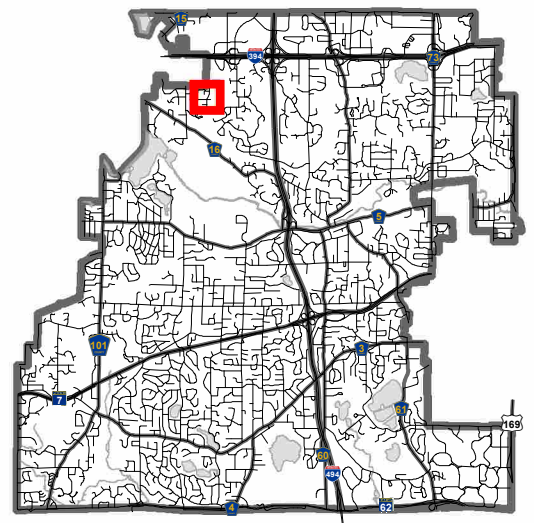


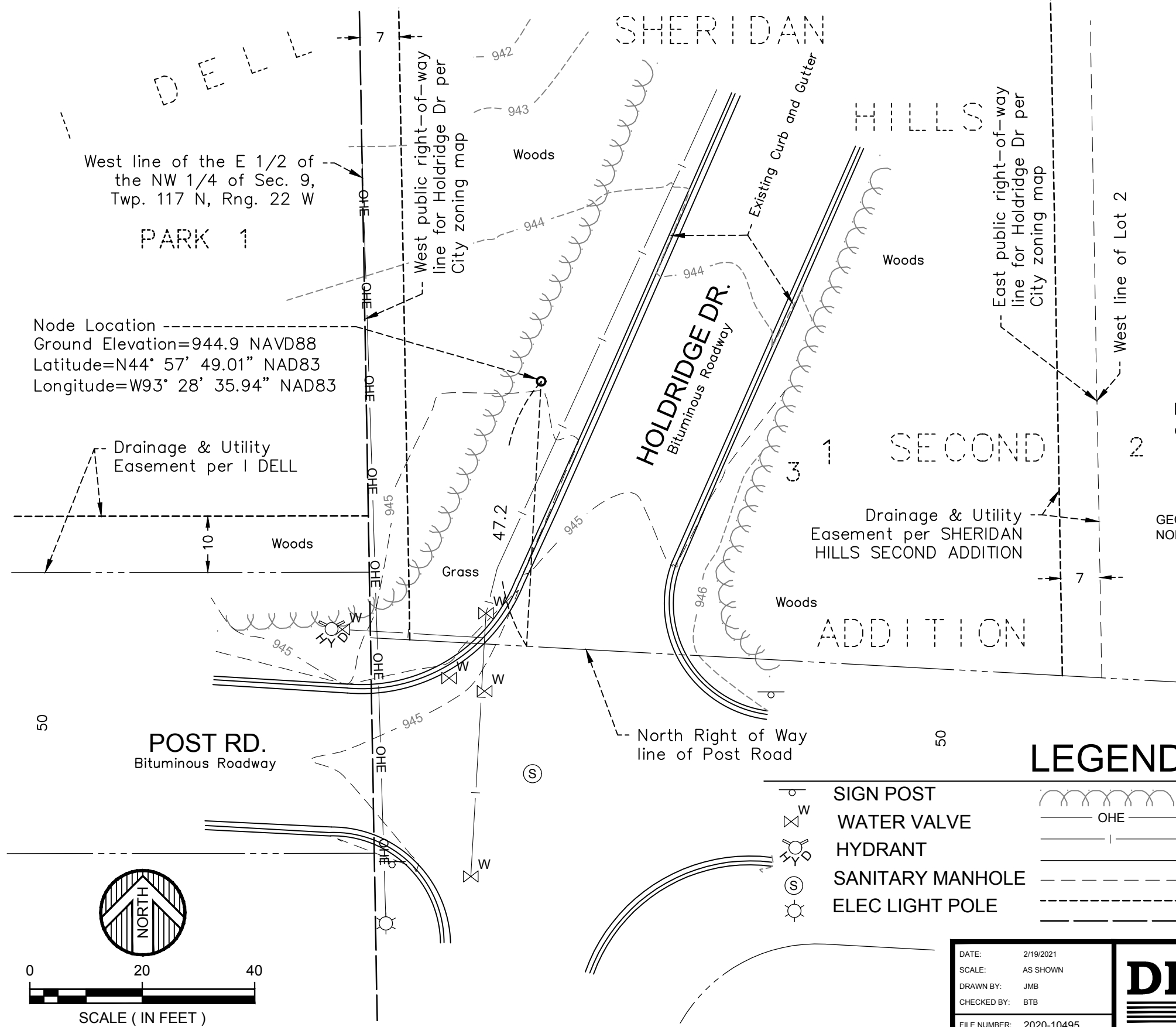


### Location Map

Project: Verizon Small Cell Wireless  
Location: Holdridge Drive and Post Road



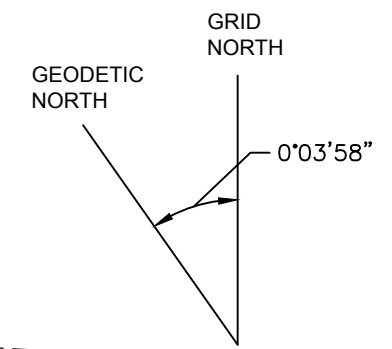
**SITE LOCATION SURVEY FOR:**  
**DESIGN 1**  
**SITE LOCATION: Post Rd. and Holdridge Dr. Minnetonka, MN**  
**SITE NAME: MIN BLAISE SC3**



NOTE: The Hennepin County tax records do not list a parcel ID or an owner for Lot 3, Block 1, SHERIDAN HILLS SECOND ADDITION.

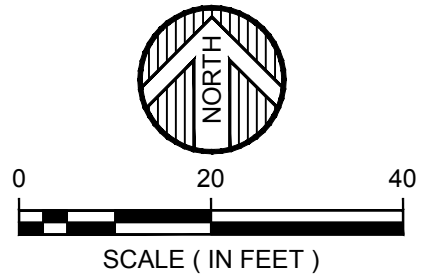
**SURVEYOR NOTE:**

- 1.) The orientation of the survey is based on the Hennepin County, MN Coordinate System, NAD83, 2011 Adj.
- 2.) No boundary work was performed in preparation of the exhibit. The right of way line depicted hereon is based on Hennepin County Resurvey coordinates and the plat SHERIDAN HILLS SECOND ADDITION.
- 3.) Existing Utilities, services and underground structures shown hereon were located either physically, from existing records made available to us or markings from GOPHER STATE ONE CALL Locate Request Ticket No. 200993413, dated April 8, 2020. Verification and location of all utilities should be obtained prior to any design, planning and excavation.
- 4.) The field work for this survey was performed on April 14, 2020.



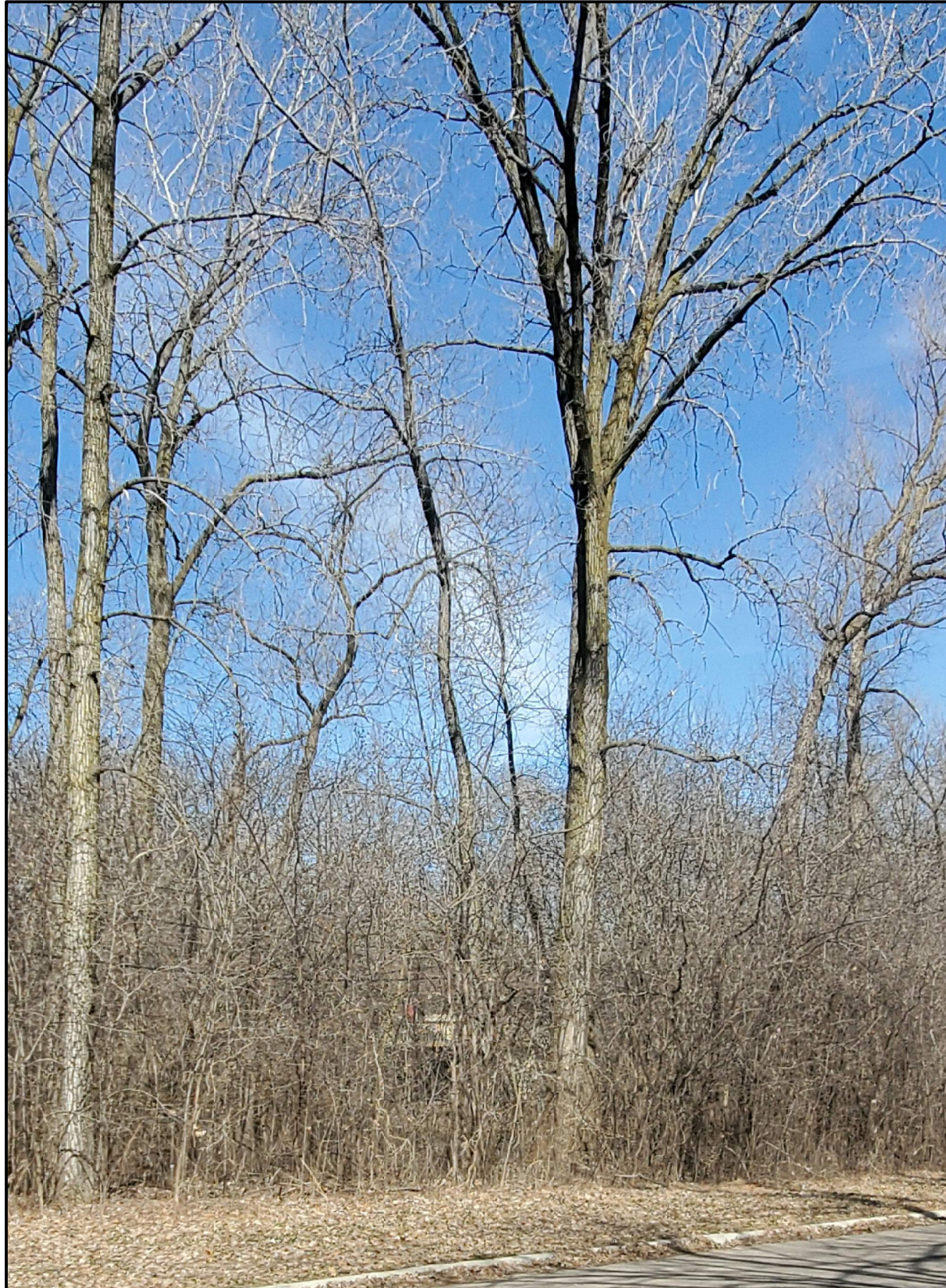
**LEGEND**

	SIGN POST		EDGE OF WOODS
	WATER VALVE		OVERHEAD ELEC
	HYDRANT		WATERMAIN
	SANITARY MANHOLE		RIGHT OF WAY LINE
	ELEC LIGHT POLE		LOT LINE
			EASEMENT LINE
			SIXTEENTH LINE



