

VILLAGE OF LAKE BLUFF  
ARCHITECTURAL BOARD OF REVIEW

TUESDAY, NOVEMBER 3, 2015 – 7:00 P.M.

VILLAGE HALL BOARD ROOM  
40 E. CENTER AVENUE, LAKE BLUFF, ILLINOIS

AGENDA

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1. **Call to Order and Roll Call**
2. **Consideration of the October 6, 2015 Architectural Board of Review Meeting Minutes and the October 21, 2015 Architectural Board of Review Workshop Minutes**
3. **Non-Agenda Items and Visitors (Public Comment Time)**  
The Architectural Board of Review Chair and Board Members allocate fifteen (15) minutes during this item for those individuals who would like the opportunity to address the Board on any matter not listed on the agenda. Each person addressing the Architectural Board of Review is asked to limit their comments to a maximum of three (3) minutes.
4. **A Public Hearing to Consider a Site Plan to Review Changes to the Exterior of the Building and Signage for Bernie's Book Bank at 917 North Shore Drive**
5. **A Public Hearing to Consider a Site Plan to Review New Antennas and Other Equipment for the Cell Tower at 45 E Center Avenue**
6. **Staff Report**
  - **Confirm Next Regular Meeting – December 1, 2015 (1<sup>st</sup> Tuesday)**
7. **Adjournment**

The Village of Lake Bluff is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities, are requested to contact R. Drew Irvin at 234-0774 or TDD number 234-2153 promptly to allow the Village of Lake Bluff to make reasonable accommodations.

**VILLAGE OF LAKE BLUFF  
ARCHITECTURAL BOARD OF REVIEW  
REGULAR MEETING  
OCTOBER 6, 2015**

**DRAFT MINUTES**

**1. Call to Order and Roll Call**

The meeting of the Architectural Board of Review (ABR) of the Village of Lake Bluff was called to order on October 6, 2015 at 7:00 p.m. in the Village Hall Board Room (40 E. Center Avenue) and the following were present.

Present: Matthew Kerouac  
Carol Russ  
John Sorenson  
Bob Hunter, Chair

Absent: Neil Dahlmann, Member  
Ed Deegan, Member  
Steve Rappin, Member

Also Present: Mike Croak, Building Codes Supervisor (BCS)

**2. Consideration of the September 15, 2015 ABR Meeting.**

Member Kerouac moved to approve the September 15, 2015 minutes as presented. Member Hunter seconded the motion. The motion passed on a unanimous voice vote.

**3. Non-Agenda Items and Visitors (Public Comment Time)**

Chair Hunter stated there were no requests to address the ABR.

**5. A Continuation of the Discussion Regarding the Possibility of ABR Review of New Single Family Homes**

BCS Mike Croak stated this is a continuation of the past discussion regarding this matter. Provided in the ABR packet are draft design guidelines that relate to the Village's master planning process downtown. BCS Croak reviewed the PCZBA summary of community character discussion points.

Chair Hunter stated the Village Board has asked the HPC to review the Village's preservation regulations and asked if the ABR review criteria should be to consider all new residential homes or redevelopments.

A discussion concerning implementation of residential design guidelines ensued.

Member Russ expressed her preference for the ABR to participate in the review process because of its expertise.

In response to a comment from Member Sorensen, Chair Hunter stated there has not been any type of structural analysis required for the HPC review as this could create a burden for homeowners.

Member Kerouac stated it is difficult to impose restriction on how homeowners should market their homes.

Chair Hunter stated Lake Bluff is concerned about individual lots and the restrictions on redevelopments. There are some restrictions such as zoning that are necessary but regulating design is difficult.

Member Kerouac stated that design guidelines with a laundry list of items will lead to bad architecture. We don't want a Disneyland recipe.

Member Kerouac stated that demolition on corner lots does make a big impact if it is subdivision and that limiting the subdividability of lots is important.

Chair Hunter stated he was hoping the zoning ordinance would become a bit more concrete with the bonus areas. We currently get a bonus for a 2 ft. wide porch and stated it should be a minimum 6 ft. wide porch so as to only apply to a usable porch.

Member Russ stated the ABR is out of synch with the other Advisory Boards. She questioned if the ABR want to add design guidelines of any kind do we want to advocate and let someone do it or do we step to the plate.

Member Kerouac stated he would rather see a simple home with beautiful details than a house with poor architectural features, and that small details such as vinyl siding and windows can ruin the entire house.

Following a discussion regarding teardowns, Chair Hunter used E. Woodland as an example and noted that in the 1980s every house of the first three blocks was demolished and the ordinance at that time were more relaxed and most of the smaller house were redeveloped and the area is not the same street.

Member Kerouac stated any potential guidelines need to be as open ended as possible to provide flexibility to the architect.

Chair Hunter suggested a rulebook with an allowable palette of materials and broad standards such as all elevations have to be designed.

Member Russ asked if we were looking for incentives that encourage quality designs.

Chair Hunter summarized the discussion: i) the possibility of instituting a requirement for ABR review of the exterior design for new single family homes, ii) the design guidelines are not suited to Village-wide use for new single family homes because they don't allow enough flexibility for the designing architects and, iii) if the community wants ABR review of new

single family homes, the ABR would prefer to define an Architectural Review District and only review new homes within that district.

**6. Adjournment**

There being no further business to consider, Member Kerouac moved to adjourn the meeting. Member Sorenson seconded the motion. The motion passed on a unanimous voice vote.

The meeting adjourned at 9:30 p.m.

Respectfully submitted,

Mike Croak, CBO, CBCO  
Building Codes Supervisor

**VILLAGE OF LAKE BLUFF  
ARCHITECTURAL BOARD OF REVIEW  
SPECIAL WORKSHOP MEETING  
OCTOBER 21, 2015**

**DRAFT MINUTES OF MEETING**

The Village of Lake Bluff Architectural Board of Review (“ABR”) met at a Special Workshop Meeting in the Village Hall Board Room (40 E. Center Avenue) on Wednesday, October 21, 2015. The Meeting was called to order at 8:00 p.m. and it was determined that the following ABR and Joint Plan Commission and Zoning Board of Appeals Members (“PCZBA”) were present:

ABR Members: Neil Dahlmann  
Matt Kerouac  
Carol Russ  
Robert Hunter, Chair

PCZBA Members: Sam Badger  
Mary Collins  
Michael Goldsberry  
Elliot Miller  
Gary Peters  
Steven Kraus, Chair

Also Present: Michael Croak, Building Codes Supervisor  
Drew Irvin, Village Administrator

**A Workshop Discussion with the PCZBA to Consider Preliminary Plans for the Proposed Changes to the Lake Bluff Middle School Building (31 E. Sheridan Place)**

Mark Barry, President of the Lake Bluff School District #65 School Board, Jean Sophie, Superintendent of Schools Lake Bluff Elementary School District #65 and Members of the Facilities Committee introduced themselves to the ABR and PCZBA.

Mr. Craig Siepka of Wight & Company, the project design manager presented the preliminary plans for the proposed changes to the Lake Bluff Middle School building. A discussion regarding the preliminary plans followed.

**Adjournment of the Workshop Meeting**

As no further business came before the ABR, the meeting adjourned at 9:23 p.m.

Respectfully submitted,

Mike Croak, CBO, CBCO  
Building Codes Supervisor

# VILLAGE OF LAKE BLUFF

## Memorandum

**TO:** Chairman Hunter and Members of the Architectural Board of Review

**FROM:** Mike Croak, Building Codes Supervisor

**DATE:** October 30, 2015

**SUBJECT:** **Agenda Item #4 – A Public Hearing to Consider a Site Plan to Review Changes to the Exterior of the Building and Signage for Bernie’s Book Bank at 917 North Shore Drive.**

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The Architectural Board of Review previously reviewed changes to 917 North Shore Drive for Bernie’s Book Bank on June 2, 2015. The petitioner is requesting approval of revisions to that design. They are proposing a smaller wall sign, the elimination of the previously proposed solid canopy at the entrance, and the elimination of the vertical trellises.

The ground sign will remain as previously approved (it has been installed).

The following is a chart summarizing the measurements of the proposed wall sign:

<b>Sign Code (L-1 District)</b>	<b>Proposed Signage</b>
1.) Two signs are permitted on a corner lot	Complies—one wall sign and one ground sign proposed
3) Allowable area for wall sign is 60 square feet	Complies – the proposed wall sign is 21 square feet

### Recommendation:

It is recommended the ABR conduct a public hearing to consider modification to the site plan and signage plan, appropriately question the Petitioner as needed, entertain public comments and questions from the petitioner and make one of the following recommendations regarding the site plan:

- Recommend that the Village Board approve the proposed site plan as presented or with conditions;
- Recommend that the Village Board deny the proposed site plan; or
- Request the petitioner to provide additional information for the ABR’s consideration.

At the conclusion of the public hearing, it is recommended that the ABR take one of the following actions with respect to the signage plan:

- Recommend the Village Board grant or deny an exemption from the Sign Code regulations for the signage as presented;
- Approve the sign permit (with conditions) that complies with all Code regulations; or
- Deny the sign permit.

The petitioner will be in attendance at Tuesday’s meeting to respond to questions from the ABR. If you should have any questions regarding this matter, please feel free to contact me at 847-283-6885.

October 29, 2015

Mike Croak, CBO, CBCO  
Building Codes Supervisor  
Village of Lake Bluff  
40 E. Center Ave.  
Lake Bluff, IL 60044

Dear Mike,

Please see attached exterior rendering submitted for your review and to request to be placed on the docket for the next Architectural Review Board meeting.

Please confirm the time and date of this meeting so I can be sure to be there to address any questions.

We have scaled back the original exterior canopy and trellis design for cost reasons, though have proposed a design which delivered essentially the same curb appearance.

In finalizing the requirements in design development and competitive bidding, the exterior work proved to be cost-prohibitive, particularly in light of other unforeseen requirements and costs. Furthermore, being a non-profit and stewarding limited and donated funds, it has been our goal to scale back all but the most functional components of the overall design.

For these reasons and curb appeal of the proposed exterior improvement, we feel that this alternate plan is superior to that previously approved, while still meeting the requirements of the Architectural Review Board.

