LEE'S SUMMIT MISSOURI

APPLICANT SITE NAME:
LEES SUMMIT

PROJECT: **RAWLAND**

DRAWING DESCRIPTION: **FINAL CD**

STATE OF MISSOURI
SHELTON KEISLING
NUMBER PE-27323
PROFESSIONAL ENGINEER
12/18/2025
DocuSigned by: Shelton Keisling
EF94D8A5B80B407...

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER PE-2020038653
PROFESSIONAL ENGINEER
12/18/2025
DocuSigned by:
00D363C201C34A0...

AERIAL MAP

SITE INFORMATION

SITE ADDRESS:	TBD LEE'S SUMMIT, MO 64063
COUNTY:	JACKSON
PROPERTY OWNER:	CITY OF LEE'S SUMMIT 207 SW MARKET ST LEE'S SUMMIT, MO 64063
TOWER INFORMATION:	
LATITUDE:	38° 55' 51.69" N (NAD 83)
LONGITUDE:	94° 22' 54.45" W (NAD 83)
GROUND ELEV:	1017' AMSL
OVERALL STRUCTURE HEIGHT:	120'-0" AGL
TOWER HEIGHT:	120'-0" AGL
TOWER TYPE:	MONOPOLE
APPLICANT:	CITY OF LEE'S SUMMIT 207 SW MARKET ST LEE'S SUMMIT, MO 64063
CLIENT:	HAYDEN TOWER SERVICE, INC. 2836 NW HIGHWAY 24 TOPEKA, KANSAS 66618
PHONE:	(785) 232-1840
FAX:	(785) 232-1877

CONSULTING TEAM

ENGINEERING:
SSC, INC.
7171 WEST 95TH STREET, SUITE 600
OVERLAND PARK, KANSAS 66212
PHONE: (913) 438-7700
FAX: (913) 438-7777
SSC SITE ID: SSC-30322
PROJECT ID: P-048362

CLIENT MANAGER:
DALLAS PELLAND

A&E PROJECT MANAGER:
JEREMY BRISCOE

LEAD ENGINEER:
CHRIS GIANNOTTI

LEAD ELECTRICAL:
SHELTON KEISLING

DRAWING INDEX

SHEET NO.	SHEET TITLE	DISC.
T-1.0	TITLE SHEET	C/E
	SURVEY (BY OTHERS)	
A-0.0	GRADING PLAN	C
A-1.0	OVERALL SITE PLAN	C
A-1.1	ENLARGED SITE PLAN	C
A-2.0	TOWER ELEVATION	C
A-3.0	SHELTER ELEVATIONS	C
A-4.0	CONSTRUCTION DETAILS (1 OF 2)	C
A-4.1	CONSTRUCTION DETAILS (2 OF 2)	C
A-5.0	FENCE DETAILS	C
E-1.0	OVERALL UTILITY PLAN	E
E-2.0	ENLARGED UTILITY PLAN AND DETAILS	E
E-3.0	ELECTRICAL DETAILS	E
G-1.0	GROUNDING PLAN	E
G-2.0	GROUNDING RISER DIAGRAM	E
G-3.0	GROUNDING DETAILS (1 OF 3)	E
G-3.1	GROUNDING DETAILS (2 OF 3)	E
G-3.2	GROUNDING DETAILS (3 OF 3)	E
SP-1.0	SPECIFICATIONS (1 OF 7)	C
SP-1.1	SPECIFICATIONS (2 OF 7)	C
SP-1.2	SPECIFICATIONS (3 OF 7)	C
SP-1.3	SPECIFICATIONS (4 OF 7)	C
SP-1.4	SPECIFICATIONS (5 OF 7)	C
SP-2.0	SPECIFICATIONS (6 OF 7)	E
SP-2.1	SPECIFICATIONS (7 OF 7)	E

JURISDICTION COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. 2018 INTERNATIONAL BUILDING CODE
2. 2018 INTERNATIONAL MECHANICAL CODE
3. ANSI/TIA-222 STRUCTURAL STANDARD
4. NFPA 780 – LIGHTNING PROTECTION CODE
5. 2017 NATIONAL ELECTRICAL CODE

811
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THE UTILITIES AS SHOWN ON THIS SET OF DRAWINGS WERE DEVELOPED FROM THE INFORMATION AVAILABLE. THE INFORMATION PROVIDED IS NOT IMPLIED NOR INTENDED TO BE THE COMPLETE INVENTORY OF UTILITIES IN THIS AREA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES (WHETHER SHOWN OR NOT) AND PROTECT SAID UTILITIES FROM ANY DAMAGE CAUSED BY CONTRACTOR'S ACTIVITIES.

ENGINEERING LICENSE:
STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM: motorola

APPLICANT: LEE'S SUMMIT MISSOURI

PLANS PREPARED FOR: Hayden TOWER SERVICE, INC.

PLANS PREPARED BY: SSC

DRAWING NOTICE:

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR REVIEW	10/14/25	DSL	A
REISSUED FOR REVIEW	10/23/25	DSL	B
REISSUED FOR REVIEW	11/13/25	DSL	C
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:
LEES SUMMIT

SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION: TITLE SHEET

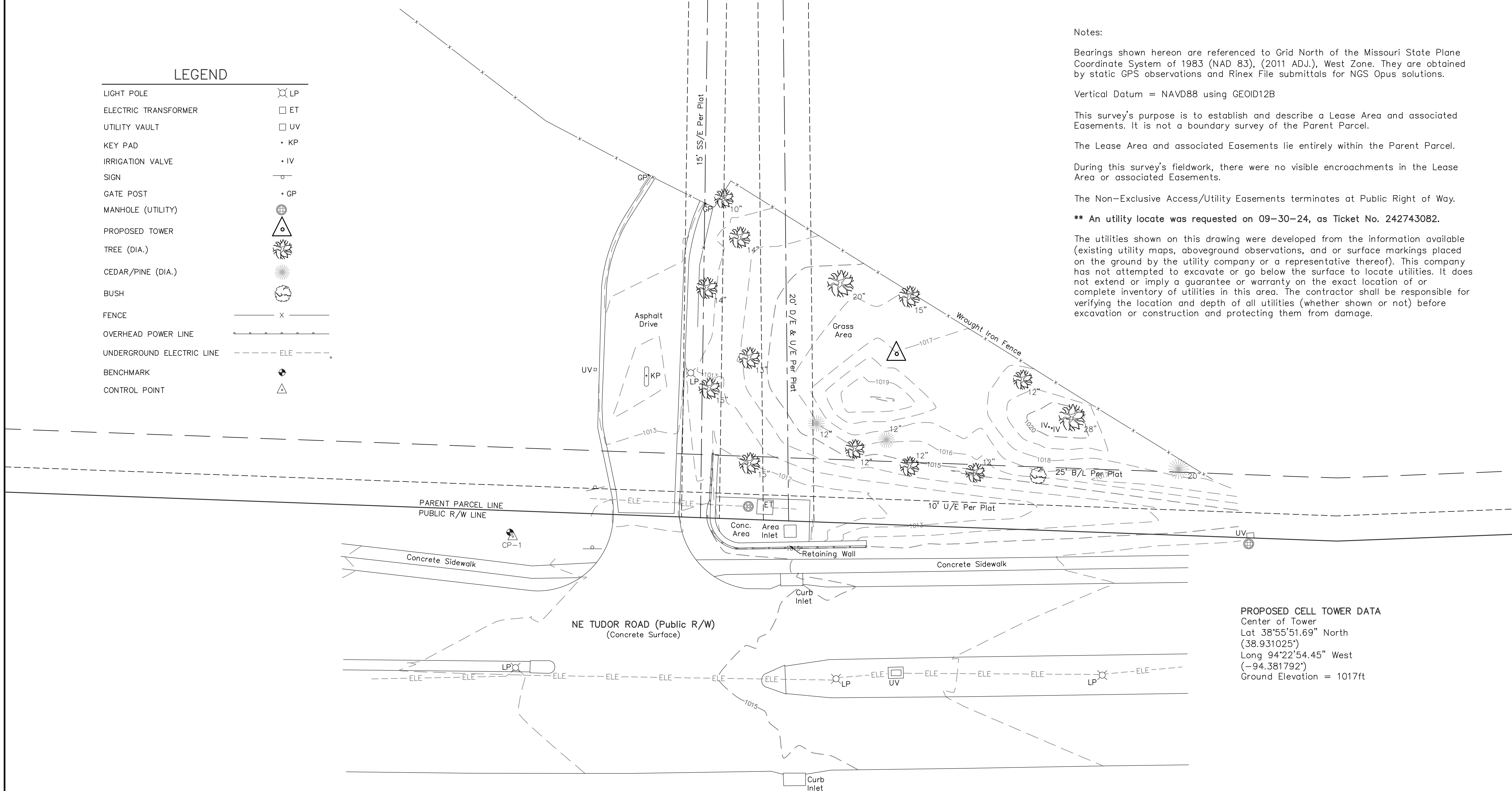
SHEET #: T-1.0

LEE'S SUMMIT

PART OF THE SE1/4, SECTION 31–T48N–R31W, IN JACKSON COUNTY, MISSOURI

LEGEND

LIGHT POLE	LP
ELECTRIC TRANSFORMER	ET
UTILITY VAULT	UV
KEY PAD	KP
IRRIGATION VALVE	IV
SIGN	
GATE POST	GP
MANHOLE (UTILITY)	
PROPOSED TOWER	
TREE (DIA.)	
CEDAR/PINE (DIA.)	
BUSH	
FENCE	
OVERHEAD POWER LINE	
UNDERGROUND ELECTRIC LINE	ELE
BENCHMARK	
CONTROL POINT	



Notes:

Bearings shown hereon are referenced to Grid North of the Missouri State Plane Coordinate System of 1983 (NAD 83), (2011 ADJ.), West Zone. They are obtained by static GPS observations and Rinex File submittals for NGS Opus solutions.

Vertical Datum = NAVD88 using GEOID12B

This survey's purpose is to establish and describe a Lease Area and associated Easements. It is not a boundary survey of the Parent Parcel.

The Lease Area and associated Easements lie entirely within the Parent Parcel.

During this survey's fieldwork, there were no visible encroachments in the Lease Area or associated Easements.

The Non-Exclusive Access/Utility Easements terminates at Public Right of Way.

**** An utility locate was requested on 09-30-24, as Ticket No. 242743082.**

The utilities shown on this drawing were developed from the information available (existing utility maps, aboveground observations, and or surface markings placed on the ground by the utility company or a representative thereof). This company has not attempted to excavate or go below the surface to locate utilities. It does not extend or imply a guarantee or warranty on the exact location of or complete inventory of all utilities in this area. The contractor shall be responsible for verifying the location and depth of all utilities (whether shown or not) before excavation or construction and protecting them from damage.

PROPOSED CELL TOWER DATA
Center of Tower
Lat 38°55'51.69" North
(38.931025°)
Long 94°22'54.45" West
(−94.381792°)
Ground Elevation = 1017ft

BENCH MARK
Top of 1/2" Iron Bar w/
Control Cap at CP-1
Elevation = 1013.68ft

CERTIFICATION:

I HEREBY CERTIFY THAT A SURVEY WAS MADE BY ME, OR UNDER MY DIRECT SUPERVISION, ON THE GROUND OF THE LEASE AREA, AND ASSOCIATED EASEMENT PREMISES HEREIN DESCRIBED, AND THE RESULTS OF SAID SURVEY ARE REPRESENTED HEREON TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

PRELIMINARY

JEFFREY B. LOVELACE MO-LS2580

DATE: ____________________

NW SLOAN
NE DOUGLAS
SITE
NE TUDOR RD

Hayden
TOWER SERVICE, INC.
2936 N.W. Hwy 24
Topeka, KS 66618
Phone: (785) 232-1840
Fax: (785) 232-1877

LOVELACE & ASSOCIATES
Land Surveying • Land Planning
Telecommunications Surveys
929 SE 3rd Street Lee's Summit, Missouri 64063
Phone: (816) 347-9997 Fax: (816) 347-9979

SURVEY PROVIDED BY:
LOVELACE AND ASSOCIATES, LLC
P.O. BOX 68,
LEE'S SUMMIT, MO 64063
TELEPHONE: 816-347-9997
FAX: 816-347-9979

N

SCALE 1" = 20'
20' 0 20' 40'

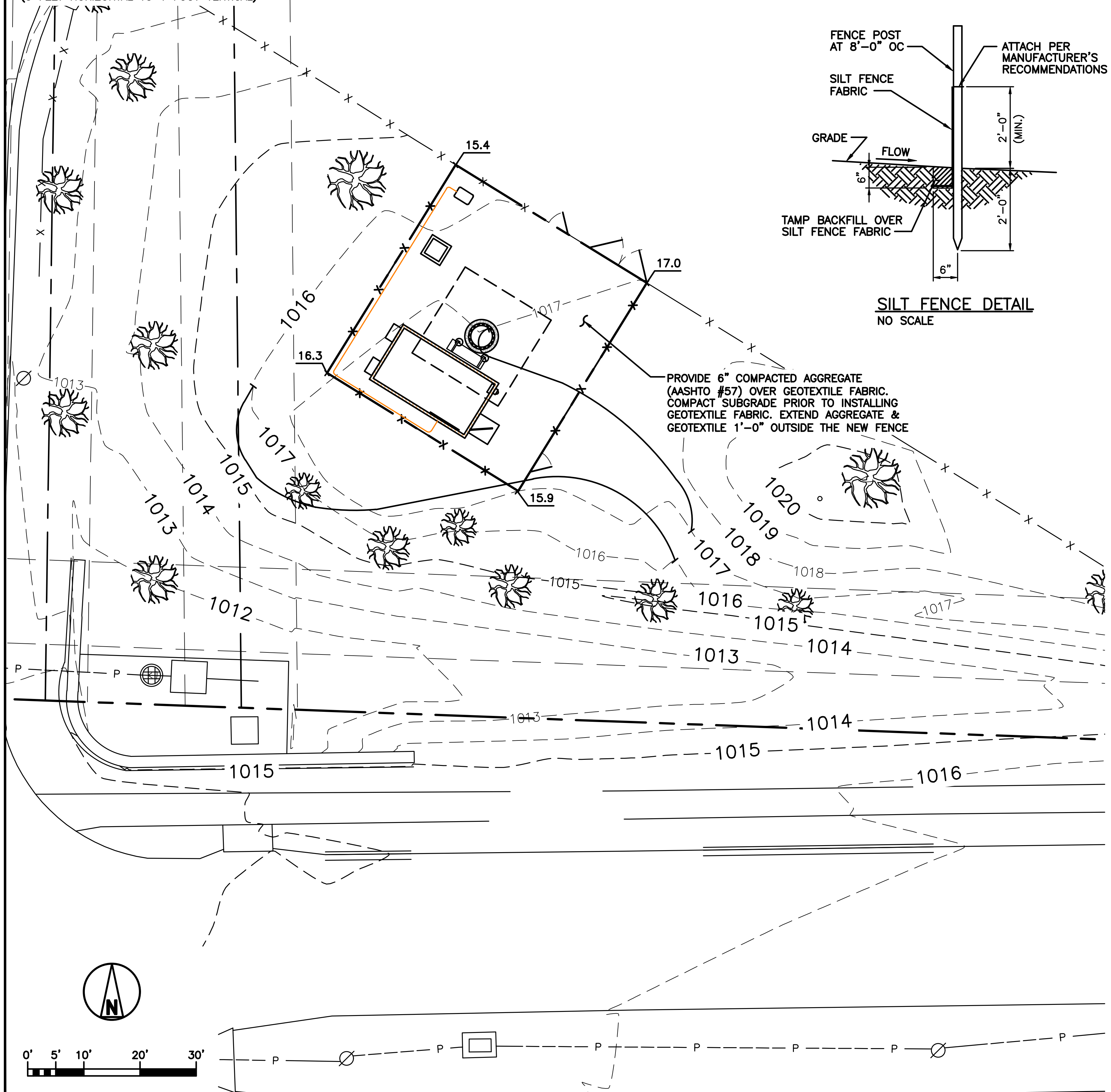
FLOOD NOTE:
According to my interpretations of Community Panel No. 29095C0417G of the Flood Insurance Rate Map for Lee's Summit, Missouri, the subject property is in Flood Zone "X", ie. "areas determined to be Outside the 0.2% annual chance floodplain".

CALL BEFORE YOU
DIG - DRILL - BLAST
1-800-344-7483
(TOLL FREE)
MISSOURI ONE CALL SYSTEM, INC.

SITE I.D.: NA
SITE NAME: LEE'S SUMMIT
SITE LOCATION:
10 NE TUDOR RD,
LEE'S SUMMIT, MO
LA PROJECT NO.: 24171
DRAWN BY: A.C.T.
CHECKED BY: J.B.L.
DATE: 10-11-24
FIELDWORK DATE: 10-10-24

Certificate of Authority:
Missouri – 2002026538

NOTE:
SLOPES SHALL NOT EXCEED 3:1
(3 FEET HORIZONTAL TO 1 FOOT VERTICAL)



SILT FENCE DETAIL
NO SCALE

GRADING NOTES:

1. STRIP THE GROUND OF ALL VEGETATION AND DEBRIS.
2. PROOF ROLL WITH LOADED TANDEM TO IDENTIFY SOFT SPOTS.
3. REMOVE SOFT SPOT MATERIAL AND COMPACT TO 95% AT STRUCTURE, 90% ELSEWHERE.
4. INSTALL GEOTEXTILE FABRIC ON PREPARED SUBGRADE.
5. PLACE AND COMPACT 6" AGGREGATE SURFACING.
6. SEE SPECIFICATIONS DRAWINGS FOR REQUIREMENTS OF BACKFILL MATERIAL.
7. MAINTAIN REASONABLE DUST CONTROL METHODS DURING CONSTRUCTION.
8. ENTIRE DRIVE LENGTH SHALL BE POSITIVE DRAINING DURING, AND AT COMPLETION OF CONSTRUCTION.
9. CONTRACTOR SHALL OBTAIN ANY SITE SPECIFIC SOILS REPORTS AND FOLLOW ALL RECOMMENDATIONS. A DISCREPANCY BETWEEN CONSTRUCTION DRAWINGS AND SOILS REPORT, THE GEOTECHNICAL REPORT SHALL GOVERN. SSC TO BE NOTIFIED OF DISCREPANCY.

SILTRATION NOTES:

1. SILTRATION CONTROL DEVICES TO REMAIN IN PLACE UNTIL ADEQUATE VEGETATION GROWTH INSURES NO FURTHER EROSION.
2. SILTRATION FENCES SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND FOR THE AMOUNT OF SEDIMENTATION WHICH HAS ACCUMULATED. REMOVAL OF SEDIMENT WILL BE REQUIRED WHEN IT REACHES 1/2 FENCE HEIGHT.
3. ATTACHMENT OF GEOTEXTILE FABRIC TO BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
4. SILT FENCING TO BE USED AT ALL AREAS OF EXCAVATION.

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:36

12/18/2025

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:
STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
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DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden
TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

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APPLICANT SITE NAME:
LEES SUMMIT

SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

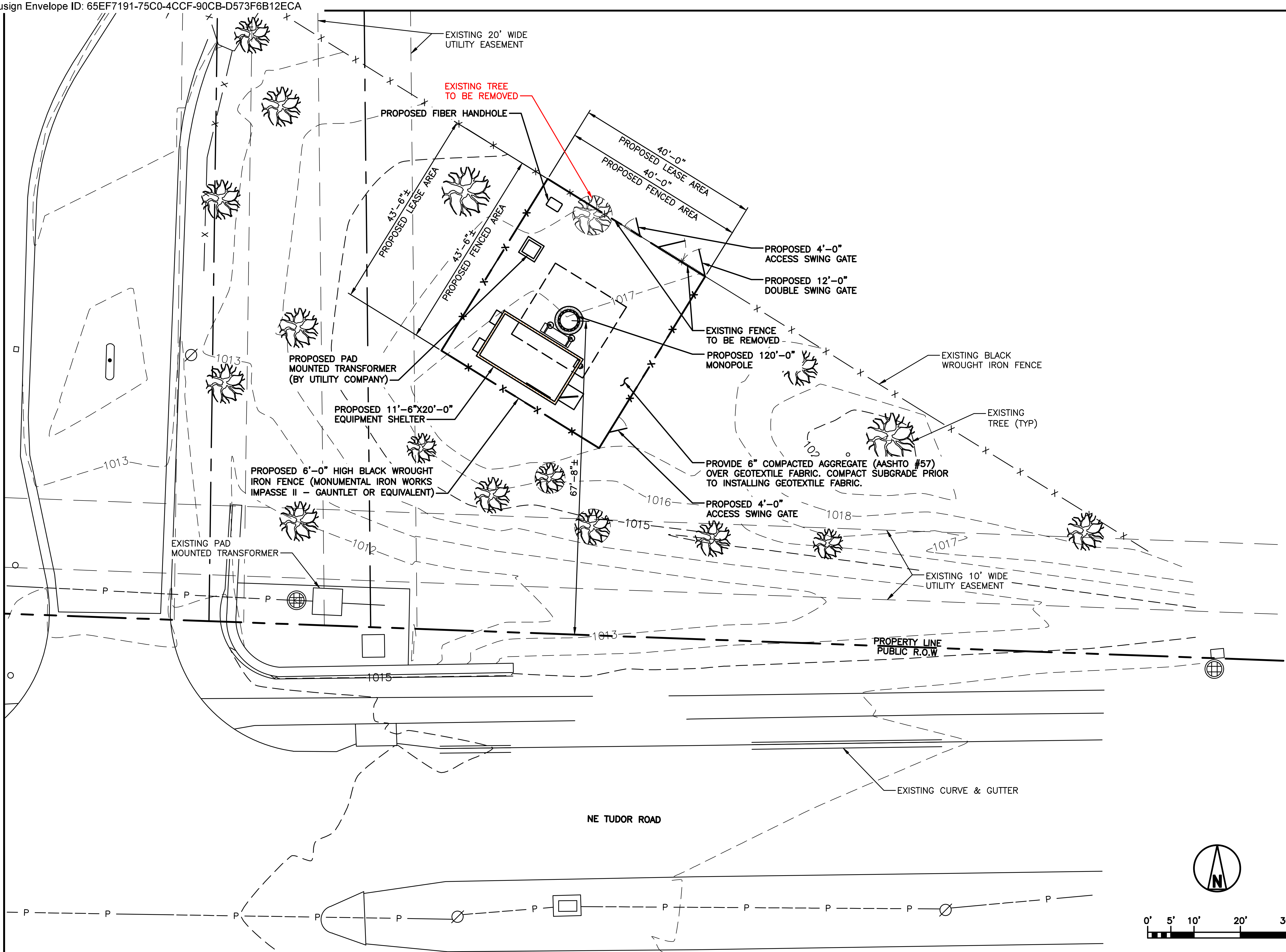
SHEET DESCRIPTION:
GRADING PLAN

SHEET #:
A-0.0

SCALE: 1:10 (22"x34")
SCALE: 1:20 (11"x17")

GRADING PLAN

1



OVERALL SITE PLAN

SCALE: 1:10 (22"x34")
SCALE: 1:20 (11"x17")

1

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motorola

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SSC

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LEES SUMMIT

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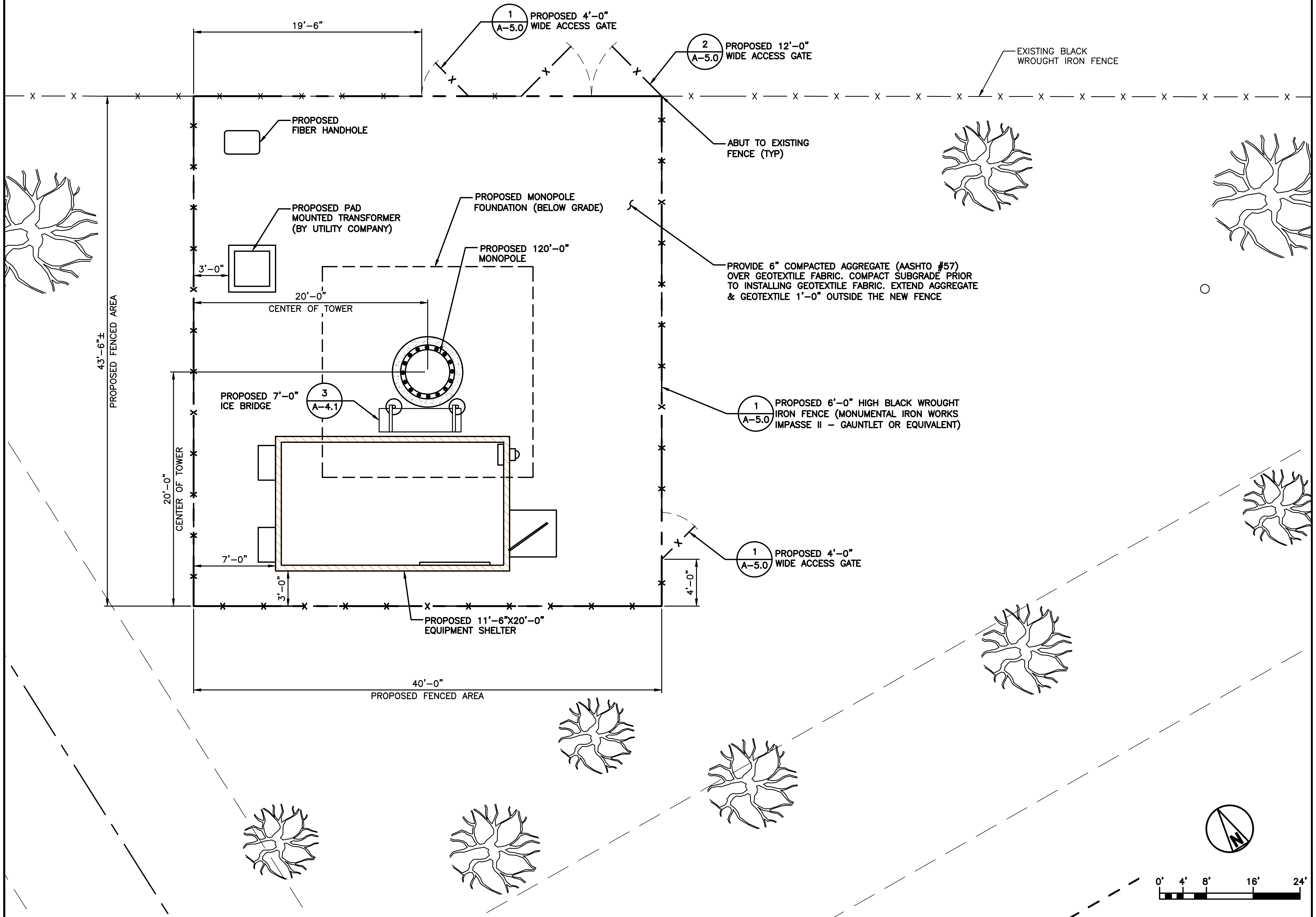
SHEET DESCRIPTION:
OVERALL SITE PLAN

SHEET #:
A-1.0

Docusign Envelope ID: 65EF7191-75C0-4CCF-90CB-D573F6B12ECA



ENLARGED SITE PLAN

1/8" = 1'–0" (22"x34")
1/16" = 1'–0" (11"x17")

1

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OEM:

motorola

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LEE'S SUMMIT

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PLANS PREPARED BY:

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LEE'S SUMMIT, MO 64063

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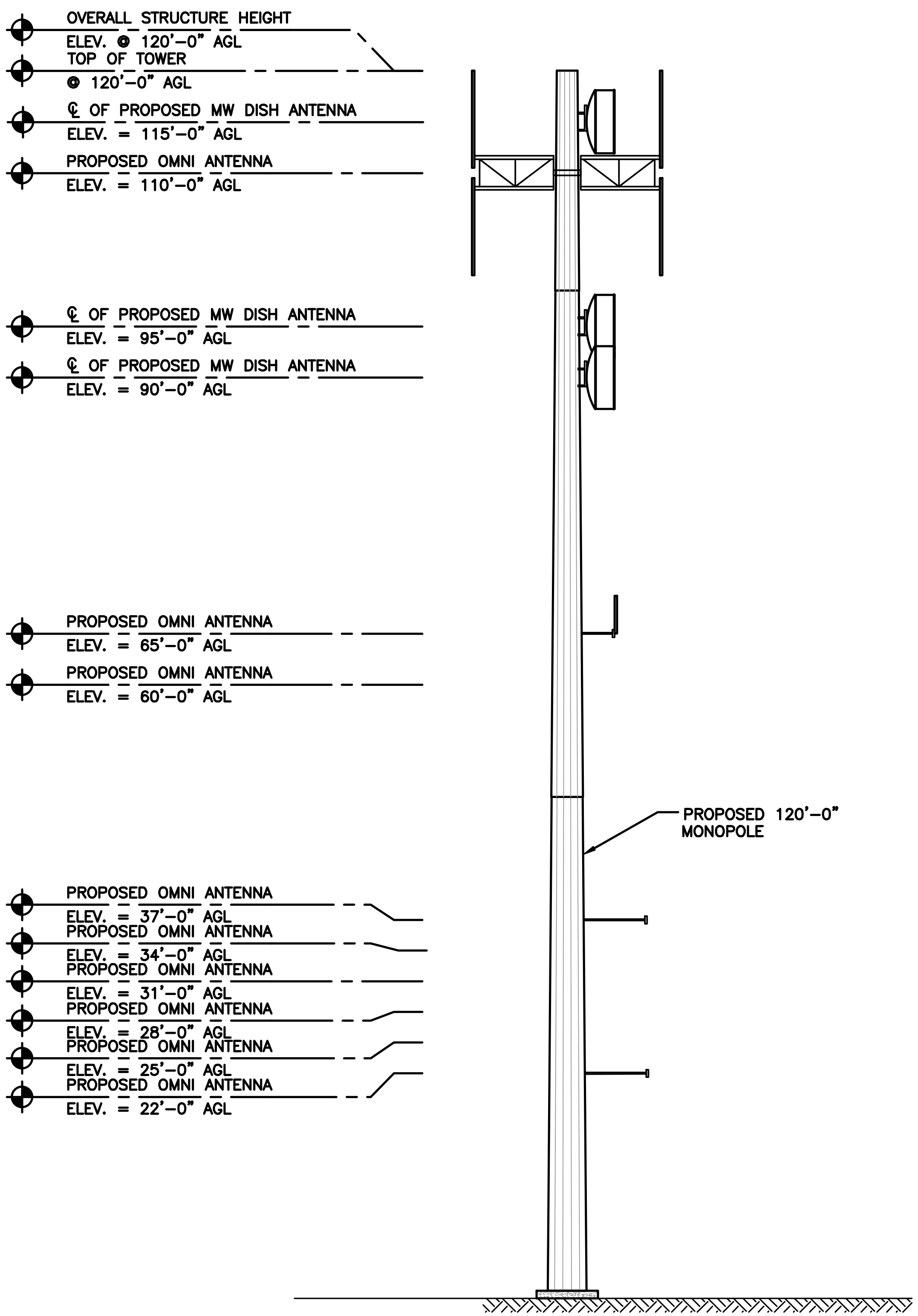
ENLARGED SITE PLAN

SHEET #:

A-1.1

ALL STRUCTURE INFORMATION SHOWN IS FOR ILLUSTRATION PURPOSES ONLY, AND MAY DIFFER FROM THE FINAL DESIGN PROVIDED BY THE STRUCTURE MANUFACTURER. THE CONTRACTOR SHALL CONSTRUCT THE STRUCTURE, FOUNDATION, AND ALL OTHER RELATED COMPONENTS IN ACCORDANCE WITH THE STRUCTURE MANUFACTURER'S DRAWINGS AND SPECIFICATIONS.



ANTENNA LOADING KEY

ANTENNA MODEL #	QTY.	ANTENNA BASE ELEVATION	LINE SIZE	AZIMUTH	EQUIPMENT	ANTENNA SIZE	ANTENNA MOUNT	PROPOSED OR FUTURE LOADING
CC807-8	4	110'-0"	(4) 7/8"	N/A	TTA	9'-6"	6' STAND-OFF	PROPOSED
DS1X00CS36UN	1	66'-11"	7/8"	N/A	TTA	3'-8"	3' STAND-OFF	PROPOSED
Y1505	1	60'-0"	1/2"	N/A		6'-0"	6' STAND-OFF	PROPOSED
Y8066	1	37'-0"	1/2"	N/A		2'-3"	3' STAND-OFF	PROPOSED
Y8066	1	34'-0"	1/2"	N/A		2'-3"	N/A	PROPOSED
Y8066	1	31'-0"	1/2"	N/A		2'-3"	N/A	PROPOSED
Y8066	1	28'-0"	1/2"	N/A		2'-3"	N/A	PROPOSED
Y8066	1	25'-0"	1/2"	N/A		2'-3"	N/A	PROPOSED
Y8066	1	22'-0"	1/2"	N/A		2'-3"	3' STAND-OFF	PROPOSED

MICROWAVE LOADING KEY

MICROWAVE MODEL #	QTY.	MICROWAVE ELEVATION	LINE SIZE	AZIMUTH	EQUIPMENT	DISH SIZE	DISH MOUNT	PROPOSED OR FUTURE LOADING
VHLP6-6W-4GR/A	1	115'-0"	EW63	N/A	HYBRID FIBER	6'-0"	PIPE MOUNT	PROPOSED
VHLPX6-6W-6WH	1	95'-0"	(2) EW63	N/A	HYBRID FIBER	6'-0"	PIPE MOUNT	PROPOSED
VHLP6-6W-4GR/A	1	90'-0"	EW63	N/A	HYBRID FIBER	6'-0"	PIPE MOUNT	PROPOSED

ANTENNA NOTES:

1. ANTENNA CONTRACTOR SHALL INSURE ALL ANTENNA MOUNTING PIPES ARE PLUMB.
2. MULTI PORT ANTENNAS: TERMINATE UNUSED ANTENNA PORTS WITH CONNECTOR CAP & WEATHERPROOF THOROUGHLY.
3. CONTRACTOR MUST FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING THE INSTALLATION OF COAXIAL CABLES, CONNECTORS, AND ANTENNAS.
4. WEATHERPROOF ALL ANTENNA CONNECTORS WITH SELF AMALGAMATING TAPE.
5. ANTENNA CONTRACTOR SHALL PERFORM A "TAPE DROP" MEASUREMENT TO CONFIRM/VALIDATE ANTENNA CENTER LINE (ACL) HEIGHT. CONTRACTOR SHALL SUBMIT A COMPLETED HEIGHT VERIFICATION FORM TO THE CONSTRUCTION MANAGER.
6. ALL AZIMUTHS ARE ORIENTED CLOCKWISE FROM TRUE NORTH.

TOWER ELEVATION | 1

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OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden
TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

DRAWING NOTICE:

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APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

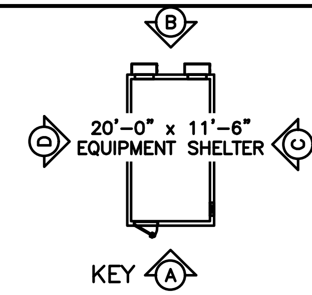
TOWER ELEVATION

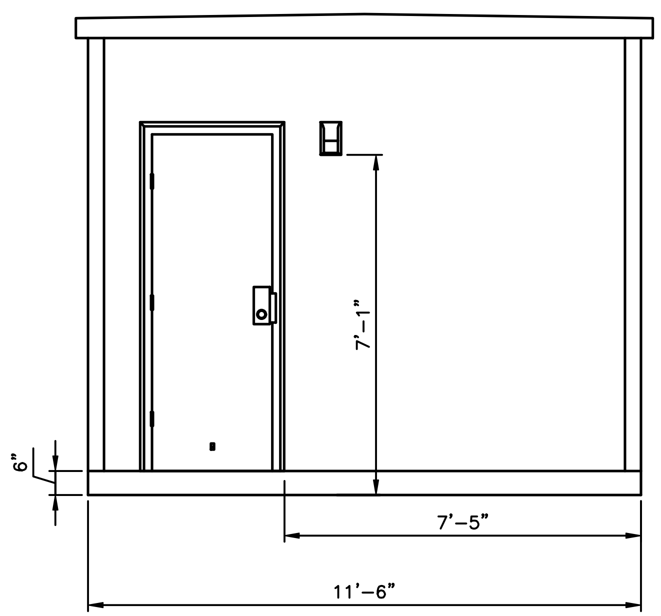
SHEET #:

A-2.0

GENERAL NOTES:

1. EXPOSED AGGREGATE PAINTED CONCRETE PANELS
2. FINAL CONDUIT LOCATIONS TO BE DETERMINED

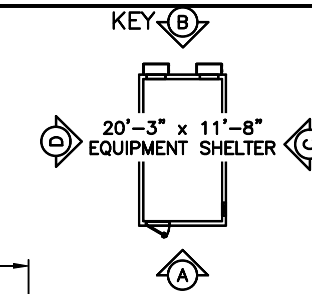


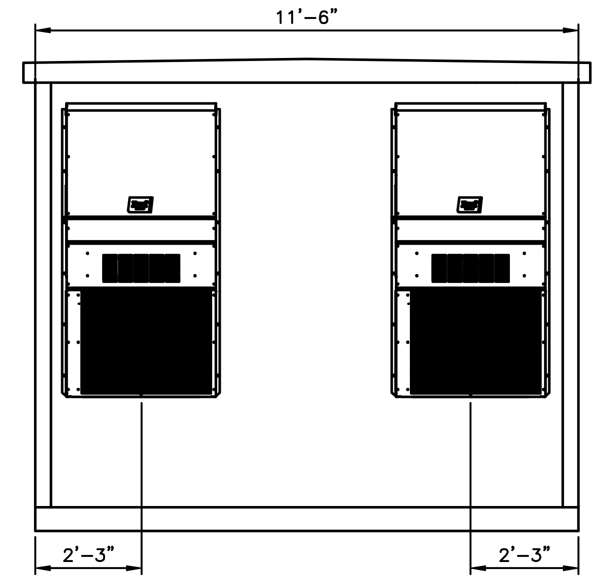


SHELTER ELEVATION "A" 3

GENERAL NOTES:

1. EXPOSED AGGREGATE PAINTED CONCRETE PANELS
2. FINAL CONDUIT LOCATIONS TO BE DETERMINED

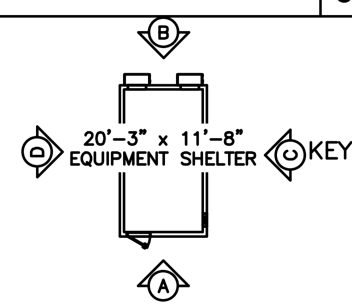


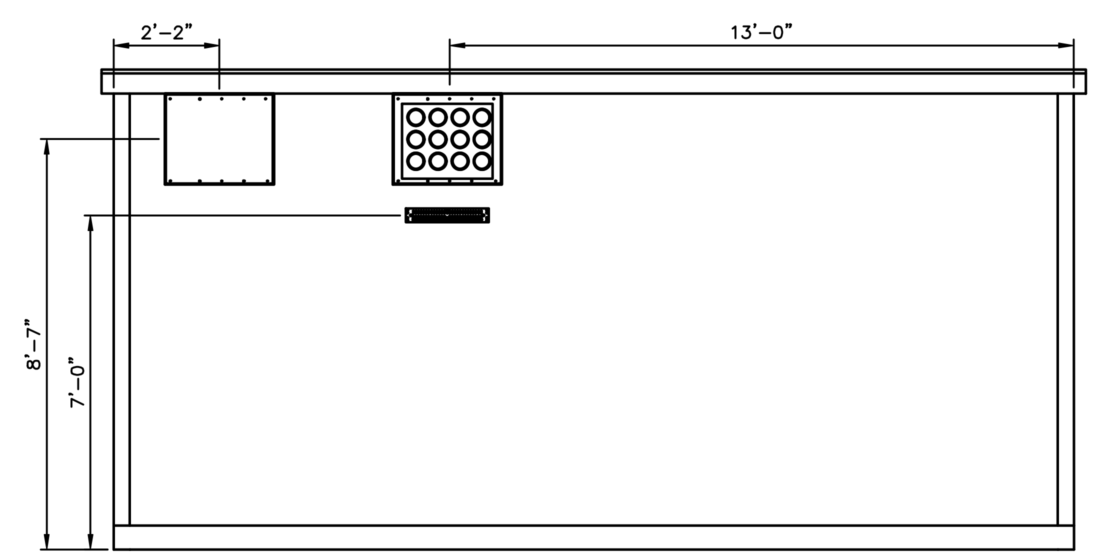


SHELTER ELEVATION "B" 1

GENERAL NOTES:

1. EXPOSED AGGREGATE PAINTED CONCRETE PANELS
2. FINAL CONDUIT LOCATIONS TO BE DETERMINED

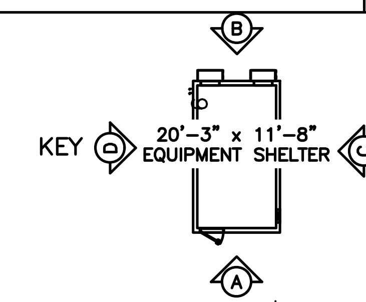


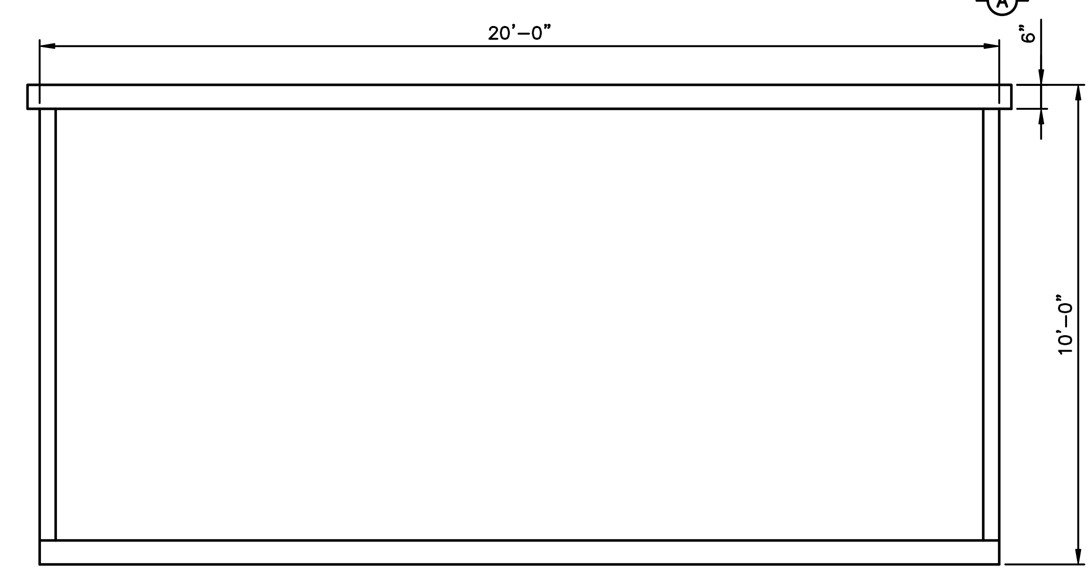


SHELTER ELEVATION "C" 4

GENERAL NOTES:

1. EXPOSED AGGREGATE PAINTED CONCRETE PANELS
2. FINAL CONDUIT LOCATIONS TO BE DETERMINED





SHELTER ELEVATION "D" 2

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:37

12/18/2025

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

DRAWING NOTICE:

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR REVIEW	10/14/25	DSL	A
REISSUED FOR REVIEW	10/23/25	DSL	B
REISSUED FOR REVIEW	11/13/25	DSL	C
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

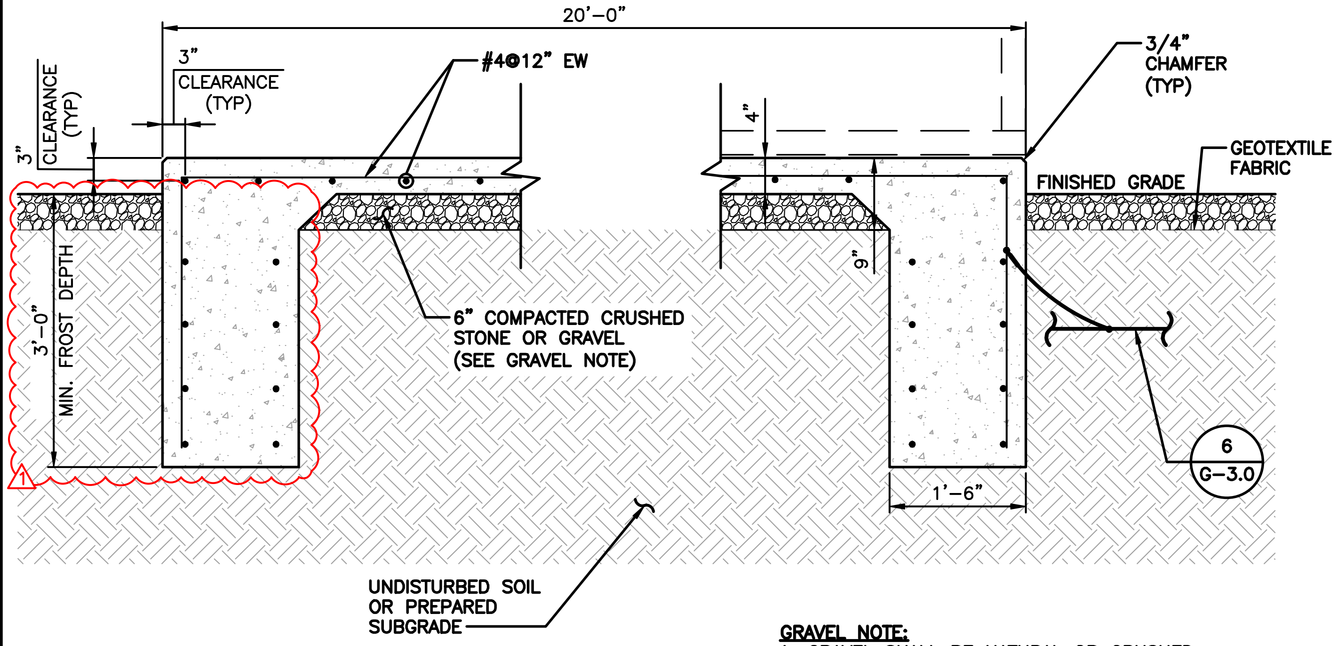
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

SHELTER ELEVATIONS

SHEET #:

A-3.0

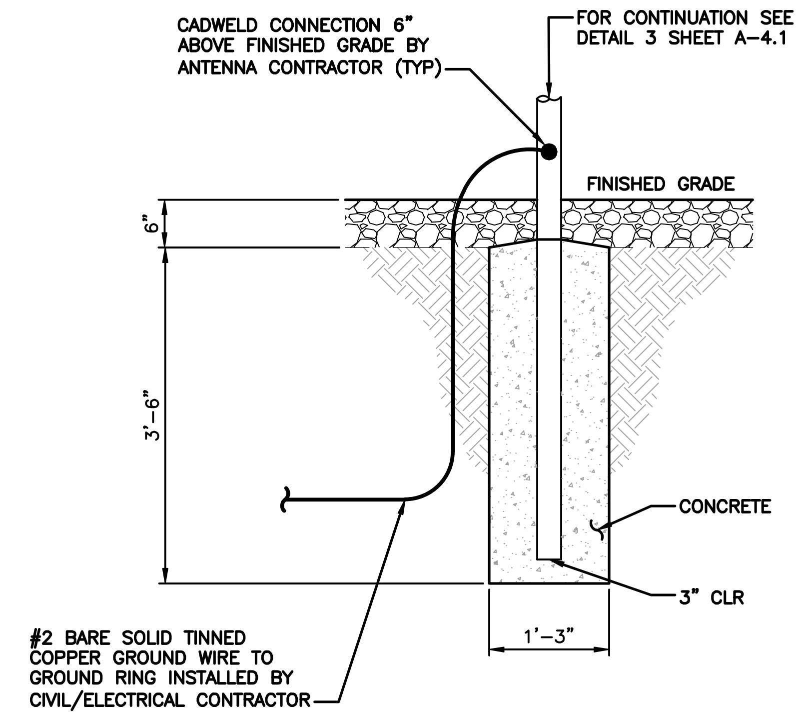


GRAVEL NOTE:
1. GRAVEL SHALL BE NATURAL OR CRUSHED STONE WITH 100 PERCENT PASSING 1 INCH SIEVE.

