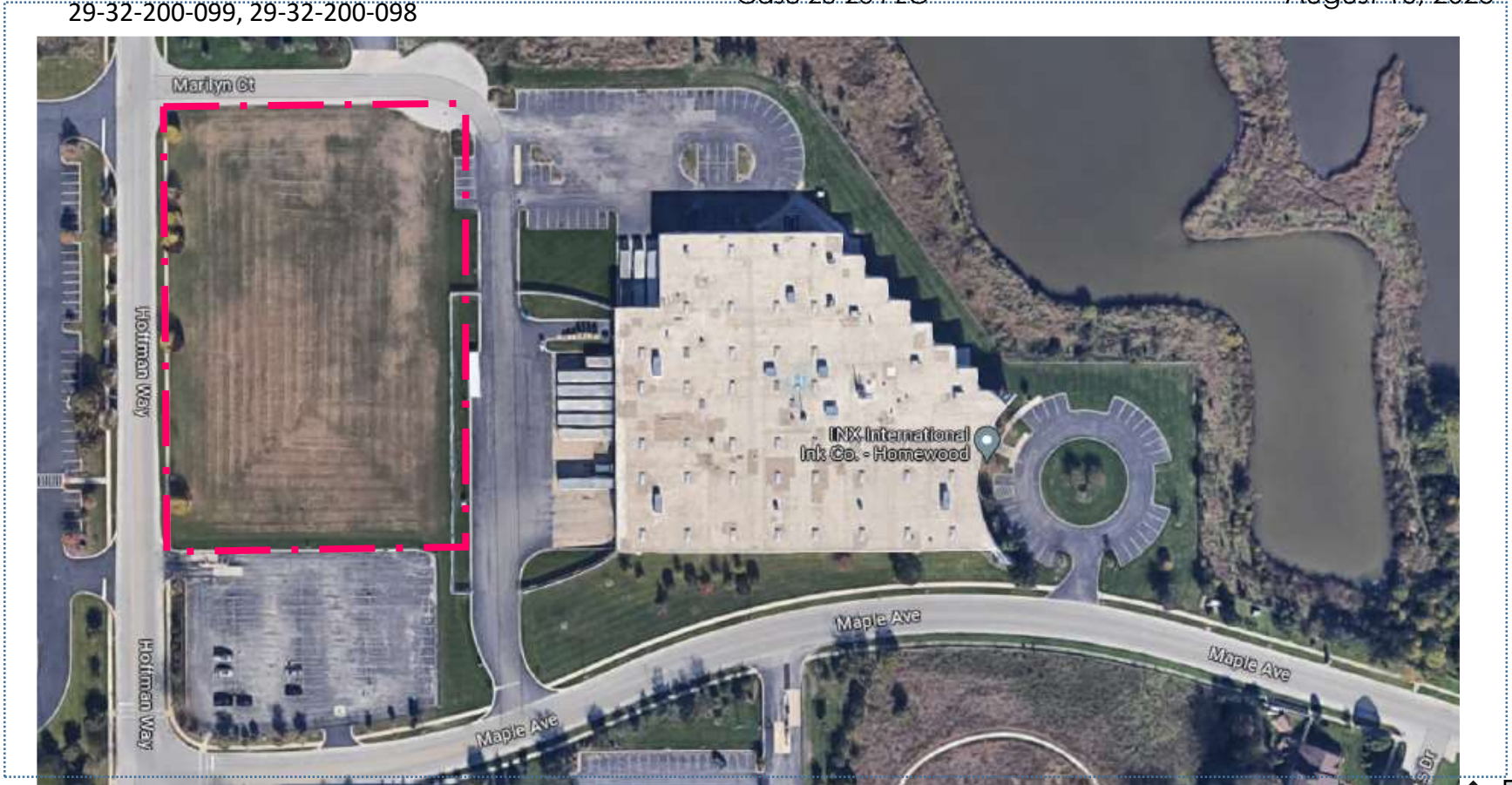
# INX International Ground Mount Solar Collection System

Site Plan  
Item 5. B.

PIN: 29-32-200-086, 29-32-200-085,  
29-32-200-099, 29-32-200-098

Case 23-23 PZC

August 10, 2023



© 2023 Google Maps.

Prepared by: Angela Mesaros, Director of Economic and Community Development



PIN: 29-32-200-086, 29-32-200-085,  
29-32-200-099, 29-32-200-098

Case 23-23 PZC

August 10, 2023



Proposed Solar System



# NON-RESIDENTIAL ZONING REVIEW PROCESS AND REQUIREMENTS



Item 5. B.

2020 Chestnut Road, Homewood, IL 60430

## APPLICATION CHECKLIST

For all applications, provide the following:

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Completed application form            | <input checked="" type="checkbox"/> Proof of ownership, or Letter of authorization by the owner | <input checked="" type="checkbox"/> Materials, as listed below |
| <input checked="" type="checkbox"/> Plat of survey with legal description |   | <input checked="" type="checkbox"/> Payment of fee             |

Based on each action(s) requested, provide the required materials listed below. Staff reserves the right to request additional materials, as required by the scope of the request, to make an informed decision.

### Special Use, Limited Use, Temporary Use

- Site plan
- Conceptual floor plan
- Completed worksheet responding to applicable standards or review criteria
- Narrative describing the proposed use, including:
  - services provided
  - hours of operations
  - anticipated average and peak capacity

### Variance

- Site plan
- Conceptual floor plan
- Completed worksheet responding to standards
- Letters of support from neighbors, optional

### Site Plan Review

- Site plan or survey of existing conditions
- Site plan of proposed development
- Conceptual floor plan(s)
- Landscape plan, existing and proposed, if impacted by changes

### Text or Map Amendment

- Site plan
- Conceptual floor plan
- Narrative describing the proposed land use requiring the amendment to the zoning text or map
- Completed worksheet responding to applicable standards

### Planned Development

- Proposed plat of record for lot consolidation or subdivision
- Directory of all development team members/consultants with contact information
- Site plan or survey of existing conditions
- Site plan of proposed development
- Conceptual floor plan(s)
- Transportation Impact Study
- Village Impact Study
- Studies or reports by outside agencies

## APPEARANCE REVIEW

For applications requiring Appearance Review, submit the following materials:

- Completed Appearance Commission application form
- Narrative describing the proposed new or changed to elevations, landscaping, lighting, and/or signage
- Elevation and/or plan drawings showing the existing and proposed conditions
- Photometric plan for new or changes to exterior lighting
- Material palette board (digital), showing, as applicable:
  - building materials
  - plants and landscape materials
  - cut sheets for lighting fixture
  - cut sheets for site furnishings



# VILLAGE OF HOMEWOOD

APPL Item 5. B.

# NON-RESIDENTIAL ZONING REVIEW

2020 Chestnut Road, Homewood, IL 60430

## PROPERTY INFORMATION

**Street Address:** 1000 Maple Ave Homewood, IL 60430

**Property Index Number(s):** 29-32-200-086, 29-32-200-085,  
29-32-200-099, 29-32-200-098

**Lot Size:** 92400 sq. ft. 2 acres  
*If the subject property is multiple lots, provide the combined area.*

**Zoning District:**  
 R-1  R-2  R-3  R-4  B-1  B-2  B-3  B-4  M-1  M-2  PL-1  PL-2

Complete this section to determine your required review(s):

Is the subject property more than one lot held in common ownership?

yes  no

→ If yes, lots held in common ownership should be consolidated

A Planned Development is required for development of lots >25,000 sf or located in the B-1 or B-2 Zoning Districts.

## REQUESTED USE

**Requested Use:** Ground Mount Solar PV System

**Gross Floor Area:** 92400 sq. ft. **Parking Provided:** \_\_\_\_\_

**Existing Use:** Open area

The requested use is:

- Permitted
- Limited
- Special
- Other:

## SITE OR BUILDING CHANGES

**Existing Development:** Open area

**Proposed Development** *Check all that apply. Provide a description and metrics below.*  
 New Construction  Addition  Site Alterations  Exterior Building Alterations

Installation of Solar PV System

Development Metrics	Existing	Proposed
Gross Floor Area (sq. ft):	<u>92400</u>	<u>92400</u>
Parking Spaces	<u>0</u>	<u>0</u>
Lot Coverage		
Impervious Area (sq. ft.)	<u>0</u>	<u>0</u>
Impervious Coverage (%)		

New construction?

yes  no

→ If yes, requires Site Plan Review

Floor area increase is 20% or more?

yes  no

→ If yes, requires Site Plan Review

Does the applicant elect to proceed as a Planned Development?

yes  no

Is site circulation or parking impacted?

yes  no

→ If yes, requires Site Plan Review

Is site landscaping impacted?

yes  no

→ If yes, requires Site Plan Review

Exterior building alterations?

yes  no

→ If yes, requires Appearance Review

## ZONING RELIEF OR CHANGES

**Zoning Variance or Amendment** *Describe any requested zoning relief or changes below.*

1. Approval for location of the solar array. 2. Requesting approval for no screening for public right of way. 3. Requesting for minimum set back so we can maximize the size of the solar PV system.

The applicant requests:

- Variance
- Administrative Exception
- Zoning Text Amendment
- Zoning Map Amendment

APPLICANT

Name Tony Jaswal  
 Company General Energy Corporation  
 Address 25 NW Point Blvd, Suite 125,  
Elk Grove Village, IL 60007  
 Phone 224-456-0715  
 Email tonyj@generalenergycorp.com  
 Role Vice President

PROPERTY OWNER

Name Kevin Cochran  
 Company INX International Ink Co.  
 Address 1000 Maple Ave #2047,  
Homewood, IL 60430  
 Phone 716-397-8953  
 Email Kevin.Cochran@inxintl.com

Check box if the applicant is the property owner

I acknowledge and attest that:

- » All the information and exhibits submitted with this application are true and accurate to the best of my knowledge;
- » Village representatives are permitted to make reasonable inspections of the subject property necessary to process this application;
- » I agree to pay all required fees;
- » No work may be done without first obtaining a Building Permit. All work shall be completed in accordance with Village Codes and Ordinances.

Tony Jaswal  
 Applicant Name

Tony Jaswal  
 Applicant Signature

6-2-2023  
 Date

**Staff Notes**

*Do not write below this line.*

Fee: _____ <input type="checkbox"/> Paid	Date Received: _____
CASE NO: <u>23-23</u> REQUEST: _____	
Comments/ Conditions:	<input type="checkbox"/> Approved <input type="checkbox"/> Approved with Conditions <input type="checkbox"/> Denied                              Date: _____
CASE NO: _____      REQUEST: _____	
Comments/ Conditions:	<input type="checkbox"/> Approved <input type="checkbox"/> Approved with Conditions <input type="checkbox"/> Denied                              Date: _____
CASE NO: _____      REQUEST: _____	
Comments/ Conditions:	<input type="checkbox"/> Approved <input type="checkbox"/> Approved with Conditions <input type="checkbox"/> Denied                              Date: _____
This application has zoning approvals and may proceed to obtain Building Permits or a Certificate of Occupancy.	
Name: _____	Signature: _____      Date: _____



# STANDARDS FOR: SPECIAL USE

2020 Chestnut Road, Homewood, IL 60430

Street Address:	1000 Maple Ave	Homewood, IL 60430
Requested Use:	Ground Mount Solar PV	Area: 92400 sq. ft.
Business Name:	INX International Ink Co.	
Applicant Name:	General Energy Corporation	Date: 6/2/2023

Provide responses to each question below using complete sentences and specific to the proposed business and selected location.

The Planning and Zoning Commission and Village Board shall consider the following responses to the Standards for a Special Use in evaluating the application. No one is controlling.

1. Is the special use deemed necessary for the public convenience at this location?

*Describe why this location is best-suited for your business to serve the community.*

The current location, owned by INX International, is uniquely suited to serve the community in several ways. Firstly, as a vacant open land, it offers the necessary space to accommodate a ground-mount solar array, which aligns with our goal of offsetting our energy usage and reducing our carbon footprint. By harnessing solar energy, we aim to showcase the practical benefits of renewable energy

2. Is the special use detrimental to the economic welfare of the community?

*Will the business have a negative impact on other businesses?*

This ground mount solar system will not have any negative impact on other business. Furthermore, the visibility of the ground-mount solar array at this location will serve as a tangible example to the community. It will demonstrate our commitment to environmental stewardship and inspire others to consider adopting solar energy solutions as well.

3. Will the special use be consistent with the goals and policies of the Comprehensive Plan?

*Describe how your business fits with the goals and policies summarized on the attached sheet.*

As a current vacant open land, it offers the necessary space to accommodate a ground-mount solar array.

4. Is the special use so designed, located, and proposed to be operated, that the public health, safety, and welfare will be protected?

*Describe any negative impacts, external to your business, that may result from it operating at this location.*

The installation of the proposed solar system will adhere to all relevant safety codes, regulations, and industry best practices. This includes proper grounding, wiring, and equipment installation to mitigate any potential electrical hazards. Additionally, appropriate signage and fencing will be implemented to prevent unauthorized access and ensure the safety of the surrounding community.

5. Is the special use a suitable use of the property, and will the property will be substantially diminished in value without the special use?

*Describe why your business is best-suited for your this property.*

The installation of the proposed solar system allows for the productive use of the property by utilizing the available space for renewable energy generation. This aligns with the growing demand for sustainable energy solutions and contributes to environmental conservation efforts. The presence of a ground mount solar system can enhance the value and desirability of the property.



- 6. Will the special use cause substantial injury to the value of other property in the neighborhood in which it is located?

*Will your business decrease the value of other properties?*

Ground mount solar systems are becoming increasingly common and accepted as a renewable energy solution. Many communities and neighborhoods have embraced solar installations as a positive addition to their surroundings. As a result, the presence of a ground mount solar system is unlikely to be perceived as a detriment or cause substantial injury to neighboring properties.

- 7. Will the special use be consistent with the uses and community character of the neighborhood surrounding the property?

*Describe how your business is compatible with its neighbors.*

The installation of a ground mount solar system aligns with the growing trend of incorporating sustainable practices into communities. As more neighborhoods prioritize renewable energy sources, the presence of a solar system can contribute to the overall community character by demonstrating a commitment to environmental responsibility and reducing carbon footprints.

- 8. Will the special use be injurious to the use or enjoyment of other property in the neighborhood for the purposes permitted in the zoning district?

*Describe any negative impacts, external to your business, that may result from it operating at this location.*

The proposed solar system will be designed and operated in a manner that is compatible with the permitted uses in the zoning district. Solar installations do not generate noise, emissions, or other nuisances that would disrupt the use or enjoyment of neighboring properties.

- 9. Will the special use impede the normal and orderly development and improvement of surrounding properties for uses permitted in the zoning district?

*Describe any negative impacts, external to your business, that may result from it operating at this location.*

The proposed solar system can coexist with a wide range of permitted uses in the zoning district. It will not impose limitations or restrictions on neighboring properties' development plans or their ability to pursue their permitted uses.

- 10. Does the special use provide adequate measures of ingress and egress in a manner that minimizes traffic congestion in the public streets?

*Describe how will customers get to and from your business.*

Ground mount solar systems do not generate significant vehicular traffic once they are installed. They are passive installations that do not require frequent visits or deliveries, resulting in minimal traffic associated with their operation.

- 11. Is the special use served by adequate utilities, drainage, road access, public safety and other necessary facilities?

*A new business going into an existing development, may answer 'no.'*

NA

- 12. Will the special use substantially adversely affect one or more historical, archaeological, cultural, natural or scenic resources located on the parcel or surrounding properties?

*A new business going into an existing development, may answer 'no.'*

The proposed solar system will adhere to all applicable regulations and guidelines related to the preservation of historical, archaeological, cultural, natural, and scenic resources. Any requirements set forth by relevant agencies or organizations will be followed.

## 1999 COMPREHENSIVE PLAN

*Below is an excerpt of the 1999 Comprehensive Plan containing those goals and objectives related to land use and community economic development which may be informative in the evaluation of special use permits.*

### Goal 1 - Land Use and Community Economic Development

Promote development of all remaining undeveloped property within the Village of Homewood for sound and orderly residential, commercial, and industrial development consistent with the Comprehensive Plan and the Future Land Use Map.

#### Objectives

- 1.1 - Recruit additional appropriate retail and industrial development for designated vacant commercial and industrial areas shown on the Future Land Use Map [current zoning map].
- 1.2 - Prepare a streetscape right-of-way plan for 183rd Street from the intersection of Dixie Highway to Governor's Highway to establish commercial "entryways" into the downtown central business district.
- 1.3 - Complete a plan to assess the potential for the Downtown to serve as a regional entertainment and "upscale" shopping district, serving residents within a 10-mile radius.
- 1.4 - Establish a transition zone surrounding the current downtown where, depending on market timing, changes in zoning from residential to commercial or mixed-uses would be favorably considered depending on specifics of the proposal.
- 1.5 - Complete an assessment of the success of the recent parking improvement actions to provide additional parking in the downtown and, if warranted, study the need and location of additional parking- both surface and elevated.
- 1.6 - Establish guidelines for appropriate mixed-use downtown development, including parking requirements, acceptable uses, and Village financing assistance (if deemed appropriate).
- 1.7 - Implement municipal utility improvements, especially storm water improvements, sidewalk construction/ replacement, streetscape, street tree plantings, and signage improvements.

## 2009 DOWNTOWN MASTER PLAN

*Below is an excerpt of the 2009 Downtown Master Plan containing the objectives of the Master Plan. The Downtown Master Plan generally encompasses those areas zoned B-1 and B-2.*

### Master Plan Objectives

- » Sustain and enhance Downtown Homewood as a regional draw for the South Suburbs.
- » Encourage mixed-use development of key opportunity sites to create a more active "18-hour" downtown.
- » Increase commercial development to provide more goods and services for residents and visitors.
- » Increase commercial development to enhance the economic base of the Village.
- » Increase residential densities throughout Downtown to support transit use and new commercial activity.
- » Increase use of the Amtrak and Metra stations.
- » Encourage new residential development that provides a wider range of housing products in the Village, including apartments, condominiums, townhomes, and senior housing.
- » Enhance and increase open space within Downtown.
- » Significantly improve physical conditions by expanding streetscape improvements to all Downtown blocks, upgrading street furniture, and improving the pedestrian tunnel and viaducts under the tracks.
- » Improve pedestrian and vehicular access and circulation.



STANDARDS FOR:  
**VARIANCE**

2020 Chestnut Road, Homewood, IL 60430

**Street Address:** 1000 Maple Ave Homewood, IL 60430

**Requested Variance:** Ground Mount Solar PV

Zoning Requirement: \_\_\_\_\_

Ordinance Reference: \_\_\_\_\_

**Applicant Name:** General Energy Corporation Date: 6/2/2023

*Provide responses to each question below using complete sentences and specific to the property and relief requested.*

The Planning and Zoning Commission and Village Board shall consider the following responses to the Standards for a Variance in evaluating the application.

No variance shall be granted unless the findings of fact for each application demonstrate a true hardship and the least deviation from the Ordinance necessary, as provided by the applicant's response to the following:

1. Can the property in question yield a reasonable return if permitted to be used only under the conditions allowed by the regulations governing the district in which it is located?

*Describe why you cannot comply with the zoning regulations and how it impacts the property value.*

Granting a variance to allow approval on the location of the ground mount system (requesting a variance from the requirement to locate the system in a rear yard). We are also requesting a variance to increase the height of the array to 5.7ft from 5ft max requirement. The installation and operation of the solar system can provide financial benefits, utilize underutilized land, and contribute to the community's sustainability

2. Is the plight of the owner due to unique circumstances?

*Describe why this request is unique to you; would it apply to your neighbors as well?*

The unique circumstances may arise from the specific characteristics of the property. These characteristics could include its size, location, topography, or other physical attributes that make it challenging to adhere strictly to the regulations governing the district. For example, the property might have limited available space or specific constraints that require flexibility in terms of setback requirements.

3. If granted, will the variance alter the essential character of the locality?

*Describe how the property, with this relief, will compare to the surrounding properties.*

Ground mount solar systems are increasingly recognized as compatible with various land uses and can seamlessly integrate into the existing landscape. They do not introduce any disruptive or conflicting elements that would significantly alter the essential character of the locality.

*Continued on following page.*

Supplemental to the above standards, the decision-making authority shall also consider and make findings of fact on the character of the alleged hardship and the potential impacts to neighboring properties of granting the variance, as provided in the applicant's following responses. No one is controlling.

