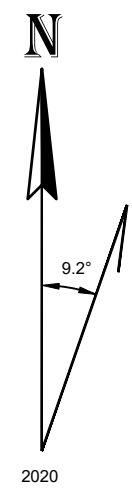


LEGEND

- 6' CHAIN LINK FENCE WITH BARBED WIRE
- LEASE LINE
- HIDDEN LINE
- CONCRETE
- RF NOTICE SIGN
- RF CAUTION SIGN
- COMPANY IDENTIFIER
- PROPANE LABEL
- NO SMOKING SIGN
- NEW/CHANGED EQUIPMENT
- RETIRE EQUIPMENT
- COLOCATION EQUIPMENT



REVIEWED
FOR
CODE
COMPLIANCE
11/16/2021

Union
WIRELESS

850 N. HIGHWAY 414
PO BOX 160
MOUNTAIN VIEW, WY 82939

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CURRENT REV	DATE
G	10/25/2021
DESIGNER:	GREG WILLIAMS
REVIEWER:	MATT FISHER



APPROVED
FOR
CONSTRUCTION
25 OCTOBER 2021

PROJECT NAME:

HAYDEN

PROJECT ADDRESS:

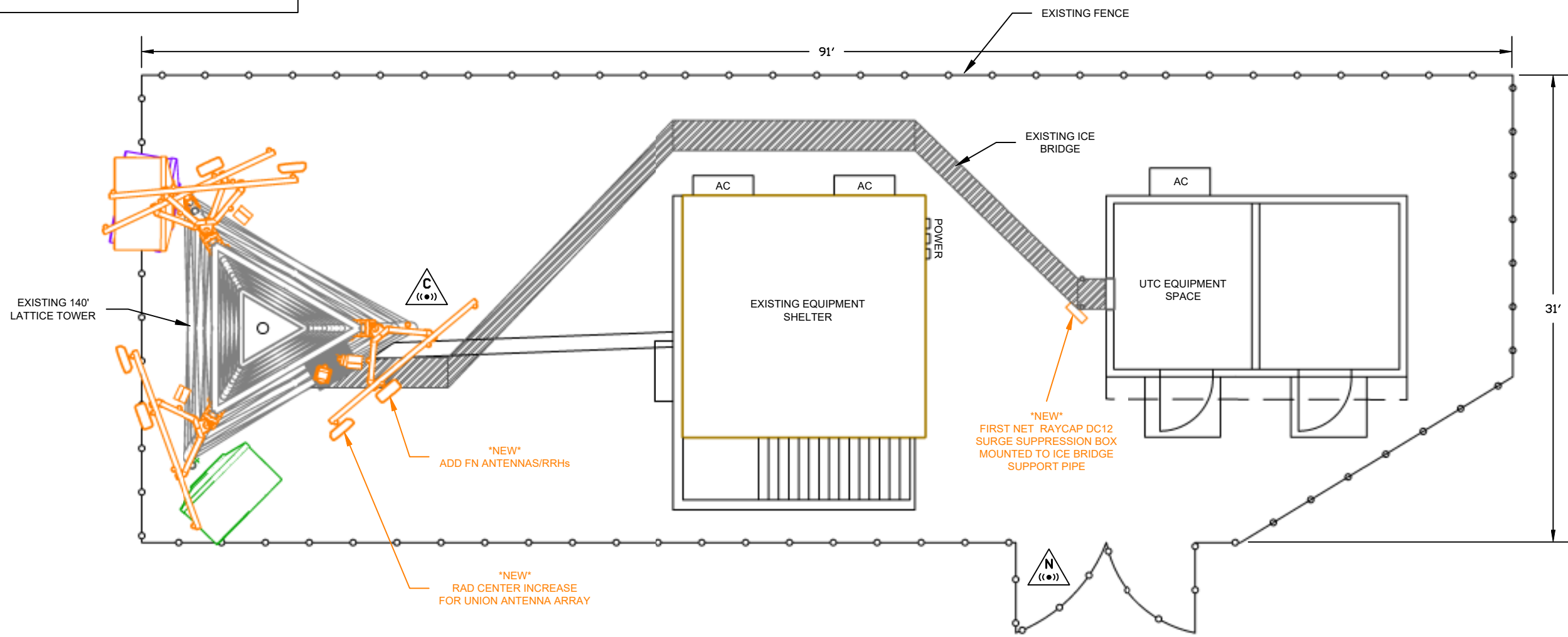
6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:

PLAN VIEW

SHEET NUMBER:

C1



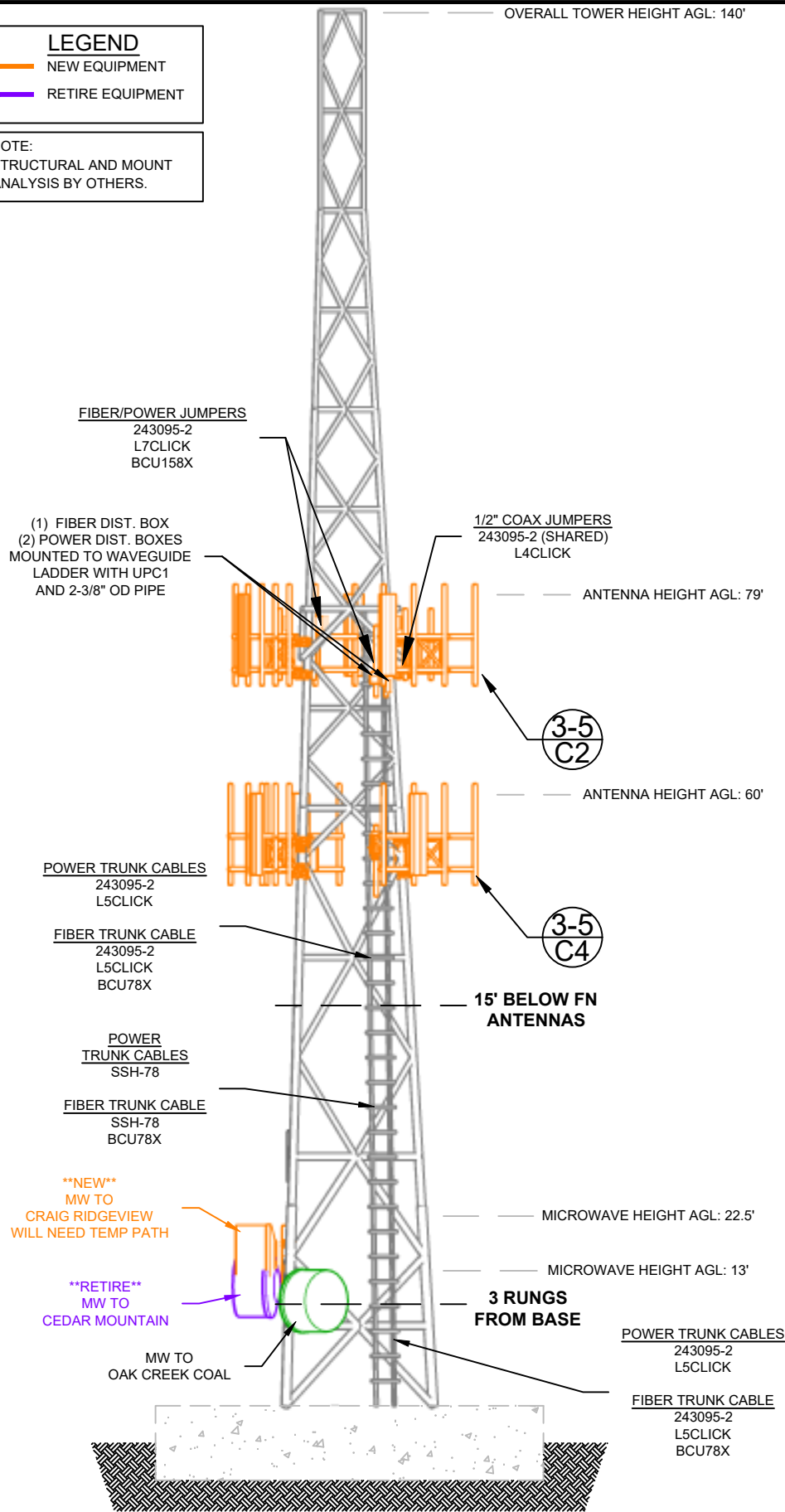
1
C2 FIRST NETSITE PLAN
SCALE: 1/8"=1'

LEGEND

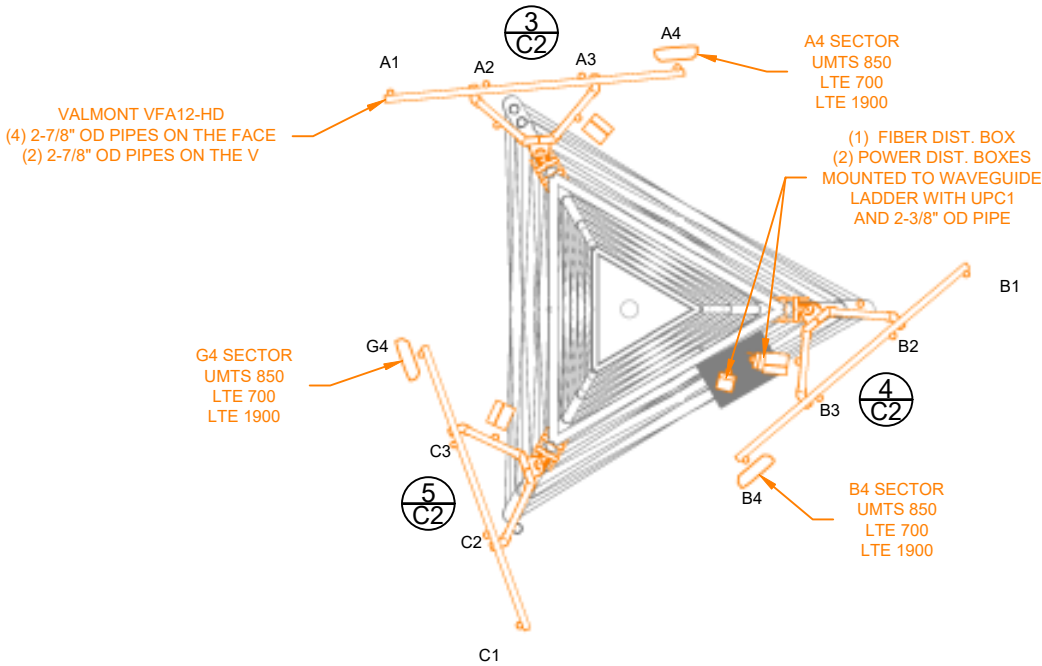
NEW EQUIPMENT

RETIRE EQUIPMENT

NOTE:
STRUCTURAL AND MOUNT
ANALYSIS BY OTHERS.



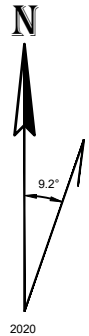
1 SOUTH FACE ELEVATION
SCALE: 1/16"=1'