FOUNDATION NOTE:

MINIMUM SOIL BEARING CAPACITY OF 2000 PSF IS ASSUMED IN ALL FOUNDATIONS AND SLAB AREAS. (GENERAL CONTRACTOR SHALL VERIFY PRIOR TO CONSTRUCTION)

SHELTER PAD DETAIL | 3



FURNISHED AND INSTALLED BY ANTENNA CONTRACTOR

SUPPORT POST (CONCRETE PIER) | 1

DETAIL NOT USED | 4

DETAIL NOT USED | 2

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:37

STATE OF MISSOURI ★ CHRISTOPHER GIANNOTTI NUMBER PE-2020038653 ★ PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:
STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
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DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

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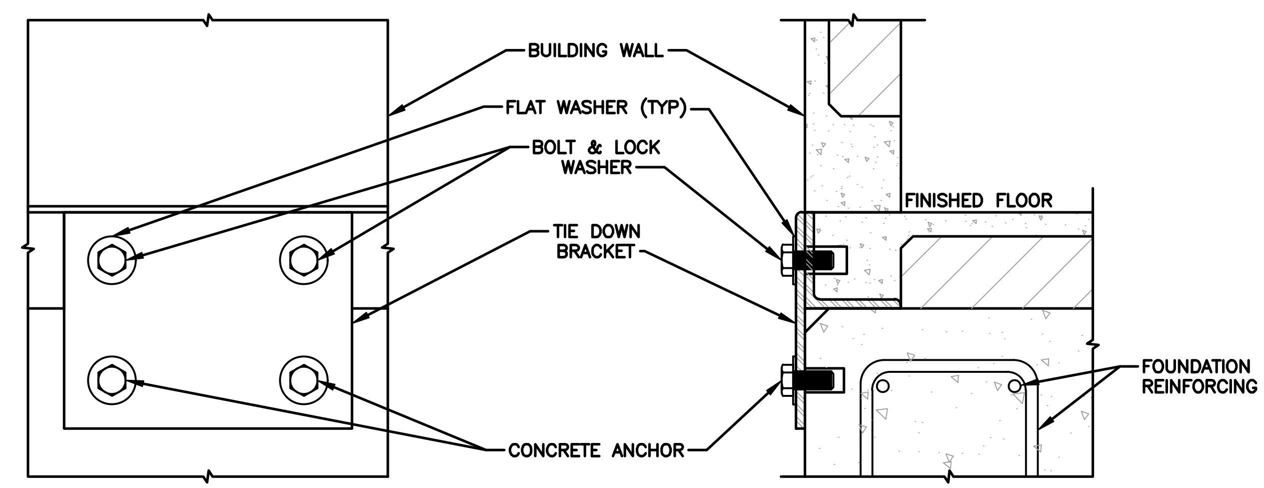
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:
LEES SUMMIT

SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:
CONSTRUCTION DETAILS (1 OF 2)

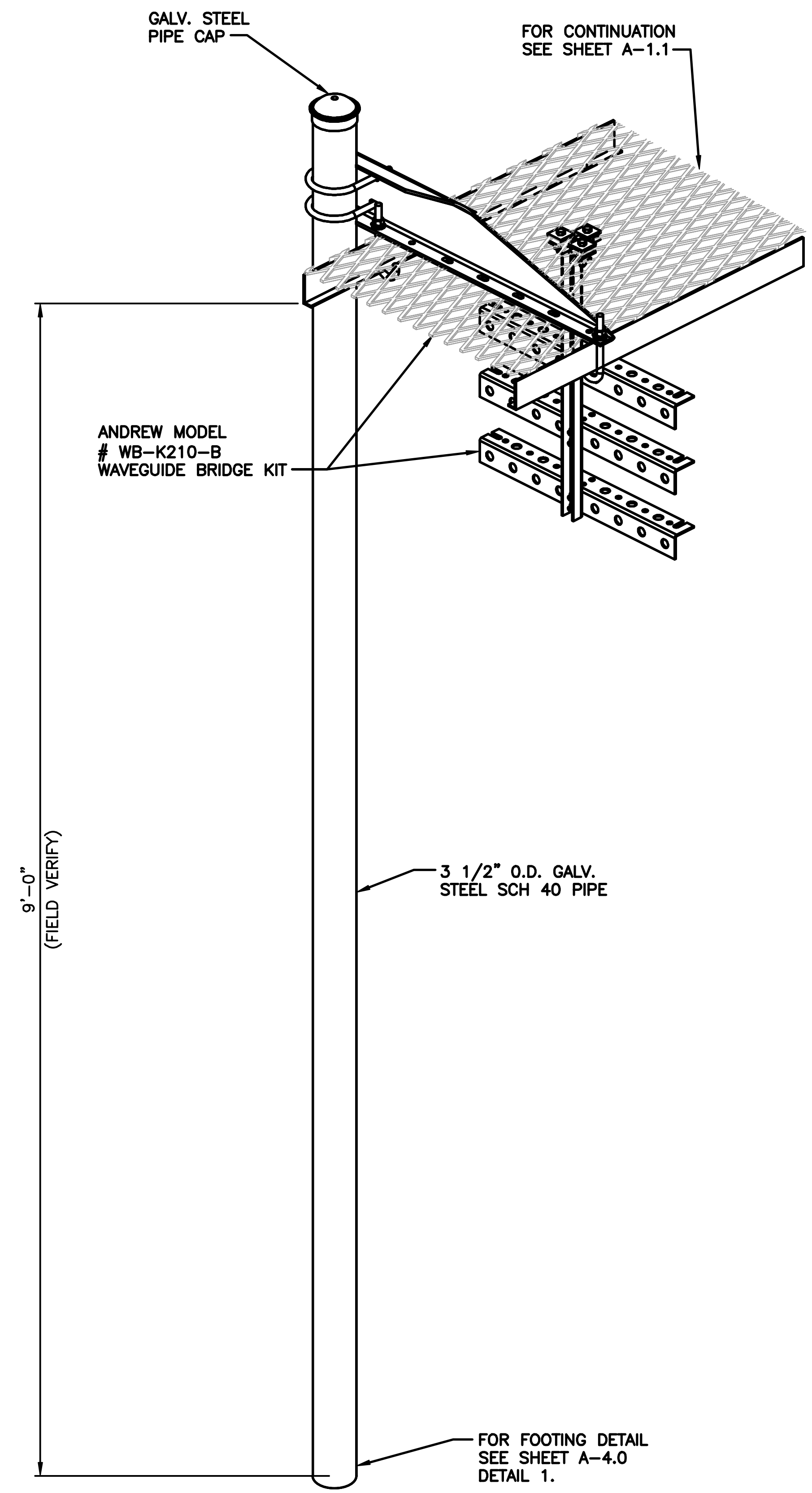
SHEET #:
A-4.0



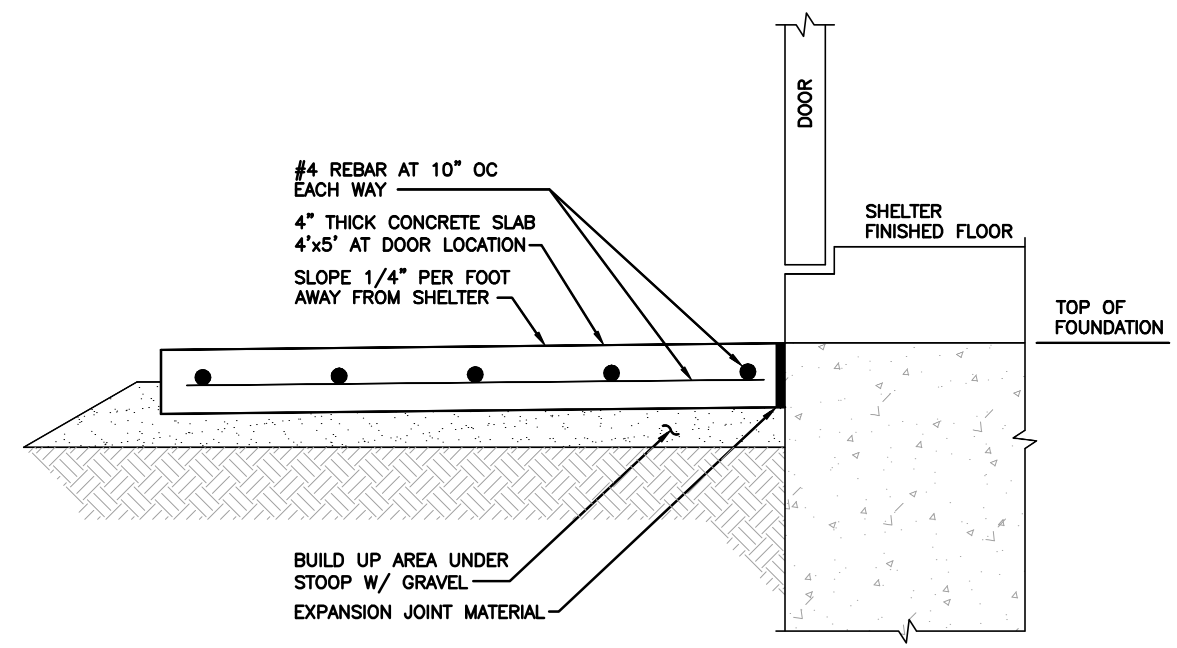
TIE DOWN BRACKET NOTES:

1. FURNISHED BY SHELTER MANUFACTURER INSTALLED BY CONTRACTOR.
2. VERIFY BRACKET AND HARDWARE SIZES WITH MANUFACTURER.

SHELTER TIE DOWN DETAIL | 1



ICE BRIDGE SUPPORT POST DETAIL | 3



STOOP DETAIL | 2

STAMP:

RELEASE FOR CONSTRUCTION
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:37

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:
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STATE CERTIFICATE OF AUTHORIZATION # EF-2791

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TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

DRAWING NOTICE:

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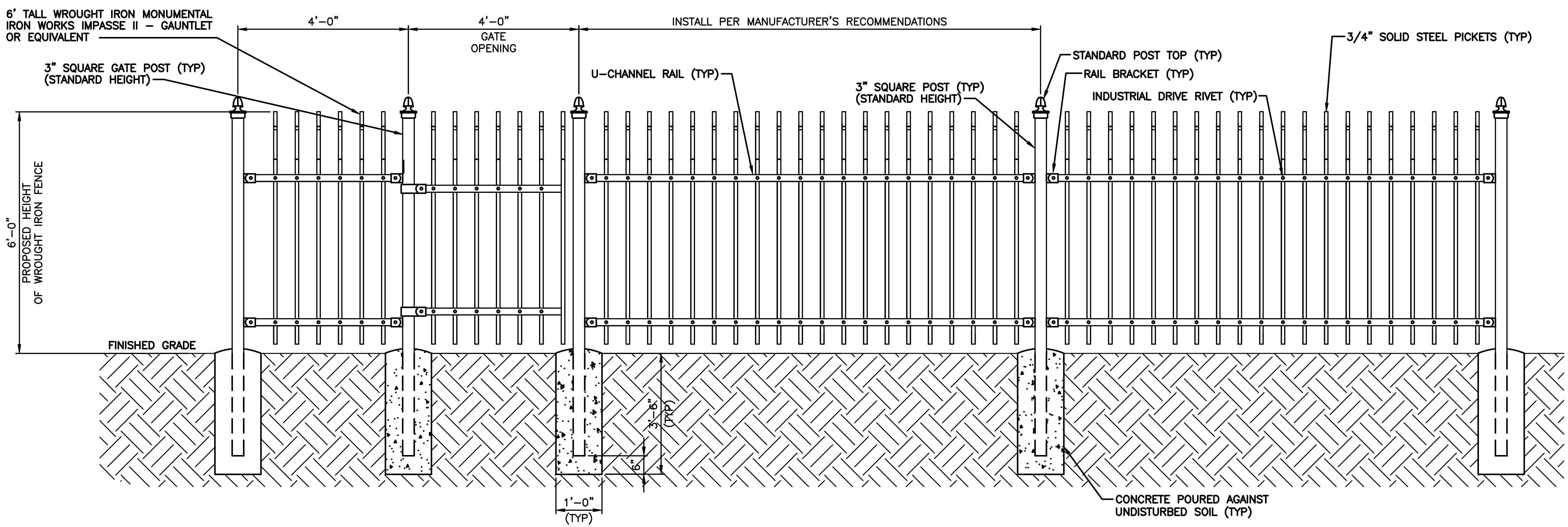
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:
LEES SUMMIT

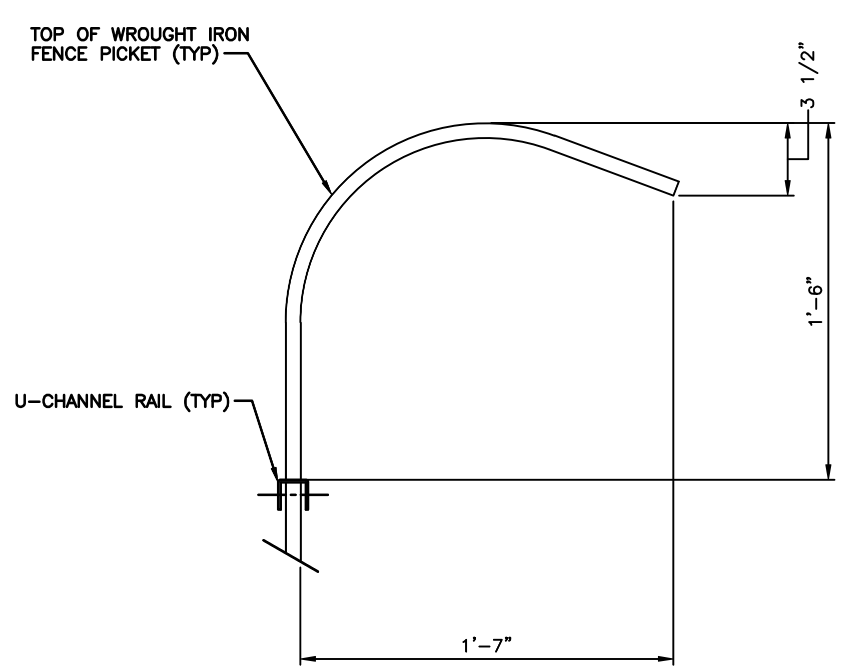
SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:
CONSTRUCTION DETAILS
(2 OF 2)

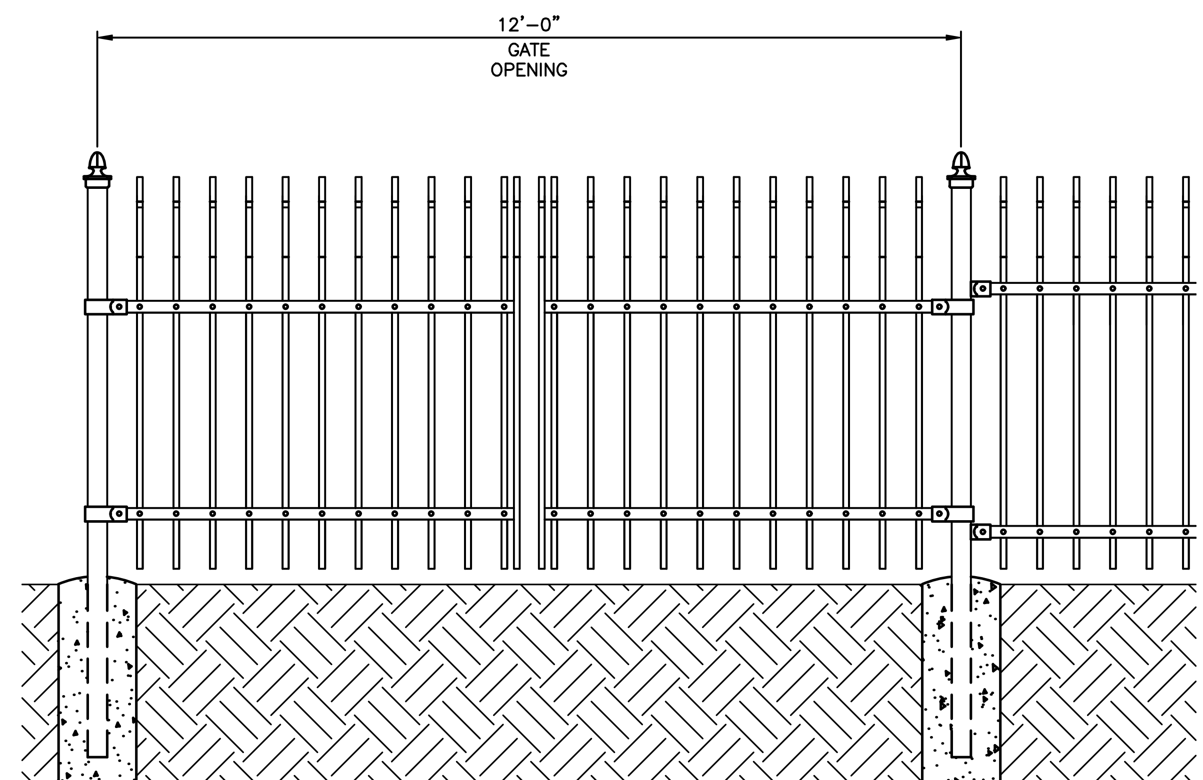
SHEET #:
A-4.1



FENCE, GATE, AND COMPOUND CROSS SECTION 1



FENCE PICKET DETAIL 3



DOUBLE GATE DETAIL 2

STAMP:

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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:37

12/18/2025

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
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TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden
TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

DRAWING NOTICE:

SUBMITTALS:

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ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

FENCE DETAILS

SHEET #:

A-5.0

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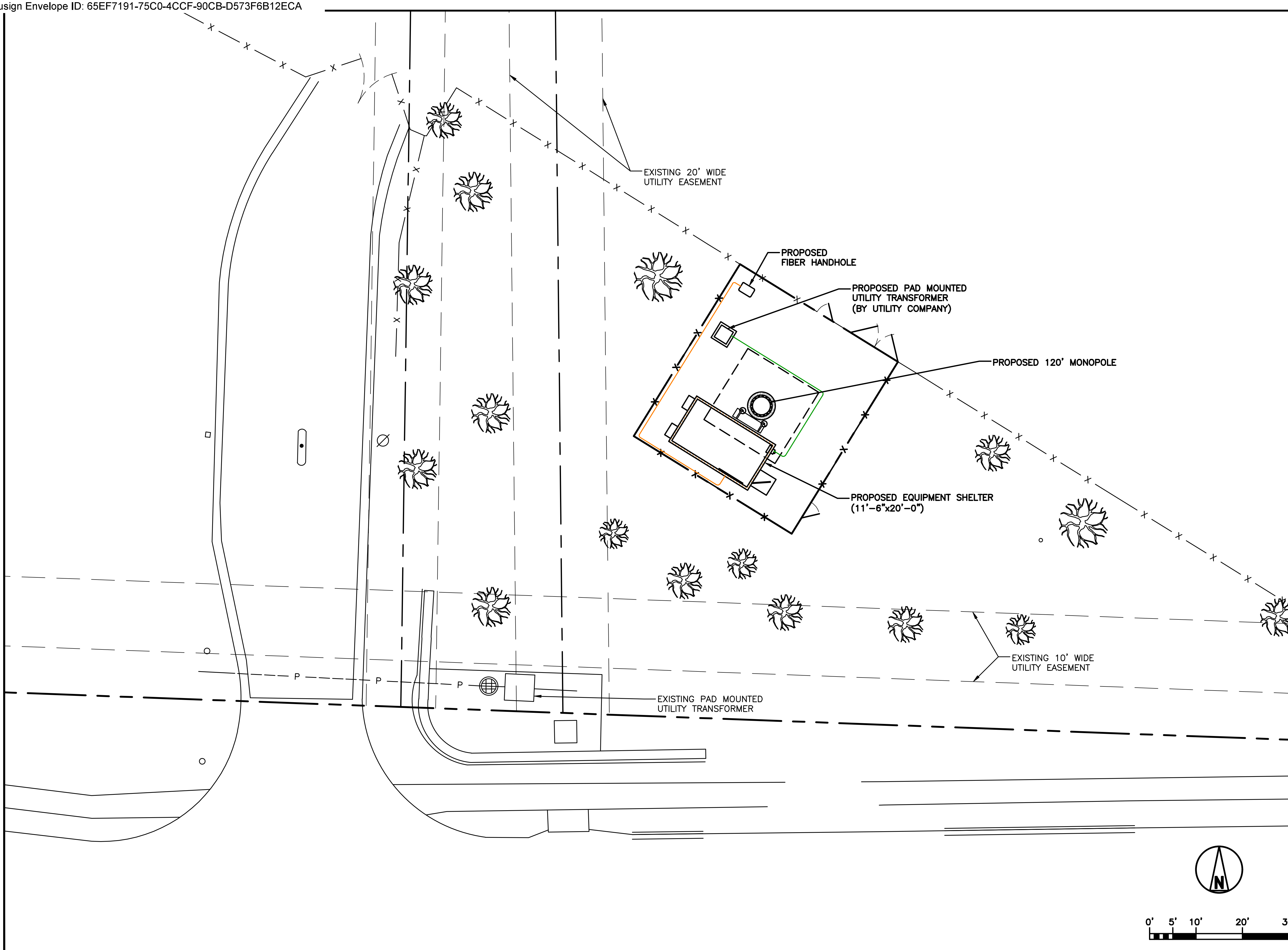

OVERALL UTILITY PLAN

SCALE: 1:10 (22"x34")
SCALE: 1:20 (11"x17")

1

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
01/14/2026 4:20:37

STAMP:

STATE OF MISSOURI
SHELTON KEISLING
NUMBER PE-27323
PROFESSIONAL ENGINEER

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
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TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden
TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

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REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

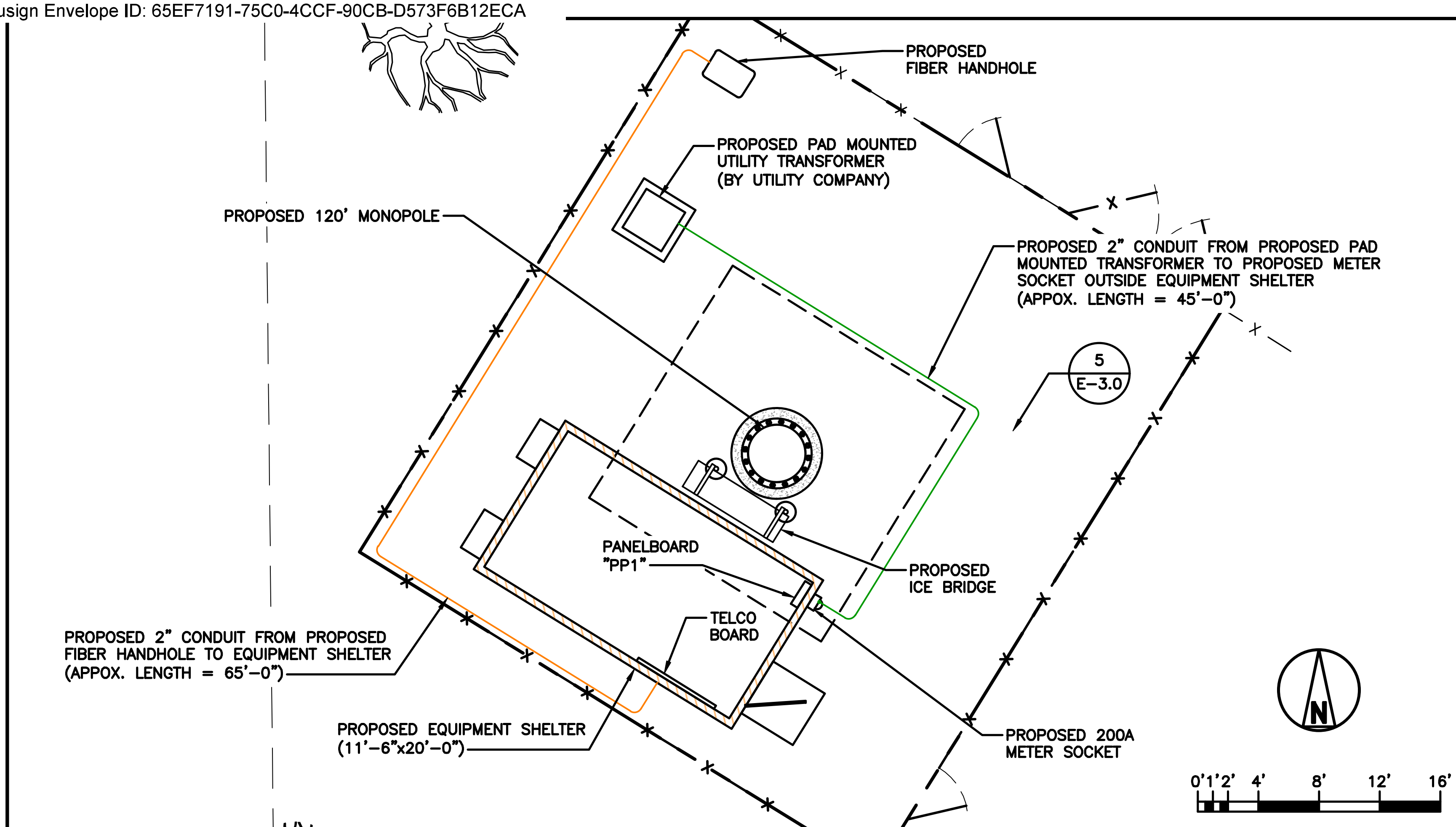
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

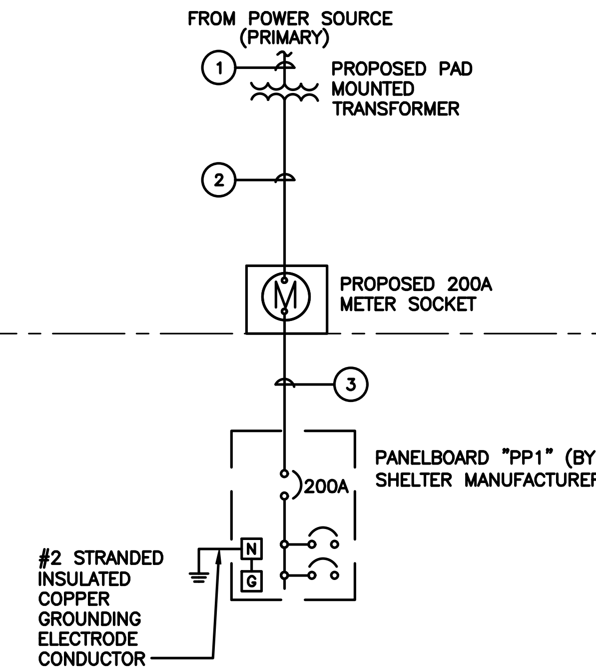
OVERALL UTILITY PLAN

SHEET #:

E-1.0



ENLARGED ELECTRICAL PLAN | 4



ONE–LINE DIAGRAM | 1

NO.	FROM	TO	CONFIGURATION	FUNCTION
1	SOURCE	TRANSFORMER	(BY UTILITY COMPANY)	PRIMARY
2	TRANSFORMER	METER SOCKET	3#3/0, 2"C	SERVICE LATERAL
3	METER SOCKET	PANELBOARD "PP1" (IN SHELTER)	3#3/0, 2"C	NORMAL POWER FEEDER FROM METER SOCKET OUTSIDE SHELTER TO PANELBOARD "PP1"

CIRCUIT SCHEDULE | 2

1. ALL ELECTRICAL WORK SHALL CONFORM TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AS A MINIMUM STANDARD.
2. ALL EXTERIOR ABOVE GROUND CONDUIT SHALL BE RIGID GALVANIZED STEEL (RGS) AND ALL INTERIOR ABOVE GROUND CONDUIT SHALL BE ELECTRICAL METALLIC TUBING (EMT) UNLESS OTHERWISE INDICATED.
3. ALL UNDERGROUND CONDUIT SHALL BE SCH 40 PVC UNLESS OTHERWISE INDICATED OR AS REQUIRED BY LOCAL UTILITY COMPANY. ALL UNDERGROUND ELBOWS SHALL BE SWEEPING BENDS.

GENERAL NOTES | 3

DETAIL NOT USED | 5

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
01/14/2026 4:20:37

STATE OF MISSOURI
SHELTON KEISLING
NUMBER PE-27323
PROFESSIONAL ENGINEER

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:
STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

DRAWING NOTICE:

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
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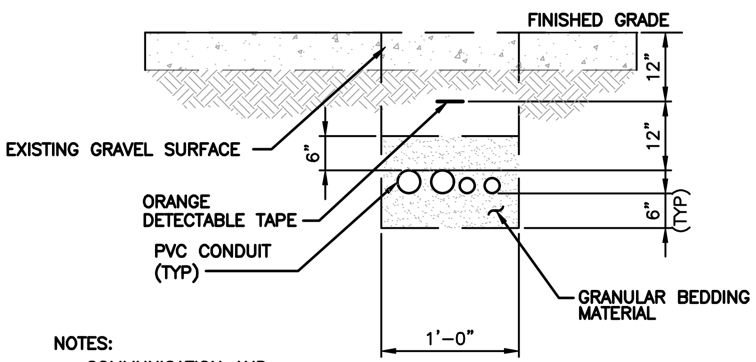
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:
LEES SUMMIT

SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:
ENLARGED UTILITY PLAN & DETAILS

SHEET #:
E-2.0



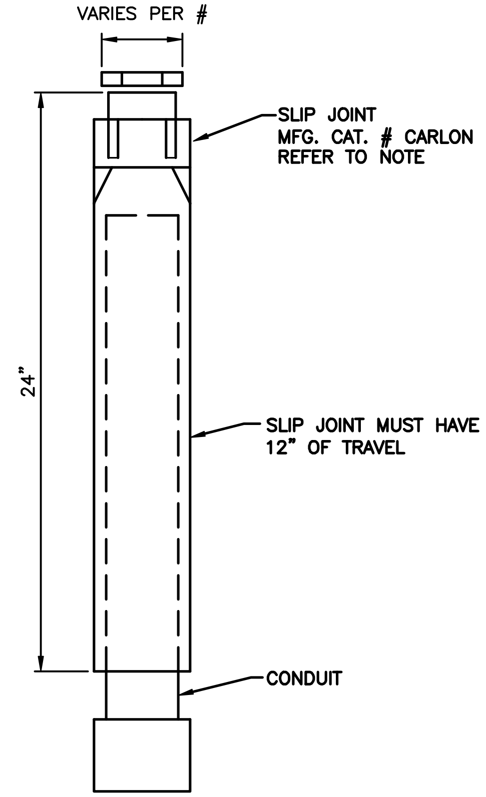
NOTES:

COMMUNICATION AND POWER CONDUITS MAY BE RUN IN SEPARATE TRENCHES.

SEE ENLARGED SITE PLAN FOR EXACT QUANTITY AND SIZE OF CONDUITS.

TRENCH DETAIL (SITE) | 5

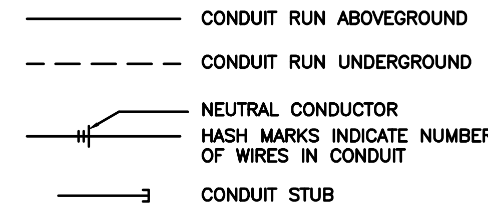
NOTES:
CARLON #
2 INCHES – #E954JXX,
3 INCHES – #E954LXX,
4 INCHES – #E954NXX,



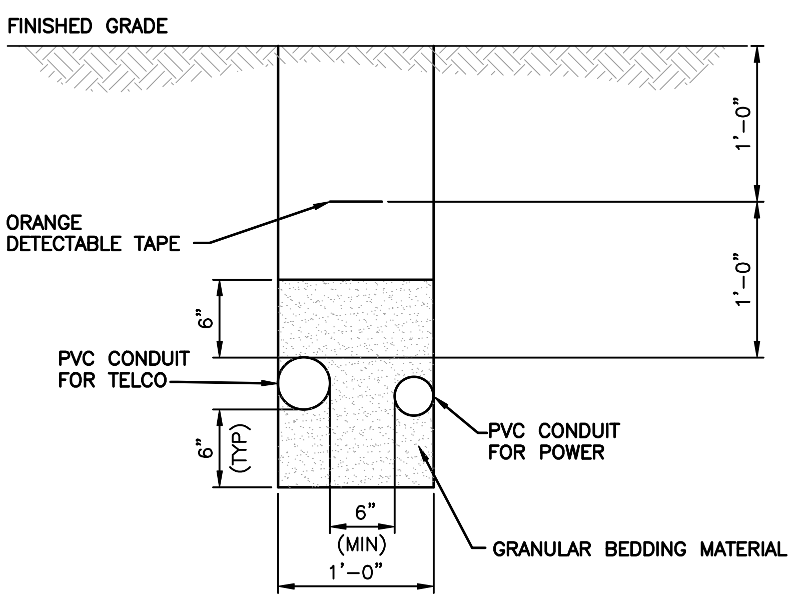
N.T.S.

SLIP JOINT DETAIL | 3

ELECTRICAL SYMBOLS



ELECTRICAL SYMBOLS | 1



TRENCH DETAIL (INCOMING) | 6

DETAIL NOT USED | 4

1. THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY THE POWER CONNECTION POINT WITH THE UTILITY COMPANY PRIOR TO COMMENCING WORK.
2. THE ELECTRICAL CONTRACTOR SHALL NOTIFY HAYDEN TOWER'S CONSTRUCTION MANAGER AFTER CALLING FOR ELECTRICAL INSPECTION OF BELOW–GRADE CONDUITS AND OTHER ELECTRICAL WORK PRIOR TO COVERING.
3. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE SITE CONSTRUCTION MANAGER AFTER THE ELECTRICAL INSPECTION HAS BEEN PERFORMED AND ACCEPTED (GREEN TAGGED).
4. THE ELECTRICAL CONTRACTOR SHALL PAY FOR ALL ELECTRICAL UTILITY FEES PER NOTE #12 ON SHEET T01 OF THE CONSTRUCTION DOCUMENTS.
5. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY REQUESTING ENERGIZING OF THE SITE AND SHALL NOTIFY THE SITE CONSTRUCTION MANAGER WHEN THIS TASK HAS BEEN COMPLETED.
6. THE ELECTRICAL CONTRACTOR SHALL CONVEY THE POLE NUMBER, TRANSFORMER NUMBER, AND THE METER NUMBER TO THE SITE CONSTRUCTION MANAGER.

ELECTRICAL NOTES | 2

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
01/14/2026 4:20:38

STATE OF MISSOURI
SHELTON KEISLING
NUMBER PE-27323
PROFESSIONAL ENGINEER

12/18/2025

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:
STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
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TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden
TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

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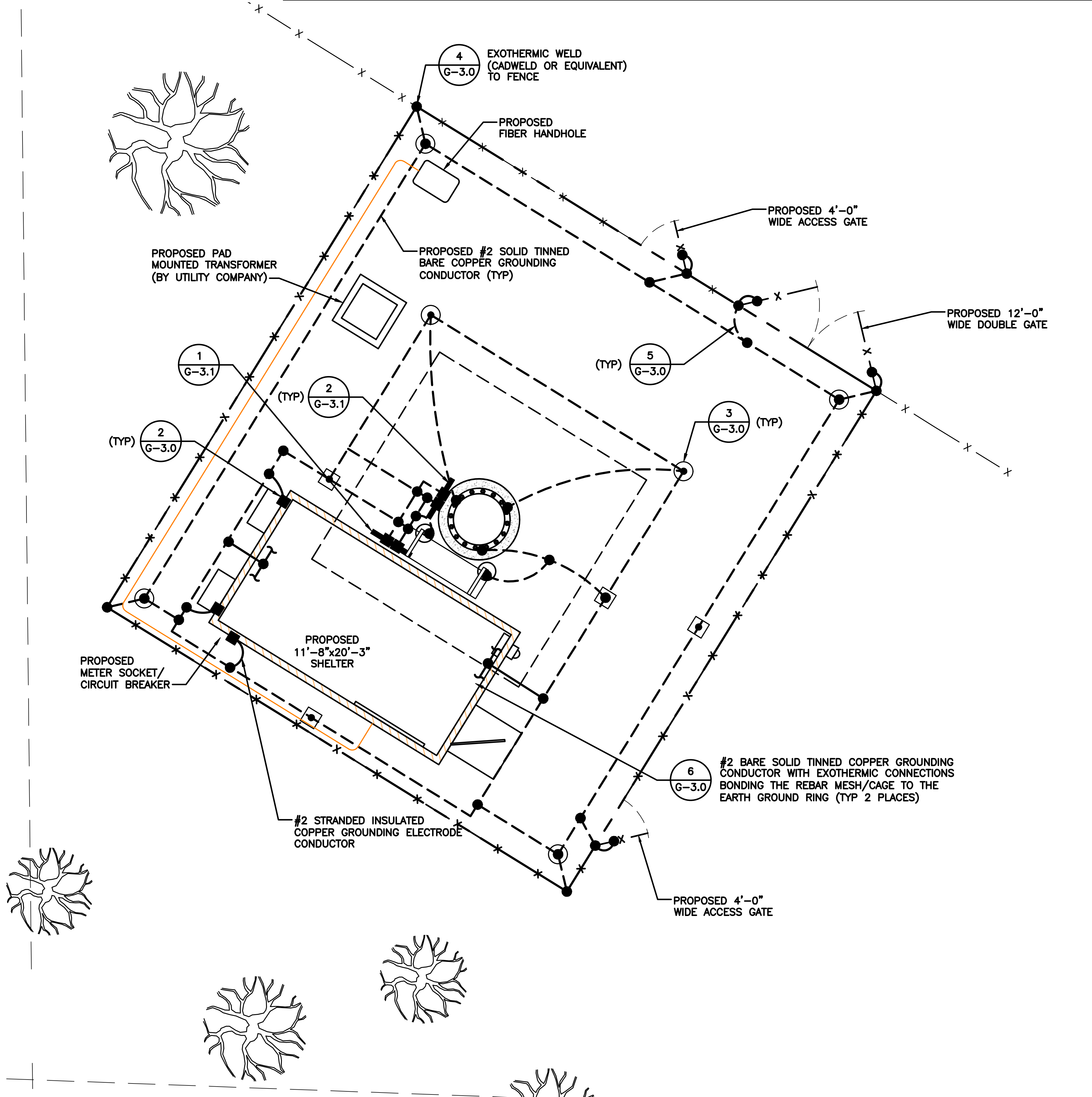
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:
LEES SUMMIT

SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

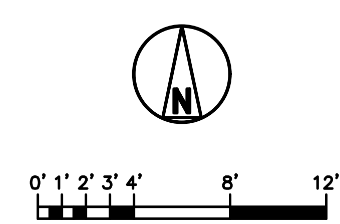
SHEET DESCRIPTION:
ELECTRICAL DETAILS

SHEET #:
E-3.0



GROUNDING PLAN SYMBOLS

- GROUNDING CONDUCTOR ABOVEGROUND
- GROUNDING CONDUCTOR UNDERGROUND
- GND BUS / GND COND — GROUND BUS WITH COMPRESSION CONNECTION
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- GROUND ROD
- GROUND INSPECTION / TESTWELL



GROUNDING PLAN | 1

STAMP:

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:38

12/18/2025

STATE OF MISSOURI
SHELTON KEISLING
NUMBER
PE-27323
PROFESSIONAL ENGINEER

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

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SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

DRAWING NOTICE:

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR REVIEW	10/14/25	DSL	A
REISSUED FOR REVIEW	10/23/25	DSL	B
REISSUED FOR REVIEW	11/13/25	DSL	C
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:
LEES SUMMIT

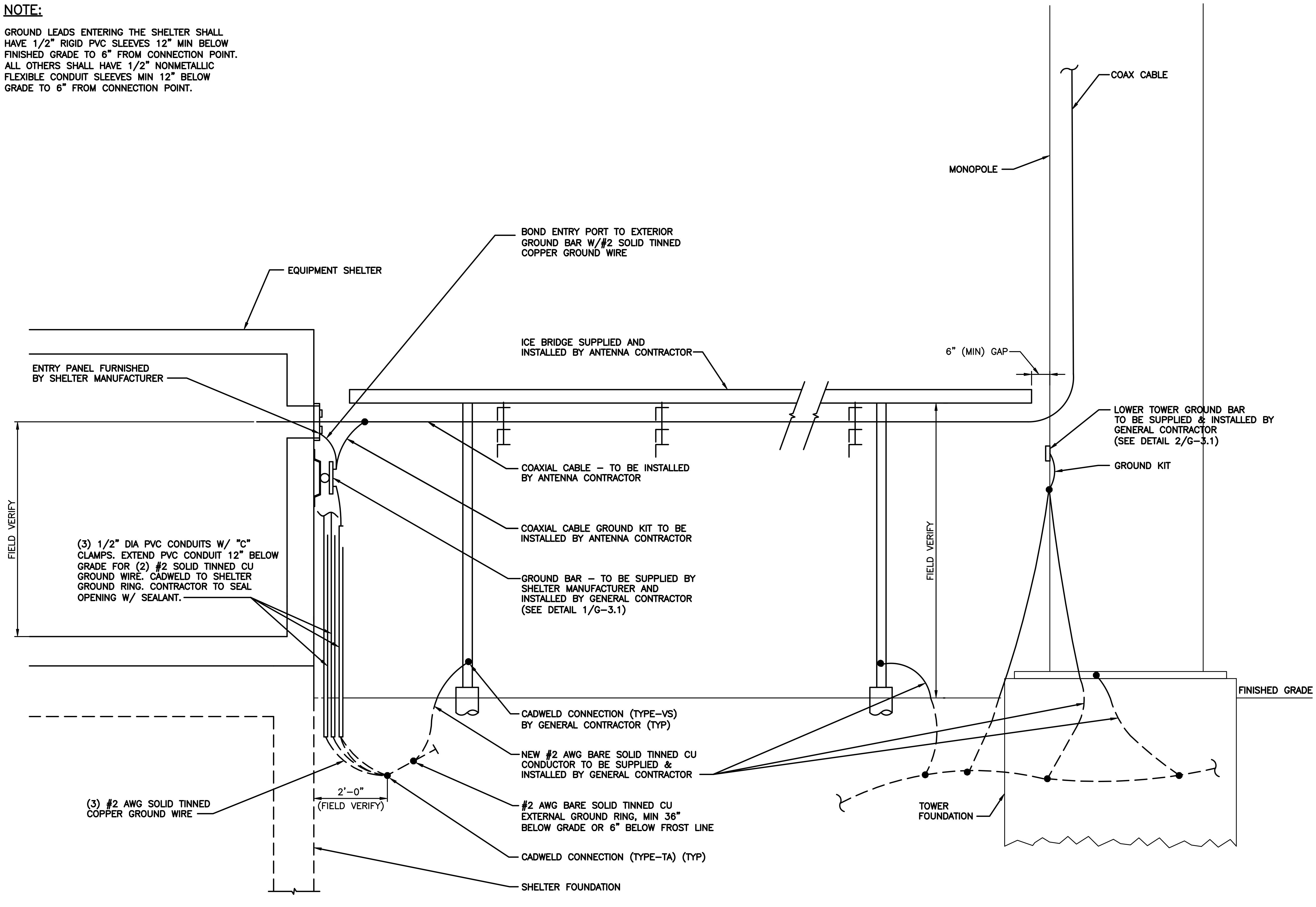
SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:
GROUNDING PLAN

SHEET #:
G-1.0

NOTE:

GROUND LEADS ENTERING THE SHELTER SHALL HAVE 1/2" RIGID PVC SLEEVES 12" MIN BELOW FINISHED GRADE TO 6" FROM CONNECTION POINT. ALL OTHERS SHALL HAVE 1/2" NONMETALLIC FLEXIBLE CONDUIT SLEEVES MIN 12" BELOW GRADE TO 6" FROM CONNECTION POINT.



GROUNDING RISER DIAGRAM | 1

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
01/14/2026 4:20:38

12/18/2025

STATE OF MISSOURI ★ PROFESSIONAL ENGINEER ★
SHELTON KEISLING
NUMBER PE-27323

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
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OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

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APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

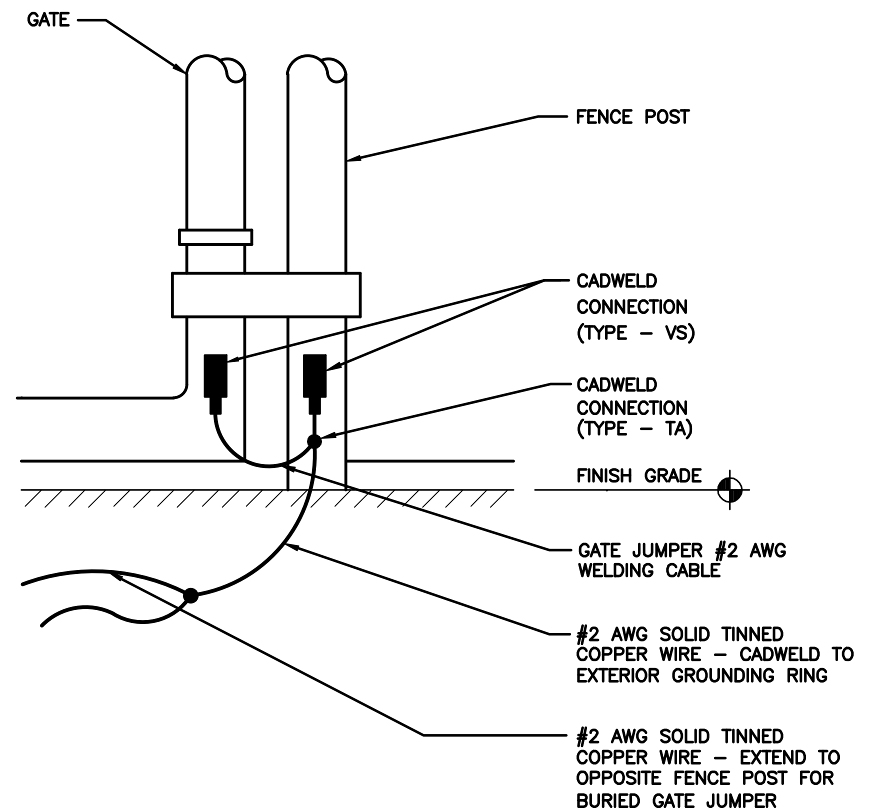
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

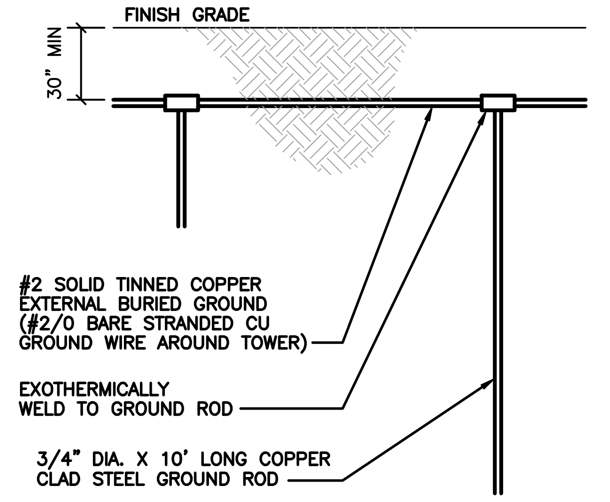
GROUNDING RISER DIAGRAM

SHEET #:

G-2.0

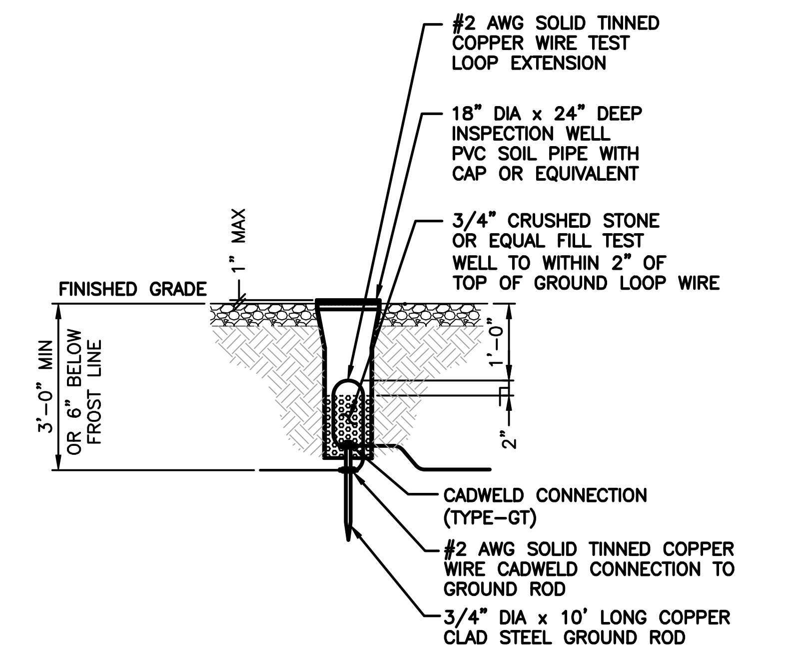


SWINGING GATE DETAIL (TYP) | 5

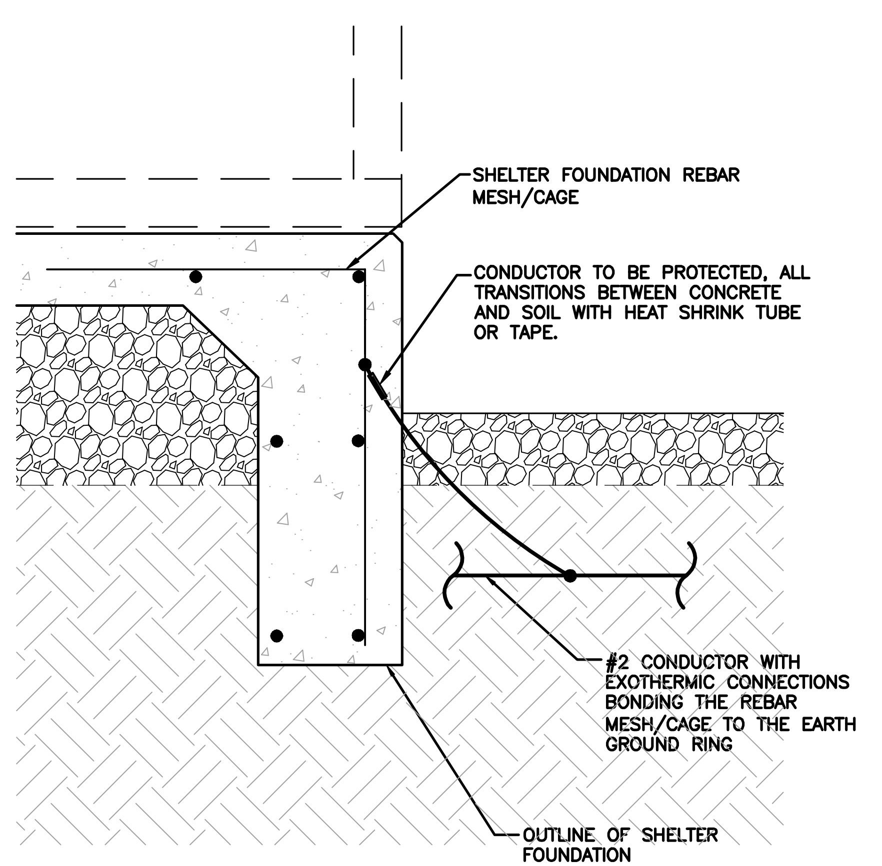


NOTE:
IF GROUND RODS CANNOT BE DRIVEN VERTICALLY TO FULL DEPTH DUE TO ROCK, DRIVE THEM AT AN ANGLE NOT TO EXCEED 45 DEGREES FROM VERTICAL. IF THAT IS NOT POSSIBLE THE RODS CAN BE LAID IN THE TRENCH HORIZONTALLY NO LESS THEN 30 INCHES DEEP.

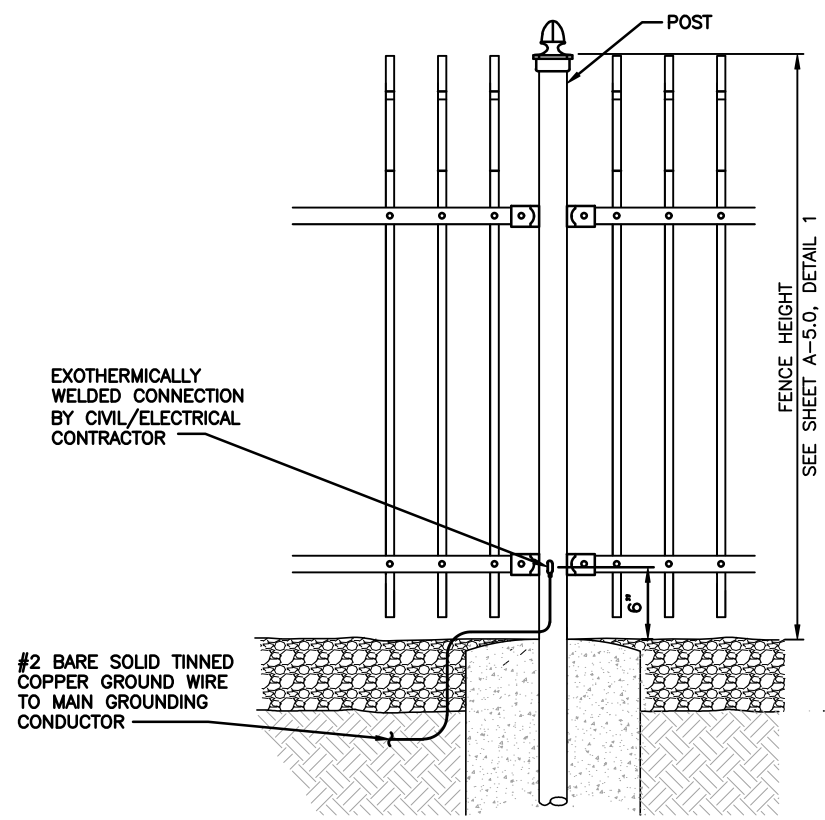
GROUND ROD DETAIL | 3



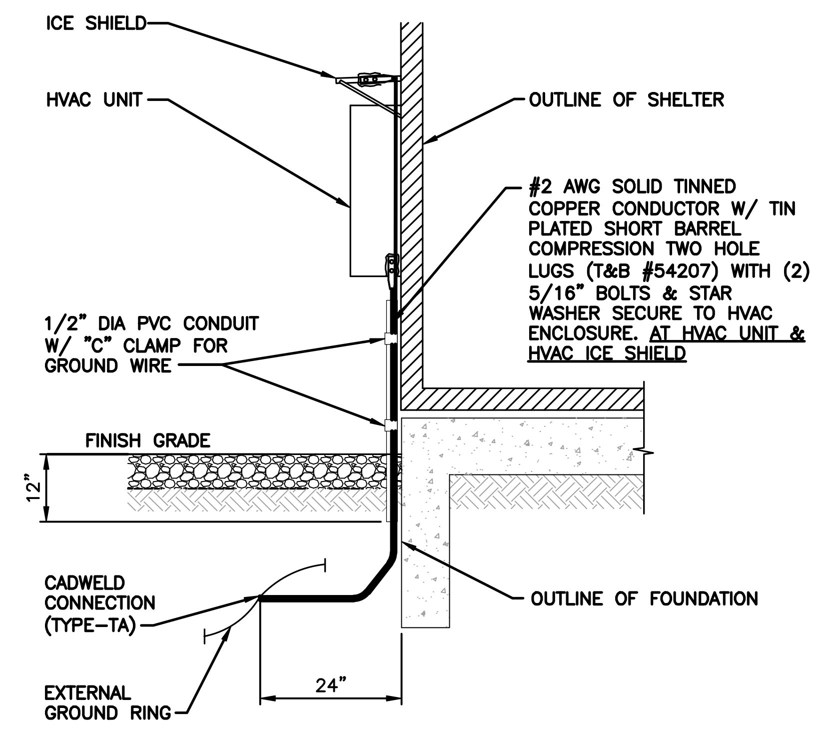
INSPECTION WELL | 1



FOUNDATION GROUNDING DETAIL | 6



FENCE END, CORNER, AND POST GROUNDING | 4



HVAC GROUNDING DETAIL | 2

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
01/14/2026 4:20:38

STATE OF MISSOURI
SHELTON KEISLING
NUMBER PE-27323
PROFESSIONAL ENGINEER

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:
STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
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REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
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TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

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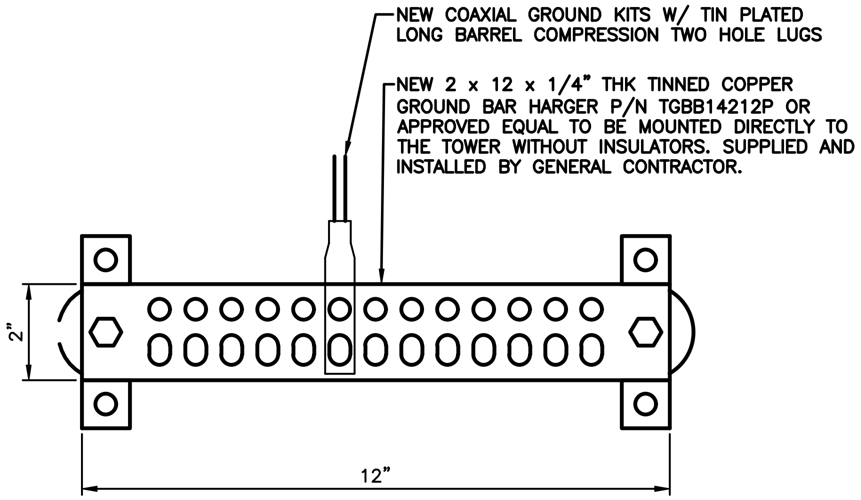
APPLICANT SITE NAME:
LEES SUMMIT

SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:
GROUNDING DETAILS (1 OF 3)

SHEET #:
G-3.0

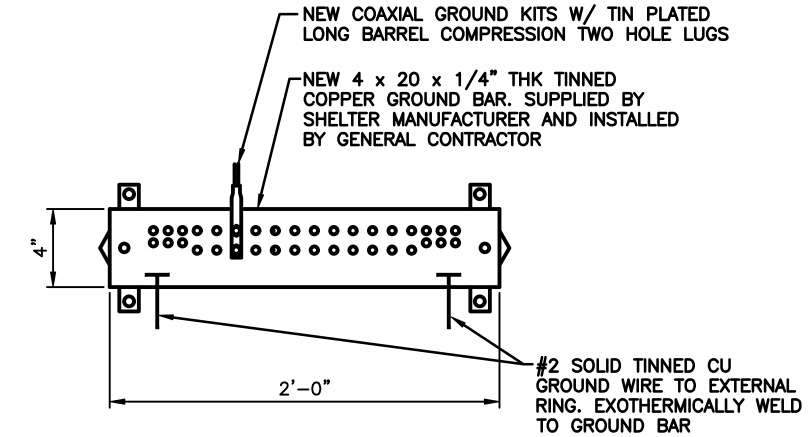
DETAIL NOT USED | 5



NOTES:

1. ALL HARDWARE 8–88 STAINLESS STEEL INCLUDING BELLVILLES, COAT ALL SURFACES WITH KOPR–SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR–SHIELD.
3. ALL HOLES ARE COUNTERSUNK 1/16".
4. CONTRACTOR TO USE A THIN COAT OF ANTI–CORROSION GREASE AT THESE CONNECTIONS.
5. INSTALLED WITHIN 12" OF END OF COAX JUMPER CONNECTION.
6. DIMPLE OR MECHANICAL CRIMP LUGS WILL NOT BE PERMITTED.

ANTENNA GROUND BAR (ONE PER SECTOR) | 3



NOTES:

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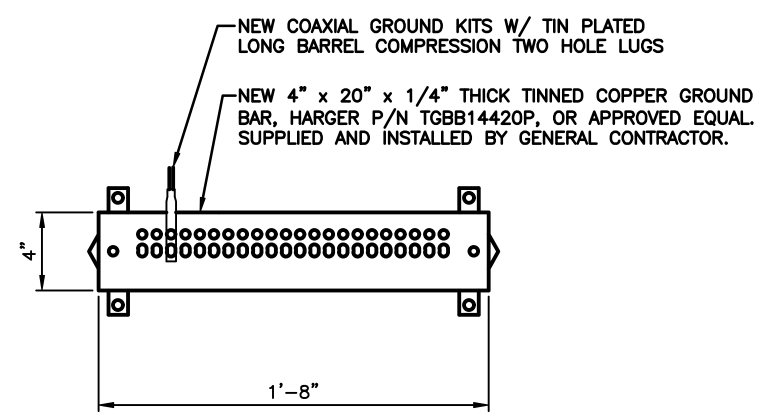
2. FOR GROUND BOND TO STEEL ONLY: INSERT A TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR–SHIELD.
3. ALL HOLES ARE COUNTERSUNK 1/16".
4. CONTRACTOR TO USE A THIN COAT OF ANTI–CORROSION GREASE AT THESE CONNECTIONS.
5. INSTALLED AT 12" BELOW THE BOTTOM OF COAX ENTRY PORT.
6. DIMPLE OR MECHANICAL CRIMP LUGS WILL NOT BE PERMITTED.

EXTERIOR SHELTER GROUND BAR | 1

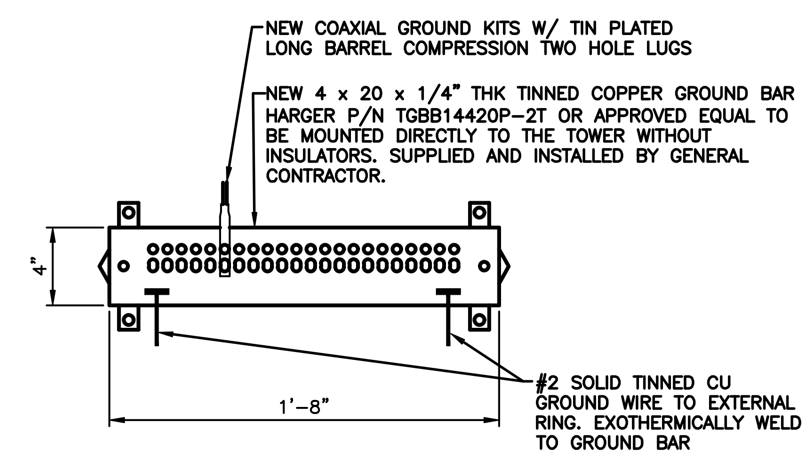
DETAIL NOT USED | 6



NOTES:

1. ALL HARDWARE 8–88 STAINLESS STEEL INCLUDING BELLVILLES, COAT ALL SURFACES WITH KOPR–SHEILD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR–SHIELD.
3. ALL HOLES ARE COUNTERSUNK 1/16".
4. CONTRACTOR TO USE A THIN COAT OF ANTI–CORROSION GREASE AT THESE CONNECTIONS.
5. INSTALLED WITHIN 12" OF INTERMEDIATE COAX GROUND KITS. COAX GROUND KITS SHALL BE AT 75' INTERVALS STARTING FROM THE ANTENNA CENTERLINE DOWN. SELF SUPPORT AND GUYED TOWERS ONLY.
6. DIMPLE OR MECHANICAL CRIMP LUGS WILL NOT BE PERMITTED.

INTERMEDIATE COAX GROUND KIT – GROUND BAR | 4



NOTES:

1. ALL HARDWARE 8–88 STAINLESS STEEL INCLUDING BELLVILLES, COAT ALL SURFACES WITH KOPR–SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR–SHIELD.
3. ALL HOLES ARE COUNTERSUNK 1/16".
4. CONTRACTOR TO USE A THIN COAT OF ANTI–CORROSION GREASE AT THESE CONNECTIONS.
5. INSTALLED AT NO GREATER THAN 36" BELOW ICE BRIDGE.
6. DIMPLE OR MECHANICAL CRIMP LUGS WILL NOT BE PERMITTED.

