



Development Review Committee

1020 East Pioneer Road
Draper, Utah 84020

STAFF REPORT

May 18, 2022

To: Jennifer Jastremsky, Zoning Administrator

Approved

Date

From: Jennifer Jastremsky, AICP, Planning Manger
(801) 576-6328 or jennifer.jastremsky@draperutah.gov

Re: Sal IX 5G-SUB6 Verizon – Permitted Use Permit Request

Application No.: USE-97-2022

Applicant: Troy Benson representing Technology Associates EC Inc.

Project Location: Approximately 11585 S State St.

Current Zoning: CR (Regional Commercial) Zone

Acreage: Approximately 2.54 acres (approximately 110,642 square feet)

Request: Request for approval of a permitted use permit in the CR zone regarding an upgrade to antenna equipment on an existing wireless telecommunications pole.

SUMMARY AND BACKGROUND

This application is a request for approval of a Permitted Use Permit for a property totaling 2.54 acres on the east side of State St., at approximately 11585 S State St. (Exhibit B and C). The property is currently zoned CR. The applicant is requesting that a permitted use permit be approved to allow for an upgrade to equipment on the existing facility for Verizon Wireless.



ANALYSIS

General Plan and Zoning. The Land Use Map of the General Plan calls for the Community Commercial land use designation for the subject property (Exhibit D). That category is characterized as follows:

Community Commercial

LAND USE DESCRIPTION	
CHARACTERISTICS	<ul style="list-style-type: none"> • Includes the full scope of commercial land uses that require and utilize exposure to the freeway • Intended to be traveler-or commuter-oriented and should provide lodging, food, personal services and other similar uses • Frontage roads • Deeper setbacks for landscaping and enhancements • Limited traffic access points • Visual unity • Uniform design standards and aesthetics • Access to individual properties should be provided only from frontage roads • Well landscaped street frontages • Limited traffic access points for the site • Common off-street traffic circulation and parking areas • Pedestrian access from surrounding residential areas
LAND USE MIX	<ul style="list-style-type: none"> • Large-scale, master-planned commercial centers • Big-box stores and offices
COMPATIBLE ZONING	<ul style="list-style-type: none"> • Community Commercial (CC) • General Commercial (CG) • Interchange Commercial (CI) • Institutional Care (IC)
LOCATION	<ul style="list-style-type: none"> • Strategically placed along high-traffic corridors with convenient points of traffic access to and from residential areas

The property has been assigned the CR zoning classifications (Exhibit E). According to the DCMC Section 9-8-020; the purpose of the CG zone is *“provide areas where a combination of destination oriented business, retail commercial, entertainment, and related uses may be established, maintained and protected to serve both residents and nonresidents of the city. Typical uses in this zone include large scale, master planned commercial centers with outlying commercial pads, big box stores, and offices.”* The property abuts the CR zone to the north and south, the CC (Community Commercial) zone to the west, and the R3 (Single-family Residential, 13,000 square foot lot minimum) zone to the east.

Requested Modification. The existing pole is 60-feet tall. The Verizon antennas are located at 56-feet high on the pole. The applicant will be adding or replacing six antennas and accessory equipment on the existing array mounts. Existing feeder lines will be used for the antennas. There will be an upgrade to the equipment in the equipment shed. The proposed plan set is included at Exhibit F.



Criteria For Approval. The criteria for review and potential approval of a permitted use request is found in Section 9-5-070(E) of the Draper City Municipal Code. This section depicts the standard of review for such requests as:

E. Approval Standards: The following standards shall apply to the issuance of a permitted use permit. A permitted use shall:

- 1. Be allowed as a permitted use in the applicable zone;*
- 2. Conform to development standards of the applicable zone;*
- 3. Conform to applicable regulations of general applicability and regulations for specific uses set forth in this title;*
- 4. Not be located on any land classified as a primary or secondary conservation area or sensitive land area, except as expressly permitted by provisions of this title;*
- 5. Not be located in any protected area as shown on a natural resource inventory; and*
- 6. Conform to any other applicable requirements of this code.*

REVIEWS

Planning Division Review. The Draper City Planning Division has completed their review of the Permitted Use Permit submission. Comments from this division, if any, can be found in Exhibit A.

Engineering and Public Works Divisions Review. The Draper City Engineering and Public Works Divisions have completed their reviews of the Permitted Use Permit submission. Comments from these divisions, if any, can be found in Exhibit A.

Fire Division Review. The Draper City Fire Marshal has completed his review of the Permitted Use Permit submission. Comments from this division, if any, can be found in Exhibit A.

Noticing. Notice has been properly issued in the manner outlined in the City and State Codes.

STAFF RECOMMENDATION

Staff finds that the application complies with the DCMC and recommends that the Zoning Administrator review the request and approve the application based on the findings listed below and the criteria for approval, as listed within the staff report.

The condition of approval are as follows:

1. The applicant shall obtain all applicable permits from Draper City Fire and the

Building Division.

The findings for approval as are follows:

1. The use is a permitted use in the applicable zone.
2. The proposal conforms to development standards of the applicable zone.
3. The proposal conforms to applicable regulations of general applicability and regulations for specific uses set forth in this title as found in DCMC Section 9-41.
4. The proposal is not located on land classified as a primary or secondary conservation area or sensitive land area.
5. The proposal is not located in protected area as shown on a natural resource inventory.
6. The proposal conforms to other applicable requirements of this code.



DEVELOPMENT REVIEW COMMITTEE ACKNOWLEDGEMENT

We, the undersigned, as duly appointed members of the Draper City Development Review Committee, do acknowledge that the application which provides the subject for this staff report has been reviewed by the Committee and has been found to be appropriate for review by the Draper City Planning Commission and/or City Council.

Draper City Public Works Department

Draper City Planning Division

Draper City Fire Department

Draper City Legal Counsel

Draper City Building Division



EXHIBIT A DEPARTMENT REVIEWS

REVIEWS ARE NOT MEANT TO BE AN ALL INCLUSIVE LIST OF POSSIBLE COMMENTS OR CONDITIONS.

Planning Division Review

No additional comments provided.

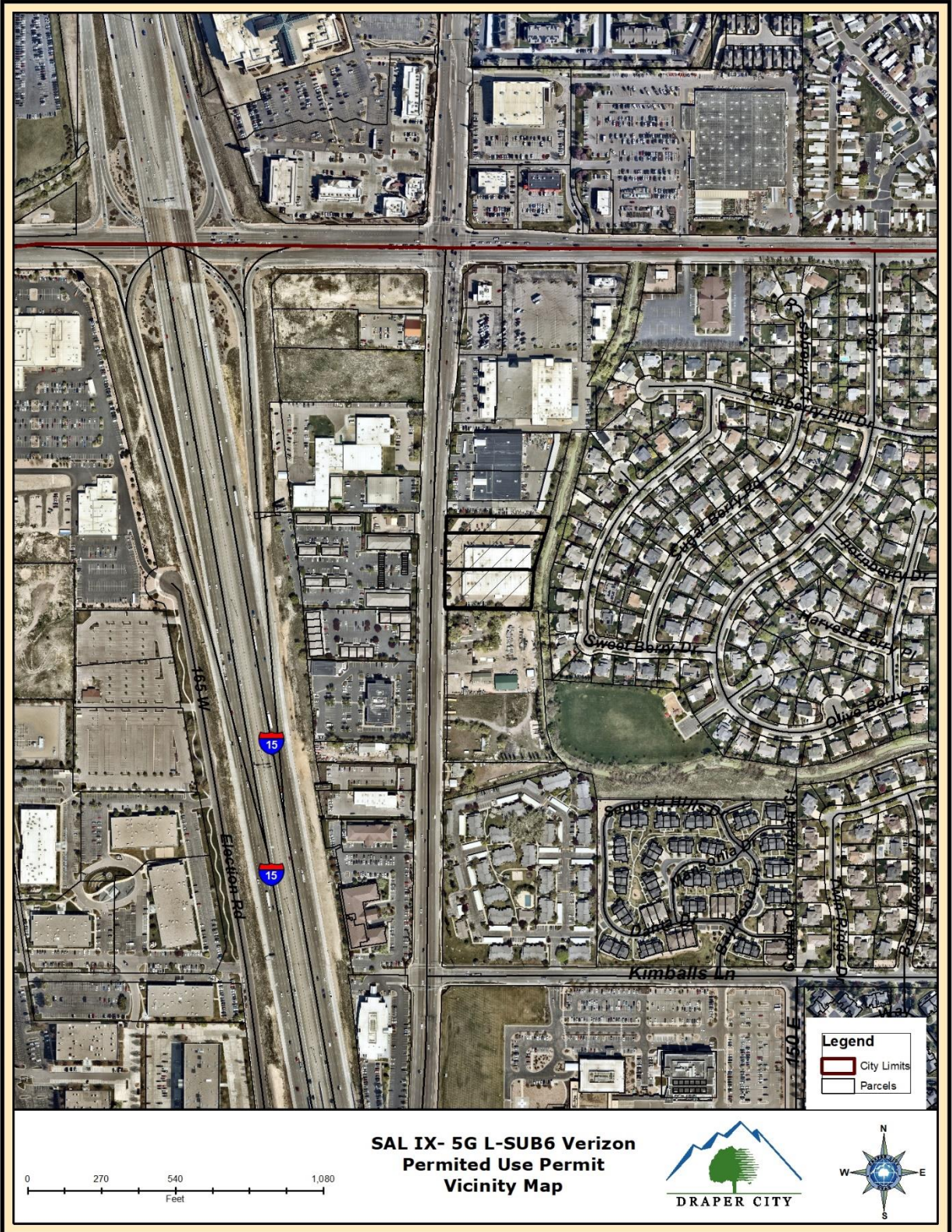
Engineering and Public Works Divisions Review.