2 ANTENNA DETAILS
SCALE: 1/8"=1'

3 ANTENNA DETAILS	
A4 SECTOR	ANTENNA MANUFACTURER & MODEL: 1x KMW EPBQ-654L8H8-L2-EPI
	AZIMUTH: 346° MAG (355° TRUE)
	TIP HEIGHT ABOVE GROUND LEVEL: 79'
	TECHNOLOGY 698-894 MHz PORTS: UMTS 850 F1/F2, LTE 700 2x2
	DOWNTILT 698-894 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX 698-894 MHz PORTS: 4x 1/2" COAX JUMPER
	TECHNOLOGY 1710-2170 MHz PORTS: LTE 1900 2x4
	DOWNTILT 1710-2170 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
B4 SECTOR	COAX SPECS 1710-2170 MHz PORTS: 4x 1/2" COAX JUMPER, 4x PORTS CAPPED
	ANTENNA MANUFACTURER & MODEL: 1x KMW EPBQ-654L8H8-L2-EPI
	AZIMUTH: 131° MAG (140° TRUE)
	TIP HEIGHT ABOVE GROUND LEVEL: 79'
	TECHNOLOGY 698-894 MHz PORTS: UMTS 850 F1/F2, LTE 700 2x2
	DOWNTILT 698-894 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX 698-894 MHz PORTS: 4x 1/2" COAX JUMPER
	TECHNOLOGY 1710-2170 MHz PORTS: LTE 1900 2x4
G4 SECTOR	DOWNTILT 1710-2170 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX SPECS 1710-2170 MHz PORTS: 4x 1/2" COAX JUMPER, 4x PORTS CAPPED
	ANTENNA MANUFACTURER & MODEL: 1x KMW EPBQ-654L8H8-L2-EPI
	AZIMUTH: 241° MAG (250° TRUE)
	TIP HEIGHT ABOVE GROUND LEVEL: 79'
	TECHNOLOGY 698-894 MHz PORTS: UMTS 850 F1/F2, LTE 2x2
	DOWNTILT 698-894 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX 698-894 MHz PORTS: 4x 1/2" COAX JUMPER
B4 SECTOR	TECHNOLOGY 1710-2170 MHz PORTS: LTE 1900 2x4
	DOWNTILT 1710-2170 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX SPECS 1710-2170 MHz PORTS: 4x 1/2" COAX JUMPER, 4x PORTS CAPPED
	ANTENNA MANUFACTURER & MODEL: 1x KMW EPBQ-654L8H8-L2-EPI
	AZIMUTH: 241° MAG (250° TRUE)
	TIP HEIGHT ABOVE GROUND LEVEL: 79'
	TECHNOLOGY 698-894 MHz PORTS: UMTS 850 F1/F2, LTE 2x2
	DOWNTILT 698-894 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
G4 SECTOR	COAX 698-894 MHz PORTS: 4x 1/2" COAX JUMPER
	TECHNOLOGY 1710-2170 MHz PORTS: LTE 1900 2x4
	DOWNTILT 1710-2170 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX SPECS 1710-2170 MHz PORTS: 4x 1/2" COAX JUMPER, 4x PORTS CAPPED
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	COAX 698-894 MHz PORTS: 4x 1/2" COAX JUMPER
	TECHNOLOGY 1710-2170 MHz PORTS: LTE 1900 2x4
	DOWNTILT 1710-2170 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX SPECS 1710-2170 MHz PORTS: 4x 1/2" COAX JUMPER, 4x PORTS CAPPED
	ANTENNA MANUFACTURER & MODEL: 1x KMW EPBQ-654L8H8-L2-EPI
	AZIMUTH: 241° MAG (250° TRUE)
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G4 SECTOR	TECHNOLOGY 698-894 MHz PORTS: UMTS 850 F1/F2, LTE 2x2
	DOWNTILT 698-894 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX 698-894 MHz PORTS: 4x 1/2" COAX JUMPER
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	DOWNTILT 1710-2170 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX SPECS 1710-2170 MHz PORTS: 4x 1/2" COAX JUMPER, 4x PORTS CAPPED
	ANTENNA MANUFACTURER & MODEL: 1x KMW EPBQ-654L8H8-L2-EPI
	AZIMUTH: 241° MAG (250° TRUE)
B4 SECTOR	TIP HEIGHT ABOVE GROUND LEVEL: 79'
	TECHNOLOGY 698-894 MHz PORTS: UMTS 850 F1/F2, LTE 2x2
	DOWNTILT 698-894 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX 698-894 MHz PORTS: 4x 1/2" COAX JUMPER
	TECHNOLOGY 1710-2170 MHz PORTS: LTE 1900 2x4
	DOWNTILT 1710-2170 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX SPECS 1710-2170 MHz PORTS: 4x 1/2" COAX JUMPER, 4x PORTS CAPPED
	ANTENNA MANUFACTURER & MODEL: 1x KMW EPBQ-654L8H8-L2-EPI
G4 SECTOR	AZIMUTH: 241° MAG (250° TRUE)
	TIP HEIGHT ABOVE GROUND LEVEL: 79'
	TECHNOLOGY 698-894 MHz PORTS: UMTS 850 F1/F2, LTE 2x2
	DOWNTILT 698-894 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
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	DOWNTILT 1710-2170 MHz PORTS: 0° MECH, RET (SEE BUILDSHEET)
	COAX SPECS 1710-2170 MHz PORTS: 4x 1/2" COAX JUMPER, 4x PORTS CAPPED

REVIEWED
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11/16/2021



850 N. HIGHWAY 414
PO BOX 160
MOUNTAIN VIEW, WY 82939

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CURRENT REV	DATE
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DESIGNER:
GREG WILLIAMS

REVIEWER:
MATT FISHER



APPROVED
FOR
CONSTRUCTION
25 OCTOBER 2021

PROJECT NAME:

HAYDEN

PROJECT ADDRESS:

6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:

ANTENNA DETAILS

SHEET NUMBER:

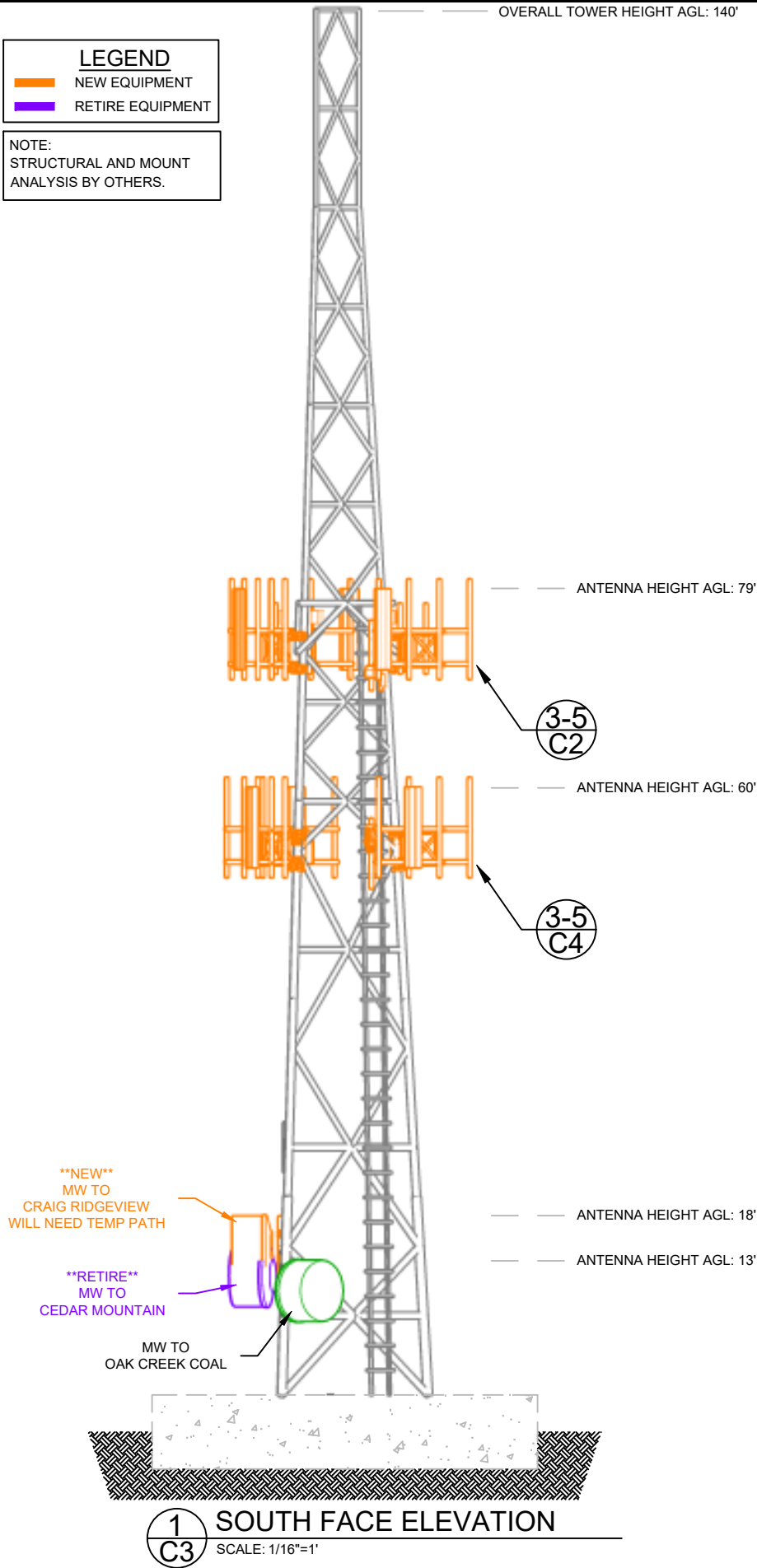
C2

LEGEND

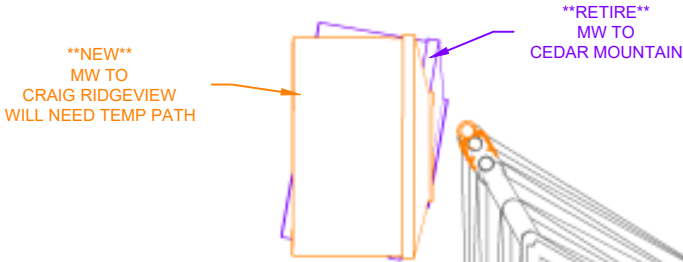
NEW EQUIPMENT

RETIRE EQUIPMENT

NOTE:
STRUCTURAL AND MOUNT
ANALYSIS BY OTHERS.



PLEASE NOTE: ONLY UNION EQUIPMENT
SHOWN FOR CLARITY.



2 ANTENNA DETAILS
3 C3 SCALE: 3/16"=1'

3 MW DETAILS
C3

MW TO CEDAR MTN				MW TO OAK CREEK COAL			
MW TO CEDAR MTN	ANTENNA MANUFACTURER & MODEL:			HP6-107, VERTICAL			HPX8-65-P6A
	AZIMUTH:			271° MAG (280.8° TRUE)			125° MAG (134.6° TRUE)
	HEIGHT ABOVE CONCRETE LEVEL:			15'			12'
	POLARIZATION:			Tx:V, Rx:V			Tx:V&H, Rx:V&H
	TECHNOLOGY/FREQUENCY/SHARED:			LICENSED 11 GHz			LICENSED 6 GHz
	WAVEGUIDE SPECIFICATIONS:			(1x) EW90 FEED			(2x) EW63 FEEDLINES
MW TO CRAIG RIDGEVIEW	MICROWAVE PATH TO:			CRAIG RIDGEVIEW			
	ANTENNA MANUFACTURER & MODEL:			ANDREW (1X) USX6-6W			
	AZIMUTH:			261° MAG (270.2° TRUE)			
	HEIGHT ABOVE CONCRETE LEVEL:			15'			
	POLARIZATION:			TX: V&H RX: V&H			
	ODU PLACEMENT HORIZONTAL POLARIZATION:			RFU-HP - POLE MOUNT			
MW TO OAK CREEK COAL	ODU PLACEMENT VERTICAL POLARIZATION:			RFU-HP - POLE MOUNT			
	TECHNOLOGY/FREQUENCY:			L6GHZ			
	WAVEGUIDE SPECIFICATIONS:			(2) LDF4-50A			

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11/16/2021



850 N. HIGHWAY 414
PO BOX 160
MOUNTAIN VIEW, WY 82939

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CURRENT REV	DATE
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DESIGNER:
GREG WILLIAMS

REVIEWER:
MATT FISHER



APPROVED
FOR
CONSTRUCTION
25 OCTOBER 2021

PROJECT NAME:

HAYDEN

PROJECT ADDRESS:

6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:

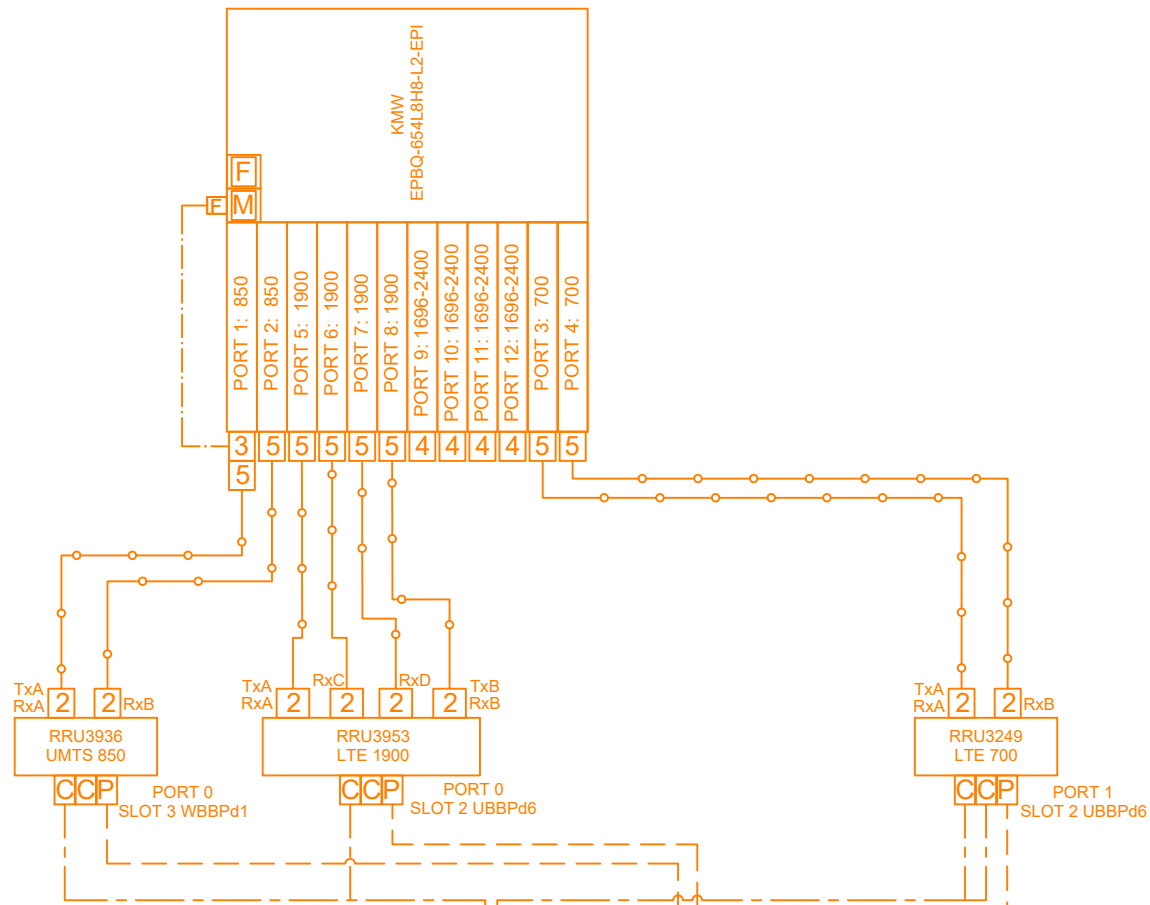
MICROWAVE DETAILS

SHEET NUMBER:

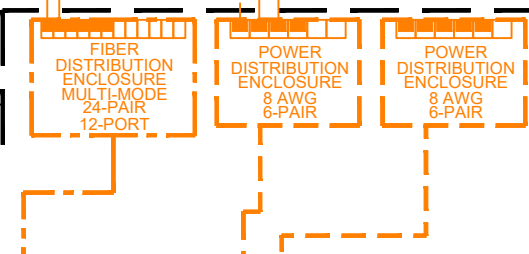
C3

SECTOR A4
UMTS 850 F1/F2
LTE 700 2x2
LTE 1900 2x4

KMW
EPBQ-654LH8-L2-EPI



**EQUIPMENT SHARED
FOR ALL SECTORS
BELOW LINE**



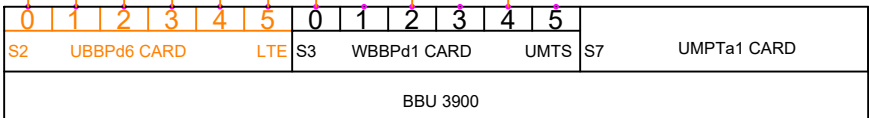
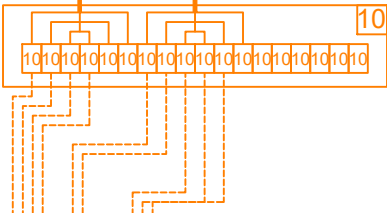
OUTDOOR CONFIGURATION

INSIDE BUILDING

CPRI PANEL

BBU CARD

CPRI PANEL - SINGLE MODE



1
R1

RAN CABLING DIAGRAM - ALPHA SECTOR

SCALE: NO SCALE

LEGEND

- 1/2" JUMPER 4.3-10(M)-DIN(M) - 15'
- 1/2" JUMPER 4.3-10(M)-4.3-10(M)
- TRUNK FIBER CABLE - 6 PAIR 3AWG
- ROS FB-L98B-A0303-190FT
- TRUNK POWER CABLE - 3 PAIR 3AWG
- ROS PR-UWPT812-190FT
- TWO PAIR SM FIBER - PLUG N PLAY
- ROS FB-L98B-A0302-7000/10000
- SINGLE PAIR #12 POWER - PLUG N PLAY
- ROS L99-P055-7000/10000
- SINGLE PAIR FIBER CABLE - SM
- SINGLE PAIR POWER CABLE
- (1x) LDF4-50A
- (1x) RET CABLE
- (1x) LMR-400 CABLE
- NEW EQUIPMENT
- GROUND KIT
- 1/2" DIN MALE CONNECTOR
- SBT-8F-64-01
- RL-65Z001-000N CAP
- 1/2" 4.3-10 MINI DIN MALE CONNECTOR
- APG-BNFN-350
- LMR-400 N MALE CONNECTOR
- LMR-400 SMA MALE CONNECTOR
- L4TNM-PSA
- RUWCD-2978-P-48
- BA384 ENTRY BOOT KIT
- BA783 ENTRY BOOT KIT
- BA124 ENTRY BOOT KIT
- FEMALE RET CONNECTOR
- MALE RET CONNECTOR
- RRU CPRI PORT
- RRU POWER PORT

REVIEWED
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11/16/2021



850 N. HIGHWAY 414
PO BOX 160
MOUNTAIN VIEW, WY 82939

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DESIGNER: GREG WILLIAMS

REVIEWER: MATT FISHER



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HAYDEN

PROJECT ADDRESS:

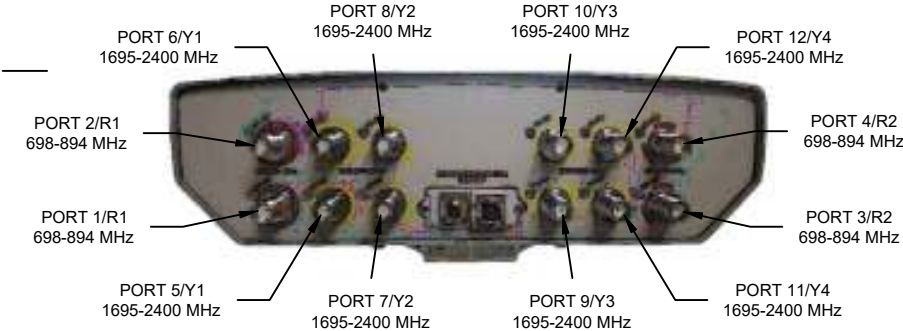
6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:

RAN DIAGRAM - A SECTOR

SHEET NUMBER:

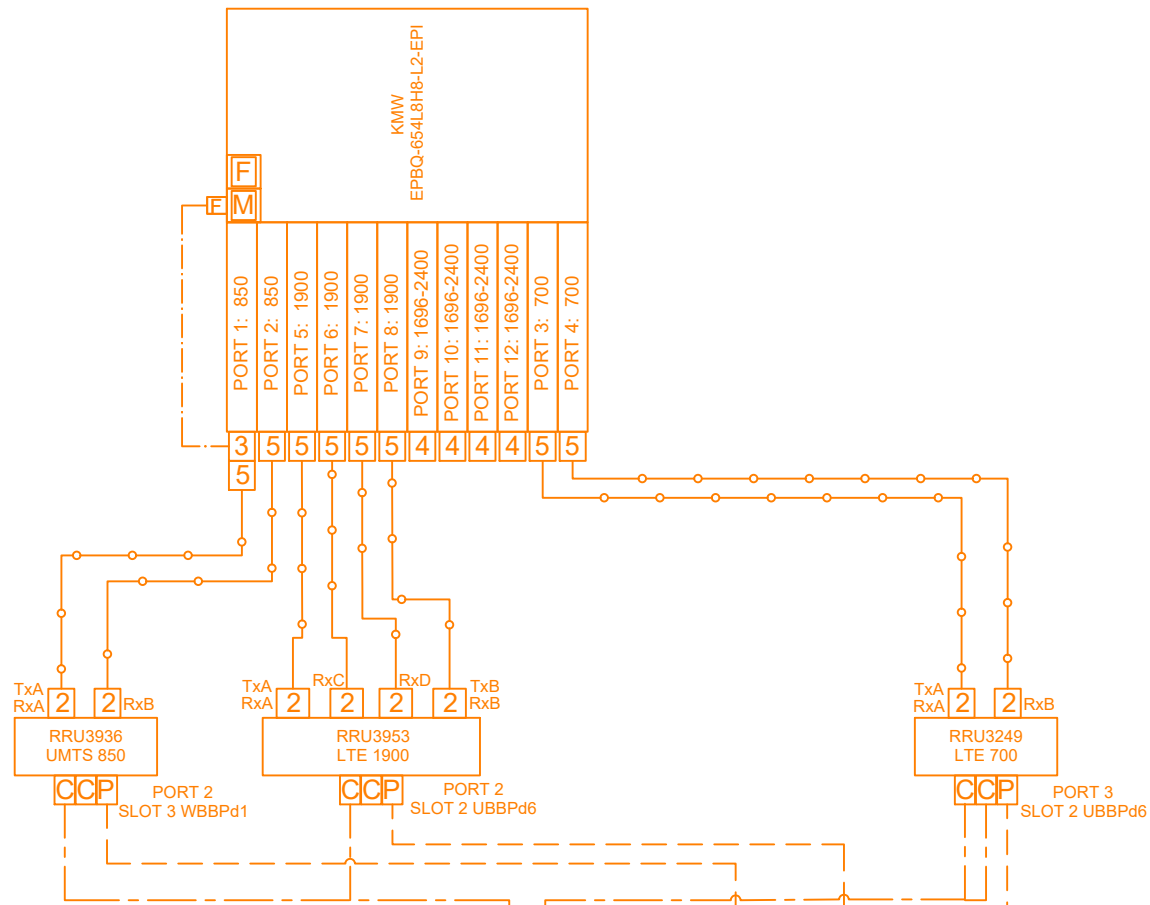
R1



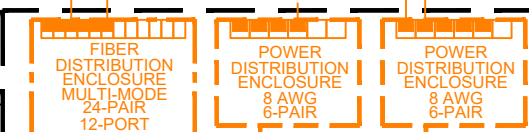
Frequency Range	Array	Connector
880-894MHz	R1	4.3-10 Female
880-894MHz	R2	4.3-10 Female
1695-2400MHz	Y1	4.3-10 Female
1695-2400MHz	Y2	4.3-10 Female
1695-2400MHz	Y3	4.3-10 Female
1695-2400MHz	Y4	4.3-10 Female

SECTOR B4
UMTS 850 F1/F2
LTE 700 2x2
LTE 1900 2x4

KMW
EPBQ-654LH8-L2-EPI

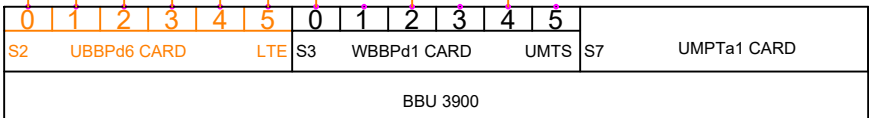
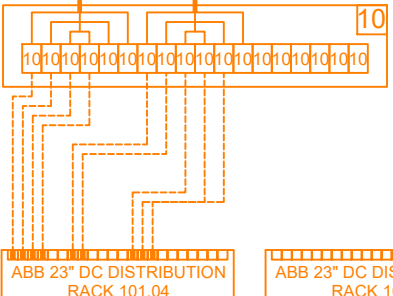
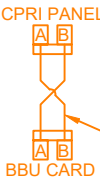


**EQUIPMENT SHARED
FOR ALL SECTORS
BELOW LINE**



OUTDOOR CONFIGURATION

INSIDE BUILDING



1 R2 RAN CABLING DIAGRAM - BETA SECTOR
SCALE: NO SCALE

LEGEND

- 1/2" JUMPER 4.3-10(M)-DIN(M) - 15
- 1/2" JUMPER 4.3-10(M)-4.3-10(M)
- TRUNK FIBER CABLE - 6 PAIR 3AWG
- ROS FB-L98B-A0303-190FT
- TRUNK POWER CABLE - 6 PAIR 3AWG
- ROS PR-UWPT812-190FT
- TWO PAIR SM FIBER - PLUG N PLAY
- ROS FB-L98B-A0302-7000/10000
- SINGLE PAIR #12 POWER - PLUG N PLAY
- ROS L99-P055-7000/10000
- SINGLE PAIR FIBER CABLE - SM
- SINGLE PAIR POWER CABLE
- (1x) LDF4-50A
- (1x) RET CABLE
- (1x) LMR-400 CABLE
- NEW EQUIPMENT

- 1 GROUND KIT
- 2 1/2" DIN MALE CONNECTOR
- 3 SBT-8F-64-01
- 4 RL-65Z001-000N CAP
- 5 1/2" 4.3-10 MINI DIN MALE CONNECTOR
- 6 APG-BNFFN-350
- 7 LMR-400 N MALE CONNECTOR
- 8 LMR-400 SMA MALE CONNECTOR
- 9 L4TNM-PSA
- 10 RUWCD-2978-P-48
- 11 BA384 ENTRY BOOT KIT
- 12 BA783 ENTRY BOOT KIT
- 13 BA124 ENTRY BOOT KIT
- F FEMALE RET CONNECTOR
- M MALE RET CONNECTOR
- C RRU CPRI PORT
- P RRU POWER PORT

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11/16/2021



850 N. HIGHWAY 414
PO BOX 160
MOUNTAIN VIEW, WY 82939

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DESIGNER: GREG WILLIAMS

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APPROVED
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25 OCTOBER 2021

PROJECT NAME:

HAYDEN

PROJECT ADDRESS:

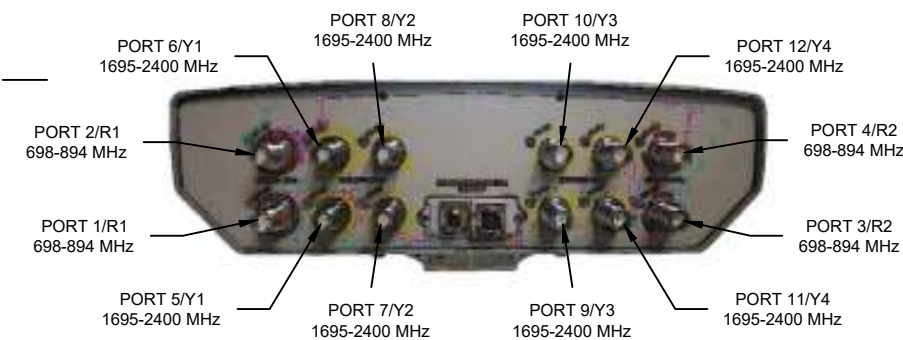
6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:

RAN DIAGRAM - B SECTOR

SHEET NUMBER:

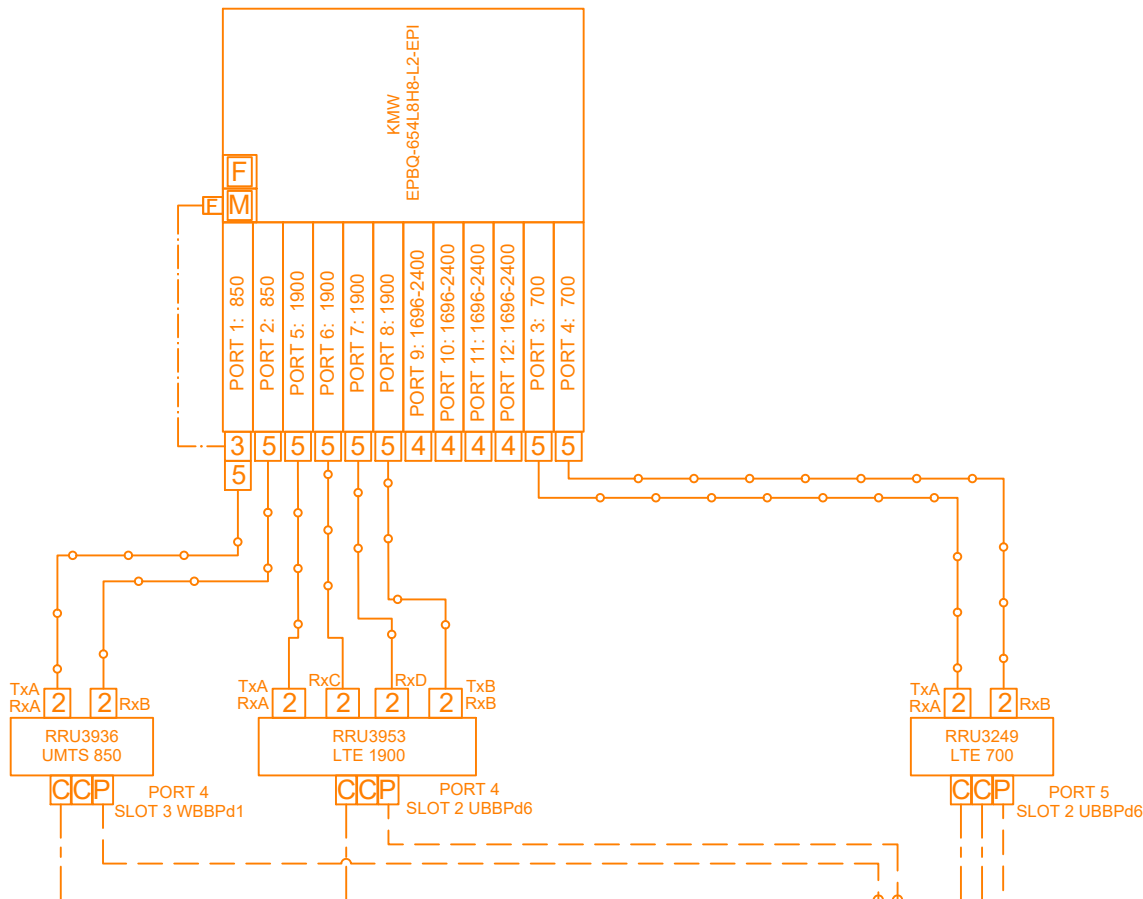
R2



Frequency Range	Array	Connector
880-894MHz	R1	4.3-10 Female
880-894MHz	R2	4.3-10 Female
1895-2400MHz	Y1	4.3-10 Female
1895-2400MHz	Y2	4.3-10 Female
1895-2400MHz	Y3	4.3-10 Female
1895-2400MHz	Y4	4.3-10 Female

SECTOR G4
UMTS 850 F1/F2
LTE 700 2x2
LTE 1900 2x4

KMW
EPBQ-654LH8-L2-EPI



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FOR ALL SECTORS
BELOW LINE**

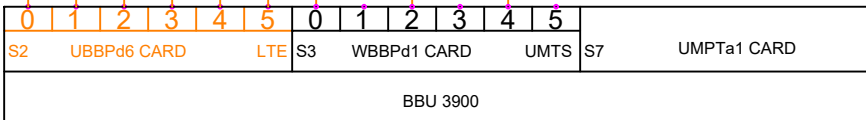
OUTDOOR CONFIGURATION

INSIDE BUILDING

CPRI PANEL

BBU CARD

CPRI PANEL - SINGLE MODE



1
R3

RAN CABLING DIAGRAM - GAMMA SECTOR

SCALE: NO SCALE

LEGEND

- 1/2" JUMPER 4.3-10(M)-DIN(M) - 15
- 1/2" JUMPER 4.3-10(M)-4.3-10(M)
- TRUNK FIBER CABLE - 6 PAIR 3AWG
- ROS FB-L98B-A0303-190FT
- TRUNK POWER CABLE - 6 PAIR 3AWG
- ROS PR-UWPT812-190FT
- TWO PAIR SM FIBER - PLUG N PLAY
- ROS FB-L98B-A0302-7000/10000
- SINGLE PAIR #12 POWER - PLUG N PLAY
- ROS L99-P055-7000/10000
- SINGLE PAIR FIBER CABLE - SM
- SINGLE PAIR POWER CABLE
- (1x) LDF4-50A
- (1x) RET CABLE
- (1x) LMR-400 CABLE
- NEW EQUIPMENT

1

GROUND KIT

2

1/2" DIN MALE CONNECTOR

3

SBT-8F-64-01

4

RL-65Z001-000N CAP

5

1/2" 4.3-10 MINI DIN MALE CONNECTOR

6

APG-BNFF-350

7

LMR-400 N MALE CONNECTOR

8

LMR-400 SMA MALE CONNECTOR

9

L4TNM-PSA

10

RUWCD-2978-P-48

11

BA384 ENTRY BOOT KIT

12

BA783 ENTRY BOOT KIT

13

BA124 ENTRY BOOT KIT

F

FEMALE RET CONNECTOR

M

MALE RET CONNECTOR

C

RRU CPRI PORT

P

RRU POWER PORT

REVIEWED
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11/16/2021



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DESIGNER:

GREG WILLIAMS

REVIEWER:

MATT FISHER



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25 OCTOBER 2021

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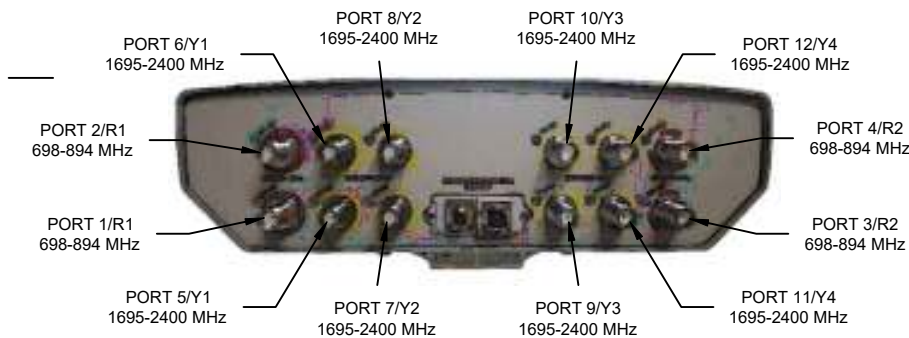
6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:

RAN DIAGRAM - G SECTOR

SHEET NUMBER:

R3



Frequency Range	Array	Connector
800-804MHz	R1	4.3-10 Female
800-804MHz	R2	4.3-10 Female
1895-2400MHz	Y1	4.3-10 Female
1895-2400MHz	Y2	4.3-10 Female
1895-2400MHz	Y3	4.3-10 Female
1895-2400MHz	Y4	4.3-10 Female

MW DISH TO PARACHUTE PEAK
ANDREW USX6-6-W



CERAGON
RFU-HP

8

9

CERAGON
RFU-HP

8

9

9

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11

8

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4

4

4

4

CERAGON IP20A
PCPK

19" RACK - 101.05

REVIEWED
FOR
CODE
COMPLIANCE
11/16/2021

LEGEND

FLEX TWIST

(1X) LDF4-50A

(1X) BW63 WAVEGUIDE

RG-8 COAXIAL

(1X) POWER CABLE

2 PAIR #16 AWG

(1X) SINGLE MODE FIBER

1310nm LC-LC

NEW EQUIPMENT

1

FLEXTWIST ADAPTER

2

E CONNECTOR

3

H CONNECTOR

4

RG8 CONNECTOR

5

SURGE PROTECTOR

6

BAZERO ENTRY BOOT

7

1101-1157 DIN RAIL

7

SURGE PROTECTOR

8

1/2" N-TYPE CONNECTOR

9

1/2" COAX GROUND

10

APG-BNFN-350

11

ENTRY BOOT FOR 1/2" COAX

O

OPTICAL PORT

P

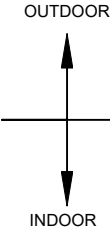
W/ GIG ETH SFP

P

POWER PORT

L

TERMINATION LOAD



ENTRY PANEL

GROUND BAR

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MOUNTAIN VIEW, WY 82939

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CURRENT REV	DATE
G	10/25/2021

DESIGNER:
GREG WILLIAMS

REVIEWER:
MATT FISHER

APPROVED
FOR
CONSTRUCTION
25 OCTOBER 2021

PROJECT NAME:
HAYDEN

PROJECT ADDRESS:
6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:
MICROWAVE CONFIGURATION

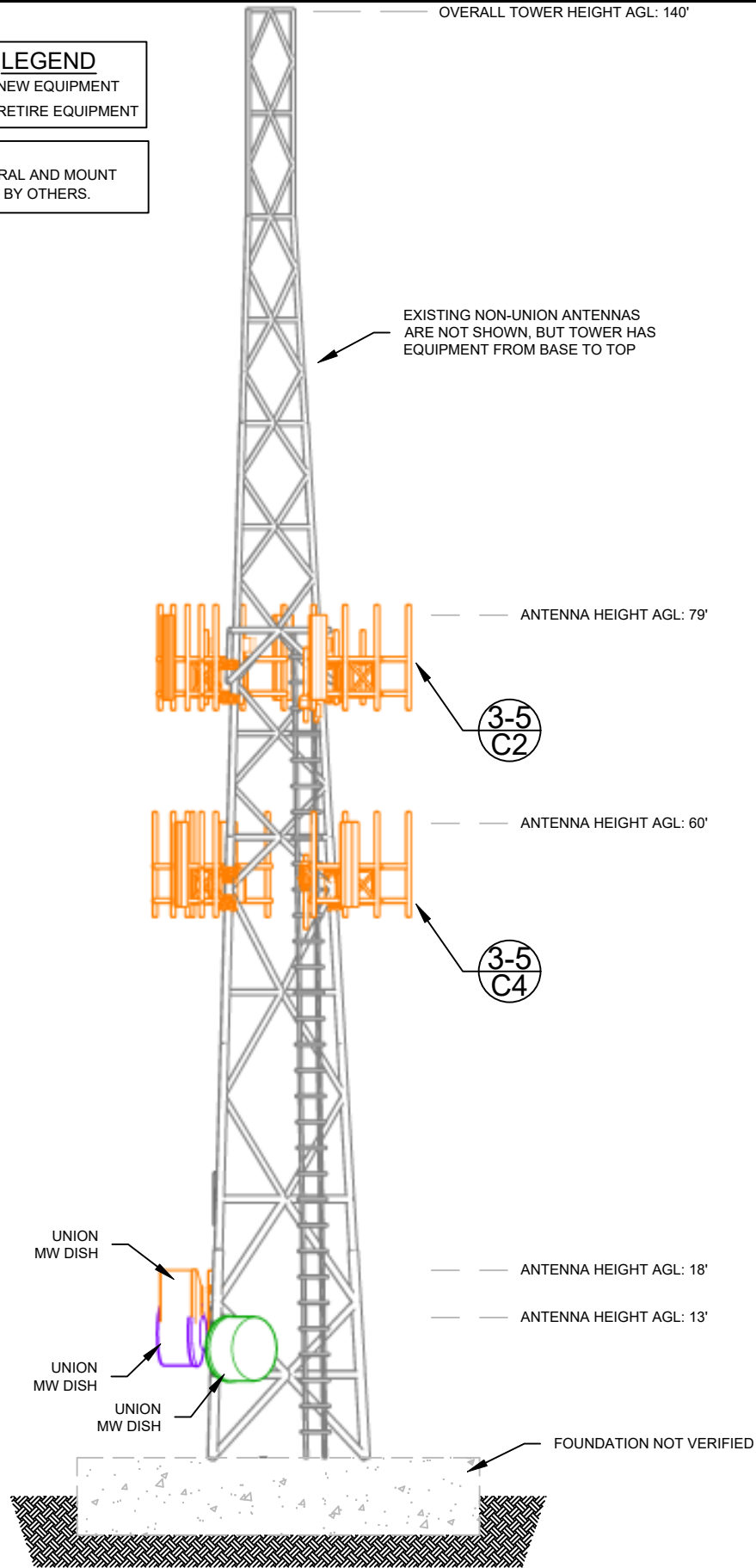
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R4

LEGEND

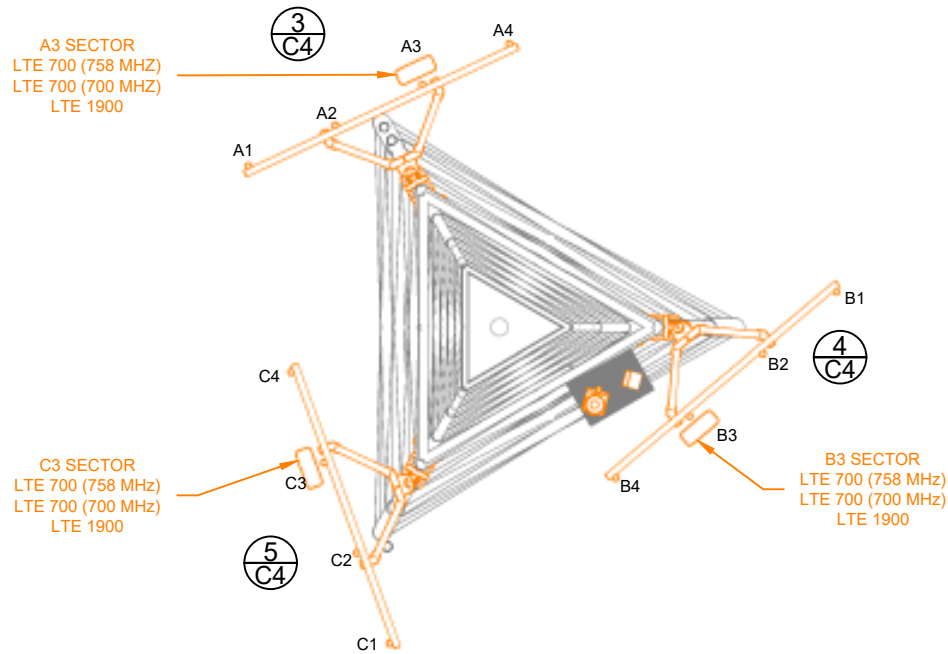
NEW EQUIPMENT

RETIRE EQUIPMENT

NOTE:
STRUCTURAL AND MOUNT
ANALYSIS BY OTHERS.



