SCOPE OF WORK

PROJECT DESCRIPTION

PROJECT TYPE:	159' MONOPOLE
EQUIPMENT:	4'-0" x 8'-0" CONC. EQUIP. PAD WITH CABINETS
GENERATOR:	EXTERIOR DIESEL GENERATOR

RF DESCRIPTION (VERIFY WITH RFDS)

PRO. ANTENNA C/L:	150' ABOVE GRADE
ANTENNAS:	(3) PRO. PANEL ANTENNA(S) (3) PRO. AIR3283 ANTENNA/RADIO(S) (3) PRO. AIR6419 ANTENNA/RADIO(S)
CABLES:	(2) PRO. HYBRID LINE(S)
EQUIPMENT:	(1) PRO. SURGE PROTECTOR (3) PRO. REMOTE RADIO UNIT(S)

STRUCTURAL

TOWER ANALYSIS:
N/A

MOUNT ANALYSIS:
N/A

CONTRACTOR TO REVIEW STRUCTURAL REPORT IN ITS ENTIRETY. ANY DISCREPANCIES OR DISAGREEMENTS BETWEEN THE REPORT AND THESE PLANS SHOULD BE RESOLVED PRIOR TO CONSTRUCTION.

verizon

IA12 DT OELWEIN
OELWEIN, IOWA
RAWLAND CONSTRUCTION DRAWINGS
159' MONOPOLE

ENGINEER SEAL:

- PRELIMINARY - NOT FOR CONSTRUCTION

I HEARBY CERIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

(SIGNATURE) (DATE)

PRINTED OR TYPED NAME:

LICENSE NUMBER:

MY LICENSE RENEWAL DATE IS DECEMBER 31,

PAGES OR SHEETS COVERED BY THIS SEAL:

G-001, G-002, G003, C-101, C-102, C-501, C-502, A-101, A-102, A-201, T-001, T-002, T-003, T-201, T-301, T-501, V-501, E-001, E-002, E-003, E-004, E-101, E-102, E-501, E-502, E-503, E-504, E-505, E-506

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

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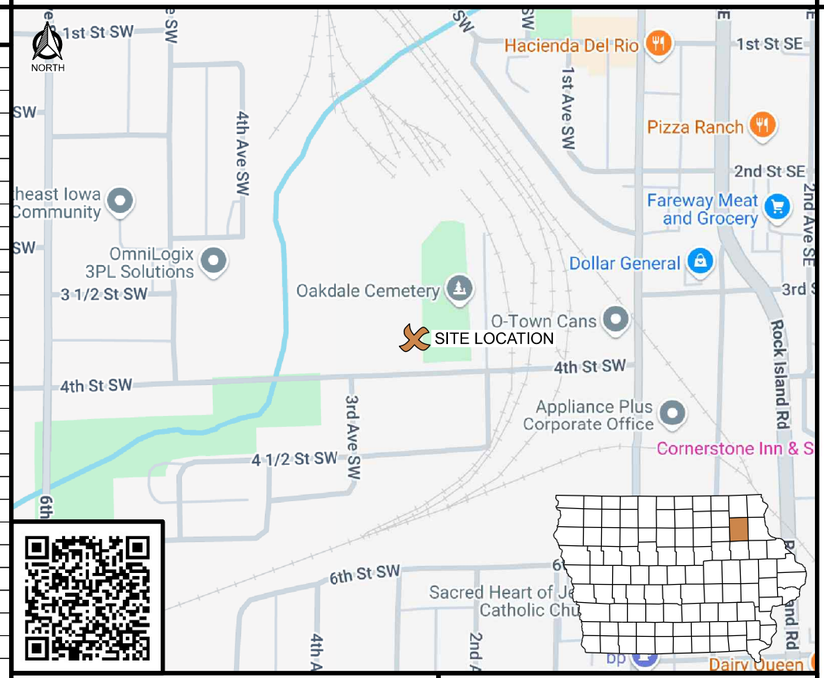
SHEET INDEX

* COMPLETED BY OTHERS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS/CONDITIONS ON SITE, IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK OR BE RESPONSIBLE FOR THE SAME.

SITE LOCATION MAP



UTILITY INFORMATION

ELECTRIC SERVICE PROVIDER
ALLIANT ENERGY
505 10TH STREET SE
OELWEIN, IA 50662
CONTACT: TBD
PHONE: 319.283.9023
WORK ORDER #:

FIBER SERVICE PROVIDER
TBD
CONTACT:
PHONE:
WORK ORDER #:

NATURAL GAS PROVIDER
N/A

ONE CALL SYSTEMS INTERNATIONAL

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN IOWA, CALL DIGGER'S HOTLINE

TOLL FREE: 1-800-292-8989
FAX A LOCATE: 1-319-322-2400

IOWA STATUTE 480.4 (1993) REQUIRES MIN. OF 2 WORK DAYS NOTICE BEFORE YOU EXCAVATE

DIRECTORY

CLIENT:
VERIZON WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438

ENGINEERING COMPANY:
EDGE CONSULTING ENGINEERS, INC.
624 WATER STREET
PRAIRIE DU SAC, WI 53578
PROJECT MANAGER: PETER ROTHMEIER, P.E.
PHONE: 608.644.1449
FAX: 608.644.1549

SITE ACQUISITION:
NEVCO WIRELESS
CONTACT: JEFFREY SKINNER
PHONE: 515.299.0736

SURVEYOR:
WIDSETH
610 FILMORE STREET
ALEXANDRIA MN, 56308
PHONE: 320.762.8149

PROJECT INFO

SITE LOCATION:
222 S FREDERICK AVE
OELWEIN, IA 50662

PSLC #: 620320

FCC #: TBD

TOWER OWNER:
VERIZON WIRELESS
10801 BUSH LAKE ROAD
BLOOMINGTON, MN 55438

PROPERTY OWNER:
CITY OF OELWEIN
CITY HALL 20 2ND AVE. SW
OELWEIN, IA 50662

SITE COORDINATES (PER 1-A CERTIFICATE):
AT TOWER BASE (CENTER OF LEASE PARCEL)
LAT: 42°-40'-24.16" N
LONG: 91°-55'-01.97" W
GROUND ELEVATION (NAVD 88): 1029.2'

PLSS INFORMATION:
PART OF SE1/4 OF THE SW1/4,
SECTION 21, T.91N., R.9W.,
CITY OF OELWEIN,
FAYETTE COUNTY
IOWA

TAX KEY NUMBER:
1821376002

TITLE SHEET
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	G-001

L:\44500\44517\Design\CAD\CD\Plot\G-001.dgn

GENERAL

THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS ARE INTERRELATED WHEN PERFORMING THE WORK. EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

DIVISION 1: GENERAL REQUIREMENTS

SECTION 01700 - PROJECT CLOSEOUT

PART 1 - GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES. INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES, AND SIMILAR RELEASES.

2. SUBMIT RECORD DRAWINGS, DAMAGE, OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.

3. COMPLETE FINAL CLEAN-UP REQUIREMENTS, INCLUDING TOUCH-UP PAINTING. TOUCH-UP AND OTHERWISE REPAIR AND RESTORED MARRED EXPOSED FINISHES.

PART 2 - FINAL CLEANING/PROJECT CLOSEOUT

1. COMPLETE THE FOLLOWING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATE OF COMPLETION:

   A. CLEAN THE PROJECT SITE, YARD AND GROUNDS IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT, AREAS OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED TO A SMOOTH, EVEN-TEXTURED SURFACE.

   B. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, AND SURPLUS MATERIAL FROM THE SITE.

   C. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT BUILDING.

   D. CLEAN EXPOSED EXTERIOR AND INTERIOR HARD-SURFACED FINISHES TO A DIRT-FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.

   E. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING ROOFS, EQUIPMENT BUILDING, MANHOLES AND SIMILAR SPACES.

   F. REMOVE LABELS THAT ARE NOT PERMANENT LABELS.

   G. TOUCH-UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CAN NOT BE SATISFACTORILY BE REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NO PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.

   H. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY.

   I. DUST OFF ALL EQUIPMENT, INCLUDING BATTERY PACKS, WITHIN EQUIPMENT BUILDING.

   J. GENERAL CONTRACTOR TO CLEAN AND APPLY STATIC-FREE WAX TO THE FLOORS ONCE FINAL SHELTER EQUIPMENT AND ACCESSORIES ARE COMPLETED.

2. REMOVAL OF PROTECTION

   REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREVIOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

DIVISION 2: SITE WORK

SECTION 02200 - EARTHWORK AND DRAINAGE

PART 1 - GENERAL

1. WORK INCLUDED - SEE SITE PLAN

2. DESCRIPTIONS

   ACCESS DRIVE WITH TURN-AROUND AREA, LEASE AREA, AND, IF APPLICABLE, UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL-DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR MATERIAL AND EQUIPMENT DELIVERIES AND MAINTENANCE PERSONNEL ACCESS.

3. QUALITY ASSURANCE

   A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).

   B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (AS NEEDED).

   C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.

4. SEQUENCING

   A. CONFIRM SURVEY STAKES AND SET ELEVATIONS STAKES PRIOR TO ANY CONSTRUCTION.

   B. COMPLETELY GRUB THE ACCESS DRIVE WITH TURN-AROUND, UNDERGROUND UTILITY EASEMENTS (IF APPLICABLE), AND LEASE AREA PRIOR TO FOUNDATION CONSTRUCTION, PLACEMENT OF BACKFILL AND SUB-BASE MATERIAL.

   C. CONSTRUCT TEMPORARY CONSTRUCTION AREA ALONG ACCESS DRIVE.

   D. BRING THE LEASE AREA AND ACCESS DRIVE WITH TURN-AROUND TO BASE COURSE ELEVATION PRIOR TO INSTALLING FOUNDATION.

   E. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS SUCH THAT THE STERILIZER ONLY COMES IN CONTACT WITH PROPOSED GRAVEL SURFACES

   F. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILTIY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AND ACCESS DRIVE WITH TURN-AROUND TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.

   G. REMOVE GRAVEL FROM TEMPORARY CONSTRUCTION ZONE TO AN AUTHORIZED AREA OR AS DIRECTED BY THE PROJECT MANAGER.

   H. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO STONE SURFACES.

5. SUBMITTALS

   A. BEFORE CONSTRUCTION
   IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO (2) COPIES OF THE LANDSCAPE PLAN UNDER NURSERY LETTERHEAD. IF LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD. REFER TO PLANS FOR LANDSCAPING REQUIREMENTS.

   G. PLACE FILL OR STONE IN SIX (6) INCH MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.

   B. AFTER CONSTRUCTION

      1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZED.

      2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.

      3. LANDSCAPING WARRANTY STATEMENT.

6. WARRANTY

   A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND SURROUNDINGS.

   B. SOIL STERILIZATION APPLICATION TO GUARANTEE VEGETATION FREE ROAD AND SITE AREAS FOR ONE YEAR FOM DATE OF FINAL INSPECTION.

   C. DISTURBED AREAS WILL REFLECT GROWTH OF NEW GRASS PRIOR TO FINAL INSPECTION.

   D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL INSPECTION.

DIVISION 2: SITE WORK (CONTINUED)

SECTION 02200 - EARTHWORK AND DRAINAGE (CONTINUED)

PART 2 - PRODUCTS

1. MATERIALS

   A. SOIL STERILIZER SHALL BE AN EPA REGISTERED, PRE-EMERGENCE LIQUID:

TOTAL KILL PRODUCT 910 EPA 10292-7	PHASAR CORPORATION P.O. BOX 5123 DEARBORN, MI 48128 313.563.8000
AMBUSH HERBICIDE EPA REGISTERED	FRAMAR INDUSTRIAL PRODUCTS 1435 MORRIS AVENUE UNION, NJ 07083 800.526.4924

   B. ROAD AND SITE MATERIALS SHALL CONFORM TO DOT SPECIFICATIONS (UNLESS OTHERWISE NOTED). ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.

   C. SOIL STABILIZED FABRIC SHALL BE MIRAFI - 500X.

PART 3 - EXECUTION

1. PREPARATION

   A. CLEAR TREES, BRUSH AND DEBRIS FROM LEASE AREA, ACCESS DRIVE WITH TURN-AROUND, AND UNDERGROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.

   B. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION, GRUB ORGANIC MATERIAL TO A MINIMUM OF SIX (6) INCHES BELOW GRADE.

   C. UNLESS OTHERWISE INSTRUCTED BY LEASEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.

   D. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.

   E. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH A STABILIZED MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.

   F. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, REMOVE SOFT SPOTS, PLACE SELECT FILL, AND COMPACT TO 95% MODIFIED PROCTOR.

2. INSTALLATION

   A. GRADE OR FILL THE LEASE AREA AND ACCESS DRIVE WITH TURN-AROUND AS REQUIRED IN ORDER THAT UPON DISTRIBUTION OF SPOILS RESULTING FROM EXCAVATIONS, THE RESULTING GRADE WILL CORRESPOND WITH SAID SUB-BASE COURSE. ELEVATIONS ARE TO BE CALCULATED FROM BENCHMARK, FINISHED GRADES, OR INDICATED SLOPES.

   B. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.

   C. BRING THE ACCESS DRIVE WITH TURN-AROUND TO BASE COURSE ELEVATION TO FACILITATE CONSTRUCTION AND OBSERVATION DURING CONSTRUCTION OF THE SITE.

   D. AVOID CREATING DEPRESSIONS WHERE WATER MAY POND.

   E. THE CONTRACT SHALL INCLUDE GRADING, BANKING, AND DITCHING, UNLESS OTHERWISE NOTED.

   F. WHEN IMPROVING AN EXISTING ACCESS DRIVE, GRADE THE EXISTING DRIVE TO REMOVE ANY ORGANIC MATTER AND SMOOTH THE SURFACE BEFORE PLACING FILL OR STONE.

   H. THE TOP SURFACE COURSE SHALL EXTEND A MINIMUM OF ONE (1) FOOT BEYOND THE SITE FENCE, UNLESS OTHERWISE NOTED, AND SHALL COVER THE AREA AS INDICATED.

   I. NO SLOPES ARE TO BE GREATER THAN 3:1.

   J. APPLY RIP-RAP TO THE SIDES OF DITCHES AND DRAINAGE SWALES WHERE INDICATED ON THE DRAWINGS.

   K. RIP-RAP ENTIRE DITCH FOR SIX (6) FEET IN ALL DIRECTIONS AT CULVERT OPENINGS. (WHEN APPLICABLE)

   L. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIP-RAPPED.

   M. UNDER NO CIRCUMSTANCES WILL DITCHES, SWALES, OR CULVERTS BE PLACED SO THAT THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SHELTER OR EQUIPMENT. IF DESIGNS OR ELEVATIONS ARE IN CONFLICT WITH THIS, ADVISE CONSTRUCTION MANAGER IMMEDIATELY.

CONSULTANT:
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CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:
- PRELIMINARY - NOT FOR CONSTRUCTION

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GENERAL SPECIFICATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	G-002

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DIVISION 2: SITE WORK (CONTINUED)

SECTION 02200 - EARTHWORK AND DRAINAGE (CONTINUED)

PART 2 - PRODUCTS (CONTINUED)

2. INSTALLATION (CONTINUED)

N. IN DITCHES WITH SLOPES GREATER THAN 10%, MOUND DIVERSIONARY HEADWALLS IN THE DITCH AT AN ANGLE NO GREATER THAN 60° OFF THE DITCH LINE. RIP-RAP THE UPSTREAM SIDE OF THE HEADWALL AS WELL AS THE DITCH FOR SIX (6) FEET ABOVE THE CULVERT ENTRANCE.

O. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.

P. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.

Q. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS BY WATERING UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.

3. FIELD QUALITY CONTROL

COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.

4. PROTECTION

A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATE.

B. ALL TREES PLACED IN CONJUNCTION WITH A LANDSCAPE CONTRACT WILL BE WRAPPED, TIED WITH HOSE PROTECTED WIRE, AND SECURED TO 2" x 2" x 4' - 0" WOODEN STAKES EXTENDING TWO-FEET INTO THE GROUND ON FOUR SIDES OF THE TREE.

C. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

DIVISION 16: UTILITY

SECTION 16050 - BASIC UTILITY MATERIALS AND METHODS

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE UTILITY EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.

2. UTILITY PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF UTILITY EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.

3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).

4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "J" WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "UL" LISTED.

5. ALL CONDUIT SHALL HAVE A PULL CORD.

6. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE UTILITY "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.

THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:

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IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

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TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	G-003

L:\44500\44517\Design\CAD\CD\Plot\G-003.dgn

SITE SURVEY

SCHEDULE "B" EXHIBITS:(per U.S. Title Solutions File No. UST75130, dated May 23, 2023)

1–3.) Not related to the survey.

4.1) Resolution by City Council of the City of Oelwein, Iowa Dated February 28, 1966, Recorded May 06, 1966, in Book 13, Page 298.
This document vacates a part of 4th Street SW and the Alley North of Block 1. The vacated alley is as shown the survey.

5.1) Plat of Survey Recorded December 20, 2007, in Book 2007, Page 3927.
The portion of this plat related to the surveyed area is shown on the survey.

5.2) Survey and Plat Recorded July 28, 1981, in Book 6, Page 127.
This survey does not affect the surveyed area and is not shown on the survey.

5.3) Ordinance Dated November 09, 1970, Recorded June 21, 1979, in Book 23, Page 67.
Not a plottable matter of survey.

5.4) Ordinance Dated February 26, 1927, Recorded March 01, 1927, in Book 3, Page 33.
Not a plottable matter of survey.

5.5) Plat of Miles Addition to Oelwein, Iowa Recorded May 22, 1899, in Book 2, Page 64.
The portion of this plat related to the surveyed area is shown on the survey.

5.6) B. H. Bennett's Addition to Oelwein Dated August 04, 1875, Recorded August 10, 1875, in Book 1, Page 81.
The portion of this plat related to the surveyed area is shown on the survey.

6.) Not related to the survey.

PROPERTY DESCRIPTION:(per U.S. Title Solutions File No. UST75130, dated May 23, 2023)

(Per Tax Sale Deed in Book 79, Page 257)
Lots 1 to 11, inclusive, Block 1, MILES ADDITION to Oelwein

(per Tax Sale Deed in Book 79, Page 259)
Lot 5 and the West 34.3 feet of Lot 4, Block 5, BENNETTS ADDITION to Oelwein

(per Town Lot Deed No. 31, Page 211)
Lot Four (4), Block Five (5) of BENNETTS ADDITION to Oelwein, Iowa

(per Town Lot Deed No. 24, Page 73)
Lots One (1) and Two (2), Block Five (5), BENNETTS ADDITION, Oelwein, as shown on the recorded plat thereof

Per Town Lot Deed No. 18, Page 329)
Lot Three (3) in Block Five (5) in BENNETTS ADDITION to the Village of Oelwein, Iowa

LEGEND

- SIGN SINGLE POST
- ELECTRIC POLE
- TREE CONIFER
- CHAIN LINK FENCE
- GAS — UNDERGROUND GAS
- OHE — OVERHEAD ELEC
- UGE — UNDERGROUND ELEC
- BOUNDARY LINE
- SECTION LINE
- QUARTER LINE
- RIGHT OF WAY LINE
- LOT / DEED LINE
- PARCEL LINE
- LEASE AREA
- EASEMENT LINE
- CENTERLINE
- CONCRETE SURFACE
- GRAVEL SURFACE

NORTH

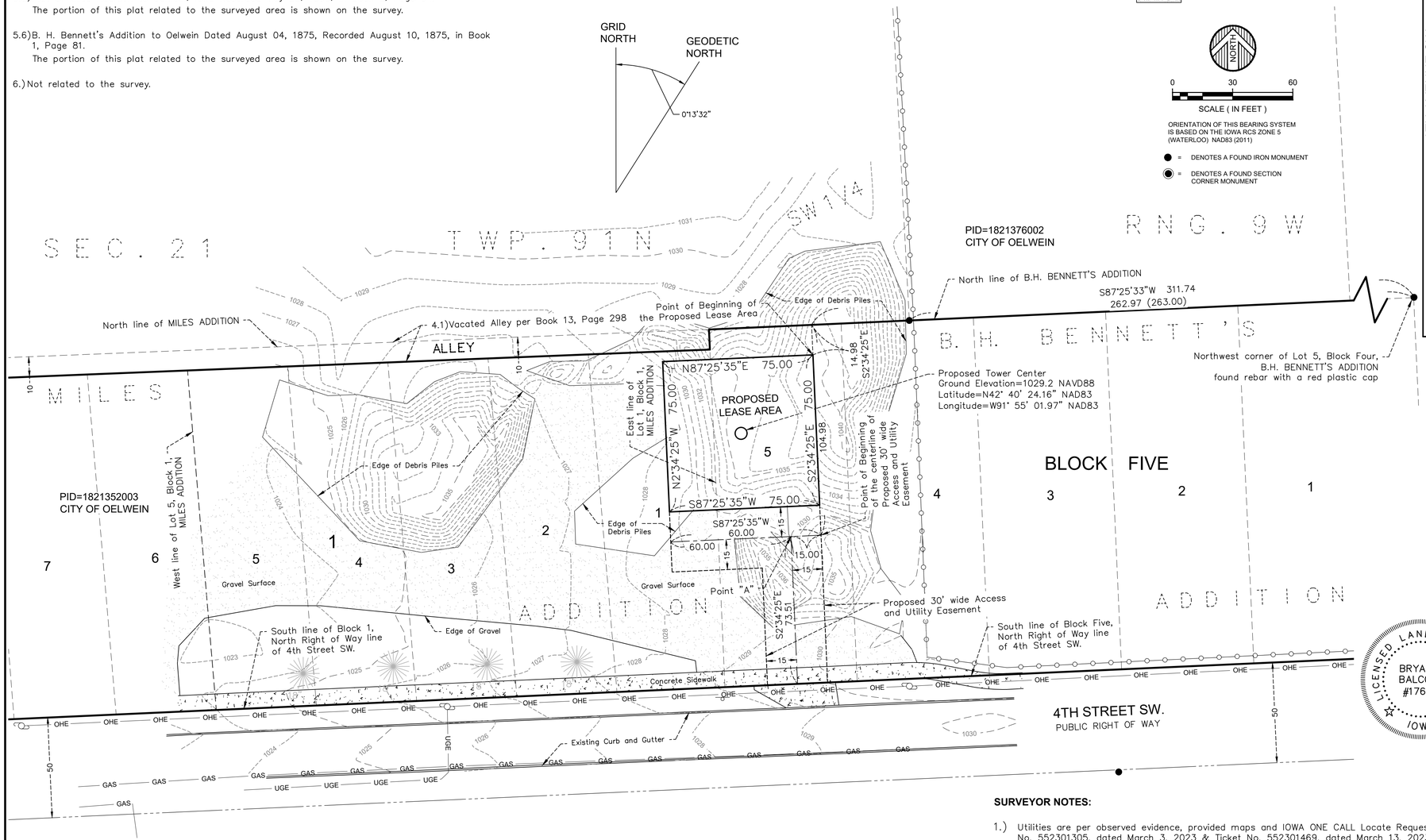
0 30 60

SCALE (IN FEET)

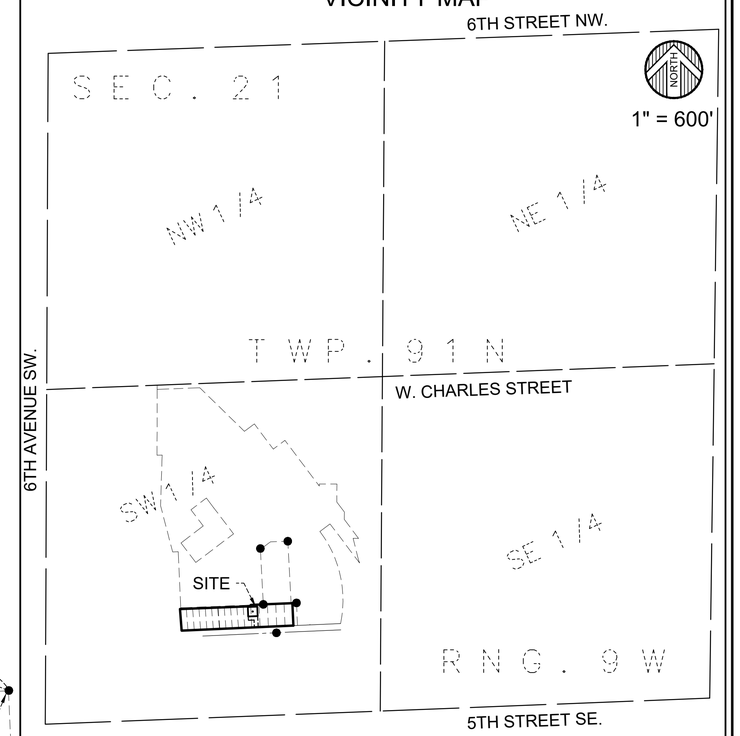
ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE IOWA RCS ZONE 5 (WATERLOO) NAD83 (2011)

● = DENOTES A FOUND IRON MONUMENT

◉ = DENOTES A FOUND SECTION CORNER MONUMENT



VICINITY MAP



PROPOSED LEASE AREA DESCRIPTION:

That part of Lot 5, Block Five, B.H. BENNETT'S ADDITION and Lot 1, Block 1, MILES ADDITION, according to the recorded plats thereof, Fayette County, Iowa, described as follows:

Commencing at the northwest corner of Lot 5, Block Four, said B.H. BENNETT'S ADDITION; thence South 87 degrees 25 minutes 33 seconds West along the North line of said B.H. BENNETT'S ADDITION, a distance of 311.74 feet; thence South 2 degrees 34 minutes 25 seconds East, a distance of 14.98 feet to the Point of Beginning of the lease area to be described; thence continue South 2 degrees 34 minutes 25 seconds East, a distance of 75.00 feet; thence South 87 degrees 25 minutes 35 seconds West, a distance of 75.00 feet; thence North 2 degrees 34 minutes 25 seconds West, a distance of 75.00 feet; thence North 87 degrees 25 minutes 35 seconds East, a distance of 75.00 feet to the Point of Beginning.

