



L600 PROJECT

Upload aerial map as vicinity map

SITE ADDRESS:

509 WIDEFIELD DRIVE
COLORADO SPRINGS, CO 80911



T-MOBILE WEST LLC
1840 EAST 22ND AVENUE
AURORA, CO 80011

PLANS PREPARED BY:
INFINIGY8
ENGINEERING, PLLC
1400 W. 121ST AVENUE, SUITE 101
WESTMINSTER, COLORADO 80234
JOB NUMBER: 317-701



SCALE PARTNER

ENGINEERING LICENSE

REVISIONS NOTICE: THESE DRAWINGS ARE CONFIDENTIAL AND ARE THE PROPERTY OF INFINIGY8 AND ANYONE WHO REPRODUCES, DISSEMINATES OR REDISTRIBUTES WITHOUT THE EXPRESS WRITTEN CONSENT OF INFINIGY8.

NO.	DESCRIPTION	DATE	BY	REV
1	ISSUED FOR CONSTRUCTION	02/27/20	SD	1
2	ISSUED FOR CONSTRUCTION	02/27/20	SD	2
3	ISSUED FOR CONSTRUCTION	02/27/20	SD	3
4	ISSUED FOR CONSTRUCTION	02/27/20	SD	4
5	ISSUED FOR CONSTRUCTION	02/27/20	SD	5
6	ISSUED FOR CONSTRUCTION	02/27/20	SD	6

WIDEFIELD - ATC

T-MOBILE SITE #
DN041666

SITE ADDRESS
370609

SHEET RESUBSCRIPTION
509 WIDEFIELD DRIVE
COLORADO SPRINGS, CO 80911

TITLE SHEET &
PROJECT DATA

SHEET NUMBER
T-1

SCOPE OF WORK

THE SCOPE OF WORK WORK CONSISTS OF:

1. REMOVE (3) EXISTING PANEL ANTENNAS
2. REMOVE (3) EXISTING FRBG & (3) EXISTING FHRB
3. INSTALL (6) NEW PANEL ANTENNAS
4. REUSE (2) EXISTING COVERS (1) AT GROUND LEVEL & (1) AT MOUNT
5. REUSE (3) EXISTING FRU
6. REMOVE EXISTING (2) JSWF & (3) FHRB FROM EQUIPMENT AT GRADE
7. INSTALL (2) NEW AMODS (2) ASKA, (4) ABFA, (1) ASIK & (1) ABIL
8. INSTALL (3) NEW AHOLA

DRIVING DIRECTIONS

- DRIVING DIRECTIONS FROM T-MOBILE OFFICE AT 18400 E. 22ND AVENUE, AURORA, CO 80011.
1. LEAVE E 22ND AVE TOWARDS TOWER RD
 2. TURN RIGHT ON TO TOWER RD
 3. TURN LEFT ON TO CO-83 N / S ACADEMY BLVD
 4. TURN RIGHT ON TO MAIN ST / S US88587
 5. TURN LEFT ON TO MAIN ST
 6. TURN RIGHT ON TO NORMAN DR
 7. TURN LEFT ON TO WIDEFIELD DR
- ARRIVED @ 509 WIDEFIELD DRIVE, COLORADO SPRINGS, CO 80911.

DESTINATION WILL BE ON THE LEFT
TOTAL TRAVEL ESTIMATE: 82 MI, 1 HR 55 MINUTES

PROFESSIONAL LICENSURE

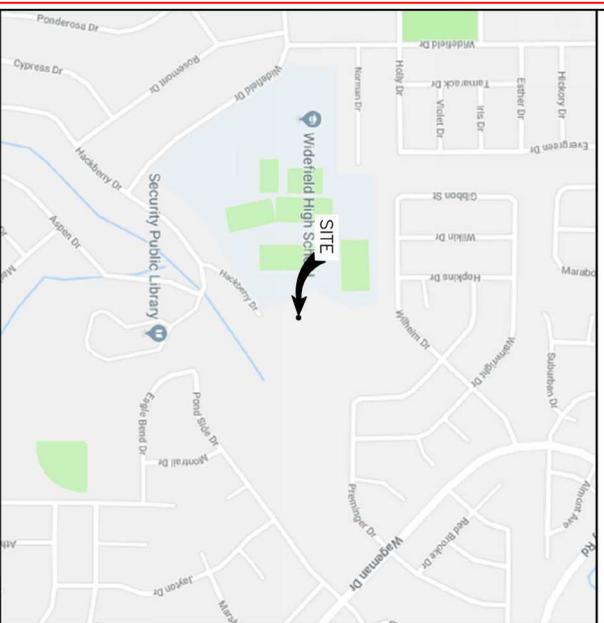
I CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE REQUIREMENTS OF THE GOVERNING LOCAL BUILDING CODE.

LICENSED PROFESSIONAL

SIGNED:

EXPIRES:

AERIAL MAP



SITE



SHEET INDEX

NO.	SHEET DESCRIPTION
T-1	TITLE SHEET
A-1	SITE PLAN
A-1A	CONCRETE REINFORCED EQUIPMENT LAYOUT
A-2	FOUNDATION DETAILS
A-3	ELEVATION DETAILS
A-3A	EXISTING & PROPOSED ANTENNA PLANS
A-4	ANTENNA & CABLE SCHEDULE
A-5	NEW EQUIPMENT SPECIFICATIONS
EG-1	PROPOSED SITE GROUNDING DIAGRAM
SP-1	GENERAL NOTES & SPECIFICATIONS

GENERAL NOTES:

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS AT THE PROJECT SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME. THE SEAL CERTIFIES ONLY THE CIVIL ENGINEERING DESIGN AND RELATED DETAILS SHOWN ON STRUCTURAL DESIGN, AND RELATED DETAILS INCLUDED IN THESE PLANS. FOR SITES WHERE A CRANE IS NECESSARY, THE CONTRACTOR SHALL CONFIRM AN UNOBSTRUCTED ROUTE FOR THE CRANE FROM PUBLIC ROAD TO TOWER SITE PRIOR TO CONSTRUCTION. NO AERIAL OBSTRUCTIONS UNDER FIFTEEN FEET ABOVE GRADE, INCLUDING AERIAL UTILITY LINES, ARE ALLOWED ALONG SAND CRANE ROUTE. GC SHALL CONTACT THE A&E FIRM PRIOR TO BROWLAK AND CONSTRUCTION START TO CONFIRM THAT DRAWINGS ARE THE MOST RECENT SET.

PROJECT INFORMATION

SITE INFORMATION:

LATITUDE: N 38° 45' 17.4" (NAD 83)
LONGITUDE: W 104° 43' 50.0" (NAD 83)
SITE TYPE: MONOPOLE TOWER

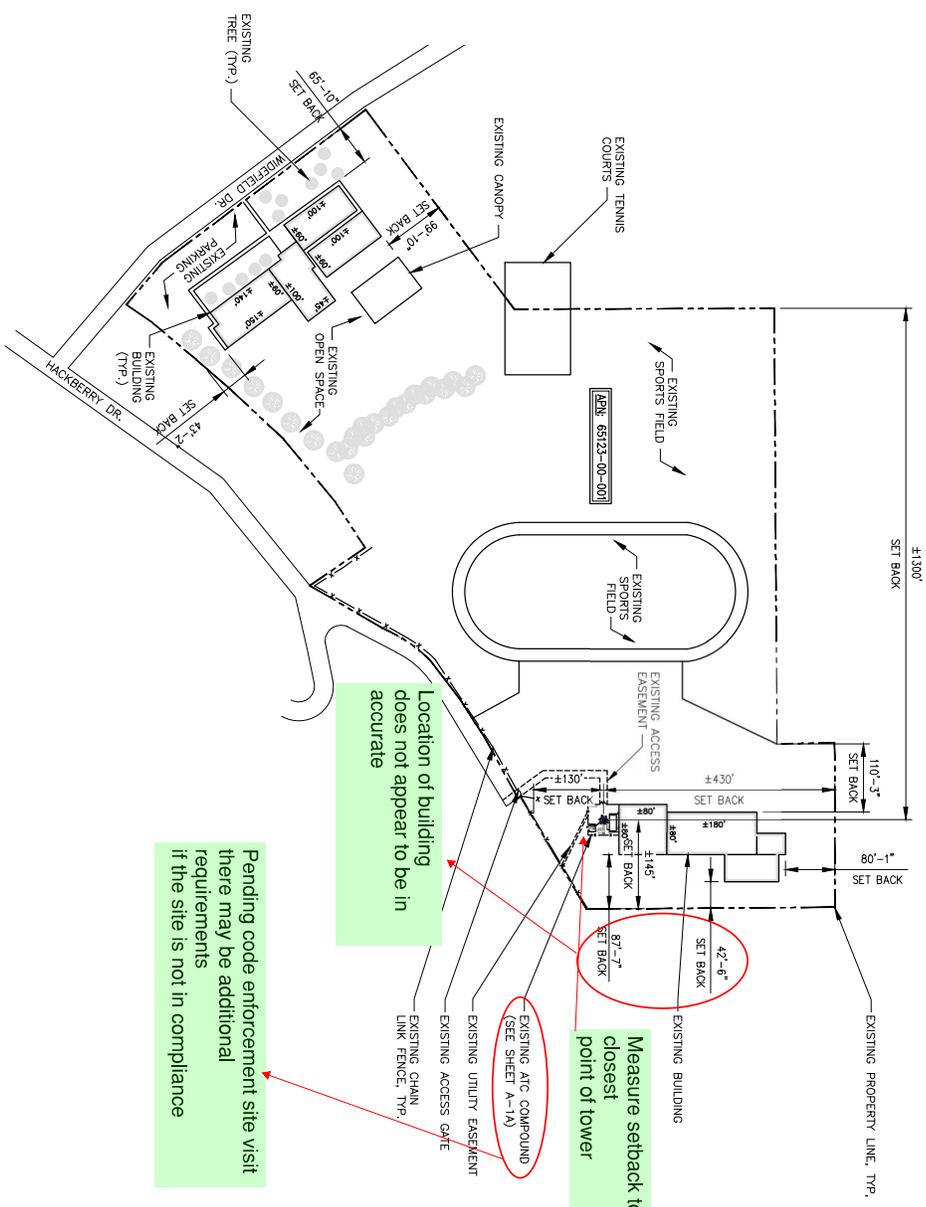
ATC PROJECT MANAGER: HERBERT HAMLIN
herb@infinigy8.com
PHONE: (303) 618-3202
ENGINEERING CONTACT: WESTMINSTER, CO 80234
PHONE: (303) 219-1178
TOWER OWNER: AMERICAN TOWER CORPORATION
1958 COLE BLVD, SUITE 205
LAKEWOOD, CO 80401

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AGENCIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES:

1. INTERNATIONAL BUILDING CODE 2012
2. NATIONAL ELECTRICAL CODE (NEC)
3. INTERNATIONAL BUILDING CODE
4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
5. TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G
6. TIA 607-C COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS



PRR 1928
 WIDEFIELD HS TOWER - 1-MOBILE UPGRADE
 509 WIDEFIELD DR
 WIDEFIELD, CO 80111
 A-5 CUB-0
 TRACTS DEB BY WD 207773, 206551, 441281, A01
 TRACTS DEB BY ASD TRACTS ON THE NE, SECURITY
 TRACTS BY ASD SECUR AND W O C T 12, S4
 SECURITY ADD 10 ON THE NW SW SEC 12, T2, R56



INFORMATION CONTAINED WITHIN DRAWINGS IS
 BASED ON PROVIDED INFORMATION AND IS NOT
 THE RESULT OF A FIELD SURVEY. CONTRACTOR TO
 VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION.

SITE PLAN

225' SCALE 1" = 200'
 115' SCALE 1" = 80'
 0' 50' 100' 150' 200'



PLANS PREPARED FOR: **T-Mobile**
 TANGIWE WEST LLC
 1640 EAST 22ND AVENUE
 AURORA, CO 80011

PLANS PREPARED BY: **INFINIGY8**
ENGINEERING, PLLC
 1400 W. 121st AVE., SUITE 101
 WESTMINSTER, COLORADO 80534
 A/E NUMBER: 317-701

U/LA PARTNER: **AMERICAN TOWER CORPORATION**

ENGINEERING LICENSE: _____
 DRAWING NOTICE:
 THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE PROPERTY OF INFINIGY8 AND SHALL NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF T-MOBILE.

REVISIONS:	DESCRIPTION	DATE	BY	REV
1	ISSUED FOR CONSTRUCTION	02/27/21	CS	0
2	RESUBMITTED FOR CONSTRUCTION	02/27/21	CS	1
3	ISSUED FOR CONSTRUCTION	02/27/21	CS	0

SITE NAME: **WIDEFIELD - ATC**
 T-MOBILE SITE #: **DN04166E**
 ATC SITE #: **370609**
 SITE ADDRESS: **509 WIDEFIELD DRIVE**
COLORADO SPRINGS, CO 80911
 SHEET DESCRIPTION: **SITE PLAN**
 SHEET NUMBER: **A-1**

PLANS PREPARED FOR:



T-MOBILE WEST LLC
18400 EAST 22ND AVENUE
AURORA, CO 80011

PLANS PREPARED BY:



1400 W. 121st AVE., SUITE 101
WESTMINSTER, COLORADO 80234
JOB NUMBER: 317-701

MLA PARTNER:



ENGINEERING LICENSE:

Pending code enforcement site visit
there may be additional
requirements
if the site is not in compliance

REVISIONS:

DESCRIPTION	DATE	BY	REV
RESUBMITTED FOR CONSTRUCTION	02/27/21	TSB	1, 2
ISSUED FOR CONSTRUCTION	02/27/21	TSB	0
ISSUED FOR CONSTRUCTION	02/27/21	TSB	0

SITE NAME: **WIDEFIELD - ATC**

T-MOBILE SITE #: **DN04166E**

ATC SITE #: **370609**

SITE ADDRESS: **509 WIDEFIELD DRIVE
COLORADO SPRINGS, CO 80911**

SHEET DESCRIPTION: **COMPOUND PLAN**

SHEET NUMBER: **A-1A**

225x4 SCALE 1" = 30'
11.25" SCALE 1" = 100'
100' 50' 0' 100'

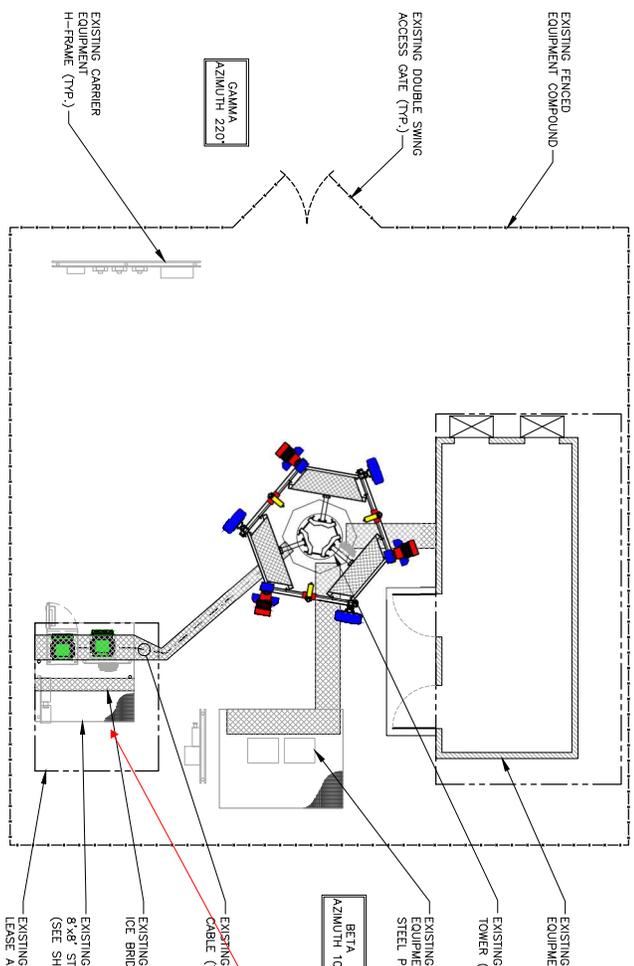


COMPOUND PLAN

INFORMATION CONTAINED WITHIN DRAWINGS IS
BASED ON PROVIDED INFORMATION AND IS NOT
THE RESULT OF A FIELD SURVEY. CONTRACTOR TO
VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION.

