

BUILDING CODE SUMMARY:	
ALL CONSTRUCTION SHALL CONFORM TO THE FOLLOWING APPLICABLE CODES:	
USED	Code Year / Type: (ORDINANCE)
X	2017 PIKES PEAK REGIONAL BUILDING CODE (RBC)
X	2015 INTERNATIONAL BUILDING CODE (IBC)
X	2015 INTERNATIONAL PLUMBING CODE (W/O CHAP. 13) (IPC)
X	2015 INTERNATIONAL FUEL GAS CODE (IFGC)
X	2015 INTERNATIONAL RESIDENTIAL CODE (IRC)
X	2015 INTERNATIONAL MECHANICAL CODE (IMC)
X	2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
X	2015 INTERNATIONAL FIRE CODE (IFC)
X	2017 NATIONAL ELECTRICAL CODE (NEC)

REFER TO BUILDING PERMIT DOCUMENTS AND ALL CONSTRUCTION DOCUMENTS FOR ADDITIONAL CODE REQUIREMENTS.

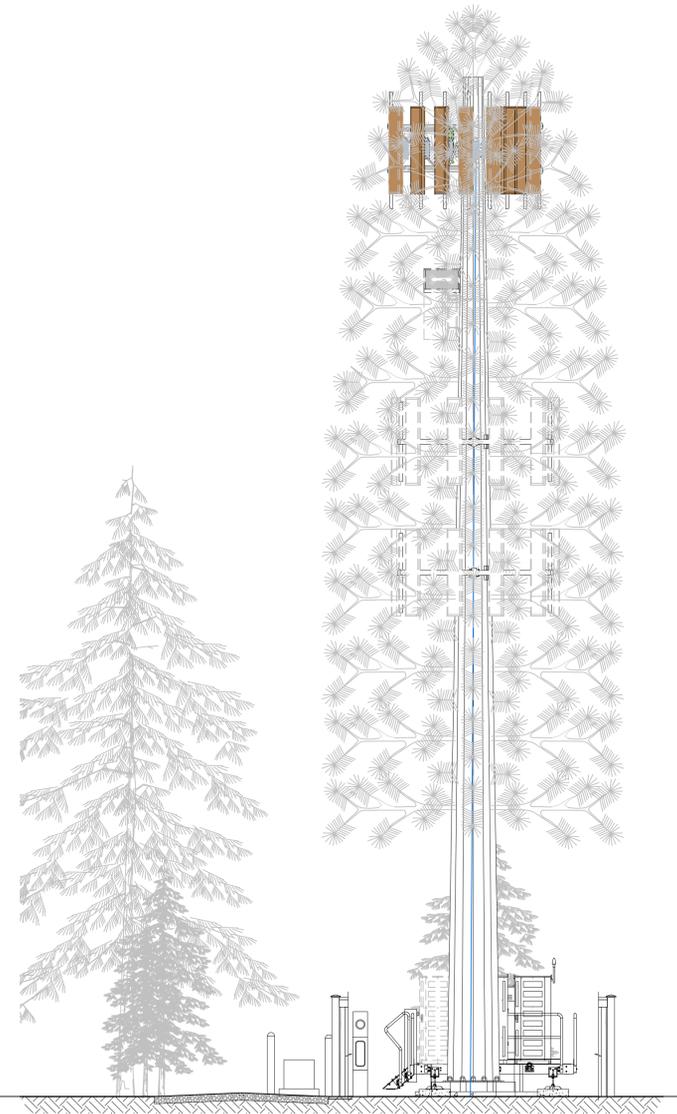


CSP HIGBY (ALT A)

PROJECT NO. 20141043268
PUBLIC RECORD PARCEL NO. 6100000298

1480 EAST HIGBY ROAD
MONUMENT, COLORADO 80132
EL PASO COUNTY

NEW 70'-0" MONOPINE
(OVERALL HEIGHT: 75'-0" A.G.L.)
RAWLAND COMMUNICATION SITE



EXISTING
WALL HATCH
NEW WORK/
UTILITY EASEMENT
ACCESS/UTILITY
EASEMENT
HYBRID CABLEBOX
DC POWER
FIBER
ANTENNAS
RRH/BBU
LEASE AREA
EXISTING
EASEMENT
PENETRATIONS



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PROJECT INDEX:	
APPLICANT/CLIENT:	VERIZON CONSTRUCTION DEPARTMENT 3131 VAUGHN WAY, SUITE 550 AURORA, COLORADO 80014
CONTACT:	ALLEN MILLER PHONE: 941-993-4916 EMAIL: ALLEN.MILLER@VERIZONWIRELESS.COM
ENGINEERS/DESIGNERS:	J5 INFRASTRUCTURE PARTNERS 8392 S CONTINENTAL DIVIDE RD, UNIT 101 LITTLETON, CO 80127
CONTACT:	STEVE HAAG PHONE: 303-683-3194 EXT. 151 SURVEYOR: GALLOWAY 1755 TELSTAR DRIVE, SUITE 107 COLORADO SPRINGS, CO 80920
CONTACT:	BRIAN DENNIS PHONE: 719-900-7220
SITE ACQUISITION:	J5 INFRASTRUCTURE PARTNERS 8392 S CONTINENTAL DIVIDE RD, UNIT 101 LITTLETON, CO 80127
CONTACT:	PERRY CARROLL MOBILE: 303-435-2252 EMAIL: pccarroll@j5ip.com

GENERAL PROJECT NOTES:	
1.	PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE SCOPE OF WORK AND ALL CONDITIONS AFFECTING THE PROPOSED PROJECT.
2.	CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS OF THE JOB SITE AND CONFIRM THAT WORK AS INDICATED ON THESE CONSTRUCTION DOCUMENTS CAN BE ACCOMPLISHED AS SHOWN PRIOR TO COMMENCEMENT OF ANY WORK.
3.	ALL FIELD MODIFICATIONS BEFORE, DURING, OR AFTER CONSTRUCTION SHALL BE APPROVED IN WRITING BY A VERIZON REPRESENTATIVE.
4.	INSTALL ALL EQUIPMENT AND MATERIALS PER THE MANUFACTURER'S RECOMMENDATIONS, UNLESS INDICATED OTHERWISE.
5.	NOTIFY VERIZON, IN WRITING, OF ANY MAJOR DISCREPANCIES REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS, AND DESIGN INTENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATIONS FROM A VERIZON REPRESENTATIVE AND ADJUSTING THE BID ACCORDINGLY.
6.	CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF THE WORK UNDER THE CONTRACT.
7.	CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS AND FINISHES THAT ARE TO REMAIN. CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY OCCUR DURING THE CONSTRUCTION TO THE SATISFACTION OF A VERIZON REPRESENTATIVE.
8.	THE CONTRACTOR IS RESPONSIBLE FOR RED-LINING THE CONSTRUCTION PLANS TO ILLUSTRATE THE AS-BUILT CONDITION OF THE SITE. FOLLOWING THE FINAL INSPECTION BY VERIZON, THE CONTRACTOR SHALL PROVIDE VERIZON WITH ONE COPY OF ALL RED-LINED DRAWINGS.
9.	VERIFY ALL FINAL EQUIPMENT WITH A VERIZON REPRESENTATIVE. ALL EQUIPMENT LAYOUT, SPECS, PERFORMANCE INSTALLATION AND THEIR FINAL LOCATION ARE TO BE APPROVED BY VERIZON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS/HER WORK WITH THE WORK AND CLEARANCES REQUIRED BY OTHERS RELATED TO SAID INSTALLATIONS.

PROJECT INFORMATION:	
OWNER:	ASPEN WILLOW ESTATES LLC 1480 EAST HIGBY ROAD MONUMENT, COLORADO 80132-8357 CONTACT: CHUCK WOODALL PHONE: (719) 265-6677
JURISDICTION:	EL PASO COUNTY 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, COLORADO 80910 PIKES PEAK REGIONAL BUILDING DEPARTMENT CONTACT: MICHAEL REBENAR, PLANNER PHONE: (719) 520-6442
PUBLIC RECORD PARCEL NO.:	6100000298

FCC COMPLIANCE:
RADIATION FROM THIS FACILITY WILL NOT INTERFERE WITH OPERATION OF OTHER COMMUNICATION DEVICES.

ADA COMPLIANCE:
THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. LANDINGS AND EXITS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES.

ABBREVIATED LEGAL DESCRIPTION:
SITUATE WITHIN A TRACT OF LAND IN THE SE 1/4 OF S20, T11S, RANGE 66 WEST OF THE 6TH PM, EL PASO COUNTY, COLORADO.

PROJECT DESCRIPTION:
THIS PROJECT CONSISTS OF THE FOLLOWING:
INSTALLATION

- ONE (1) 70'-0" MONOPINE (DESIGNED BY OTHERS)
- ONE (1) NEW COMMSCOPE RBA72-36 CABINET MOUNTED ON GALVANIZED COMMSCOPE PLATFORM
- ONE (1) NEW COMMSCOPE RBA72-30 CABINET MOUNTED ON GALVANIZED COMMSCOPE PLATFORM
- ONE (1) NEW MANUFACTURED GALVANIZED COMMSCOPE PLATFORM FOR EQUIPMENT CABINETS
- ONE (1) NEW OUTDOOR GENERATOR WITH DIESEL BELLY TANK MOUNTED ON CONCRETE PAD
- ONE (1) NEW MAIN OVP UNIT
- SIX (6) NEW RRH UNITS
- ONE (1) NEW LOW INDUCTANCE HYBRID CABLE
- NEW BARBLESS FENCE ENCLOSURE WITH GATE
- SIX (6) NEW PANEL ANTENNAS
- TWO (2) NEW 4" PVC CONDUIT PIPES FOR CABLEING
- THREE (3) NEW 4" CONCRETE BOLLARDS

FUTURE INSTALLATION

- ONE (1) FUTURE 4'-0" MICROWAVE ANTENNA
- TWO (2) FUTURE CARRIERS
- ONE (1) FUTURE COMMSCOPE RBA72-30 CABINET MOUNTED ON GALVANIZED COMMSCOPE PLATFORM
- ONE (1) FUTURE MAIN OVP UNIT
- SIX (6) FUTURE RRH UNITS
- ONE (1) FUTURE LOW INDUCTANCE HYBRID CABLE
- SIX (6) FUTURE PANEL ANTENNAS



DRIVING DIRECTIONS:
FROM THE VERIZON OFFICE LOCATED AT 3131 SOUTH VAUGHN WAY, AURORA, CO: HEAD WEST ON S VAUGHN WAY. MERGE ONTO CO-83N PARKER RD VIA THE RAMP ON THE LEFT. MERGE ONTO I-225 S. USE THE LEFT LANES TO TAKE EXIT 1A FOR INTERSTATE 25 S TOWARD COLO SPGS. KEEP LEFT AND MERGE ONTO I-25 S FOR 5.2 MI. CONTINUE STRAIGHT TO STAY ON I-25 S FOR 34.3 MI. TAKE EXIT 161 FOR CO-105 TOWARD MONUMENT/PALMER LAKE. TURN RIGHT ONTO CO-105 E. TURN RIGHT ONTO JACKSON CREEK PKWY FOR 1.1 MI., TURN LEFT ONTO HIGBY RD FOR 3.1 MI., TURN RIGHT ONTO HAPPY LANDING DRIVE. DESTINATION WILL BE ON THE LEFT.