4. Do the particular physical surroundings, shape, or topographical conditions of the subject property pose a particular hardship upon the owner, as distinguished from a mere inconvenience, under the strict application of these regulations?

*Describe the unique characteristics of the site that limit use or development without the requested relief.*

The site has limited available space. This limited space restricts the ability to comply with standard development requirements without the requested relief of minimum setbacks. The installation of a ground mount solar system requires a certain amount of land area.

5. Would the conditions upon which the request for variance is based be generally applicable to other property within the same zoning classification?

*Do your neighbors have the same circumstances?*

Yes, granting the variance for a ground mount solar system aligns with broader sustainability goals and initiatives. Many communities strive to promote renewable energy and reduce their carbon footprint. Allowing for the installation of solar systems contributes positively to these sustainability objectives without altering the essential character of the locality.

6. Has the alleged practical difficulty or particular hardship been created by any person presently having an interest in the property?

*Provide information about any personal gains related to the hardship.*

There are no personal gains directly related to the hardship being experienced. The requested relief is not sought for personal gain but rather to address specific challenges and limitations that hinder the development or use of the property in a manner that aligns with the intended purpose of installing a ground mount solar system. The purpose of seeking the relief is primarily to promote renewable energy generation, reduce carbon footprint, and contribute to sustainable practices.

7. If granted, will the variance be detrimental to public welfare or injurious to other neighboring properties?

*Describe any potential negative impacts on neighboring properties and mitigation efforts.*

The system will be strategically planned to minimize visibility from adjacent properties. Consideration will be given to the orientation, height, and screening options to ensure that the system blends harmoniously with the surroundings.

8. If granted, will the variance: impair an adequate supply of light and air to adjacent property; substantially increase the danger of fire or otherwise endanger the public safety; or, substantially diminish or impair values of neighboring property?

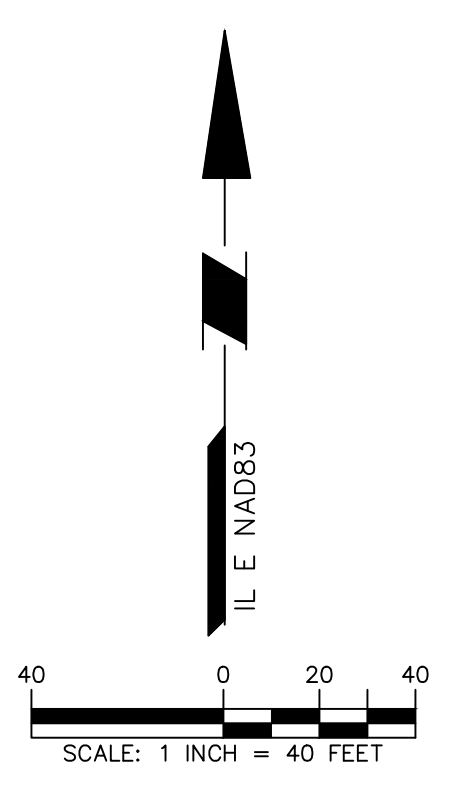
*Explain how the requested relief will not create a hazard or de-value adjacent property.*

The design and installation of the ground mount solar system will adhere to all relevant safety standards and regulations. Professional engineers and experts will ensure that the system is structurally sound, properly grounded, and poses no risk to adjacent properties. Measures such as setback requirements, fencing, and appropriate signage will be implemented to enhance safety and prevent any potential hazards.





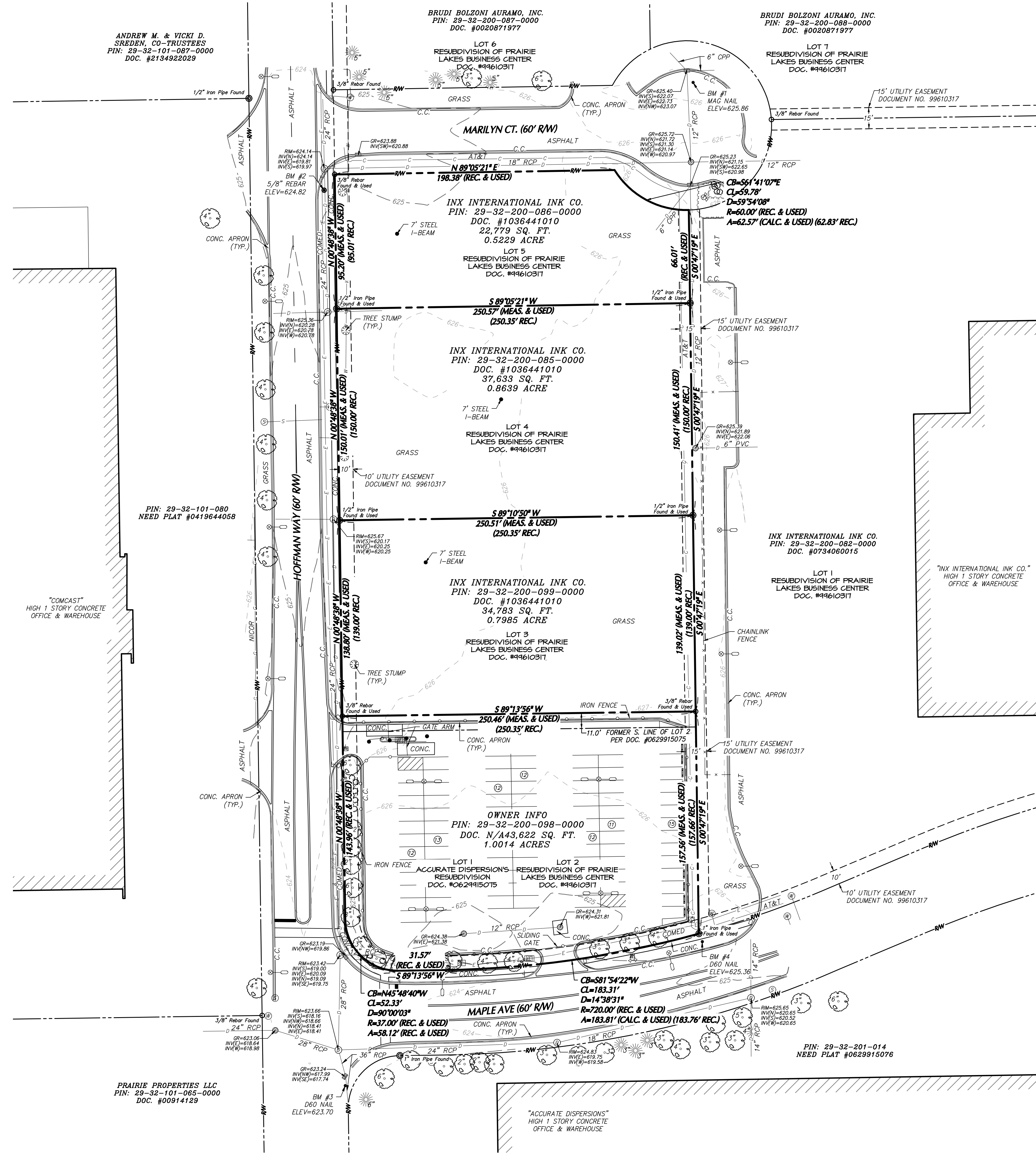




ANDREW M. & VICKI D. SREDDEN, CO-TRUSTEES  
 PIN: 29-32-101-087-0000  
 DOC. #2134922029

BRUDI BOLZONI AURAMO, INC.  
 PIN: 29-32-200-088-0000  
 DOC. #0020871977

BRUDI BOLZONI AURAMO, INC.  
 PIN: 29-32-200-088-0000  
 DOC. #0020871977



**LEGEND (NOT SHOWN TO SCALE)**

⊗	MONUMENTATION FOUND (TYPE AS NOTED)	REC.	DEED OF RECORD
⊙	SET 5" X 30" STEEL PIN WITH CAP "LANGAN"	AC.	ACRES
⊕	SET DRILL HOLE	CALC.	CALCULATED
⊖	HYDRANT	OBS.	OBSERVED
⊗	STAND PIPE	SQ. FT.	SQUARE FEET
⊘	ROOF DRAIN	CSR.	CITY SURVEY RECORD
⊙	BOLLARD	AFN	AUDITOR'S FILE NUMBER
⊗	STREET LIGHT	PN	PARCEL NUMBER
⊘	AREA LIGHT	VOL.	DEED VOLUME
⊙	SIGNAL POLE	PG.	PAGE
⊗	POWER POLE	LSA	LANDSCAPE AREA
⊘	GUY WIRE	CP	CONCRETE PAD
⊙	MANHOLE (TYPE AS LABELED)	CC	CONCRETE CURB
⊗	WATER VALVE	EP	EDGE OF PAVEMENT
⊘	GAS VALVE		FENCE (TYPE AS NOTED)
⊙	UNKNOWN VALVE		SUBJECT PROPERTY LINE
⊗	CATCH BASIN		ADJOINING PROPERTY LINE
⊘	CLEAN OUT		EASEMENT LINE
⊙	SIGN		TREE LINE
⊗	BOLLARD		GUIDE RAIL (TYPE AS NOTED)
⊘	ELECTRIC BOX	ST-ST	STEAM LINE
⊙	ELECTRIC METER		OVERHEAD WIRE
⊗	GAS METER	COMB	COMBINED SEWER LINE
⊘	WATER METER	G	GAS LINE
⊙	TELEPHONE BOX	W	WATER LINE
⊗	TRAFFIC SIGNAL POLE	E	ELECTRIC LINE
⊘	DOOR	C	COMMUNICATION LINE
⊙	DOUBLE DOOR	S	SANITARY LINE
⊗	GARAGE DOOR	D	DRAINAGE LINE
⊘		X*	REFERENCE UTILITY LINE (TYPE AS NOTED) - PLOTTED FROM EXISTING MAPPING

**CERTIFICATION**  
 I HEREBY CERTIFY THAT I HAVE PREPARED THIS PLAT AND SURVEY, AND THAT THE SAME IS CORRECT AND ACCURATE. THIS PLAT WAS PREPARED FROM A FIELD SURVEY, ANALYSIS OF RECORD PLATS, RECORDED DEEDS, AND CITY SURVEY RECORDS, (AS APPLICABLE). BEARINGS ARE BASED ON STATE PLANE COORDINATES PER GPS OBSERVATIONS. DISTANCES ARE GIVEN IN FEET AND DECIMAL PART THEREOF, ALL OF WHICH I CERTIFY TO BE CORRECT TO THE BEST OF MY KNOWLEDGE.

**DRAFT**

BRANDON L. REID, P.L.S.  
 PROFESSIONAL LAND SURVEYOR  
 IL LIC. No. 3787

PRAIRIE PROPERTIES LLC  
 PIN: 29-32-101-085-0000  
 DOC. #00914129

"ACCURATE DISPERSIONS"  
 HIGH 1 STORY CONCRETE  
 OFFICE & WAREHOUSE

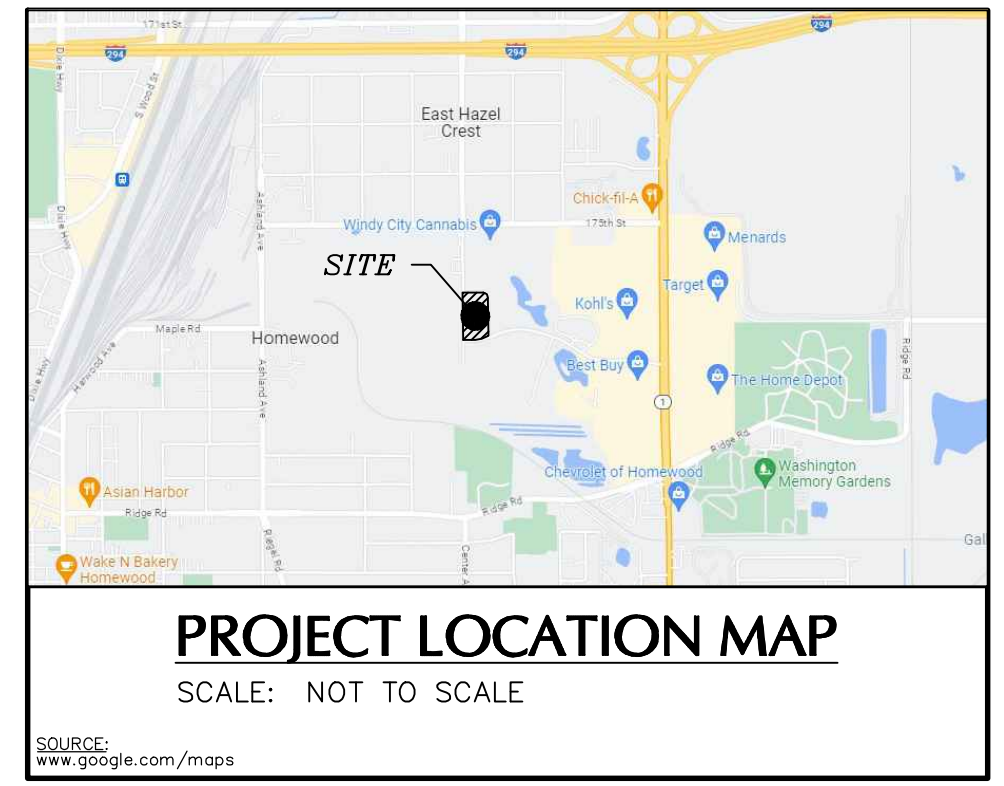
"INX INTERNATIONAL INK CO."  
 HIGH 1 STORY CONCRETE  
 OFFICE & WAREHOUSE

**BASIS OF BEARINGS**  
 MERIDIAN IS REFERENCED TO ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83, PER GPS OBSERVATIONS IN JUNE, 2023.

**DATUM**  
 VERTICAL DATUM IS NAVD 88 OBTAINED FROM GPS OBSERVATIONS ON 06/14/2023

**BENCHMARK**  
 BM #1 - MAG NAIL, ELEV=625.86  
 BM #2 - 5/8" REBAR, ELEV=624.82  
 BM #3 - D60 NAIL, ELEV=623.70  
 BM #4 - D60 NAIL, ELEV=625.36

**UTILITY INFORMATION**  
 DESIGN TICKET A231631527-00A  
 DIG TICKET X231631241-00X



**ZONING**  
 AS PER THE VILLAGE OF HOMWOOD ZONING MAP WITH AN EFFECTIVE DATE OF JANUARY 10, 2023, THE SUBJECT PARCEL IS ZONED M-1, LIMITED MANUFACTURING. NO ZONING INFORMATION PROVIDED BY THE INSURER. FOR MORE INFORMATION SEE THE VILLAGE OF HOMWOOD ZONING ORDINANCE.

**PARKING**  
 87 REGULAR PARKING SPACES  
 0 HANDICAP PARKING SPACES  
 87 TOTAL PARKING SPACES

**FLOOD CERTIFICATION**  
 AS PER THE NATIONAL FLOOD INSURANCE PROGRAM MAP (FIRM), MAP NUMBER 1703100734J, WITH AN EFFECTIVE DATE OF AUGUST 19, 2008, THE SUBJECT PARCEL IS LOCATED IN ZONE X, AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

- NOTES**
- THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SEARCH, THEREFORE THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHTS-OF-WAY, COVENANTS, ETC. AS MAY BE DISCLOSED IN A CURRENT, COMPREHENSIVE TITLE SEARCH.
  - THIS PLAN WAS PREPARED WITH THE RESPECT TO THE FOLLOWING REFERENCES:  
 A. PLAT FOR RESUBDIVISION OF PRAIRIE LAKES BUSINESS CENTER, RECORDED JUNE 24, 1999 IN THE COOK COUNTY RECORDER OF DEEDS AS DOCUMENT NO. 99610317  
 B. PLAT FOR ACCURATE DISPERSION'S RESUBDIVISION, RECORDED OCTOBER 26, 2006 IN THE COOK COUNTY RECORDER OF DEEDS AS DOCUMENT NO. 0629915075
  - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES FIELD WORK COMPLETED DURING THE MONTH OF JUNE 2023.
  - UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC.). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND LOCATIONS WHERE DATA IS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE, THE SURVEYOR CANNOT, AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES.
  - ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA MAY BE SHOWN FROM FIELD LOCATED SURFACE MARKINGS (BY OTHERS), EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS.
  - UNLESS SPECIFICALLY NOTED HEREON, THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.
  - PRIOR TO ANY DESIGN OR CONSTRUCTION, THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
  - THIS SURVEY IS NOT VALID WITHOUT THE EMBOSSED OR INKED SEAL OF THE PROFESSIONAL.
  - NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WAS OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK.

Date	Description	No.
	Revisions	

**LANGAN**  
 Langan Engineering, Environmental, Surveying,  
 Landscape Architecture, and Geology, D.P.C.  
 200 W Madison Street, Suite 1920  
 Chicago, IL 60606  
 T: 312.547.7700 F: 312.547.7701 www.langan.com

Project  
**17705-17801**  
**HOFFMAN WAY**  
 PIN: 29-32-200-086, 29-32-200-085, 29-32-200-099,  
 29-32-200-098  
**HOMWOOD**  
 COOK COUNTY ILLINOIS

Drawing Title  
**ALTA/NSPS LAND**  
**TITLE SURVEY**

Project No.	541029901	Drawing No.	VL101
Date	06/30/23		
Drawn By	TJD		
Checked By	BLR		
		Sheet 1 of 1	