DATE: 2/19/2021  
 SCALE: AS SHOWN  
 DRAWN BY: JMB  
 CHECKED BY: BTB  
 FILE NUMBER: 2020-10495





1 EXISTING PHOTO  
SCALE: N/A



2 PROPOSED IMAGE  
SCALE: N/A

NOT FOR  
CONSTRUCTION

**DESIGN** 1

9973 VALLEY VIEW RD.  
EDEN PRAIRIE, MN 55344  
(952) 903-9299  
WWW.DESIGN1EP.COM

**verizon**

10801 BUSH LAKE ROAD  
BLOOMINGTON, MN 55438

PROJECT  
20181794769  
LOC. CODE: 492963

MIN  
BLAISE SC

SHEET CONTENTS:  
PHOTO SIMULATION

DRAWN BY:	MJS
DATE:	01/26/21
CHECKED BY:	TAB
v.1	01-27-21

PS-SC3

GENERAL SHEET INDEX	
SHEET	SHEET DESCRIPTION
TITLE SHEET	PROJECT INFORMATION, MAPS, DIRECTIONS, & SHEET INDEX
OVERALL	OVERALL SITE LOCATION MAP
SHEET 1	ELEVATION, ANTENNA & EQUIPMENT KEY
SHEET 2	MOUNTING DETAILS & PLANS
SHEET 3	EQUIPMENT DETAILS
SHEET 4 / 5	FIBER & POWER DETAILS, GROUNDING PLAN
SHEET 6	GENERAL NOTES
SC 3 - SC 4 & SURVEY	SITE SPECIFIC PLAN, UTILITY PLAN, & PHOTOS




# MIN BLAISE

## SC 3



10801 Bush Lake Rd  
Bloomington, MN 55438  
952.946.4694 voice



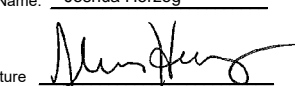
9973 VALLEY VIEW RD.  
EDEN PRAIRIE, MN 55344  
(952) 903-9299  
WWW.DESIGN1EP.COM



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

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.

Print Name: Joshua Herzog

Signature: 

Date: 01/27/2021 License # 42392

PROJECTS						PROJECT DESCRIPTION		
PROJECT NAME	SITE ADDRESS	COORDINATES	PROJECT NUMBER	LOCATION CODE	SHEET INDEX	WORK ITEM	SUPPLIED BY	INSTALLED BY
MIN BLAISE SC 3	15510 HOLDRIDGE DR	N44° 57' 49.01" (NAD83) W93° 28' 35.94" (NAD83)	20181794769	492963	SC 3, SURVEY	PROPOSED POLE	VERIZON	CONTRACTOR
MIN BLAISE SC 4	1818 LINNEN RD	N44° 57' 59.08" (NAD83) W93° 28' 09.50" (NAD83)	20181794770	492964	SC 4, SURVEY	VERIZON OWNED EQUIPMENT	VERIZON	CONTRACTOR
						CABLING	CONTRACTOR	CONTRACTOR
						RAYCAP BOX	VERIZON	CONTRACTOR
						HAND HOLE	FIBER PROVIDER	FIBER PROVIDER
						FIBER FROM FIBER HAND HOLE TO EQUIPMENT	CONTRACTOR	CONTRACTOR
						ELECTRICAL RUN	CONTRACTOR	CONTRACTOR
						ELECTRICAL RISER	SEE UTILITY PLAN	SEE UTILITY PLAN
						ELECTRICAL HAND HOLE	CONTRACTOR	CONTRACTOR
						ELECTRICAL METER	CONTRACTOR	CONTRACTOR
						POLE INFORMATION		
						EXISTING POLE TYPE: N/A	NEW POLE MATERIAL: ALUMINUM	PAINT CODE: SW 6006 (BLACK BEAN)
						EXISTING POLE FINISH: N/A	NEW POLE FINISH: PAINT	

STRUCTURAL #: 201237

CHECKED BY: \_\_\_\_\_ TAB

## MIN BLAISE

SC03

### DIRECTORY

**ARCHITECT:**  
DESIGN 1 ARCHITECTS LLC  
9973 VALLEY VIEW ROAD  
EDEN PRAIRIE, MN 55344  
PHONE: 952.903.9299

**ASSET OWNER:**  
VERIZON WIRELESS  
10801 BUSH LAKE ROAD  
BLOOMINGTON, MN 55403  
KATIE POSER 612.968.9077

**POWER PROVIDER:**  
XCEL ENERGY  
1518 CHESTNUT AVE  
MINNEAPOLIS, MN 55403  
CONTACT: DAN HAMANN  
PHONE: 952.380.2655

**VERIZON PROJECT MANAGER:**  
CONTACT: KATIE POSER  
PHONE: 612.968.9077  
EMAIL: katie.poser@verizonwireless.com

**VERIZON IMPLEMENTATION MANAGER:**  
CONTACT: PETE BLUTH  
PHONE: 952.380.7496  
EMAIL: peter.bluth@verizonwireless.com

**VERIZON CONSTRUCTION MANAGER:**  
CONTACT: JOHN HAUGEN  
PHONE: 612.290.9707  
EMAIL: cameron.conrad@verizonwireless.com

**ROW CONTACT:**  
299 WAYZATA BLVD W, WAYZATA, MN 55391  
CONTACT: JEN SCHUMANN  
PHONE: 952.404.5371  
EMAIL: jschumann@wayzata.org

**STRUCTURAL ENGINEER:**  
HERZOG ENGINEERING  
530 NORTH 3RD ST, SUITE 230  
MINNEAPOLIS, MN 55401  
CONTACT: JOSHUA HERZOG  
PHONE: 651-844-1234

- ### 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 MN, and the city of WAYZATA.
  - 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 directed to the Architect for clarification prior to fabrication and/or construction. Submit necessary shop drawings prior to fabrication for approval by the Architect. No information or details on these sheets may be used without the permission of the owner, or the architect.
  - Do not scale drawings!
  - Unless otherwise shown or noted, typical details shall be used where applicable.
  - Details shall be considered typical at similar conditions.
  - Safety measures: The contractor shall be solely and completely responsible for the conditions of the job site, including safety of the persons and property and for independent engineering reviews of these conditions. The Architect's or Engineers' 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 determine the division of work among sub-contractors.
  - The general contractor is responsible in obtaining necessary public and private underground utility locate services prior to start of excavating / construction.

### VERIZON DEPARTMENTAL APPROVALS

JOB TITLE	NAME	DATE
RF ENGINEER	CRISTOFER RUBIO RAMIREZ	7/28/2020
RE P.O.C	CONNOR OKANE	7/24/2020
CONSTRUCTION ENGINEER	JOHN HAUGEN	7/21/2020
EQUIPMENT ENGINEER	MIKE MAUKSTAD	7/21/2020

### ADDITIONAL APPROVALS

JOB TITLE	NAME	DATE

SUBMITTAL:

INITIAL:	DATE:	DESCRIPTION:
SWS	06-26-20	REV. A
NPR	07-20-20	REV. A.1
NPR	08-03-20	REV. 0
NPR	01-27-21	REV. 1

**STRUCTURAL ANALYSIS:**

DATE:	DESCRIPTION:

**RFDS:**

DATE:	
04-08-20	

PLOT DATE	01-27-21
SET TYPE	CONSTRUCTION / BID
SHEET TITLE	TITLE SHEET
SHEET NUMBER	TITLE

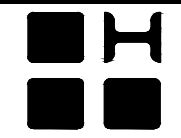


**verizon**<sup>v</sup>

10801 Bush Lake Rd  
Bloomington, MN 55438  
952.946.4694 voice

**DESIGN**<sup>1</sup>

9973 VALLEY VIEW RD.  
EDEN PRAIRIE, MN 55344  
(952) 903-9299  
WWW.DESIGN1EP.COM



**HERZOG**  
ENGINEERING LLC

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

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.

Print Name: Joshua Herzog

Signature *Joshua Herzog*

Date 01/27/2021 License # 42392

STRUCTURAL #: 201237

CHECKED BY: \_\_\_\_\_ TAB

**MIN BLAISE**

SC03

**SUBMITTAL:**

INITIAL:	DATE:	DESCRIPTION:
SWS	06-26-20	REV. A
NPR	07-20-20	REV. A.1
NPR	08-03-20	REV. 0
NPR	01-27-21	REV. 1

**STRUCTURAL ANALYSIS:**

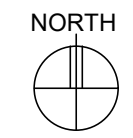
DATE:	DESCRIPTION:

**RFDS:**

DATE:	
04-08-20	

PLOT DATE	01-27-21
SET TYPE	CONSTRUCTION / BID
SHEET TITLE	OVERALL SITE LOCATIONS
SHEET NUMBER	GROUP MAP

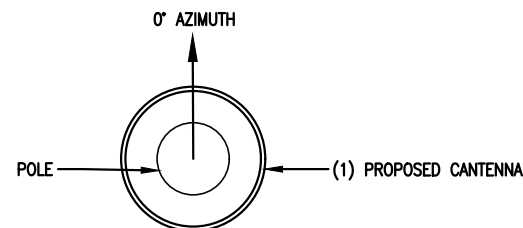
**A** GROUP LOCATION AERIAL MAP  
SCALE: N.T.S



