

ZONING COMMITTEE STAFF REPORT

1. **FILE NAME:** Verizon Wireless (1160 Grand Avenue) **FILE #** 14-088-188
 2. **APPLICANT:** Verizon Wireless **HEARING DATE:** March 13, 2014
 3. **TYPE OF APPLICATION:** Conditional Use Permit
 4. **LOCATION:** 1160 Grand Ave, SW corner at Dunlap
 5. **PIN & LEGAL DESCRIPTION:** 032823410037, Manson And Simontons Addition Lot 1 Blk 3
 6. **PLANNING DISTRICT:** 16 **PRESENT ZONING:** RM2
 7. **ZONING CODE REFERENCE:** §65.310; §61.501
 8. **STAFF REPORT DATE:** March 6, 2014 **BY:** Jamie Radel
 9. **DATE RECEIVED:** January 16, 2014 **60-DAY DEADLINE FOR ACTION:** April 14, 2014
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- A. **PURPOSE:** Conditional use permit for cellular antennas and associated equipment on a residential structure less than sixty (60) feet high
- B. **PARCEL SIZE:** 9,000 square feet
- C. **EXISTING LAND USE:** Multi-family residential
- D. **SURROUNDING LAND USE:**
 - North: Commercial/business
 - East: Commercial/retail
 - South: Single-family residential
 - West: Multifamily residential
- E. **ZONING CODE CITATION:** §65.310 provides standards and conditions for the installation of antenna and cellular telephone uses; §61.501 lists general conditions that must be met by all conditional uses.
- F. **HISTORY/DISCUSSION:** No zoning history.
- G. **DISTRICT COUNCIL RECOMMENDATION:** District Council 16 does not support this CUP application.
- H. **FINDINGS:**
 1. The applicant, Verizon Wireless, seeks to install six (6) cell antennas within a 10.5-foot (width) x 10.5-foot (length) x 11.0-foot (height) enclosure on the roof of the 2.5-story, 28-foot (to the top of the parapet), multifamily residential structure at 1160 Grand Avenue. As proposed, the new rooftop structure would be placed 20 feet from the front of the building and 14 feet from both sides. The enclosure would be covered in materials that look similar to the exterior of the existing residential structure and is designed so that the applicant could add additional antenna within the enclosure without additional visual impact to the building. The associated operating equipment would be located in the basement of the building with two cooling units in the rear yard. In December 2009, the Department of Safety and Inspections issued a Determination of Similar Use statement that broadband data service is substantially similar in character to traditional cellular telephone service.
 2. §65.310 defines "cellular telephone antenna," requires a conditional use permit for cellular telephone antennas on a residential structure less than 60 feet high, and lists standards and conditions with which they must comply. Conditions (a), (b), (c), (d), (h) and (i) apply:
 - a) *In residential districts, a conditional use permit is required for cellular telephone antennas on a residential structure less than sixty (60) feet high. In residential, traditional neighborhood and business districts, a conditional use permit is required for cellular telephone antennas on a freestanding pole, except for existing utility poles. In residential and traditional neighborhood districts, existing utility poles to which cellular telephone antennas are attached shall be at least sixty (60) feet high. This condition is met. An application for a conditional use permit has been made for a wireless communication antenna on a residential structure less than 60 feet high.*

- b) *In residential, traditional neighborhood, and OS--B3 and B5 business districts, the antennas shall not extend more than fifteen (15) feet above the structural height of the structure to which they are attached. In B4 Business and Industrial Districts, the antennas shall not extend more than forty (40) feet above the structural height of the structure to which they are attached. This condition is met. The antenna will be less than 15-feet high above the roof of the structure.*
 - c) *For antennas proposed to be located on a residential structure less than sixty (60) feet high in residential districts, or on a new freestanding pole in residential, traditional neighborhood, and business districts, the applicant shall demonstrate that the proposed antennas cannot be accommodated on an existing freestanding pole, an existing residential structure at least sixty (60) feet high, an existing institutional use structure, or a business building within one-half (1/2) mile radius of the proposed antennas due to one (1) or more of the following reasons:*
 - i. *The planned equipment would exceed the structural capacity of the existing pole or structure.*
 - ii. *The planned equipment would cause interference with other existing or planned equipment on the pole or structure.*
 - iii. *The planned equipment cannot be accommodated at a height necessary to function reasonably. This condition is met. The applicant has provided a map showing buildings within one half mile of the proposed antenna site, and explained why the proposed antenna cannot be accommodated on existing structures in the area.*
 - iv. *The owner of the existing pole, structure or building is unwilling to co-locate an antenna. This condition is met. The applicant has provided a map showing buildings within one-half mile of the proposed antenna site, and explained why the proposed antenna cannot be accommodated on existing structures in the area.*
 - d) *In residential, traditional neighborhood and business districts, cellular telephone antennas to be located on a new freestanding pole are subject to the following standards and conditions: The proposed antenna is not a freestanding design.*
 - e) *Transmitting, receiving and switching equipment shall be housed within an existing structure whenever possible. If a new equipment building is necessary, it shall be permitted and regulated as an accessory building, section 63.500, and screened from view by landscaping where appropriate. This condition is met. The applicant is proposing to house the equipment cabinets in the basement of the building. Two cooling units will be placed in the rear yard of the property.*
 - f) *Cellular telephone antennas that are no longer used for cellular telephone service shall be removed within one (1) year of nonuse. This condition is met. The applicant has agreed to abide by this condition.*
2. §61.501 lists five standards that all conditional uses must satisfy:
- a) *The extent, location and intensity of the use will be in substantial compliance with the Saint Paul Comprehensive Plan and any applicable subarea plans which were approved by the city council. This condition is met. The Comprehensive Plan refers to the importance of ensuring investments in local and regional infrastructure supportive of economic development.*
 - b) *The use will provide adequate ingress and egress to minimize traffic congestion in the public streets. This condition is met as it is not applicable to this project.*
 - c) *The use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety and general welfare. This condition is met subject to the condition that the antenna enclosure shall be placed a minimum of 40 feet from the front and back of the building and placed a minimum of 12 feet from the sides of the building. While the proposed structure is well within the 50-foot height limit for structures in the RM2 district, moving the antenna enclosure to the central*

portion of the roof this will decrease the visibility of the enclosure and while keeping it behind the existing chimneys on the southern portion of the roof.

- d) *The use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.* This condition is met. The use will not impede the development or improvement of surrounding properties.
- e) *The use shall, in all other respects, conform to the applicable regulations of the district in which it is located.* This condition is met. The construction, operation and maintenance of the antenna will conform to all applicable district regulations.

I. **STAFF RECOMMENDATION:** Based on the above findings, staff recommends approval of the conditional use permit for cellular antennas and associated equipment within an enclosure on a residential structure less than sixty (60) feet high subject to the following additional condition(s):

1. The antenna enclosure shall be placed a minimum of 40 feet from the front and back of the building and minimum of 12 feet from the sides of the building.
2. The antenna enclosure shall be clad in materials that look similar to those on the residential structure below.
3. Antennas that are no longer used for cellular phone or data services shall be removed within one (1) year of nonuse.
4. The antenna enclosure shall be removed from the rooftop at the same time as the last antenna.



CONDITIONAL USE PERMIT APPLICATION

Department of Planning and Economic Development

Zoning Section

1400 City Hall Annex

25 West Fourth Street

Saint Paul, MN 55102-1634

(651) 266-6589

Zoning office use only

File # 14-088188

Fee: _____

Tentative Hearing Date: _____

2-13-14

PD=16

032823410037

APPLICANT

Name Eddie Buell on behalf of Verizon Wireless
Address 1360 Energy Park Drive, Suite 210
City St. Paul St. MN Zip 55108 Daytime Phone 651-361-8113
Name of Owner (if different) 1160 Grand LLC (agent of owner is Brian Pergament)
Contact Person (if different) _____ Phone _____

PROPERTY LOCATION

Address / Location 1160 Grand Ave, St. Paul, MN 55105
Legal Description Lot 1, Block 3, Manson & Simonton's Addition to St. Paul, Ramsey County, Minnesota Current Zoning RM2
(attach additional sheet if necessary)

TYPE OF PERMIT: Application is hereby made for a Conditional Use Permit under provisions of Chapter 65, Section 310, Paragraph a of the Zoning Code.

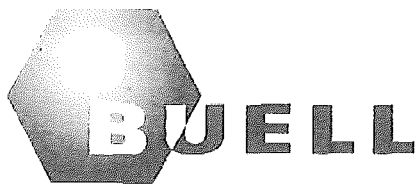
SUPPORTING INFORMATION: Explain how the use will meet all of the applicable standards and conditions. If you are requesting modification of any special conditions or standards for a conditional use, explain why the modification is needed and how it meets the requirements for modification of special conditions in Section 61.502 of the Zoning Code. Attach additional sheets if necessary.

please see attached sheet

C/K
22130
800⁰⁰

☒ Required site plan is attached

Applicant's Signature E. Buell Date 1/13/14 City Agent pdd
1-13-14



Buell Consulting, Inc.
1360 Energy Park Drive, Suite 210
Saint Paul, Minnesota 55108
(651) 225-0792
www.buellconsulting.com

*Site Acquisition
Permitting
Established 1991*

March 4, 2014

City of Saint Paul
25 West 4th Street, Suite 1400
Saint Paul, MN 55102
Attn: Planning & Economic Development

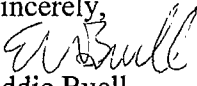
RE: Project Description for Placement of Antennas Inside Penthouse on Rooftop

Verizon Wireless Site Name: MIN McAllister
Site Address: 1160 Grand Ave, Saint Paul, MN 55105
Property Index Number: 03.28.23.41.0037

Verizon Wireless is proposing to place antennas on a rooftop located at the above referenced property. The proposed antennas will be placed in a penthouse structure that is designed with radio-frequency friendly material to hide the antennas from view whilst looking like part of the original building structure. The antennas will fill a void in wireless services caused by a lack of capacity to handle the increasing data usage of Verizon consumers. This high traffic area along Grand Avenue will benefit from additional capacity and increase the strength of 4G wireless services. Verizon is proposing to place six (6) antennas, six (6) remote radio head units, and one (1) raycap surge protector box inside the penthouse on the roof with twelve (12) lines of coax and one (1) hybrid cable running from the roof into the basement equipment room of the building. The penthouse is designed to accommodate additional antennas and related equipment in order to expand the site's capacity as demand for service in the area increases in the future. The cables will run on the outside of the building with a conduit to shield them. On the ground in the rear of the building is the location of a proposed condensing unit to help cool the equipment located inside the basement equipment room.

Verizon's interest in the property stems from a lease between the deed holder of the property, 1160 Grand, LLC, and Verizon Wireless. The lease will commence on the date which Verizon begins to install equipment on the premises. The lease is divided into five (5) terms each lasting five (years) for a total of twenty-five (25) years. Verizon's ability to use the premises is contingent upon its obtaining all of the certificates, permits, and other approvals that may be required by an Federal, State or Local authorities. Please let me know if you require any further documentation in order to complete your review of the proposed scope of work. Thank you.

Sincerely,


Eddie Buell

Buell Consulting, Inc.

On Behalf of Verizon Wireless

P: (651) 361-8113

ebuell@buellconsulting.com

Explanation of Meeting Code Requirements

Sec. 65.310. – Antenna, cellular telephone. Paragraph (c).

- a. There are no existing free standing poles within one-half (1/2) mile radius of the proposed antennas.
- b. There are no residential structures over sixty (60) feet in height within one-half (1/2) mile radius of the proposed antennas.
- c. There are no business buildings within one-half (1/2) mile radius of the proposed antennas that can accommodate the necessary height required to function properly.
- d. There are no institutional buildings within one-half (1/2) mile radius of the proposed antennas, with owners who are willing to allow co-location of antennas, that can accommodate the necessary height required to function properly.

Sec. 65.310. – Antenna, cellular telephone. Paragraph (h).

- a. Transmitting, receiving and switching equipment will be housed in the basement of the existing building to which the antennas are attached.

Sec. 66.221. – Principal uses.

- Table 66.221, principal uses in residential districts, shows Antenna, cellular phone under Public Services and Utilities as a P/C use in the RM2 District.

Sec. 66.231. – Density and dimensional standards table

- Table 66.231, residential district dimensional standards, shows RM2 height maximum as fifty (50) feet. This installation will not increase the height of the structure and the antennas height will be thirty-eight (38) feet above ground. The current chimneys on the structure are forty-four (44) feet and eleven (11) inches above the ground.

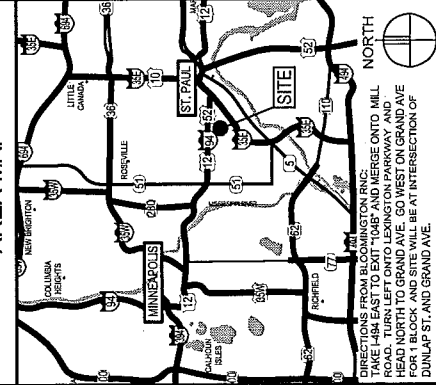


Map Legend

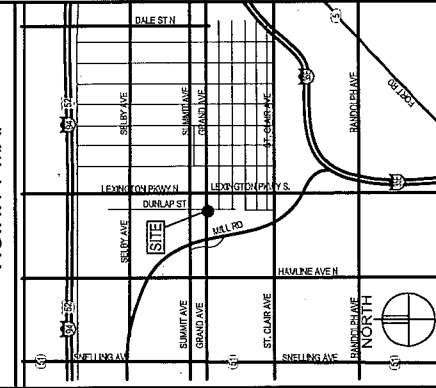
- ★ - 1160 Grand Ave Apartment – Subject parcel property
- - One-half (1/2) mile radius of the proposed antennas.
- A – Mount Zion Temple – LL unwilling to allow antennas on structure
- B – Saint Thomas More Catholic Church – LL unwilling to lease space at desired height
- C – Oxford Hill Condominiums – Homeowner's Association unwilling to agree to terms
- D – Saint Paul Academy and Summit School – LL unwilling to come to lease terms, lack of indoor space for equipment
- E – Saint George Greek Orthodox Church – Building did not have adequate roof top space or required height
- F – Single residential homes
- G – Single residential homes
- H – Single residential homes
- I – Single residential homes
- J – Single residential homes
- K – Single residential homes
- L – Single residential homes
- M – Single residential homes
- N – Single residential homes
- O – Single residential homes

VERIZON WIRELESS

AREA MAP



VICINITY MAP



GENERAL NOTES

- In the event that Special Inspections are not performed in compliance with the contract terms, bid specifications and/or specified form, the General Contractor will be liable for all damages, construction performance, failures, and corrective actions related to the same.
- The following general notes shall apply to drawings and govern unless otherwise noted or specified.
- The work delineated in these drawings and described in the specifications shall conform to codes, standards and regulations that have jurisdiction in the state of MINNESOTA, and the city of ST. PAUL.
- Requirements and regulations pertaining to R.F. safety codes and practices must be incorporated in the work even though they may not be listed individually and separately in either the drawings or the specifications.
- Compare field conditions with architectural and engineering drawings. Any discrepancies shall be discussed to the Architect for clarification prior to fabrication of the work. The Architect's approval is required prior to fabrication for approval by the Architect. No fabrication or details on those areas may be used without the permission of the owner or the architect.
- Do not scale drawings. 11" x 17" drawings to scale 24" x 36" drawings scale multiply by 2
- Unless otherwise shown or noted, typical details shall be used where applicable.
- Details shall be considered typical at similar conditions.
- Safety measures: This contractor shall be solely and completely responsible for the conditions of the job site, including safety of the persons and property of the contractor and the public. The Architect or Engineer's job site review is not intended to include review of the adequacy of the contractor's safety measures.
- Within these plans and specifications, "Owner" implies VERIZON WIRELESS.
- The work is the responsibility of the general contractor unless noted otherwise.
- The terms "contractor" and "g.c." refer to the owner's general contractor and the general contractor's sub-contractors. It is the general contractor's responsibility to coordinate all work with the owner and the general contractor.
- The general contractor is responsible in obtaining necessary public and private underground utility locate services prior to start of excavation / construction.

