



WY1 CANYON VILLAGE

GRAND LOOP ROAD
YELLOWSTONE NATIONAL PARK, WYOMING 89190
PARK COUNTY

ALT #1
RAW LAND

RF DESIGN REQUIRED TO
COMPLETE DRAWING SET



ADAMS & CLARK INC.
1720 W. FOURTH AVE.
SPOKANE, WA 99201
PH. (509) 747-4600 FAX. (509) 747-8913

A&C PROJECT # 2015-01-028

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DIRECTOR _____

REVISIONS

1	12/09/16	PRELIMINARY CD
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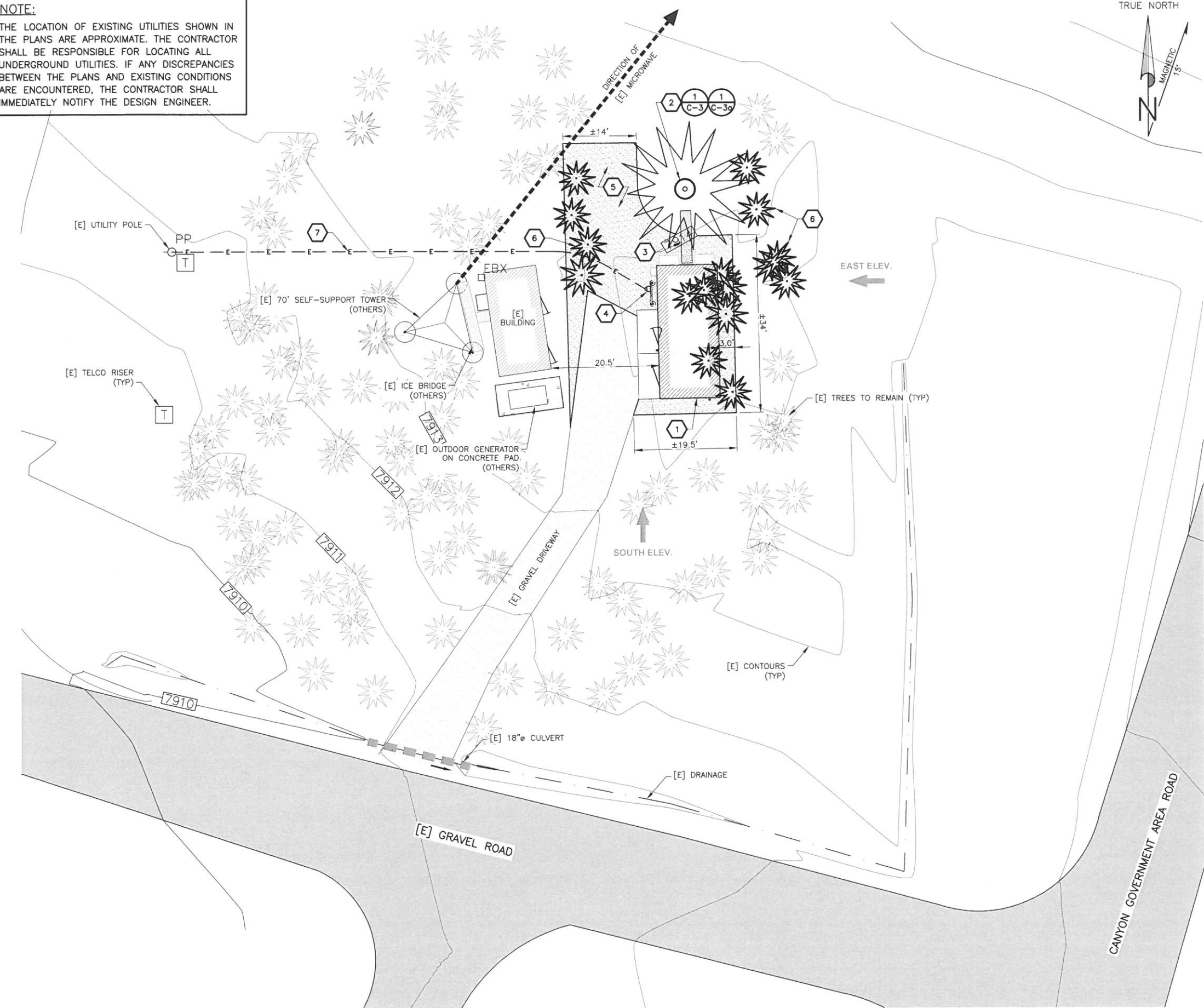
SITE
ALT #1
WY1 CANYON VILLAGE
YELLOWSTONE NATIONAL PARK, WY