LEGEND & SYMBOLS

- UTILITY POLE
- SIGN
- TELECO PEDESTAL
- FIRE HYDRANT
- LIGHT STANDARD
- INLET
- CATCH BASIN
- MANHOLE
- TRAFFIC SIGNAL
- IRON MARKER
- IRON PIPE SET
- IRON PIPE FOUND
- BUFFALO BOX
- VALVE BOX
- HORIZONTAL CONTROL POINT
- HANDICAPPED PARKING SPACE
- DECIDUOUS TREE W/ SIZE
- CONIFEROUS TREE W/ SIZE
- BRUSH
- TREE LINE
- CONTOUR W/ELEVATION
- EXISTING GUARDRAIL
- CHAIN LINK FENCE
- IRON FENCE
- WOOD FENCE
- OVERHEAD WIRES
- LOT LINE
- PROPERTY LINE
- LEASE AREA LINE
- UTILITY EASEMENT LINE
- CENTER LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND GAS LINE
- UNDERGROUND FIBER LINE
- UNDERGROUND TELCO LINE
- UNDERGROUND FIBER LINE
- UNDERGROUND STORM/SANITARY SEWER LINE
- UNDERGROUND WATER LINE
- UNDERGROUND COMMUNICATION/MONITORING LINE
- CONCRETE
- ASPHALT
- GRAVEL
- CULTIVATED FIELD
- GRASS AREA
- ICE BRIDGE
- STEEL PLATFORM



APN: 651200001

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/27/20	ISB	0
ISSUED FOR CONSTRUCTION	02/27/20	ISB	0
REDESIGNED FOR CONSTRUCTION	02/27/20	ISB	2

SITE NAME: **WIDEFIELD - ATC**

T-MOBILE SITE # **DN04166E**

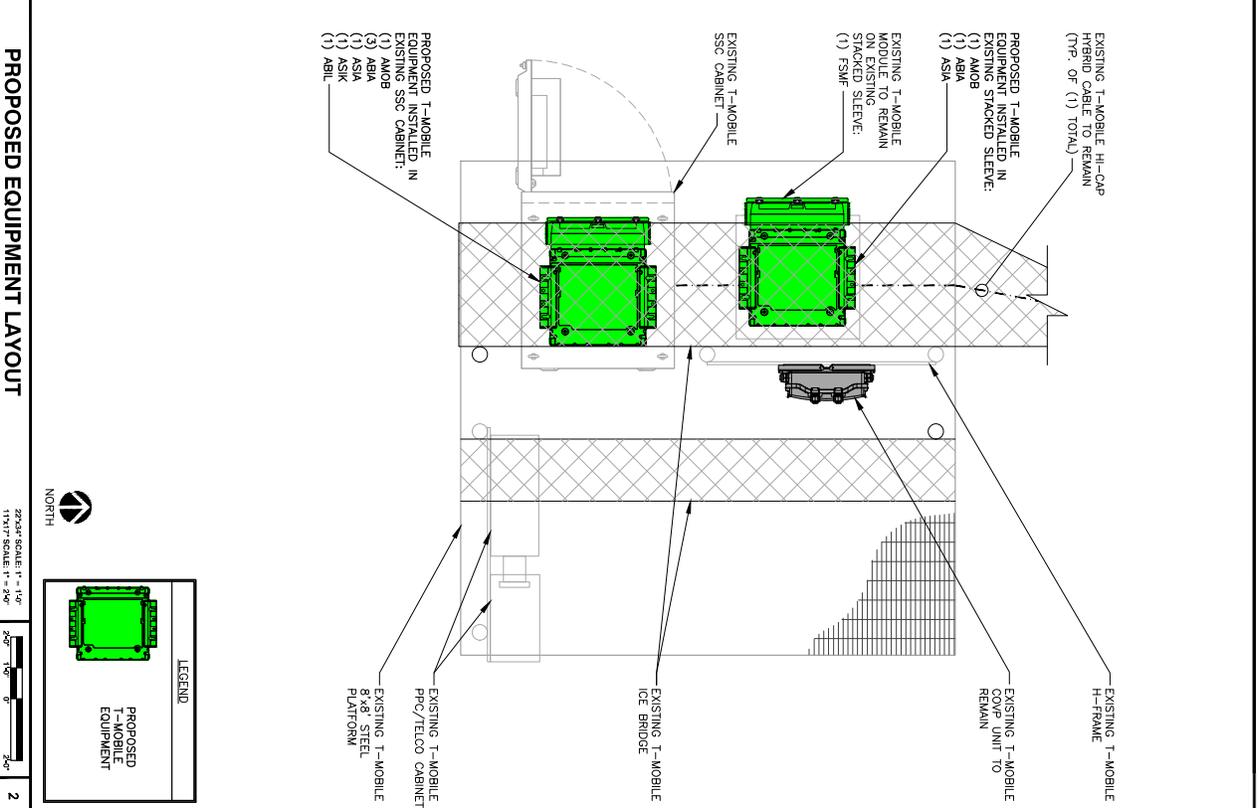
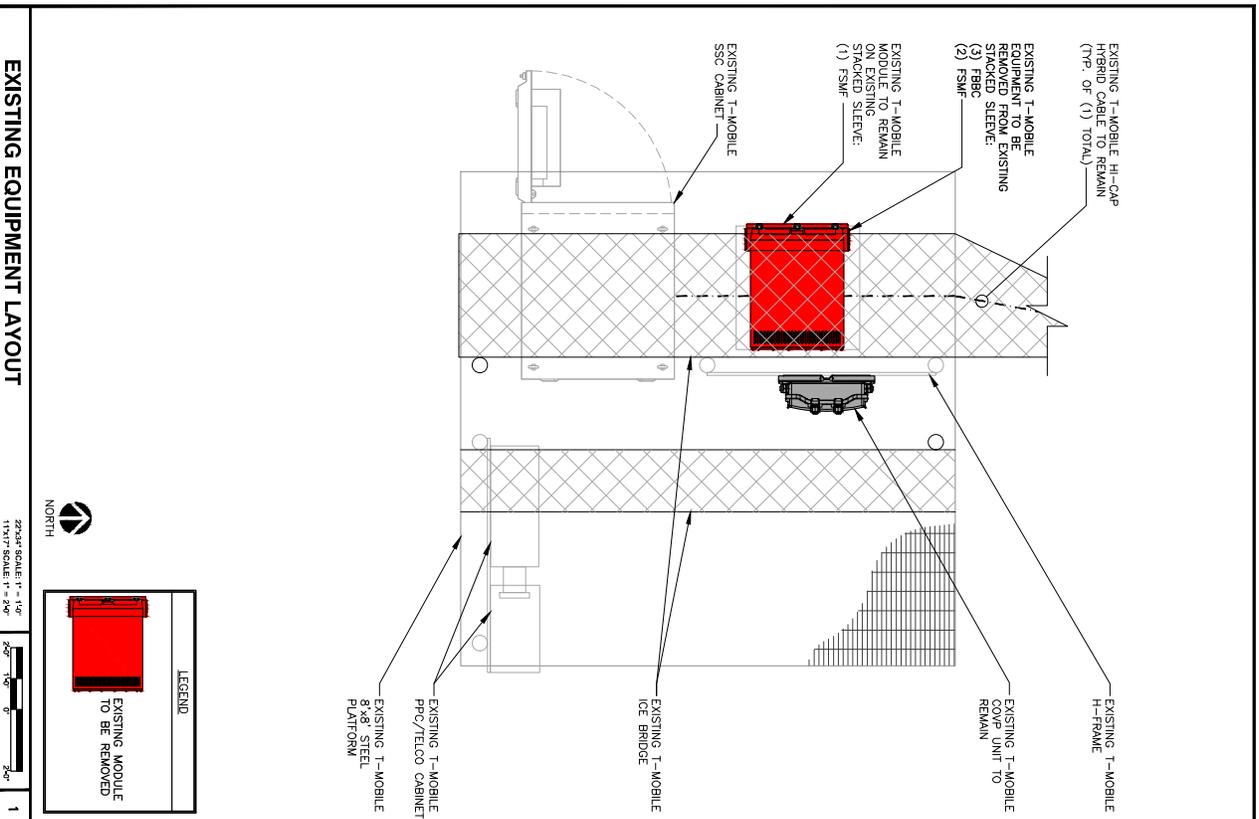
ATC SITE # **370609**