LOWER TOWER GROUND BAR | 2

STAMP:

STATE OF MISSOURI
SHELTON KEISLING
NUMBER
PE-27323
PROFESSIONAL ENGINEER

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:
STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
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TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

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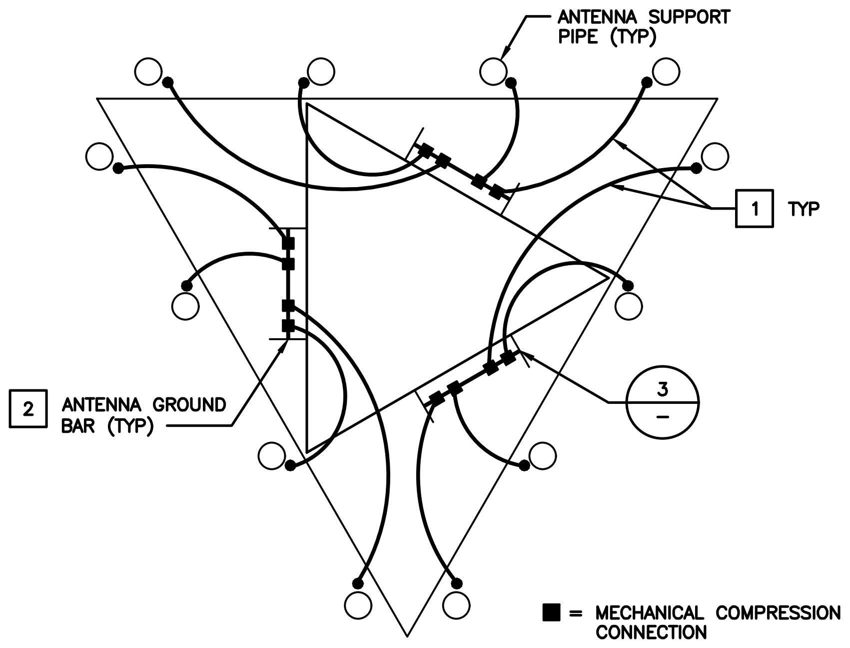
APPLICANT SITE NAME:
LEES SUMMIT

SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:
GROUNDING DETAILS
(2 OF 3)

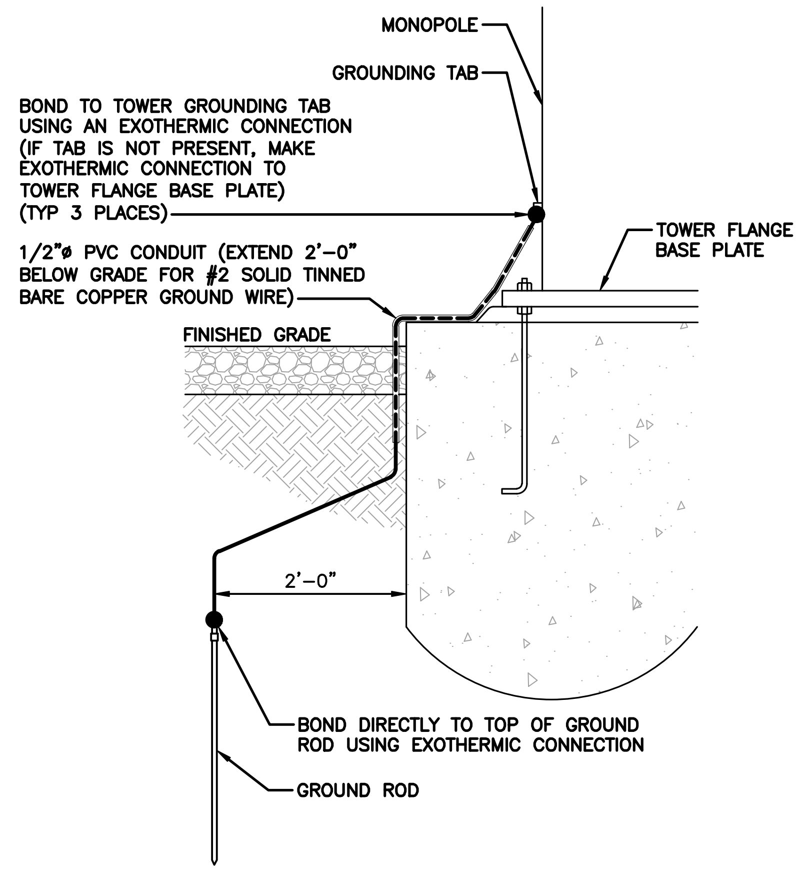
SHEET #:
G-3.1



NOTES:

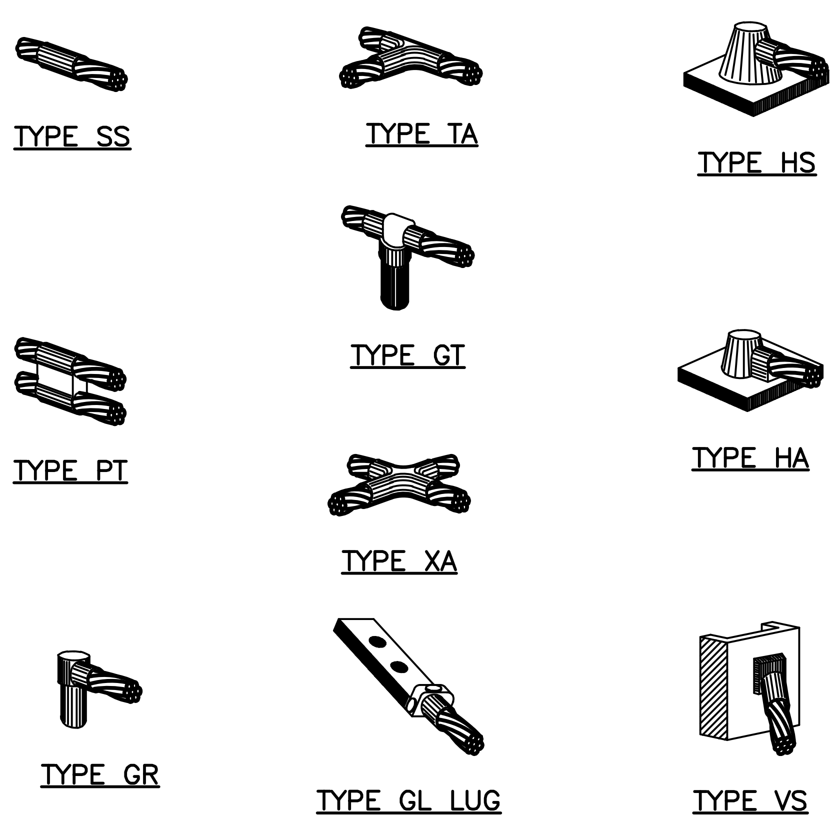
1. COAX GROUND KIT WIRES.
2. MOUNT TOWER GROUND BAR DIRECTLY TO TOWER WITHOUT ISOLATION BUSHINGS. CONTRACTOR TO REMOVE TOWER GALVANIZED COATING WHERE GROUND BAR COMES INTO CONTACT WITH TOWER. SUPPLY AND INSTALL COLD GALVANIZING TO TOWER AND GROUND BAR CLAMPS AFTER INSTALLATION.

ANTENNA GROUNDING PLAN | 5



TOWER GROUNDING DETAIL | 3

DETAIL NOT USED | 1



EXOTHERMIC CONNECTION TYPE DETAILS | 6

DETAIL NOT USED | 4

DETAIL NOT USED | 2

STAMP:

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:38

12/18/2025

STATE OF MISSOURI
SHELTON KEISLING
NUMBER PE-27323
PROFESSIONAL ENGINEER

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:

STATE OF MISSOURI

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OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

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APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

GROUNDING DETAILS
(3 OF 3)

SHEET #:

G-3.2

GENERAL REQUIREMENTS

PART 1: GENERAL

1.1 INTENT:

A. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION. PLANS ARE NOT TO BE SCALED.

B. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY, HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED OR SPECIFIED IN ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.

C. THE INTENTION OF DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.

D. CONFLICTS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING MATERIALS OR DOING ANY WORK. NO COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND THOSE ON THE DOCUMENTS. ANY DISCREPANCY SHALL BE REPORTED TO THE OWNER OR THEIR AGENT FOR CONSIDERATION.

1.2 LICENSING REQUIREMENTS:

A. THE CONTRACTOR IS RESPONSIBLE FOR PROCUREMENT AND MAINTAINING ALL APPLICABLE LICENSES AND BONDS.

1.3 STORAGE:

A. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION THAT DOES NOT OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

1.4 CLEAN UP:

A. THE CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH AT ALL TIMES.

1.5 QUALITY ASSURANCE:

A. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

PART 2: PRODUCTS – NOT APPLICABLE TO THIS SECTION

PART 3: EXECUTION – NOT APPLICABLE TO THIS SECTION

END OF SECTION

COMMUNICATIONS/ANTENNA'S

PART 1: GENERAL

1.1 WORK INCLUDED:

A. ANTENNA AND FEEDLINE CABLES ARE FURNISHED BY OWNER UNDER SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND PROPERTY FROM HAZARDOUS EXPOSURE TO OVERHEAD DANGER.

B. INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND OWNER SPECIFICATIONS.

C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.

D. INSTALL FURNISHED GALVANIZED STEEL WAVEGUIDE LADDER AS INDICATED ON DRAWINGS.

E. THE CONTRACTOR SHALL PROVIDE FREQUENCY DOMAIN REFLECTOMETER (FDR) TEST RESULTS TO THE CONSTRUCTION MANAGER AND OWNER WITHIN ONE WEEK OF COMPLETION.

F. INSTALL FEEDLINE CABLES AND TERMINATORS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL FEEDLINE CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.

G. ANTENNA AND FEEDLINE CABLE GROUNDING:

1. ALL FEEDLINE CABLE GROUNDING CONNECTIONS ARE TO BE WEATHER SEALED WITH ANDREW CONNECTOR/SPLICE WEATHERPROOFING KITS OR APPROVED EQUAL.

2. ALL FEEDLINE CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF FEEDLINE CABLE (NOT WITHIN BENDS)

1.2 RELATED WORK:

A. FURNISH THE FOLLOWING WORK AS SPECIFIED UNDER CONSTRUCTION DOCUMENTS, BUT COORDINATE WITH OTHER TRADES PRIOR TO BID:

1. FLASHING OF OPENING INTO OUTSIDE WALLS.

2. SEAL AND CAULK ALL OPENINGS.

3. PAINTING.

4. CUTTING AND PATCHING.

1.3 REQUIREMENTS OF REGULATOR AGENCIES:

A. FURNISH UL LISTED EQUIPMENT WHERE SUCH LABEL IS AVAILABLE, INSTALL IN CONFORMANCE WITH UL STANDARDS WHERE APPLICABLE.

B. INSTALL ANTENNA, ANTENNA CABLES, AND GROUNDING SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS IN EFFECT AT PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL BUILDING CODES, AND ANY SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

1. TIA–222 (TELECOMMUNICATIONS INDUSTRY ASSOCIATION) – STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.

2. FAA (FEDERAL AVIATION ADMINISTRATION ADVISORY) – CIRCULAR AC 70/7460–1K, OBSTRUCTION MARKING AND LIGHTING.

3. FCC (FEDERAL COMMUNICATIONS COMMISSION) – RULES AND REGULATIONS OBSTRUCTION MARKING AND LIGHTING SPECIFICATIONS FOR ANTENNA STRUCTURES AND HIGH INTENSITY OBSTRUCTION LIGHTING SPECIFICATIONS FOR ANTENNA STRUCTURES.

4. AISC (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) – SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.

5. NEC (NATIONAL ELECTRICAL CODE) – FOR TOWER LIGHTING KITS.

6. UL (UNDERWRITERS LABORATORIES) – APPROVED ELECTRICAL PRODUCTS.

7. IN ALL CASES, THE FAA RULES AND THE FCC RULES ARE APPLICABLE AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OR SPECIFICATIONS.

8. LIFE SAFETY CODE NFPA, LATEST EDITION.

PART 2: PRODUCTS – NOT APPLICABLE TO THIS SECTION

PART 3: EXECUTION – NOT APPLICABLE TO THIS SECTION

END OF SECTION

SITE CLEARING/EROSION CONTROL

PART 1: GENERAL

1.1 SUMMARY:

A. PROVIDE SITE–CLEARING AS REQUIRED TO COMPLETE WORK AS SHOWN ON CONTRACT DOCUMENTS INCLUDING CLEARING, GRUBBING, STRIPPING, EROSION AND SILTATION CONTROL, AND PROTECTION OF LANDSCAPE MATERIALS DESIGNATED TO BE PROTECTED DURING CONSTRUCTION.

1.2 QUALITY ASSURANCE:

A. COMPLY WITH GOVERNING CODES AND REGULATIONS.

B. SITE PROTECTION: PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE SUBCONTRACT

C. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.

PART 2: PRODUCTS

2.1 MATERIALS:

A. TREE PROTECTION, EROSION CONTROL, SILTATION CONTROL, AND DUST CONTROL MATERIALS SUITABLE FOR SITE CONDITIONS.

PART 3: EXECUTION

3.1 SITE CLEARING OPERATIONS:

A. PROTECTION OF EXISTING TREES, VEGETATION, LANDSCAPING, AND SITE IMPROVEMENTS NOT SCHEDULED FOR CLEARING WHICH MIGHT BE DAMAGED BY CONSTRUCTION ACTIVITIES.

B. TRIMMING OF EXISTING TREES AND VEGETATION AS RECOMMENDED BY ARBORIST FOR PROTECTION DURING CONSTRUCTION ACTIVITIES.

C. CLEARING AND GRUBBING OF STUMPS AND VEGETATION, AND REMOVAL AND DISPOSAL OF DEBRIS, RUBBISH, DESIGNATED TREES, AND SITE IMPROVEMENTS.

D. TOPSOIL STRIPPING AND STOCKPILING.

E. TEMPORARY EROSION CONTROL, SILTATION CONTROL, AND DUST CONTROL.

F. TEMPORARY PROTECTION OF ADJACENT PROPERTY, STRUCTURES, BENCHMARKS, AND MONUMENTS.

G. WATERING OF TREES AND VEGETATION DURING CONSTRUCTION ACTIVITIES.

H. REMOVAL AND LEGAL DISPOSAL OF CLEARED MATERIALS.

I. MAINTAIN ALL EXISTING FENCING AND GATES TO MAINTAIN A SECURE SITE AT ALL TIMES.

J. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT LIFE AND PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.

3.2 CLEARING:

A. PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED TO REMAIN, INCLUDING ON AND OFF SITE. PROTECT EXISTING TREES AND VEGETATION INDICATED TO REMAIN. DO NOT STOCKPILE MATERIALS AND RESTRICT TRAFFIC WITHIN DRIP LINE OF EXISTING TREES TO REMAIN OR THAT INTERFERE WITH ACCESS TO SITE. PROVIDE AND MAINTAIN TEMPORARY GUARDS TO ENCIRCLE TREES OR GROUPS OF TREES TO REMAIN; OBTAIN APPROVAL BEFORE BEGINNING WORK.

B. WATER VEGETATION AS REQUIRED TO MAINTAIN HEALTH. COVER TEMPORARILY EXPOSED ROOTS WITH WET BURLAP AND BACKFILL AS SOON AS POSSIBLE. COAT CUT PLANT SURFACES WITH APPROVED EMULSIFIED ASPHALT PLANT COATING.

C. REPAIR OR REPLACE VEGETATION DESIGNATED FOR REUSE, WHICH HAS BEEN DAMAGED. REMOVE HEAVY GROWTHS OF GRASS BEFORE STRIPPING. STOCKPILE SATISFACTORY TOPSOIL CONTAINING NO LARGE STONES, FOREIGN MATTER AND WEEDS ON SITE FOR REUSE.

D. COMPLETELY REMOVE ALL IMPROVEMENTS, STUMPS AND DEBRIS EXCEPT FOR THOSE INDICATED TO REMAIN. REMOVE BELOW GRADE IMPROVEMENTS AT LEAST 12" BELOW FINISH GRADE SO AS NOT TO INTERFERE WITH NEW CONSTRUCTION. REMOVE ABANDONED MECHANICAL AND ELECTRICAL WORK AS REQUIRED.

E. PREVENT EROSION AND SILTATION OF STREETS, CATCH BASINS AND PIPING. CONTROL WINDBLOWN DUST. REMOVE WASTE MATERIALS AND UNSUITABLE SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.

F. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL AND COMPACT AS REQUIRED.

3.3 EROSION CONTROL:

A. PROVIDE EROSION AND SILTATION CONTROL AS REQUIRED TO MEET ALL LOCAL AND STATE REQUIREMENTS.

END OF SECTION

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:39

12/18/2025

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

DRAWING NOTICE:

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR REVIEW	10/14/25	DSL	A
REISSUED FOR REVIEW	10/23/25	DSL	B
REISSUED FOR REVIEW	11/13/25	DSL	C
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

SPECIFICATIONS
(1 OF 7)

SHEET #:

SP-1.0

CAST–IN–PLACE–CONCRETE

PART 1: GENERAL

1.1 SUMMARY:

A. FURNISH AND INSTALL ALL CAST–IN–PLACE CONCRETE, REINFORCING AND ACCESSORIES, AS SPECIFIED HEREIN AND AS SHOWN ON THE DRAWINGS.

1.2 SUBMITTALS:

A. PRODUCT DATA: SUBMIT MANUFACTURER'S PRODUCT DATA AND INSTALLATION INSTRUCTIONS FOR EACH MATERIAL AND PRODUCT USED.

B. SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INDICATING MATERIAL CHARACTERISTICS, DETAILS OF CONSTRUCTION, CONNECTIONS, AND RELATIONSHIP WITH ADJACENT CONSTRUCTION.

1. SHOP DRAWINGS SHALL BE PREPARED AND STAMPED BY A QUALIFIED ENGINEER LICENSED IN THE JURISDICTION OF THE PROJECT.

C. MIX DESIGN: SUBMIT FOR APPROVAL MIX DESIGN PROPOSED FOR USE.

1.3 QUALITY ASSURANCE:

A. COMPLY WITH GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR A MINIMUM OF THREE YEARS. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. TESTING: EMPLOY AN INDEPENDENT TESTING AGENCY ACCEPTABLE TO OWNER TO DESIGN CONCRETE MIXES AND TO PERFORM MATERIAL EVALUATION TESTS. PROVIDE 4 AND 28 DAY CYLINDER TESTS. COMPLY WITH ASTM C 143, C 173, C 31 AND C 39.

C. STANDARDS

1. ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.

2. ACI 318, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AND CRSI MANUAL OF STANDARD PRACTICE.

PART 2: PRODUCTS

2.1 MATERIALS:

A. MATERIALS SHALL CONFORM TO THE RESPECTIVE PUBLICATIONS AND OTHER REQUIREMENTS SPECIFIED HEREIN.

B. CEMENT: CEMENT SHALL CONFORM TO ASTM C150, TYPE 1. CEMENT MAY BE BAGGED OR BULK. CEMENT SHALL BE USED FROM ONLY ONE MILL THROUGHOUT PROJECT.

C. FINE AGGREGATE: FINE AGGREGATE SHALL CONFORM TO ASTM C33–08 AND SHALL BE UNIFORMLY GRADED, CLEAN, SHARP, WASHED MATERIAL OR CRUSHED SAND, FREE FROM ORGANIC IMPURITIES.

D. COURSE AGGREGATE: COURSE AGGREGATE SHALL CONFORM TO ASTM C33–08 AND SHALL BE NATURAL WASHED GRAVEL OR WASHED CRUSHED ROCK HAVING HARD, STRONG, DURABLE PIECES, FREE FORM ADHERENT COATINGS, THE MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4" IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM C33–08; GRADATION SIZE NO. 67.

E. WATER: WATER USED IN THE CONCRETE MIX SHALL BE POTABLE, CLEAN, AND FREE FROM OILS, ACIDS, SALTS, CHLORIDES, ALKALI, SUGAR, VEGETABLE, OR OTHER INJURIOUS SUBSTANCES.

F. REINFORCING STEEL: ALL BARS ARE TO BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60. BENDING DETAILS ARE TO CONFORM TO THE STANDARDS OF ACI 318.

G. FORMS: THE FORMS SHALL BE TRUE AND RIGID AND CONFORM TO SHAPE, LINE AND DIMENSIONS AS SHOWN ON THE DRAWINGS. ALL FORMS SHALL BE RIGIDLY CONSTRUCTED, BRACED AND TIED TO PREVENT ANY DEFLECTION OR DISPLACEMENT DURING PLACING OF CONCRETE. ALL EXPOSED CORNERS AND EDGES SHALL HAVE 3/4" FILLETS. ALL JOINTS SHALL BE MORTAR TIGHT; OPEN JOINTS SHALL BE SEALED AS REQUIRED.

H. CONCRETE:

1. PROPORTIONING: CONCRETE SHALL CONFORM TO THE FOLLOWING:

a. CEMENT–6 SACKS PER CUBIC YARD, MINIMUM

b. WATER SHALL BE KEPT TO AN ABSOLUTE MINIMUM TO MAINTAIN SLUMP AS SPECIFIED

c. AGGREGATE; SAND FACTOR SHALL BE AS REQUIRED TO GIVE THE BEST WORKABLE MIX WITHIN THE RANGE OF 46% TO 52% OF TOTAL AGGREGATE.

d. STRENGTH–4,000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE

e. ALL CONCRETE SHALL CONTAIN A WATER–REDUCING AGENT AND SHALL HAVE THREE (3) TO FIVE (5) PERCENT ENTRAINED AIR.

2.2 SLUMP:

A. THE MAXIMUM SLUMP SHALL NOT EXCEED 3" EXCEPT FOR CONCRETE TO BE PLACED IN FORMS 8" WIDE OR LESS, WHERE THE MAXIMUM SLUMP SHALL BE 4".

B. THE DETERMINATION OF SLUMP SHALL CONFORM TO ASTM C143.

2.3 MIXING:

A. THE CONTRACTOR SHALL USE READY–MIXED CONCRETE, MIXED AND DELIVERED IN CONFORMANCE WITH ASTM C94.

2.4 MIXTURES:

A. THE CONCRETE SHALL CONTAIN AN AIR–ENTRAINING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF ASTM C–260 AND ACI 212.1R AND A WATER–REDUCING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF ASTM C–494 AND ACI 212.1R. ADMIXTURES SHALL BE PURCHASE AND BATCHED IN LIQUID SOLUTION. THE USE OF CALCIUM CHLORIDE OR AN ADMIXTURE CONTAINING CALCIUM CHLORIDE IS PROHIBITED.

B. ADMIXTURES SHALL BE OF THE SAME MANUFACTURER TO ASSURE COMPATIBILITY.

C. ACCEPTABLE MANUFACTURERS ARE:

1. W.R. GRACE 3. MASTER BUILDERS

2. SIKA GROUP 4. EUCLID CHEMICAL CO

2.5 CURING COMPOUNDS:

A. CURING COMPOUNDS SHALL CONFORM TO ASTM C309, TYPE 1, ID, CLASS A AND B AND ASTM C171 AS APPLICABLE

PART 3: EXECUTION

3.1 GENERAL:

A. CONSTRUCT AND ERECT FORMWORK IN ACCORDANCE WITH ACI 301 ACI 347.

B. COLD–WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.

C. HOT–WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305.

3.2 INSERTS, EMBEDDED COMPONENTS AND OPENINGS:

A. CONTRACTOR SHALL CHECK ALL CIVIL, ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL DRAWINGS FOR OPENINGS, SLEEVES, ANCHOR BOLTS, INSERTS AND OTHER ITEMS TO BE BUILT INTO THE CONCRETE WORK.

B. COORDINATE THE WORK OF OTHER SECTIONS IN FORMING AND SETTING OPENINGS, RECESSES, SLOTS, CHASES, ANCHORS, INSERTS AND OTHER ITEMS TO BE EMBEDDED.

C. EMBEDDED ITEMS SHALL BE SET ACCURATELY IN LOCATION, ALIGNMENT, ELEVATION, AND PLUMBNESS. LOCATE AND MEASURE FROM ESTABLISHED SURVEYED REFERENCE BENCHMARKS.

D. EMBEDDED ITEMS SHALL BE ANCHORED INTO PLACE AS REQUIRED TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT AND CONSOLIDATION. COMPONENTS FORMING A PART OF A COMPLETE ASSEMBLY SHALL BE ALIGNED BEFORE ANCHORING. PROVIDE TEMPORARY BRACING, ANCHORAGE, AND TEMPLATES AS REQUIRED TO MAINTAIN THE SETTING AND ALIGNMENT.

3.3 REINFORCEMENT PLACEMENT:

A. REINFORCEMENT SHALL BE PLACED IN ACCORDANCE WITH CHECKED AND RELEASED DRAWINGS AND ACI 301 AND ACI 315; SECURELY WIRE–TIE REINFORCEMENT AT ALL INTERSECTIONS.

B. ACCURATELY POSITION, SUPPORT AND SECURE REINFORCEMENT AGAINST DISPLACEMENT FROM FORMWORK CONSTRUCTION OR CONCRETE PLACEMENT AND CONSOLIDATION. REINFORCING SHALL BE SUPPORTED ON METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS, AND HANGERS.

C. SPLICES OF REINFORCING BARS SHALL BE CLASS B UNLESS SHOWN OTHERWISE. SPLICES SHALL BE STAGGERED. FULL DEVELOPMENT LENGTH SHALL BE PROVIDED ACROSS JOINTS.

D. LOCATE REINFORCING TO PROVIDE CONCRETE COVER AND SPACING SHOWN ON THE DRAWINGS. MINIMUM COVER SHALL BE AS REQUIRED BY ACI 318.

E. WELDING OF AND TO ANY REINFORCING MATERIALS INCLUDING TACK WELDING OF CROSSING BARS IS STRICTLY PROHIBITED. BARS SHALL BE FREE OF FLAKY OR SCALY RUST AT THE TIME THE CONCRETE IS PLACED.

3.4 CONCRETE PLACEMENT:

A. PRIOR TO PLACING CONCRETE, FORMS AND REINFORCEMENT SHALL BE THOROUGHLY INSPECTED. ALL WOOD CHIPS, DIRT, ETC., AS WELL AS ALL TEMPORARY BRACING, TIES, AND CLEATS REMOVED, AND ALL OPENINGS FOR UTILITIES PROPERLY BOXED, ALL FORMS SHALL BE PROPERLY SECURED IN THEIR CORRECT POSITION AND MADE TIGHT. ALL REINFORCING AND EMBEDDED ITEMS SHALL BE SECURED IN THEIR PROPER LOCATIONS.. ALL OLD AND DRY CONCRETE AND DIRT SHALL BE CLEANED AND ALL STANDING WATER AND OTHER FOREIGN MATTER REMOVED.

B. PLACING CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 304 AND SHALL BE CARRIED OUT AT SUCH A RATE THAT THE CONCRETE PREVIOUSLY PLACED IS STILL PLASTIC AND INTEGRATED WITH THE FRESHLY PLACE CONCRETE. CONCRETING, ONCE STARTED, SHALL BE CARRIED ON AS A CONTINUOUS OPERATION UNTIL THE SECTION IS COMPLETED. NO COLD JOINTS SHALL BE ALLOWED.

C. CONSTRUCTION JOINTS: USE KEYWAYS, CONTINUE REINFORCEMENT THROUGH JOINT.

D. EXPANSION JOINTS: FOR EXTERIOR WORK, LOCATE AT 30'–0" O.C. MAXIMUM, AT APPROVED LOCATIONS. PROVIDE SMOOTH DOWELS ACROSS JOINT WHICH PERMIT 1" HORIZONTAL MOVEMENT AND NO VERTICAL SHEAR MOVEMENT.

E. ISOLATION JOINTS: PROVIDE BETWEEN SLABS AND VERTICAL ELEMENTS SUCH AS COLUMNS AND STRUCTURAL WALLS.

F. CONTROL JOINTS: PROVIDE SAWN OR TOOLED JOINTS OR REMOVABLE INSERT STRIPS; DEPTH EQUAL TO 1/4 SLAB THICKNESS. SPACING SHALL BE AS REQUIRED AND APPROVED.

G. ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED AND COMPACTED BY VIBRATION, SPADING, RODDING, OR FORKING DURING THE OPERATION OF PLACING AND DEPOSITING IN ACCORDANCE WITH ACI 309. THE CONCRETE SHALL BE WORKED AROUND REINFORCEMENT, EMBEDDED ITEMS, AND INTO THE CORNERS OF THE FORMS SO AS TO ELIMINATE ALL AIR AND STONE POCKETS.

3.5 FINISHING:

A. FINISHING OF ALL SLABS SHALL BE IN ACCORDANCE WITH ACI 302.1; SECTION 7.2 WITH A MINIMUM OF THREE TROWELINGS.

1. INTERIOR SLAB FINISH TOLERANCE AS MEASURED IN ACCORDANCE WITH ASTM E 1155, SHALL HAVE AN OVERALL TEST F NUMBER FOR FLATNESS, FF=20 AND FOR LEVEL, FL=15. THE MINIMUM LOCAL NUMBER FOR FLATNESS, FF=15 AND FOR LEVEL, FL=10.

2. EXTERIOR SLAB FINISH SHALL BE FLAT (FF=20) AND SHALL BE SLOPED A MINIMUM OF 1/8" PER FOOT TO A MAXIMUM OF 1/4" PER FOOT TO PREVENT PONDING WATER.

B. SURFACES OF SLABS SHALL RECEIVE TWO COATS OF CLEAR SEALER/HARDNER.

C. ABOVE GRADE WALL SURFACES SHALL HAVE A SMOOTH FORM FINISH AS DEFINED IN CHAPTER 10 OF ACI 301.

3.6 CURING:

A. FRESHLY DEPOSITED CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING AND EXCESSIVELY HOT OR COLD TEMPERATURES AND SHALL BE MAINTAINED WITH MINIMAL MOISTURE LOSS AT A RELATIVELY CONSTANT TEMPERATURE FOR A PERIOD OF TIME NECESSARY FOR THE HYDRATION OF THE CEMENT AND PROPER HARDENING OF THE CONCRETE.

B. CURING SHALL IMMEDIATELY FOLLOW THE FINISH OPERATION. CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST AT LEAST OVERNIGHT, IMMEDIATELY FOLLOWING THE INITIAL CURING. BEFORE THE CONCRETE HAS DRIED, ADDITIONAL CURING SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING MATERIALS OR METHODS:

1. PONDING OR CONTINUOUS SPRINKLING

2. ABSORPTIVE MAT OR FABRIC KEPT CONTINUOUSLY WET

3. NON–ABSORPTIVE FILM (POLYETHYLENE) OVER A PREVIOUSLY SPRINKLED SURFACE

4. SAND OR OTHER COVERING KEPT CONTINUOUSLY WET

5. CONTINUOUS STEAM (NOT EXCEEDING 150 DEGREES F) OR VAPOR MIST BATH.

6. SPRAYED–ON CURING COMPOUND APPLIED IN TWO COATES, SPRAYED IN PERPENDICULAR DIRECTIONS.

C. THE FINAL CURING SHALL CONTINUE UNTIL THE CUMULATIVE NUMBER OF DAYS OR FRACTION THEREOF, NOT NECESSARILY CONSECUTIVE, DURING WHICH TEMPERATURE OF THE AIR IN CONTACT WITH CONCRETE IS ABOVE 50 DEGREES F HAS TOTALED SEVEN (7) DAYS. CONCRETE SHALL NOT BE PERMITTED TO FREEZE DURING THE CURING PERIOD. RAPID DRYING AT THE END OF THE CURING PERIOD SHALL BE PREVENTED.

END OF SECTION

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:39

12/18/2025

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
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TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

DRAWING NOTICE:

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR REVIEW	10/14/25	DSL	A
REISSUED FOR REVIEW	10/23/25	DSL	B
REISSUED FOR REVIEW	11/13/25	DSL	C
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

SPECIFICATIONS
(2 OF 7)

SHEET #:

SP-1.1

UNIT MASONRY

PART 1: GENERAL

1.1 SUMMARY:

A. PROVIDE UNIT MASONRY CONSTRUCTION AS INDICATED ON THE DRAWINGS.

PART 2: PRODUCTS

2.1 MATERIALS:

A. CLAY MASONRY UNITS:

1. APPLICATION: BRICK AND CONCRETE BLOCK CAVITY WALLS.
2. SIZE: STANDARD MODULAR, 3-5/8" THICK BY 2-1/4" HIGH BY 7-5/8" LONG OR AS INDICATED ON DRAWINGS.
3. TYPE: ASTM C 216, TYPE FBS, FOR GENERAL EXPOSED USE, OR AS INDICATED ON DRAWINGS. GRADE SHALL BE SW, UNLESS NOTED OTHERWISE ON DRAWINGS.
4. SPECIAL SHAPES: AS REQUIRED BY BUILDING CONFIGURATION. OR AS INDICATED ON DRAWINGS
5. BOND PATTERN: RUNNING BOND

B. CONCRETE MASONRY UNITS:

1. CONCRETE MASONRY UNITS: HOLLOW, LOAD-BEARING, NORMAL WEIGHT, ASTM C 90, GRADE N, TYPE 1, 1500 F'M COMPRESSIVE STRENGTH:
   a. MEDIUM WEIGHT
2. SIZE: 7-5/8" HIGH BY 15-5/8" LONG BY EITHER 7-5/8" OR 11-5/8" THICK OR AS INDICATED ON DRAWINGS.
3. SPECIAL SHAPES: AS REQUIRED BY BUILDING CONFIGURATION.
4. BOND PATTERN: RUNNING BOND UNLESS NOTED OR SHOWN DIFFERENTLY ON DRAWINGS.

C. LIMESTONE/PRECAST TRIM UNITS:

1. GRADE AND COLOR: AS SHOWN ON DRAWINGS
2. FINISH: AS IDENTIFIED ON DRAWINGS

D. MORTAR AND GROUT FOR BRICK AND CONCRETE MASONRY UNIT ASSEMBLIES:

1. MORTAR MIX: ASTM C 270, TYPE S, FOR REINFORCED MASONRY, MASONRY BELOW GRADE AND MASONRY IN CONTACT WITH EARTH AND ASTM C 270, TYPE N, FOR ABOVE-GRADE LOADBEARING AND NONLOADBEARING WALLS. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE 1. MASONRY CEMENT SHALL CONFORM TO ASTM C91. FINE AGGREGATE SHALL CONFORM TO ASTM C144.
2. MORTAR COLOR: NATURAL COLOR UNLESS NOTED OTHERWISE ON DRAWINGS.
3. GROUT: ALL GROUT FOR FILLING BOND BEAMS AND REINFORCED CELLS SHALL CONFORM TO NON-AIR ENTRAINED GROUT PER ASTM C476 WITH PORTLAND CEMENT PER ASTM C150, TYPE 1, AND INE AND COARSE AGGREGATE PER ASTM C404.

E. REINFORCING STEEL:

1. REINFORCING BARS: ASTM A 615, GRADE 60.
2. WELDED WIRE FABRIC: ASTM A 185, PLAIN.

F. REINFORCING: WELDED WIRE WITH DEFORMED SIDE RODS.

1. STEEL WIRE: 9 GAUGE (.1875 INCH) GALVANIZED STEEL.
2. TRUSS TYPE

G. TIES AND ANCHORS:

1. BENT WIRE TIES: GALVANIZED STEEL.
2. RIGID ANCHORS: GALVANIZED STEEL STRAPS.

PART 3: EXECUTION

3.1 INSTALLATION:

A. INSTALLATION OF MASONRY ASSEMBLIES:

1. COMPLY WITH PCA RECOMMENDED PRACTICES FOR LAYING CONCRETE BLOCK, BRICK INSTITUTE OF AMERICA BIA TECH NOTES, AND NCMA TEK BULLETINS.
2. COMPLY WITH COLD WEATHER AND WARM WEATHER PROTECTION PROCEDURES AS RECOMMENDED IN BIA TECH NOTES.

END OF SECTION

STRUCTURAL STEEL FRAMING

PART 1: GENERAL

1.1 SUMMARY:

A. PROVIDE STRUCTURAL STEEL ASSEMBLIES, FABRICATIONS, AND ERECTION OF STEEL AND OTHER ITEMS AS SHOWN ON THE DRAWINGS OR REQUIRED FOR A COMPLETE INSTALLATION.

1.2 QUALITY ASSURANCE:

A. COMPLY WITH ALL APPLICABLE GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. STANDARDS: AISC, CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AND APPLICABLE REGULATIONS.

C. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL: COMPLY WITH FABRICATION REQUIREMENTS, INCLUDING TOLERANCE LIMITS, AND INSTALLATION TOLERANCES OF AISC'S "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" FOR STRUCTURAL STEEL.

D. ERECTION TOLERANCES: AISC STANDARDS.

1.3 SUBMITTALS:

A. SUBMIT FABRICATION AND ERECTION DRAWINGS SHOWING ALL DETAILS, CONNECTIONS, MATERIAL DESIGNATIONS, AND ALL TOP OF STEEL ELEVATIONS TO ENGINEER FOR APPROVAL.

B. WELDERS SHALL BE QUALIFIED AS PRESCRIBED IN AWS D1.1.

PART 2: PRODUCTS

2.1 MATERIALS:

A. STRUCTURAL STEEL:

1. STRUCTURAL STEEL SHAPES, PLATES, AND BARS: ASTM A 572, ASTM A-36.
2. COLD-FORMED STEEL TUBING: ASTM A 500, GRADE B.
3. STEEL PIPE: ASTM A 53, TYPE E OR S, GRADE B; OR ASTM A 501.
4. ANCHOR BOLTS: ASTM A 307, NON-HEADED TYPE
5. COMMON (MACHINE) BOLTS SHALL CONFORM TO ASTM A307 GRADE A AND NUTS TO ASTM A563. ONE COMMON BOLT ASSEMBLY SHALL CONSIST OF A BOLT, A HEAVY HEX NUT, AND A HARDENED WASHER. BOLTS AND NUTS TO BE HOT DIPPED GALVANIZED PER ASTM A153 IF EXPOSED.
6. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A325 OR A490, AS APPLICABLE. ONE HIGH STRENGTH BOLT ASSEMBLY SHALL CONSIST OF A HEAVY HEX STRUCTURAL BOLT, A HEAVY HEX NUT, AND A HARDENED WASHER CONFORMING TO ASTM F436. THE HARDENED WASHER SHALL BE INSTALLED AGAINST THE ELEMENT TURNED IN TIGHTENING. BOLTS AND NUTS TO BE HOT-DIP GALVANIZED PER ASTM A153 IF EXPOSED.
7. AUXILIARY MATERIALS:
   a. DIRECT TENSION INDICATORS: ASTM A 959
   b. ELECTRODES FOR WELDING: AWS CODE; E70XX
8. GROUTS:
   a. CEMENT GROUT: PORTLAND CEMENT, SAND.
   b. METALLIC SHRINKAGE-RESISTANT GROUT: PREMIXED FERROUS AGGREGATE GROUTING COMPOUND ASTM C 1107.
   c. NONMETALLIC SHRINKAGE-RESISTANT GROUT: PREMIXED NONMETALLIC GROUTING COMPOUND, ASTM C 1107.

B. SHOP PAINTING

1. GENERAL: ALL STRUCTURAL STEEL MATERIALS EXPOSED TO THE ELEMENTS SHALL BE HOT DIPPED GALVANIZED PER ASTM 123. ALL OTHER STRUCTURAL STEEL SHALL BE SHOP PRIMED.
   a. DO NOT PAINT SURFACES TO BE WELDED OR HIGH-STRENGTH BOLTED WITH FRICTION-TYPE CONNECTIONS.
   b. DO NOT PAINT SURFACES SCHEDULED TO RECEIVE SPRAYED-ON FIREPROOFING.
2. STRUCTURAL STEEL FACTORY APPLIED PRIMER PAINT (FOR NON-GALVANIZED MATERIALS): STANDARD RED OXIDE, LEAD AND CHROMATE-FREE, NON-ASHPHALTIC, RUST-INHIBITING PRIMER COMPLYING WITH FS TT-P-664
3. ZINC COATED (HOT DIP GALVANIZED) PER ASTM A123 (AFTER FABRICATION): TOUCH-UP AFTER ERECTION: CLEAN AND WIRE BRUSH ANY ABRADED AND OTHER SPOTS WORN THROUGH ZINC COATING, INCLUDING THREADED PORTIONS OF BOLTS AND WELDS AND TOUCH-UP WITH GALVANIZING REPAIR PAINT.

C. FIELD PAINTING: REPAIR / TOUCH-UP OF DAMAGED GALVANIZED OR PRIMED SURFACES:

a. FOR GALVANIZED SURFACES, USE ORGANIC ZINC-RICH COATING MATCHING THE APPEARANCE OF HOT-DIP GALVANIZING CONTAINING AT LEAST 65% - 69% OR ABOVE 92% METALLIC ZINC. BY WEIGHT IN THE DRY FILM, MEETING THE PERFORMANCE REQUIREMENTS OF THE FOLLOWING: ASTM A 780-01, DOD-P-21035B, MIL-P-46105, AND SSPC PS-12, PS-12.01, PS-20, PS-22, PS-29 AND PS-30

b. FOR PRIMED SURFACES, CLEAN ALL SURFACES AND RE-PRIME PER RECOMMENDATIONS OF ORIGINAL PRIME MATERIALS.

PART 3: EXECUTION

3.1 FABRICATION:

A. SHOP FABRICATE AND ASSEMBLE MATERIALS AS SPECIFIED HEREIN:

1. FABRICATE ITEMS IN ACCORDANCE WITH THE AISC-ASD SPECIFICATIONS
2. ALL EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123
3. PROPERLY MARK AND MATCH-MARK MATERIALS FOR FIELD ASSEMBLY AND FOR IDENTIFICATION AS TO LOCATION FOR WHICH INTENDED
4. FABRICATE AND DELIVER IN A SEQUENCE WHICH WILL EXPEDITE ERECTION AND MINIMIZE FIELD HANDLING OF MATERIALS.
5. PROVIDE FINISH SURFACE OF MEMBERS EXPOSED IN THE FINAL STRUCTURE FREE FROM MARKINGS, BURRS, AND OTHER DEFECTS.

B. CONNECTIONS

1. PROVIDE BOLTS AND WASHERS OF TYPES AND SIZE REQUIRED FOR COMPLETION OF FIELD ERECTION. USE 3/4" DIAMETER A325 N BOLTS UNLESS NOTED OTHERWISE.
2. INSTALL HIGH STRENGTH THREADED FASTENERS IN ACCORDANCE WITH RCSC "SPECIFICATIONS FOR STRUCTURAL JOINTS" USING ASTM A325 N OR ASTM A490 BOLTS.
3. WELDED CONSTRUCTION SHALL COMPLY WITH AWS D1.1 FOR PROCEDURES, APPEARANCE, QUALITY OF WELDS, AND METHODS USED IN CORRECTING WELDED WORK.
4. THE FABRICATOR SHALL FURNISH AND INSTALL ERECTION CLIPS FOR FIT-UP OF WELDED CONNECTIONS.
5. DOUBLE ANGLE MEMBERS SHALL HAVE WELDED FILLERS SPACED IN ACCORDANCE WITH CHAPTER E4 OF THE AISC-ASD SPECIFICATION.
6. GUSSET AND STIFFENER PLATES SHALL BE 3/8" THICK MINIMUM.

3.2 INSTALLATION:

A. INSTALLATION OF STRUCTURAL STEEL SHALL COMPLY WITH AISC "CODE OF STANDARD PRACTICE".

B. STRUCTURAL FIELD WELDING SHALL BE DONE BY THE ELECTRIC SUBMERGED OR SHIELDED METAL ARC PROCESS. WELDED CONSTRUCTION SHALL COMPLY WITH AWS D1.1

C. PROVIDE TEMPORARY SHORING AND BRACING WITH CONNECTIONS OF SUFFICIENT STRENGTH TO BEAR IMPOSED LOADS. REMOVE WHEN FINAL CONNECTIONS HAVE BEEN MADE.

D. ALIGN AND ADJUST MEMBERS AS REQUIRED PRIOR TO FINAL INSPECTION.

E. INSTALL AND FULLY TENSION HIGH STRENGTH THREADED FASTENERS IN ACCORDANCE WITH RCSC, "SPECIFICATIONS FOR STRUCTURAL JOINTS" USING ASTM A 325 N OR ASTM A 490 BOLTS.

3.3 FINAL INSPECTION:

A. CLEAN ALL SURFACES UPON COMPLETION OF WORK.

B. COMPLY WITH AISC CODES AND SPECIFICATIONS, AND WITH AWS "STRUCTURAL WELDING CODE".

C. TOUCH-UP FIELD WELDS AND ABRADED AREAS AS REQUIRED.

END OF SECTION

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:39

12/18/2025

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:
STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:
motorola

APPLICANT:
LEE'S SUMMIT

PLANS PREPARED FOR:
Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:
SSC

DRAWING NOTICE:

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR REVIEW	10/14/25	DSL	A
REISSUED FOR REVIEW	10/23/25	DSL	B
REISSUED FOR REVIEW	11/13/25	DSL	C
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:
LEES SUMMIT

SITE ADDRESS:
TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:
SPECIFICATIONS
(3 OF 7)

SHEET #:
SP-1.2

EARTH MOVING/EXCAVATION/BACKFILLING SECTION

PART 1: GENERAL

1.1 SUMMARY:

A. PROVIDE EARTHWORK OPERATIONS INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, TRENCHING AND COMPACTION.

1.2 QUALITY ASSURANCE COMPACTION:

A. UNDER STRUCTURES, BUILDING SLABS, STEPS, PAVEMENTS, AND WALKWAYS, 95% MAXIMUM DENSITY, ASTM D 1557.

1. GRADING TOLERANCES:

a. LAWNS, UNPAVED AREAS, AND WALKS, PLUS OR MINUS 1".

b. KEEP SITE FREE FROM ANY PONDING WATER

c. GRADING TOLERANCE FOR FILL UNDER BUILDING OR EQUIPMENT SLABS: PLUS OR MINUS 1/4" MEASURED WITH 10'-0" STRAIGHTEDGE.

2. TESTING: FIELD TESTING OF EARTHWORK AND COMPACTION SHALL BE PERFORMED BY OWNER'S INDEPENDENT TESTING LAB. THIS WORK IS TO BE COORDINATED BY THE CONTRACTOR.

3. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE OWNER OR HIS AGENT WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK AS SPECIFIED AND/OR CALLED OUT BY THE CONSTRUCTION DOCUMENTS. PROVIDE A MINIMUM OF 48 HOURS NOTICE PRIOR TO ANY PLACEMENT OF CONCRETE OR BACKFILLING OF TRENCHES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

4. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY OWNER OR HIS AGENT AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

PART 2: PRODUCTS

2.1 GENERAL:

A. UTILITY TRENCH: PROVIDE WELL GRADED SAND (SW-SM) FROM BASE OF TRENCH TO MINIMUM ABOVE THE HIGHEST CONDUIT WITHIN TRENCH. REMAINDER OF TRENCH AREA CAN BE EITHER AB 3 OR CLEAN GRAVEL AS DESCRIBED HEREIN. COMPACT AS REQUIRED TO PREVENT SETTLING.

B. ACCESS ROADS: 6" MINIMUM (UNLESS NOTED OTHERWISE ON DRAWINGS) COMPACTED AB 3 OR APPROVED EQUAL (UNWASHED CRUSHED LIMESTONE GRAVEL CONSISTING OF MULTIPLE AGGREGATE SIZES, ROCK CHIPS, AND ROCK DUST.)

C. COMPOUND (NEW CONSTRUCTION): 2" THICK CLEAN GRAVEL, WITH 100% PASSING THROUGH A 1" SIEVE OVER 4" COMPACTED AB 3.

D. COMPOUND (EXISTING): PROVIDE CLEAN GRAVEL WITH 100% PASSING THROUGH A 1" SIEVE AS REQUIRED TO BRING COMPOUND TO PROPER GRADE OR REPAIR EXISTING DAMAGED AREAS.

E. STRUCTURAL FILL: PROVIDE 4" MINIMUM AB 3 BELOW STRUCTURES OR SLABS

2.2 MATERIALS:

A. GEOTEXTILE FABRIC: PROVIDE MIRAFI 500X OR APPROVED EQUAL.

B. PLASTIC MARKING TAPE: SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES, 6" WIDE WITH A MINIMUM THICKNESS OF 0.004". TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL WIRES OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3'-0" DEEP. THE CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR OTHER MEANS TO PROTECT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION

PART 3: EXECUTION

3.1 INSTALLATION:

A. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE OF ANY OBSTRUCTIONS NOT SHOWN THAT MIGHT INTERFERE WITH NEW CONSTRUCTION. NOTIFY THE OWNER OR HIS AGENT OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.

B. EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE REGARDLESS OF MATERIALS. REPAIR EXCAVATIONS BEYOND ELEVATIONS AND DIMENSIONS INDICATED AS REQUIRED.

C. MAINTAIN STABILITY OF EXCAVATIONS; COORDINATE SHORING AND BRACING AS REQUIRED BY AUTHORITIES HAVING JURISDICTION. PREVENT SURFACE AND SUBSURFACE WATER FROM ACCUMULATING IN EXCAVATIONS. STOCKPILE SATISFACTORY MATERIALS FOR REUSE, ALLOW FOR PROPER DRAINAGE.

D. COMPACT MATERIALS AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 1557 BY AERATION OR WETTING TO 95% OF MAXIMUM DRY DENSITY TO SUITABLE DEPTH.

E. PLACE ACCEPTABLE MATERIALS IN LAYERS NOT MORE THAN 8" LOOSE DEPTH FOR MATERIALS COMPACTED BY HEAVY EQUIPMENT AND NOT MORE THAN 4" LOOSE DEPTH FOR MATERIALS COMPACTED BY HAND EQUIPMENT TO SUBGRADES INDICATED AS FOLLOWS:

1. STRUCTURAL FILL: USE UNDER FOUNDATIONS, SLABS ON GRADE IN LAYERS AS INDICATED.

2. DRAINAGE FILL: USE UNDER DESIGNATED BUILDING SLABS, AT FOUNDATION DRAINAGE AND ELSEWHERE AS INDICATED.

3. COMMON FILL: USE UNDER UNPAVED AREAS.

4. SUBBASE MATERIAL: USE UNDER GENERAL COMPOUND AREA. IF THICKNESS OF LIFT IS GREATER THAN 6 SPREAD AND COMPACT THE CRUSHED STONE IN MULTIPLE LIFTS OF EQUAL THICKNESS WITH A MAXIMUM LIFT OF 6"

F. GRADE TO 1/2" ABOVE OR BELOW REQUIRED SUBGRADE AND TO A TOLERANCE OF 1/4" IN 10'-0".

G. PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION. RE-COMPACT AND RE-GRADE SETTLED, DISTURBED AND DAMAGED AREAS TO RESTORE QUALITY, APPEARANCE, AND CONDITION.

H. CONTROL EROSION TO PREVENT RUNOFF INTO SEWERS OR DAMAGE TO AREAS.

I. CONTROL DUST TO PREVENT HAZARDS TO ADJACENT PROPERTIES AND VEHICLES. IMMEDIATELY REPAIR OR REMEDY DAMAGE CAUSED BY DUST INCLUDING AIR FILTERS IN EQUIPMENT AND VEHICLES. CLEAN SOILED SURFACES.

J. DISPOSE OF WASTE AND UNSUITABLE MATERIALS OFF-SITE IN A LEGAL MANNER.

3.2 BACKFILL:

A. AS SOON AS PRACTICAL AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.

1. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL HAVE BEEN REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.

2. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL, WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8" LOOSE THICKNESS. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4" IN LOOSE DEPTH.

3. IF THE DENSITY TESTING INDICATES THAT THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS AUTHORIZED BY THE GEO-TECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY TO OBTAIN PROPER COMPACTION.

B. COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.3 TRENCH EXCAVATION:

A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE OWNER OR HIS AGENT. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.

B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6" BEYOND THE OUTSIDE EDGE OF THE OUTER-MOST CONDUIT.

C. WHEN SOFT, YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12" BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.

3.4 TRENCH BACKFILL:

A. PROVIDE GRANULAR BEDDING MATERIAL (WELL GRADED SAND) IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.

B. NOTIFY THE OWNER OR HIS AGENT 24 HOURS IN ADVANCE OF BACKFILLING.

C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6" UNCOMPACTED LIFTS UNTIL 6" OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACES AROUND CONDUITS.

E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT BACKFILL MATERIAL IN 8" MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN EXISTING UNDISTURBED MATERIAL ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.5 AGGREGATE ACCESS ROAD (IF APPLICABLE):

A. CLEAR, GRUB, STRIP AND EXCAVATE FOR ACCESS ROAD TO THE LINES AND GRADES INDICATED ON DRAWINGS. SCARIFY TO A DEPTH OF 6" AND PROOF-ROLL ALL HOLES, RUTS, SOFT PLACES AND OTHER DEFECTS.

B. THE ENTIRE SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 1557.

C. AFTER PREPARATION OF THE SUBGRADE IS COMPLETE, THE GEOTEXTILE FABRIC (MIRAFI 500X) SHALL BE INSTALLED TO THE LIMITS INDICATED ON DRAWINGS BY ROLLING THE FABRIC OUT LONGITUDINALLY ALONG ROADWAY. THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUBGRADE. PLACE THE ENTIRE ROLL IN A SINGLE OPERATION, AS SMOOTHLY AS POSSIBLE.

1. OVERLAPS PARALLEL TO THE ROADWAY WILL BE PERMITTED AT THE CENTERLINE AND AT LOCATIONS BEYOND THE ROADWAY SURFACE WIDTH. NO LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE CENTERLINE AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MINIMUM OF 3'-0" WIDE.

2. TRANSVERSE OR PERPENDICULAR OVERLAPS AT THE END OF A ROLL SHALL OVERLAP IN THE DIRECTION OF THE AGGREGATE PLACEMENT (PREVIOUS ROLL ON TOP) AND SHALL HAVE A MINIMUM LENGTH OF 3'-0".

3. ALL OVERLAPS SHALL BE PINNED WITH STAPLES OR NAILS BETWEEN 10" AND 12" LONG TO INSURE POSITIONING DURING PLACEMENT OF AGGREGATE. PIN LONGITUDINAL SEAMS AT 25'-0" O.C. AND TRANSVERSE SEAMS EVERY 5'-0" O.C.

D. THE AGGREGATE BASE AND SURFACE COURSES SHALL BE CONSTRUCTED IN LAYERS NOT MORE THAN 6" (COMPACTED) THICKNESS. AGGREGATE TO BE PLACED ON GEOTEXTILE FABRIC AND SHALL BE END-DUMPED ON THE FABRIC FROM THE FREE END OF THE FABRIC OR OVER PREVIOUSLY PLACED AGGREGATE. AT NO TIME SHALL EQUIPMENT BE PERMITTED ON THE ROADWAY WITH LESS THAN 6" OF MATERIAL COVERING THE FABRIC.

E. THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE PROCTOR TEST, ASTM D 1557 WITH A TAMPING ROLLER, A PNEUMATIC-TIRED ROLLER, OR WITH A VIBRATORY MACHINE OR ANY COMBINATION OF THE ABOVE. THE TOP LAYER SHALL BE GIVEN A FINAL ROLLING WITH A THREE-WHEEL OR TANDEM ROLLER.

3.6 FINISH GRADING:

A. PERFORM ALL GRADING TO PROVIDE SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIALS RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR THE REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.

C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 6" OF AB 3 ON TOP OF SOIL STABILIZER FABRIC.

D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

END OF SECTION

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:39

12/18/2025

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden
TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR REVIEW	10/14/25	DSL	A
REISSUED FOR REVIEW	10/23/25	DSL	B
REISSUED FOR REVIEW	11/13/25	DSL	C
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

SPECIFICATIONS
(4 OF 7)

SHEET #:

SP-1.3

FENCES AND GATES (UNLESS NOTED OTHERWISE)

PART 1: GENERAL

1.1 SUMMARY:

A. PROVIDE FENCING AND GATES INCLUDING ALL ASSOCIATED POSTS, RAILS, BRACES, TERMINAL POSTS, AND RELATED MATERIALS AS SHOWN ON DRAWINGS.