No additional comments provided.

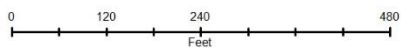
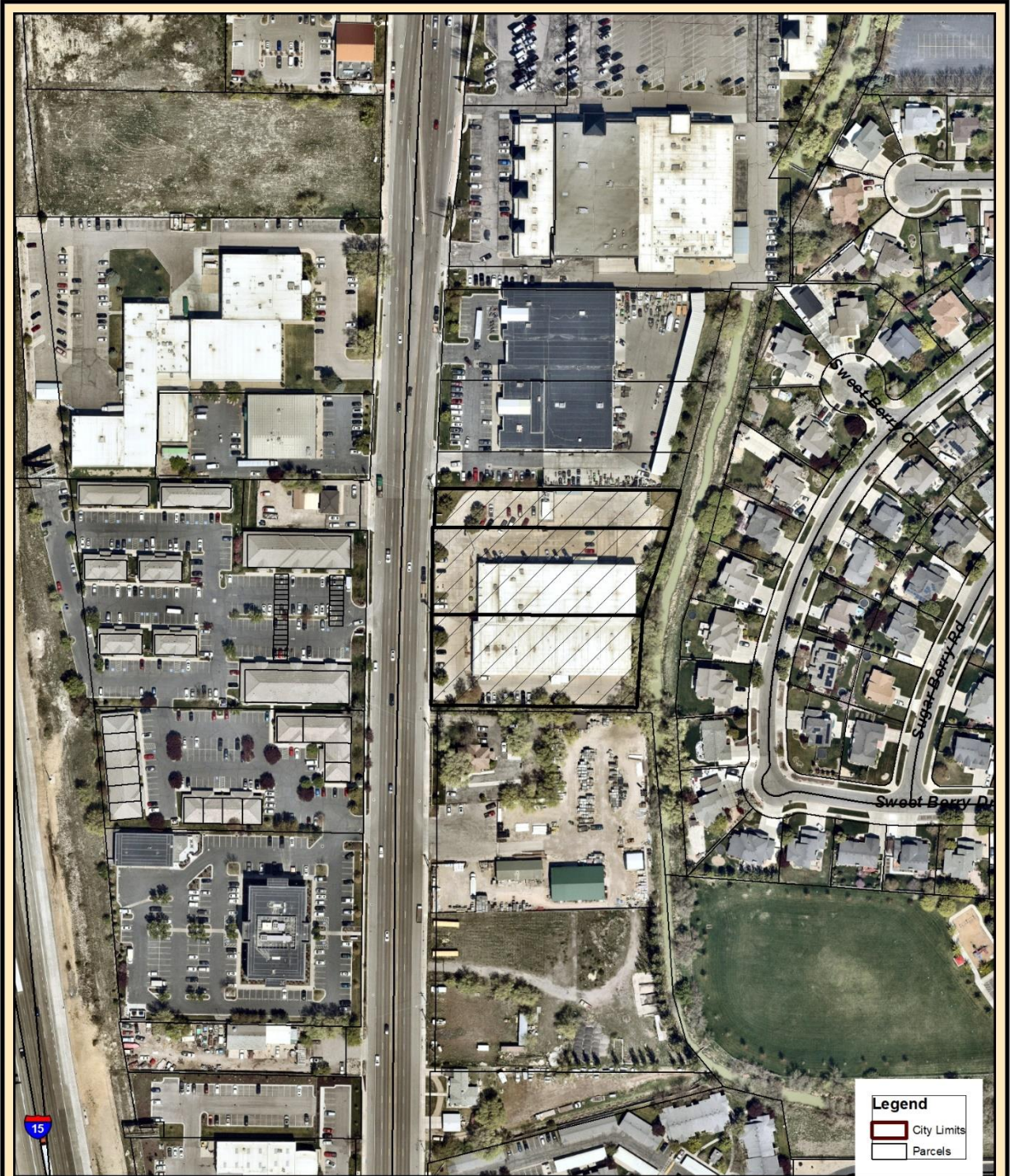
Fire Division Review.

1. 2A-10BC Fire Extinguishers required. The extinguisher needs to be a serviceable type meaning metal head and metal neck. Extinguishers need to be located in a conspicuous location where they will be readily accessible and immediately available for use. Placed on every level of the home. If in cabinet or not the extinguisher or cabinet needs to be mounted so that the top is not more than five (5) feet above the floor.
2. Fire Department Access is required to be maintained. Vehicles cannot park in such a way to impede fire department or emergency vehicle access.
3. Hazardous Material Permit – A Draper City Fire Hazardous Material Permit may need to be obtained. This is for all new and existing installations.