SHEET TITLE
TITLE SHEET

T-1

PROJECT DATA	SHEET INDEX	PROJECT LOCATION	PROJECT DESCRIPTION
<p>SITE NUMBER: ALT #1</p> <p>SITE NAME: WY1 CANYON VILLAGE</p> <p>SITE ADDRESS: SEC. -, T-N, R-E, P.M.M. GRAND LOOP ROAD YELLOWSTONE NATIONAL PARK, WYOMING 89190 PARK COUNTY</p> <p>PARCEL NUMBER: NONE</p> <p>GEOCODE: -</p> <p>CURRENT ZONING: UNZONED</p> <p>JURISDICTION: YELLOWSTONE NATIONAL PARK</p> <p>PROPERTY OWNER: NATIONAL PARK SERVICE - US DEPARTMENT OF INTERIOR</p> <p>CONTACT: BRET DE YOUNG / (406) 581-2617</p> <p>APPLICANT: VERIZON WIRELESS</p> <p>3131 S VAUGHN WAY STE 550 AURORA, CO 80014-3683</p> <p>REAL ESTATE CONTACT: DEREK BUDIG / (509) 939-6202</p> <p>CONSTRUCTION CONTACT: VERIZON WIRELESS KENT McDERMOTT / (406) 238-0008</p> <p>POWER: TBD</p> <p>TELEPHONE: TBD</p> <p>SITE DATA:</p> <p>REFERENCE MAP:</p>	<p>SHT. NO. SHEET TITLE REV. NO.</p> <p>T-1 TITLE SHEET A</p> <p>C-2 SITE PLAN A</p> <p>C-3 SOUTH ELEVATION A</p> <p>C-3o EAST ELEVATION A</p> <p>C-4 ANTENNA PLAN AND DETAILS A</p>	<p><u>DRIVING DIRECTIONS:</u></p> <p>FROM WEST YELLOWSTONE ENTRANCE, FOLLOW ENTRANCE ROAD 0.4 MILES; LEFT ON GRAND LOOP ROAD AND FOLLOW 14 MILES TO MADISON; LEFT ON NORRIS CANYON ROAD AND GO 26 MILES TO CANYON JUNCTION. JUST BEFORE CANYON JUNCTION TURN LEFT ON CANYON GOVERNMENT AREA ROAD FOR 0.26 MILES; LEFT ON GRAVEL ROAD TOWARD MAINTENANCE BUILDING; RIGHT ON GRAVEL DRIVEWAY TO EXISTING CELL SITE.</p> <p>MAINTENANCE BUILDING</p> <p>CANYON GOVERNMENT AREA RD</p> <p>WEST ENTRANCE</p> <p>NORRIS CANYON RD</p> <p>CANYON JUNCTION</p> <p>GRAND LOOP RD</p> <p>CANYON VILLAGE</p> <p>POST OFFICE</p> <p>CAMPGROUND OFFICE</p> <p>N RIM DR</p> <p>VICINITY MAP NOT TO SCALE</p> <p>N</p>	<p>TOWER TYPE: MONOPINE</p> <p>HT. OF ANTENNA SUPPORT STR.: 90' WITH 5' LIGHTNING ROD</p> <p>EQUIPMENT TYPE: BASE STATION</p> <p>SECTOR(S): (1)</p> <p>EQUIPMENT BUILDING: 25'-5 1/2" x 11'-6" PREFAB SHELTER, DIESEL GENERATOR RIGHT</p> <p>APPROVALS</p> <p>LANDLORD _____</p> <p>LEASING _____</p> <p>R.F. _____</p> <p>ZONING _____</p> <p>CONSTRUCTION _____</p> <p>A&E _____</p>

NOTE:
THE LOCATION OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. IF ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER.



