



2020 ANCHOR CONSTRUCTION DRAWINGS

SITE NAME:

SWEETEST HEART OF MARY

SITE NUMBER:

DE04229B

STREET ADDRESS:

4440 E. CANFIELD D/B/A 4440 RUSSELL ST.

DETROIT, MICHIGAN 48207



28505 SCHOOLCRAFT RD, BLDG#6
LIVONIA, MICHIGAN 48150
Phone: 734.367.7200
Fax: 734.367.7242

CONTACT: KEN KALOUSEK
(734) 444-0181

LANDTECH PROJECT NUMBER: 20398031

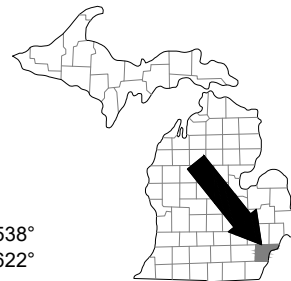
REV.	DATE	DESCRIPTION	BY
A	07/09/20	PRELIMINARY RELEASE	CJL
B	02/10/22	ADD'D ANT. COVER NOTE	TLR
C	03/30/22	RELOC PROP ANTENNAS	TLR
D	11/02/23	REV'D PER CLIENT	TLR

2020 ANCHOR CONSTRUCTION DRAWINGS

NOTE: THESE DRAWINGS ARE TO SCALE WHEN PLOTTED ON 11"x17" SHEETS. REFER TO GRAPHIC SCALES ON REPRODUCTIONS.

FROM T-MOBILE OFFICE HEAD NORTH ON MERRIMAN ROAD TO I-96; TURN EAST ON I-96 AND CONTINUE TO I-75; TURN SOUTH ON I-75 AND PROCEED TO WARREN AVENUE; TURN EAST ON WARREN AVENUE AND CONTINUE TO RUSSELL STREET; TURN SOUTH ON RUSSELL STREET AND PROCEED TO CANFIELD STREET; SITE IS LOCATED AT THE NORTHEAST CORNER OF RUSSELL STREET AND CANFIELD STREET.

DRIVING DIRECTIONS



LATITUDE: 42.35805538°
LONGITUDE: -83.0480622°

FAA INFORMATION

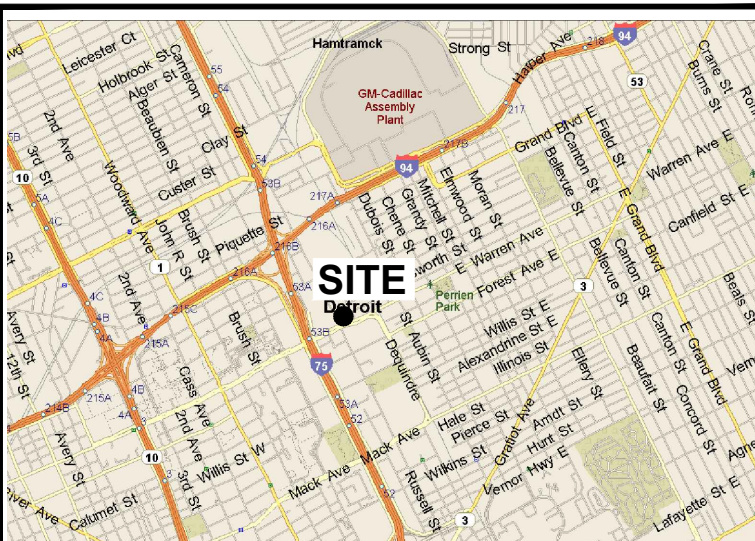
THE UTILITIES SHOWN ON THESE DRAWINGS ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. OTHER UTILITIES THAT ARE NOT SHOWN MAY BE PRESENT AT THE SITE. LANDTECH ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF THE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

THIS SEAL CERTIFIES ONLY THE CIVIL ENGINEERING DESIGN AND RELATED DETAILS SHOWN ON THESE PLANS. THIS SEAL DOES NOT CERTIFY ANY ARCHITECTURAL, ELECTRICAL, MECHANICAL, STRUCTURAL DESIGN, AND RELATED DETAILS INCLUDED IN THESE PLANS.

UTILITY NOTICE

SHEET DESCRIPTION

SHEET	DESCRIPTION
T-1	TITLE SHEET
C-1	SITE PLAN
C-1.1	SITE PLAN
C-2	EQUIPMENT ROOM
C-2.1	FLOOR PLANS
C-3	EXISTING ANTENNA PLAN
C-4	PROPOSED ANTENNA PLAN
C-5	ELEVATION VIEW
C-5.1	PICTORIAL VIEWS
C-5.2	PICTORIAL VIEWS
C-6	EQUIPMENT DETAILS
C-6.1	EQUIPMENT DETAILS
C-6.2	ANTENNA DETAILS
C-6.3	MOUNTING DETAILS
SK-1	PLATFORM STRUCTURAL PLAN
SK-2	ANTENNA STRUCTURAL DETAIL
SK-3	PLATFORM STRUCTURAL DETAIL
E-1	CONDUIT CABLE SCHEMATIC
E-1.1	CABLE DETAILS
E-1.2	ELECTRIC DETAILS
E-2	ONE-LINE DIAGRAM
E-3	GROUNDING PLAN
E-3.1	GROUNDING DETAILS
E-3.2	GROUNDING SCHEMATIC
M-1	HVAC DETAILS
M-1.1	HVAC GENERAL NOTES
M-1.2	EXHAUST FAN & LOUVER SCHEDULE
N-1	GENERAL NOTES
N-2	GENERAL NOTES



LOCATION MAP



Know what's below.
Call before you dig.

APPLICANT/LESSEE

NAME: T-MOBILE
ADDRESS: 28505 SCHOOLCRAFT ROAD, BLDG #6
LIVONIA, MI 48150
CONTACT: KEN KALOUSEK
PHONE: (734) 444-0181

PROPERTY INFORMATION

PROPERTY OWNER: CATHOLIC ARCHDIOCESE OF DETROIT
ADDRESS: 12 STATE STREET,
DETROIT, MI 48226

CONTACT:
PHONE:

AREA OF CONSTRUCTION: 165 SQ. FT.
PRESENT OCCUPANCY TYPE: ASSEMBLY
PROPOSED OCCUPANCY TYPE: ASSEMBLY

CURRENT ZONING:

PARCEL NUMBER: WARD 7, ITEM 001241

HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED.

CIVIL ENGINEER & SURVEYOR:

NAME: LANDTECH PROFESSIONAL SURVEYING & ENGINEERING
ADDRESS: 1275 MCGREGOR WAY
GRAWIN, MI 49637
CONTACT: MATTHEW MOKANYK, P.S., P.E.
PHONE: (231) 943-0050

PROJECT SUMMARY

ATTENTION GC:
THESE DRAWINGS ARE PREPARED BASED ON RFDS DATED: 06/03/20

GENERAL CONTRACTOR TO CHECK WITH CONSTRUCTION TO VERIFY THAT THE RFDS IS CORRECT.

RFDS DESIGN

TITLE	NAME	DATE
OPERATIONS		
RF ENGINEER		
ZONING ADMINISTRATOR		
CONSTRUCTION MANAGER		
POWER APPROVAL		
FIBER/AAV APPROVAL		

T-MOBILE APPROVALS

SIGNATURE DATE

PRINTED NAME

NO CHANGES CHANGES NEEDED SEE COMMENTS

LESSOR APPROVAL

SHEET INDEX

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:

- | | |
|----------------------------------|--------------------------------------|
| 1. 2015 MICHIGAN BUILDING CODE | 7. 2015 MICHIGAN PLUMBING CODE |
| 2. 2015 MICHIGAN MECHANICAL CODE | 8. INTERNATIONAL FIRE CODE |
| 3. ANSI / TIA-222-H | 9. 2015 MICHIGAN UNIFORM ENERGY CODE |
| 4. NATIONAL ELECTRIC CODE 2017 | 10. MIOSHA RULES AND REGULATIONS |
| 5. LOCAL BUILDING CODE | 11. NFPA-101 LIFE SAFETY CODE |
| 6. CITY/COUNTY ORDINANCES | |

CITY OF DETROIT HAD ADOPTED MICHIGAN BUILDING CODE 2015 AND MICHIGAN REHABILITATION, PL FOLLOW.

USE GROUP: A-3
CONSTRUCTION TYPE: 1A

CODE COMPLIANCE



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SITE ADDRESS: 4440 E. CANFIELD D/B/A 4440 RUSSELL ST.
DETROIT, MICHIGAN 48207

Sheet Title:

TITLE SHEET

Sheet Number:

T-1

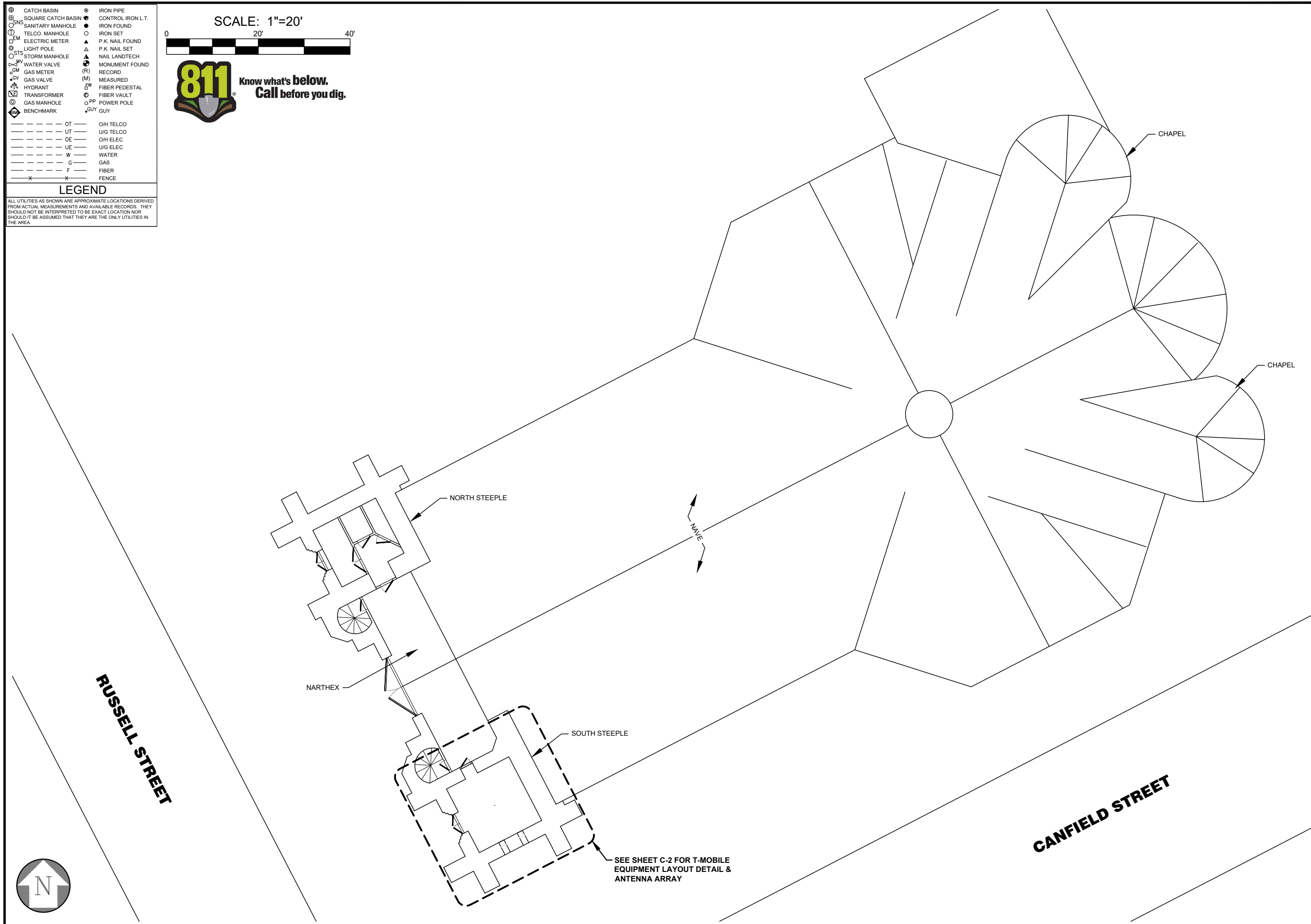
⊕	CATCH BASIN	⊙	IRON PIPE
⊕	SQUARE CATCH BASIN	⊙	CONTROL IRON L.T.
⊕	SANITARY MANHOLE	⊙	IRON FOUND
⊕	TELCO. MANHOLE	⊙	IRON SET
⊕	ELECTRIC METER	▲	P.K. NAIL FOUND
⊕	LIGHT POLE	▲	P.K. NAIL SET
⊕	STORM MANHOLE	▲	NAIL LANDTECH
⊕	WATER VALVE	▲	MONUMENT FOUND
⊕	(R)	▲	RECORD
⊕	GAS METER	▲	MEASURED
⊕	GAS VALVE	▲	FIBER PEDESTAL
⊕	HYDRANT	▲	FIBER VAULT
⊕	TRANSFORMER	▲	POWER POLE
⊕	GAS MANHOLE	▲	GUY
⊕	BENCHMARK	▲	GUY

SCALE: 1"=20'

811 Know what's below. Call before you dig.

LEGEND

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA.



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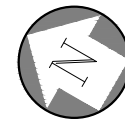
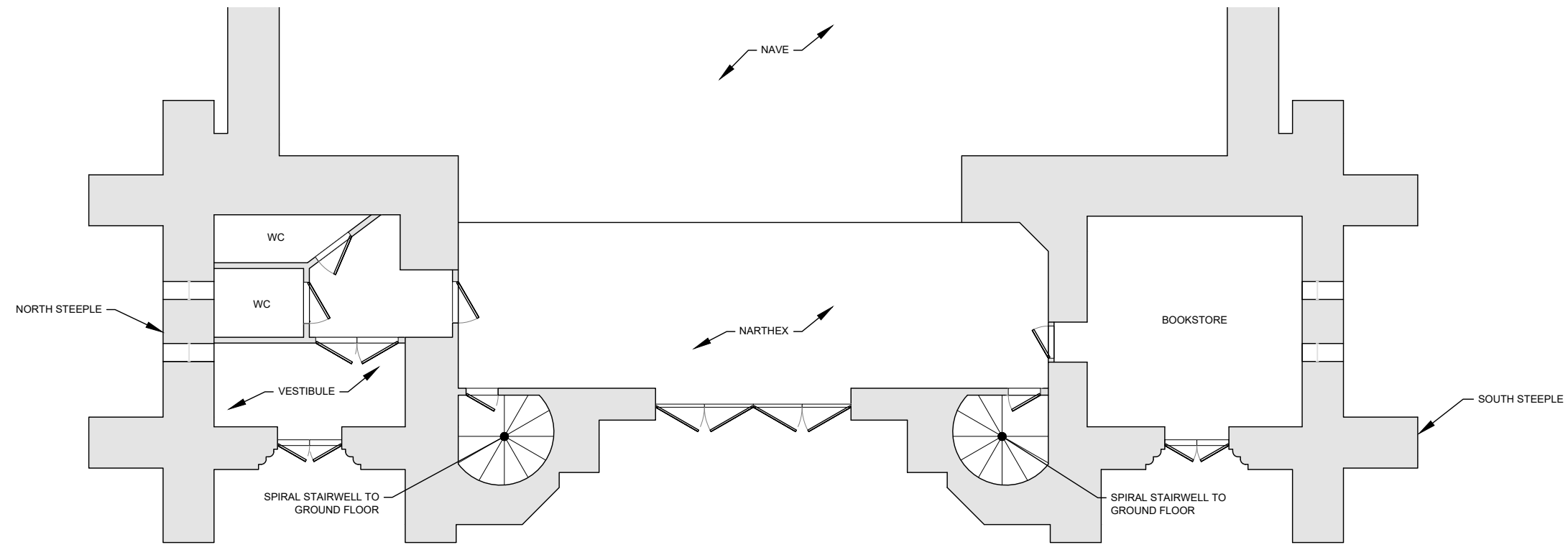
Sheet Title:
SITE PLAN

Sheet Number:
C-1

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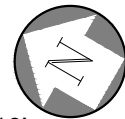
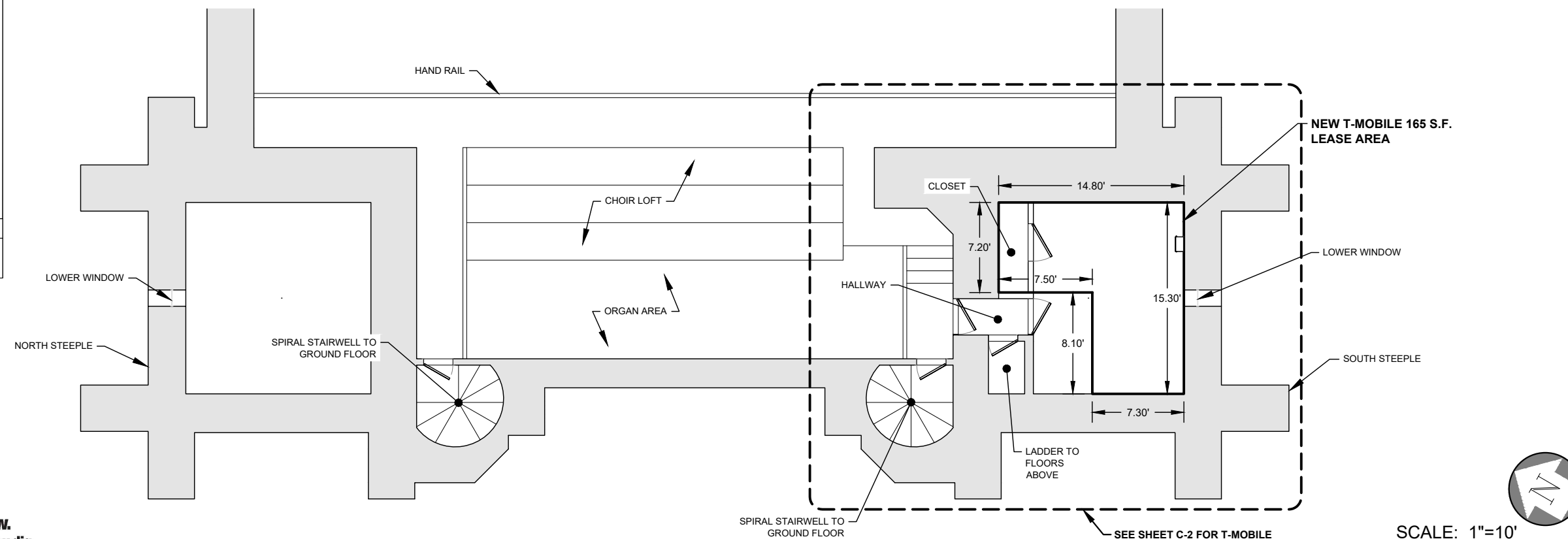
GROUND FLOOR 1"=10'

1

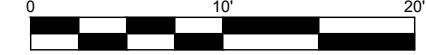
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- ⊕ SQUARE CATCH BASIN
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- ⊕ TELCO. MANHOLE
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- ⊕ FIBER VAULT
- ⊕ POWER POLE
- ⊕ GUY
- ⊕ GUY

- OT --- OH TELCO
- UT --- U/G TELCO
- OE --- OH ELEC
- UE --- U/G ELEC
- W --- WATER
- G --- GAS
- F --- FIBER
- X --- FENCE

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SCALE: 1"=10'



SECOND FLOOR LOFT AND STEEPLE PLAN 1"=10'

1



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Sheet Title: **SITE PLAN**

Sheet Number: **C-1.1**



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**2020 ANCHOR
CONSTRUCTION
DRAWINGS**

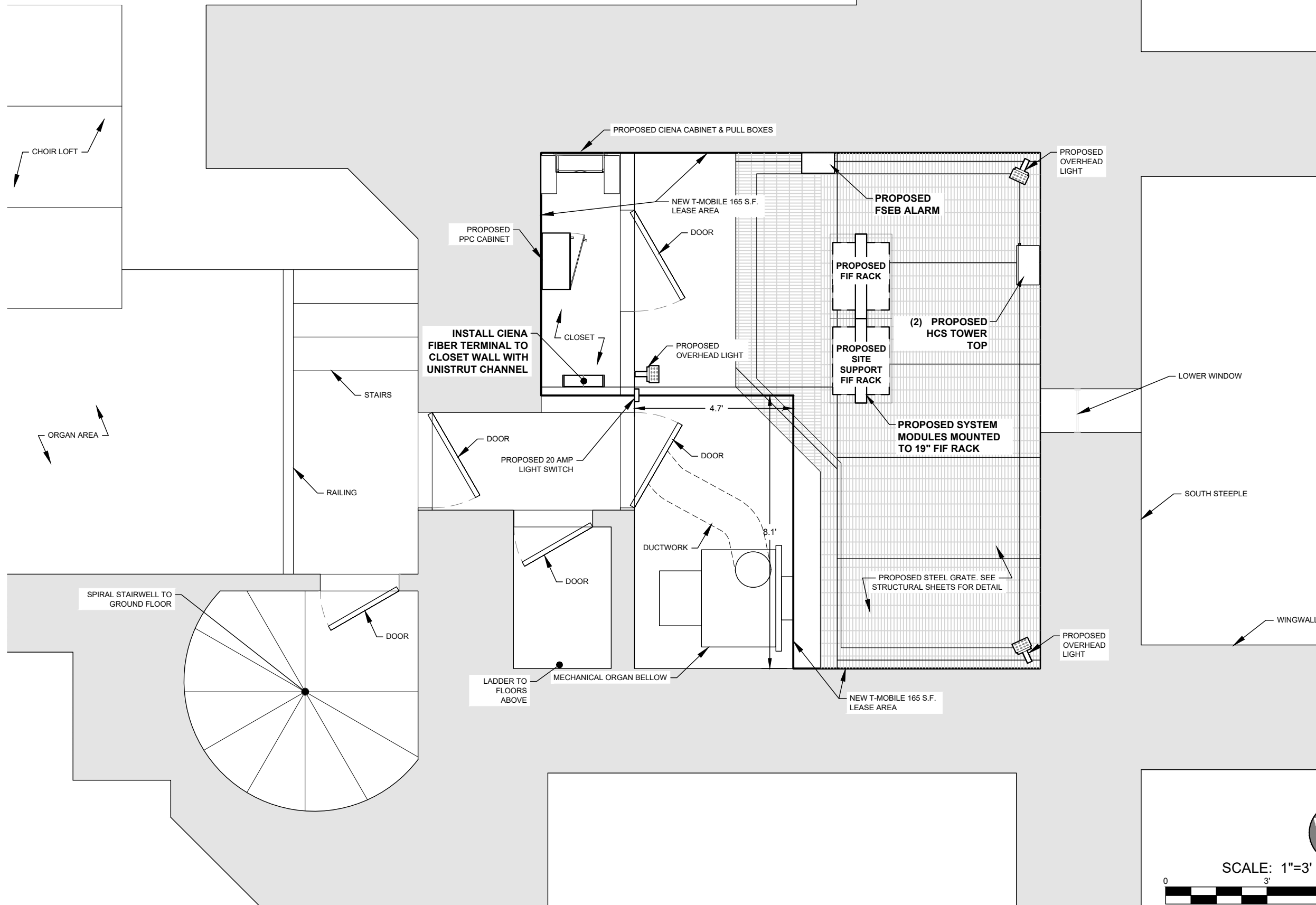
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Sheet Title:
EQUIPMENT ROOM