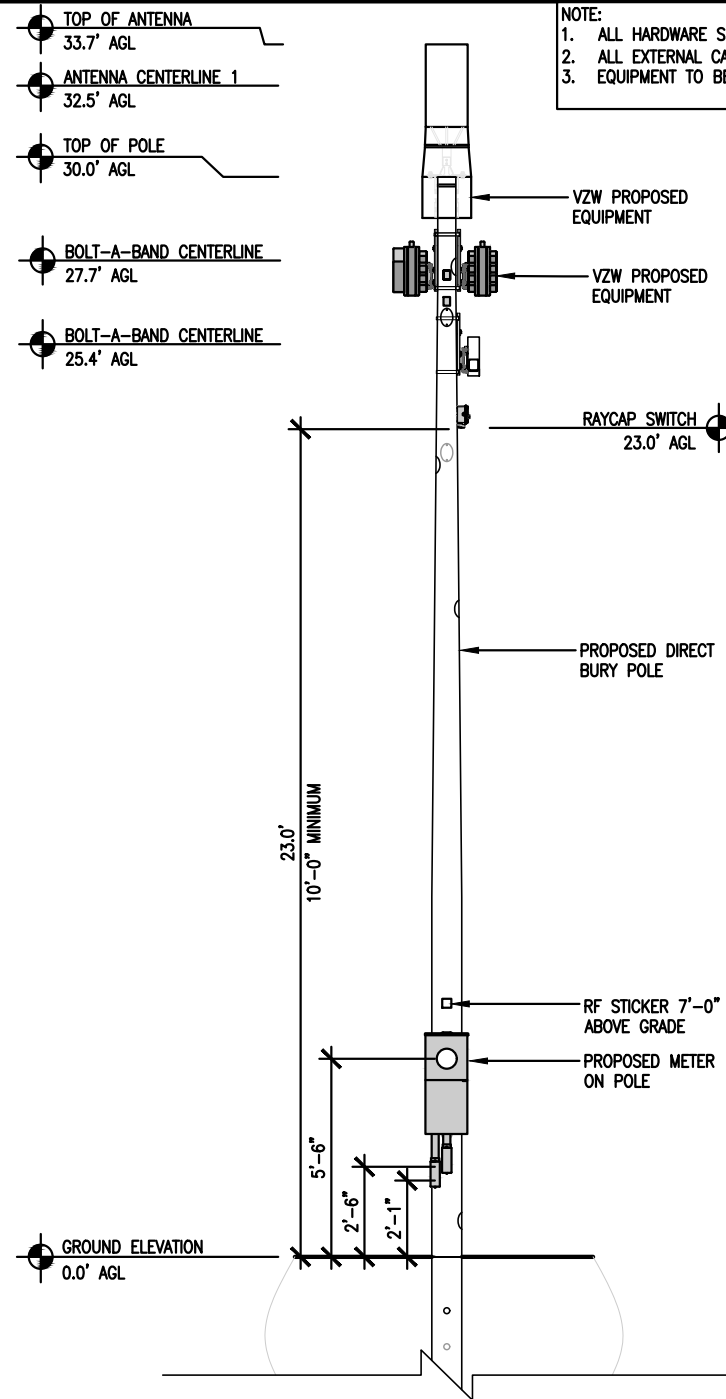
PROPOSED ANTENNA KEY														
NODE	QTY	MANUFACTURER	ANTENNA MODEL	AZIMUTH	ANTENNA HEIGHT	ANTENNA WIDTH	ANTENNA WEIGHT	ANTENNA TIP 1	ANTENNA CENTER 1	ANTENNA TIP 2	ANTENNA CENTER 2	ELEC DOWNTILT	MECH DOWNTILT	STATUS
SC 3	1	JMA	CX160MI236-1C	0°	24.1'	18.8"	15.0 LBS	33.7'	32.5'			0°	0°	PROPOSED
SC 4	1	JMA	CX160MI236-1C	0°	24.1'	18.8"	15.0 LBS	33.7'	32.5'			0°	0°	PROPOSED

PROPOSED EQUIPMENT KEY			
QTY. (PER SITE)	MANUFACTURER	MODEL	STATUS
1	RAYCAP	RSCAC-1333-PS-240	PROPOSED
1	ERICSSON	RRU-8843	PROPOSED
1	ERICSSON	RRU-4449	PROPOSED
2	ERICSSON	PSU-6302	PROPOSED
-	-	-	-
-	-	-	-
-	-	-	-

**A** ANTENNA AND EQUIPMENT KEY  
SCALE: N/A



**B** TYP. ANTENNA PLAN  
SCALE: 3/4" = 1'-0"



NOTE:  
1. ALL HARDWARE SHALL BE STAINLESS STEEL.  
2. ALL EXTERNAL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.  
3. EQUIPMENT TO BE PAINTED, SEE SHEET 6 PAINT SPEC 09 9000 PAINTING.

NOTE:  
THE VALMONT POLE WILL BE REQUIRED TO BE EMBEDDED A MINIMUM DISTANCE OF 12'-0" BELOW THE SURFACE GRADE. EXCAVATION SHALL BE SIZED SUCH THAT THE OUTSIDE DIAMETER OF THE EXCAVATED HOLE SHALL BE A MINIMUM OF 12" GREATER THAN THE DIAMETER OF THE POLE BUTT END. EXCAVATION TO BE TERMINATED 12" BELOW POLE BUTT END.  
BACKFILL MATERIAL TO BE GRADED AND WELL-COMPACTED AGGREGATE MATERIAL. 12" OF BACKFILL MATERIAL SHALL BE PLACED AND WELL-COMPACTED AT THE BOTTOM OF THE EXCAVATION. BACKFILL MATERIAL SHALL BE PLACED AND WELL-COMPACTED IN LIFTS NOT TO EXCEED 6" IN THICKNESS. BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR. BACKFILL SHALL BE WELL BANKED AND TAMPED AROUND THE POLE TO A HEIGHT OF 6" ABOVE GRADE.  
PRESUMPTIVE SOIL CONDITIONS HAVE BEEN ASSUMED AS SITE SOIL CONDITIONS OR GEOTECHNICAL REPORT HAVE NOT BEEN PROVIDED FOR REVIEW AND ANALYSIS. OUR DESIGN HAS ASSUMED THE EXISTING SOILS AT THE SITE CONFORM TO 2015 MN BUILDING CODE - TABLE 1806.2, CLASS OF MATERIALS 5.) CLAY, SANDY CLAY, SILTY CLAY  
CLAYEY SILT SILT AND SANDY SILT ( CL, ML, MH, AND CH) WITH THE FOLLOWING PRESUMED LOAD BEARING VALUES:  
VERTICAL FOUNDATION PRESSURE = 1,500 PSF  
LATERAL BEARING PRESSURE = 100 PSF/FT BELOW NATURAL GRADE  
MINIMUM TOP 4' OF BACKFILL AROUND POLES SHALL BE TOPSOIL AND ALL DISTURBED AREAS MUST BE RESTORED WITH SEED OR SOD (SEE SHEET 6, SITE WORK, SPEC 02 8500)  
IF BETTER SOILS ARE PRESENT AT THE SITE, THE CURRENT DESIGN IS SUFFICIENT. HOWEVER, IF WORSE SOILS ARE PRESENT, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY HERZOG ENGINEERING, LLC (612-844-1234) AS A REDISIGN MAY BE NECESSARY.

**C** NEW POLE ELEVATION  
SCALE: 3/16" = 1'-0"

**verizon**

10801 Bush Lake Rd  
Bloomington, MN 55438  
952.946.4694 voice

**DESIGN**

9973 VALLEY VIEW RD.  
EDEN PRAIRIE, MN 55344  
(952) 903-9299  
WWW.DESIGN1EP.COM

**HERZOG**  
ENGINEERING LLC

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

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.

Print Name: Joshua Herzog

Signature: *Joshua Herzog*

Date: 01/27/2021 License #: 42392

STRUCTURAL #: 201237

CHECKED BY: TAB

MIN BLAISE

SC03

SUBMITTAL:

INITIAL:	DATE:	DESCRIPTION:
SWS	06-26-20	REV. A
NPR	07-20-20	REV. A.1
NPR	08-03-20	REV. 0
NPR	01-27-21	REV. 1

STRUCTURAL ANALYSIS:

DATE: DESCRIPTION:

RFDS:

DATE: 04-08-20

PLOT DATE 01-27-21

SET TYPE CONSTRUCTION / BID

SHEET TITLE ELEVATION & ANTENNA PLAN

SHEET NUMBER SHEET 1



10801 Bush Lake Rd  
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952.946.4694 voice



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**HERZOG**  
ENGINEERING LLC

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Signature

Date 01/27/2021 License # 42392

STRUCTURAL #: 201237

CHECKED BY: TAB

MIN BLAISE

SC03

SUBMITTAL:

INITIAL:	DATE:	DESCRIPTION:
SWS	06-26-20	REV. A
NPR	07-20-20	REV. A.1
NPR	08-03-20	REV. 0
NPR	01-27-21	REV. 1

STRUCTURAL ANALYSIS:

DATE: DESCRIPTION:

RFDS:

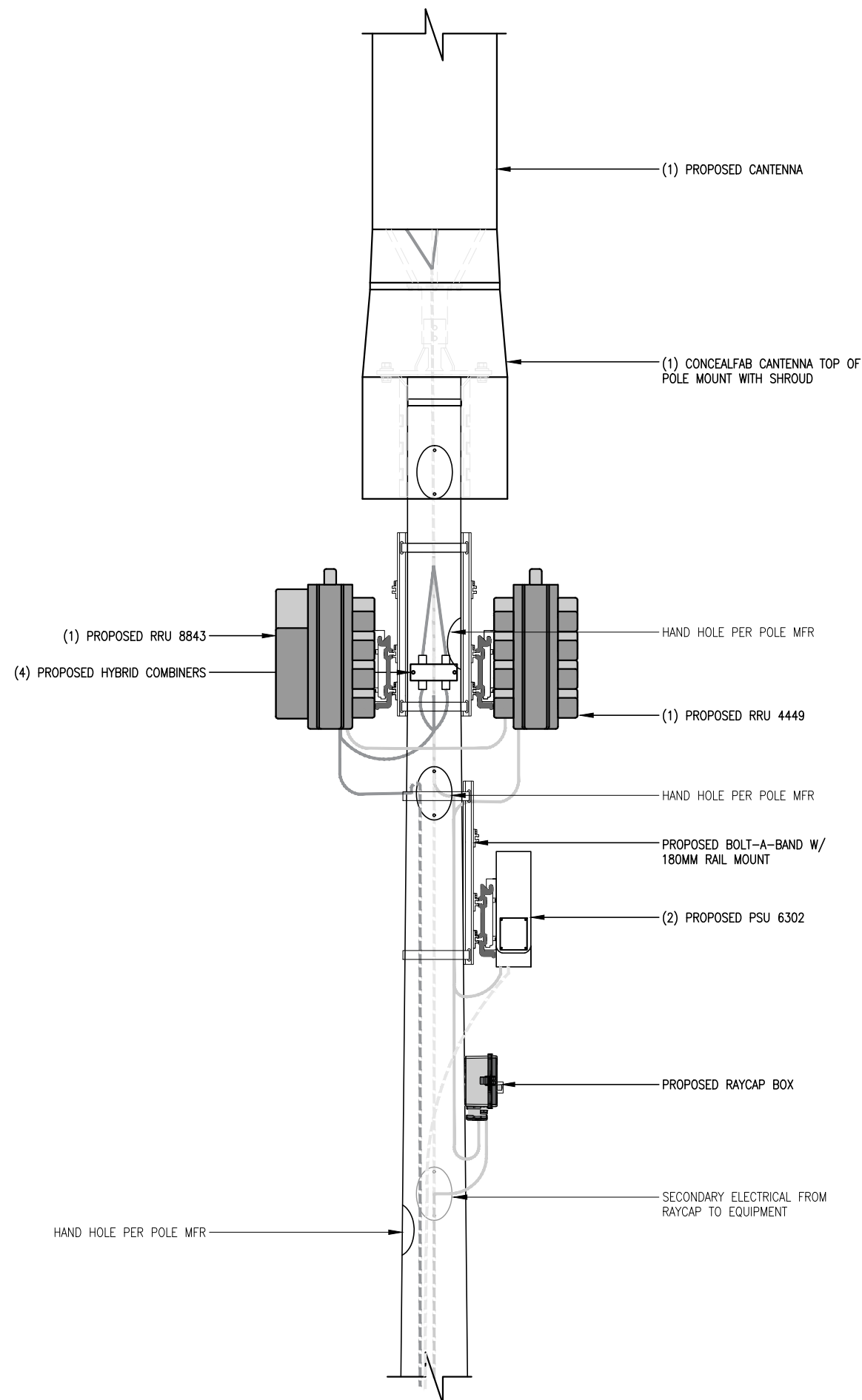
DATE: 04-08-20

PLOT DATE 01-27-21

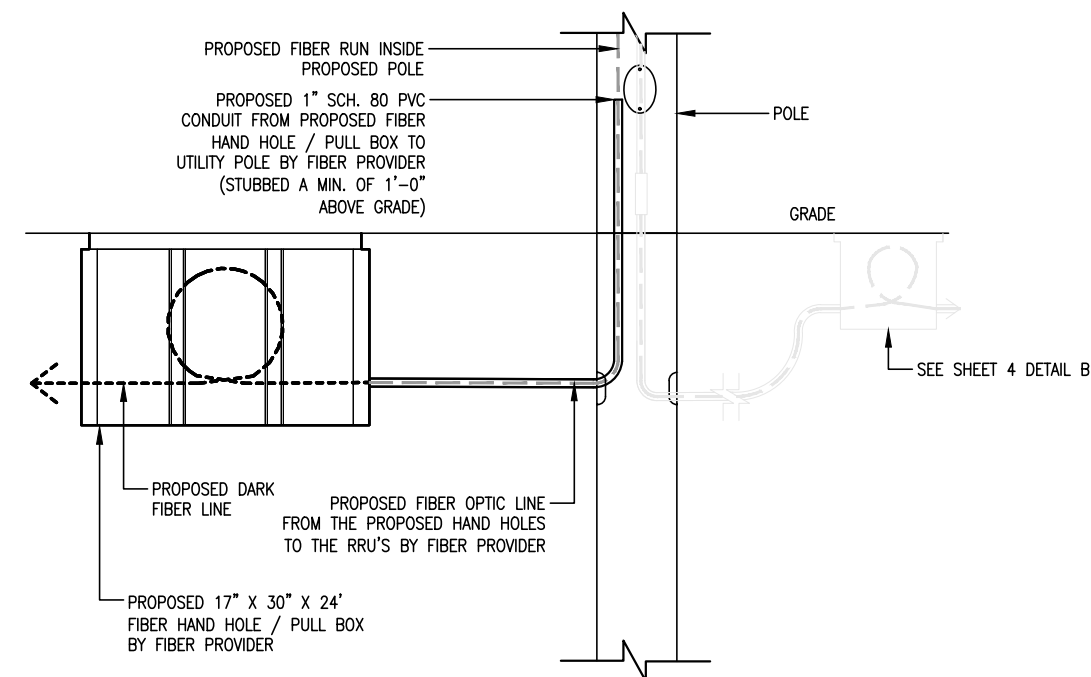
SET TYPE CONSTRUCTION / BID

SHEET TITLE MOUNTING DETAIL & PLANS

SHEET NUMBER SHEET 2



**A** ANTENNA AND EQUIPMENT MOUNTING DETAIL  
SCALE: 3/4" = 1'-0"



**B** FIBER HAND HOLE DETAIL  
SCALE: 1/2" = 1'-0"

**verizon**

10801 Bush Lake Rd  
Bloomington, MN 55438  
952.946.4694 voice

**DESIGN** 1

9973 VALLEY VIEW RD.  
EDEN PRAIRIE, MN 55344  
(952) 903-9299  
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**HERZOG**  
ENGINEERING LLC

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

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Print Name: Joshua Herzog

Signature *Joshua Herzog*

Date 01/27/2021 License # 42392

STRUCTURAL #: 201237

CHECKED BY: \_\_\_\_\_ TAB

**MIN BLAISE**

SC03

SUBMITTAL:

INITIAL:	DATE:	DESCRIPTION:
SWS	06-26-20	REV. A
NPR	07-20-20	REV. A.1
NPR	08-03-20	REV. 0
NPR	01-27-21	REV. 1

STRUCTURAL ANALYSIS:

DATE:	DESCRIPTION:

RFDS:

DATE:	
	04-08-20

PLOT DATE 01-27-21

SET TYPE CONSTRUCTION / BID

SHEET TITLE EQUIPMENT DETAILS

SHEET NUMBER **SHEET 3**

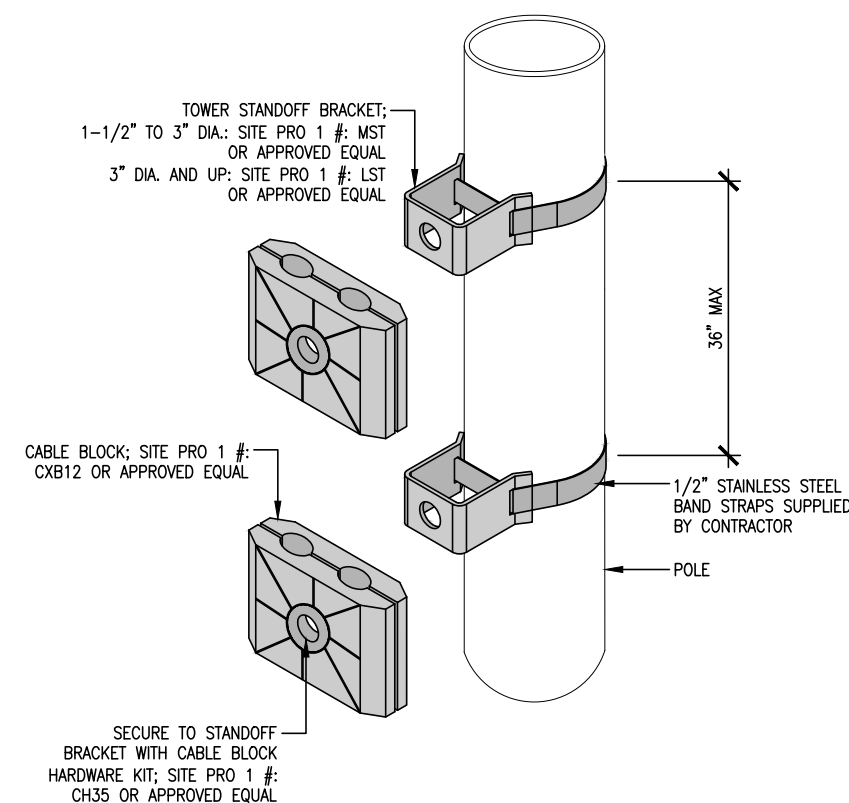
**TUFF-SEAL BUSHING LIST**

PART #	BUSHING SPEC	# OF HOLES	Ø OF EACH HOLE	HUB SIZE
RSR-500-2	SRB-500-2	2	.500/.375	1 1/2"
RSR-508-2	SRB-508-2	2	0.5	1 1/2"
RSR-510-2	SRB-510-2	2	0.625	1 1/2"
RSR-506-3	SRB-506-3	3	0.375	1 1/2"