DESIGNED FOR:

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

PROJECT NAME: CSP HIGBY (ALT A)
NEW 70'-0" MONOPINE
(OVERALL HEIGHT: 75'-0" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS: 1480 EAST HIGBY ROAD
MONUMENT, COLORADO 80132
EL PASO COUNTY

SHEET TITLE: TITLE SHEET

REV.	DESCRIPTION	DATE	BY	CHK
0	APPROVED FOR LEASING & ZONING	08/28/20	MKR	-

SAVE DATE: 8/28/2020 3:11 PM

SHEET NUMBER: T1

EXISTING
WALL HATCH
NEW WORK/
UTILITY EASEMENT
ACCESS/UTILITY
EASEMENT
HYBRID CABLE/CABLE
DC POWER
FIBER
ANTENNAS
RR/HBBU
LEASE AREA
EXISTING
EASEMENT
PENETRATIONS

PCD FILE NUMBER PPR-20-022

GENERAL PROJECT NOTES:

- CONTRACTOR IS RESPONSIBLE FOR ERECTING TEMPORARY BARRICADES AND/OR FENCING TO PROTECT THE SAFETY OF THE PUBLIC DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY BARRIERS AND REPAIR ALL DAMAGE TO PROPERTY ON THE SITE CAUSED BY THIS CONSTRUCTION. THE COST OF REPAIR IS THE CONTRACTOR'S RESPONSIBILITY.
- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE PRIOR TO ORDERING ANY MATERIALS OR CONDUCTING ANY WORK.
- EXCESS SOIL MATERIAL AND DEBRIS CAUSED BY THIS CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
- CONTRACTOR SHALL MAKE ADJUSTMENTS TO GRADING ELEVATIONS AS NECESSARY TO ENSURE A SITE FREE OF DRAINAGE PROBLEMS.
- CONTRACTOR SHALL COORDINATE A CONSTRUCTION LAYDOWN AREA WITH THE PROPERTY OWNER. CONSTRUCTION LAYDOWN AREA SHALL BE FENCED-IN WITH TEMPORARY (45 DAY) CONSTRUCTION FENCE. THE TEMPORARY FENCE SHALL BE CONSTRUCTED OF 6' HIGH CHAIN LINK FABRIC AND IS TO BE REMOVED AT THE END OF CONSTRUCTION. LAYDOWN AREA IS TO BE RESTORED TO ITS ORIGINAL CONDITION AFTER FENCE REMOVAL.
- SURVEY INFORMATION SHOWN WAS CREATED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY.
- THESE PLANS DO NOT ADDRESS THE SAFETY AND STABILITY OF THE STRUCTURE DURING ASSEMBLY AND ERECTION, WHICH ARE THE RESPONSIBILITY OF THE ERECTOR, BASED ON THE MEANS AND METHODS CHOSEN BY THE ERECTOR.
- NEW EQUIPMENT COMPOUND SHALL BE COVERED W/ 4" CRUSHED ROCK INSTALLED OVER CLIENT-APPROVED WEED BARRIER MATERIAL (IF APPLICABLE). (OR PER BUILT-UP COMPOUND SECTION.)

GENERAL CONTRACTOR NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE PROJECT SCOPE OF WORK DEFINED UNDER THE REQUEST FOR PROPOSAL (RFP) FOR THIS PROJECT AND ALL ASSOCIATED ATTACHMENTS AND DOCUMENTS PROVIDED.
THE RFP AND ALL ASSOCIATED DOCUMENTS SHALL DEFINE THE COMPLETE PROJECT SCOPE OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL DOCUMENTS AND IS SOLELY RESPONSIBLE FOR ALL WORK.
ALL DOCUMENTS INCLUDED WITHIN THE PROJECT REQUEST FOR PROPOSAL ARE REQUIRED FOR THE COMPLETE PROJECT SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK (EQUIPMENT, MATERIAL, INSTALLATION, TESTING, ETC.) INDICATED IN ALL DOCUMENTS. THE RFP, VERIZON NETWORK STANDARDS AND PROJECT ADDENDUMS AND CLARIFICATIONS ARE COMPLEMENTARY TO EACH OTHER. THE FORMAT OF THE SPECIFICATIONS AND DRAWING NUMBERING PER DISCIPLINE IS NOT INTENDED TO IMPLY SEGREGATION OF SUB CONTRACTOR WORK. CONTRACTOR SHALL ASSIGN ALL SUB CONTRACTOR WORK AND VERIZON WILL NOT ACCEPT ANY CHANGE ORDERS FOR INTERNAL CONTRACTOR WORK ASSIGNMENTS.
CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING ALL RFP DOCUMENTS TO THEIR SUB CONTRACTORS. ALL RFP DOCUMENTS ARE REQUIRED TO INDICATE THE PROJECT SCOPE OF WORK. PARTIAL SUB CONTRACTOR DOCUMENT PACKAGES ARE HIGHLY DISCOURAGED.
IN THE EVENT OF A CONFLICT BETWEEN THE DRAWINGS, SPECIFICATIONS, REFERENCED STANDARDS, VERIZON STANDARDS, OR AGREEMENT TERMS AND CONDITIONS THE ARCHITECT/ENGINEER SHALL BE CONTACTED FOR FORMAL INTERPRETATION OF THE REQUIREMENTS. THE CONTRACTOR SHALL BE DEEMED TO HAVE PROVIDED THE DETAILED AND EXPENSIVE INTERPRETATION. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECT/ENGINEER INTERPRETATIONS SHALL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO VERIZON.

STRUCTURAL DESIGN CRITERIA:

ALL LOADS DERIVED FROM REQUIREMENTS OF INTERNATIONAL BUILDING CODE 2015, ASCE 7-05, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" & ANSI TIA-222-G "STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS".

BUILDING STRUCTURES:

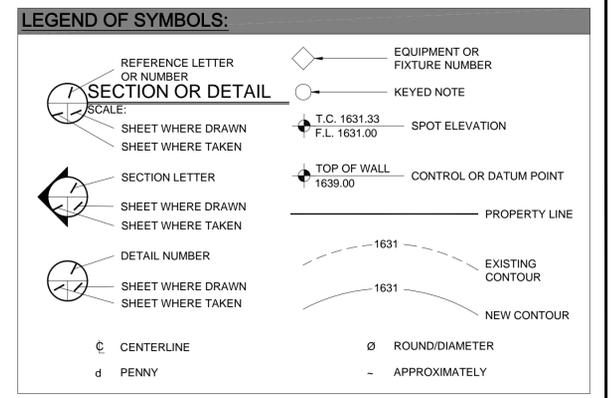
- WIND LOADS: IBC 2015 §1609 & ASCE 7-10 §6.4 (SIMPLIFIED METHOD)
V = 130 MPH
OCCUPANCY CAT. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0
- SEISMIC LOADS: IBC 2015 §1613 & ASCE 7-05 §12.14 (SIMPLIFIED METHOD)
OCCUPANCY CAT. = II; SITE CLASS = D
 $V = \frac{F(S_{DS}W)}{R}$
F = 1.0 (SINGLE-STORY), 1.1 (TWO STORY), 1.2 (THREE STORY)
R = 1.5 (ORDINARY PLAIN CONCRETE SHEARWALLS),
6.5 (LIGHT-FRAMED WALLS W/ WOOD STRUCTURAL PANELS),
4.0 (ORDINARY REINFORCED CONCRETE SHEARWALLS)

COMMUNICATIONS STRUCTURES:

- WIND LOADS: IBC 2015 §1609, ASCE 7-10 §6.5.15 & ANSI TIA-222-G
V = 130 MPH (3-SEC. GUST)
V = 50 MPH (0" RADIAL ICE)
STRUCTURE CLASS. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0
- SEISMIC LOADS: IBC 2017 §1613, ASCE 7-05 §15.6.6 & ANSI TIA-222-G
*MAY BE IGNORED FOR STRUCTURE CLASS I AND/OR EARTHQUAKE SPECTRAL RESPONSE FOR SHORT PERIOD ($S_s \leq 1.0$)
STRUCT. CLASS. = II; OCC. CAT. = II; SITE CLASS = D; IMPORTANCE FACTOR = 1.0
 $V = \frac{S_{DS}(W)}{R}$ (EQUIVALENT LATERAL FORCE PROCEDURE (METHOD 1))
 $V = \frac{S_{Saz}(Wz)}{R}$ (EQUIVALENT MODAL ANALYSIS PROCEDURE (METHOD 2))

ANTENNA, MOUNTS & HARDWARE INSTALLATION NOTES:

- CONTRACTOR TO INSTALL ANTENNAS, MOUNTS AND TOWER HARDWARE PER MANUFACTURER'S RECOMMENDATIONS (OR AS REQUIRED BY THE OWNER/PROVIDER).
- ALL BOLTS SHALL BE TIGHTENED PER AISC REQUIREMENTS (SEE STEEL NOTES).
- ANY GALVANIZED SURFACES THAT ARE DAMAGED BY ABRASIONS, CUTS, DRILLING OR FIELD WELDING DURING SHIPPING OR ERECTION SHALL BE TOUCHED-UP WITH TWO COATS OF COLD GALVANIZING COMPOUND MEETING THE REQUIREMENTS OF ASTM A780.
- ANTENNA MOUNTS SHALL NOT BE USED AS A CLIMBING DEVICE. WORKERS SHALL ALWAYS TIE OFF TO AN APPROVED CLIMBING POINT.
- SEE ALSO GENERAL ANTENNA NOTES ON SHEET RF1 (IF APPLICABLE).



APPROVED FOR LEASING/ZONING



VIEW OF NEW LEASE AREA (LOOKING WEST)



VIEW OF NEW LEASE AREA (LOOKING NORTH)



VIEW OF NEW LEASE AREA (LOOKING NORTHEAST)

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DESIGNED FOR:

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

PROJECT NAME: CSP HIGBY (ALT A)
NEW 70'-0" MONOPINE
(OVERALL HEIGHT: 75'-0" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS: 1480 EAST HIGBY ROAD
MONUMENT, COLORADO 80132
EL PASO COUNTY

SHEET TITLE: SPECIFICATION & PHOTO SHEET

REV	DESCRIPTION	DATE	BY	CHK
0	APPROVED FOR LEASING & ZONING	08/28/20	MKR	-

SAVE DATE: 8/28/2020 3:11 PM
SHEET NUMBER: SP1

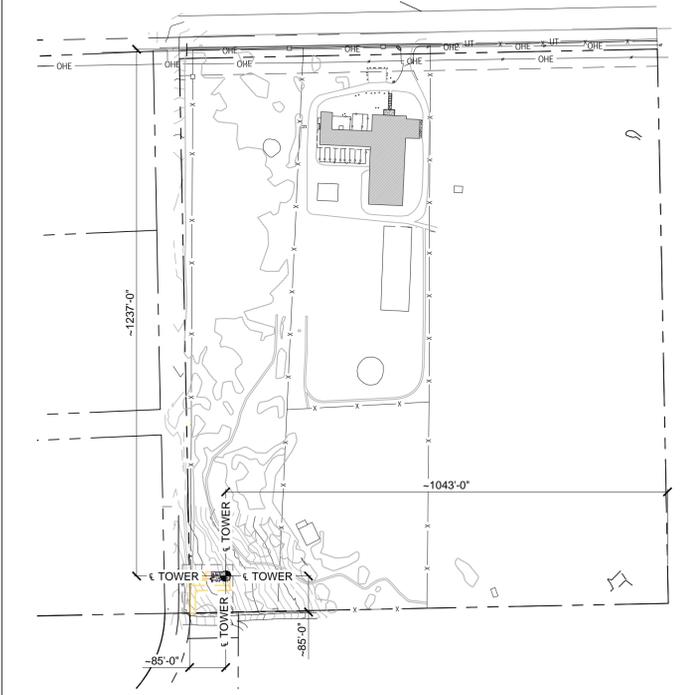
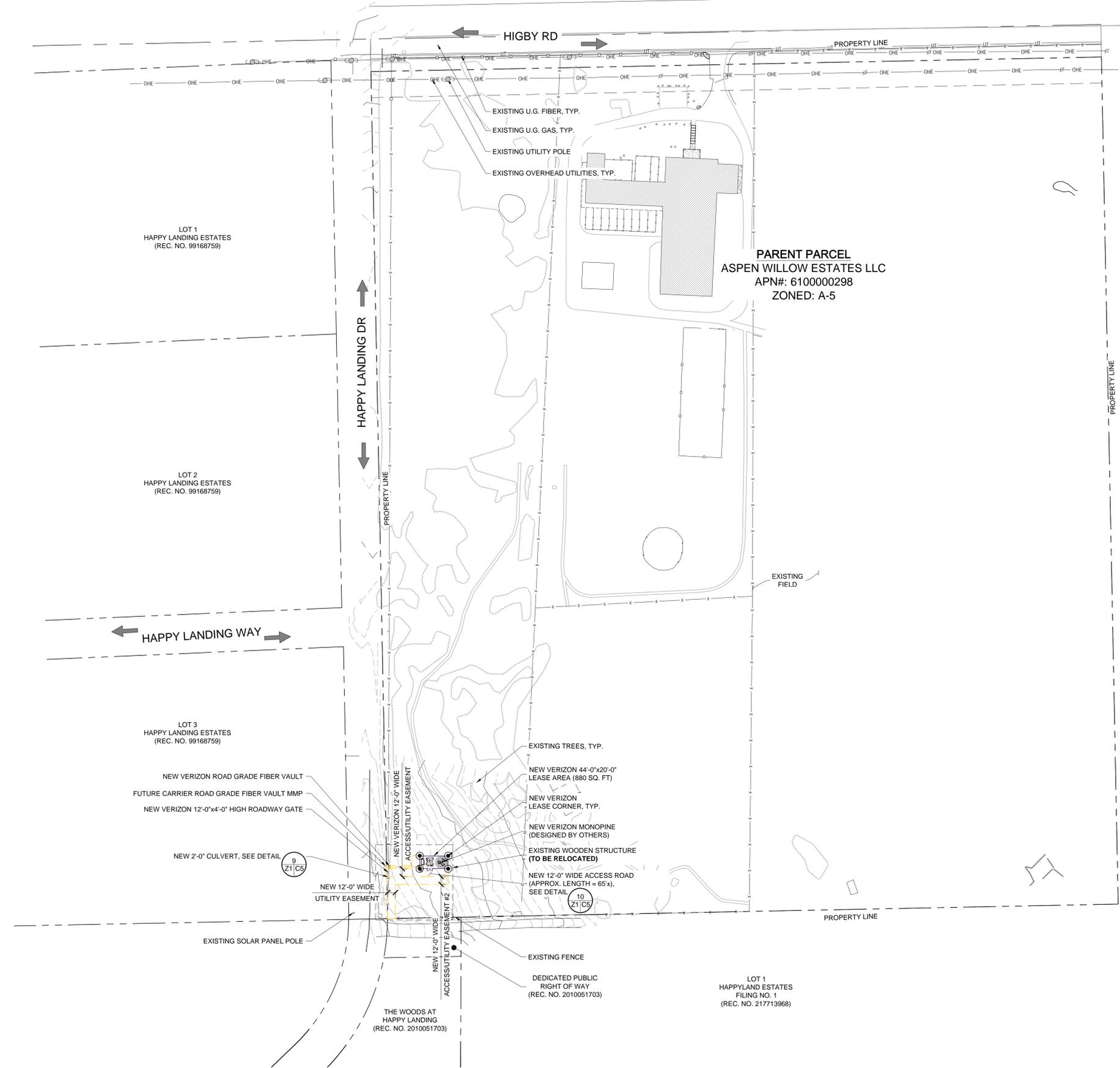
SITE NOTES:
 1. SITE WILL REQUIRE AN ACCESS PERMIT, PERMIT CAN BE OBTAINED FROM THE EL PASO PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT, AND CAN BE APPLIED FOR ONLINE.