GENERAL ENERGY CORP  
25 NORTHWEST POINT, SUITE 125  
ELK GROVE VILLAGE, IL 60007

ENGINEER'S STAMP

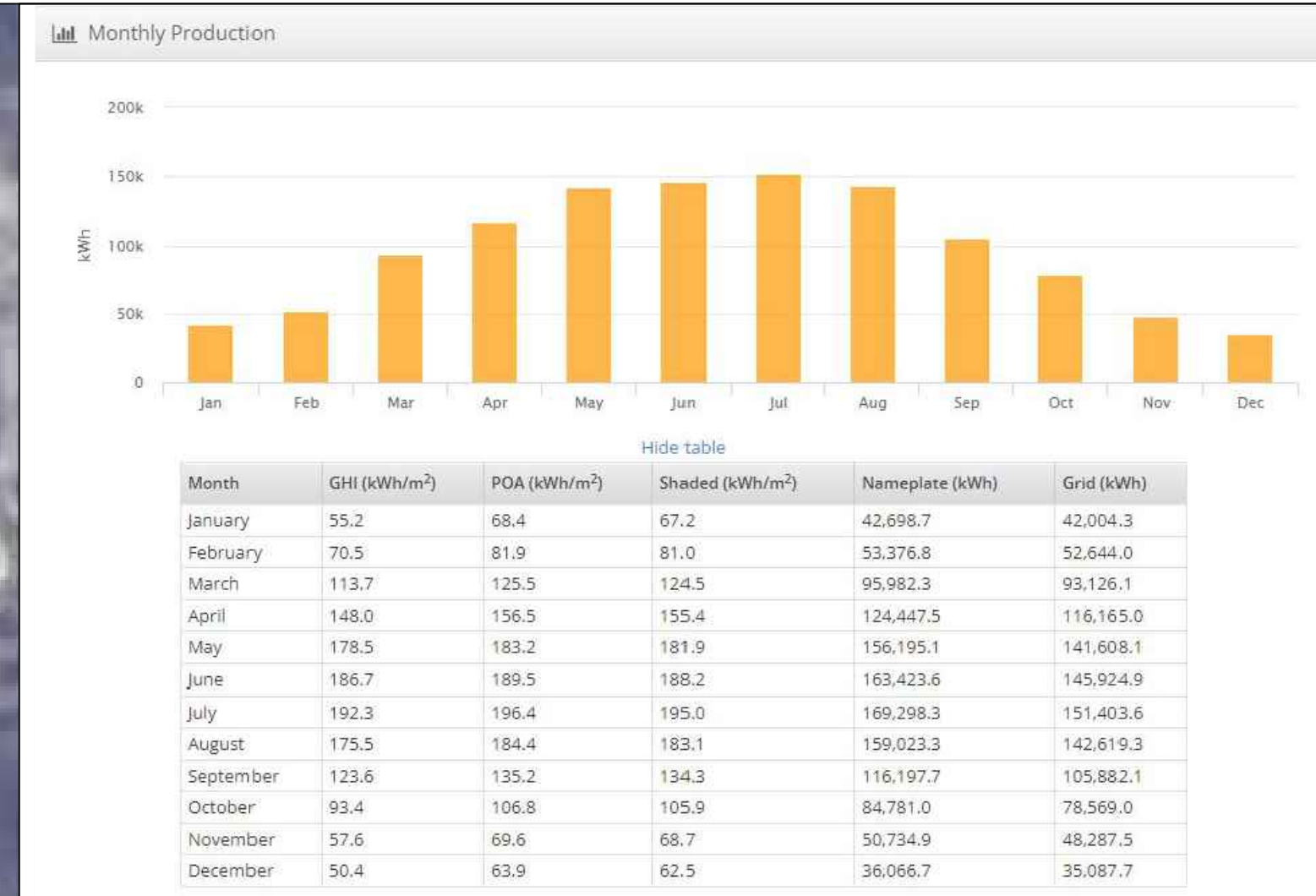
INX HOMEWOOD

1000 MAPLE AVE #2047, HOMEWOOD, IL 60430

REV	DESCRIPTIONS	DATE
A	PROPOSAL	08-05-22
B	SITE NEW INFO	05-15-23
C	SITE NEW INFO	05-23-23

SHEET TITLE  
**TERRASMART  
GROUND MOUNT  
LAYOUT**

DRAWING NO.  
**PV - 1**



PROJECT SUMMARY

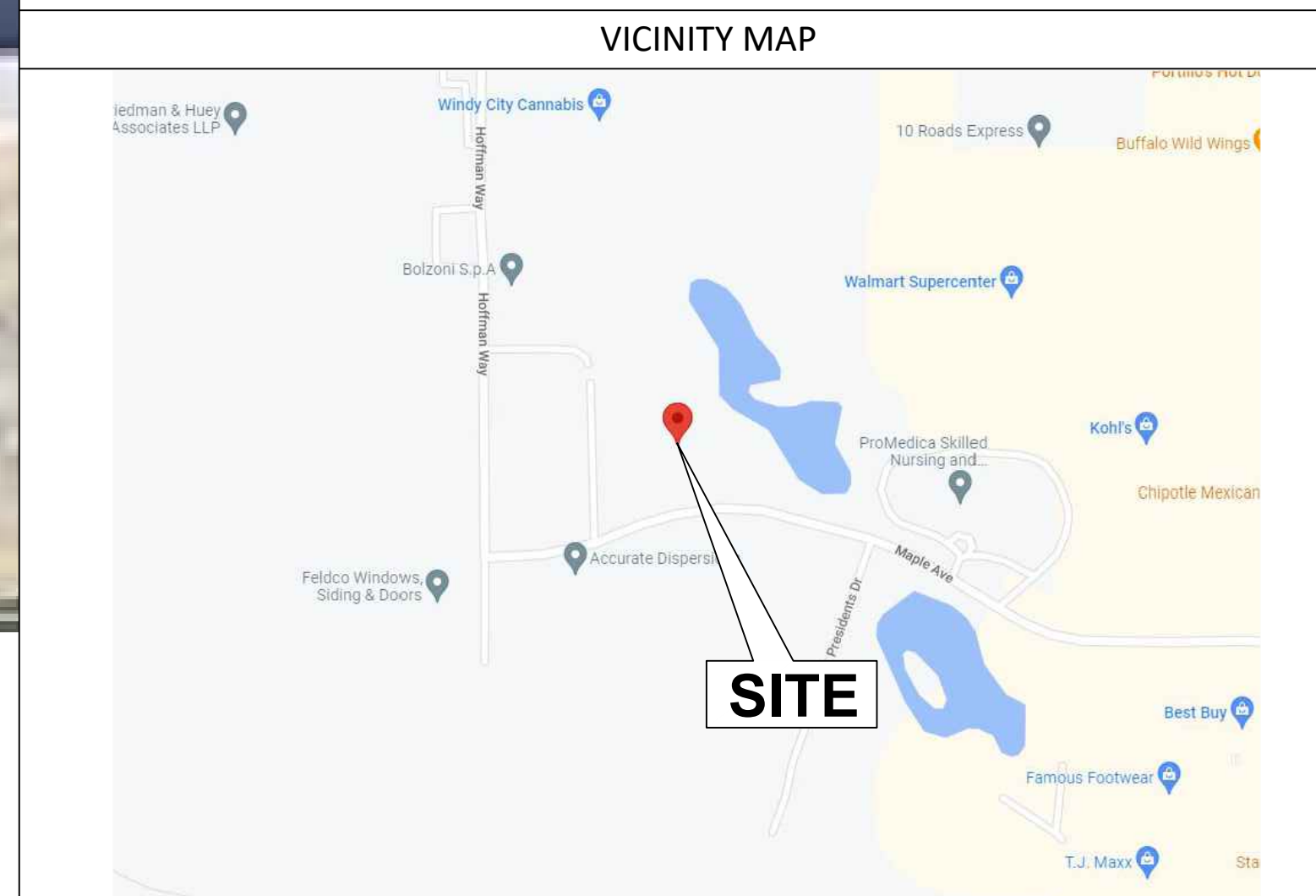
DC SYSTEM SIZE	915.320 kW
TOTAL NO. OF MODULES	1,868
AC SYSTEM	750.000 kW
YIELD	1,260.0 kWh/kWp
ESTIMATED ANNUAL PRODUCTION	1,153,321.6 kWh
MODULE TYPE	Q,PEAK DUO XL-G10 490
RACKING SYSTEM TYPE	TERRASMART GLIDE WAVE
AZIMUTH	180°
ROW SPACING	8'
TILT AND HEIGHT	10° & 4.4'

ROW SUMMARY

NUMBER OF ROWS	NUMBER OF MODULES PER ROW	TOTAL SYSTEM SIZE (kW)
1	98	48.020
2 TO 16	1770	867.300
TOTAL		915.320

INVERTER SUMMARY

INVERTER TYPE	INVERTER QUANTITY
SMA PEAK 3 (125KW AC)	6
	6



- NOTES:
- 107 MPH WIND ZONE (ASCE 7-16) CATEGORY II, EXPOSURE B
  - SNOWLOAD 25 PSF, ELEVATION 623'
  - ARRAY SHOWN ON AERIAL IMAGE.
  - GROUND CLEARANCE: 4FT
  - ALL TREES WITHIN THE ARRAY BOUNDARY NEED TO BE REMOVED PRIOR TO INSTALLATION

1 ARRAY LAYOUT  
SCALE: 7/128" = 1'-0"





terrasmart™  
6715 STEGER DRIVE  
CINCINNATI, OH 45237  
513.242.2051  
FAX: 513.242.0816

PROFESSIONAL SEAL

ENGINEER'S SEAL APPLIES TO DESIGN OF STRUCTURAL COMPONENTS ONLY



TERRASMART, INC. IS NOT RESPONSIBLE FOR CONSTRUCTION THAT IS BUILT FROM SET LABELED "NOT FOR CONSTRUCTION"

GROUND MOUNT FOR GENERAL ENERGY CORP

RELEASE RECORD

MARK DATE	DESCRIPTION
2 07/03/23	50% REVIEW (R1)
1 06/12/23	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS: <b>INX HOMEWOOD</b>	
1000 MAPLE AVE #2047 HOMEWOOD, IL 60430	
TERRASMART PROJECT No.: 2330085	
DRAWN BY:	REVIEWED BY:
SHEET TITLE: COVER SHEET	
SHEET No.: <b>SG001</b>	

# PHOTOVOLTAIC MODULE GROUND MOUNT SYSTEM

## TERRASMART, INC. RACK MODEL: RBI GLIDE WAVE

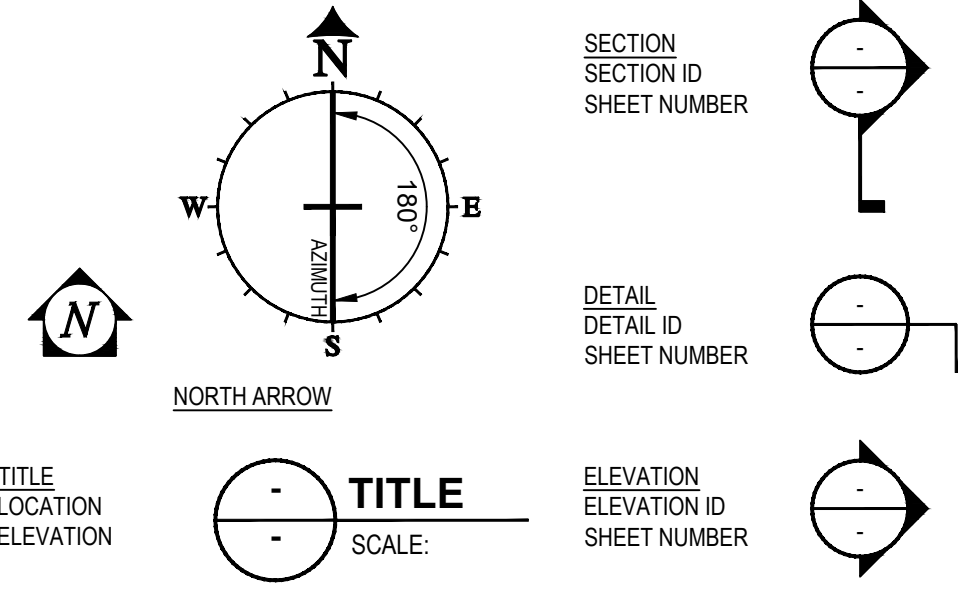
FOR

### GENERAL ENERGY CORP

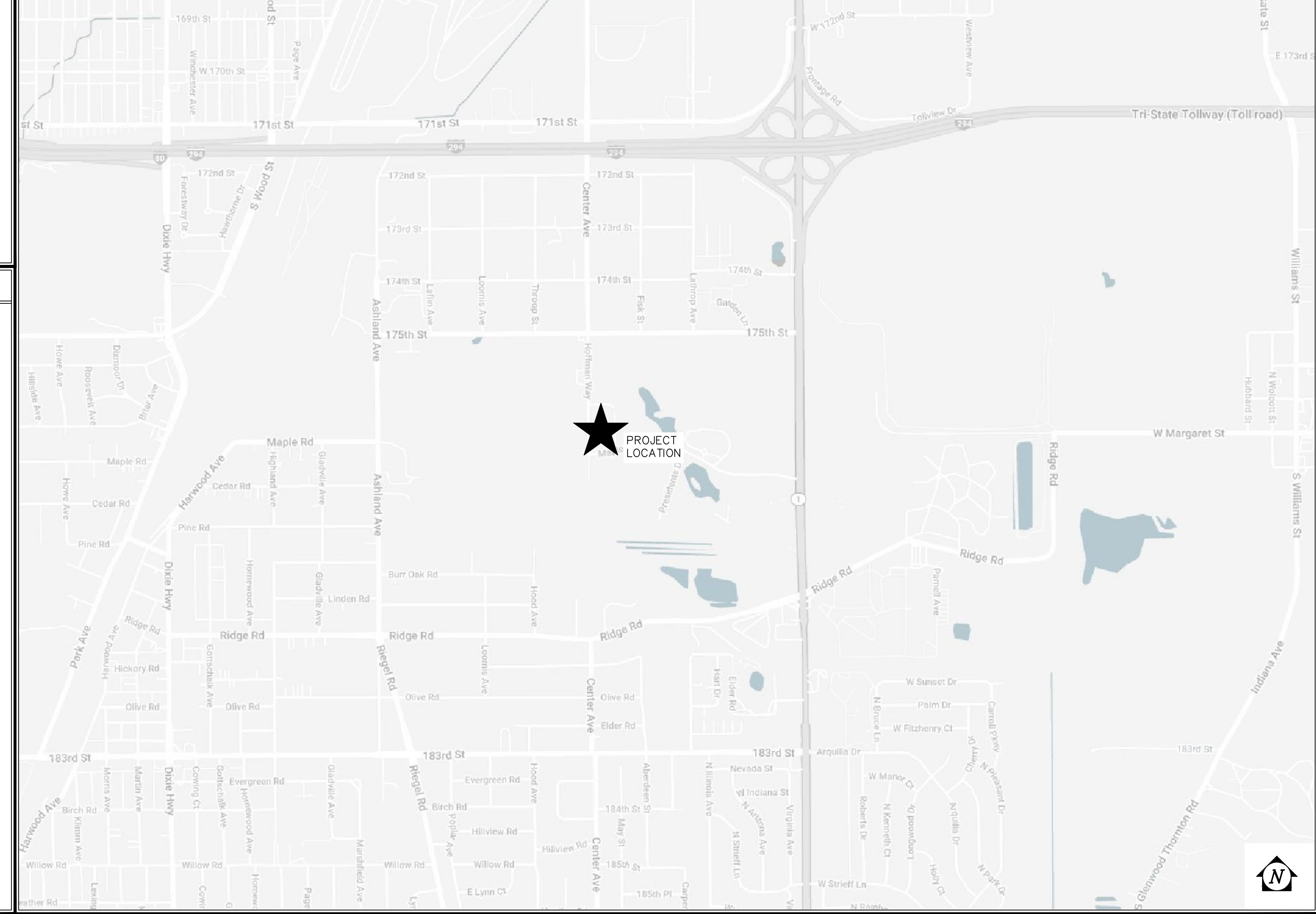
AT

**INX HOMEWOOD**  
**1000 MAPLE AVE #2047**  
**HOMEWOOD, IL 60430**

### SYMBOLS LEGEND



### VICINITY MAP



### SHEET INDEX

SHT. No.	SHEET DESCRIPTION	REL. No.	SHT. No.	SHEET DESCRIPTION	REL. No.
SG001	COVER SHEET	2			
SG002	GENERAL NOTES/MODULE SPECIFICATION SHEETS	2			
SG003	SITE PLAN & BILL OF MATERIALS	2			
SG301	RACK SECTION & BAY PLAN VIEWS	2			
SG302	ALTERNATE FOUNDATIONS SECTIONS & DETAILS	2			
SG501	DETAILS	2			

### GOVERNING CODE

ILLINOIS BUILDING CODE 2021 (IBC 2018)

RISK CATEGORY: I

DESIGN LOADS:

- DEAD LOADS:
  - STRUCTURE: 2.0 PSF
  - GLAZING: 3.0 PSF
  - Z: 5.0 PSF
- ROOF LIVE LOAD = 0 PSF
- SNOW LOAD:
  - $P_g = 25.0$  PSF (GROUND SNOW)
  - $P_f = 15.2$  PSF (FLAT ROOF SNOW)
  - $P_s = 16.0$  PSF (SLOPED ROOF SNOW)
  - $C_d = 0.90$
  - $C_e = 1.20$
  - $C_g = 1.00$
  - $I_s = 0.80$
- WIND LOAD: (MAIN WIND FORCE RESISTING SYSTEM)
  - $V = 86$  MPH (PER LOCAL WIND STUDY BY WINDSIM)
  - DATED: 07/06/2023
  - REPORT #: 230607\_RBI\_HOMEWOOD\_100\_A
  - EXPOSURE: C
- SEISMIC:
  - $S_s = 0.125$
  - $S_1 = 0.067$
  - $S_{d1} = 0.134$
  - $S_{d2} = 0.067$
  - $R = 2.00$
  - SITE CLASS: D
  - SEISMIC DESIGN CATEGORY: B
  - SEISMIC FORCE RESISTING SYSTEM = CANTILEVERED COLUMN SYSTEM
  - DESIGN BASE SHEAR:  $V = 0.067W$
  - $C_u = 0.067$
  - $R = 2.00$
  - EQUIVALENT LATERAL FORCE ANALYSIS

### CUSTOMER SPECIFICATIONS

NOTE:  
THIS SUBMITTAL/CONSTRUCTION SET WAS PRODUCED FROM DOCUMENTS RECEIVED FROM CUSTOMER ON 06/09/2023.

PV MODULE MANUFACTURER	HANWHA
PV MODULE MODEL #	Q.PEAK DUO XL-G10.3_BFG
PV MODULE WATTAGE	490
# OF PV MODULES/STRING	T.B.D. BY CUSTOMER
# OF ACTIVE PV MODULES	1868
# OF INACTIVE PV MODULES	0
TOTAL # OF PV MODULES	1868
PV SYSTEM WATTS SUBTOTAL	915.320 kW
TOTAL PV SYSTEM WATTS	915.320 kW
TOPOGRAPHIC RELATIONSHIP	FOLLOW GRADE
ARRAY TILT	10° ±2°
MINIMUM MODULE CLEARANCE	3'-0"
ARRAY AZIMUTH*	180°

\* - NOT ADJUSTED FOR MAGNETIC DECLINATION











**terrasmart**  
6715 STEGER DRIVE  
CINCINNATI, OH 45237  
513.242.2051  
FAX: 513.242.0816

PROFESSIONAL SEAL

ENGINEER'S SEAL APPLIES TO DESIGN OF STRUCTURAL COMPONENTS ONLY



TERRASMART, INC. IS NOT RESPONSIBLE FOR CONSTRUCTION THAT IS BUILT FROM SET LABELED "NOT FOR CONSTRUCTION"

# GROUND MOUNT FOR GENERAL ENERGY CORP

RELEASE RECORD

MARK	DATE	DESCRIPTION
2	07/03/23	50% REVIEW (R1)
1	06/12/23	50% REVIEW

PROJECT INFORMATION

**TITLE & ADDRESS:**  
**INX HOMEWOOD**

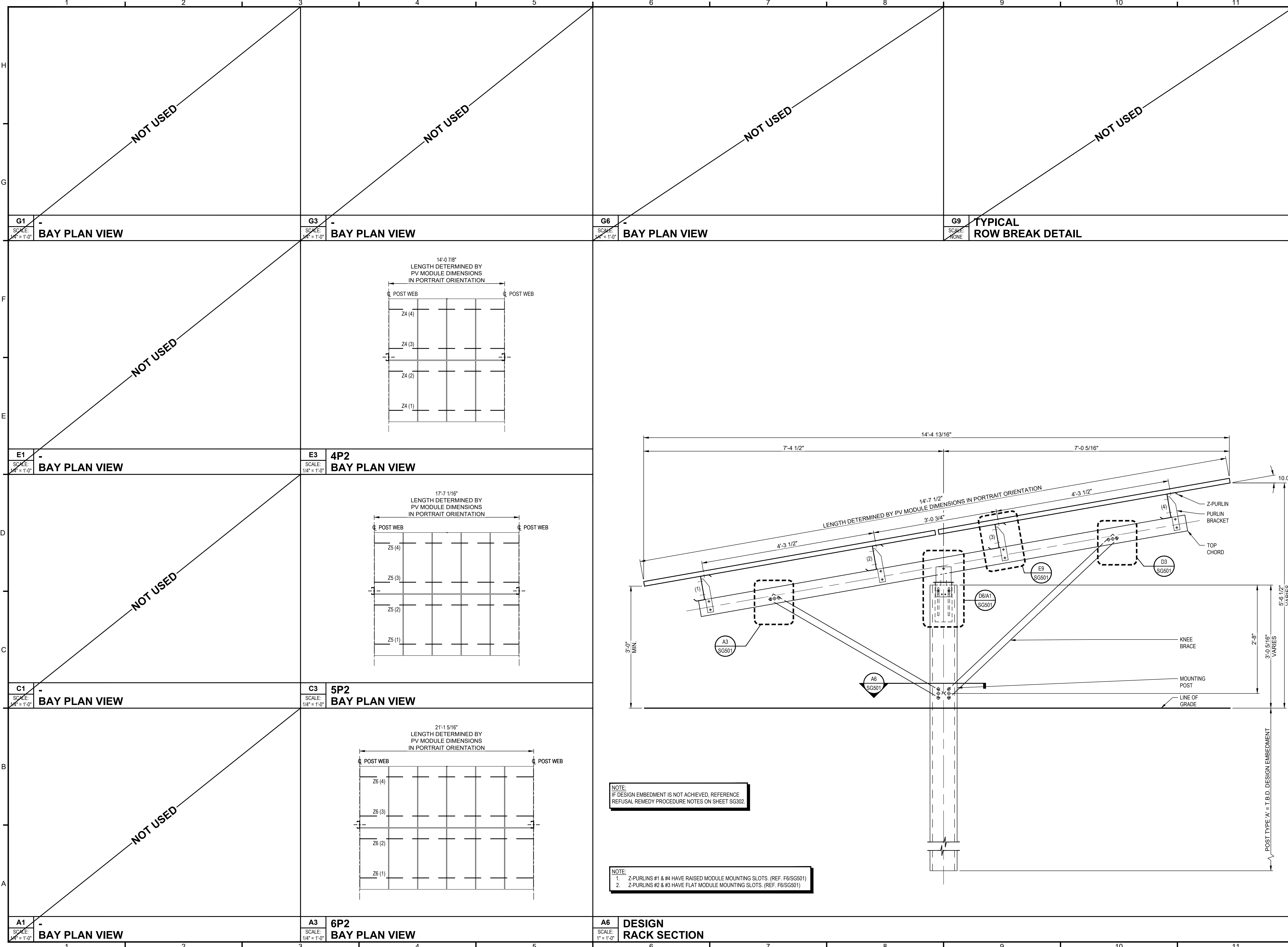
1000 MAPLE AVE #2047  
HOMEWOOD, IL 60430

TERRASMART PROJECT No.:  
2330085

DRAWN BY: \_\_\_\_\_ REVIEWED BY: \_\_\_\_\_

SHEET TITLE:  
**RACK SECTION & BAY PLAN VIEWS**

SHEET No.:  
**SG301**



NOTE:  
IF DESIGN EMBEDMENT IS NOT ACHIEVED, REFERENCE REFUSAL REMEDY PROCEDURE NOTES ON SHEET SG302.