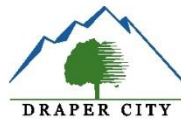
**EXHIBIT B
VICINITY MAP**



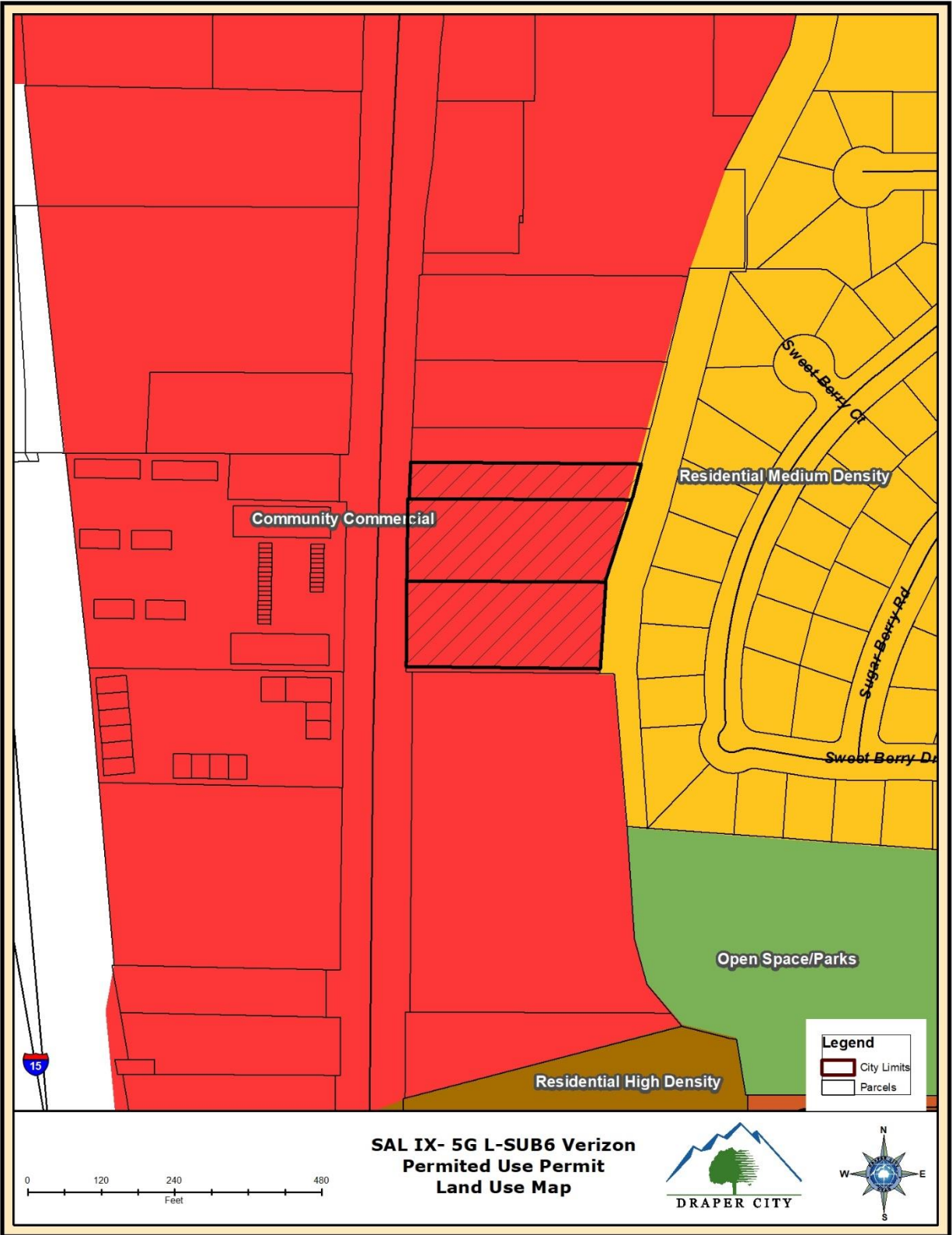
**EXHIBIT C
AERIAL MAP**



**SAL IX- 5G L-SUB6 Verizon
Permitted Use Permit
Aerial Map**



**EXHIBIT D
LAND USE MAP**



**SAL IX- 5G L-SUB6 Verizon
Permitted Use Permit
Land Use Map**

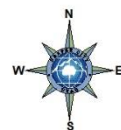
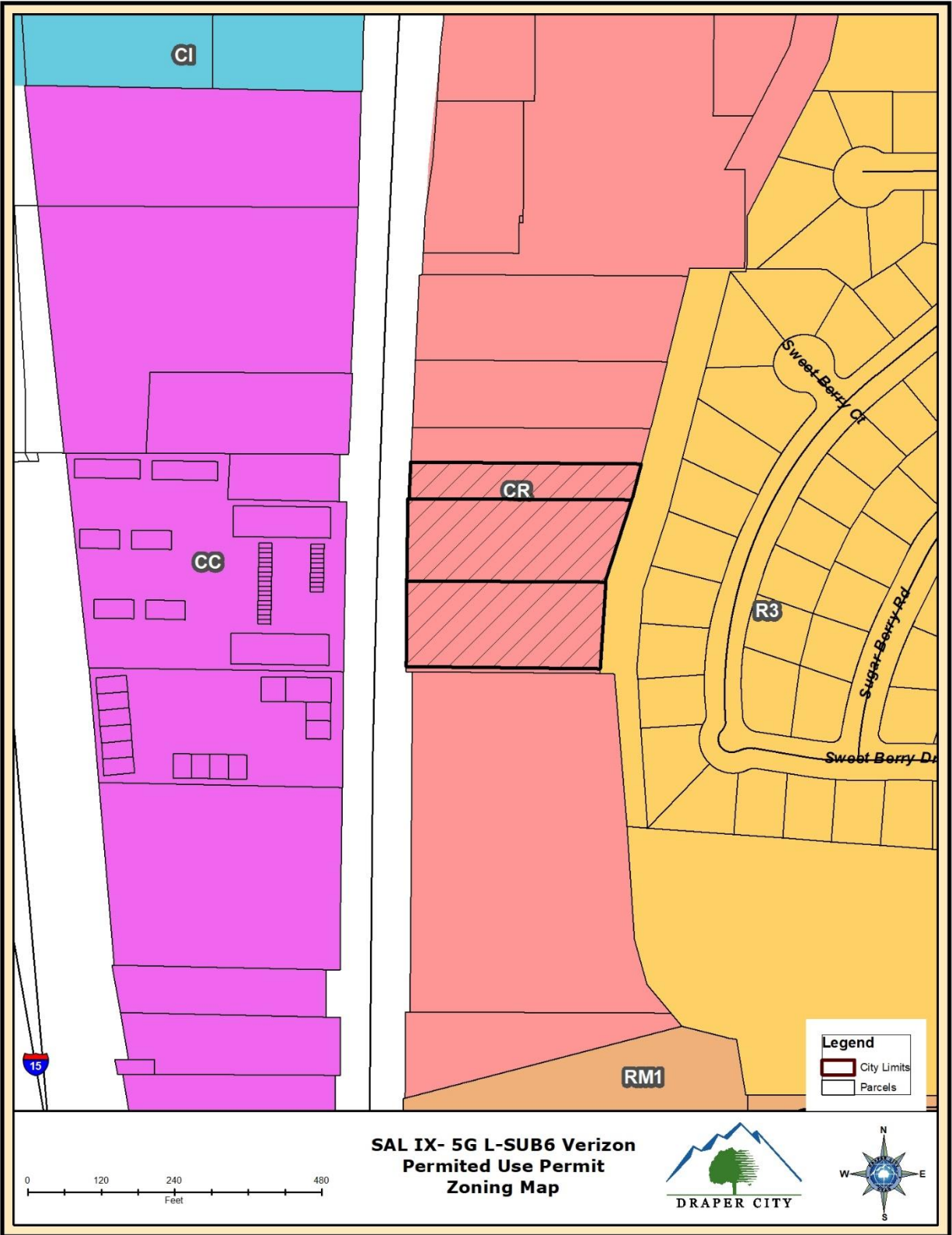


EXHIBIT E ZONING MAP

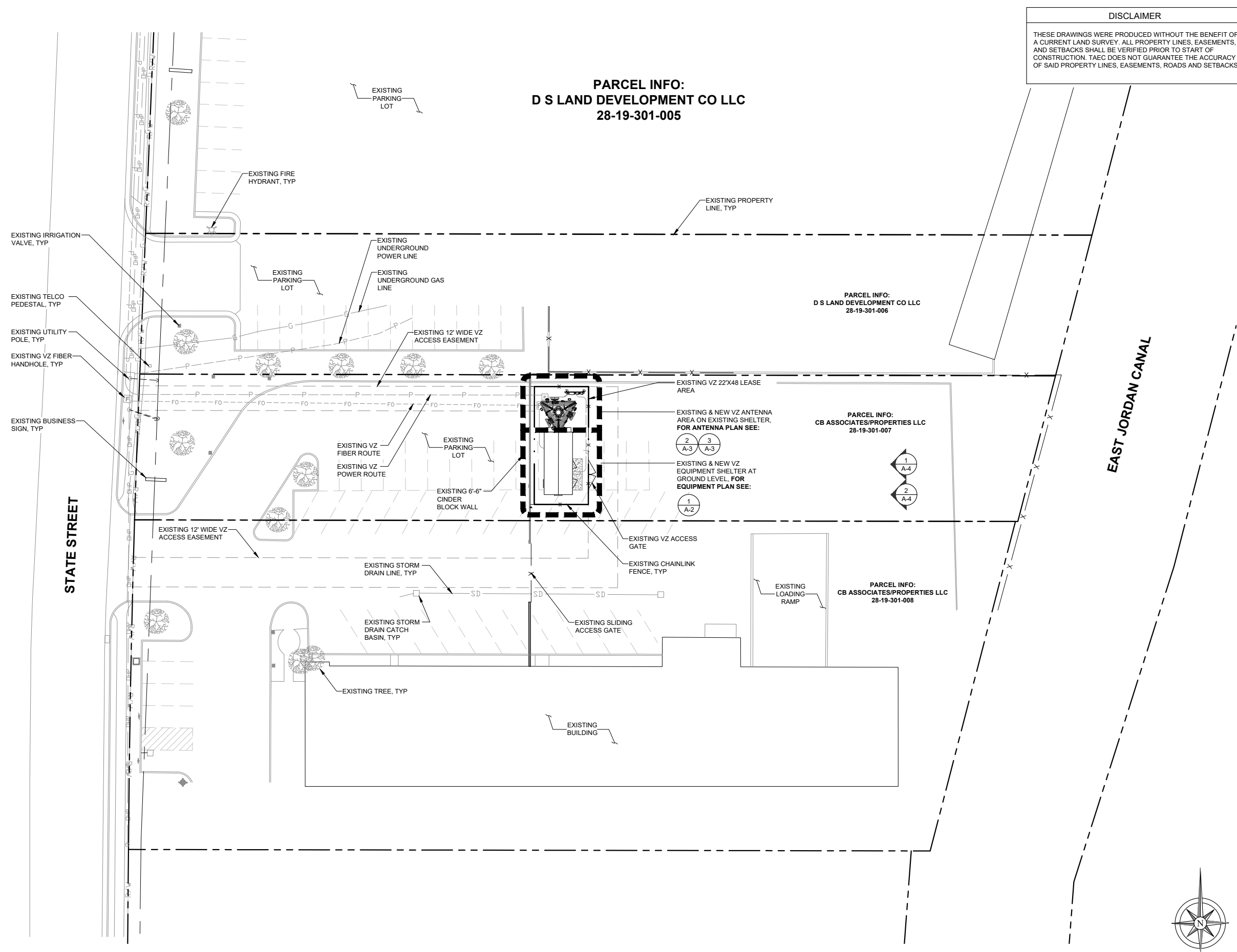


**SAL IX- 5G L-SUB6 Verizon
Permitted Use Permit
Zoning Map**



**EXHIBIT F
PROPOSED PLANS**

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES



DISCLAIMER
THESE DRAWINGS WERE PRODUCED WITHOUT THE BENEFIT OF A CURRENT LAND SURVEY. ALL PROPERTY LINES, EASEMENTS, AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION. TAEC DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINES, EASEMENTS, ROADS AND SETBACKS.

PARCEL INFO:
D S LAND DEVELOPMENT CO LLC
28-19-301-005

PARCEL INFO:
D S LAND DEVELOPMENT CO LLC
28-19-301-006

PARCEL INFO:
CB ASSOCIATES/PROPERTIES LLC
28-19-301-007

PARCEL INFO:
CB ASSOCIATES/PROPERTIES LLC
28-19-301-008

verizon
9656 SOUTH PROSPERITY ROAD
WEST JORDAN, UT 84088

Technology Associates
MOUNTAIN REGION OFFICE
1042 E FORT UNION BLVD, SUITE 484
MIDVALE, UT 84047

REV	DATE	DESCRIPTION	BY
0	03/28/2022	ISSUED FOR FINAL CD	CMB
B	03/24/2022	ISSUED FOR FINAL CD REVIEW	TS
A	03/09/2022	ISSUED FOR CD REVIEW	TS

PROFESSIONAL STRUCTURAL ENGINEER
No. 10196393-2203
JOEL R. HARTMAN
STATE OF UTAH
03.28.22

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SAL IX
11585 SOUTH STATE STREET
DRAPER, UT 84020
MONOPOLE

SHEET TITLE
SITE PLAN

SHEET NUMBER
A-1

SITE PLAN

20' 0 10' 20' SCALE: 1" = 20'-0" (24x36)
(OR) 1/2" = 20'-0" (11x17)

1



NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES



EXISTING BBU/OVP RACK

- EXISTING (1) VZ 7705 BBU
- EXISTING (2) VZ RAYCAP OVPS
(1) TO REMAIN
(1) TO BE REMOVED & REPLACE
WITH (1) NEW 12X24 OVP
- EXISTING (1) VZ 6630 BBU
- EXISTING (2) VZ 6601 BBUS
- INSTALL (1) NEW VZ 6630 BBU
- INSTALL (1) NEW VZ 6648 BBU