SITE ADDRESS: **509 WIDEFIELD DRIVE
COLORADO SPRINGS, CO 80911**

SHEET DESCRIPTION: **EXISTING & PROPOSED
ENLARGED
EQUIPMENT LAYOUT**

SHEET NUMBER: **A-2**

22'x34' SCALE 1" = 10'
11'x17' SCALE 1" = 5'

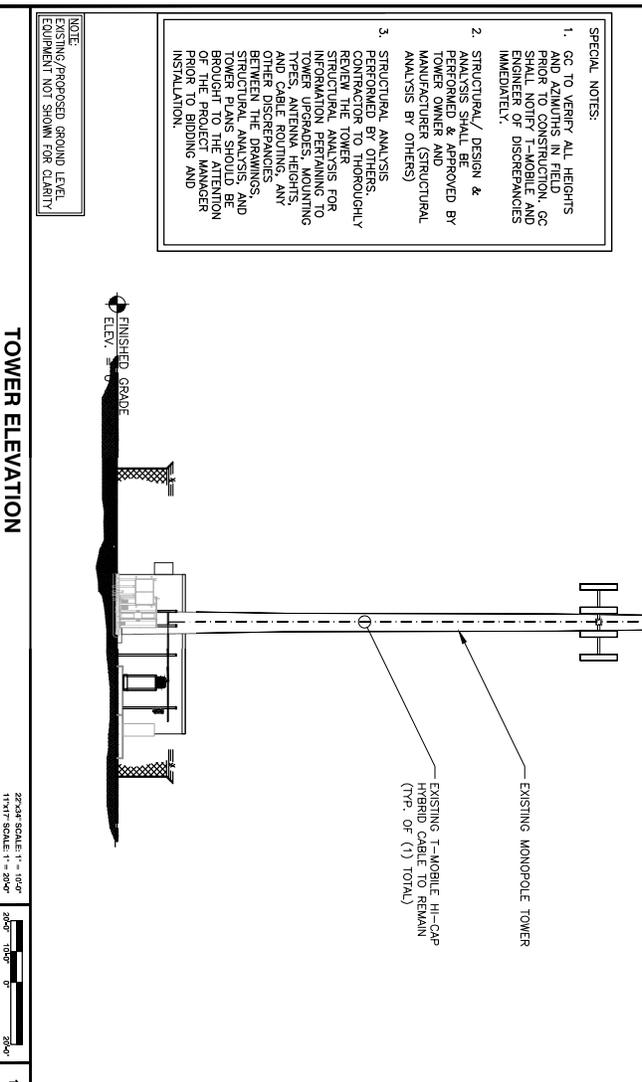
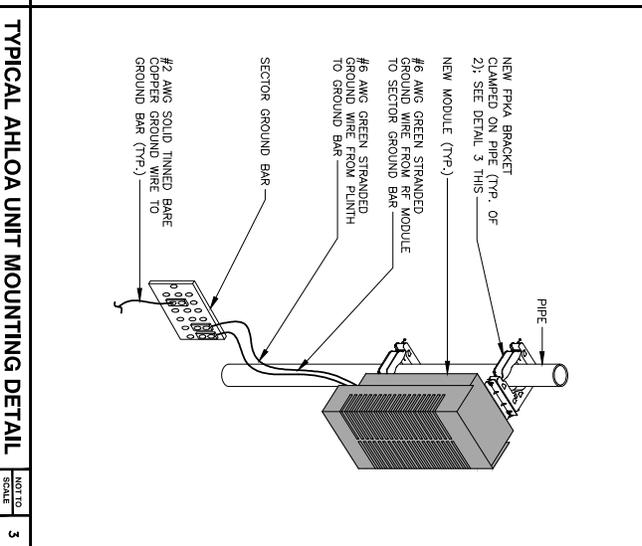
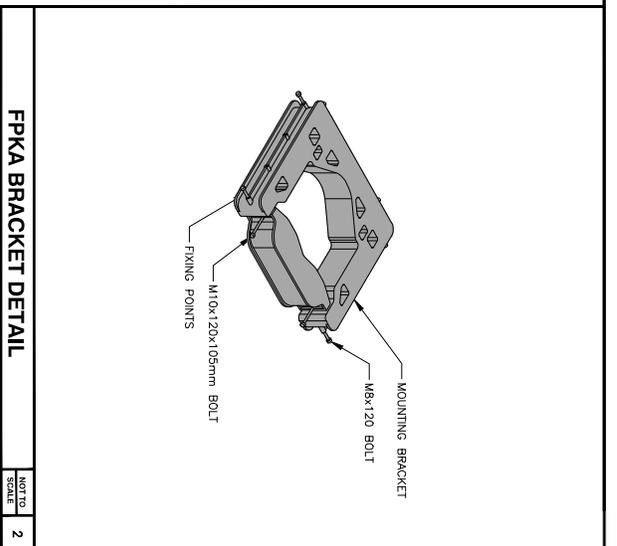


DRAWING NOTICE: THESE DRAWINGS ARE CONFIDENTIAL AND ARE THE PROPERTY OF INFINIGY8 AND AMERICAN TOWER. ANY REPRODUCTION, DISSEMINATION OR REDISTRIBUTION WITHOUT THE EXPRESS WRITTEN CONSENT OF INFINIGY8.

REVISIONS	DESCRIPTION	DATE	BY	REV
1	ISSUED FOR CONSTRUCTION	02/27/20	ISB	1
2	REDESIGNED THE CONNECTION	02/27/20	ISB	2
3	ISSUED FOR CONSTRUCTION	02/27/20	ISB	3