NOTE:  
1. Z-PURLINS #1 & #4 HAVE RAISED MODULE MOUNTING SLOTS. (REF. F6/SG501)  
2. Z-PURLINS #2 & #3 HAVE FLAT MODULE MOUNTING SLOTS. (REF. F6/SG501)





**terrasmart**  
 6715 STEGER DRIVE  
 CINCINNATI, OH 45237  
 513.242.2051  
 FAX: 513.242.0816

PROFESSIONAL SEAL

ENGINEERS SEAL APPLIES TO DESIGN OF STRUCTURAL COMPONENTS ONLY

**NOT FOR CONSTRUCTION**

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**GROUND MOUNT FOR GENERAL ENERGY CORP**

RELEASE RECORD

MARK DATE	DESCRIPTION
07/03/23	50% REVIEW (R1)
06/12/23	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:  
**INX HOMEWOOD**

1000 MAPLE AVE #2047  
 HOMEWOOD, IL 60430

TERRASMART PROJECT No.:  
 2330085

DRAWN BY: \_\_\_\_\_ REVIEWED BY: \_\_\_\_\_

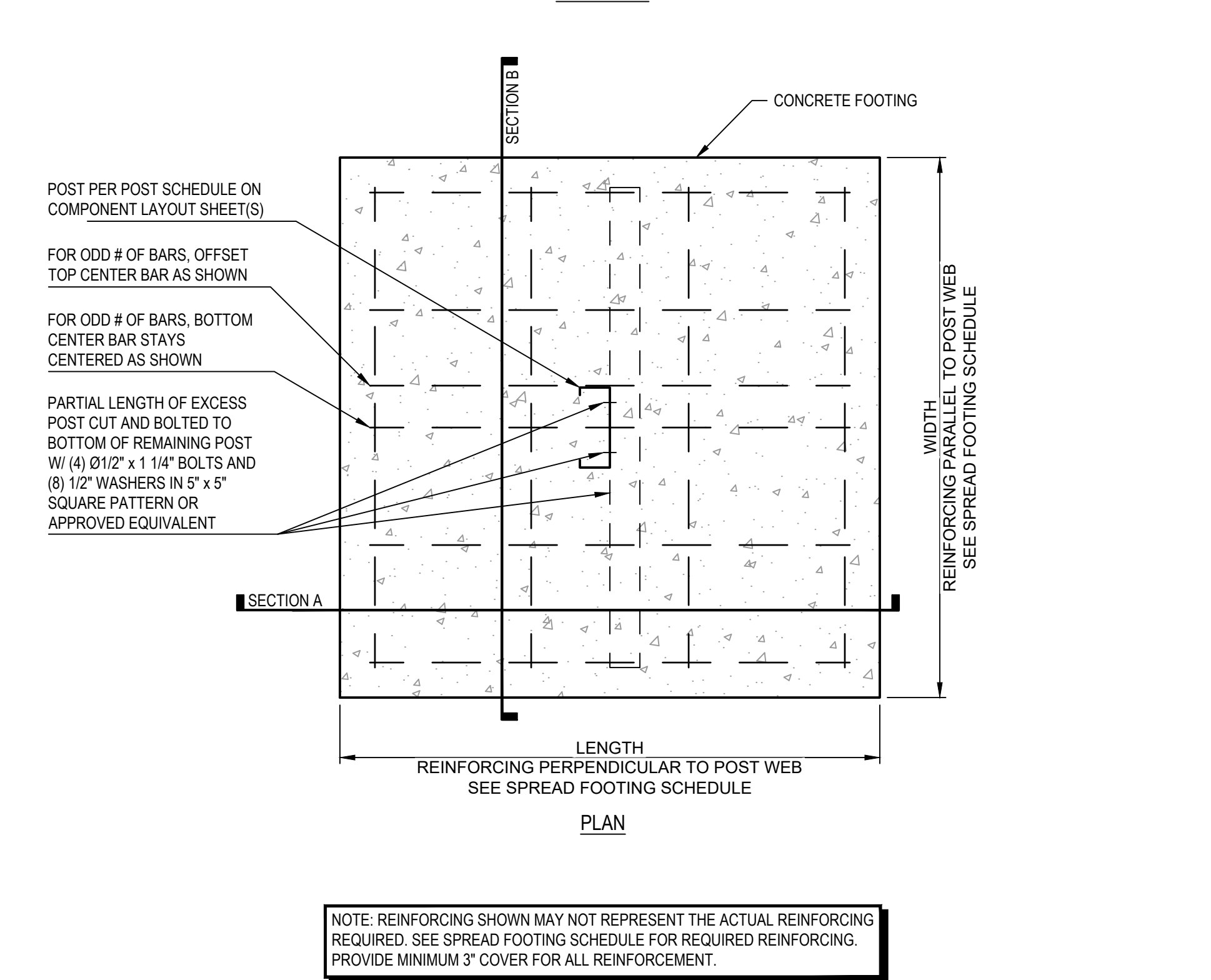
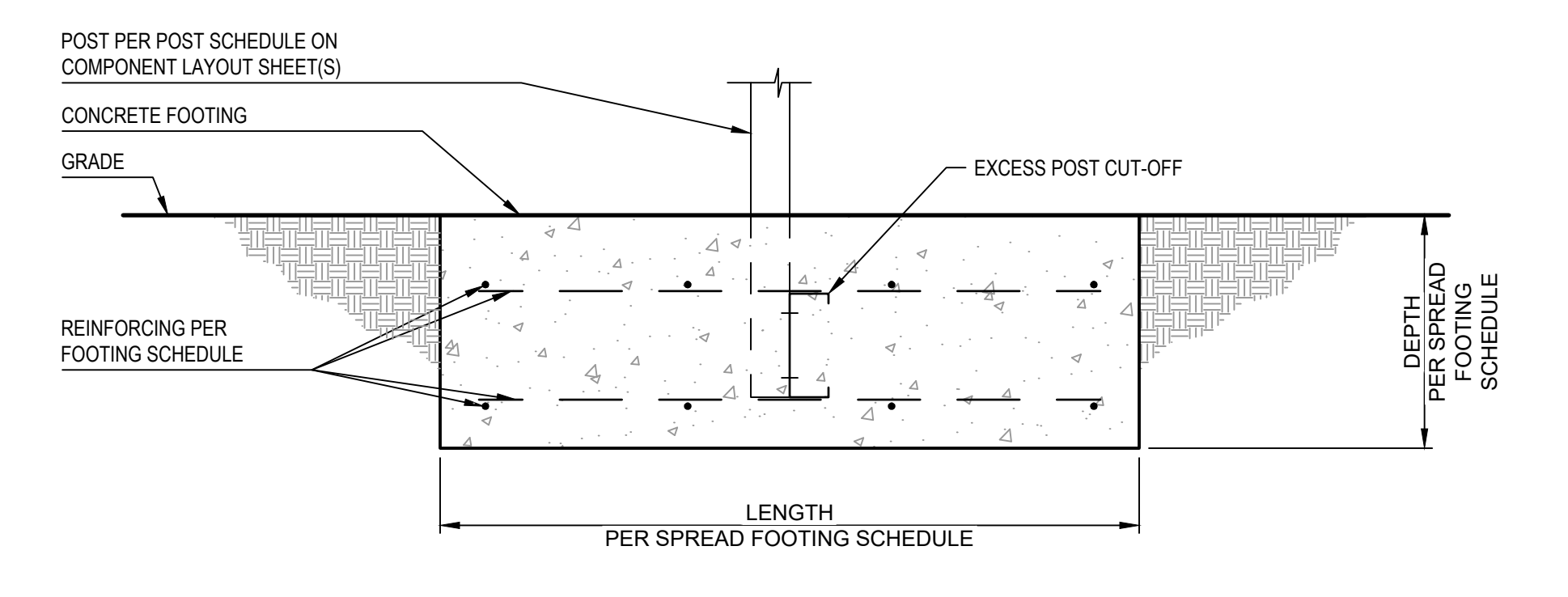
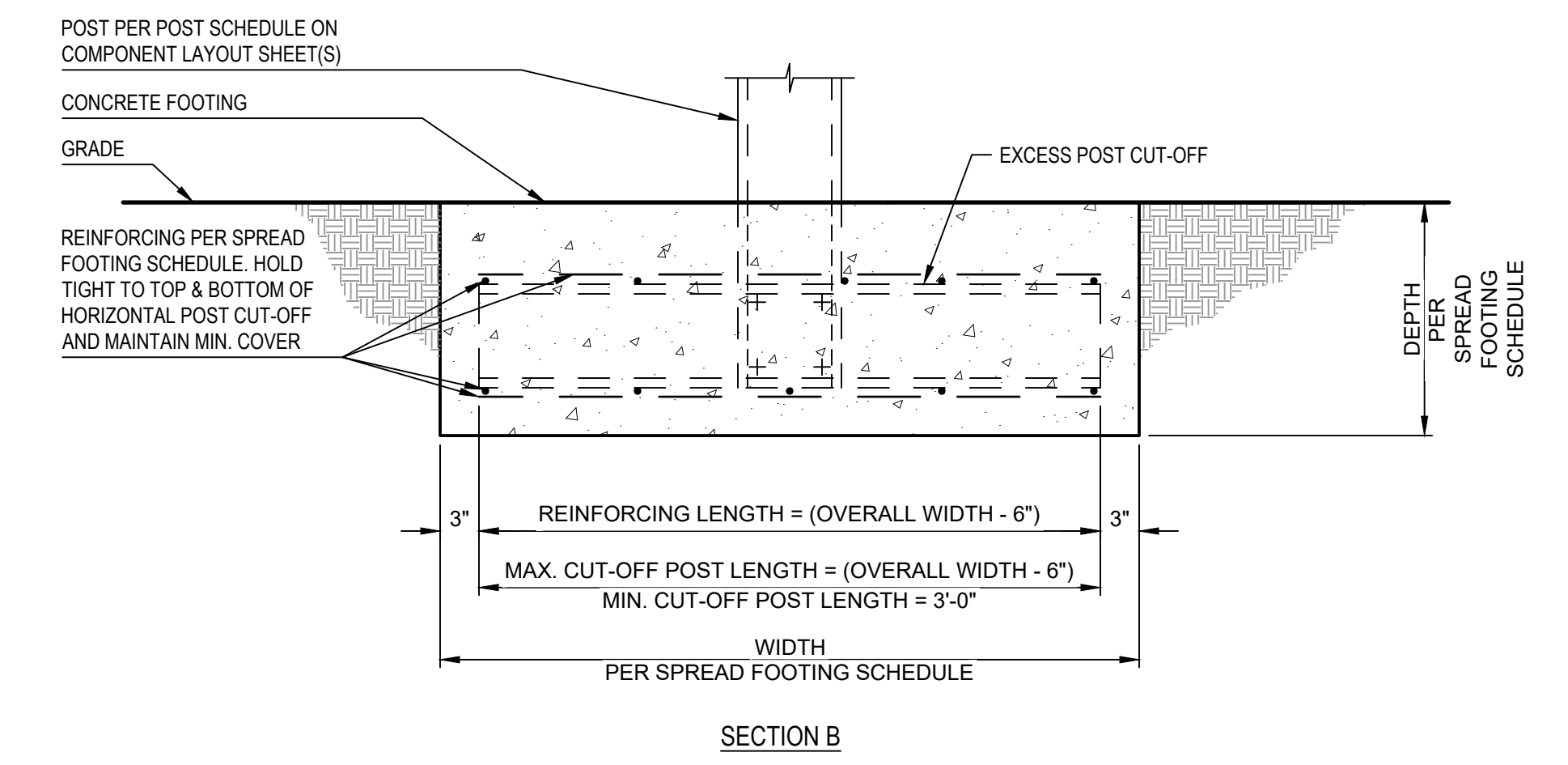
SHEET TITLE:  
**ALTERNATE FOUNDATIONS SECTIONS & DETAILS**

SHEET No.:  
**SG302**

**SPREAD FOOTING SCHEDULE**

TYPE	LENGTH	WIDTH	DEPTH	REINFORCING PARALLEL TO POST WEB AND POST CUT-OFF	REINFORCING PERPENDICULAR TO POST WEB AND POST CUT-OFF
ALL	4'-0"	4'-0"	1'-6"	(4) #4 BARS T&B OR (4) #5 BARS T&B	(4) #4 BARS T&B OR (4) #5 BARS T&B
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

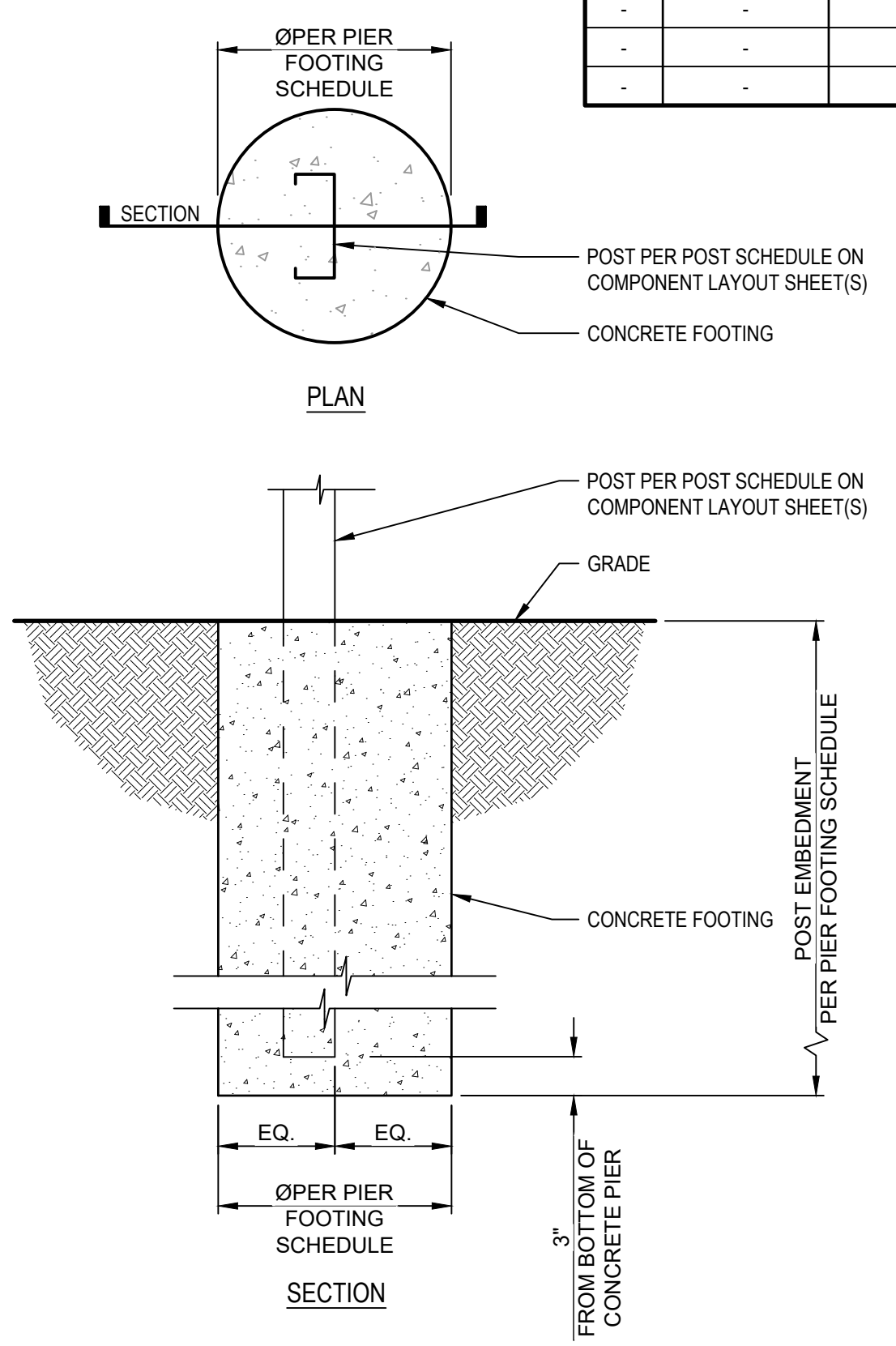
NOTE: ALL REINFORCING TO HAVE 3" MINIMUM COVER



NOTE: REINFORCING SHOWN MAY NOT REPRESENT THE ACTUAL REINFORCING REQUIRED. SEE SPREAD FOOTING SCHEDULE FOR REQUIRED REINFORCING. PROVIDE MINIMUM 3" COVER FOR ALL REINFORCING.

**PIER FOOTING SCHEDULE**

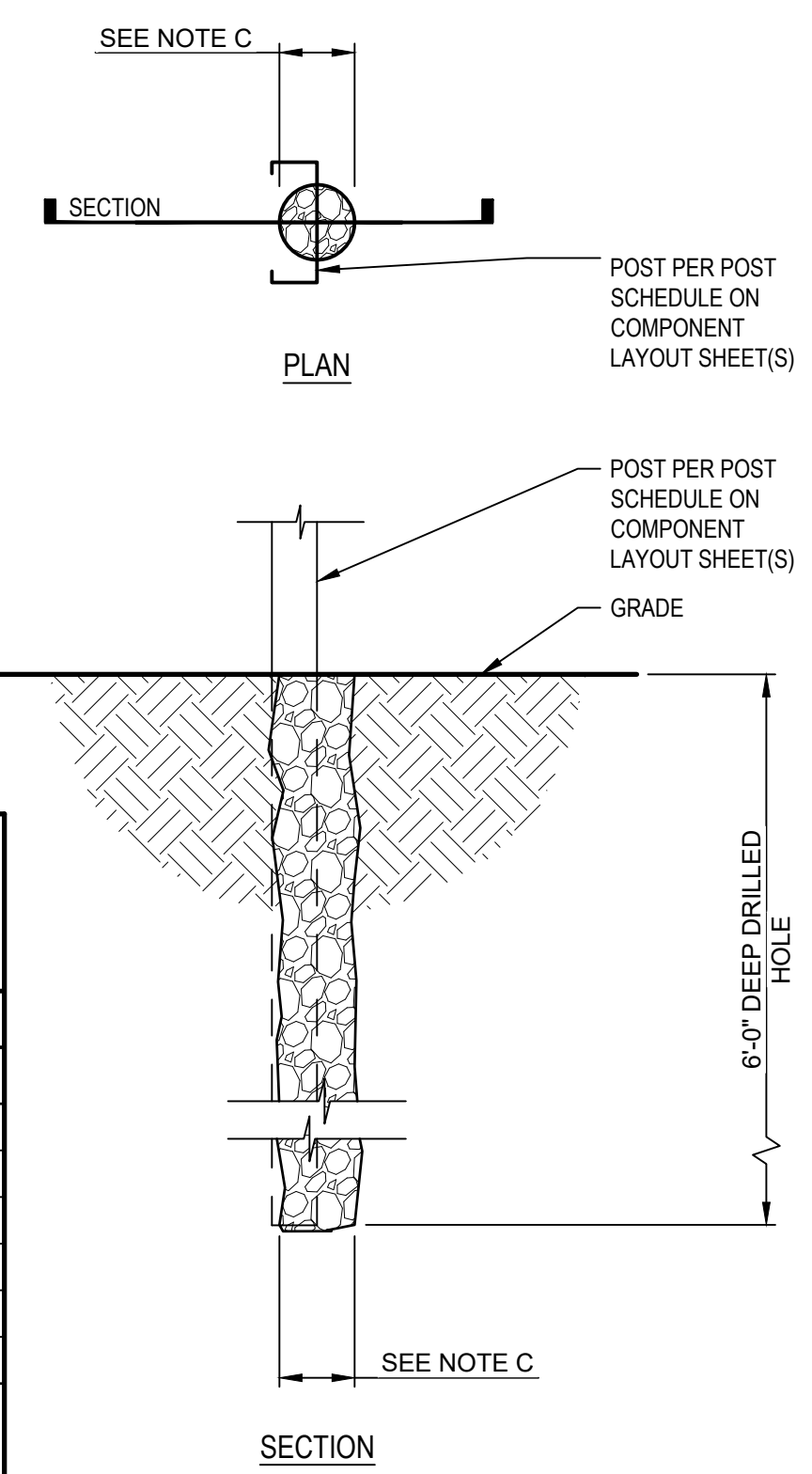
TYPE	DIAMETER	DEPTH
ALL	1'-6"	7'-0"
-	-	-
-	-	-
-	-	-



NOTES:  
 1. CONCRETE PIER DEPTH SHALL MEET OR EXCEED DESIGN EMBEDMENT. BOTTOM OF STEEL POST MAY BE RAISED A MAXIMUM OF 0'-9" ABOVE DESIGN EMBEDMENT AS REQUIRED.