1. TYPE A: GALVANIZED CHAIN LINK FENCING AND GATES
2. TYPE B: GALVANIZED CHAIN LINK FENCING AND GATES WITH BARBED WIRE
3. TYPE C: TREATED WOOD FENCING AND GATES
4. MATCH EXISTING FENCE

B. TERMINOLOGY:

1. CHAIN LINK CLASSIFICATION: GALVANIZED (ZINC COATED).
2. TREATED LUMBER: TREATED LUMBER SHALL BE "ACQ" OR APPROVED EQUAL. CCA WILL NOT BE ACCEPTED.
3. O.D.: OUTSIDE DIMENSION

1.2 QUALITY ASSURANCE:

A. COMPLY WITH GOVERNING CODES AND REGULATIONS.

B. PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS. USE EXPERIENCED INSTALLERS.

1.3 SCHEDULING AND SEQUENCING:

A. CERTAIN PORTIONS OF THE WORK MAY BE SPECIFIED TO BE COMPLETED AND OPERATIONAL PRIOR TO COMPLETION OF ALL WORK. SEQUENCE AND PROPERLY PROTECT EQUIPMENT TO PREVENT CONTAMINATION OR DAMAGE TO EQUIPMENT IN ADJACENT WORK AREAS.

B. STORAGE AND PROTECTION: STORE MATERIALS A MINIMUM OF 12" ABOVE GROUND.

PART 2A: PRODUCTS – CHAIN LINK FENCES AND GATES

2A.1 PRODUCTS:

A. FENCE FABRIC, POSTS, TENSION WIRE, CORNER POSTS, AND APPURTENANCES SHALL CONFORM TO THE ASTM CODES AND STANDARDS FOR THE APPROPRIATE TYPE OF MATERIALS AS LISTED.

B. MATERIALS SHALL BE UNIFORM, CONSISTENT, AND MEET THE FOLLOWING REQUIREMENTS.

1. FENCE FABRIC: 6'–0" HIGH (UNLESS NOTED OTHERWISE), HEAVY GALVANIZED CHAIN LINK FENCE CONFORMING TO ASTM A392, CLASS 2, OF 2" MESH 9 GAGE WIRE (0.148" DIAMETER), WITH THE TOP SELVAGE BARBED AND THE BOTTOM KNUCKLED.
2. LINE POSTS: LINE POSTS SHALL BE GALVANIZED PIPE. COMPLY WITH ASTM F 1083.
3. END, CORNER, AND PULL POSTS: GALVANIZED PIPE. COMPLY WITH ASTM F 1083.
4. GATE POSTS: GALVANIZED PIPE. COMPLY WITH ASTM F 1083.
5. BRACE RODS (LOCATED ON EACH SIDE OF GATES AND EACH SIDE AT CORNERS): GALVANIZED PIPE.
6. TRUSS RODS/CROSS BRACING: DIAGONAL BARS WITH TURNBUCKLE.
7. TENSION WIRE: US STEEL WIRE GALVANIZED PER ASTM A116 COATING CLASS III
8. APPURTENANCES SUCH AS BRACE BANDS, TENSION BANDS AND BARS: FABRICATED OF GALVANIZED STEEL WITH GALVANIZED STEEL CARRIAGE BOLTS AND NUTS PER ASTM A123. TENSION BARS SHALL BE GALVANIZED STEEL BAR PER ASTM A153.
9. FABRIC TIES: CLASS I GALVANIZED STEEL WIRE NO LESS THAN 9 GA.
10. POST TOPS: PROVIDED FOR EACH POST. MATERIALS SHALL BE PRESSED STEEL OR MALLEABLE IRON THAT PROVIDES WATERTIGHT CLOSURE CAP FOR TUBULAR POSTS AND SHALL BE GALVANIZED PER ASTM A153.
11. BARBED WIRE: BARBED WIRE SHALL CONSIST OF DOUBLE STRANDED, 12–1 1/2 GAGE O.C. THE TOP WIRE ASTM A121, CLASS 3 WITH 4 POINT BARBS, SHALL CONSIST OF 3 STRANDS OF BARBED WIRE ATTACHED TO A 45 DEGREE ANGLE WITH HEAVY PRESSED ARMS CAPABLE OF WITHSTANDING, WITHOUT FAILURE 250 POUNDS DOWNWARD PULL AT THE OUTERMOST END OF THE ARM.
12. GATES
    a. GATE MATERIALS SUCH AS FABRIC, BOLTS, NUTS, AND TENSION BARS, SHALL BE CONSISTENT WITH FENCE MATERIALS. GATES SHALL CONSIST OF BOTH SINGLE AND DOUBLE SWING GATES AS SHOWN ON THE DRAWINGS.
    b. GATES SHALL BE MANUALLY OPERATED.
    c. GATE FRAMES SHALL BE FURNISHED WITH ALL NECESSARY FITTINGS, INCLUDING HEAVY DUTY COMMERCIAL DOUBLE GATE LATCH.

PART 2B PRODUCTS: WOOD FENCES AND GATES

2B.1 PRODUCTS:

A. FENCE MATERIALS, INCLUDING POSTS, RAILS, CORNER POSTS, AND PICKETS SHALL BE AS FOLLOWS:

1. END CORNER, GATE, AND PULL POSTS SHALL BE GALVANIZED STEEL PIPE PER ASTM A120.
2. LINE POSTS UP TO SHALL BE COLD–FORMED AND WELDED STEEL PIPE COMPLYING WITH ASTM F 1043 & ASTM A120.
3. TOP, MIDDLE, AND BOTTOM RAILS SHALL BE TREATED LUMBER.
4. PICKETS SHALL BE TREATED LUMBER.

B. TREATED LUMBER

1. ALL ABOVE GROUND MATERIALS SHALL BE TREATED WITH A MINIMUM OF .25 POUNDS OF PRESERVATIVE PER CUBIC FOOT OF MATERIAL.
2. TREATMENT FOR LUMBER SHALL BE APPROVED BY ALL GOVERNING BODIES.

C. GATES:

1. MANUALLY OPERATED WOOD GATES SHALL BE CONSTRUCTED WITH STEEL FRAME AND WOOD PICKETS. GATES SHALL BE SINGLE OR DOUBLE SWING AS INDICATED ON DRAWINGS.

D. PIPE GRIP TIES: PROVIDE PIPE GRIP TIES OF RECOMMENDED SIZE FOR USE WITH STEEL POSTS SIMPSON PGT'S. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

PART 3: EXECUTION

3.1 INSTALLATION:

A. PHYSICAL LOCATIONS OF FEATURES SUCH AS FENCE LINES, GATES, TERMINAL POSTS SHALL BE PER THE PLANS.

B. INSTALL MATERIALS PER MANUFACTURER'S INSTRUCTIONS. COMPLY WITH ASTM F 567 FOR CHAIN LINK FENCES AND F 537 FOR WOOD FENCES. INSTALL MATERIALS WITH UNIFORM APPEARANCE. COORDINATE WITH OTHER SECTIONS.

C. PROVIDE A REASONABLY SMOOTH PROFILE AT FENCE LINE. BOTTOM OF FENCE SHALL NOT BE MORE THAN 2" ABOVE FINISHED GRADE. IF FENCE CROSSES EXTREME GRADE DEPRESSION, CONFORM THE FENCE TO THE GROUND CONTOUR, UNLESS NOTED OTHERWISE. CLOSE SPACE BELOW THE BOTTOM OF THE FENCE WITH ADDITIONAL FENCE MATERIALS WHILE MAINTAINING A UNIFORM TOP.

D. POST SPACING AND INSTALLATION

1. INSTALL LINE POSTS AND BRACE AT EVENLY SPACED INTERVAL. LOCATE CORNER AND TERMINAL POSTS PER DRAWINGS. INSTALL CORNER POSTS WHERE CHANGES IN GRADE EXCEED 30 DEGREES.
2. SET POSTS VERTICALLY IN CYLINDRICAL CONCRETE FOUNDATION IN ACCORDANCE WITH ASTM F567.
3. TOP SURFACE OF THE CONCRETE FOUNDATION SHALL BE SMOOTH 1/2" CROWN, SLOPING AWAY FROM THE POST AND BE A MINIMUM OF 4" BELOW GRADE. THE POST SHALL BE 6" FROM THE BOTTOM OF THE CONCRETE POUR.
4. HOLES MAY BE HAND AUGURED OR DRILLED. IF ROCK IS ENCOUNTERED, DRILL MIN. 12" FOR LINE POSTS AND 18" FOR CORNER, GATE, OR TERMINAL POSTS. DRILL HOLES 1" LARGER DIAMETER AND DEPTH OF FOUNDATION. IF SOLID ROCK IS BELOW SOIL OVERBURDEN, DRILL TO FULL DEPTH REQUIRED, EXCEPT PENETRATION INTO ROCK NEED NOT EXCEED MINIMUM DEPTHS SPECIFIED.

E. SETTING POSTS

1. REMOVE ANY LOOSE AND FOREIGN MATERIALS FROM THE SIDES AND BOTTOMS OF THE HOLES; MOISTEN SOIL PRIOR TO PLACING THE CONCRETE. CENTER AND ALIGN POSTS, TAMP TO CONSOLIDATE, AND SECURE UNTIL CONCRETE IS FULLY CURED.
2. KEEP CONCRETE SURFACES MOIST FOR AT LEAST 7 DAYS AFTER PLACEMENT.
3. POSTS SET IN SLEEVED HOLES SHALL BE GROUTED IN PLACE USING A NON–SHRINK PORTLAND CEMENT GROUT APPROVED BY THE ENGINEER.
4. PRIOR TO PLACING COMPONENTS SUCH AS FABRIC, RAILS, TENSION WIRE, AND GATES, VERIFY THAT THE CONCRETE HAS REACHED AT LEAST 75% OF ITS DESIGN STRENGTH AS PRESCRIBED ON THE PLAN DETAILS, OR HAS CURED A MINIMUM OF 7 DAYS AFTER SETTING THE POSTS.

F. BRACING (CHAIN LINK FENCE ONLY)

1. INSTALL TENSION WIRES PARALLEL TO THE LINE OF FABRIC BY WEAVING NO LESS THAN 7 GA. WIRE OF THE APPROPRIATE TYPE THROUGH FABRIC AND TYING TO EACH POST. INSTALL TENSION WIRE BEFORE STRETCHING FABRIC.
2. INSTALL HORIZONTAL PIPE BRACE AT MID–HEIGHT ON EACH SIDE OF TERMINAL POSTS. FIRMLY ATTACH WITH FITTINGS. INSTALL DIAGONAL TRUSS RODS AT THESE POINTS. ADJUST TRUSS ROD, ENSURING POSTS REMAIN PLUMB.

G. INSTALLING FABRIC (CHAIN LINK FENCE ONLY)

1. INSTALL THE CHAIN LINK FENCE FABRIC SO THAT THE POSTS ARE ENCLOSED. STRETCH THE FABRIC TAUT, APPROXIMATELY 2" ABOVE THE GROUND, AND SECURELY TO THE POSTS.
2. CUT FABRIC AND ATTACH EACH SPAN INDEPENDENTLY AT ALL TERMINAL AND CORNER POSTS. USE STRETCHER BARS WITH FABRIC BANDS SPACED AT MAX. 5" INTERVALS TO FASTEN FABRIC TO TERMINAL POSTS. USE TIE WIRE, METAL BANDS, OR OTHER APPROVED MATERIAL ATTACHED AT MAXIMUM 15" INTERVALS TO FASTEN FABRIC TO LINE POSTS, TOP RAIL OR BOTTOM TENSION WIRE.

H. INSTALLING GATES

1. INSTALL GATES ACCORDING TO THE LOCATIONS, TYPE, AND SIZE INDICATED ON THE PLANS.
2. GATES SHALL BE BRACED AND TRUSSED TO PREVENT SAGGING, BUCKLING, AND WEAVING, AND COVERED WITH SAME FABRIC AS THE FENCE, UNLESS NOTED OTHERWISE. FIXED END RATCHET BANDS SHALL BE FURNISHED FOR FASTENING. FURNISH GATES WITH ALL FITTINGS AND HARDWARE REQUIRED. HEAVY DUTY COMMERCIAL LATCHES PROVIDED FOR USE WITH PADLOCK AND HINGES SHALL ALLOW 180 DEGREE SWING. PROVIDE 3/8" DIAMETER CROSSBRACING.
3. INSTALL GATES PLUMB, LEVEL, AND SECURE FOR THE FULL OPENING WITHOUT INTERFERENCES
4. INSTALL ALL ITEMS PER MANUFACTURER'S RECOMMENDATIONS. INSPECT ALL PARTS AND ATTACHMENTS FOR DEFECTS, AND INSTALL, LUBRICATE, AND ADJUST EQUIPMENT TO ENSURE SMOOTH OPERATION.
5. INSTALL (WELD TO GATE FRAME) (2) 8" SECTIONS (ONE PER GATE) OF 1/4" NOMINAL WELDED, GRADE 30 MINIMUM GALVANIZED STEEL CHAIN JUST BELOW LATCH FOR PADLOCKS. VERIFY INSIDE DIMENSIONS OF CHAIN LINK WILL RECEIVE STANDARD PADLOCKS.

I. MISCELLANEOUS INSTALLATION (CHAIN LINK FENCE)

1. USE U–SHAPED TIE WIRES, CONFORMING TO THE DIAMETERS OF PIPE, THAT CLASP THE PIPE AND FABRIC FIRMLY WITH ENDS TWISTED AT LEAST 2 FULL TURNS.
2. INSTALL NUTS FOR FASTENERS ON TENSION BANDS AND HARDWARE BOLTS ON THE SIDE OF THE FENCE OPPOSITE THE FABRIC. THE ENDS OF BOLTS, ONCE SECURE AND CHECKED FOR SMOOTH OPERATION, SHALL BE PEENED TO PREVENT REMOVAL OF NUTS.

3.2 PROTECTION:

A. A GUARANTEE SHALL BE FURNISHED FOR ALL MATERIALS, INSTALLATION, AND WORKMANSHIP TO BE FREE OF DEFECTS FOR A PERIOD OF 1 YEAR FROM THE DATE OF ACCEPTANCE UNLESS NOTED OTHERWISE IN THE CONTRACT DOCUMENTS. ANY DEFECT IN INSTALLATION OR WORKMANSHIP SHALL BE REPAIRED, AND/OR REPLACED WITHOUT COST TO THE OWNER.

B. REPAIR COATINGS DAMAGED IN THE FIELD AS RECOMMENDED BY THE MANUFACTURER.

END OF SECTION

STAMP:

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:39

STATE OF MISSOURI
CHRISTOPHER GIANNOTTI
NUMBER
PE-2020038653
PROFESSIONAL ENGINEER

DocuSigned by:
00D363C201C34A0

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
CG	CHRISTOPHER GIANNOTTI	PE-2020038653	CIVIL	C
REJ	ROBERT E. JENSEN	PE-028974	CIVIL	C
PMS	PHILIP M. SWOBODA	PE-2024040585	CIVIL	C
SDK	SHELTON D. KEISLING	PE-27323	ELECTRICAL	E
DJW	DAVID J. WALDRON	PE-2024034789	ELECTRICAL	E
TMS	TERRANCE M. SUPER	PE-18521	ELECTRICAL	E

OEM:

motorola

APPLICANT:

LEE'S SUMMIT

PLANS PREPARED FOR:

Hayden TOWER SERVICE, INC.

PLANS PREPARED BY:

SSC

DRAWING NOTICE:

SUBMITTALS:

DESCRIPTION	DATE	BY	REV
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REISSUED FOR REVIEW	10/23/25	DSL	B
REISSUED FOR REVIEW	11/13/25	DSL	C
ISSUED FOR CONSTRUCTION	12/03/25	DSL	0
REISSUED FOR CONSTRUCTION	12/18/25	DSL	1

APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

SPECIFICATIONS
(5 OF 7)

SHEET #:

SP-1.4

ELECTRICAL

PART 1: GENERAL

1.1 GENERAL CONDITIONS:

A. THE CONTRACTOR SHALL INSPECT THE SITE WHERE THIS WORK IS TO BE PERFORMED AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS RELATED TO THIS PROJECT.

B. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND LICENSES AND SHALL MAKE ALL DEPOSITS AND PAY ALL FEES REQUIRED FOR THE PERFORMANCE OF WORK UNDER THIS SECTION.

C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWINGS SHALL NOT BE SCALED TO DETERMINE DIMENSIONS.

1.2 LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES:

A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES.

1.3 REFERENCES:

A. THE PUBLICATIONS LISTED BELOW FORM PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION UNLESS NOTED OTHERWISE. EXCEPT AS MODIFIED BY THE REQUIREMENTS SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THESE PUBLICATIONS.

1. NEC (NATIONAL ELECTRICAL CODE)
2. ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE)
3. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)
4. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
5. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
6. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
7. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
8. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
9. UL (UNDERWRITERS LABORATORIES, INC.)

1.4 SCOPE OF WORK:

A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL AND ASSOCIATED SERVICES REQUIRED TO COMPLETELY CONSTRUCT AND LEAVE READY FOR OPERATION SYSTEMS AS SHOWN ON THE DRAWINGS AND HEREIN DESCRIBED.

B. ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE CONTRACTOR.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINING, TRENCHES, BACKFILLING, AND REMOVAL OF EXCESS DIRT.

D. THE CONTRACTOR SHALL FURNISH TO THE OWNER, CERTIFICATES OF FINAL INSPECTION AND APPROVAL FROM THE INSPECTION AUTHORITIES HAVING JURISDICTION.

PART 2: PRODUCTS

2.1 GENERAL:

A. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE NEW, FREE FROM DEFECTS AND OF THE BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE.

B. ALL MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED.

C. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.

D. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING RATING EQUAL TO OR GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 10,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT.

2.2 MATERIALS AND EQUIPMENT:

A. CONDUIT:

1. RIGID GALVANIZED STEEL CONDUIT (RGS) SHALL BE HOT-DIP GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.
2. FLEXIBLE METAL CONDUIT SHALL BE GALVANIZED, ZINC-COATED STEEL, PVC COATED FOR OUTDOOR APPLICATIONS.
3. CONDUIT CLAMPS, STRAPS AND SUPPORTS SHALL BE STEEL OR MALLEABLE IRON. ALL FITTINGS SHALL BE COMPRESSION TYPE AND WATERTIGHT.
4. NON-METALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC, HEAVY-WALL RIGID WITH SOLVENT-CEMENT-TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.

B. WIRE AND CABLE:

1. WIRE AND CABLE SHALL BE FLAME-RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC, SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 600 VOLT, SIZES AS INDICATED, #12 AWG MINIMUM.
2. #10 AWG AND SMALLER CONDUCTORS SHALL BE SOLID AND #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED.
3. SOLDERLESS, PRESSURE-TYPE CONNECTORS CONSTRUCTED OF HIGH-STRENGTH, NON-CORRODIBLE, TIN-PLATED COPPER DESIGNED TO FURNISH HIGH-PULLOUT STRENGTH AND HIGH CONDUCTIVITY JOINTS SHALL BE USED.
4. SUPPORT GRIPS SHALL BE SINGLE WEAVE, CLOSED MESH, HIGH-GRADE, NON-MAGNETIC, TIN-COATED BRONZE CAPABLE OF SUPPORTING TEN TIMES THE CABLE DEAD WEIGHT, HUBBELL KELLEMS OR APPROVED EQUAL.

C. DISCONNECT SWITCHES:

1. DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCKED WITH COVER IN CLOSED POSITION, RATING AS INDICATED, UL LABELED FURNISHED IN NEMA 3R ENCLOSURE, SQUARE D CLASS 3110 OR APPROVED EQUAL.

D. SYSTEM GROUNDING:

1. GROUNDING CONDUCTOR SHALL BE SOLID TINNED BARE COPPER, SIZE AS INDICATED, EXCEPT ABOVE GROUND GROUNDING CONDUCTORS SHALL BE STRANDED INSULATED.
2. GROUND BUSSES SHALL BE GALVANIZED STEEL BARS OF RECTANGULAR CROSS SECTION.
3. CONNECTORS SHALL BE HIGH-CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDING CONNECTORS FOR THE MATERIALS USED. USE TWO-HOLE COMPRESSION LUGS WITH HEAT SHRINK FOR MECHANICAL CONNECTIONS.
4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN KIT FORM AND SELECTED FOR THE SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.
5. GROUND RODS SHALL BE COPPER-CLAD STEEL WITH HIGH-STRENGTH STEEL CORE AND ELECTROLYTIC-GRADE COPPER OUTER SHEATH, MOLTEN WELDED TO CORE, 3/4" x 10'-0".

E. OTHER MATERIALS:

1. THE CONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:39

12/18/2025

STATE OF MISSOURI
SHELTON KEISLING
NUMBER PE-27323
PROFESSIONAL ENGINEER

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:

STATE OF MISSOURI
STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
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motorola

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APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

SPECIFICATIONS
(6 OF 7)

SHEET #:

SP-2.0

PART 3: EXECUTION

3.1 GENERAL:

A. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

B. EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT OR WATER, AND AGAINST CHEMICAL OR MECHANICAL INJURY DURING INSTALLATION AND CONSTRUCTION PERIODS.

3.2 LABOR AND WORKMANSHIP:

A. ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE DONE BY EXPERIENCED MECHANICS OF THE PROPER TRADES.

B. ALL ELECTRICAL EQUIPMENT FURNISHED SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE CONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.

C. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CRATING OR CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION.

3.3 COORDINATION:

A. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER-FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK.

3.4 INSTALLATION:

A. CONDUIT:

1. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS HEREIN SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4" NOMINAL SIZE SHALL BE USED.
2. PROVIDE RGS CONDUIT FOR ALL EXPOSED, EXTERIOR CONDUIT.
3. PROVIDE SCHEDULE 40 PVC OR RGS CONDUIT BELOW GRADE, 1" MINIMUM, UNLESS NOTED OTHERWISE. ALL 90 DEGREE BENDS TO ABOVE GRADE SHALL BE RGS. MINIMUM BURIAL DEPTH SHALL BE 24" CLEAR TO TOP OF CONDUIT, UNLESS NOTED OTHERWISE.
4. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION IS NOT DESIRABLE FOR REASONS OF EQUIPMENT MOVEMENT, VIBRATION, OR FOR EASE OF MAINTENANCE. USE LIQUIDTIGHT, PVC COATED FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS.
5. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF CONNECTION TO EQUIPMENT MOUNTED ON SUPPORTS TO ALLOW FOR EXPANSION AND CONTRACTION.
6. A RUN OF CONDUIT BETWEEN BOXES OR FITTINGS SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER-BENDS INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE BOX OR FITTING. THE RADIUS OF BENDS SHALL NEVER BE SHORTER THAN THAT OF THE CORRESPONDING TRADE ELBOW.
7. WHERE CONDUIT HAS TO BE CUT IN THE FIELD, IT SHALL BE CUT SQUARE WITH A PIPE CUTTER USING CUTTING KNIVES.
8. ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF WIRE OR CABLE. CLEAR ALL BLOCKAGES AND REMOVE BURRS, DIRT, AND DEBRIS.
9. INSTALL PULL STRINGS IN ALL EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH END WITH ITS DESTINATION.
10. PROVIDE INSULATED GROUNDING BUSHINGS FOR ALL CONDUITS STUBBED INTO EQUIPMENT ENCLOSURES OR STUBBED OUT FOR FUTURE USE BY OTHERS.
11. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY OPENINGS IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. CONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOVED.
12. INSTALL 2" ORANGE DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUIT AND WIRE.
13. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO INSURE AGAINST COLLECTION OF TRAPPED CONDENSATION.

B. WIRE AND CABLE:

1. ALL POWER WIRING SHALL BE COLOR CODED AS FOLLOWS:

DESCRIPTION	120/240V	208Y/120V	480Y/277V
PHASE A	BLACK	BLACK	BROWN
PHASE B	RED	RED	ORANGE
PHASE C		BLUE	YELLOW
NEUTRAL	WHITE	WHITE	GRAY
GROUND	GREEN	GREEN	GREEN

2. SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAYS WITH PRESSURE-TYPE CONNECTORS.
3. PULLING LUBRICANTS SHALL BE SOAPSTONE POWDER, POWDERED TALC, OR A COMMERCIAL PULLING COMPOUND. NO SOAP SUDS, SOAP FLAKES, OIL, OR GREASE SHALL BE USED, AS THESE MAY BE HARMFUL TO CABLE INSULATION. CONTRACTOR SHALL USE NYLON OR HEMP ROPE FOR PULLING CABLE TO AVOID SCORING THE CONDUIT.
4. CABLES SHALL BE NEATLY TRAINED, WITHOUT INTERLACING, AND BE OF SUFFICIENT LENGTH IN ALL BOXES, EQUIPMENT, ETC. TO PERMIT MAKING A NEAT ARRANGEMENT. CABLES SHALL BE SECURED IN A MANNER TO AVOID TENSION ON CONDUCTORS OR TERMINALS, AND SHALL BE PROTECTED FROM MECHANICAL INJURY AND FROM MOISTURE. SHARP BENDS OVER CONDUIT BUSHINGS ARE PROHIBITED. DAMAGED CABLES SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

C. DISCONNECT SWITCHES:

1. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUND AS INDICATED.

D. GROUNDING:

1. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
2. PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEMS INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
3. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.
4. TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.
5. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
6. ALL GROUND CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC-WELDED CONNECTIONS SHALL BE APPROVED BY THE CONSTRUCTION INSPECTOR BEFORE BEING PERMANENTLY CONCEALED.
7. APPLY CORROSION-RESISTANT FINISH TO FIELD CONNECTIONS, AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED. USE COPPER-BASED "NO-OX" OR APPROVED EQUAL.
8. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS
9. BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE #6 AWG GROUNDING CONDUCTOR TO A GROUND BUS OR GROUNDING LUG IN ENCLOSURE.
10. DIRECT BURIED GROUND CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 30" BELOW GRADE, UNLESS NOTED OTHERWISE.
11. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSULATED OR INSTALLED IN PVC CONDUIT.
12. INSTALL ELECTROLYTIC GROUNDING SYSTEM IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHER HOLES. INSTALL PROTECTIVE BOX FLUSH WITH GRADE.
13. DRIVE GROUND RODS UNTIL TOPS ARE 30" BELOW FINAL GRADE.
14. GROUNDING CONDUCTOR TO EQUIPMENT GROUND LUGS:
    a. BOLTED TO EQUIPMENT HOUSING WITH STAINLESS STEEL BOLTS AND LOCK WASHERS.
    b. ALL EQUIPMENT TO BE GROUNDED SHALL BE FREE OF PAINT OR ANY OTHER MATERIAL COVERING BARE METAL AT THE POINT OF CONNECTION.

3.5 ACCEPTANCE TESTING:

A. PROVIDE PERSONNEL AND EQUIPMENT, MAKE REQUIRED TESTS, AND SUBMIT TEST REPORTS UPON COMPLETION OF TESTS.

B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE SPECIFIED REQUIREMENTS, THE NONCOMPLYING ITEMS SHALL BE REMOVED FROM THE JOBSITE AND REPLACED WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE OF SUCH NON-COMPLIANCE.

C. TEST PROCEDURES:

1. ALL FEEDERS SHALL HAVE THEIR INSULATION TESTED AFTER INSTALLATION, BUT BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. INVESTIGATE ANY VALUES LESS THAN 50 MEGAOHMS.
2. PRIOR TO ENERGIZING CIRCUITRY, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER POLARITY CONNECTIONS.
3. MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE WIRES AND NEUTRALS. SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES.
4. PERFORM GROUND TEST TO MEASURE GROUND RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3-POINT "FALL-OF-POTENTIAL" METHOD. PROVIDE PLOTTED TEST VALUES & LOCATION SKETCH. NOTIFY THE ENGINEER IMMEDIATELY IF MEASURED VALUE IS OVER 5 OHMS.

END OF SECTION

END OF SPECIFICATION

STAMP:

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:40

12/18/2025

STATE OF MISSOURI
SHELTON KEISLING
NUMBER PE-27323
PROFESSIONAL ENGINEER

DocuSigned by:
Shelton Keisling
EF94D8A5B80B407...

ENGINEERING LICENSE:

STATE OF MISSOURI

STATE CERTIFICATE OF AUTHORIZATION # EF-2791

ENGINEER:		PE#:	DISCIPLINE:	
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APPLICANT SITE NAME:

LEES SUMMIT

SITE ADDRESS:

TBD
LEE'S SUMMIT, MO 64063

SHEET DESCRIPTION:

SPECIFICATIONS
(7 OF 7)

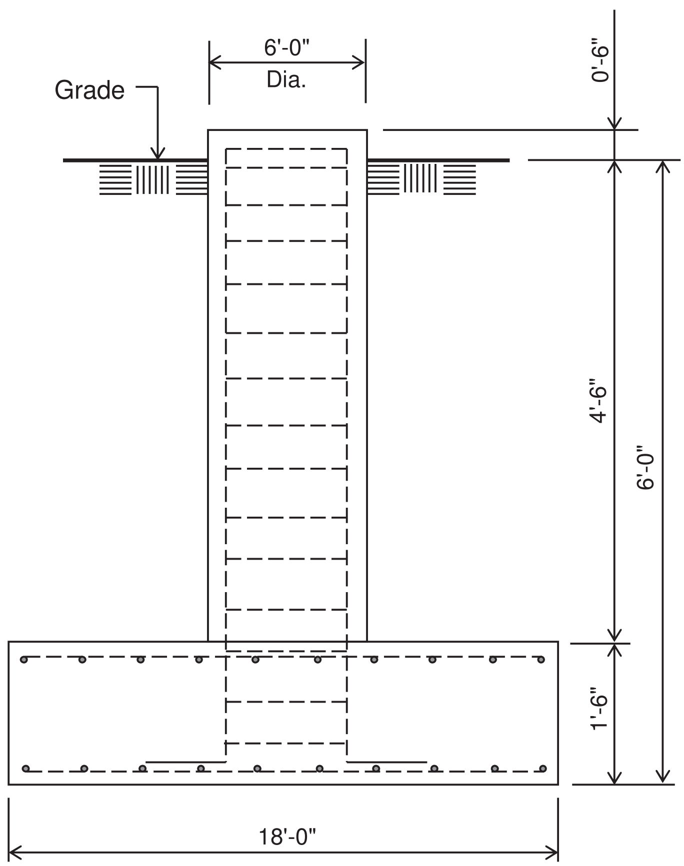
SHEET #:

SP-2.1

Sabre Industries™
INNOVATION DELIVERED

No.: 26-2169-RSS-R2 Opt. 2
Date: 01/14/26
By: KJT

Customer: MOTOROLA ISPO
Site: Lee's Summit JOF, MO
120' Monopole



ELEVATION VIEW
(23.24 Cu. Yds.)
(1 REQUIRED; NOT TO SCALE)

Notes:

1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-14.
2) Rebar to conform to ASTM specification A615 Grade 60.
3) All rebar to have a minimum of 3" concrete cover.
4) All exposed concrete corners to be chamfered 3/4".
5) The foundation design is based on the geotechnical report by UES, Project No. J045326.01, dated May 21, 2024.
6) See the geotechnical report for compaction requirements, if specified.
7) 4.5 ft of soil cover is required over the entire area of the foundation slab.
8) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

1/14/26

Rebar Schedule for Pad and Pier	
Pier	(34) #7 vertical rebar w/ hooks at bottom w/ #5 ties, (2) within top 5" of pier, then 4" C/C
Pad	(19) #8 horizontal rebar evenly spaced each way top and bottom (76 total)

7101 Southbridge Drive - P.O. Box 658 - Sioux City, IA 51102-0658 - Phone 712.258.6690 - Fax 712.279.0814

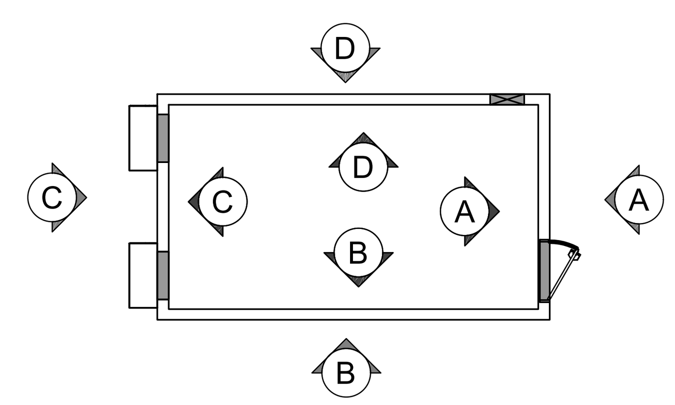
NOTE:
ORIGINAL BUILDING MANUFACTURED BY FIBREBOND WEST, INC. DRAWING # D-5208, DATED: 06/13/2000.

NOTE:
SHELTER DRAWINGS TO SHOW MINIMUM FROST PROTECTION DEPTH OF 36". (MEASURED TO GRADE, NOT TOP OF SLAB)

SITE NAME: LEES SUMMIT

LEES SUMMIT ROAD
LEES SUMMIT, MO 64081
JACKSON COUNTY

CELLSITE SHELTER KEY



WIND DESIGN

WIND SPEED:	109 MPH
GUST DURATION:	3 SECONDS
EXPOSURE:	C
GCpi:	±0.18 (PER ASCE 7)

EXTERIOR DIMENSIONS

LENGTH:	20'-0"
WIDTH:	11'-6"
HEIGHT:	10'-0"

INTERIOR DIMENSIONS

INTERIOR LENGTH:	18'-10"
INTERIOR WIDTH:	10'-5"
INTERIOR HEIGHT:	8'-11.5"

PROJECT TEAM

APPLICANT:	UTILITY ENGINEERING UTILITY POWER, LLC 702 OBERLIN RD, SUITE 230 RALEIGH NC 27605
PROJECT MANAGEMENT FIRM:	CELLSITE SOLUTIONS ANDREW GALLAGHER 4150 C STREET SW, CEDAR RAPIDS, IA 52404 (319) 210-2974
ENGINEERING FIRM:	NB+C ENGINEERING SERVICES, LLC. 6095 MARSHALLEE DRIVE, SUITE 300 ELKRIDGE, MD 21075 KKOLANDAIVELU@NBCLLC.COM (804) 548-4079

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FIRE CODE
- 2023 NATIONAL ELECTRICAL CODE
- 2015 NFPA 101 LIFE SAFETY CODE
- ASCE 7-16
- ANSI/TIA-222-H

NOTES

1. LISTED CODES INCLUDES LATEST STATE ADOPTED AMENDMENTS AND APPENDICES.
2. THIS SHELTER IS AN "ENCLOSED STRUCTURE" NOT INTENDED FOR HUMAN HABITATION.
3. OCCUPANT LOAD = 0. THIS BUILDING SHALL BE OCCUPIED FOR SERVICING EQUIPMENT AND MAINTENANCE ONLY.
4. SPECIAL CONDITIONS AND PERMISSIBLE TYPES OF GASSES; N/A
5. STATE INSIGNIA LABEL/DECAL IS LOCATED NEAR MAIN ELECTRICAL SERVICE PANEL.
6. DOOR MUST BE MINIMUM 90 MINUTE FIRE RATED, IF USED IN 2 HOUR FIRE RATED SHELTER AND MINIMUM 45 MINUTE FIRE RATED IF USING 1 HOUR FIRE RATED SHELTER.
7. HVAC UNITS ARE SIZED TO ALLOW FOR MAX FUTURE EQUIPMENT CAPACITY AND HEAT LOADS WITHIN SHELTER WITH REDUNDANCY IN MIND. THEY ARE TO BE CONTROLLED TO STAGE UNITS BASED ON CURRENT LOAD.
8. EXTERNAL GROUNDING BY OTHERS.
9. SHELTER CONSTRUCTED IN ACCORDANCE WITH 61G20- 3.006.
10. THIS BUILDING DOES NOT CONTAIN PLUMBING FACILITIES, PLUMBING FACILITIES SHALL BE PROVIDED ON SITE SUBJECT TO THE LOCAL AUTHORITY HAVING JURISDICTION.

DRAWING INDEX

T-1	TITLE SHEET
C-1	EXTERIOR ELEVATION FACE A
C-2	EXTERIOR ELEVATION FACE B
C-3	EXTERIOR ELEVATION FACE C
C-4	EXTERIOR ELEVATION FACE D
C-5	FLOOR PLAN LAYOUT
C-6	FLOOR PLAN - LIGHTING
C-7	FLOOR PLAN - HVAC
C-8	FLOOR PLAN - CABLE TRAY
C-9	INTERIOR ELEVATION FACE A
C-10	INTERIOR ELEVATION FACE B
C-11	INTERIOR ELEVATION FACE C
C-12	INTERIOR ELEVATION FACE D
S-1	FOUNDATION DETAILS
G-1	FLOOR PLAN - GROUNDING
D-1	LOAD CENTER DETAIL
D-2	AC SURGE SUPPRESSOR DETAIL
D-3	HVAC DETAIL
D-4	INTERIOR LED LIGHT DETAIL
D-5	EXIT - EMERGENCY LIGHT DETAIL

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 22"X34" & HALF SIZE AT 11"X17". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE DESIGNER / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME. CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICE TO PREVENT STORM WATER POLLUTION DURING CONSTRUCTION.

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

NB+C TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

SITE INFORMATION

LEES SUMMIT
NB+C PROJECT #: 101210
LEES SUMMIT ROAD
LEES SUMMIT, MO 64081
JACKSON COUNTY

DESIGN RECORD

REVISIONS

REV	DATE	DESCRIPTION	BY
1	01/05/26	COMMENTS	CCC
0	11/04/25	FINAL CDS	GS
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PROFESSIONAL STAMP

STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

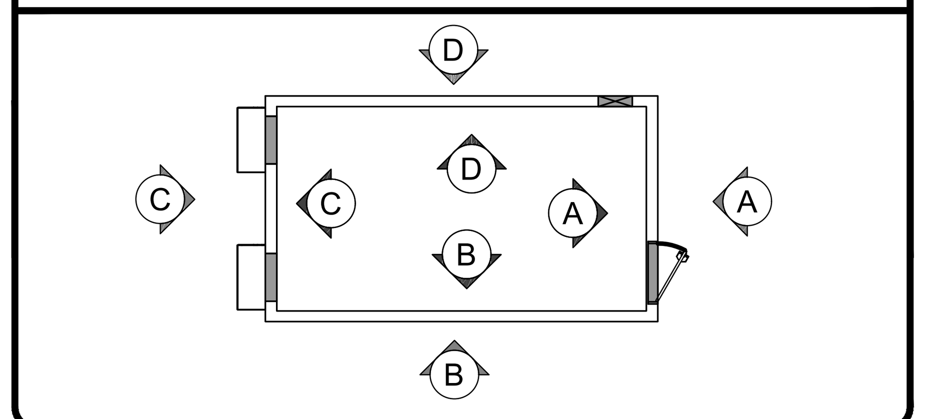
TITLE SHEET

SHEET NUMBER

T-1

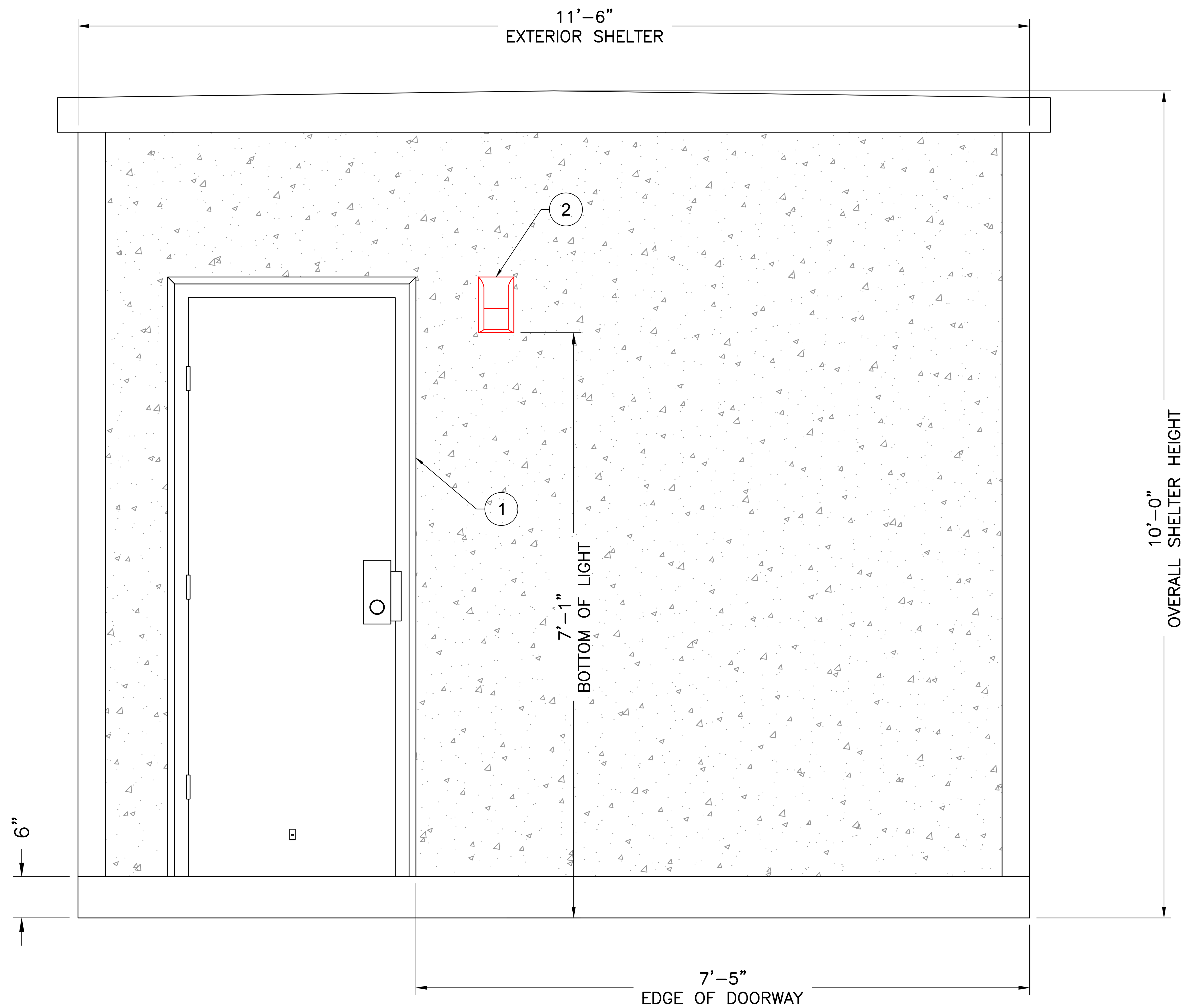
CONTRACTOR NOTE:
CONTRACTOR IS RESPONSIBLE FOR THE MOUNTING MEANS AND METHODS FOR ALL EXTERIOR AND INTERIOR EQUIPMENT. CONTRACTOR SHALL FOLLOW THE MANUFACTURES RECOMMENDATION WHEN MOUNTING ALL EXTERIOR AND INTERIOR EQUIPMENT. NB+C IS NOT RESPONSIBLE FOR SHELTER DESIGN & DIMENSIONS.

CELLSITE SHELTER KEY



MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING	
			LOCATION	HEIGHT
1	DOOR & HARDWARE	1	EXTERIOR FACE A	0'–6" ABOVE FLOOR
2	EXTERIOR LIGHT, 100W INCANDESCENT W/ MOTION DECTECTOR, KENALL 3636	1	EXTERIOR FACE A	7'–1" ABOVE FLOOR



1
C-1
EXTERIOR ELEVATION FACE A
SCALE: 1" = 1' (22X34)
SCALE: 1/2" = 1' (11X17)

GRAPHIC SCALE
1 0 0.5 1 2 4
1 INCH = 1 FOOT (22X34)
1/2 INCH = 1 FOOT (11X17)

APPLICANT
CELLSITE SOLUTIONS, LLC

ENGINEER
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BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
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SHEET TITLE
EXTERIOR ELEVATION FACE A

SHEET NUMBER
C-1

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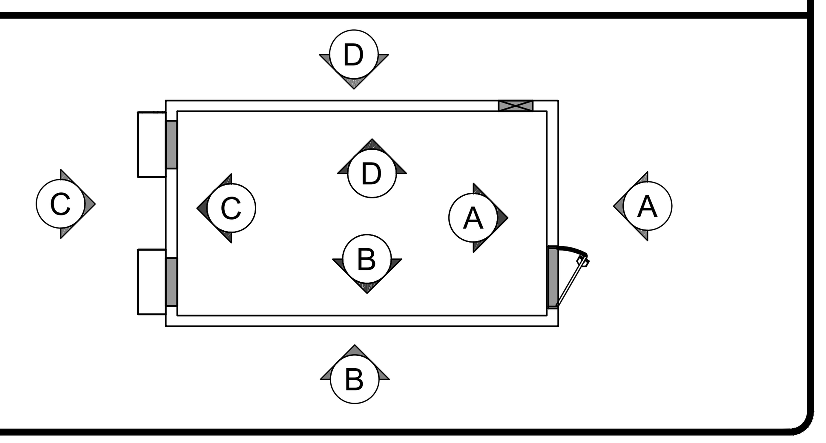
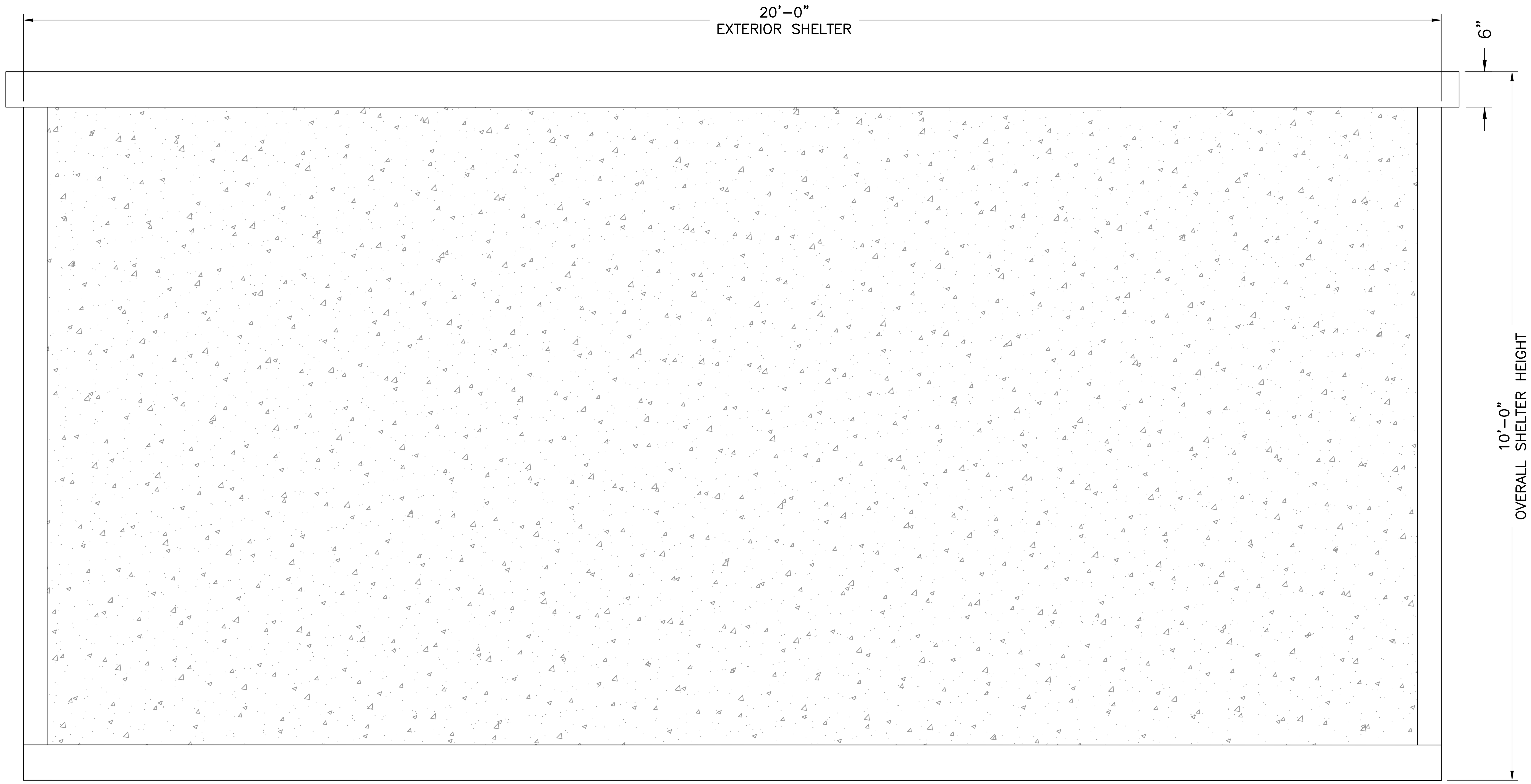
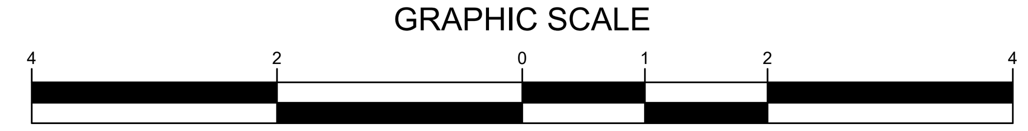




1 / C-2 EXTERIOR ELEVATION FACE B
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE



3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

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01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

EXTERIOR ELEVATION FACE B

SHEET NUMBER

C-2

CONTRACTOR NOTE:
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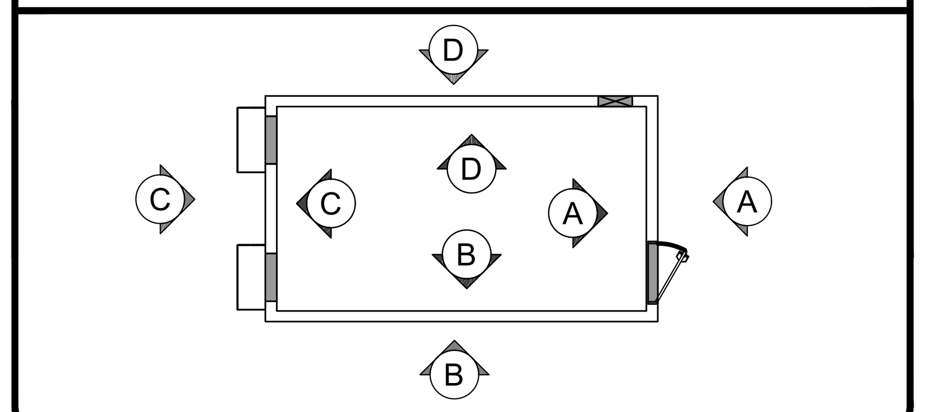
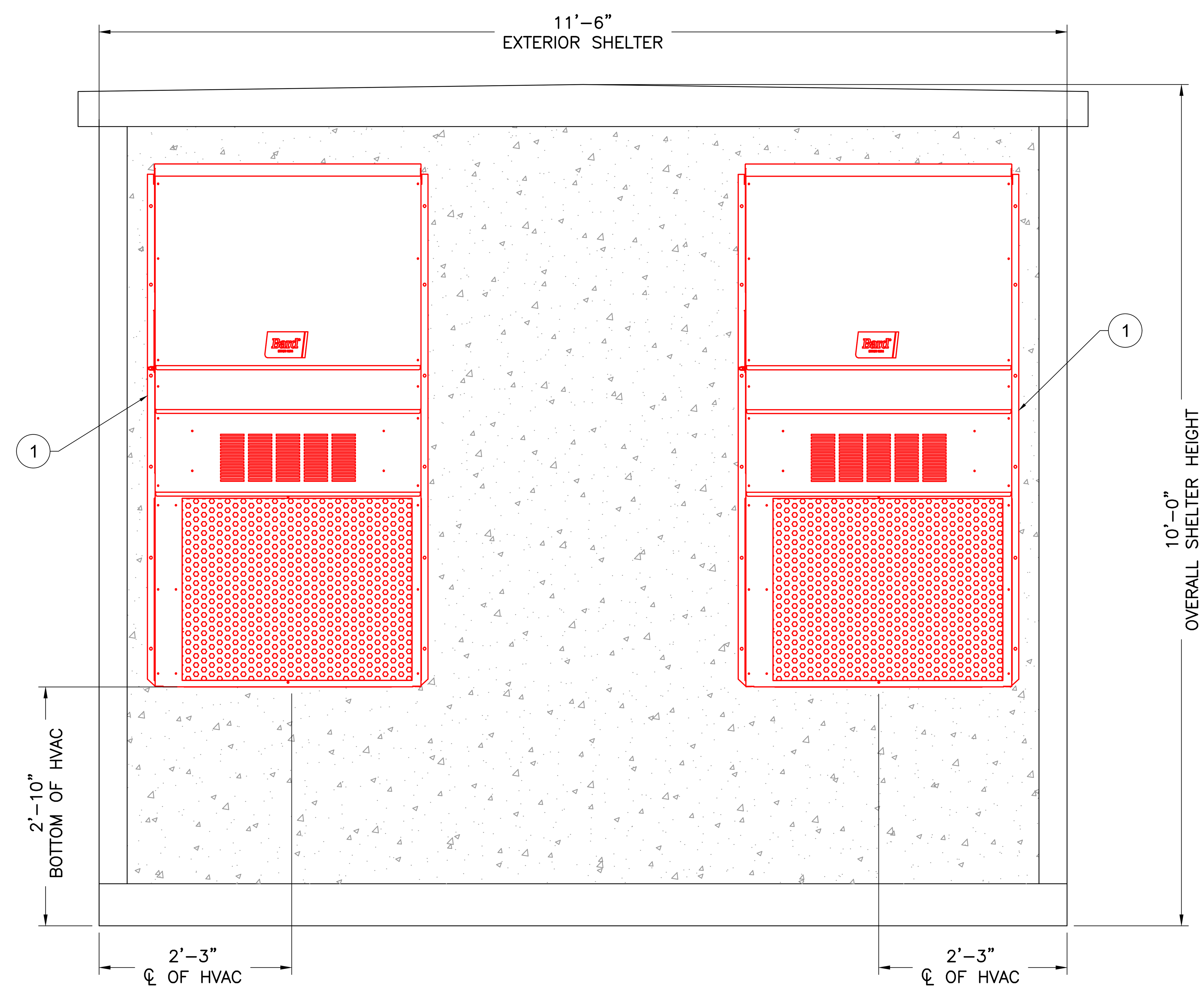
CELLSITE SHELTER KEY



MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING LOCATION	MOUNTING HEIGHT
1	BARD W36 74.56" X 38.20" X 17.13" HVAC	2	EXTERIOR FACE C	2'–10" ABOVE FLOOR



1 / C-3 EXTERIOR ELEVATION FACE C
SCALE: 1" = 1' (22X34)
SCALE: 1/2" = 1' (11X17)

GRAPHIC SCALE
1 0 0.5 1 2 4
1 INCH = 1 FOOT (22X34)
1/2 INCH = 1 FOOT (11X17)

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

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ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