CALL BEFORE YOU DIG (800) 424-5555

PROPOSED CONSTRUCTION KEYED NOTES

- 11'-6" x 25'-5 1/2" EQUIPMENT BUILDING WITH FOUNDATION, DIESEL GENERATOR RIGHT
- 90' MONOPINE WITH FOUNDATION
- 2' WIDE ICE BRIDGE, APPROX 10' LONG
- POWER METER ON H-FRAME
- EXTEND GRAVEL SURFACE, MIN. 3' AROUND [P] VZW EQUIPMENT SHELTER TO [E] GRAVEL DRIVEWAY
- REMOVE (16) [E] TREES
- POWER SERVICE FROM [E] UTILITY POLE

SYMBOLS AND ABBREVIATIONS

- | | |
|---------|------------------------|
| —E— | POWER LINE |
| —T— | TELEPHONE LINE |
| —OU— | OVERHEAD UTILITY LINE |
| —GAS— | UNDERGROUND GAS LINE |
| —W— | UNDERGROUND WATER LINE |
| —X—X—X— | FENCE LINE |
| [E] | EXISTING |
| [P] | PROPOSED |
| SST | SELF-SUPPORTING TOWER |
| ○ | UTILITY POLE |
| ↑ | GUY ANCHOR |
| ⊕ | LUMINAIRE |
| ▒ | ASPHALT |
| ▒ | CONCRETE |
| ▒ | BUILDING |
| ⊗ | DETAIL NUMBER |
| ⊗ | SHEET NUMBER |

SITE NOTES



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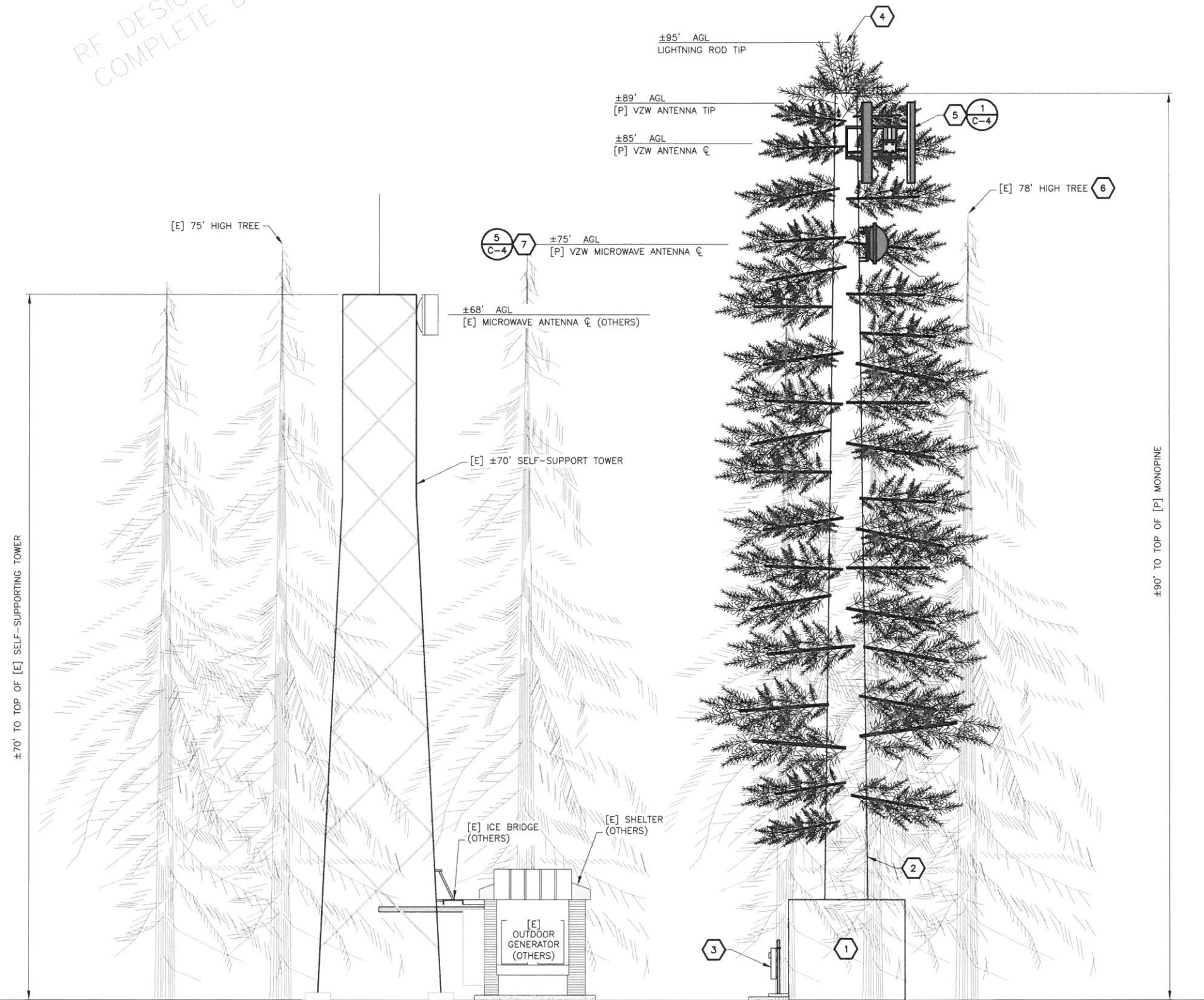
SITE
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WY1 CANYON VILLAGE
YELLOWSTONE NATIONAL PARK, WY