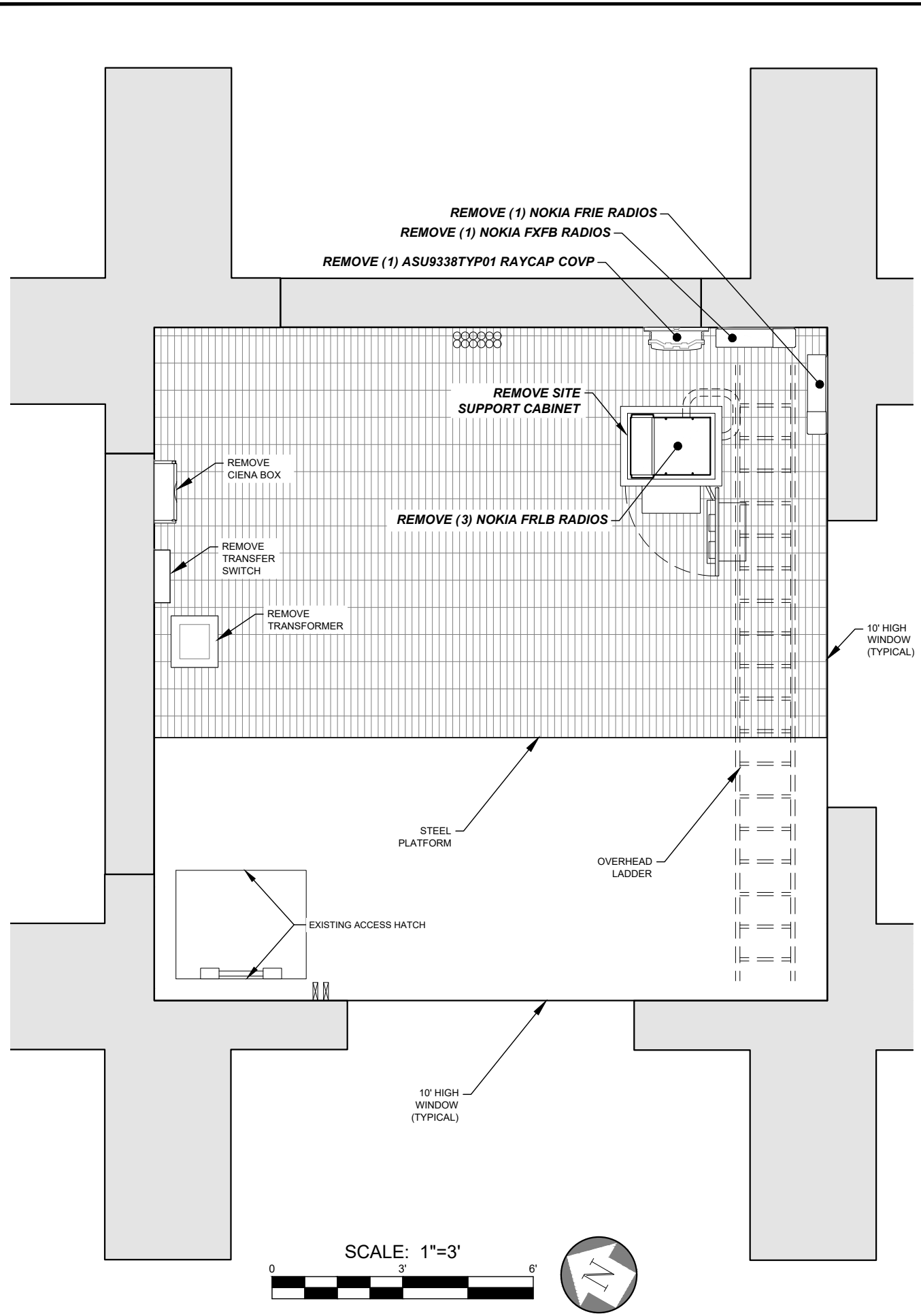
Sheet Number:
C-2



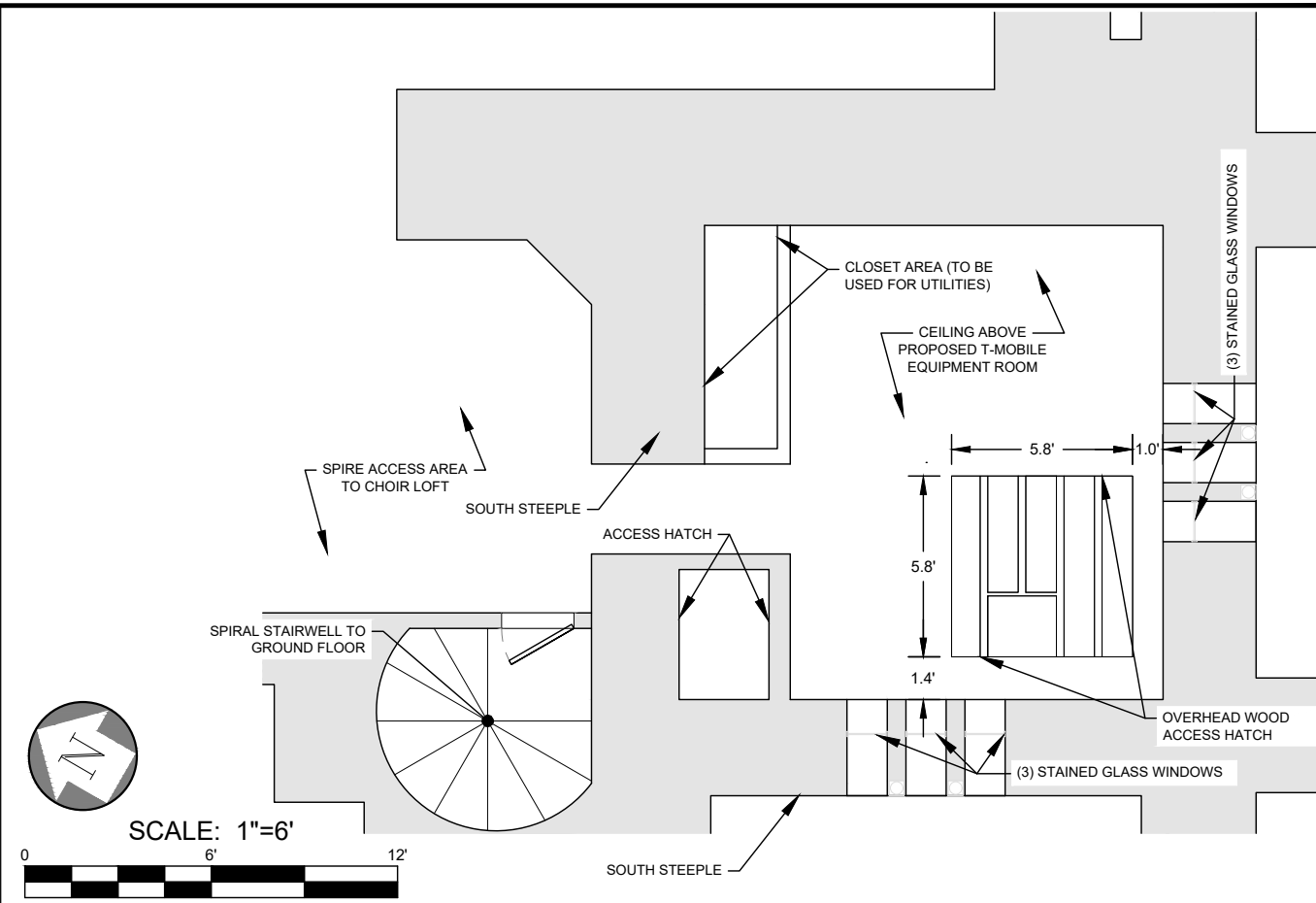
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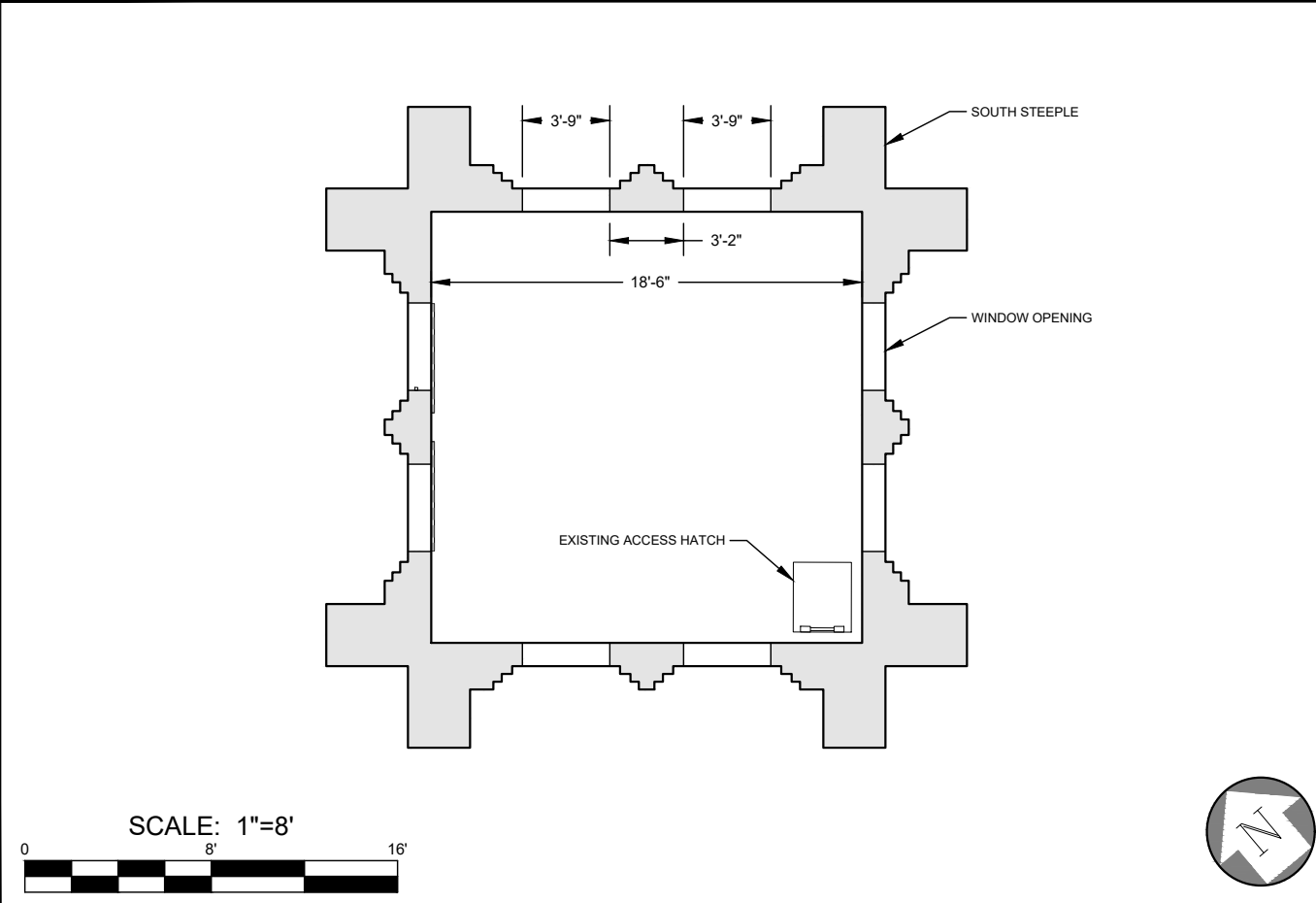
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3rd FL. SOUTH STEEPLE - OLD EQUIPMENT ROOM DEMO PLAN 1"=3' **1**



2ND FLOOR SOUTH STEEPLE CEILING VIEW 1"=6' **2**



5th FLOOR SOUTH STEEPLE - ANTENNA ROOM 1"=8' **3**



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Sheet Title:
FLOOR PLANS

Sheet Number:
C-2.1

NOTE: ANTENNA AND RADIO LAYOUT AS OBSERVED DURING SITE VISIT DOES NOT MATCH RFDS PROVIDED BY T-MOBILE. FIELD VISIT DATA SHOWN HEREON.

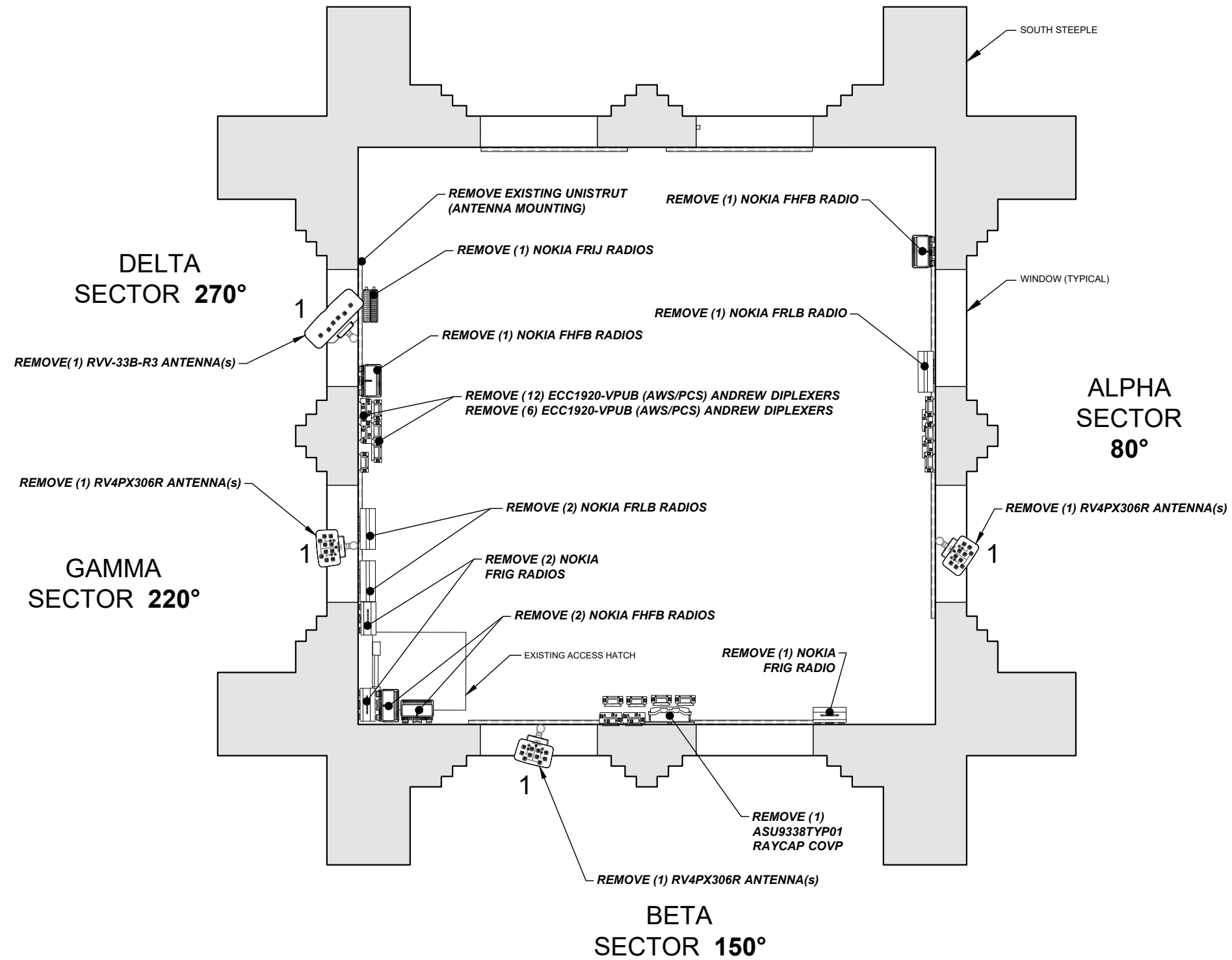
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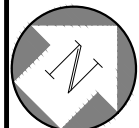
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Sheet Title: EXISTING ANTENNA PLAN

Sheet Number: C-3



NOTE: ALL PROPOSED ANTENNAS REQUIRE A BLACK FABRIC COVER, TO BE APPROVED BY THE LANDLORD

ANTENNA SCHEDULE						
SECTOR	ALPHA		BETA		GAMMA	
ANTENNA POSITION	A-1	A-2	B-1	B-2	C-1	C-2
AZIMUTH	80°	80°	150°	150°	220°	220°
RAD CENTER (AGL)	110'	110'	110'	110'	110'	110'
MODEL	FFHH-65C-R3	AAHF (MASSIVE MIMO)	FFHH-65C-R3	AAHF (MASSIVE MIMO)	FFHH-65C-R3	AAHF (MASSIVE MIMO)
FEEDER LENGTH	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"

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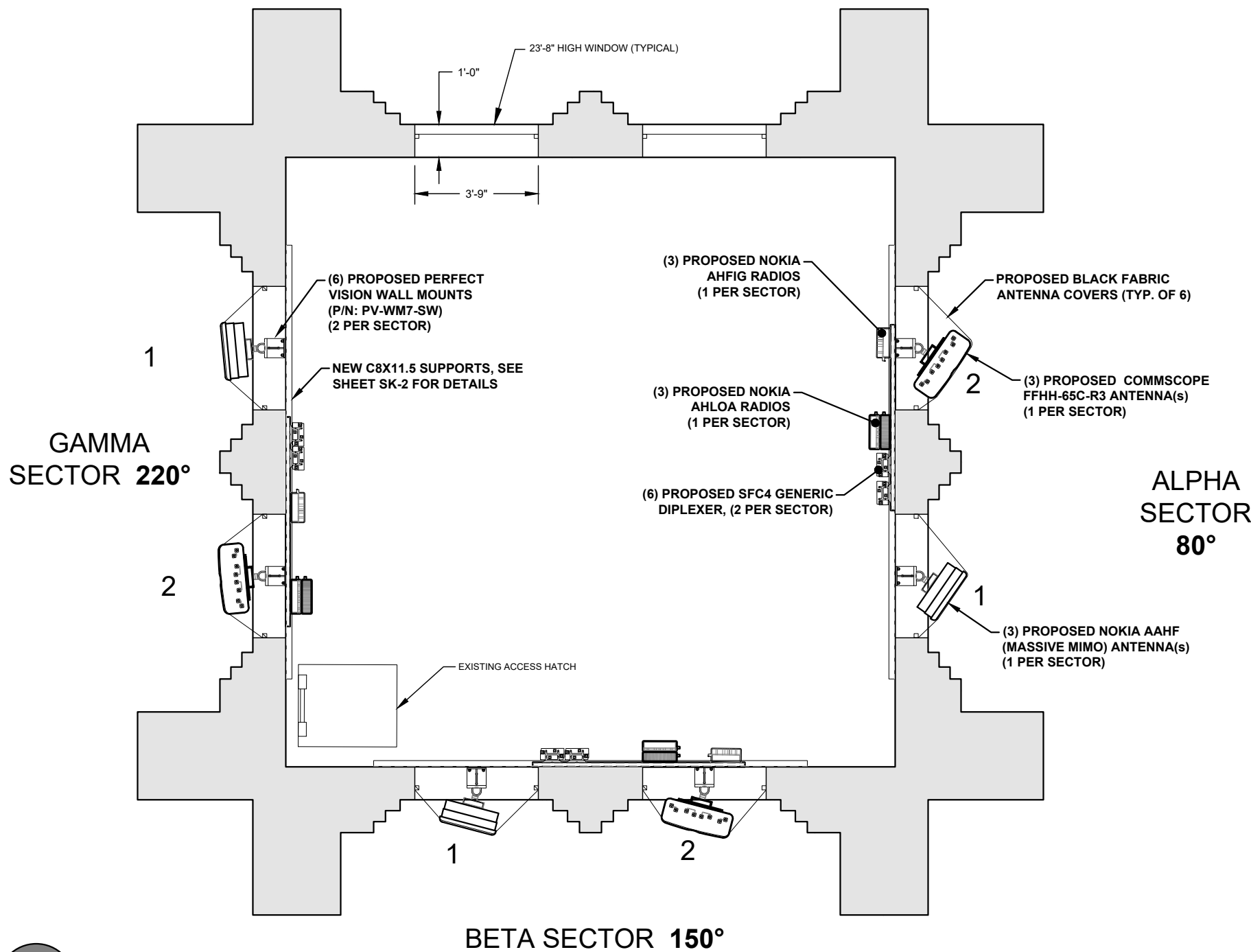
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Sheet Title: PROPOSED ANTENNA PLAN

Sheet Number: C-4



PROPOSED ANTENNA PLAN 1/4" = 1'

APPURTENANCE LIST

- REMOVING**
- (3) COMMSCOPE RV4PX306R ANTENNA(S) [63"l x 13.9"w x 8.2"d 52.9lb(s)]
 - (1) COMMSCOPE RVV-33B-R3 ANTENNA(S) [72"l x 25.2"w x 9.3"d 94.8lb(s)]
 - (3) NOKIA FRLB RADIOS (@SECTOR) [15.75"l x 15.75"w x 5.2"d 52.5lb(s)]
 - (1) NOKIA FRIE RADIOS (@SECTOR) [5.2"l x 5.2"w x 22"d 55.1lb(s)]
 - (1) NOKIA FXFB RADIOS (@SECTOR) [5.2"l x 19.4"w x 22.1"d 55.1lb(s)]
 - (3) NOKIA FRIG RADIOS (@SECTOR) [18.1"l x 15.2"w x 6"d 57.32lb(s)]
 - (4) NOKIA FHFB RADIOS (@SECTOR) [34.3"l x 12.6"w x 7.8"d 52.9lb(s)]
 - (1) NOKIA FRIJ RADIOS (@SECTOR) [23.1"l x 12.6"w x 5.8"d 46.3lb(s)]
 - (6) ETM19V2S12UB (STYLE 4) COMMSCOPE AMPLIFIER (@SECTOR) [10"l x 8.6"w x 2.3"d 11.2lb(s)]
 - (1) ASU9338TYP01 RAYCAP COVP (@PLATFORM) [20.38"l x 18.86"w x 5.83"d 19lb(s)]
 - (1) ASU9338TYP01 RAYCAP COVP (@SECTOR) [20.38"l x 18.86"w x 5.83"d 19lb(s)]
 - (12) ECC1920-VPUB (AWS/PCS) ANDREW DIPLEXERS (@SECTOR) [7.6"l x 7.3"w x 2.6"d 7.9lb(s)]
 - (6) ECC1920-VPUB (AWS/PCS) ANDREW DIPLEXERS (@PLATFORM) [7.6"l x 7.3"w x 2.6"d 7.9lb(s)]
 - (1) 1-1/4"Ø [1.24"OD] NOKIA MID CAP HCS HYBRID CABLE(S)
 - (2) 7/8"Ø [7/8"OD] NOKIA LOW CAP HCS HYBRID CABLE(S)
 - (6) 7/8"Ø [1.03"OD] ANDREW LDF5-50A COAX CABLE(S)
- INSTALLING**
- (6) PERFECT VISDION PV-WM7-SW MOUNTING BRACKETS
 - (3) COMMSCOPE FFHH-65C-R3 ANTENNA(S) [95.9"l x 25.2"w x 9.3"d 127.6lb(s)]
 - (3) NOKIA AAHF (MASSIVE MIMO) ANTENNA(S) [35.4"l x 21"w x 8.3"d 104lb(s)]
 - (3) NOKIA AHLOA RADIOS (@SECTOR) [22.1"l x 12.2"w x 7.5"d 83.9lb(s)]
 - (3) NOKIA AHFIG RADIOS (@SECTOR) [27.4"l x 12.1"w x 5.2"d 79.3lb(s)]
 - (6) SFC4 GENERIC DIPLEXER (@SECTOR)
 - (1) VOLTAGE BOOSTER POWERPLUS W/ 2 AMPLIFIER RAYCAP (@FIF RACK)
 - (1) EXTRA AMPLIFIER FOR POWERPLUS VOLTAGE BOOSTER (@FIF RACK)
 - (2) 1-1/2"Ø [1.55"OD] NOKIA HCS 2.0 TRUNK HYBRID CABLE(S)

APPURTENANCE LIST N.T.S.