PROPOSED ACCESS AND UTILITY EASEMENT DESCRIPTION:

A 30.00 foot wide easement for ingress, egress and utility purposes over, under and across Lot 5, Block Five, B.H. BENNETT'S ADDITION and Lot 1, Block 1, MILES ADDITION, according to the recorded plats thereof, Fayette County, Iowa, the centerline of said easement is described as follows:

Commencing at the northwest corner of Lot 5, Block Four, said B.H. BENNETT'S ADDITION; thence South 87 degrees 25 minutes 33 seconds West along the North line of said B.H. BENNETT'S ADDITION, a distance of 311.74 feet; thence South 2 degrees 34 minutes 25 seconds East, a distance of 104.98 feet to the Point of Beginning of the centerline to be described; thence South 87 degrees 25 minutes 35 seconds West, a distance of 15.00 feet to a point hereinafter referred to as Point "A"; thence continue South 87 degrees 25 minutes 35 seconds West, a distance of 60.00 feet and said centerline there terminating.

TOGETHER WITH

A 30.00 foot wide easement for ingress, egress and utility purposes over, under and across said Lot 5, the centerline of said easement is described as follows:

Beginning at the previously described Point "A"; thence South 2 degrees 34 minutes 25 seconds East, a distance of 73.51 feet to the North right of way line of 4th Street Southwest and said centerline there terminating.

The sidelines of said easement shall be shortened or lengthened to terminate at said North right of way line of 4th Street Southwest.

SURVEYOR NOTES:

1.) Utilities are per observed evidence, provided maps and IOWA ONE CALL Locate Request Ticket No. 552301305, dated March 3, 2023 & Ticket No. 552301469, dated March 13, 2023.

2.) This survey was completed for Edge Consulting Engineers Inc.

LICENSED LAND SURVEYOR
BRYAN T. BALCOME
#17677
IOWA

Edge Consulting Engineers, Inc.

SITE NAME: IA12 DT OELWEIN

Fayette County, IA

No.	Date	REVISIONS	By	CHK	APP'D

FIELD WORK: 3/21/23 | CHECKED BY: BTB | DRAWN BY: JMB

I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEY WORK WAS PERFORMED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA

SIGNATURE: Bryan T. Balcome
BRYAN T. BALCOME, L.S.
DATE: 6/28/23 LICENSE # 17677
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2024

FULL SCALE ON 22"x34"
HALF SCALE ON 11"x17"
2023-10340

WIDSETH
ARCHITECTS ▪ ENGINEERS ▪ SCIENTISTS ▪ SURVEYORS

NORTH

CITY OF OELWEIN IS TO COMPLETE DEBRIS REMOVAL

CITY REQUIRES A NOTICE PERIOD PRIOR TO SCHEDULING THE REMOVAL

NOTICE PERIOD TO BE VERIFIED WITH CITY

PARCEL ID: 1821376002 CITY OF OELWEIN

PROPERTY LINE

DEBRIS PILE

PROPOSED MONOPOLE TOWER DESIGNED BY OTHERS; SEE T-201 FOR DETAILS

PROPOSED DIESEL GENERATOR ON 4'-0" x 8'-0" CONCRETE PAD WITH CANOPY

PROPOSED 75'-0" x 75'-0" LEASE AREA

PROPOSED VERIZON EQUIPMENT ON 4'-0" x 8'-0" CONCRETE PAD WITH CANOPY

PROPOSED 50'-0" x 50'-0" FENCED COMPOUND

DEBRIS PILE

PROPOSED 20'-0" WIDE GRAVEL TURNAROUND

PARCEL ID: 1821352003 CITY OF OELWEIN

LOT LINE

PROPOSED 12' WIDE DOUBLE-SWING ACCESS GATE

PROPOSED UNDERGROUND ELECTRICAL CONDUIT ROUTING

GRAVEL SURFACE

PROPOSED 12'-0" WIDE GRAVEL ACCESS DRIVE

DEBRIS PILE

PROPOSED UNDERGROUND FIBER OPTIC ROUTING

EXTENT OF PROPOSED 30' WIDE VERIZON ACCESS AND UTILITY EASEMENT

8'-0" 12'-0" 10'-0" 30'-0"

EXISTING WOOD POWER POLE TO BE POWER SOURCE

PROPERTY LINE

EXISTING OVERHEAD UTILITIES (TYP.)

PROPOSED FIBER HANDHOLE INSTALLED IN RIGHT OF WAY BY FIBER PROVIDER

4TH STREET SW.

RIGHT OF WAY

NOTE:

1. FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

15' 0 15' 30'

SCALE: 11" x 17" - 1" = 30'
22" x 34" - 1" = 15'

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CONSULTANT:

Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:

verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:

- PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SITE PLAN
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	C-101

NORTH

PROPERTY LINE

LOT LINE

LOT LINE

LOT LINE

75'-0" LEASE AREA

PROPOSED
75' x 75' LEASE AREA

50'-0" FENCED COMPOUND

PROPOSED 50'-0" x 50'-0"
FENCED COMPOUND

12'-6"

12'-6"

12'-6"

1030

1032

1040

1027

1028

1034

1035

25'-0"

25'-0"

6'-6"

8'-0"

6'-6"

4'-0"

6'-6"

8'-0"

4'-0"

8'-6"

PROPOSED VERIZON DIESEL GENERATOR
ON 4'-0" x 8'-0" CONCRETE PAD;
SEE E-001 & E-002 FOR DETAILS

PROPOSED VERIZON OVERHEAD
GENERATOR CANOPY TO BE
INSTALLED BY VERIZON CONTRACTOR;
SEE E-003 FOR DETAILS

(3) PROPOSED BURIED CONDUITS
FROM GENERATOR TO ILC;
SEE E-102 FOR DETAILS

PROPOSED VERIZON
INTEGRATED LOAD CENTER (ILC);
SEE E-505 FOR DETAILS

PROPOSED VERIZON CHARLES
CUBE FIBER JUNCTION BOX;
SEE E-505 FOR DETAILS

PROPOSED VERIZON EQUIPMENT
CABINETS ON 4'-0" x 8'-0" CONCRETE PAD;
SEE 'A' SERIES FOR DETAILS

PROPOSED VERIZON OVERHEAD
EQUIPMENT CANOPY TO BE INSTALLED
BY VERIZON CONTRACTOR;
SEE A-201 FOR DETAILS

PROPOSED MONOPOLE
DESIGNED BY OTHERS;
SEE T-201 FOR DETAILS

PROPOSED 8'-0" ± ICE BRIDGE;
SEE C-501 FOR DETAILS

GRAVEL
COMPOUND

PROPOSED VERIZON COMPOUND
FIBER VAULT TO BE INSTALLED BY
VERIZON CONTRACTOR;
SEE E-102 FOR DETAILS

PROPOSED MULTI-METER RACK

19'-0"

12'-0"

19'-0"

2'-6"

7'-0"

PROPOSED
TRANSFORMER

PROPOSED 12' WIDE DOUBLE-
SWING ACCESS GATE

PROPOSED CONCRETE-FILLED
BOLLARD (TYP.)

12'-6"

20'-0" TURNAROUND

GRAVEL
TURNAROUND

PROPOSED UNDERGROUND
UTILITY CONDUIT ROUTING,
APPROX. 100' FROM R.O.W.;
SEE E-102 FOR DETAILS

12'-0"

5' 0 5' 10'

SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

NOTE:

1. FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

B **PROPOSED LEASE AREA**

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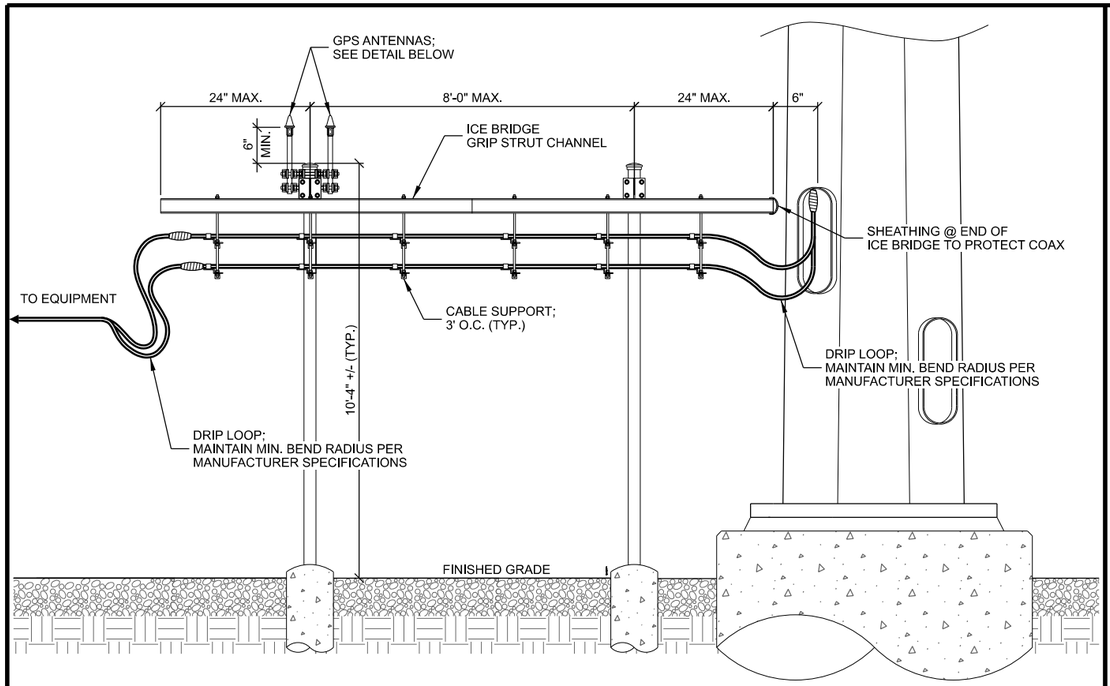
ENLARGED SITE PLAN
IA12 DT OELWEIN
OELWEIN, IOWA

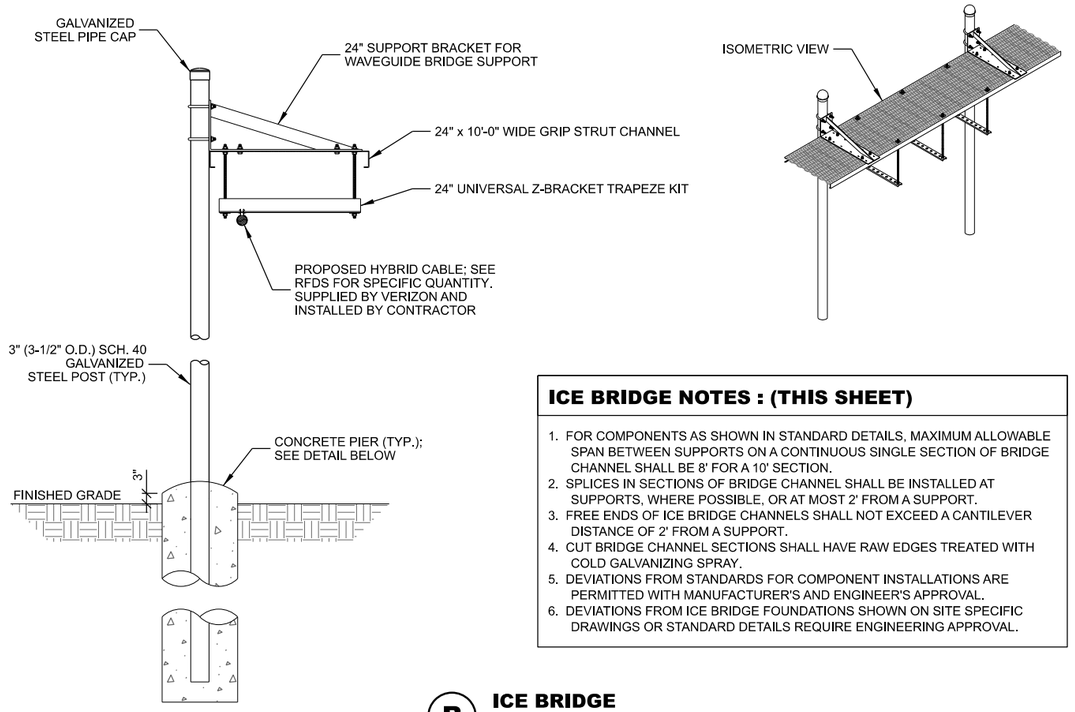
SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	C-102



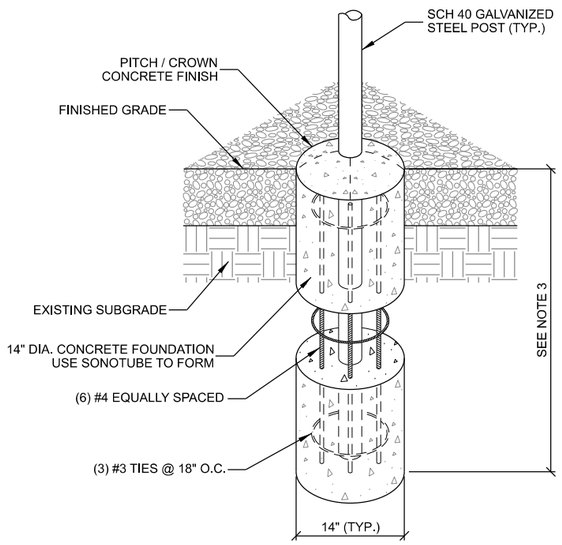
A **ICE BRIDGE INSTALLATION**



B **ICE BRIDGE**

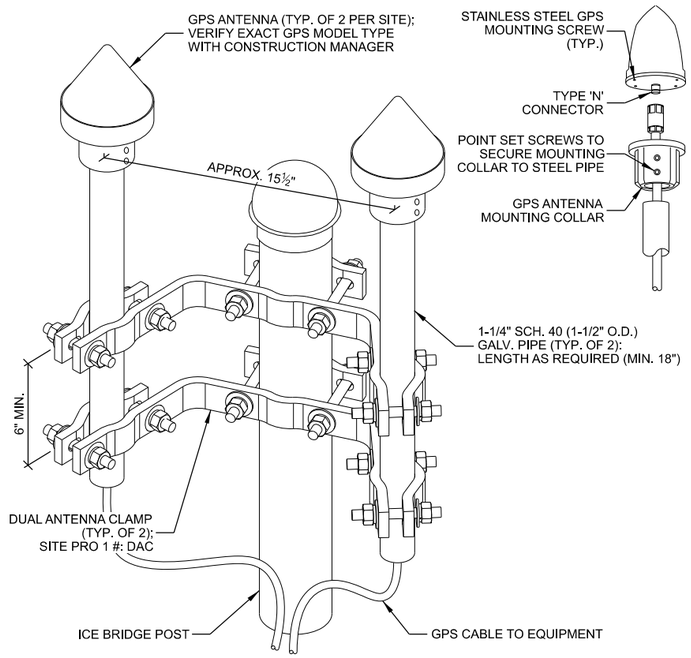
ICE BRIDGE NOTES : (THIS SHEET)

1. FOR COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 8' FOR A 10' SECTION.
2. SPLICES IN SECTIONS OF BRIDGE CHANNEL SHALL BE INSTALLED AT SUPPORTS, WHERE POSSIBLE, OR AT MOST 2' FROM A SUPPORT.
3. FREE ENDS OF ICE BRIDGE CHANNELS SHALL NOT EXCEED A CANTILEVER DISTANCE OF 2' FROM A SUPPORT.
4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES TREATED WITH COLD GALVANIZING SPRAY.
5. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH MANUFACTURER'S AND ENGINEER'S APPROVAL.
6. DEVIATIONS FROM ICE BRIDGE FOUNDATIONS SHOWN ON SITE SPECIFIC DRAWINGS OR STANDARD DETAILS REQUIRE ENGINEERING APPROVAL.



NOTES:
1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS.
2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

C **ICE BRIDGE POST PIER FOUNDATION**



D **GPS ANTENNA MOUNTING**

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Edge
Consulting Engineers, Inc
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ICE BRIDGE AND GPS DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	C-501

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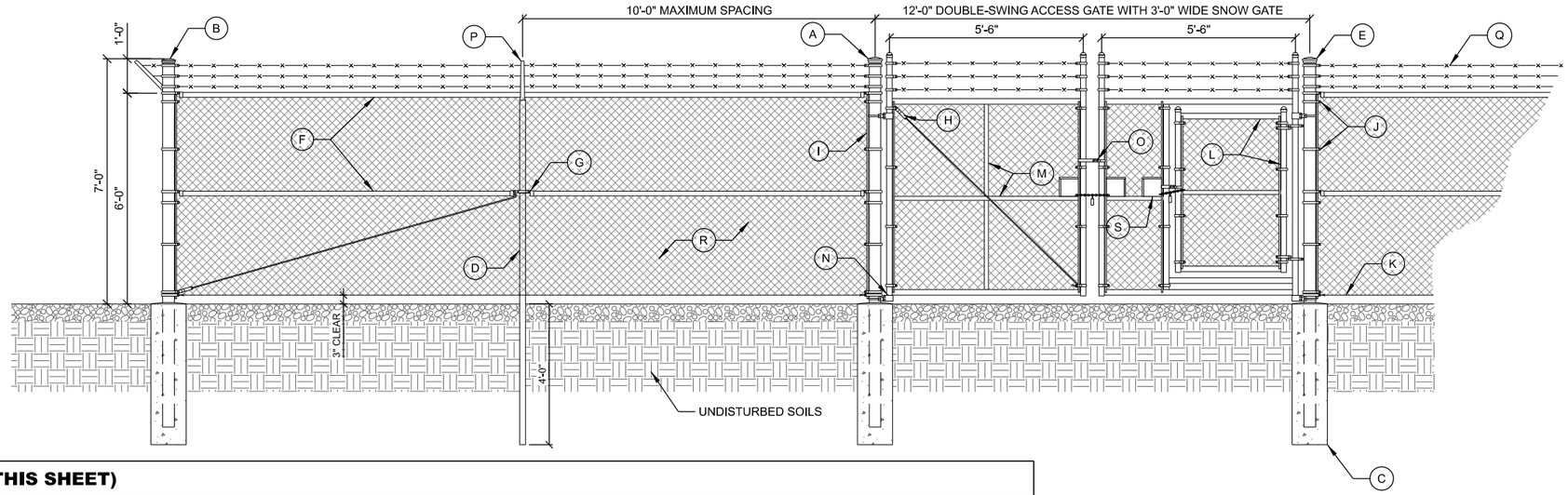
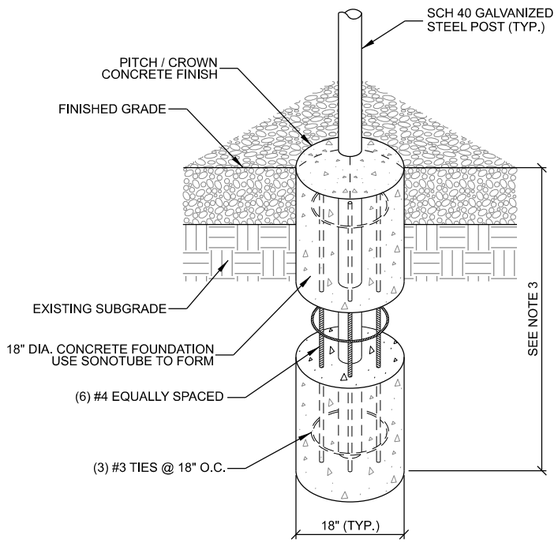


REFERENCE NOTES: (THIS SHEET)

- (A) 4" (4-1/2" O.D.) SCH. 40 GALV. STEEL GATE POST
- (B) 4" (4-1/2" O.D.) SCH 40 GALV. STEEL CORNER POST
- (C) CONCRETE PIER FOUNDATION AT CORNERS AND GATE; SEE DETAIL BELOW
- (D) 2" (2-3/8" O.D.) SCH. 40 GALV. STEEL INTERMEDIARY LINE POSTS; LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 10'-0" O.C
- (E) FENCE POST CAP (SIZE VARIES)
- (F) 1-1/4" (1.66" O.D.) TOP RAIL & MID BRACE RAIL PIPE
- (G) OFFSET BRACE RAIL ENDS FOR MID BRACE RAIL
- (H) 5/16" O.D. TRUSS ROD WITH TRUSS TIGHTENER ASSEMBLY
- (I) 3/16" x 3/4" STRETCHER BAR; TO EXTEND FULL HEIGHT OF FENCE FABRIC
- (J) 3/4" TENSION BAND (TYP.).
- (K) TENSION WIRE
- (L) 1-1/2" (1.9" O.D.) SCH. 40 GALV. STEEL FENCE GATE FRAME
- (M) 1-1/4" (1.66" O.D.) SCH. 40 GALV. STEEL HORIZONTAL AND VERTICAL GATE BRACES
- (N) MALLEABLE BUTT HINGES (TYP.)
- (O) GATE LATCH; VERIFY REQUIREMENTS WITH FENCE MANUFACTURER
- (P) 45° BARB ARM FENCE POST CAP
- (Q) (3) STRANDS OF 4 PT. GALV. BARB WIRE
- (R) #9 GAUGE GALV. CHAIN LINK FENCE FABRIC WITH TWISTED TOP SELVAGE AND KNUCKELD BOTTOM SELVAGE
- (S) 6" x 6" HANDHOLE FOR CHAIN LOCK

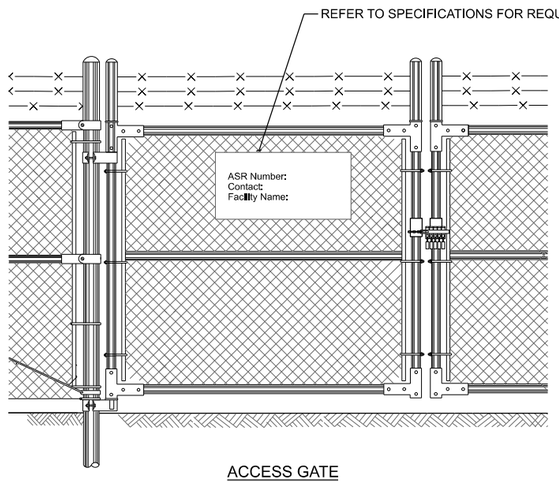
A COMPOUND FENCE



NOTES:

1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS.
2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

B FENCE POST PIER FOUNDATION



ACCESS GATE

GENERAL NOTES:

1. THE ANTENNA STRUCTURE REGISTRATION NUMBER SHALL BE DISPLAYED PER 47 CFR 17.4 (g).
2. THE ASR NUMBER SHALL BE POSTED ON THE PERIMETER FENCE OR ACCESS GATE SO THAT IT IS CONSPICUOUSLY VISIBLE AND LEGIBLE FROM THE PUBLICLY ACCESSIBLE AREA NEAREST THE BASE OF THE ANTENNA STRUCTURE ALONG A PUBLICLY ACCESSIBLE ROADWAY OR PATH.
3. MATERIALS USED TO DISPLAY THE ANTENNA STRUCTURE REGISTRATION NUMBER MUST BE WEATHER-RESISTANT AND OF SUFFICIENT SIZE TO BE EASILY SEEN WHERE POSTED.