VERIZON WIRELESS DEPARTMENTAL APPROVALS

NAME	DATE
RF ENGINEER	11- SEPT - 2013
OPERATIONS MANAGER	
CONSTRUCTION ENGINEER	18- SEPT - 2013
CONSTRUCTION MANAGER	
REAL ESTATE MANAGER	

LESSOR / LICENSOR APPROVAL

SIGNATURE	PRINTED NAME	DATE
BRIAN P.		10.01.13

LESSOR / LICENSOR: PLEASE CHECK THE APPROPRIATE BOX BELOW
☒ NO CHANGES. ☐ CHANGES NEEDED. SEE COMMENTS ON PLANS.

PROJECT INFORMATION

SITE NAME: MNC MCALLISTER
 PROJECT NUMBER: 2013087458
 SITE ADDRESS: GRAND AVE
 ST. PAUL, MN 55105
 COUNTY: RAMSEY
 LATITUDE: N44°56' 22.45"
 LONGITUDE: W93°09' 57.89"
 GROUND ELEVATION: 926.8' AMSL
 ANTENNA TIP HEIGHT: 954.9' AMSL - 30.0' AGL
 ANTENNA TIP HEIGHT: 953.2' AMSL - 30.0' AGL
 ANTENNA CENTERLINE HEIGHT: 966.8' AMSL - 34' AGL
 BUILDING HEIGHT: 954.9' AMSL - 28' AGL
 OVERALL STRUCTURE HEIGHT: 971.7' AMSL - 44'11" AGL
 DRAWING BASED ON: 06.13.13
 SITE DATA FORM DATED: 06.13.13
 OCCUPANCY: B
 BUILDING TYPE: V-B
 SITE AREA: 132 S.F.
 ROOF LOAD: LIVELOAD = 105 PSF
 PARKING: PROVIDED
 ESTIMATED COAX RUN: "X" COAX RUN = N/A
 "Y" COAX RUN = N/A
 "Z" COAX RUN = (B) HYBRID CABLE / 7 UNES @ 8' EA

PROJECT DESCRIPTION: ADDITION OF TWO TOP ANTENNAS AND SUPPORTING INTERIOR AND EXTERIOR EQUIPMENT TO IMPROVE COMMUNICATION SERVICE IN THE ST. PAUL, MN AREA.

SHEET INDEX

SHEET	SHEET DESCRIPTION
T-1	PROJECT INFORMATION, MAPS, DIRECTIONS, AND SHEET INDEX
A-1	SITE PLAN
A-2	ROOF PLAN
A-2.1	FLOOR PLAN AND EQUIPMENT LAYOUT PLAN
A-3	AMS ONE-LINE DIAGRAM, ANTENNA KEY AND COAX KEY
A-4	EXTERIOR ELEVATION AND SECTION
A-4.1	EXTERIOR ELEVATION AND SECTION
A-5	MISCELLANEOUS DETAILS
A-6	OUTLINE SPECIFICATIONS
Q1-Q2	GROUNDING NOTES, GROUNDING PLANS AND LEAD IDENTIFICATION
E-1 & E-2	SECTION ELEVATIONS, LIGHTING, CABLE DIAGRAM, AND GENERAL NOTES
S1-S4	SECTION, DETAILS, AND GENERAL NOTES
	SURVEY

ISSUE SUMMARY

REV.	DESCRIPTION	SHEET OR DETAIL
A	ISSUED FOR REVIEW - 06.06.13	ALL
B	ISSUED FOR REVIEW - 08.25.13	ALL
C	ISSUED FOR REVIEW - 03.03.14	ALL

CONTACTS

LESSOR / LICENSOR:	PERGOLA MANAGEMENT, LLC 201 BUSH LAKE ROAD ST. PAUL, MN 55102 651.802.8150
LESSEE:	VERIZON WIRELESS 1801 BUSH LAKE ROAD BLOOMINGTON, MN 55438 MIKE COGAR (612) 723-0030
POWER UTILITY COMPANY CONTACT:	XCEL ENERGY 414 NICOLLET MALL MINNEAPOLIS, MN 55401 1-800-529-2121
TELCO UTILITY COMPANY CONTACT:	CENTURY LINK 200 SOUTH 5TH STREET MINNEAPOLIS, MN 55402 612.332.6562
ARCHITECT:	DESIGN 1 OF EDEN PRAIRIE, LLC 875 VALLEY VIEW ROAD EDEN PRAIRIE, MN 55344 (952) 903-6295
SURVEYOR:	UTLIFE ENGINEERS 5201 E. RIVER ROAD, SUITE 308 MINNEAPOLIS, MN 55421 (763) 571-2500
STRUCTURAL ENGINEER:	UTLIFE ENGINEERS 5201 E. RIVER ROAD, SUITE 308 MINNEAPOLIS, MN 55421 (763) 571-2500
GEOTECHNICAL ENGINEER:	T.B.D.

SHEET CONTENTS:

CONTRACT NO.	001
CONTRACT NAME	VERIZON WIRELESS
SHEET INDEX	001
DEPARTMENTAL APPROVALS	
LESSOR APPROVAL	
PROJECT INFORMATION	
GENERAL NOTES	
DRAWN BY:	001
CHECKED BY:	001
REV. A	08.25.13
REV. B	08.25.13
REV. C	03.03.14

T-1

NOT FOR
CONSTRUCTION

DESIGN 1
ROBERT DAVIS, AIA
ARCHITECT
6973 VALLEY VIEW RD.
EDEN PRAIRIE, MN 55344
(952) 903-6295

VERIZON
WIRELESS
1801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(612) 723-0030

PROJECT
2013087458

MNC
MCALLISTER

GRAND AVE.
ST. PAUL, MN 55105

DESIGN 

ROBERT J DAVIS, AIA
ARCHITECT
6973 VALLEY VIEW RD.
EDEDEN PRAIRIE, MN 55344
(652) 603-0290

**VERIZON
WIRELESS**
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(612) 720-0030

PROJECT
20130877458

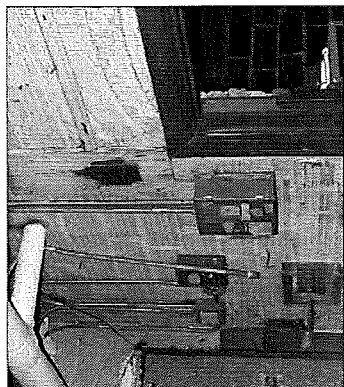
MINC
MCALLISTER

GRAND AVE.
ST. PAUL, MN 55105

SHEET CONTENTS:
FLOOR PLAN & EQUIPMENT PLAN

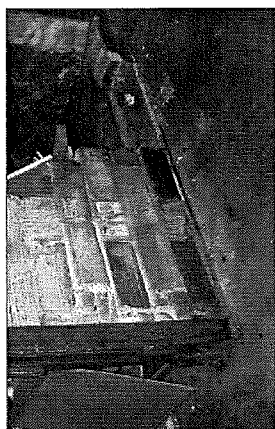
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REV. B	09.25.13
REV. C	03.03.14

A-2.1

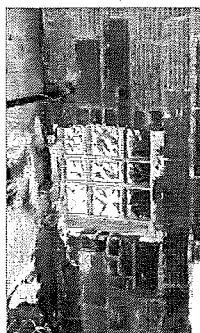


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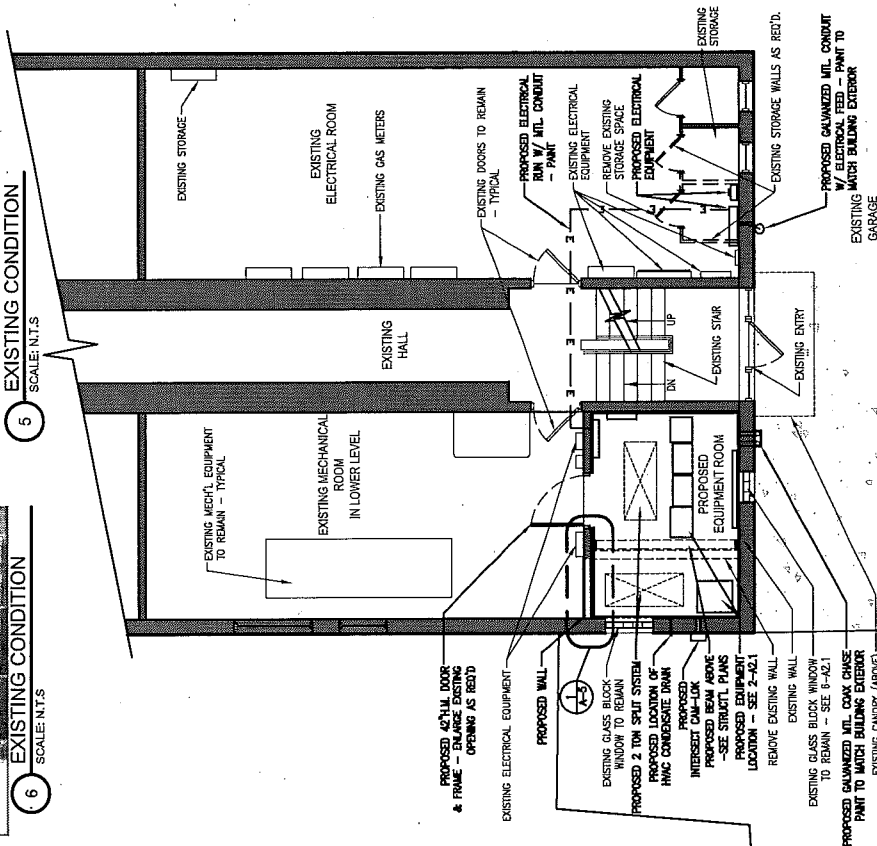
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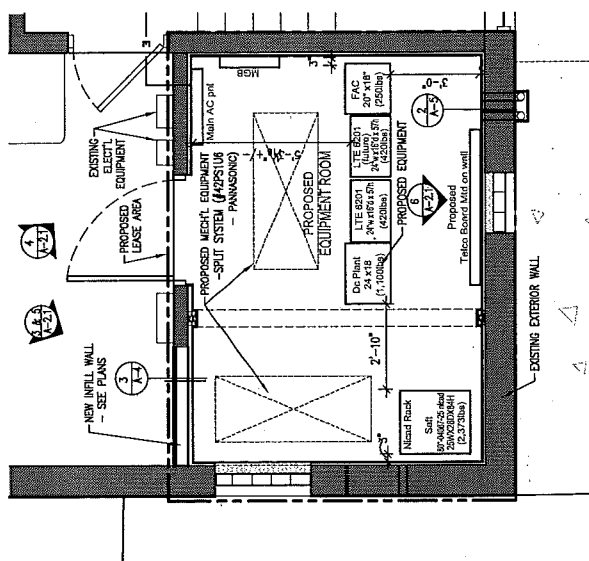
EXISTING CONDITION
SCALE: N.T.S.



EXISTING CONDITION
SCALE: N.T.S.



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



2 ENLARGED FLOOR PLAN AND EQUIPMENT PLAN
SCALE: 1/4" = 1'-0"



GRAPHIC SCALE

DESIGN 1

ROBERT J DAVIS, AIA
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EDEN PRAIRIE, MN 55344
(952) 963-6268

**VERIZON
WIRELESS**
1801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(612) 720-0030

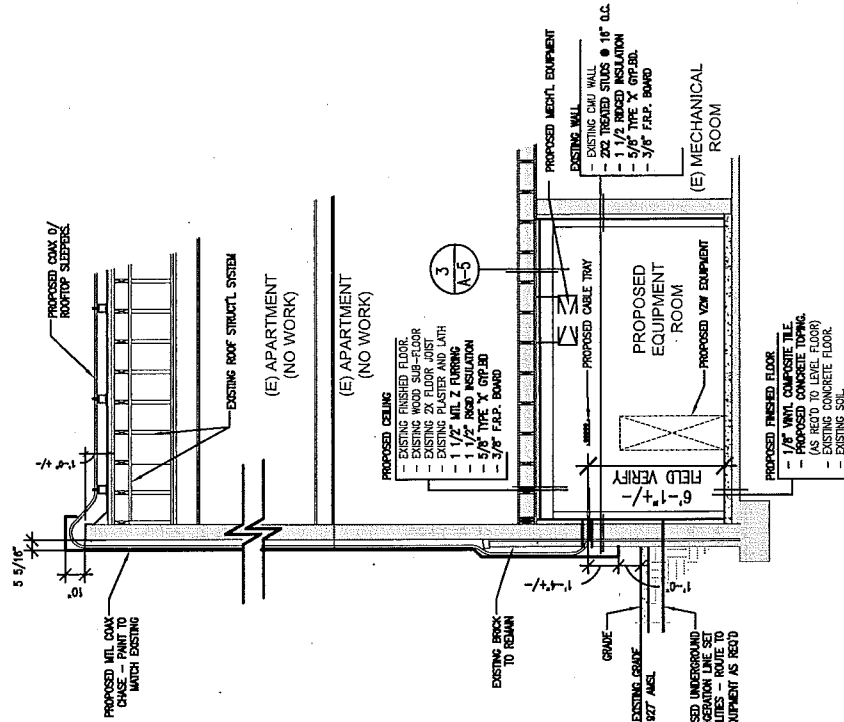
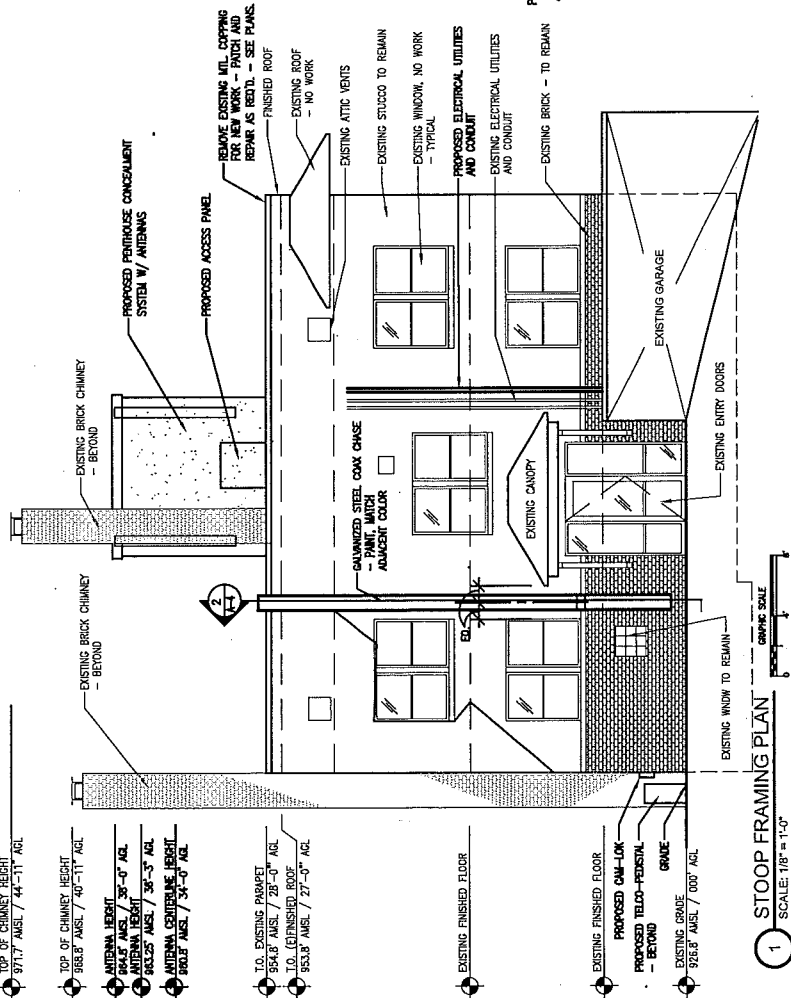
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MCALLISTER