PCD FILE NUMBER PPR-20-022

SETBACK TABLE:

	TOWER BASE TO PARENT PROPERTY LINE	LEASE BOUNDARY TO PARENT PROPERTY LINE
NORTH	-1237'-0"	-1227'-0"
EAST	-1043'-0"	-1033'-0"
SOUTH	-85'-0"	-75'-0"
WEST	-85'-0"	-51'-0"

- EXISTING
- WALL HATCH
- NEW WORK/ UTILITY EASEMENT
- ACCESS/UTILITY EASEMENT
- HYBRID CABLE/SOCK
- DC POWER
- FIBER
- ANTENNAS
- RR/HBBU
- LEASE AREA
- EXISTING EASEMENT
- PENETRATIONS



SITE PLAN
 SCALE: 1" = 80'-0"

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3131 SOUTH VAUGHN WAY, SUITE 550
 AURORA, COLORADO 80014

DESIGNED BY:

PROJECT NAME: **CSP HIGBY (ALT A)**
NEW 70'-0" MONOPINE
(OVERALL HEIGHT: 75'-0" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:
1480 EAST HIGBY ROAD
MONUMENT, COLORADO 80132
EL PASO COUNTY

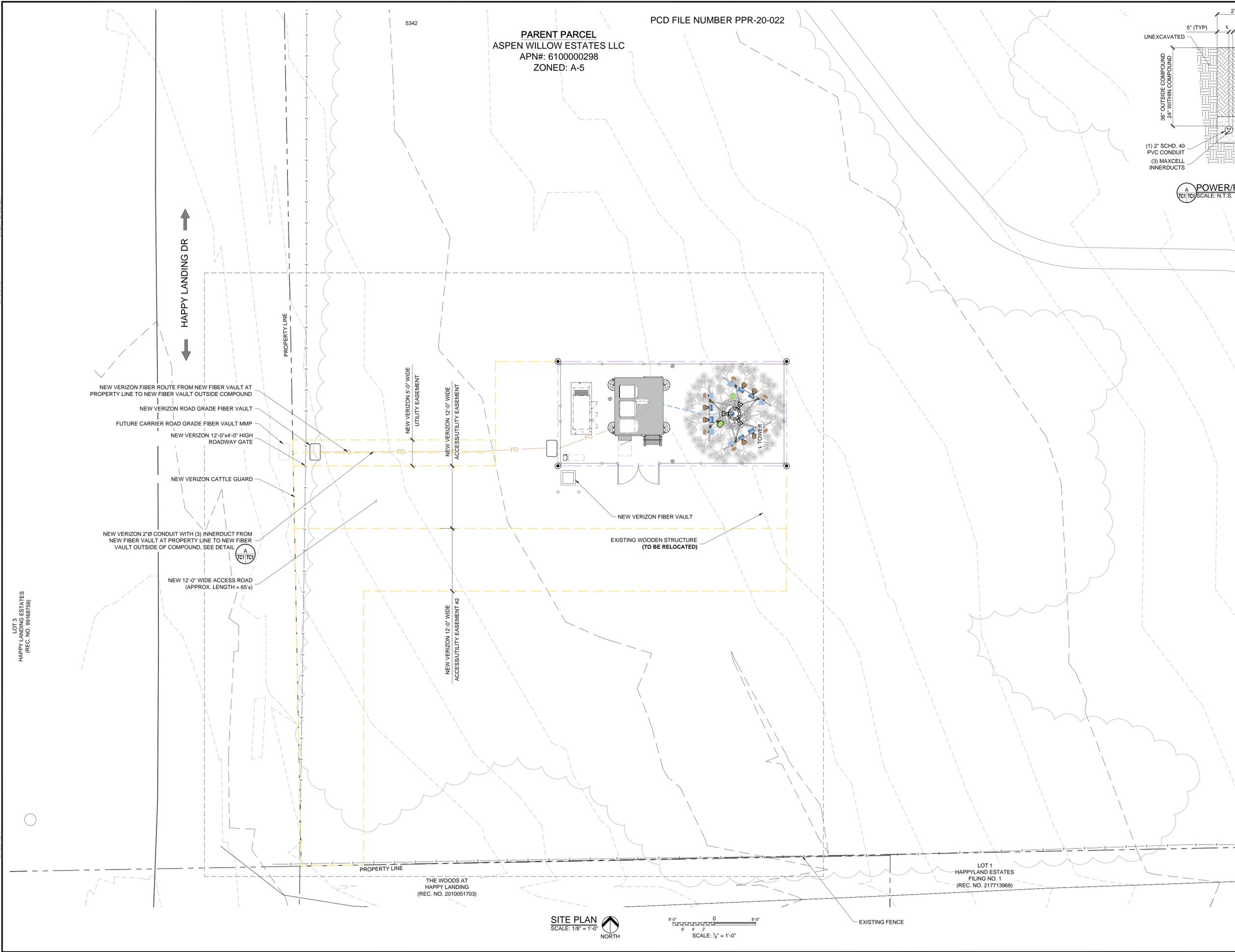
SHEET TITLE:
SITE PLAN & SETBACK SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
0	APPROVED FOR LEASING & ZONING	08/28/20	MKR	-

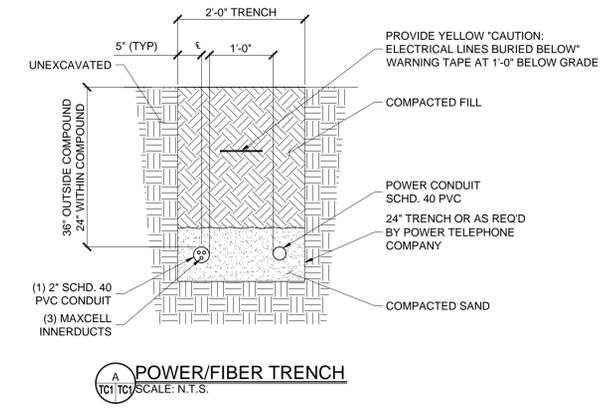
SAVE DATE: 8/28/2020 3:11 PM
 SHEET NUMBER: **Z1**



EXISTING
WALL HATCH
NEW WORK/
UTILITY EASEMENT
ACCESSIBILITY
EASEMENT
HYBRID CABLES/COAX
DC POWER
FIBER
ANTENNAS
RR/HIBBU
LEASE AREA
EXISTING
EASEMENT
PENETRATIONS



PCD FILE NUMBER PPR-20-022
PARENT PARCEL
ASPEN WILLOW ESTATES LLC
APN#: 6100000298
ZONED: A-5



POWER/FIBER TRENCH
SCALE: N.T.S.

APPROVED
FOR LEASING/ZONING

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DESIGNED FOR:
verizon
3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:
J5 INFRASTRUCTURE PARTNERS

PROJECT NAME:
CSP HIGBY (ALT A)
NEW 70'-0" MONOPINE
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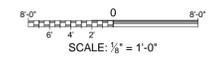
PROJECT ADDRESS:
1480 EAST HIGBY ROAD
MONUMENT, COLORADO 80132
EL PASO COUNTY

SHEET TITLE:
FIBER COORDINATION
SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
0	APPROVED FOR LEASING & ZONING	08/28/20	MKR	-

SAVE DATE: 8/28/2020 3:11 PM
SHEET NUMBER: TC1

SITE PLAN
SCALE: 1/8" = 1'-0"
NORTH



LOT 3
HAPPY LANDING ESTATES
(REC. NO. 99168759)

THE WOODS AT
HAPPY LANDING
(REC. NO. 2010051703)

LOT 1
HAPPYLAND ESTATES
FILING NO. 1
(REC. NO. 217713968)

EXISTING FENCE

NOTES:

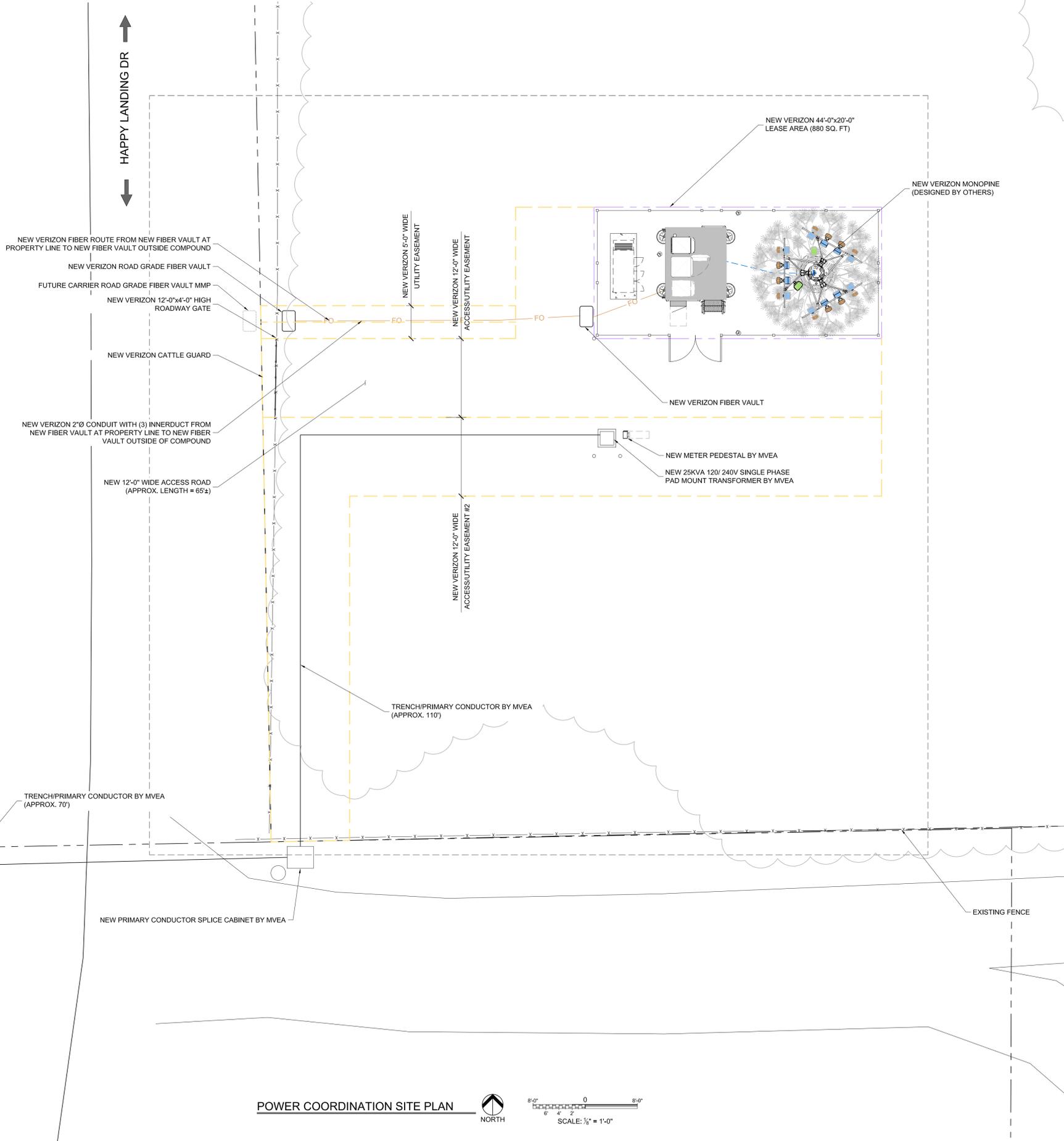
1. POWER COORDINATION INFORMATION DEPICTED ON THESE DRAWINGS IS ACCURATE AND COMPLETE AS OF 7-1-2018. HOWEVER, PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL VERIFY WITH VERIZON CONSTRUCTION MANAGER THAT CONDITIONS HAVE NOT CHANGED.
2. REFER TO CONSTRUCTION DRAWING FOR COMPLETE FIBER DESIGN.
3. ALL CONDUIT NOT SPECIFIED OTHERWISE SHALL BE SCHD. 40 PVC BELOW GRADE, IMC ABOVE, EMT ACCEPTABLE INDOORS IN AREAS THAT ARE ACCESSIBLE ONLY TO LESSEE AUTHORIZED PERSONNEL.