EXTERIOR ELEVATION FACE C

SHEET NUMBER

C-3

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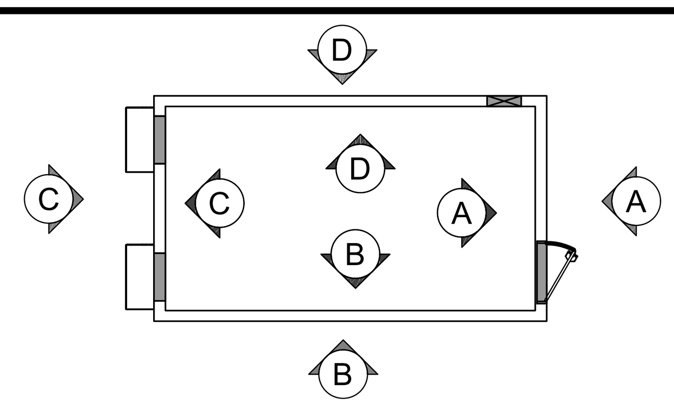
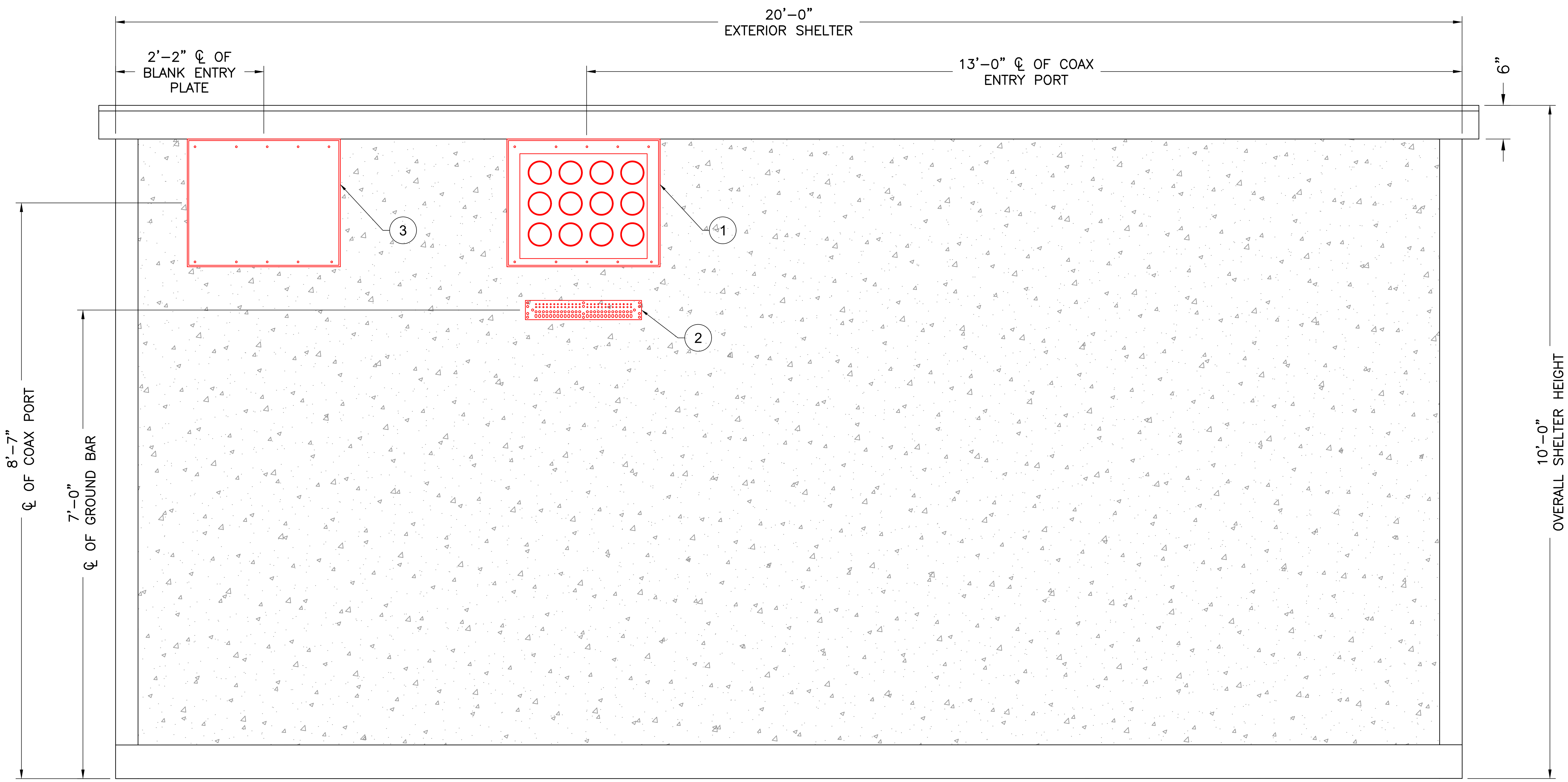


MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING LOCATION	MOUNTING HEIGHT
1	12–HOLE 4" COAX ENTRY PLATE	1	EXTERIOR FACE D	8'–7" ℄ ABOVE FLOOR
2	GROUND BAR	1	EXTERIOR FACE D	7'–0" ℄ ABOVE FLOOR
3	BLANK ENTRY PLATE	1	EXTERIOR FACE D	8'–7" ℄ ABOVE FLOOR



1
C-4
EXTERIOR ELEVATION FACE D
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE
4 2 0 1 2 4
3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

APPLICANT
CELLSITE SOLUTIONS, LLC

ENGINEER
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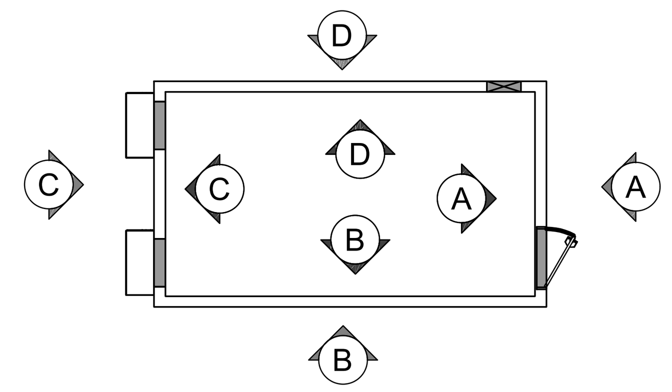
SHEET TITLE
EXTERIOR ELEVATION FACE D

SHEET NUMBER
C-4

CELLSITE SHELTER KEY



CONTRACTOR NOTE:
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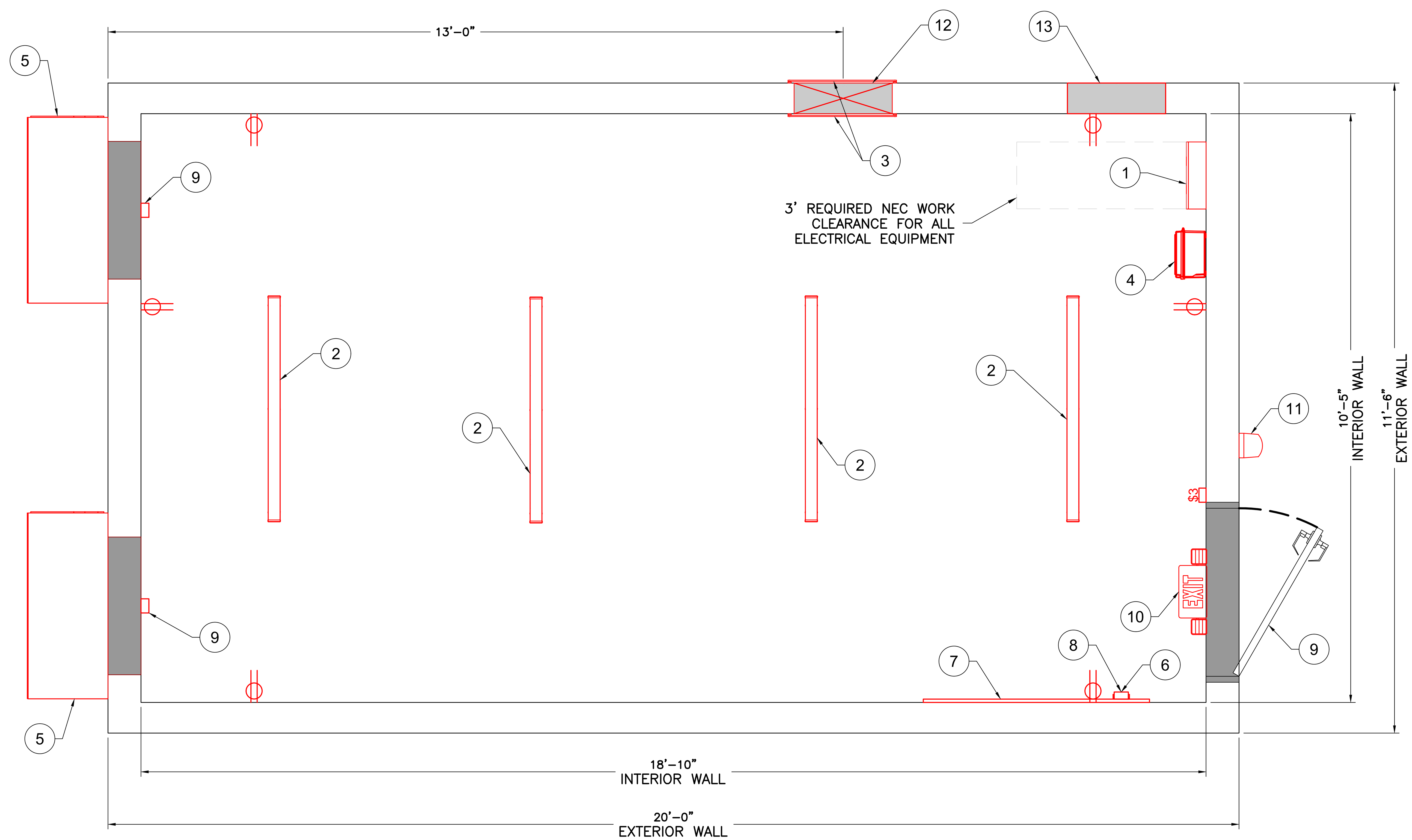
NB+C IS NOT RESPONSIBLE FOR SHELTER DESIGN & DIMENSIONS.

MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING	
			LOCATION	HEIGHT
1	200A 42 CKT MAIN BREAKER LOAD CENTER	1	INTERIOR FACE A	2'–10" ABOVE FLOOR
2	4' LED LIGHT FIXTURES	4	CEILING	CEILING
3	GROUND BAR	2	INTERIOR/EXTERIOR FACE D	5'–8" ℄ ABOVE FLOOR
4	AC SURGE SUPPRESSOR	1	INTERIOR FACE A	1'–8" ABOVE FLOOR
5	BARD W36 74.56" X 38.20" X 17.13" HVAC	2	EXTERIOR FACE C	2'–10" ABOVE FLOOR
6	ALARM BLOCK	1	INTERIOR FACE B	5'–8" ABOVE FLOOR
7	TELCO BOARD	1	INTERIOR FACE B	3'–0" ABOVE FLOOR
8	JUNCTION BOX	7	INTERIOR FACE A, B & C	7'–2" ABOVE FLOOR
9	DOOR & HARDWARE	1	INTERIOR FACE A	0'–6" ABOVE FLOOR

MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING	
			LOCATION	HEIGHT
10	EXIT–EMERGENCY LIGHT	1	INTERIOR FACE A	7'–3" ABOVE FLOOR
11	EXTERIOR LIGHT, 100W INCANDESCENT W/ MOTION DECTECTOR, KENALL 3636	1	EXTERIOR FACE A	7'–1" ABOVE FLOOR
12	12–HOLE 4" COAX ENTRY PLATE	1	EXTERIOR FACE D	8'–7" ℄ ABOVE FLOOR
13	BLANK ENTRY PLATE	1	EXTERIOR FACE D	8'–7" ℄ ABOVE FLOOR
⊖	20A 120V DUPLEX RECEPTACLE	6	INTERIOR FACE A, B, C, & D	1'–6" ℄ ABOVE FLOOR
$3	20AMP, 120V LIGHT SWITCH	1	INTERIOR FACE A	3'–11" ℄ ABOVE FLOOR



1
C-5
FLOOR PLAN LAYOUT
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE
4 2 0 1 2 4
3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

NB+C
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

SITE INFORMATION

LEES SUMMIT
NB+C PROJECT #: 101210
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LEES SUMMIT, MO 64081
JACKSON COUNTY

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PROFESSIONAL STAMP

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BRADLEY R. NEWMAN
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01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

FLOOR PLAN LAYOUT

SHEET NUMBER

C-5

CONTRACTOR NOTE:
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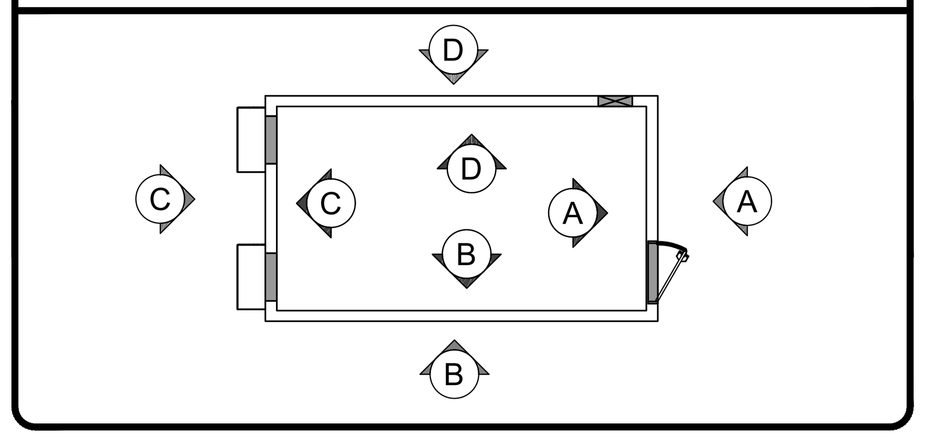
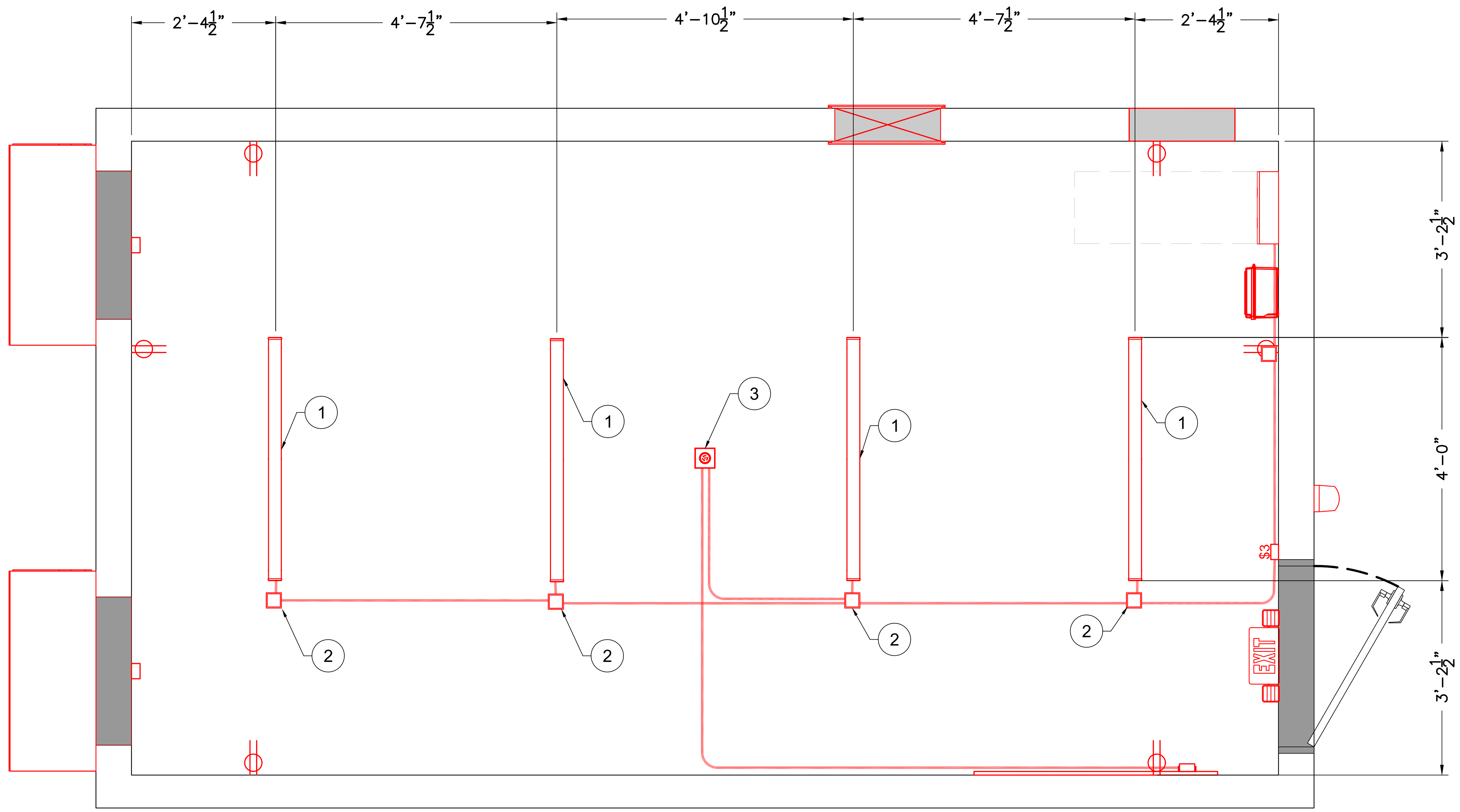
CELLSITE SHELTER KEY



MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING	
			LOCATION	HEIGHT
1	4' LED LIGHT FIXTURES	4	CEILING	CEILING
2	JUNCTION BOX	4	INSIDE SHELTER CEILING	CEILING
3	SMOKE DETECTOR	1	CEILING	CEILING
$3	20AMP, 120V LIGHT SWITCH	1	INTERIOR FACE A	3'-9" ℄ ABOVE FLOOR



1
C-6
FLOOR PLAN - LIGHTING
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE
4 2 0 1 2 4
3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

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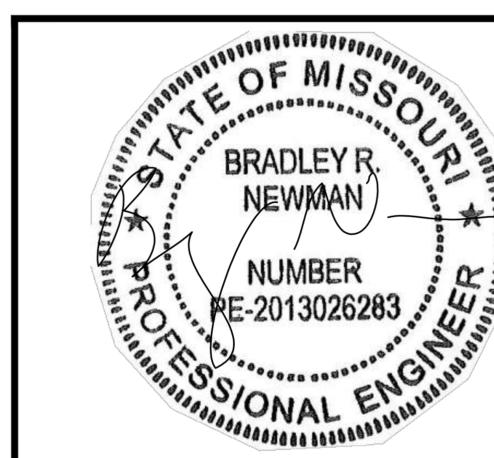

01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

FLOOR PLAN - LIGHTING

SHEET NUMBER

C-6

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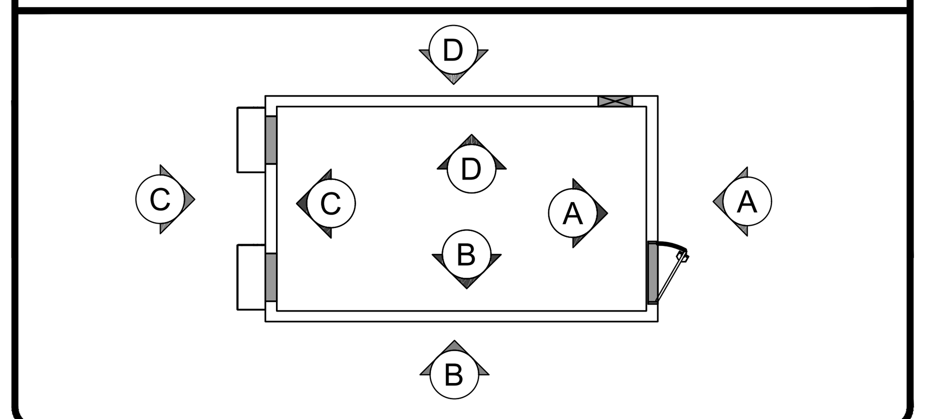
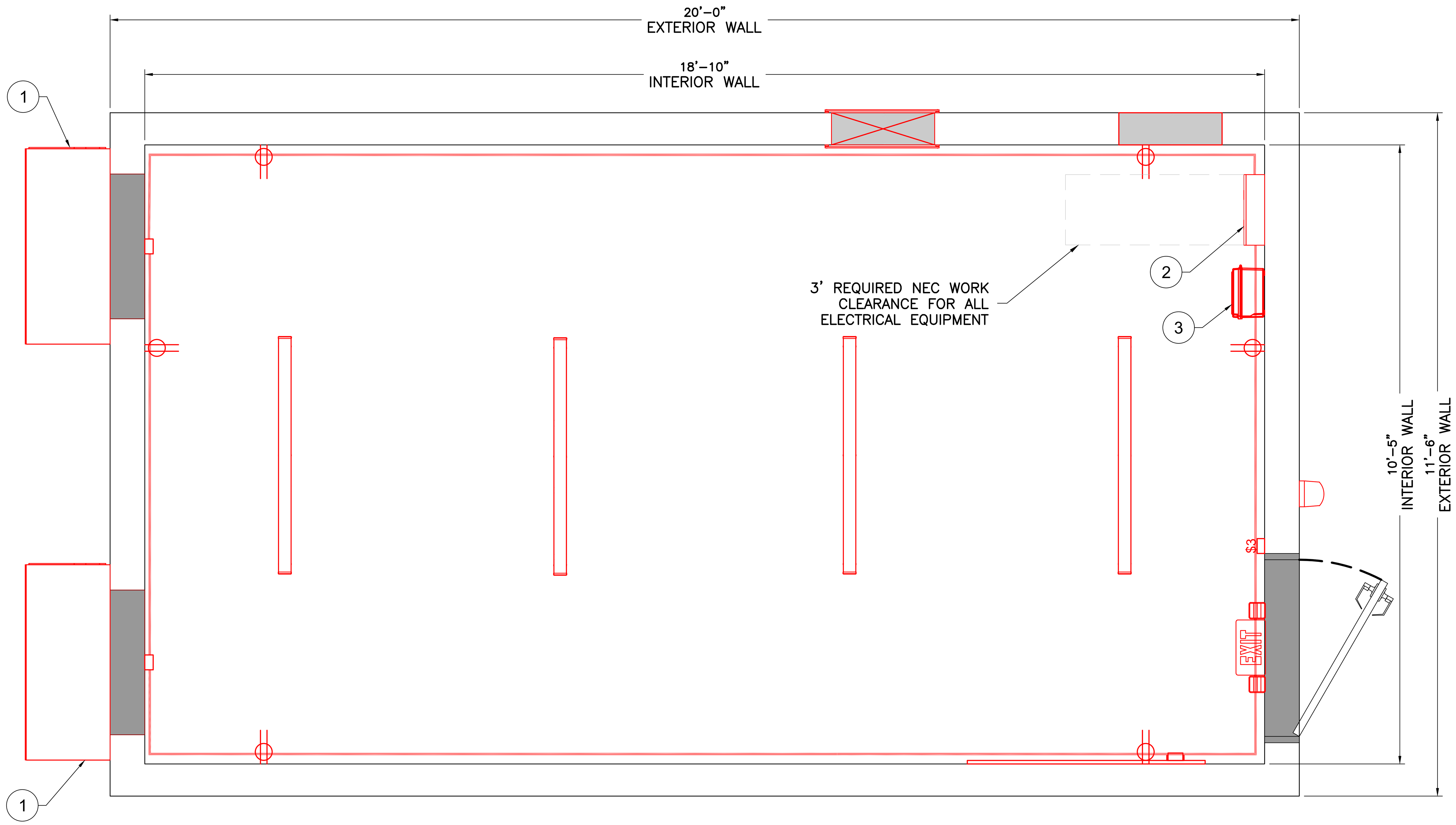


MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING LOCATION	MOUNTING HEIGHT
1	BARD W36 74.56" X 38.20" X 17.13" HVAC	2	EXTERIOR FACE C	2'–10" ABOVE FLOOR
2	200A 42 CKT MAIN BREAKER LOAD CENTER	1	INTERIOR FACE A	2'–10" ABOVE FLOOR
3	AC SURGE SUPPRESSOR	1	INTERIOR FACE A	1'–8" ABOVE FLOOR



1 / C-7 FLOOR PLAN - HVAC
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE
4 2 0 1 2 4
3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

APPLICANT
CELLSITE SOLUTIONS, LLC

ENGINEER
NB+C TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

SITE INFORMATION
LEES SUMMIT
NB+C PROJECT #: 101210
LEES SUMMIT ROAD
LEES SUMMIT, MO 64081
JACKSON COUNTY

DESIGN RECORD

REVISIONS

REV	DATE	DESCRIPTION	BY
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0	11/04/25	FINAL CDS	GS
B	10/28/25	COMMENTS	CCC
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PROFESSIONAL STAMP
STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

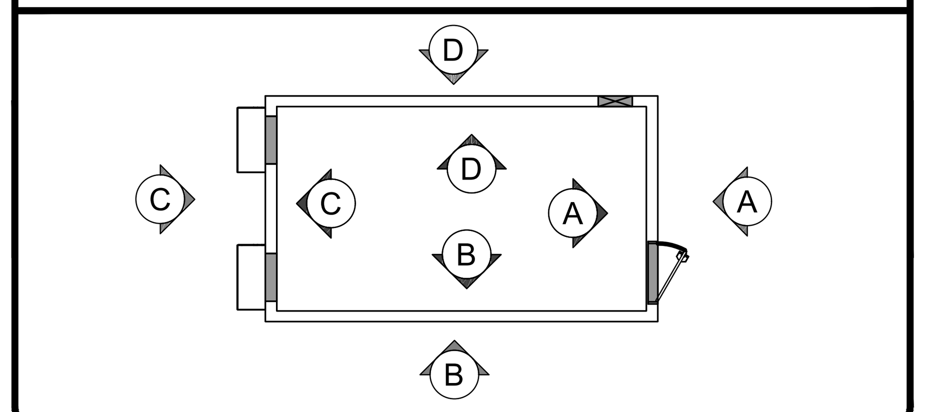
ENGINEER
BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

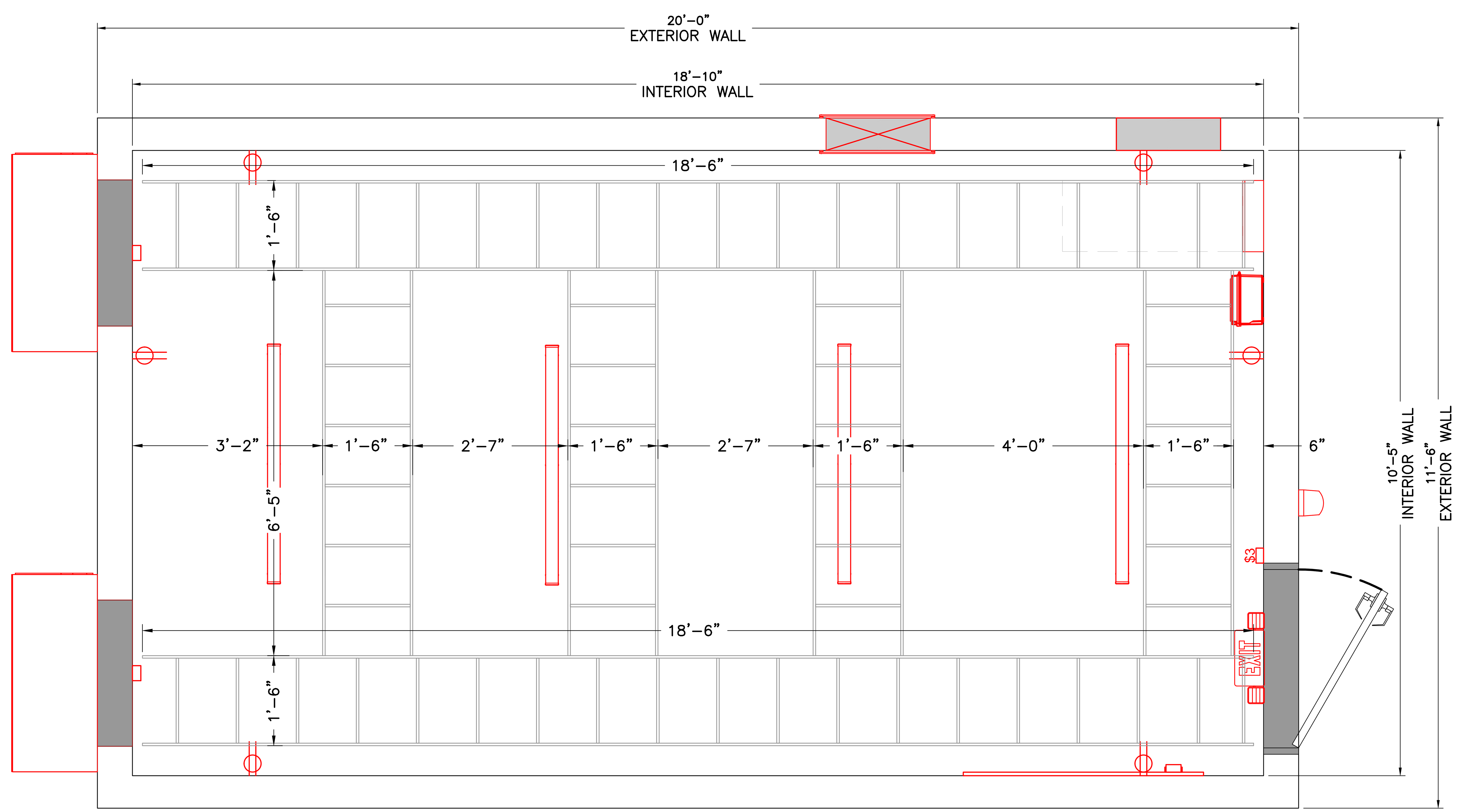
SHEET TITLE
FLOOR PLAN - HVAC

SHEET NUMBER
C-7

CONTRACTOR NOTE:
CONTRACTOR IS RESPONSIBLE FOR THE MOUNTING MEANS AND METHODS FOR ALL EXTERIOR AND INTERIOR EQUIPMENT. CONTRACTOR SHALL FOLLOW THE MANUFACTURES RECOMMENDATION WHEN MOUNTING ALL EXTERIOR AND INTERIOR EQUIPMENT.
NB+C IS NOT RESPONSIBLE FOR SHELTER DESIGN & DIMENSIONS.

CELLSITE SHELTER KEY





1 / C-8 **FLOOR PLAN - CABLE TRAY**
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE
4 2 0 1 2 4
3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

NB+C TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
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PROFESSIONAL STAMP

STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

FLOOR PLAN - CABLE TRAY

SHEET NUMBER

C-8

CONTRACTOR NOTE:
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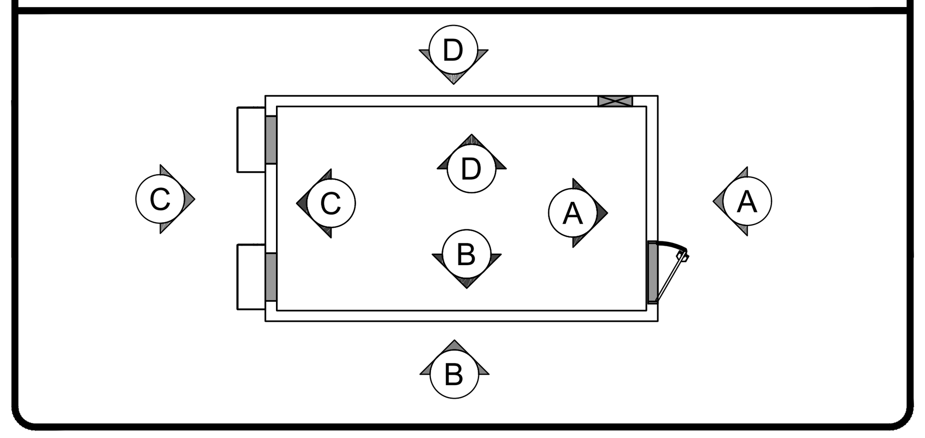
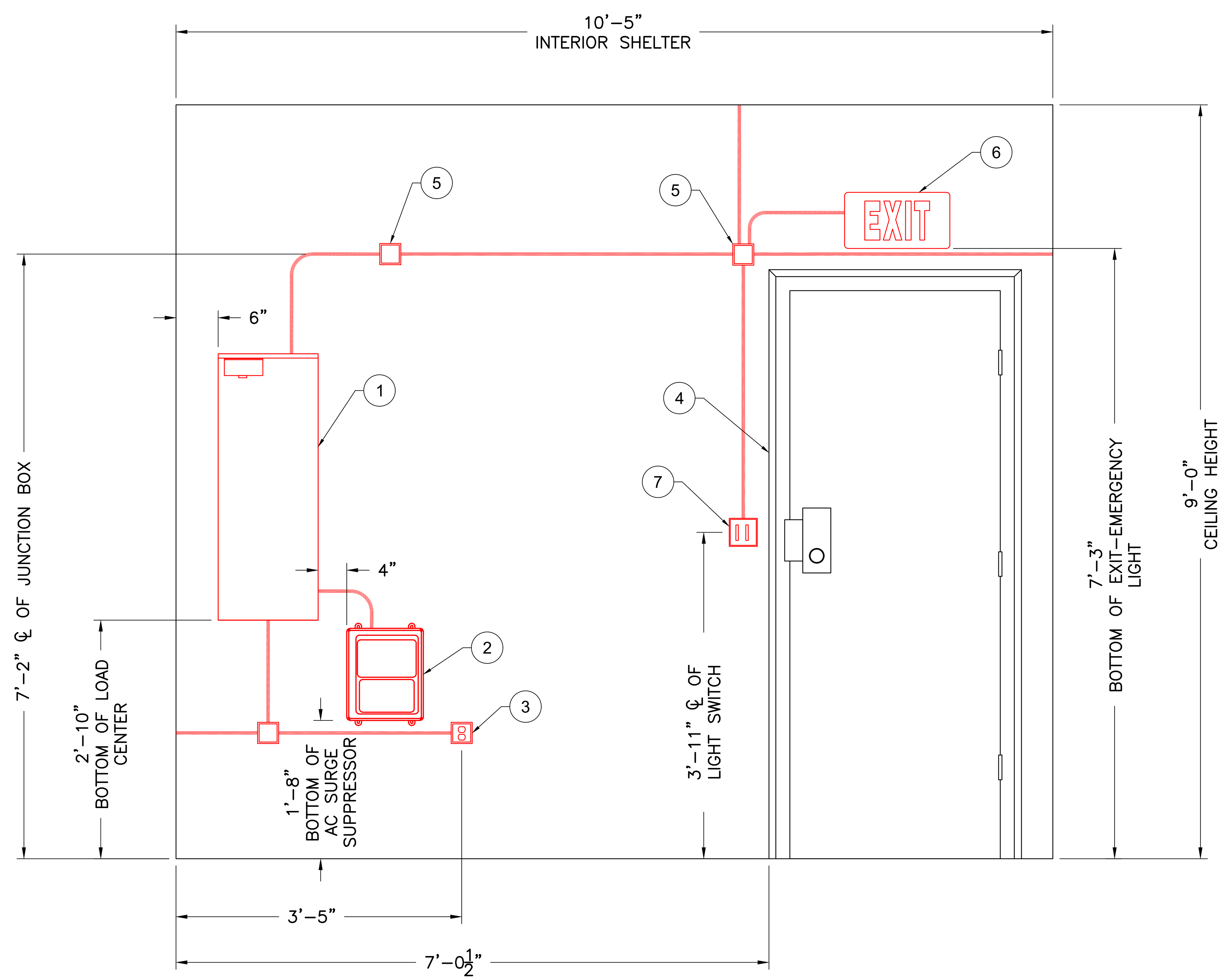
CELLSITE SHELTER KEY



MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING LOCATION	MOUNTING HEIGHT
1	200A 42 CKT MAIN BREAKER LOAD CENTER	1	INTERIOR FACE A	2'-10" ABOVE FLOOR
2	AC SURGE SUPPRESSOR	1	INTERIOR FACE A	1'-8" ABOVE FLOOR
3	20A 120V DUPLEX RECEPTACLE	1	INTERIOR FACE A	1'-6" ℄ ABOVE FLOOR
4	DOOR & HARDWARE	1	INTERIOR FACE A	ABOVE FLOOR
5	JUNCTION BOX	3	INTERIOR FACE A	7'-2" ℄ ABOVE FLOOR
6	EXIT-EMERGENCY LIGHT	1	INTERIOR FACE A	7'-3" ABOVE FLOOR
7	20AMP, 120V LIGHT SWITCH	1	INTERIOR FACE A	3'-11" ℄ ABOVE FLOOR



1
C-9
INTERIOR ELEVATION FACE A
SCALE: 1" = 1' (22X34)
SCALE: 1/2" = 1' (11X17)

GRAPHIC SCALE
1 0 0.5 1 2 4
1 INCH = 1 FOOT (22X34)
1/2 INCH = 1 FOOT (11X17)

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

NB+C TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

SITE INFORMATION

LEES SUMMIT
NB+C PROJECT #: 101210
LEES SUMMIT ROAD
LEES SUMMIT, MO 64081
JACKSON COUNTY

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PROFESSIONAL STAMP

STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

INTERIOR ELEVATION FACE A

SHEET NUMBER

C-9

CONTRACTOR NOTE:
CONTRACTOR IS RESPONSIBLE FOR THE MOUNTING MEANS AND METHODS FOR ALL EXTERIOR AND INTERIOR EQUIPMENT. CONTRACTOR SHALL FOLLOW THE MANUFACTURES RECOMMENDATION WHEN MOUNTING ALL EXTERIOR AND INTERIOR EQUIPMENT.
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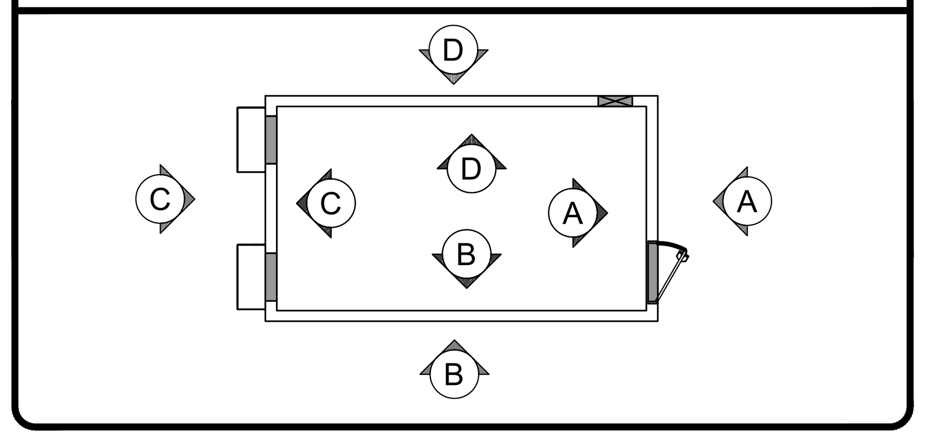
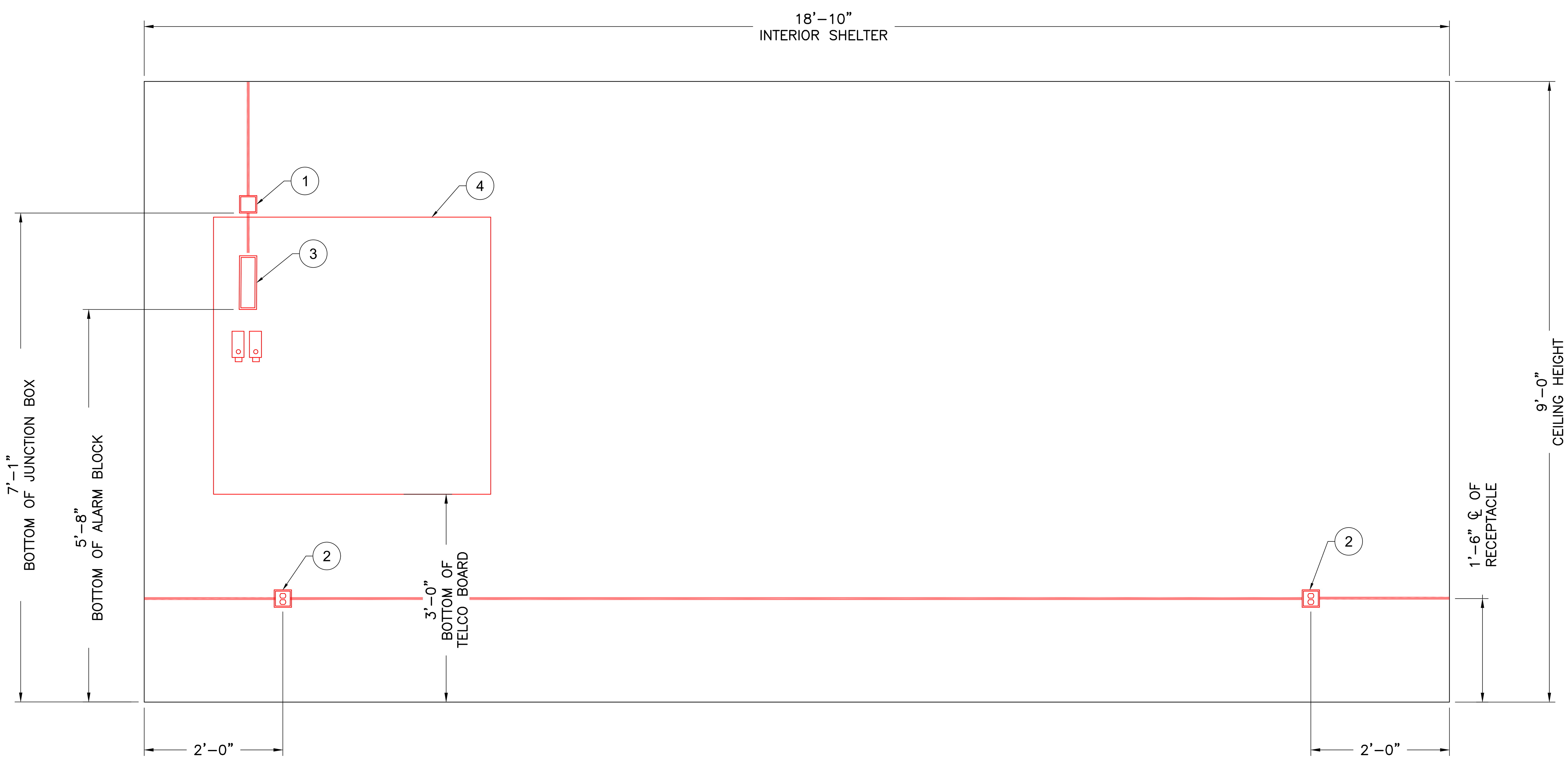
CELLSITE SHELTER KEY



MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING LOCATION	MOUNTING HEIGHT
1	JUNCTION BOX	1	INTERIOR FACE B	7'–1" ABOVE FLOOR
2	20A 120V DUPLEX RECEPTACLE	2	INTERIOR FACE B	1'–6" ℄ ABOVE FLOOR
3	ALARM BLOCK	1	INTERIOR FACE B	5'–8" ABOVE FLOOR
4	TELCO BOARD	1	INTERIOR FACE B	3'–0" ABOVE FLOOR



1 C-10 INTERIOR ELEVATION FACE B
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE
4 2 0 1 2 4
3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

APPLICANT
CELLSITE SOLUTIONS, LLC

ENGINEER
NB+C TOTALLY COMMITTED.

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PROFESSIONAL STAMP
STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

ENGINEER
BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE
INTERIOR ELEVATION FACE B

SHEET NUMBER
C-10

CONTRACTOR NOTE:
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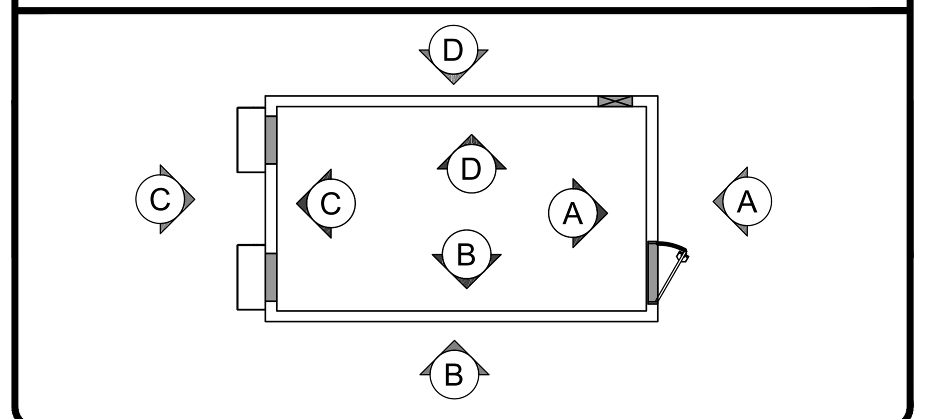
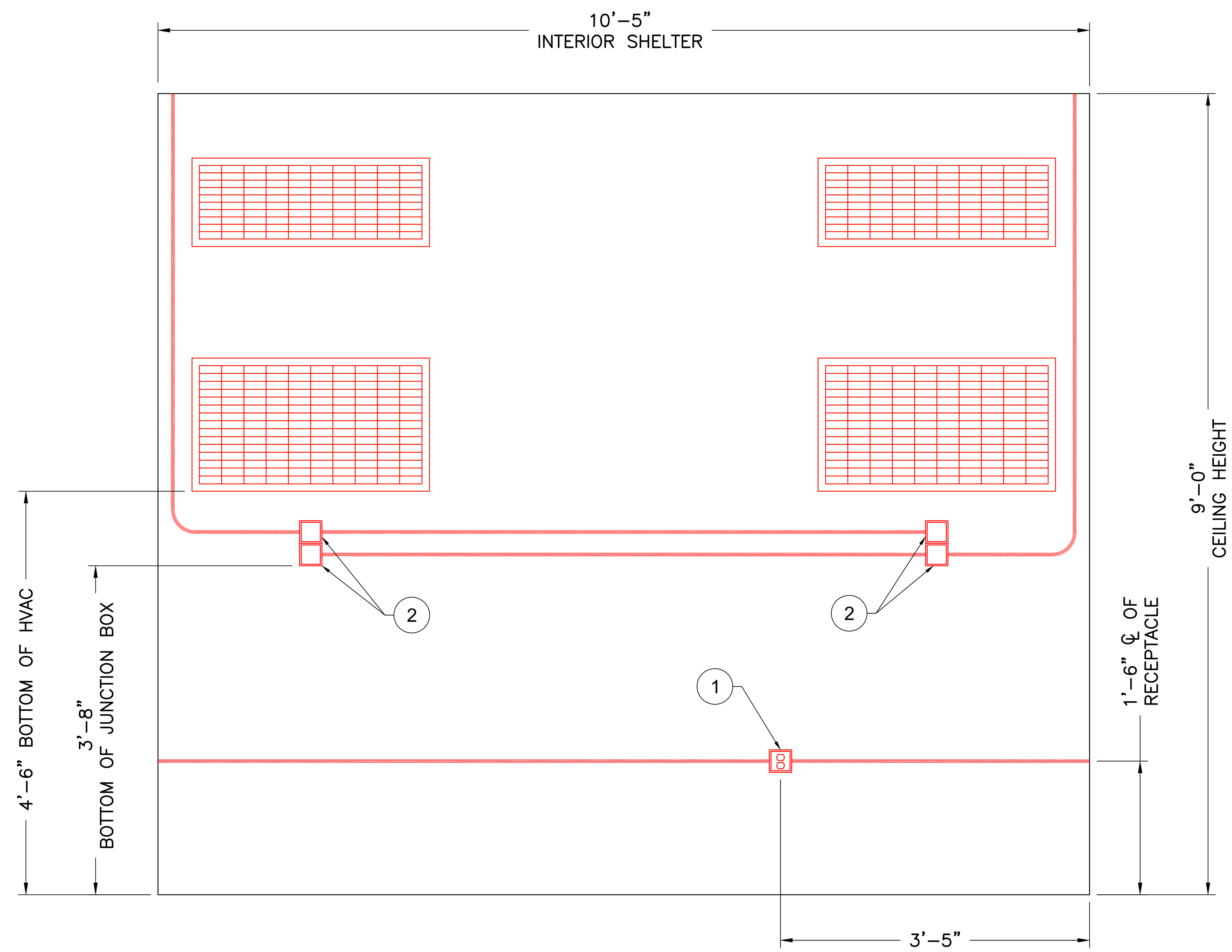
CELLSITE SHELTER KEY



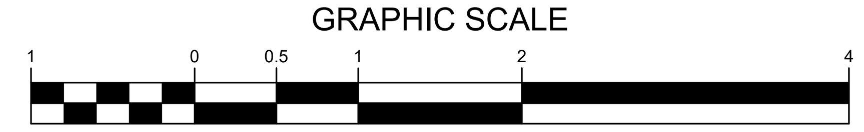
MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING LOCATION	MOUNTING HEIGHT
1	20A 120V DUPLEX RECEPTACLE	1	INTERIOR FACE C	1'–6" ℄ ABOVE FLOOR
3	JUNCTION BOX	4	INTERIOR FACE C	3'–8" ABOVE FLOOR



1 / C-11 INTERIOR ELEVATION FACE C
SCALE: 1" = 1' (22X34)
SCALE: 1/2" = 1' (11X17)

GRAPHIC SCALE



1 INCH = 1 FOOT (22X34)
1/2 INCH = 1 FOOT (11X17)

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

NB+C TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

SITE INFORMATION

LEES SUMMIT
NB+C PROJECT #: 101210
LEES SUMMIT ROAD
LEES SUMMIT, MO 64081
JACKSON COUNTY

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PROFESSIONAL STAMP

STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER
PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

INTERIOR ELEVATION FACE C

SHEET NUMBER

C-11

CONTRACTOR NOTE:
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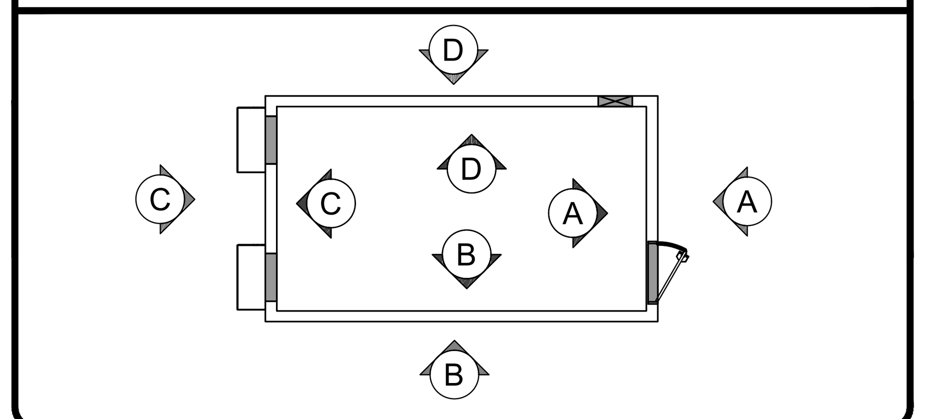
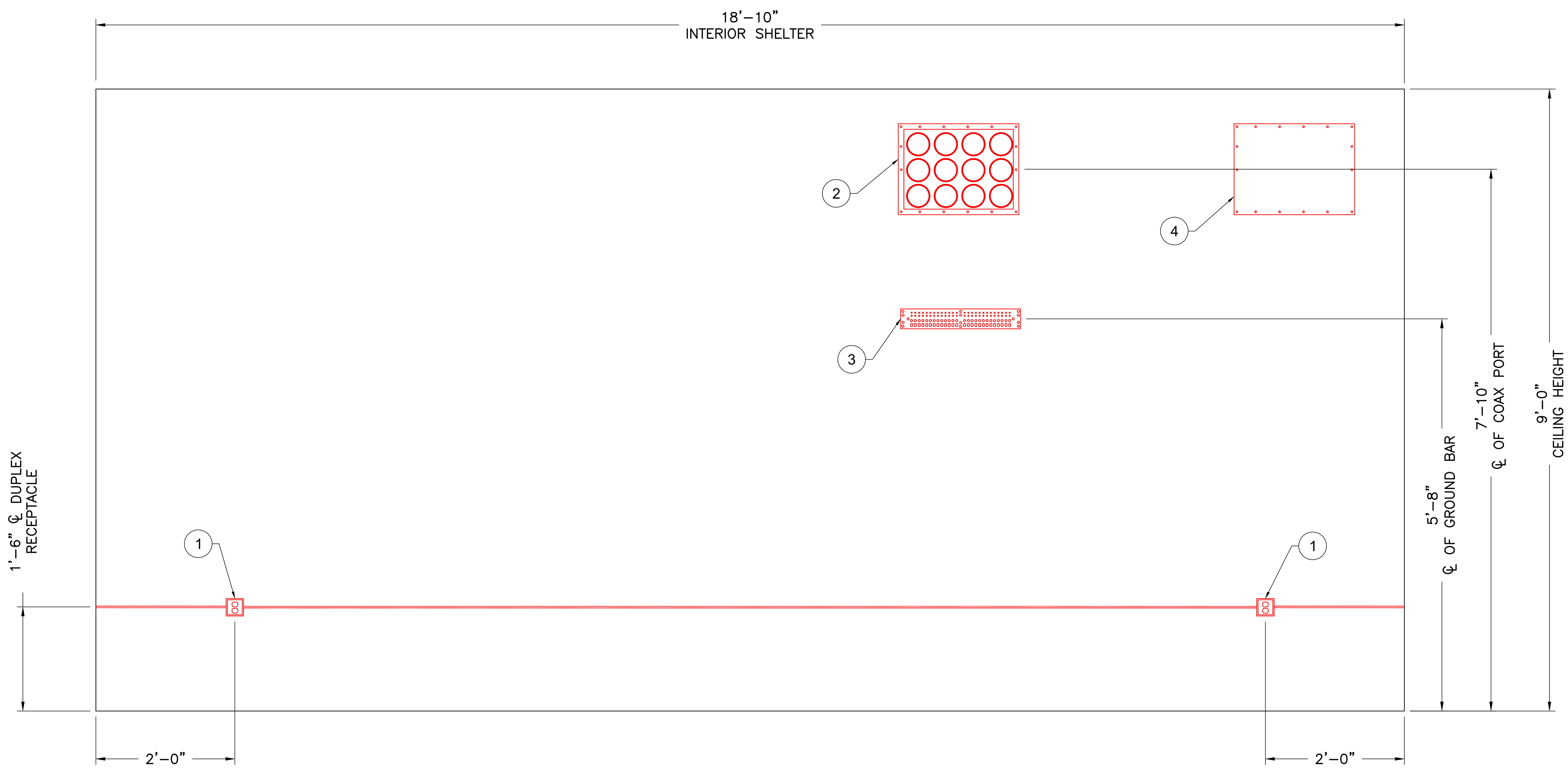
CELLSITE SHELTER KEY



MATERIAL SCHEDULE

SYMBOL	DESCRIPTION	QTY.	MOUNTING LOCATION	MOUNTING HEIGHT
1	20A 120V DUPLEX RECEPTACLE	2	INTERIOR FACE D	1'-6" ℄ ABOVE FLOOR
2	12-HOLE 4" COAX ENTRY PLATE	1	INTERIOR FACE D	7'-10" ℄ ABOVE FLOOR
3	GROUND BAR	1	INTERIOR FACE D	5'-8" ℄ ABOVE FLOOR
4	BLANK ENTRY PLATE	1	INTERIOR FACE D	7'-10" ℄ ABOVE FLOOR



1 C-12 INTERIOR ELEVATION FACE D
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE
4 2 0 1 2 4
3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

NB+C TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

SITE INFORMATION

LEES SUMMIT
NB+C PROJECT #: 101210
LEES SUMMIT ROAD
LEES SUMMIT, MO 64081
JACKSON COUNTY

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PROFESSIONAL STAMP

STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER
PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

ENGINEER

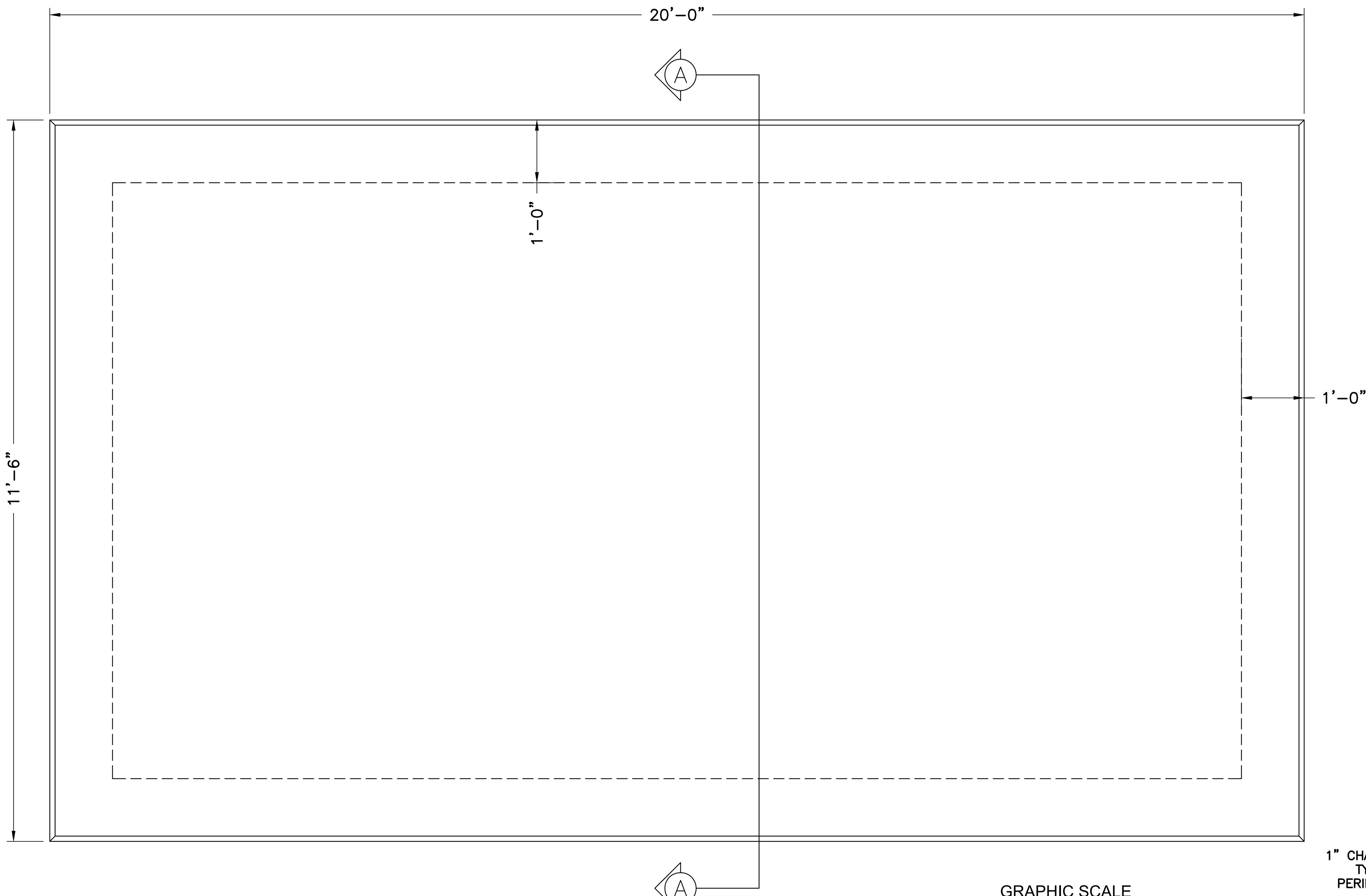
BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

INTERIOR ELEVATION FACE D

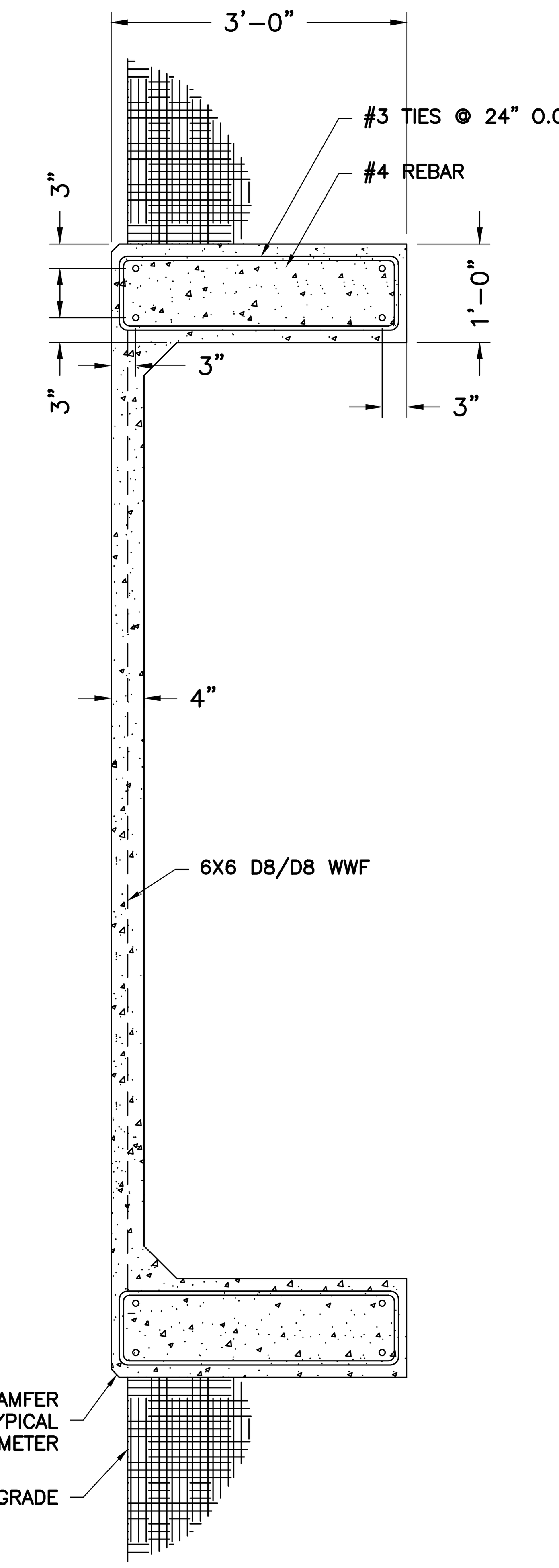
SHEET NUMBER

C-12



1 S-1 SLAB FOUNDATION DETAILS
SCALE: 1" = 1' (22X34)
SCALE: 1/2" = 1' (11X17)

GRAPHIC SCALE
1 INCH = 1 FOOT (22X34)
1/2 INCH = 1 FOOT (11X17)



GENERAL NOTES:

1. SLAB TOLERANCE IS ±1/4".
2. FOOTING TO EXTEND A MINIMUM OF 36" BELOW UNDISTURBED SOIL AND FROST LINE
3. FINAL SITE DESIGN IS THE RESPOSIBILITY OF THE SITE CONTRACTOR
4. SLAB FOUNDATION DESIGNED ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF
5. SLAB FOUNDATION DESIGNED ASSUMING MAXIMUM SOIL PLASTICITY INDEX OF 27
6. CONCRETE STRENGTH SHALL BE A MAXIMUM OF 3000 PSI .