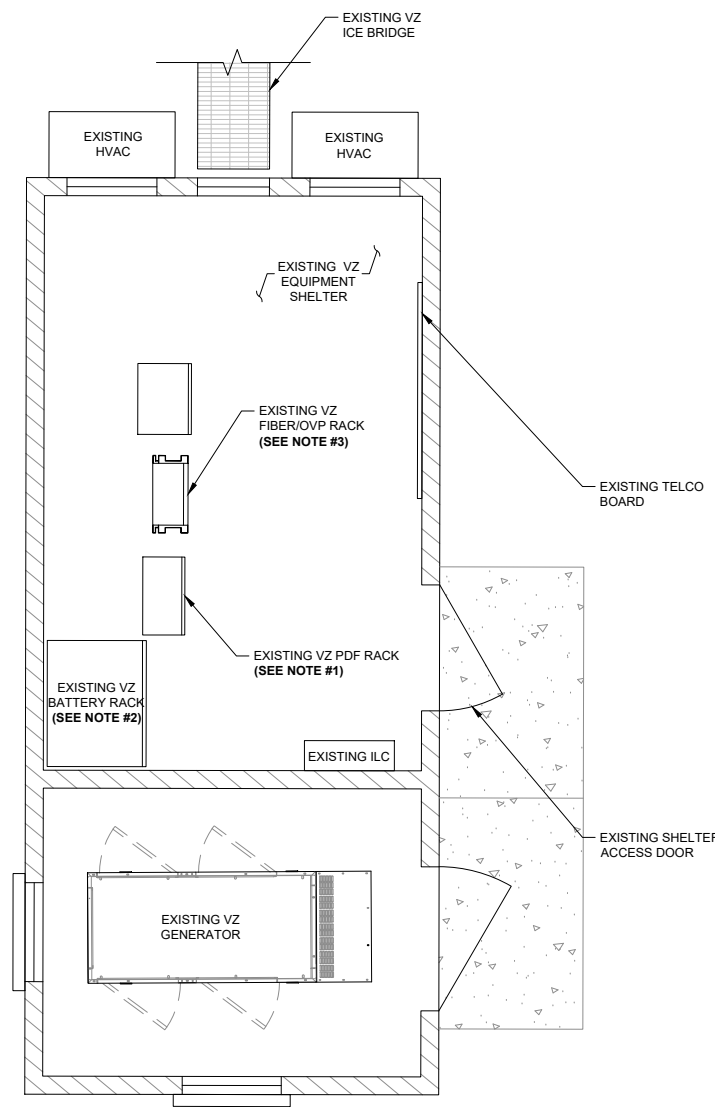
EXISTING PDF RACK

- PDF
INFINITY NE-M POWER SYSTEM
CC#109142007
(6) NE050AC48ATEZ RECTIFIERS
(4) NE075AC24A CONVERTERS
25.9 V1 @ 101.2A
-54.53 VDC2 @ 123.9A
INSTALL (4) 48V, 50A RECTIFIERS
- INSTALL (1) NEW UPCONVERTERS,
REQUIRES (3) RACK UNITS

EQUIPMENT NOTES:

1. PDF LINEAGE (AS OF 11-07-18 WALK)
 - INFINITY NE-M POWER SYSTEM
 - CC#109142007
 - (6) NE050AC48ATEZ RECTIFIERS
 - (4) NE075AC24A CONVERTERS
 - 25.9 V1 @ 101.2A
 - -54.53 VDC2 @ 123.9A
 - **INSTALL (4) 48V, 50A RECTIFIERS**
 - **INSTALL (1) NEW UPCONVERTER**
2. BATTERY RACK
 - DEKA UNIGY II
 - 6 AVR 2/95-15L
 - (2) STRINGS OF (24) CELLS
3. FIBER RACK
 - (1) EXISTING 6630 VZ BBU
 - (1) EXISTING 6601 VZ BBU
 - (2) EXISTING VZ RAYCAP OVPS
 - **INSTALL (1) VZ 6648 VZ BBU**
 - **REMOVE (1) VZ RAYCAP OVP**
 - **INSTALL (1) VZ RAYCAP OVP**

OVERALL RESULTS	
Existing Load	6966.0 W
Future Additional Load	7385.0 W
Total New Plant Float Load	14351.0 W
Total New -48V DC Amps	265.8 A
Ancillary loads	2104.6 W
Total HVAC Load	6402.6 W
Min Sensible HVAC	21852.0 Btu
Number of Selected HVAC Units (Includes +1 unit)	2
Min +48V 50A Rectifier Count	10
Min -48V 75A Rectifier Count per NSTD47 - Total Rectifier Count	7
AC Load if 120/240V 1Ø	150.0 A
Min 1 Ø 240 V Utility Size	200 A
AC Load if 120/208V 3Ø	100.0 A
Min 3 Ø 208 V Utility Size	200 A
Generator Peak Loads	36.0 kW
Generator (Diesel Size)	40 kW
Generator (LP/NG)	48/50 kW



verizon
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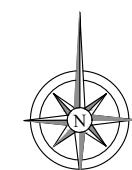
SAL IX

11585 SOUTH STATE STREET
DRAPER, UT 84020

MONOPOLE

SHEET TITLE
EQUIPMENT PLAN

SHEET NUMBER
A-2



NOTES:

- ALL AZIMUTHS ARE TO BE ESTABLISHED CLOCKWISE FROM THE TRUE NORTH HEADING.
- CONTRACTOR SHALL VERIFY ANTENNA CENTERLINE, MECHANICAL DOWNTILT, ORIENTATION, AND CABLE LENGTHS PRIOR TO INSTALLATION. REFER TO SITE MODIFICATION CHANGE ORDER FOR ADDITIONAL INFORMATION.
- USE CONCEALFAB LOW-PIM ANTENNA AND CABLE MOUNTING HARDWARE.
- GC TO CONFIRM IF VZ WANTS TO REPLACE EXISTING 3315 OVP'S WITH (1) 6627 OVP, OR INSTALL 3315-ALM-RS548 RETROFIT BOARDS

SPECIAL INSTRUCTIONS PER MOUNT ANALYSIS:

CONTRACTOR SHALL INSTALL A NEW 48" LONG P2 STD OVP PIPE ON STANDOFF ARM BETWEEN ALPHA AND BETA SECTOR. ATTACH THE PROPOSED OVP PIPE TO THE STANDOFF WITH CROSSOVER PLATE VZSMART MSK6. INSTALL PROPOSED PIPE 12" AWAY FROM TOWER CONNECTION AND WITH TOP OF PIPE 36" ABOVE STANDOFF HORIZONTAL. CONTRACTOR SHALL ATTACH PROPOSED OVP 12" FROM THE TOP OF OVP PIPE.

CONTRACTOR SHALL INSTALL A NEW 48" LONG P2 STD OVP PIPE ON STANDOFF ARM BETWEEN GAMMA AND BETA SECTOR. ATTACH THE PROPOSED OVP PIPE TO THE STANDOFF WITH CROSSOVER PLATE VZSMART MSK6. INSTALL PROPOSED PIPE 12" AWAY FROM TOWER CONNECTION AND WITH TOP OF PIPE 36" ABOVE STANDOFF HORIZONTAL. CONTRACTOR SHALL ATTACH PROPOSED OVP 12" FROM THE TOP OF OVP PIPE.

CONTRACTOR SHALL REMOVE EXISTING RRH PIPES AND ASSOCIATED HARDWARE FROM POSITION 2 ON ALL SECTORS.

CONTRACTOR SHALL INSTALL NEW SAFETY CLIME WIRE ROPE GUIDE (PERFECT VISION PART#: PV-SCRB-RM-U OR EOR APPROVED EQUIVALENT) ONTO EXISTING MOUNT COLLAR THREADED RODS SUCH THAT THE EXISTING WIRE ROPE DOES NOT CONTACT WITH EXISTING MOUNT MEMBERS.

HYBRIFLEX LENGTHS:

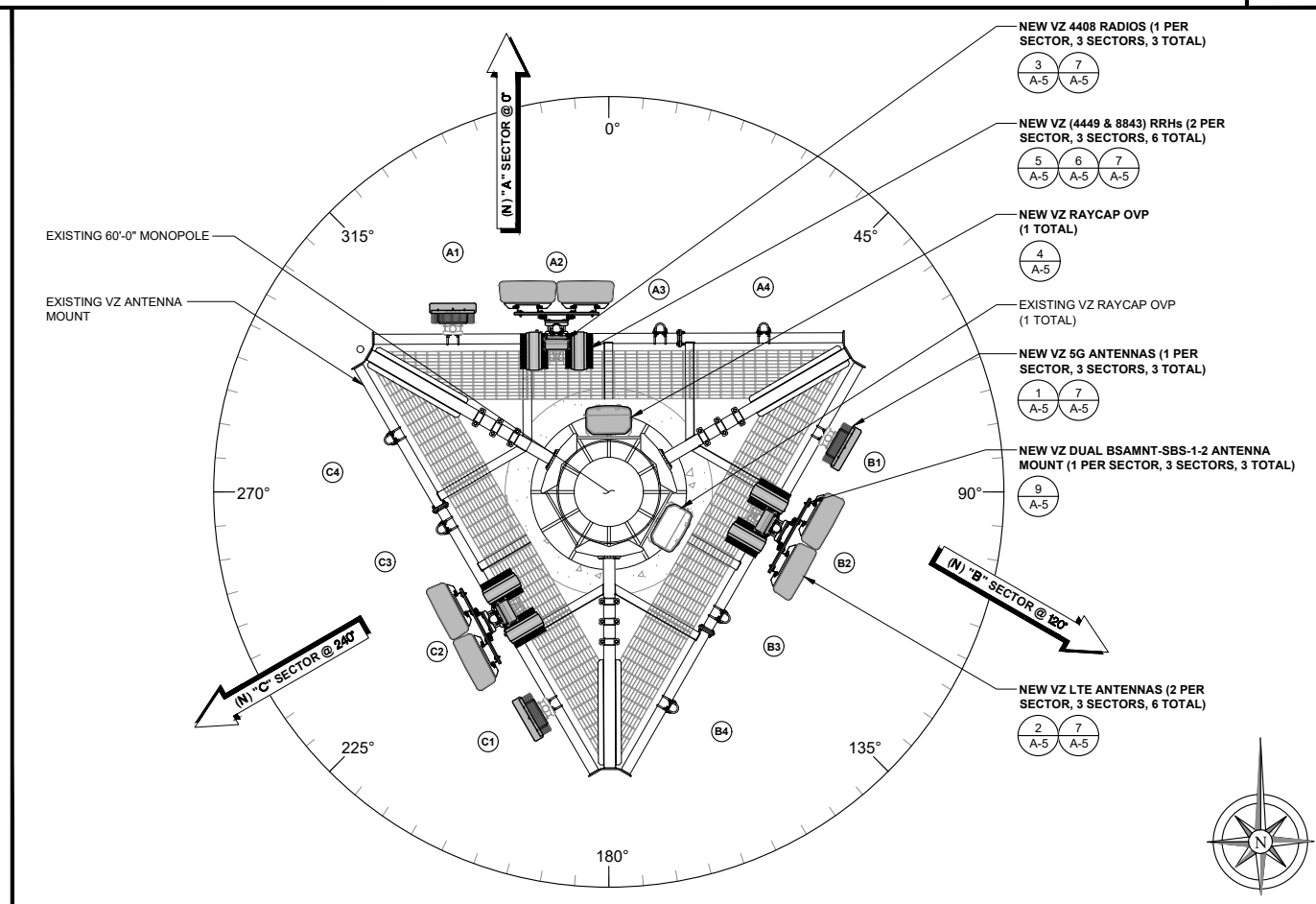
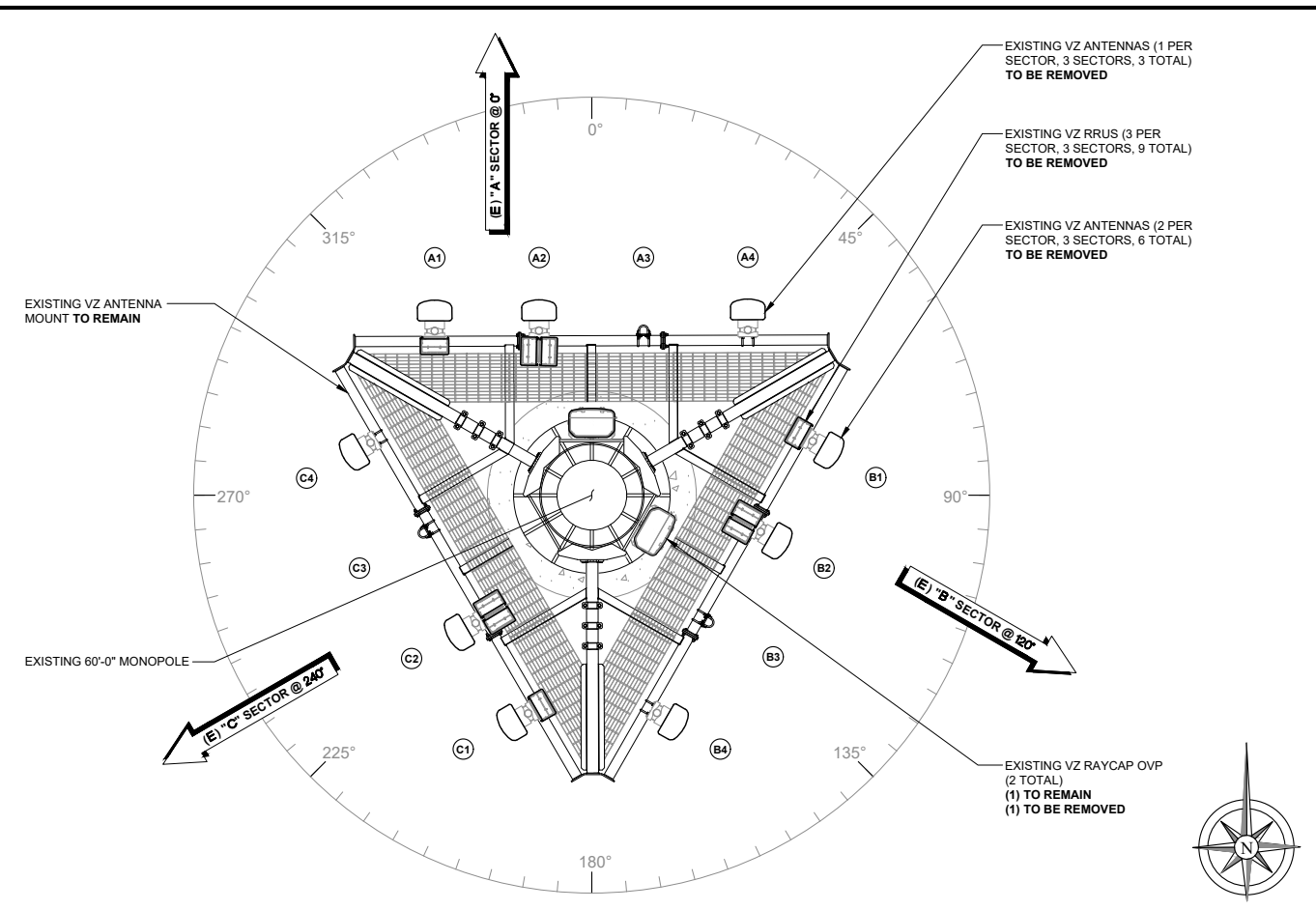
- FROM THE EQUIPMENT ROOM (E) RACK MOUNT OVP TO THE ANTENNA CENTERLINE (E) OVP BOX REQUIRES (2) RUNS OF 6x12 HYBRIFLEX BE INSTALLED, LENGTH = ±100'-0" (FIELD VERIFY)
- FROM THE ANTENNA CENTERLINE OVP BOX TO EACH RRH WILL REQUIRE (1) RUN OF 1x1 HYBRIFLEX BE INSTALLED, LENGTH = ±15'

ANTENNA KEY									HYBRID KEY						RRH KEY				
SECTOR	STATUS	AZIMUTH	POSITION	QTY.	MFG.	MODEL	SERVICE	RAD CENTER	SECTOR	STATUS	QTY.	TYPE	DIELECTRIC	DIAMETER	RUN	STATUS	QTY.	MFG.	MODEL
ALPHA	REMOVED	0°	(A1)(A2)	2	ANDREW	SBNHH-1D65C	LTE	±56'-0"	ALPHA	REMOVED	4	JUMPER	-	1/2"	15'	REMOVED	3	NOKIA	UHBA B13, UHFA B25, UHIC B4
	REMOVED	0°	(A4)	1	COMMSCOPE	X7C-865-7	CDMA	±56'-0"		PROPOSED	1	JUMPER	-	1/2"	15'	PROPOSED	1	ERICSSON	4408 B48 RADIO
	PROPOSED	0°	(A1)	1	ERICSSON	AIR 6449 B77D/L-SUB6	5G	±56'-0"		PROPOSED	2	JUMPER	1 X 1 FIBER		15'	PROPOSED	1	ERICSSON	4449 B13 B5 DUAL BAND RADIO
	PROPOSED	0°	(A2)	2	JMA WIRELESS	MX10FRO860-xx	LTE	±56'-0"		PROPOSED	2	JUMPER	1 X 1 FIBER		15'	PROPOSED	1	ERICSSON	8843 B2 B66A DUAL BAND RADIO
BETA	REMOVED	120°	(B1)(B2)	2	ANDREW	SBNHH-1D65C	LTE	±56'-0"	BETA	REMOVED	4	JUMPER	-	1/2"	15'	REMOVED	3	NOKIA	UHBA B13, UHFA B25, UHIC B4
	REMOVED	120°	(B4)	1	COMMSCOPE	X7C-865-7	CDMA	±56'-0"		PROPOSED	1	JUMPER	-	1/2"	15'	PROPOSED	1	ERICSSON	4408 B48 RADIO
	PROPOSED	120°	(B1)	1	ERICSSON	AIR 6449 B77D/L-SUB6	5G	±56'-0"		PROPOSED	2	JUMPER	1 X 1 FIBER		15'	PROPOSED	1	ERICSSON	4449 B13 B5 DUAL BAND RADIO
	PROPOSED	120°	(B2)	2	JMA WIRELESS	MX10FRO860-xx	LTE	±56'-0"		PROPOSED	2	JUMPER	1 X 1 FIBER		15'	PROPOSED	1	ERICSSON	8843 B2 B66A DUAL BAND RADIO
GAMMA	REMOVED	240°	(C1)(C2)	2	ANDREW	SBNHH-1D65C	LTE	±56'-0"	GAMMA	REMOVED	4	JUMPER	-	1/2"	15'	REMOVED	3	NOKIA	UHBA B13, UHFA B25, UHIC B4
	REMOVED	240°	(C4)	1	COMMSCOPE	X7C-865-7	CDMA	±56'-0"		PROPOSED	1	JUMPER	-	1/2"	15'	PROPOSED	1	ERICSSON	4408 B48 RADIO
	PROPOSED	240°	(C1)	1	ERICSSON	AIR 6449 B77D/L-SUB6	5G	±56'-0"		PROPOSED	2	JUMPER	1 X 1 FIBER		15'	PROPOSED	1	ERICSSON	4449 B13 B5 DUAL BAND RADIO
	PROPOSED	240°	(C2)	2	JMA WIRELESS	MX10FRO860-xx	LTE	±56'-0"		PROPOSED	2	JUMPER	1 X 1 FIBER		15'	PROPOSED	1	ERICSSON	8843 B2 B66A DUAL BAND RADIO
RAYCAP OVP	REMOVED	N/A	MONOPOLE	1	RAYCAP	RHSDC-3315-PF-48	-	±56'-0"		REMOVED	1	SHARED	HYBRID CABLES	6 X 12	±100'				
RAYCAP OVP	EXISTING	N/A	MONOPOLE	1	RAYCAP	RRODC-3315-PF-48	-	±56'-0"		EXISTING	1	SHARED	HYBRID CABLES	6 X 12	±100'				
RAYCAP OVP	PROPOSED	N/A	MONOPOLE	1	RAYCAP	RCMDC-6627-PF-48	-	±56'-0"		PROPOSED	1	SHARED	HYBRID CABLES	12 X 24	±100'				

SOURCE	EXISTING AZIMUTH			RAD CENTER
	A	B	C	
RFDS	0°	120°	240°	56'
TOWER MAPPING	355°	115°	235°	55'-8"/55'-3"
MOUNT ANALYSIS	0°	120°	240°	54.404'/54.529'/54.363', 53.613'/54.279'

RAD CENTERS & AZIMUTHS DRAWN PER RFDS. INSTALLERS TO VERIFY LATEST RF DATA SHEET & PLUMBING / WIRING DIAGRAMS, PRIOR TO INSTALLATION.