1 SOUTH FACE ELEVATION
SCALE: 1/16"=1'



2 FN ANTENNA DETAILS
SCALE: 1/8"=1'

3 ANT FRAME DETAILS

A3 SECTOR	ANTENNA MANUFACTURER & MODEL:	1X COMMSCOPE NNH4-65C-R6-V3 OR SIMILAR
	AZIMUTH:	326° MAG (335° TRUE)
	TIP HEIGHT ABOVE GROUND LEVEL:	60'
	TECHNOLOGY FOR 698-896 MHz PORTS:	LTE 7A_1_FA/7A_2_A
	DOWNTILT FOR 698-896 MHz:	0°MECH, RET (SEE RFDS)
	WAVEGUIDE SPECS FOR 698-896 MHz:	(4) LDF4-50A
	TECHNOLOGY FOR 1695-2360 MHz PORTS:	LTE 9A_1_A
	DOWNTILT FOR 1695-2360 MHz:	0°MECH, RET (SEE RFDS)
B3 SECTOR	WAVEGUIDE SPECS FOR 1695-2360 MHz:	(4) LDF4-50A, (4) PORTS CAPPED

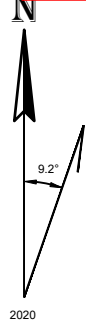
4 ANT FRAME DETAILS

B3 SECTOR	ANTENNA MANUFACTURER & MODEL:	1X COMMSCOPE NNH4-65C-R6-V3 OR SIMILAR
	AZIMUTH:	131° MAG (140° TRUE)
	TIP HEIGHT ABOVE GROUND LEVEL:	60'
	TECHNOLOGY FOR 698-896 MHz PORTS:	LTE 7B_1_FA/7B_2_A
	DOWNTILT FOR 698-896 MHz:	0°MECH, RET (SEE RFDS)
	WAVEGUIDE SPECS FOR 698-896 MHz:	(4) LDF4-50A
	TECHNOLOGY FOR 1695-2360 MHz PORTS:	LTE 9B_1_A
	DOWNTILT FOR 1695-2360 MHz:	0°MECH, RET (SEE RFDS)
C3 SECTOR	WAVEGUIDE SPECS FOR 1695-2360 MHz:	(4) LDF4-50A, (4) PORTS CAPPED

5 ANT FRAME DETAILS

C3 SECTOR	ANTENNA MANUFACTURER & MODEL:	1X COMMSCOPE NNH4-65C-R6-V3 OR SIMILAR
	AZIMUTH:	241° MAG (250° TRUE)
	TIP HEIGHT ABOVE GROUND LEVEL:	60'
	TECHNOLOGY FOR 698-896 MHz PORTS:	LTE 7C_1_FA/7C_2_A
	DOWNTILT FOR 698-896 MHz:	0°MECH, RET (SEE RFDS)
	WAVEGUIDE SPECS FOR 698-896 MHz:	(4) LDF4-50A
	TECHNOLOGY FOR 1695-2360 MHz PORTS:	LTE 9C_1_A
	DOWNTILT FOR 1695-2360 MHz:	0°MECH, RET (SEE RFDS)
B3 SECTOR	WAVEGUIDE SPECS FOR 1695-2360 MHz:	(4) LDF4-50A, (4) PORTS CAPPED

REVIEWED
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11/16/2021



850 N. HIGHWAY 414
PO BOX 160
MOUNTAIN VIEW, WY 82939

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REVIEWER:
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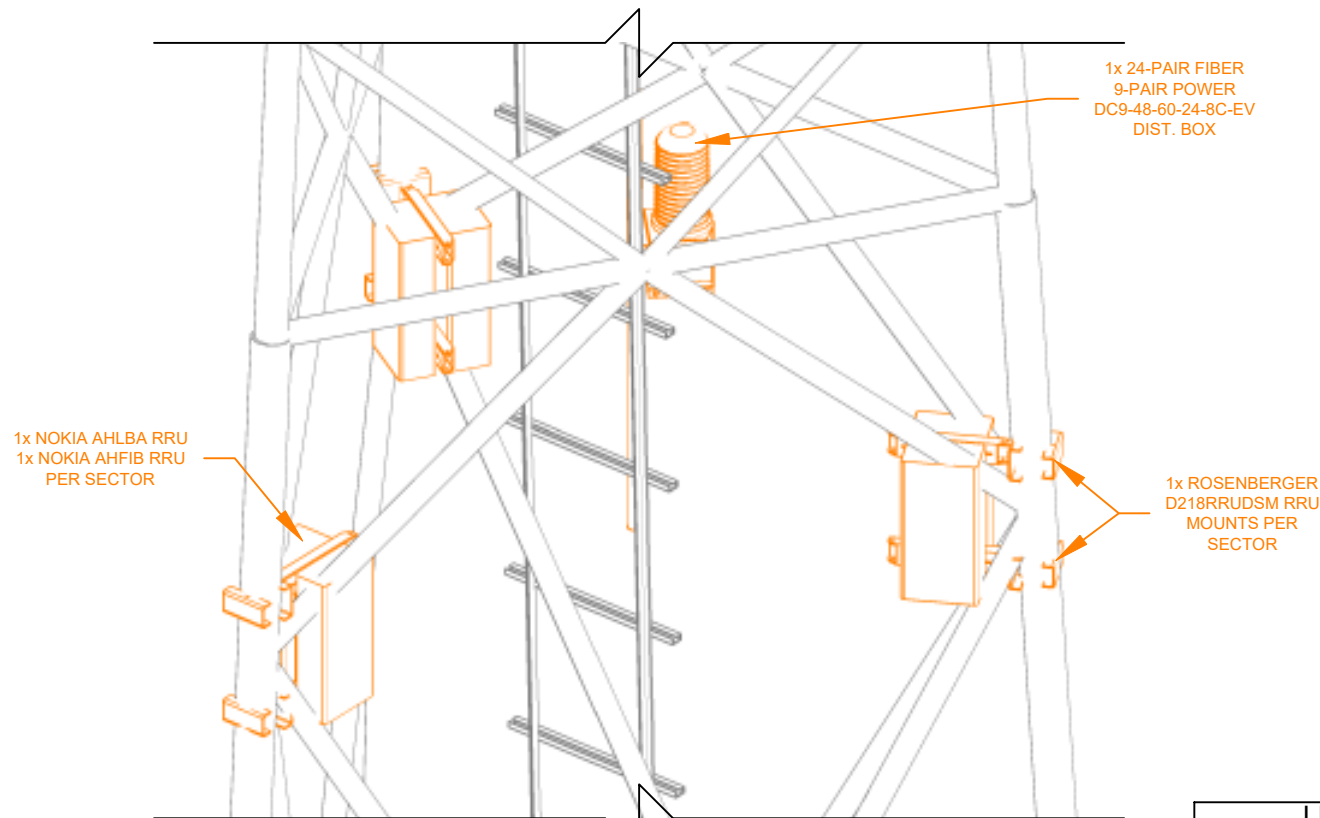
FA CODE:
15084276