SITE NAME: **WIDEFIELD - ATC**
 T-MOBILE SITE # **DN04166E**
 ATC SITE # **370609**

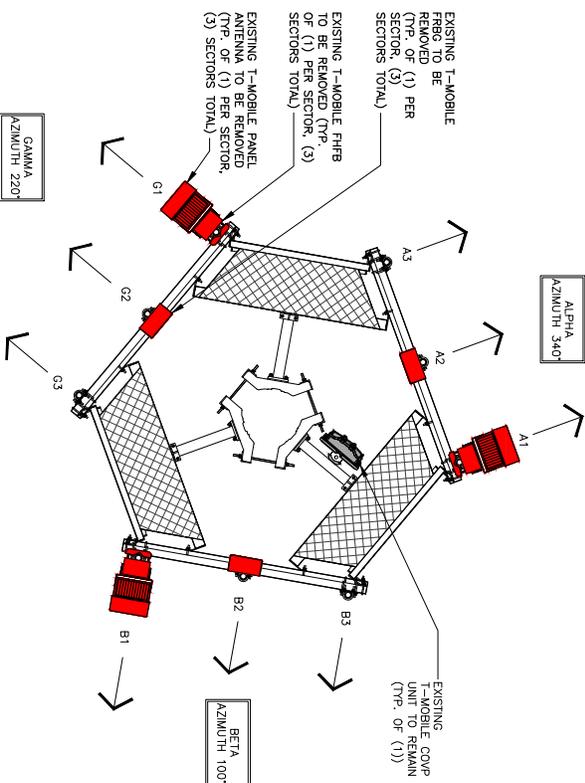
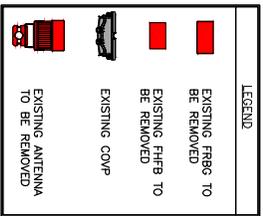
SITE ADDRESS: **509 WIDEFIELD DRIVE
 COLORADO SPRINGS, CO 80911**
 SHEET DESCRIPTION: **ELEVATION & DETAILS**
 SHEET NUMBER: **A-2A**



SPECIAL NOTES:

- GC TO VERIFY ALL HEIGHTS AND ADJUSTS IN FIELD PRIOR TO CONSTRUCTION. GC SHALL VERIFY ALL HEIGHTS AND ANGLES OF DISCREPANCIES IMMEDIATELY.
- STRUCTURAL/ DESIGN & ANALYSIS SHALL BE PROVIDED BY TOWER OWNER AND MANUFACTURER (STRUCTURAL ANALYSIS BY OTHERS).
- STRUCTURAL ANALYSIS CONTRACTOR TO THOROUGHLY REVIEW THE TOWER INFORMATION PERTAINING TO TOWER APPROVAL, HEIGHTS AND CABLE ROUTING. ANY OTHER DISCREPANCIES BETWEEN THE DRAWINGS, STRUCTURAL ANALYSIS, AND TOWER INFORMATION SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO BIDDING AND INSTALLATION.

NOTE:
 EXISTING/PROPOSED GROUND LEVEL EQUIPMENT NOT SHOWN FOR CLARITY



EXISTING T-MOBILE ANTENNA CONFIGURATION

225' SCALE 1" = 25'
1 1/2" SCALE 1" = 40'



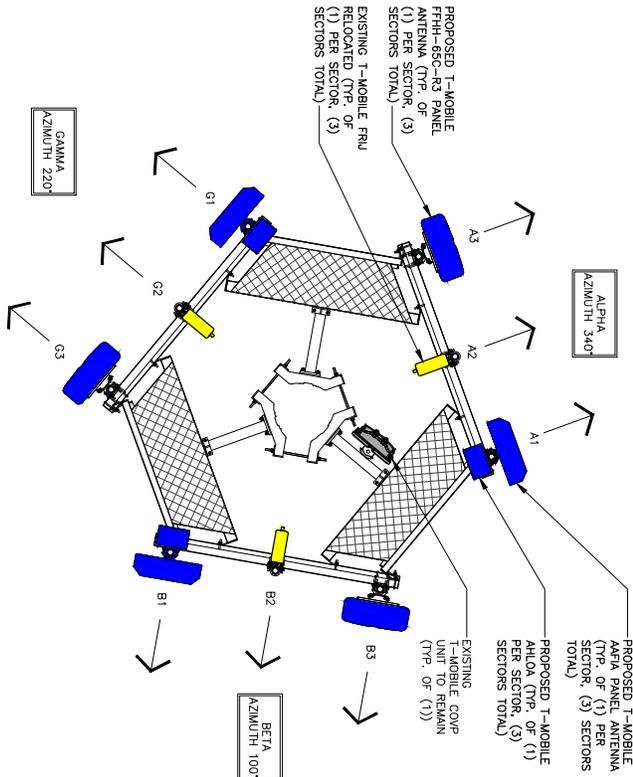
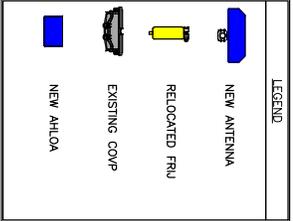
1

PROPOSED T-MOBILE ANTENNA CONFIGURATION

225' SCALE 1" = 25'
1 1/2" SCALE 1" = 40'



2



SPECIAL NOTES:
STRUCTURAL ANALYSIS PERFORMED BY OTHERS. CONTRACTOR TO THOROUGHLY REVIEW THE TOWER & ANTENNA DRAWINGS FOR DISCREPANCIES PERTAINING TO MOUNT UPDATES, MOUNTING TIES, ANTENNA HEIGHTS, AND CABLE ROUTING. ANY OTHER DISCREPANCIES BETWEEN THE DRAWINGS, STRUCTURAL ANALYSIS, AND TOWER PLANS SHOULD BE REPORTED IMMEDIATELY TO THE PROJECT MANAGER PRIOR TO BIDDING AND INSTALLATION.

PLANS PREPARED FOR:



PLANS PREPARED BY:
INFINIGY8
ENGINEERING, PLLC
1400 W. 121st AVE., SUITE 101
WESTMINSTER, COLORADO 80134
JOB NUMBER: 317-781



ENGINEERING LICENSE:

REVISIONS:

DESCRIPTION	DATE	BY	REV
ISSUED FOR CONSTRUCTION	02/27/21	CS	0
REDESIGNED THE CONNECTION	02/27/21	CS	1
REVISED THE CONNECTION	02/27/21	CS	2

THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE PROPERTY OF INFINIGY8 AND AMERICAN TOWER CORPORATION. ANY INFORMATION BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF INFINIGY8.

SHEET NUMBER: **A-3**

SHEET DESCRIPTION: **EXISTING & PROPOSED ANTENNA PLANS**

WIDEFIELD - ATC

T-MOBILE SITE # **DN04166E**

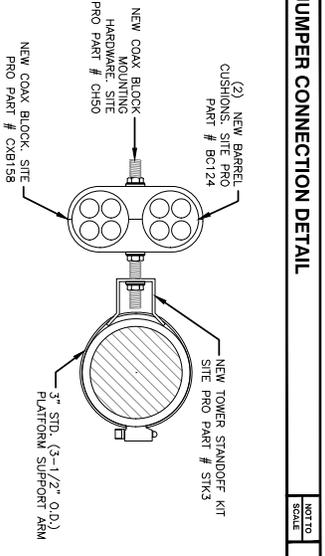
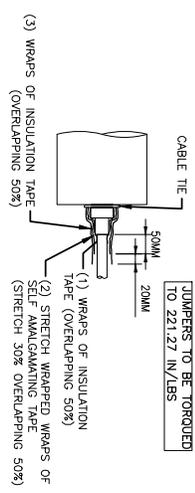
ATC SITE # **370609**

SITE ADDRESS: **509 WIDEFIELD DRIVE
COLORADO SPRINGS, CO 80911**

NEW AND EXISTING ANTENNA AND CABLE SCHEDULE

SECTOR	POS.	AZIMUTH	RAD CENTER	TECHNOLOGY	ANTENNA	STATUS	RRU TYPE	DIPLEXERS (TOWER LEVEL)	COVP	CABLE STATUS	COAX CABLE LENGTH	HCS FACTORY LENGTH	JUMPER LENGTH
ALPHA	A1	340°	108'	LTE 1900/2100	(1) AAFA - MASSIVE MIMO)	NEW	(1) FRU (1) AHL0A	-	-	-	-	-	< 15'-0"
	A2	-	-	-	-	-	-	-	-	-	-	-	< 15'-0"
	A3	340°	108'	LTE 600/700 N600	(1) COMMSCOPE FHH-65C-R3	NEW	-	-	-	-	-	-	< 15'-0"
BETA	B1	100°	108'	LTE 1900/2100	(1) AAFA - MASSIVE MIMO)	NEW	(1) FRU (1) AHL0A	-	-	-	-	-	< 15'-0"
	B2	-	108'	-	-	-	-	-	(1) EXISTING COVP (*)	EXISTING	EXISTING	EXISTING	< 15'-0"
GAMMA	G1	100°	108'	LTE 600/700 N600	(1) COMMSCOPE FHH-65C-R3	NEW	-	-	-	-	-	-	< 15'-0"
	G2	-	108'	-	-	NEW	(1) FRU (1) AHL0A	-	-	-	-	-	< 15'-0"
	G3	220°	108'	LTE 600/700 N600	(1) COMMSCOPE FHH-65C-R3	NEW	-	-	-	-	-	-	< 15'-0"

(*) SHARED WITH ALL SECTORS
 IMPORTANT NOTE: PLEASE REFER TO LATEST RFD'S SHEET FOR NSN CONFIGURATION. GC TO CAP ALL UNUSED PORTS.