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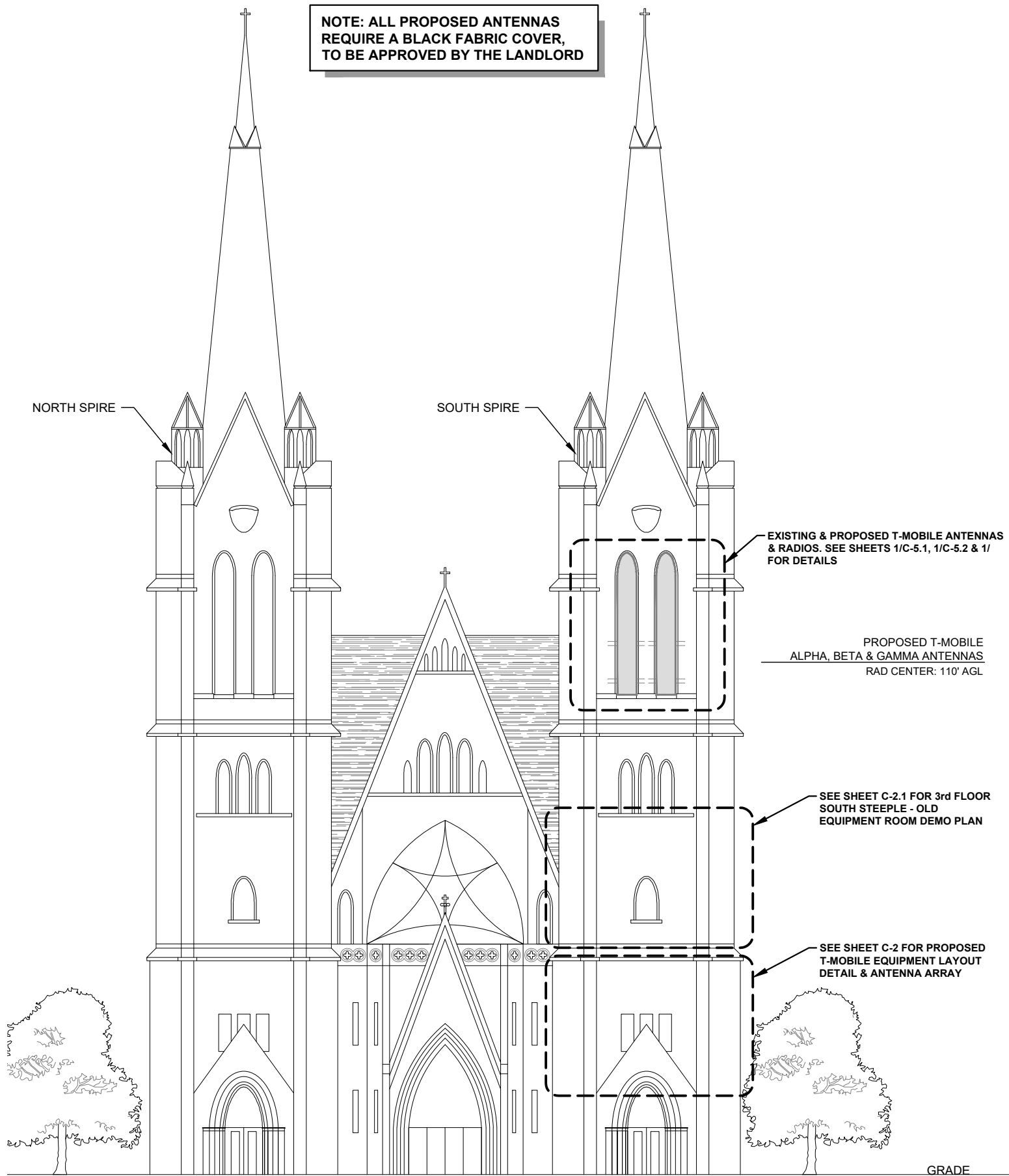


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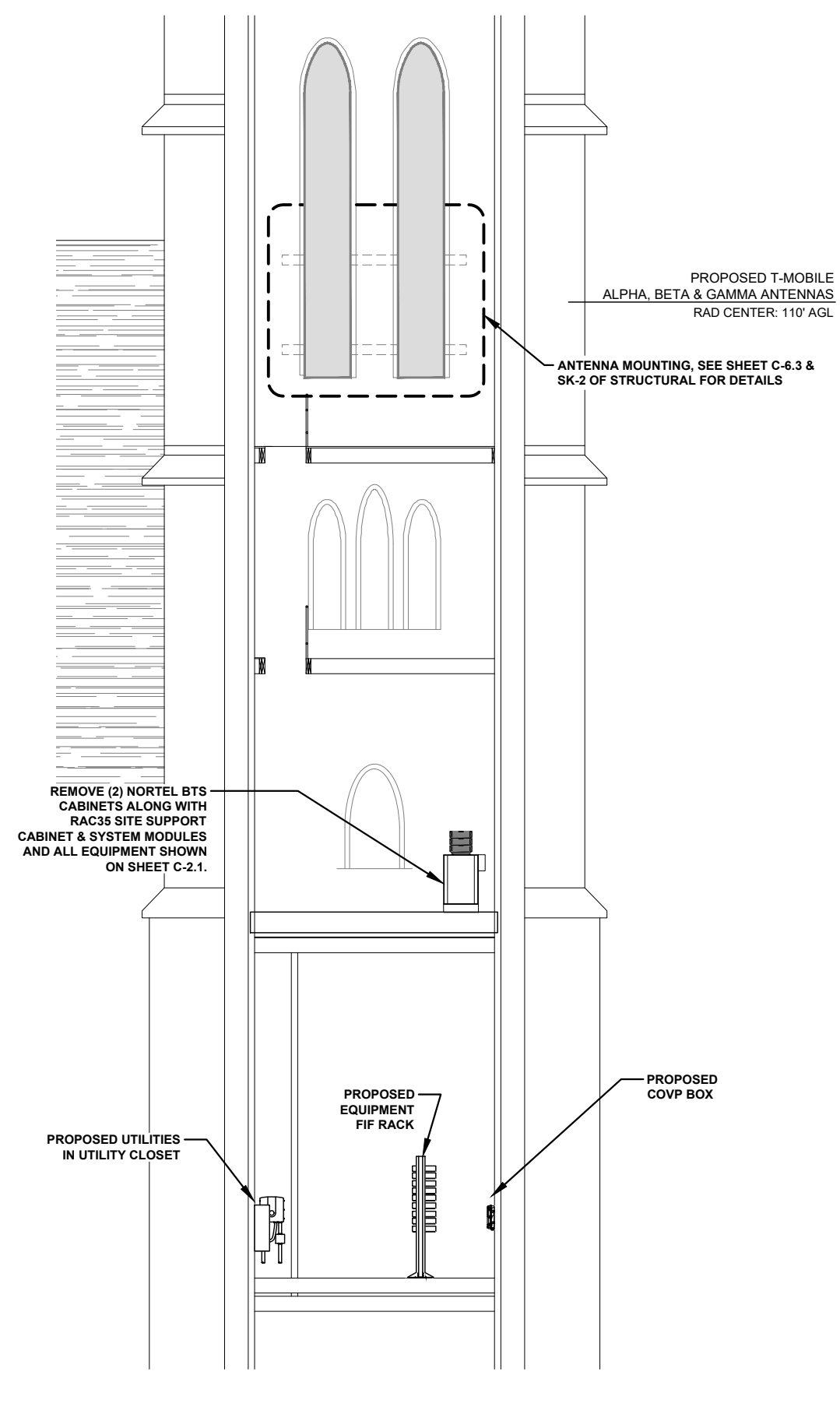
Sheet Title: ELEVATION VIEW

Sheet Number: C-5

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WEST ELEVATION VIEW N.T.S. **1**



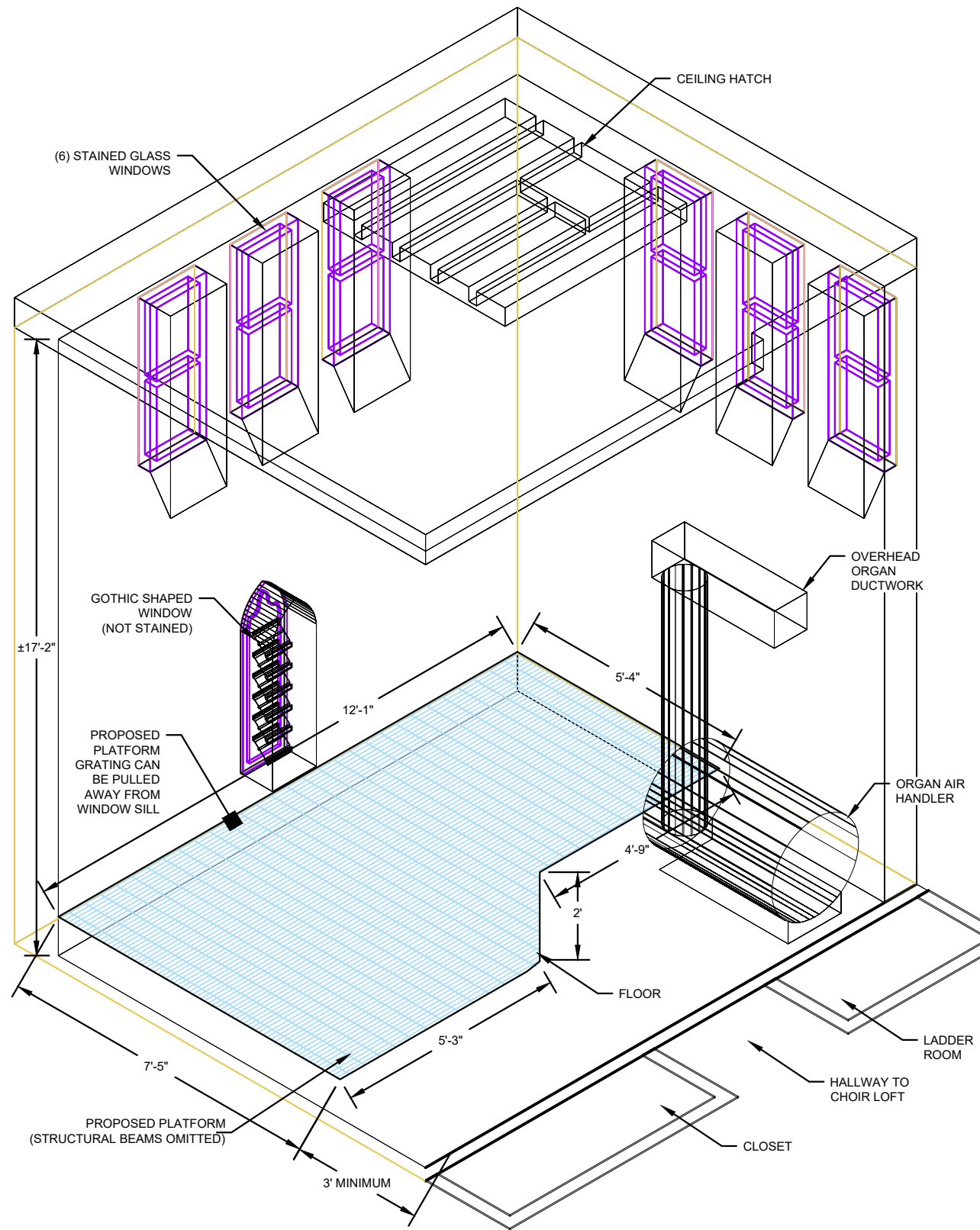
INTERIOR SOUTH SPIRE ELEVATION N.T.S. **2**

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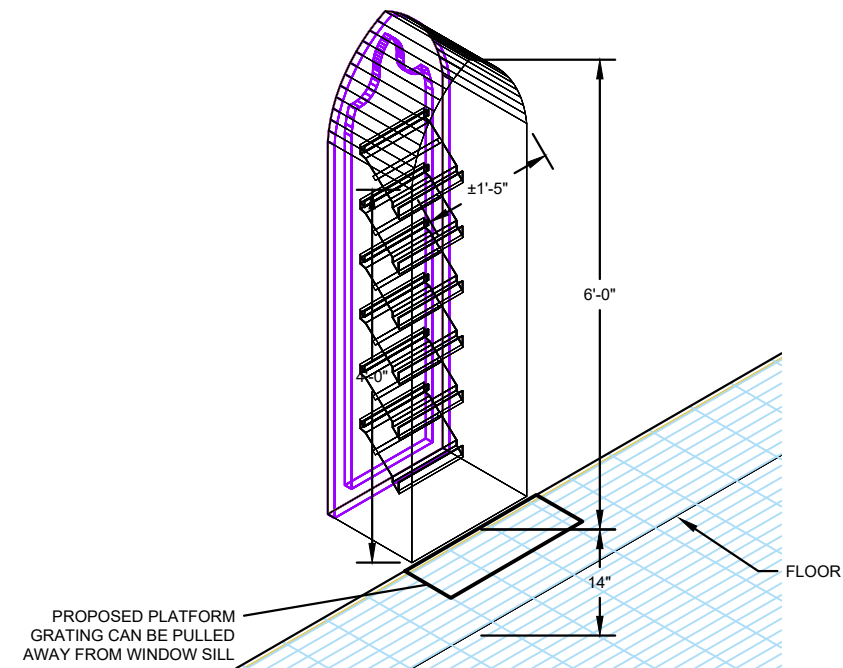
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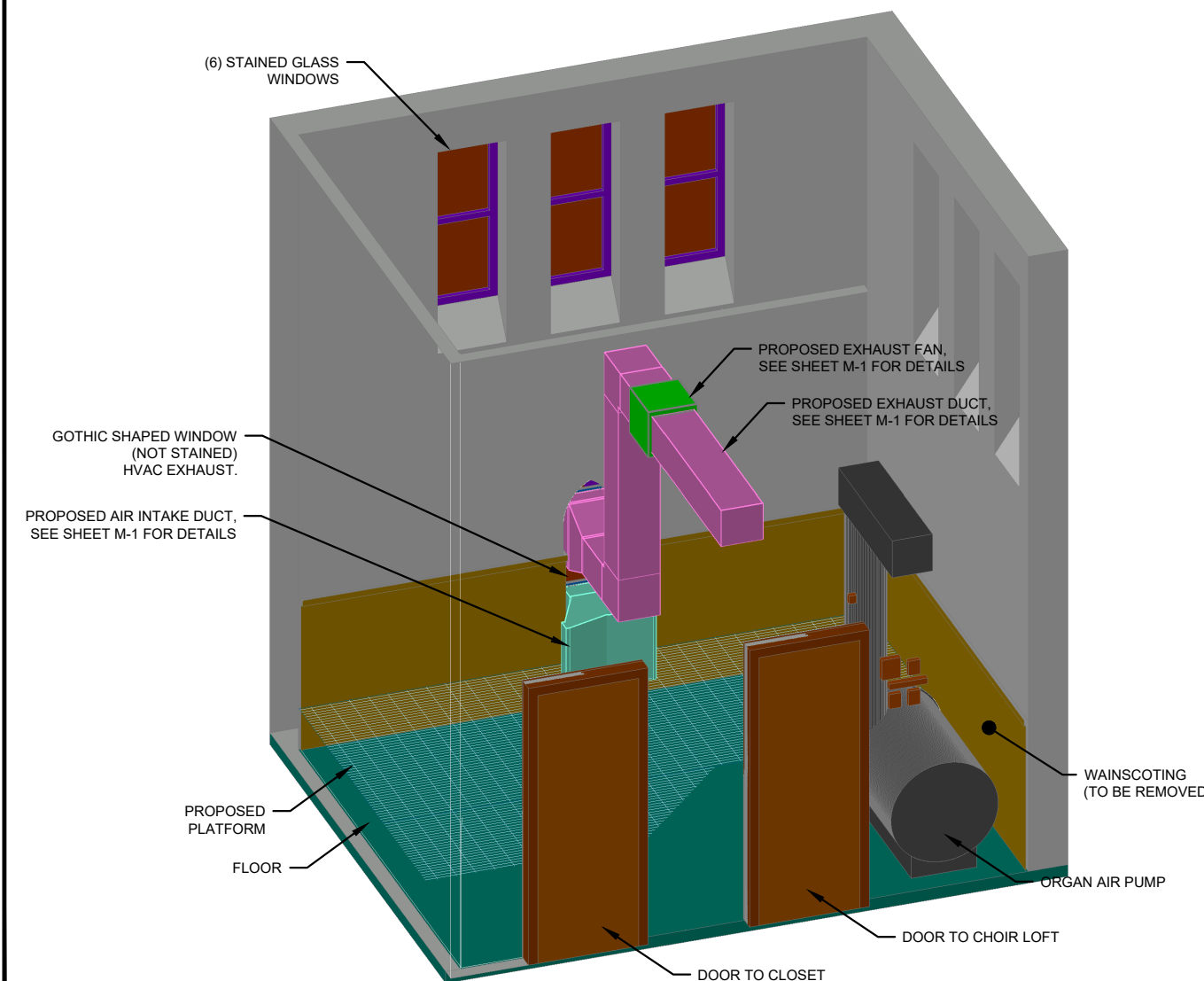
WIREFRAME VIEW N.T.S.

1



WINDOW DETAIL N.T.S.

2



ISOMETRIC VIEW N.T.S.

3



SITE #: DE04229B
 SITE NAME: SWEETEST HEART OF MARY
 SITE ADDRESS: 4440 E. CANFIELD D/B/A 4440 RUSSELL ST. DETROIT, MICHIGAN 48207

Sheet Title: PICTORIAL VIEWS

Sheet Number: C-5.1

LANDTECH PROJECT NUMBER: 20398031

REV.	DATE	DESCRIPTION	BY
B	02/10/22	ADD'D ANT. COVER NOTE	TLR
C	03/30/22	RELOC PROP ANTENNAS	TLR
D	11/02/23	REV'D PER CLIENT	TLR

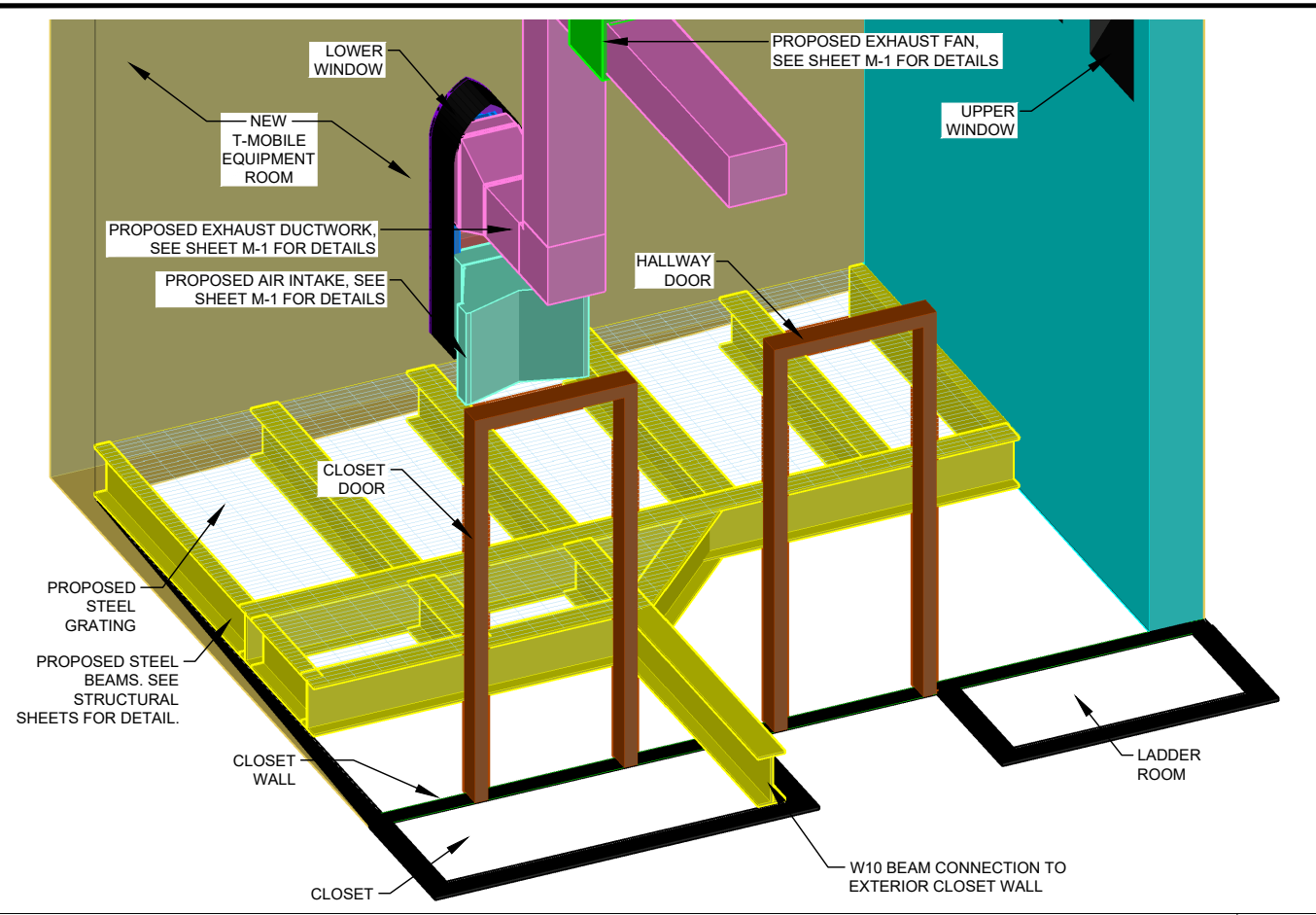
2020 ANCHOR CONSTRUCTION DRAWINGS
 NOTE: THESE DRAWINGS ARE TO SCALE WHEN PLOTTED ON 11"x17" SHEETS. REFER TO GRAPHIC SCALES ON REPRODUCTIONS.



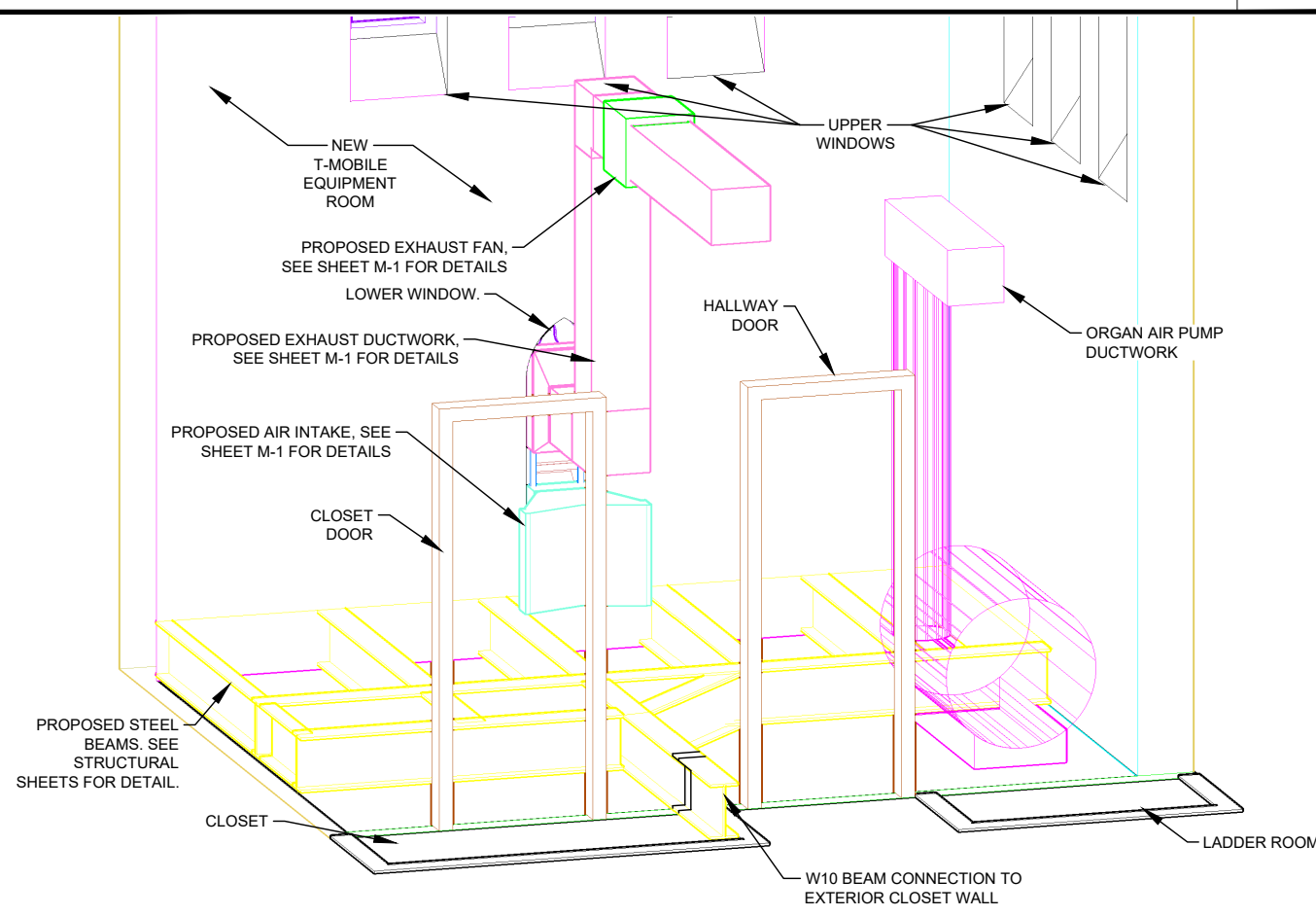
SITE #: DE04229B
 SITE NAME: SWEETEST HEART OF MARY
 SITE ADDRESS: 4440 E. CANFIELD D/B/A 4440 RUSSELL ST. DETROIT, MICHIGAN 48207