C ANTENNA STRUCTURE REGISTRATION (ASR) SIGNAGE

THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:
- PRELIMINARY - NOT FOR CONSTRUCTION

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FENCE DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	C-502

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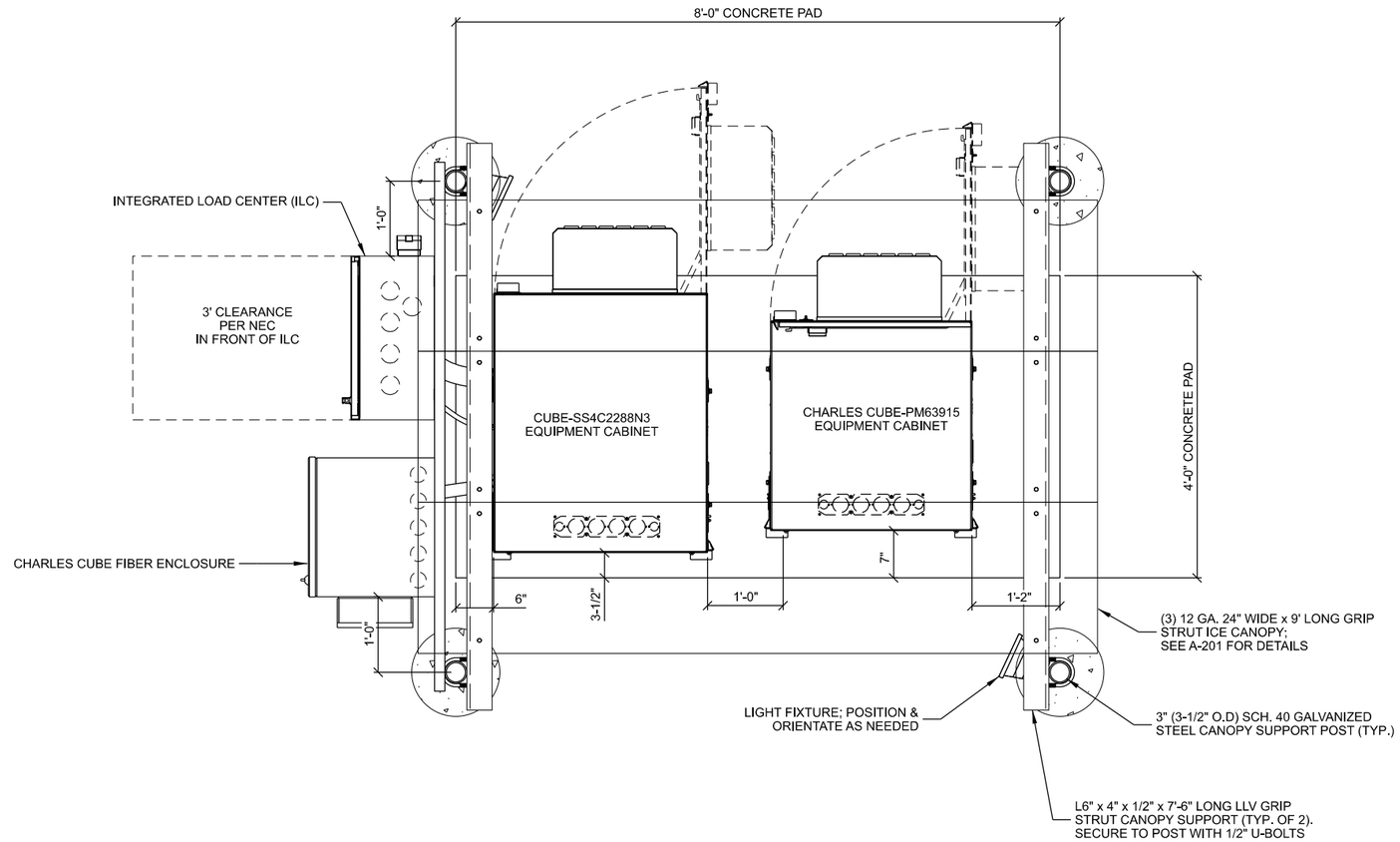
B
A-201



A
A-201

A EQUIPMENT PAD LAYOUT

SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"

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CONSULTANT:
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EQUIPMENT PAD LAYOUT
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
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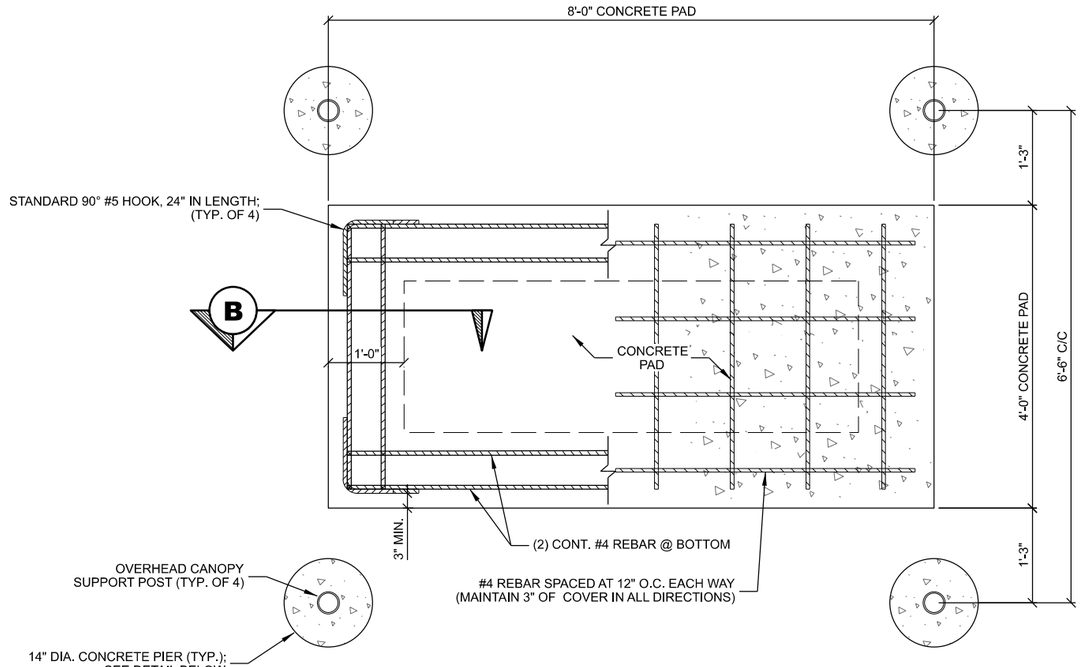
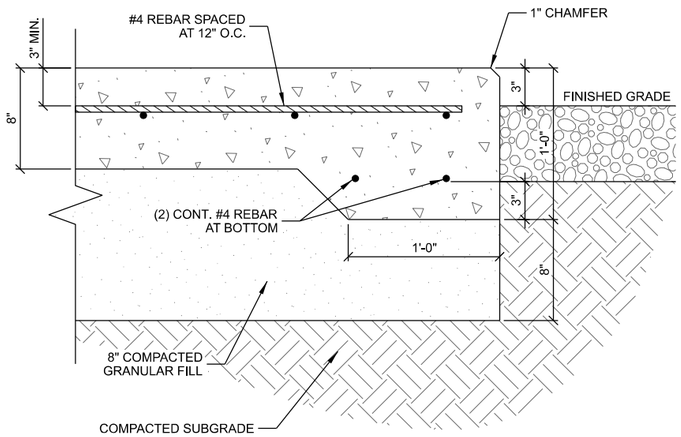
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	A-101

REBAR SCHEDULE		
SIZE	LENGTH	QTY
#4	7'-6"	8
#4	3'-6"	12
#5	2'-0"	4



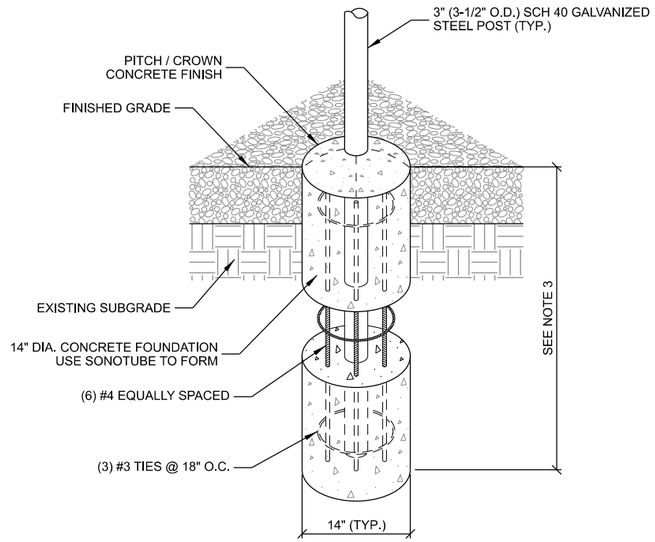
A EQUIPMENT PAD FOUNDATION

SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"



NOTE:
1. 3" MIN. CONCRETE COVER OVER BAR AND WIRE.

B THICKENED SLAB FOUNDATION



NOTES:
1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS. 2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS. 3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

C CANOPY POST PIER FOUNDATION

CONCRETE AND REINFORCING NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND MOST CURRENT VERSION OF ACI STANDARDS.
2. ALL EXPOSED CONCRETE SURFACES EXPOSED TO VIEW SHALL HAVE A SURFACE FINISH SF-2.0 IN ACCORDANCE WITH ACI 301.
3. ALL CONCRETE UNLESS SPECIFICALLY NOTED SHALL BE NORMAL WEIGHT (145 PCF) AND SHALL ACHIEVE A 28-DAY COMPRESSIVE STRENGTH (f'c) OF 4,000 PSI. EXPOSED EXTERIOR CONCRETE TO BE AIR ENTRAINED WITH 6% AIR CONTENT. CONTRACTOR TO PERFORM CONCRETE SLUMP TEST (4" MAX SLUMP). NO WATER TO BE ADDED AFTER SLUMP HAS BEEN MEASURED.
4. ALL CONCRETE REINFORCING SHALL BE ASTM A615 GRADE 60 AND PLACED IN ACCORDANCE WITH ACI STANDARDS W/ 3" MIN COVERAGE IF CAST AGAINST EARTH AND 2" MIN COVERAGE OTHERWISE.
5. REMOVE ALL ORGANIC MATERIAL, SOFT AREAS, AND POOR SOILS BENEATH FOUNDATION TO A DEPTH OF AT LEAST 2'-0" BELOW FOUNDATION.
6. SLAB NOT SUITABLE AT SITES WITH ORGANIC SOIL, UNCOMPACTED FILL, EXPANSIVE SOIL, OR SOILS SUSCEPTIBLE TO FROST HEAVE.
7. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM ALL FOUNDATIONS.
8. DESIGN BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. NO GEOTECHNICAL REPORT FOR THE EQUIPMENT PAD HAS BEEN COMPLETED.

CONSULTANT:
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EQUIPMENT PAD DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
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CHECKED BY	PER
EDGE SITE ID	S8464
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SET TYPE	DRAFT
SHEET NUMBER	A-102

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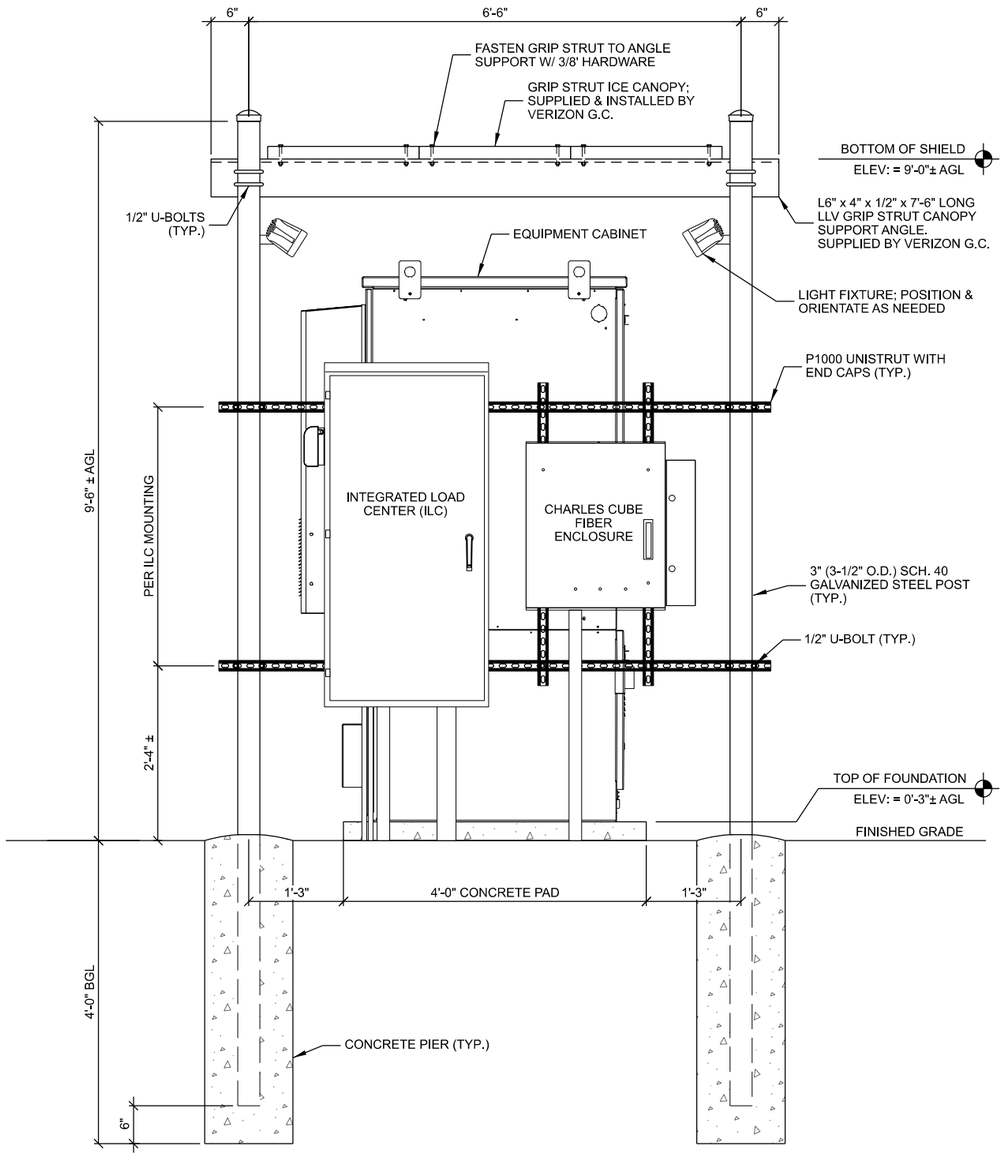
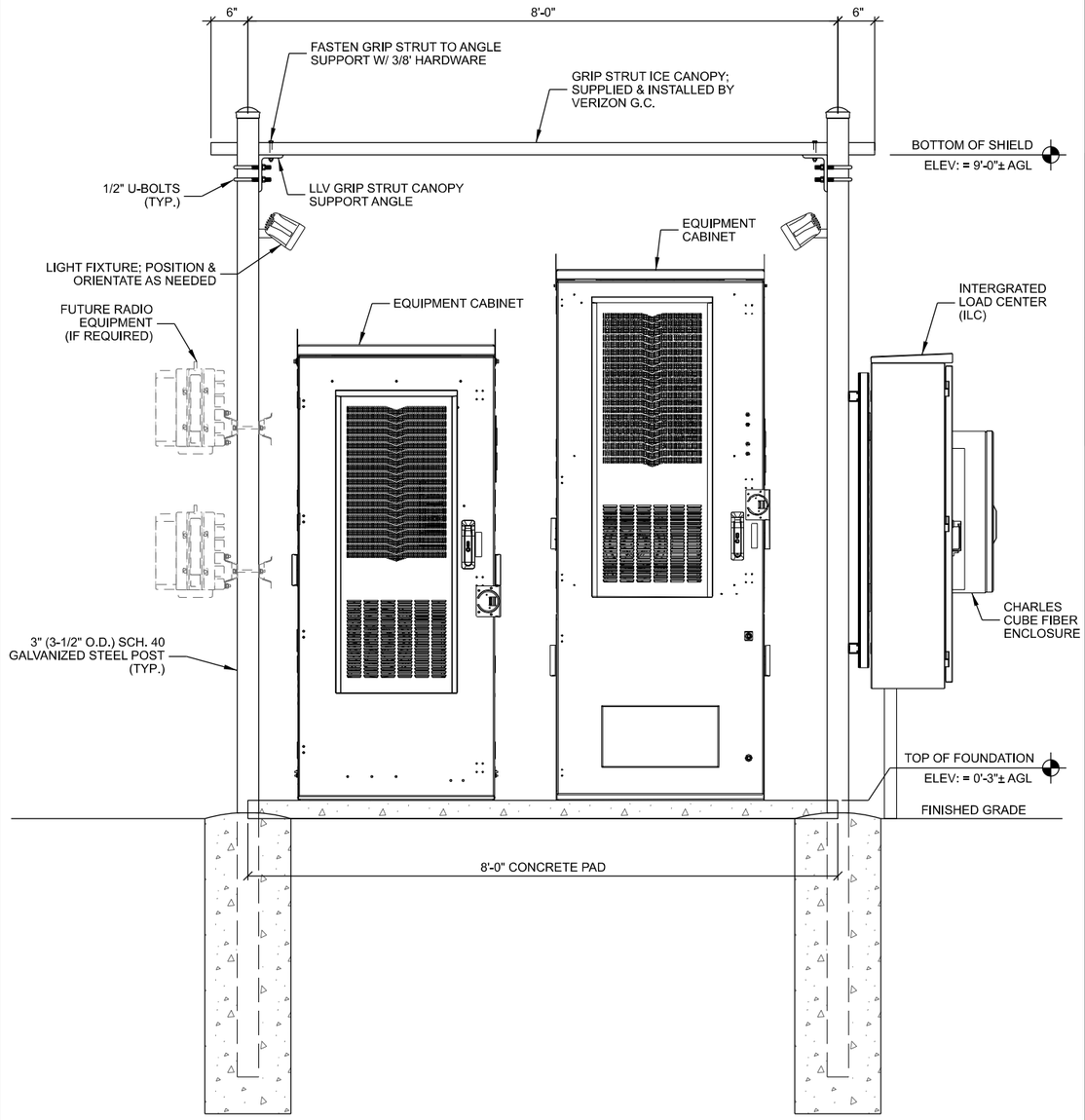


NOTES:

1. CONDUITS AND CABLING NOT SHOWN FOR CLARITY.
2. ELEVATIONS PROVIDED FOR CONVENIENCE ONLY.
3. SECURE CABINET(S) TO CONCRETE PAD PER MANUFACTURERS SPECIFICATIONS

A **EQUIPMENT PAD SIDE ELEVATION**



NOTES:

1. CONDUITS AND CABLING NOT SHOWN FOR CLARITY.
2. ELEVATIONS PROVIDED FOR CONVENIENCE ONLY.
3. SECURE CABINET(S) TO CONCRETE PAD PER MANUFACTURERS SPECIFICATIONS

B **EQUIPMENT PAD FRONT ELEVATION**

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:
- PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

EQUIPMENT PAD ELEVATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	A-201

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MX08FHG865-BHG

NWAV™ X-Pol 8-Port Antenna

X-Pol 8-Port 8 ft, 65° Form In Tighter High Gain (FHG) with Smart Bias Ts, 698-4200 MHz:

4 ports 698-894 MHz and 4 ports 3400-4200 MHz

- High efficiency macro panel antenna with optimized 4T4R MIMO performance for low and high band with industry-leading high gain for extended coverage
- Enhanced pattern performance with superior cross-pol performance and front-to-back ratio
- Fully integrated (iRETs) with independent RET control for low band and high band
- Optimized CBRS radiation patterns for improved RSRP and maximum EIRP
- Excellent passive intermodulation (PIM) performance reduces harmful interference.
- Suitable for 4G and 5G interface technologies
- Integrated Smart Bias-Ts reduce leasing costs
- Optimized form factor for reduced wind loading

nwav

Electrical specification (minimum/maximum)	Ports 1, 2, 3, 4	
Frequency bands, MHz	698-806	806-894
Polarization	± 45°	
Maximum gain over all tilts, dBi	17.0	17.3
Average gain over all tilts, dBi	16.7 ± 0.3	17.0 ± 0.3
Horizontal beamwidth (HBW), degrees[1]	67	64
Front-to-back ratio, co-polar power @180°± 30°, dB	>28.0	>28.0
SPR (Sector Power Ratio), %	5	4.5
X-Pol discrimination (CPR) at boresight, dB	>20.0	>20.0
Vertical beamwidth (VBW), degrees[1]	9	8
Electrical downtilt (EDT) range, degrees	0-10	
First upper side lobe (USLS) suppression, dB[1]	≤-18.0	≤-16.0
Cross-polar isolation, port-to-port, dB[1]	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0	
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153	
Max input power per any port, watts	300	
Total composite power all ports, watts	1500	