Please let me know if you require any additional information.

Thank you.

Respectfully submitted,

Jim Foley  
Owner Representative  
Bernie's Book Bank



**BERNIE'S**  
**BOOK BANK**  
*Bernie's*

**BOOKS FOR A  
BETTER LIFE**

info@berniesbookbank.org  
847-780-READ [7323]  
www.berniesbookbank.org  
28101 N. Ballard Dr., Unit A  
Lake Forest, Illinois 60045

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**Chris Keogh**  
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Management Division, Goldman Sachs

**Shelley Patenaude**  
Interior Designer,  
Shelley Patenaude Interiors

**Jonathan Sisler**  
CFO, Coyote Logistics, LLC

## Michael Croak

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**From:** James Foley <foley@eqrep.com>  
**Sent:** Thursday, October 29, 2015 3:44 PM  
**To:** Michael Croak  
**Cc:** Brian Floriani; Robert Zylstra  
**Subject:** Bernie's Book Bank - ABR clarifications  
**Attachments:** BULLET12NW.PDF; ATT00001.txt

Dear Mike,

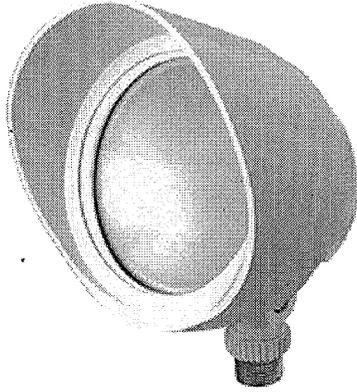
Following up on my prior email, I am providing the requested clarifications for the amendment to the Exterior Improvements to Bernie's Book Bank.

Wall/ shop sign: aluminum 2-sided sign hung from brick mounted horizontal bar. Sign size 42"w X 72"H

Lighting: the entrance vestibule will have the same recessed can light previously approved. The signage will be illuminated on both sides by recessed ceiling mounted fixtures shown on attached specification sheet. One on each side.

Trellis size & materials: trellis will be 8" x 8" and constructed of painted aluminum tubing and cedar or other weather resistant material.

# BULLET12NW



12W LED equivalent to 75W BR30/halogen/wide flood. Available in black, white, bronze and verde green.

Color: White

Weight: 3.4 lbs

<b>Project:</b> Bernie's books	<b>Type:</b> sign
<b>Prepared By:</b>	<b>Date:</b>

Driver Info		LED Info	
Type:	Constant Current	Watts:	12W
120V:	0.10A	Color Temp:	4000K (Neutral)
208V:	N/A	Color Accuracy:	84 CRI
240V:	N/A	L70 Lifespan:	100,000
277V:	N/A	Lumens:	832
Input Watts:	13W	Efficacy:	64 LPW
Efficiency:	92%		

## Technical Specifications

### Listings

#### UL Listing:

Suitable for wet locations

#### IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have been received the Department of Energy "Lighting Facts" label.

#### DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

### LED Characteristics

#### LEDs:

Multi-chip, high-output, long-life LEDs

#### Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculation

#### Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

#### Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

### Electrical

#### Driver:

Innovative integrated driver technology with 120V TRIAC and ELV dimming

### Construction

#### Thermal Management:

Superior heat sinking with external Air-Flow fins

#### Housing:

Die-cast aluminum housing, lens frame and mounting plate

#### Reflector:

Semi-specular, vacuum-metalized polycarbonate

#### Lens:

Microprismatic diffusion lens for smooth and even light distribution

#### Mounting:

Heavy-duty mounting arm with "O" ring seal and stainless steel screws

#### Gaskets:

High-temperature silicone gaskets

#### Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contain no VOC or toxic heavy metals.

#### Green Technology:

Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

### Other

#### California Title 24:

BULLET12 complies with 2013 California Title 24 building and electrical codes as a residential outdoor lighting fixture with no additional hardware required and as a commercial outdoor non-pole-mounted fixture ≤ 30 Watts when used with a photosensor control. Select catalog number to order a photosensor.

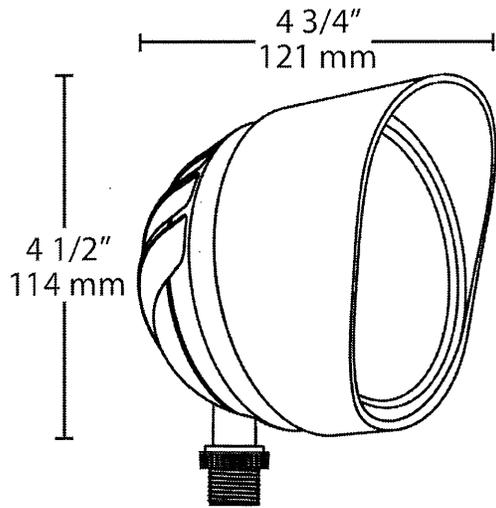
#### Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

# BULLET12NW



## Dimensions



## Features

- 12W LED equivalent to 75W BR30/halogen/wide flood
- Mount as an uplight or downlight on a RAB Mighty Post or junction box
- Microprismatic diffusion lens for smooth and even light distribution
- 100,000-hour LED Lifespan

## Ordering Matrix

Family	Watts	Color Temp	Finish
BULLET	12 = 12W	= Cool Y = Warm N = Neutral	A = Bronze B = Black VG = Verde Green W = White

Revised Elevation



Previously Approved Elevation



## VILLAGE OF LAKE BLUFF

### Memorandum

**TO:** Chairman Hunter and Members of the Architectural Board of Review

**FROM:** Mike Croak, Building Codes Supervisor

**DATE:** October 30, 2015

**SUBJECT:** **Agenda Item #5 – A Public Hearing to Consider a Site Plan to Review New Equipment on the Existing Cell Tower at 45 E Center Avenue**

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T Mobile has submitted an application to add new antennas and install new equipment on the existing cell tower at the Public Safety Building.

As shown on page A-1 of the attached drawings, T Mobile proposes to add a platform with six antennas and five other pieces of equipment to the cell tower at a height of 123' above ground level. They also propose to add equipment outdoors near ground level within the brick walled area as shown on page C-2 and C-3.

The new antennas require approval of a special use permit. The PCZBA recently held a public hearing on this request and made a recommendation to the Village Board in favor of approval.

All items will be painted to match the existing tower.

### Recommendation:

It is recommended the ABR conduct a public hearing to consider the modifications to the site plan, appropriately question the Petitioner as needed, entertain public comments and questions from the petitioner and make one of the following recommendations regarding the site plan:

- Recommend that the Village Board approve the proposed site plan as presented or with conditions;
- Recommend that the Village Board deny the proposed site plan; or
- Request the petitioner to provide additional information for the ABR's consideration.

Elton Manion, representing T Mobile, will be in attendance at Tuesday's meeting to respond to questions from the ABR. If you should have any questions regarding this matter, please feel free to contact me at 847-283-6885.

# T-Mobile® stick together®

JUL - 1 2015

SITE NUMBER: CH464321  
 SITE NAME: LAKE BLUFF CCI 839926  
 SITE TYPE: 164' MONOPOLE TOWER

JURISDICTION: VILLAGE OF LAKE BLUFF  
 CITY: LAKE BLUFF  
 COUNTY: LAKE

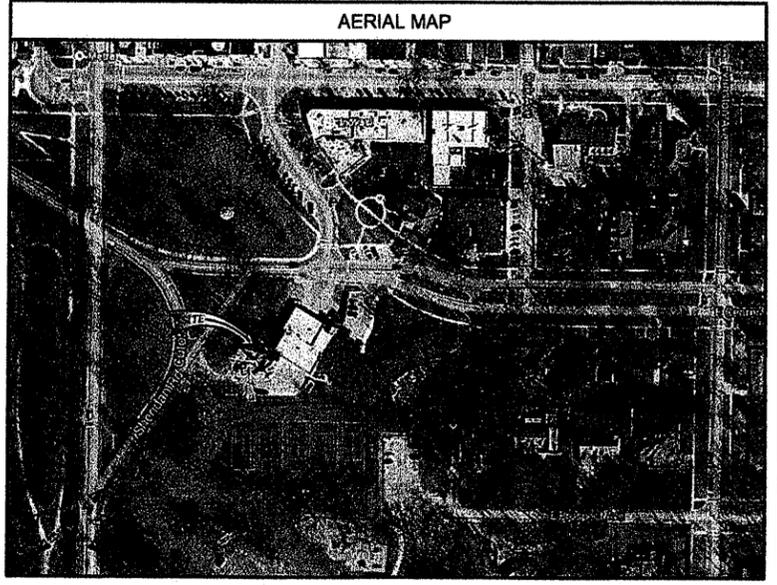
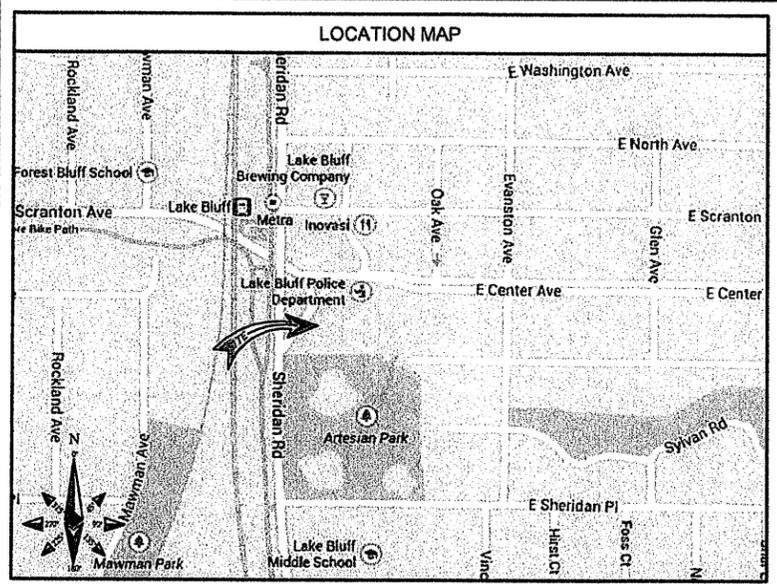
**T-Mobile®**  
**stick together®**  
 8550 BRYN MAWR AVENUE, SUITE 100  
 CHICAGO, ILLINOIS 60631

**WESTCHESTER SERVICES LLC**  
 604 FOX GLEN  
 BARRINGTON, IL 60010  
 TELEPHONE: 847-277-0070  
 FAX: 847-277-0080  
 AE@westchesterservices.com

**JOHN M. BANKS ARCHITECT**  
 604 FOX GLEN  
 BARRINGTON, IL 60010  
 TELEPHONE: 847-277-0070  
 FAX: 847-277-0080

**smartlink**  
 1997 ANNAPOLIS EXCHANGE PKWY  
 SUITE 200  
 ANNAPOLIS, MD 21401

STATE OF ILLINOIS  
 JOHN M. BANKS  
 001014586  
 LICENSED ARCHITECT  
 Exp. 11/30/16  
 IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ARCHITECT, TO ALTER THIS DOCUMENT.