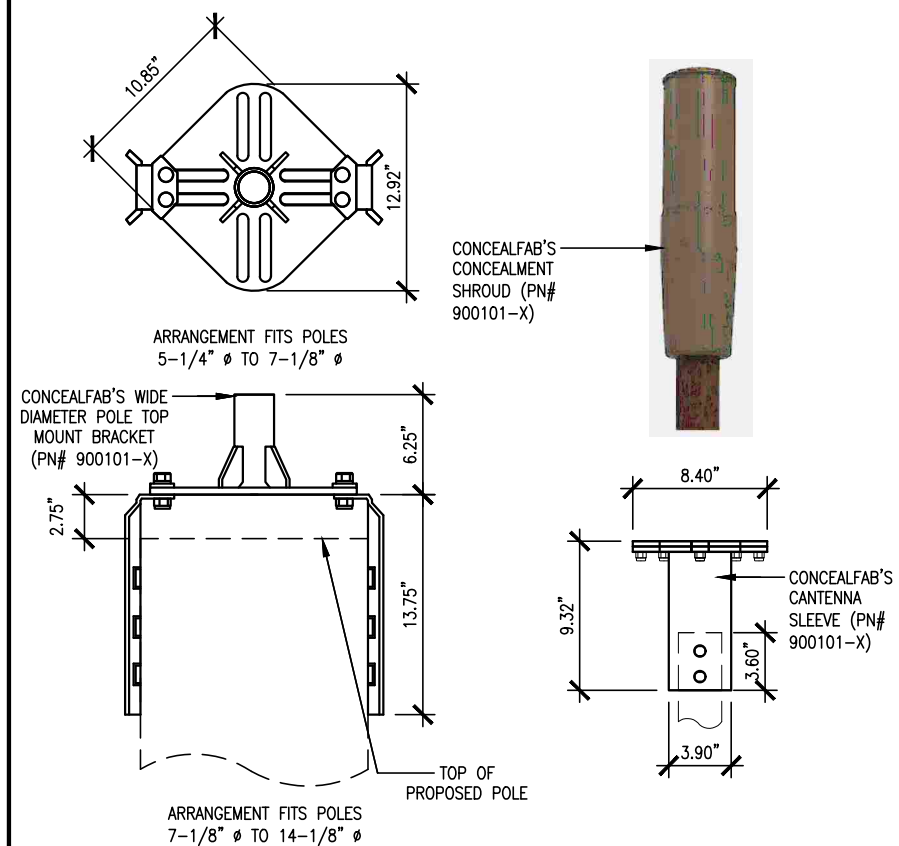
**A** TUFF-SEAL BUSHING  
SCALE: N.T.S



**B** RF WARNING SIGNS @ 7' AGL  
SCALE: N.T.S



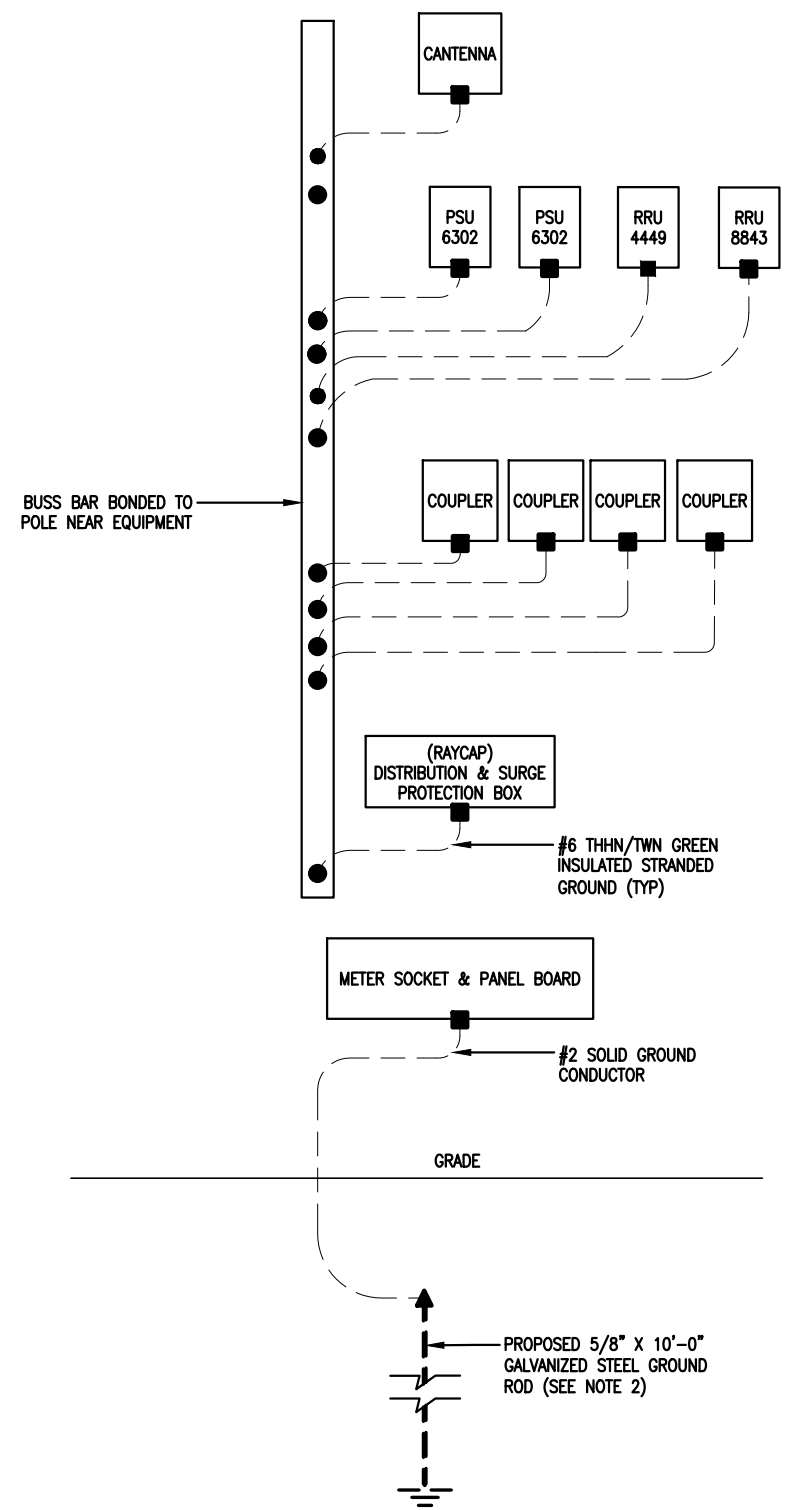
**C** TYP. CABLE MANAGEMENT  
SCALE: N.T.S



**D** MOUNTING DETAIL  
SCALE: 1" = 1'-0"

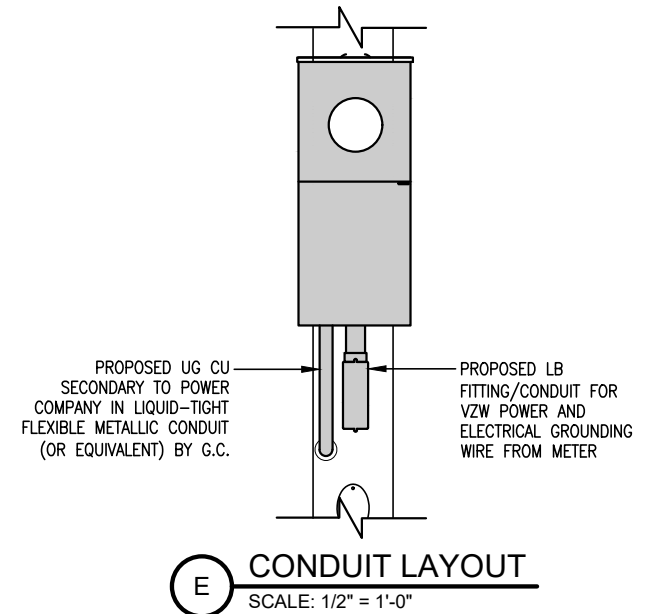


**LEGEND:**  
 ▲ EXOTHERMIC CONNECTION  
 ■ MECHANICAL CONNECTION  
 ● COMPRESSION CONNECTION

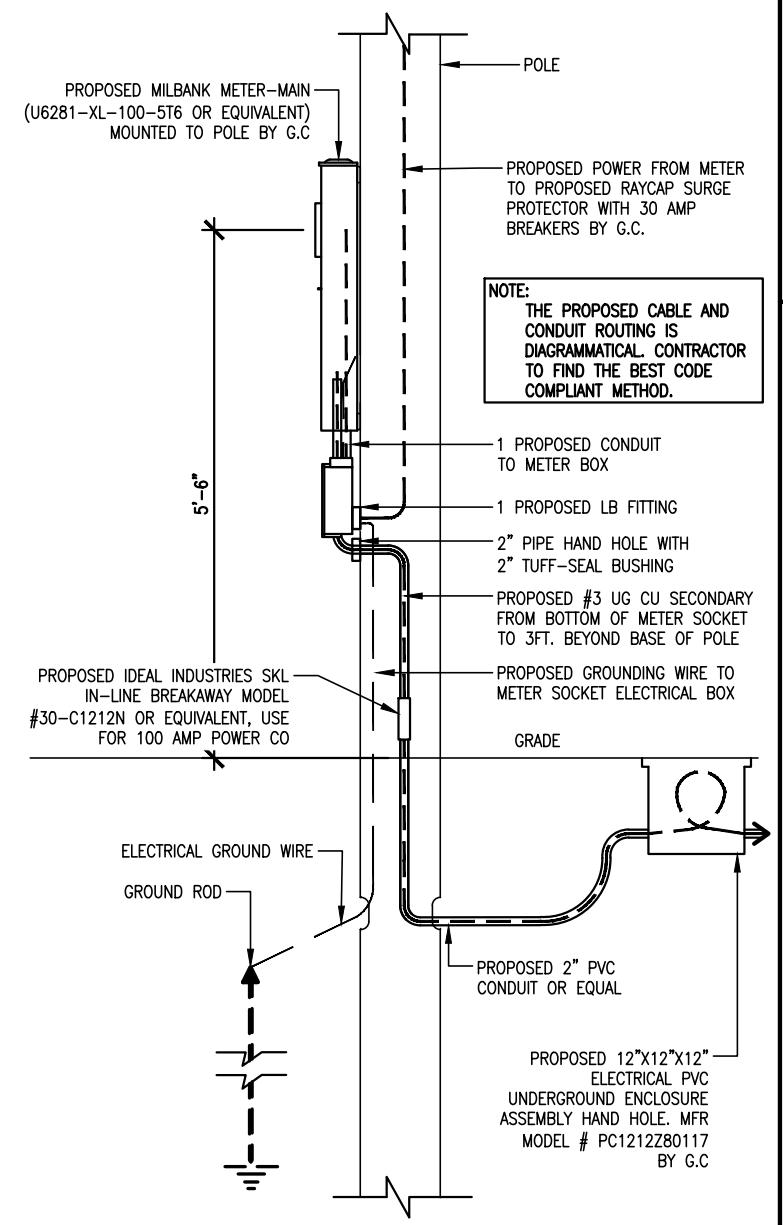


**NOTES:**  
 1. GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWINGS FOR EQUIPMENT AND ANTENNA LOCATIONS.  
 2. DRIVE GROUND ROD TO A MINIMUM DEPTH OF 30" OR 6" BELOW FROST LINE.  
 3. DIRECT BURIED POLE TO BE USED AS GROUNDING MEDIUM.