[1] Typical value over frequency and tilt

MX08FHG865-BHG

NWAV™ X-Pol 8-Port Antenna

Electrical specification (minimum/maximum)	Ports 5, 6, 7, 8		
Frequency bands, MHz	3400-3550	3550-3980	3980-4200
Polarization	± 45°		
Maximum gain over all tilts, dBi	14.7	14.9	15.1
Average gain over all tilts, dBi	14.5 ± 0.2	14.7 ± 0.2	14.9 ± 0.2
Horizontal beamwidth (HBW), degrees	71	69	67
Front-to-back ratio, co-polar power @180°± 30°, dB	>25	>25	>25
Vertical beamwidth (VBW), degrees[1]	16.7	15.9	15.1
Electrical downtilt (EDT) range, degrees	2-12		
First upper side lobe (USLS) suppression, dB[1]	≤-15	≤-15	≤-15
Cross-polar isolation, port-to-port, dB[1]	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-145		
Max input power per any port, watts	150		

Ordering information	
Antenna model	**Description**
MX08FHG865-BHG	8F X- Pol 8 PORT FIT 65º 0-10º/2-12º, 4.3-10 & SBT
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations
91900314-03	Dual Mount Bracket (see 91900314 bracket document for details)

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+1 315.431.7100 customerservice@jmawireless.com

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
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ANTENNA SPECIFICATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	**T-001**

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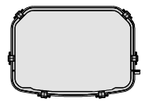
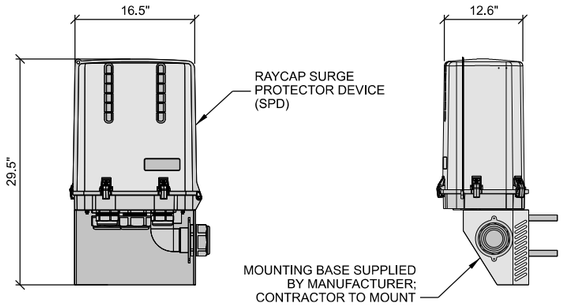
MANUFACTURER: RAYCAP
MODEL: RCMDC-6627-PF-48
DIMENSIONS: 29.5" x 16.5" x 12.6" (H x W x D)
WEIGHT: 32 LBS



PLAN VIEW

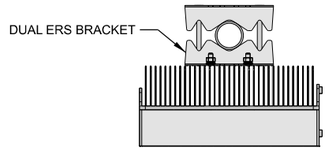


FRONT VIEW

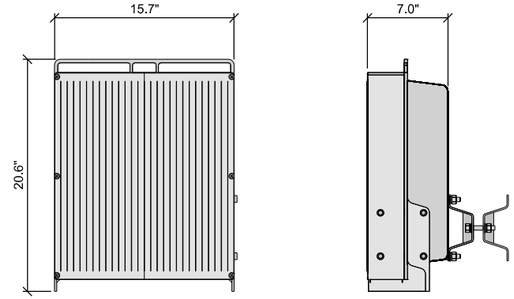
SIDE VIEW

A RAYCAP SURGE PROTECTOR DEVICE (SPD)

MANUFACTURER: ERICSSON
MODEL: RADIO 4490
DIMENSIONS: 20.6" x 15.7" x 7.0" (H x W x D)
WEIGHT: 68.4 LBS



PLAN VIEW



FRONT VIEW

SIDE VIEW

B ERICSSON RADIO 4490

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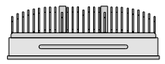
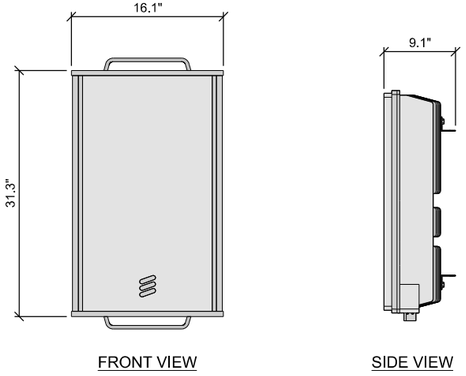
MANUFACTURER: ERICSSON
MODEL: AIR6419
DIMENSIONS: 31.3" x 16.1" x 9.1" (H x W x D)
WEIGHT: 71 LBS.



PLAN VIEW

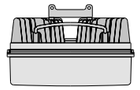


FRONT VIEW

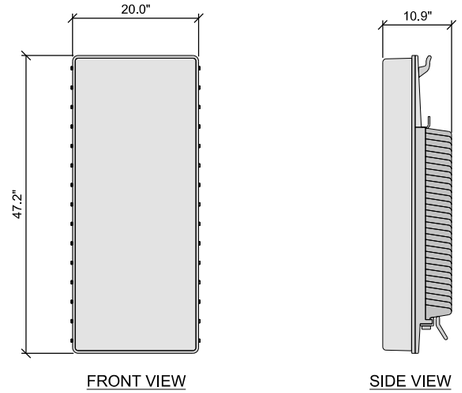
SIDE VIEW

C ERICSSON AIR6419

MANUFACTURER: ERICSSON
MODEL: AIR3283 B25 B66
DIMENSIONS: 47.2" x 20.0" x 10.9" (H x W x D)
WEIGHT: 108 LBS.



PLAN VIEW



FRONT VIEW

SIDE VIEW

D ERICSSON AIR3283 B25 B66

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CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

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EQUIPMENT SPECIFICATIONS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	T-002

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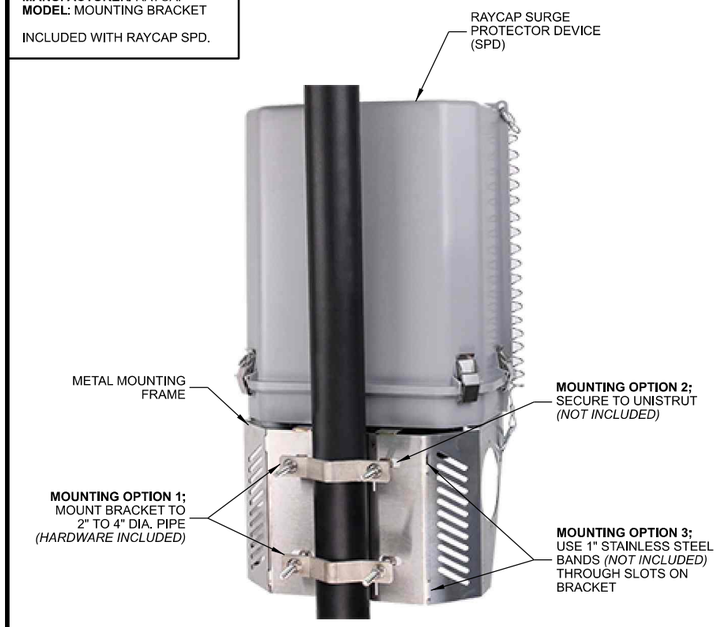
MANUFACTURER: RAYCAP
MODEL: MOUNTING BRACKET

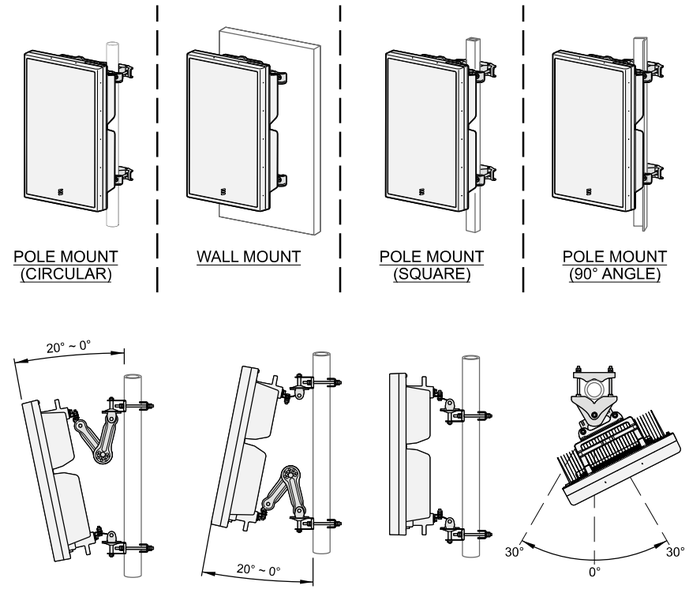
INCLUDED WITH RAYCAP SPD.



A RAYCAP SURGE PROTECTOR DEVICE (SPD) MOUNT

MANUFACTURER: ERICSSON
MODEL: SXK 109 2064/1 (SWIVEL ANGLE)
SXK 109 2065/1 (SWIVEL ANGLE AND TILT ANGLE)
WEIGHT: 9.7 LBS. (SWIVEL ANGLE)
13.0 LBS. (SWIVEL ANGLE AND TILT ANGLE)

POLE	CICULAR	SQUARE	90° ANGLE
MIN. OUTER DIMENSION	3" DIA.	2" x 2"	2" x 2"
MAX. OUTER DIMENSION	4.5" DIA.	3.15" x 3.15"	3.15" x 3.15"



B ERICSSON SWIVEL MOUNT KIT

MANUFACTURER: ERICSSON
MODEL: SXK 109 1973/2
WEIGHT: 3.75 LBS

BRACKET FOR ATTACHING TWO STANDARD OR HEAVY ERS UNITS WITH A HOLE PATTERN OF CC 30 MM AND/OR CC 80 MM., EITHER TO A POLE, WALL, ANGLE TOWER OR SQUARE TUBE.

BOLTS FOR ATTACHING TWO ERS UNITS ARE SUPPLIED IN THE PACKAGE.

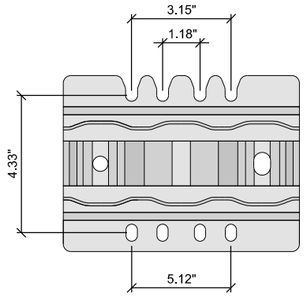


PLATE MOUNTING PATTERN

DUAL RADIO ATTACHMENT

ISOMETRIC VIEW

C DUAL ERS BRACKET

THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
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MOUNTING SPECIFICATIONS

IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	**T-003**

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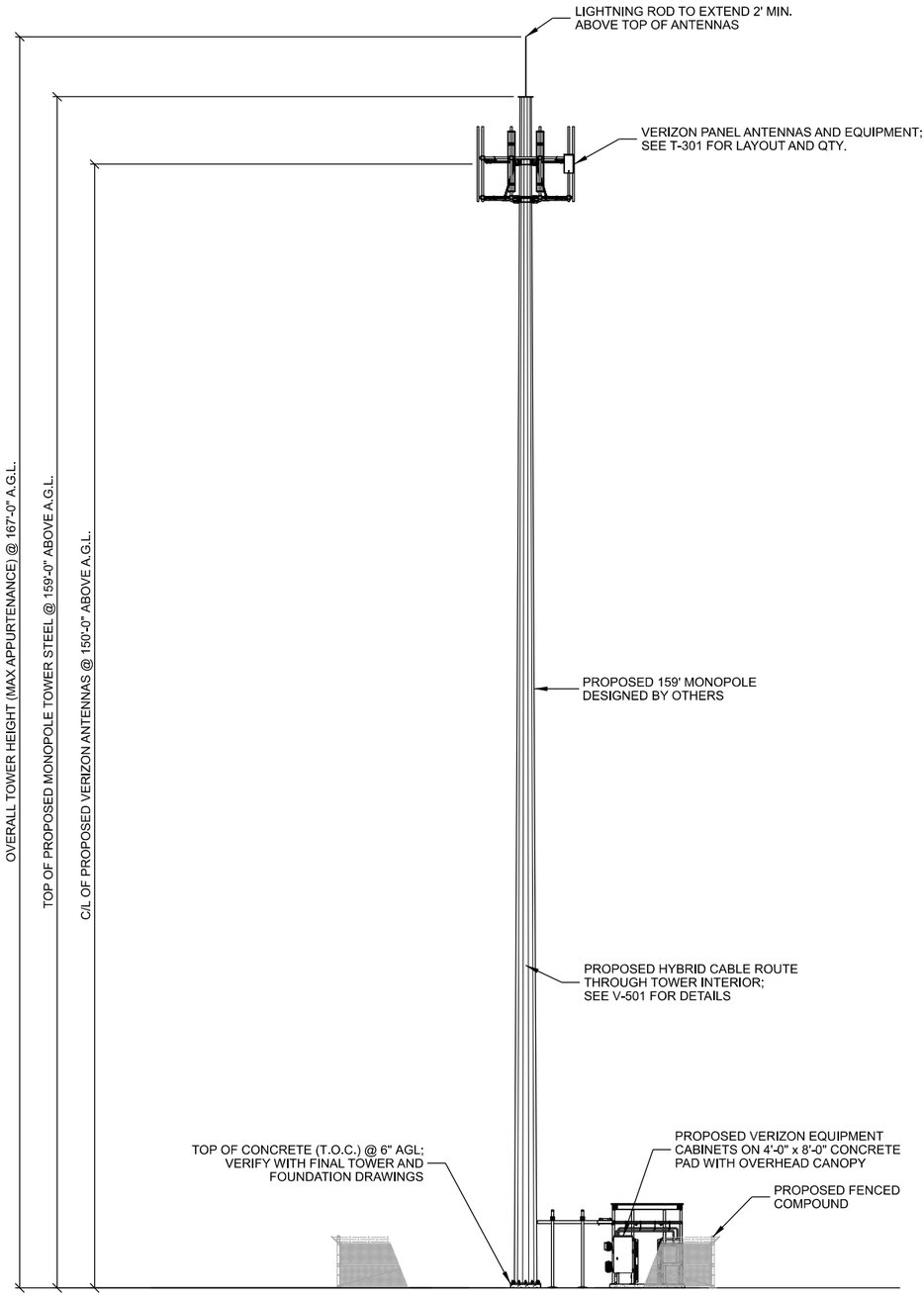
RF EMISSION REPORT REQUIRED

☐ YES ☐ NO

Date: _____



NOTES:

1. CONTRACTOR TO VERIFY HEIGHT AND DIRECTION OF ANTENNAS WITH PROJECT MANAGER AND FINAL RF DESIGN.
2. CONTRACTOR TO VERIFY LIGHTNING ROD EXTENDS 2' MIN. ABOVE ALL ANTENNAS & EQUIPMENT.
3. REFER TO STRUCTURAL REVIEW NOTE ON G-001.
4. TOWER MANUFACTURER TO INSTALL PORTS NEAR VERIZON ANTENNA C/L. VERIFY FINAL PORT HEIGHT, SIZE, AND ORIENTATION WITH TOWER PLANS.

A SITE ELEVATION

SCALE: 11" x 17" - 1" = 20'-0"
22" x 34" - 1" = 10'-0"

CONSULTANT:

Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
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TOWER ELEVATION

IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	**T-201**

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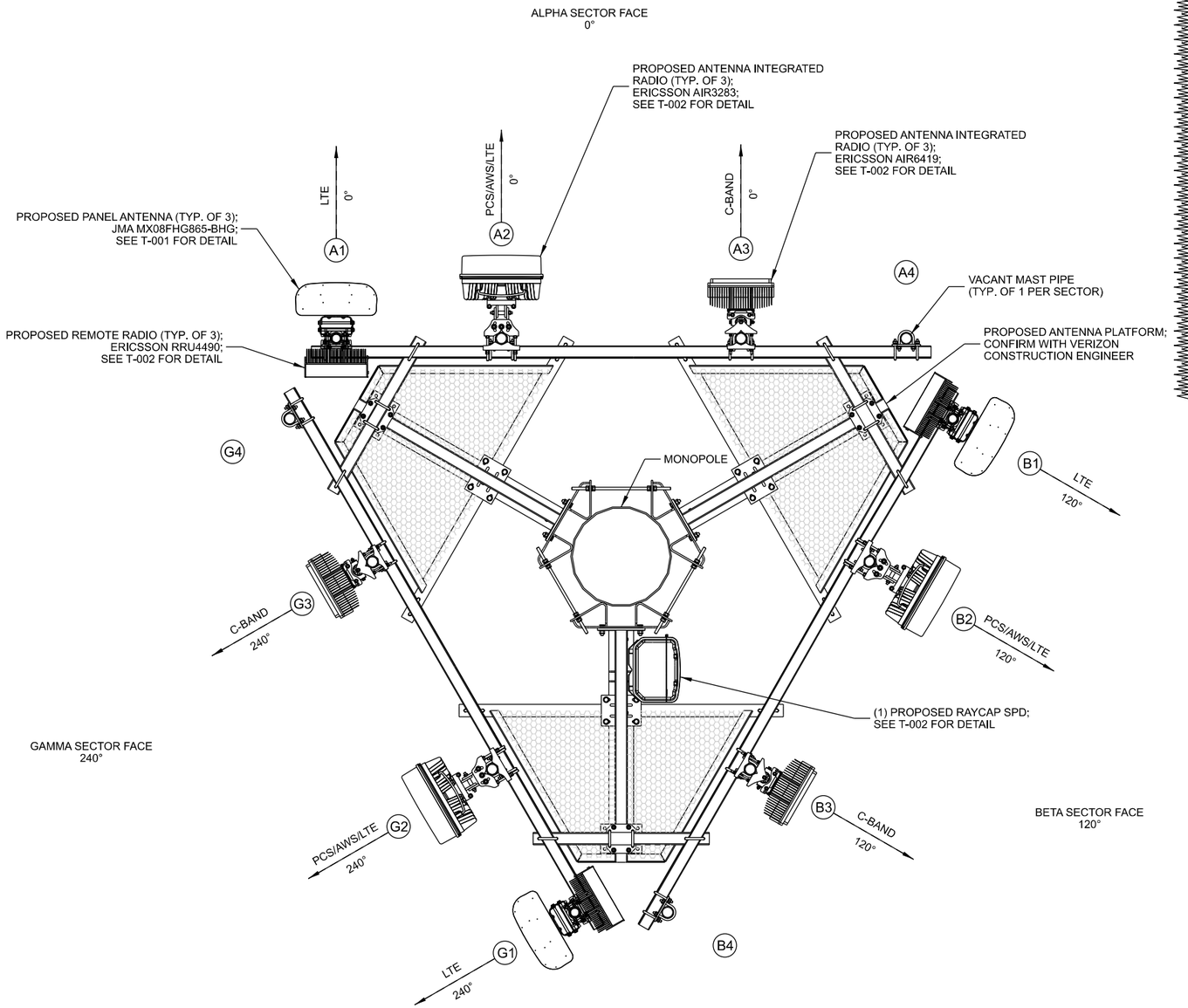
NORTH



NOTE:

1. CONTRACTOR SHALL RECORD ALL DIMENSIONS AND MEMBER SIZES REQUESTED IN THE MOUNT GEOMETRY VERIFICATION REQUIREMENTS SECTION OF THE MOUNT ANALYSIS REPORT. CONTRACT EOR IF THESE DOCUMENTS ARE NOT AVAILABLE TO THE GENERAL CONTRACTOR.
2. CONTRACTOR SHALL INSPECT CLIMBING FACILITIES AND SAFETY CLIMB, IF PRESENT, AND ENSURE THEY ARE IN GOOD CONDITION. CONTRACTOR SHALL INSTALL SAFETY CLIMB WIRE ROPE GUIDES IN LOCATIONS WHERE WIRE ROPE IS RUBBING AGAINST THE MOUNT OR MOUNT-TO-TOWER CONNECTION STEEL. WIRE BRUSH CLEAN ANY OBSERVED CORROSION AND PROTECT WITH TWO (2) COATS OF COLD GALVANIZATION (ZINGA OR ZINC KOTE). CONTRACTOR SHALL PROVIDE PHOTOS OF WIRE ROPE GUIDE INSTALLATION AS PART OF PMI DOCUMENTS. CONTRACT EOR IF ADDITIONAL GUIDANCE IS REQURED.
3. CONTRACTOR TO PROVIDE AND INSTALL ALL RRU AND ANTENNA MOUNTING HARDWARE AS REQUIRED.
4. CONTRACTOR TO ENSURE MOUNT DOES NOT IMPEDE SAFETY CLIMB
5. VERIZON WIRELESS TO PROVIDE PROPOSED MOUNT. PROPOSED MOUNT TO MEET VERIZON MOUNT STANDARD NSTD-445. GC TO REQUEST MOUNT CLASSIFICATION DOCUMENTATION PRIOR TO CONSTRUCTION TO CONFIRM THE MOUNT MEETS NSTD-445. GC TO BRING ANY CONCERNS OR DISCREPANCIES TO THE ATTENTION OF THE CONSTRUCTION ENGINEER AND ENGINEER OF RECORD.

NOTES:

1. ALL ANTENNA AZIMUTHS TO BE FROM TRUE NORTH.
2. SEE MOUNT ANALYSIS FOR INSTALLATION REQUIREMENTS OF ANTENNAS AND EQUIPMENT.