PROPOSED ANTENNA/COAX/RRH KEY



EXISTING ANTENNA PLAN

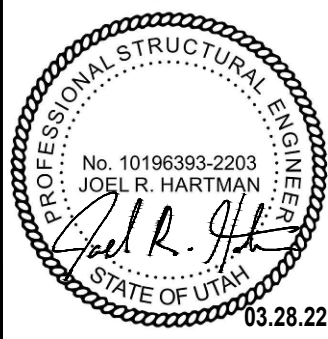
SCALE: 3/8" = 1'-0" (24x36)
(OR) 3/16" = 1'-0" (11x17)

NEW ANTENNA PLAN

SCALE: 3/8" = 1'-0" (24x36)
(OR) 3/16" = 1'-0" (11x17)



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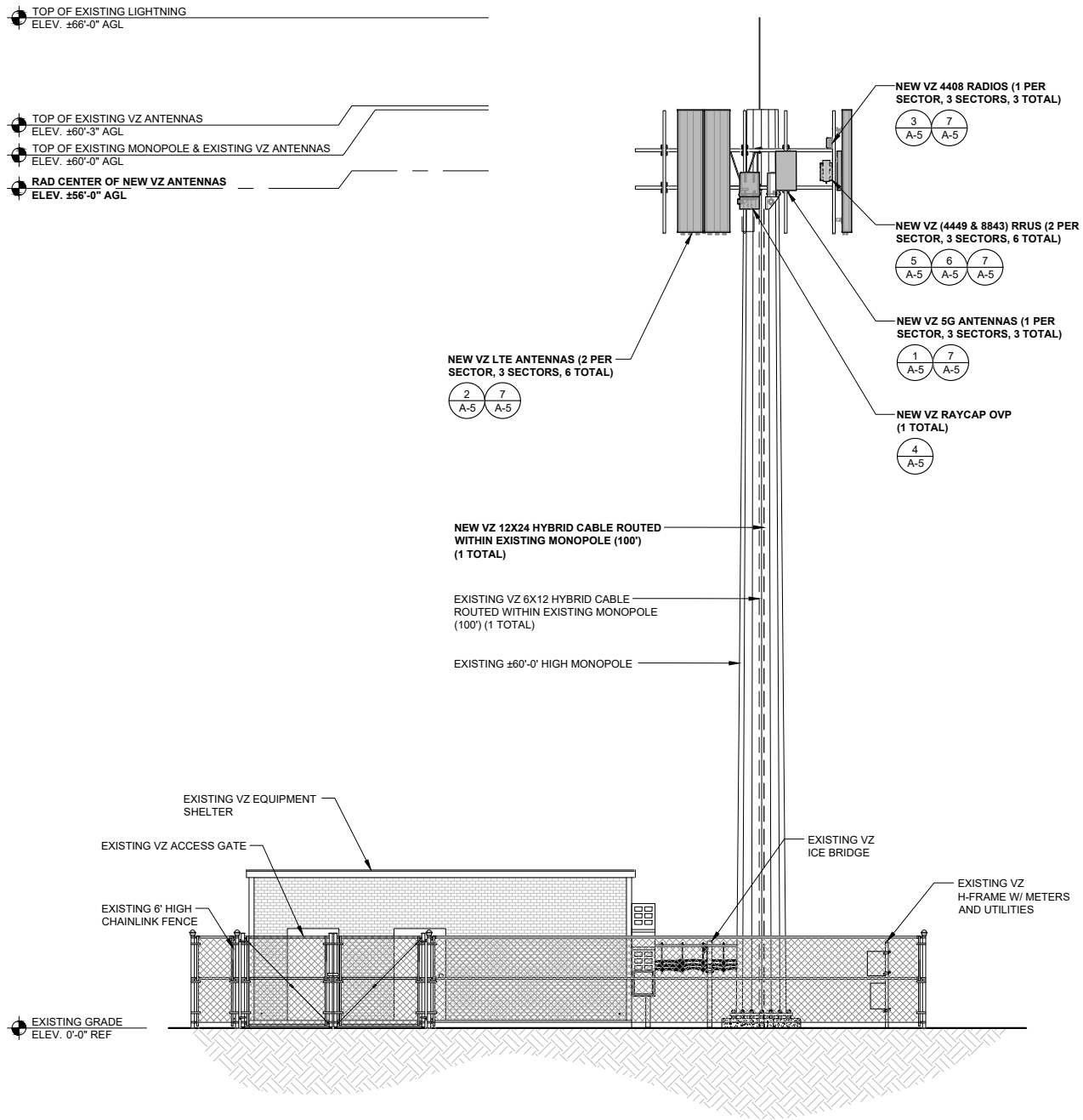
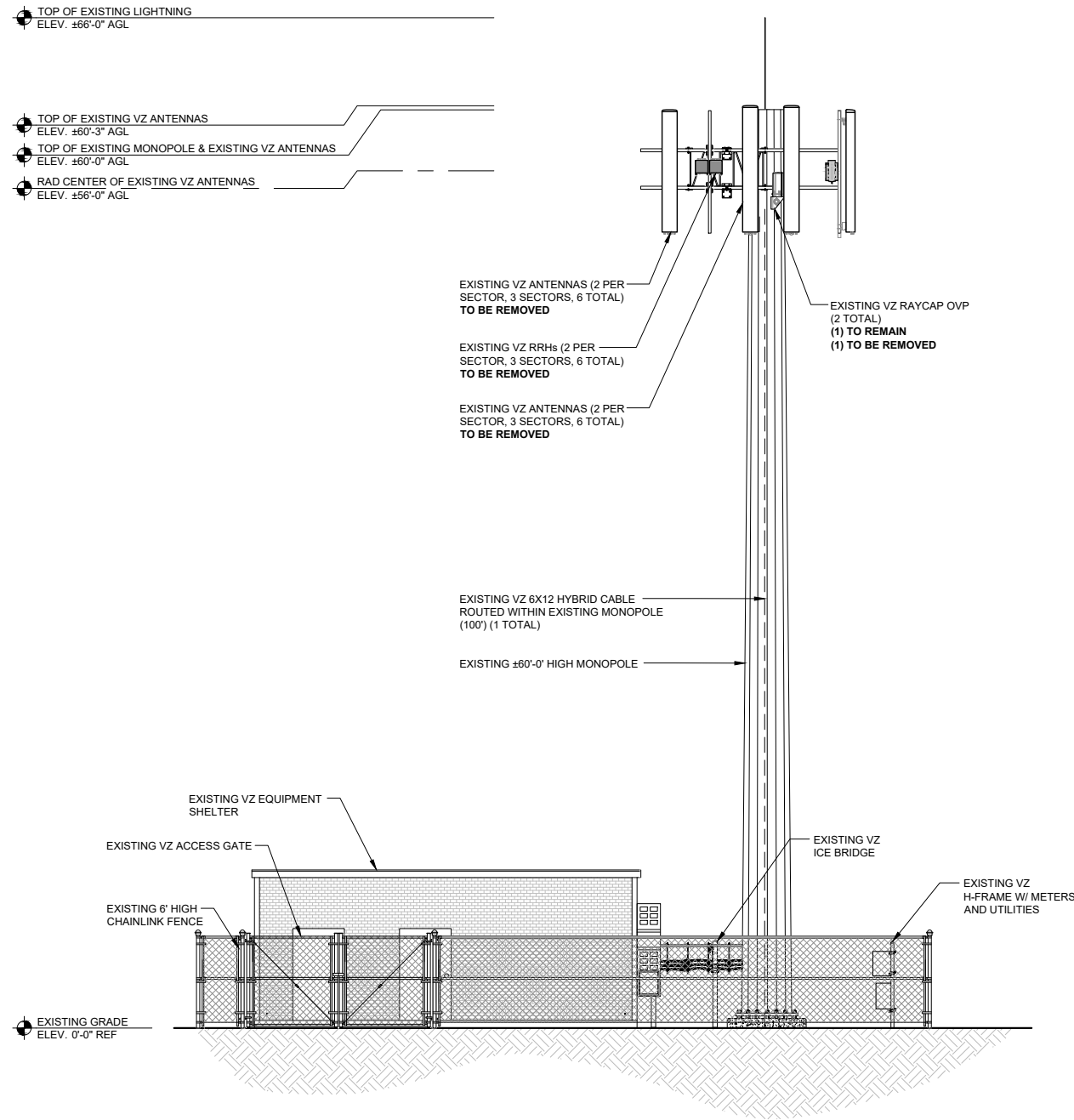
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SAL IX
11585 SOUTH STATE STREET
DRAPER, UT 84020
MONOPOLE