GRAND AVE.
ST. PAUL, MN 55105

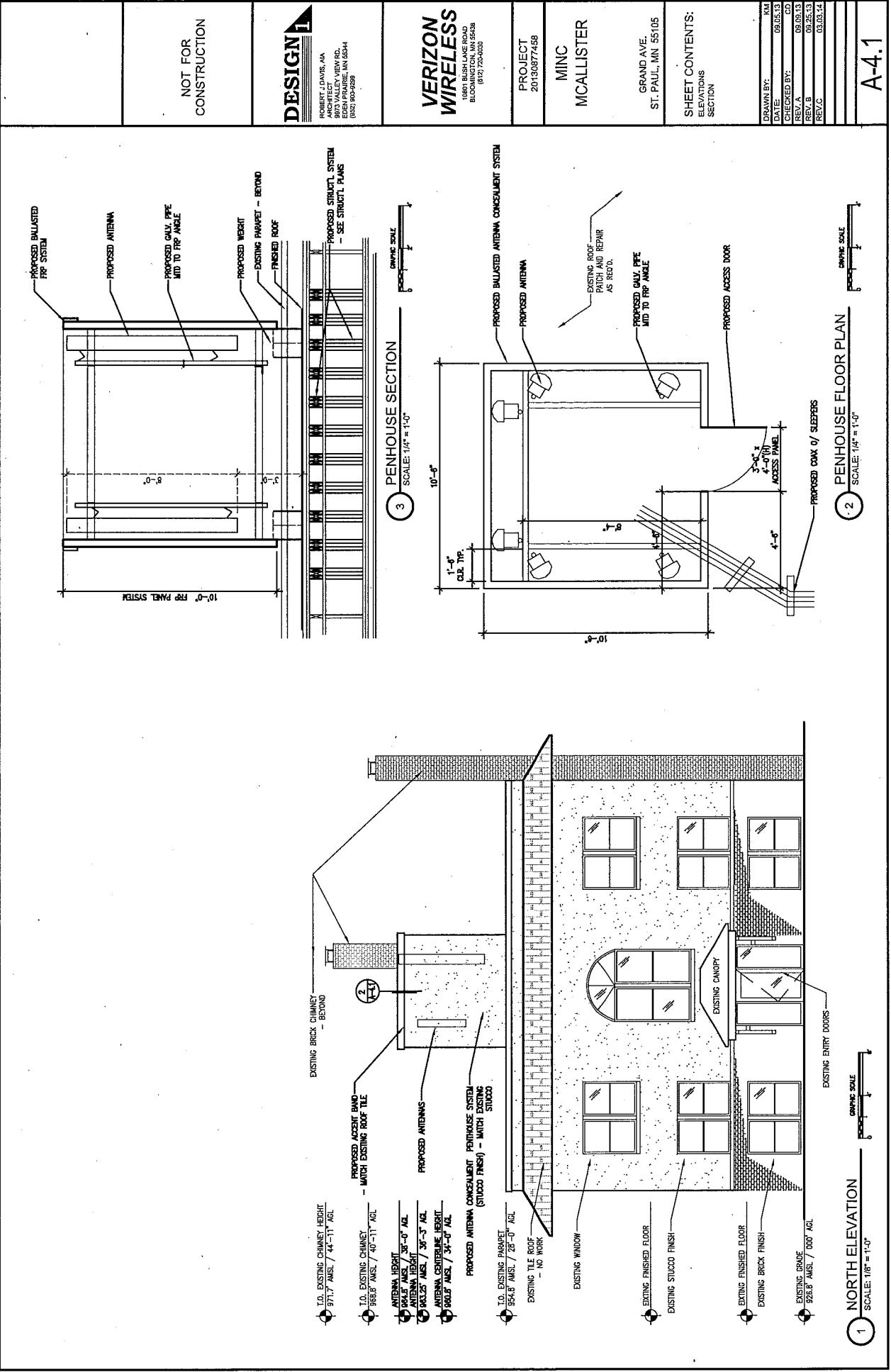
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ELEVATIONS
SECTION

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DATE:	09.05.13
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REV. A	09.09.13
REV. B	09.25.13
REV. C	03.03.14

A-4



SECTION 2
SCALE: 3/16" = 1'-0"



DESIGN 1

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(952) 953-9289

**VERIZON
WIRELESS**
10801 BUSH LAKE ROAD
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(612) 720-0030

PROJECT
20130877458

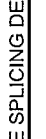
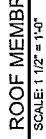
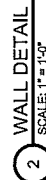
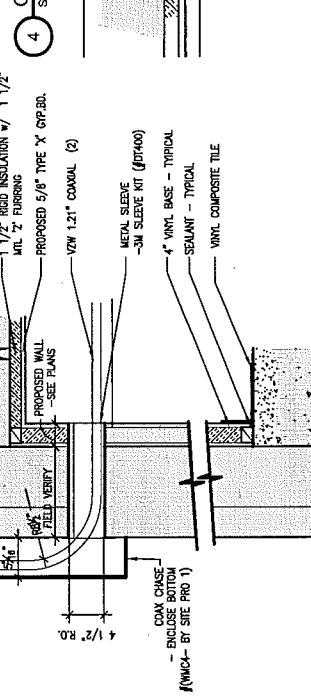
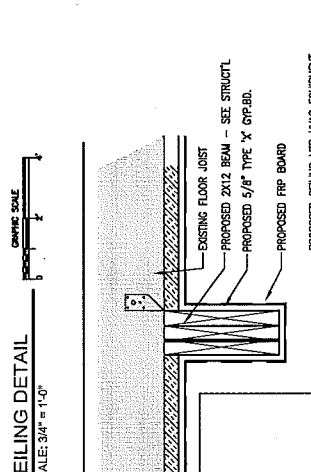
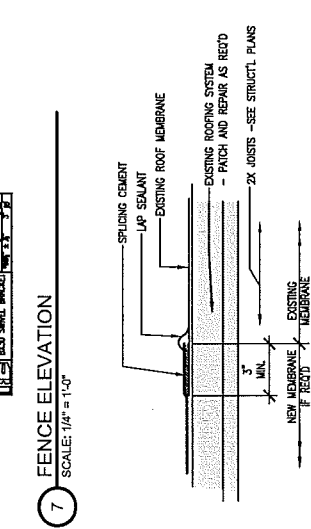
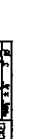
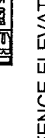
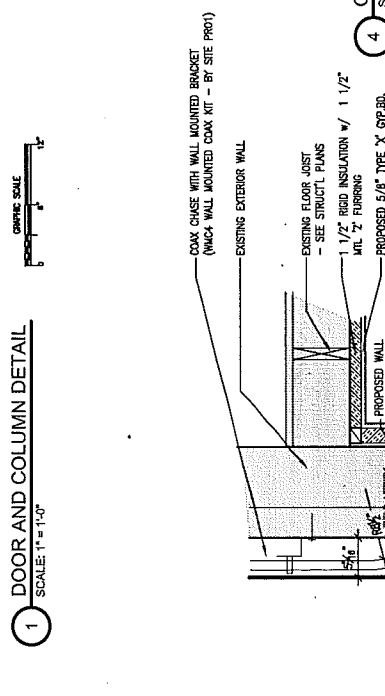
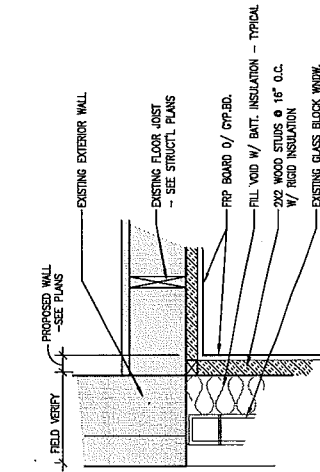
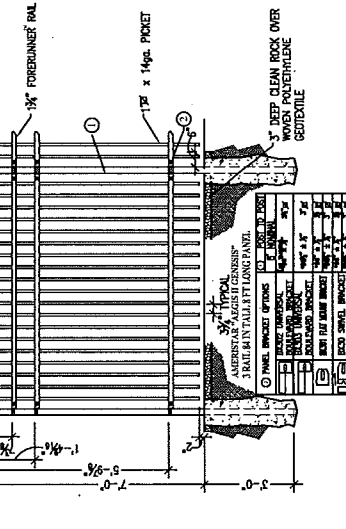
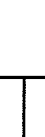
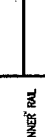
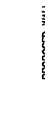
MINC
MCALLISTER

GRAND AVE.
ST. PAUL, MN 55105

SHEET CONTENTS:
MISC. DETAILS

DRAWN BY:	KJM
DATE:	09.05.13
CHECKED BY:	CD
REV. A	09.09.13
REV. B	09.25.13
REV. C	03.03.14

A-5



GENERAL GROUNDING NOTES:

An external buried ground ring (Lead 1) shall be established around the equipment shelter and tower foundations. Lead 1 shall be kept 24" from foundations. If foundations are less than 48" apart, Lead 1 shall be established around each foundation, and the two Lead 1's shall be bonded with two parallel leads at least 6 feet apart horizontally. Connections between the two Lead 1's shall be bi-directional.

All subgrade connections shall be by exothermic weld, brazed weld, or gas-tight UL487-listed compression fittings pre-filled with anti-oxidant compound. Subgrade connections shall JST to "cold galvanneal" coated.

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

Ground rods shall be galvanized steel, 5/8", spaced ten feet apart, or as shown. Rods shall be kept min. 24 inches from foundations. Ground rods are required to be installed at least 12" from building length. Depth shall be as shown in Detail 1/51.

SPECIAL CONSIDERATIONS FOR GROUND RODS:

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

When specified with slurred Bentonite encasement, drilling equipment will be used to bore a hole for ground rod placement. Slurry shall be made by mixing Bentonite Slurry with water. Bentonite shall be allowed to hydrate before use. Obstructions are found, Contractor shall drill to the specified depth and provide Bentonite encasement.

Above-grade connections shall be by lug w/ lap-bolt technique unless noted otherwise. Joints to lead rods by welding (188 548566E "BROWN"), self-threading crimping (BUNYD YAC 2TC 14E2), or 10,000psi crimping (BUNYD YAC 2TC 14E2). Surfaces that are galvanized or coated shall have coating(s) removed prior to bolting. Bolt shall be stainless steel with flat washer beneath the fastening nut. Star-tooth washers shall be used between lug & dissimilar metal (copper-to-steel, etc) but are not required between tin-clad CU lugs & tin-clad CU bare base lug.

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

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

Ground Bar Leads

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

The Main Ground Bar (MGB), typically mounted inside on the equipment shelter, back wall, shall be connected to the exterior ground ring.

Inside and outside on the equipment shelter walls beneath the transmission line port. Note: Transmission line grounds also attach to the ECPGB.

The Transmission Line Ground Bar (TLGB) mounted at the bottom of the shelter, shall be connected to the main grounds are attached. Transmission line grounds also attach to the TLGB.

SYMBOL AND NOTE LEGEND

75-foot vertical intervals on any gaged or self-support tower, and that transmission lines are grounded to each tower. Only the bottom-most TGB is connected from the tower frame as common ground, requiring no copper leads between TGBs.

#2 SBTC Whip Leads

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

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

Self-Support Towers:

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

Coyled Towers:

- Two whips to flange(s) on the tower base. If none are provided, attach to the baseplate or consult tower manufacturer.

Establish Lead 1 within the fence enclosure of each guy anchor, at least 40 foot perimeter and having 4 ground rods.

#2 SBTC leads shall extend up, and be clamped (bracket channel or equal), to any two guy wires. NEVER weld leads to the guy wires. The lead to the guy anchor hand plate may be welded.

Fences:

- Metallic fence within 25 feet of tower Lead 1, or within metallic of shelter lead 1, shall have whip leads as follows:
 - Each corner post.
 - Each line post over 20'-0" from a grounded post.
 - Each gate post.
 - Each gate post over 20'-0" from a grounded post.
 - Each gate post over 20'-0" from a grounded post.
 - Each gate post over 20'-0" from a grounded post.

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

GROUND BUSS BAR DETAILS

GROUND BUSS BAR W/ WALL BRACKETS

GROUND BUSS BAR W/ ANGLE ADAPTERS

GROUND BUSS BAR

NOTE: REMOVE GALVANIZING FROM BUS BARS TO EXPOSE ALL SURFACES TO THE UNDER-SIDE OF THE LUGS W/ ANTI-OX COMPOUND BEFORE ATTACHING TO POSTS.

NOTE: REMOVE GALVANIZING FROM BUS BARS TO EXPOSE ALL SURFACES TO THE UNDER-SIDE OF THE LUGS W/ ANTI-OX COMPOUND BEFORE ATTACHING TO POSTS.

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NOTE: REMOVE GALVANIZING FROM BUS BARS TO EXPOSE ALL SURFACES TO THE UNDER-SIDE OF THE LUGS W/ ANTI-OX COMPOUND BEFORE ATTACHING TO POSTS.