PROJECT NAME:
HAYDEN

PROJECT ADDRESS:
6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

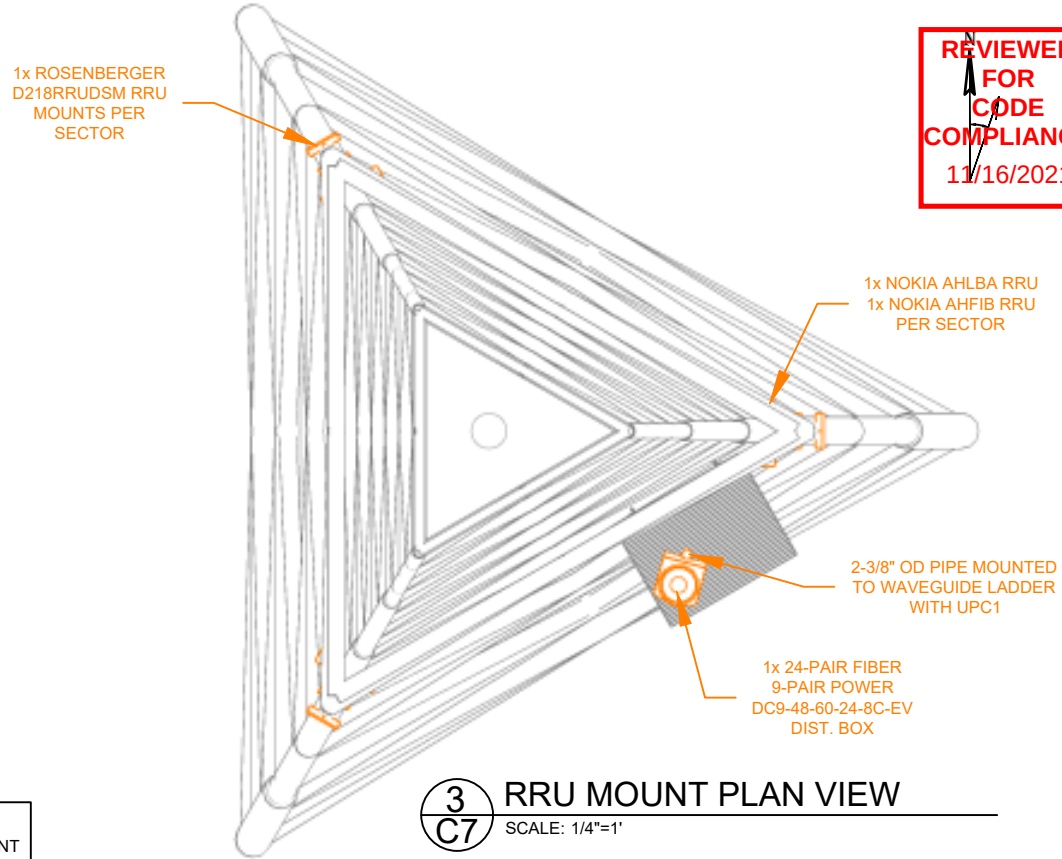
SHEET TITLE:
FN ANTENNA DETAILS

SHEET NUMBER:
C4

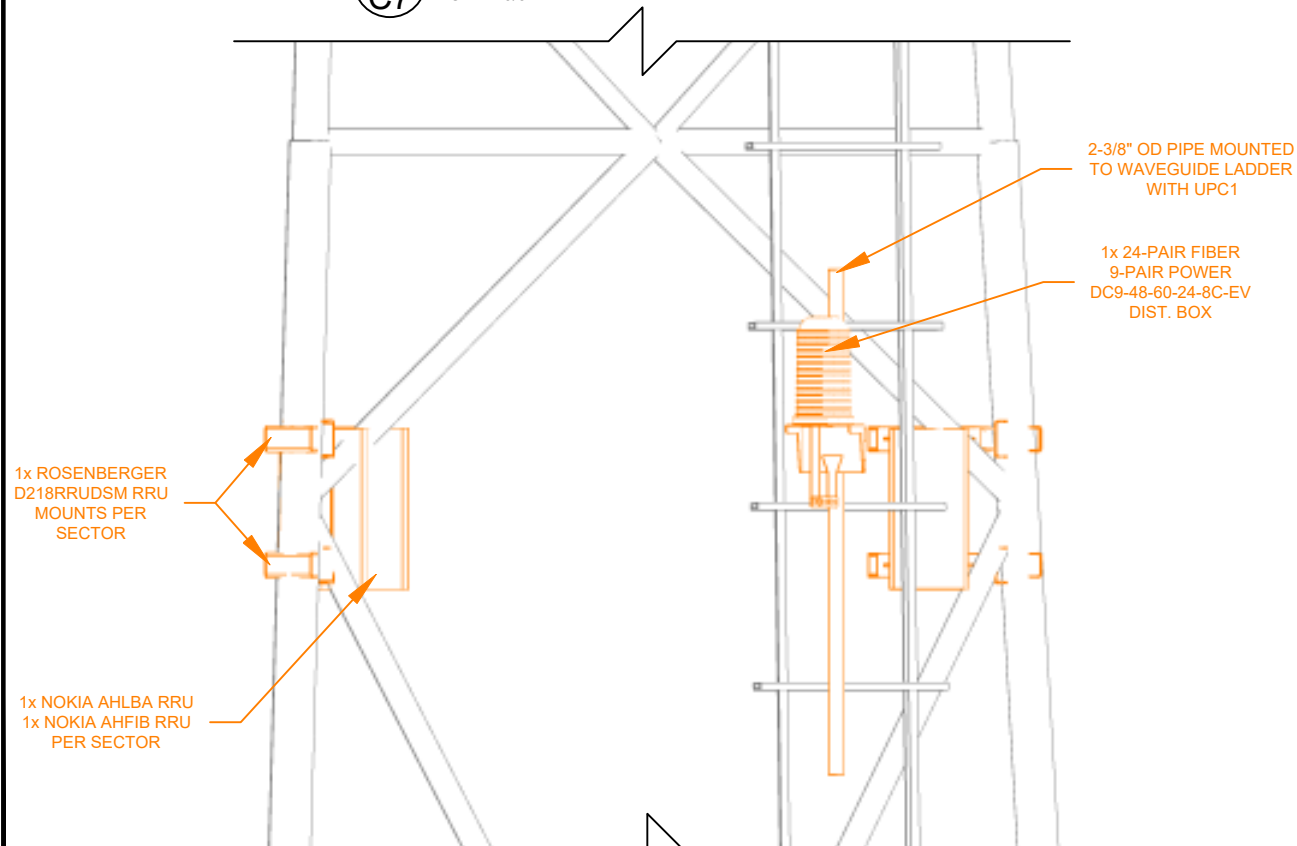


1 RRU MOUNT PERSPECTIVE
C7 SCALE: 3/8"=1'

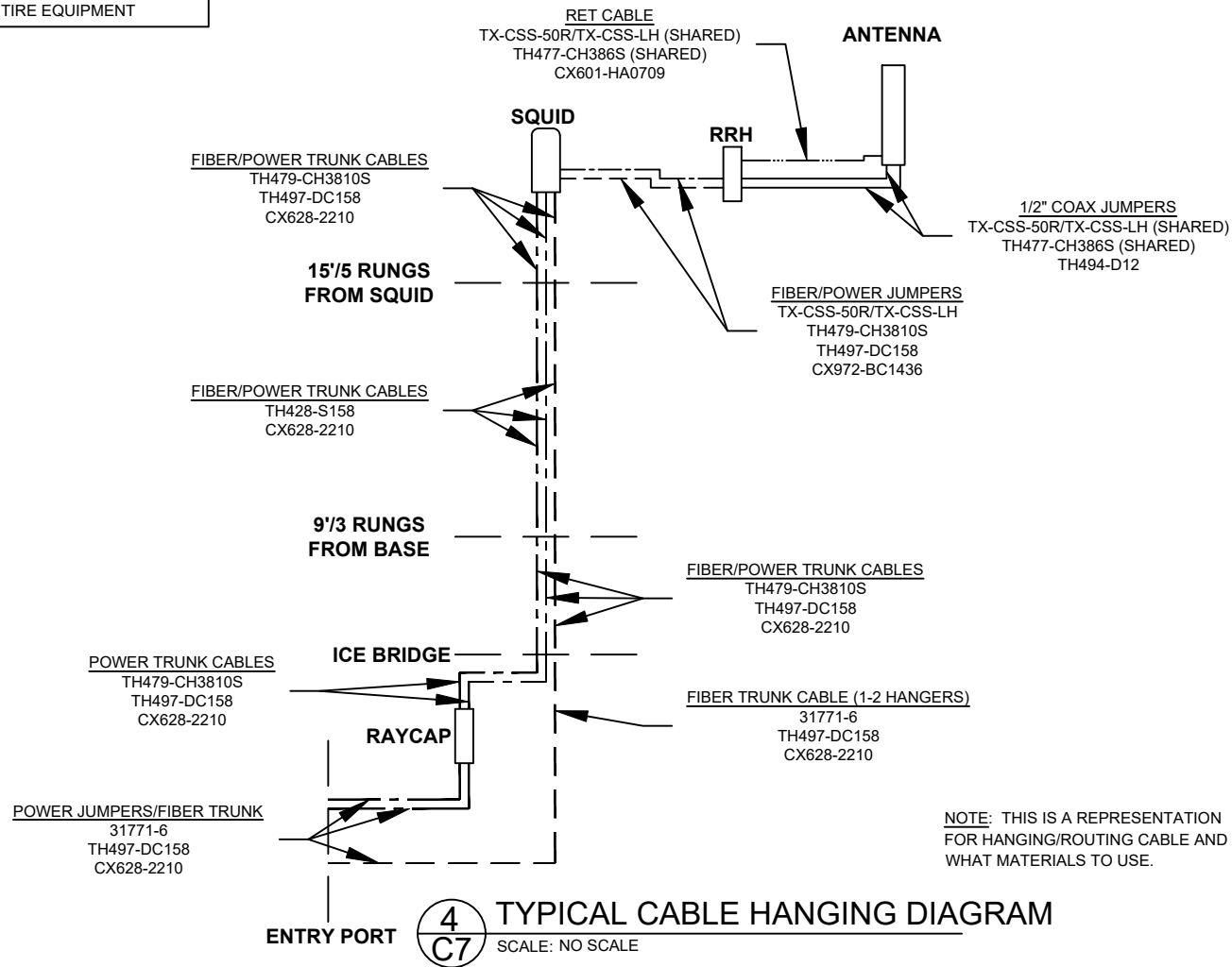
LEGEND	
	NEW/CHANGED EQUIPMENT
	RETIRE EQUIPMENT



3 RRU MOUNT PLAN VIEW
C7 SCALE: 1/4"=1'



2 RRU ELEVATION VIEW
C7 SCALE: 3/8"=1'



4 TYPICAL CABLE HANGING DIAGRAM
C7 SCALE: NO SCALE

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6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:
FN RRU MOUNT DETAILS

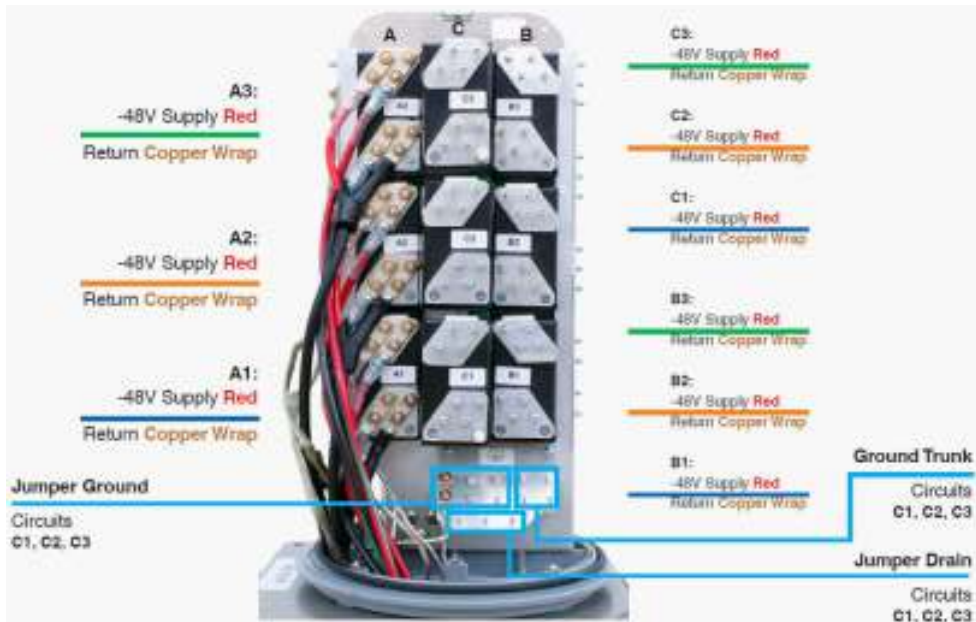
SHEET NUMBER:
C7

1 Power Cable Configuration - Squid

R6 SCALE: NO SCALE

POWER CABLE LAYOUT					
Power Squid					
Port	Sector	Frequency Band	Trunk Cable - Tape Requirement	Cable Stripe Color (Inside Keycap)	Power Jumper between Squid and RRU
A3	A	700	Red	Green	Red/Blue
A7	A	PCS/AWS	Red	Orange	Red/Yel w/ PCS / White AWS
A1	A	Spare	Red	Blue	
B3	B	700	Blue	Green	Blue/Blue
B2	B	PCS/AWS	Blue	Orange	Blue/Yel w/ PCS / White AWS
B1	B	Spare	Blue	Blue	
C7	C	700	Green	Green	Green/Blue
C1	C	PCS/AWS	Green	Orange	Green/Yel w/ PCS / White AWS
C1	C	Spare	Green	Blue	

** BOTH AWS AND PCS PRESENT AT THE W-1E **



Squid Power Configuration

3 Power Cable Configuration - DC12

R6 SCALE: NO SCALE

DC12				
Port	Sector	Frequency Band	Trunk Cable - Tape Requirement	Cable Stripe Color (Inside Keycap)
A1	A	Spare	Red	Blue
A2	A	PCS/AWS	Red	Orange
A3	A	700	Red	Green
B1	B	Spare	Blue	Blue
B2	B	PCS/AWS	Blue	Orange
B3	B	700	Blue	Green
C1	C	Spare	Green	Blue
C2	C	PCS/AWS	Green	Orange
C3	C	700	Green	Green
D1	D	N/A	N/A	N/A
D2	D	N/A	N/A	N/A
D3	D	N/A	N/A	N/A

** Note **

ONLY 4 OF PORTS IN DC12 IS HIRED FROM HAYDEN SQUID

2 Fiber Cable Configuration

R6 SCALE: NO SCALE

FIBER LAYOUT				
Fiber Pair	Sector	Frequency Band	Jumper between Squid & RRU (see Requirement)	Trunk Cable - Tape Requirement
1	A	700 - Optical 1	Red/Blue/Red	
2	A	700 - Optical 2	Red/Blue/Blue	
3	A	PCS/AWS - Optical 1	Red/Yel w/ White/Red	
4	A	PCS/AWS - Optical 2	Red/Yel w/ White/Blue	
5	A	Spare	r/a	
6	A	Spare	r/a	
7	B	700 - Optical 1	Blue/Blue/Red	
8	B	700 - Optical 2	Blue/Blue/Blue	
9	B	PCS/AWS - Optical 1	Blue/Yel w/ White/Red	
10	B	PCS/AWS - Optical 2	Blue/Yel w/ White/Blue	
11	B	Spare	r/a	
12	B	Spare	r/a	
13	C	700 - Optical 1	Green/Blue/Red	
14	C	700 - Optical 2	Green/Blue/Blue	
15	C	PCS/AWS - Optical 1	Green/Yel w/ White/Red	
16	C	PCS/AWS - Optical 2	Green/Yel w/ White/Blue	
17	C	Spare	r/a	
18	C	Spare	r/a	
19	C	Spare	r/a	
20	C	Spare	r/a	
21	C	Spare	r/a	
22	C	Spare	r/a	
23	C	Spare	r/a	
24	C	Spare	r/a	

** Yellow tape indicates PCS **

** White tape indicates AWS **



Squid Fiber Configuration

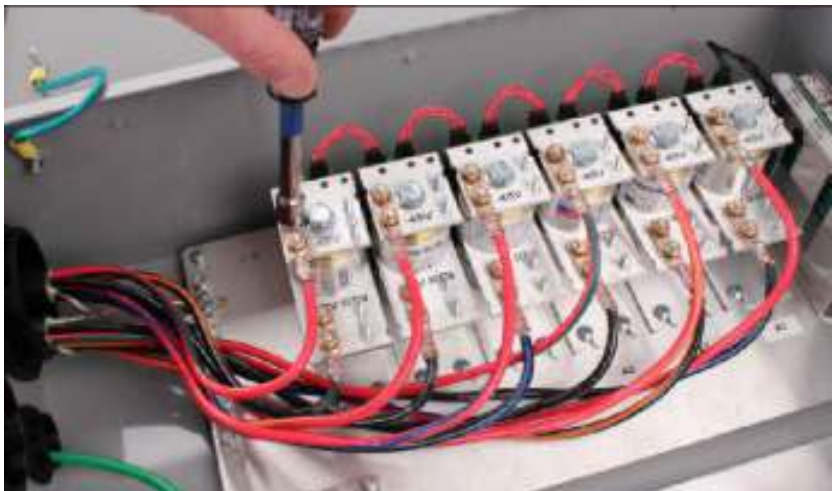
4 RET Cable Configuration - RRU

R6 SCALE: NO SCALE

RET		
Sector	Frequency Band	RET
A	700	Red/Blue
	AWS	1/2
	PCS	1/2
B	700	Blue/Blue
	AWS	1/2
	PCS	1/2
C	700	Green/Blue
	AWS	1/2
	PCS	1/2



DC12-48-60-0-25E Port Layout



DC12-48-60-0-25E Port Configuration



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DESIGNER: GREG WILLIAMS

REVIEWER: MATT FISHER



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FOR
CONSTRUCTION
25 OCTOBER 2021