**PROJECT DESCRIPTION**  
 INSTALL (6) ANTENNAS TO BE MOUNTED ON EXISTING MONOPOLE AND T-MOBILE EQUIPMENT CABINET ON NEW EQUIPMENT PLATFORM AT GRADE. NO NEW WATER OR SEWER IS REQUIRED AS FACILITY IS UNMANNED.

**PROJECT LOCATION**  
**COORDINATES (NAD83):** LAT: 42° 16' 42.5"N LONG: 87° 50' 42.1"W AMSL: 865.2'  
**SITE ADDRESS:** 45 E CENTER AVE, LAKE BLUFF, IL 60044  
 DATE OBTAINED FROM T-MOBILE RFDS: 05/11/2015

**PROPERTY SUMMARY**  
**SITE ADDRESS:** 45 E CENTER AVE, LAKE BLUFF, IL 60044  
**ZONING:** R-3  
**ASSESSOR'S PARCEL NUMBER (APN):** 12-21-100-003

**APPLICABLE CODES**  
 BUILDING CODE: INTERNATIONAL BUILDING CODE 2009 WITH AMENDMENTS  
 ELECTRICAL CODE: NATIONAL ELECTRICAL CODE 2005

**DRIVING DIRECTIONS**  
 FROM CHICAGO O'HARE INTERNATIONAL AIRPORT  
 GET ON I-190 E. HEAD SOUTH ON BESSIE COLEMAN DR. TAKE THE INTERSTATE 190 RAMP TO INTERSTATE 90/INTERSTATE 294/CHICAGO. FOLLOW I-294 N AND I-94 W TO IL-176 E/W ROCKLAND RD IN GREEN OAKS. TAKE THE ROCKLAND RD/IL-176 EXIT FROM I-94 W. MERGE ONTO I-190 E. TAKE EXIT 1C FOR I-294 N/TOLLWAY TOWARD MILWAUKEE. MERGE ONTO I-294 N. MERGE ONTO I-94 W. TAKE THE ROCKLAND RD/IL-176 EXIT. CONTINUE ON IL-176 E/W ROCKLAND RD. DRIVE TO SHERIDAN RD CUTOFF IN LAKE BLUFF. TURN LEFT ONTO IL-176 E/W ROCKLAND RD. CONTINUE ONTO W SCRANTON AVE. TURN RIGHT ONTO SHERIDAN RD CUTOFF. DESTINATION WILL BE ON THE LEFT.

**CONTACTS**  
**APPLICANT:**  
 T-MOBILE USA  
 8550 BRYN MAWR AVE, SUITE 100  
 CHICAGO, IL 60631  
 TEL: (773) 444-5400  
**PROPERTY OWNER CONTACT:**  
 CROWN CASTLE  
 2000 CORPORATE DRIVE  
 CANONSBURG, PA 15317

**UTILITIES**  
**ELECTRIC:**  
 COMED  
 TEL: (866) 639-3532  
 CONTACT: CUSTOMER SERVICE  
**TELCO:**  
 AT&T  
 TEL: (800) 288-2020  
 CONTACT: CUSTOMER SERVICE

**PROJECT TEAM**  
**ARCHITECT:** JOHN M. BANKS, 604 FOX GLEN, BARRINGTON, IL 60010, TEL: (847) 277-0070, FAX: (847) 277-0080  
**SITE ACQUISITION:** JONATHAN RESTIVO, SMARTLINK, 1997 ANNAPOLIS EXCHANGE PKWY, SUITE 200, ANNAPOLIS, MD 21401, TEL: (860) 334-9509  
**STRUCTURAL ENGINEER:** CROWN CASTLE, 2000 CORPORATE DRIVE, CANONSBURG, PA 15317

**SHEET INDEX**

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C-3	ENLARGED SITE PLAN
C-4	PLATFORM DETAILS
C-5	PLATFORM DETAILS
C-6	EQUIPMENT ELEVATION
C-7	ICE BRIDGE DETAILS
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**APPROVALS**

PENDING APPROVAL OF THE JURISDICTION, THE FOLLOWING PARTIES HAVE REVIEWED THE DESIGN WITHIN THEIR FUNCTIONAL RESPONSIBILITIES AND HAVE APPROVED THIS PROJECT FOR CONSTRUCTION. CONTRACTORS MAY NOT START CONSTRUCTION WITHOUT A NOTICE TO PROCEED (NTP) FROM T-MOBILE.

	PRINT NAME	SIGNATURE	DATE
LANDLORD:			
PROCON. MGR:			
DEVELOP. MGR:			
CONST. INSP.:			
A&E MGR:			
RF ENGINEER:			
OPERATIONS:			
ZONING REP:			
UTILITIES:			

REV	DATE	BY	DESCRIPTION
0	06/29/15	RA	PERMIT/CONSTRUCTION

CH464321  
 LAKE BLUFF  
 CCI 839926  
 45 E CENTER AVE.  
 LAKE BLUFF, IL 60044

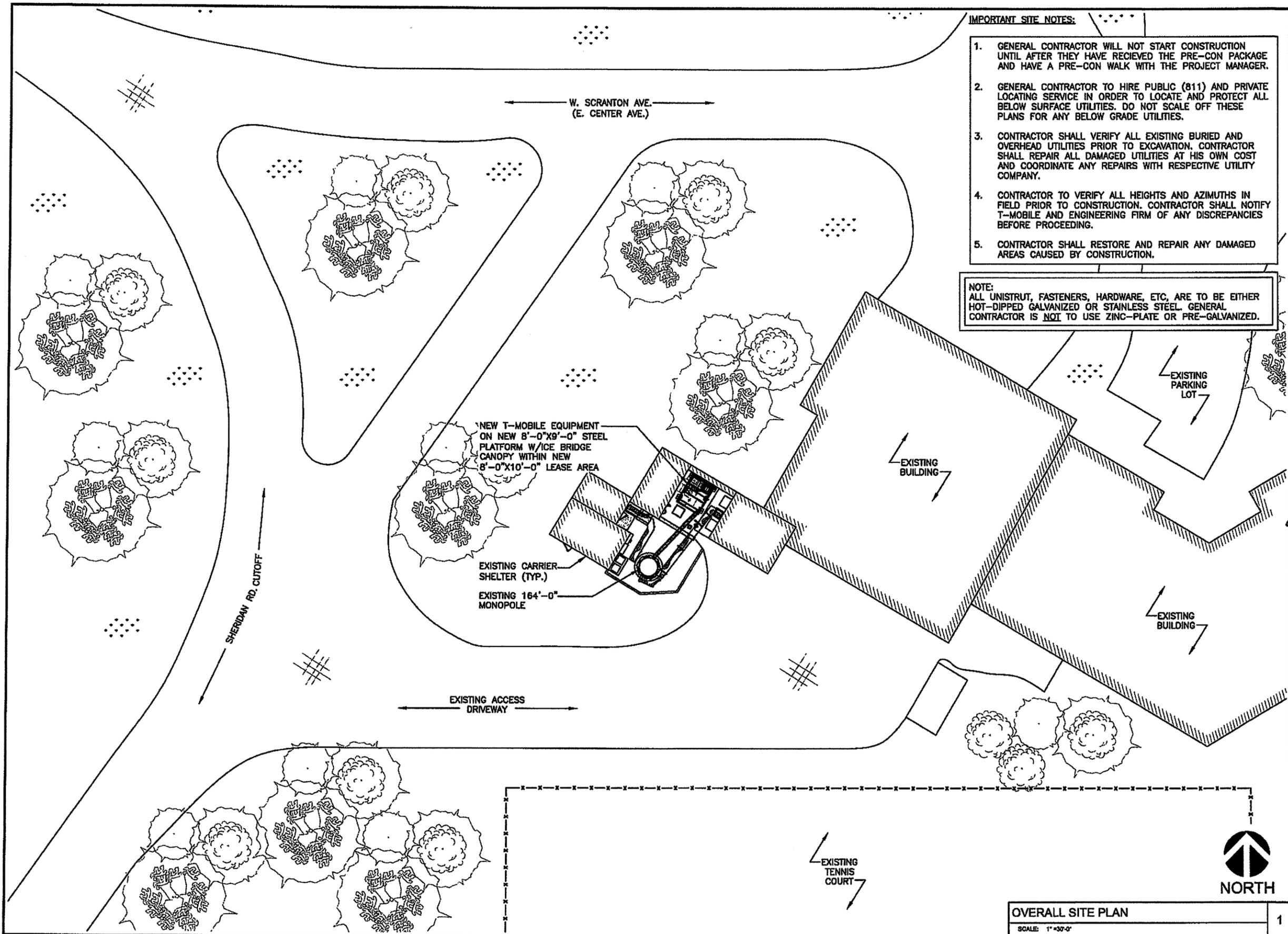
SHEET TITLE  
**TITLE SHEET**

SHEET NUMBER  
**T-1**

**IMPORTANT SITE NOTES:**

1. GENERAL CONTRACTOR WILL NOT START CONSTRUCTION UNTIL AFTER THEY HAVE RECEIVED THE PRE-CON PACKAGE AND HAVE A PRE-CON WALK WITH THE PROJECT MANAGER.
2. GENERAL CONTRACTOR TO HIRE PUBLIC (811) AND PRIVATE LOCATING SERVICE IN ORDER TO LOCATE AND PROTECT ALL BELOW SURFACE UTILITIES. DO NOT SCALE OFF THESE PLANS FOR ANY BELOW GRADE UTILITIES.
3. CONTRACTOR SHALL VERIFY ALL EXISTING BURIED AND OVERHEAD UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL REPAIR ALL DAMAGED UTILITIES AT HIS OWN COST AND COORDINATE ANY REPAIRS WITH RESPECTIVE UTILITY COMPANY.
4. CONTRACTOR TO VERIFY ALL HEIGHTS AND AZIMUTHS IN FIELD PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY T-MOBILE AND ENGINEERING FIRM OF ANY DISCREPANCIES BEFORE PROCEEDING.
5. CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION.