Sheet Title: PICTORIAL VIEWS

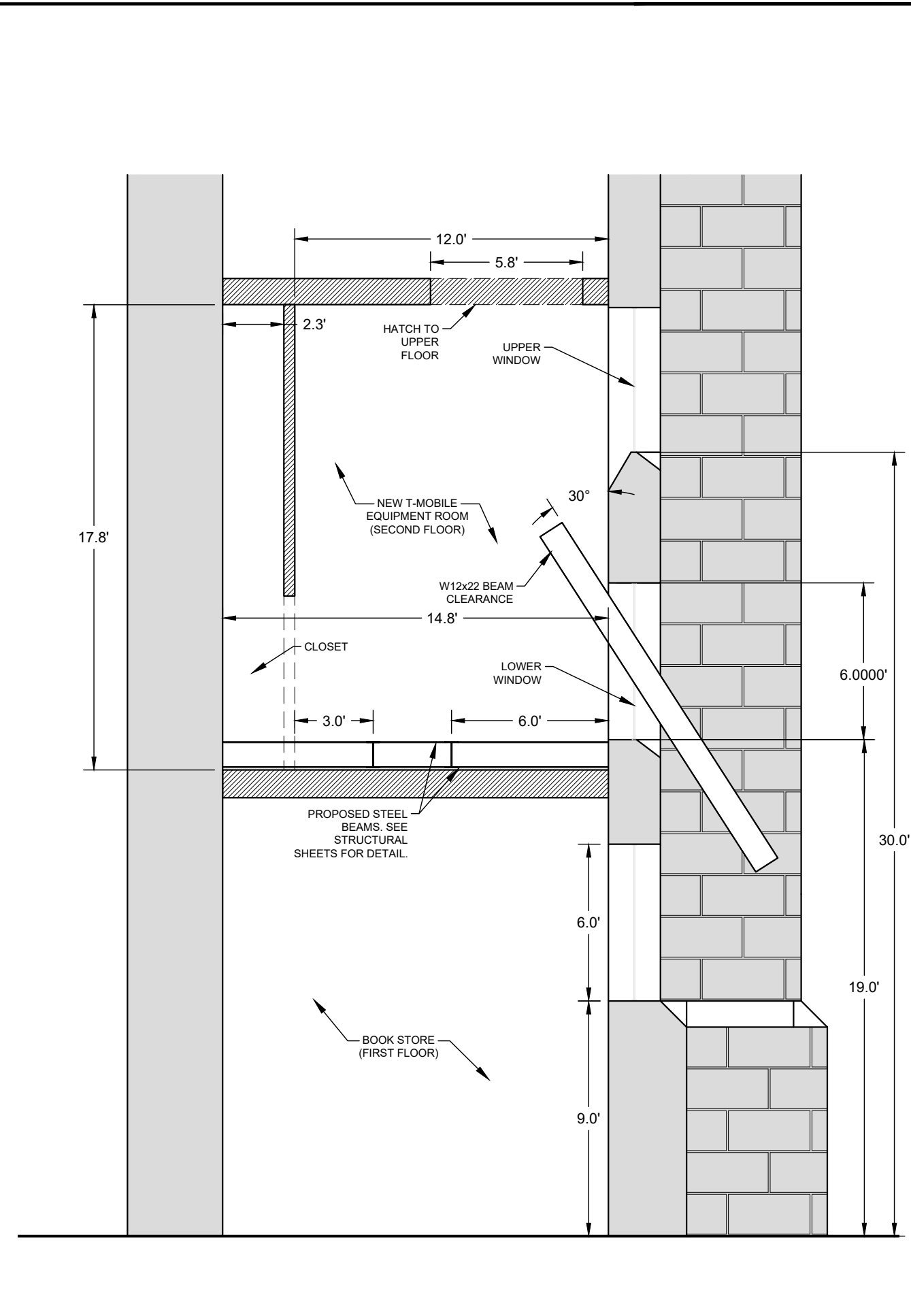
Sheet Number: C-5.2



PLATFORM DETAIL N.T.S. **1**

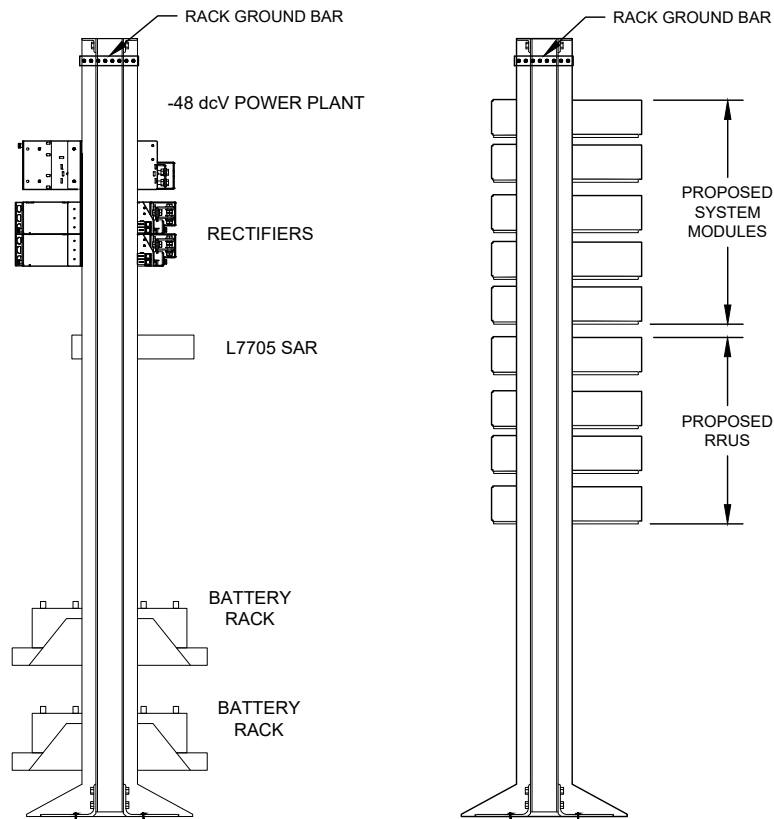


PLATFORM PICTORIAL N.T.S. **2**



CROSS-SECTION DETAIL A-A 1"=5' **3**

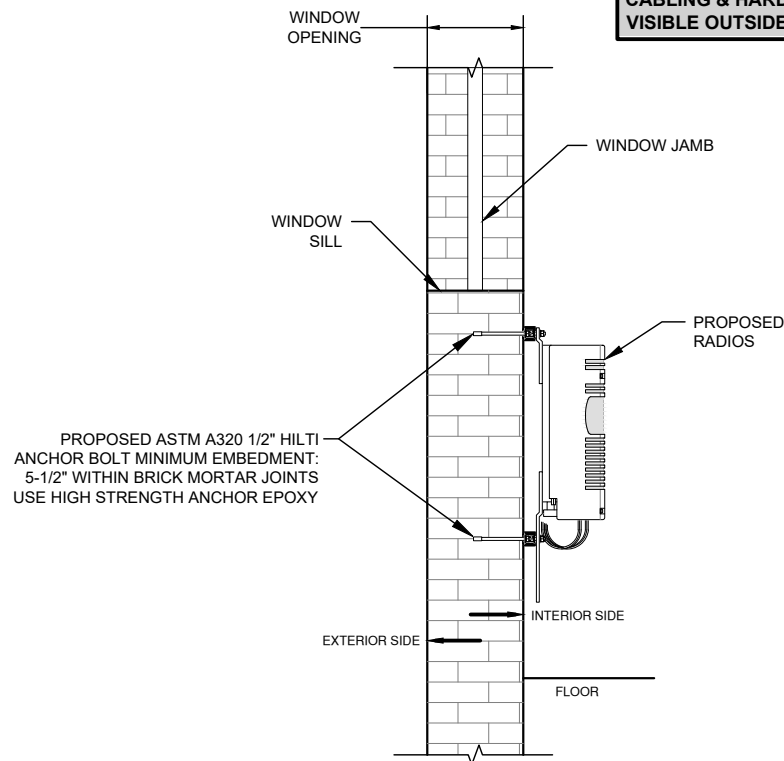
NOTE: GROUND ALL EQUIPMENT IN RACK, TO RACK GROUND BAR PER MANUFACTURER'S REQUIREMENTS. MINIMUM 6 AWG SOLID TINNED CU



NOTE: NUMBER OF MODULES/RADIOS VARIES. CONSULT CURRENT RFDS FOR EXACT QUANTITIES.

19" WIDE FIF RACK DETAIL N.T.S. **1**

PAIN ALL ANTENNAS, CABLING & HARDWARE VISIBLE OUTSIDE BLACK.

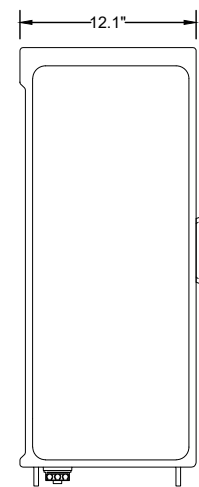


NOTE: CABLING FROM COVP TO RADIOS OMITTED FOR CLARITY. SEE SHEET C-2 FOR DETAILS.

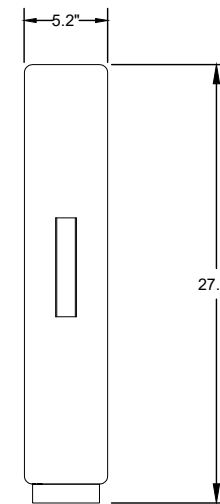
RADIO MOUNTING DETAIL N.T.S. **2**



PLAN VIEW



FRONT VIEW



SIDE VIEW

MANUFACTURER: NOKIA
 MODEL: AHFIG
 BANDWIDTH: 65 MHz & 80 MHz
 DIMENSIONS: 27.4" x 12.1" x 5.2"
 WEIGHT: 79.3 lbs
 NO. OF PORTS: 4T4R
 FIBER PORTS: 2 X 9.8 Gbps CPRI
 RF CONNECTORS: 4.3-10+

AHFIG RADIO UNIT N.T.S. **3**

T-Mobile

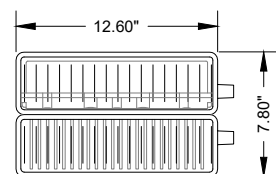
28505 SCHOOLCRAFT RD, BLDG#6
 LIVONIA, MICHIGAN 48150
 Phone: 734.367.7200
 Fax: 734.367.7242
 CONTACT: KEN KALOUSEK
 (734) 444-0181

LANDTECH PROJECT NUMBER: 20398031

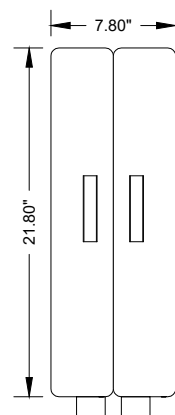
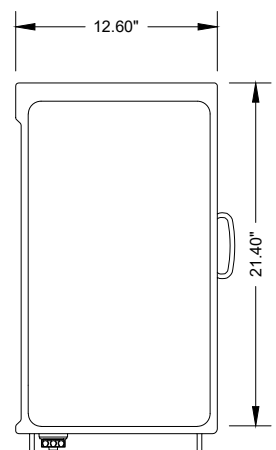
REV.	DATE	DESCRIPTION	BY
A	07/09/20	PRELIMINARY RELEASE	CJL
B	02/10/22	ADD'D ANT. COVER NOTE	TLR
C	03/30/22	RELOC PROP ANTENNAS	TLR
D	11/02/23	REV'D PER CLIENT	TLR

2020 ANCHOR CONSTRUCTION DRAWINGS

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MANUFACTURER: NOKIA
 MODEL: AHLOA
 FREQUENCY: 600 MHz
 DIMENSIONS w/ SOLAR SHIELD: 22.1" x 12.2" x 7.5"
 WEIGHT w/ BRACKET & SOLAR SHIELD: 83.9 lbs
 CONNECTORS: (2) OPTICAL
 (1) DIN FEMALE (DC POWER)



AHLOA RADIO UNIT N.T.S. **4**

NOT USED **5**

NOT USED **6**



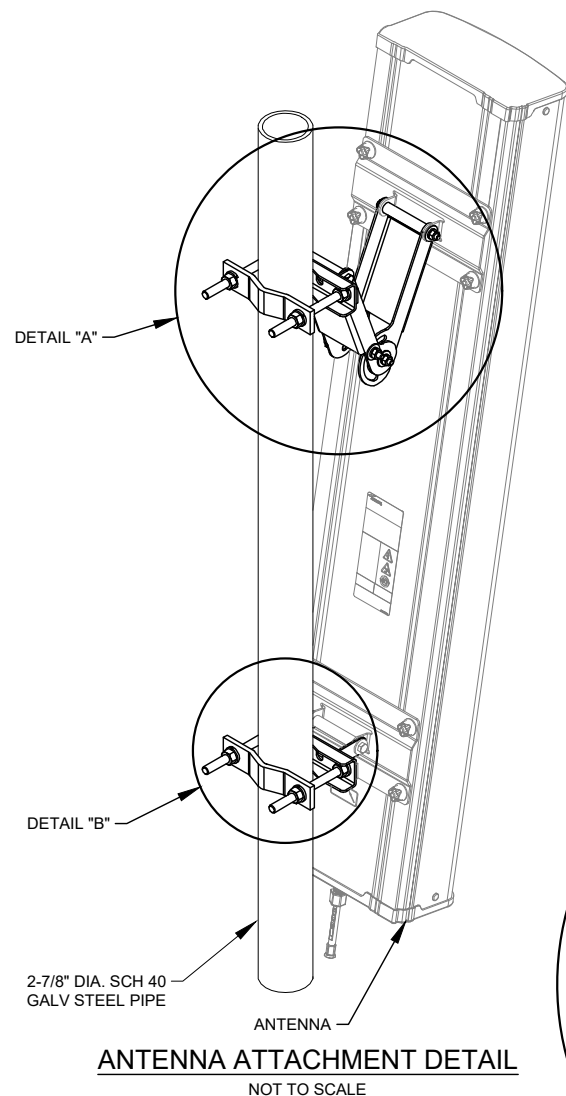
SITE #: DE04229B
 SITE NAME: SWEETEST HEART OF MARY
 SITE ADDRESS: 4440 E. CANFIELD D/B/A 4440 RUSSELL ST. DETROIT, MICHIGAN 48207

Sheet Title: EQUIPMENT DETAILS

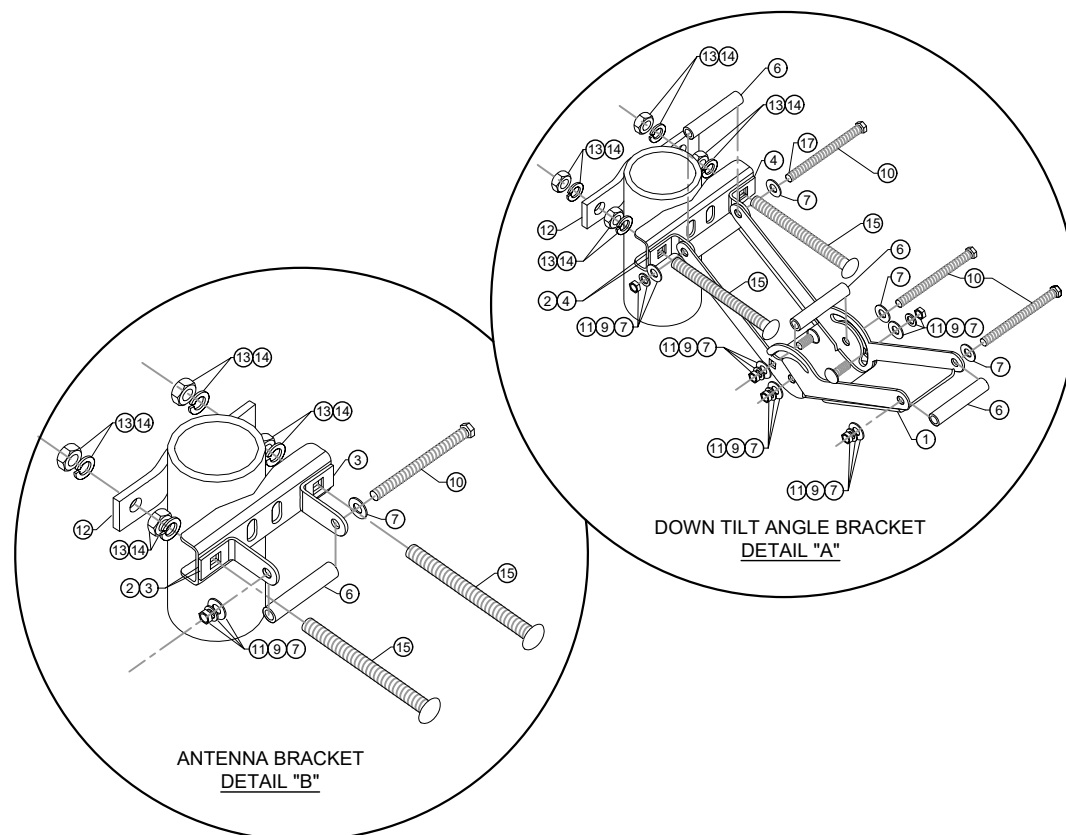
Sheet Number: C-6

PARTS LIST

ITEM #	QUANTITY	PART NUMBER	DESCRIPTION
1	2	601257	ANGLE ARM
2	2	601256	MOUNTING CLAMP
3	2	601235-1	BRACKET
4	2	601235-2	BRACKET
5	1	601258	LABEL, ANGLE
6	4	600679-3	SPACER TUBE
7	14	100525-24	ME FLAT WASHER (STAINLESS STEEL)
8	2	600419-8	M8x1.25x25mm LARGE CARRIAGE BOLT (STAINLESS STEEL)
9	6	6/1/7395	M8 LOCK WASHER (STAINLESS STEEL)
10	4	600419-10	M8x1.25x110mm LARGE HEX HEAD SCREW (STAINLESS STEEL)
11	6	204001-15	M8x1.25 HEX NUT (STAINLESS STEEL)
12	2	225244	CLAMP PLATE
13	8	600419-24	LARGE LOCK WASHER (STAINLESS STEEL)
14	8	204001-21	M12x1.75 HEX NUT (STAINLESS STEEL)
15	4	600419-12	M12x1.75x150mm LARGE CARRIAGE BOLT (STAINLESS STEEL)
17	1	601584	MOLYBDENUM DISULFIDE GREASE

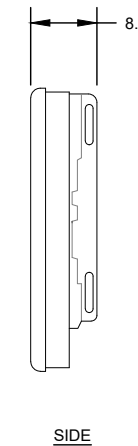
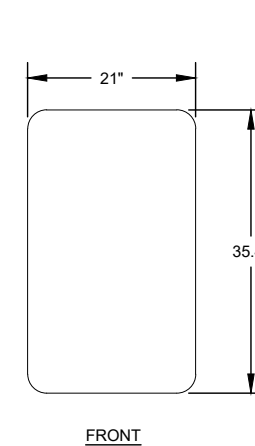
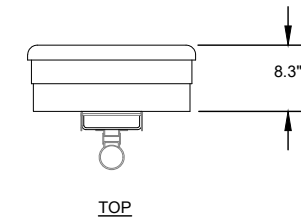


NOTE: TORQUE ALL HARDWARE
M8 HARDWARE: 18 Nm (160 lbf-in.)
M12 HARDWARE: 30 Nm (266 lbf-in.)

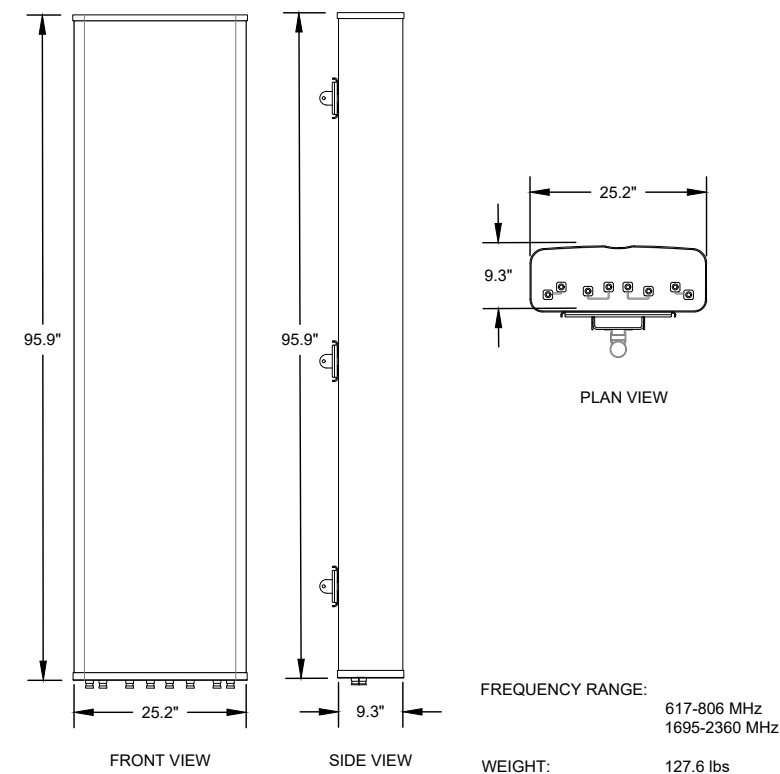


ANTENNA MOUNTING DETAIL N.T.S. **1**

MANUFACTURER: NOKIA
MODEL: AAHF MASSIVE MIMO (64 TRX)
IBW: 120 MHz
DIMENSIONS: 900x550x210 (mm)
35.4" x 21" x 8.3"
WEIGHT: 47.2 KG (104 lbs)
MAX OUTPUT: 1.875 W/TRX (120W TOTAL)



NOKIA AAHF MASS. MIMO ANTENNA N.T.S. **2**



COMMSCOPE FFHH-65C-R3 ANTENNA N.T.S. **3**

T-Mobile
28505 SCHOOLCRAFT RD, BLDG#6
LIVONIA, MICHIGAN 48150
Phone: 734.367.7200
Fax: 734.367.7242
CONTACT: KEN KALOUSEK
(734) 444-0181

LANDTECH PROJECT NUMBER: 20398031

REV.	DATE	DESCRIPTION	BY
A	07/09/20	PRELIMINARY RELEASE	CJL
B	02/10/22	ADD'D ANT. COVER NOTE	TLR
C	03/30/22	RELOC PROP ANTENNAS	TLR
D	11/02/23	REV'D PER CLIENT	TLR

2020 ANCHOR CONSTRUCTION DRAWINGS

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SITE #: DE04229B
SITE NAME: SWEETEST HEART OF MARY
SITE ADDRESS: 4440 E. CANFIELD D/B/A 4440 RUSSELL ST. DETROIT, MICHIGAN 48207