SHEET TITLE
**OVERALL SITE PLAN
AND SITE PLAN**

C-2

RF DESIGN REQUIRED TO
COMPLETE DRAWING SET

MONOPINE AND ANTENNA COLORS
TO MATCH ADJACENT PINE TREES



1 SOUTH ELEVATION
C-3 SCALE: NTS

PROPOSED CONSTRUCTION KEYED NOTES

- 11'-6" x 25'-5 1/2" EQUIPMENT BUILDING WITH FOUNDATION, DIESEL GENERATOR RIGHT
- 95' MONOPINE WITH FOUNDATION
- POWER METER ON 4" H-FRAME
- 5' LIGHTNING ROD
- CELLULAR ANTENNAS WITH PINE NEEDLE SLEEVES
- REMOVE (16) TREES AS SHOWN ON PLAN VIEW
- MICROWAVE ANTENNA, PAINTED TO MATCH ADJACENT PINE TREES (HEIGHT AND AZIMUTH TBD)

SYMBOLS AND ABBREVIATIONS

—E—	POWER LINE
—T—	TELEPHONE LINE
—OU—	OVERHEAD UTILITY LINE
—GAS—	UNDERGROUND GAS LINE
—W—	UNDERGROUND WATER LINE
—X—X—X—	FENCE LINE
[E]	EXISTING
[P]	PROPOSED
SST	SELF-SUPPORTING TOWER
○	UTILITY POLE
←	GUY ANCHOR