**NOTE:**  
ALL UNISTRUT, FASTENERS, HARDWARE, ETC. ARE TO BE EITHER HOT-DIPPED GALVANIZED OR STAINLESS STEEL. GENERAL CONTRACTOR IS NOT TO USE ZINC-PLATE OR PRE-GALVANIZED.



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CHICAGO, ILLINOIS 60631

**WESTCHESTER SERVICES LLC**  
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BARRINGTON, IL 60010  
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FAX : 847-277-0080

**smartlink**  
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SUITE 200  
ANNAPOLIS, MD 21401

STATE OF ILLINOIS  
JOHN M. BANKS  
001 014586  
LICENSED ARCHITECT  
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ARCHITECT, TO ALTER THIS DOCUMENT.

REV	DATE	BY	DESCRIPTION
0	06/28/15	RA	PERMIT/CONSTRUCTION

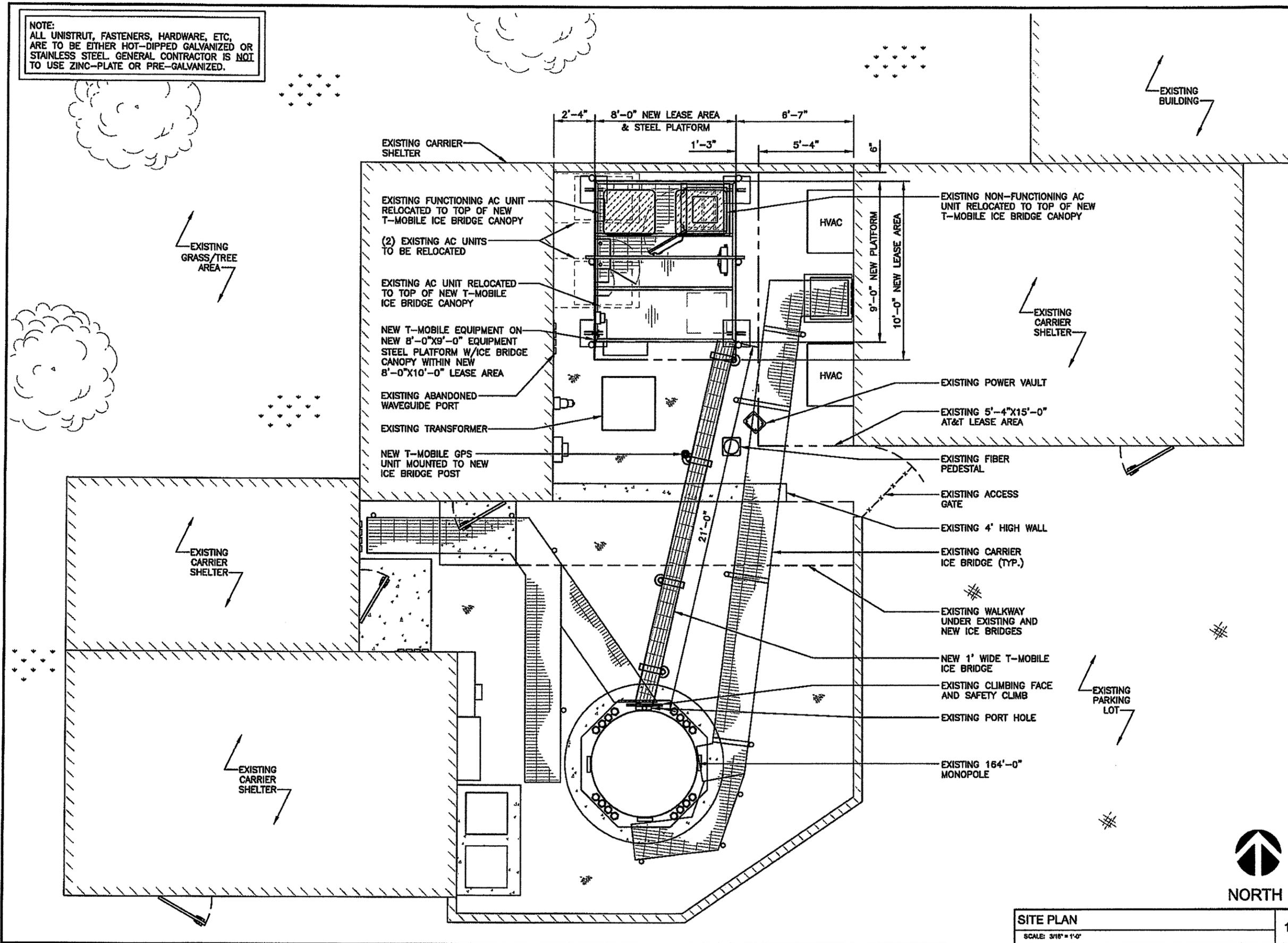
CH464321  
LAKE BLUFF  
CCI 839926  
45 E CENTER AVE.  
LAKE BLUFF, IL 60044

SHEET TITLE  
**OVERALL SITE PLAN**

SHEET NUMBER  
**C-1**

**OVERALL SITE PLAN**  
SCALE: 1"=30'-0"  
1

NOTE:  
ALL UNISTRUT, FASTENERS, HARDWARE, ETC,  
ARE TO BE EITHER HOT-DIPPED GALVANIZED OR  
STAINLESS STEEL. GENERAL CONTRACTOR IS NOT  
TO USE ZINC-PLATE OR PRE-GALVANIZED.



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STATE OF ILLINOIS  
JOHN M. BANKS  
001-014586  
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0	06/29/15	RA	PERMIT/CONSTRUCTION

CH464321  
LAKE BLUFF  
CCI 839926  
45 E CENTER AVE.  
LAKE BLUFF, IL 60044

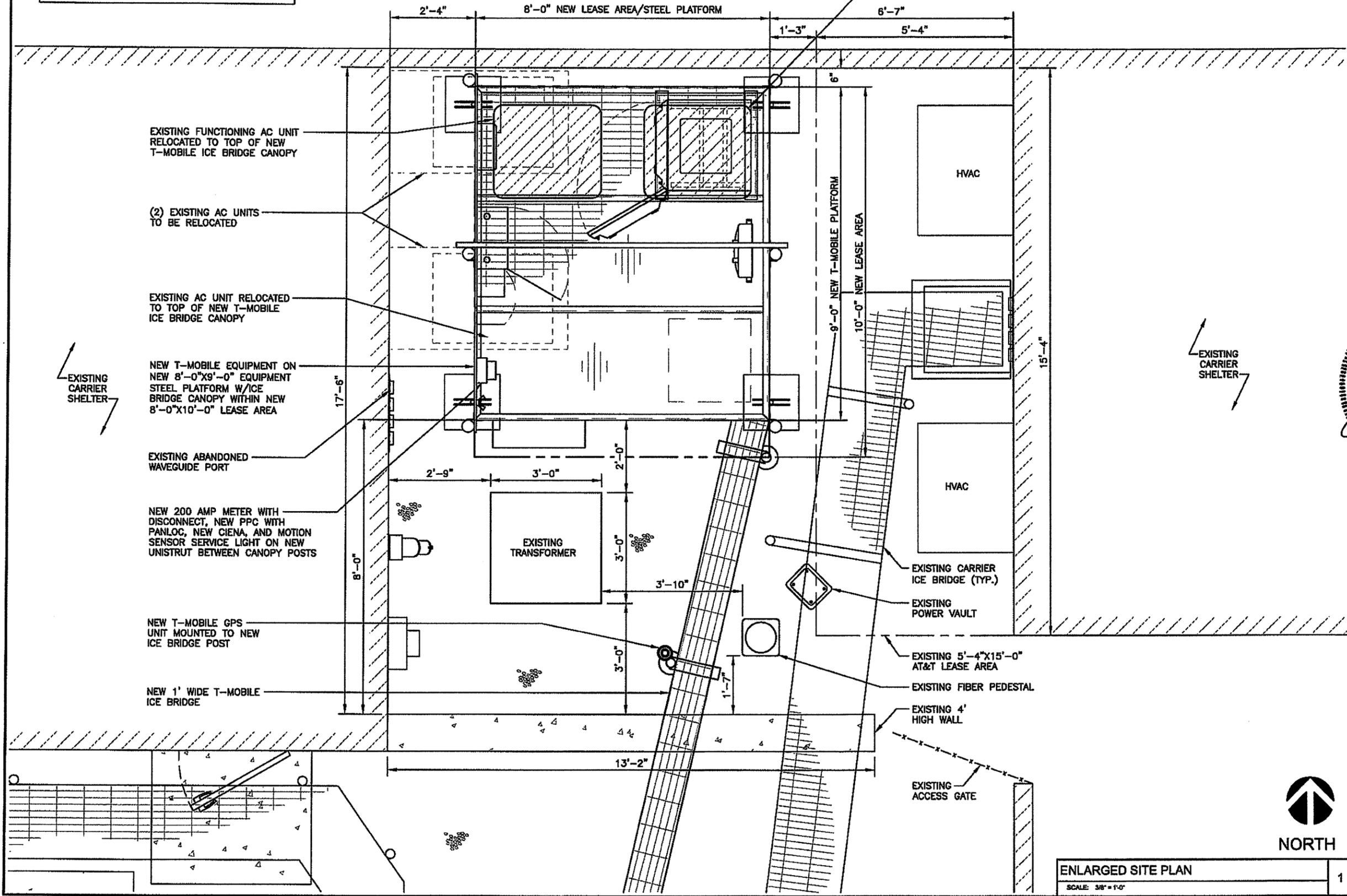
SHEET TITLE  
**SITE PLAN**

SHEET NUMBER  
**C-2**

**SITE PLAN**  
SCALE: 3/16" = 1'-0"  
1



NOTE:  
ALL UNISTRUT, FASTENERS, HARDWARE, ETC,  
ARE TO BE EITHER HOT-DIPPED GALVANIZED OR  
STAINLESS STEEL. GENERAL CONTRACTOR IS NOT  
TO USE ZINC-PLATE OR PRE-GALVANIZED.