COMPRESSION CONNECTOR DETAILS

TYPE RU

TYPE HS

TYPE PT

TYPE GL LUG

TYPE VS

TYPE VS

TYPE VS

TYPE VS

TYPE VS

TYPE VS

TYPE VS

TYPE VS

TYPE VS

NOT FOR CONSTRUCTION

DESIGN

ROBERT J. DAVIS, AIA

8973 VALLEY VIEW RD.

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20130877458

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ST. PAUL, MN 55105

SHEET CONTENTS:

GENERAL NOTES

GROUND RING & ROD DETAIL

CONNECTOR DETAILS

WELD DETAILS

TEST WELL DETAIL

DRAWN BY:

DATE:

CHECKED BY:

REV. A

REV. B

REV. C

REV. D

REV. E

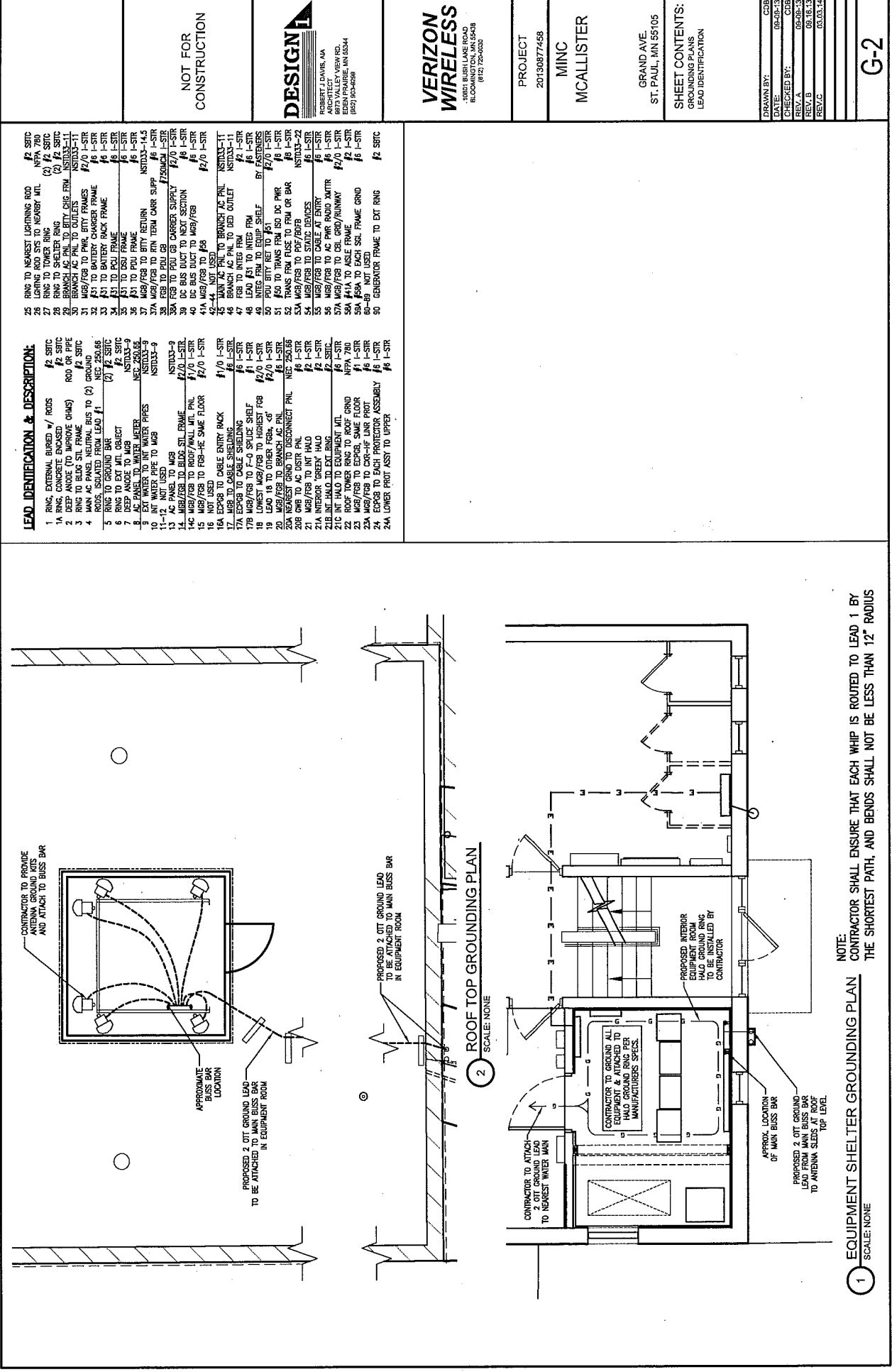
REV. F

REV. G

REV. H

REV. I

REV. J



LEAD IDENTIFICATION & DESCRIPTION:

- 1. RING EXTERNAL BURIED w/ ROOS #2 SPTC
- 2. RING CONCRETE CRACKED #2 SPTC
- 3. RING TO SHEDDER RING (2) #2 SPTC
- 4. RING TO BLOC STL FRAME #2 SPTC
- 5. MAIN AC PANEL NEUTRAL BUS TO (2) GROUND #2 SPTC
- 6. RING TO GROUND BAR #2 SPTC
- 7. RING TO EXT INT OBJECT #2 SPTC
- 8. AC PANEL TO WATER METER #2 SPTC
- 9. EXT WATER TO INT WATER PIPES #2 SPTC
- 10. INT WATER PIPE TO MGB #2 SPTC
- 11. INT WATER PIPE TO MGB #2 SPTC
- 12. AC PANEL TO MGB #2 SPTC
- 13. MGB/FEB TO BLOC STL FRAME #2 SPTC
- 14. MGB/FEB TO ROOF/WALL MTL PHL #2 SPTC
- 15. MGB/FEB TO FSB-HE SAME FLOOR #2 SPTC
- 16. NOT USED #2 SPTC
- 17. EXPD TO CABLE ENTRY RACK #2 SPTC
- 18. EXPD TO CABLE SHIELDING #2 SPTC
- 19. LOWEST MGB/FEB TO HIGHEST FSB #2 SPTC
- 20. MGB/FEB TO BRANCH AC PHL #2 SPTC
- 21. NEAREST GROUND TO DISCONNECT PHL #2 SPTC
- 22. MGB/FEB TO INT HALO #2 SPTC
- 23. INT HALO TO EXT RING #2 SPTC
- 24. ROOF TOWER RING TO ROOF GROUND #2 SPTC
- 25. MGB/FEB TO EXTER SAME FLOOR #2 SPTC
- 26. EXPD TO EACH PROTECTOR ASSEMBLY #2 SPTC
- 27. LOWER PROT ASSTY TO UPPER #2 SPTC
- 28. RING TO NEAREST LIGHTNING ROD #2 SPTC
- 29. RING TO TOWER RING #2 SPTC
- 30. BRANCH AC PHL TO BLOC STL FRAME #2 SPTC
- 31. MGB/FEB TO PWR BLOC FRAME #2 SPTC
- 32. RING TO EXTER SAME FLOOR #2 SPTC
- 33. #31 TO BUTTER BACK FRAME #2 SPTC
- 34. #31 TO PUL FRAME #2 SPTC
- 35. #31 TO DSL FRAME #2 SPTC
- 36. #31 TO PUL FRAME #2 SPTC
- 37. MGB/FEB TO BLOC STL FRAME #2 SPTC
- 38. MGB/FEB TO RIN TERM QWR SUPP #2 SPTC
- 39. MGB/FEB TO RIN TERM QWR SUPP #2 SPTC
- 40. DC BUS DUCT TO NEXT SECTION #2 SPTC
- 41. DC BUS DUCT TO MGB/FEB #2 SPTC
- 42. NOT USED #2 SPTC
- 43. MAIN AC PHL TO BRANCH AC PHL #2 SPTC
- 44. EXPD TO CABLE SHIELDING #2 SPTC
- 45. FSB TO INTG FMB #2 SPTC
- 46. LEAD #31 TO INTG FMB #2 SPTC
- 47. INTG FMB TO EQUIP SHELF #2 SPTC
- 48. INTG FMB TO EQUIP SHELF #2 SPTC
- 49. PUL BLOC RET TO #31 #2 SPTC
- 50. PUL BLOC RET TO #31 #2 SPTC
- 51. MGB/FEB TO FSB-HE SAME FLOOR #2 SPTC
- 52. MGB/FEB TO INT HALO #2 SPTC
- 53. MGB/FEB TO INT HALO #2 SPTC
- 54. MGB/FEB TO INT HALO #2 SPTC
- 55. MGB/FEB TO AC PWR RADIO XMTTR #2 SPTC
- 56. MGB/FEB TO CBL GROUND/RUNWAY #2 SPTC
- 57. MGB/FEB TO CBL GROUND/RUNWAY #2 SPTC
- 58. #31A TO EACH SEC FRAME GROUND #2 SPTC
- 59. GENERATOR FRAME TO EXT RING #2 SPTC

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VERIZON WIRELESS
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PROJECT
20130877458

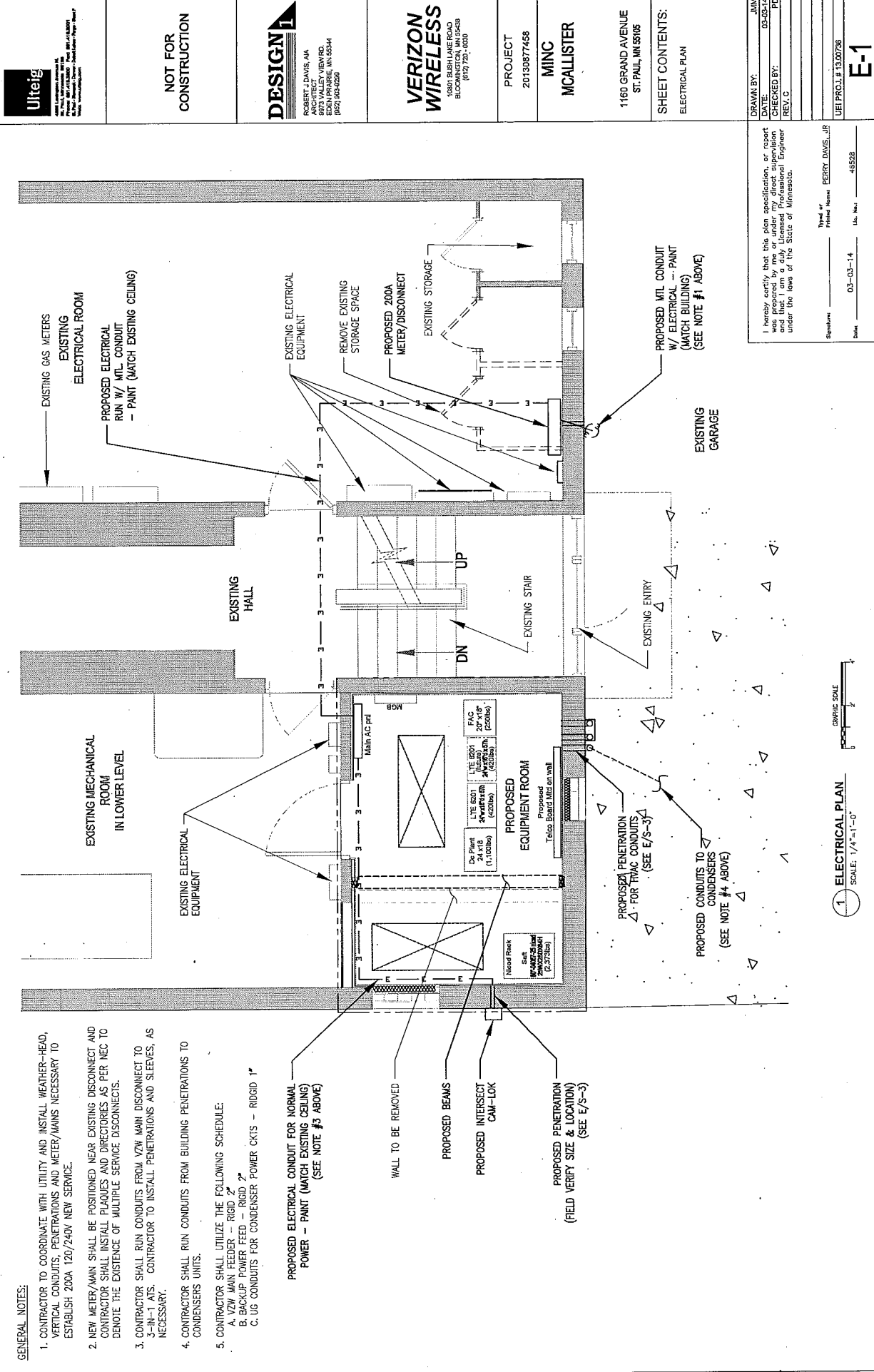
MINC
MCALLISTER

GRAND AVE.
ST. PAUL, MN 55105

SHEET CONTENTS:
GROUNDING PLANS
LEAD IDENTIFICATION

DRAWN BY:	CDB
DATE:	08-28-13
CHECKED BY:	CDB
REV. A	08-28-13
REV. B	08-28-13
REV. C	08-28-13

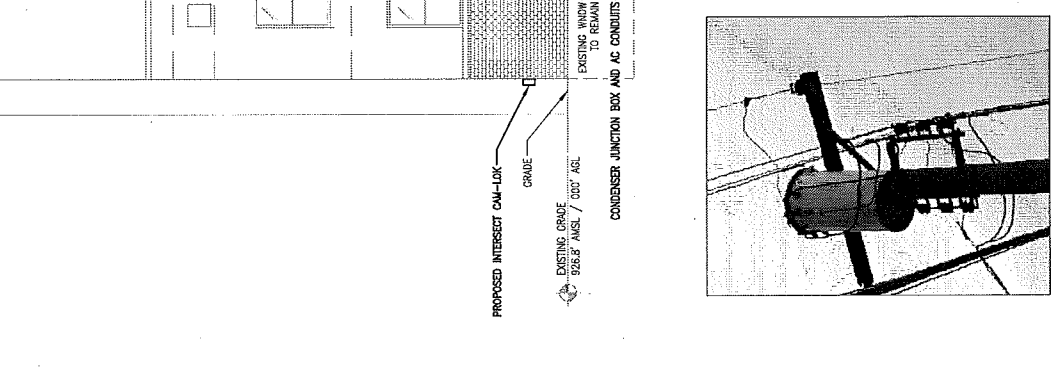
G-2



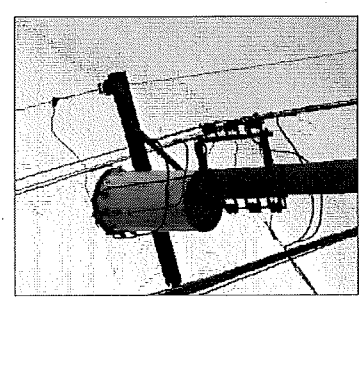
GENERAL ELECTRICAL NOTES:

1. SUBMITTAL OF BID INDICATES CONTRACTOR IS AWARE OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THESE CONDITIONS.
2. CONTRACTOR SHALL PERSONAL VISUAL VERIFICATION OF THE ELECTRICAL SYSTEM PRIOR TO THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MAINTENANCE, FAULTY EQUIPMENT AND DISCREPANCIES.
3. HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
4. THESE PLANS ARE DIAGRAMMATIC ONLY. FOLLOW AS CLOSELY AS POSSIBLE.
5. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANEL BOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).
6. CONTRACTOR SHALL PROVIDE LABOR, MATERIALS, TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE AND PROPER OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
7. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "I" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NFPA.
8. CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL ORDINANCES.
9. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS.
10. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT THE ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
11. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
12. PROVIDE CONSTRUCTION ENGINEER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
13. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
14. USE T-TRAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR.
15. ALL CONDUCTORS SHALL BE COPPER.
16. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
17. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES AND DRAWINGS.
18. RECEPTACLES SHALL BE 20 AMPERE, 120 VOLT A.C., WHITE AS REQUIRED BY THE ARCHITECT OR APPROVED EQUAL.
19. WALL SWITCHES SHALL BE SINGLE-POLE, HUBBELL #1201 OR EQUIVALENT, WHITE AS REQUIRED BY THE ARCHITECT.
20. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS, SHALL HAVE ENGRAVED LETTERING INDICATED ON THE DRAWINGS.
21. WEATHERPROOF RECEPTACLES SHALL HAVE RACO #800, 1/2" BASED WORK COVERS.
22. WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM, NO BX OR RMX CABLE IS PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.
23. GROUND RODS SHALL BE AS SPECIFIED ON THE GROUNDING DRAWINGS.
24. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS.
25. MANUFACTURED BY SQUARE D COMPANY OR APPROVED EQUAL. IF HOST FACILITY REQUIRES THE NEW SERVICE TO BE SUB-METERED FROM THE EXISTING SERVICE, SUB-METER SHALL BE OF THE 10X OR 15X TYPE.
26. ALL MATERIALS SHALL BE U.L. LISTED.
27. CONDUIT: A. SERVICE CONDUITS SHALL BE GRAY SCH40 PVC BURIED MIN. 36" EXCEPT THAT SCHED. SHALL BE USED UNDER PROGRAMS AND CONDITIONS SUBJECT TO LOCAL IMPACTS. BENDS SHALL BE MADE USING "WIDE SWEET" (12 MIN. RADIIUS) CLEWY FITTINGS. ANY CODE-REQUIRED RIGID STEEL CONDUIT SHALL BE U.L. LISTED, GALVANIZED INSIDE & OUTSIDE. CONDUIT SHALL EXTEND MIN. 36" BELOW GRADE WITH "SNEEP" ELBOWS (12 MIN.) ENDING IN PVC TRANSITION FITTINGS. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2" LAP-WRAPPED WITH HUNTS PROCESS NO. 3 EXTENDING MIN. 12" ABOVE GRADE.
28. INTERIOR CONDUITS SHALL BE ELECTRICAL METALLIC TUBING HAVING U.L. LABEL. FITTINGS SHALL BE GAND RING COMPRESSION TYPE.
29. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE.
30. FITTINGS SHALL BE "JUNK" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. NO SUCH CONDUIT SHALL EXCEED SIX FEET IN LENGTH.
31. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT IDENTIFICATION TAGS.
32. RACEWAYS AND RACEWAY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK STOPPED IN ACCORDANCE WITH SECTION 712.
33. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH SECTION 712.
34. PENETRATIONS- INTERNATIONAL BUILDING CODE (IBC) DECKS, DRILLING OR CORING HOLES IN CONCRETE WALLS OR DECKS, WHETHER FOR FASTENING OR ANCHORING PURPOSES, REQUIRES THAT TENDONS OR REINFORCING STEEL MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT (X-RAY OR OTHER DEVICES) THAT CAN ACCURATELY LOCATE THEM. TENDONS OR REINFORCING MUST NOT BE DRILLED, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
35. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL BOUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO CONSTRUCTION ENGINEER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNCHANGED CONDITION.
36. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR PROTECTION OF EXISTING UTILITIES AND REINFORCEMENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOUSING COSTS TO BE PAID BY CONTRACTOR.
37. CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS AS NECESSARY TO COMPLETE THE INSTALLATION OF ANY TOWER LIGHTING SYSTEM DESCRIBED IN THE RFO.

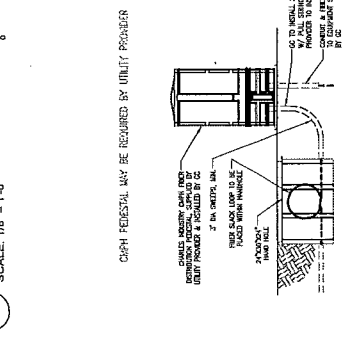
EXISTING TRANSFORMER



1 SCALE: No Scale

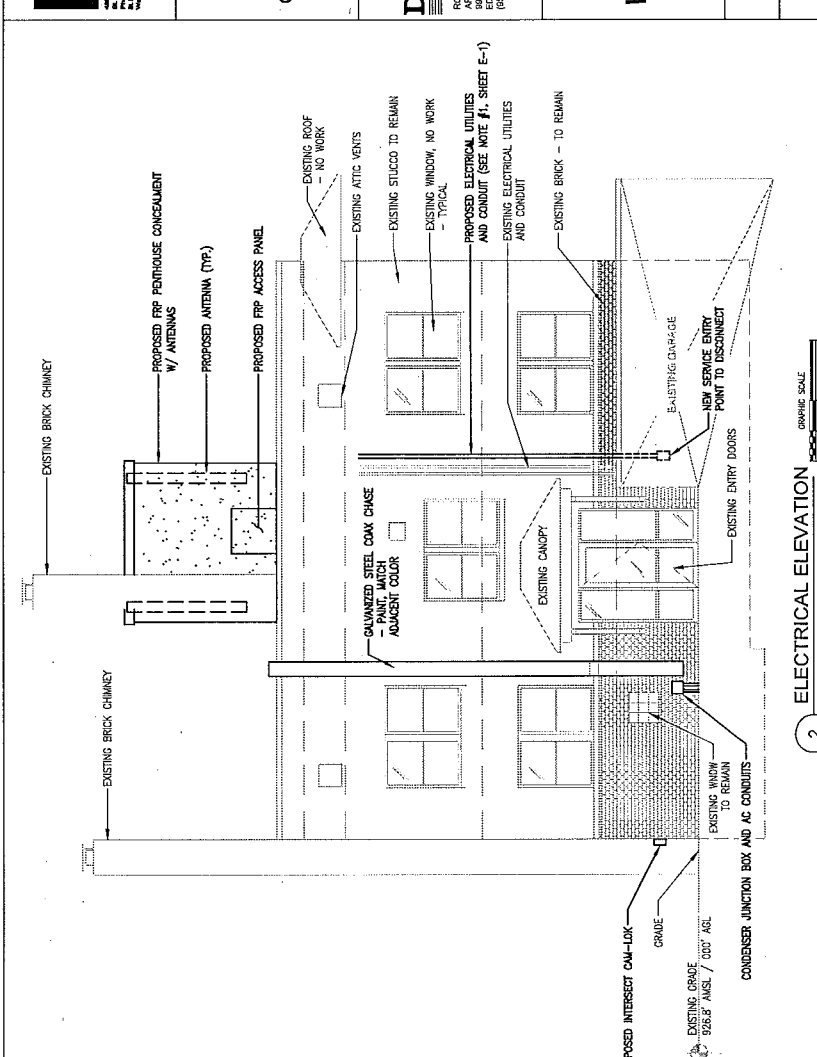


3 SCALE: No Scale



3 CMPH PEDESTAL SCALE: No Scale

CMPH PEDESTAL MAY BE REQUIRED BY UTILITY PROVIDER



2 ELECTRICAL ELEVATION SCALE: 1/8" = 1'-0"



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SHEET CONTENTS:
ELECTRICAL ELEVATION,
NOTES & DETAILS

DRAWN BY:	JMM
DATE:	03-03-14
CHECKED BY:	PD
REV. C	
UFI PROJ. #	1300796
Rev. C	
Signature	PERCY DAVIS, JR.
Date	03-03-14
Us. No.	46528

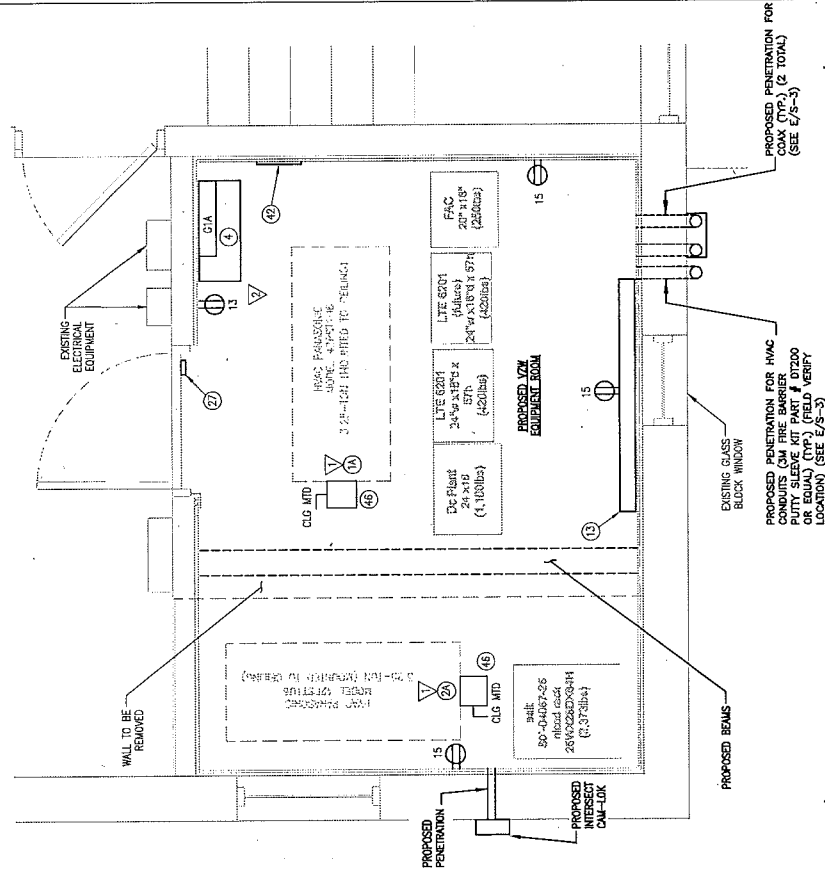
I hereby certify that this plan specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

E-2

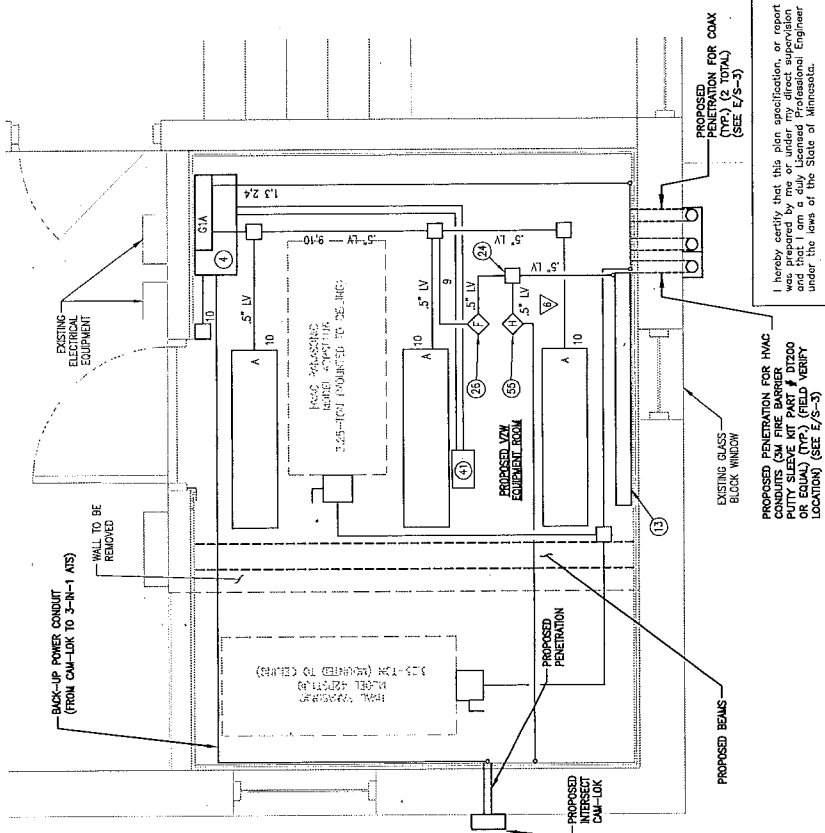
- GENERAL NOTES:**
- REFER TO WALL ELEVATION SECTIONS SHEET FOR MOUNTING HEIGHTS.
 - CIRCLES WITH NUMBERS INSIDE REPRESENT EQUIPMENT NUMBERS. SEE EQUIPMENT LIST ON SHEET E-6.
 - SEE FUTURE SCHEDULE FOR FUTURE INFORMATION ON SHEET E-6.
 - ALL CONDUCTORS SHALL BE TYPE THHN.

KEYED NOTES:

- 1 PROVIDE 2 1/2" INTERLOCK TO CONDENSER LOCATED ON SITE
- 2 PROVIDE 250KCM COPPER GROUND FROM FACILITY ELECTRICAL SERVICE GROUNDING POINT TO VERIZON WIRELESS GROUNDING GRID/BUS LOCATION. ROUTE IN METALLIC CONDUIT. VERIFY LOCATION OF FACILITY ELECTRICAL GEAR.
- 3 2" C 2 1/2" O.D. + 1 1/2" I.D. + 1 1/2" O.D. FROM GENERATOR TO 200A GENERATOR CIRCUIT BREAKER IN EQ#4 CABINET.
- 4 2" C 2 1/2" O.D. + 1 1/2" I.D. + 1 1/2" O.D. FROM DISCONNECT THRU LB FROM GFA MAIN CIRCUIT BREAKER.
- 5 TELCO ENTRY. WALL PENETRATION LOCATION WILL BE DETERMINED ON SITE.
- 6 POWER HYDROGEN DETECTOR FROM DC CABINETS.