A ANTENNA AND EQUIPMENT LAYOUT

CONSULTANT:
Edge
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ANTENNA CONFIGURATION
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	T-301

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FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY							NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	QTY.	ANTENNA	BAND	ELEC D-TILT	MECH D-TILT	STATUS	QTY.	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	150'	0°	A1	1	JMA MX08FHG865-BHG	700/850	2°	0°	INSTALL	1	ERICSSON RRU4490	INSTALL
	150'	0°	A2	1	ERICSSON AIR3283	1900/AWS	3°	0°	INSTALL	-	-	-
	150'	0°	A3	1	ERICSSON AIR6419	C-BAND	3°	0°	INSTALL	-	-	-
	-	-	A4	-	-	-	-	-	-	-	-	-
BETA	150'	120°	B1	1	JMA MX08FHG865-BHG	700/850	2°	0°	INSTALL	1	ERICSSON RRU4490	INSTALL
	150'	120°	B2	1	ERICSSON AIR3283	1900/AWS	3°	0°	INSTALL	-	-	-
	150'	120°	B3	1	ERICSSON AIR6419	C-BAND	3°	0°	INSTALL	-	-	-
	-	-	B4	-	-	-	-	-	-	-	-	-
GAMMA	150'	240°	C1	1	JMA MX08FHG865-BHG	700/850	2°	0°	INSTALL	1	ERICSSON RRU4490	INSTALL
	150'	240°	C2	1	ERICSSON AIR3283	1900/AWS	3°	0°	INSTALL	-	-	-
	150'	240°	C3	1	ERICSSON AIR6419	C-BAND	3°	0°	INSTALL	-	-	-
	-	-	C4	-	-	-	-	-	-	-	-	-
ANTENNA TOTAL:			9							NON ANTENNA TOTAL:		3

PROPOSED HARDWARE

QTY	MANUFACTURER	MODEL	DESCRIPTION	LOCATION	STATUS
1	RAYCAP	RVZDC-4520-RM-48	DISTRIBUTION BOX	ON ICE BRIDGE POST	INSTALL
1	RAYCAP	RVZDC-6627-PF-48	DISTRIBUTION BOX	ON TOWER	INSTALL
1	RAYCAP	RTF-4575	FIBER MANAGEMENT TRAY	CABINETS	INSTALL
2	HUBER+SUHNER	HFT1206	HYBRID	TRUNK CABLE	INSTALL
5	COMMSCOPE	-	UP-CONVERTER MODULES	CABINETS	INSTALL
1	COMMSCOPE	-	DC-DC UP-CONVERTER	CABINETS	INSTALL

HYBRID CABLE LENGTH

QUANTITY	2
LENGTH FROM GROUND SURGE PROTECTOR TO TOWER	15 FT
LENGTH FROM T.O.C. TO TOWER TOP SURGE PROTECTOR C/L	150 FT
TOTAL LENGTH OF HYBRID CABLE(S)	165 FT
** HYBRID CABLE LENGTH NOT TO EXCEED 367'	

JUMPER CABLE LENGTH CHECK

IS THE DISTANCE FROM SURGE PROTECTOR TO RADIO UNIT LESS THAN 30'?	
ALPHA SECTOR	YES
BETA SECTOR	YES
GAMMA SECTOR	YES

NOTE:

1. RF DESIGN DETAILED ON THIS SHEET PROVIDED BY VERIZON AND IS INCLUDED FOR CONVENIENCE ONLY. FINAL RF DESIGN TO BE VERIFIED WITH VERIZON PRIOR TO CONSTRUCTION. IF SIGNIFICANT CHANGES OR DISCREPANCIES ARE IDENTIFIED, CONTACT ENGINEER PRIOR TO INSTALLATION.
2. IF CABLING LENGTH EXCEEDS MAXIMUM ALLOWED LENGTH CONTRACTOR SHALL CONTACT CLIENT AND ENGINEER TO RESOLVE PRIOR TO CONSTRUCTION.

A PROPOSED ANTENNA SUMMARY

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
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ANTENNA & EQUIPMENT SUMMARY

IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
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SET TYPE	DRAFT
SHEET NUMBER	T-501

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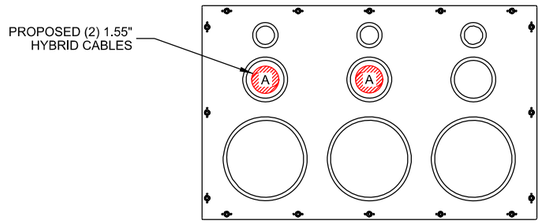
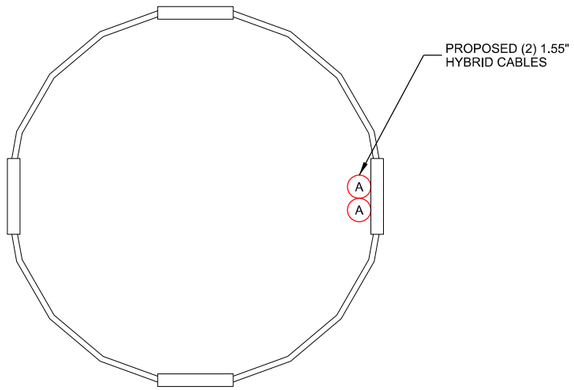


A PROPOSED CABINET COAX PORT (EXTERIOR VIEW)



CONTRACTOR TO PROVIDE AND INSTALL ALL ENTRY PORT BOOTS FOR PROPOSED HYBRID TRUNK CABLE AND CAPS.

CONTRACTOR TO PROVIDE AND INSTALL ALL ICE BRIDGE HARDWARE REQUIRED FOR PROPOSED COAX/HYBRID TRUNK CABLE

CONTRACTOR TO PROVIDE AND INSTALL ALL COAX/HYBRID TRUNK CABLE ATTACHMENT TO TOWER HARDWARE

B PROPOSED TOWER CABLE LAYOUT

NORTH

COAX SYMBOL	(#) SIZE	MOUNTING TYPE	CARRIER / OWNER	TECHNOLOGY	MOUNT HEIGHT
A	(2) 1.55"	TOWER INTERIOR	VERIZON	HYBRID	150'

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:

- PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

CABLE ROUTING
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	V-501

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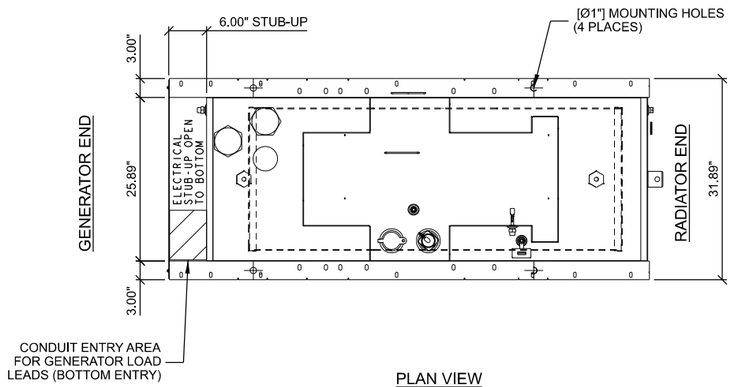
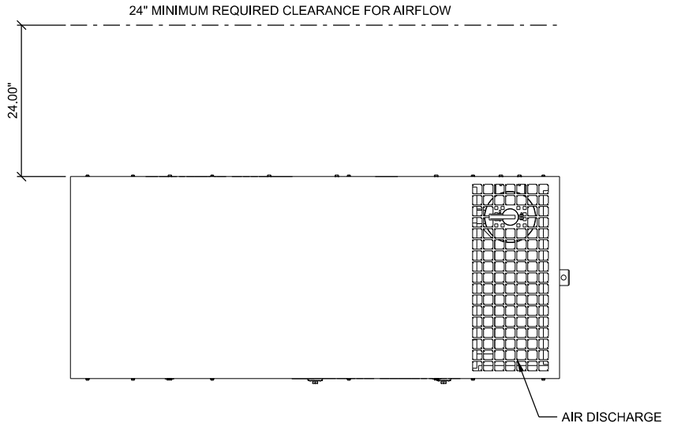
NOTES:

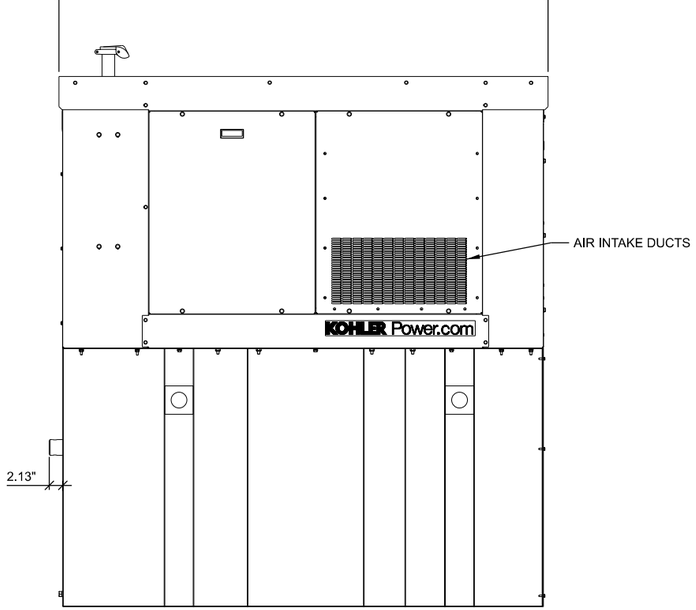
1. THE RIGHT SIDE OF THE GENERATOR IS SERVICE ACCESSIBLE.
2. 6 AMP BATTERY CHARGER.
3. 120VAC ENGINE BLOCK HEATER.
4. GENERATOR MUST BE GROUNDED.
5. SOUND ATTENUATED ENCLOSURE STANDARD WITH GENERATOR.
6. MUST ALLOW FREE FLOW OF DISCHARGE AIR AND EXHAUST.
7. MUST ALLOW FREE FLOW OF INTAKE AIR.
8. EASE ACCESS SERVICE PANEL IS LOCATED ON THE RIGHT SIDE OF GENERATOR ONLY.
9. BASE TANK REQUIRES ALL STUB-UPS TO BE IN RREAR TANK STUB-UP AREA.
10. SEE TABLE FOR SUBBASE FUEL TANK CAPACITY.
11. TANK EQUIPPED WITH FIRE SAFETY VALVE ON FUEL SUPPLY LINE.
12. IT IS THE RESPONSIBILITY OF THE INSTALLATION TECHNICIAN TO ENSURE THAT THE GENERATOR INSTALLATION COMPLIES WITH ALL APPLICABLE CODES, STANDARDS, AND REGULATIONS.
13. GENERATOR IS INSTALLED ON A UL-142 RATE DOUBLE WALL SUBBASE FUEL TANK.



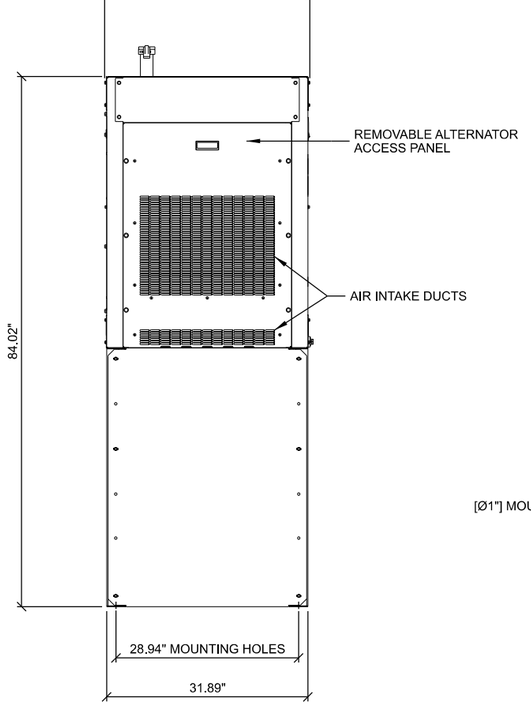
PLAN VIEW



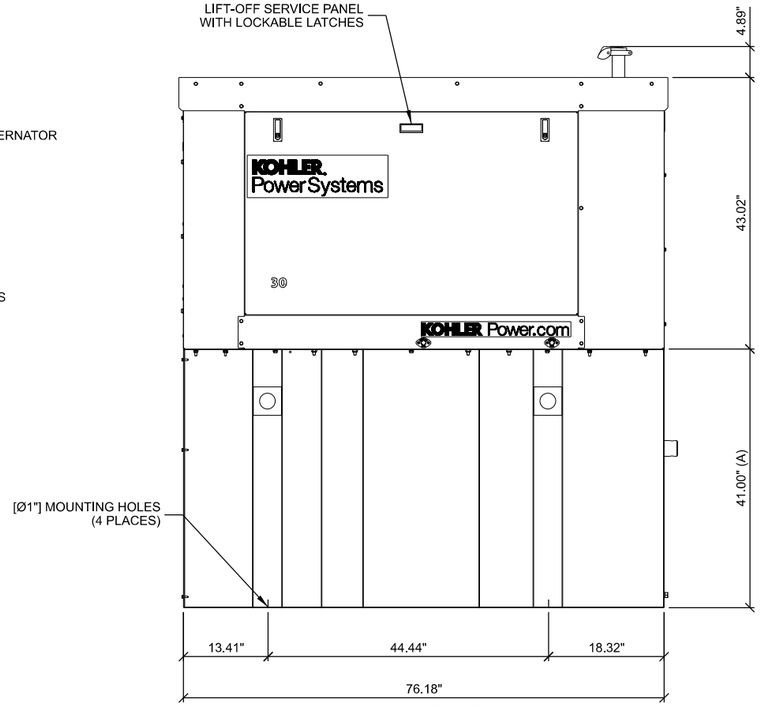
PLAN VIEW W/ ENCLOSURE



RIGHT VIEW



REAR VIEW



LEFT VIEW

GENSET	TANK P/N	TANK HT (A) IN	DESCRIPTION	ASSY WEIGHT
30REOZK	GM97093-MA2	41.0"	SKID/TANK 203 GAL	2114 LBS
30REOZK	GM97093-MA1	32.0"	SKID/TANK 148 GAL	1969 LBS

A **KOHLER 30REOZK DIESEL GENERATOR**

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

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GENERATOR SPECIFICATIONS
IA112 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-001

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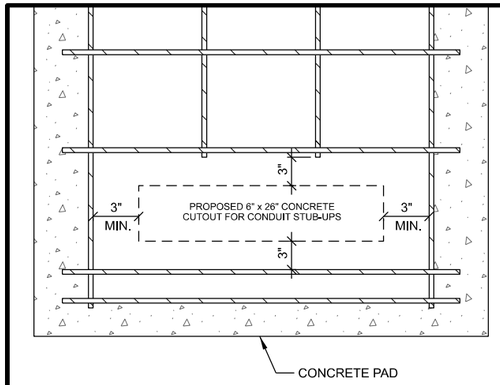
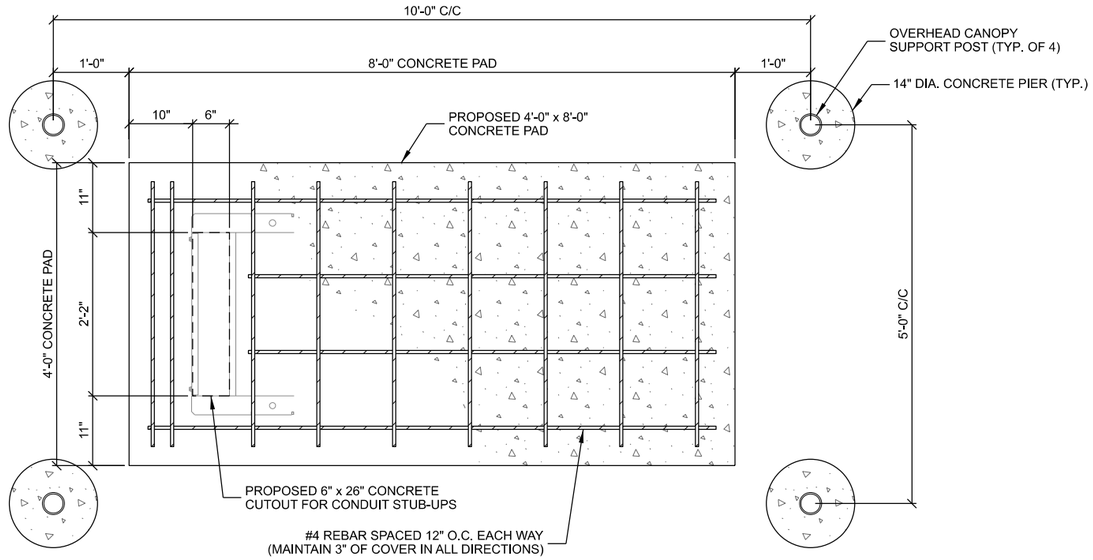


STUB-UP REINFORCEMENT

NOTE:
VERIFY EXACT CONDUIT STUB-UP LOCATIONS WITH GENSET PLANS



A **KOHLER 30REOZK DIESEL GENERATOR FOUNDATION LAYOUT**

REBAR SCHEDULE		
SIZE	LENGTH	QTY
#4	7'-6"	2
#4	3'-6"	9
#4	6'-2"	2

GENERATOR CLEARANCE NOTE:

- MINIMUM OF 10' OF CLEARANCE FROM COMBUSTIBLE WALL
- MINIMUM OF 5' OF CLEARANCE FROM A NON-COMBUSTIBLE WALL
- MINIMUM OF 20' OF CLEARANCE FROM AN OUTDOOR ELECTRICAL TRANSFORMER OR NORMAL POWER DISTRIBUTION EQUIPMENT

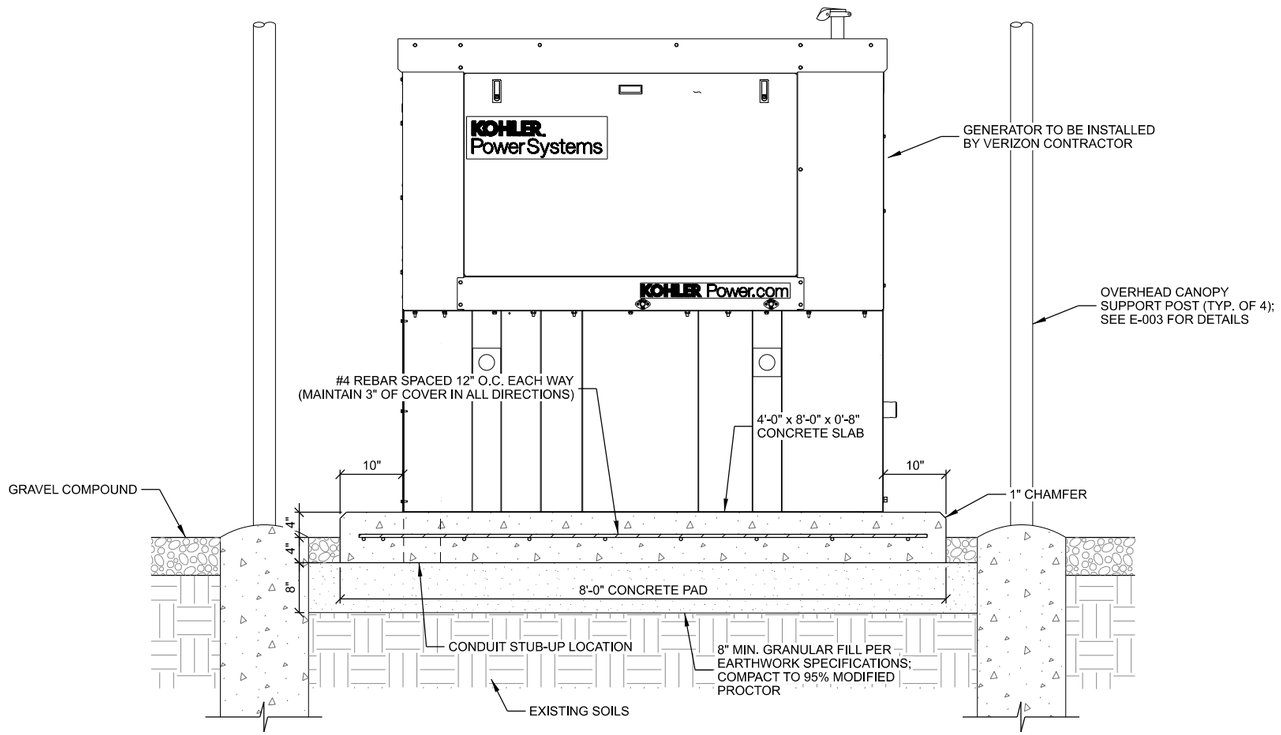
NOTE:

SEE GENERATOR MANUFACTURER'S DRAWINGS FOR PHYSICAL LOCATION OF FUEL LINES, CONTROL AND POWER INTERCONNECTIONS AND OTHER INTERFACES THAT ARE TO BE CAST INTO THE CONCRETE. THE PREFERRED METHOD IS TO BRING THE CONDUIT THROUGH THE CONCRETE PAD TO THE UNDERSIDE OF THE GENERATOR (MINIMIZES RODENT DAMAGE). FINISH CONNECTIONS WITH FLEXIBLE CONDUIT PER GENERATOR MANUFACTURER'S SPECIFICATIONS. RIGID CONDUITS SHALL BE SECURED TO THE EXISTING SLAB, THEN BURIED BETWEEN SLAB AND PLATFORM

NOTE:

SLAB NOT SUITABLE AT SITES WITH ORGANIC SOIL, UNCOMPACTED FILL, EXPANSIVE SOIL, OR SOILS SUSCEPTIBLE TO FROST HEAVE

REMOVE ALL ORGANIC MATERIAL, SOFT AREAS, AND POOR SOILS BENEATH CONCRETE PAD TO A DEPTH OF ATLEAST 2'-0" BELOW CONCRETE PAD



B **KOHLER 30REOZK DIESEL GENERATOR FOUNDATION DETAIL**

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Edge
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PRAIRIE DU SAC, WI 53578
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GENERATOR SPECIFICATIONS
IA112 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-002