POWER CONTACT:
 MOUNTAIN VIEW ELECTRIC ASSOCIATION, INC.
 VINCE BRACKETT
 PH: 719-494-2615
 brackett-v@mvea.org
 CONTACT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.

PROPERTY OWNER
 ASPEN WILLOW ESTATES LLC
 CHUCK WOODALL
 PH. 719-265-6677
 CONTACT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.

VERIZON WIRELESS BILLING ADDRESS:
 VERIZON WIRELESS
 MS 3846
 PO BOX 2375
 SPOKANE, WA 99210-2375

EXISTING
 WALL HATCH
 NEW WORK/
 UTILITY EASEMENT
 ACCESS/UTILITY
 EASEMENT
 HYBRID CABLES/COAX
 DC POWER
 FIBER
 ANTENNAS
 RR/HBBU
 LEASE AREA
 EXISTING
 EASEMENT
 PENETRATIONS



PRELIMINARY
 NOT FOR CONSTRUCTION

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 AURORA, COLORADO 80014

DESIGNED BY:

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 CSP HIGBY (ALT A)
 NEW 70'-0" MONOPINE
 (OVERALL HEIGHT: 75'-0" A.G.L.)
 RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:
 1480 EAST HIGBY ROAD
 MONUMENT, COLORADO 80132
 EL PASO COUNTY

SHEET TITLE:
 POWER COORDINATION
 SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY - NOT FOR CONSTRUCTION	08/27/20	SB	LRP

SAVE DATE: 1/2/2020 8:39 AM
 SHEET NUMBER: PC1

NOTICE:
 1. CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.



EXISTING
 WALL HATCH
 NEW WORK
 UTILITY EASEMENT
 ACCESS/UTILITY EASEMENT
 HYBRID CABLES/CAX
 DC POWER
 FIBER
 ANTENNAS
 RR/HBBU
 LEASE AREA
 EXISTING EASEMENT
 PENETRATIONS

GENERAL ELECTRICAL NOTES

- CONTRACTOR SHALL COMPLY WITH UTILITY'S ELECTRICAL SERVICE SPECIFICATIONS, OBTAIN A COPY AS NEEDED.
- THE ELECTRICAL INSTALLATION WORK SHALL COMPLY WITH ALL LOCAL, STATE AND NATIONAL CODES, LAWS AND ORDINANCES APPLICABLE TO ELECTRICAL WORK.
- ARC FLASH HAZARD WARNING SIGNS:
PER NEC ARTICLE 110.16 EACH OF THE FOLLOWING DEVICES SHALL HAVE A PERMANENT LABEL OR SIGN AFFIXED WARNING QUALIFIED PERSONS OF POTENTIAL ARC FLASH HAZARDS: SERVICE GUTTER-BOXES, METER ENCLOSURES, DISCONNECTS, TRANSFORMERS DOWN-STREAM OR SERVICE EQUIPMENT, TRANSFER SWITCHES, DISTRIBUTION PANEL BOARDS, ANY OTHER DEVICES THAT ARE INSTALLED AND ARE SPECIFIED IN NEC ARTICLE 110.16. THIS LABEL OR SIGN SHALL MEET THE GUIDELINES FOR SAFETY SIGNS SPECIFIED IN THE CURRENT REVISION OF ANSI Z535.4.
- CONTRACTOR SHALL VISIT SITE AND VERIFY EXISTING CONDITIONS BEFORE BEGINNING WORK.
- ALL MATERIAL AND EQUIPMENT FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE NEW, FREE FROM DEFECTS, AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER OR HIS REPRESENTATIVE. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD DUE TO FAULTY WORKMANSHIP, MATERIAL OR EQUIPMENT, THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS AND LABOR TO CORRECT THE TROUBLE WITHOUT COST TO THE OWNER.
- ALL WORK TO BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO ELECTRICAL WORK.
- ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER TYPE "TH," #12, AND #10 SOLID, #8 AND LARGER STRANDED.
- CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE VERIZON WIRELESS PROJECT MANAGER UPON COMPLETION OF THE JOB.
- ELECTRICAL WORK SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED, INCLUDING BUT NOT LIMITED TO COMPLETE ELECTRICAL SYSTEMS POWER AND LIGHTING, TELEPHONE CONDUIT SYSTEM, SIGNAL SYSTEMS, PANELBOARD(S), CONTROL WIRING, GROUNDING, CONDUIT ONLY SYSTEMS, ETC., AS INDICATED ON ELECTRICAL DRAWINGS AND/OR REQUIRED BY GOVERNING CODES.
- PRIOR TO INSTALLING ANY ELECTRICAL WORK, THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND REQUIREMENTS ON THE JOB, AND BY REFERENCE TO ARCHITECTURE, AND EQUIPMENT SUPPLIER'S DRAWINGS. SHOULD THERE BE ANY QUESTIONS OR PROBLEMS CONCERNING THE NECESSARY PROVISIONS TO BE MADE, PROPER DIRECTIONS FROM THE VERIZON WIRELESS PROJECT MANAGER SHALL BE OBTAINED BEFORE PROCEEDING WITH ANY WORK.
- THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS, ELECTRICAL SERVICE REQUIREMENTS AND COORDINATE ALL INTERCONNECTION REQUIREMENTS WITH LOCAL UTILITY AS NECESSARY.
- THE NOTE, SPECIFICATION OR CODE WHICH PRESCRIBES AND ESTABLISHES THE HIGHEST STANDARD OF PERFORMANCE SHALL PREVAIL IN THE EVENT OF ANY CONFLICT OR INCONSISTENCY BETWEEN ITEMS SHOWN ON THE PLANS AND/OR SPECIFICATIONS.
- THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL PERMITS AND RELATED FEES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE, STATE OF COLORADO ELECTRICAL SAFETY ORDERS, ALL CODES AND ORDINANCES AND ALL OTHER ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION OVER THIS WORK.
- NETWORK-POWERED BROADBAND COMMUNICATIONS EQUIPMENT AND CABLES SHALL BE LISTED AND MARKED IN ACCORDANCE WITH NEC 830.179 (A) OR (B).
- PREMISES - POWERED BROADBAND COMMUNICATIONS SYSTEMS EQUIPMENT & CABLES SHALL BE LISTED AND MARKED IN ACCORDANCE WITH NEC 840.179.

KEYED COMPONENT NOTES:

- EXISTING UTILITY SPLICE CABINET
- NEW 25KVA, 120/240V, SINGLE PHASE PAD MOUNT TRANSFORMER BY UTILITY
- NEW METER PEDESTAL WITH SERVICE DISCONNECT, BY UTILITY, 200A, 120/240V, SINGLE PHASE, NEMA 3R
- INTEGRATED LOAD CENTER: GENERAC 200A, 2-POLE, SOLID-NEUTRAL AUTOMATIC TRANSFER SWITCH WITH DISTRIBUTION PANEL BUILT IN, PROVIDED BY VERIZON. SCCR = 25,000A.
- NEW GENERAC 48KW STANDBY GENERATOR PROVIDED BY VERIZON WIRELESS. GENERATOR NEUTRAL SHALL NOT BE BONDED TO FRAME. IT SHALL BE SOLIDLY CONNECTED THROUGH TRANSFER SWITCH TO SERVICE NEUTRAL.

KEYED CONDUIT NOTES:

- NEW CONDUCTORS BY UTILITY.
- 2" C MINIMUM, (3) #3/0 THWN COPPER CONDUCTORS BY CONTRACTOR.
- 2" C MINIMUM, (3) #3/0 THWN COPPER CONDUCTORS, (1) #2 THWN COPPER GROUND BY CONTRACTOR.
-

GENERAL GROUNDING NOTES:

- CONTRACTOR TO COMPLY WITH VERIZON WIRELESS CELL SITE GROUNDING & BONDING SPECIFICATIONS. IN THE EVENT THAT DRAWINGS CONFLICT WITH VERIZON WIRELESS SPECIFICATIONS, VERIZON WIRELESS SPECIFICATIONS SHALL GOVERN.
- CONTRACTOR TO INSURE THAT ALL SITE GROUNDING MEETS NEC & LOCAL CODE REQUIREMENTS. IN THE EVENT LOCAL CODE OR NEC REQUIREMENTS CONFLICT W/LESSEE REQUIREMENTS THEN LOCAL CODE AND NEC SHALL GOVERN.

PCD FILE NUMBER PPR-20-022

SHORT CIRCUIT CALCULATIONS:

POINT TO POINT METHOD FOR SHORT CIRCUIT CALCULATIONS ILLUSTRATED IN BUSSMAN MANUFACTURING PUBLICATION FORM SPD90.

$I_{sc} = \frac{25 \times 1000}{240} = 104.167$

MULTIPLIER = $\frac{100}{1.4} = 71.43$

AVAILABLE SHORT CIRCUIT CURRENT FROM UTILITY = 7,741 A.

FIND FACTOR $f = \frac{2.0 \times (\text{length in feet}) \times (\text{short circuit current})}{13,923 \times 240}$

$f = \frac{2.0 \times 10 \times 7,741}{13,923 \times 240} = 0.046$

FIND FACTOR $M = \frac{1}{1.7} \quad M = 0.956$

SHORT CIRCUIT CURRENT AT NEW UTILITY METER = $M \times \text{AVAILABLE S.C. CURRENT}$

$I = 7,398 \text{ A.}$

LENGTH IN FEET = 17

FACTOR $f = 0.075 \quad f = \frac{2.0 \times 17 \times 7,398}{13,923 \times 240} = 0.075$

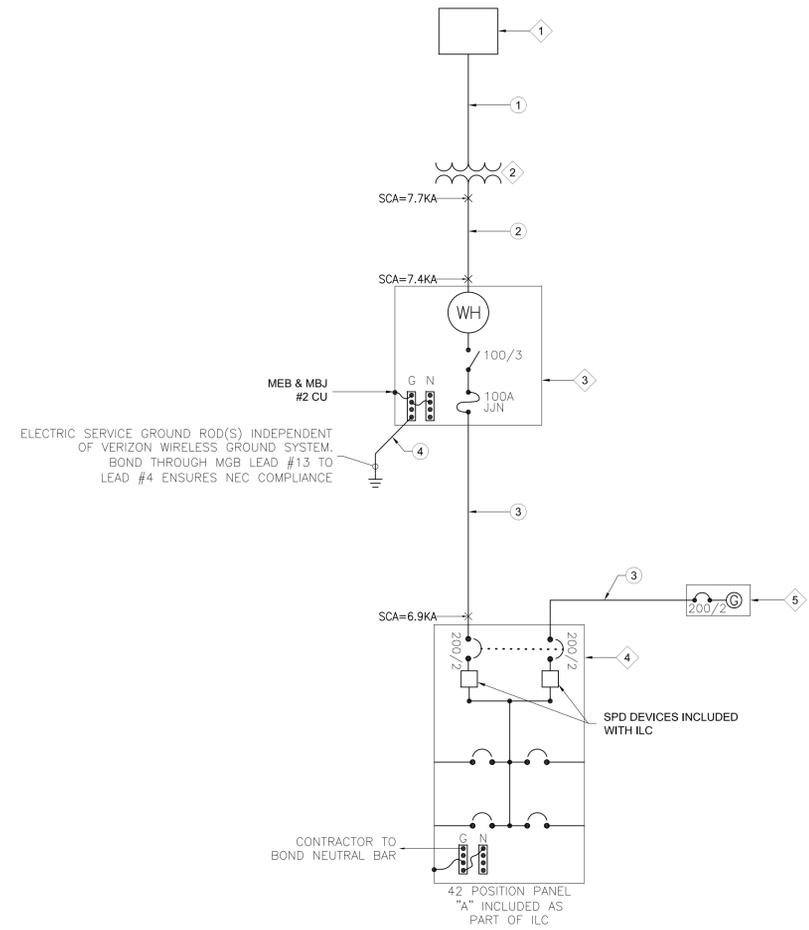
FACTOR $M = 0.93$

SHORT CIRCUIT CURRENT AT PANEL "VERIZON" = 6,880A

PANELBOARD SCHEDULE "VERIZON"