⊕	LUMINAIRE
▒	ASPHALT
▒	CONCRETE
▒	BUILDING
⊗	DETAIL NUMBER
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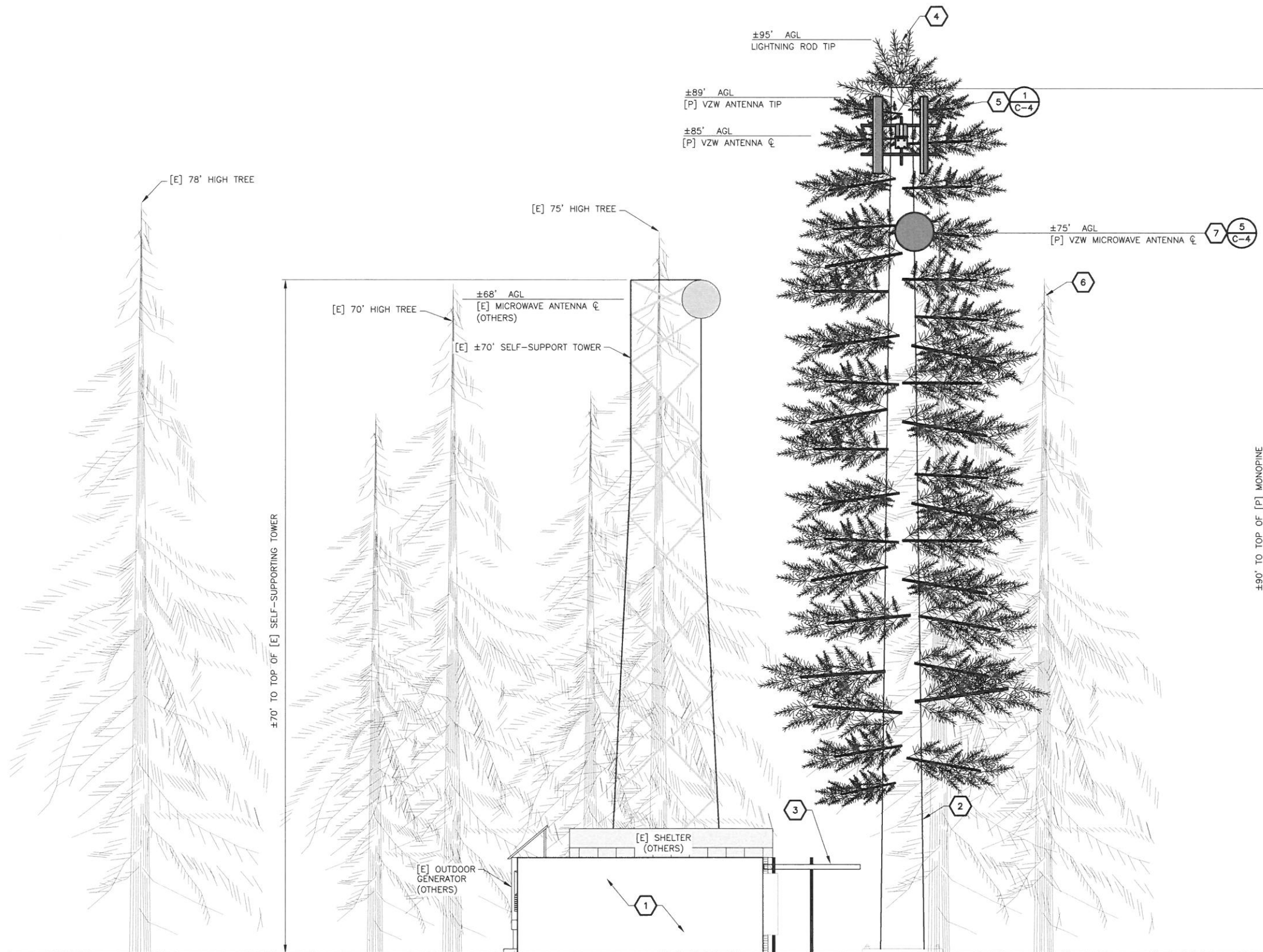
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WY1 CANYON VILLAGE
YELLOWSTONE NATIONAL PARK, WY

SHEET TITLE
SOUTH ELEVATION

C-3



1 EAST ELEVATION
C-3a SCALE: NTS

PROPOSED CONSTRUCTION KEYED NOTES

- 11'-6" x 25'-5 1/2" EQUIPMENT BUILDING WITH FOUNDATION, DIESEL GENERATOR RIGHT
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SYMBOLS AND ABBREVIATIONS

—E—	POWER LINE
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[E]	EXISTING
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SST	SELF-SUPPORTING TOWER
⊙	UTILITY POLE
←	GUY ANCHOR
⊙	LUMINAIRE
▒	ASPHALT
▒	CONCRETE
▒	BUILDING
⊙ X-X	DETAIL NUMBER SHEET NUMBER