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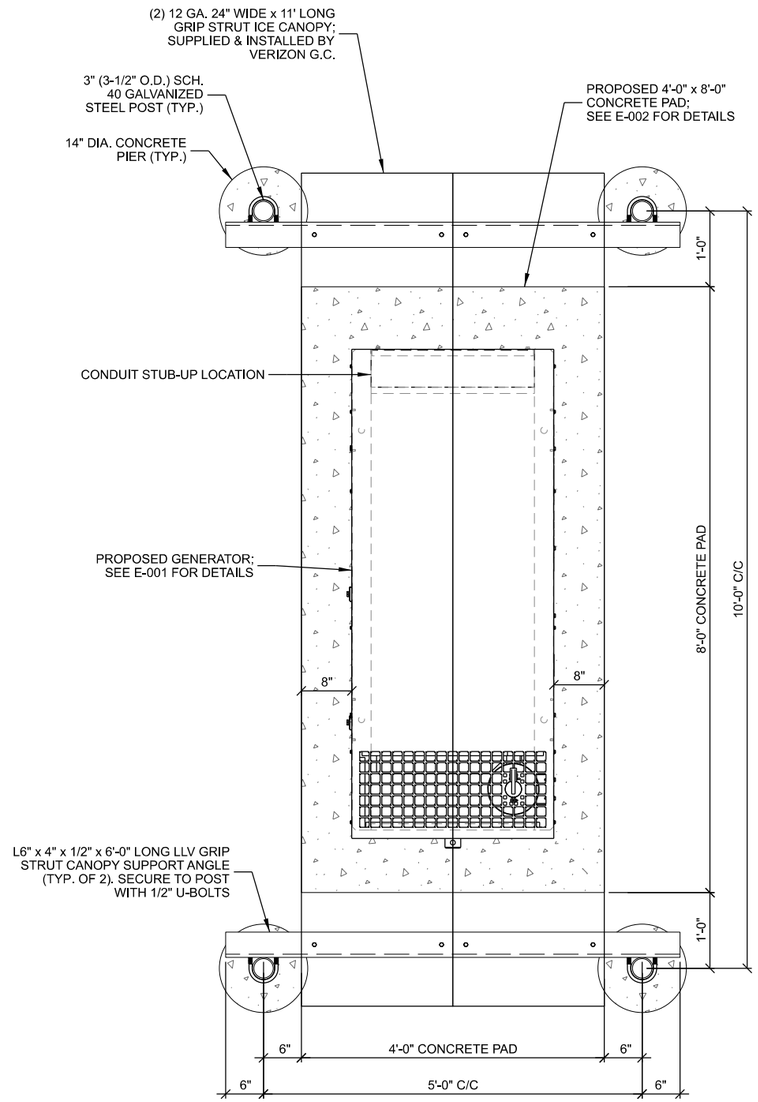
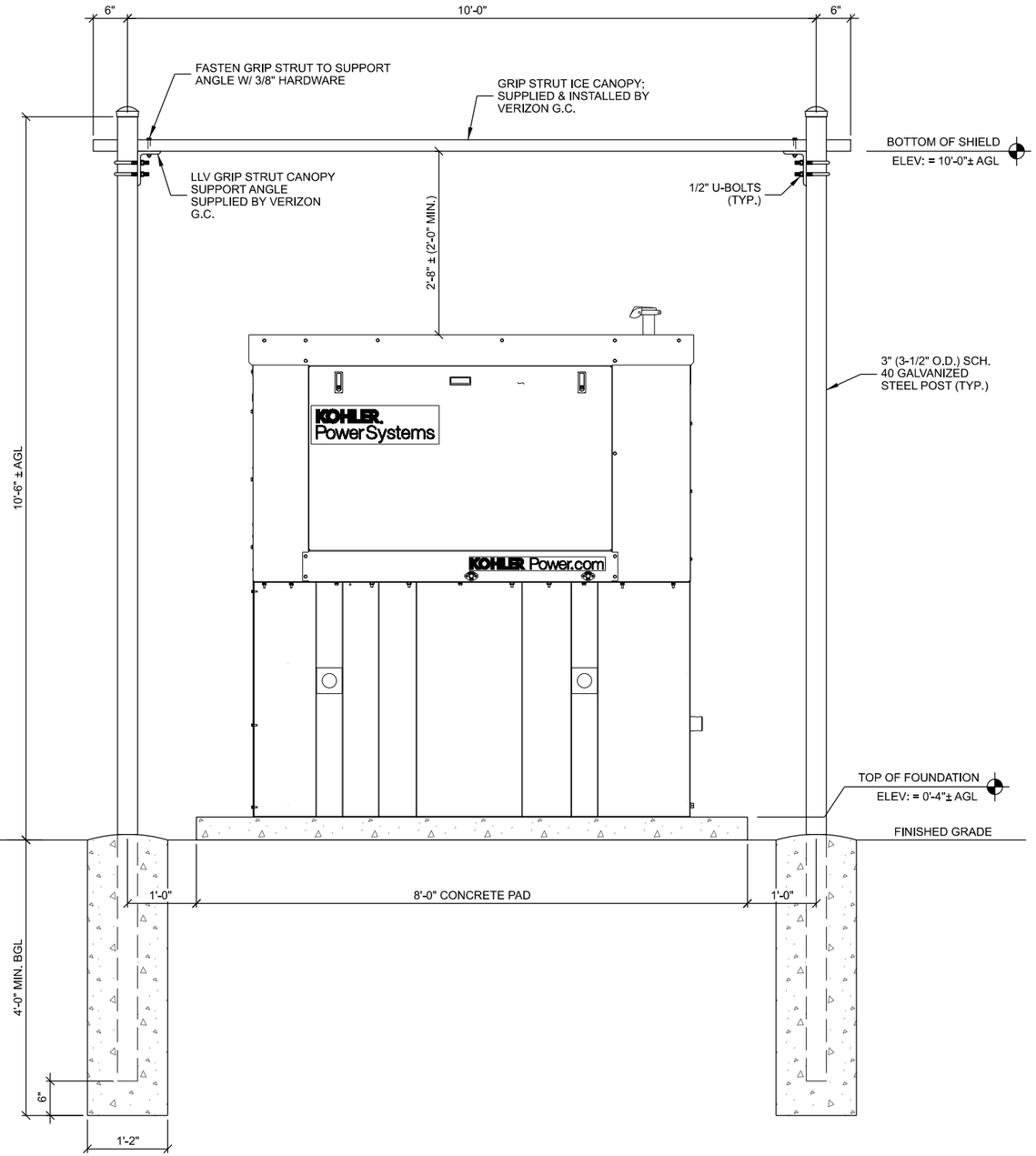


A **GENERATOR CANOPY PLAN**



B **GENERATOR CANOPY ELEVATION**

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CONSULTANT:
Edge
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624 WATER STREET
PRAIRIE DU SAC, WI 53578
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CLIENT:
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GENERATOR CANOPY DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-003

KEYNOTES: (THIS SHEET)

- (A) EQUIPMENT GROUND RING #2 AWG SOLID TINNED COPPER GROUND LEAD MIN. 4'-6" BURY OR 6" BELOW FROST WHICH EVER IS GREATER
- (B) MAINTAIN 2- FOOT CLEARANCE FROM ALL STRUCTURES
- (C) MASTER GROUND BAR (MGB) MOUNTED VERTICALLY TO FIRST ICE BRIDGE POST ON INSULATORS
- (D) 5/8" DIAMETER x 10'-0" LONG COPPER CLAD GROUND ROD; SPACED AT 8' O.C.
- (E) BOND EQUIPMENT GROUND RING TO THE TOWER GROUND RING WITH (2) #2 SOLID BARE TINNED COPPER GROUND LEADS
- (F) EQUIPMENT CABINET GROUND; SEE E-501 FOR DETAILS
- (G) INTEGRATED LOAD CENTER (ILC) GROUND; SEE E-501 FOR DETAILS
- (H) FIBER ENCLOSURE GROUND; SEE E-501 FOR DETAILS
- (I) GENERATOR GROUND; SEE E-501 FOR DETAILS
- (J) EQUIPMENT PAD REBAR GROUND; SEE E-502 FOR DETAILS
- (K) GPS GROUND TO ICE BRIDGE POST; SEE E-501 FOR DETAILS
- (L) ICE BRIDGE POST GROUND; SEE E-501 FOR DETAILS
- (M) ICE BRIDGE SECTION GROUND; SEE E-501 FOR DETAILS
- (N) ICE BRIDGE SECTION TO POST; SEE E-501 FOR DETAILS
- (O) GROUND FENCE POSTS WITHIN 6-FEET OF EQUIPMENT
- (P) INSPECTION WELL (TYP.); SEE E-503 FOR DETAILS
- (Q) TOWER GROUND BAR (TGB) INSTALLED ON TOWER; SEE E-501 FOR DETAILS
- (R) 4" x 12" x 1/4" GROUND BAR INSIDE HAND HOLE; CONTRACTOR TO DRIVE 10' GROUND ROD & CLAMP TO GROUND BAR (IF APPLICABLE)
- (S) GROUND ELECTRIC METER TO (2) INDEPENDENT GROUND RODS, SPACED 10' O.C. WITH #2 AWG SOLID TINNED COPPER (IF APPLICABLE)
- (T) RAYCAP SPD GROUND (TYP.). SEE E-501 FOR DETAILS

NOTES:

1. THE GROUNDING SHALL BE TESTED PRIOR TO FINAL BACKFILLING. DOCUMENTATION OF 5 OHM OR LESS RESISTANCE TO BE PROVIDED TO PROJECT MANAGER.
2. ALL NON-INSULATED GROUND LEADS EXTENDING ABOVE GROUND LEVEL SHALL BE ENCASED IN 3/4" PVC & SEALED WITH SILICONE. PVC SHALL BE MIN. 16" INTO EARTH & EXTEND MIN. 6" ABOVE GROUND.
3. INSTALL 18" X 18" COPPER PLATES IN LIEU OF GROUND RODS WHEN INSTALLING OVER TOWER FOUNDATION OR WHERE DRIVING GROUND RODS IS NOT FEASIBLE.

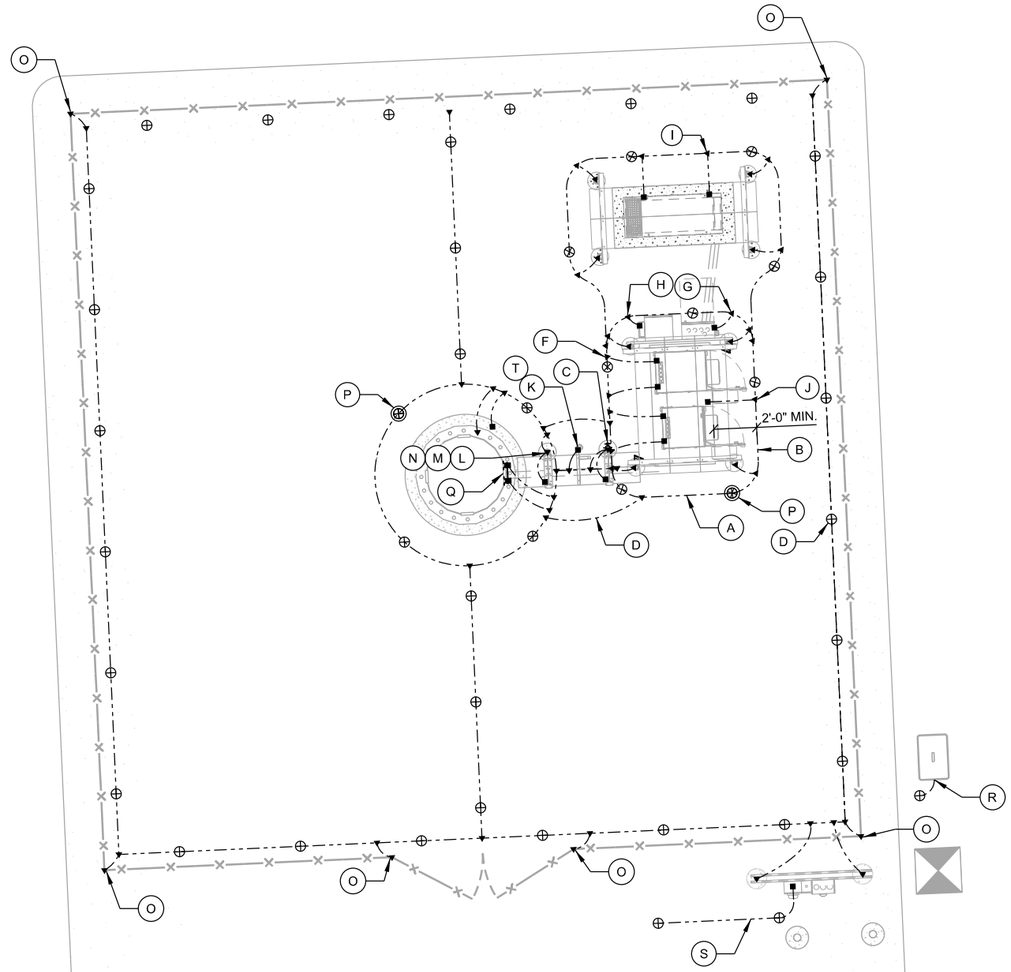
GROUNDING LEGEND: (THIS SHEET)

- ▲ EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION
- ■ MECHANICAL CONNECTION
- — - - GROUND LEAD
- ⊗ INSPECTION WELL
- ⊗ 5/8" DIA. x 10'-0" LONG, STEEL CLAD W/ A PURE COPPER JACKET (10' MAX SEPARATION); TOP OF EACH GROUND ROD SHALL EXTEND NO MORE THAN 6" ABOVE BOTTOM OF TRENCH
- ⊗ 18" X 18" X .032" THK COPPER PLATE (10' MAX SEPARATION)

GROUNDING ELECTRODE SYSTEM NOTES:

1. CONNECTIONS:
   ALL CONNECTIONS SHALL BE EXOTHERMICALLY CONNECTED UNLESS NOTED OTHERWISE. CONTRACTOR TO FOLLOW ALL MANUFACTURER'S GUIDELINES & RECOMMENDATIONS.
2. ALL ELECTRICAL AND MECHANICAL GROUND CONNECTIONS SHALL HAVE ANTI-OXIDANT COMPOUND APPLIED TO CONNECTION.
3. FENCE/GATE:
   GROUND FENCE POSTS WITHIN 6-FEET OF ENCLOSURE AND 25-FEET OF TOWER. GROUND EACH GATE POST AND CORNER POST. GROUND CONNECTIONS TO FENCE POSTS SHALL BE MADE BY THE EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.
4. CONTRACTOR SHALL SUBMIT THE GROUND RESISTANCE TEST REPORT AS FOLLOWS:
   A. ONE (1) COPY TO THE OWNER REPRESENTATIVE
   B. ONE (1) COPY TO THE ENGINEER
   C. ONE (1) COPY TO KEEP INSIDE EQUIPMENT ENCLOSURE

NORTH



GROUNDING NOTE:

1. THIS GROUNDING PLAN WAS PREPARED PRIOR TO THE COMPLETION OF THE GEOTECHNICAL REPORT AND RECEIPT OF THE TOWER FOUNDATION DESIGN. THE LAYOUT OF RADIALS AND GROUND RODS ARE APPROXIMATE IN NATURE AND MAY NEED TO BE ADJUSTED IN THE FIELD. GROUND RODS SHOULD NOT EXTEND THROUGH THE TOWER FOUNDATION OR OTHER STRUCTURAL ELEMENTS WITHOUT PRIOR APPROVAL FROM THE DESIGN ENGINEER. IN ADDITION, SOME ADJUSTMENT TO THE GROUND METHOD MAY BE REQUIRED IN INSTANCES WHERE SHALLOW BEDROCK OR OTHER UNIQUE CIRCUMSTANCES ARE ENCOUNTERED. CONTRACTOR SHALL CONSULT GEOTECHNICAL REPORT FOR FURTHER DESIGN AND CONSTRUCTION RECOMMENDATIONS.

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
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GROUNDING PLAN
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-101

5' 0 5' 10'
SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

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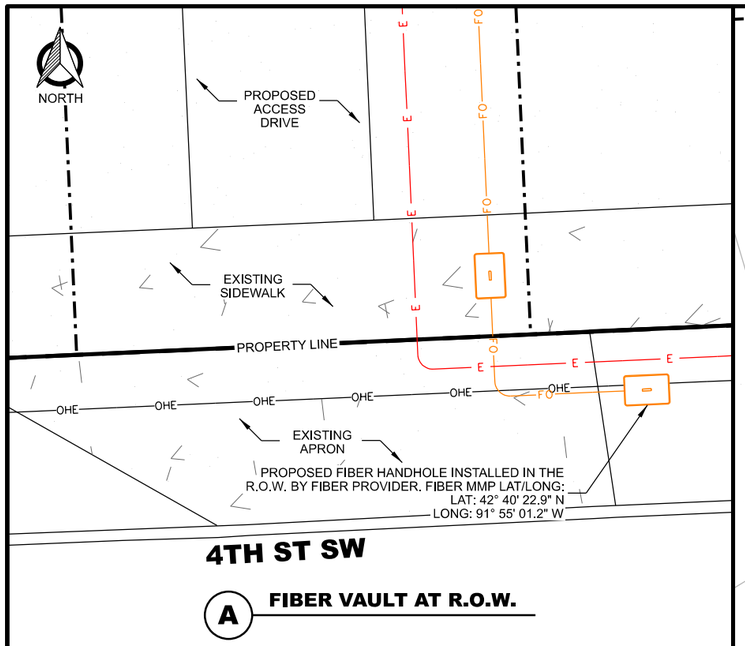
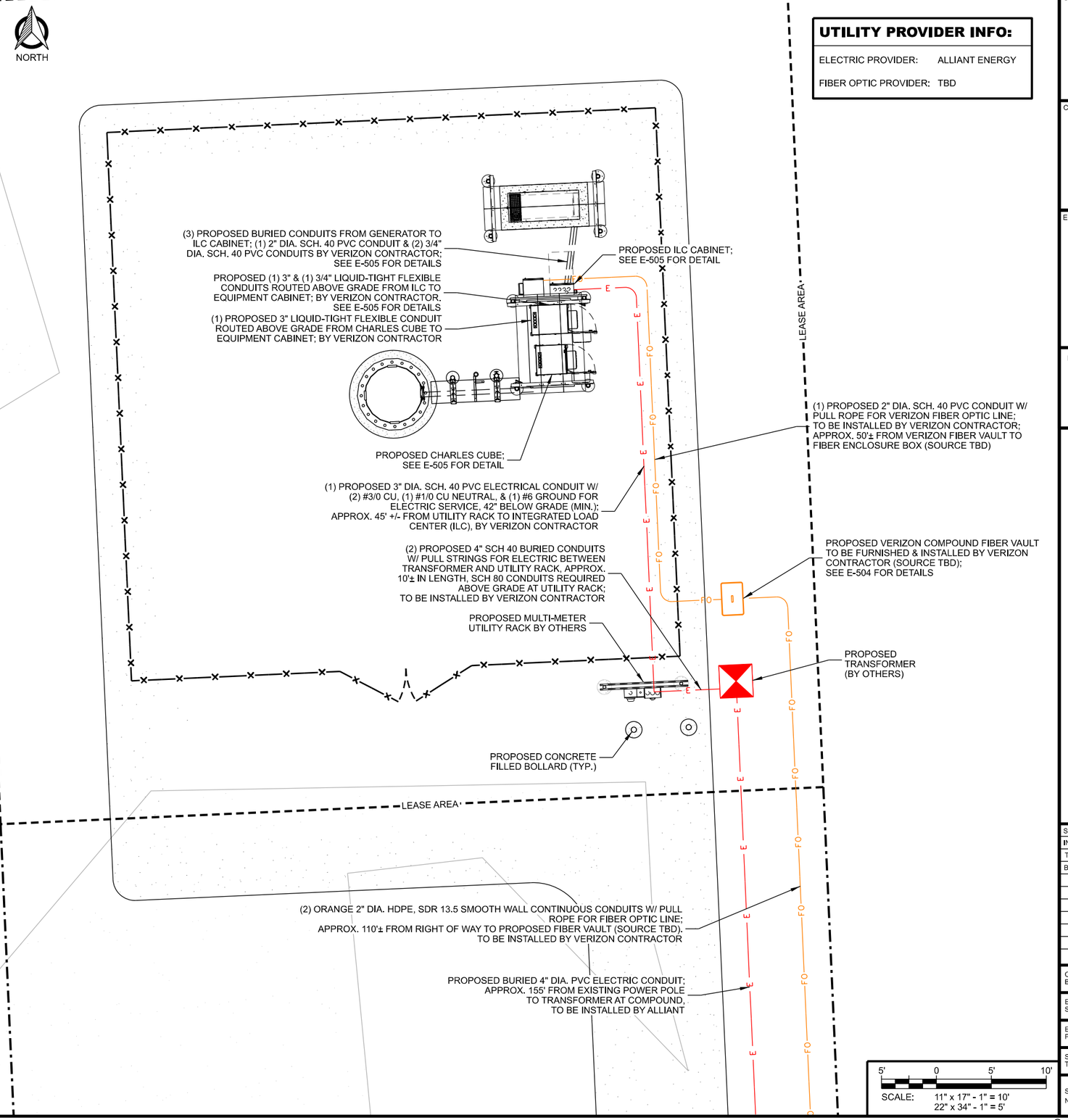


A FIBER VAULT AT R.O.W.



UTILITY PROVIDER INFO:	
ELECTRIC PROVIDER:	ALLIANT ENERGY
FIBER OPTIC PROVIDER:	TBD

NOTE:

1. FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

5' 0 5' 10'

SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

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UTILITY PLAN
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-102

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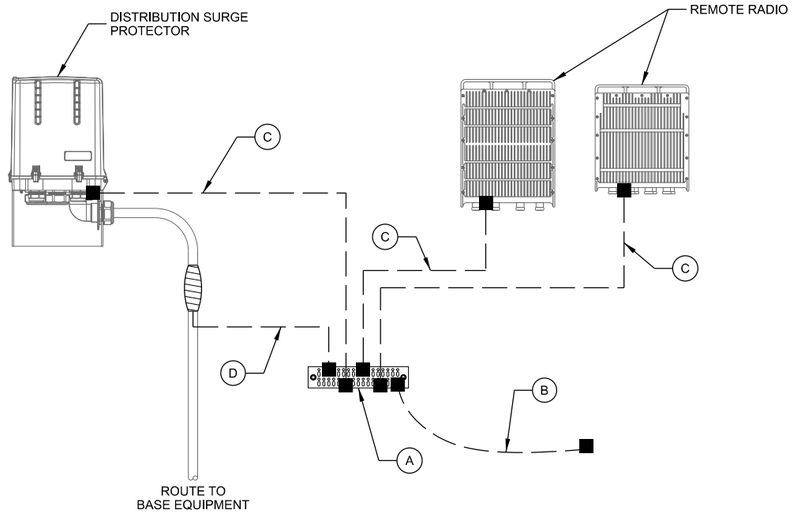
KEYNOTES: (THIS SHEET)

- (A) 1/4" x 4" x 12" COLLECTOR GROUND BAR (CGB) FOR CONNECTION OF MULTIPLE GROUND KITS AT ONE LEVEL
- (B) CGB GROUND #2 AWG GREEN-INSULATED STRANDED COPPER LEAD WITH 2 HOLE LONG BARREL AND UL LISTED BONDING CLAMP TO TOWER STEEL AND/OR MOUNT STEEL
- (C) ANCILLARY EQUIPMENT GROUND KIT #2 AWG STRANDED INSULATED LEAD TO GROUND BAR WITH 2 HOLE LONG BARREL LUG (TYP.)
- (D) CABLE GROUND #2 AWG STRANDED INSULATED TO GROUND BAR WITH 2 HOLE LONG BARREL LUG (TYP.)
- (E) 1/4" x 4" x 20" MASTER GROUND BAR (MGB) MOUNTED VERTICALLY TO FIRST ICE BRIDGE POST ON INSULATORS
- (F) EQUIPMENT CABINET GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE TO EQUIPMENT PAD GROUND RING (TYP. OF 2 PER CABINET)
- (G) INTEGRATED LOAD CENTER (ILC) GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE TO EQUIPMENT PAD GROUND RING
- (H) FIBER ENCLOSURE GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE TO EQUIPMENT PAD GROUND RING
- (I) GENERATOR GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE TO EQUIPMENT PAD GROUND RING (TYP. OF 2)
- (J) CANOPY POST GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE (TYP. OF 4)
- (K) CANOPY TO POST GROUND #2 AWG GREEN-INSULATED STRANDED COPPER LEAD WITH 2 HOLE LONG BARREL ON EACH END (TYP.);
- (L) EQUIPMENT PAD REBAR GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE
- (M) CONDUIT GROUND #2 AWG SOLID TINNED COPPER LEAD
- (N) GPS GROUND TO ICE BRIDGE POST #2 AWG GREEN-INSULATED STRANDED COPPER LEAD
- (O) ICE BRIDGE POST GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE (TYP.)
- (P) ICE BRIDGE SECTION GROUND #2 AWG GREEN-INSULATED STRANDED COPPER LEAD WITH 2 HOLE LONG BARREL ON EACH END (TYP.)
- (Q) ICE BRIDGE SECTION TO POST GROUND #2 AWG SOLID TINNED COPPER LEAD (TYP.); ORIENT LEAD WITH HIGH SIDE TOWARDS TOWER
- (R) 1/4" x 4" x 20" TOWER GROUND BAR (TGB) INSTALLED ON TOWER; FOR LATTICE TOWERS, MOUNT TGB DIAGONALLY AT 12" ABOVE ICE BRIDGE FOR EASIER HOOK-UP OF GROUNDING KIT LEADS
- (S) TGB GROUND #2 AWG SOLID TINNED COPPER LEAD ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE FROM TGB TO TOWER GROUND RING (TYP. OF 2)
- (T) TBG GROUND #2 AWG GREEN-INSULATED STRANDED COPPER LEAD WITH 2 HOLE LONG BARREL AND UL LISTED BONDING CLAMP TO FLAT METAL
- (U) SECURE GROUND LEADS TO TOWER WITH BAND STRAPS OR SNAP-IN HANGERS AT GENERAL CONTRACTOR'S DISCRETION. USE MULTIPLE LEVELS OF ATTACHMENT IF GROUND BAR IS ATTACHED HIGH ABOVE GRADE.