AT&T SITE ID: COL04472A

FA CODE: 15084276

PROJECT NAME: HAYDEN

PROJECT ADDRESS: 6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE: FN ARRESTOR DIST. LAYOUT

SHEET NUMBER: R6

GROUND ROD CONNECTION

GROUNDING CONNECTORS

TOWER GROUND CONNECTOR

GR

GROUND ROD - 10"x5/8" OD

GROUND BAR (GB-0424-IS OR SIMILAR)

SOLID #2 AWG TINNED COPPER WIRE - BEND RADIUS NOT TO BE LESS THAN 12"

STRANDED #2 AWG COPPER WIRE - GREEN INSULATED

STRANDED #6 AWG COPPER WIRE - GREEN INSULATED

#6 AWG ONE HOLE LUG (YA6CL3BOX)

#2 AWG LUG (YA2C2TC38)

1-5/8" COAXIAL CABLE - AVA7-50

1/2" COAXIAL CABLE - LDF4-50A

24-PAIR SINGLE MODE TRUCK FIBER CABLE

6-PAIR #8 AWG TRUCK POWER CABLE

FN 24-PAIR SINGLE MODE TRUNK FIBER CABLE

FN 3-PAIR #8 AWG TRUCK POWER CABLE

NEW EQUIPMENT

1

G1

GROUNDING DIAGRAM

SCALE: NO SCALE

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11/16/2021

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GREG WILLIAMS

REVIEWER:
MATT FISHER

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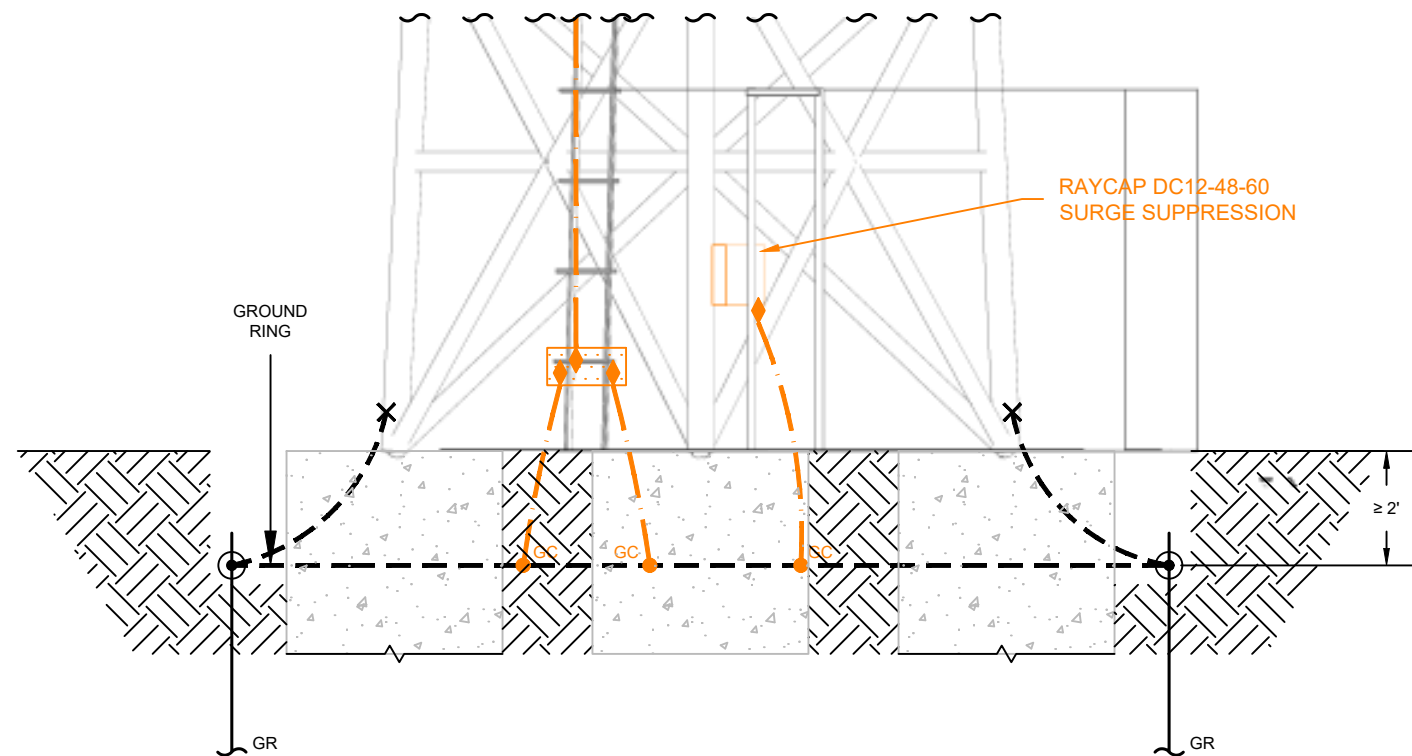
FA CODE:
15084276

PROJECT NAME:
HAYDEN

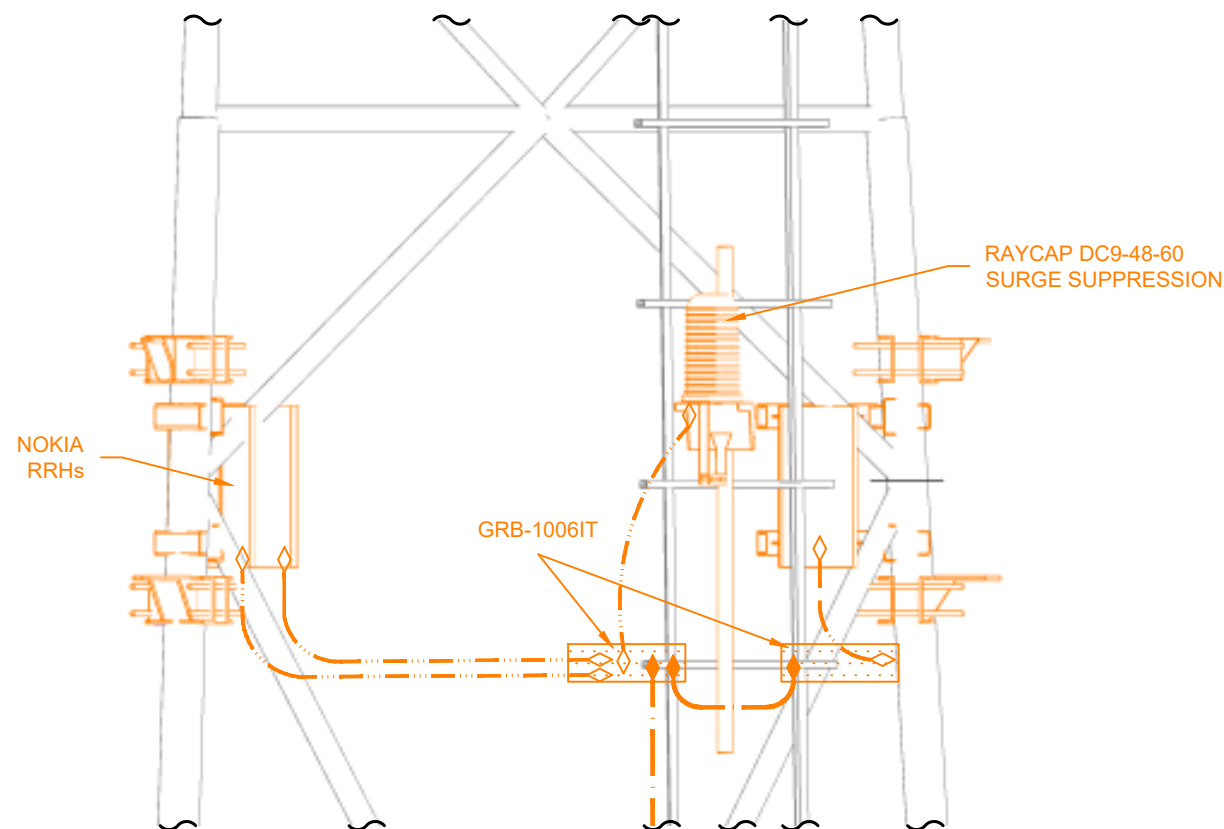
PROJECT ADDRESS:
6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

SHEET TITLE:
FN GROUNDING PLAN VIEW

SHEET NUMBER:
G1



1
G2 TOWER GROUNDING ELEVATION
SCALE: NO SCALE

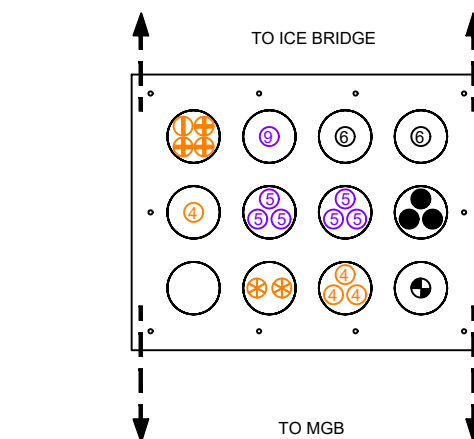


2
G2 TOWER GROUNDING ELEVATION
SCALE: NO SCALE

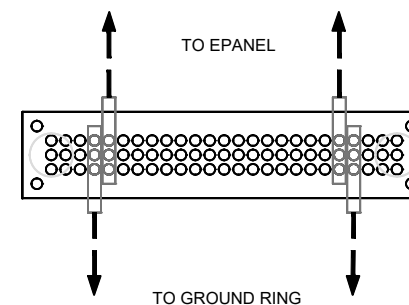
LEGEND

- ⊙ GROUND ROD CONNECTION
- GROUNDING CONNECTORS
- ✕ TOWER GROUND CONNECTOR
- GR GROUND ROD - 10'x5/8" OD
- ▨ GROUND BAR (GB-0424-IS OR SIMILAR)
- SOLID #2 AWG TINNED COPPER WIRE - BEND RADIUS NOT TO BE LESS THAN 12"
- STRANDED #2 AWG COPPER WIRE - GREEN INSULATED
- STRANDED #6 AWG COPPER WIRE - GREEN INSULATED
- ◇ #6 AWG ONE HOLE LUG (YA6CL3BOX)
- ◆ #2 AWG LUG (YA2C2TC38)
- ⑨ EW90 WAVEGUIDE
- ⑥ EW63 WAVEGUIDE
- ⑤ 7/8" COAXIAL CABLE
- ④ 1/2" COAXIAL CABLE
- ⊗ CAT6 - OUTDOOR RATED
- ⊕ SINGLE PAIR MULTI-MODE FIBER JUMPERS
- SINGLE PAIR #12 AWG POWER JUMPERS
- ① FN 24-PAIR SINGLE MODE TRUNK FIBER CABLE
- ⊕ FN 3-PAIR #8 AWG TRUCK POWER CABLE
- NEW EQUIPMENT