CONTRACTOR NOTE:
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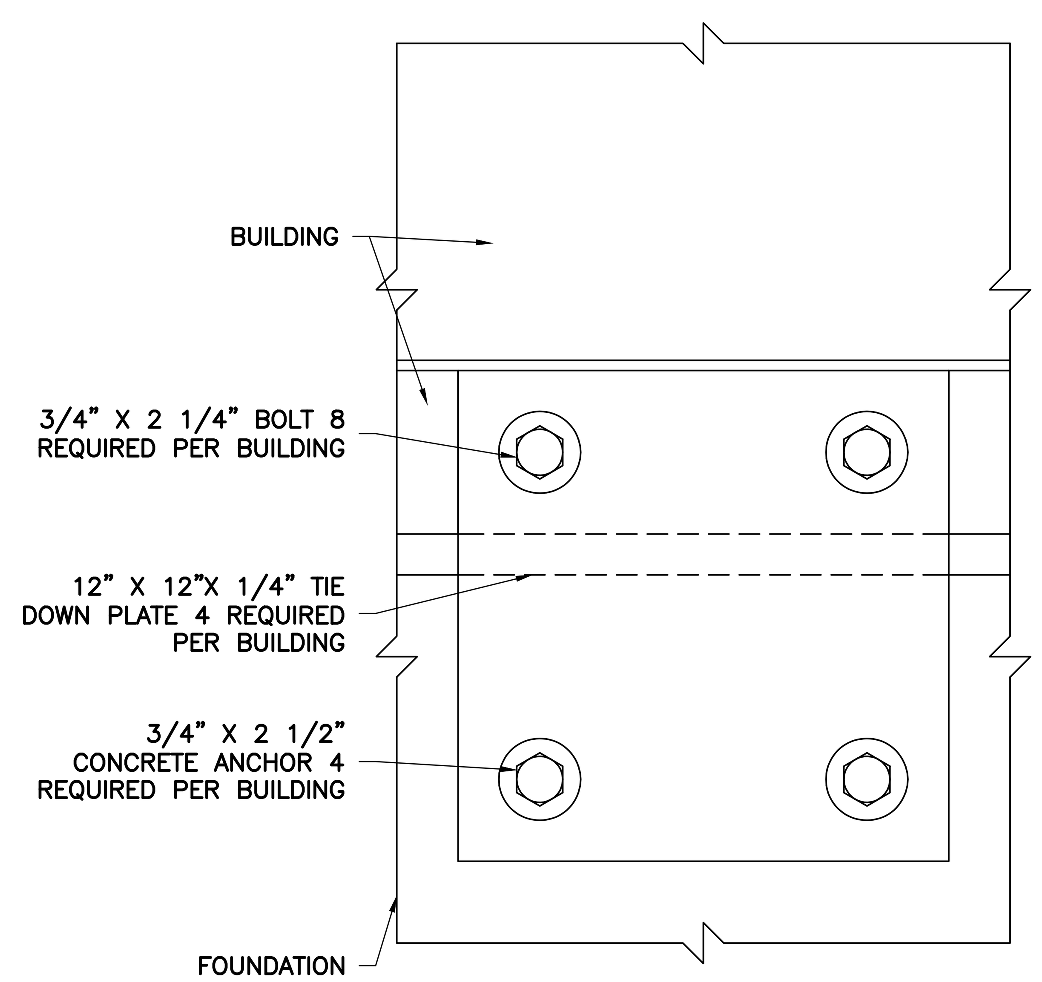
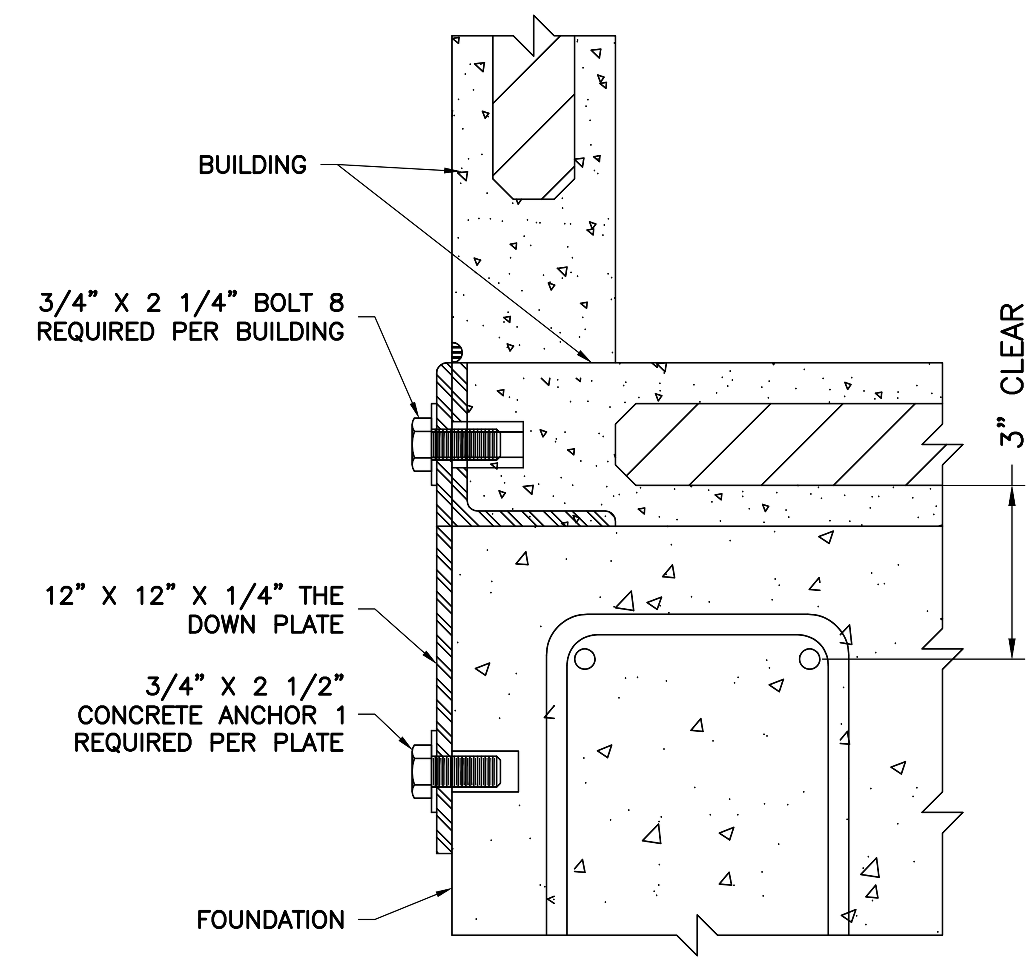
NB+C IS NOT RESPONSIBLE FOR SHELTER DESIGN & DIMENSIONS.

OPTIONAL REINFORCING BAR		
SIZE	GRADE	LAT/LONG SPACING
#3	40	9" C/C
#4	40	16" C/C
#5	40	19" C/C
#3	60	10" C/C
#4	60	18" C/C
#5	60	18" C/C



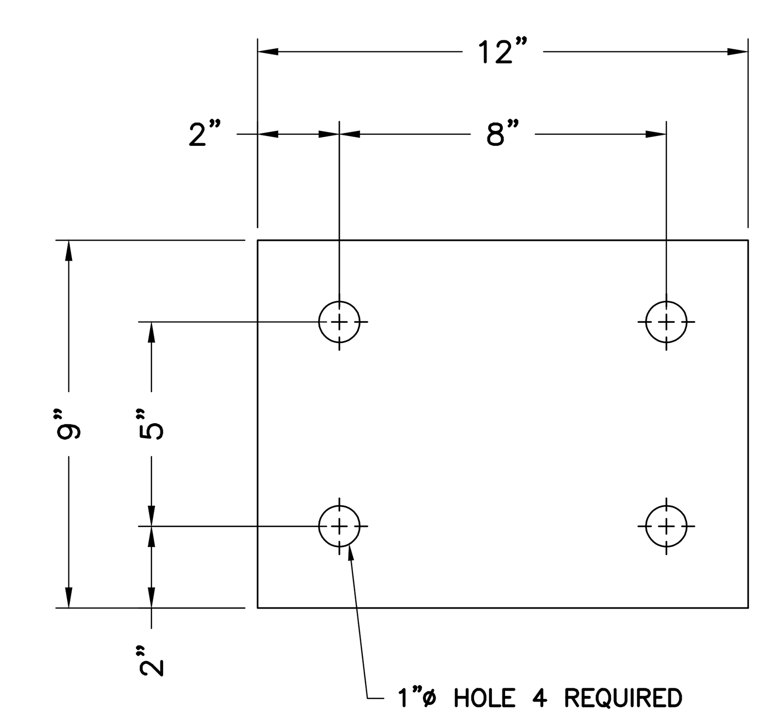
2 S-1 CONNECTION DETAILS FRONT
SCALE: 1" = 1' (22X34)
SCALE: 1/2" = 1' (11X17)

GRAPHIC SCALE
1 INCH = 1 FOOT (22X34)
1/2 INCH = 1 FOOT (11X17)



3 S-1 CONNECTION DETAILS SIDE
SCALE: 1" = 1' (22X34)
SCALE: 1/2" = 1' (11X17)

GRAPHIC SCALE
1 INCH = 1 FOOT (22X34)
1/2 INCH = 1 FOOT (11X17)



4 S-1 TIE DOWN PLATE DETAIL
SCALE: 1" = 1' (22X34)
SCALE: 1/2" = 1' (11X17)

GRAPHIC SCALE
1 INCH = 1 FOOT (22X34)
1/2 INCH = 1 FOOT (11X17)

APPLICANT
CELLSITE SOLUTIONS, LLC

ENGINEER
NB+C TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

SITE INFORMATION
LEES SUMMIT
NB+C PROJECT #: 101210
LEES SUMMIT ROAD
LEES SUMMIT, MO 64081
JACKSON COUNTY

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PROFESSIONAL STAMP
STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

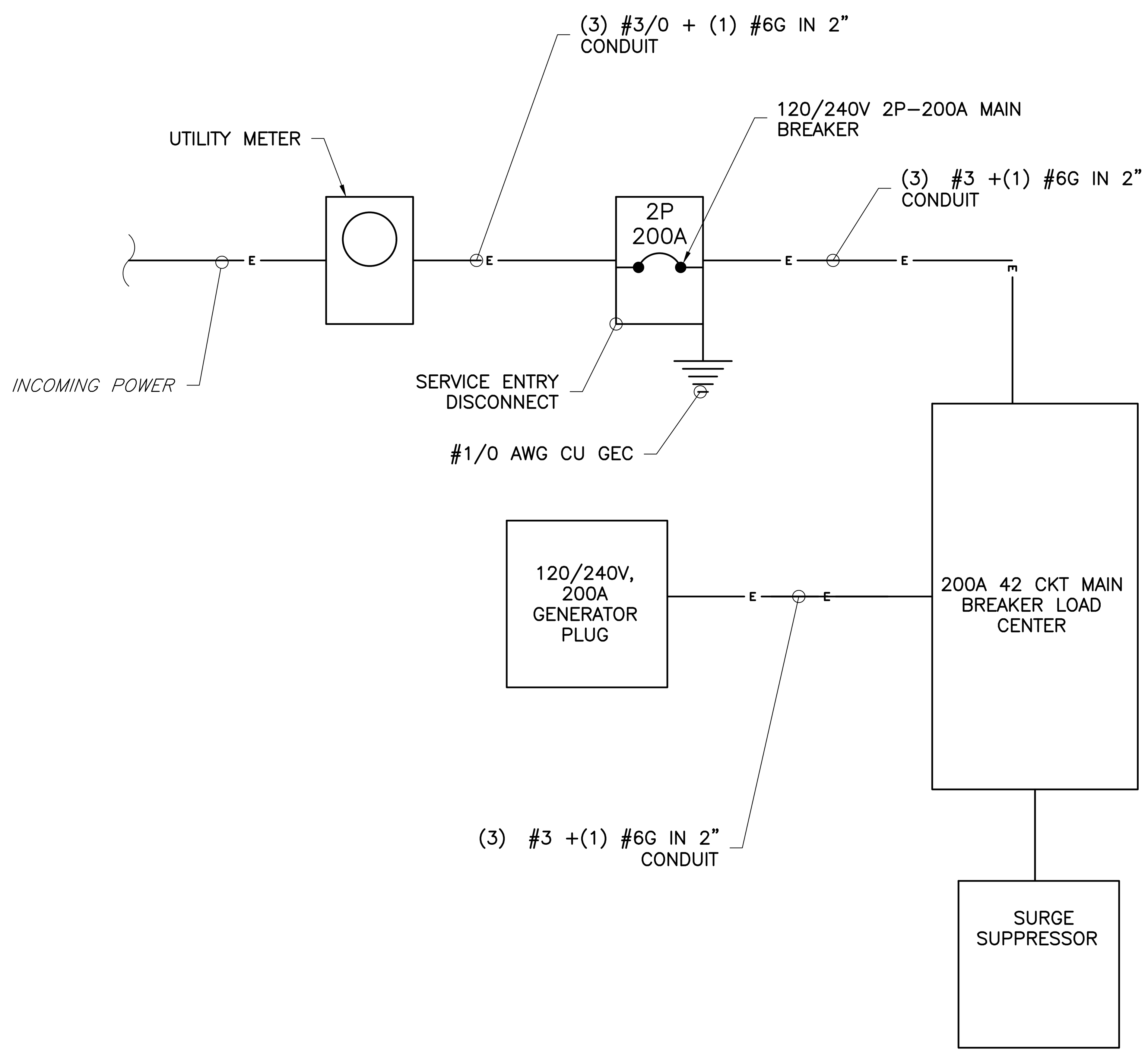
ENGINEER
BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE
FOUNDATION DETAILS

SHEET NUMBER
S-1

NOTES:
1. ALL WORK SHALL COMPLY WITH NEC AND SUBSTATION DESIGN STANDARDS.
2. ELECTRICAL INFORMATION PROVIDED BY CLIENT.

NOTES:
THE PANEL SCHEDULE TO BE PROVIDED BY CELLSITE SOLUTIONS



1 / E-1 ELECTRICAL ONE-LINE DIAGRAM
NOT TO SCALE

TO BE PROVIDED BY CELLSITE SOLUTIONS

2 / E-1 ELECTRICAL PANEL SCHEDULE
NOT TO SCALE

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

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STATE OF MISSOURI
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PROFESSIONAL ENGINEER
01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

PANEL SCHEDULE & ONE LINE DIAGRAM

SHEET NUMBER

E-1

TO BE PROVIDED BY
CELLSITE SOLUTIONS

1
E-2
PUNCH BLOCK ALARM DETAILS
NOT TO SCALE

APPLICANT

CELLSITE SOLUTIONS, LLC

ENGINEER

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STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER
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PROFESSIONAL ENGINEER
01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

PUNCH BLOCK ALARM DETAILS

SHEET NUMBER

E-2

CONTRACTOR NOTE:
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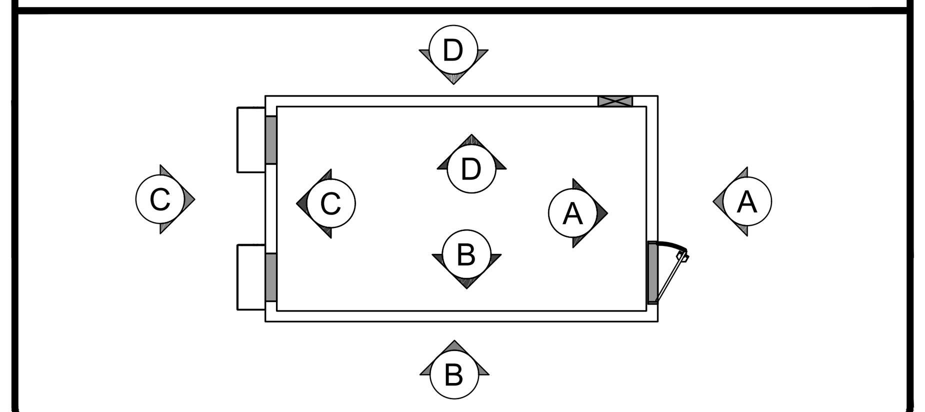
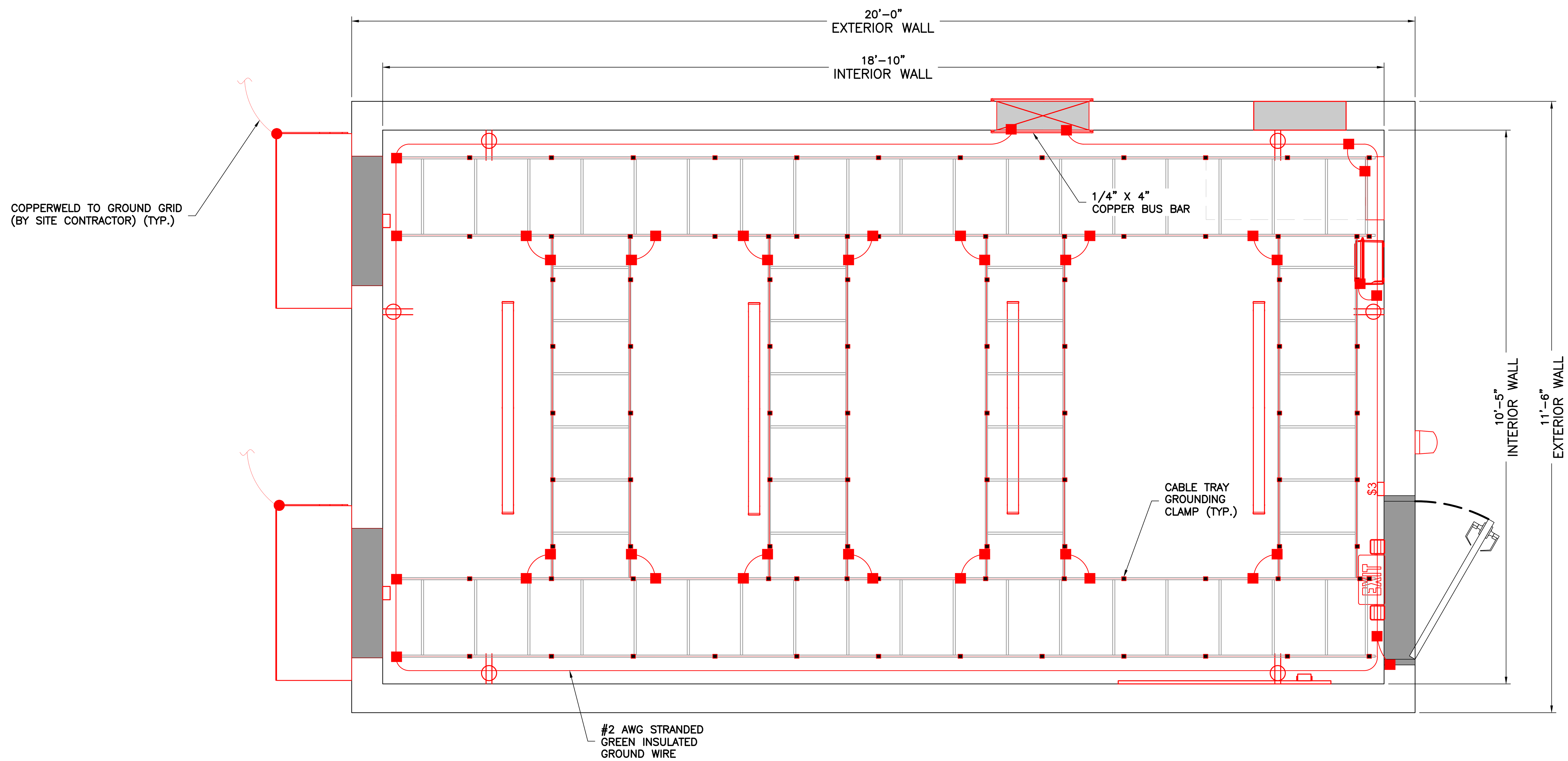
NB+C IS NOT RESPONSIBLE FOR SHELTER DESIGN & DIMENSIONS.

NOTES:
1. ALL METALLIC OBJECTS SHALL BE BONDED TO THE GROUND SYSTEM.
2. PROVIDE BONDING JUMPER ACROSS STEEL STRUCTURAL CONNECTIONS WHERE FASTENER IS LESS THAN 1/2 INCH DIAMETER.
3. ALL WORK SHALL COMPLY WITH NEC AND SUBSTATION DESIGN STANDARDS.

CELLSITE SHELTER KEY





GROUNDING LEGEND

	COAXIAL CABLE SHIELD GROUND KIT CONNECTION
	COMPRESSION FITTING CONNECTION
	EXOTHERMIC WELD CONNECTION
	5/8"X10' COPPER–CLAD STEEL GROUND ROD
	5/8"X10' COPPER–CLAD STEEL GROUND ROD WITH INSPECTION WELL
	PROPOSED GROUND WIRING
	EXISTING GROUND WIRING
	TINNED COPPER GROUND BAR 1/4"X4"X12" OR 1/4"X4"X20"
CGB	COLLECTOR GROUND BAR
MGB	MAIN GROUND BAR

1 / G-1 EQUIPMENT GROUNDING PLAN
SCALE: 3/4" = 1' (22X34)
SCALE: 3/8" = 1' (11X17)

GRAPHIC SCALE
4 2 0 1 2 4
3/4 INCH = 1 FOOT (22X34)
3/8 INCH = 1 FOOT (11X17)

Know what's below. Call before you dig.

APPLICANT
CELLSITE SOLUTIONS, LLC

ENGINEER
NB+C TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

SITE INFORMATION
LEES SUMMIT
NB+C PROJECT #: 101210
LEES SUMMIT ROAD
LEES SUMMIT, MO 64081
JACKSON COUNTY

DESIGN RECORD

REVISIONS

REV	DATE	DESCRIPTION	BY
1	01/05/26	COMMENTS	CCC
0	11/04/25	FINAL CDS	GS
B	10/28/25	COMMENTS	CCC
A	10/24/25	PRELIMINARY CDS	GS

PROFESSIONAL STAMP
STATE OF MISSOURI
BRADLEY R. NEWMAN
NUMBER PE-2013026283
PROFESSIONAL ENGINEER
01/05/26

ENGINEER
BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE
FLOOR PLAN - SHELTER GROUNDING

SHEET NUMBER
G-1

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:43

Product data sheet
Characteristics

QO142M200P

Load center, QO, 1 phase, 42 spaces, 52 circuits, 200A convertible main breaker, PoN, NEMA1

Main

Marketing Trade Name	QO
Product Type	Load Center
Cover Type	Order separately

Complementary

Tightening Torque	Cover 20 lb.in
PoN Convertible Mains (lugs)	PoN Convertible Mains (breaker)
Rated Current	200 A
Number of Spaces	42
Max Short Circuit Current Rating	22 kA
Maximum Number of Single Pole Circuits	52
Maximum Number of Tandem Breakers	10
Number of Phases	1 phase 3 wires
Voltage Rating	120/240 V AC
Wire Size	AWG 4...300 kcmil aluminium/copper
Ground Bar	Grounding bar (ordered separately)
Electrical Connection	Lugs
Busbar Material	Tin plated copper: busbar
Enclosure Material	Welded sheet steel
Surface Finish	Baked enamel Gray
Box Number	11
Height	38.0 in (965 mm)
Width	14.3 in (362 mm)

Environment

Enclosure Rating	NEMA 1 indoor enclosure
Ambient Air Temperature for Operation	23 °F (-5 °C) 104 °F (40 °C)
Product Certifications	UL Listed

Ordering and shipping details

Category	US1DE3A10001
Discount Schedule	DE3A
GTIN	785901324386
Returnability	Yes
Country of origin	MX

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.30 in (10.922 cm)
Package 1 Width	14.80 in (37.592 cm)
Package 1 Length	38.70 in (98.298 cm)
Package 1 Weight	22.350 lb(US) (10.138 kg)
Unit Type of Package 2	PAL
Number of Units in Package 2	27
Package 2 Height	40.00 in (101.600 cm)
Package 2 Width	42.00 in (106.680 cm)
Package 2 Length	48.00 in (121.920 cm)
Package 2 Weight	655.0005 lb(US) (297.103 kg)

Offer Sustainability

Packaging without single use plastic	No
Packaging made with recycled cardboard	No
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
Take-back	No
Carbon footprint (kg CO2 eq, Total Life cycle)	78

Contractual warranty

Warranty	18 months

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LICENSE #2013026283

SHEET TITLE

LOAD CENTER DETAIL

SHEET NUMBER

D-1

TRANSTECTOR®
an INFINITE brand

Keeping Your Power Online

AC Surge Protector SPD APEX IMAX Panel 120/240 Vac Split-Phase MOV 160 kA, UL 1449 5th Ed. Type 2

1101-808-MM-1

Surge Protection Specification

Description	Minimum	Typical	Maximum	Units
VPR 8/20µs				
L - N			700	Vpk
Response Time			25	ns
SCCR (Short Circuit Current Rating)		65		kAIC

Mechanical Specifications

Size		
Height	12.5 in	[317.5 mm].
Width	10.5 in	[266.7 mm]
Depth	6.5 in	[165.1 mm]
Weight	14 lbs	[6.35 kg]
Housing Material and Plating	Fiberglass	

Environmental Specifications

Temperature Range (Operational)	-40 to +75 deg C
Temperature Range (Storage)	-40 to +75 deg C
Environmental Protection Rating	NEMA 4
Humidity	90% non-condensing

Installation

Mount Type	Panel
Service Wiring Terminal	#4 to #1/0 AWG
Status Indication Terminal	#14 to #22 AWG

Compliance Certifications

UL Compliant	Yes
Certifications	UL 1449 5th Ed. NOM

Transtector Systems specializes in protection of highly sensitive, low voltage equipment through its patented, non-degrading silicon diode technology and custom filters. Our power quality expertise translates into a diverse product offering including AC, DC, and signal applications as well as integrated cabinets, power distribution panels and EMP hardened devices.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: AC Surge Protector SPD APEX IMAX Panel 120/240 Vac Split-Phase MOV 160 kA, UL 1449 5th Ed. Type 2 1101-808-MM-1

URL: https://www.transtector.com/ac-surge-protector-spd-apex-imax-panel-1101-808-mm-1-p.aspx

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. Transtector reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Transtector does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Transtector does not assume liability arising out of the use of any part or document.

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01/05/26

ENGINEER

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STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

AC SURGE SUPPRESSOR DETAIL

SHEET NUMBER

D-2

BARD WALL-MOUNT™ Air Conditioners 1.5 - 6 Ton Capacity W18A - W72A Models 208V - 460V 60hz

11EER W18A-W60A Series WALL-MOUNT™
11EER W18L-W36L Series WALL-MOUNT™
10EER W72A Series WALL-MOUNT™

The Bard Wall-Mount Air Conditioner is an energy efficient self contained system, which is designed to offer maximum indoor comfort at a minimal cost without using valuable indoor floor space or outside ground space. This unit is the ideal product for versatile applications such as: new construction, modular offices, school modernization, telecommunication structures, portable structures, correctional facilities and many more. Factory or field installed accessories are available to meet specific job requirements for your unique application.

- Complies with efficiency requirements of ANSI/ASHRAE/IES 90.1-2019.
- Certified to AHRI Standard 390-2021 for SPVU (Single Package Vertical Units).
- Intertek ETL Listed to Standard for Safety Heating and Cooling Equipment ANSI/UL 1995/CSA 22.2 No. 236-05 Fourth Edition.
- Commercial Product - Not intended for residential applications.
- Bard is an ISO 9001:2015 Certified Manufacturer.
- The AHRI Certified® mark indicates Bard Manufacturing Company participation in the AHRI Certification program. For verification of individual certified products, go to www.ahridirectory.org.

BARDHVAC.COM

FORM NO. S3583-0723

Climate Control Solutions

Cabinet and Clearance Dimensions - W18L to W36L Left Side Control Panel Units

CLEARANCES REQUIRED FOR SERVICE ACCESS AND ADEQUATE CONDENSER INLET AIRFLOW		
MODELS	LEFT SIDE	RIGHT SIDE
W18LB, W24LB, W30LB, W36LB	20"	15"

NOTE: For side-by-side installation of two (2) WL models, there must be 20" between units. This can be reduced to 15" by using a WL model (left side compressor and controls) for the left unit and WA (right side compressor and controls) for right unit.

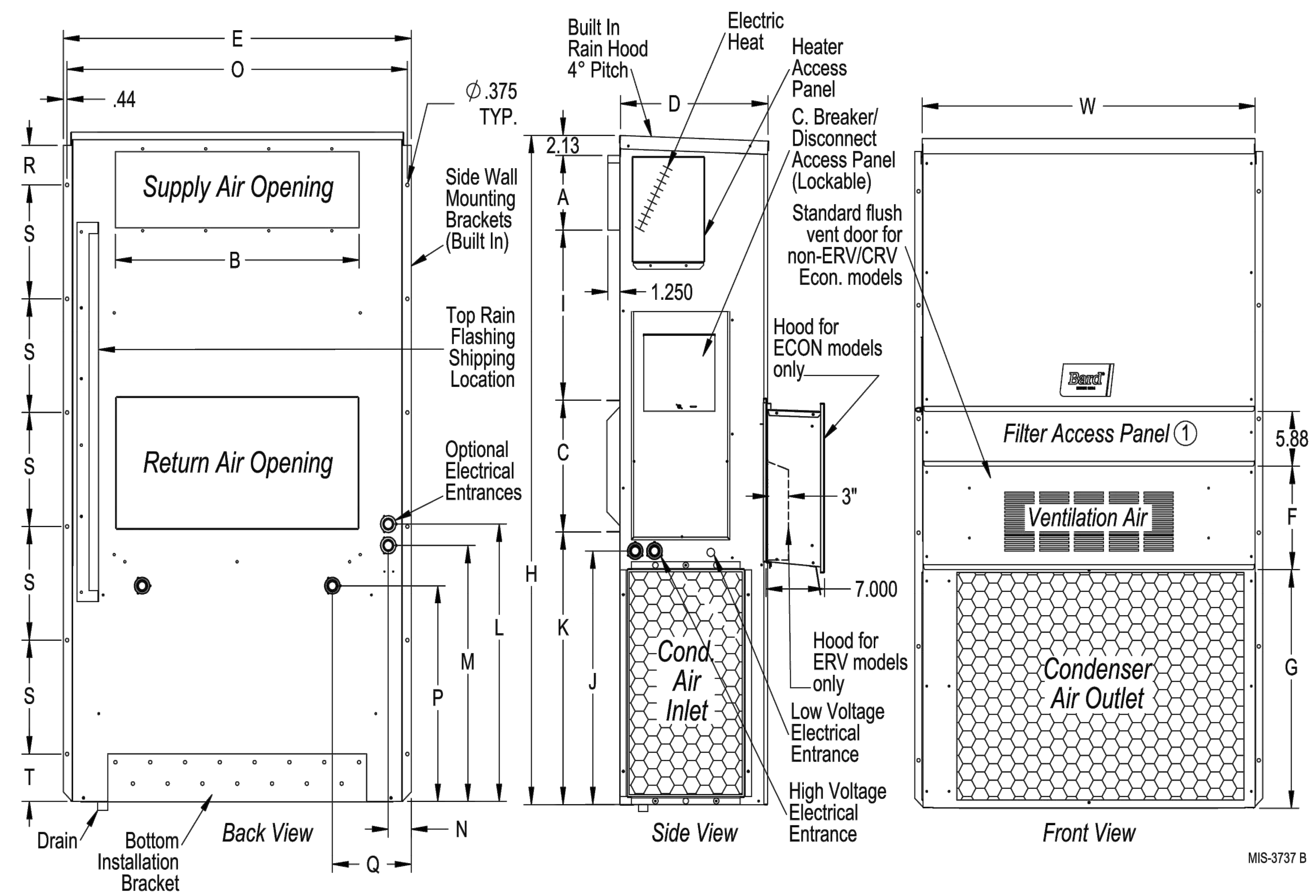
1.) Follow all national, state, and local codes and regulations regarding the installation of heating and cooling equipment regarding Single Packaged Vertical Units (SPVU) including electrical access clearances.
2.) Field ventilation installation with the unit installed requires 40" on the left or right side of the unit.
3.) Bard recommends a minimum of 10 ft. between the unit front condenser air outlet and solid objects including fences, walls, bushes, and other airflow obstructions.
4.) Bard recommends a minimum of 15 ft. between the condenser air outlets of 2 units that are facing each other.

MINIMUM CLEARANCES REQUIRED TO COMBUSTIBLE MATERIALS		
MODELS ①	SUPPLY AIR DUCT FIRST THREE FEET	CABINET
W18LB, W24LB	0"	0"
W30LB, W36LB	1/4"	0"

① Refer to the Installation Manual for more detailed information.

DIMENSIONS OF W18-36L BASIC UNIT FOR ARCHITECTURAL & INSTALLATION REQUIREMENTS (NOMINAL)

MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN																
				A	B	C	B	E	F	G	I	J	K	L	M	N	O	P	Q	R	S	T
W18LB W24LB	33.300	17.125	74.563	7.88	19.88	11.88	19.88	35.00	10.88	29.75	20.56	30.75	32.06	33.25	31.00	2.63	34.13	26.06	10.55	3.94	12.00	9.00
W30LB W36LB	38.200	17.125	74.563	7.88	27.88	13.88	27.88	40.00	10.88	29.75	17.93	30.75	32.75	33.25	31.00	2.75	39.13	26.75	9.14	3.94	12.00	9.00



APPLICANT: CELLSITE SOLUTIONS, LLC

ENGINEER: NB+C TOTALLY COMMITTED.
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PROFESSIONAL STAMP: STATE OF MISSOURI BRADLEY R. NEWMAN NUMBER PE-2013026283 PROFESSIONAL ENGINEER 01/05/26

ENGINEER:
BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE: **HVAC DETAIL**

SHEET NUMBER: **D-3**

LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

INTENDED USE — Available in several color temperatures, lumen packages and lengths. Ideal for use in commercial, retail, office, warehouse and display applications. **Certain airborne contaminants can diminish integrity of acrylic and/or polycarbonate. Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.**

Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. **Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.**

CONSTRUCTION — Compact-design channel and cover are formed from code compliant, 22 gauge cold-rolled steel.

SENSOR SWITCH JUST ONE TOUCH TECHNOLOGY — Single room control wireless technology available for easy install and commissioning to aid in code compliance. The JOT option enables the fixture with Just One Touch pairing capability. The JOTVTX15 option features a luminaire-embedded occupancy and ambient light sensor allows the luminaire to power off when the space is unoccupied or when enough ambient light is entering the space.

SENSOR SWITCH VISIBLE LIGHT PROGRAMMING TECHNOLOGY — Standalone sensor programming via VLP mobile app and smart device's camera flash from up to 8ft away.

FINISH — High-gloss, baked white enamel (standard).

OPTICS — LEDs provide 80+ color rendering index (CRI) at 3500K, 4000K and 5000K. Diffuse acrylic lens with ultra-sonically welded end caps provides smooth, linear illumination.

ELECTRICAL — Luminaire Surge Protection Level: Designed to withstand up to 2.5kV/0.75kA per ANSI C82.77-5-2015. For applications requiring higher level of protection additional surge protection must be provided.

Driver is standard 0-10V dimming class 2.

Optional internal pluggable wiring harness for reduced labor cost in row mounting applications. (See PLR_ ordering information on page 5.)

INSTALLATION — Fixture may be surface or suspension mounted with appropriate mounting options (see accessories). Easy to install row aligner bracket included for continuous row mounting.

LISTINGS — CSA certified to US and Canadian safety standards and listed suitable for damp locations. Minimum starting temperature of -40°F (-40°C). Maximum ambient operating temperature of 104°F (40°C) for 4ft models and 95°F (35°C) for 8ft models. See notes for controls temperature restrictions.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

LED Strip Light

CSS

DAMP LOCATION™ C US DIMMABLE LED JOT JUST ONE TOUCH VLP

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or XPoint™ Wireless control networks marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.
*See ordering tree for details

CS CONTRACTOR SELECT™ Looking for Contractor Select readily available configurations? Click here to visit Contractor Select™ spec sheet or go to www.contractorselect.com

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative.

Example: CSS L96 AL04 MVOLT SWW3 80CRI

Series	Length	Lumen Output	Voltage	Color temperature	Color rendering index
CSS Contractor Single Strip LED	L48 48"	4000LM 4000 Lumens ‡ AL03 Switchable lumens, 3000LM / 4000LM / 5000LM	MVOLT 120-277V 347 347V ‡	35K 3500K ‡ 40K 4000K ‡ 50K 5000K ‡ SWW3 Switchable white, 35K / 40K / 50K	80CRI 80 CRI
	L96 96"	8000LM 8000 Lumens ‡ AL04 Switchable lumens, 6000LM / 8000LM / 10000LM			

Options

Emergency Battery: ‡

IE7WCP	Emergency battery pack, 7W, CA Title 20 Noncompliant
IE10WCPHE	Emergency battery pack, 10W, Certified in CA Title 20 MAEDBS

Plug-in Wiring: ‡

PLR__	Plug-in wiring, see page 5 for ordering information
PLR1LVG	Plug-in wiring, low voltage dimming

JOT Enabled Wireless Controls: ‡

JOT	Wireless room control with "Just One Touch" pairing
JOTVTX15	Wireless occupancy sensor with "Just One Touch" pairing

VLP Enabled Controls: ‡

VTX15FADC	Vertex sensor with Visible Light Programming; On/Off Occupancy with Auto Dimming Photocell (default)
VTX15FANL	Vertex sensor with Visible Light Programming; High/Low/(Off) Occupancy Dimming with Auto Dimming Photocell (default)

Individual Controls: ‡

SFR30CSS	Factory installed 360°, large motion, high bay sensor, SFR 30
SFR7CSS	Factory installed 360°, small motion, low bay sensor, SFR 7 ‡

Wire Guard (ships separately):

WG	Wire Guard ‡

NOTE: ‡ indicates option chosen has ordering restrictions. Please reference ordering restrictions chart.

Accessories: *Order as separate catalog number.*

HC36 M12	Hanger chain, 36" (1 pair)
ZACVH M100	Adjustable 10' aircraft cable with Y hanger (1 pair)
SQ_	Swivel stem hanger (specify length in 2" increments up to 48")
rPP20D	nLight® air dimming/switching module
SFR30CSS	Field installed 360°, large motion, high bay sensor, SFR 30 ‡
SFR7CSS	Field installed 360°, small motion, low bay sensor, SFR 7 ‡
Y J10	Y hanger in multiples of 10 (five pair)
WGCSS	Wire Guard with Mounting hardware (one 4ft)
MNLK JBOXCVR M12	Junction box cover and hardware, white

‡ Option Value Ordering Restrictions

Option value	Restriction
35K, 40K, 50K	Not available with ALO lumen packages.
4000LM, 8000LM	Not available with SWW3.
Emergency Battery	Not available with 347V or PLR
JOT Enabled Controls	Not available with AL03, AL04, 347V or SWW3. Minimum starting temp of 14°F (-10°C). Maximum operating temp of L48 at 95°F (35°C) & L96 at 86°F (30°C). Controls contained in endcap.
VLP Enabled Sensors	Not available with AL03, AL04, 347V or SWW3. See page 5 for default programming and coverage pattern information. Sensors contained in endcap.
SFR Sensors	Not available with 347V. Can only be mounted at the end of continuous row mount applications. On/off function only. Minimum starting temp of 14°F (-10°C). Sensors mount to end of fixture.
Wire Guard	Does not cover SFR controls. Not recommended for use with endcap integrated JOT or VLP enabled controls due to potential detection obstruction.
PLR__ & PLR1LVG	Not available with Emergency or Controls

ACCESSORY BATTERY PACKS - SUITABLE FOR FIELD INSTALLATION

are ***Remote mount outside the fixture.***

Battery Part Number	CA Title 20	Self Diagnostics
ILB CP10 A	No	No
ILB CP10 HE A	Yes	No
ILBLP CP10 HE SD A	Yes	Yes
LEM04 A	Yes	No
LEM08 A	Yes	No

How to Estimate Delivered Lumens in Emergency Mode
Use the formula below to estimate the delivered lumens in emergency mode
Delivered Lumens = 1.25 x P x LPW
P = Output power of emergency driver. P = 10W for IE10WCPHE
LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

The LPW rating is also available at Designlight Consortium.

APPLICANT

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ENGINEER

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SITE INFORMATION

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STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

INTERIOR LED LIGHT DETAIL

SHEET NUMBER

D-4

TAMLITE LIGHTING

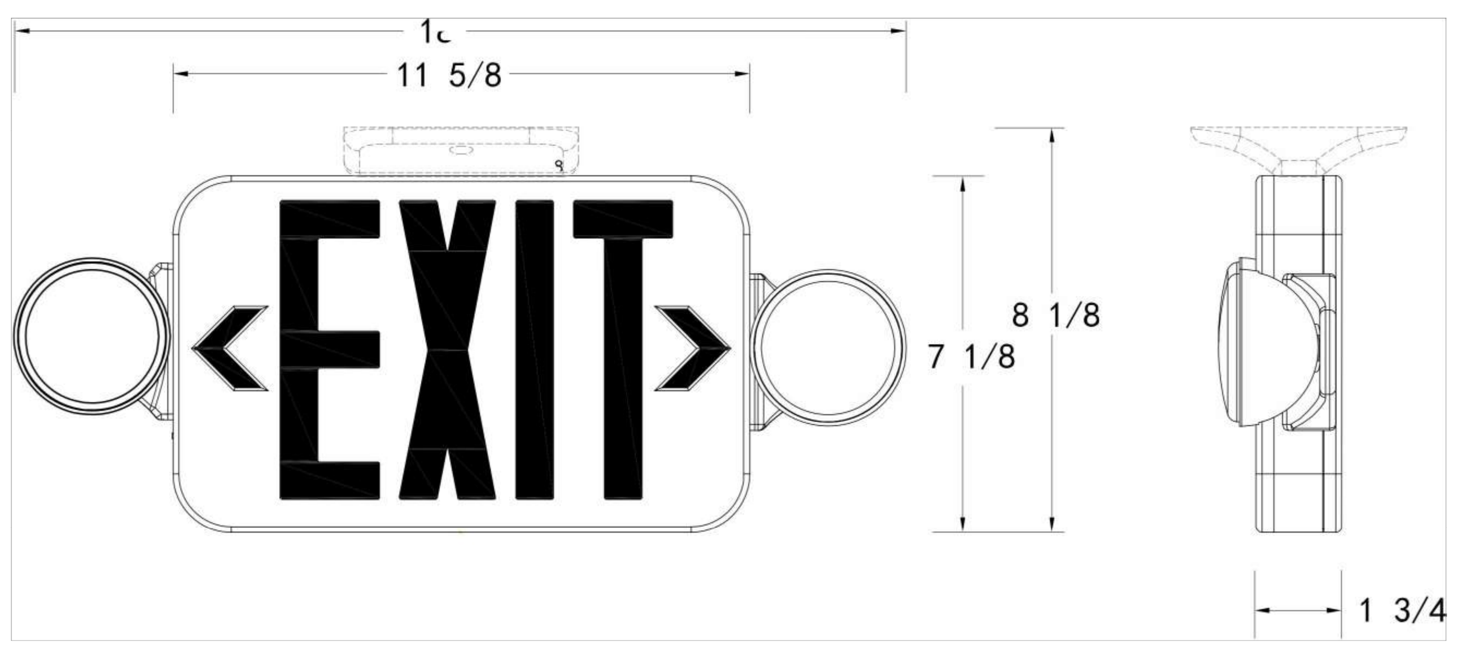
MODEL :		TYPE
PROJECT :		
PREPARED BY :	DATE :	

SERIES SPECIFICATIONS — LXPC SERIES

The LXPC series thermoplastic LED exit sign and emergency lighting combination unit that offers long lamp life, energy efficiency and uniform illumination with round LED light heads.

UL LISTED · DAMP LOCATION · 5 YEAR LIMITED WARRANTY

LINE DRAWING



CONSTRUCTION

Housing
Injection molded, engineering grade, UV-stabilized, UL94-0, high impact resistant thermoplastic

Transfer switch
Internal solid-state transfer switch automatically connects the internal battery to lamp heads

Chevrons
Easy snap out chevron directional indicators

Remote Capacity*
3.44W

Illumination
Two LED lamp heads with long life Red or Green LED letters.

Charger
Fully automatic solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours.

Remote Compatiblity*
LSRH1 and LSRH2 - 3.6 Series

APPLICATION AND PERFORMANCE SPECIFICATION INFORMATION IS SUBJECT TO CHANGE WITHOUT NOTIFICATION

11675 SW TOM MACKIE BLVD. | PORT ST. LUCIE, FL 34987 | PH: 772.878.4944 | TAMLITEUSA.COM

TAMLITE LIGHTING

MODEL :		TYPE
PROJECT :		
PREPARED BY :	DATE :	

ELECTRICAL SPECIFICATIONS

Battery Type
Rechargeable NiCad

Low Voltage Disconnect
Prevents battery from deep discharge

Operating Voltage
120/277

Emergency Illumination
Minimum 90 Minutes

LED Indicator
Charge rate/power "ON" and push to test switch

Battery Recharge Time
24 Hours

Battery Discharge Time
1.5 Hours

AMPERAGE/WATTAGE

CATALOG NUMBER	INPUT WATTS (W)		INPUT AMPS (A)	
	120V	277V	120V	277V
LXPC-RED	5.0	4.8	0.044	0.017
LXPC-GREEN	3.9	3.9	0.032	0.015

MOUNTING SPECIFICATIONS

Surface mount via "easy connect" backplate, which fits most standard junction boxes

Snaps into place making internal electrical connections

Conduit mounts using knockouts on the backplate or on top of the housing

Suitable for wall or ceiling mount

Options

SD
Self-diagnostic test feature continually diagnoses unit's performance and tests system to ensure reliable operation and to meet electrical and life safety codes (Available in RC and HL versions)

HL
Two high-lumen LED lamp heads

RC
Remote capable option will run two LED remote heads for 90 minutes.

APPLICATION AND PERFORMANCE SPECIFICATION INFORMATION IS SUBJECT TO CHANGE WITHOUT NOTIFICATION

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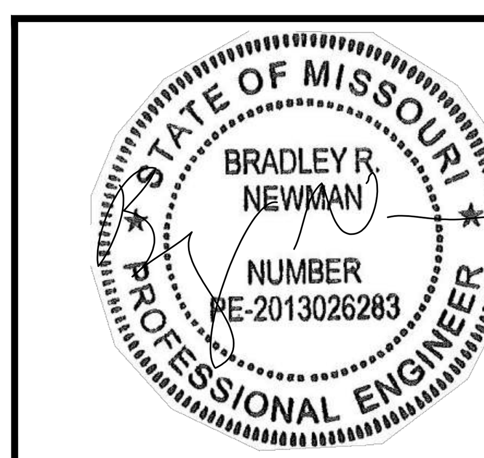


01/05/26

ENGINEER

BRAD R. NEWMAN, P.E.
STATE OF MISSOURI
PROFESSIONAL ENGINEER
LICENSE #2013026283

SHEET TITLE

EXIT - EMERGENCY LIGHT DETAIL

SHEET NUMBER

D-5

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:43

sabre

SO 569487

NOTICE

ALL PARTS ARE TO BE INVENTORIED AND ANY SHORTAGES REPORTED
WITHIN 48 HOURS OF DELIVERY TO THE CONTRACTING ERECTOR.
SHORTAGES REPORTED AFTER THIS TIME PERIOD
WILL BE CHARGED TO THE CONTRACTOR.
CALL 712-258-6690 TO REACH THE SABRE CONTRACTS DEPARTMENT.