GROUNDING LEGEND: (THIS SHEET)

- ▲ EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION
- ■ MECHANICAL CONNECTION
- — - - GROUND LEAD



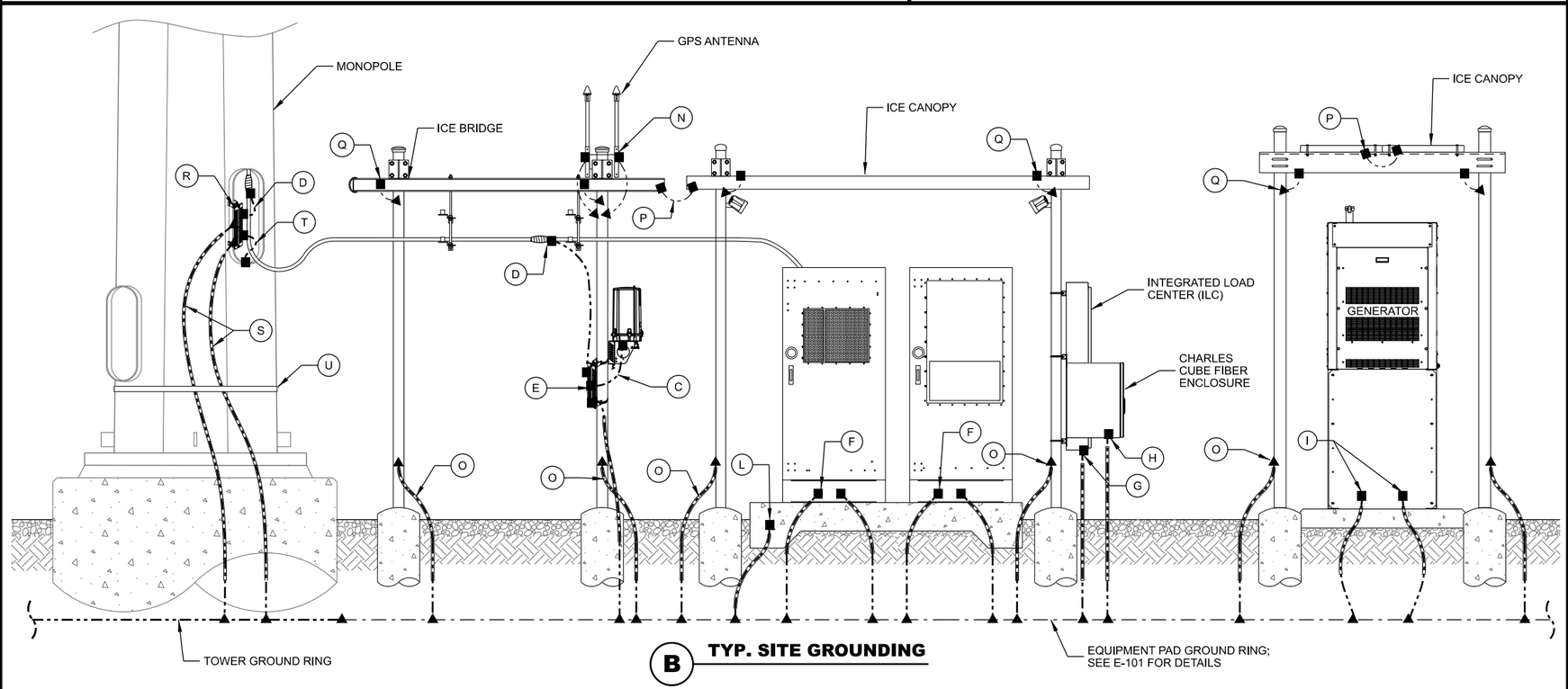
NOTES:

1. ALL CABLING AND/OR GROUNDING RUNS SHALL BE INSTALLED IN A NEAT AND ORDERLY FASHION.
2. CONTRACTOR SHALL INSTALL PER LATEST EDITION OF THE N.E.C.
3. SCHEMATIC DETAIL ONLY. REFER TO ANTENNA AND EQUIPMENT CONFIGURATION FOR EQUIPMENT QUANTITY AND LOCATION.
4. ALL GROUND LEADS TO BE ROUTED IN A DOWNWARD FASHION.

A ANTENNA LEVEL GROUNDING

NOTES: (THIS SHEET)

1. ALL BELOW-GRADE CONNECTIONS ARE TO BE EXOTHERMICALLY WELDED A MINIMUM OF 48" BELOW GRADE.
2. ALL LEADS EXTENDING ABOVE GRADE TO BE ENCASED IN 3/4" CONDUIT AND EXTEND A MINIMUM OF 6" ABOVE FINISHED GRADE AND 24" BELOW FINISHED GRADE.
3. APPLY COLD GALVANIZATION TO ALL ABOVE-GROUND EXOTHERMICALLY WELDED CONNECTIONS.
4. APPLY ANTI OXIDANT COMPOUND TO ALL MECHANICAL CONNECTIONS.
5. UPPER AND LOWER TOWER GROUND BARS TO BE BONDED DIRECTLY TO TOWER STEEL WITH #2 CONDUCTORS.
6. AIR TERMINAL TO EXTEND 2' ABOVE HIGHEST ANTENNA MIN. ON MAST PIPE MECHANICALLY FASTEN AIR TERMINAL TO MAST PIPE, MAST PIPE TO BE MECHANICALLY CONNECTED TO TOWER STEEL



B TYP. SITE GROUNDING

CONSULTANT:
Edge Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:
- PRELIMINARY - NOT FOR CONSTRUCTION

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GROUNDING DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-501

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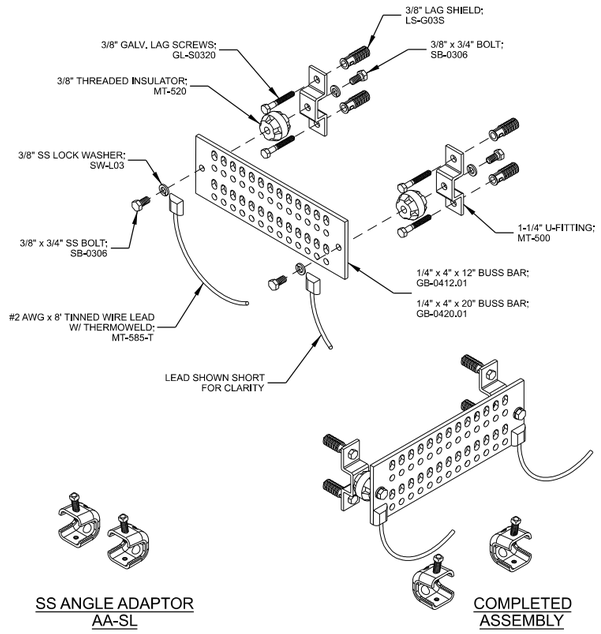
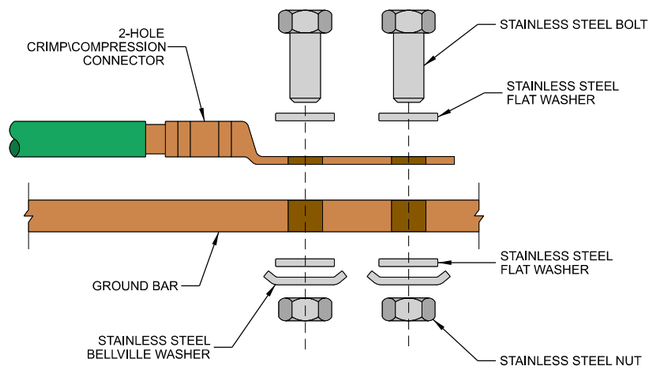


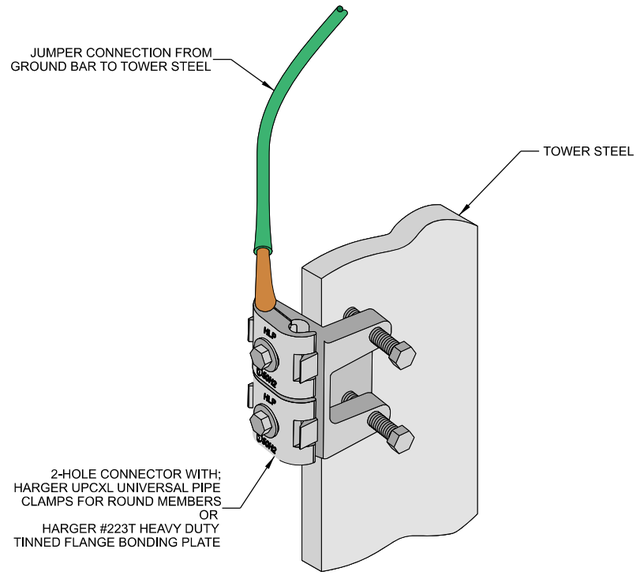
A GROUND AND BUSS BAR



NOTES:

1. ALL OUTDOOR HARDWARE (BOLTS, SCREWS, NUTS, WASHERS) SHALL BE 18-8 STAINLESS STEEL TYPE GRADE. INDOORS, GRADE 5 STEEL HARDWARE MAY BE USED.
2. CHOOSE BOLT LENGTH TO ALLOW THE EXPOSURE OF AT LEAST TWO THREADS.
3. BACK TO BACK LUG CONNECTIONS ARE AN ACCEPTABLE PRACTICE WHEN BONDED TO A GROUND BAR OR STEEL OBJECTS.
4. AT CONNECTIONS MADE TO STEEL OR ANY OTHER DISSIMILAR METALS, A DRAGON TOOTH WASHER MEETING VZW PRACTICES SHALL BE USED BETWEEN THE CONNECTOR AND STEEL.
5. IF NOT USING DRAGON TOOTH WASHERS, THOROUGHLY REMOVE A SECTION OF PAINT OR COATING APPROXIMATELY THE SAME SIZE AS CONNECTOR. REMOVE THE PAINT FROM SURFACE USING A DREMEL TYPE TOOL.
6. USE AN APPROVED ANTI-OXIDATION COMPOUND ON ALL GROUNDING CONNECTIONS. A COPPER COSMOLINE GREASE BASED COMPOUND (NO OX-ID) SHALL BE USED ON ALL COPPER TO COPPER CONNECTIONS. A ZINC BASED (GREY COLORED) COMPOUND SHALL BE USED ON ALL COPPER TO STEEL CONNECTIONS.
7. WHEN BONDING TO A METALLIC OBJECT WHERE ACCESS IS LIMITED TO ONLY ONE SURFACE, DRILLING & TAPPING OR SELF DRILLING SCREWS ARE THE PREFERRED AND ACCEPTABLE MEANS OF CONNECTION. SHEET METAL SCREWS SHALL NOT BE USED.

B GROUNDING LUG

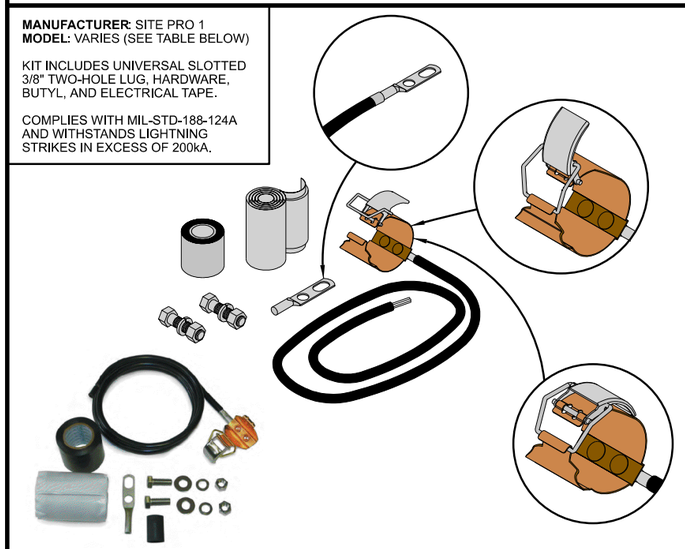


C GROUND BAR CONNECTION TO TOWER STEEL

MANUFACTURER: SITE PRO 1
MODEL: VARIES (SEE TABLE BELOW)

KIT INCLUDES UNIVERSAL SLOTTED 3/8" TWO-HOLE LUG, HARDWARE, BUTYL, AND ELECTRICAL TAPE.

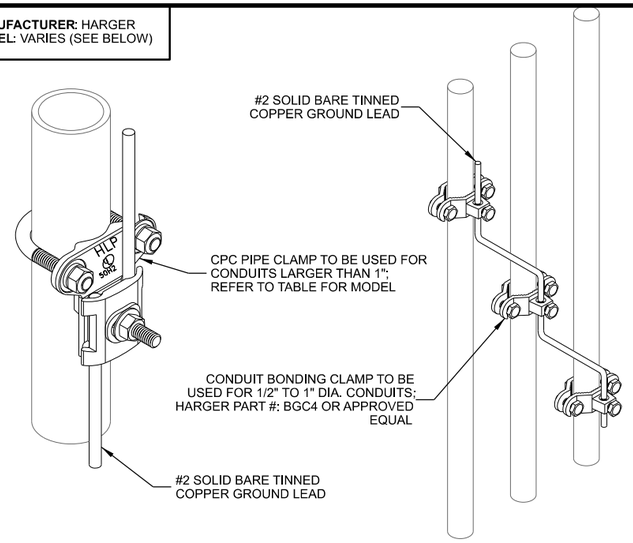
COMPLIES WITH MIL-STD-188-124A AND WITHSTANDS LIGHTNING STRIKES IN EXCESS OF 200kA.



PART #	CABLE SIZE & TYPE	LENGTH	LUG	WEIGHT
GK-C12	1/2" CORRUGATED	5'	UNATTACHED	1.50 LB.
GK-C78	7/8" CORRUGATED	5'	UNATTACHED	1.65 LB.
GK-C114	1-1/4" CORRUGATED	5'	UNATTACHED	1.70 LB.
GK-C158	1-5/8" CORRUGATED	5'	UNATTACHED	1.70 LB.
GK-C214	2-1/4" CORRUGATED	5'	UNATTACHED	1.80 LB.

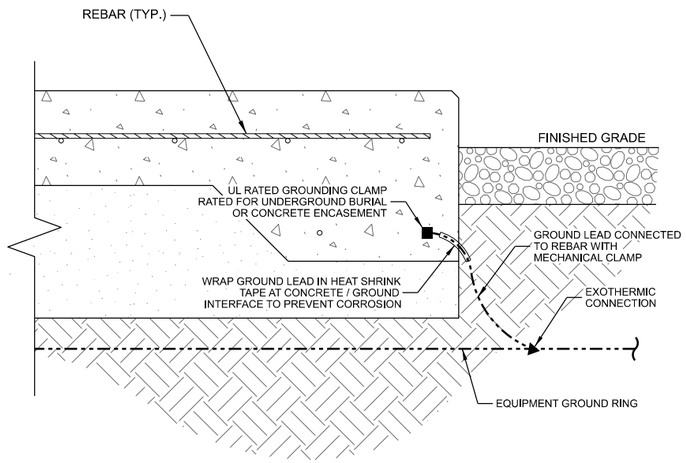
D CLIP ON GROUND KIT

MANUFACTURER: HARGER
MODEL: VARIES (SEE BELOW)



PART #	NOMINAL PIPE SIZE RANGE	PIPE OUTSIDE DIAMETER
CPC1/1.25	1" - 1.25"	0.9375" - 1.7"
CPC1.5/2	1.5" - 2"	1.25" - 2.4"
CPC2.5/3	2.5" - 3"	2.5" - 3.5"
CPC3.5/4	3.5" - 4"	3.375" - 4.5"
CPC5/6	5" - 6"	4.75" - 6.63"

E CONDUIT GROUNDING



NOTES:

1. FOUNDATION SHOWN IS TYPICAL. SEE TOWER FOUNDATION PLANS FOR REINFORCEMENT DETAILS.
2. FOUNDATION GROUNDING PER NEC 250.52(3)(A). GROUNDING CONNECTIONS TO BE COVERED BY A MINIMUM OF 3" CONCRETE AND BE MADE TO A MIN, 20' CONTINUOUS REBAR, IF POSSIBLE.

F EQUIP. PAD FOUNDATION GROUNDING

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
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IA12 DT OELWEIN
OELWEIN, IOWA

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BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-502

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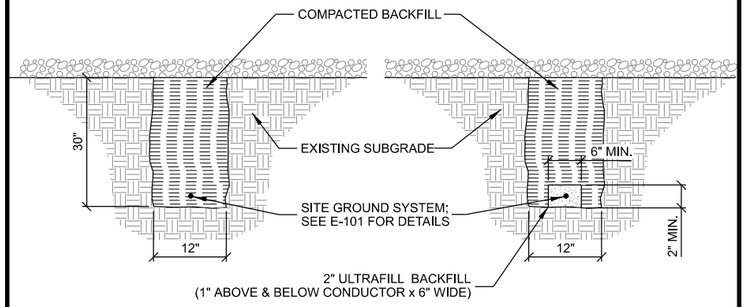
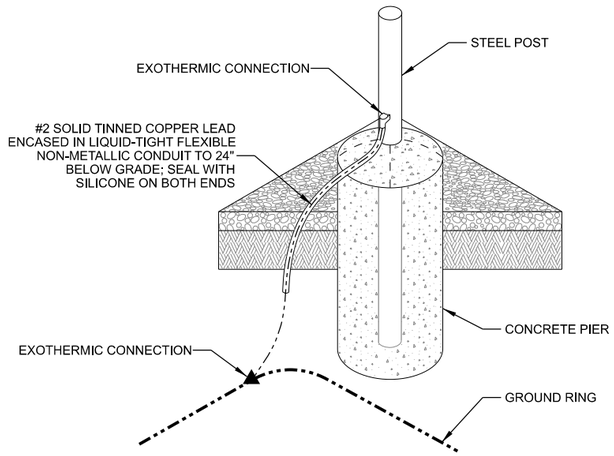


STANDARD GROUND TRENCH ENHANCED GROUND TRENCH

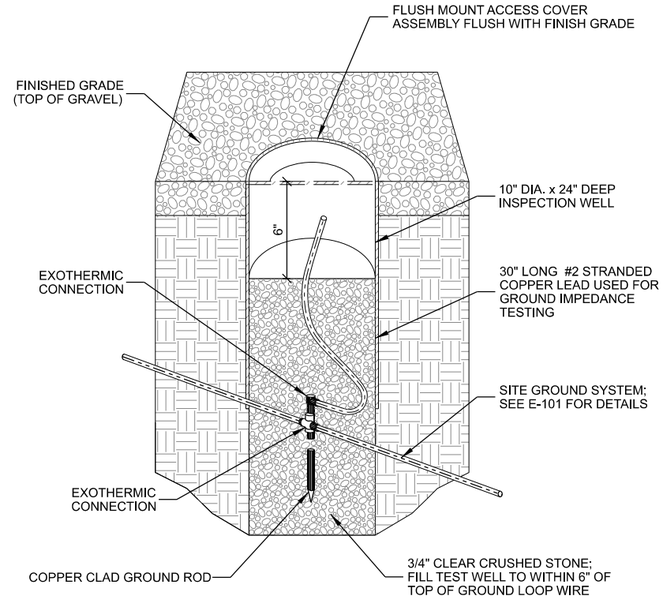
NOTES:

1. GROUNDING TRENCHES TO BE BACK FILLED WITH NATIVE SOIL.
2. COMPACT BACK FILL TO 95% MODIFIED PROCTOR.
3. CONTACT PSC MINIMUM 24HRS NOTICE PRIOR TO BACK FILLING TO ALLOW FOR INSPECTION.

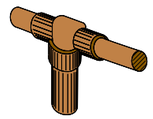
A GROUND TRENCH



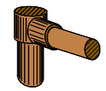
B POST GROUNDING



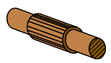
C INSPECTION WELL



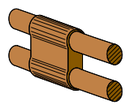
TYPE RT
* NOT PERMITTED *



TYPE GR

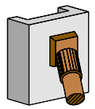


TYPE BS



TYPE PT

TYPE HD

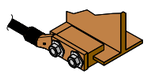


TYPE VA

NOTES:

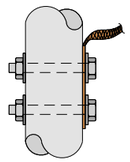
1. EXOTHERMIC "TYPES" SHOWN ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR OTHER POSSIBLE TYPES OF EXOTHERMIC CONNECTIONS THAT CAN BE USED IN STANDARD OR SPECIALLY DESIGNED GROUNDING PLANS.
2. CONTRACTOR TO PROVIDE ALL REQUIRED EXOTHERMIC CONNECTIONS.

D EXOTHERMIC CONNECTIONS

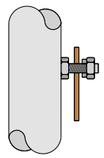


TYPE YGIBS

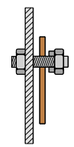
TYPE YGHA



TYPE B



TYPE KC TO PIPE



TYPE KC
* TO FLAT SURFACE *

NOTES:

1. MECHANICAL "TYPES" SHOWN ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR OTHER POSSIBLE TYPES OF MECHANICAL CONNECTIONS THAT CAN BE USED IN STANDARD OR SPECIALLY DESIGNED GROUNDING PLANS.
2. CONTRACTOR TO PROVIDE ALL REQUIRED MECHANICAL CONNECTIONS.