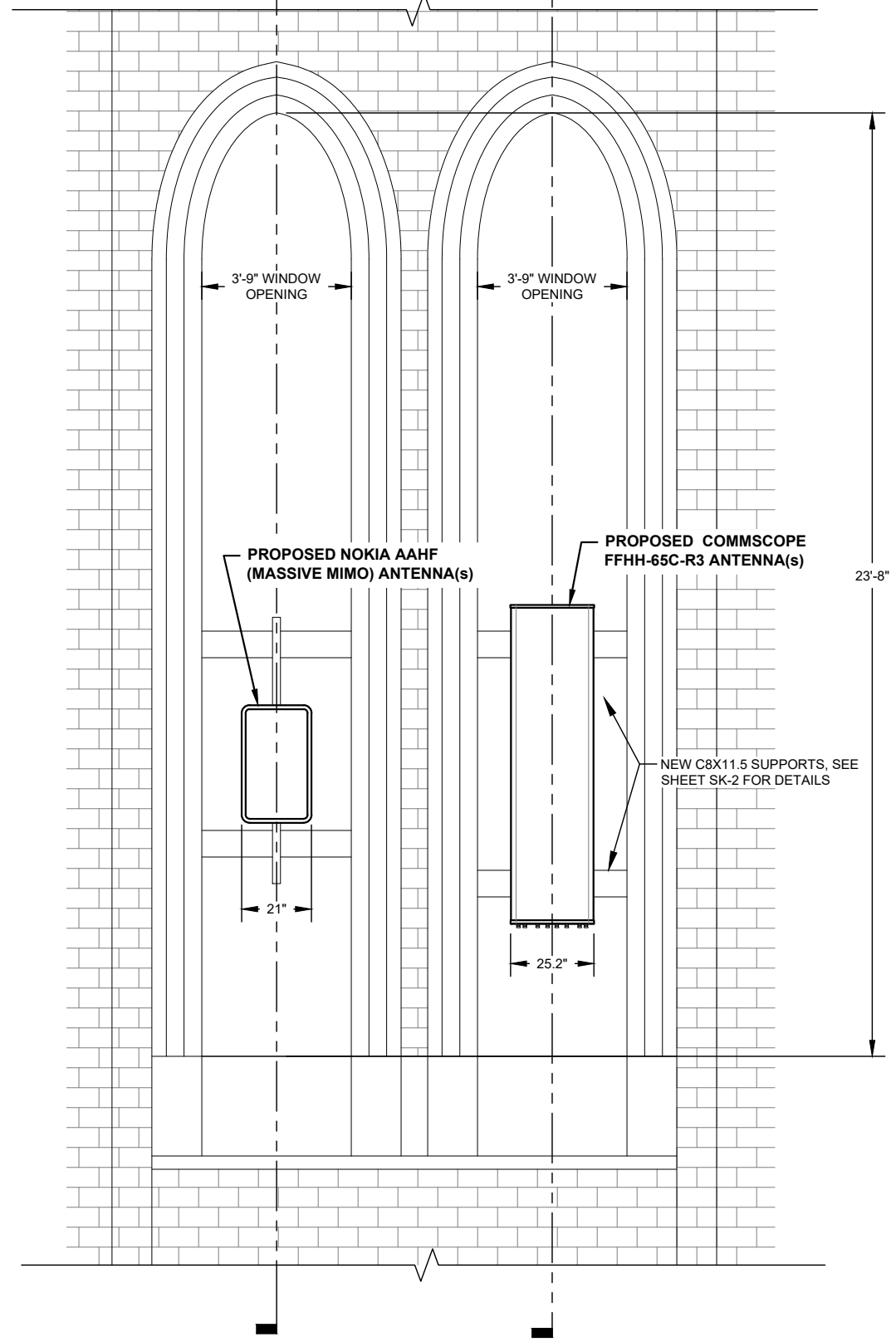
Sheet Title: **ANTENNA DETAILS**

Sheet Number: **C-6.2**

**PAIN T ALL ANTENNAS,
CABLING & HARDWARE
VISIB LE OUTSID E BLACK.**

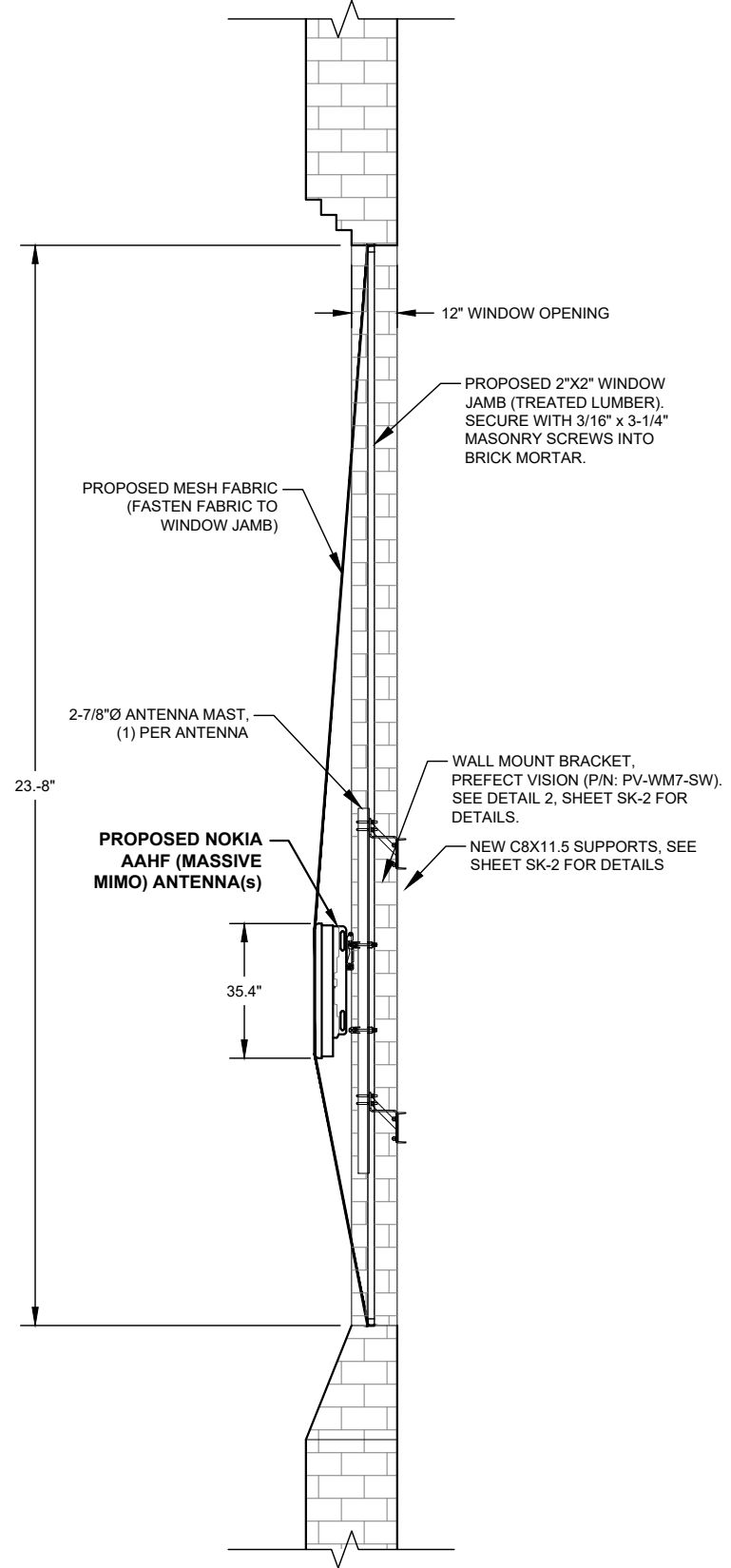
2
C-6.3

3
C-6.3



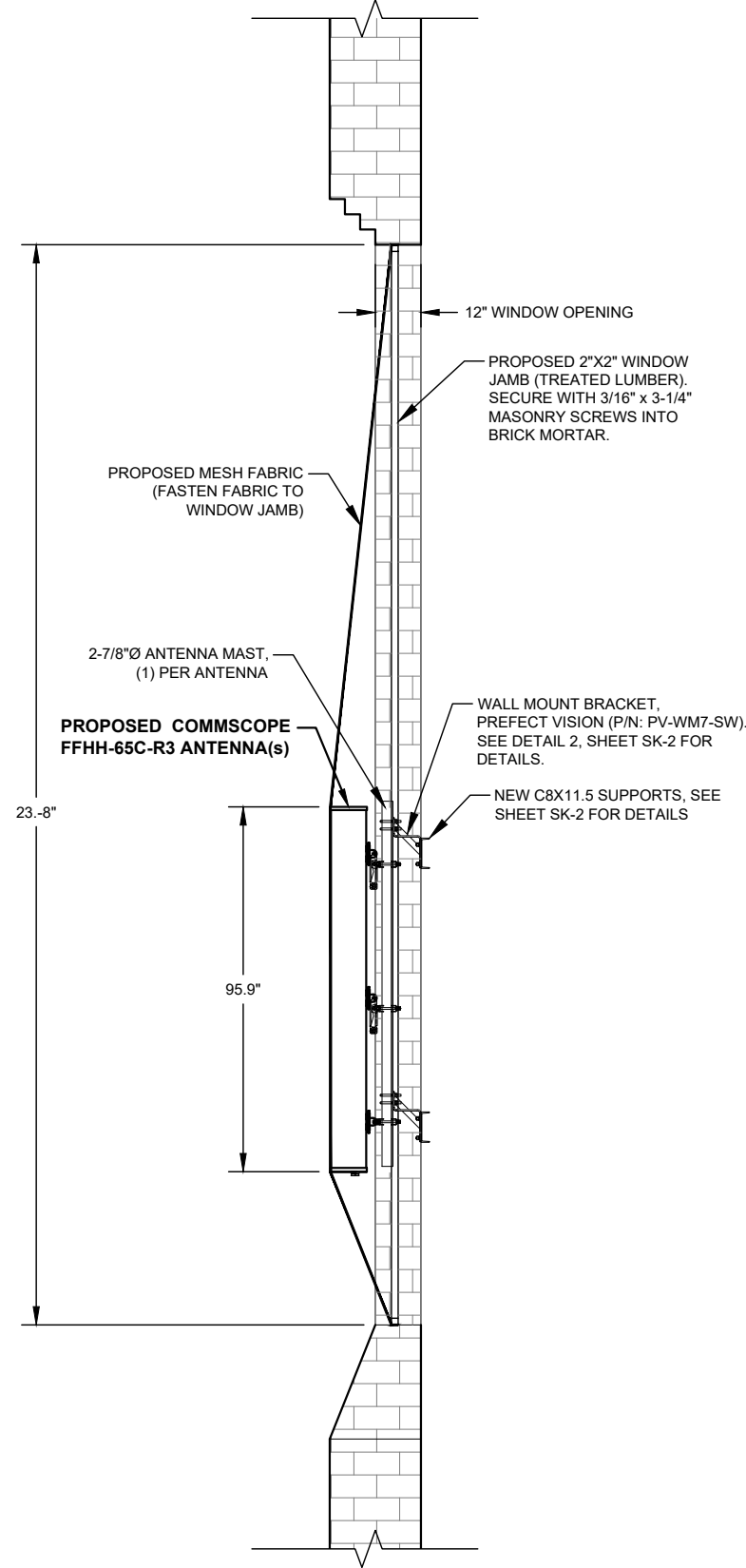
ANTENNA MOUNT ELEVATION VIEW N.T.S.

1



ANTENNA MOUNTING SIDE VIEW 1/4" = 1'

2



ANTENNA MOUNTING SIDE VIEW 1/4" = 1'

3

T-Mobile
28505 SCHOOLCRAFT RD, BLDG#6
LIVONIA, MICHIGAN 48150
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LANDTECH PROJECT NUMBER: **20398031**

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**2020 ANCHOR
CONSTRUCTION
DRAWINGS**

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Sheet Title:
MOUNTING DETAILS

Sheet Number:
C-6.3

REV.	DATE	DESCRIPTION	BY
A	07/09/20	PRELIMINARY RELEASE	CJL
B	02/10/22	ADD'D ANT. COVER NOTE	TLR
C	03/30/22	RELOC PROP ANTENNAS	TLR
D	11/02/23	REV'D PER CLIENT	TLR

**2020 ANCHOR
CONSTRUCTION
DRAWINGS**

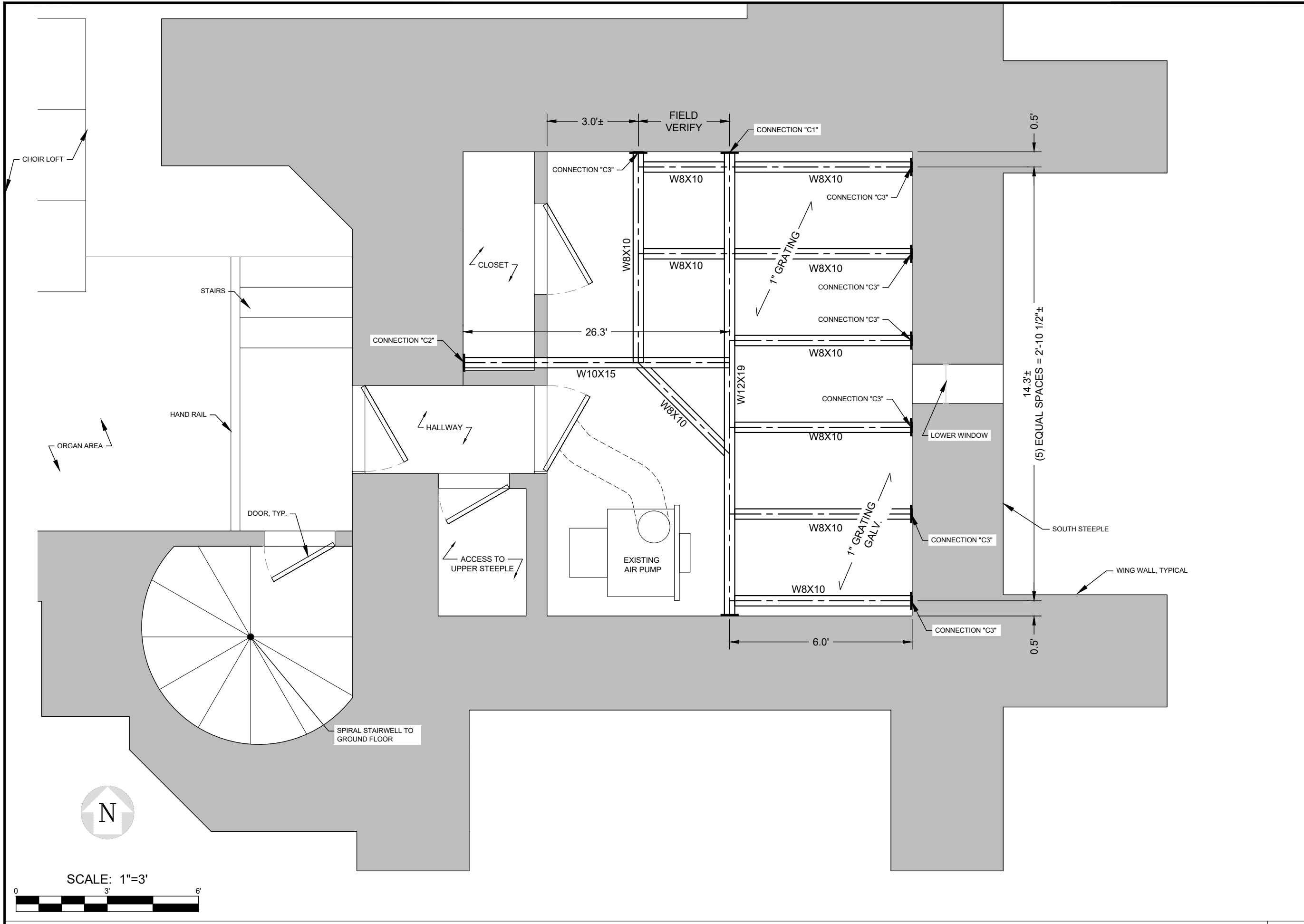
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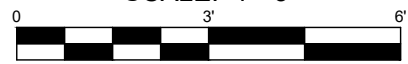
SITE #: DE04229B
SITE NAME:
**SWEETEST
HEART OF MARY**
SITE ADDRESS:
4440 E. CANFIELD D/B/A 4440 RUSSELL ST.
DETROIT, MICHIGAN 48207

Sheet Title:
**PLATFORM
STRUCTURAL PLAN**

Sheet Number:
SK-1



SCALE: 1"=3'



REV.	DATE	DESCRIPTION	BY
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2020 ANCHOR CONSTRUCTION DRAWINGS

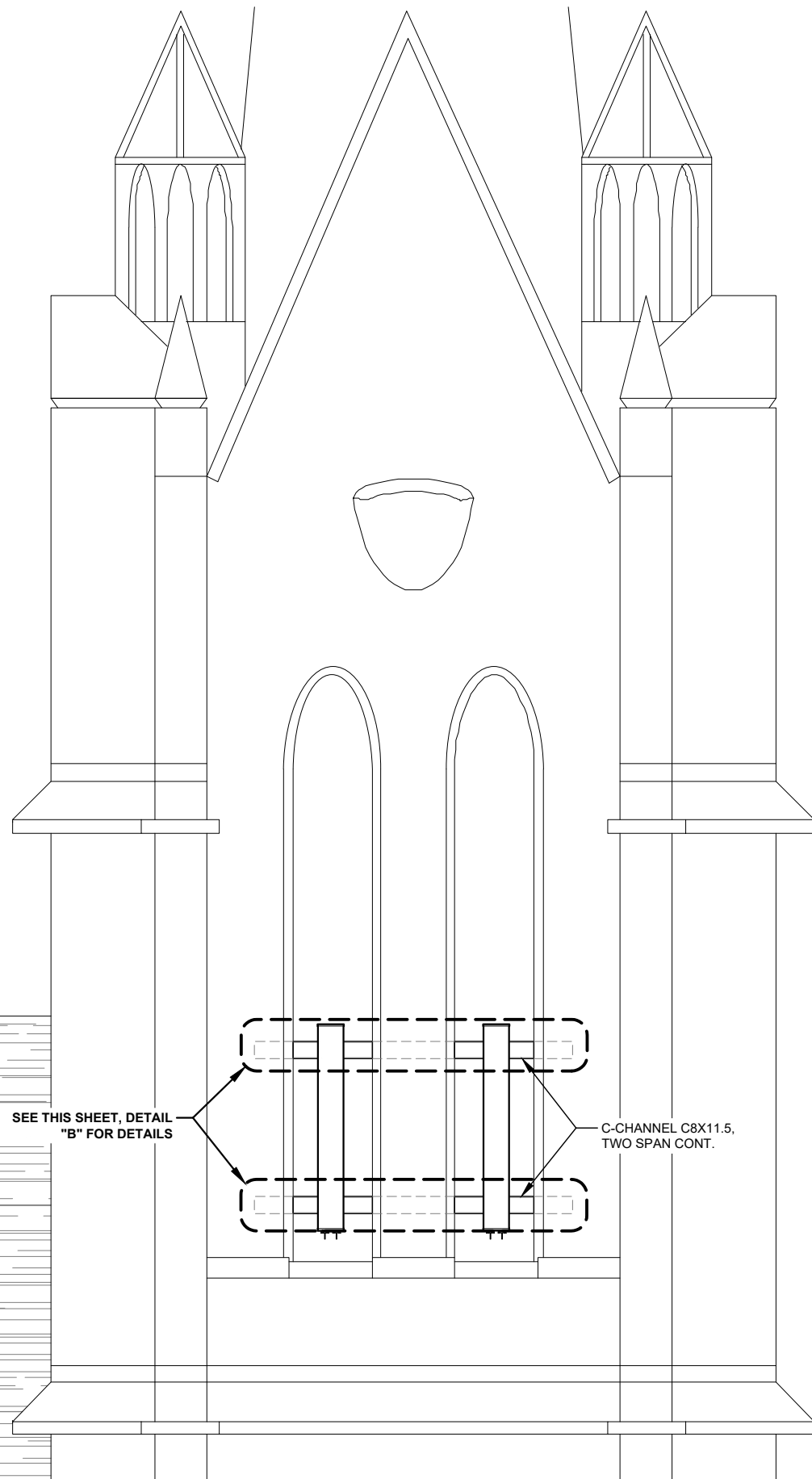
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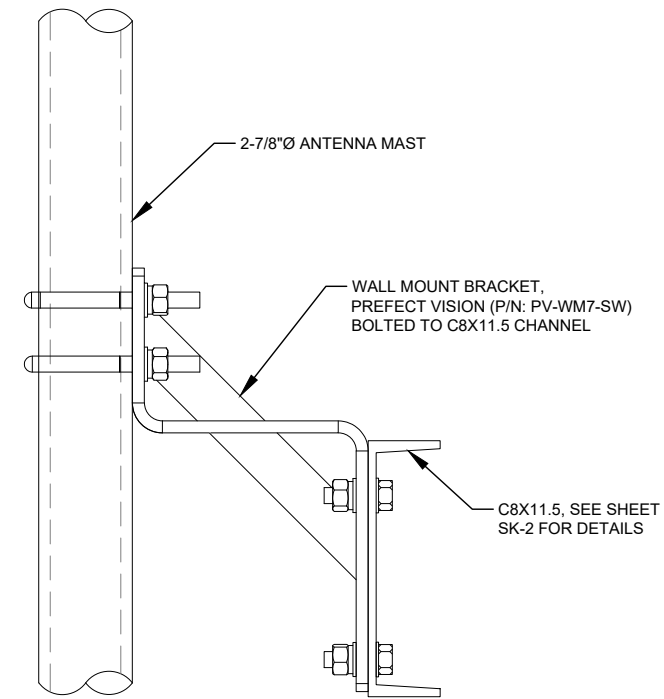
Sheet Title: **ANTENNA STRUCTURAL DETAIL**

Sheet Number: **SK-2**



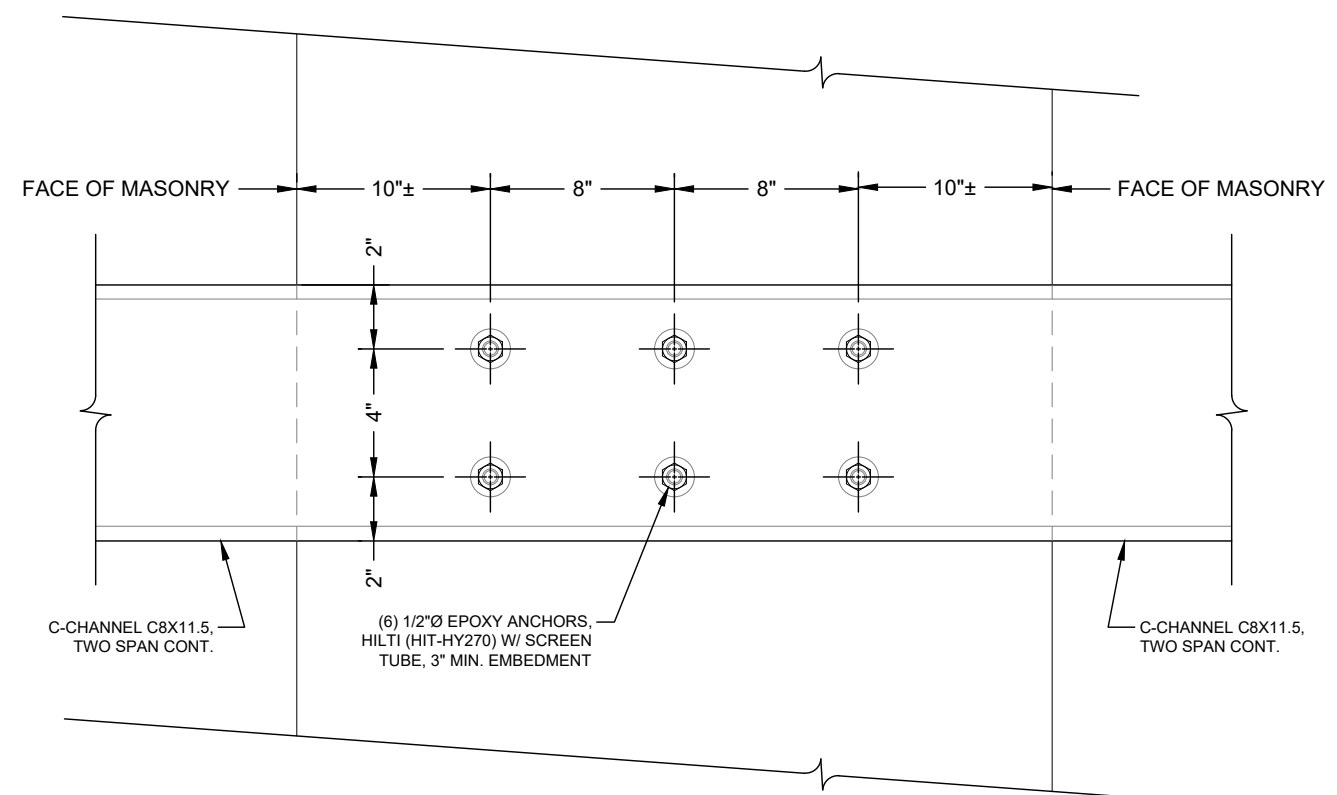
PLATFORM DETAILS N.T.S.

1



ANTENNA MOUNT DETAIL

2

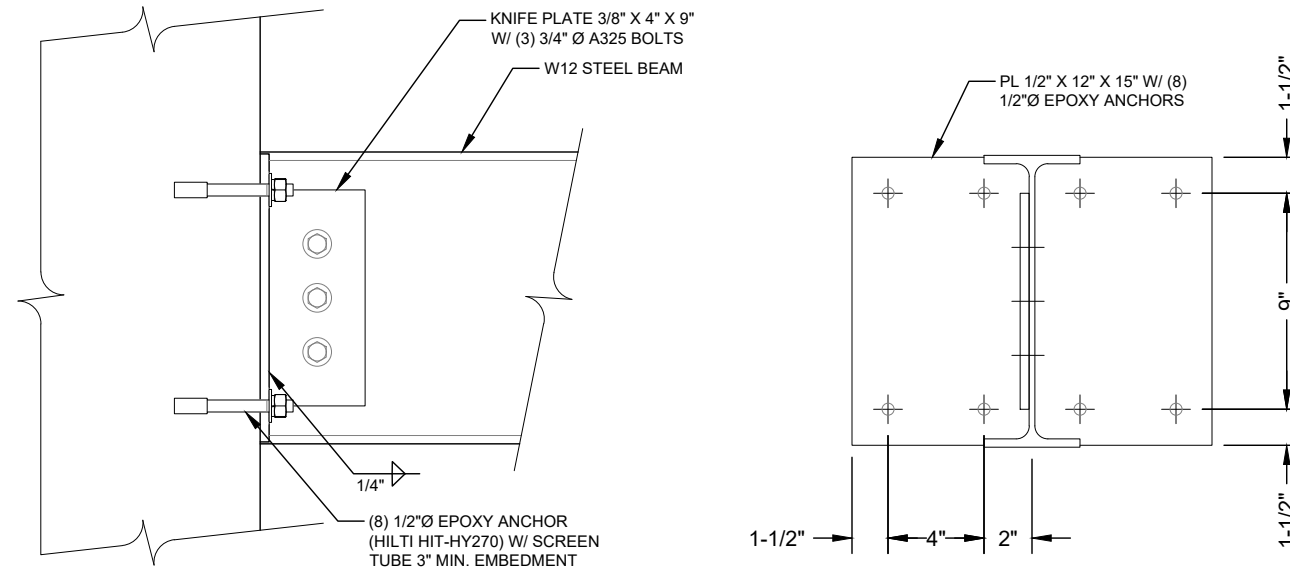


DETAIL "B" N.T.S.