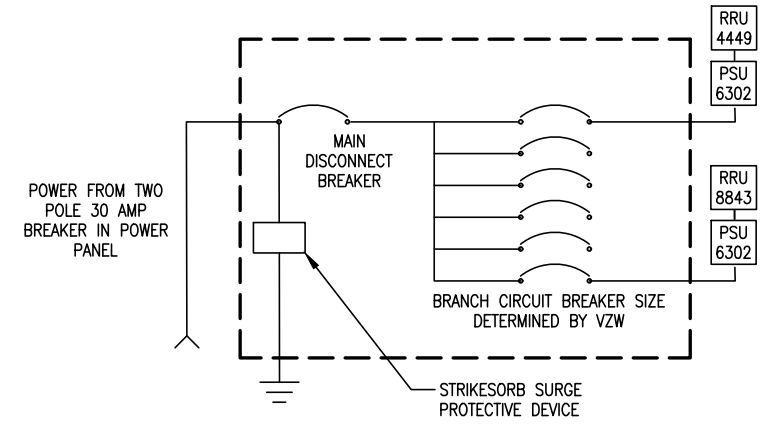
**A** GROUNDING DIAGRAM  
 SCALE: N.T.S



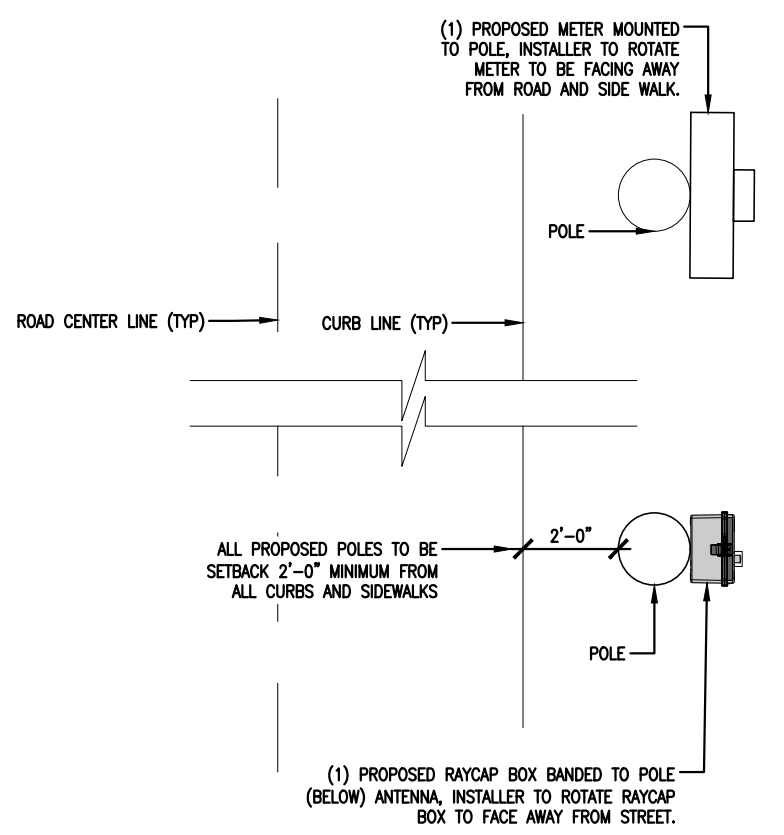
**E** CONDUIT LAYOUT  
 SCALE: 1/2" = 1'-0"



**B** METER MOUNTING DETAIL / POWER  
 SCALE: 1/2" = 1'-0"



**D** TYPICAL RAYCAP ONE-LINE DIAGRAM  
 SCALE: N/A



**C** RAYCAP AND METER ORIENTATION  
 SCALE: N.T.S

**verizon**  
 10801 Bush Lake Rd  
 Bloomington, MN 55438  
 952.946.4694 voice

**DESIGN 1**  
 9973 VALLEY VIEW RD.  
 EDEN PRAIRIE, MN 55344  
 (952) 903-9299  
 WWW.DESIGN1EP.COM

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: *Ali Abedini*  
 Name: Ali Abedini  
 Date: 01/27/2021  
 License Number: 56614

CHECKED BY: TAB

**MIN BLAISE**  
 SC03

**SUBMITTAL:**

INITIAL:	DATE:	DESCRIPTION:
SWS	06-26-20	REV. A
NPR	07-20-20	REV. A.1
NPR	08-03-20	REV. 0
NPR	01-27-21	REV. 1

**STRUCTURAL ANALYSIS:**

DATE:	DESCRIPTION:

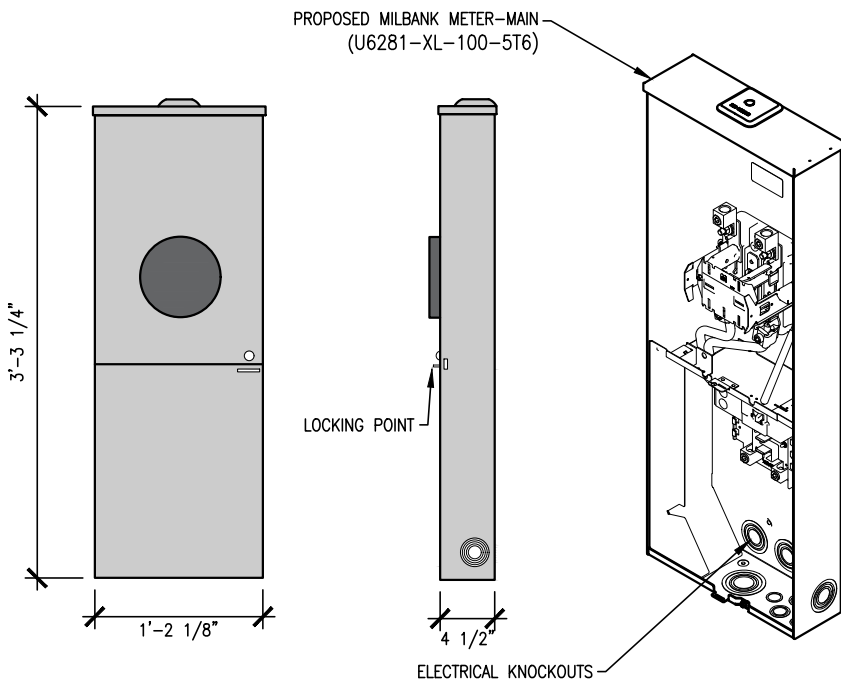
**RFDS:**

DATE:	

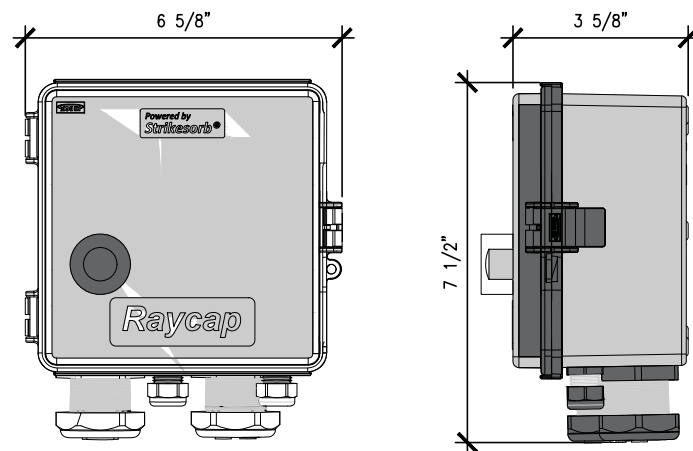
PLOT DATE	01-27-21
SET TYPE	CONSTRUCTION / BID
SHEET TITLE	ELECTRICAL, FIBER & GROUNDING DETAILS
SHEET NUMBER	SHEET 4

MANUFACTURE: RAYCAP  
MODEL NO: RSCAC-1333-PS-240

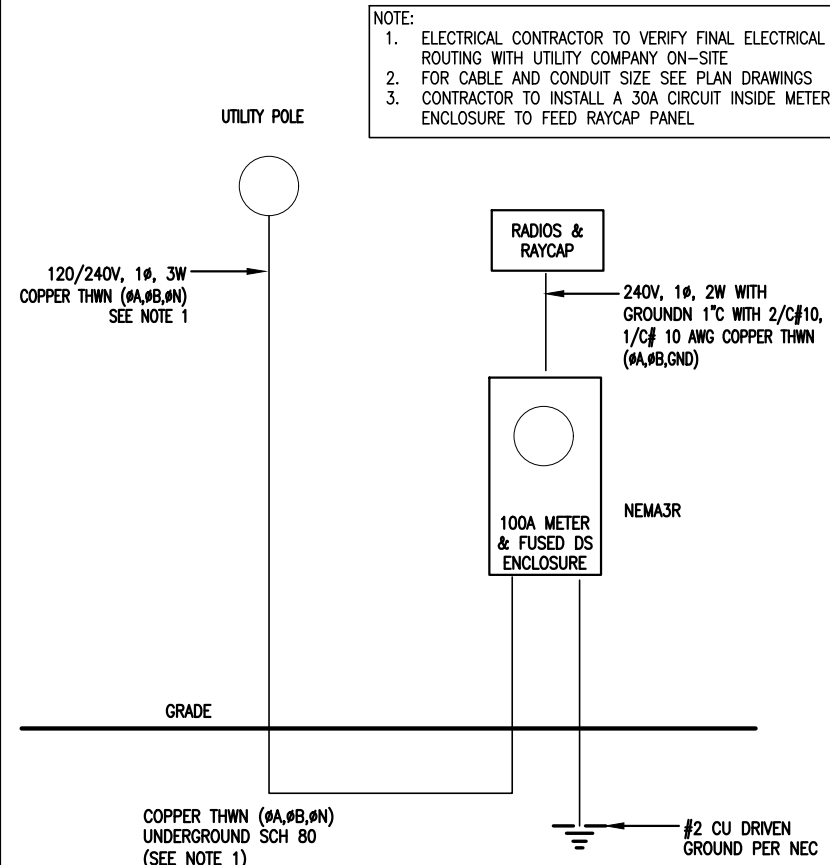
NOTE:  
RAYCAP INSTALLATION & BUILD QUALITY AS PER MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS. SEE MANUFACTURER'S INFORMATION PACKET FOR MORE INFORMATION.



A METER BOX DETAIL  
SCALE: N.T.S



B RAYCAP DETAIL  
SCALE: 3" = 1'-0"



C ONE LINE RISER DIAGRAM  
SCALE: N.T.S

verizon

10801 Bush Lake Rd  
Bloomington, MN 55438  
952.946.4694 voice

DESIGN 1

9973 VALLEY VIEW RD.  
EDEN PRAIRIE, MN 55344  
(952) 903-9299  
WWW.DESIGN1EP.COM

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: *Ali Abedini*

Name: Ali Abedini

Date: 01/27/2021

License Number: 56614

CHECKED BY: TAB

MIN BLAISE

SC03

SUBMITTAL:

INITIAL:	DATE:	DESCRIPTION:
SWS	06-26-20	REV. A
NPR	07-20-20	REV. A.1
NPR	08-03-20	REV. 0
NPR	01-27-21	REV. 1

STRUCTURAL ANALYSIS:

DATE: DESCRIPTION:

RFDS:

DATE: 04-08-20

PLOT DATE 01-27-21

SET TYPE CONSTRUCTION / BID

SHEET TITLE ELECTRICAL, FIBER & GROUNDING DETAILS

SHEET NUMBER SHEET 5

ELECTRICAL LOAD ANALYSIS PANEL

VOLTAGE: 120/240 V -1PH OCCUPANCY: TELECOMMUNICATION TOWER

DESCRIPTION OF LOAD	LOAD	AMPS AT 240V 1 Ø			
		Ø A	Ø B	Ø C	Ø N
4449 POWER X 1.25 =	1552	6.5	6.5	-	-
8843 POWER X 1.25 =	1560	6.5	6.5	-	-
TOTAL CONNECTED LOAD =		13	13	-	-
SERVICE AMPACITY		100	100	-	100