E MECHANICAL CONNECTIONS

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CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

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IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-503

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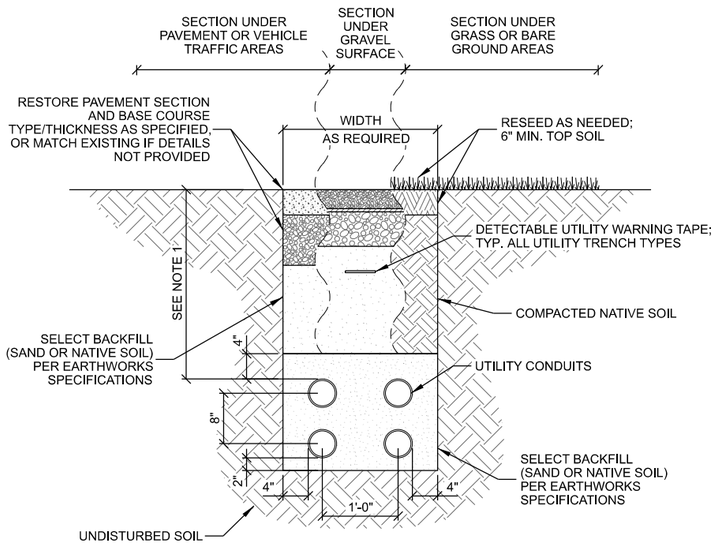
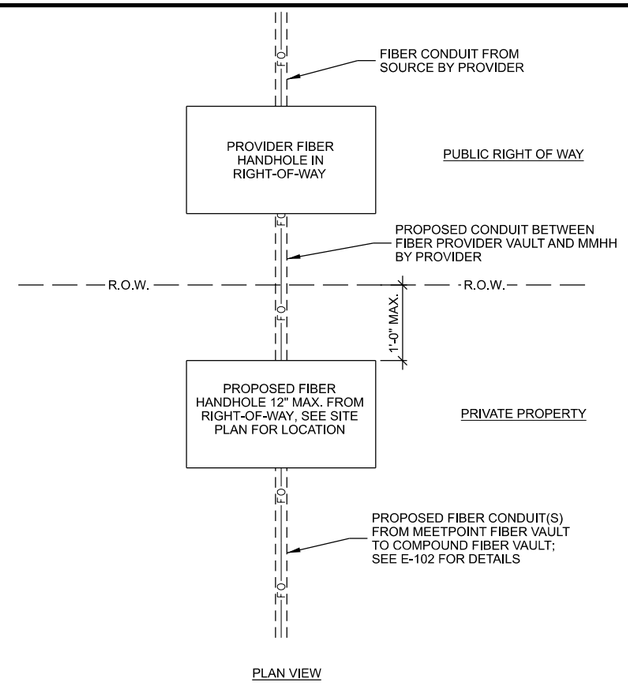


NOTES:

1. UTILITY CONDUITS TO BE BURIED A MINIMUM DEPTH OF 42" BELOW GROUND LEVEL OR 6" BELOW THE FROST LINE.

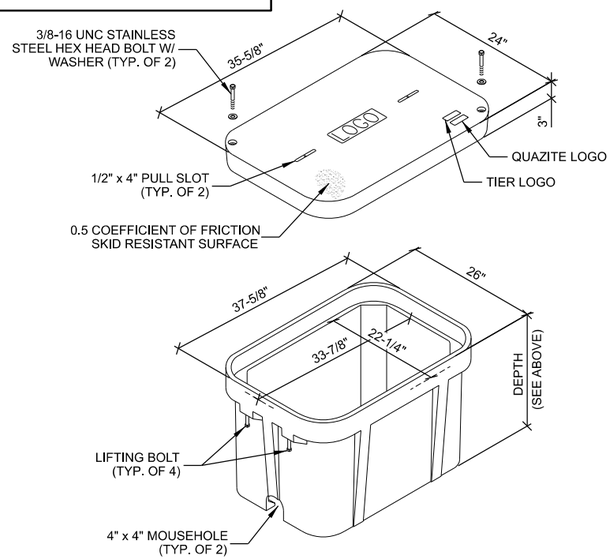
A **UTILITY TRENCH**



B **FIBER HANDHOLE INSTALLATION**

MANUFACTURER: QUAZITE
MODEL: PG2436BA36 (SPLICE BOX)
PG2436BA24 (PULL BOX)
PG2436KK00 (COVER)
INSIDE DIMENSIONS:
36" x 24" x 36" (L x W x D) SPLICE BOX
36" x 24" x 24" (L x W x D) PULL BOX

POLYMER CONCRETE BOX WITH OPEN BOTTOM



C **UTILITY VAULT**

WARNING TAPE & TRACE WIRE NOTES: (THIS SHEET)

1. WARNING TAPE TO BE INSTALLED ABOVE THE ELECTRICAL RUN FROM THE GENERATOR TO THE PLATFORM AND ABOVE THE FUEL LINE BETWEEN THE GENERATOR AND FUEL SOURCE.
2. WARNING TAPE SHALL BE RUN CONTINUOUSLY ALONG THE ENTIRE LENGTH AND INSTALLED 12 INCHES ABOVE THE TOP OF THE CONDUITS
3. TRACER WIRE SHALL RUN CONTINUOUSLY ALONG THE ENTIRE LENGTH OF THE BURIED GAS AND ELECTRIC CONDUITS
4. TRACER WIRE SHALL BE SECURED TO THE CONDUIT AND MAINTAINED ABOVE THE CONDUIT CENTERLINE DURING TRENCH BACKFILLING.
5. TRACER WIRE TO EXTEND TO THE TOP OF PVC ABOVE CONCRETE ON BOTH ENDS - LOOP AND WRAP AROUND APPROPRIATE CONDUIT.
6. TRACER WIRE SHALL CONSIST OF 14GA. SOLID COPPER WIRE WITH A CORROSION PROTECTIVE COATING.
7. INSTALL TRACER WIRE WITH SPACER AND SECURE PER MNFG. RECOMMENDATIONS - AT A MIN. EVERY 10' AND AT ALL BENDS. - DO NOT WRAP BURIED CONDUIT WITH TRACER WIRE TO AVOID UNNECESSARY STRESS ON TRACER. - CONTRACTOR TO CHECK CONTINUITY OF TRACER WIRE BEFORE AND AFTER BURIAL AND DOCUMENT RESULTS. 12" ABOVE THE TOP OF THE CONDUITS.

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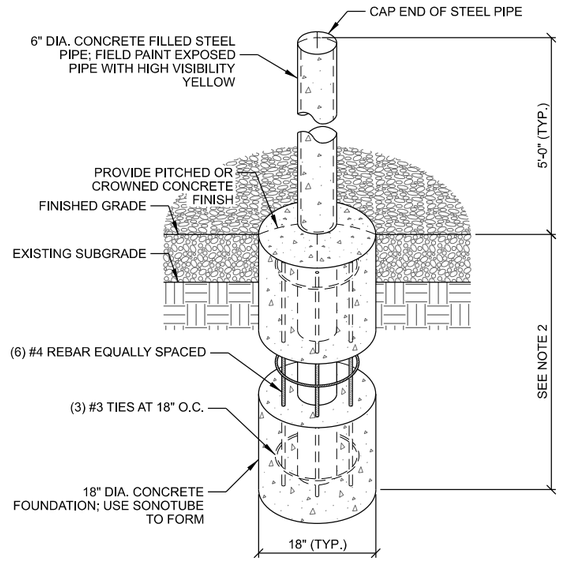

NOTES:

1. MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTION
2. PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH
3. CONCRETE TO BE A MINIMUM OF 4,000 PSI AT 28 DAYS

D **PIPE BOLLARD**

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BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-504

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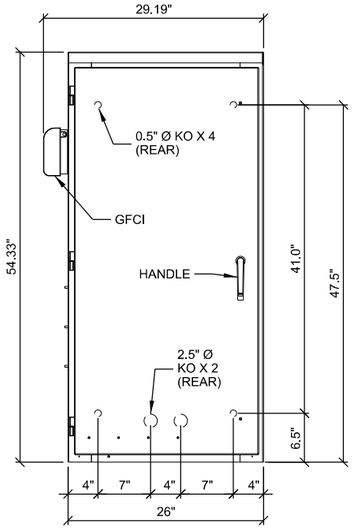
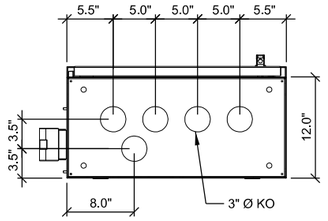
MANUFACTURER: INTERSECT, INC.
MODEL: 112200-30-42-ATS-3R
DIMENSIONS: 54.33" x 26.0" x 12.0" (H x W x D)

TYPE 3R ENCLOSURE

ATS 1-PHASE, 42 POSITION LOAD CENTER



FRONT VIEW

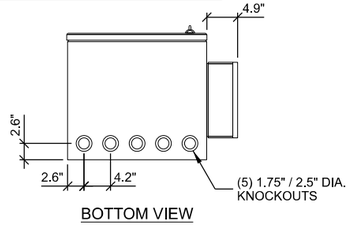


BOTTOM VIEW

A INTEGRATED LOAD CENTER (ILC)

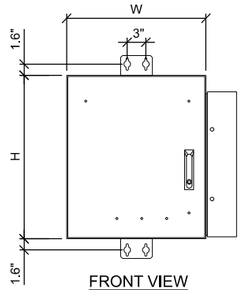
MANUFACTURER: CHARLES INDUSTRIES
MODEL: CUBE-RL1003
DIMENSIONS: 26.3" x 22.1" x 20.0" (H x W x D)
RACK SPACE: 14RU

ACCESSORIES
POLE MOUNT KIT: 97-CABPMKIT
H-FRAME HARDWARE KIT: 97-001971-A
SLIDE OUT TRAY: 97-001990-A
10" PLINTH KIT: 97-002127-A

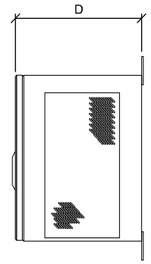


BOTTOM VIEW

SHOWN WITH OPTIONAL SLIDE OUT TRAY



FRONT VIEW



SIDE VIEW

B FIBER ENCLOSURE

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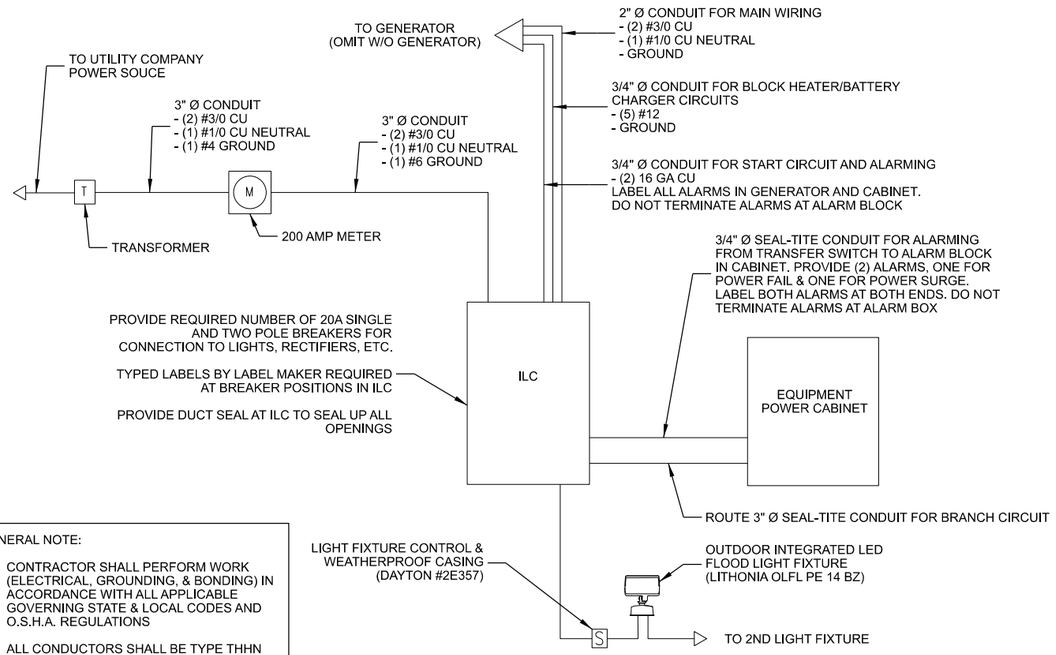
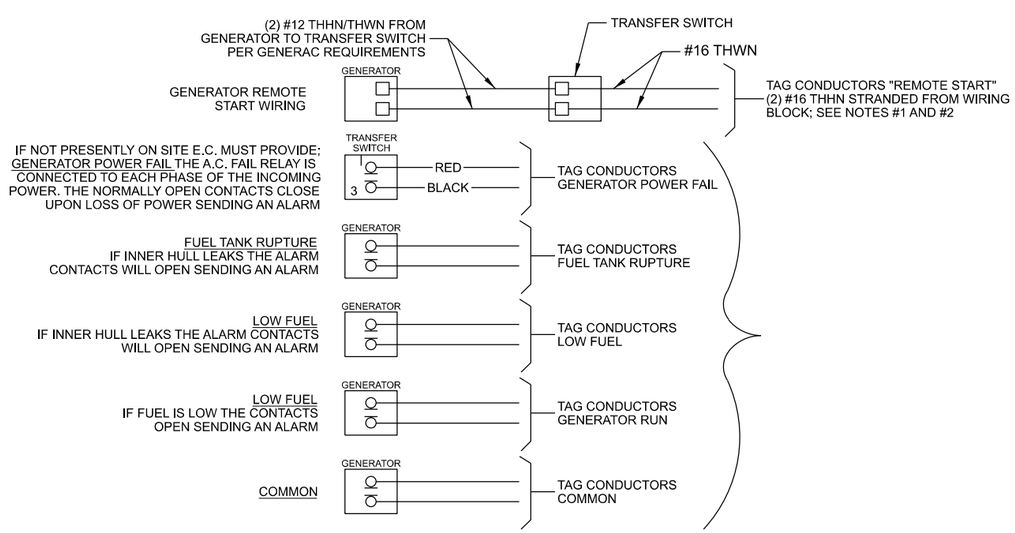


GENERAL NOTE:

1. CONTRACTOR SHALL PERFORM WORK (ELECTRICAL, GROUNDING, & BONDING) IN ACCORDANCE WITH ALL APPLICABLE GOVERNING STATE & LOCAL CODES AND O.S.H.A. REGULATIONS
2. ALL CONDUCTORS SHALL BE TYPE THHN UNLESS NOTED OTHERWISE
3. LABEL METER & DISCONNECT PER NEC.
4. EQUIPMENT AND MATERIALS SHOWN (OR APPROVED EQUAL) TO BE PROVIDED BY CONTRACTOR UNLESS NOTED OTHERWISE

C ONE-LINE ELECTRICAL DIAGRAM



NOTES:

1. STANDARD DIAGRAM PROVIDED BY CLIENT, INCLUDED HERE FOR CONVENIENCE ONLY.
2. ELECTRICAL CONTRACTOR TO PULL (1) #16 AWG SOLID RED AND (1) #16 AWG SOLID BLACK FROM THE TRANSFER SWITCH TO ALARM WIRING BLOCK FOR REMOTE START.
3. ELECTRICAL CONTRACTOR TO PULL ALL ALARM LEADS TO EXISTING ALARM WIRING BLOCK. LEAVE A MINIMUM OF 24" PIGTAILS AT ALARM WIRING BLOCK AND TAG CONDUCTORS AS INDICATED. TERMINATIONS ON ALARM POINT WIRING BLOCK BY OTHERS. CONDUCTORS CAN BE RUN EXPOSED. THEY SHALL BE BUNDLED NEATLY USING TIES AND SUPPORTED AT 24" INTERVALS FOR NEAT INSTALLATION.

D GENERATOR ALARM WIRING

CONSULTANT:
Edge
Consulting Engineers, Inc
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

CLIENT:
verizon
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438

ENGINEER SEAL:
- PRELIMINARY - NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

ELECTRICAL DETAILS
IA12 DT OELWEIN
OELWEIN, IOWA

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	07/16/25	REV. A
BSS	08/07/25	REV. B

CHECKED BY	PER
EDGE SITE ID	S8464
EDGE PROJ. #	44517
SET TYPE	DRAFT
SHEET NUMBER	E-505

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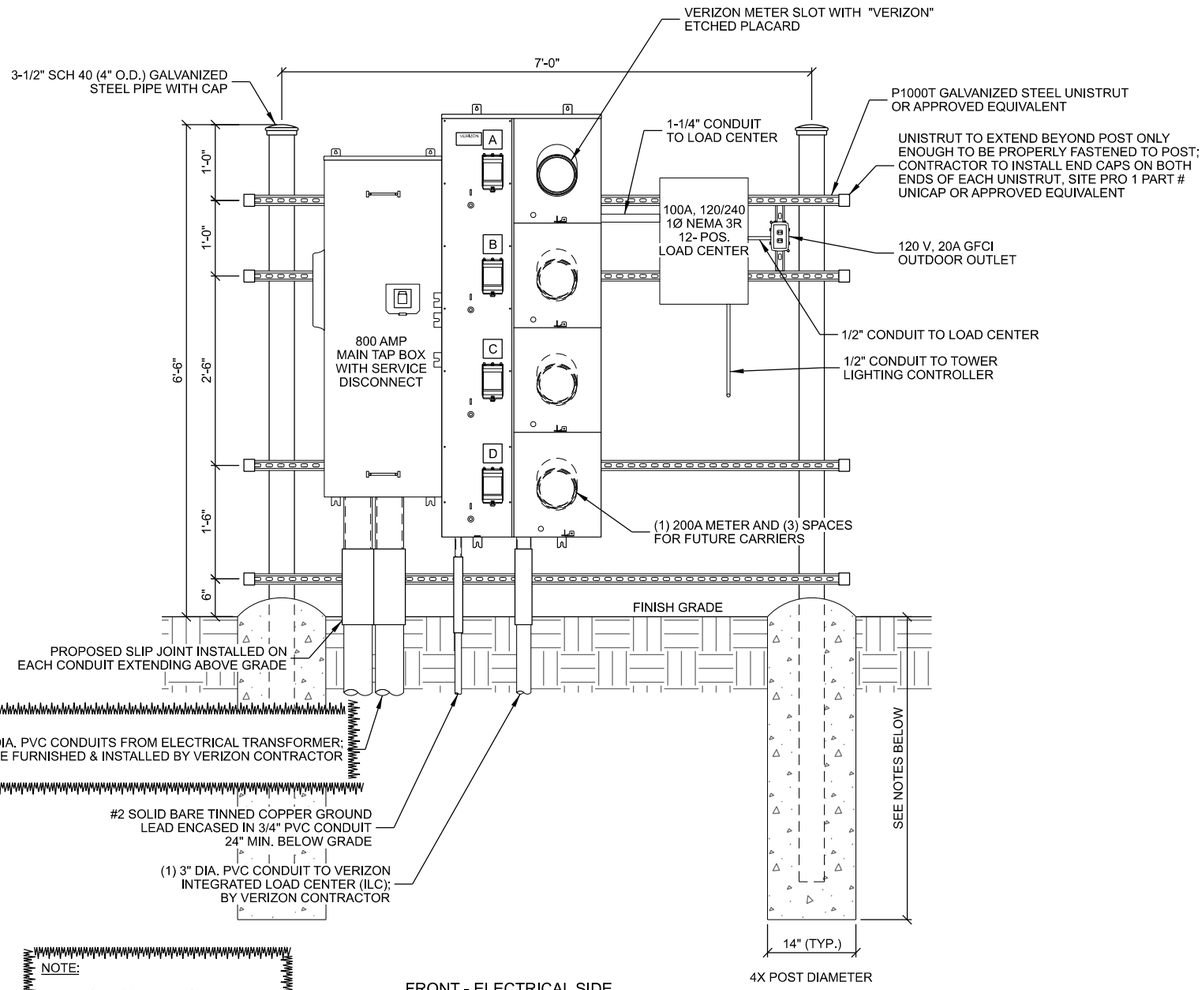
NOTE:

VERIZON CONTRACTOR RESPONSIBLE FOR INSTALLING VERIZON BREAKER



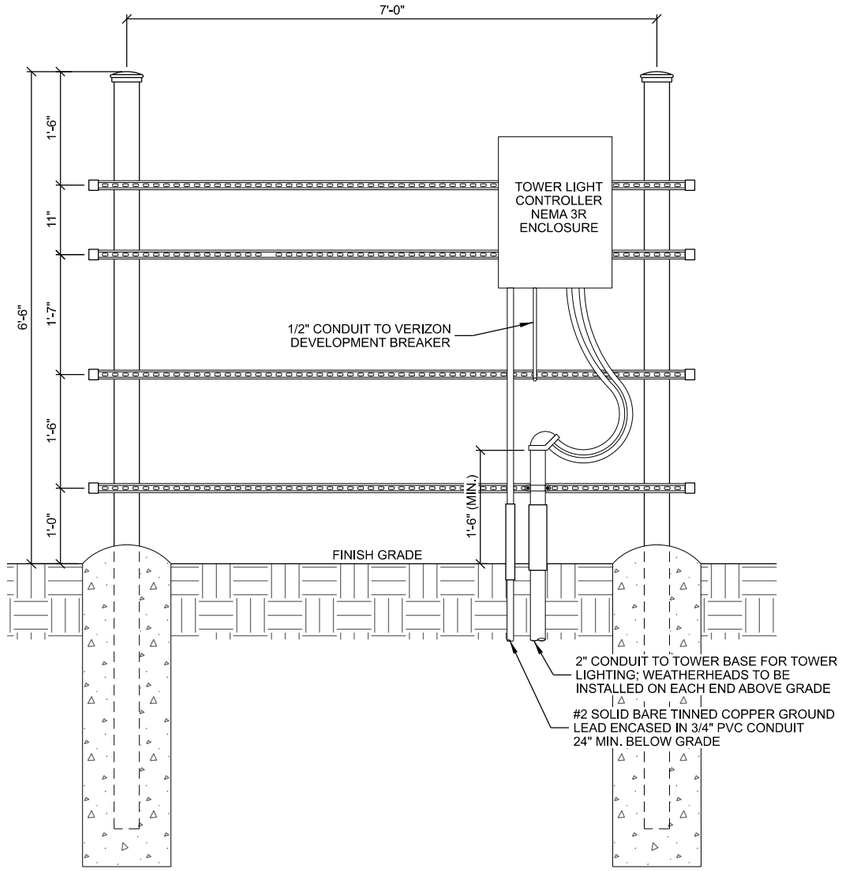
NOTE:

A TEMPORARY 200AMP SUB-PANEL MAY BE REQUIRED IF VERIZON ILC IS NOT INSTALLED

FRONT - ELECTRICAL SIDE

LIGHTING NOTE:

LIGHTING CONTROLS AND SOW DICTATED BY FLASH "NEW CONSTRUCTION TELECOM STRUCTURES FAA LIGHTING INSTALLATIONS GUIDELINES". THIS WILL BE PROVIDED WITH BID DOCUMENTS



REAR - TOWER LIGHTING SIDE

NOTE:

1. INSTALL PVC CONDUITS FOR SERVICE LATERAL CONNECTION TO UTILITY.
2. EXTEND SERVICE LATERAL CONDUITS UNDERGROUND BEYOND FENCELINE. CAP ENDS (NO DUCT TAPE ALLOWED) AND STAKE, EQUIP WITH PULL CORD, VERIFY REQUIREMENTS W/UTILITY PROVIDER.
3. MARK CARRIER METER SLOT @ BREAKER OR SOCKET EXTERIOR WITH PLACARD.
4. SQD EZ METER PAK, 120/240 VAC 1 PHASE, 3 WIRE OR EQUIV.,VERIFY REQUIREMENTS WITH UTILITY PROVIDER
5. FINAL LAYOUT AND DESIGN DETERMINED BY CONTRACTOR/UTILITY & MEET NEC 2020 CODE REQUIREMENTS OR LATEST NEC. VERIFY FINAL DESIGN WITH THE CARRIER.
6. CONCRETE FOR PIER TO BE A MINIMUM OF 2,500 PSI AT 28 DAYS.
7. MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTIONS.
8. PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH.

A MULTI-METER UTILITY RACK

SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"

NOTES:

- VERIZON CONTRACTOR TO ENSURE LOCAL ELECTRIC CODE REQUIREMENTS ARE MET
- VERIZON CONTRACTOR TO CONTACT ELECTRIC UTILITY TO CONFIRM ALL REQUIREMENTS
- VERIZON CONTRACTOR RESPONSIBLE FOR INSTALLING VERIZON BREAKER
- SQUARE D PRODUCTS SHOWN FOR CLARITY. APPROVED EQUIVALENTS ARE ACCEPTABLE. VERIFY FINAL ELECTRIC EQUIPMENT WITH APPROVED UTILITY LIST
- VERIZON CONTRACTOR TO VERIFY ELECTRIC UTILITY WILL ACCEPT A MAIN TAP BOX WITH SERVICE DISCONNECT INCLUDED

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UTILITY RACK DETAILS

IA12 DT OELWEIN
OELWEIN, IOWA

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