**E5 ALTERNATE FOUNDATION PIER FOOTING DETAIL**  
 SCALE: 1" = 1'-0"

NOTE:  
 A. POST NOT REQUIRED TO BE CENTERED IN HOLE.  
 B. POST SHOULD BOTTOM OUT AT THE HOLE.  
 C. WHEN DRILLING SOLID ROCK, HOLE TO BE 1/2"-1" LARGER THAN DIAMETER OF POST. WHEN DRILLING LOOSE ROCK & SOFT SOIL, OR STIFF SOIL, HOLE TO BE 1/2"-1" SMALLER THAN DIAMETER OF POST.



**AGGREGATE MATERIAL SPECIFICATION FOR PRE-DRILL, FILL, AND DRIVE**

SIEVE	% PASSING	
	OPTION A	OPTION B
1"	100	100
3/4"	50-85	60-100
#4	35-65	50-85
#10	25-50	40-70
#40	15-30	25-45
#200	<6	<6

NOTE:  
 1. AGGREGATE SHALL BE CRUSHED STONE, SLAG, GRAVEL, OR CHERT.  
 2. FINES ARE TO BE MANUFACTURED SAND OR OTHER FINE MATERIALS NATURALLY CONTAINED OR ADDED TO MEET SPECIFICATIONS ABOVE.  
 3. AGGREGATE TO BE WELL GRADED.

**A5 ALTERNATE FOUNDATION PRE-DRILL, FILL, AND DRIVE DETAIL**  
 SCALE: 1" = 1'-0"

REFUSAL REMEDY PROCEDURE:

WHEN DRIVEN POSTS DO NOT ACCOMPLISH DESIGN EMBEDMENT DEPTH(S) AS SPECIFIED ON A6/SG301 AND, IF APPLICABLE, SHEET SG201 DUE TO REFUSAL, FOLLOW THIS PROCEDURE:

- WHEN REFUSAL IS ENCOUNTERED, EFFORTS TO DRIVE THE POST FURTHER SHOULD BE STOPPED AND DRIVEN POST DEPTH AND LOCATION SHALL BE RECORDED.
- ATTEMPT TO DRIVE RELOCATED POST TO THE DESIGN EMBEDMENT DEPTH SPECIFIED ON A6/SG301 AND, IF APPLICABLE, SHEET SG201. IF POST DOES NOT REACH THE MINIMUM EMBEDMENT DEPTH OF 5.5 FEET, AN ALTERNATE FOUNDATION SHALL BE REQUIRED.
- IF POST DOES NOT REACH DESIGN EMBEDMENT DEPTH SPECIFIED ON A6/SG301 AND, IF APPLICABLE, SHEET SG201, BUT REACHED THE MINIMUM EMBEDMENT DEPTH OF 5.5 FEET, THE POST MUST PASS THE FOLLOWING VERTICAL AND LATERAL TESTS:
  - VERTICAL TEST - MINIMUM UPLIFT FORCE 2250 LBS. RESULTING IN VERTICAL DEFLECTION LESS THAN 1/2".
  - LATERAL TEST - MINIMUM LATERAL FORCE 2000 LBS. APPLIED AT 4 FEET ABOVE GRADE AND POST DEFLECTION < 1.00 INCH MEASURED AT GRADE.
- ANY POST BELOW THE DESIGN EMBEDMENT DEPTH THAT DOES NOT PASS THE VERTICAL AND LATERAL TEST SHALL REQUIRE AN ALTERNATE FOUNDATION.
- IF THE POST REACHED THE MINIMUM EMBEDMENT DEPTH OF 5.5 FEET AND PASSED THE VERTICAL AND LATERAL TESTS SPECIFIED ABOVE, THE POST CAN BE FIELD-CUT AND DRILLED ACCORDINGLY.
- ALL FIELD-CUT SURFACES SHALL BE PAINTED WITH BRUSH-ON GALVANIZING PAINT. TERRASMART, INC. DOES NOT RECOMMEND SPRAY GALVANIZING FOR REPAIR AND PAINTING OF CUT SURFACES.
- FOR INSTANCES WHERE IT IS DESIRED TO REDUCE THE POST EMBEDMENT BUT REFUSAL IS NOT ENCOUNTERED, PLEASE CONTACT THE TERRASMART, INC. ENGINEERING DEPARTMENT FOR RECOMMENDATIONS.

**A1 REFUSAL REMEDY PROCEDURE**  
 SCALE: NONE

**A8 ALTERNATE FOUNDATION SPREAD FOOTING DETAIL**  
 SCALE: 1" = 1'-0"





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MARK DATE	DESCRIPTION
2_07/03/23	50% REVIEW (R1)
1_06/12/23	50% REVIEW