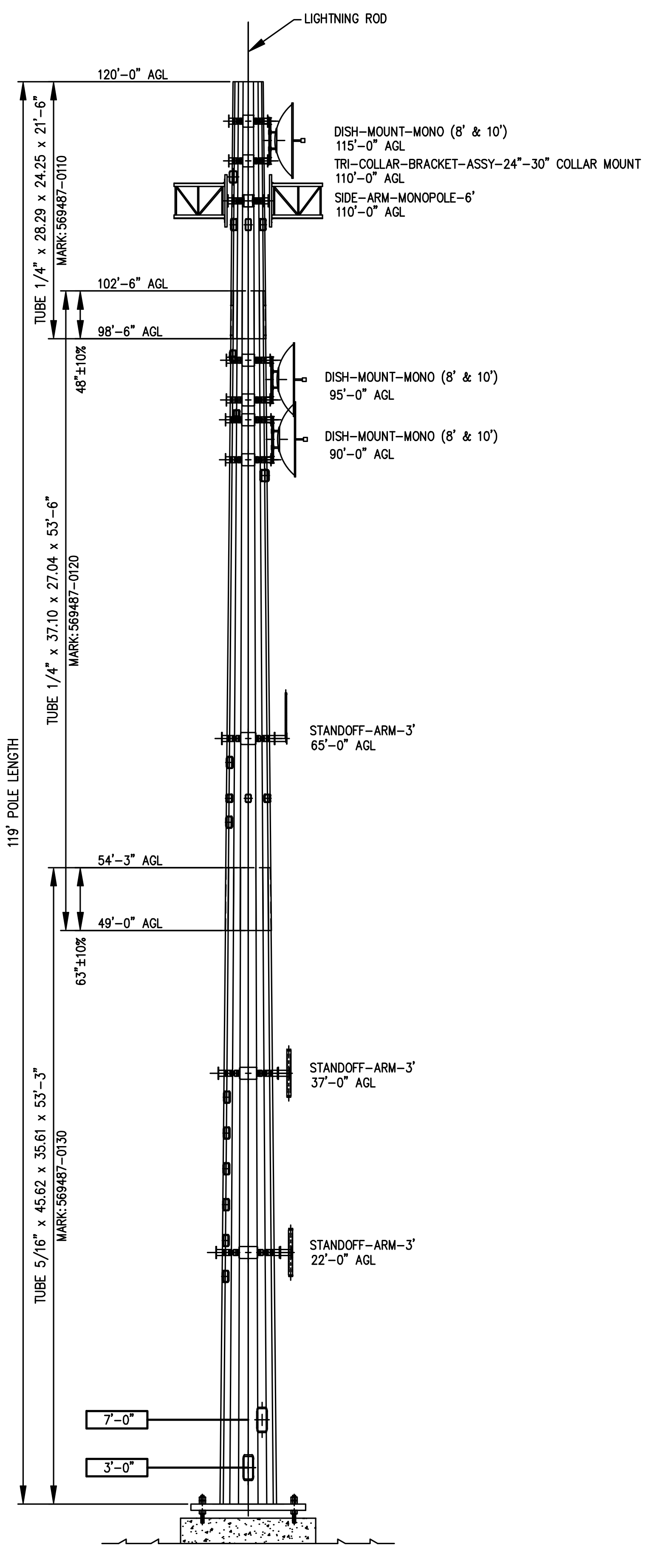
STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER

1/13/26

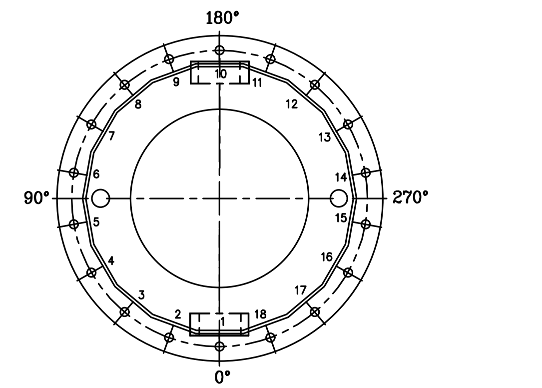
AVISO

TODAS LAS PARTES SERAN INVENTARIADAS Y LOS FALTANTES REPORTADOS POR EL CONTRATISTA
DENTRO DE LAS 48 HORAS A PARTIR DE LA ENTREGA.
LOS FALTANTES REPORTADOS DESPUES DE 48 HORAS SERAN CARGADOS AL CONTRATISTA.
PARA ACLARACIONES LLAME A:
SABRE-DEPARTAMENTO DE CONTRATACIONES
(001) 712 258-6690

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:44

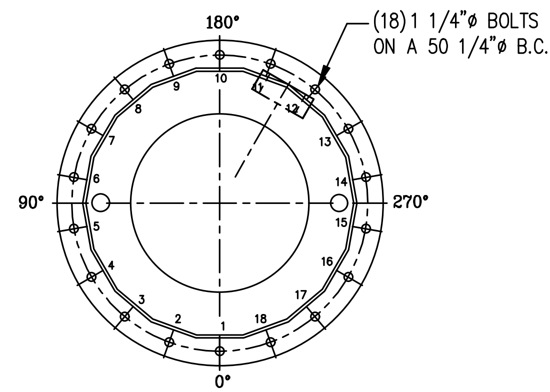


POLE ELEVATION



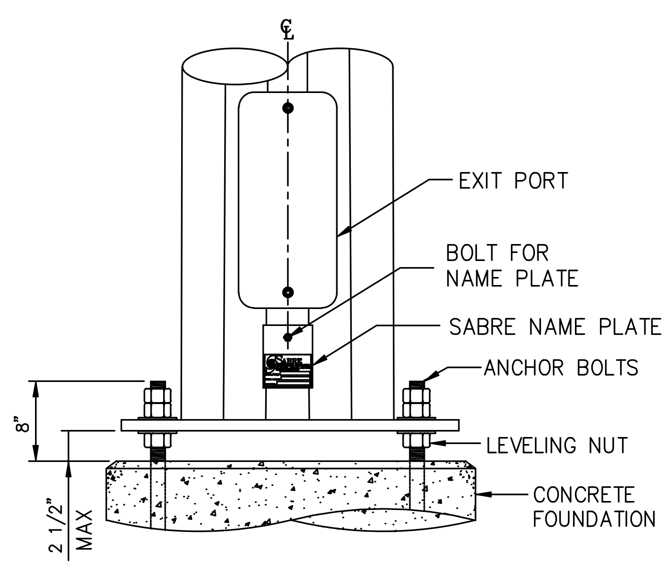
ACCESS PORT @ 3'-0"

ORIENT POLE IN THE FIELD TO SUIT



ACCESS PORT @ 7'-0"

ORIENT POLE IN THE FIELD TO SUIT



BASE INSTALLATION

NOTICE: ALL PARTS ARE TO BE INVENTORIED AND ANY SHORTAGES REPORTED WITHIN 48 HOURS OF DELIVERY. SHORTAGES REPORTED AFTER THIS TIME PERIOD WILL BE CHARGED TO THE CONTRACTOR.

CALL 800/369-6690 ASK FOR THE CONTRACTS DEPARTMENT

DRAWING LIST

MONOPOLE ERECTION	569487-MM
MONOPOLE FOUNDATION(S)	569487-F1
MONOPOLE FABRICATION	569487-01
MOUNTS: TRI-COLLAR	C10112377 C10112378
PIPE MOUNT (8' -10' DISHES)	C10117008
6' SIDEARM	C10119106C C10151106 C10179001
3' STANDOFF ARM	C10114003
LIGHT-SIDELIGHT MOUNT	C30002002
SAFETY CLIMB EXTENSION KIT	C30012089
SAFETY CLIMB EXTENSION KIT	C30012088
LIGHTNING ROD CCS 5/8" X 4'	9025689
BILL OF MATERIALS	BOM-1

STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER

1/13/26

WIND INDUCED VIBRATIONS, SUCH AS VORTEX SHEDDING AND HARMONIC OSCILLATION/RESONANCE, OF STRUCTURES OF ALL TYPES DUE TO UNPREDICTABLE INTERACTION WITH WIND AND SURROUNDING STRUCTURES, EXPOSURE AND TERRAIN RARELY OCCUR. THE OWNER'S MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATIONS FOR VIBRATION AND ANY RESULTING LOOSENING OF CONNECTING HARDWARE OR DAMAGE TO THE STRUCTURE.

ANCHOR ROD INSTALLATION DETAIL

ALL ANCHOR ROD NUTS (TOP & LEVELING NUTS) SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION. TOP NUTS SHALL BE ROTATED, WITH THE LEVELING NUT SECURED AN ADDITIONAL 1/3 TURN FOR ANCHOR RODS 1.5 INCHES OR LESS IN DIAMETER & AN ADDITIONAL 1/6 TURN FOR ANCHOR ROD DIAMETERS GREATER THAN 1.5 INCHES.

BOLT INSTALLATION DETAILS

1. INSTALLATION OF BOLTS: BOLTS FOR TOWERS AND ANTENNAS SHALL BE INSTALLED WITH THE NUTS FACING TO THE OUTSIDE AND/OR TO THE TOP OF THE TOWER, UNLESS PROHIBITED BY LACK OF CLEARANCE.
2. TIGHTENING OF BOLTS: ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION, AS DEFINED BY AISC.
3. NUT LOCKING DEVICE: ALL NUTS SHALL BE EQUIPPED WITH SOME TYPE OF NUT LOCKING DEVICE. SEE THE INDIVIDUAL DRAWINGS FOR THE TYPE OF NUT LOCKING DEVICE TO BE USED FOR EACH INDIVIDUAL APPLICATION.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16" ANGLES ± 1/2 DEG. DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

Rev	DATE	DRW	CHK	DESCRIPTION

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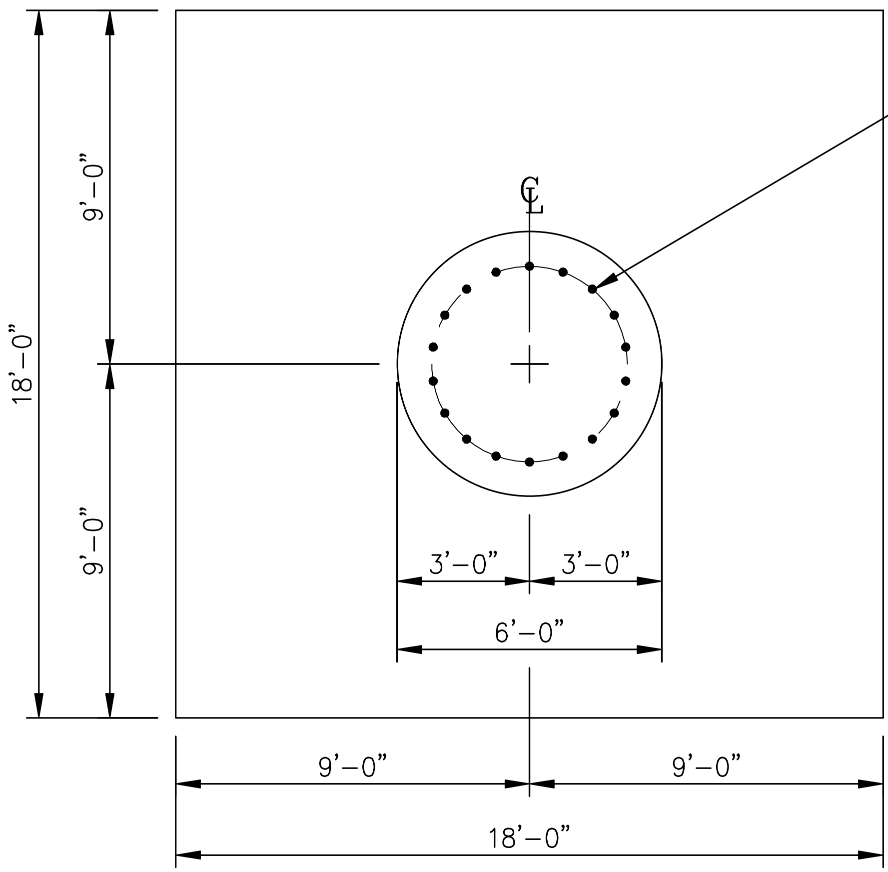
MOTOROLA ISPO

LEE'S SUMMIT JOF, MO

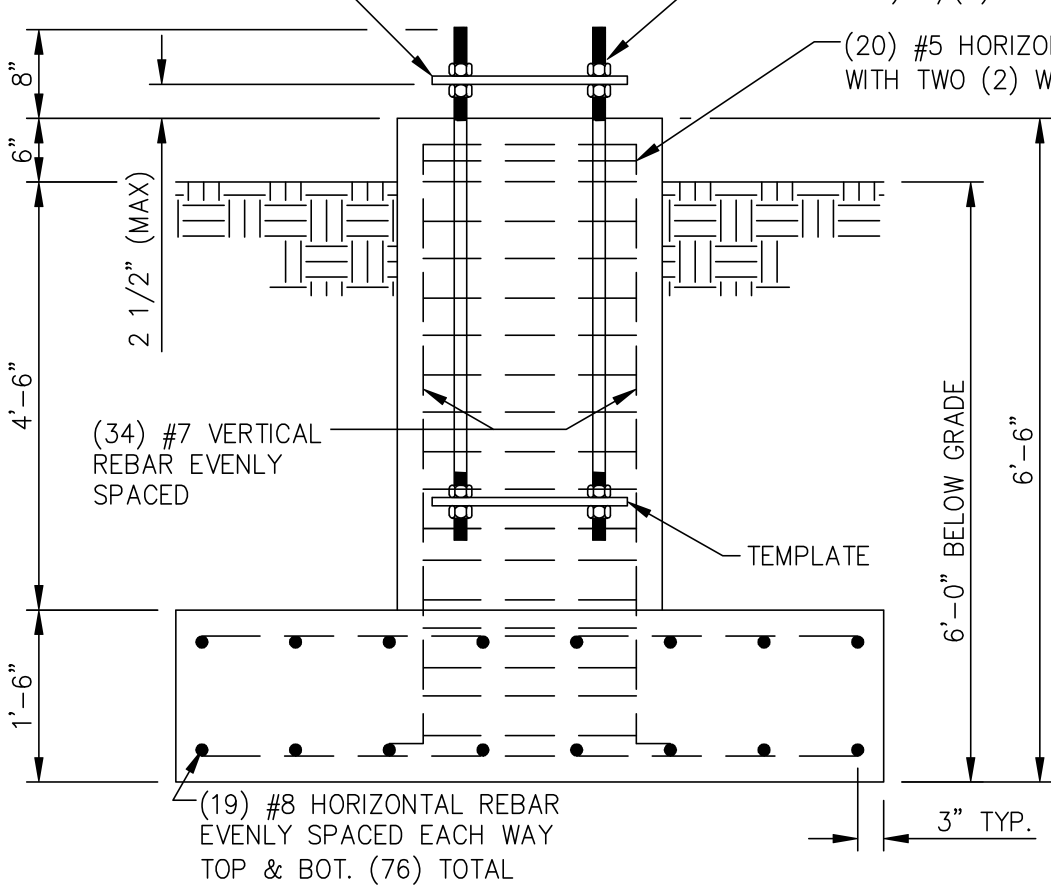
120.00 MONOPOLE

JOB 569487	SIZE B	DRAWING NO. 569487-MM		REV 0
DATE 11/26/25				
DRAWN BY PSB	26-2169-RSS-R2 OPT. 2	SCALE N.T.S.	PAGE 1 OF 1	
CHECKED BY MLC				



PLAN VIEW

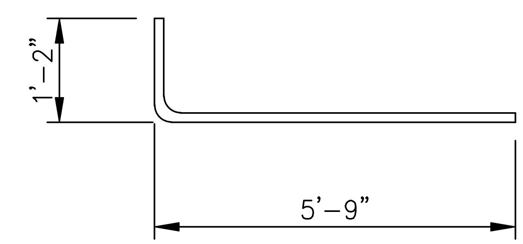
TOP & BOTTOM TEMPLATES
PART NO.: 569487–9001



ELEVATION VIEW

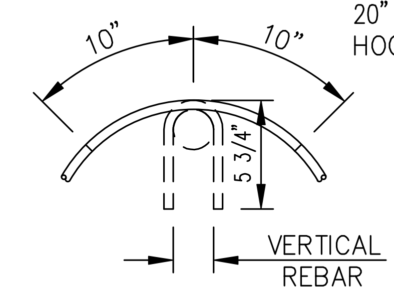
REINFORCING STEEL SCHEDULE

LOCATION	NO REQ'D.	BAR SPC'G.	SIZE	CUT LGTH.	TOTAL LGTH.	TOTAL WT.	SHAPE
PAD HORIZONTAL REINFORCING	76	NOTED ON DWG.	#8	17'–6"	1330'–0"	3551 LBS.	STRAIGHT
PIER VERTICAL REINFORCING	34	NOTED ON DWG.	#7	6'–11"	235'–2"	481 LBS.	SEE REBAR DETAIL "A"
PIER TIES	20	NOTED ON DWG.	#5	18'–10"	376'–8"	393 LBS.	5'–6" O.D.
					TOTAL REBAR WT.	4425 LBS.	



REBAR DETAIL "A"

PIER TIES TO HAVE 20" OVERLAP OR 5 3/4" HOOK AS SHOWN



PIER TIE HOOK DETAIL

GENERAL NOTES:

1. ALL ANCHOR BOLTS AND VERTICAL REINFORCING BARS ARE TO BE SECURELY TIED BEFORE CONCRETE IS PLACED SO THEY WILL REMAIN PARALLEL TO THE CENTERLINE OF THE PIER.
2. THE GROUND ELEVATION SHALL BE A MAXIMUM OF 6" BELOW THE TOP OF THE PIER.
3. ALL EXPOSED CONCRETE CORNERS ARE TO BE CHAMFERED 3/4 INCH.
4. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS.
5. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4500 PSI, IN ACCORDANCE WITH ACI 318–14.
6. REINFORCING STEEL TO HAVE A 3" MINIMUM CONCRETE COVER.
7. FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY UES, PROJECT NO. J045326.01, DATED MAY 21, 2024.
8. ANCHOR BOLTS 1 1/4"ø X 5'–3" (F1554 GR. 105 OR EQUAL) ON A 50.25"ø BOLT CIRCLE (18 REQ'D).
9. CONCRETE REQUIRED 23.24 CUBIC YARDS.
10. SEE THE GEOTECHNICAL REPORT FOR COMPACTION REQUIREMENTS, IF SPECIFIED.
11. THE BOTTOM ANCHOR BOLT TEMPLATE SHALL BE POSITIONED AS CLOSELY AS POSSIBLE TO THE BOTTOM OF THE ANCHOR BOLTS.
12. 4.5 FT OF SOIL COVER IS REQUIRED OVER THE ENTIRE AREA OF THE FOUNDATION SLAB.
13. DISTANCE BETWEEN CENTER OF ANCHOR BOLT CAGE & THE CENTER OF PIER NOT TO EXCEED 1/2" WITHOUT APPROVAL FROM ENGINEER OF RECORD.

STATE OF MISSOURI
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E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION

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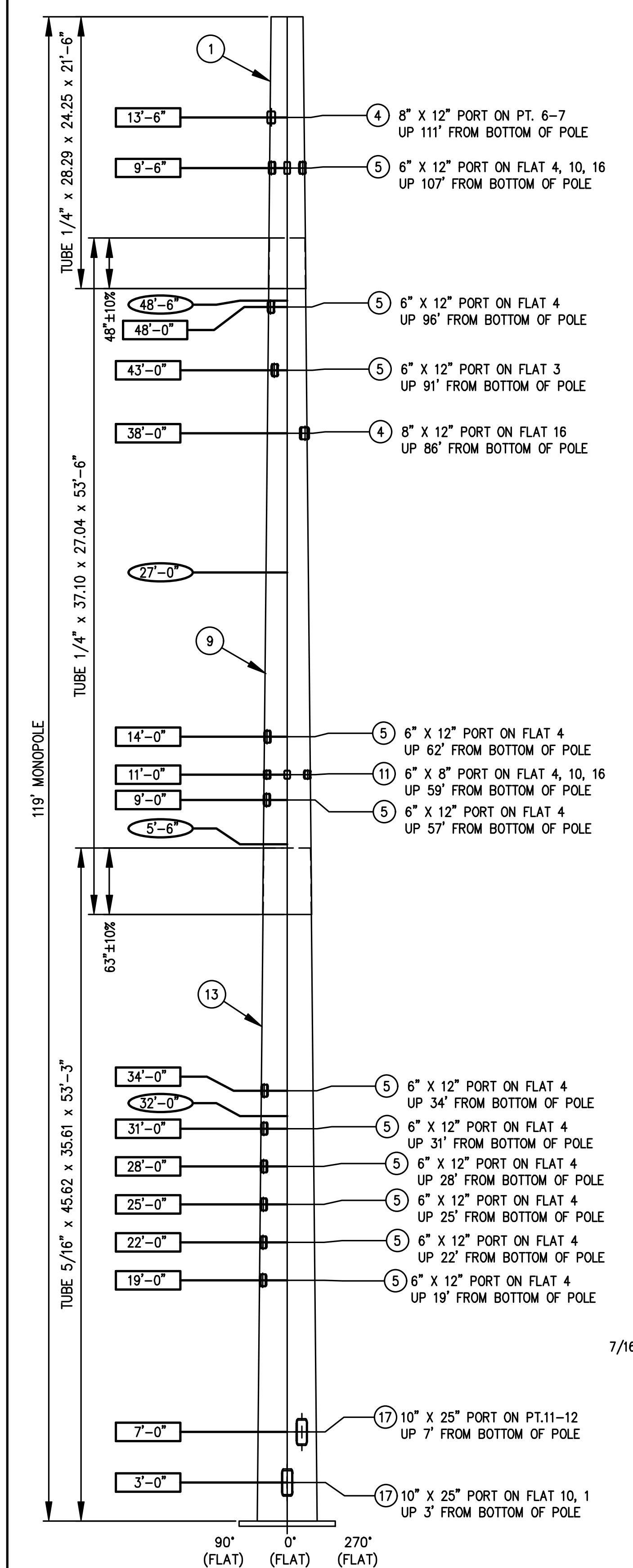
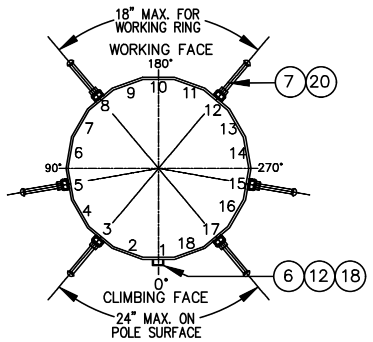
MOTOROLA ISPO
LEE'S SUMMIT JOF, MO
120' MONOPOLE

JOB NO. 569487		SIZE	DRAWING NO.	REV
DATE	11/26/25	B	569487–F1	0
DRAWN BY	PSB		SCALE	PAGE
CHECKED BY	MLC		None	1 OF 1

(ft'-in") = BOTTOM OF SECTION TO STAND OFF BRACKET
(ft'-in") = C-LINE OF BUSS BAR LUG

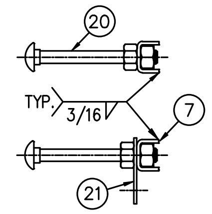


POLE ELEVATION

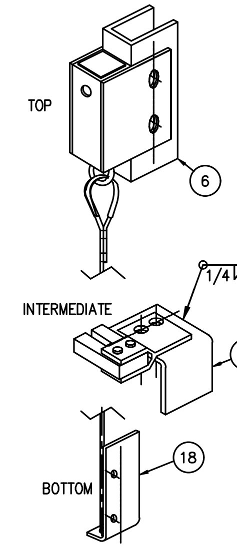


- CLIMBING FACILITY IS CENTERED ON FACE 1 STARTING AT 15" BELOW TOP TO 10'-0" FROM BASE WITH 15" ALTERNATE SPACING.
- WORKING STEP CLIP RINGS ARE PLACED AT THE NEAREST CLIMBING STEP LEVEL SPACED ON THE CIRCUMFERENCE AT A DISTANCE NOT TO EXCEED 18" ON CENTER.
  (2) RINGS DOWN 24"-48" FROM THE PORT CENTER LINE
  (2) RINGS 24"-48" BELOW CENTERLINE OF THE JACKING NUTS
  (2) RINGS 24"-48" BELOW CENTERLINE OF FLANGE (IF POLE IS FLANGED)
- SAFETY CLIMB SYSTEM IS CENTERED ON FACE 1.
- TOP STAND OFF BRACKET IS 12" FROM THE TOP.
- INTERMEDIATE STAND OFF BRACKETS ARE SPACED AT 27' MAX.
- BOTTOM STAND OFF BRACKET IS 10'-0" FROM THE BASE.

CLIMBING AND SAFETY DETAILS

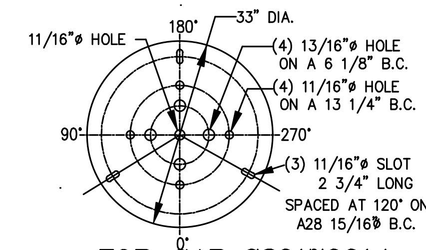


STEP BOLTS, CLIP, & ATTACHMENT POINT

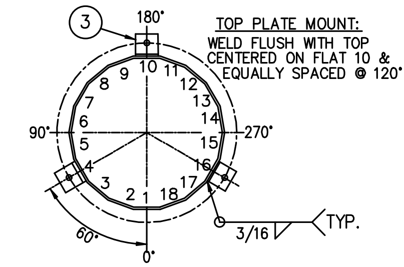


3/8" DIAMETER WIRE ROPE SAFETY CABLE

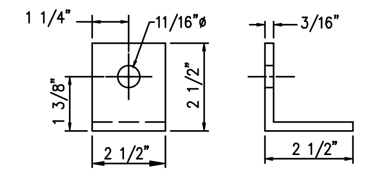
SAFETY CLIMB NOTE:
BOTTOM SAFETY CLIMB BRACKET MUST HAVE DOUBLE HOLES AWAY FROM THE POLE FOR USE WITH SAFETY CLIMB KIT PROVIDED.



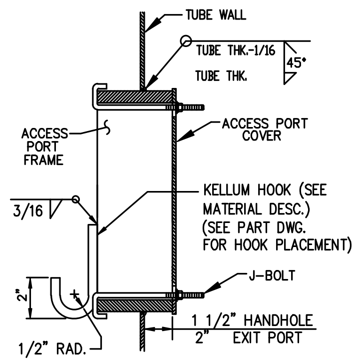
(30) TOP CAP: C30170014
INCLUDES (3) 5/8" X 2" BOLTS



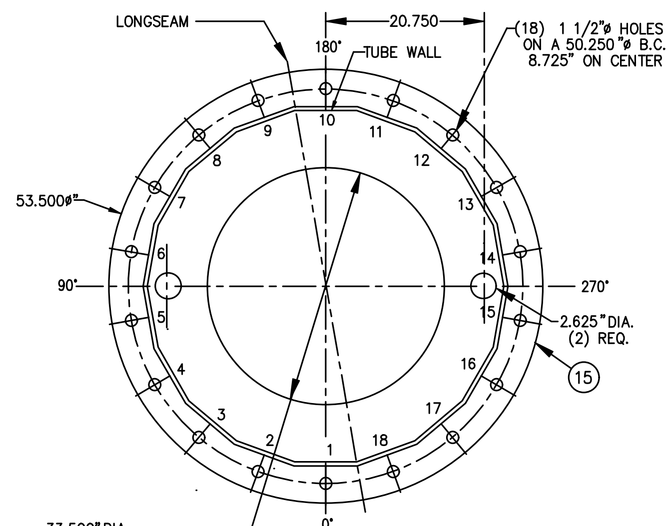
ANGLE WELDMENT

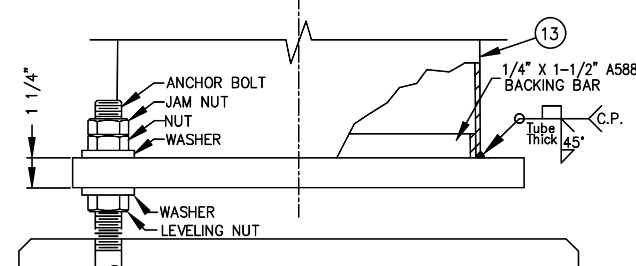


(3) MARK: MWS00005

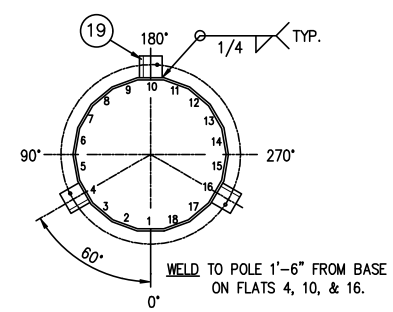


ACCESS PORT DETAIL

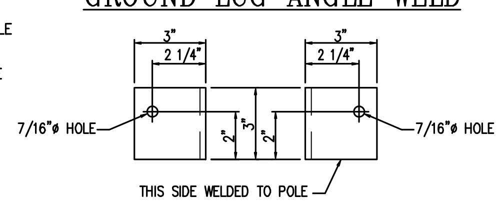




(15) BASE PLATE DETAIL



GROUND LUG ANGLE WELD



(19) MARK: MWS00004

STATE OF MISSOURI
KEITH J. TINDALL
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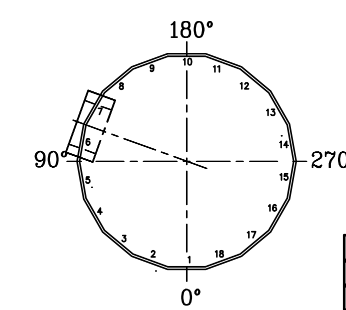
REGISTERED PROFESSIONAL ENGINEER
1/13/26



HAND HOLES
TYPICAL ORIENTATION

18-SIDED POLE			LIST OF MATERIAL	TAPER=.1880 IN/FT	
ITEM	QTY	MARK NO.	DESCRIPTION	MATERIAL	WEIGHT
1	1	569487-0110	TUBE 1/4" x 28.29 x 24.25 x 21'-6"	A572-65	1507
2	1	UID05	ID TAG 1/4" x 2" x 0'-5 3/4"	A572-65	1
3	3	MWS00005	ANGLE 3/16" X 2 1/2" X 2 1/2" X 2 1/2" LONG	A-36	3
4	1	C30138104	ACCESS PORT (8" X 12" X 3 1/2" X 5/8") WITH 2 HOOKS	A-500-C	23
5	3	C30138101	ACCESS PORT (6" X 12" X 3 1/2" X 5/8") WITH 2 HOOKS	A-500-C	62
6	1	MWS00001	TOP STAND OFF SAFETY BRACKET	A-36	1
7	35	TWS00081	STEP BOLT CLIP	A-36	11
8	4	C40001553	1"-8 HEAVY HEX JACKING NUT	A-563	4
				ASSEMBLY WEIGHT:	1611
9	1	569487-0120	TUBE 1/4" x 37.10 x 27.04 x 53'-6"	A572-65	4589
10	1	UID05	ID TAG 1/4" x 2" x 0'-5 3/4"	A572-65	1
4	1	C30138104	ACCESS PORT (8" X 12" X 3 1/2" X 5/8") WITH 2 HOOKS	A-500-C	23
5	4	C30138101	ACCESS PORT (6" X 12" X 3 1/2" X 5/8") WITH 2 HOOKS	A-500-C	82
11	3	C30138701	ACCESS PORT (6" X 8" X 4" X 1/2") WITH 2 HOOKS	A-500-C	44
12	3	MWS00002	MIDDLE STAND OFF SAFETY BRACKET	A-36	3
7	116	TWS00081	STEP BOLT CLIP	A-36	35
8	8	C40001553	1"-8 HEAVY HEX JACKING NUT	A-563	8
				ASSEMBLY WEIGHT:	4784
13	1	569487-0130	TUBE 5/16" x 45.62 x 35.61 x 53'-3"	A572-65	7233
14	1	UID05	ID TAG 1/4" x 2" x 0'-5 3/4"	A572-65	1
15	1	569487-5001	BASE PLATE 1 1/4" x 53.50" ROUND	A572-50	473
16	13 ft	L770016	FLAT 1/4" x 1 1/2"	A588	16
5	6	C30138101	ACCESS PORT (6" X 12" X 3 1/2" X 5/8") WITH 2 HOOKS	A-500-C	123
17	3	C30138005	ACCESS PORT (10 1/2" X 25 1/2" X 4" X 3/4") WITHOUT HOOKS	A-572-65	165
12	1	MWS00002	MIDDLE STAND OFF SAFETY BRACKET	A-36	1
18	1	MWS00003	BOTTOM STAND OFF SAFETY BRACKET	A-36	1
7	129	TWS00081	STEP BOLT CLIP	A-36	39
8	4	C40001553	1"-8 HEAVY HEX JACKING NUT	A-563	4
19	3	MWS00004	GROUND LUG ANGLE	A-36	3
				ASSEMBLY WEIGHT:	8058
				STRUCTURE BLACK WEIGHT:	14453

SHIP LOOSE MISC.					
20	280	C40044017	5/8"-11 X 7" STEP BOLT (GALV)	A-449	280
21	8	C40011014	STEP BOLT ATTACHMENT POINT	A302	6
22	2	C30136003	8.5" X 12.5" X 0.1875PL ACCESS COVER (GALV)	A-36	13
23	13	C30136002	6.5" X 12.5" X 0.1875PL ACCESS COVER (GALV)	A-36	67
24	3	C30136001	11.0" X 26.0" X 0.1875PL ACCESS COVER (GALV)	A-36	49
25	1	C30012033	SAFETY-CLIMB-SYSTEM-SELECT-KIT 150'	--	59
26	2	C30012089	SAFETY CLIMB EXTENSION KIT	--	6
27	1	C30012088	SAFETY CLIMB EXTENSION KIT	--	14
28	1	C30086001	LIGHTNING ROD CCS 5/8" X 4'	--	4
29	3	C30002002	LIGHT-SIDELIGHT MOUNT	A-36	15
30	1	C30170014	TOP COVER KIT 24" TO 28"	A-36	96
31	1	C40068001	13oz CAN of COLD GALV SPRAY	--	1
32	1	CS00500	NAME PLATE	--	1

NOTE:
SECTION ID TAG NUMBER TO MATCH TUBE MARK NO.

NOTE:
REFER TO DRAWING 9029280 FOR MONOPOLE LONGSEAM WELD DETAILS.

ACCESS PORT DATA TABLE						
ITEM	PART NUMBER	WIDTH	HEIGHT	DEPTH	THICK	MATERIAL SPEC
4	C30138104	8"	12"	3 1/2"	5/8"	A-500-C
5	C30138101	6"	12"	3 1/2"	5/8"	A-500-C
11	C30138701	6"	8"	4"	1/2"	A-500-C
17	C30138005	10 1/2"	25 1/2"	4"	3/4"	A-572-65

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES
TOLERANCES: FRACTIONS ± 1/16" ANGLES ± 1/2 DEG. DECIMALS ± .010"

MATERIAL:
TOLERANCES DO NOT APPLY TO RAW MATERIAL

Rev	DATE	DRW	CHK	DESCRIPTION

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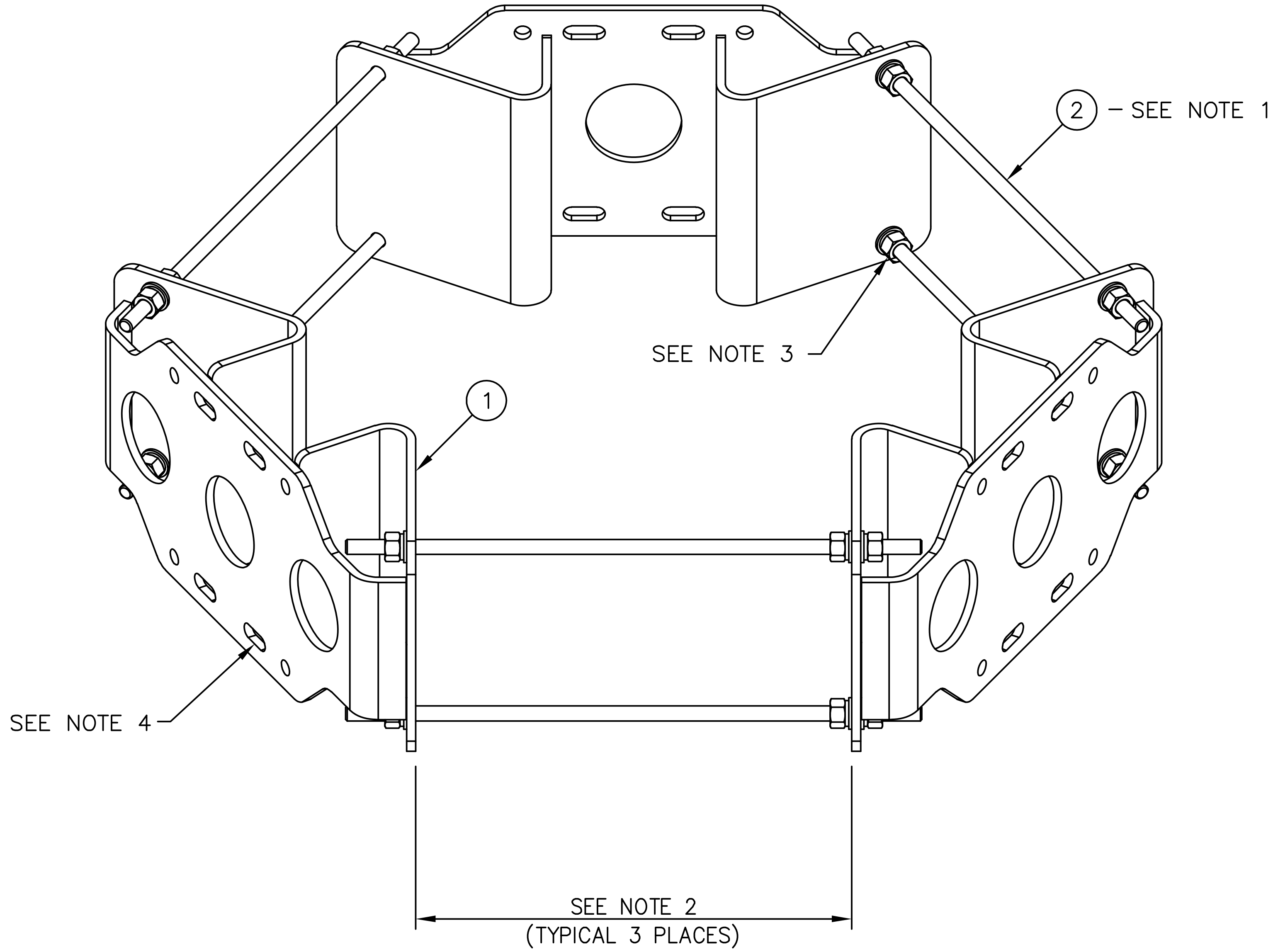
MOTOROLA ISPO
LEE'S SUMMIT JOF, MO
120.00 MONOPOLE

JOB	569487	SIZE	DRAWING NO.	REV
DATE	11/26/25	B	569487-01	0
DRAWN BY	PSB		SCALE	PAGE
CHECKED BY	MLC		N.T.S.	1 of 1

C10112377 TRI–COLLAR ASSEMBLY (10"–40" MONOPOLE)

ITEM	QTY.	PART. NO.	DESCRIPTION	WEIGHT
1.	3	CW01324	WELDMENT, TRI–COLLAR (10"–40" MONOPOLE)	166
2.	6	C40094027	THREADED ROD ASSEMBLY 5/8 X 2'–9"	19
			TOTAL WEIGHT	185



ISOMETRIC VIEW

NOTES:

1. THREADED ROD MAY BE SHORTENED IF REQUIRED, FIELD CUT AND COLD GALV SPRAY TO SUIT.
2. THIS DISTANCE MUST BE EQUAL IN ALL (3) LOCATIONS TO ENSURE THE STRUCTURAL INTEGRITY OF THE THREADED RODS AS WELL AS 120° SEPARATION.
3. ONLY (1) NUT AND (1) LOCKWASHER IS NEEDED BETWEEN THE WELDMENTS (AT ONE INSIDE END ONLY) OF EACH THREADED ROD ASSEMBLY.
4. THE MOUNTING SLOTS NOTED WILL ACCOMMODATE 2 3/8"–4 1/2" O.D. MOUNTING PIPES.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
3	10/09/23	FJM	EK	ITEM 2 WAS C40094012, REVISED NOTES & REMOVED INSIDE NUT & WASHER
2	07/07/23	KLE	DLW	REVISED NOTES AND DELETED ITEM 3 (C40094002)
1	07/16/18	JKW	WJ	REVISED NOTES

Sabre Industries™
INNOVATION DELIVERED

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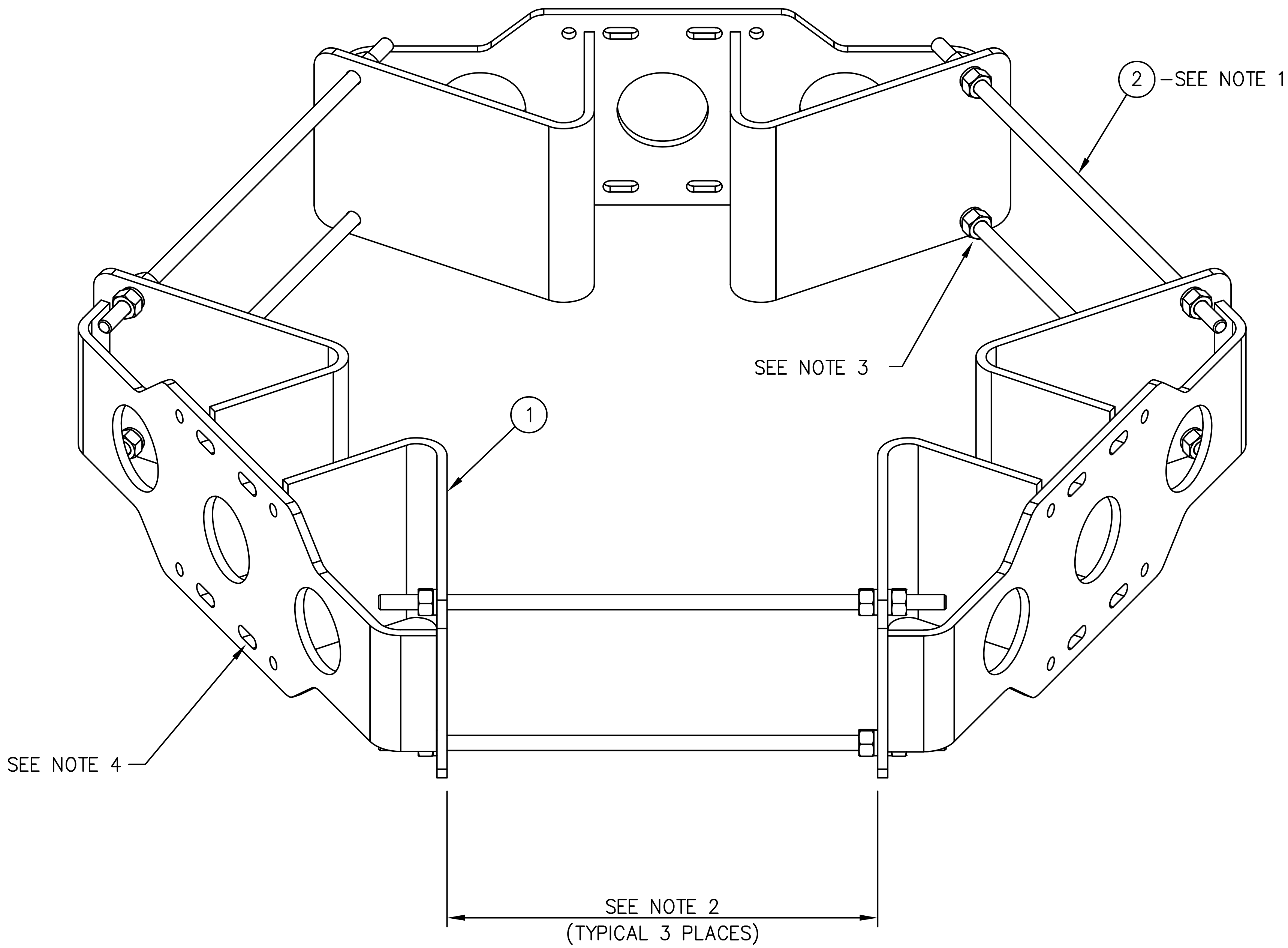
TRI–COLLAR BRACKET ASSEMBLY
FOR MONOPOLES (10"–40" DIA.)
(CIRCUMFERENCE 31.4" TO 125.7")

DATE	04/15/16	SIZE: B	DRAWING NO.: C10112377	REV: 3
DRAWN BY	WRF		SCALE: None	PAGE: 1 OF 1
CHECKED BY	KLE			

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:44

C10112378 TRI-COLLAR ASSEMBLY (12"-60" MONOPOLE)				
ITEM	QTY.	PART. NO.	DESCRIPTION	WEIGHT
1.	3	CW01334	WELDMENT, TRI-COLLAR (12"-60" MONOPOLE)	330
2.	6	C40094030	THREADED ROD ASSEMBLY 3/4 X 4'-4"	42
			TOTAL WEIGHT	372



ISOMETRIC VIEW

NOTES:

1. THREADED ROD MAY BE SHORTENED IF REQUIRED, FIELD CUT AND COLD GALV SPRAY TO SUIT.
2. THIS DISTANCE MUST BE EQUAL IN ALL (3) LOCATIONS TO ENSURE THE STRUCTURAL INTEGRITY OF THE THREADED RODS AS WELL AS 120° SEPARATION.
3. ONLY (1) NUT AND (1) LOCKWASHER IS NEEDED BETWEEN THE WELDMENTS (AT ONE INSIDE END ONLY) OF EACH THREADED ROD ASSEMBLY.
4. THE MOUNTING SLOTS NOTED WILL ACCOMMODATE 2 3/8"-4 1/2" O.D. MOUNTING PIPES.

STATE OF MISSOURI
KEITH J. TINDALL
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REGISTERED PROFESSIONAL ENGINEER
1/13/26

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS INCLUDE
FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

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REV	DATE	DRW	CHK	DESCRIPTION
2	10/09/23	FJM	EK	ITEM 2 WAS C40094010, REVISED NOTES & REMOVED INSIDE NUT & WASHER
1	07/07/23	KLE	DLW	REVISED NOTES

Sabre Industries™
INNOVATION DELIVERED

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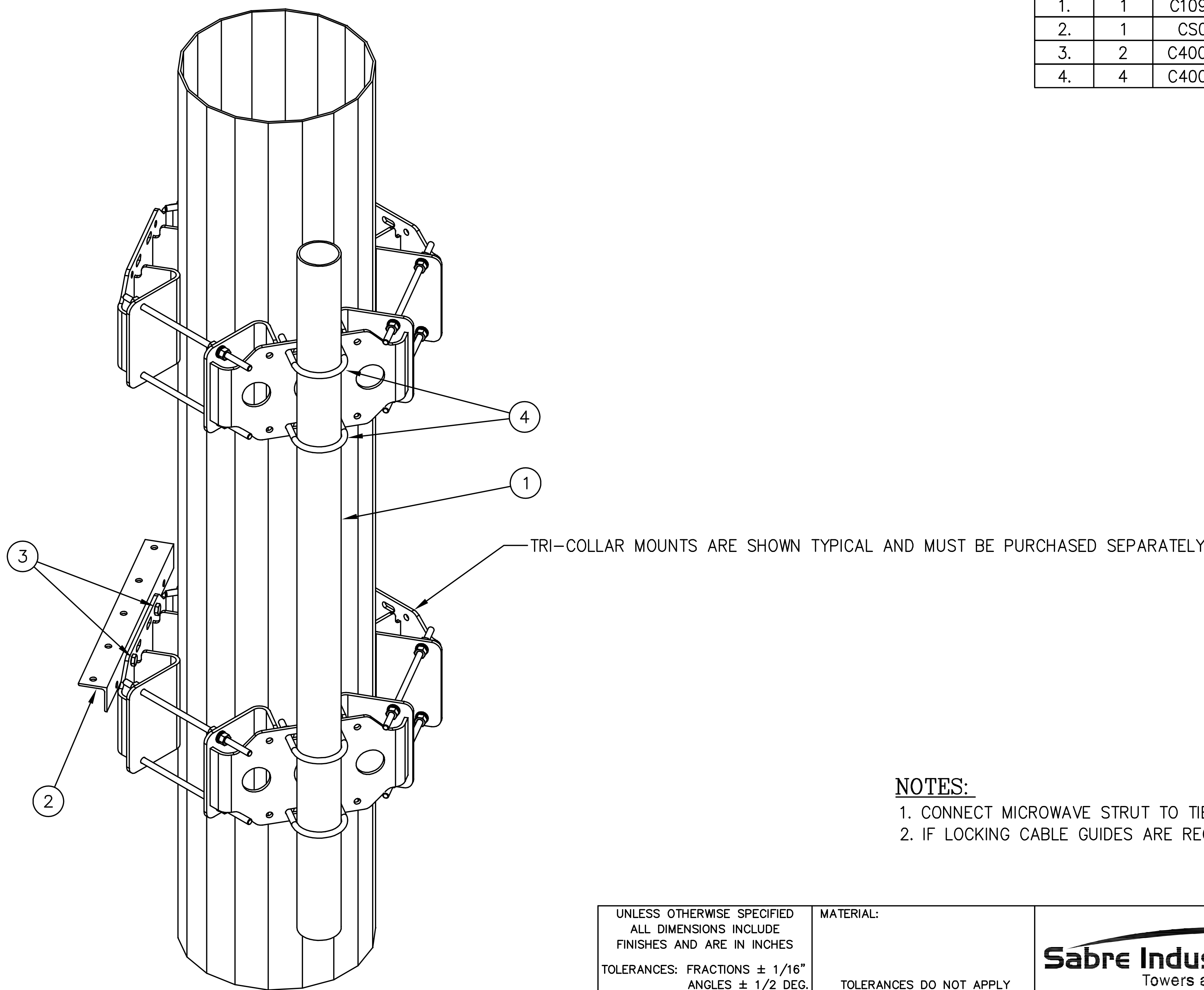
TRI-COLLAR BRACKET ASSEMBLY
FOR MONOPOLES (12"-60" DIA.)
(CIRCUMFERENCE 37.7" TO 188.5")

DATE	12/08/16	SIZE: B	DRAWING NO.: C10112378	REV: 2
DRAWN BY	WRF		SCALE: None	PAGE: 1 OF 1
CHECKED BY	KE			

C10117008 PIPE MOUNT

ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	1	C10901407	SUPPORT PIPE, 4 1/2" O.D. X 0.237 X 7'-0	79
2.	1	CS00079	ANGLE, STRUT BRACKET	11
3.	2	C40026024	BOLT ASSEMBLY, 5/8"ø X 2 1/4 A325	1
4.	4	C40034032	U-BOLT ASSEMBLY, 5/8"ø X 5 3/16 C/C	9
			TOTAL WEIGHT	100



ISOMETRIC VIEW

NOTES:
1. CONNECT MICROWAVE STRUT TO TIE BACK CLIP. CONTACT SABRE IF ADDITIONAL PARTS ARE REQUIRED.
2. IF LOCKING CABLE GUIDES ARE REQUIRED, THEY MUST BE PURCHASED SEPARATELY (SEE PAGE 2).

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
3	08/26/24	FJM	DLW	REVISED ITEM 1 (WAS C10981407), UPDATED ISO VIEW & ADDED CABLE GUIDE MOUNTING OPTIONS
2	01/15/09	MLC	MC	REVISED PIPE (ITEM 1)
1	07/07/06	WMN	WRF	ADDED ISOMETRIC VIEW

Sabre Industries™
Towers and Poles

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PIPE MOUNT
8 FT. TO 10 FT. DISH
FOR MONOPOLES

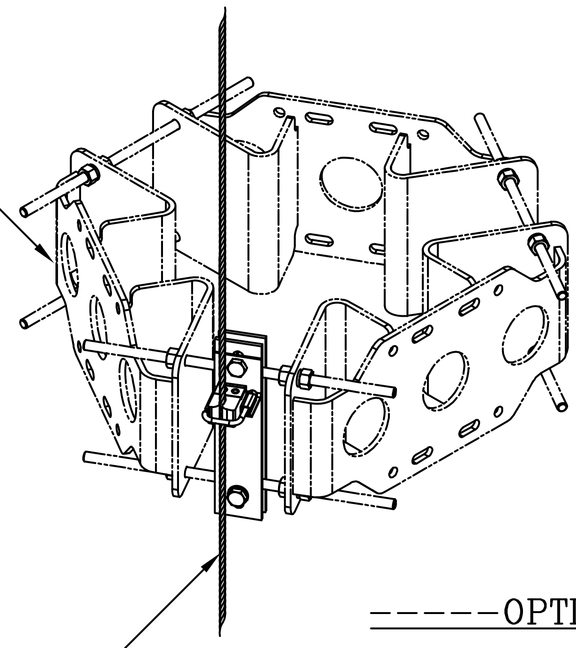
DATE	6/1/00	SIZE: B	DRAWING NO.: C10117008	REV: 3
DRAWN BY	KLE			
CHECKED BY	BCT		SCALE: None	PAGE: 1 OF 2

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:44

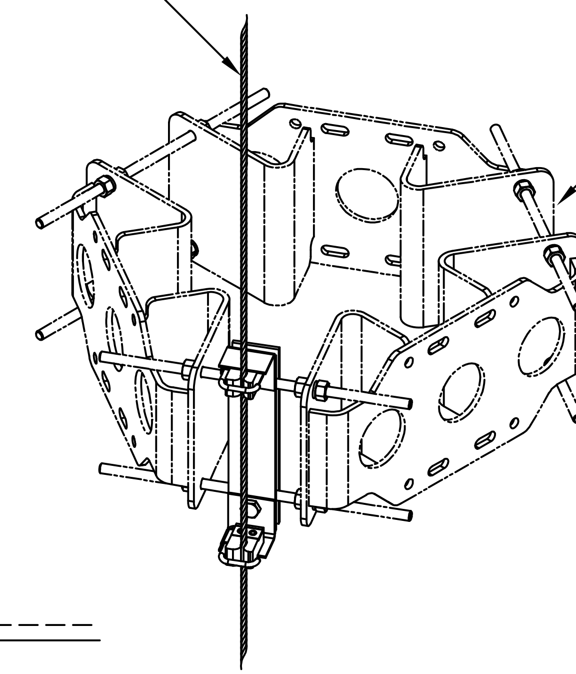
OPTIONAL LOCKING CABLE GUIDE

IF REQUIRED PLEASE ORDER THE APPROPRIATE KIT BELOW TO FIT YOUR INDIVIDUAL FIELD NEEDS.