VOLTAGE: 120/240V, 1Ø, 3W		MAINS: 200A, M.B.		MOUNTING: SURFACE		NEMA 3R ENCLOSURE	
USE AND/OR AREA SERVED	C/B	CIR NO.	LOAD ØA ØB	CIR NO.	C/B	USE AND/OR AREA SERVED	
RECTIFIER #1	20	1	1450	2	20	10,000 BTUH A/C #1	
		2	1320				
		3	1450				
		4	1320				
RECTIFIER #2	20	5	1450	6	20	10,000 BTUH A/C #2	
		7	1320				
		8	1450				
		9	1320				
RECTIFIER #3	20	10	1450	10	20	GFCI RECEPTACLE	
		11	360				
		12	1450				
		13	360				
RECTIFIER #4	20	14	1450	14	20	GENERATOR BATT. CHARGER	
		15	1500				
		16	1450				
		17	500				
FUTURE RECTIFIER 5	20	18	180	18	20	GFCI RECEPTACLE	
		19	1450				
		20	1000				
FUTURE RECTIFIER 6	20	21	1450	22	-	SPACE	
		23	-				
		24	-				
SPACE	-	25	-	26	-	SPACE	
SPACE	-	27	-	28	-	SPACE	
SPACE	-	29	-	30	-	SPACE	
SPACE	-	31	-	32	-	SPACE	
SPACE	-	33	-	34	-	SPACE	
SPACE	-	35	-	36	-	SPACE	
SPACE	-	37	-	38	-	SPACE	
SPACE	-	39	-	40	-	SPACE	
SPACE	-	41	-	42	-	SPACE	
TOTAL LOAD PER PHASE		13,380	13,200	26,580VA 240V = 110.8 AMPS			

PANEL SCHEDULE "VERIZON"



SINGLE LINE DIAGRAM

NOTICE:

- CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.

PRELIMINARY
 NOT FOR CONSTRUCTION

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DESIGNED FOR:

verizon
 3131 SOUTH VAUGHN WAY, SUITE 550
 AURORA, COLORADO 80014

DESIGNED BY:

J5 INFRASTRUCTURE PARTNERS

PROJECT NAME:

CSP HIGBY (ALT A)
 NEW 70'-0" MONOPINE
 (OVERALL HEIGHT: 75'-0" A.G.L.)
 RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:

1480 EAST HIGBY ROAD
 MONUMENT, COLORADO 80132
 EL PASO COUNTY

SHEET TITLE:

SINGLE-LINE DIAGRAM & NOTES

REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY - NOT FOR CONSTRUCTION	08/27/20	SB	LRP

SAVE DATE: 1/2/2020 8:39 AM

SHEET NUMBER: **E1**

KEYED COMPONENT NOTES:

- 1 NEW 25KVA PAD MOUNT TRANSFORMER, BY UTILITY.
- 2 NEW METER PEDESTAL/SERVICE DISCONNECT SPECIFIED ON SINGLE-LINE DIAGRAM, BY CONTRACTOR.
- 3 NEW GENERAC 200A INTEGRATED LOAD CENTER, SPECIFIED ON SINGLE-LINE DIAGRAM, PROVIDED BY VERIZON, INSTALLED BY CONTRACTOR.
- 4 NEW GENERAC 48KW STANDBY GENERATOR, SPECIFIED ON SINGLE-LINE DIAGRAM, PROVIDED BY VERIZON WIRELESS.

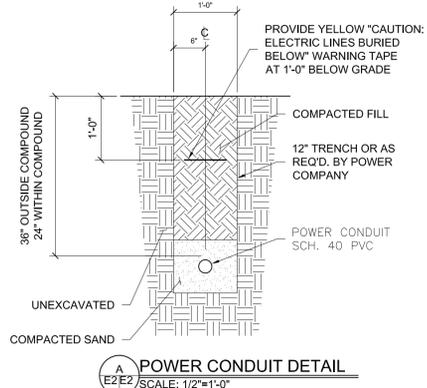
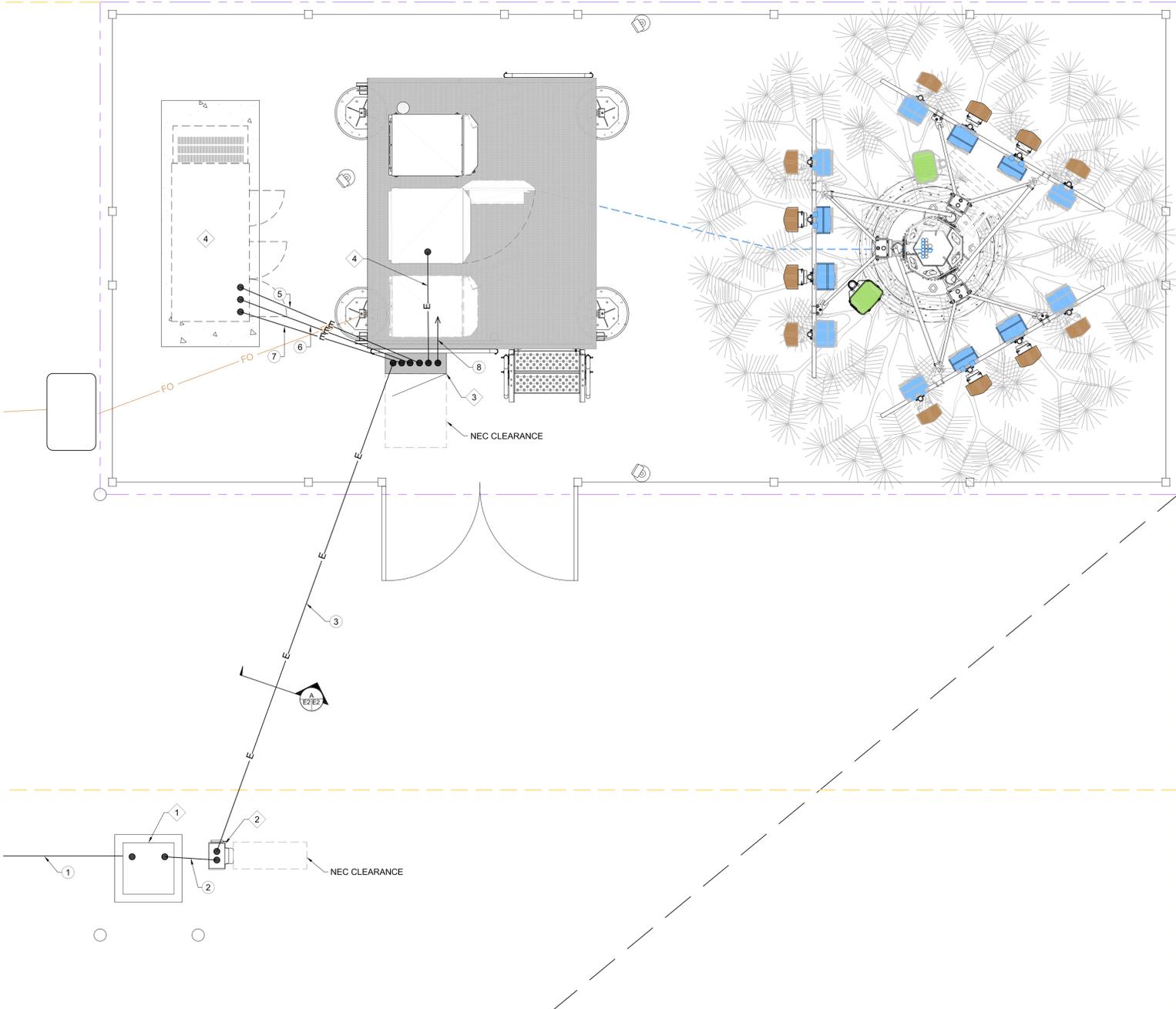
KEYED CONDUIT NOTES:

- 1 NEW CONDUCTORS BY UTILITY
- 2 NEW CONDUIT & CONDUCTORS, SPECIFIED ON SINGLE-LINE DIAGRAM FROM NEW TRANSFORMER TO NEW METER PEDESTAL
- 3 NEW CONDUIT & CONDUCTORS, SPECIFIED ON SINGLE-LINE DIAGRAM FROM METER PEDESTAL TO ILC.
- 4 NEW CONDUIT & CONDUCTORS, SPECIFIED ON SINGLE-LINE DIAGRAM, FROM ILC TO VERIZON EQUIPMENT CABINET.
- 5 3/4" CONDUIT & BLOCK HEATER/BATTERY CHARGER CONDUCTORS FROM ILC TO GENERATOR.
- 6 3/4" CONDUIT & ALARM & CONTROL CONDUCTORS FROM GENERATOR TO ILC
- 7 NEW CONDUIT & CONDUCTORS SPECIFIED ON SINGLE-LINE DIAGRAM FROM GENERATOR TO ILC.
- 8 3/4" CONDUIT & ALARM CONDUCTORS TO VERIZON WIRELESS ALARM PANEL.

NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL (3) QUARTZ HALOGEN OR LED OUTDOOR FLOOD LIGHTS TO BE CONTROLLED OF A TIMER SWITCH MOUNTED ADJACENT TO THE ILC.

EXISTING
 WALL HATCH
 NEW WORK/
 UTILITY EASEMENT
 ACCESS/UTILITY
 EASEMENT
 HYBRID CABLES/CAX
 DC POWER
 FIBER
 ANTENNAS
 RR/HBBU
 LEASE AREA
 EXISTING
 EASEMENT
 PENETRATIONS



NOTICE:

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DESIGNED FOR:
verizon
 3131 SOUTH VAUGHN WAY, SUITE 550
 AURORA, COLORADO 80014