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SHEET TITLE  
**ENLARGED SITE PLAN**

SHEET NUMBER  
**C-3**

ENLARGED SITE PLAN  
SCALE: 3/8" = 1'-0"

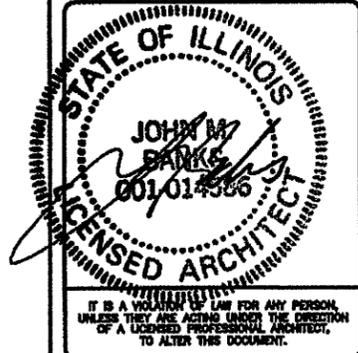


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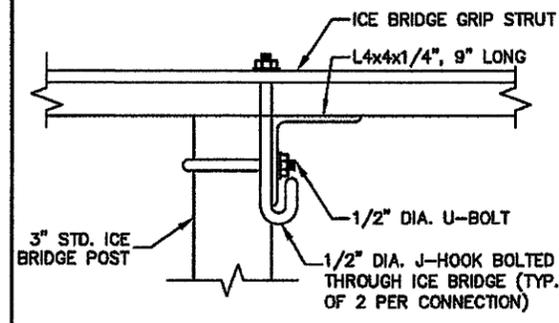


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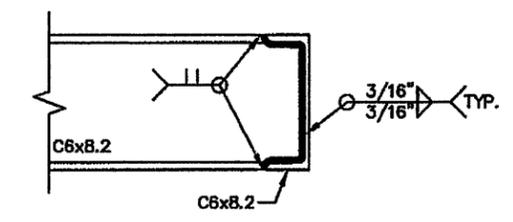
CH464321  
LAKE BLUFF  
CCI 839926  
45 E CENTER AVE.  
LAKE BLUFF, IL 60044

SHEET TITLE  
**PLATFORM DETAILS**

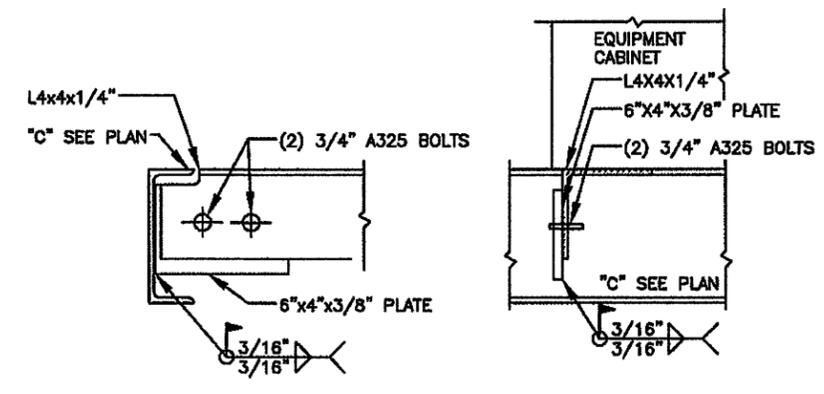
SHEET NUMBER  
**C-4**



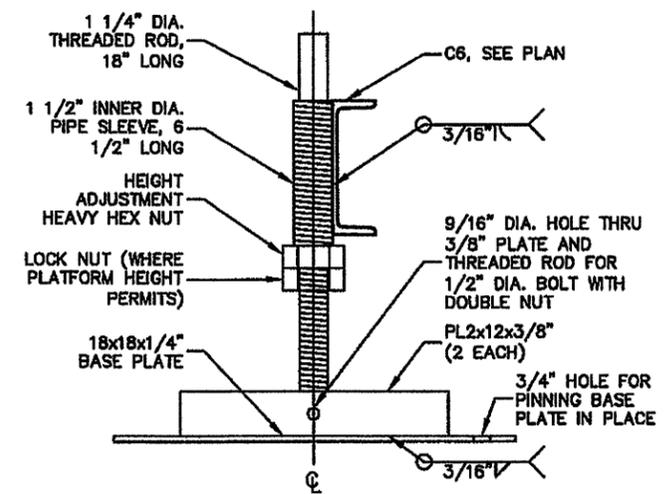
CONNECTION DETAIL 2  
SCALE: 1-1/2" = 1'-0"



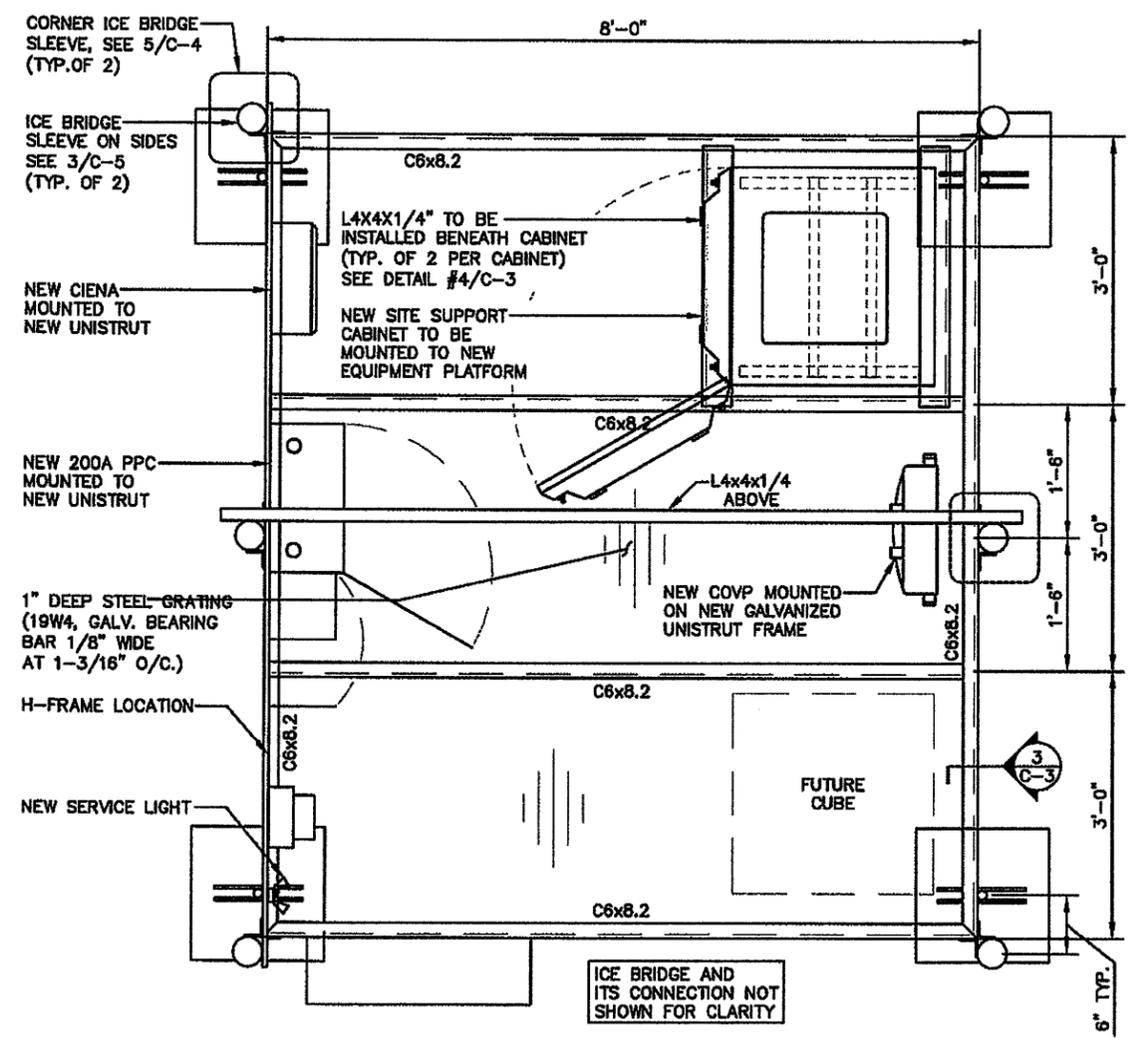
CONNECTION DETAIL 3  
SCALE: 1-1/2" = 1'-0"



CABINET SUPPORT CONNECTION DETAIL 4  
SCALE: 1-1/2" = 1'-0"

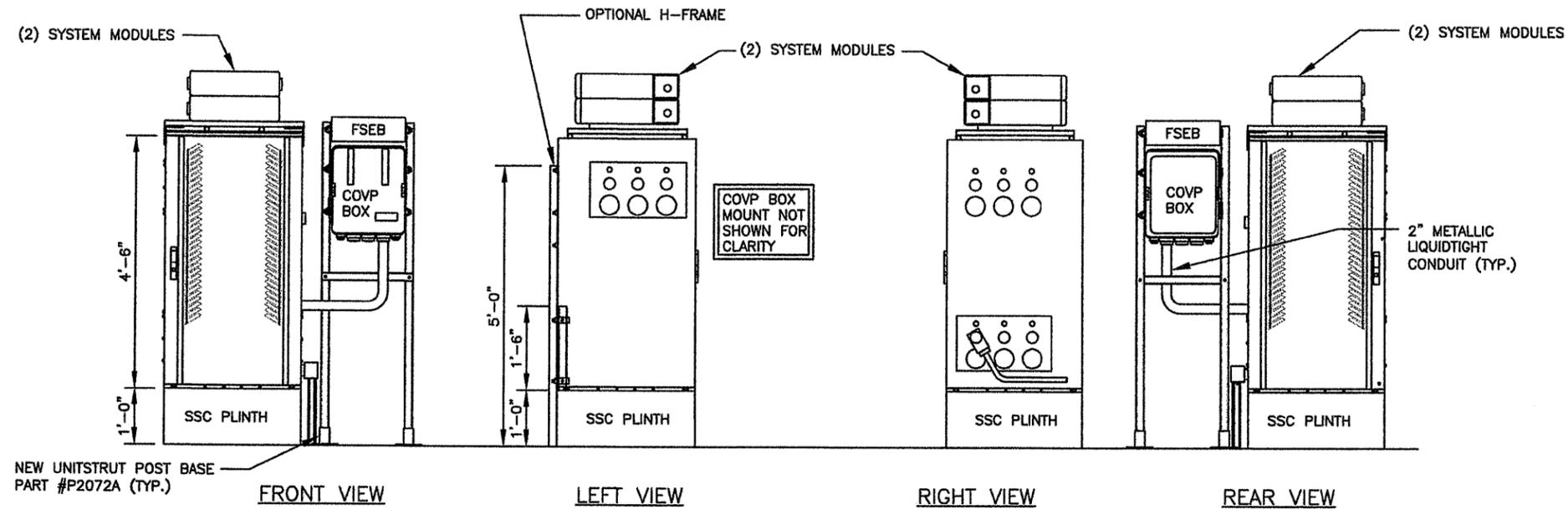


PLATFORM LEG DETAIL 5  
SCALE: 1-1/2" = 1'-0"