PROJECT INFORMATION

TITLE & ADDRESS:  
**INX HOMEWOOD**

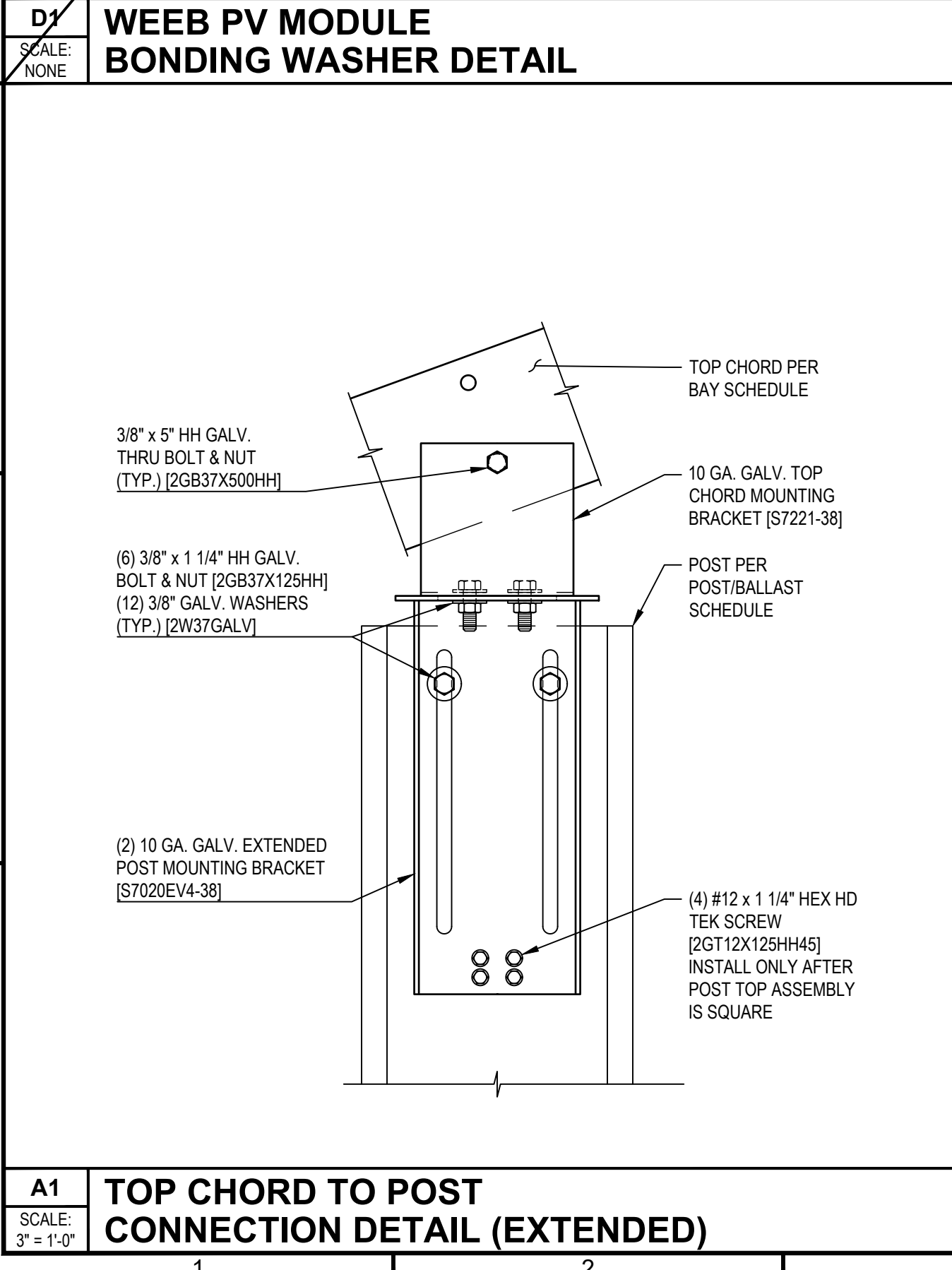
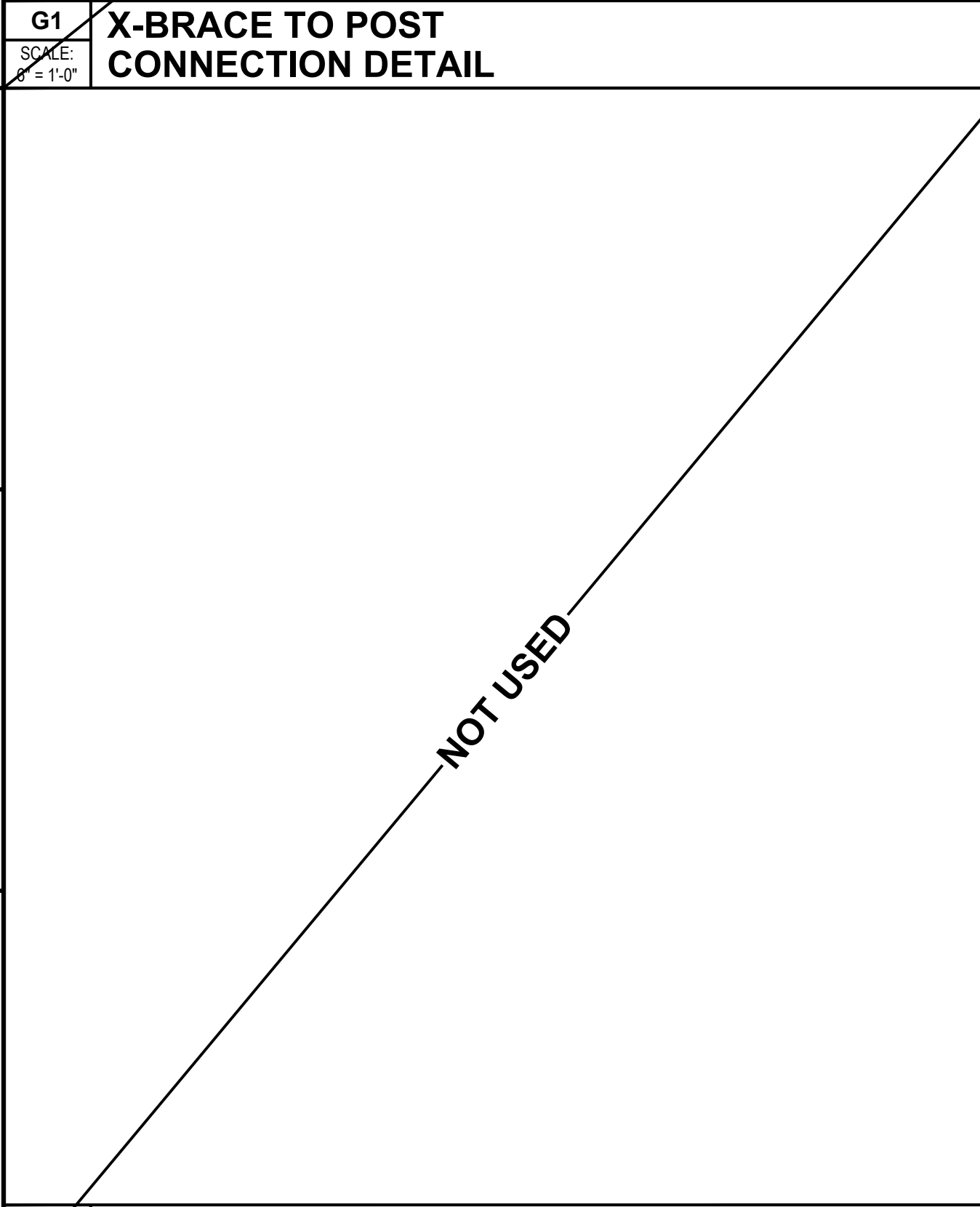
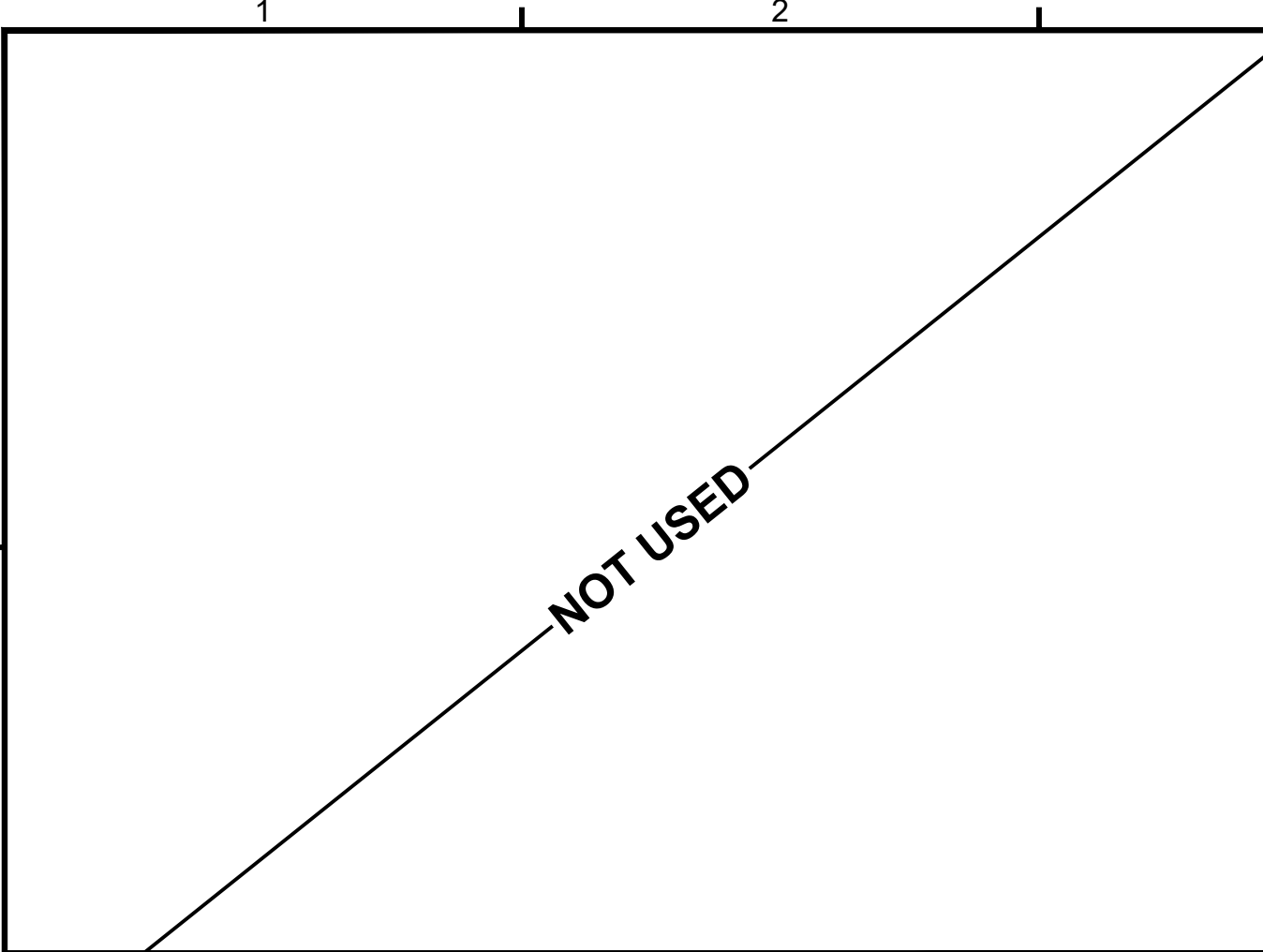
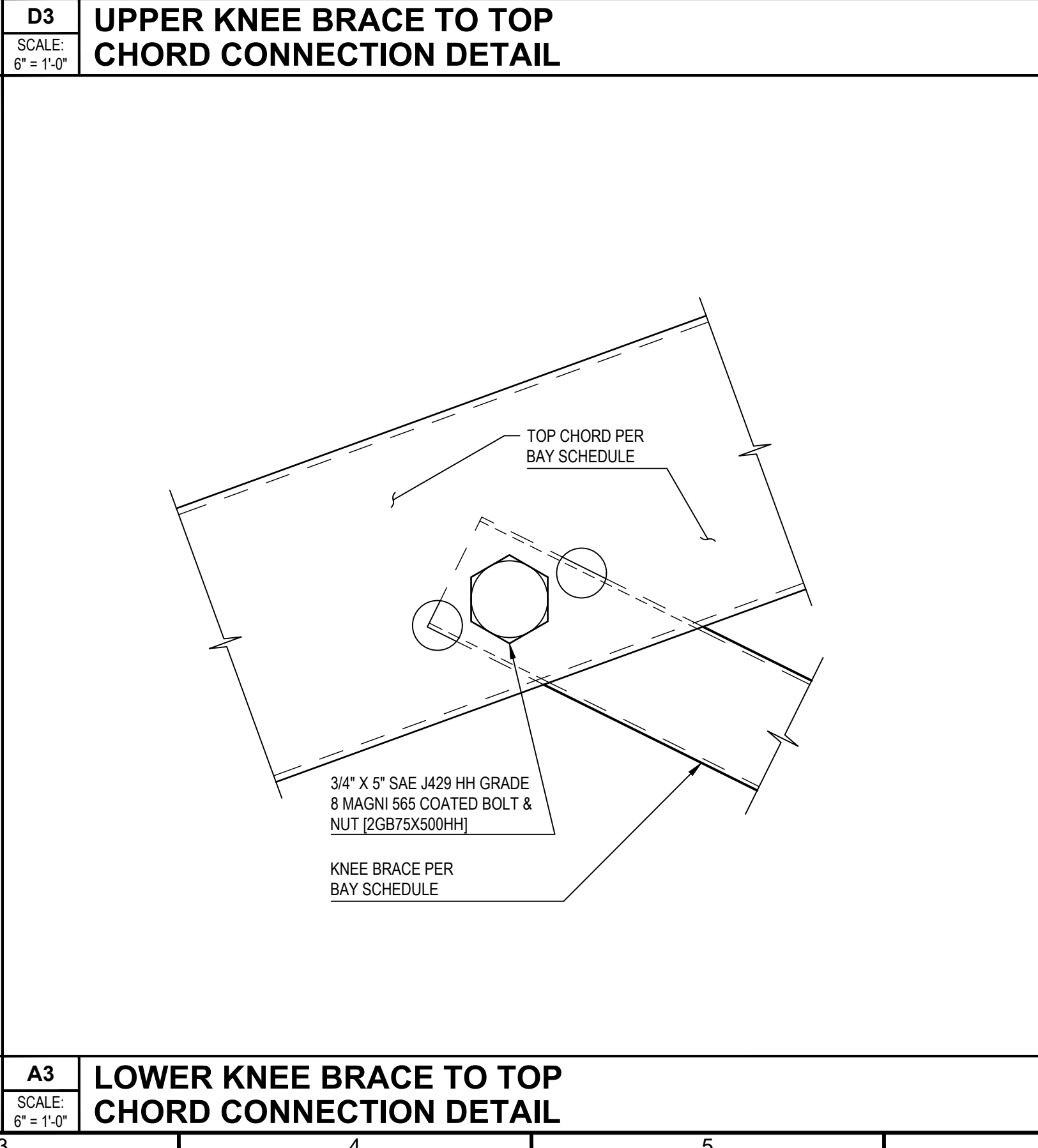
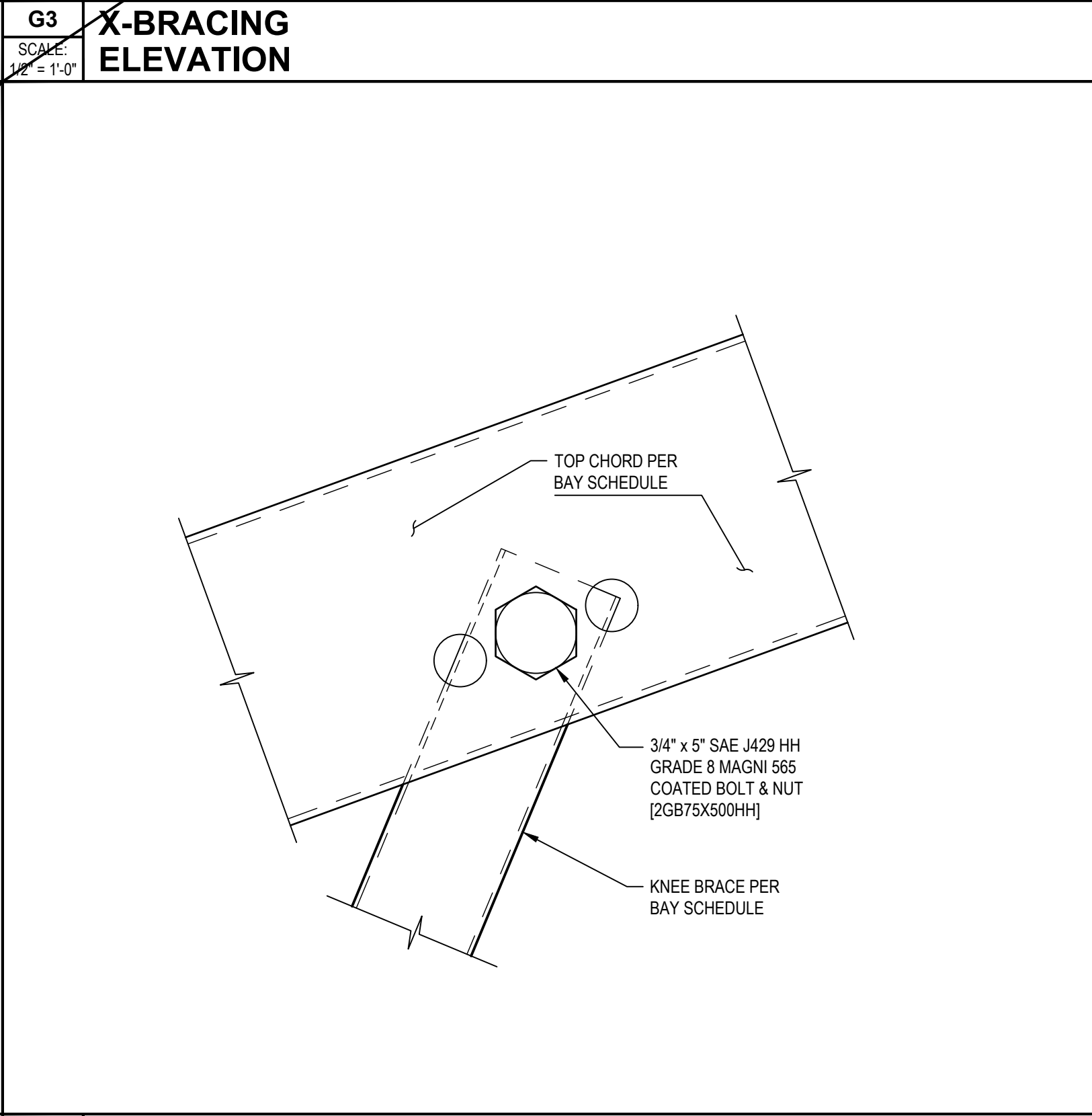
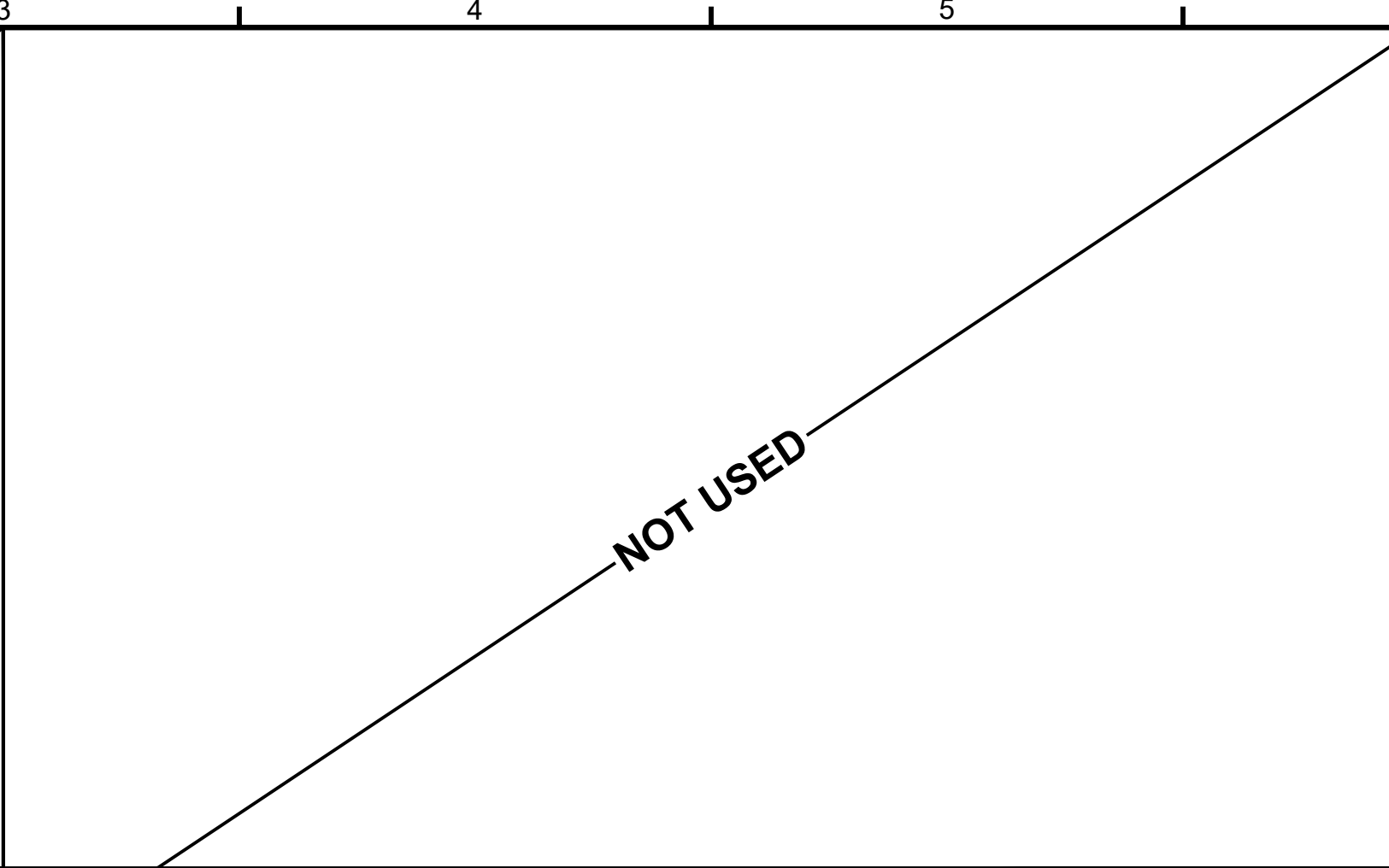
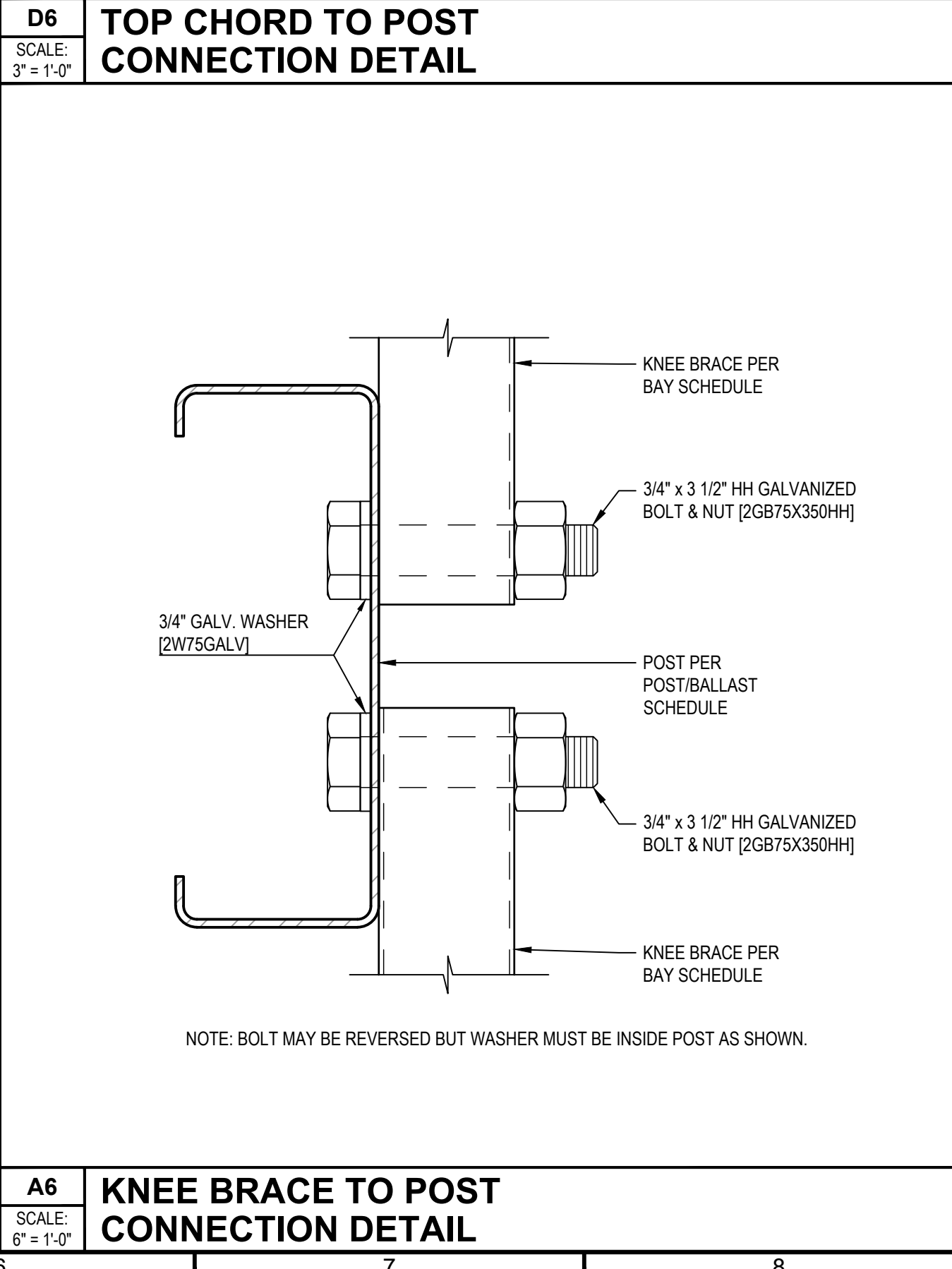
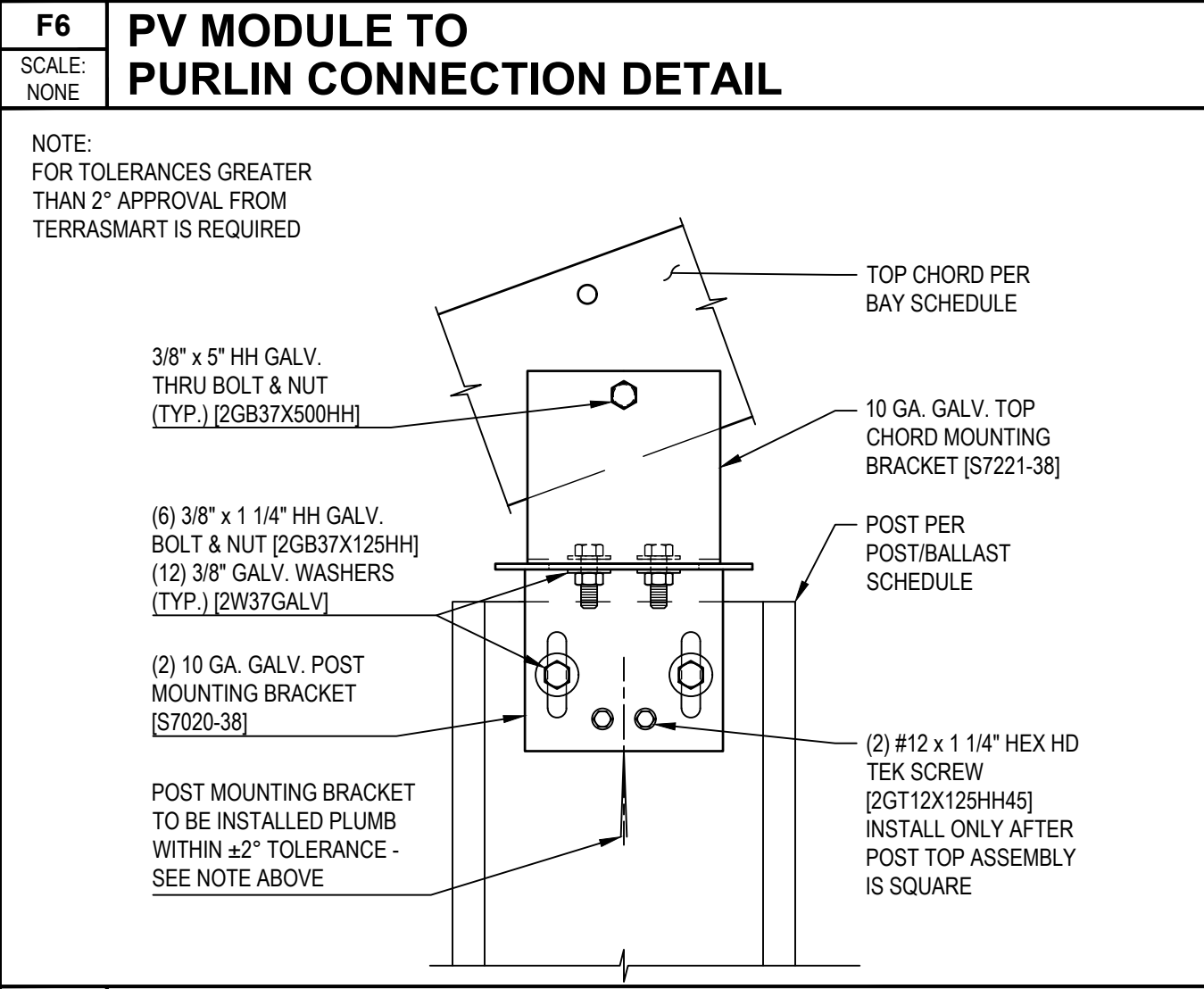
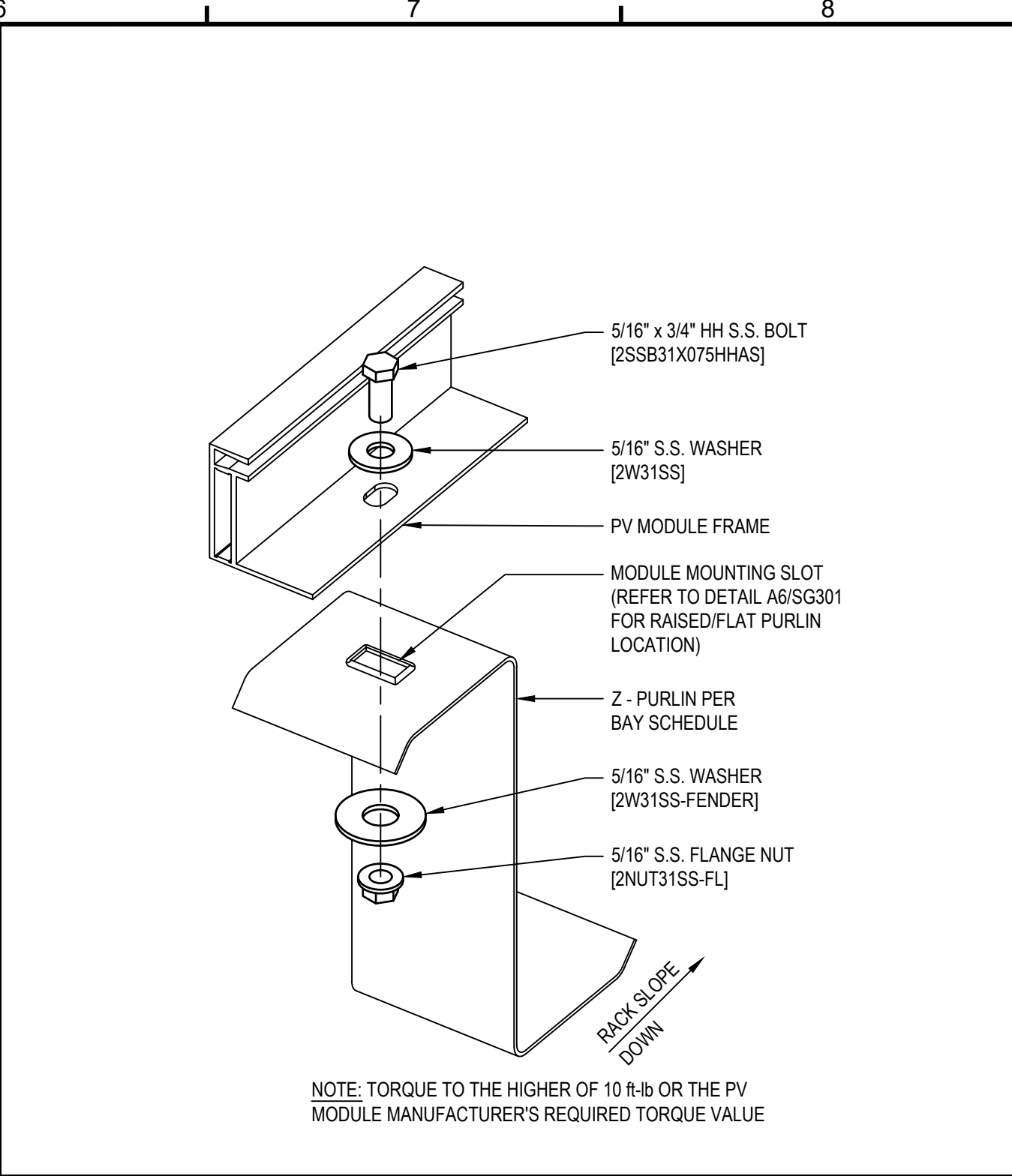
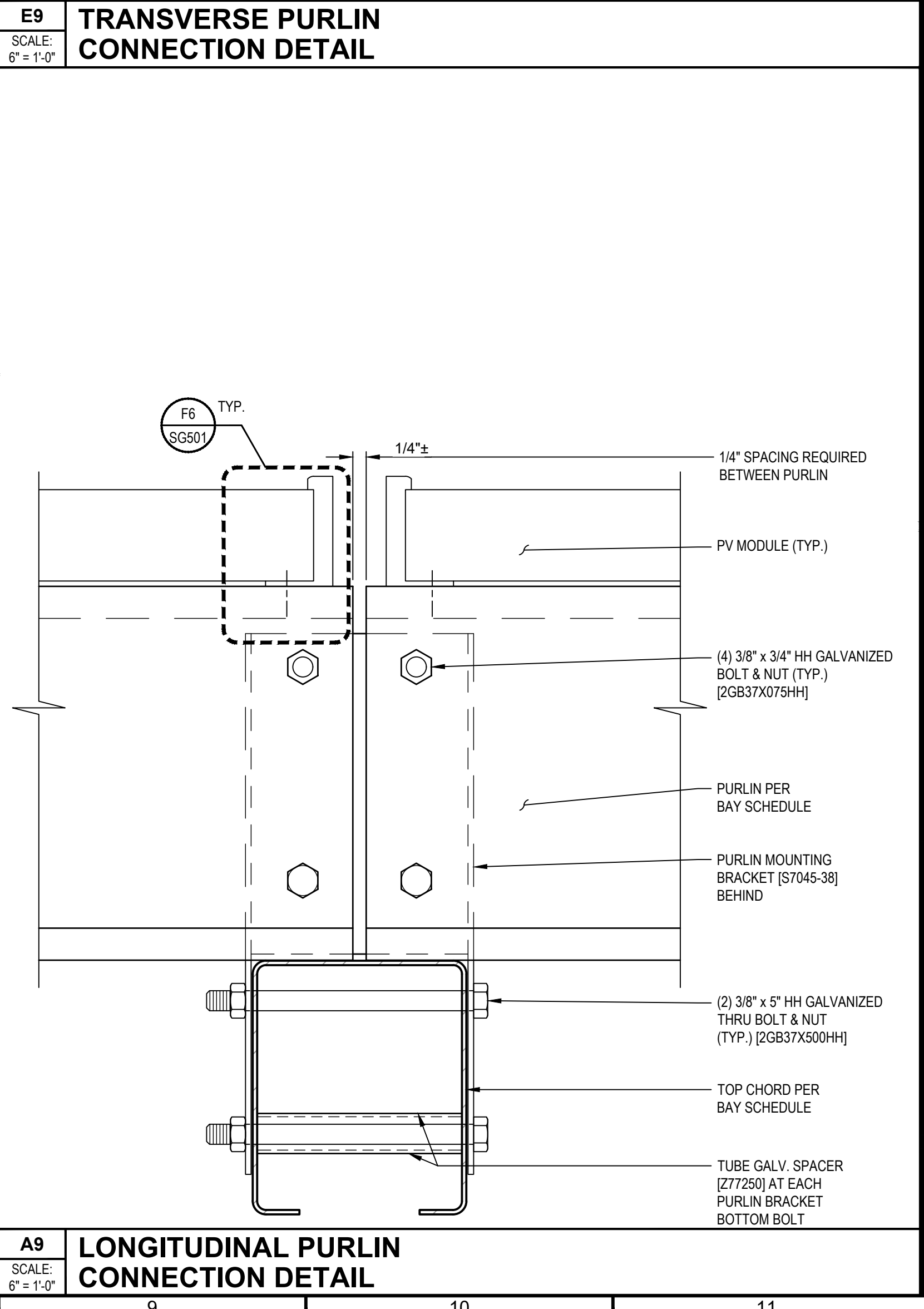
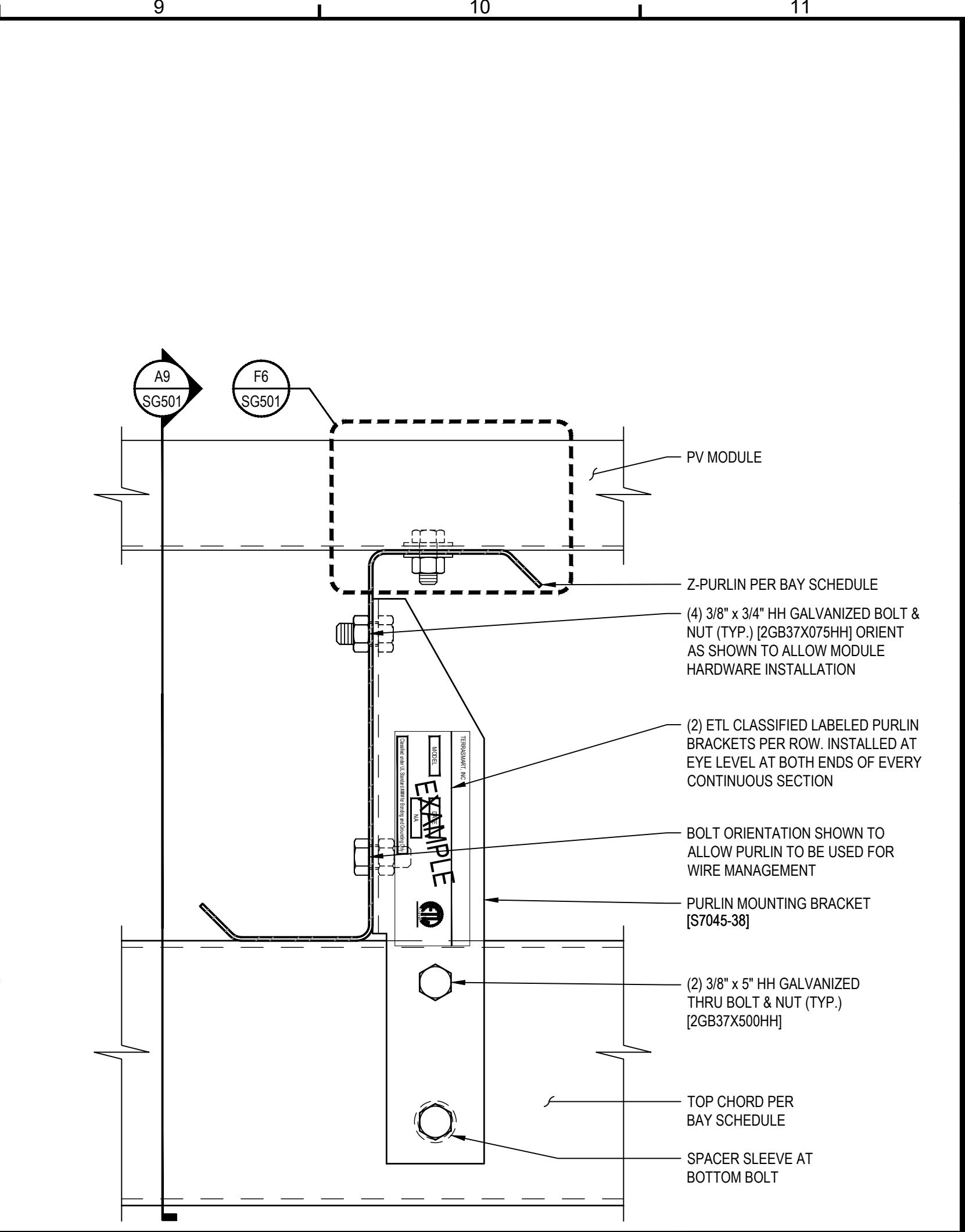
1000 MAPLE AVE #2047  
HOMEWOOD, IL 60430