SHEET TITLE
ANTENNA PLANS

SHEET NUMBER
A-3

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES



NOTE:
 1. INSTALLERS TO VERIFY LATEST RF DATA SHEET & PLUMBING / WIRING DIAGRAMS, PRIOR TO INSTALLATION.
 2. USE CONCEALFAB LOW-PIM ANTENNA AND CABLE MOUNTING HARDWARE



9656 SOUTH PROSPERITY ROAD
 WEST JORDAN, UT 84088



MOUNTAIN REGION OFFICE
 1042 E FORT UNION BLVD, SUITE 484
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SAL IX

11585 SOUTH STATE STREET
 DRAPER, UT 84020
 MONOPOLE

SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-4

EXISTING EAST ELEVATION

0 1.5' 3' 5' SCALE: 3/16" = 1'-0" (24x36)
 (OR) 3/32" = 1'-0" (11x17)

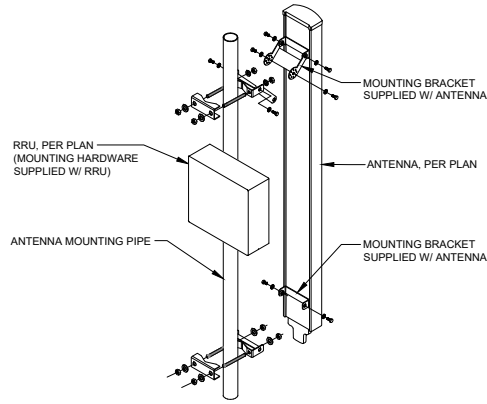
1

NEW EAST ELEVATION

0 1.5' 3' 5' SCALE: 3/16" = 1'-0" (24x36)
 (OR) 3/32" = 1'-0" (11x17)

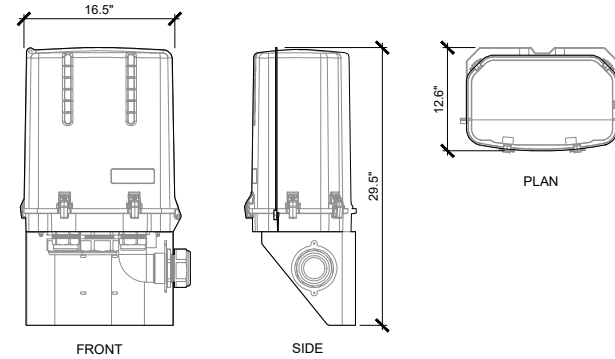
2

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES



COMMSCOPE RAYCAP RCMD 6627-PF-48

DIMENSIONS: 12.6" X 29.5" X 16.5"
 WEIGHT: 14.51 kg (32.0 lbs)
 COLOR: GRAY



ERICSSON - AIR 6449 B77D/ C-BAND

SPECTRUM n77D C-BAND (3.7 - 3.98 GHz)
 OpBW 280 MHz
 IBW/CBW 200 MHz
 MU-MIMO LAYERS 16 DL / 8 UL
 OUTPUT POWER / EIRP UP TO 320 W / 79 dBm
 ANTENNA ACTIVE ANTENNA SYSTEM (AAS)
 BRANCHES / ELEMENTS 64Tx/64Rx WITH 192 ANTENNA ELEMENTS

SIZE AND WEIGHT:

AIR 6449 B77D/ C-BAND	HEIGHT	WIDTH	DEPTH	WEIGHT
W/O PROTRUDING ITEMS	30.4 in (772 mm)	15.9 in (403 mm)	8.1 in (205 mm)	88.0 in (39.9 kg)
W/ PROTRUDING ITEMS	30.8 in (783 mm)	16.1 in (408 mm)	10.8 in (273 mm)	

#CPRI PORTS: 4x25 GBPS eCPRI, (COMPATIBLE TO 10G - eCPR SFP28)
 POWER INPUT: -48 VDC
 OPERATIONAL CONDITIONS: -40 TO +55 °C. (INCL. SOLAR LOAD)
 POWER: < 1540 W MAX



verizon
 9656 SOUTH PROSPERITY ROAD
 WEST JORDAN, UT 84088

Technology Associates

MOUNTAIN REGION OFFICE
 1042 E FORT UNION BLVD, SUITE 484
 MIDVALE, UT 84047

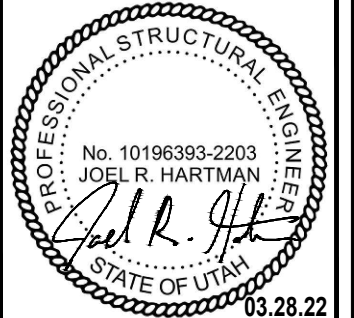
NOT USED SCALE N.T.S. 10

ANTENNA & RRU MOUNTING SCALE N.T.S. 7

RAYCAP SPECIFICATIONS SCALE N.T.S. 4

ANTENNA SPECIFICATIONS SCALE N.T.S. 1

REV	DATE	DESCRIPTION	BY
0	03/28/2022	ISSUED FOR FINAL CD	CMB
B	03/24/2022	ISSUED FOR FINAL CD REVIEW	TS
A	03/09/2022	ISSUED FOR CD REVIEW	TS



NOT USED SCALE N.T.S. 11

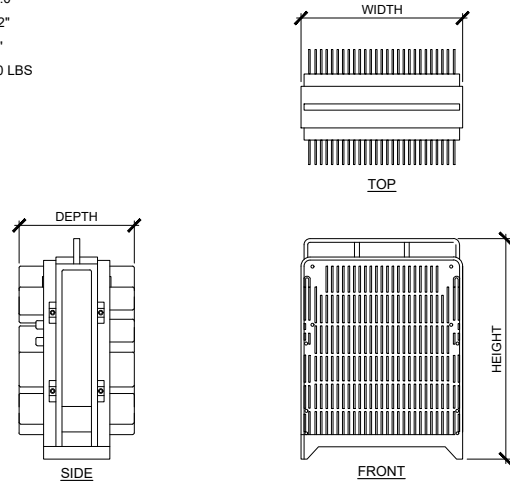
NOT USED SCALE N.T.S. 8

RRU SPECIFICATIONS SCALE N.T.S. 5

ANTENNA SPECIFICATIONS SCALE N.T.S. 2

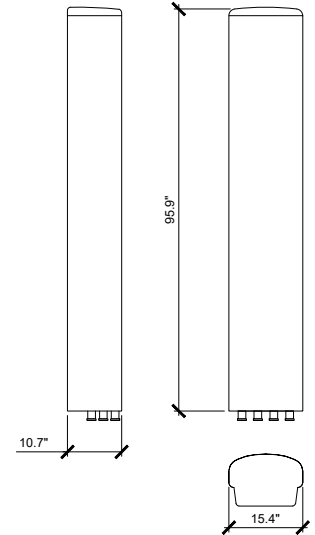
ERICSSON 4449-B13+B5 - 4TX 4RX

HEIGHT: 18.0"
 WIDTH: 13.2"
 DEPTH: 9.4"
 WEIGHT: 70 LBS



JMA WIRELESS MX06FRO860-xx

DIMENSIONS, HxWxD: 95.9" x 15.4" x 10.7"
 WEIGHT: 79 lbs.
 NET WEIGHT MOUNTING KIT: 26 lbs.



NOT USED SCALE N.T.S. 12

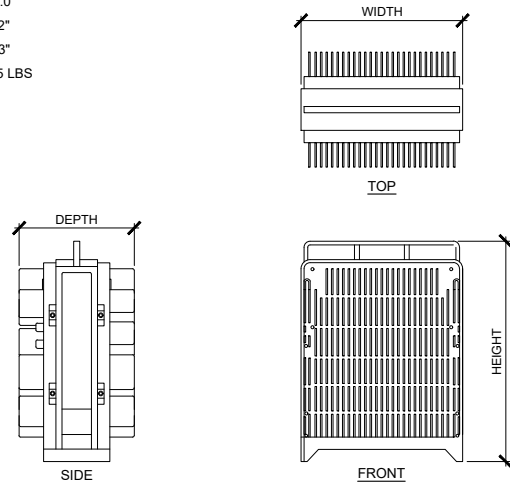
NOT USED SCALE N.T.S. 9

RRU SPECIFICATIONS SCALE N.T.S. 6

ANTENNA SPECIFICATIONS SCALE N.T.S. 3

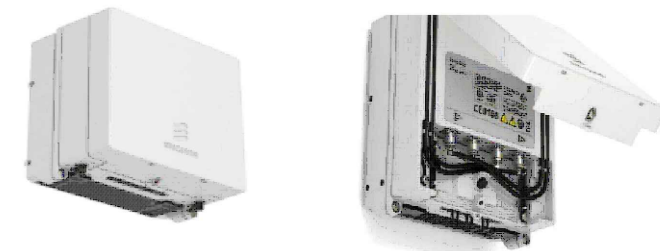
ERICSSON 8843 B2 + B66A - 4T4R, 2T4R, 2T2R

HEIGHT: 18.0"
 WIDTH: 13.2"
 DEPTH: 11.3"
 WEIGHT: 75 LBS



ERICSSON RADIO 4408

DIMENSIONS, HxWxD: 8.41" x 7.88" x 4.13"
 WEIGHT: 10.14 lbs.
 CAPACITY AND SPECIFICATIONS:
 - 4TX/4RX
 - UP TO 4x5W
 - 120MHz IBW
 - INTEGRATED OR EXTERNAL ANTENNA
 - IP65, -40 TO +55°C
 - 6 LTE CARRIERS
 - 2x10.1 GPS CPRI
 - AC OR -48 VDC
 - 2 EXTERNAL ALARM