8'-0"x9'-0" PLATFORM PLAN 1  
SCALE: 1/2" = 1'-0"





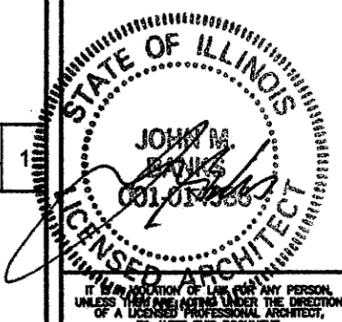
NEW UNISTRUT POST BASE  
PART #P2072A (TYP.)

COVP BOX  
MOUNT NOT  
SHOWN FOR  
CLARITY

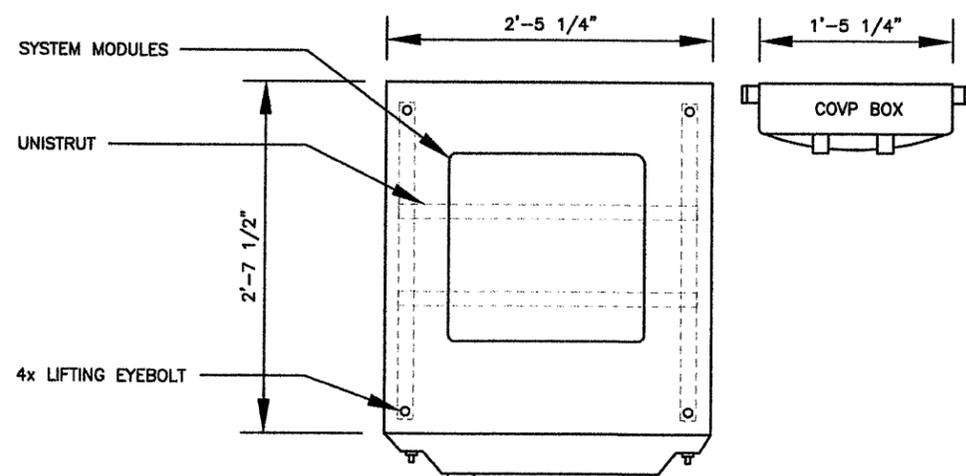
2\"/>

SITE SUPPORT CABINET LAYOUT

SCALE: NONE



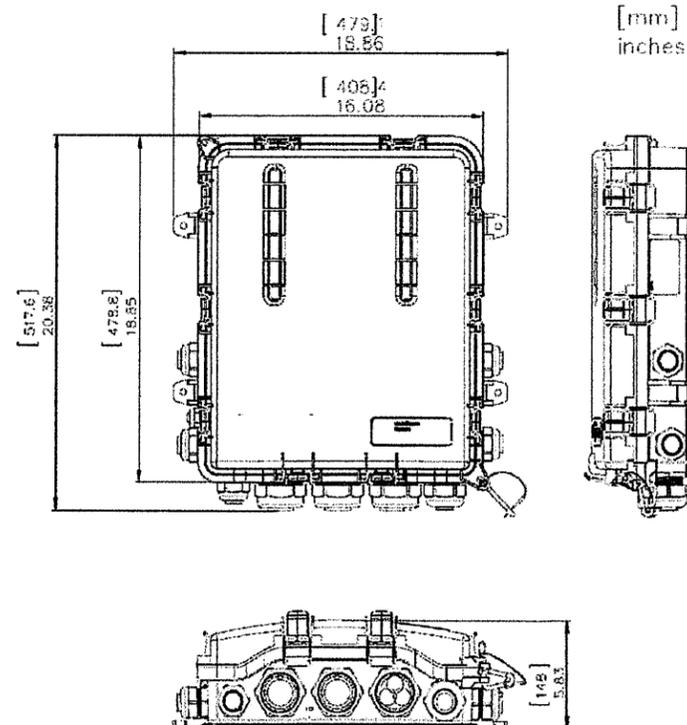
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TOP VIEW SITE SUPPORT CABINET

SCALE: NONE

2



MODEL: ASU9338TYP01

LARGE COVP

SCALE: NONE

3

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SHEET TITLE  
EQUIPMENT  
ELEVATION

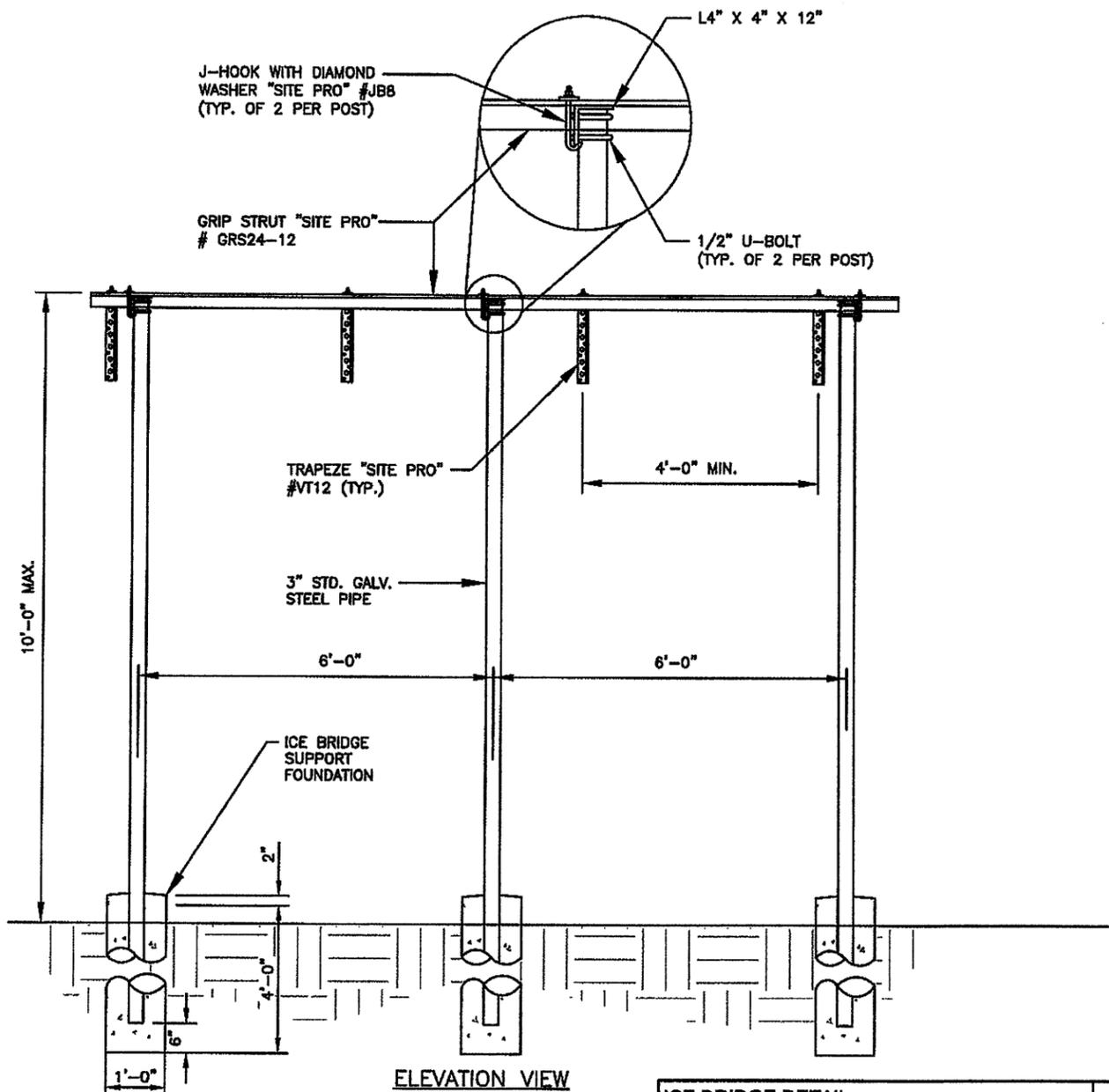
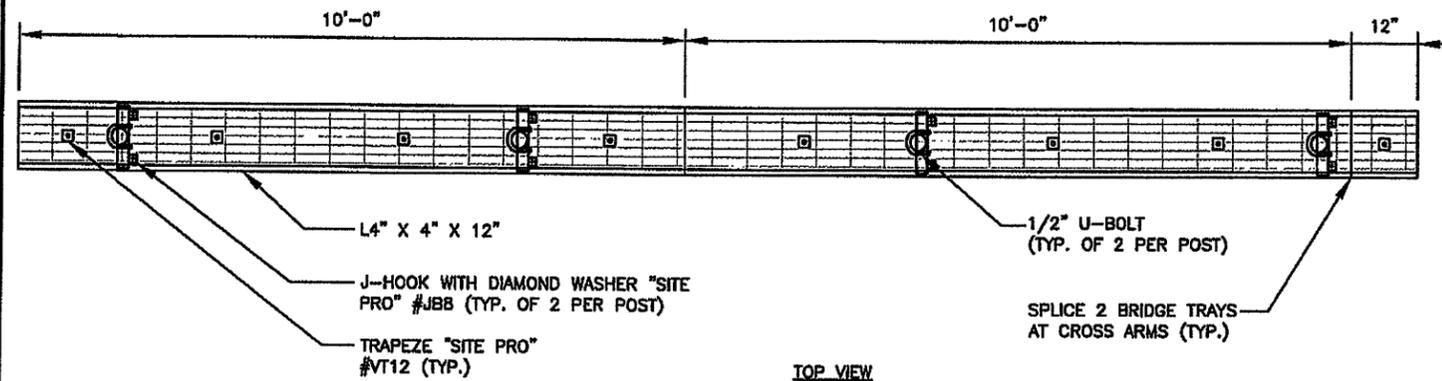
SHEET NUMBER  
C-6