RF JUMPER MOUNTING DETAIL

NOT TO SCALE 1

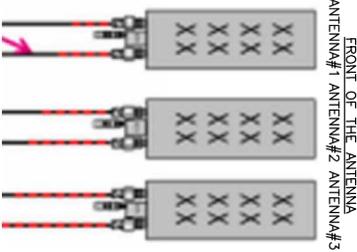
COAX COLOR CODING

- ANTENNAS WILL BE LABELED (BACK OF ANTENNA VIEW)
- COAX/JUMPER LINES WILL BE IDENTIFIED BY SECTOR COLOR AND BY NUMBER OF BANDS AROUND THE COAX/JUMPER

SECTOR A	RED
SECTOR B	GREEN
SECTOR C	BLUE
SECTOR D	YELLOW
SECTOR E	WHITE
SECTOR F	PURPLE
LMU	BROWN + SECTOR COLOR BANDS (1 & 2)
FIBER ID	GRAY
UNUSED COAX	PINK
MICROWAVE	ORANGE
DWVE T-1'S + GPS DOWNLINK CABLE	ID LABEL MAKER

FRONT OF THE ANTENNA
 ANTENNA#1 ANTENNA#2 ANTENNA#3

EXAMPLE: COAX WITH FOUR BANDS OF RED TAPE WILL REPRESENT ALPHA SECTOR AND THE 4TH PORT OF ANTENNA



TAGGING COLOR AND NOTES

NOT TO SCALE 3

ANTENNA AND COAXIAL CABLE SCHEDULE

- ALL ANTENNAS SHALL BE FURNISHED WITH DOWNLIFT BRACKETS. CONTRACTOR SHALL COORDINATE REQUIRED MECHANICAL DOWNLIFT FOR EACH ANTENNA WITH RF ENGINEER. ANTENNA DOWNLIFT SHALL BE SET AND VERIFIED BY A SMART LEVEL.
- CONTRACTOR SHALL INSTALL COLOR CODE RINGS ON EACH OF THE XPRD CABLES AND JUMPER CABLES WITH UV RESISTANT TAPE. ALL CABLE SHALL BE MARKED AT TOP AND BOTTOM WITH 2" COLOR TAPE OR STENCIL TAG. COLOR TAPE MAY BE OBTAINED FROM GRAVBAR ELECTRONICS

PLANS PREPARED FOR: **Mobile**
 T-Mobile WEST LLC
 15400 EAST 22ND AVENUE
 AURORA, CO 80011

PLANS PREPARED BY: **INFINIGY8**
 ENGINEERING, PLLC
 1400 W. 121st AVE., SUITE 101
 WESTMINSTER, COLORADO 80534
 JOB NUMBER: 317-701

MLA PARTNER: **AMERICAN TOWER CORPORATION**

ENGINEERING LICENSE: _____

REVISIONS NOTICE: THESE DRAWINGS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF T-MOBILE. ANY AND ALL BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF T-MOBILE.

REVISIONS	DESCRIPTION	DATE	BY	REV
1	ISSUED FOR CONSTRUCTION	02/27/19	DL	0
2	REDESIGNED THE CONNECTION	02/27/19	DL	1
3	REDESIGNED THE CONNECTION	02/27/19	DL	2

WIDEFIELD - ATC

MOBILE SITE # : DNO4166E

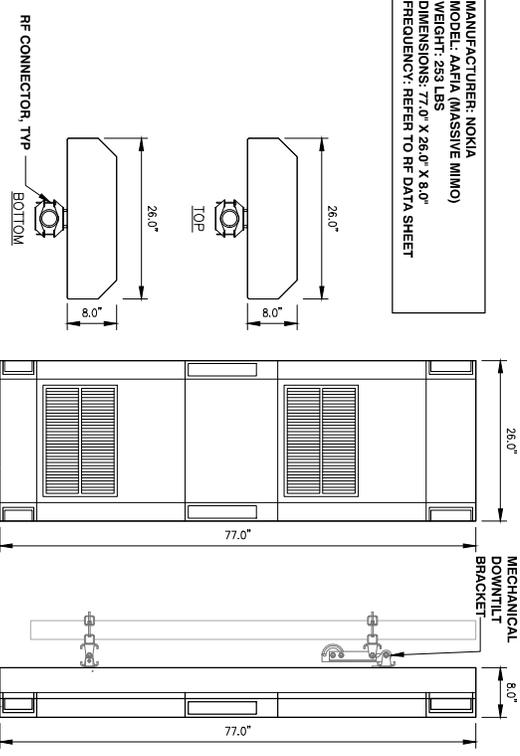
370609

SITE ADDRESS : 509 WIDEFIELD DRIVE
 COLORADO SPRINGS, CO 80911

ANTENNA & CABLE SCHEDULE

SHEET NUMBER: **A-3A**

MANUFACTURER: NOKIA
 MODEL: AAFIA (MASSIVE MIMO)
 WEIGHT: 253 LBS
 DIMENSIONS: 77.0" X 26.0" X 8.0"
 FREQUENCY: REFER TO RF DATA SHEET

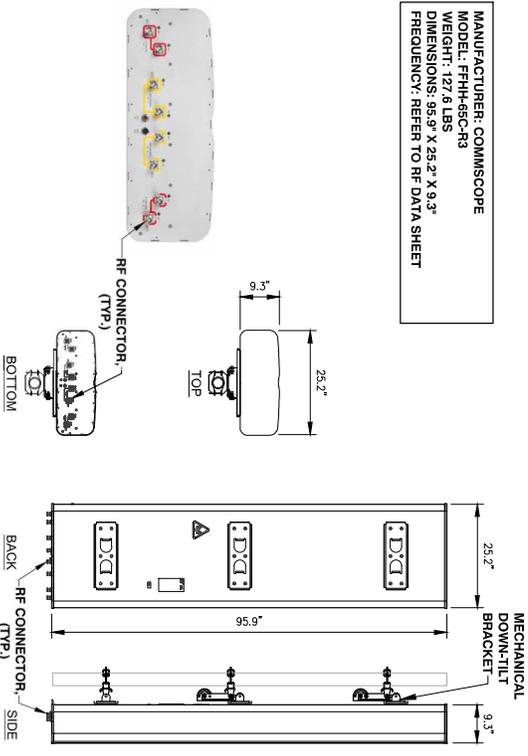


ANTENNA (NOKIA AAFIA)