3

LANDTECH PROJECT NUMBER: 20398031

REV.	DATE	DESCRIPTION	BY
A	07/09/20	PRELIMINARY RELEASE	CJL
B	02/10/22	ADD'D ANT. COVER NOTE	TLR
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D	11/02/23	REV'D PER CLIENT	TLR

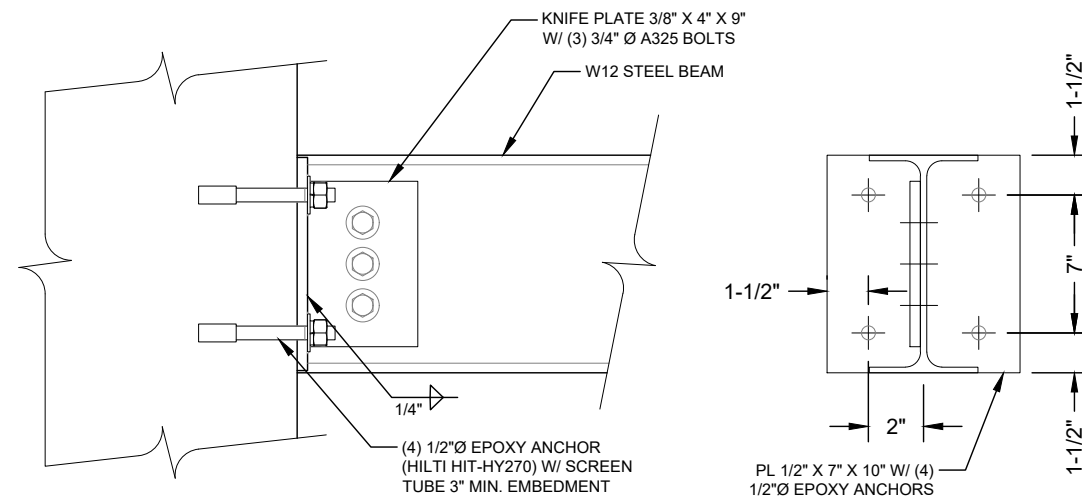


CONNECTION "C1" N.T.S

1

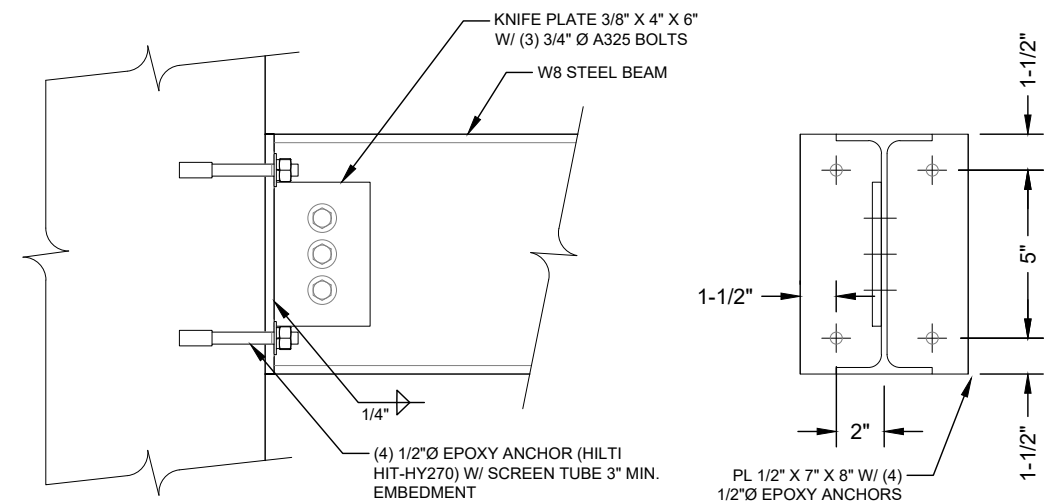
**2020 ANCHOR
 CONSTRUCTION
 DRAWINGS**

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CONNECTION "C2" N.T.S

2



CONNECTION "C3" N.T.S

3



SITE #: DE04229B
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 SWEETEST
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 SITE ADDRESS:
 4440 E. CANFIELD D/B/A 4440 RUSSELL ST.
 DETROIT, MICHIGAN 48207

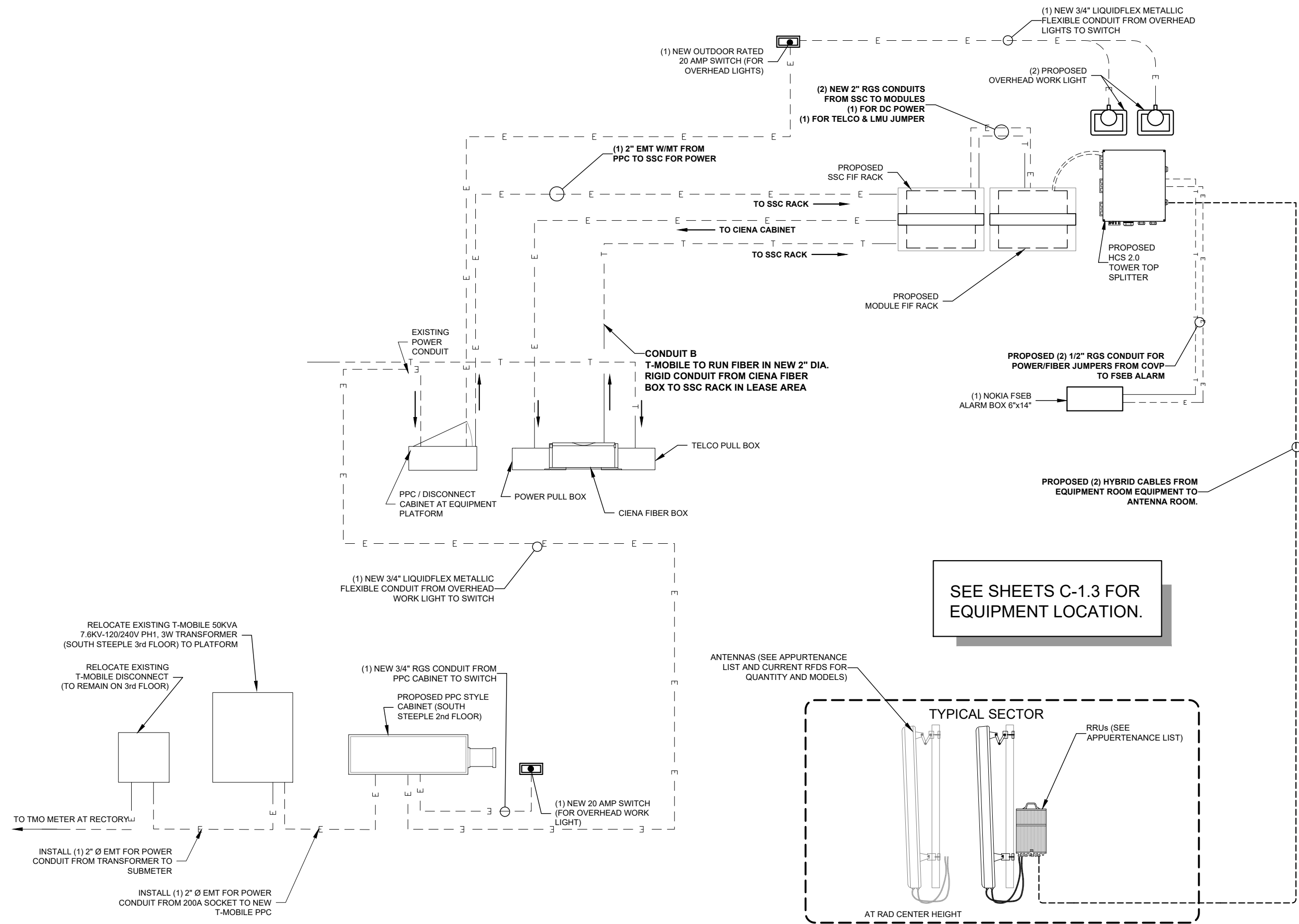
Sheet Title:
 PLATFORM
 STRUCTURAL DETAIL

Sheet Number:
 SK-3

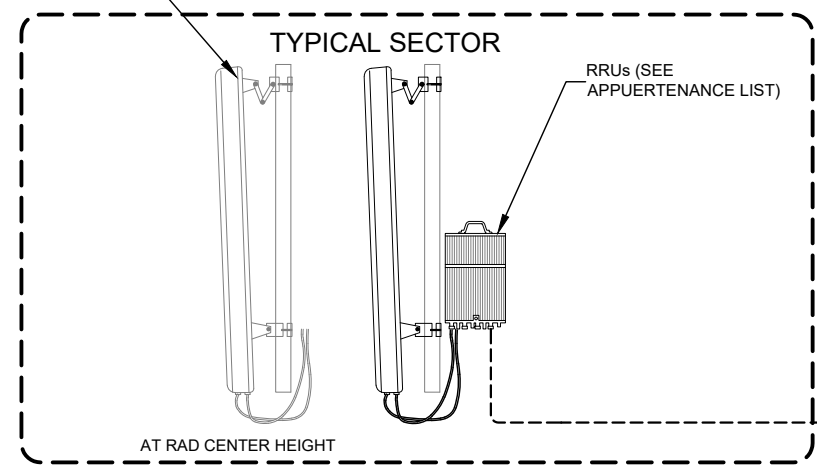
REV.	DATE	DESCRIPTION	BY
A	07/09/20	PRELIMINARY RELEASE	CJL
B	02/10/22	ADD'D ANT. COVER NOTE	TLR
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2020 ANCHOR CONSTRUCTION DRAWINGS

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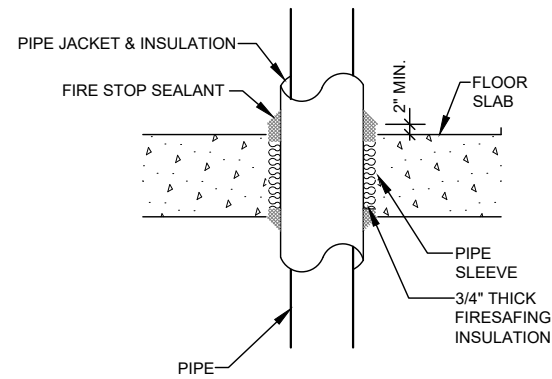
SEE SHEETS C-1.3 FOR EQUIPMENT LOCATION.



SITE #: DE04229B
SITE NAME: SWEETEST HEART OF MARY
SITE ADDRESS: 4440 E. CANFIELD D/B/A 4440 RUSSELL ST. DETROIT, MICHIGAN 48207

Sheet Title: **CONDUIT CABLE SCHEMATIC**

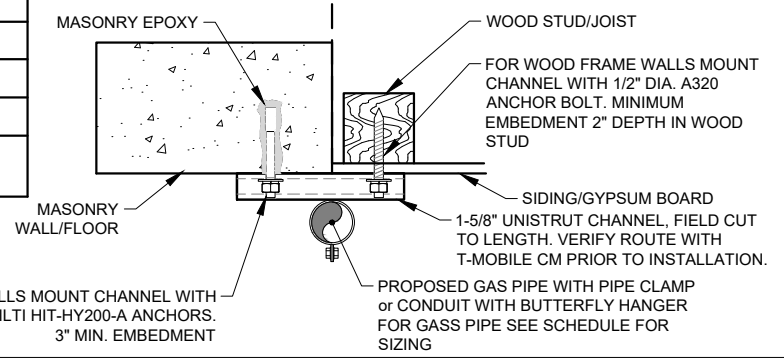
Sheet Number: **E-1**



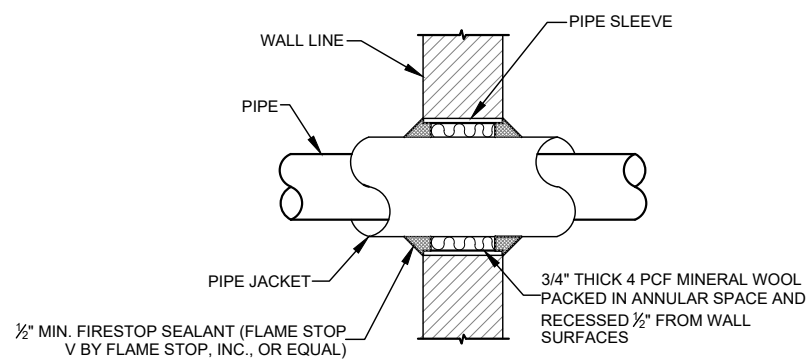
FLOOR PENETRATION DETAIL N.T.S. **1**

RIGID STEEL CLAMP SIZING SCHEDULE	
PIPE SIZE	UNISTRUT RIGID STEEL CONDUIT CLAMP P/N
3/4"	P1112
1"	P1113
1-1/4"	P1114
1-1/2"	P1115
2" AND GREATER	CONTACT ENGINEER

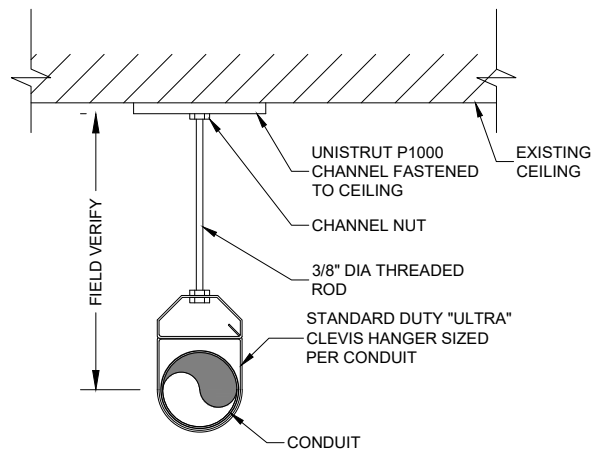
MASONRY WOOD FRAMED



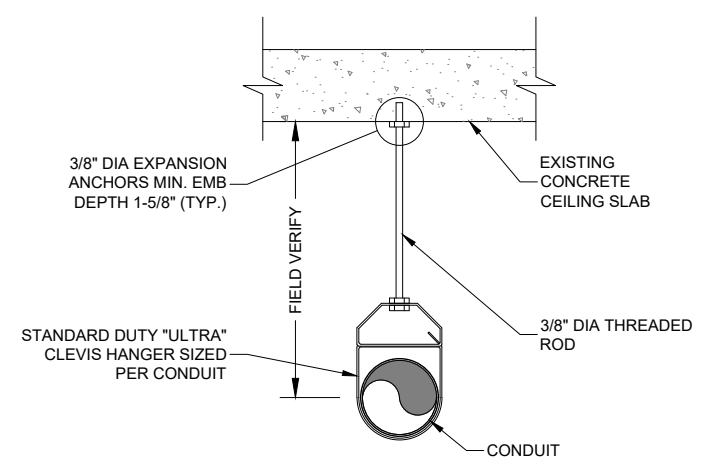
CEILING/WALL CONDUIT HANGER DETAIL N.T.S. **2**



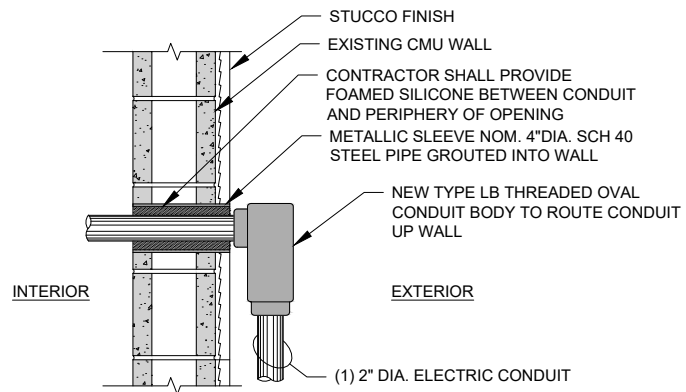
WALL PENETRATION DETAIL N.T.S. **3**



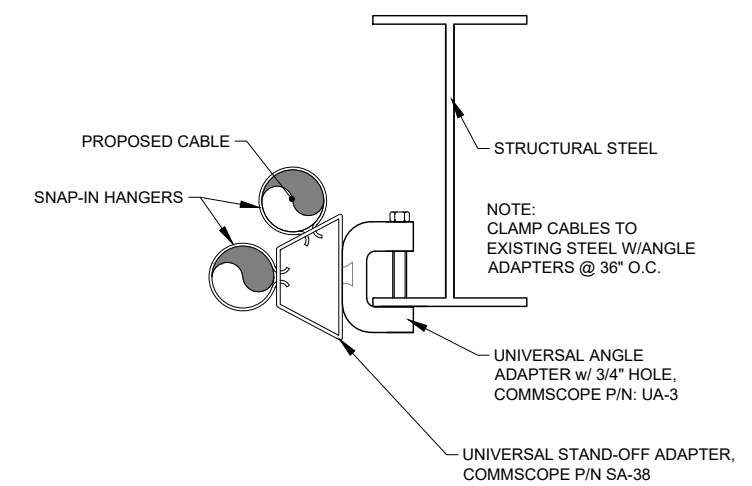
CEILING HANGER DETAIL N.T.S. **4**



CEILING HANGER DETAIL N.T.S. **5**



CONDUIT WALL PENETRATION DETAIL N.T.S. **6**



CABLE HANGER DETAIL N.T.S. **8**

INTENTIONALLY OMITTED N.T.S. **7**

T-Mobile
 28505 SCHOOLCRAFT RD, BLDG#6
 LIVONIA, MICHIGAN 48150
 Phone: 734.367.7200
 Fax: 734.367.7242
 CONTACT: KEN KALOUSEK
 (734) 444-0181

LANDTECH PROJECT NUMBER: 20398031

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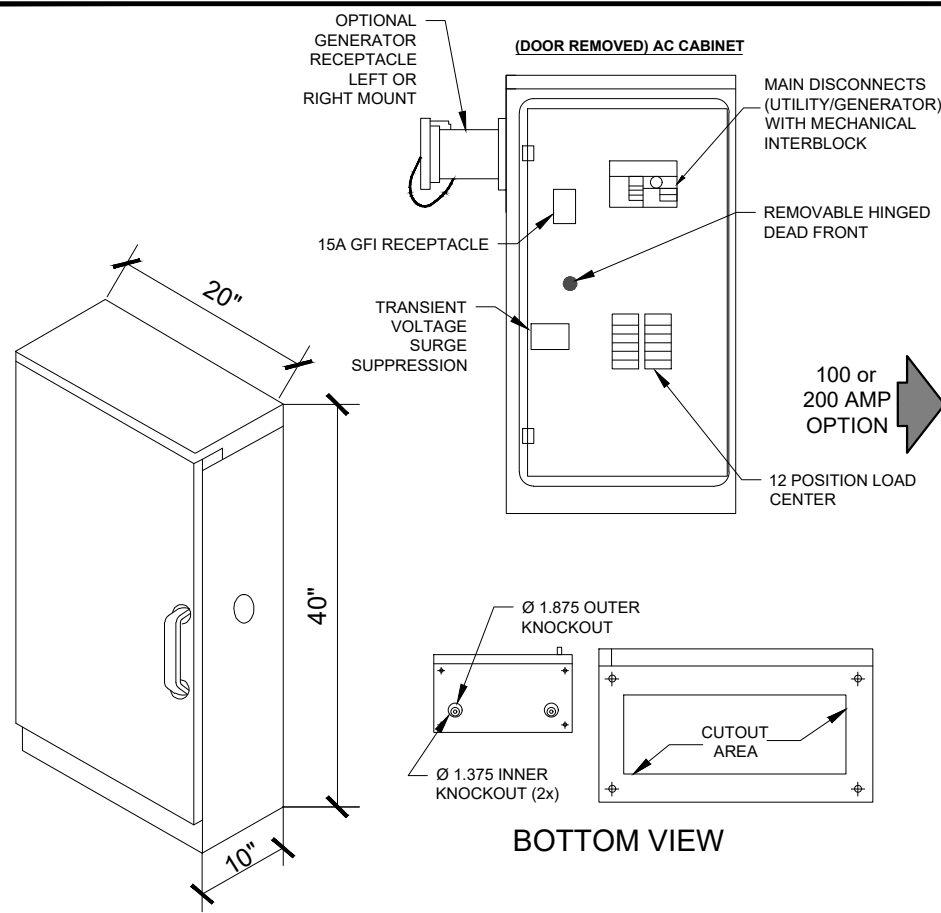
2020 ANCHOR CONSTRUCTION DRAWINGS
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 SITE ADDRESS: 4440 E. CANFIELD D/B/A 4440 RUSSELL ST. DETROIT, MICHIGAN 48207

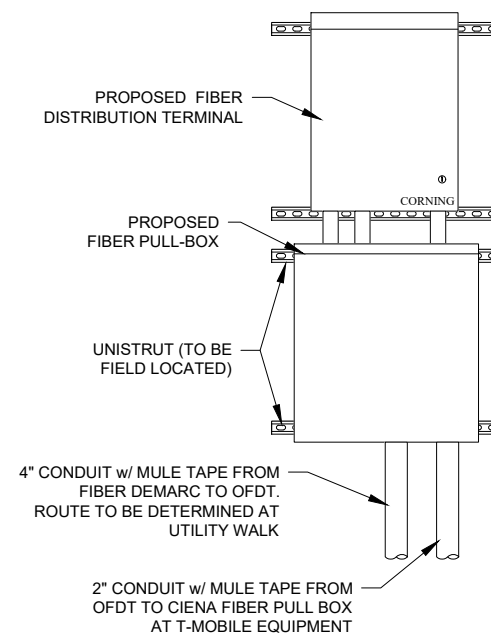
Sheet Title: **CABLE DETAILS**

Sheet Number: **E-1.1**



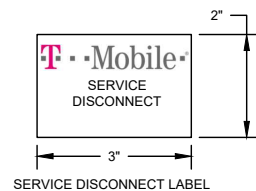
Specifications – CAC Model	
Enclosure	AC Cabinet
Cabinet Dimensions	39.00" H x 20.00" W x 10.00" D
Weight Approx.	75 lbs.
External Material	0.1" thick aluminum
Mounting	Wall or pad-mount (with optional pad-mounting base)
Cabinet Enclosure Type	One AC Power TVSS cabinet (NEMA 3R type enclosure)
Weather Protection	Rain/drip hood, rain tested per UL 891
Electrical	
Operating Voltage	120/240 VAC, single phase, 3 wire and ground
Service	100 Amp or 200 Amp. utility/standby
Disconnect	Slide bar mechanical interlock
AIC Rating	10kAIC, 22kAIC, 65kAIC
Load	Center 200 Amp, 24 position
	1-30 Amp double pole (AC TVSS)
	1-15 Amp single pole (GFI receptacles)
Bonding Jumper	Optional N-G bonding jumper
Standby Power Receptacle	Appleton AR20044RS Standard (100A or 200A), 10kAIC
TVSS with Indicator Lights	Metal Oxide Varistors (MOV) (160kA/Phase)
	Remote alarm contacts
Grounding	
Security (padlockable)	3-point door closure with 1/4 turn handle, SS hinge
Safety Compliance	UL 891, dead front switchboards
Options	10,000 or 22,000, 65,000 AIC series rated
	Pad-mounting base (8" thick)
	Various generator receptacles

POWER PEDESTAL CABINET N.T.S. **1**



FIBER DEMARCATION DETAIL N.T.S. **2**

1. FROM TAP BOX: THE TWO (2) FOUR-INCH (4") CONDUIT WILL RETURN TO THE LOCATION DETERMINED BY "DTE" AND EXTEND OUT OF THE FINISHED GRADE 12" AND 36" RESPECTIVELY (SEE DETAIL). BOTH CONDUITS SHALL BE INSTALLED WITH PULL-STRINGS AND WATERPROOF CAPS.



2. CABINET AND CONDUCTORS FURNISHED & INSTALLED BY CUSTOMER, 350 KCMIL SERVICE CONDUCTORS FURNISHED & INSTALLED BY UTILITY.

3. EQUIPMENT ASSEMBLY DRAWINGS AND RISER DIAGRAMS MUST BE SUBMITTED TO A UTILITY PLANNER FOR ACCEPTANCE PRIOR TO INSTALLATION.