TERRASMART PROJECT No.:  
2330085

DRAWN BY: \_\_\_\_\_ REVIEWED BY: \_\_\_\_\_

SHEET TITLE:  
**DETAILS**

SHEET No.:  
**SG501**

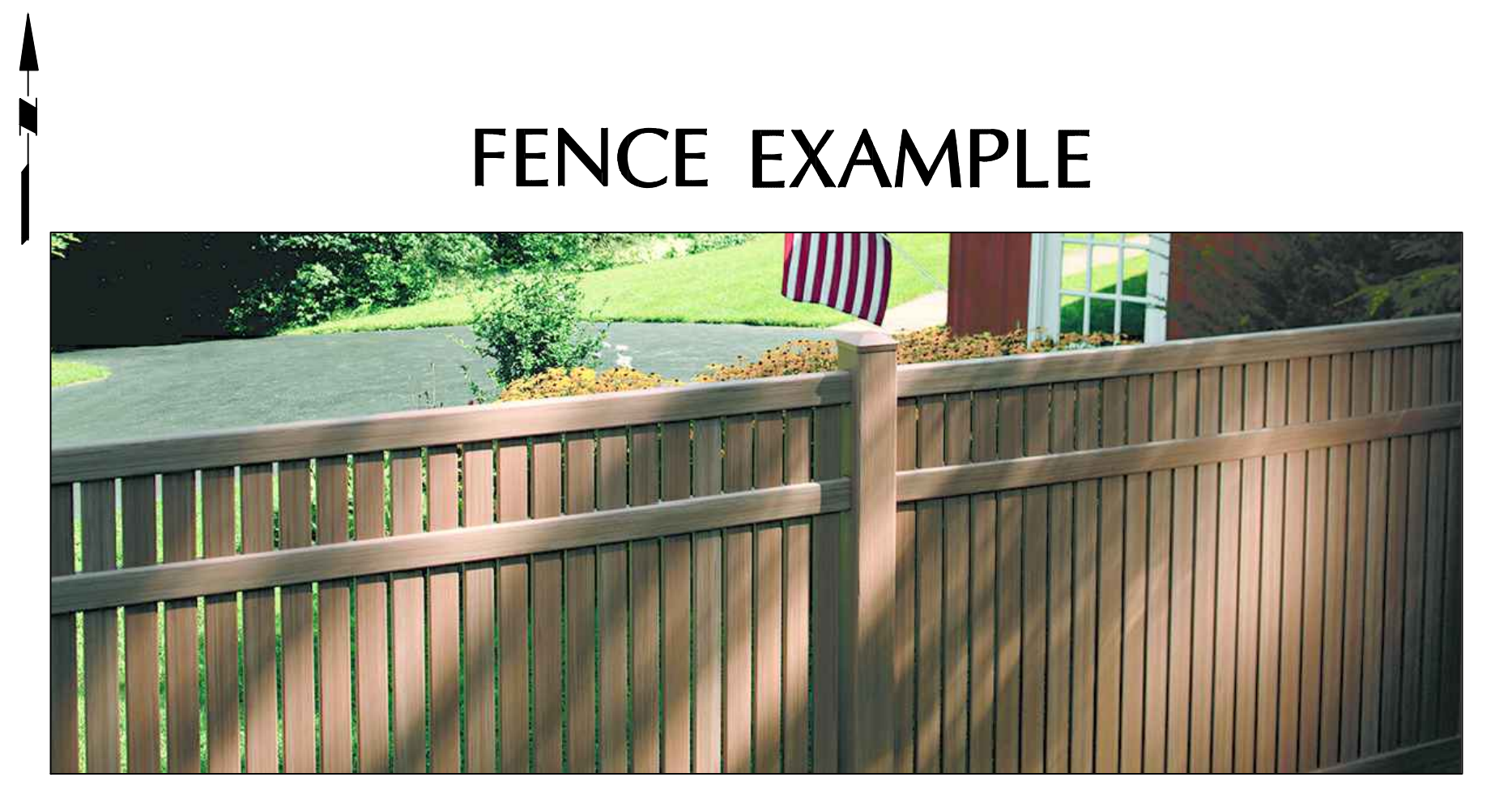
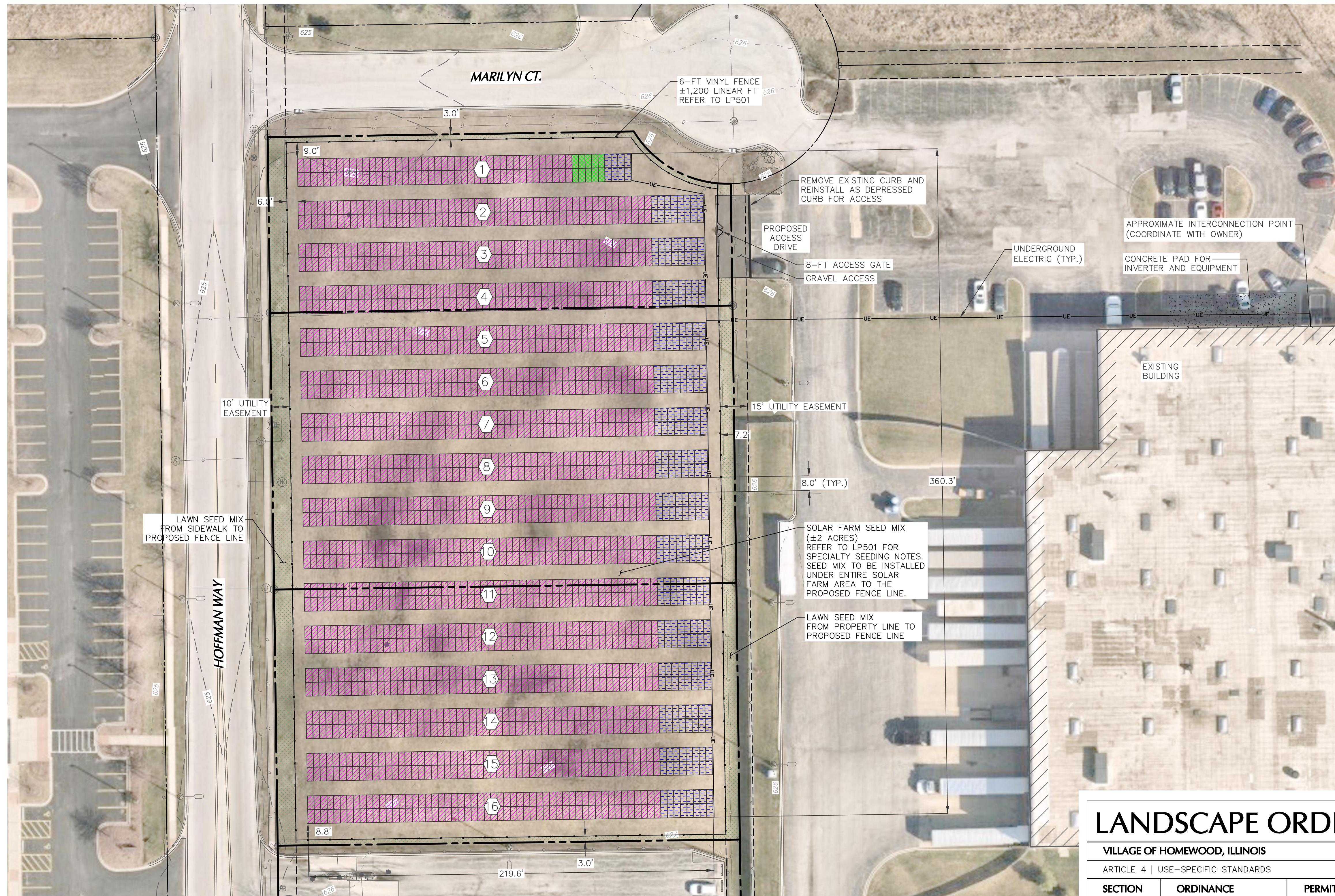


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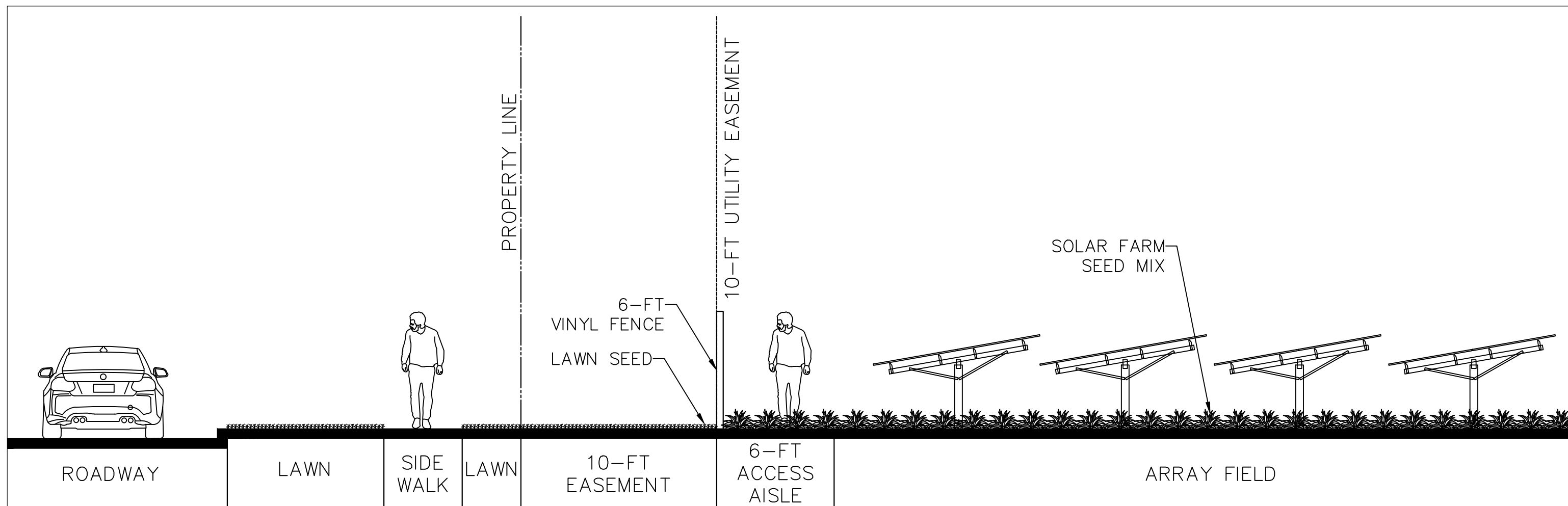
FENCE EXAMPLE

ARRAY LEGEND		
QTY	SYM	DESC
30		4P2 ARRAY
1		5P2 ARRAY
143		6P2 ARRAY

ROW SUMMARY	
ROW NUMBER	MODULES PER ROW
1	102
2 TO 16	124
TOTAL	1,962

### LANDSCAPE ORDINANCE COMPLIANCE CHART

VILLAGE OF HOMEWOOD, ILLINOIS				
ARTICLE 4   USE-SPECIFIC STANDARDS				
SECTION	ORDINANCE	PERMITTED/REQUIRED	SITE SPECIFIC CALCULATION	PROPOSED
44-04-14	SOLAR ENERGY COLLECTION SYSTEM (GROUND), 1-5 ACRE SITE	GROUND-MOUNTED SOLAR ENERGY COLLECTION SYSTEMS SHALL BE EXEMPT FROM THE IMPERVIOUS SURFACE LIMITS IF THE GROUND DIRECTLY UNDER THE SOLAR PANEL IS PLANTED WITH NATIVE PLANTINGS AND GROUND COVER.	54,622 SF (1.25 AC) OF PROPOSED SOLAR ARRAY	2.0 ACRE OF NATIVE/NATURALIZED SOLAR FARM SEED MIX
		SOLAR PANELS SHALL BE SCREENED FROM VIEW FROM ANY PUBLIC RIGHT OF WAY UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ECONOMIC AND COMMUNITY DEVELOPMENT	642 LINEAR FEET OF ARRAY FIELD ADJACENT TO PUBLIC RIGHT OF WAY	6-FT VINYL PRIVACY FENCE PROPOSED ADJACENT TO PUBLIC R.O.W.
ARTICLE 5   DEVELOPMENT STANDARDS				
SECTION	ORDINANCE	PERMITTED/REQUIRED	SITE SPECIFIC CALCULATION	PROPOSED
44-05-08	GROUND OR WALL MOUNTED BUILDING EQUIPMENT	MATERIALS USED FOR SCREENING SHALL BE DESIGNED AND ESTABLISHED SO THAT THE AREA OR ELEMENT BEING SCREENED IS NO MORE THAN 20 PERCENT VISIBLE THROUGH THE SCREEN.	642 LINEAR FEET OF ARRAY FIELD ADJACENT TO PUBLIC RIGHT OF WAY	6-FT VINYL PRIVACY FENCE PROPOSED ADJACENT TO PUBLIC R.O.W.
		CHAIN-LINK FENCE OR SLATS IN CHAIN-LINK FENCE ARE PROHIBITED FOR MEETING THIS REQUIREMENT.		