SUPPORTED FREQUENCY BANDS	3GPP BAND 12/71
FREQUENCIES	BAND 12 ADJUSTED: RX 698 - 715 MHz, TX 728 - 745 MHz BAND 71: RX 663 MHz - 698 MHz, TX 617 MHz - 652 MHz
NUMBER OF TARRX PATHS/SPPERS	4 PRRS, 2/TAR, 4/TAR FOR BOTH BANDS
INSTANTANEOUS BANDWIDTH/BW	16 MHz FOR B12 AND 35MHz FOR B71
OCCUPIED BANDWIDTH/GBW	52 MHz TOTAL ACROSS BANDS
OUTPUT POWER	60W PER TX SHARED BETWEEN BANDS DC-148 V / 36 V TO 40 V
SUPPLY VOLTAGE RANGE	664W (ETS) BUSY HOUR CNO AT 4TX@60W (BOTH BANDS ACTIVE)
TYPICAL POWER CONSUMPTION	369W (ETS) BUSY HOUR CNO AT 4TX@30W (ONE BAND ACTIVE)
ANTENNA PORTS	4 PORTS: 4,3,-10
OPTICAL PORTS	2x CORN 9.8 Gbps
ALO CONTROL INTERFACES	ARSSA FROM ANT.1,2,3,4 & RELOC ON ANT.1 & ANT.3
OTHER INTERFACES	EXTERNAL ALARM MDR-26 SERIAL CONNECTOR (4 INPUTS, 1 OUTPUT) DC CIRCUITRY POWER CONNECTOR
PHYSICAL	560MM/22.44INCHES/320MM/12.72INCHES/183MM/7.44INCHES 38KG/83.7 LBS WITHOUT COVER AND BRACKETS
OPERATING TEMPERATURE RANGE	-40°C TO 55°C (WITH NO SOLAR LOAD)
SURGE PROTECTION	CLASS II SA
INSTALLATION OPTIONS	VERTICAL & HORIZONTAL BOK MOUNT, POLE & WALL MOUNT

RRH (AIRSCALE - AHLOA)

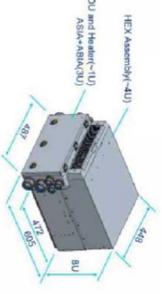
MANUFACTURER: COMMSCOPE
 MODEL: FHH-65C-R3
 WEIGHT: 127.6 LBS
 DIMENSIONS: 95.9" X 25.2" X 9.3"
 FREQUENCY: REFER TO RF DATA SHEET



ANTENNA (COMMSCOPE - FHH-65C-R3)

HEIGHT	8U (354 MM/13.94 INCH)
WIDTH (FRONT COVER)	487MM/19.17 INCH
WIDTH (CABINET)	483MM/19.17 INCH (WITH/OUT CONDUIT PLUGS OR FITTINGS)
DEPTH	TOTAL 659MM/26.31 INCH (42MM/1.65 INCH FROM FRONT PANEL TO REAR PANEL) 483MM/19.17 INCH (WITH/OUT CONDUIT PLUGS OR FITTINGS)
WEIGHTS	23 KG/50.7 LBS AMOB ENCLOSURE 3 KG/6.6 LBS ASB (EXPANSION MODULE) 3 KG/6.6 LBS ASB (CORE MODULE) 2 KG/4.4 LBS ASB (EXPANSION MODULE) 41 KG/90.39 LBS FULL CAPACITY (2 CORE + 8 EXPANSION)
INGRESS PROTECTION	IP55
OPERATING TEMPERATURE	-40°C UP TO +55°C (WITHOUT SOLAR RADIATION)
INSTALLATION TEMPERATURE	-20°C - +55°C
AIRFLOW DIRECTION	BACK TO FRONT AIRFLOW DIRECTION SUPPORTED FOR FRONT PANEL FROM REAR PANEL STACK (ARRIED FOR FRONT/WALL AND POLE MOUNTING CASE)
CLEARANCES FOR COOLING	40 MM MINIMUM ON THE BACK AND FRONT SIDE
COLD START	-2H FROM -40°C TO -5°C *OPTIONAL 2ND HEATER CAN BE ADDED TO MEET NMI REQUIREMENT COLD START FROM -40°C TO -5°C IN 1 HOUR INSTEAD OF 2 HOURS
NOMINAL SUPPLY VOLTAGE	-40.5 ... -57 VDC
INPUT VOLTAGE RANGE	EXTENDED SERVICE VOLTAGE RANGE SUPPORTED 38VDC .. 40VDC FLOATING
VOLUME	104.2L
MASS CAPACITY	SUPPORT MAX 18KG INSIDE
POWER CONSUMPTION	TYPICAL MAX ~265W (ALL FANS AT HIGHEST SPEED) COLD START ~400W (HEATER ON 55W + FANS AT LOW SPEED)
CONDUIT CABLE ENTRY	2X1.5" + 1" ON EACH LEFT AND RIGHT SIDE

AIRSCALE SUBRACK OUTDOOR AMOB



PLANS PREPARED FOR: **Mobile**
 TAMBRIE WEST LLC
 15400 EAST 22ND AVENUE
 AURORA, CO 80011

PLANS PREPARED BY: **INFINIGY8 ENGINEERING, PLLC**
 1400 W. 121st AVE., SUITE 101
 WESTMINSTER, COLORADO 80534
 303 NUMBER 307-701

MLA PARTNER: **AMERICAN TOWER CORPORATION**

ENGINEERING LICENSE: _____

DRAWING NOTICE: THESE REQUIREMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF INFINIGY8 AND ANYONE BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF INFINIGY8.

REVISIONS	DESCRIPTION	DATE	BY	REV
1	ISSUED FOR CONSTRUCTION	02/27/20	ISB	1
2	REVISED FOR CONSTRUCTION	02/27/20	ISB	2
3	REVISED FOR CONSTRUCTION	02/27/20	ISB	3
4	ISSUED FOR CONSTRUCTION	02/27/20	ISB	4

SITE NAME: **WIDEFIELD - ATC**

MOBILE SITE #: **DN041666**

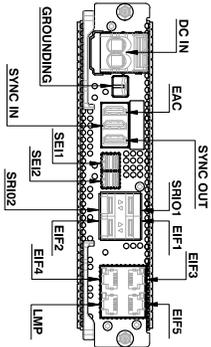
ATC SITE #: **370609**

SITE ADDRESS: **509 WIDEFIELD DRIVE
 COLORADO SPRINGS, CO 80911**

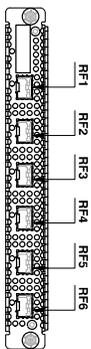
SHEET RESPECIFICATION: **NEW EQUIPMENT SPECIFICATION**

SHEET NUMBER: **A-4**

MANUFACTURER: NOKIA
 MODEL: ASIA UNIT
 DIMENSIONS: 8.6"x14.2"x1.7" (UNIT ONLY)
 WEIGHT: 6.6 LBS (UNIT ONLY)



MANUFACTURER: NOKIA
 MODEL: ABIA UNIT
 DIMENSIONS: 8.6"x14.2"x1.1" (UNIT ONLY)
 WEIGHT: 4.4 LBS (UNIT ONLY)



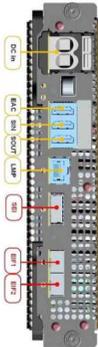
ASIA DETAIL

NOT TO SCALE 1

ABIA DETAIL

NOT TO SCALE 2

MANUFACTURER: NOKIA
 MODEL: ASIK UNIT
 DIMENSIONS: 1.9"x8.6"x14.8" (UNIT ONLY)
 WEIGHT: 7.05 LBS (UNIT ONLY)



MANUFACTURER: NOKIA
 MODEL: ABIL UNIT
 DIMENSIONS: 0.9"x8.6"x14.3" (UNIT ONLY)
 WEIGHT: 4.7 LBS (UNIT ONLY)



ASIK DETAIL

NOT TO SCALE 3

ABIL DETAIL

NOT TO SCALE 4

PLANS PREPARED FOR: **T-Mobile**
 T-MOBILE WESTLIC
 18400 EAST 22ND AVENUE
 AURORA, CO 80011

PLANS PREPARED BY: **INFINIGY8**
 ENGINEERING, PLLC
 1400 W. 121st AVE., SUITE 101
 WESTMINSTER, COLORADO 80234
 AEB NUMBER: 317-701

U.S. PARTNER: **AMERICAN TOWER CORPORATION**

ENGINEERING LICENSE: _____
 DRAWING NOTICE: THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE PROPERTY OF INFINIGY8. ANY AND ALL REPRODUCTION, DISSEMINATION OR REDISTRIBUTION WITHOUT THE EXPRESS WRITTEN CONSENT OF INFINIGY8.