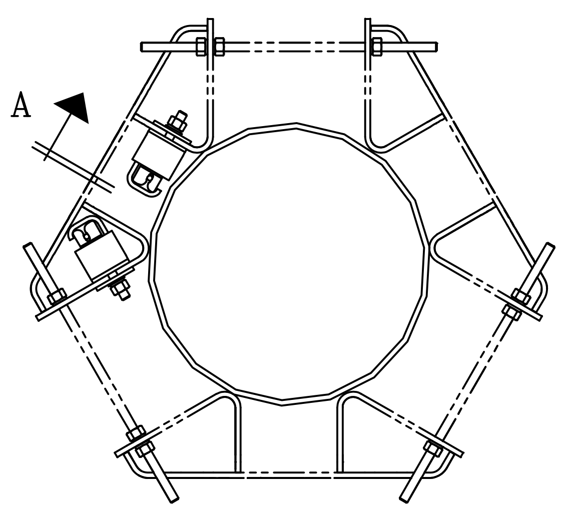
-----OPTIONAL CABLE GUIDE MOUNTING OPTIONS -----

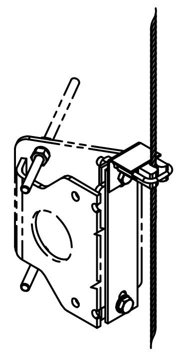


KIT C30017031



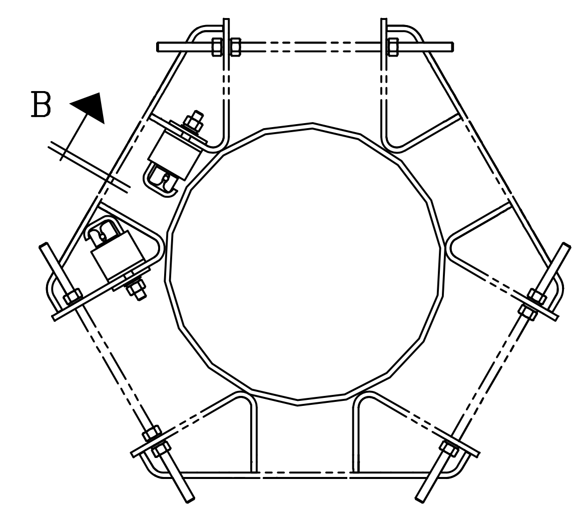
KIT C30017032

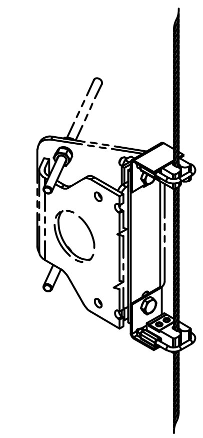




VIEW A-A

STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26





VIEW B-B

NOTE

OTHER ADDITIONAL CABLE GUIDE SUPPORTS MAY BE REQUIRED ABOVE AND BELOW COLLARS SO THAT CABLE ALIGNMENT IS WITHIN REQUIRED LIMITS.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
3	08/26/24	FJM	DLW	REVISED ITEM 1 (WAS C10981407), UPDATED ISO VIEW & ADDED CABLE GUIDE MOUNTING OPTIONS
2	01/15/09	MLC	MC	REVISED PIPE (ITEM 1)
1	07/07/06	WMN	WRF	ADDED ISOMETRIC VIEW

Sabre Industries
Towers and Poles

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PIPE MOUNT
8 FT. TO 10 FT. DISH
FOR MONOPOLES

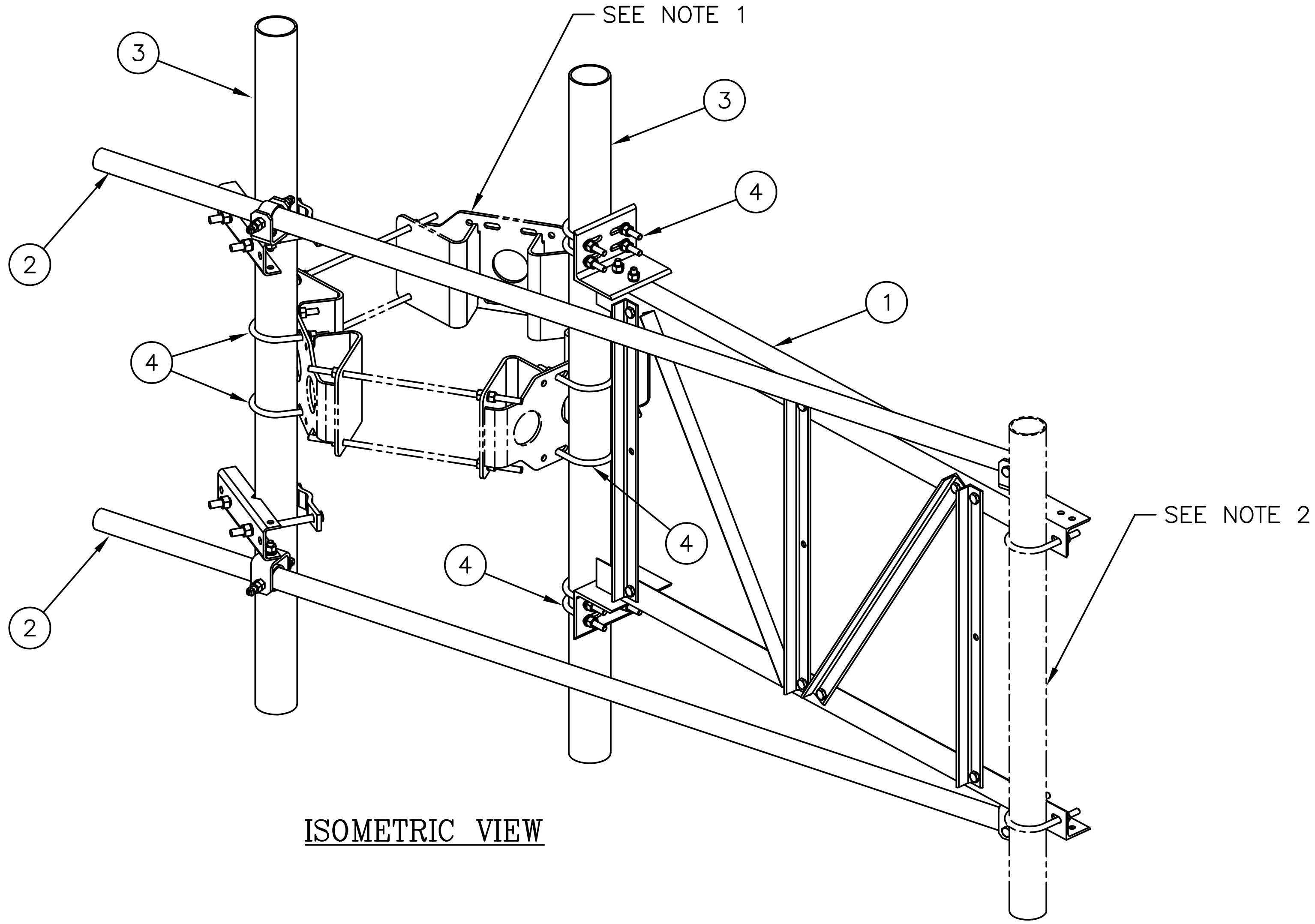
DATE	6/1/00	SIZE: B	DRAWING NO.: C10117008	REV: 3
DRAWN BY	KLE			
CHECKED BY	BCT		SCALE: None	PAGE: 2 OF 2

C10119106C 6 FT. SIDEARM W/(2) TIEBACKS

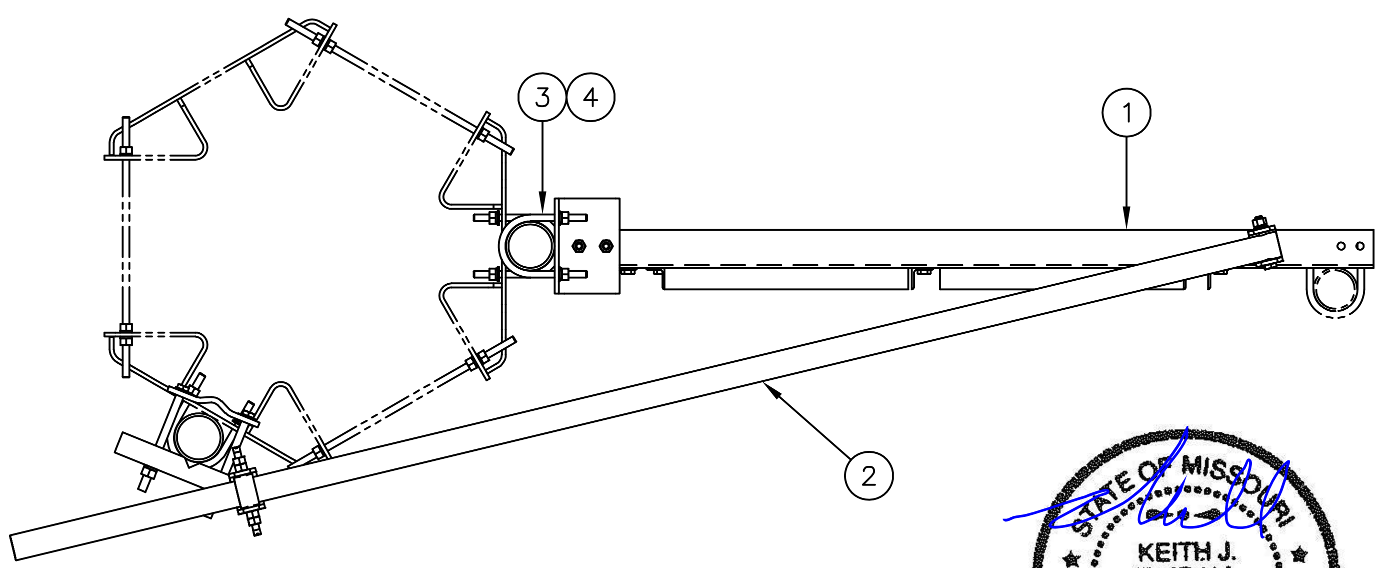
ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	1	C10151106	6 FT. SIDEARM ASSEMBLY	144
2.	2	C10179001	SWIVEL KNUCKLE TIEBACK ASSEMBLY	130
3.	2	C10901405	PIPE, 4 1/2"ø X .237 X 5'-3	118
4.	8	C40034032	U-BOLT ASSEMBLY, 5/8ø X 5 3/16 C-C	17
			TOTAL WEIGHT	409

NOTES:

1. SEE DRAWING C10151106 FOR INSTALLATION OF 6 FT. SIDEARM ASSEMBLY.
2. SEE DRAWING C10179001 FOR INSTALLATION OF SWIVEL KNUCKLE TIEBACK ASSEMBLY.
3. TRI-COLLAR MOUNTS ARE SHOWN TYPICAL AND MUST BE ORDERED SEPARATELY.
4. 2 3/8" THRU 4" O.D. MOUNTING PIPE & U-BOLTS MUST BE PURCHASED SEPERATELY.
5. QUANTITIES SHOWN ARE FOR ONE (1) SIDEARM ONLY.



ISOMETRIC VIEW



PLAN VIEW

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION

Sabre Industries
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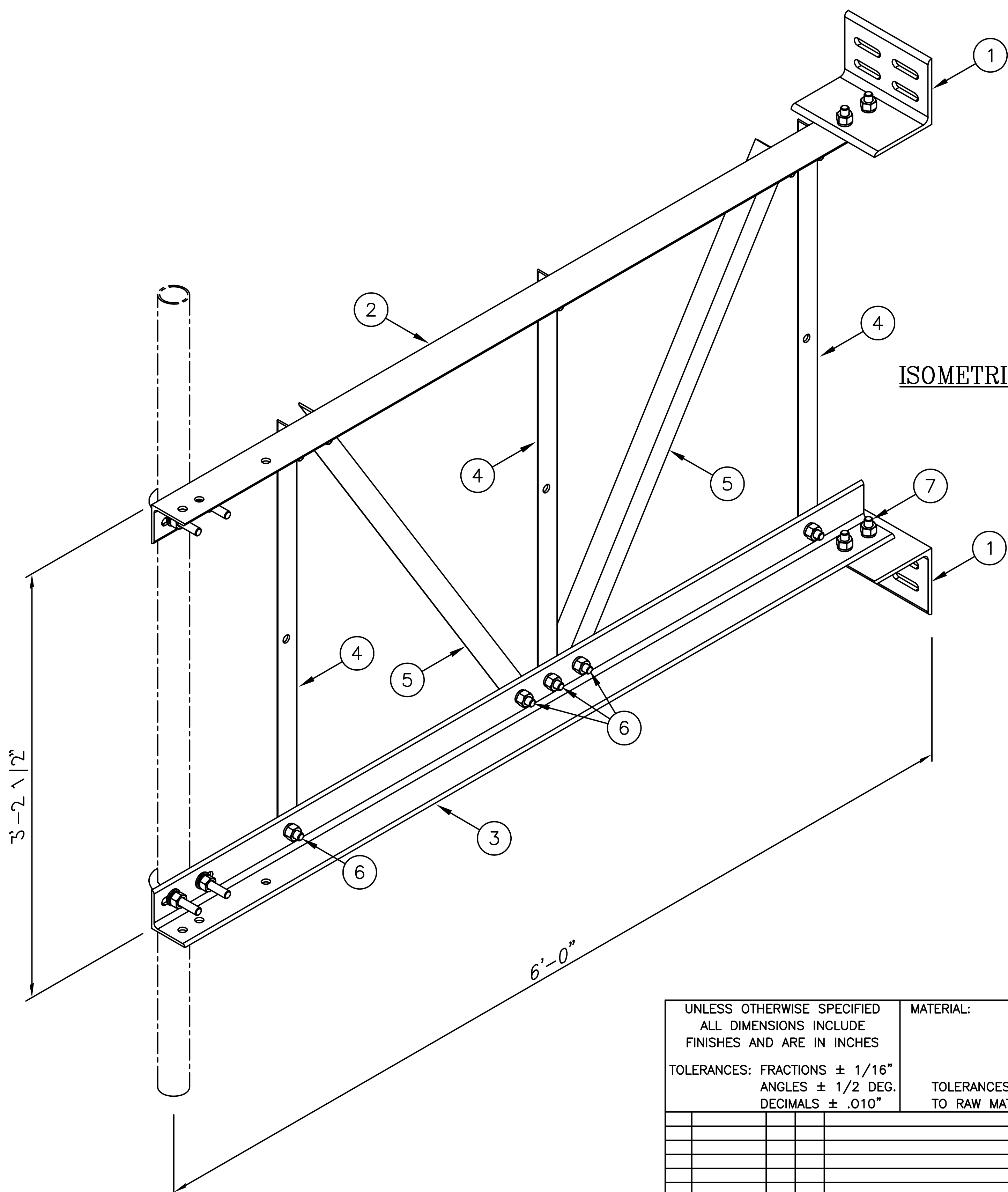
6 FT. SIDEARM W/(2) TIEBACKS
FOR MONOPOLES
(FOR MTG. PIPES 2 3/8" O.D. THRU 4" O.D.)

DATE	06/18/24	SIZE B	DRAWING NO. C10119106C	REV 0
DRAWN BY	FJM		SCALE None	PAGE 1 OF 1
CHECKED BY	DLW			

C10151106



ISOMETRIC VIEW

C10151106 6 FT. SIDEARM ASSEMBLY

(1)	CK00061	SIDEARM ANGLE KIT	138
(1)	---	MISC HARDWARE (FRAMING)	6
		TOTAL WEIGHT	144

CK00061 KIT LIST OF MATERIAL

ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	2	CS00067	ANGLE, BOOM SUPPORT	23
2.	1	CS01225	ANGLE, TOP CHORD	37
3.	1	CS01226	ANGLE, BOTTOM CHORD	37
4.	3	CS00065	ANGLE, VERTICAL	23
5.	2	CS01228	ANGLE, DIAGONAL	18
			TOTAL WEIGHT	138

MISC HARDWARE (FRAMING)

ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
6.	10	C40026022	BOLT ASSEMBLY, 5/8 ø X 1 3/4 A325	4
7.	4	C40026023	BOLT ASSEMBLY, 5/8 ø X 2 A325	2
			TOTAL WEIGHT	6

STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26

NOTES:
1. 2 3/8" O.D. THRU 4" O.D. MOUNTING PIPE & U-BOLTS MUST BE PURCHASED SEPARATELY.
2. QUANTITIES SHOWN ARE FOR ONE (1) SIDEARM ONLY.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
1	11/10/06	WRF	WMN	ADDED ISOMETRIC VIEW

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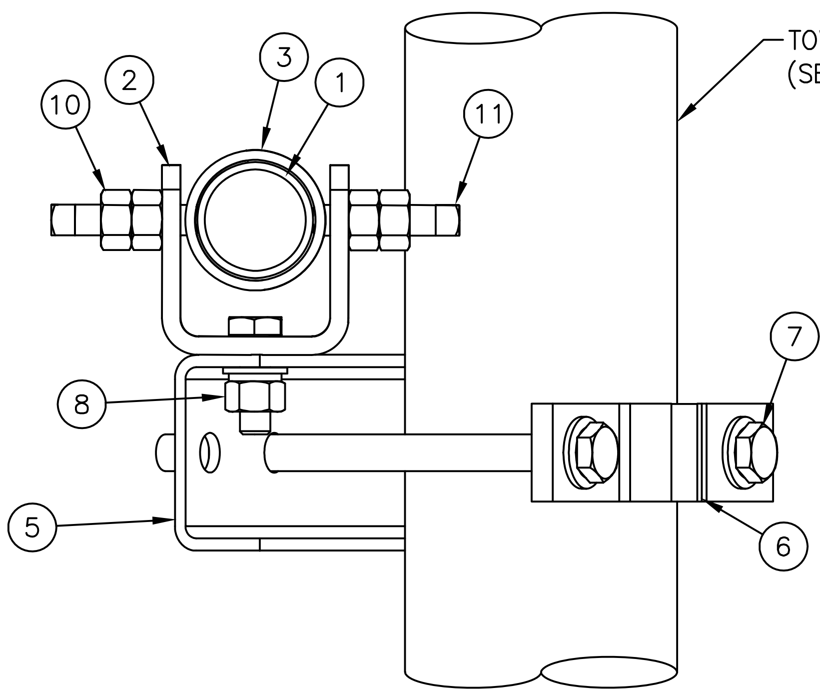
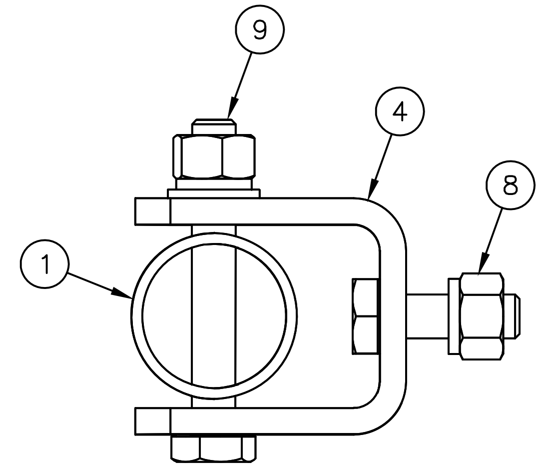
6 FT. SIDEARM
(FOR MTG. PIPES 2 3/8" O.D. THRU 4" O.D.)

DATE	12/19/05	SIZE B	DRAWING NO. C10151106	REV 1
DRAWN BY	TLH/RWM			
CHECKED BY	RWM		SCALE None	PAGE 1 OF 1



SECTION A–A



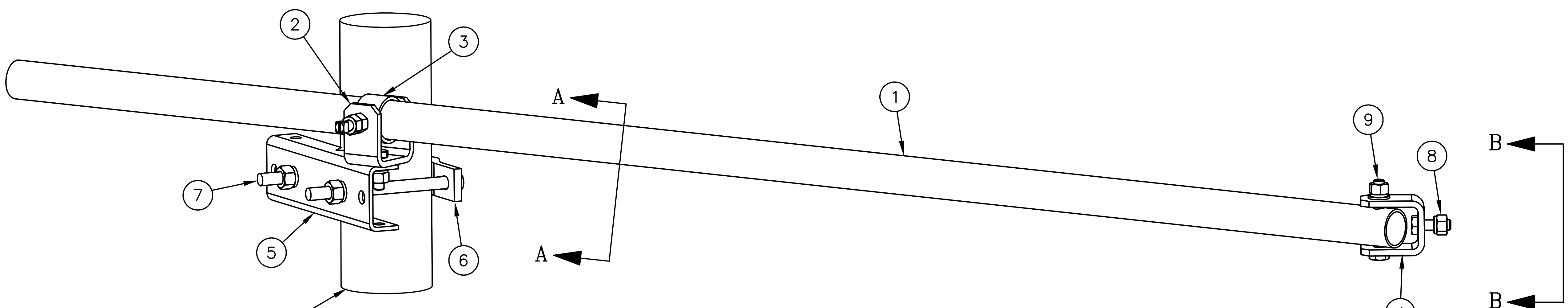
SECTION B–B

C10179001 SWIVEL KNUCKLE TIEBACK ASSEMBLY				
ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	1	CS03333	PIPE, 2 3/8" O.D. X 0.154 X 10'–0	38
2.	1	CW00013	SWIVEL PLATE WELDMENT	3
3.	1	CS00097	PIPE, 2 7/8" O.D. X 0.203 X 0'–1 3/4	1
4.	1	CS00098	BENT SWIVEL PLATE	3
5.	1	CS01360	PLATE, MOUNTING BRACKET (FORMED CHANNEL)	9
6.	1	CS01361	PLATE, 2 HOLE ADAPTER CLAMP	3
7.	2	C40140001	BOLT ASSEMBLY, 3/4 X 10 A307 W/NUT, LKW, FLW	4
8.	2	C40026023	BOLT ASSEMBLY, 5/8 X 2 A325	1
9.	1	C40026033	BOLT ASSEMBLY, 5/8 X 4 1/2 A325	1
10.	2	C40042007	HEX NUT, 5/8 A194 2H	1
11.	2	C40998007	SQ. HEAD SET SCREW, 5/8 X 2 1/2	1
			TOTAL WEIGHT	65

NOTES:

1. QUANTITIES SHOWN IN LISTS OF MATERIAL ARE FOR ONE (1) SWIVEL KNUCKLE TIBACK ONLY.
2. THIS SWIVEL KNUCKLE TIEBACK KIT WILL MOUNT TO THE FOLLOWING:
   - 1 1/2"ø TO 5 9/16"ø ROUND LEG
   - L 2 1/2 X 2 1/2 TO L 4 X 4 ANGLE LEG

STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26



ISOMETRIC VIEW

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
4	09/17/24	FJM	DLW	REVISED ITEM 1 (WAS CS02099)
3	08/06/09	MLC	MC	REVISED WALL THICKNESS ON ITEM 1
2	01/07/09	MLC	MC	REVISED ITEM 1
1	12/01/06	MLC	MC	REVISED NOTE 2

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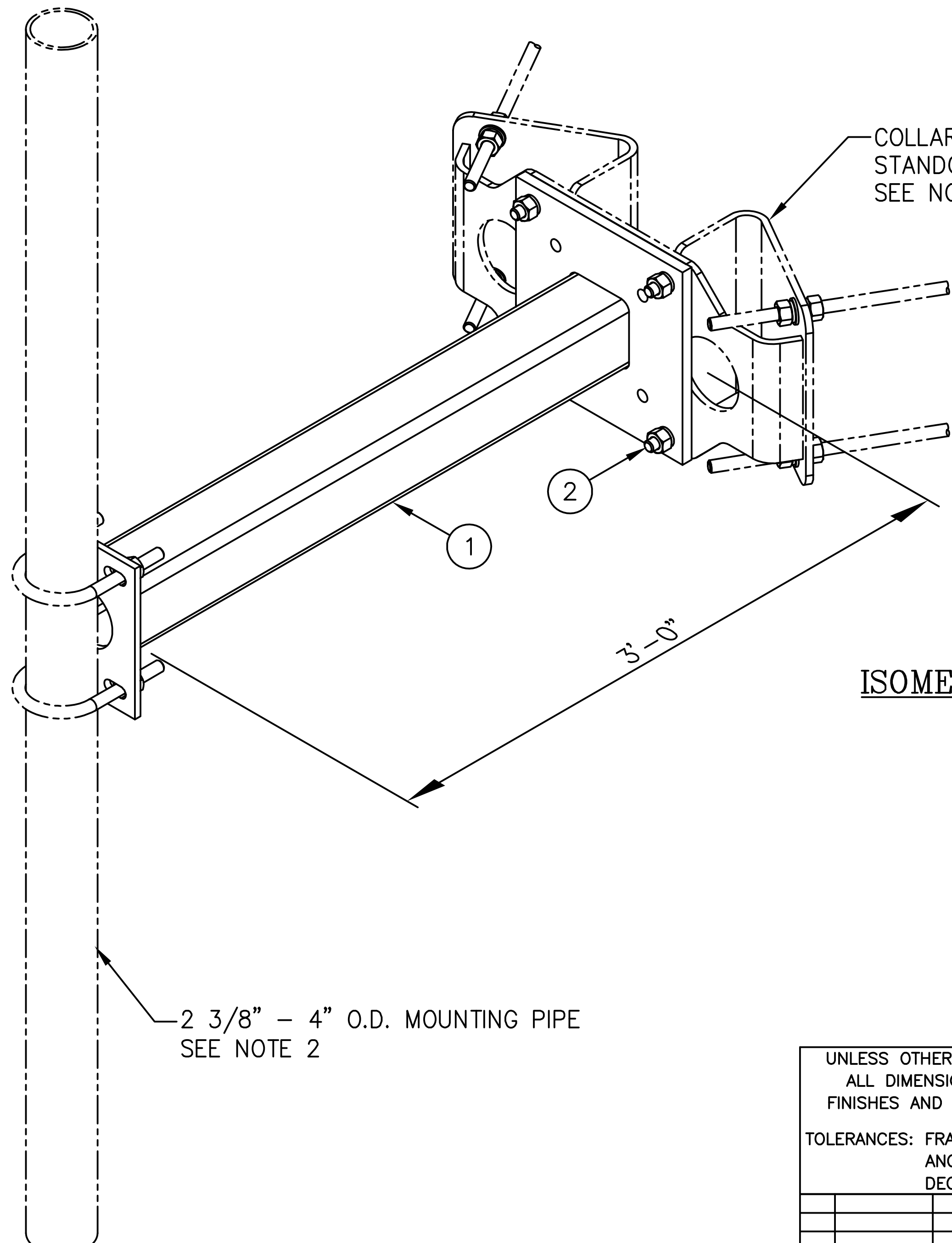
SWIVEL KNUCKLE TIEBACK ASSEMBLY
(2 3/8"ø PIPE X 10'–0")

DATE	10/12/06	SIZE	DRAWING NO.		REV
DRAWN BY	MLC	B	C10179001		4
CHECKED BY	MC			SCALE None	PAGE 1 OF 1

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:45

C10114003 3'-0" STANDOFF ARM				
ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	1	CW00525	WELDMENT, 3'-0" STANDOFF ARM	63
2.	4	C40026024	BOLT ASSEMBLY, 5/8 ø X 2 1/4 A325	2
			TOTAL WEIGHT	65



ISOMETRIC VIEW

STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26

NOTES:

1. COLLAR MOUNTS ARE SHOWN TYPICAL AND MUST BE PURCHASED SEPARATELY.
2. 2 3/8" TO 4" O.D. MOUNTING PIPE & U-BOLTS MUST BE PURCHASED SEPARATELY.
3. QUANTITIES SHOWN ARE FOR ONE (1) STANDOFF ARM.

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
2	05/04/23	FJM	DLW	CHANGED ISOMETRIC VIEW AND NOTE 1
1	03/26/19	WRF	DLW	BOLTS WERE 5/8 X 2 1/2 (C40026025)

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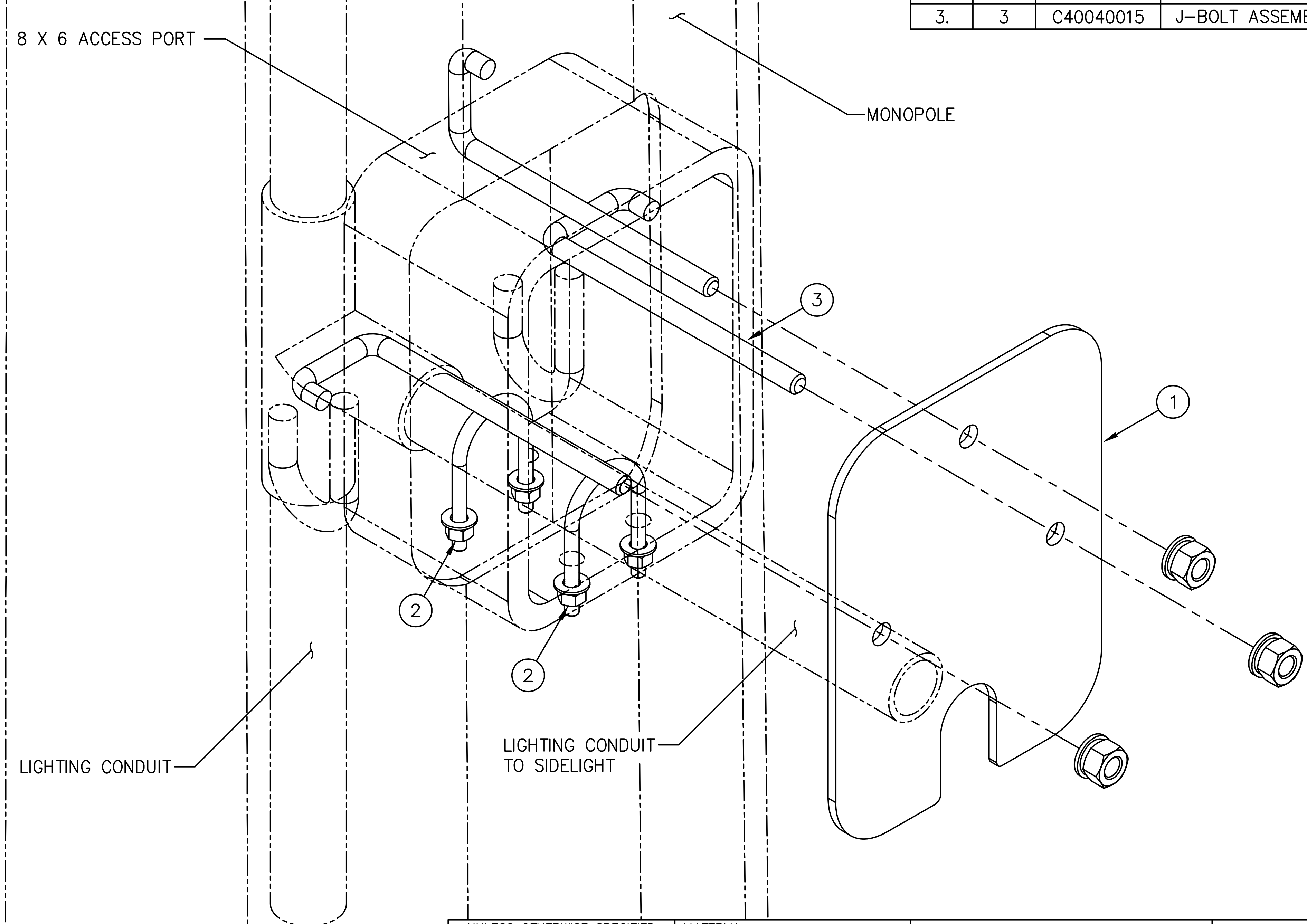
3'-0" STANDOFF ARM

DATE	07/11/06	SIZE	DRAWING NO.	REV
DRAWN BY	WRF	B	C10114003	2
CHECKED BY	DLW		SCALE None	PAGE 1 OF 1

C30002002

LIST OF MATERIAL

ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	1	CS02868	SIDELIGHT ACCESS PORT COVER PLATE	3
2.	2	Z40998074	U-BOLT ASSEMBLY, 1/4 ø X 1 5/8 C/C	1
3.	3	C40040015	J-BOLT ASSEMBLY, 3/8 ø X 6 1/8 I.L.	1
			TOTAL WEIGHT	5



UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION

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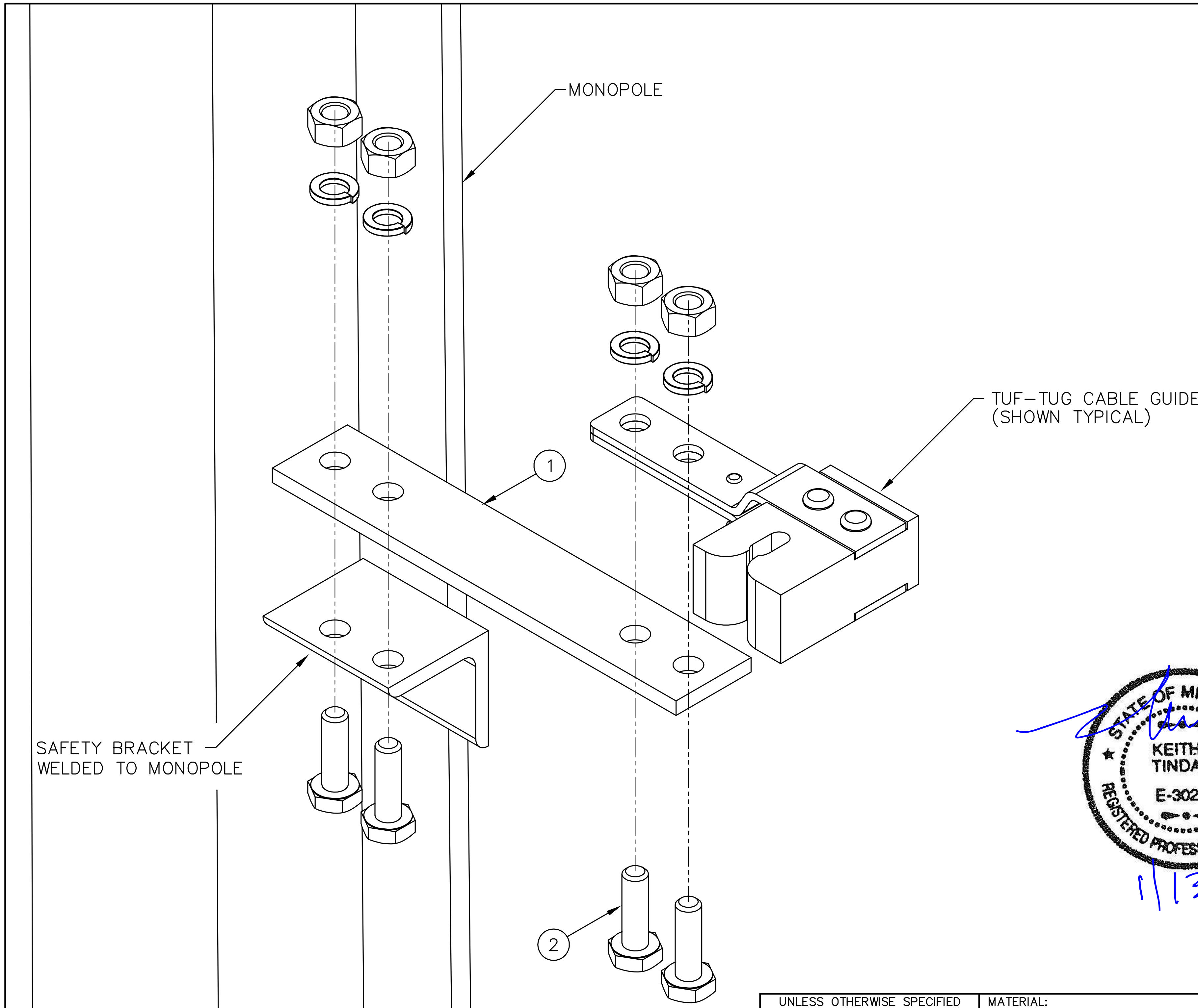
SIDELIGHT INSTALLATION DETAIL
FOR MONOPOLES
(FOR 3/4" AND 1" CONDUITS)

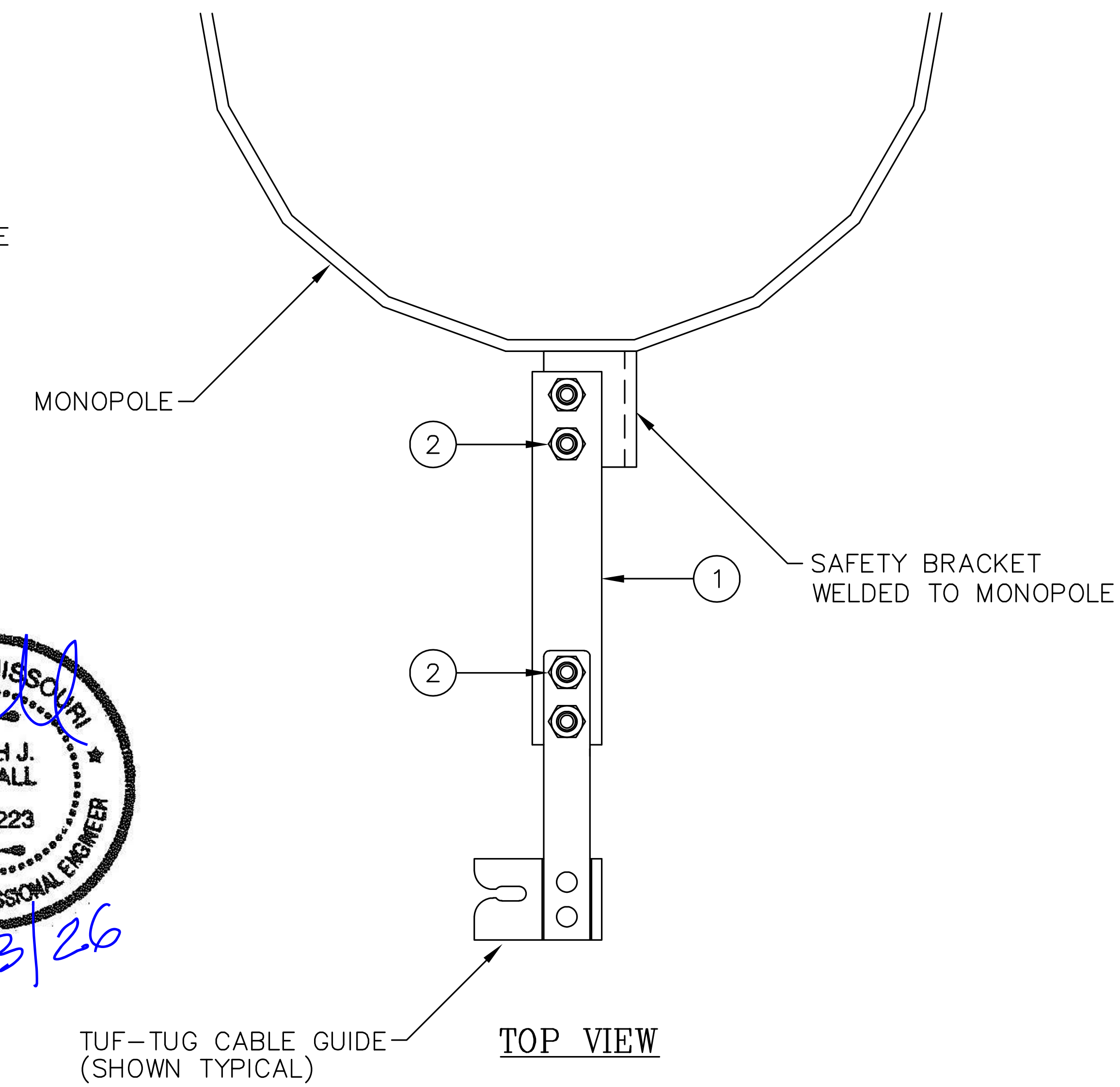
		SIZE	DRAWING NO.	REV
DATE	06/08/12	B	C30002002	0
DRAWN BY	WRF			
CHECKED BY	KLE		SCALE None	PAGE 1 OF 1

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:45

C30012089 CABLE GUIDE EXTENSION LIST OF MATERIAL				
ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	1	MS03799	SAFETY CLIMB CABLE GUIDE EXTENSION PLATE	2
2.	4	C40024003	BOLT ASSEMBLY, 3/8 ø X 1 1/4 GR5 (FULL THREAD)	1
			TOTAL WEIGHT	3



EXPLODED VIEW



TOP VIEW

STATE OF MISSOURI
KEITH J.
TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION

Sabre Industries™
Towers and Poles

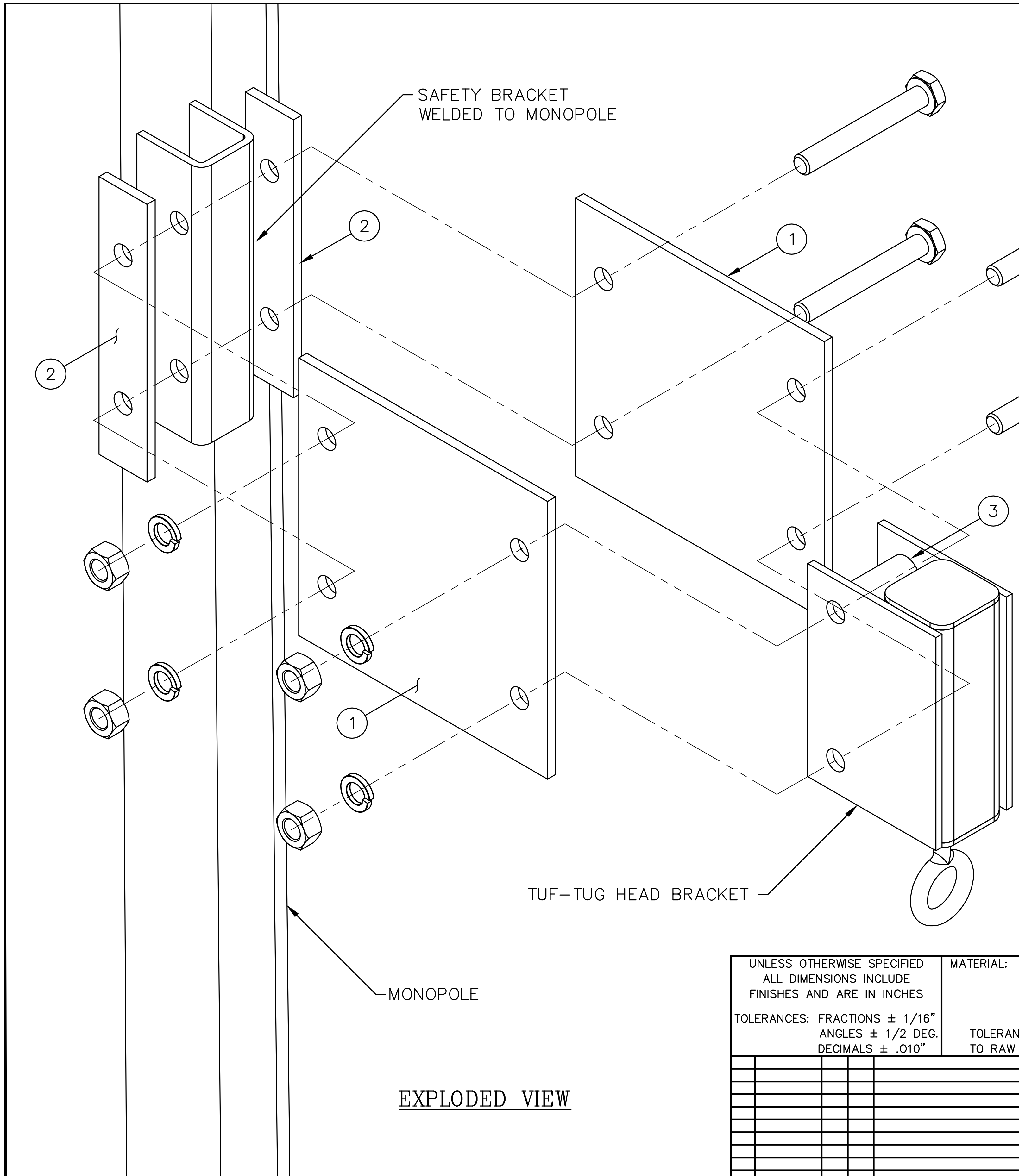
CABLE GUIDE
SAFETY CLIMB EXTENSION
FOR TUF-TUG SAFETY DEVICE

DATE	2/22/18	SIZE: B	DRAWING NO.: C30012089	REV: 0
DRAWN BY	JKW		SCALE: None	PAGE: 1 OF 1
CHECKED BY	WJ			

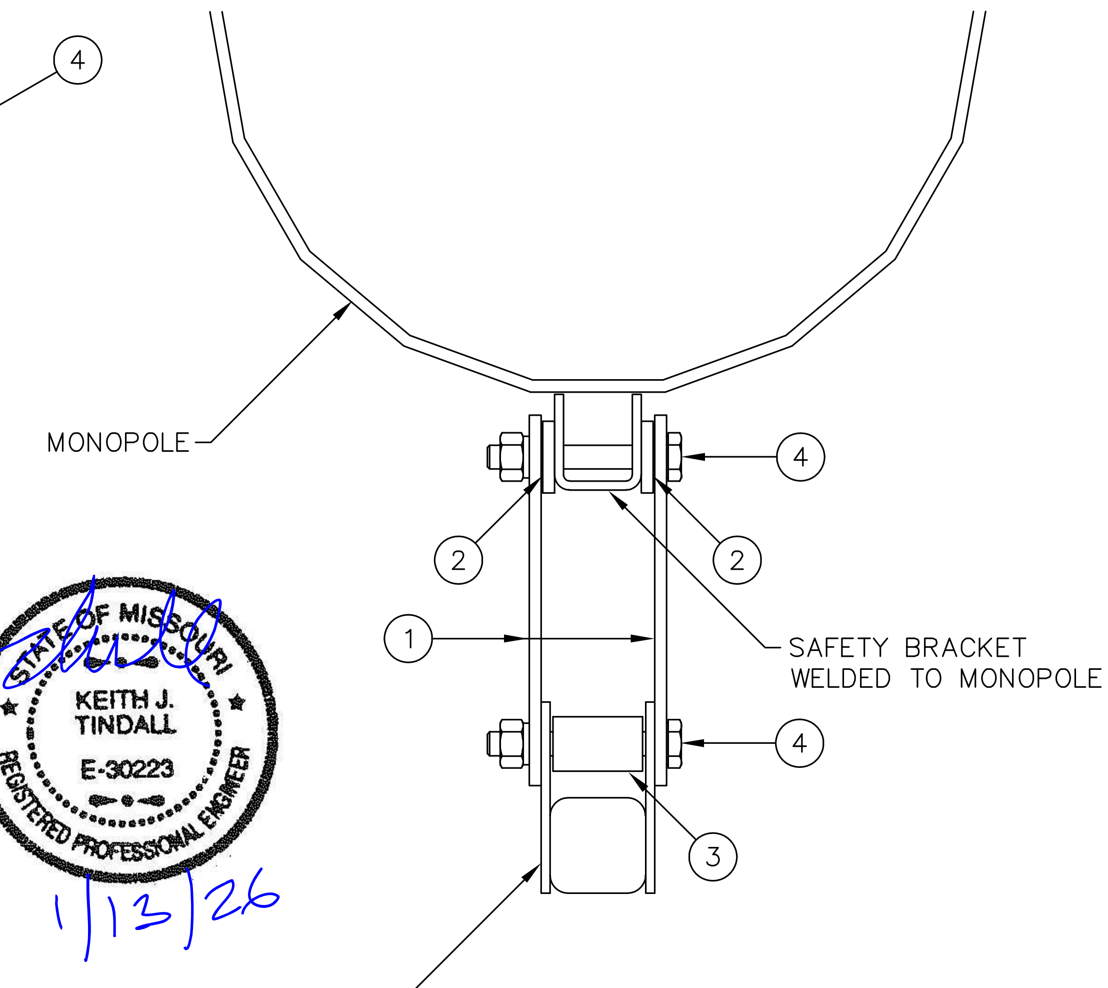
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/14/2026 4:20:46

C30012088 TOP BRACKET EXTENSION LIST OF MATERIAL

ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	2	MS02935	TOP SAFETY CLIMB EXTENSION PLATE	9
2.	2	MS03798	TOP SAFETY CLIMB EXTENSION FILLER PLATE	2
3.	2	CS03553	PIPE, SPACER 1.05 O.D. X .113 X 0'–1 7/8	1
4.	4	C40026012	BOLT ASSEMBLY, 1/2 ø X 3 3/4 A325	2
			TOTAL WEIGHT	14



EXPLODED VIEW



TOP VIEW

STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION

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Towers and Poles

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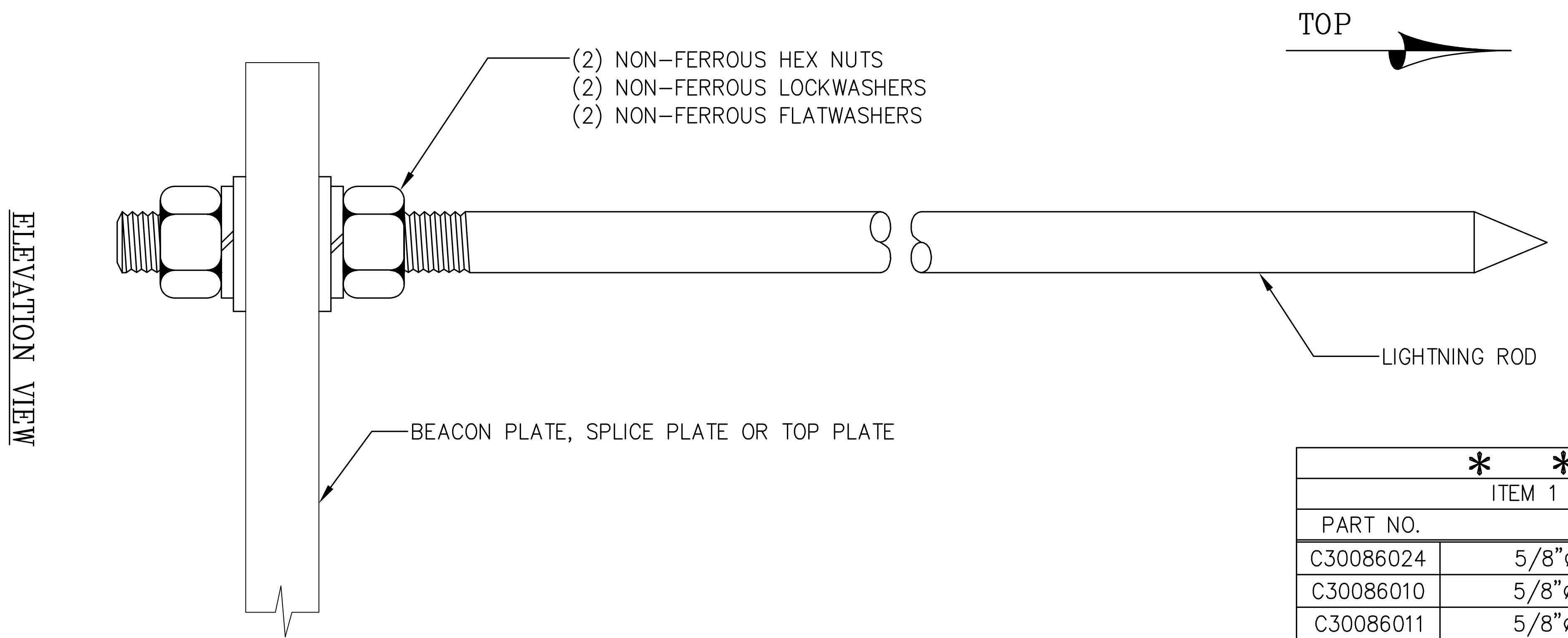
TOP BRACKET
SAFETY CLIMB EXTENSION
FOR TUF–TUG SAFETY DEVICE

DATE	2/22/18	SIZE: B	DRAWING NO.: C30012088	REV: 0
DRAWN BY	JKW		SCALE: None	PAGE: 1 OF 1
CHECKED BY	WJ			

LIST OF MATERIAL				
ITEM	QTY.	PART NO.	DESCRIPTION	WEIGHT
1.	1	* *	LIGHTNING ROD W/(2) NUT, LKW, FLW	* *



* *		
	ITEM 1	
	PART NO.	SIZE
	C30086024	5/8"ø X 1'-0"
	C30086010	5/8"ø X 2'-0"
	C30086011	5/8"ø X 3'-0"
	C30086001	5/8"ø X 4'-0"
*	C30086008	5/8"ø X 4'-0"
▶	C30086022	5/8"ø X 4'-0"
	C30086005	5/8"ø X 5'-0"
	C30086006	5/8"ø X 6'-0"
	C30086002	5/8"ø X 8'-0"
	C30086007	3/4"ø X 6'-0"
	C30086003	3/4"ø X 8'-0"
	C30086004	3/4"ø X 10'-0"

*THIS LIGHTNING ROD IS STAINLESS STEEL.
▶THIS LIGHTNING ROD IS GALVANIZED.

STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS INCLUDE FINISHES AND ARE IN INCHES

TOLERANCES: FRACTIONS ± 1/16"
ANGLES ± 1/2 DEG.
DECIMALS ± .010"

MATERIAL:

TOLERANCES DO NOT APPLY TO RAW MATERIAL

REV	DATE	DRW	CHK	DESCRIPTION
10	12/22/15	KTW	WTK	REMOVED 5/8"ø X 12'-0" LIGHTNING ROD.
9	08/19/15	LRS	ZAK	ADDED 5/8"ø X 1' LIGHTNING ROD
8	06/16/15	PSB	KTW	ADDED GALVANIZED 5/8"ø X 4' LIGHTNING ROD
7	6/6/07	DPJ	JPD	ADDED STAINLESS STEEL 5/8"ø LIGHTNING ROD
6	09/20/06	KMM	CE	ADDED 5/8"ø X 2' LIGHTNING ROD OPTION
5	4/28/05	CHH	HHC	ADDED 5/8"ø X 3' LIGHTNING ROD OPTION
4	3/12/04	CHH	CE	UPDATED LIST OF MATERIAL
3	06/18/03	RGF	FGR	ADDED 5/8 X 12 FT LIGHTNING ROD OPTION
2	04/02/03	JKW	RWM	ADDED 5/8"ø X 8'-0" LIGHTNING ROD OPTION.
1	8/19/02	CHH	ZAK	CHANGED PART NO'S. TO CATALOG.

Sabre Industries™
INNOVATION DELIVERED

CONFIDENTIAL

TYPICAL LIGHTNING ROD INSTALLATION

DATE	1/15/02	SIZE	DRAWING NO.		REV
		B	9025689		10
DRAWN BY	TLH		SCALE	PAGE	
CHECKED BY	CE		None	1 OF 1	

sabre

CUSTOMER : MOTOROLA ISPO

SITE : LEE'S SUMMIT JOF, MO

B.O.M. 120 FT. MONOPOLE

PC=PIECE	OR=ORANGE
PLT=PALLET	WH=WHITE
BDL=BUNDLE	O/W=OR & WH
CRT=CRATE	N/R=NOT REQ'D
D=DRUM	SP=SPECIAL
BX=BOX	

ITEM NO.	NO. REQ'D.	DRAWING NUMBER	DRAWING REV	PART NO.	DESCRIPTION	TOTAL WEIGHT LBS.	PAINT	PACKING KIT	PACKING QTY OF PKG'S	PACKING PKG. NO.
1					**ANCHOR BOLTS AND TEMPLATES**					
2	2			569487-9001	ANCHOR BOLT TEMPLATES (W\ 50.25" BOLT CIRCLE)	96				
3	18			C40041059	1-1/4" X 5'-3" (ASTM F1554 GRADE 105) OR EQUAL	488				
4					**SECTIONS**					
5	1			MR5694870110	21'-6" TOP SECTION	1707	G			
6	1			MR5694870120	53'-6" MID SECTION	5072	G			
7	1			MR5694870130	53'-3" BOTTOM SECTION W\ BASE	8527	G			
8					**SAFETY CLIMB**					
9	1			C30012033	SAFETY-CLIMB-SYSTEM-SELECT-KIT 150'	60				
10	2			C30012089	SAFETY CLIMB EXTENSION KIT	6				
11	1			C30012088	SAFETY CLIMB EXTENSION KIT	14				
12					**CLIMBING SYSTEM**					
13	8			C40011014	STEP BOLT ANCHOR BRACKET, 45° FORMED YELLOW	6				
14	280			C40044017	STEP BOLT 5/8" X 7"	280				
15					**OBSTRUCTION LIGHT MATERIAL**					
16	3			C30002002	LIGHT-SIDELIGHT MOUNT	15				
17					**MOUNTS**					
18	10			C10112377	TRI-COLLAR MOUNT 10"-40" POLE DIAMETER	2080				
19	1			C10112378	TRI-COLLAR MOUNT 12"-60" POLE DIAMETER	366				
20	3			C10117008	DISH-MOUNT-MONO (8' & 10')	237				

STATE OF MISSOURI
KEITH J. TINDALL
E-30223
REGISTERED PROFESSIONAL ENGINEER
1/13/26

REV	DATE	DRW	CHK	DESCRIPTION

DATE	11/26/25	**JOB NO.**	569487
DRAWN BY	PSB	**PRINT NO.**	BOM-1
CHECKED BY	MLC	**PAGE**	1 OF 2

sabre

CUSTOMER : MOTOROLA ISPO

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B.O.M. 120 FT. MONOPOLE

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ITEM NO.	NO. REQ'D.	DRAWING NUMBER	DRAWING REV	PART NO.	DESCRIPTION	TOTAL WEIGHT LBS.	PAINT	PACKING KIT	PACKING QTY OF PKG'S	PACKING PKG. NO.
1					**MOUNTS CONT'D**					
2	2			C10119106C	SIDE-ARM-MONOPOLE-6'	794				
3	3			C10114003	STANDOFF-ARM-3'	189				
4	1			C10900104	PIPE ANTENNA MOUNTING KIT 2-3/8" X 4'-0"	19				
5	1			C10900105	PIPE ANTENNA MOUNTING KIT 2-3/8" X 5'-0"	22				
6	2			C10900110	PIPE ANTENNA MOUNTING KIT 2-3/8" X 10'-0"	83				
7	2			C10900115	PIPE ANTENNA MOUNTING KIT 2-3/8" X 15'-0"	120				
8					**GROUNDING**					
9	1			C30086001	LIGHTNING ROD CCS 5/8" X 4'	5				
10					**MISCELLANEOUS**					
11	2			C30136003	8.5" X 12.5" X 0.1875PL ACCESS COVER (GALV)	13				
12	13			C30136002	6.5" X 12.5" X 0.1875PL ACCESS COVER (GALV)	66				
13	3			C30136001	11" X 26" X 0.1875PL ACCESS COVER (GALV)	49				
14	1			C30170014	TOP COVER KIT 24" TO 28"	96				
15	1			C40068001	13OZ CAN OF COLD GALV SPRAY	1				
16	1			CS00500	NAME PLATE	1				
17										
18										
19										
20										

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CHECKED BY	MLC	**PAGE**	2 OF 2