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



2 LIGHTING PLAN
SCALE: 3/8"=1'-0"

I hereby certify that this plan specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: _____
Typed or Printed Name: PERRY, DAVIS, JR.
Date: 03-03-14
Lic. No.: 46529



NOT FOR
CONSTRUCTION

DESIGN 1
ROBERT J. DAVIS, AIA
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20130877458

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MCALLISTER

1160 GRAND AVENUE
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SHEET CONTENTS:
ELECTRICAL POWER &
LIGHTING PLAN

DRAWN BY: JMM
DATE: 03-03-14
CHECKED BY: PD
REV. C

USE PROJ. # 130796
E-3



NOT FOR
CONSTRUCTION



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20130877458

**MINC
MCALLISTER**

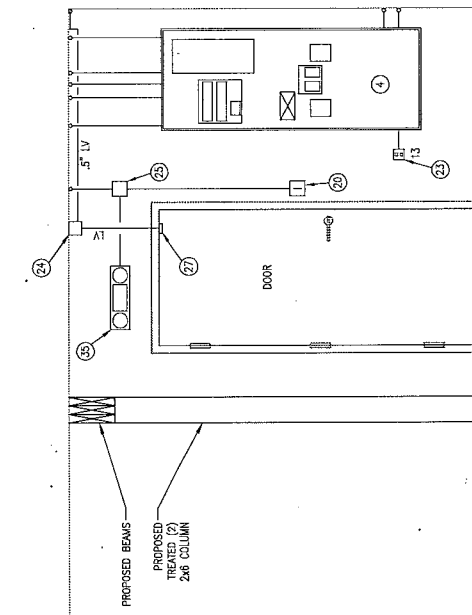
1160 GRAND AVENUE
ST. PAUL, MN 55105

SHEET CONTENTS:
ELECTRICAL WALL ELEVATIONS

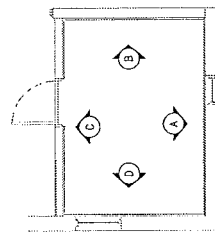
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DATE:	03-03-14
CHECKED BY:	PD
REV. C	

C.J. # 13.00738

E-4



C ELECTRICAL WALL ELEVATION "C"
SCALE: 3/8" = 1'-0"

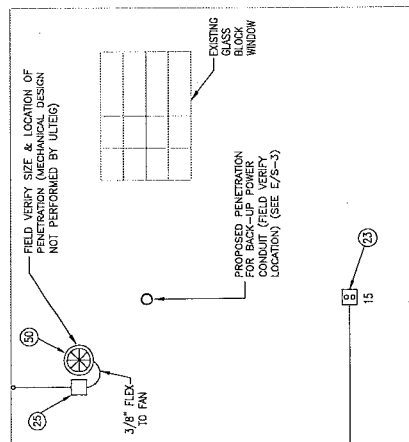


ELEVATION KEY

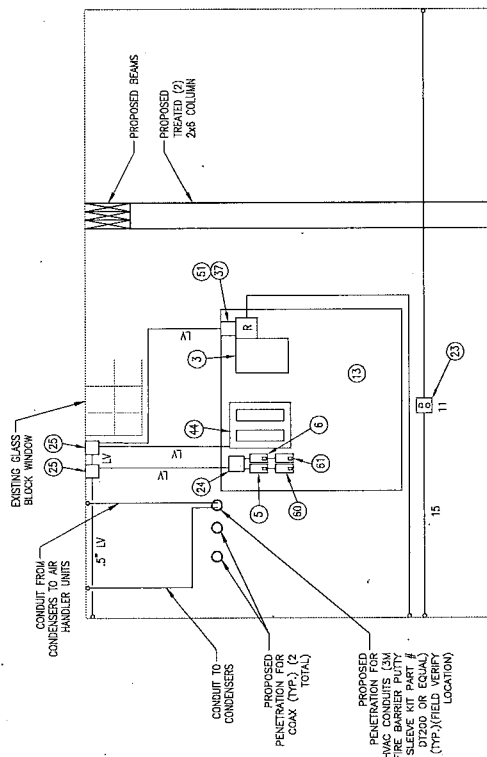
I hereby certify that this plan specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: _____ Type of Printed Name: PERRY DAVIS, JR

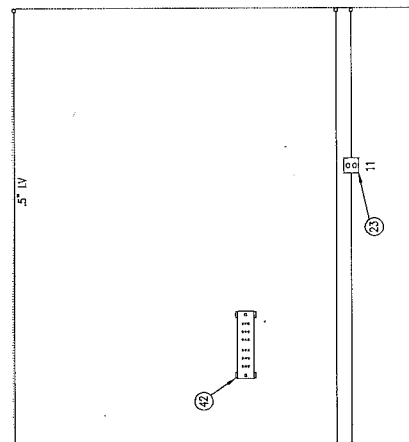
03-03-14 43528



D ELECTRICAL WALL ELEVATION "D"
SCALE: 3/8"=1'-0"



A ELECTRICAL WALL ELEVATION "A"
SCALE: 3/8"=1'-0"



B ELECTRICAL WALL ELEVATION "B"
SCALE: 3/8"=1'-0"

MAGNETIC DOOR ALARM

THE MAGNETIC DOOR ALARMS ARE WIRE NORMALLY CLOSED CONTACTS. WHEN A DOOR IS OPENED, CONTACTS OPEN, SENDING AN ALARM.

LOW TEMP ALARM

THE LOW TEMP ALARM IS SET TO OPEN ON TEMP DECREASE.

HIGH TEMP ALARM #1

THE HIGH TEMP ALARM IS SET TO OPEN ON TEMP INCREASE TO PRE-SET TEMP POINT 'X'.

UTILITY POWER FAIL ALARM

THE UTILITY POWER FAIL FROM AHS.

SURGE ARRESTOR ALARM

FOR SURGE ARRESTOR ALARM, CONNECT TO SURGE ARRESTOR. NORMALLY CLOSED CONTACTS. NORMALLY CLOSED CONTACTS WILL BE CLOSED IN NORMAL POWER CONDITION. CONTACTS WILL OPEN IF ELEMENTS BLOW OR A.C. POWER FAILS.

SMOKE DETECTOR

THE SMOKE ALARM CONTACTS ARE SET TO OPEN NORMALLY CLOSED, WHEN SMOKE IS DETECTED THE CONTACTS OPEN SENDING AN ALARM.

HIGH TEMP ALARM #2

THE HIGH TEMP ALARM IS SET TO OPEN ON TEMP INCREASE TO PRE-SET TEMP POINT 'Y'.

HIGH TEMP ALARM #3

THE HIGH TEMP ALARM IS SET TO OPEN ON TEMP INCREASE TO PRE-SET TEMP POINT 'Z'.

NOTES:

- ALL ALARMS OPEN ON ALARM UNLESS OTHERWISE NOTED.
- ALARM WIRES TO BE 24V. 22GA. WIRE UNLESS OTHERWISE SPECIFIED.
- N.C.=BLK C.=RED

1 SECURITY ALARM CABLING DIAGRAM

SCALE: NONE

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HIGH TEMP ALARM #3

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NOTES:

- ALL 1-BOXES TO BE 4"x4".
- ALL CONDUIT TO BE 3/4" EMT UNLESS SHOWN OTHERWISE ON ELEVATIONS.
- SEE E04/H4 (SECURITY PANEL) INDEX FOR LIST OF L.V. DEVICES TO BE CABLED BACK TO PUNCH DOWN BLOCKS.

NOTE: SEE PLAN VIEW DRAWINGS FOR LOCATIONS

2 HVAC SHUTDOWN CONNECTION DIAGRAM

SCALE: NONE

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- SEE E04/H4 (SECURITY PANEL) INDEX FOR LIST OF L.V. DEVICES TO BE CABLED BACK TO PUNCH DOWN BLOCKS.

NOTE: SEE PLAN VIEW DRAWINGS FOR LOCATIONS

3 SECURITY PANEL - EQUIPMENT 44

SCALE: NONE

MAGNETIC DOOR ALARM

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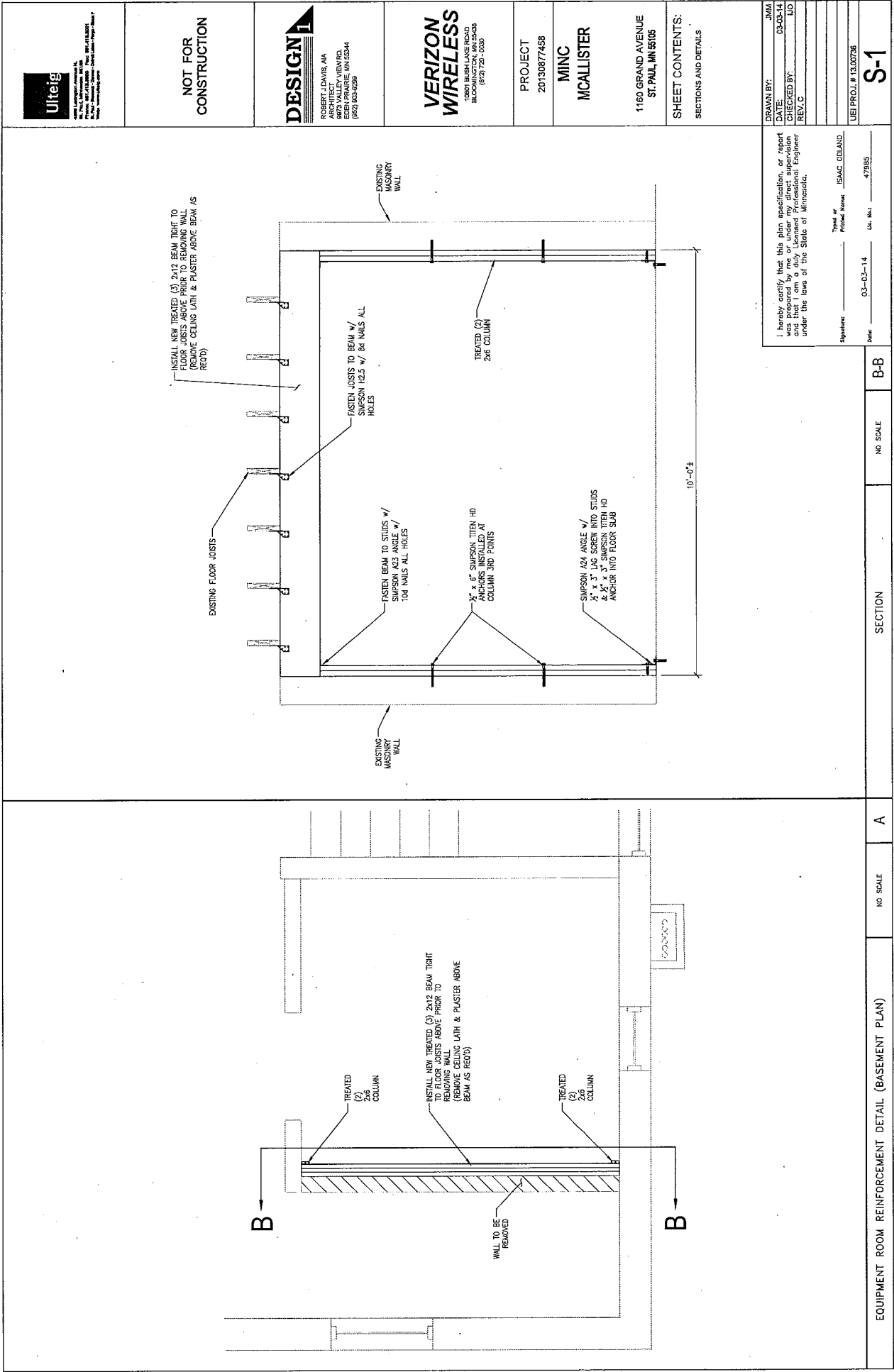
NOTES:

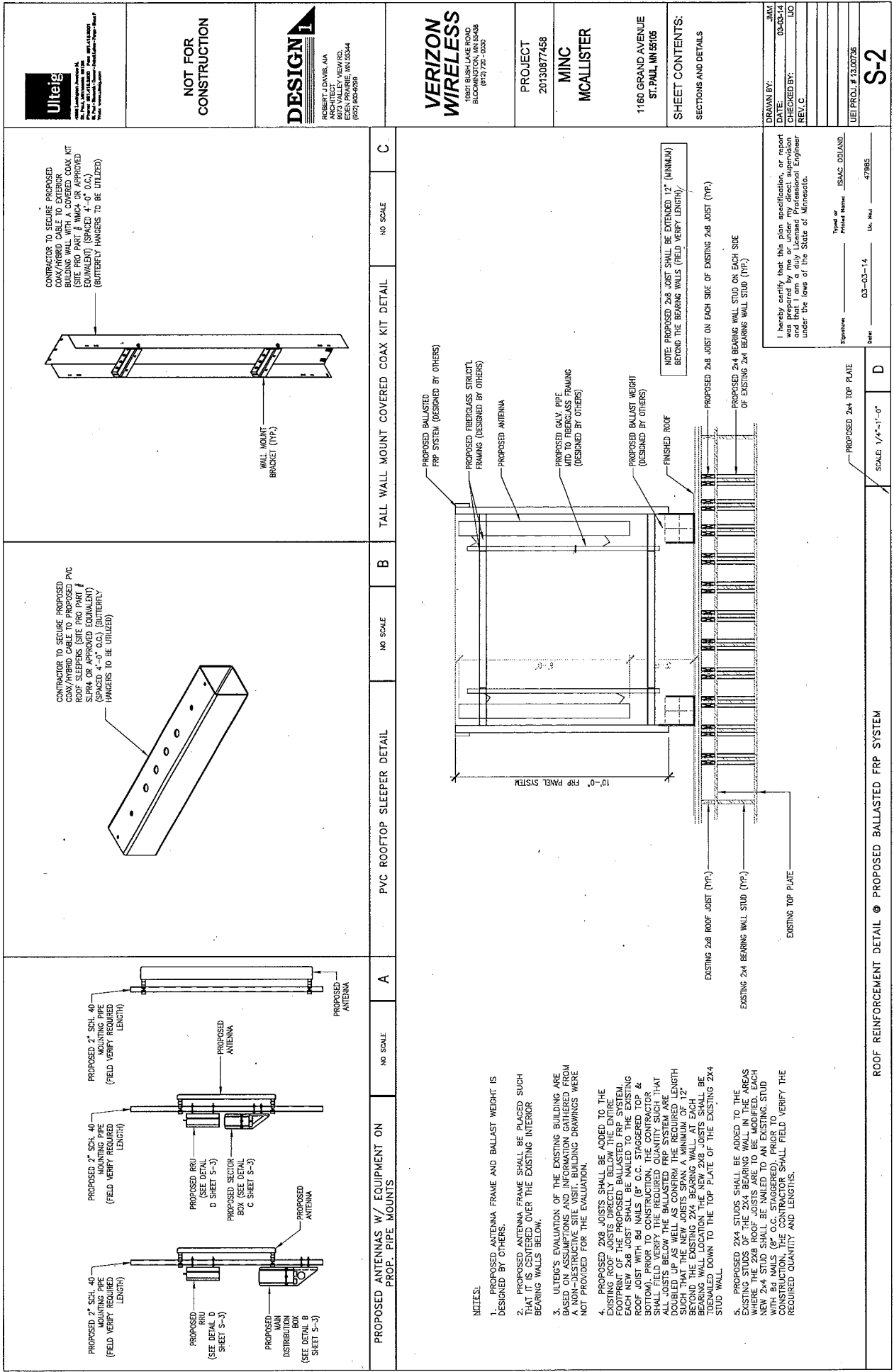
- ALL 1-BOXES TO BE 4"x4".
- ALL CONDUIT TO BE 3/4" EMT UNLESS SHOWN OTHERWISE ON ELEVATIONS.
- SEE E04/H4 (SECURITY PANEL) INDEX FOR LIST OF L.V. DEVICES TO BE CABLED BACK TO PUNCH DOWN BLOCKS.