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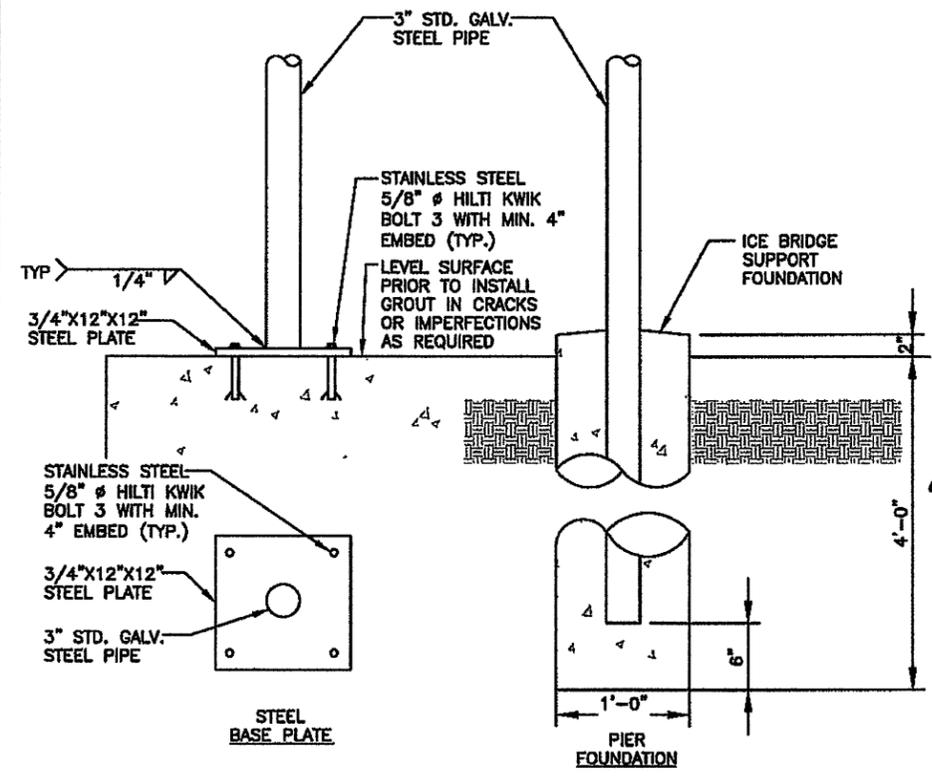
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**ICE BRIDGE DETAIL**  
SCALE: 3/8" = 1'-0"  
1



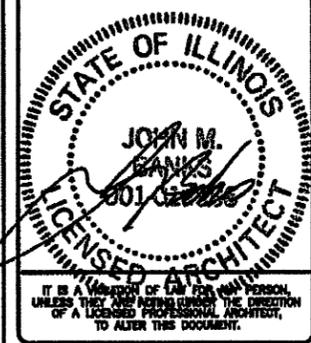
**POST CONNECTION DETAIL**  
SCALE: 3/4" = 1'-0"  
2

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SHEET TITLE  
**ICE BRIDGE DETAILS**

SHEET NUMBER  
**C-7**

NOTE:  
REFER TO STRUCTURAL ANALYSIS FOR MOUNTING INSTRUCTIONS  
OF ALL ANTENNA SYSTEMS.

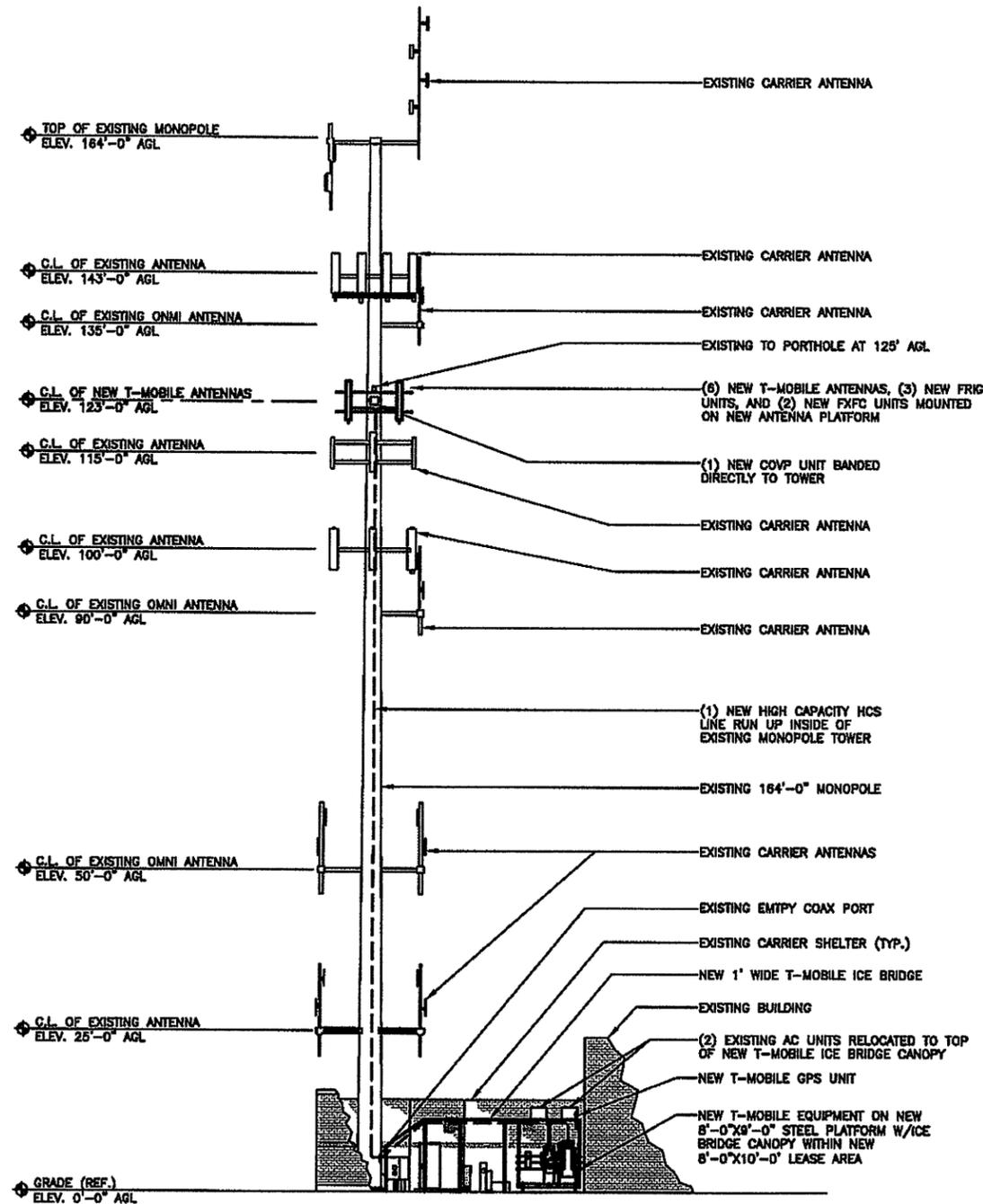
NOTE:  
CONTRACTOR TO VERIFY ALL HEIGHTS AND AZIMUTHS IN FIELD  
PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY T-MOBILE  
AND ENGINEERING FIRM OF ANY DISCREPANCIES BEFORE  
PROCEEDING.

NOTE:  
CONTRACTOR TO USE PROPER TORQUE WRENCH WHEN INSTALLING  
AND TIGHTENING CONNECTORS TO INSURE PROPER FIT.

TOWER CAPACITY UNDER PENDING STRUCTURAL EVALUATION OF  
PROPOSED IMPROVEMENTS BY OTHERS. CONTRACTOR TO VERIFY  
NEW ANTENNA LOADING WITH STRUCTURAL ANALYSIS PRIOR TO  
ANY ANTENNA WORK.

NOTE:  
CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING FINAL RF  
CONFIGURATION AND NOTIFY T-MOBILE AND ENGINEERING FIRM  
WITH ANY DISCREPANCIES.

NOTE:  
CONTRACTOR SHALL VERIFY ALL FINAL CONNECTION LOCATIONS  
WITH T-MOBILE ENGINEER, RF ENGINEER, AND NET-OPS PRIOR  
TO INSTALLATION.



**ELEVATION**

SCALE: 1"=25'-0"

1

NEW 1/2" U-BOLTS  
(V.I.F.), CONTRACTOR TO  
FIELD DRILL AS REQUIRED

NEW ANDREW TMBXX-6516-A2M  
ANTENNA ON NEW PIPE MOUNT  
(TYP.)