4. CABINETS AND CONDUITS SHOWN SHALL CONTAIN ONLY UNMETERED LINE CONDUCTORS. CABINET SHALL BE SEALABLE WITH ACCEPTABLE SEALING HASP.

5. TRANSMISSION TOWER SERVICES WILL UTILIZE A STANDARD 200 AMP SERVICE W/ CONTINUOUS CONDUIT TO THE SOURCE.

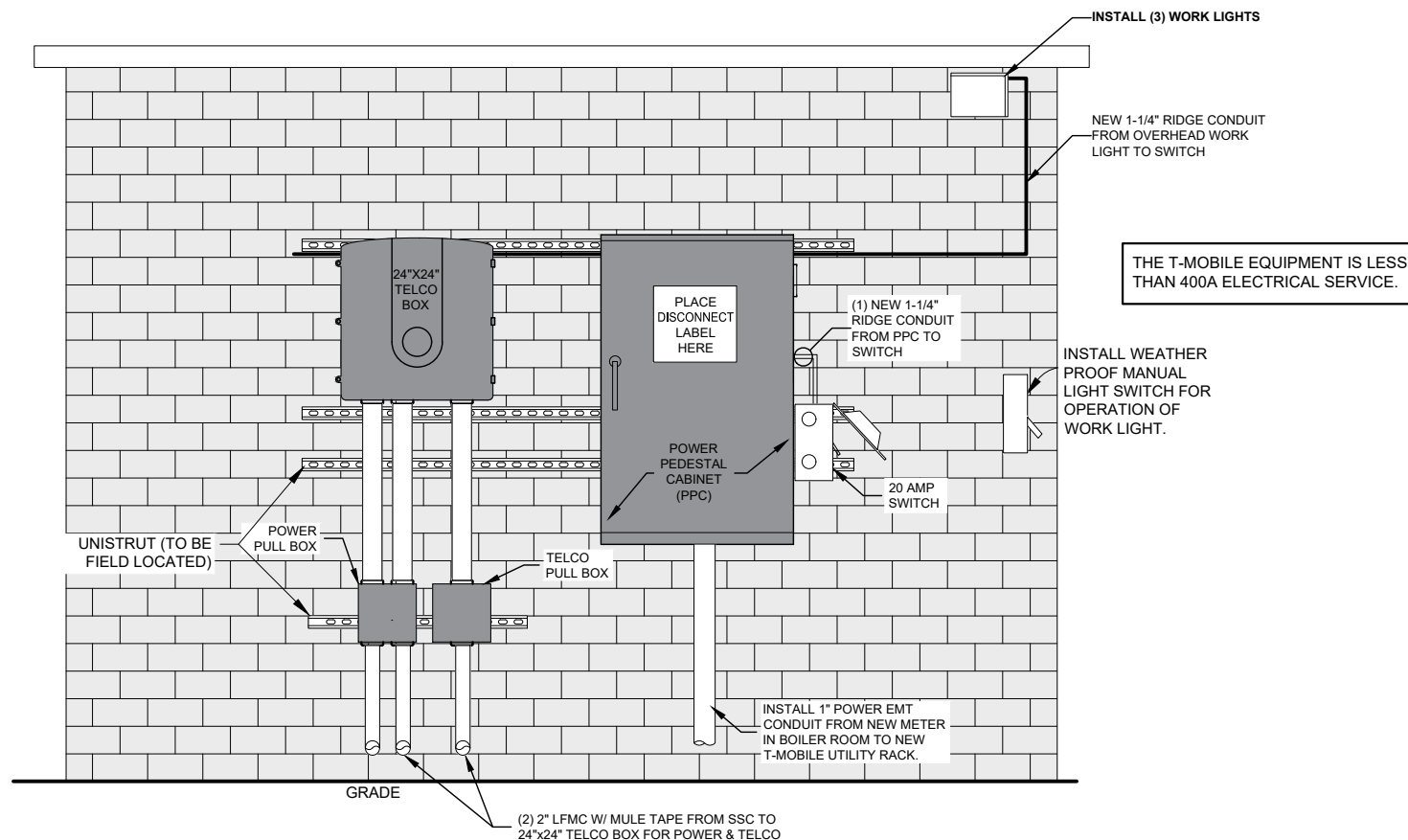
6. SUBSTATION CELLULAR SERVICES WILL BE A SINGLE 200-AMP SERVICE OR BUILT TO THIS SPECIFICATION. NO SERVICE SHALL BE TAKEN OUT OF THE SUBSTATION HOUSE SERVICE.

7. ALL CONDUIT AND NIPPLE ENTRIES TO CABINET AND METER BOXES WILL BE MADE WITH WEATHERPROOF HUBS, CONNECTORS OR LOCKNUTS LISTED FOR THE APPLICATIONS. NON-METALLIC BUSHINGS.

8. FOR INACCESSIBLE LOCATIONS CONSULT WITH METER ENGINEERING FOR POSSIBLE ERT METER INSTALLATION.

9. ONLY ONE SERVICE ALLOWED PER LUG. ALL GROUNDING AND BONDING MUST COMPLY WITH NEC 250 REQUIRED.

- THE LPMC SHALL BE CONNECTED TO THE ICE BRIDGE WITH MANUFACTURER APPROVED METALLIC PIPE STRAPS OR "MINIS" USING STAINLESS STEEL BANDING, OUTDOOR RATED METALLIC PIPE CLAMPS, AND/OR MANUFACTURER APPROVED OUTDOOR RATED ROUTING PRODUCTS.
- THE LIGHT SWITCH AND ANY JUNCTION BOXES SHALL BE DIE-CAST METALLIC WEATHER RATED BOXES AND MOUNTED WITH 100% WEATHERPROOF INSTALLATION METHODS. THE MOUNTING CLIPS SHALL BE USED AND NO BOXES SHALL BE DRILLED WITH SELF-TAPPING SCREWS FOR INSTALLATION.
- EACH LIGHT SHALL BE AN LED FLOOD LIGHT (NOT SPOT) RATED AT A MINIMUM OF 1,200 LUMEN BRIGHTNESS FACTOR AND SHALL BE OUTDOOR RATED TO A MINIMUM OF -30 DEGREES FAHRENHEIT (BELOW ZERO) OPERATING RANGE.



UTILITY EQUIPMENT N.T.S. **3**

T-Mobile
 28505 SCHOOLCRAFT RD, BLDG#6
 LIVONIA, MICHIGAN 48150
 Phone: 734.367.7200
 Fax: 734.367.7242
 CONTACT: KEN KALOUSEK
 (734) 444-0181

LANDTECH PROJECT NUMBER: **20398031**

REV.	DATE	DESCRIPTION	BY
A	07/09/20	PRELIMINARY RELEASE	CJL
B	02/10/22	ADD'D ANT. COVER NOTE	TLR
C	03/30/22	RELOC PROP ANTENNAS	TLR
D	11/02/23	REV'D PER CLIENT	TLR

2020 ANCHOR CONSTRUCTION DRAWINGS

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 SITE NAME: **SWEETEST HEART OF MARY**
 SITE ADDRESS: **4440 E. CANFIELD D/B/A 4440 RUSSELL ST. DETROIT, MICHIGAN 48207**

Sheet Title: **ELECTRIC DETAILS**

Sheet Number: **E-1.2**

THE T-MOBILE EQUIPMENT IS LESS THAN 400A ELECTRICAL SERVICE.



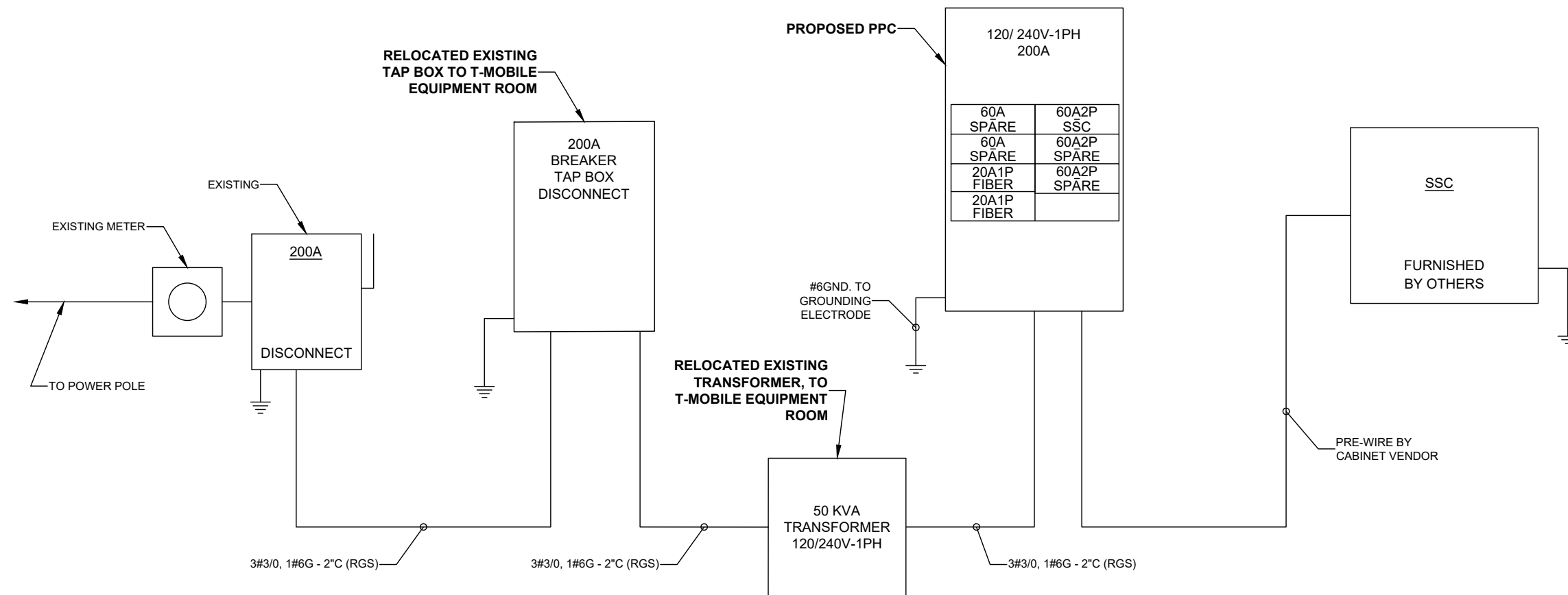
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Sheet Title: ONE-LINE DIAGRAM

Sheet Number: E-2

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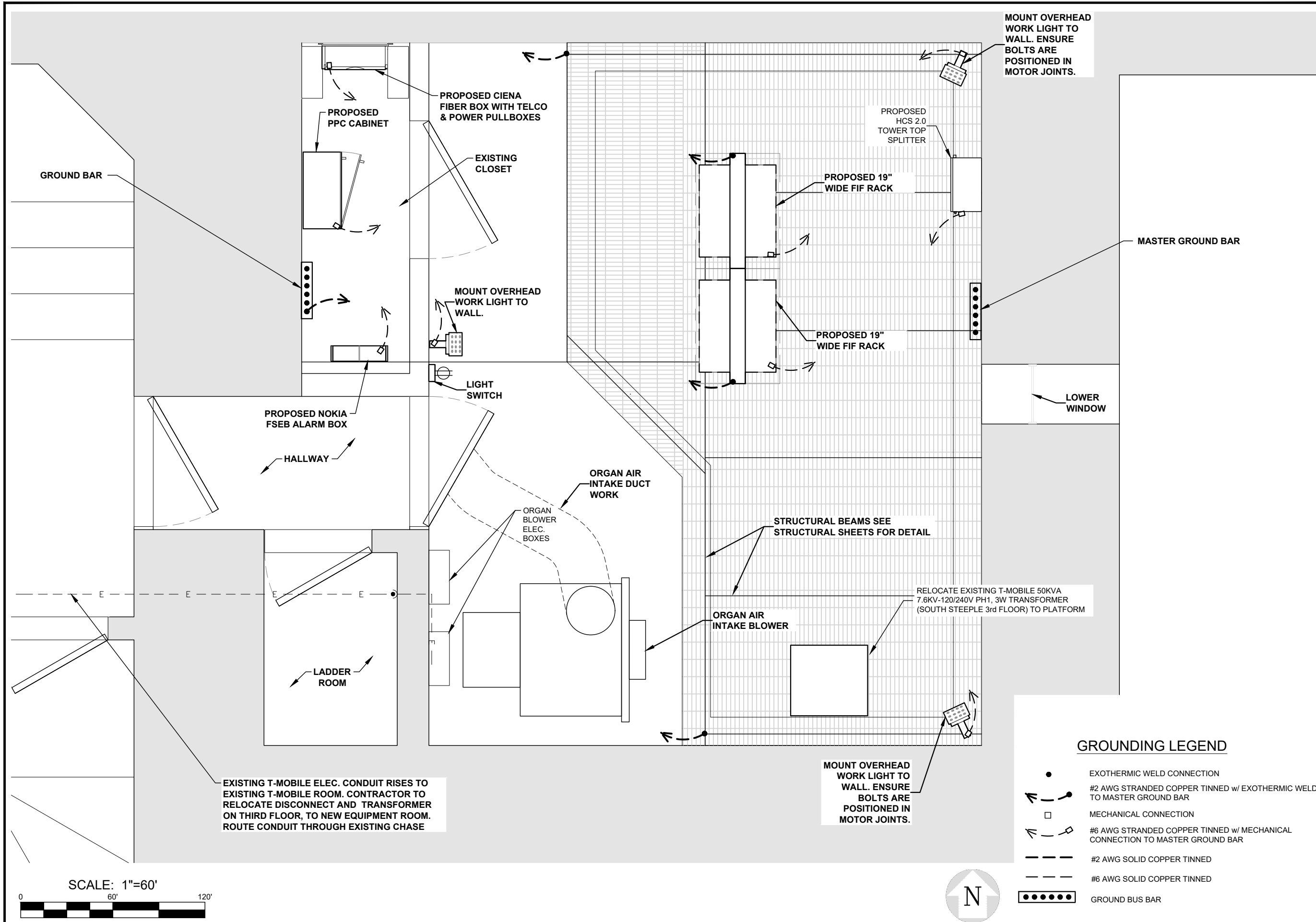
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Sheet Title: **GROUNDING PLAN**

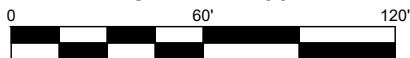
Sheet Number: **E-3**



GROUNDING LEGEND

- EXOTHERMIC WELD CONNECTION
- #2 AWG STRANDED COPPER TINNED w/ EXOTHERMIC WELD TO MASTER GROUND BAR
- MECHANICAL CONNECTION
- #6 AWG STRANDED COPPER TINNED w/ MECHANICAL CONNECTION TO MASTER GROUND BAR
- #2 AWG SOLID COPPER TINNED
- #6 AWG SOLID COPPER TINNED
- GROUND BUS BAR

SCALE: 1"=60'



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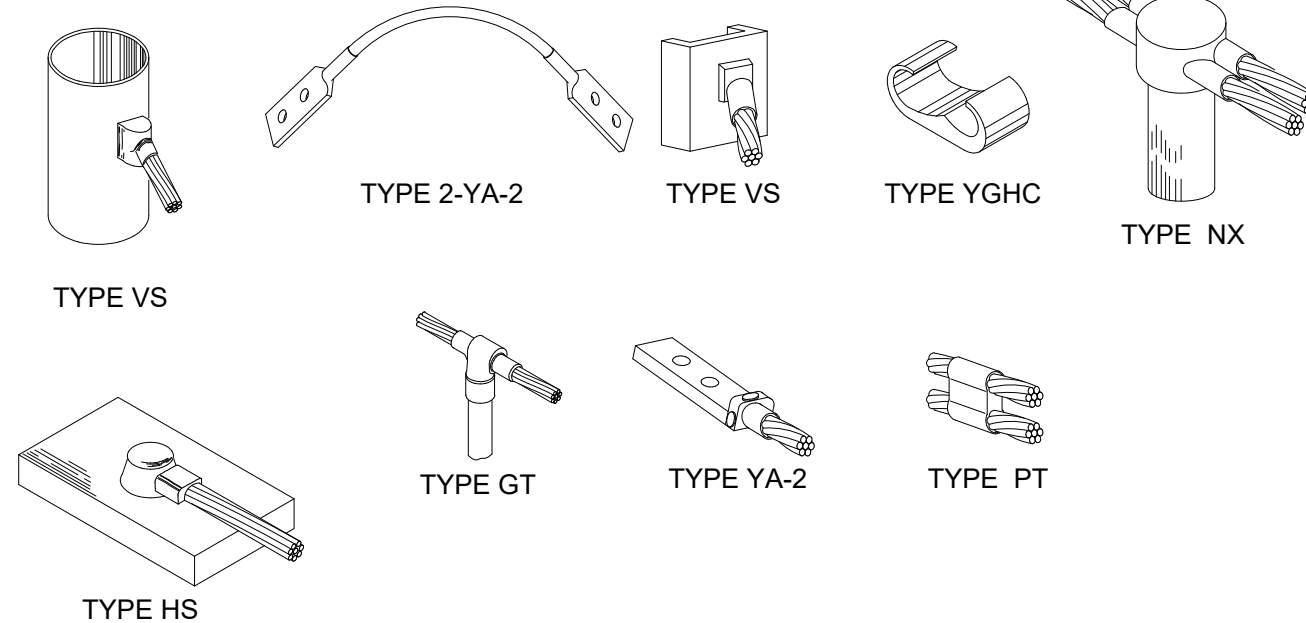
2020 ANCHOR CONSTRUCTION DRAWINGS

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IMPORTANT GROUNDING / CABLE NOTES:

1. T-MOBILE IS ELIMINATING THE HOME RUN GROUND WIRE FROM TOP BUSS BAR AND THE BOTTOM BUSS BAR ON TOWER SITES. ROOFTOPS ARE STILL REQUIRED TO HAVE SECTORIZED GROUND AND #2 INSULATED GROUND WIRE. FROM SECTOR GROUNDS TO MAIN BUSS BARS AND BUILDING STEEL. 4 GROUND BARS, 3 ISOLATED ONE FOR EACH SECTOR, ONE AS COLLECTION POINT MOUNTED WITHOUT CHERRIES.
2. REMOVE INSULATORS (CHERRIES) FROM THE BUSS BARS AND GROUND TO TOWER, TOP AND BOTTOM ON TOWER SITES ONLY.
3. ALL EXPOSED GROUNDS TO BE DRESSED WITH SEAL TIGHT. (ONLY AT GRADE)
4. THE DISTANCE BETWEEN BUTTERFLIES AND CABLE STAND OFFS IS 36".
5. THE DISTANCE BETWEEN CONVENTIONAL AND/OR SNAP-HANGERS ON 1/2" JUMPERS SHALL BE NO MORE THAN 3 FEET AT THE TOP AND 2 FEET ON THE BOTTOM JUMPERS PER MANUFACTURER'S RECOMMENDATION.
6. NO HYBRID CABLES SHOULD TOUCH METAL OR STEEL. THE USE OF STANDOFF BRACKETS ARE REQUIRED. USE OF GROMMETS AS SUPPLIED BY T-MOBILE. (EXCEPT 1-5/8" SNAP-IN FOR CABLE MANAGEMENT)
7. HYBRID AND JUMPER LINES SHOULD BE DRESSED IN ON THE SIDE OR BOTTOM OF SECTOR FRAMES / MONOPOLES. NEVER ON TOP WERE SOMEONE WOULD WALK.
8. PARALLEL #2 TINNED PATH RUNS, WIDTH, DEPTH, BACKFILL, COMPACTION SPECS.
9. ALL MECHANICAL GROUND CONNECTIONS NEED TO BE SCRAPPED IF PAINTED TO BARE METAL AND NO-OX APPLIED ON ALL CONNECTIONS ABOVE GROUND.
10. GROUND BARS NEED TO BE COPPER.
11. GROUNDING HARDWARE NEEDS TO BE STAINLESS STEEL.

NOTE:
CADWELD "TYPES" SHOWN ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC TYPES OF CADWELDS TO BE USED FOR THIS PROJECT.



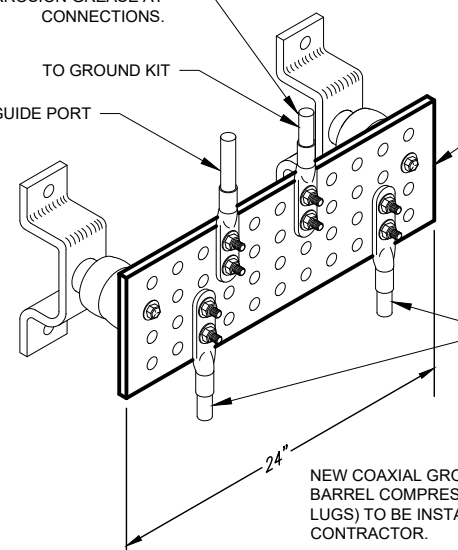
CADWELD CONNECTION TYPES N.T.S. **2**

#2 AWG STRANDED JUMPER W/ LONG BARREL COMPRESSION LUGS TO GROUND BAR BY GENERAL CONTRACTOR
NOTE: CONTRACTOR TO USE ANTI-CORROSION GREASE AT CONNECTIONS.

TO GROUND KIT
TO WAVEGUIDE PORT

NEW 4"x24"x1/4" THICK ALUMINUM GROUND BAR, T-MOBILE CONSTRUCTION MANAGER TO VERIFY EXACT LOCATION AND INSTALLATION IN FIELD.

REFER TO GROUND RISER SCHEMATIC (SHEET C-3) FOR CONNECTIONS



NEW COAXIAL GROUND KITS W/ LONG BARREL COMPRESSION LUGS (DOUBLE LUGS) TO BE INSTALLED BY ANTENNA CONTRACTOR.

- NOTES:
1. CONTRACTOR SHALL UTILIZE LUGGED HOLES PROVIDED. NO DRILLING OF THE BAR WILL BE PERMITTED.
 2. ALL HARDWARE SHALL BE 18-8 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
 3. FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHIELD.

GROUNDING / CABLE NOTES

1

GROUNDING BAR DETAIL N.T.S.