NOTE: SEE PLAN VIEW DRAWINGS FOR LOCATIONS

4 TYPICAL ALARM CONDUIT SYSTEM

SCALE: NONE







DESIGN 1

ROBERT J DAVIS, AIA
ARCHITECT
9973 VALLEY VIEW RD
EDEN PRAIRIE, MN 55337
(952) 803-9299

**VERIZON
WIRELESS**
10901 BUSH LAKE ROAD
BLOOMINGTON, MN 55438
(612) 720-0030

PROJECT
20130877458

MINC
MCALLISTER

1160 GRAND AVENUE
ST. PAUL, MN 55105

SHEET CONTENTS:
SECTIONS AND DETAILS

DRAWN BY: JMM
DATE: 03-03-14
CHECKED BY: LJO
REV. C

S-3

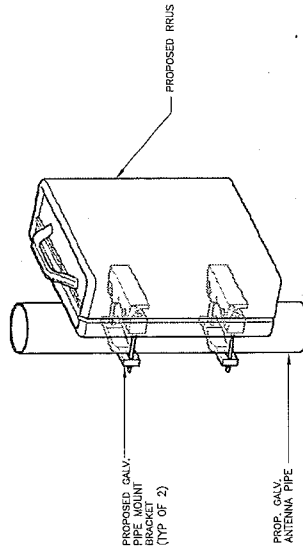
CONTRACTOR TO
PROVIDE 3/8" GALV.
BOLT WITH LOCK
WASHER AND LOCK
NUT FOR ATTACHMENT
TO COAX SUPPORT
BRACKETS



HYBRID CABLE BUTTERFLY HANGER

ERICSSON RRUS-12 W/ SOLAR SHIELD

WEIGHT WITHOUT BRACKETS: 58 lbs



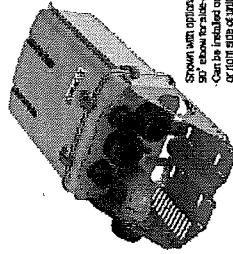
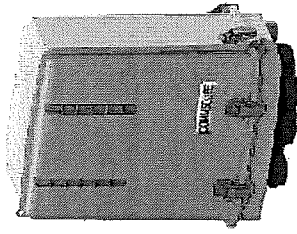
RRIS-12 W/ SOLAR SHIELD	NO SCALE	D
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I hereby certify that this plan specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: _____ Type of Printed Name: ISAAC ODLAND

Date: 03-03-14 Use No.: 47985

DIMENSIONS, WxDxH: 400x261x584mm (15.73"x10.25"x22.98")
WEIGHT, WITH BRACKETS: 27 lbs



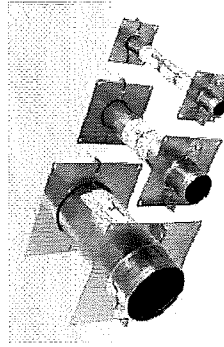
Shown with optional
50" elbow for late entry.
Can be installed on left
or right side of unit.

Nourishing Probiotic | Probiotic

MAIN DISTRIBUTION BOX (TOP)

NO SCALE

8



3M FIRE BARRIER PUTTY SLEEVE KIT PHOTO

SEE LOCAL APPLICABLE
BUILDING CODES FOR
HOURLY FIRESTOP RATING
SYSTEM.

PROPOSED 3M FIRE
BARRIER PUTTY SLEEVE KIT
(PART # DT200 OR EQUAL)

CORE DRILL FOR NEW
CONDUIT PENETRATION

EXISTING BRICK WALL (CONTRACTOR TO FIELD VERIFY WALL THICKNESS PRIOR TO START OF CONSTRUCTION)

3M® Fire Barrier Putty	Shove size	Flange Dimension	Min. Opening Size	Max. Opening Size
177 100	1" (25mm) Diameter 1" (50mm) Length	3-3/8" (86mm) x 3-3/8" (86mm)	1-1/8" (28mm)	2-1/4" (57mm)
177 200	2" (50mm) Diameter 3" (90mm) Length	5-1/4" (134mm) x 5-1/4" (134mm)	2-3/8" (60mm)	4" (102mm)
177 400	4" (102mm) Diameter	8" (203mm) x 8" (203mm)	4-1/2" (114mm)	8" (152mm)

1. CONTRACTOR SHALL COMPLY WITH ALL BUILDING CODES AS WELL AS LANDLORD AND LOCAL JURISDICTION REQUIREMENTS.
2. CONTRACTOR TO LOCATE EXISTING STRUCTURAL REINFORCEMENT WITHIN EXISTING BRICK WALL PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL NOT CUT ANY CONCRETE REINFORCEMENT, AND EXISTING REINFORCEMENT SHALL MAINTAIN ITS ORIGINAL PURPOSE AND INTEGRITY.
4. ULTEIG DO NOT PERFORM A REVIEW IN REGARD TO FIRE SAFETY.

WALL PENETRATION DETAIL

NO SCALE

14

MINC McAlister

PREMISES DESCRIPTION:

Lot 1, Block 3, MANSON & SIMONTON'S ADDITION TO ST. PAUL, Ramsey County, Minnesota.

LAND SPACE DESCRIPTION:

A tract of land for telecommunication purposes over, under and across Lot 1, Block 3, MANSON & SIMONTON'S ADDITION TO ST. PAUL, Ramsey County, Minnesota described as follows:

Commencing at the Southwest corner of said Lot 1; thence South 89 degrees 52 minutes 36 seconds East, assumed bearing, along the south line of said Lot 1 a distance of 15.69 feet to the point of beginning of the land space to be described; thence North 00 degrees 00 minutes 00 seconds East a distance of 10.04 feet; thence North 00 degrees 00 minutes 00 seconds East a distance of 5.50 feet to a point hereinafter referred to as Point "A"; thence continuing North 00 degrees 00 minutes 00 seconds East a distance of 5.50 feet; thence South North 00 degrees 00 minutes 00 seconds West a distance of 10.06 feet to the south line of said Lot 1; thence North 89 degrees 52 minutes 36 seconds West a distance of 11.00 feet to the point of beginning.

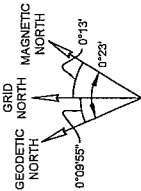
Contains 111 sq. ft., more or less.

UTILITY EASEMENT DESCRIPTION:

A 7.00 foot wide strip of land for utility purposes over, under and across the hereinbefore described property, lying 3.50 feet on each side of the following described centerline:

Beginning at the herein described Point "A"; thence North 16 degrees 27 minutes 39 seconds East a distance of 17.03 feet and there terminating.

Contains 119 sq. ft., more or less.



CONVERGENCE ANGLE AND MAGNETIC DECLINATION AT THE SOUTHWEST CORNER OF THE BUILDING (NOT TO SCALE)

UTILITY EASEMENT DESCRIPTION:

A 6.00 foot wide strip of land for utility purposes over, under and across the hereinbefore described property, lying 3.00 feet on each side of the following described centerline:

Commencing at the Southwest corner of said Lot 1; thence South 89 degrees 52 minutes 36 seconds East, assumed bearing, along the south line of said Lot 1 a distance of 37.12 feet to the point of beginning of the centerline to be described; thence North 89 degrees 52 minutes 36 seconds East a distance of 23.87 feet and there terminating.

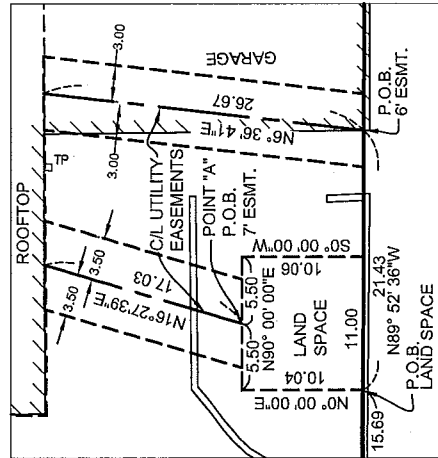
Contains 160 sq. ft., more or less.

UTILITY EASEMENT DESCRIPTION:

A 6.00 foot wide strip of land for utility purposes over, under and across the hereinbefore described property, lying to the left of and abutting the following described centerline:

Beginning at the Northwest corner of said Lot 1; thence South 00 degrees 19 minutes 01 second East, along the west line of said Lot 1, for a distance of 110.72 feet; thence North 89 degrees 39 minutes 40 seconds East a distance of 13.85 feet to the west wall of an existing building and there terminating.

Contains 711 sq. ft., more or less.



DETAIL A

GRAND AVE.



MANSON & SIMONTON'S

FD. PINCHED 0.7 S., 0.3 W.

6' UTILITY EASEMENT

EDGE OF PARAPET

ROOF DRAIN

EXISTING BUILDING

#1160 GRAND AVE.

VENT (TYP.)

TOP OF CHIMNEY FLUE=967.7 FT.

SCUTTLE HATCH

TOP OF CHIMNEY FLUE=971.7 FT.

SEE DETAIL A

WALL MOUNTED TEL BOX 946 FT.

CONC. RET. WALL

FINISHED FLOOR

REINFORCED CONCRETE

STEPS

SW COR. LOT 1

89° 52' 36" E S. LINE OF LOT 1

15.69

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Radel, Jamie (CI-StPaul)

From: Jackie Hartman <jackieb.hartman@gmail.com>
Sent: Friday, February 07, 2014 11:57 AM
To: Radel, Jamie (CI-StPaul)
Subject: Re: Cell Phone Tower at Grand & Dunlap

Yes please

Jackie Hartman
1179 Goodrich Ave.
St. Paul, MN 55105

On Fri, Feb 7, 2014 at 9:16 AM, Radel, Jamie (CI-StPaul) <jamie.radel@ci.stpaul.mn.us> wrote:

Ms. Hartman-

If you would like this email to be part of the public record, I need you to include your first and last name as well as your address.

Thank you,

Jamie

Jamie Radel

Planner

Planning and Economic Development

City of St. Paul

25 W. 4th St., Suite 1400
Saint Paul, MN 55102

Telephone: (651) 266-6614

jamie.radel@ci.stpaul.mn.us

From: Jackie Hartman [mailto:jackieb.hartman@gmail.com]
Sent: Thursday, February 06, 2014 8:59 PM
To: Radel, Jamie (CI-StPaul)
Subject: Cell Phone Tower at Grand & Dunlap

Hi There-

I am writing to dissuade the community from putting a cell phone on the corner of Grand & Dunlap. As a long-term neighborhood resident I have several concerns about the proposed tower's location & impact on our community.

1. Alternate options - I'd like to understand the other options Verizon considered when they determined a cell phone tower should go in the Grand/Dunlap location. Why there? It is the center of a densely-populated neighborhood. Surely, there are other locations that are less populated.
2. Health - While some studies suggest that health risks are minimal, other studies uncovered evidence that the microwave radiation from cellular towers is connected to headaches, sleep problems, anxiety and negative cognitive functioning. Until we are confident towers can be proven 100% safe, we should assume that living next to such towers is possibly unhealthy.
3. Property values – we are just climbing out of a long, hard financial recession where property values have declined significantly. Any undesirable development is imprudent given the fragile local economy. Furthermore, many have worked very hard to protect Grand Avenue's unique character & charm. Cell phone towers will only serve as an eye-sore in a quaint, historic neighborhood.

Thank you for your thorough consideration.

Sincerely,

Jackie

Laura Willemsen
1180 Lincoln Ave
St. Paul, MN 55105

To Whom it May Concern:

I am writing this letter to strongly condemn Verizon's proposed installation of 6 antennas and associated equipment on the roof of 1160 Grand Avenue. The reasons to reject this tower are threefold: potential health risks, declining property values and, finally, the likelihood that suitable alternative locations exist in the area whereby Verizon can still serve its customers well.

First, the long term health risks of cellular towers are still unknown, and there is some evidence that there are health risks that could have a strong negative impact on the quality of life for those in the close proximity to such towers. While some studies suggest that health risks are minimal, other peer-reviewed empirical studies uncovered evidence that the microwave radiation from cellular towers is connected to headaches, sleep problems, anxiety and negative cognitive functioning (see study attached). Indeed, most articles exploring the health concerns of cellular radiation end with a call for more research, particularly longitudinal research, into the potential health risks associated with living in the vicinity of such towers. In short, no one yet knows what the long-term health risks are of living in close proximity to a tower that emits microwave radiation for twenty four hours a day, seven days a week, and there is some preliminary evidence to suggest that the risks are real. Until these towers can be proven 100% safe, it is wise to act under the assumption that living next to such towers is possibly unhealthy.

Further, it has been proven that property values are negatively impacted according to their vicinity to cellular antennas (see study attached). While studies understanding health risks are ongoing, there remains a strong public perception that cellular towers are a threat to human health, therefore potential buyers are less likely to buy homes near such towers and property values suffer. The proposed site for this cellular antenna is in a community already contending with the possibility that Ayd Mill will soon connect to I-94, resulting in increased noise and pollution and, ultimately, a possible negative impact on our property values. This tower is yet another affront to the desirability of our neighborhood in the eyes of the home market.

Finally, while 1160 Grand Avenue is in a highly populated residential area, there are several areas in the vicinity that are mainly industrial and/or commercial where it is likely that a cellular tower would pose less of a health and financial threat while still meeting the needs of Verizon customers. Given that radiation is more highly concentrated the closer one is to the vicinity of such towers, and that one's property values are more negatively impacted by such proximity, it makes sense for Verizon to find alternative options where fewer people live.

That there is even a necessity for there to be a public zoning hearing on the proposed cellular tower on 1160 Grand Avenue is an acknowledgement that the tower is bound to carry with it negative repercussions. It is not in our community's interests to allow this tower to be built. Verizon's proposal is one best rejected, and I strongly urge St. Paul's zoning committee to do just that.

Sincerely,

Laura Willemsen

Radel, Jamie (CI-StPaul)

From: Karyn Wrenshall <karynwren@gmail.com>
Sent: Tuesday, February 04, 2014 6:06 PM
To: Radel, Jamie (CI-StPaul)
Subject: Regarding File # 14-088-188

Follow Up Flag: Follow up
Flag Status: Flagged

To Jamie Radel and the St. Paul Planning Commission Zoning Committee:

I am writing regarding File# 14-088-188. This proposal asks permission to install 6 cellular antennas and associated equipment at 1160 Grand Ave. I strongly object to this installation. My neighbors and I share a quiet, residential neighborhood. The proposed structure does not fit the character of our existing homes, and would have a very negative impact on our surroundings.

Please do not permit the installation of these antennas.

Sincerely,
Karyn Wrenshall
1201 Lincoln Avenue

Radel, Jamie (CI-StPaul)

From: Mark King <marktking@mac.com>
Sent: Monday, February 17, 2014 12:09 PM
To: Radel, Jamie (CI-StPaul)
Subject: Regarding permit application 14-088-188

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Radel -

I'm writing in regard to the following permit application:

14-088-188 Verizon Wireless (postponed to February 27, 2014)

Conditional use permit for 6 cellular antennas and associated equipment on a residential structure less than 60 feet high

1160 Grand Ave, SW corner at Dunlap
RM2

I am the owner and resident of 1177 Lincoln Avenue with my husband, Jonathan Lubin. Our property backs the same alleyway of 1160 Grand Avenue.

I oppose the issuance of this permit because it detracts from the residential character of the neighborhood and introduces visual blight destroying the neighborhood aesthetics. The residences on either side of Grand (Lincoln and Summit) are of a vintage that is not often found in the area, and such blight can negatively affect property/resale values. The proposed antenna would be clearly visible from all the windows on the rear of our house and from the back yard.

I am also concerned that issuance of this permit will result in other requests for other carriers for antenna installations in the neighborhood, further degrading the visual character of this unique and vibrant neighborhood. If this permit is issued, any other permits will have to be issued.

I urge rejection of this permit.