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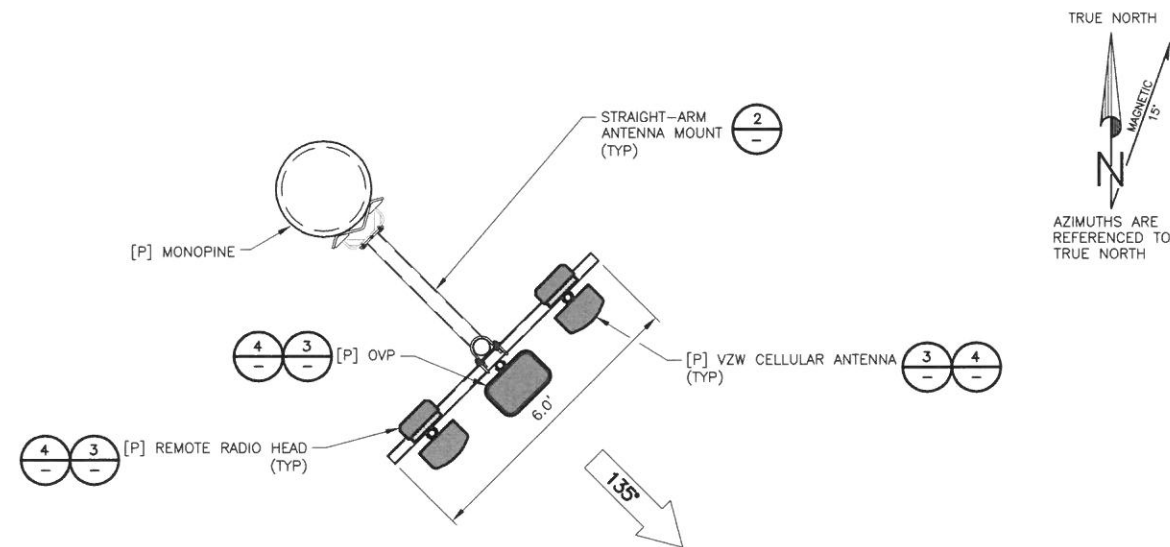
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SHEET TITLE
EAST ELEVATION

C-3a



1 ANTENNA PLAN
C-4 SCALE: NTS

PROPOSED ANTENNA AND COAXIAL CABLE SCHEDULE											
SECTOR /TYPE	ANTENNA TYPE	QTY	ANTENNA	VENDOR	AZIMUTH TN	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	RAD CENTER	CABLE LENGTH	COAXIAL CABLE	COAX QTY
ALPHA	850 MHz	-	-	-	-	-	-	-	-	-	-
	PCS	-	-	-	-	-	-	-	-	-	-
	700 LTE	1	SBNHH-1D65C	AMPHENOL	135°	0°	0°	85'	±110'	HYBRIFLEX	1
MW	AWS LTE	1	SBNHH-1D65C	AMPHENOL	135°	0°	0°	85'	-	-	-
	TBD	1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	1
GPS	RX0	2	GPS-26dB	NORTEL	180°	-	-	TBD	TBD	1/2"	2

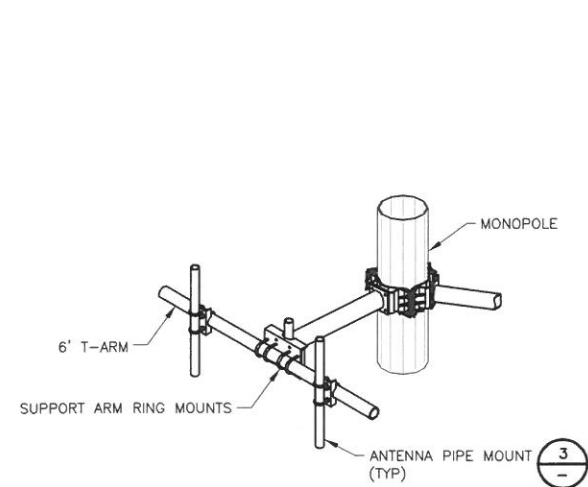
ADDITIONAL EQUIPMENT		QTY	DESCRIPTION
AWS	REMOTE RADIO HEAD	2	TWO PER SECTOR
	OVP	2	(1) MOUNTED IN EQUIPMENT BUILDING; (1) MOUNTED NEAR ANTENNA @ AT 86' AGL.
	HYBRIFLEX	1	RUN FROM OVP IN EQUIPMENT BUILDING TO OVP NEAR ANTENNA @, LENGTH = ±110 FT.

NOTES:
1. ALL ANTENNAS TO BE FURNISHED WITH DOWNTILT BRACKETS.
2. REFER TO VERIZON WIRELESS DESIGN BOOK FOR FINAL ANTENNA SPECIFICATIONS, AZIMUTHS, AND MECHANICAL DOWNTILT ANGLES.