NOTE:

1. FIELD VERIFY LOAD PRIOR TO INSTALLING WIRE, CONDUIT, ETC.
2. ALL LOADS REQUIRE APPROPRIATE GROUND WIRE.
3. ALL CONDUCTORS SHALL BE COPPER UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL INSTALL FEEDERS BASED ON THE OVER CURRENT DEVICE RATINGS.
5. ABOVE GROUND CONDUIT SHALL BE RIGID EMT OR IMC CONDUIT OR BETTER.
6. CONTRACTOR SHALL INSTALL A MINIMUM 2"x3" LABEL IN BLUE LETTERING ON A CONTRASTING DATE OF CALCULATION FOR AVAILABLE SHORT CIRCUIT CURRENT.
7. ALL THE INSTALLED ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES OR EQUIPMENT SHALL BE IN FULL COMPLIANCE WITH STATE OF MINNESOTA RULES AND OTHER APPLICABLE CODES. THE MARKER'S NAME, TRADEMARK OR OTHER IDENTIFICATION SYMBOL SHALL BE PLACED ON ALL THE MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES AND EQUIPMENT. ALL THE INSTALLED ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED AND LABEL FOR INTENDED USE AND SHALL BE INCLUDED IN A LIST PUBLISHED BY APPROVED AGENCY.
8. SERVICE DISCONNECT AND METERING LOCATION SHALL BE COORDINATED WITH VERIZON AND XCEL ENERGY.
9. ALL UNDERGROUND CABLE SHALL BE BURIED 24" MINIMUM UNDERGROUND. IT SHALL BE ROUTED IN MINIMUM PVC SCH 80 CONDUIT.
10. CONTRACTOR TO PROVIDE HAND HOLE/PULL BOX TO PROTECT CABLE I.E. STREET CROSSING, LONG RUN, CABLE DIRECTION CHANGE MORE THAN 270 DEGREE.
11. ALL WORK SHALL MEET LATEST ADOPTED NEC AND OTHER NATIONAL AND LOCAL CODES.
12. ALL CABLE AND CONDUIT ROUTING IS SHOWN DIAGRAMMATICALLY. CONTRACTOR TO FIND THE BEST CODE COMPLIANT METHOD AND COORDINATE IT WITH VZW, CITY AND UTILITY.

**GENERAL CONDITIONS**

**00 0001 PERMITS**

Construction Permit shall be acquired by, or in the name of, Verizon Wireless, to be hereinafter referred to as the OWNER. Other permits shall be acquired by the Contractor.

**00 0002 SURVEY FEES**

Survey shall be furnished by the Architect. Layout Staking shall be coordinated with the Surveyor per "Request For Quote", (RFQ).

**01 0010 INSURANCE & BONDS**

Contractor is to furnish Insurance certificates for themselves and subcontractors. Contractor will provide any required Bonding. Contractor agrees to warranty the project for (1) one year after completion.

**01 0400 SUPERVISION & COORDINATION**

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

**01 0600 TESTING**

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

**01 2000 MEETINGS**

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

**01 5100 TEMPORARY UTILITIES**

Contractor shall maintain the job site in a clean and orderly fashion, providing temporary sanitary facilities, and waste disposal.

**01 5300 EQUIPMENT RENTAL**

Contractor shall furnish equipment necessary to expedite work.

**01 5900 FIELD OFFICES & SHEDS**

Contractor shall provide security (fence area or trailer module) for tools and materials that remain overnight on site.

**01 7000 CLEAN UP & CLOSE OUT**

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

**01 8000 TRUCKS & MILEAGE**

Contractor shall provide transportation for their own personnel.

**01 8300 TRAVEL TIME & PER DIEM**

Contractor shall provide room and board for their own personnel, and reasonable time for traveling to & from job site.

**01 9200 TAXES**

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

**SITework**

**02 1000 SITE PREPARATION**

N/A

**02 1100 ROAD IMPROVEMENT & CONSTRUCTION**

N/A

**02 2000 EARTHWORK & EXCAVATION**

N/A

**02 5000 PAVING & SURFACING**

Existing bituminous and concrete surfaces damaged during the construction process must be returned to pre construction condition or better. Coordinate with owner and architect.

**02 7800 POWER TO SITE**

Contractor shall coordinate the electrical service to the RRU's with the Utility Provider. Contractor to supply redlined drawings of power route if changed at the time of construction in the field.

**02 7900 TELCO TO SITE**

Contractor shall provide 2" schedule 40 PVC conduit, (schedule 80 PVC under roads and drives) with 'large sweep' elbows & pull string for TELCO service as noted on plans. Cable to be fiber optic lines, source and provider T.B.D.

**02 8000 SITE IMPROVEMENTS**

N/A

**02 8001 FENCING**

N/A

**02 8500 IRRIGATION SYSTEMS**

Contractor shall add to/re-route existing irrigation system as necessary for new construction. Contractor shall provide temporary irrigation of new seed or sod, to be maintained so it survives 1 year after planting.

**02 9000 LANDSCAPING**

Contractor to restore turf areas damaged by construction to preconstruction condition or better.

Contractor shall protect existing landscape elements that are not in the Scope of Work. Reasonable precautions shall be taken to assure the health of existing trees and shrubbery. If conflicts arise regarding the location of root systems, branch lines, etc., the Architect must be contacted prior to performing Work that may cause damage. Damage resulting from disregard of this Article shall be compensated by the Responsible Party and at a cost to be determined by the Property Owner, Architect, and Owner. Contractor shall furnish and install new seed or sod.

Watering shall be as described in 02 8500.

**CONCRETE**

**03 1000 CONCRETE FORM WORK**

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

**MASONRY**

N/A

**METALS**

**05 0000 METALS**

Contractor will furnish and install structural and fabricated steel items not specifically furnished by Owner, and install Owner-furnished items. Structural steel shall be fabricated and erected per AISC specifications. Welding shall conform to AWS standards. Field welding shall be as shown on Shop Drawings, performed by AWS Certified Welders, and inspected as prescribed by the Structural Engineer. Steel shall be ASTM A992 OR A36, and 3/4" field bolts shall be A325. Temporary erecting bolts, clip hangers, and bracing shall be furnished by Contractor. Fabrications shall be shop welded if possible, and galvanized before delivery to site. Structural steel, and miscellaneous iron and steel, shall be hot dipped galvanized per ASTM A123 thickness grade 55. Fabricated iron and steel hardware shall be hot dipped galvanized per ASTM A153. Repair of damaged or uncoated galvanized surfaces shall be per ASTM A780.

**WOOD & PLASTICS**

N/A

**THERMAL & MOISTURE**

N/A

**DOORS AND HARDWARE**

N/A

**FINISHES**

**09 9000 PAINTING**

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

Contractor to obtain Lessor and Architect approvals of all swatches prior to application of paint:

\* Contractor to paint non 5G antennas, RRU's, mounts, and related equipment SW 6006 (BLACK BEAN). See SHEET 2 for 5G Wrap.

**SPECIAL CONSTRUCTION**

**13 1260 CABLE BRIDGE, CANOPY**

N/A

**13 1400 ANTENNA INSTALL**

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

**13 3423 TRANSPORT AND SET ANTENNAS / EQUIPMENT**

Contractor shall provide crane(s) and/or truck for transporting, setting antennas and related equipment on pole.

**13 3613 ANTENNA MOUNTS**

Contractor to install antenna mounts per manufacturers specifications.

**13 5000 CONCEALMENT FILM**

Contractor to furnish the antennas and equipment with Concealment Film as indicated in the drawings. Concealment Film to be 3M "Envision Print Wrap Films 480mC". Concealment film to be mirror-like, solid-color or custom-pattern as indicated in the drawings. Printing to be performed by a 3M MCS Certified graphics manufacturer. Printed concealment film to be covered with 3M "Anti-Graffiti Wrap Matte Overlamine 8590M". Concealment film to be installed on antennas and equipment to the extents indicated in the drawings and shall exclude heat-sink "fins". Installation of the overlaminated, printed concealment film onto antennas and equipment to be by a

trained 3M "Preferred", "Endorsed" or "Certified" installer or graphic installation company. For procuring the proper 3M concealment film with the desired color/pattern and to find local certified installers contact ConcealFab at (719) 599-3400 or sales@concealfab.com.

\*Solid color to be Sherwin Williams SW 6006 (BLACK BEAN), for color conversion to RGB and Hex Values see https://www.sherwin-williams.com/home-builders/color/tools/downloadable-color-palettes.

**13 RF SIGNAGE**

Contractor to install at minimum 2 identical "RF WARNING" stickers at approximately 3 feet below the lowest attached Verizon owned equipment, 180' apart from each other.

**MECHANICAL**

**15 4000 PLUMBING**

N/A

**15 5000 HVAC**

N/A

**ELECTRIC**

**16 5000 LIGHTING AND ELECTRICAL**

SEE SHEET 5 & 6 FOR DETAILS.

**16 6000 GROUNDING**

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

**SCOPE OF WORK:**

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

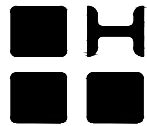
SITE PREPARATION  
INSTALL ANTENNAS/RRU's  
POWER/FIBER TO RRU's  
SITE GROUNDING



10801 Bush Lake Rd  
Bloomington, MN 55438  
952.946.4694 voice



9973 VALLEY VIEW RD.  
EDEN PRAIRIE, MN 55344  
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WWW.DESIGN1EP.COM



**HERZOG**  
ENGINEERING LLC

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

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.

Print Name: Joshua Herzog

Signature

Date 01/27/2021 License # 42392

STRUCTURAL #: 201237

CHECKED BY: TAB

**MIN BLAISE**

SC03

**SUBMITTAL:**

INITIAL:	DATE:	DESCRIPTION:
SWS	06-26-20	REV. A
NPR	07-20-20	REV. A.1
NPR	08-03-20	REV. 0
NPR	01-27-21	REV. 1

**STRUCTURAL ANALYSIS:**

DATE:	DESCRIPTION:

**RFDS:**

DATE:	
	04-08-20

PLOT DATE	01-27-21
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SET TYPE	CONSTRUCTION / BID
----------	--------------------

SHEET TITLE	GENERAL NOTES
-------------	---------------

SHEET NUMBER	<b>SHEET 6</b>
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NOTE:  
 1. CONTRACTOR TO REQUEST ONE CALL PRIOR TO CONSTRUCTION.  
 2. CONTRACTOR TO ACQUIRE ALL PERMITS PERTAINING TO UNDERGROUND ROW WORK NECESSARY FOR PROPOSED POWER ROUT & VZW EQUIPMENT PRIOR TO REMOVALS & INSTALLATIONS.