Sincerely, Mark King

Radel, Jamie (CI-StPaul)

From: Ryan Willemsen <rywillemsen@gmail.com>
Sent: Tuesday, February 18, 2014 9:19 PM
To: Radel, Jamie (CI-StPaul)
Subject: Regarding proposed cellular antennas at 1160 Grand

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Jamie

Please add my name to list of residents opposing the proposed cellular antennas at 1160 Grand. I live at 1180 Lincoln Avenue and we can see the roof of this building from our second story. The prospect of looking out over antennas is not appealing, both for us and for potential future owners of our home. Many studies have shown a strong link between the rise of an antenna and the reduction in nearby property values. I support business entrepreneurship but this location appears to benefit one to the detriment of many. There are a number of alternative sites that minimize the negative impacts of the antennas, thereby providing more net benefit. Verizon has not appropriately explored these options, per their own admission.

Thanks for your consideration
Ryan Willemsen

Sent from my iPad

Radel, Jamie (CI-StPaul)

From: Matt Doughty <doughtym@gmail.com>
Sent: Monday, February 10, 2014 5:21 PM
To: Radel, Jamie (CI-StPaul)
Subject: Re: Cell Phone Tower Location

Follow Up Flag: Follow up
Flag Status: Flagged

Jamie:

Thanks for the information. Below is my email re-submitted with the requested information. Thanks.

Jamie:

I am a resident on Goodrich Avenue of nearly 8 years. I would hate to see my gorgeous neighborhood have an unappealing cell phone tower added in the proposed location.

I am strongly opposed to this tower location for aesthetics, property value and potential health concerns to my family and the children attending SPA.

Please take my feelings into consideration when making your decision. My name, address and contact information are below. I am happy to discuss, call with questions.

Matt Doughty
1161 Goodrich Avenue
St. Paul, MN
55105
303-359-1809
doughtym@gmail.com

Thanks for your assistance in this matter,

Matt

On Mon, Feb 10, 2014 at 8:58 AM, Radel, Jamie (CI-StPaul) <jamie.radel@ci.stpaul.mn.us> wrote:

Matt-

If you would like to include this email as part of the official record with the zoning case, you need to provide me with your first and last name and your address in the body of the email.

Thank,

Jamie

From: Matt Doughty [mailto:doughtym@gmail.com]
Sent: Friday, February 07, 2014 5:41 PM
To: Radel, Jamie (CI-StPaul)
Subject: Cell Phone Tower Location

Jamie:

I am a resident on Goodrich Avenue of nearly 8 years. I would hate to see my gorgeous neighborhood have an unappealing cell phone tower added in the proposed location.

I am strongly opposed to this tower location for aesthetics, property value and potential health concerns to my family and the children attending SPA.

Please take my feelings into consideration when making your decision.

I am happy to discuss, call with questions.

Matt

--

Matthew Doughty
doughtym@gmail.com
[303-359-1809](tel:303-359-1809)

--

Matthew Doughty
doughtym@gmail.com
[303-359-1809](tel:303-359-1809)

Radel, Jamie (CI-StPaul)

From: Bonnie Genereux <genfam@att.net>
Sent: Thursday, February 13, 2014 8:44 AM
To: Radel, Jamie (CI-StPaul); summithill@visi.com
Subject: verizon wireless

Follow Up Flag: Follow up
Flag Status: Flagged

Jamie, I live right behind the proposed location for Verizon's conditional use permit for 6 cellular antennas and associated equipment. The neighbors on Lincoln are not happy about this. Please count my vote against this proposal. There must be an alternative location that would meet their needs and also allow people to enjoy looking out their windows. My personal concerns are esthetic, health and resale value of our home.

I was unable to attend the meeting on Feb 6 but hope to make the rescheduled meeting with the zoning commission.

Bonnie Genereux

1165 Lincoln Ave.

Sent from my iPad

Re File # 14-088-188
2/27 Hearing

February 21, 2014

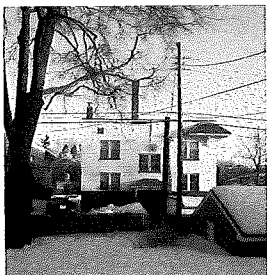
Dear St. Paul Zoning Committee:

We are writing in opposition to Verizon Wireless' application for a conditional use permit for an unsightly cluster of cellular antennas and associated equipment at 1160 Grand Avenue. The site in question is a small vintage apartment building that shares an alley with Lincoln Avenue. That portion of Lincoln is located within the Summit Hill neighborhood—a quaint residential area with numerous historic homes.

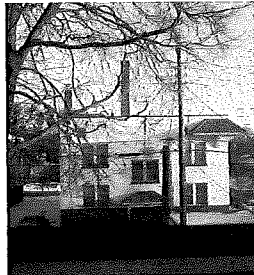


View of home at 1165 Lincoln and site at 1160 Grand from corner of Dunlap and Lincoln

According to Verizon's paperwork, the building at 1160 Grand Avenue is less than 30 feet high. In fact the building is so short that the roof line of the building is lower than the tops of some of the adjacent single-family homes just across the alley on Lincoln Avenue. Thus any equipment placed on top of it will be directly within the sightlines of property owners on Lincoln Avenue:



View from kitchen porch at 1165 Lincoln



View from sleeping porch at 1165 Lincoln



View from sunroom at 1171 Lincoln



View from backyard at 1171 Lincoln

This situation is quite a bit different than other more appropriately placed antennas in the area, such as those located on the St. Thomas More campus (which are surrounded by taller church and school buildings), and the antennas located above Bruegger's on Grand Avenue (which are located on a taller building that sits well above nearby single-family residences).

Subsection (c) of St. Paul City Ordinance Section 61.501 (attached) requires that the use for which any conditional use permit is sought not be detrimental to the character of the neighborhood. Given the nature of the surrounding residential neighborhood on Lincoln Avenue, it would clearly be detrimental to its character to place a mess of ugly metal on top of a small residential building.

In fact, the detrimental nature of the project is likely to impact property values of the adjacent homes on Lincoln Avenue. For example, several of the homes across the alley were built in the late 1800s and early 1900s. In the classic style of that time, some have eating and/or sleeping porches on the north side of the property. The homeowners use

these porches extensively year round. If allowed, Verizon's proposed equipment will permanently mar the homeowners' views from these rooms, as it will the views from nearly all north facing windows of homes located behind 1160 Grand. This will clearly reduce the value of these homes, since it will directly affect some of their unique features. Moreover, this is a slippery slope. If Verizon is allowed to place these antennas in the place and manner proposed there will be little basis for precluding a proliferation of future like projects throughout the historic Summit Hill neighborhood. Thus, because the proposed placement of the equipment will be detrimental to the character of the neighborhood, Verizon's application should be denied.

In addition to Section 61.501, Verizon's application should also be denied because it violates St. Paul City Ordinance Section 65.310. That ordinance (also attached) demonstrates that when a wireless provider wants to place antennas on a residential building that is less than 60 feet high in a residential area, *the wireless provider has the burden* of proving there is no other better alternative location in the area.

The types of "better alternatives" listed by the Ordinance include:

- Existing free-standing poles
- Residential structures that are taller than 60 feet
- Institutional use structures, such as churches, schools and rec centers
- and business buildings.

In a cursory effort to appear to have met the ordinance's requirements, Verizon has submitted paperwork to the City that lists a handful of buildings it has supposedly considered within the required half-mile radius. However, the list is clearly not exhaustive. In fact, Verizon's radius map and legend demonstrates that it only really considered five buildings.¹ However, anyone who familiar with the area knows there are several other buildings in the half-mile radius that are not listed that fit the Section 65.310 (c) criteria listed above.

One glaring example is Kowalski's Market,² which sits back away from nearby homes, has elevated office space behind the main store and has expansion plans which will include additional mezzanine level space. At the Summit Hill Zoning Board Meeting the representative for Verizon indicated it was his understanding Verizon did not consider Kowalski's because it was not within the radius Verizon considers desirable for its purposes. There are two obvious problems with that position. 1) Verizon does not get to self-limit the area of its search to less than the half-mile radius the Ordinance requires. Rather it is Verizon's burden to come up with a solution that satisfies the statute and does not negatively impact the character of the neighborhood. 2) Even if it were permissible for Verizon to self-limit its search to a smaller area, it apparently approached Mount Zion Temple, which is in fact farther west than Kowalski's.³

¹ The other ten locations listed are actually single family homes, and thus unlikely (for good reason) to have actually have been seriously considered.

² We are not specifically recommending other locations.

³ Moreover, even setting aside Kowalski's and the numerous other business and other buildings that were improperly excluded or not considered by Verizon, some of Verizon's claims as to why they have ruled out

Moreover, even setting buildings that were simply omitted, the reasons listed for excluding the few sites that were considered are suspect. In fact the spokesperson that represented Verizon at the Summit Hill Zoning Board hearing indicated that an issue with at least one of the locations was a failure to come to agreement with respect to the lease rate. Verizon is a multibillion dollar corporation. It has the means to pay to place its proposed antenna in a more appropriate spot. Thus, Verizon should be obliged to do so rather than be allowed to essentially dump its equipment in our neighborhood.

Thus, because Verizon did not undertake an exhaustive effort to demonstrate that there are no better alternatives within the scope of Section 65.310, its application must be denied for that reason as well.

Thank you in advance for your time and careful consideration of this matter.

Sincerely,

Amanda Karls and Andrew Rorvig—1171 Lincoln Avenue
Karyn Wrenshall—1201 Lincoln
Winnie Moy—1185 Lincoln
Andy and Gina McCabe—1186 Lincoln
Laura and Ryan Willemsen—1180 Lincoln
Tom and Kristi Kuder—1176 Lincoln Avenue
Connie Kuhn—1191 Lincoln Avenue
Jonathan Lubin and Mark King—1177 Lincoln Avenue
Steve Hancock and Jill Stedman—1200 Lincoln Avenue
Bonnie and Mark Genereux—1165 Lincoln Avenue
Lyndon and Christy Shirley—1187 Lincoln Avenue
Rudolf Bachofner and Elizabeth Day—1188/1190 Lincoln Avenue
Joe and Carol Bell—1196 Lincoln Avenue

CC: Councilmember Dave Thune
w/enclosures

some of the small number of locations it actually did consider are dubious. For example, St. Thomas More was excluded because they were “unwilling to lease space at required height.” In fact, if with exception of a small garage building all of the buildings located on the St. Thomas Moore Campus, including the building where other cell phone antennas are located, are all taller than the proposed site at 1160 Lincoln.

Sec. 61.501. Conditional use permit, general standards.

Before the planning commission may grant approval of a conditional use, the commission shall find that:

- (a) The extent, location and intensity of the use will be in substantial compliance with the Saint Paul Comprehensive Plan and any applicable subarea plans which were approved by the city council.
- (b) The use will provide adequate ingress and egress to minimize traffic congestion in the public streets.
- (c) The use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety and general welfare.
- (d) The use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.
- (e) The use shall, in all other respects, conform to the applicable regulations of the district in which it is located.

Sec. 65.310. Antenna, cellular telephone.

A device consisting of metal, carbon fibre, or other electromagnetically conductive rods or elements, usually arranged in a circular array on a single supporting pole or other structure, and used for the transmission and reception of radio waves in wireless telephone communications.

Standards and conditions:

- (a) In residential districts, a conditional use permit is required for cellular telephone antennas on a residential structure less than sixty (60) feet high. In residential, traditional neighborhood and business districts, a conditional use permit is required for cellular telephone antennas on a freestanding pole, except for existing utility poles. In residential and traditional neighborhood districts, existing utility poles to which cellular telephone antennas are attached shall be at least sixty (60) feet high.
- (b) In residential, traditional neighborhood, and OS—B3 and B5 business districts, the antennas shall not extend more than fifteen (15) feet above the structural height of the structure to which they are attached. In B4 business and industrial districts, the antennas shall not extend more than forty (40) feet above the structural height of the structure to which they are attached.
- (c) For antennas proposed to be located on a residential structure less than sixty (60) feet high in residential districts, or on a new freestanding pole in residential, traditional neighborhood, and business districts, the applicant shall demonstrate that the proposed antennas cannot be accommodated on an existing freestanding pole, an existing residential structure at least sixty (60) feet high, an existing institutional use structure, or a business building within one-half (½) mile radius of the proposed antennas due to one (1) or more of the following reasons:
- (1) The planned equipment would exceed the structural capacity of the existing pole or structure.
 - (2) The planned equipment would cause interference with other existing or planned equipment on the pole or structure.
 - (3) The planned equipment cannot be accommodated at a height necessary to function reasonably.
 - (4) The owner of the existing pole, structure or building is unwilling to co-locate an antenna.
- (d) In residential, traditional neighborhood and business districts, cellular telephone antennas to be located on a new freestanding pole are subject to the following standards and conditions:
- (1) The freestanding pole shall not exceed seventy-five (75) feet in height, unless the applicant demonstrates that the surrounding topography, structures, or vegetation renders a seventy-five-foot pole impractical. Freestanding poles may exceed the above height limit by twenty-five (25) feet if the pole is designed to carry two (2) antennas.
 - (2) Antennas shall not be located in a required front or side yard and shall be set back one (1) times the height of the antenna plus ten (10) feet from the nearest residential structure.
 - (3) The antennas shall be designed where possible to blend into the surrounding environment through the use of color and camouflaging architectural treatment.

Drawings or photographic perspectives showing the pole and antennas shall be provided to the planning commission to determine compliance with this provision.

- (4) In residential and traditional neighborhood districts, the pole shall be on institutional use property at least one (1) acre in area. In business districts, the zoning lot on which the pole is located shall be within contiguous property with OS or less restrictive zoning at least one (1) acre in area.
- (e) In industrial districts, cellular telephone antennas on a freestanding pole shall not exceed one hundred fifty (150) feet in height, shall not be located in a required front or side yard, and shall be set back one (1) times the height of the antenna plus ten (10) feet from the nearest residential structure.
- (f) Antennas located in historic districts shall be subject to review and approval of the heritage preservation commission.
- (g) Freestanding poles shall be a monopole design.
- (h) Transmitting, receiving and switching equipment shall be housed within an existing structure whenever possible. If a new equipment building is necessary, it shall be permitted and regulated as an accessory building, section 63.500, and screened from view by landscaping where appropriate.
- (i) Cellular telephone antennas that are no longer used for cellular telephone service shall be removed within one (1) year of nonuse.

GISmo Oblique Photography

Images courtesy of: Microsoft® Virtual Earth™ 2006

☒ Show Dashboard ☐ Show Reference Map



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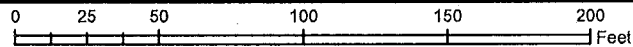
APPLICANT Verizon Wireless

APPLICATION TYPE Conditional Use Permit

FILE # 14-088188 DATE 1-16-14

PLANING DISTRICT 16

ZONING MAP # 14



- | | | | |
|--|----------------------|--|--------------------------|
| | Commercial & Office | | Residential One Family |
| | Industrial & Utility | | Residential Two Family |
| | Institutional | | Residential Three Family |
| | Vacant/Undeveloped | | Multifamily |

Saint Paul Department of Planning and Economic Development
Ramsey County