DESIGNED BY:
JS INFRASTRUCTURE PARTNERS

PROJECT NAME:
 CSP HIGBY (ALT A)
 NEW 70'-0" MONOPINE
 (OVERALL HEIGHT: 75'-0" A.G.L.)
 RAWLAND COMMUNICATION SITE

PROJECT ADDRESS:
 1480 EAST HIGBY ROAD
 MONUMENT, COLORADO 80132
 EL PASO COUNTY

SHEET TITLE:
ELECTRICAL SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY - NOT FOR CONSTRUCTION	08/27/20	SB	LRP

SAVE DATE: 1/2/2020 8:39 AM SHEET NUMBER: **E2**

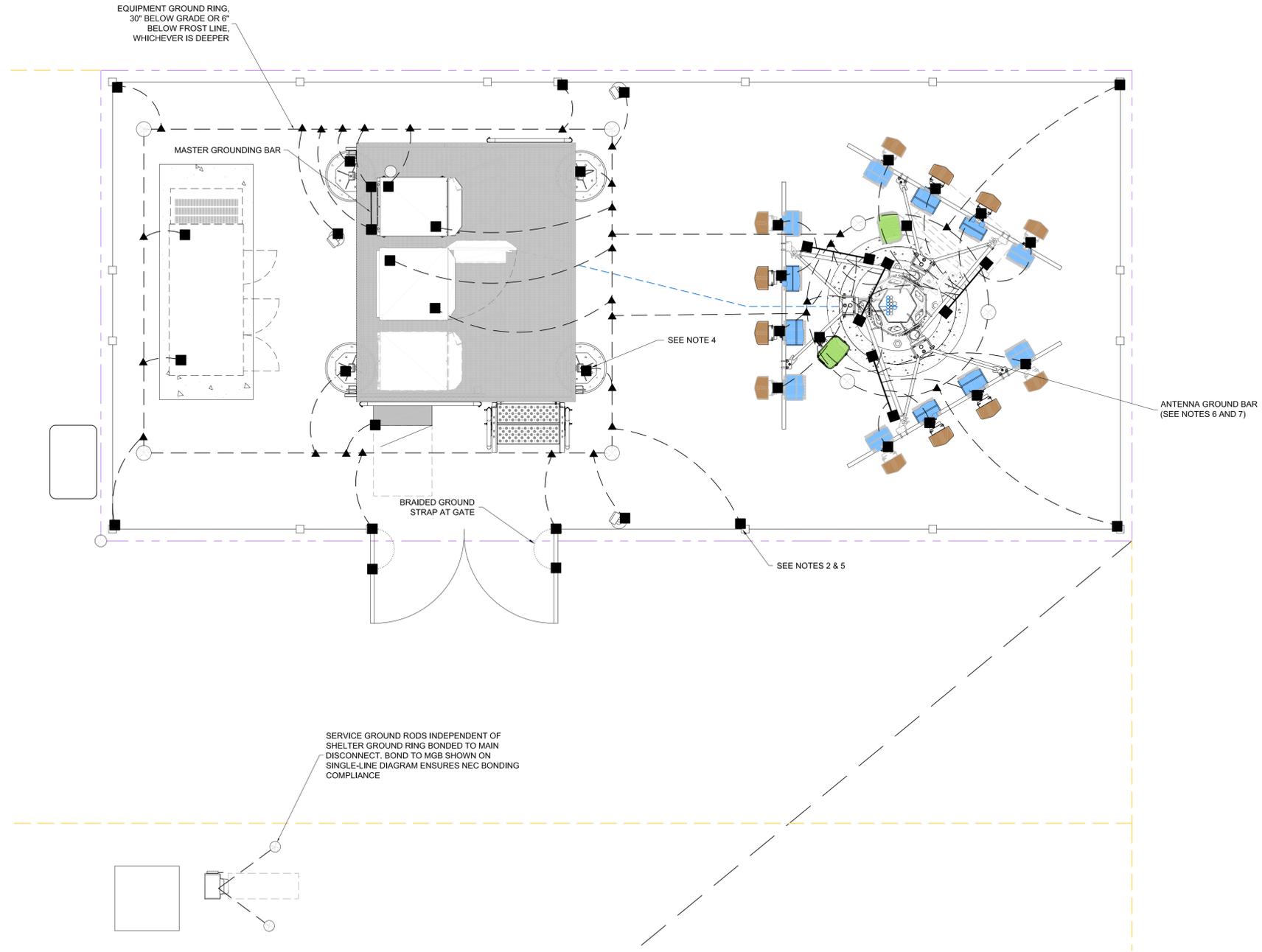
PRELIMINARY
 NOT FOR CONSTRUCTION

- NOTES:**
1. ALL EXTERIOR GROUND BARS SHALL BE GALVANIZED STEEL AND SHALL HAVE ALARM CONNECTIONS FOR THEFT PREVENTION PER LESSEE GROUNDING STANDARD NSTD46 REV 2-1-11, SECTION 5.3.
 2. CONTRACTOR TO BOND ANY METALLIC ITEMS WITHIN 6' OF VERIZON WIRELESS EQUIPMENT, SHELTER OR GROUND RING TO VERIZON WIRELESS GROUND RING.
 3. THE GROUNDING DIAGRAM SHOWN HERE IS SOMEWHAT SCHEMATIC IN NATURE AND MANY OF THE GROUNDING CONDUCTORS ARE SHOWN WITH A CURVE TO THEM, THIS IS SIMPLY TO INSURE THAT THEY STAND OUT FROM LEASE LINES, FENCE LINES AND SHELTER LINES ETC. ALL GROUNDING AND BONDING CONDUCTORS SHOULD BE INSTALLED IN AS STRAIGHT A LINE AS POSSIBLE. ANY BENDS THAT ARE REQUIRED IN GROUNDING OR BONDING CONDUCTORS SHOULD HAVE A RADIUS NO LESS THAN 12".
 4. BONDING JUMPERS FROM REBAR CAGE AND ANCHOR BOLT TO GROUND RING SHOULD ATTACH AT LOCATIONS ALLOWING JUMPERS TO BE CLOSE TO HORIZONTAL AS POSSIBLE.
 5. SOME FENCE POSTS BETWEEN CORNER POSTS SHALL BE BONDED TO GROUNDING SYSTEM SO THAT MAXIMUM DISTANCE BETWEEN BONDED POSTS DOES NOT EXCEED 20'.
 6. EACH ANTENNA SECTOR FRAME SHALL BE BONDED TO VERIZON GROUNDING SYSTEM WITH MINIMUM OF (2) BONDS. BONDS SHALL BE INSTALLED IN OPPOSITE SIDES OF COAX CABLE TRAY IS NOT USED.
 7. CONTRACTOR TO LOCATE GROUND BAR FOR SECTOR FRAME AT LOCATION THAT PERMITS GROUNDING COAX FOR FRAME WITHOUT GROUNDING KIT PIGTAILS BENDING BACK ON THEMSELVES. PER VERIZON STANDARDS.

GROUNDING LEGEND:

▲	CADWELD CONNECTION
■	MECHANICAL CONNECTION
○	5/8"X8" CU CLAD STEEL GROUND ROD
---	#2 SOLID, TINNED, BARE COPPER

EXISTING
 WALL HATCH
 NEW WORK/
 UTILITY EASEMENT
 ACCESS/UTILITY
 EASEMENT
 HYBRID CABLES/COAX
 DC POWER
 FIBER
 ANTENNAS
 RR/HBBU
 LEASE AREA
 EXISTING
 EASEMENT
 PENETRATIONS



SERVICE GROUND RODS INDEPENDENT OF SHELTER GROUND RING BONDED TO MAIN DISCONNECT. BOND TO MGB SHOWN ON SINGLE-LINE DIAGRAM ENSURES NEC BONDING COMPLIANCE



- NOTICE:**
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DESIGNED FOR:

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

PROJECT NAME: CSP HIGBY (ALT A)
NEW 70'-0" MONOPINE
(OVERALL HEIGHT: 75'-0" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS: 1480 EAST HIGBY ROAD
MONUMENT, COLORADO 80132
EL PASO COUNTY

SHEET TITLE: GROUNDING SITE PLAN

REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY - NOT FOR CONSTRUCTION	08/27/20	SB	LRP

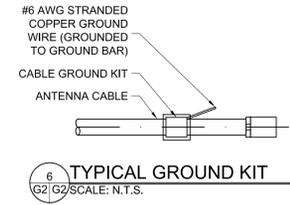
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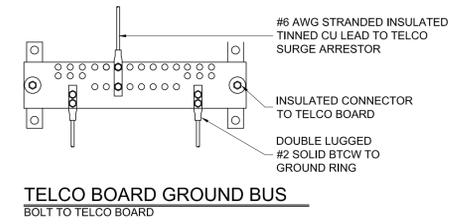
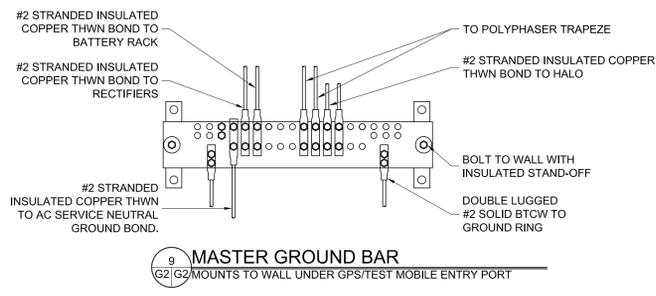
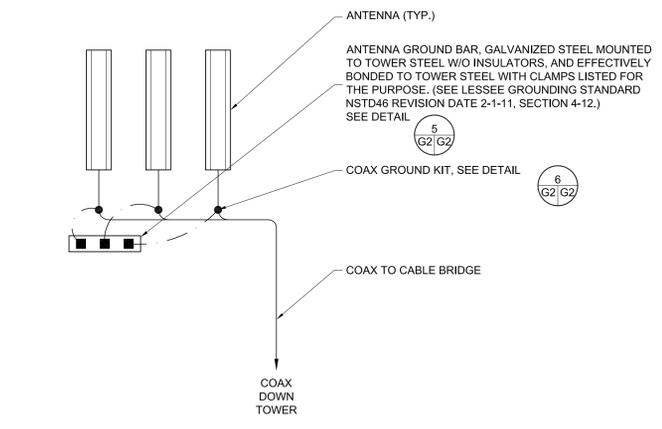
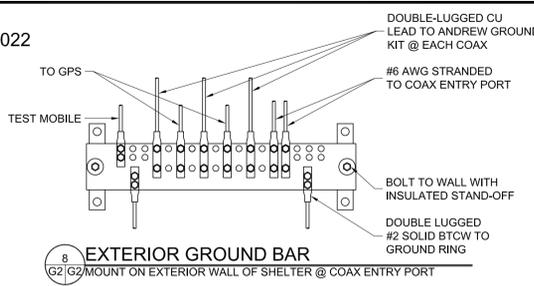
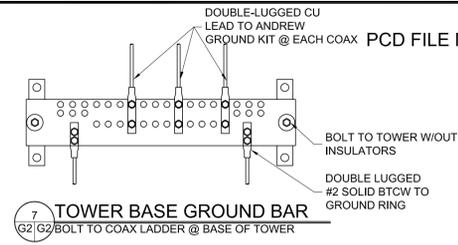
EXISTING WALL HATCH NEW WORK/ UTILITY EASEMENT ACCESS/UTILITY EASEMENT HYBRID CABLE/COAX DC POWER FIBER ANTENNAS RR/HBBU LEASE AREA EXISTING EASEMENT PENETRATIONS

GROUNDING LEGEND:

▲	CADWELD CONNECTION
●	COAX GROUND KIT
■	MECHANICAL CONNECTION
⊗	5/8"X8" CU CLAD GROUND ROD
Ⓜ	INSPECTION WELL
—	#2 SOLID TINNED COPPER
---	#2 STRANDED, THWN INSULATED COPPER
---	COAX & JUMPERS
---	#6 STRANDED, INSULATED COPPER THWN

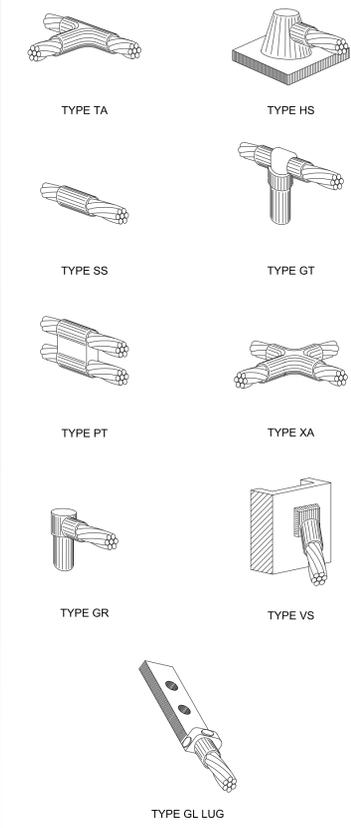


THEFT DETERRENT:
ALL EXTERIOR GROUND BARS TO BE GALVANIZED STEEL ATTACHED WITH TAMPER PROOF HARDWARE AND WITH ALARM CONNECTIONS PER LESSEE CONNECTIONS PER LESSEE GROUNDING STANDARD NSTD46 REVISION DATE 2-1-11. SEE NOTES BELOW.



- NOTES:**
- ALL HARDWARE TO BE TAMPER PROOF STAINLESS STEEL PER NSTD46 REVISION DATE 2-1-11.
 - COAT ALL SURFACES WITH KOPR-SHEILD BEFORE MATING.
 - ALL LUGS SHALL BE 2-BOLT CONNECTIONS.
 - EXTERIOR BUS BARS: 4"x20"x1/2" GALVANIZED STEEL.
 - INTERIOR BUS BARS: 4"x20"x1/2" COPPER.
 - ALL LEADS TO MGB MUST BE LABELED ACCORDING TO NSTD46 REV 2-1-11 SECTION 3.8, FIG. 3.4. WHEN FUTURE REVISIONS ARE ISSUED THE CORRESPONDING INFORMATION FROM THE MOST RECENT REVISION SHALL BE USED.
 - EXTERIOR GROUND BARS SHALL HAVE ALARM CONNECTIONS FOR THEFT PROTECTION AS SPECIFIED IN NSTD46 REV DATE 2-1-11 SECTION 5.3.

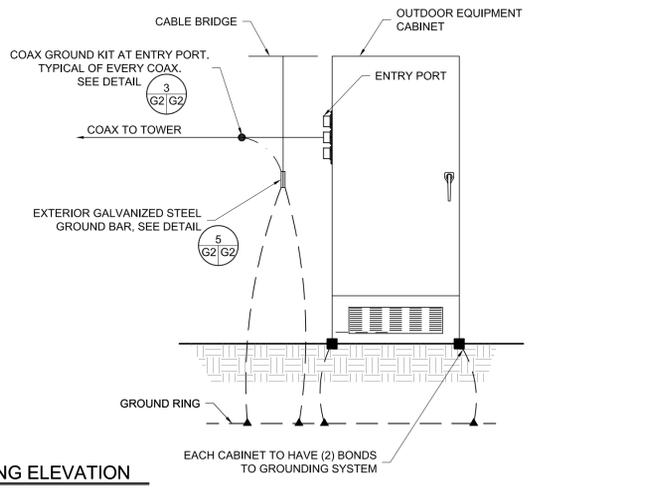
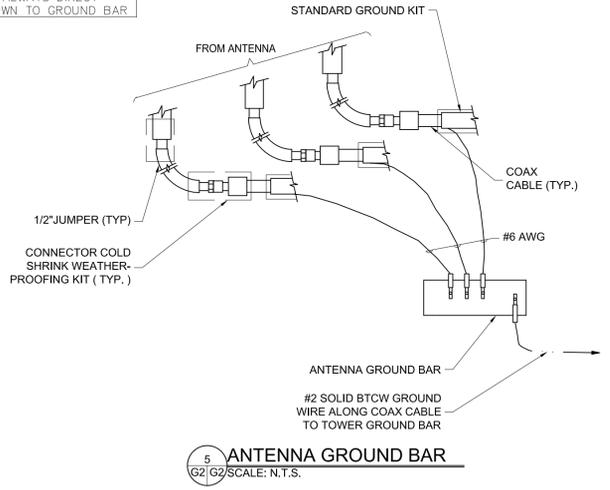
GROUNDING SCHEMATIC DETAILS
SCALE: N.T.S.