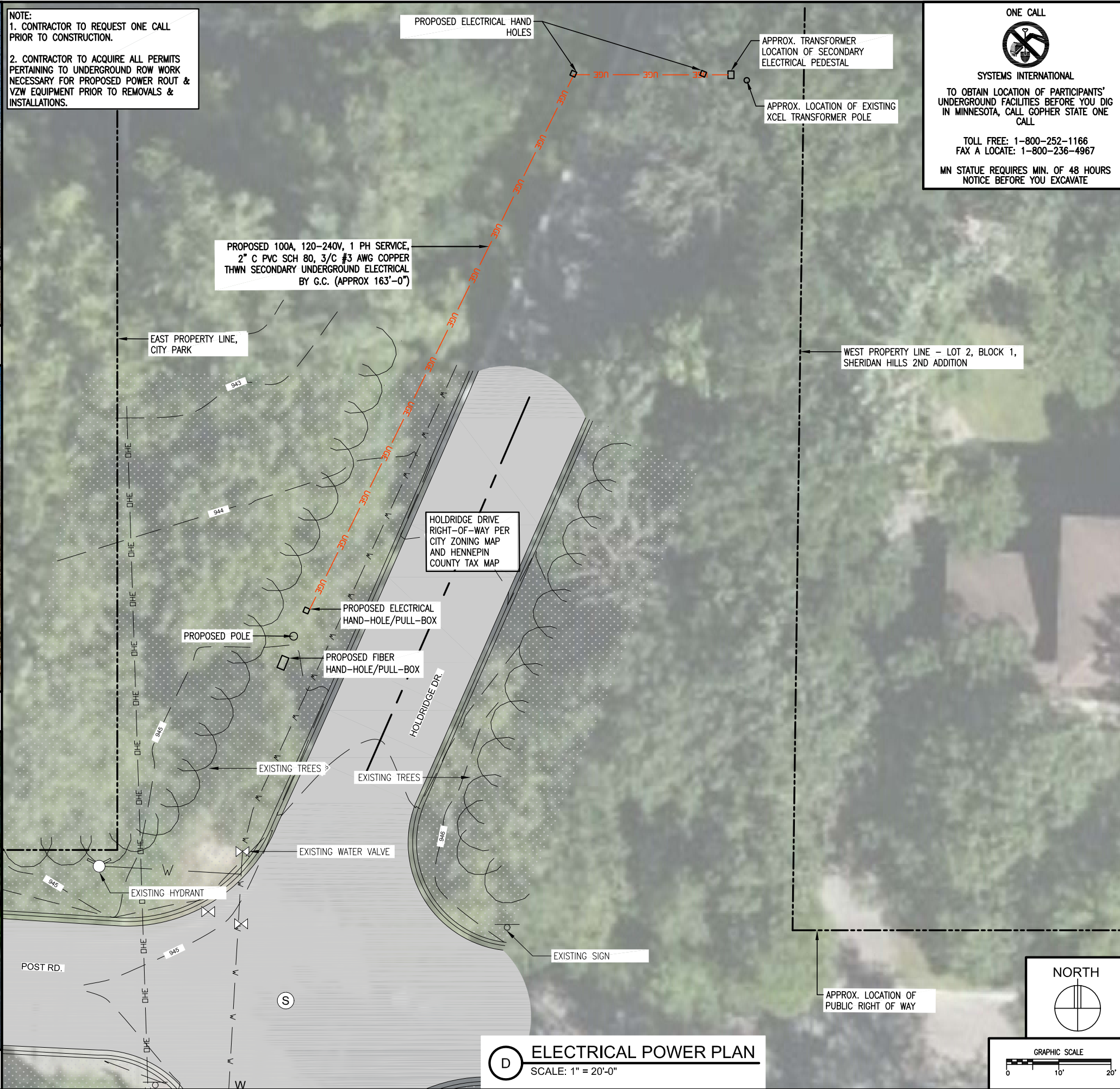
A OVERVIEW OF SITE



B OVERVIEW OF SITE



C OVERVIEW OF SITE



D ELECTRICAL POWER PLAN  
 SCALE: 1" = 20'-0"

ONE CALL

SYSTEMS INTERNATIONAL  
 TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN MINNESOTA, CALL GOPHER STATE ONE CALL  
 TOLL FREE: 1-800-252-1166  
 FAX A LOCATE: 1-800-236-4967  
 MN STATUTE REQUIRES MIN. OF 48 HOURS NOTICE BEFORE YOU EXCAVATE

**verizon**

10801 Bush Lake Rd  
 Bloomington, MN 55438  
 952.946.4694 voice

**DESIGN 1**

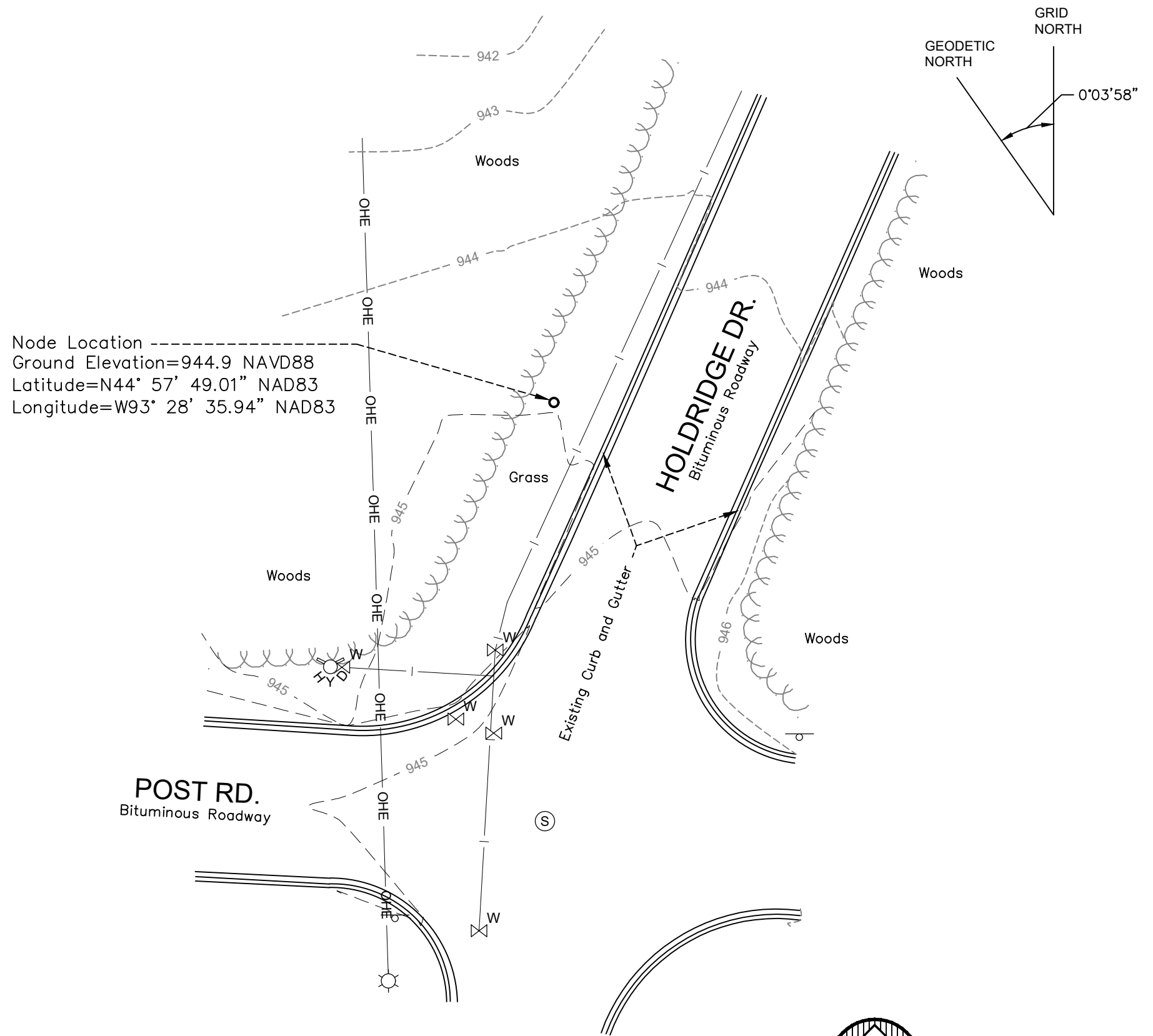
9973 VALLEY VIEW RD.  
 EDEN PRAIRIE, MN 55344  
 (952) 903-9299  
 WWW.DESIGN1EP.COM

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: *Ali Abedini*  
 Name: Ali Abedini  
 Date: 01/27/2021  
 License Number: 56614

CHECKED BY:	TAB
<b>MIN BLAISE</b> SC03	
15510 HOLDRIDGE DR WAYZATA, MN 55437	
SUBMITTAL:	
INITIAL:	DATE: DESCRIPTION:
SWS	06-26-20 REV. A
NPR	07-20-20 REV. A.1
NPR	08-03-20 REV. 0
NPR	01-27-21 REV. 1
STRUCTURAL ANALYSIS:	
DATE:	DESCRIPTION:
RFDS:	
DATE:	04-08-20
PLOT DATE	01-27-21
SET TYPE	CONSTRUCTION / BID
SHEET TITLE	SC 3 SITE PLAN
SHEET NUMBER	SC 3

# MIN BLAISE SC03

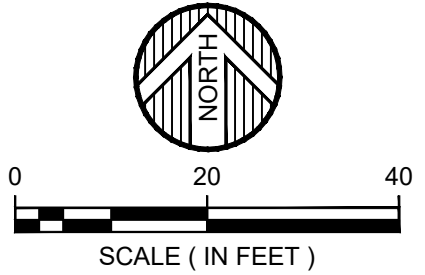


## LEGEND

	SIGN POST
	WATER VALVE
	HYDRANT
	SANITARY MANHOLE
	ELEC LIGHT POLE
	EDGE OF WOODS
	OVERHEAD ELEC
	WATERMAIN

**SURVEYOR NOTE:**

- 1.) Utilities are per Observed Evidence and markings from GOPHER STATE ONE CALL Locate Request Ticket No. 200993413, dated April 8, 2020.



DATE:	5/1/2020
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	BTB
FILE NUMBER:	2020-10495