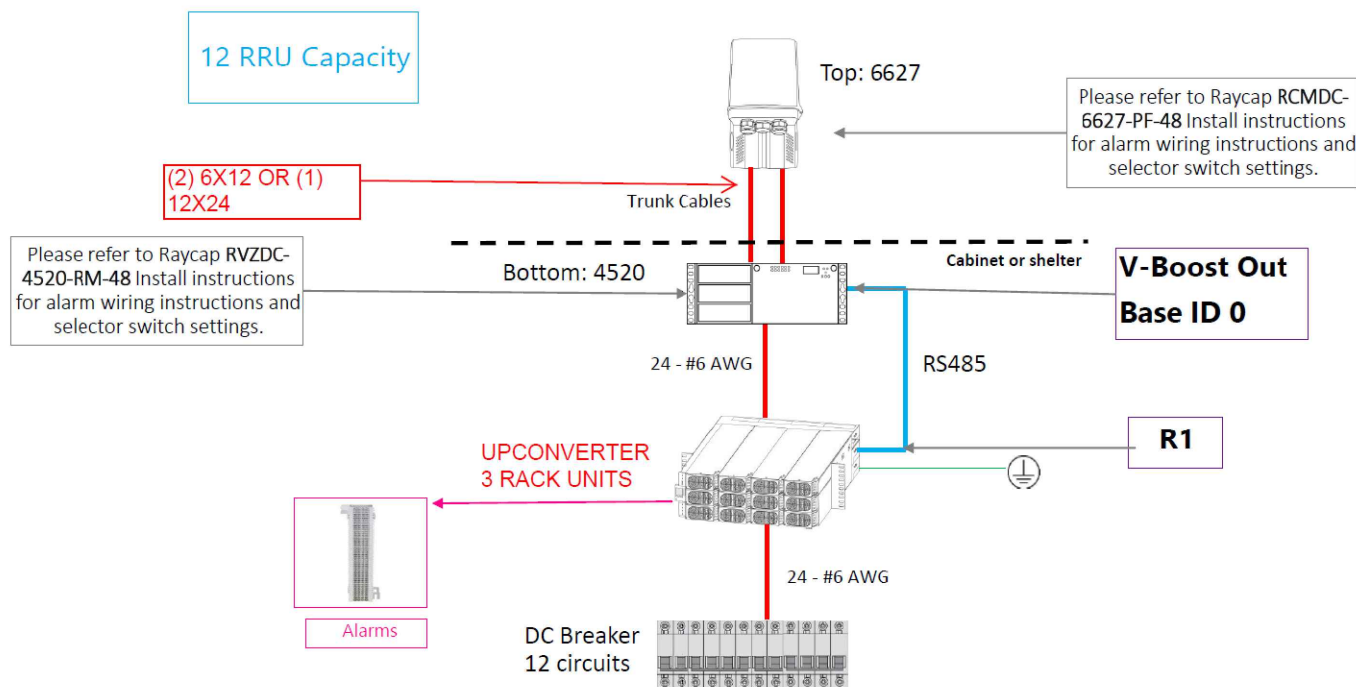
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SAL IX
 11585 SOUTH STATE STREET
 DRAPER, UT 84020
 MONOPOLE

SHEET TITLE
DETAILS

SHEET NUMBER
A-5

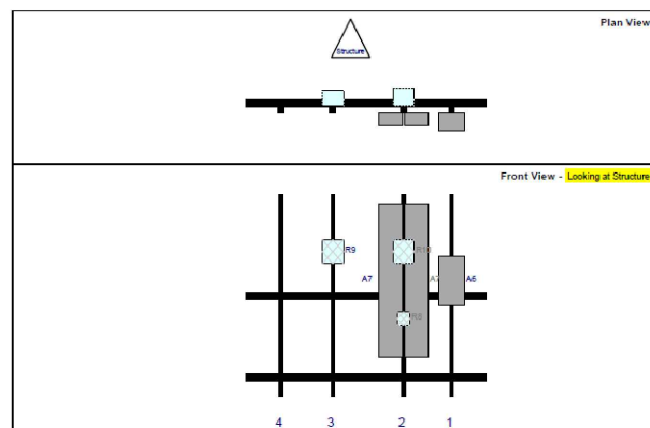
REV	DATE	DESCRIPTION	BY
0	03/28/2022	ISSUED FOR FINAL CD	CMB
B	03/24/2022	ISSUED FOR FINAL CD REVIEW	TS
A	03/09/2022	ISSUED FOR CD REVIEW	TS



UPCONVERTER PLUMBING DIAGRAM

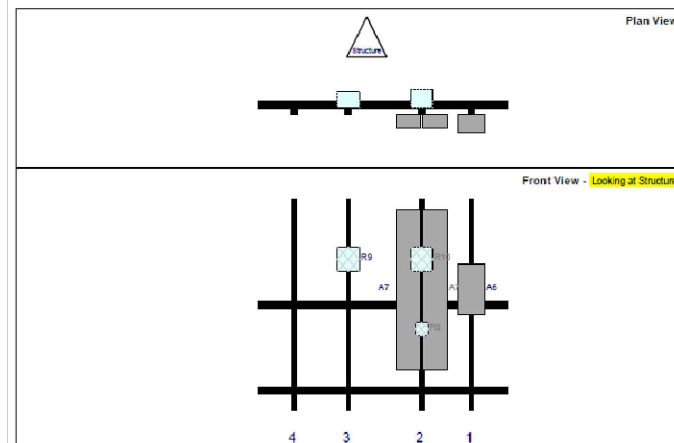
SCALE
N.T.S. 1

NOTE:
ANTENNAS AND RRRHs TO BE MOUNTED PER MASER MA. REFERENCE MASER MOUNT ANALYSIS INFORMATION DATED MARCH 16, 2022.



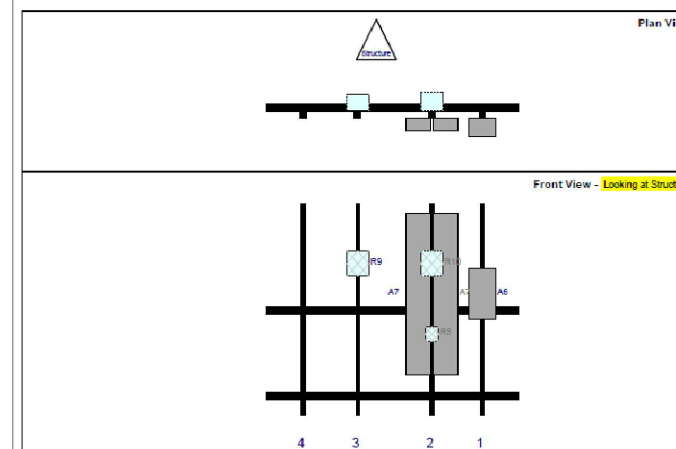
Ref#	Model	Height (ft)	Width (ft)	H Dist (ft)	Pipe #	Pipe Pos V	Pipe Pos	Ant Pos	C-Ant Pos	Ant H Off	Status	Validation
A6	AIR 6449	30.8	16.1	128.5	1	a	Front	S4	0	0	Added	
A7	MX10PRO660-xx	95.9	15	98.5	2	a	Front	S4	-8	0	Added	
R9	4408	8.4	7.9	98.5	2	a	Behind	78	0	0	Added	
R10	8643	15	13.2	98.5	2	a	Behind	36	0	0	Added	
R9	4449	15	13.2	54.25	3	a	Behind	36	0	0	Added	
OVP2	RVZDC-6627-PF-48	29.5	16.5			Member					Added	
M137	RVZDC-6627-PF-48	29.5	16.5			Member					Added	

SECTOR A



Ref#	Model	Height (ft)	Width (ft)	H Dist (ft)	Pipe #	Pipe Pos V	Pipe Pos	Ant Pos	C-Ant Pos	Ant H Off	Status	Validation
A6	AIR 6449	30.8	16.1	128.5	1	a	Front	S4	0	0	Added	
A7	MX10PRO660-xx	95.9	15	98.5	2	a	Front	S4	-8	0	Added	
R9	4408	8.4	7.9	98.5	2	a	Behind	78	0	0	Added	
R10	8643	15	13.2	98.5	2	a	Behind	36	0	0	Added	
R9	4449	15	13.2	54.25	3	a	Behind	36	0	0	Added	

SECTOR B

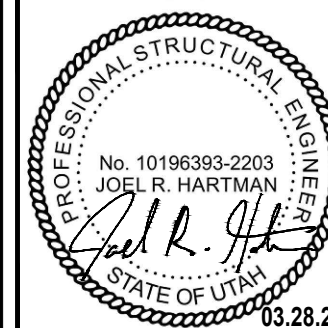


Ref#	Model	Height (ft)	Width (ft)	H Dist (ft)	Pipe #	Pipe Pos V	Pipe Pos	Ant Pos	C-Ant Pos	Ant H Off	Status	Validation
A6	AIR 6449	30.8	16.1	128.5	1	a	Front	S4	0	0	Added	
A7	MX10PRO660-xx	95.9	15	98.5	2	a	Front	S4	-8	0	Added	
R9	4408	8.4	7.9	98.5	2	a	Behind	78	0	0	Added	
R10	8643	15	13.2	98.5	2	a	Behind	36	0	0	Added	
R9	4449	15	13.2	54.25	3	a	Behind	36	0	0	Added	

SECTOR C

ANTENNA MOUNTING RECOMMENDATIONS

SCALE
N.T.S. 2



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SAL IX

11585 SOUTH STATE STREET
DRAPER, UT 84020

MONOPOLE

SHEET TITLE
PLUMBING DIAGRAM & ANTENNA MOUNTING RECOMMENDATIONS

SHEET NUMBER
A-6

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.