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

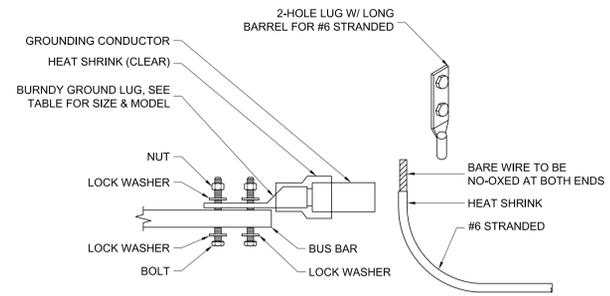
TYPICAL CADWELD & COMPRESSION CONNECTION DETAILS

NOTE:
DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR



- NOTES:**
- ALL HARDWARE BOLTS, NUTS & LOCK WASHERS SHALL BE STAINLESS STEEL. CONNECTIONS SHALL BE BOLT, LOCK WASHER, BUS BAR, LUG & LOCK WASHER, IN THAT ORDER.
 - CONNECTIONS TO STEEL SHALL HAVE A THOMAS & BETTS IDTW DRAGON TOOTH TRANSITION WASHER BETWEEN THE LUG, & STEEL. THE ORDER OF STEEL CONNECTIONS SHALL BE BOLT, LOCK WASHER, STEEL, DRAGON TOOTH WASHER, LUG, LOCK WASHER, NUT.
 - KOPER SHIELD, ANTIOX, CR NO-OX, OR EQUIVALENT IS TO BE PLACED WHERE ALL DISSIMILAR METALS CONNECT.

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6	YA6C-2TC38	3/8"-16 NC S 2-BOLT
#2 AWG SOLID	YA3C-2TC38	3/8"-16 NC S 2-BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8"-16 NC S 2-BOLT
#2/0 AWG	YA26-2TC38	3/8"-16 NC S 2-BOLT
#4/0 AWG	YA28-2N	1/2"-16 NC S 2-BOLT



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DESIGNED FOR:
CSP HIGBY (ALT A)
NEW 70'-0" MONOPINE
(OVERALL HEIGHT: 75'-0" A.G.L.)
RAWLAND COMMUNICATION SITE

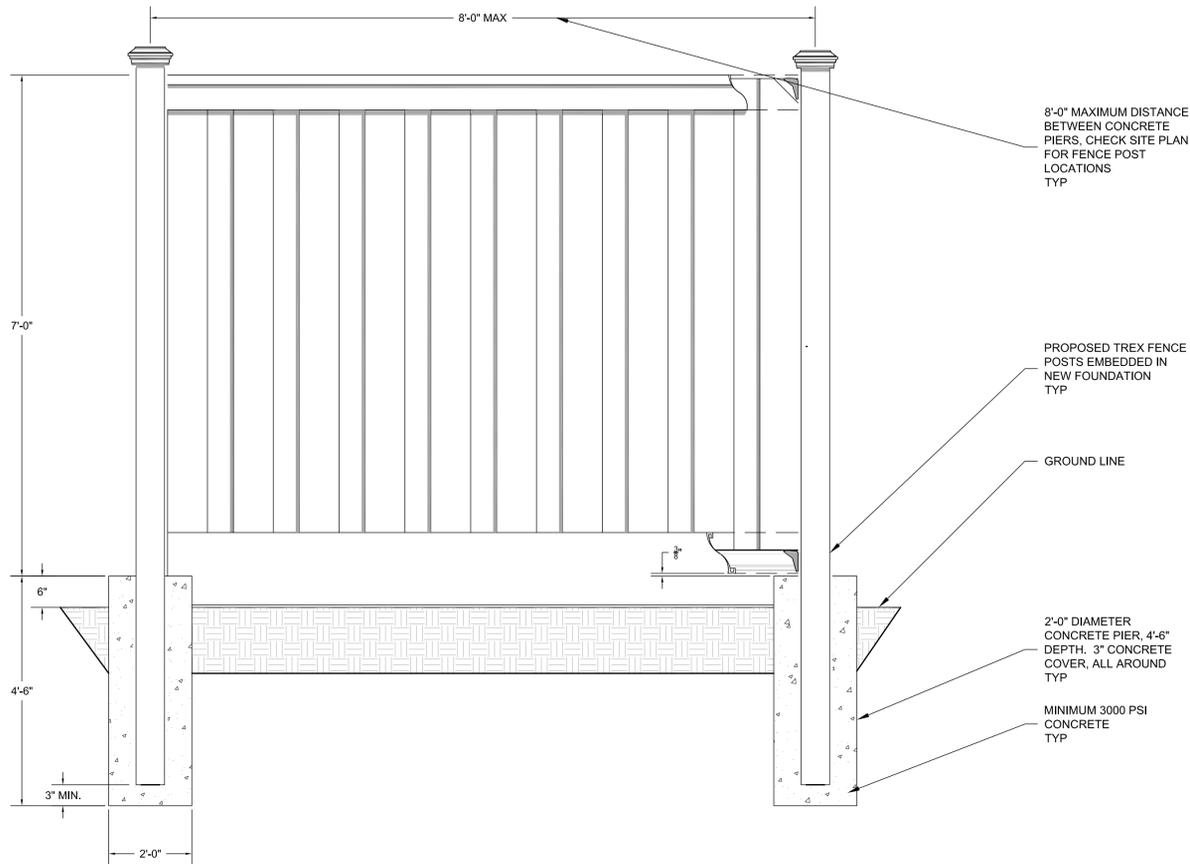
PROJECT ADDRESS:
1480 EAST HIGBY ROAD
MONUMENT, COLORADO 80132
EL PASO COUNTY

SHEET TITLE:
GROUNDING DETAILS

REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY - NOT FOR CONSTRUCTION	08/27/20	SB	LRP

SAVE DATE: 1/2/2020 8:39 AM SHEET NUMBER: G2

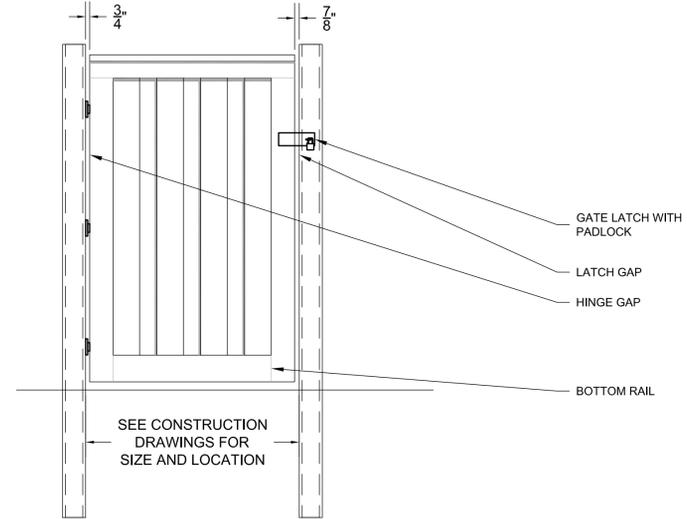
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1 FENCE (ELEVATION)
S-1 N.T.S.

NOTES:

1. INSTALLATION TO BE COMPLETED PER MANUFACTURER'S SPECIFICATION.
2. THIS DRAWING IS PROVIDED FOR PLANNING PURPOSES. REFER TO MANUFACTURER'S INSTALLATIONS FOR CONSTRUCTION DETAILS.
3. REFER TO MANUFACTURER'S WEBSITE FOR PRODUCT INFORMATION.
4. DRAWING NOT TO SCALE.



2 FENCE GATE
S-1 N.T.S.

NOTES:

1. INSTALLATION TO BE COMPLETED PER MANUFACTURER'S SPECIFICATION.
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3. REFER TO MANUFACTURER'S WEBSITE FOR PRODUCT INFORMATION.
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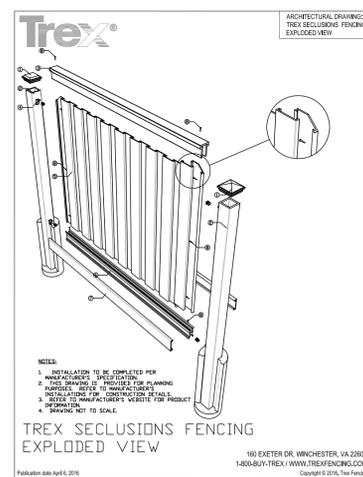
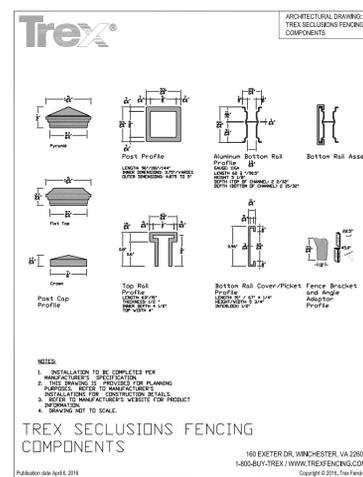
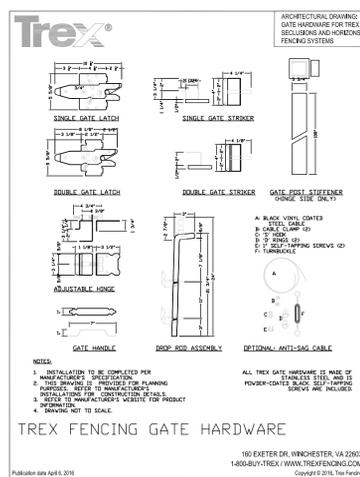
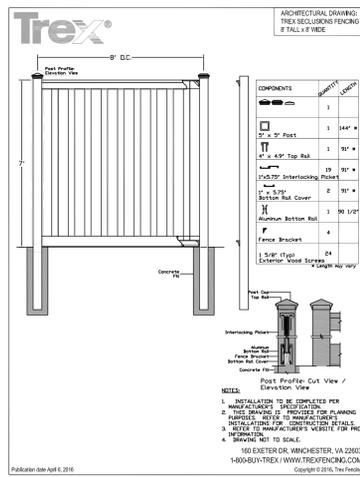
GENERAL STRUCTURAL NOTES:

1. DESIGN INFORMATION AND GENERAL REQUIREMENTS

- 1.1 CODES**
- a. DESIGN TO CONFORM TO 2017 PIKES PEAK REGIONAL BUILDING CODE AND 2015 INTERNATIONAL BUILDING CODE, W/ LOCAL AMENDMENTS.
 - b. AMERICAN CONCRETE INSTITUTE (ACI), BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE 318.
 - c. ALL DESIGNS SHOULD CONFORM TO ABOVE CODES AND ARE CERTIFIED BY A STRUCTURAL ENGINEER.

- 1.2 LOADS**
- WIND LOAD SHALL BE 130 MPH ULTIMATE BASED ON PIKES PEAK REGIONAL BUILDING CODE.

- 1.3 MISCELLANEOUS**
- a. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH THE WORK.
 - b. REFER TO STRUCTURAL ANALYSIS FOR CHECK OF PROPOSED CONCRETE PIERS.
 - c. ALL MEANS AND METHODS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO REQUIRED CODES AND NOTES WITHIN THIS CONSTRUCTION SET.