TYPICAL SECTION VIEW

**LANGAN**  
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Project  
**HOMEWOOD, IL  
GROUND MOUNT  
SOLAR**  
HOMEWOOD  
ILLINOIS

Drawing Title  
**LANDSCAPE PLAN**

Project No.  
**541029901**  
Date  
**07/18/2023**  
Drawn By  
**MRP**  
Checked By  
**HMG**  
Drawing No.  
**LP101**



## GENERAL LANDSCAPE PLANTING NOTES

- NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION, PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
- ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A NATURAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST..
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
- STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
- NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE.
- THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER, TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
- LANDSCAPE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
- THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
- DELIVERY, STORAGE, AND HANDLING
  - PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
  - TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED. DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSIT. DO NOT DROP BALLED AND BURLAPPED STOCK DURING DELIVERY OR HANDLING.
  - ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOTBALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8 INCHES INTO THE PLANTING HOLE. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
  - THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 8 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.
- ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND AN UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
- ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
- NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF TWO YEARS FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
- THE BACKFILL MIXTURE AND SOIL MIXES TO BE INSTALLED PER THE SPECIFICATIONS.
- AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
- MULCH SHOULD NOT BE PILED UP AROUND THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR.
- ALL FENCE INSTALLATION SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY LANDSCAPE PLANTING, LAWN AND GRASSES, OR IRRIGATION WORK.
- FOR ANY DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND PLANTING PLAN THE GRAPHIC QUANTITY SHOWN SHALL GOVERN.
- PLANT MATERIALS SHALL NOT BE PLANTED UNTIL THE FINISHED GRADING HAS BEEN COMPLETED.
- ALL PLANT INSTALLATIONS SHALL BE COMPLETED EITHER BETWEEN APRIL 1 - JUNE 15 OR AUGUST 15 - NOVEMBER 1, UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT. SEE LAWN SEEDING DATES IN SEEDING NOTES.

## PLANTING SOIL SPECIFICATIONS

- PLANTING SOIL SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODORS.
- PLANTING SOIL:**  
CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARP/AULIN UNTIL TIME OF ACTUAL USE.
- THE FOLLOWING TESTING SHOULD BE PERFORMED AND RESULTS GIVEN TO THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE INSTALLATION:
  - PARTICLE SIZE ANALYSIS - LOAMY SAND: 70-85% SAND, 15-30% SILT AND CLAY
  - FERTILITY ANALYSIS: pH (5.5-6.5), SOLUBLE SALTS (0.25-0.60 MMHOS/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM
  - ORGANIC MATTER CONTENT: 7-10%
  - TOXIC SUBSTANCE ANALYSIS
  - MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED
- ORGANIC MATTER AS A SOIL AMENDMENT:
  - LEAF MOLD WITH 60-90% ORGANIC CONTENT BY WEIGHT.
  - SHREDDED LEAF LITTER, COMPOSTED FOR A MINIMUM OF 1 YR. SHOULD BE FREE OF DEBRIS, STONES OVER 1/2", WOOD CHIPS OVER 1".
- SOIL AMENDMENT FOR PLANT MATERIAL:  
SOIL IN BEDS AND PLANTING ISLANDS OTHER THAN BACKFILL MATERIAL AND TOPSOIL, SHOULD BE FRIABLE, WELL DRAINED, AND FREE OF DEBRIS, INCLUDING STONES AND TRASH. AMENDMENTS FOR BACKFILL IN TREE AND SHRUB PITS:
  - GROUND LIMESTONE (WITH A MIN. OF 88% OF CALCIUM AND MAGNESIUM CARBONATES) USED PENDING RESULTS OF SOIL ANALYSIS.
    - BRING pH LEVELS TO 5.5 MIN. TO 6.5 FOR NON-ERICACEOUS PLANTS
    - BRING pH LEVELS TO 4.5 MIN. TO 5.5 FOR ERICACEOUS PLANTS
  - TERRA-SORB BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN PLANTER BACKFILL MIXTURE WITH TREES AND SHRUBS.
  - MYCOR-ROOT SAVER BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN BACKFILL MIXTURE WITH TREES.

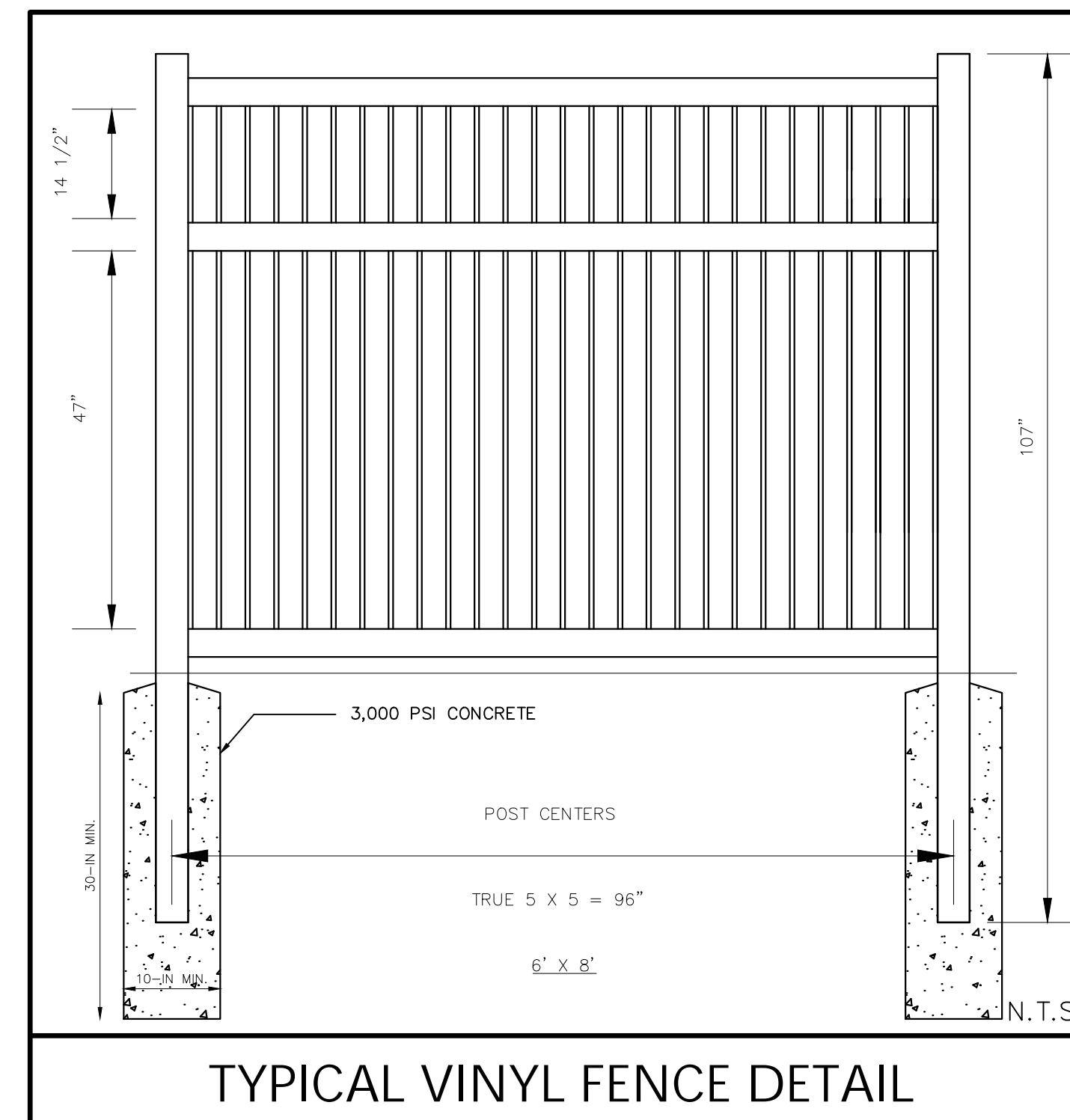
CLEAN SOIL FILL IN LANDSCAPE AREAS:  
LANDSCAPE FILL MATERIAL SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5 - 7.

**SOIL CONDITIONING:**  
CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH PLANTING SOIL LAYER IN SHRUB AREAS, AND THIRTY-SIX INCHES (36") MINIMUM DEPTH PLANTING SOIL LAYER IN TREE PLANTING AREAS. PLANTING SOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN SIX INCH (6") LIFTS UNTIL FULL DEPTHS ARE ACHIEVED AS DESCRIBED ABOVE. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS. ADJUST PH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM. LOWER PH USING ELEMENTAL SULFUR ONLY. PEAT MOSS OR COPPER SULFATE MAY NOT BE USED. GROUND LIMESTONE AS A SOIL AMENDMENT MATERIAL WILL ONLY BE USED PENDING RESULTS OF SOIL ANALYSIS. PROVIDE WITH MINIMUM 88% CALCIUM AND MAGNESIUM CARBONATES AND SHALL HAVE TOTAL 100% PASSING THE 10 MESH SIEVE, MINIMUM 90% PASSING 20 MESH SIEVE, AND MINIMUM 60% PASSING 100 MESH SIEVE. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

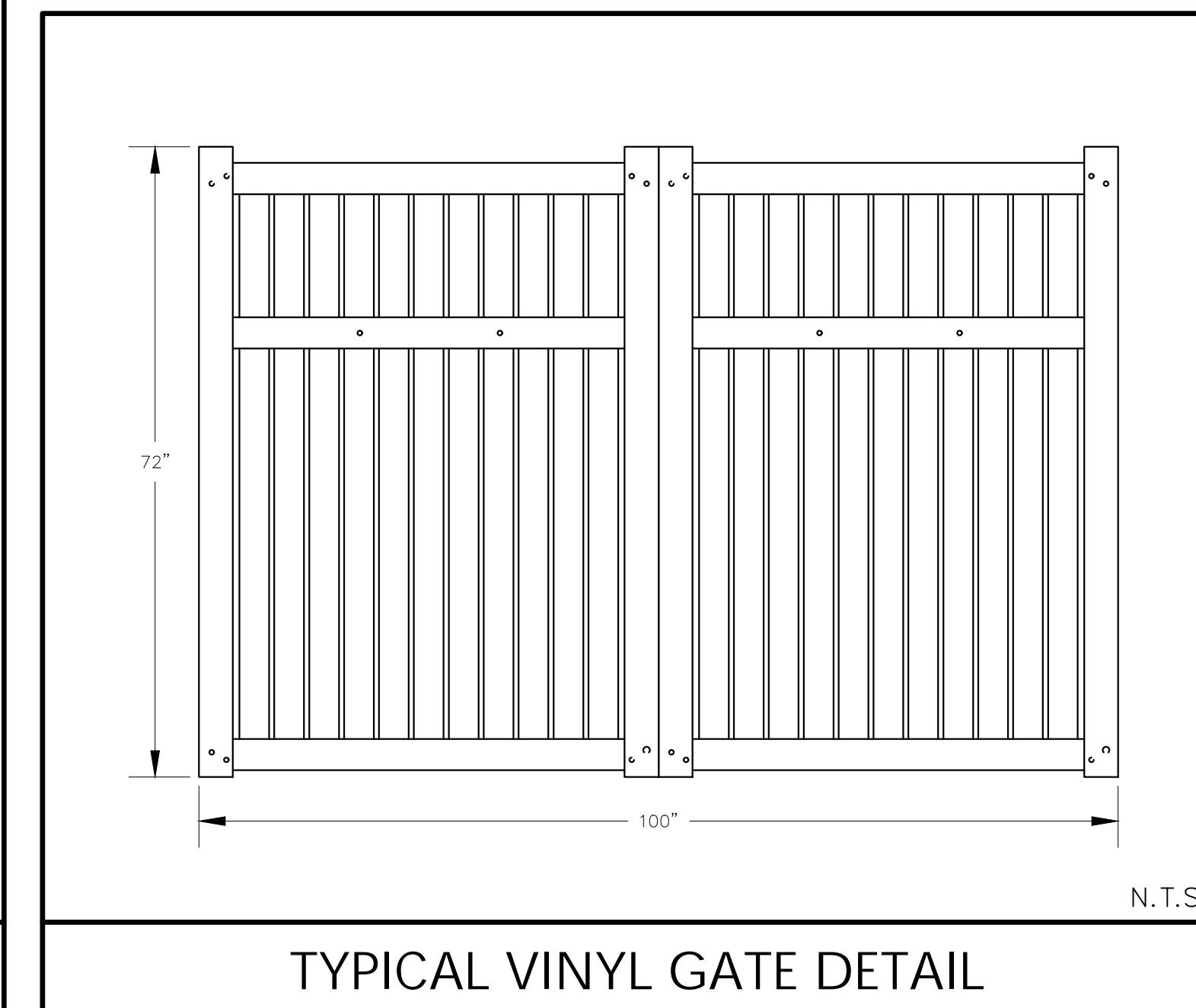
**SOIL MODIFICATIONS (PENDING RESULTS OF SOIL ANALYSIS):**  
THOROUGHLY TILL ORGANIC MATTER (LEAF COMPOST) INTO THE TOP 6 TO 12 IN. OF MOIST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.0. PEAT MOSS MAY NOT BE USED AS ORGANIC MATTER AMENDMENT.

MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY AND/OR GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSURFACE DRAINAGE LINES.

MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.



TYPICAL VINYL FENCE DETAIL



TYPICAL VINYL GATE DETAIL

NOTES:

- FENCE DETAILS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW.
- FENCE AND GATE TO BE CERTAINTED IMPERIAL CERTAGRAIN OR OWNER APPROVED EQUIVALENT. OWNER TO SELECT COLOR.

## LANDSCAPE MAINTENANCE NOTES

- MAINTENANCE OPERATIONS BEFORE APPROVAL:**
  - PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.
  - CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
  - CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.
- MAINTENANCE DURING CONSTRUCTION:**
  - MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WIRES SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.
  - IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT.
  - ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
  - PLANTS SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS AFTER INSPECTION AND PROVISIONAL ACCEPTANCE.
  - AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.

## LAWN SEED NOTES

- LAWN SEED MIX**
- PRIOR TO SEEDING, AREA IS TO BE TOPSOLED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 1" DIAMETER.
  - THE FOLLOWING SEED MIX SHALL BE SOWN AT THE RATES AS DEPICED:
 

RED FESCUE	1 1/2 LBS./1,000 SF
PERENNIAL RYEGRASS	1 LB./1,000 SF
KENTUCKY BLUEGRASS	1 1/2 LBS./1,000 SF
SPREADING FESCUE	1 LB./1,000 SF
  - SEED MIX SHALL BE MULCHED WITH SALT HAY OR UNROTTED SMALL GRAIN STRAW AT A RATE OF 2 TONS/AC OR 90 LBS/1,000 SF
  - SEEDING DATES FOR THIS MIXTURE SHALL BE AS FOLLOWS: SPRING: APRIL 1 - JUNE 1 FALL: SEPTEMBER 1 - OCTOBER 31
  - GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL A STAND OF COVER IS ESTABLISHED AND ACCEPTED BY THE OWNER.

**GENERAL SEEDING NOTES:**

- SEEDING SHALL TAKE PLACE IN THE SPRING (APRIL 1 TO JUNE 1) OR THE FALL (SEPTEMBER 1 TO OCTOBER 31).
- ELIMINATE UNWANTED VEGETATION PRIOR TO SEEDING USING A GLYPHOSATE-BASED HERBICIDE PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR TO ENSURE HERBICIDE IS INDICATED FOR USE AROUND WATER BODIES.
- IT IS RECOMMENDED THAT CONTRACTOR INSTALL SEED MIXTURE USING A NO-TILL TRUAX-TYPE DRILL WHERE APPLICABLE.
- THERE MUST BE CONTINUOUS SOIL MOISTURE FOR 4-6 WEEKS TO ALLOW PROPER GERMINATION.

**WEED CONTROL / MAINTENANCE**

- DURING THE ESTABLISHMENT YEAR, CONTRACTOR SHALL MOW SEEDING IF WEED HEIGHT EXCEEDS MEADOW MIX HEIGHT. MOW AT A HEIGHT OF 8"-10". DO NOT MOW CLOSE, AS SOME OF THE MEADOW MIX MAY BE DAMAGED.
- AFTER THE FIRST GROWING SEASON, AND IF MEADOW MIX IS WELL ESTABLISHED, THE MEADOW MIX SHALL BE MOWED ONLY ONCE ANNUALLY. ANNUAL MAINTENANCE MOWING SHALL BE DONE IN LATE WINTER DURING THE MONTH OF MARCH.

## SPECIALTY SEEDING NOTES

ERNST NATIVE/NATURALIZED SOLAR FARM SEED MIX (ERNMX-186-1)

- 34.0% FESTUCA RUBRA (CREEPING RED FESCUE)
- 33.0% FESTUCA OVINA, VARIETY NOT STATED (SHEEP FESCUE, VARIETY NOT STATED)
- 10.0% FESTUCA BREVIPILA, 'BEACON' (HARD FESCUE, 'BEACON')
- 5.0% FESTUCA OVINA VAR. DURIUSCULA, 'JETTY' (HARD FESCUE, 'JETTY')
- 5.0% FESTUCA OVINA VAR. GLAUCA, 'BLUE RAY' (BLUE FESCUE, 'BLUE RAY')
- 5.0% POA PRATENSIS, 'MAVERICK' (KENTUCKY BLUEGRASS, 'MAVERICK')
- 5.0% POA PRATENSIS, 'SHAMROCK' (KENTUCKY BLUEGRASS, 'SHAMROCK')
- 3.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE)

NOTES:

- SEED AT A RATE OF 4 LBS PER 1,000 SQ. FT.
- FOR SPRING SEEDING, APPLY A NURSE CROP OF OATS AT A RATE OF 20 LBS/ACRE.
- FOR FALL SEEDING, APPLY A NURSE CROP OF BARLEY AT A RATE OF 20 LBS/ACRE.

<p>LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology, D.P.C. 200 W Madison Street, Suite 1920 Chicago, IL 60606 T: 312.547.7700 F: 312.547.7701 www.langan.com</p>	Project	HOMWOOD, IL GROUND MOUNT SOLAR	Drawing Title	LANDSCAPE DETAILS	Project No.	541029901	Drawing No.	LP501
	Project	HOMWOOD, IL	Drawing Title	LANDSCAPE	Date	07/17/2023	LP501	
	Project	HOMWOOD, IL	Drawing Title	DETAILS	Drawn By	MRP		
	Project	HOMWOOD, IL	Drawing Title	DETAILS	Checked By	HMG		
Project	COOK COUNTY	HOMWOOD, IL	Drawing Title	LANDSCAPE	Project No.	541029901	Drawing No.	LP501
Project	ILLINOIS	HOMWOOD, IL	Drawing Title	DETAILS	Date	07/17/2023	Drawing No.	LP501
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## Decommissioning Plan

### **System Components:**

- Solar modules
- String inverters
- Racking/canopy structures
- Racking foundations
- Above-ground conduit and wiring
- AC equipment
- Concrete pads and electrical systems
- Battery Energy Storage System (BESS)
- Miscellaneous equipment/terminations

### **Decommissioning Process**

The recommended approach to decommissioning and removing the system and associated equipment is to essentially reverse the installation process. The system components and removal sequencing are outlined below. Approximately 90% of the system will be recycled (and possibly resold) and a majority of the system will be removed from site. As this is an electrically charged system, applicable safety precautions and procedures will be used during the decommissioning process.

### **Decommissioning Sequence:**

1. Disconnect grid power and turn off system equipment (Utility involvement will be required).
2. Test all circuits to confirm the AC system components are de-energized.
3. Disconnect medium voltage wiring.
4. Disconnect module strings and confirm DC system components are de-energized.
5. Remove modules and recycle module frames.
6. Remove and recycle project fencing, as appropriate. Wooden, mesh and other non-recyclable fencing materials will likely be disposed.
7. Remove and recycle system wiring, inverters, transformers, and other electrical equipment including BESS as applicable.
8. Remove and recycle all canopy steel/racking steel.
9. Remove and dispose of above grade portions of the concrete foundations.
10. Replant vegetation where necessary.



### **Decommissioning Cost**

The primary costs associated with decommissioning are direct labor, loading, and off-site shipping. The decommissioning cost assumes that the items noted below will be recycled. The above-grade portions of the concrete foundations and concrete equipment pads will be removed, and disturbed land areas will be repaired with soil and seed to match existing grade and vegetation.

The following system components are assumed to be recycled:

- solar modules
- string inverters
- BESS
- racking/steel structural components
- combiner boxes
- balance of system (wire, Unistrut, conduit etc.)