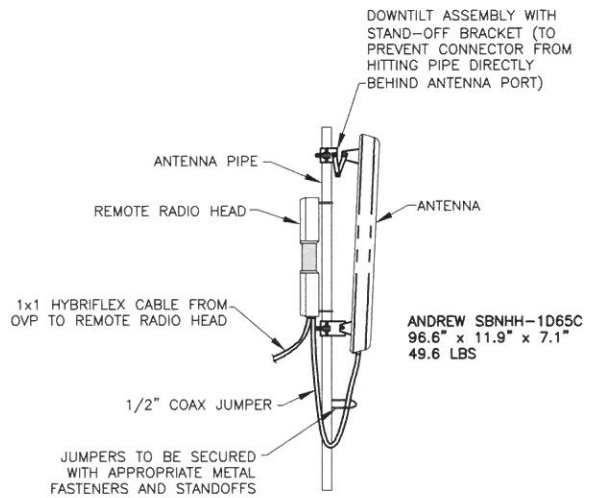
HYBRIFLEX CABLE BEND TABLE						
CABLE SIZE	ROSENBERGER SITE SOLUTIONS CABLE TYPE #	MFR MIN BEND RADIUS	JACKET O.D.	CABLE TO CABLE SPACING	MAX VRT HANGER SPACING	MAX HOR HANGER SPACING
6x12	HCH-6624XXX*	22.11"	1.474"	1-1/2"	4'-0"	3'-0"
6x12	HL-9612XXX*	22.39"	1.493"	1-1/2"	4'-0"	3'-0"

* XXX TO SPECIFY CABLE LENGTH (i.e. HCH-6624505Q IS A 50 FT. CABLE)
NOTE: FOR TYP. CLIMATES W/ 125 MPH WINDS - 1/2" ICE CONDITIONS; SEE MANUFACTURER'S SPECIFICATIONS FOR VARIANCES

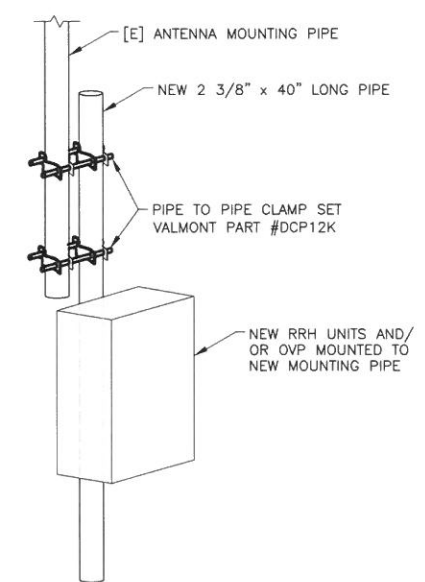
GENERIC ANTENNAS USED
UPDATE ANTENNAS ONCE RF
DESIGN IS COMPLETED



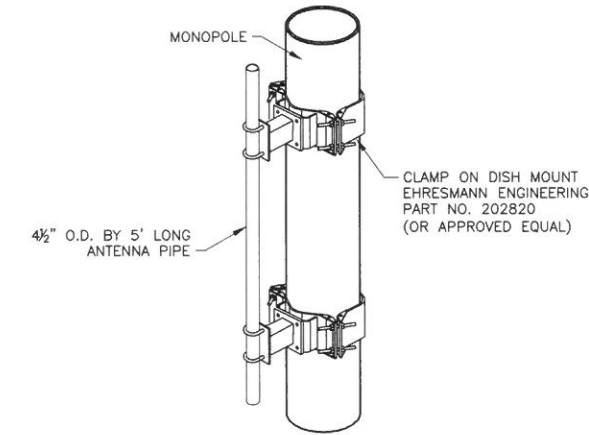
2 STRAIGHT-ARM ANTENNA SUPPORT
C-4 SCALE: NTS



3 PANEL ANTENNA W/ RRH MOUNT
C-4 SCALE: NTS



4 RRH/OVP MOUNT
C-4 SCALE: NTS



5 MICROWAVE PIPE MOUNT
C-4 SCALE: NTS



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SHEET TITLE
**ANTENNA PLAN
AND DETAILS**

C-4