PROJECT #: DK19-0338

REVISION SCHEDULE

REV	DATE	BY	DESCRIPTION
0	12-30-2019	DR	FENCE DRAWINGS

REV	DATE	BY	DESCRIPTION

DRAWING TITLE:

FENCE AND FOUNDATION

DRAWING SHEET:

S-1

SHEET NUMBER:

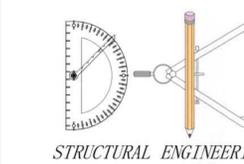
1 OF 1

SITE INFORMATION:

SITE NAME:
CSP HIGBY

SITE ADDRESS:
1480 EAST HIGBY ROAD,
MONUMENT, CO 80132

JURISDICTION:
PIKES PEAK REGIONAL
BUILDING DEPARTMENT



STRUCTURAL ENGINEERING
5023 W. 120TH AVE SUITE #110
BROOMFIELD, COLORADO 80020
PH: (972) 839-4522
PM@DKSTRUCTURAL.COM

DANIEL F. RECKERT, P.E.
COLORADO PROFESSIONAL ENGINEER
LICENSE # 52731 (EXP. 10/31/2021)

EXISTING
 WALL HATCH
 NEW WORK/
 UTILITY EASEMENT
 ACCESS/UTILITY
 EASEMENT
 HYBRID CABLE/COAX
 DC POWER
 FIBER
 ANTENNAS
 RRH/BBU
 LEASE AREA
 EXISTING
 EASEMENT
 PENETRATIONS

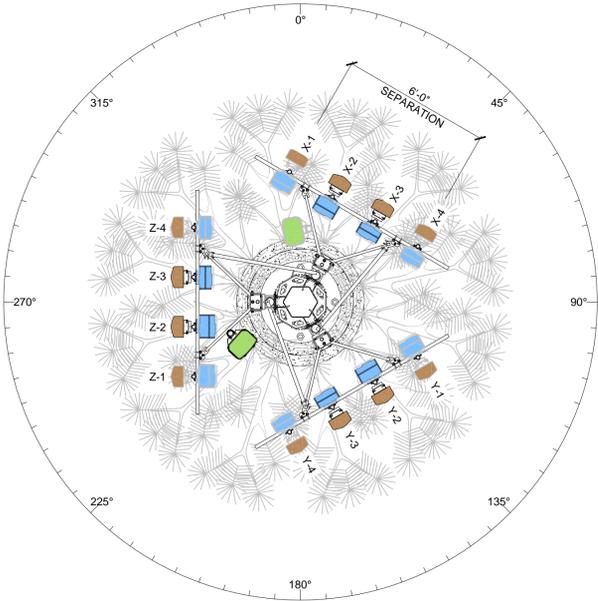
PCD FILE NUMBER PPR-20-022

NEW VERIZON ANTENNA SCHEDULE:

ATTACH LEVEL (COR)	AZIMUTHS (DEG., MN)	ANTENNA TYPE	ANTENNA QUANTITY	MOUNT TYPE	COAX (QUANTITY) SIZE (NOMINAL)	ESTIMATED COAX CABLE LENGTH	MECHANICAL DOWN TILT
65'-0"	30° 150°	ANDREW NHH-65C-R2B 6' PANEL ANTENNA	4	SEE ANTENNA MOUNT SCHEDULE	(1) LOW INDUCTANCE HYBRID CABLES (NEW)	SEE PLUMBING DIAGRAM	-
	270°	COMMSCOPE NHH-65B-R2B 6' PANEL ANTENNA	2				
	30° 150° 270°	6' PANEL ANTENNA	6 (FUTURE)				

NOTES:

- FOR EXACT ANTENNA INFORMATION REFER TO THE RF DESIGN.
- ALL NEW COAX SHALL BE INSTALLED ON INSIDE OF NEW MONOPINE.
- CONTRACTOR TO INSTALL DIPLEXERS IN SHELTER AND ON TOWER AS REQUIRED BY RF DESIGN (IF APPLICABLE).
- NEW AND/OR FUTURE VERIZON MICROWAVES NOT SHOWN FOR CLARITY.



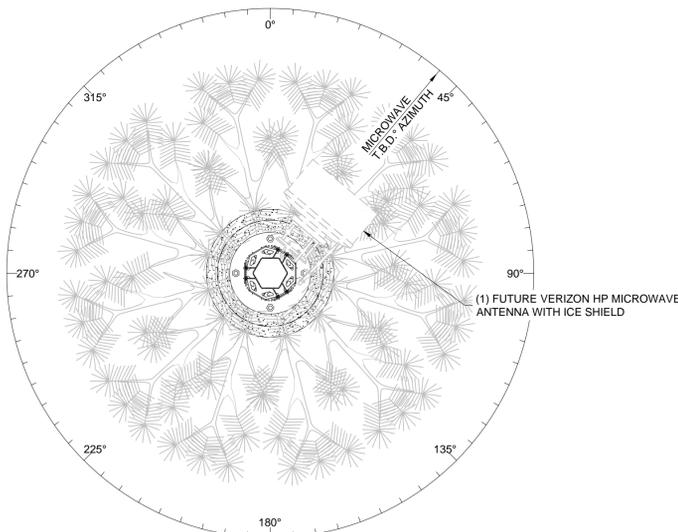
ANTENNA SECTION @ 65'-0"
SCALE: N.T.S.

FUTURE VERIZON MICROWAVE SCHEDULE:

ATTACH LEVEL (COR)	AZIMUTHS (DEG., TN)	ANTENNA TYPE	ANTENNA QUANTITY	MOUNT TYPE	COAX (QUANTITY) SIZE (NOMINAL)	ESTIMATED COAX CABLE LENGTH	FACING
54'-0"	T.B.D.	4'-0" HP MICROWAVE	1	SEE ANTENNA MOUNT SCHEDULE	T.B.D.	T.B.D.	T.B.D.

NOTES:

- FOR EXACT MICROWAVE INFORMATION REFER TO THE MICROWAVE DESIGN.



MICROWAVE SECTION @ T.B.D.
SCALE: N.T.S.

ANTENNA COLOR CODES (CELL SITE COAX LABELING)

ANTENNA FUNCTION	ANTENNA SECTOR					
	X		Y		Z	
	FIRST STRIPE	SECOND STRIPE	FIRST STRIPE	SECOND STRIPE	FIRST STRIPE	SECOND STRIPE
800 VOICE	WHITE/RED	WHITE/YELLOW	BLUE/RED	BLUE/YELLOW	GREEN/RED	GREEN/YELLOW
800 EVDO	WHITE/2 RED	WHITE/2 YELLOW	BLUE/2 RED	BLUE/2 YELLOW	GREEN/2 RED	GREEN/2 YELLOW
800 LTE	WHITE/3 RED	WHITE/3 YELLOW	BLUE/3 RED	BLUE/3 YELLOW	GREEN/3 RED	GREEN/3 YELLOW
1900 EVDO	PURPLE/RED	PURPLE/YELLOW	ORANGE/RED	ORANGE/YELLOW	BROWN/RED	BROWN/YELLOW
1900 VOICE	PURPLE/2 RED	PURPLE/2 YELLOW	ORANGE/2 RED	ORANGE/2 YELLOW	BROWN/2 RED	BROWN/2 YELLOW

NOTICE:

- CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.

ANTENNA COLOR CODE:

ANTENNA FUNCTION	COLOR
CDMA-800 B-BAND	RED
CDMA-800 A-BAND	WHITE
PCS-1900	YELLOW
LTE-700	PURPLE

ANTENNA SECTOR

X	GREEN
Y	ORANGE
Z	BROWN

ANTENNA MOUNT SCHEDULE:

QUANTITY	DESCRIPTION	PART NUMBER(S)
1	10'-6" FACE, SECTOR FRAME • (2) RING MOUNTS • (12) 96" PIPES • (3) SECTOR FRAMES • PIPE MOUNTS • STIFF ARM	MCG23HD-10M-12-96

NOTE: ALL PRODUCTS ARE FROM "COMMSCOPE, INC OF NORTH CAROLINA" WWW.COMMSCOPE.COM

GENERAL ANTENNA NOTES:

- DUAL POLAR ANTENNAS REQUIRE TWO RUNS OF COAX PER ANTENNA.
- LENGTHS GIVEN ON THIS CHART ARE ESTIMATED FROM AVAILABLE INFORMATION.
- TYPES AND SIZES OF THE ANTENNA CABLES ARE BASED ON THE ESTIMATED LENGTH OF THE CABLES. CONTRACTOR TO VERIFY ALL ACTUAL LENGTHS IN FIELD PRIOR TO INSTALLATION AND NOTIFY THE FIELD ENGINEER FOR VERIFICATION OF SIZES OF CABLES.
- CONTRACTOR TO PROVIDE AS BUILT FOR THE LENGTH OF CABLES UPON COMPLETION OF INSTALLATION.
- CONTRACTOR TO PROVIDE FINAL CABLE LENGTHS AND RETURN LOSSES FOR ALL CABLES.
- ALL AZIMUTHS REFERENCE TRUE NORTH. CONSULT REQUIRED QUADRANGLE MAP FOR NECESSARY MECHANICAL DECLINATION.

DIAGRAM ABBREVIATIONS:

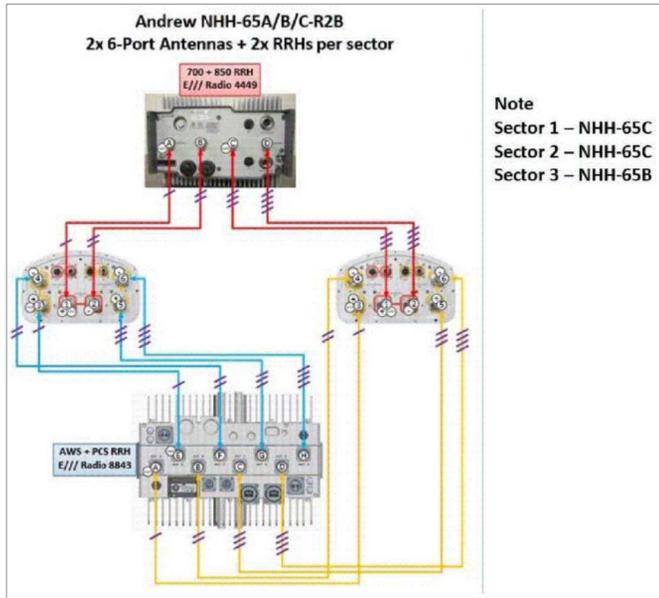
T.O.M.=	TOP OF MONOPINE
O.E.C.=	OUTDOOR EQUIPMENT CABINET
RRH=	REMOTE RADIO HEAD
PDF=	POWER DISTRIBUTION FRAME
LTE=	LTE PANEL ANTENNA
AWS=	AWS PANEL ANTENNA
PCS=	PCS PANEL ANTENNA

NEW HYBRID CABLE LENGTHS:

FROM (MAIN OVP) TO (MAIN OVP)				
SECTOR	CABLE/COAX SIZE (NOMINAL)	CABLE/COAX (QUANTITY)	ESTIMATED CABLE/COAX LENGTH	
-	HYB 6X12	1	-105'	
-	HYB 6X12	1	-105'	

FROM (MAIN OVP) TO (RRH)				
SECTOR	CABLE/COAX SIZE (NOMINAL)	CABLE/COAX (QUANTITY)	ESTIMATED CABLE/COAX LENGTH	
X	HYB 1X1	1	-12'	
	HYB 1X1	1	-12'	
	HYB 1X1	1	-12'	
Y	HYB 1X1	1	-13'	
	HYB 1X1	1	-13'	
	HYB 1X1	1	-13'	
Z	HYB 1X1	1	-12'	
	HYB 1X1	1	-12'	
	HYB 1X1	1	-12'	

FROM (RRH) TO (ANTENNAS)				
SECTOR	CABLE/COAX SIZE (NOMINAL)	CABLE/COAX (QUANTITY)	ESTIMATED CABLE/COAX LENGTH	
X	1/2" Ø	16	CUT TO FIT	
	1/2" Ø	16	CUT TO FIT	
	1/2" Ø	16	CUT TO FIT	
Y	1/2" Ø	16	CUT TO FIT	
	1/2" Ø	16	CUT TO FIT	
	1/2" Ø	16	CUT TO FIT	
Z	1/2" Ø	16	CUT TO FIT	
	1/2" Ø	16	CUT TO FIT	
	1/2" Ø	16	CUT TO FIT	



RRH HYBRID CABLE DIAGRAM AND CHART
SCALE: N.T.S.

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DESIGNED FOR:

3131 SOUTH VAUGHN WAY, SUITE 550
AURORA, COLORADO 80014

DESIGNED BY:

PROJECT NAME: CSP HIGBY (ALT A)
NEW 70'-0" MONOPINE
(OVERALL HEIGHT: 75'-0" A.G.L.)
RAWLAND COMMUNICATION SITE

PROJECT ADDRESS: 1480 EAST HIGBY ROAD
MONUMENT, COLORADO 80132
EL PASO COUNTY

SHEET TITLE: ANTENNA INFORMATION & RRH HYBRID CABLE DIAGRAM & CHART

REV	DESCRIPTION	DATE	BY	CHK
0	APPROVED FOR LEASING & ZONING	08/28/20	MKR	-

SAVE DATE: 8/28/2020 3:11 PM SHEET NUMBER: RF1

APPROVED FOR LEASING/ZONING