NEW 3"Ø x 6'-6" (MIN.)  
MOUNTING PIPE TO REPLACE  
EXISTING PIPE

NEW 1/2" U-BOLTS  
(V.I.F.), CONTRACTOR TO  
FIELD DRILL AS REQUIRED



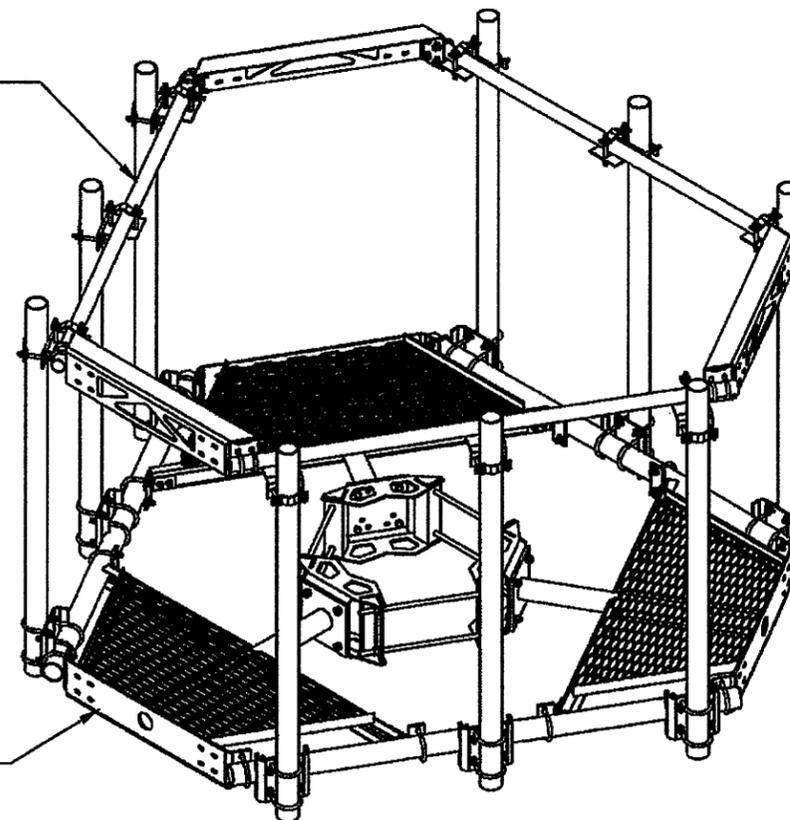
**ANTENNA MOUNTING DETAIL**

SCALE: NONE

2

PLATFORM HANDRAIL KIT  
ANDREW# MT-195-8

LOW PROFILE CO-LOCATION  
PLATFORM KIT ANDREW#  
MC-PK8-B



**ANTENNA PLATFORM DETAIL**

SCALE: NONE

3

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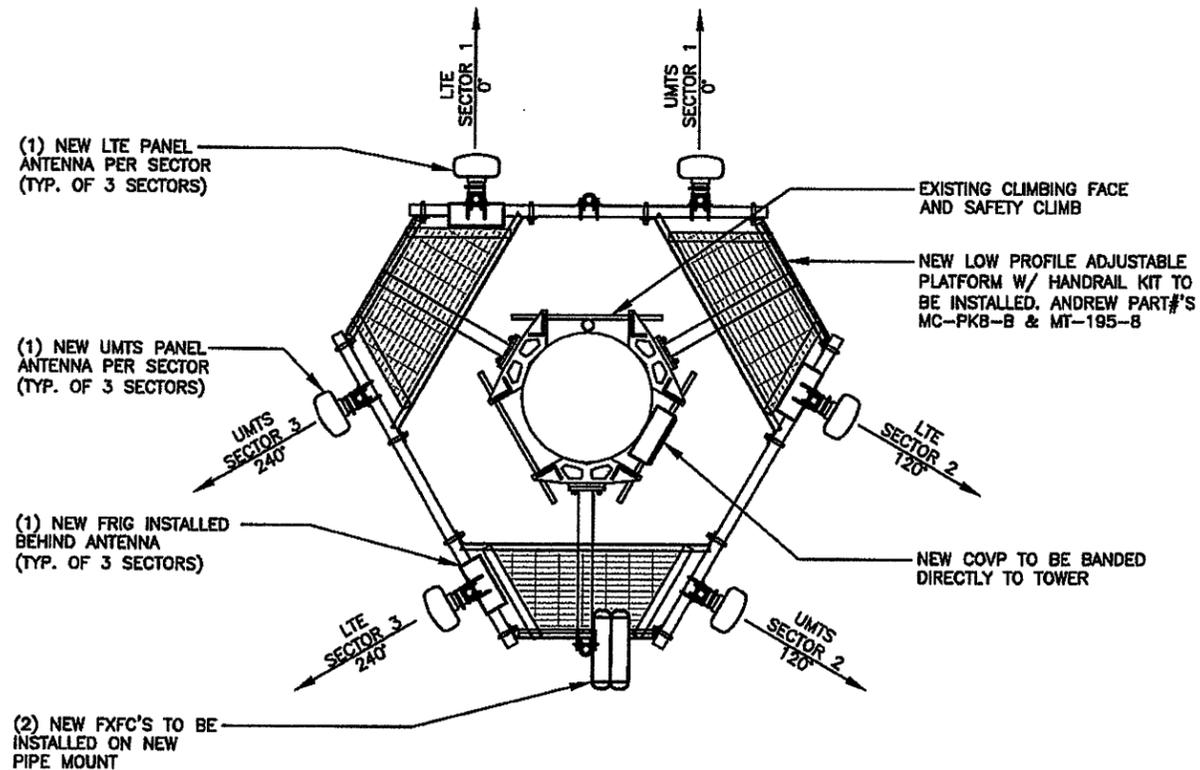
SHEET TITLE  
**ELEVATION**

SHEET NUMBER  
**A-1**

ANTENNA & CABLE SCHEDULE						
SECTOR	ALPHA		BETA		GAMMA	
LOCATION	A-2	A-1	B-2	B-1	C-2	C-1
TECHNOLOGY	LTE	UMTS	LTE	UMTS	LTE	UMTS
AZIMUTH	0°		120°		240°	
RAD CENTER	123°-0"		123°-0"		123°-0"	
COLOR CODING	RED (5-8)	RED (1-4)	GREEN (5-8)	GREEN (1-4)	BLUE (5-8)	BLUE (1-4)
MODEL #	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M
MECHANICAL DOWNTILT	0°	0°	0°	0°	0°	0°
ELECTRICAL DOWNTILT	2°	2°	2°	2°	2°	2°
RRU TYPE	FRIG	(2) FXFC'S	FRIG	SHARED FXFC	FRIG	SHARED FXFC
HCS DIA. & TYPE	1.584" HIGH CAPACITY	SHARED	SHARED	SHARED	SHARED	SHARED
HCS ACTUAL LENGTH	±155'-0"	SHARED	SHARED	SHARED	SHARED	SHARED
HCS FACTORY LENGTH	175'-0"	SHARED	SHARED	SHARED	SHARED	SHARED
JUMPER TYP FROM COVP TO RRU	POWER & FIBER JUMPERS					
JUMPER LENGTH	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
JUMPER TYPE FROM RRU TO ANTENNA	AISG	AISG	AISG	AISG	AISG	AISG
JUMPER LENGTH	4'-0"	12'-0"	4'-0"	6'-0"	4'-0"	12'-0"

TOWER CAPACITY UNDER PENDING STRUCTURAL EVALUATION OF NEW IMPROVEMENTS BY OTHERS. CONTRACTOR TO VERIFY NEW ANTENNA LOADING WITH STRUCTURAL ANALYSIS PRIOR TO ANY ANTENNA WORK.

NOTE:  
ANTENNA INFORMATION OBTAINED FROM T-MOBILE  
RF DATA CONFIGURATION SHEET DATED 05/11/15



ANTENNA PLAN

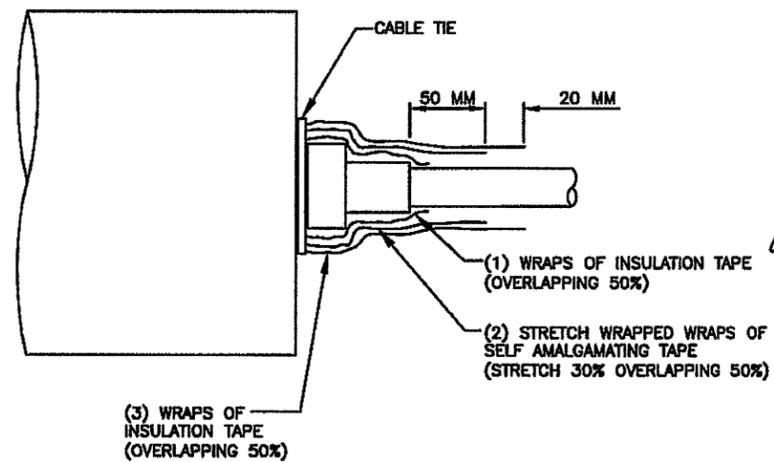
SCALE: 1/4" = 1'-0"

1

NOT USED

SCALE: NONE

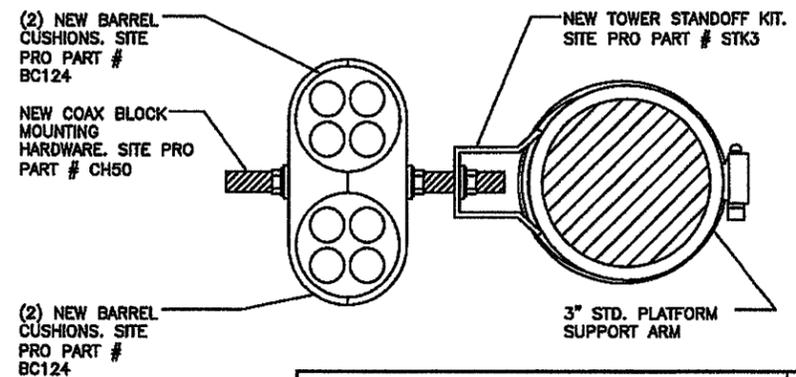
2



RF JUMPER CONNECTION DETAIL

SCALE: NONE

3



RF JUMPER MOUNTING DETAIL

SCALE: NONE

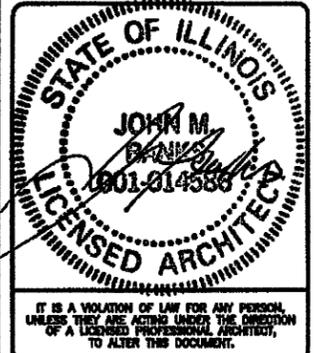
4

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SHEET TITLE  
**ANTENNA PLAN**

SHEET NUMBER  
**A-2**