**REVIEWED
FOR
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11/16/2021



3
G2 EPANEL CONFIGURATION
SCALE: NO SCALE



4
G2 MAIN GROUND BUS - BUILDING
SCALE: NO SCALE

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DESIGNER: **GREG WILLIAMS**

REVIEWER: **MATT FISHER**

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6985 HOMESTEADER LANE 2
HAYDEN, ROUTT COUNTY, COLORADO

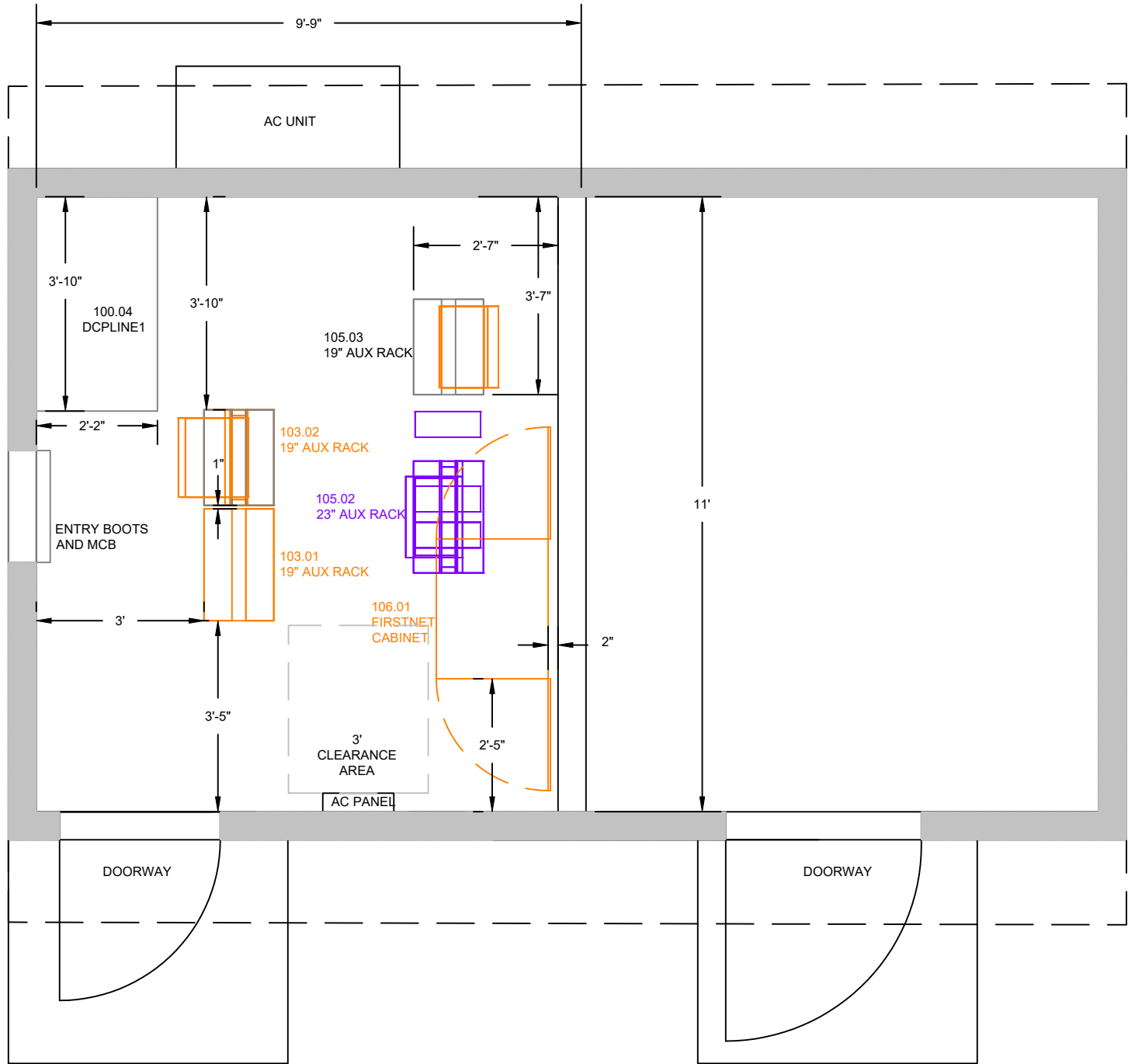
SHEET TITLE:
FN GROUNDING DIAGRAMS

SHEET NUMBER: **G2**

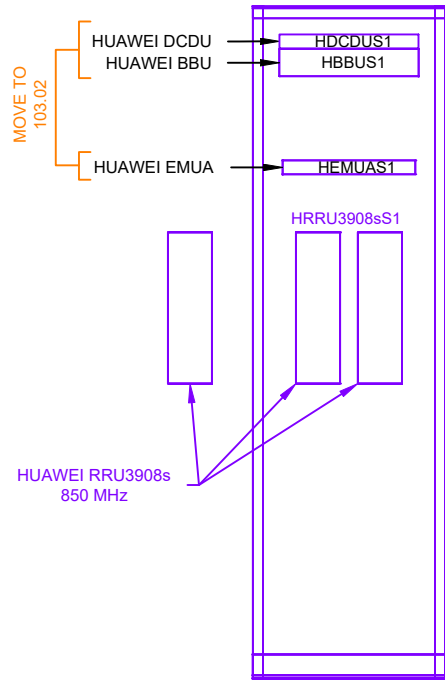
LEGEND

NEW EQUIPMENT

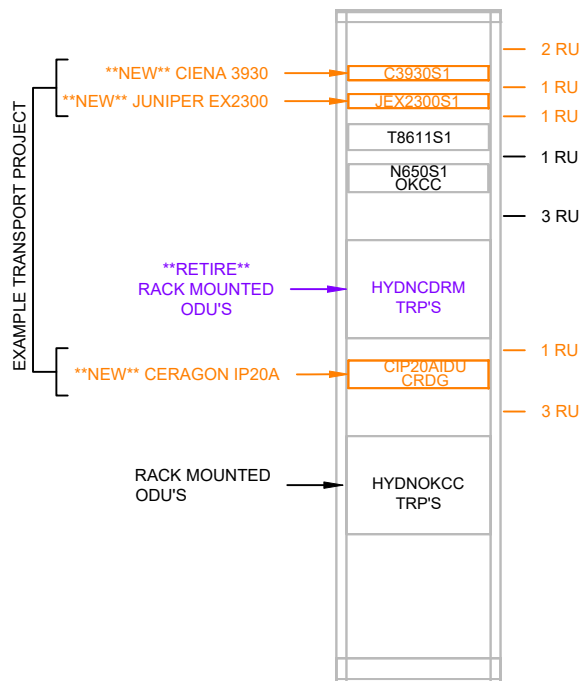
RETIRE EQUIPMENT



1
A1 COMMUNICATION SITE FLOOR PLAN
SCALE: 3"=8'

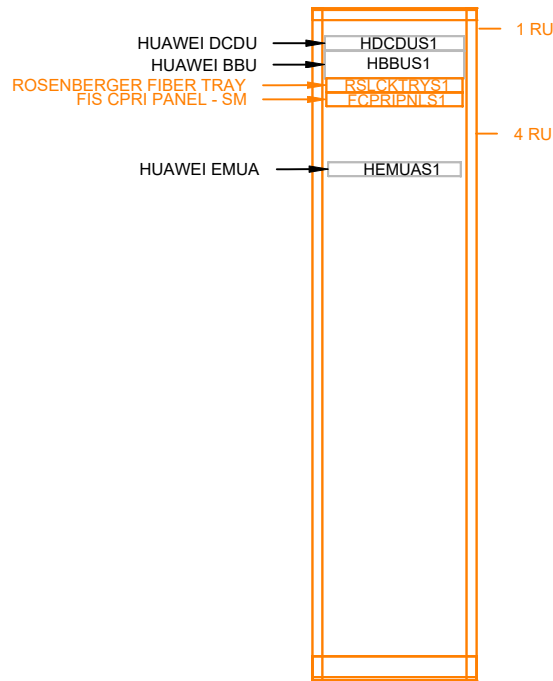


2
A1 105.02 - 23" AUX RACK
SCALE: 1"=2'



3
A1 105.03 - 19" AUX RACK
SCALE: 1"=2'

NOTE: PLEASE PROVIDE HEIGHT MEASUREMENTS IN AS BUILTS



4
A1 103.02 - 19" AUX RACK
SCALE: 1"=2'

NOTE: PLEASE PROVIDE HEIGHT MEASUREMENTS IN AS BUILTS

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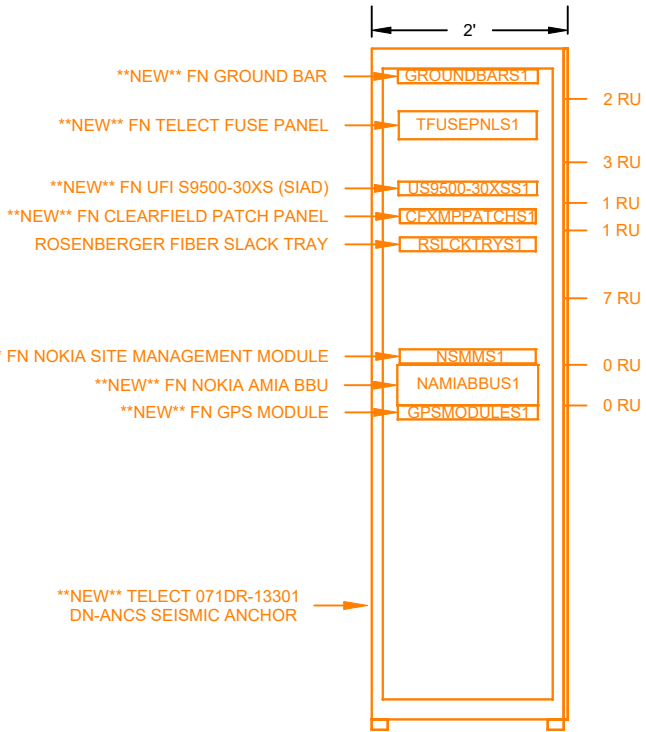
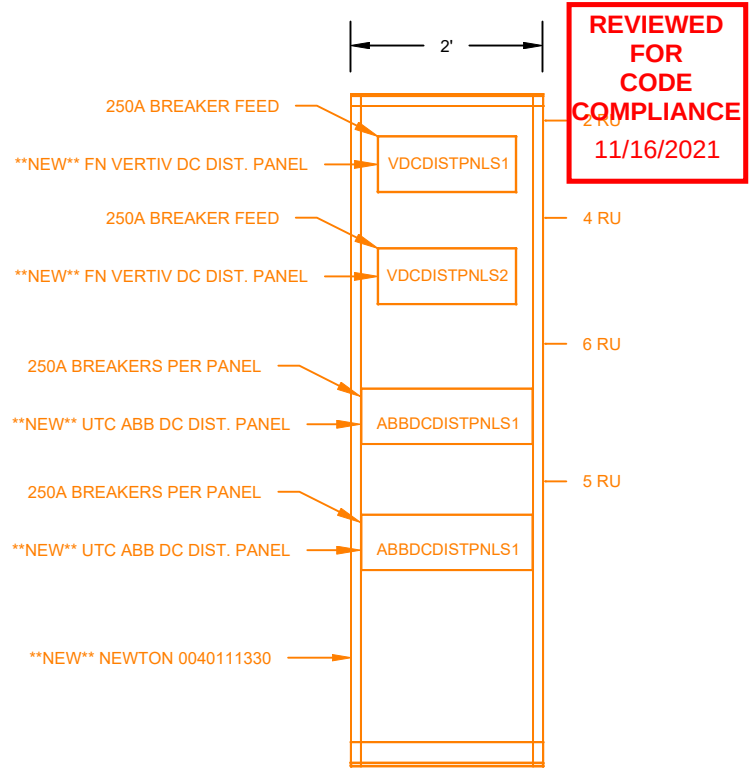
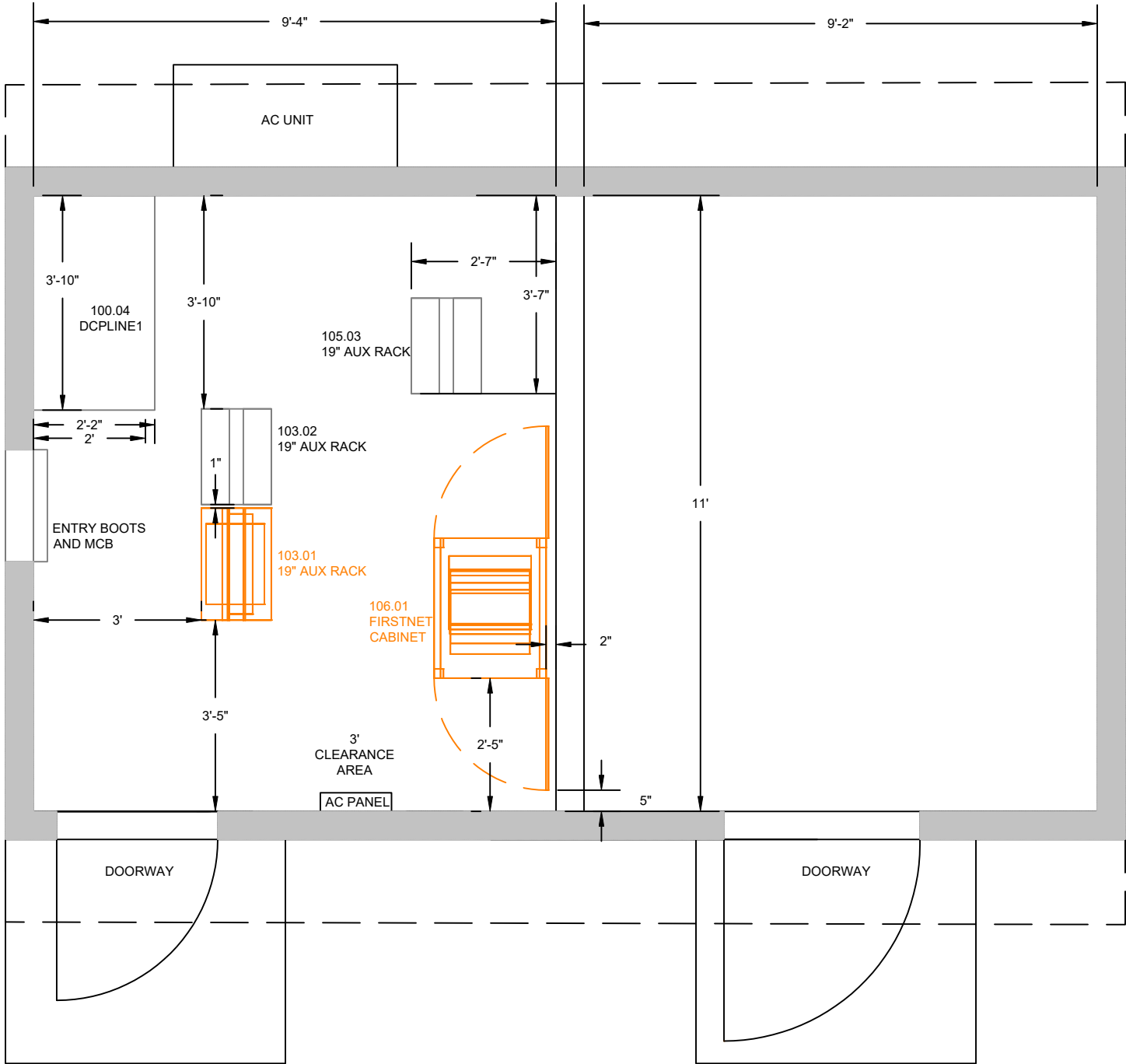
SHEET TITLE:
EQUIPMENT
BUILDING LAYOUT

SHEET NUMBER:
A1

LEGEND

NEW EQUIPMENT

RETIRE EQUIPMENT



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SHEET TITLE:
FN EQUIPMENT
BUILDING LAYOUT

SHEET NUMBER:
A2