3

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Sheet Title: **GROUNDING DETAILS**

Sheet Number: **E-3.1**



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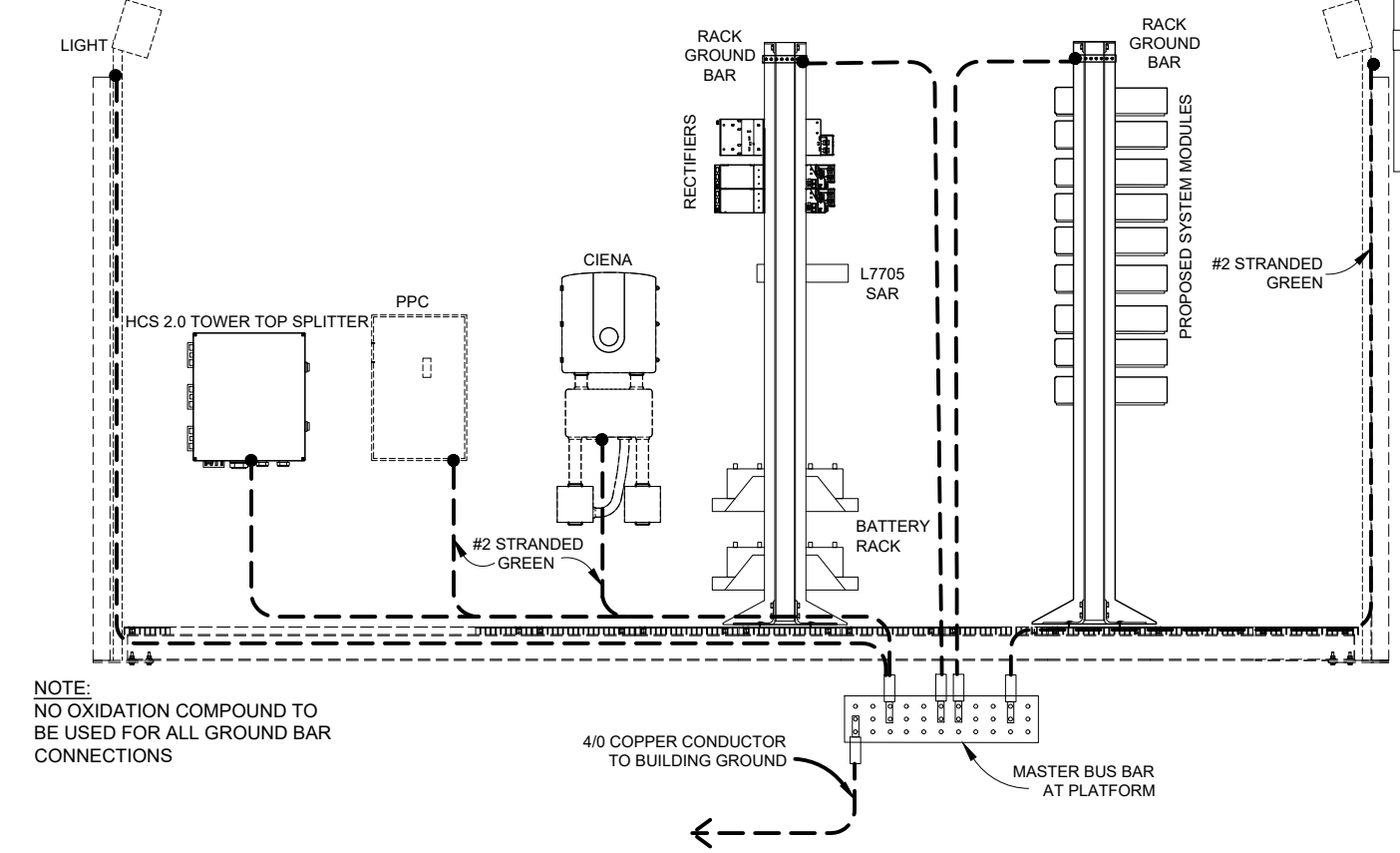
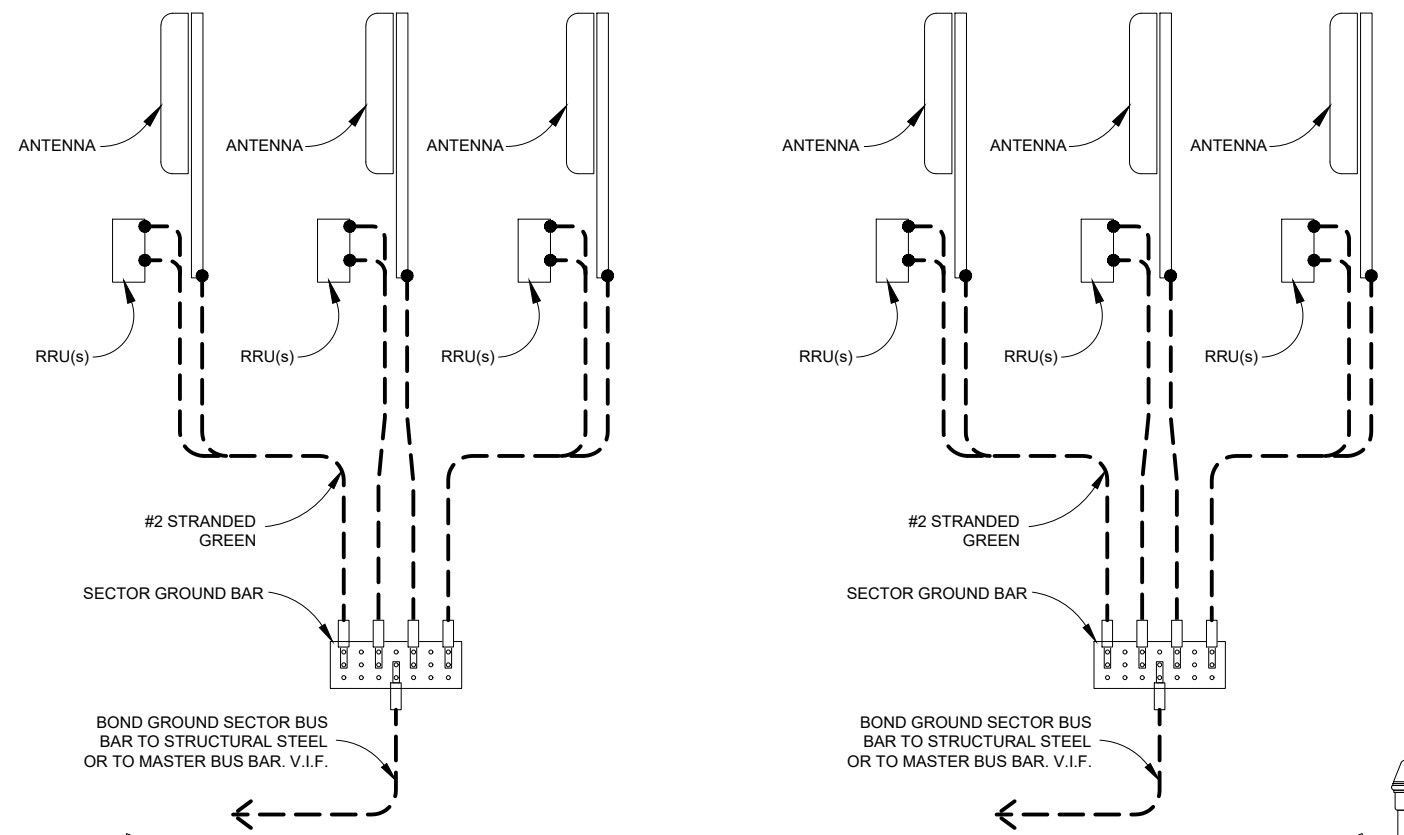
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SECTOR A

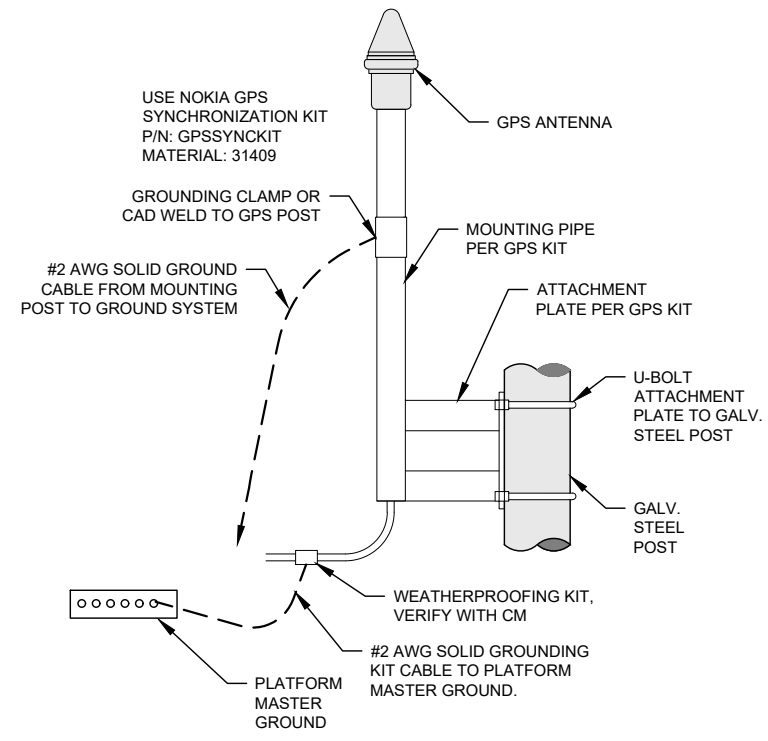
SECTOR B

SECTOR C



● = MECHANICAL CONNECTION
 ■ = CAD WELD CONNECTION

SEE GPS ANTENNA DETAIL THIS SHEET



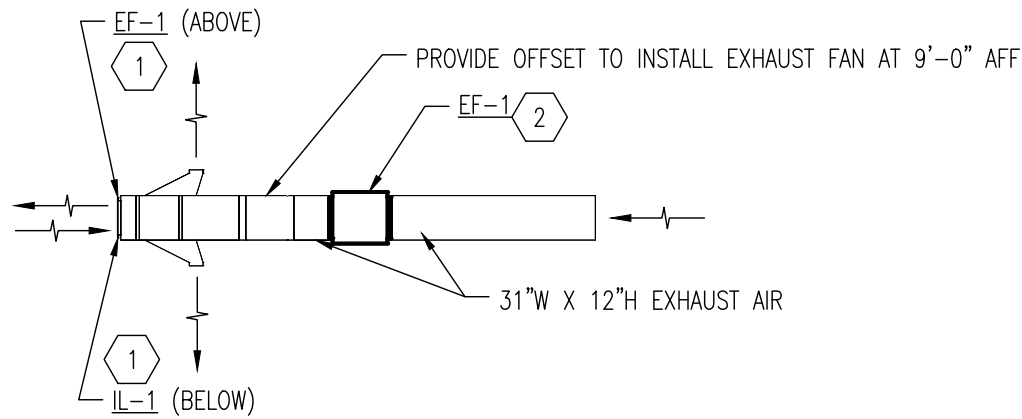
GPS ANTENNA DETAIL



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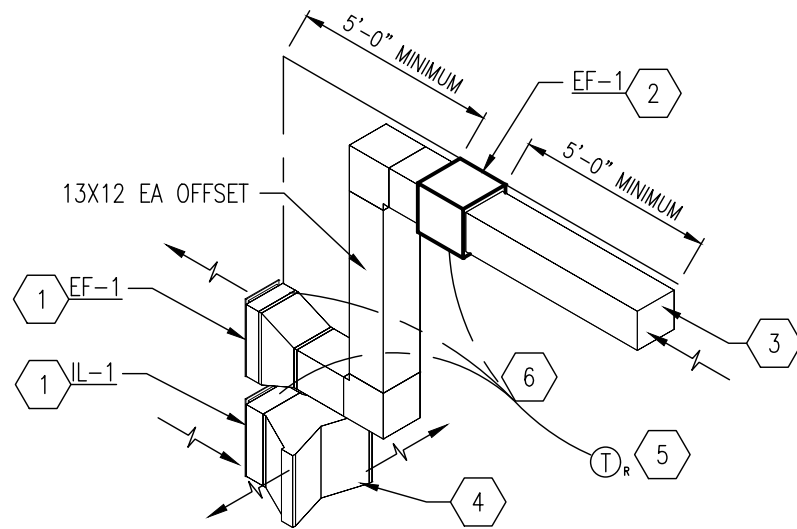
Sheet Title: **GROUNDING SCHEMATIC**

Sheet Number: **E-3.2**



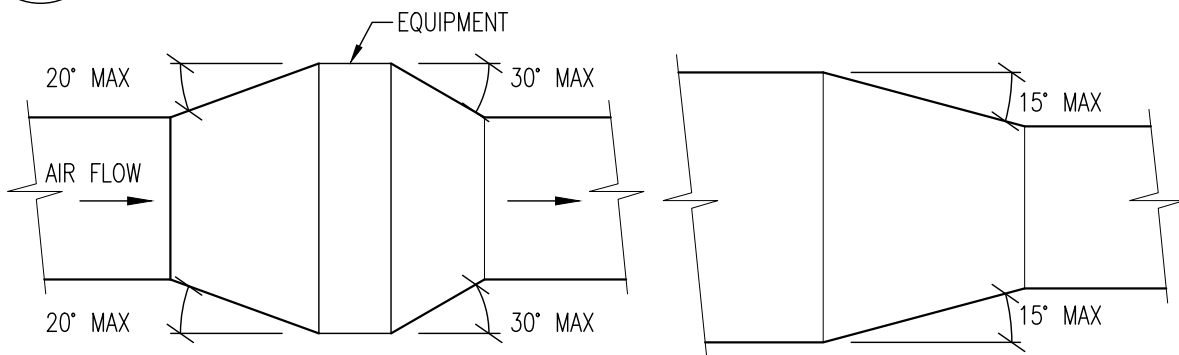
1 FLOOR PLAN - HVAC

M-1 SCALE: NOT TO SCALE



2 ISOMETRIC DETAIL - HVAC

M-1 SCALE: NOT TO SCALE



DUCT TRANSITION W/EQUIPMENT

DUCT TRANSITION

NOTES:

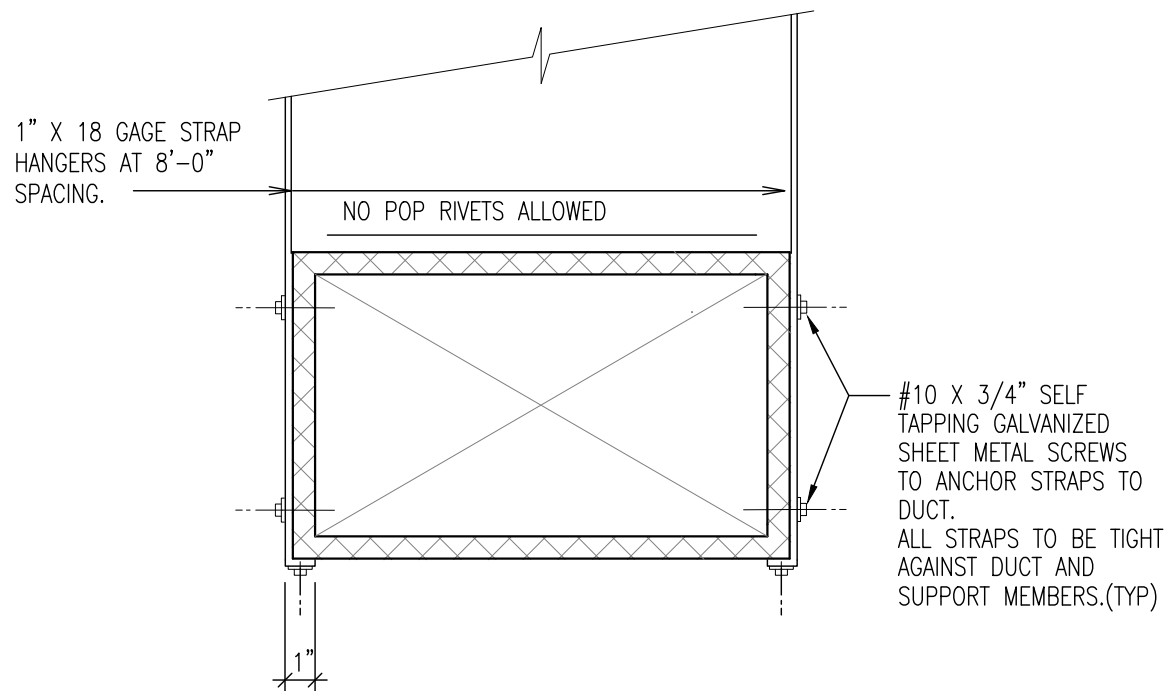
1. UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

3 TYPICAL DUCT TRANSITION DETAIL

M-1 SCALE: NOT TO SCALE

HVAC KEY NOTES

1. PROVIDE INTAKE OR EXHAUST LOUVER WITH FACTORY OPTIONS/FINISH AS SCHEDULED.
2. PROVIDE EXHAUST FAN WITH FACTORY OPTIONS AS SCHEDULED. INSTALL AT 9'-0" ABOVE FINISH FLOOR.
3. EXTEND 13" WIDE X 12" HIGH EXHAUST DUCT 10'-0" INTO THE ROOM AND TERMINATE WITH GALVANIZED 16-GAUGE 1x1 WIRE MESH GRILLE ON END.
4. PROVIDE A FIELD FABRICATED FITTING TO TRANSITION FROM THE INTAKE LOUVER TO TWO 22x4 OPENINGS TO DIRECT AIR INTO THE SPACE AT A 90° ANGLE.
5. PROVIDE A 120V REVERSE ACTING THERMOSTAT, INSTALL AT 4'-0" ABOVE FINISH FLOOR BETWEEN THE TWO DOORS.
6. INTERLOCK THE EXHAUST FAN WITH THE NORMALLY CLOSED INTAKE AND NORMALLY CLOSED EXHAUST LOUVER TO OPEN WHEN THE EXHAUST FAN IS ON.



4 TYPICAL DUCT STRAP HANGER DETAIL

M-1 SCALE: NOT TO SCALE

T-Mobile
 28505 SCHOOLCRAFT RD, BLDG#6
 LIVONIA, MICHIGAN 48150
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Sheet Title: HVAC DETAILS

Sheet Number: M-1

SECTION 23 0000 - HVAC

THE REQUIREMENTS OF THE "GENERAL CONDITIONS" AND "DIVISION 1" SECTIONS OF THE SPECIFICATIONS SHALL APPLY TO THIS SECTION OF THE SPECIFICATIONS.

PART 1 – GENERAL

1.01 SUMMARY

- A. THE CONTRACTOR SHALL PROVIDE A COMPLETE AND OPERATIONAL HVAC SYSTEM AS SHOWN ON THE DRAWINGS INCLUDING EQUIPMENT, MATERIAL, LABOR, DUCTWORK, PIPING, DIFFUSERS, GRILLES AND REQUIRED ELECTRICAL. THE CONTRACTOR SHALL PROVIDE OPERATING AND MAINTENANCE INSTRUCTIONS TO THE OWNER FOR ALL EQUIPMENT. ALL COMPRESSORS SHALL BE PROVIDED WITH A FIVE (5) YEAR EXTENDED WRITTEN WARRANTY ON PARTS AND, WHERE APPLICABLE, ALL GAS FIRED HEAT EXCHANGERS SHALL BE PROVIDED WITH AN EXTENDED TEN (10) YEAR PARTS WARRANTY. THE CONTRACTOR SHALL PROVIDE AN UNCONDITIONAL WARRANTY OF ONE YEAR FOR ALL OTHER ASSOCIATED EQUIPMENT AND DEVICES.
- B. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE LOCAL BUILDING, MECHANICAL, AND ENERGY CODES ASHRAE, SMACNA, AND ALL OTHER APPLICABLE STATE AND FEDERAL CODES.
- C. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED FOR THE EXECUTION OF THIS WORK.
- D. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND SHALL DISPLAY A UL LABEL WHERE APPLICABLE.
- E. ALL INTERIOR INSULATION MATERIALS, JACKETS, COVERINGS, SEALS AND MASTICS SHALL HAVE A FLAME SPREAD INDEX OF 25 OR LESS AND SMOKE DEVELOPED INDEX OF 50 OR LESS PER ASTM E84 (NFPA 255).

1.02 SUBMITTALS

- A. PRODUCT DATA: INCLUDE MANUFACTURER'S TECHNICAL DATA FOR EACH MODEL INDICATED, INCLUDING RATED CAPACITIES, DIMENSIONS, REQUIRED CLEARANCES, CHARACTERISTICS, FURNISHED SPECIALTIES, ACCESSORIES, AND OPERATION AND MAINTENANCE DATA.

1.03 QUALITY ASSURANCE

- A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE.

PART 2 – PRODUCTS

2.01 DUCTWORK AND SPECIALTIES

- A. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL OF GAUGES AND JOINT TYPES AS SPECIFIED IN THE SMACNA MANUAL FOR THE APPLICABLE SIZES. VOLUME DAMPERS SHALL BE MANUAL LOCKING, BLADE-TYPE, TWO GAUGES HEAVIER THAN DUCT. DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS FOR TWO-INCH STATIC PRESSURE. ALL DUCTWORK SHALL BE SEALED WITH MASTIC. ACCESS DOORS SHALL BE PROVIDED IN DUCTWORK AT FIRE DAMPERS OR OTHER CONTROL DEVICES AS REQUIRED FOR MAINTENANCE. DOUBLE-THICKNESS TURNING VANES SHALL BE PROVIDED AT ALL RECTANGULAR ELBOWS. FLEXIBLE CONNECTIONS TO AIR HANDLING UNITS SHALL BE PROVIDED.

2.02 INSULATION

- A. ALL DUCTWORK SHALL BE WRAPPED WITH INSULATION WITH A MINIMUM R VALUE OF R-3.5.

2.03 EXHAUST FAN

- A. EXHAUST FAN TO BE SUPPLIED AS INDICATED ON THE DRAWINGS.
- B. FAN SPEED CONTROLLER INSTALLATION LOCATION SHALL BE COORDINATED WITH ELECTRICAL CONTRACTOR AND BE INSTALLED AT OR BY THE FAN FOR ADJUSTMENT BY BALANCE CONTRACTOR.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. INSTALL UNITS LEVEL AND PLUMB, MAINTAINING MANUFACTURER'S RECOMMENDED CLEARANCES. INSTALL ACCORDING TO ARI GUIDELINE B.
- B. ALL DUCTWORK AND EXHAUST FANS SHALL BE SUPPORTED PROPERLY FROM THE TOP CHORD OF ROOF JOISTS. NO DUCTWORK OR DEVICES SHALL BE ATTACHED DIRECTLY TO ROOF DECK.
- C. THE HVAC SYSTEM SHALL OPERATE WITHOUT OBJECTIONABLE VIBRATION, PULSATION, OR RATTLE. MOTORS SHALL BE MOUNTED ON RUBBER VIBRATION ISOLATORS OR THE COMPLETE UNIT SHALL BE ISOLATED FROM THE BUILDING WITH ISOLATION PADS. ALL DAMPERS, GRILLES, AND ACCESSORIES SHALL HAVE NO MOVEMENT UNDER OPERATING CONDITIONS AND SHALL OPERATE WITHOUT NOISE. ALL DUCTWORK INSTALLED EXTERNAL TO THE BUILDING SHALL BE COMPLETELY WEATHERPROOF AND INSULATED.

3.04 CONNECTIONS

- A. ELECTRICAL SYSTEM CONNECTIONS: COMPLY WITH APPLICABLE REQUIREMENTS IN DIVISION 16 SECTIONS FOR POWER WIRING, SWITCHES, AND MOTOR CONTROLS.
- B. GROUND EQUIPMENT ACCORDING TO DIVISION 16 SECTIONS "GROUNDING AND BONDING".
- C. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS ACCORDING TO MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES. IF MANUFACTURER'S TORQUE VALUES ARE NOT INDICATED, USE THOSE SPECIFIED IN UL 486A AND UL 486B.

3.05 TESTING ADJUSTING AND BALANCING

- A. TEST, ADJUST, AND BALANCE THE EXHAUST AIR SYSTEMS.:
- B. MAKE ADJUSTMENTS AND RE-TEST SYSTEM TO ACHIEVE THE REQUIRED FLOW WITHIN 10% OF SPECIFIED FLOW FOR AIR SYSTEMS.
- C. WHEN DEFICIENCIES ARE IDENTIFIED, RE-TEST AND ADJUST FLOWS AFTER CORRECTIVE MEASURES ARE TAKEN.
- D. PERMANENTLY IDENTIFY POSITION OF SPEED CONTROLLER AND DAMPERS FOR FUTURE REFERENCE.

END OF SECTION 23 0000



28505 SCHOOLCRAFT RD, BLDG#6
LIVONIA, MICHIGAN 48150
Phone: 734.367.7200
Fax: 734.367.7242
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Sheet Title: HVAC GENERAL NOTES

Sheet Number: M-1.1

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Sheet Title:
**EXHAUST FAN &
LOUVER SCHEDULE**

Sheet Number:
M-1.2

EXHAUST FAN SCHEDULE

TAG	BASIS OF DESIGN		FLOW RATE (CFM)	E.S.P.	FAN SPEED (RPM)	DRIVE TYPE	BLADE TYPE	WEIGHT (LBS)	SONES	ELECTRICAL DATA		DISCONNECT DATA		NOTES
	MANUFACTURER	MODEL								HP	VOLTAGE	M.T.C.	E.T.C.	
EF-1	GREENHECK	SQ-95-G	530	0.25	1,300	DIRECT	BACKWARDS INCLINED	49	6.4	1 / 15	115 / 1 / 60	√		①②③

- ① SUSPEND FROM STRUCTURE WITH UNISTRUT AND HANGING SPRING ISOLATORS
- ② PROVIDE WITH 120V REVERSE-ACTING THERMOSTAT, COORDINATE SET POINT WITH OWNER
- ③ INTERLOCK WITH LOUVERS, COORDINATE WITH LOUVER SCHEDULE AND FLOOR PLAN

LOUVER SCHEDULE

TAG	BASIS OF DESIGN		SERVICE	FLOW RATE (CFM)	LOUVER WIDTH	LOUVER HEIGHT	LOUVER DEPTH	FREE AREA (FT ²)	VELOCITY (FPM)	ELECTRIC ACUTATOR		DISCONNECT DATA		NOTES
	MANUFACTURER	MODEL								TYPE	VOLTAGE	M.T.C.	E.T.C.	
IL-1	GREENHECK	EAD-635	INTAKE LOUVER	530	13"	22"	6"	0.8	782	NORMALLY CLOSED	115 / 1 / 60	√		①②③
EL-1	GREENHECK	EAD-635	INTAKE LOUVER	530	13"	22"	6"	0.8	782	NORMALLY CLOSED	115 / 1 / 60	√		①②③

- ① PROVIDE WITH FACTORY GREENHECK 70% KYNAR 500 / HYLAR 5000 IN SIERRA TAN (COLOR CODE GF118)
- ② PROVIDE WITH FACTORY INSECT SCREEN
- ③ INTERLOCK TO OPEN WHEN THE EXHAUST FAN IS RUNNING