REVISIONS:	DESCRIPTION	DATE	BY	REV
1	ISSUED FOR CONSTRUCTION	02/27/09	CS	1
2	REDESIGNED THE CONNECTION	02/27/09	CS	2
3	ISSUED FOR CONSTRUCTION	02/27/09	CS	3
4	ISSUED FOR CONSTRUCTION	02/27/09	CS	4

SITE NAME: **WIDEFIELD - ATC**
 T-MOBILE SITE # _____
 ATC SITE # **DN04166E**
370609

SITE ADDRESS: **509 WIDEFIELD DRIVE**
COLORADO SPRINGS, CO 80911
 SHEET DESCRIPTION: **NEW EQUIPMENT SPECIFICATION**

SHEET NUMBER: **A-5**

CADWELD CONNECTIONS OR APPROVED EQUAL	BURNDY CONNECTIONS OR APPROVED EQUAL

HORIZONTAL SPLICED OR APPROVED EQUAL	VERTICAL PIPE CABLE DOWN AT 45° TO RANGE OF VERTICAL PIPES	COPPER LUGS TWO HOLE - LONG BARREL LENGTH TYPE YA-2

GROUNDING DETAILS:

1. UNDERGROUND AND OVERHEAD UTILITY LENGTHS TO BE DETERMINED FROM SITE PLAN.
2. SEE ELECTRICAL SPECIFICATIONS SECTION 16000 FOR ALL ELECTRICAL AND GROUNDING INSTALLATION REQUIREMENTS.
3. FOR ORIENTATION OF SITE LAYOUT SEE SITE PLAN, DRAWING.
4. DRAWINGS FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR.
5. CONDUITS SHALL BE RIGIDIFIED TO ACCOMMODATE 2 HOLE LUG CONNECTION AND APPROPRIATE LENGTH.
6. CONTRACTOR RESPONSIBLE TO PROVIDE OWNER CERTIFICATION OF RESISTIVITY TESTING.
7. GROUND RODS TO BE INSTALLED AT 10' CENTERS.
8. ALL GROUND LEADS TO BE SLEAVED IN 3/4" SCHEDULE 40 PVC CONDUIT AND SEALED W/ SILICONE.
9. BARS SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR.
10. ALL BENDS IN GROUNDING SYSTEM MUST BE SMOOTH AND WELL ROUNDED AND MAINTAIN BENDING RADIUS.
11. SEE SITE PLAN FOR COAXIAL ROUTING THIS SHEET IS INTENDED FOR GROUNDING CLARITY ONLY AND IS SUPPLEMENTAL IN DETAIL BETWEEN 8"-18" OF ALL CONNECTORS.
12. TOWER FOUNDATION DESIGN BY OWNER INSTALLED BY CONTRACTOR.
13. ADDITIONAL GROUND KITS TO BE PLACED AT 100' WHEN ANTENNA CENTERLINE IS 200' OR ABOVE.
15. ALL CONDUITS TO BE SEALED W/ SILICONE TO PROVIDE A WATER TIGHT SEAL.

GROUND BAR CONNECTIONS DETAIL (TYP.)	GROUND BAR DETAIL (TYP.)	MECH. GROUND CONNECTION (TYP.)

LEGEND

1- GROUND BUSS BAR, 1/4" X 24", CONFORM W/T-MOBILE PROJECT MANAGER THE APPROVED BUSS W/ HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION
2- INSULATORS, CONFORM THE APPROVED BUSS W/ F. W/T-MOBILE
3- 5/8" LOCKWASHERS, CONFORM W/T-MOBILE THE APPROVED BUSS W/ F. INSTRUMENT CO. CAT. NO. 3015-8 OR EQUIVALENT (CO. CAT. NO. 4-6056 OR APPROVED EQUIVALENT) CONFORM THE APPROVED BUSS W/ F.
4- 5/8-11 X 1" HH-C.S. BOLTS, NEWTON INSTRUMENT CO. CAT. NO. 3012-1 OR APPROVED EQUIVALENT.



KEY NOTES:

- #2 SOLID TINNED BARE COPPER GROUND WIRE FROM ICE BRIDGE TO ICE BRIDGE POST.
- #2 SOLID TINNED BARE COPPER GROUND WIRE PER POST REQUIRED.
- #2 SOLID TINNED BARE COPPER GROUND WIRE FROM GROUND TO EXISTING GROUND RING (2 REQUIRED).
- #2 SOLID TINNED BARE COPPER GROUND WIRE FROM NEW H-HERM POST TO EXISTING GROUND RING.
- NEW GROUND BAR
- EXISTING GROUND BAR
- #6 AWG GREEN STRANDED GROUND CU WIRE FROM NEW MODULES TO PLINTH
- #2 AWG GREEN STRANDED GROUND WIRE FROM STEEL CUBER/INTH W/MODULES TO EXISTING GROUND
- #2 AWG BAR GROUND WIRE FROM MODULES PLINTH TO EXISTING GROUND BAR
- #6 AWG GREEN STRANDED GROUND CU WIRE FROM MODULES TO PLINTH ON CABINET
- #2 AWG GREEN STRANDED GROUND WIRE FROM MODULES PLINTH ON CABINET TO EXISTING GROUND RING
- #6 AWG GREEN STRANDED GROUND CU WIRE FROM SSC TO SSC PLINTH
- #2 AWG SOLID TINNED BARE GROUND CU WIRE FROM SSC TO EXISTING GROUND RING
- #2 AWG GREEN STRANDED CU GROUND WIRE FROM NEW ALARM BOX TO NEW GROUND BAR
- #6 AWG GREEN STRANDED CU GROUND WIRE FROM NEW HYBRID CABLE TO NEW GROUND BAR
- #2 AWG GREEN STRANDED GROUND WIRE FROM NEW GREEN STRANDED GROUND WIRE FROM NEW GROUND BAR
- #2 AWG GREEN STRANDED CU GROUND WIRE FROM NEW GROUND BAR TO EXISTING GROUND RING
- #2 AWG SOLID TINNED BARE GROUND CU WIRE FROM FCOA CABINET TO GROUND RING
- #6 AWG SOLID TINNED BARE GROUND CU WIRE FROM NEW DIR/EXTR/FRPL EXTR TO EXISTING GROUND BAR
- #2 AWG SOLID TINNED BARE GROUND CU WIRE FROM BATTERY CABINET TO GROUND RING

SYMBOLS LEGEND:

GROUND BAR	EXISTING GROUND BAR

NOTE:

- EXISTING GROUNDING NOT SHOWN IN THIS DIAGRAM. GC TO VERIFY EXISTING EQUIPMENT GROUNDING IN FIELD GO TO V.I.F. AND INSTALL ANY MISSING T-MOBILE GROUND BAR ON SITE

GROUNDING DIAGRAM (TYP.)

1. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING SHEET BEFORE MAKING SURFACES WITH KOR-1000. ALL SURFACES WITH KOR-1000. ALL SURFACES WITH KOR-SHIELD.

2. FOR GROUND BOND TO STEEL ONLY: INSERT A DRACON TIGHT WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH KOR-SHIELD.

GROUND BAR CONNECTIONS DETAIL (TYP.)	GROUND BAR DETAIL (TYP.)	MECH. GROUND CONNECTION (TYP.)

REVISIONS:

NO.	DESCRIPTION	DATE	BY	REV
1	ISSUED FOR CONSTRUCTION	02/27/20	ISB	1
2	REVISIONS FOR CONSTRUCTION	02/27/20	ISB	2
3	ISSUED FOR CONSTRUCTION	02/27/20	ISB	3
4	ISSUED FOR CONSTRUCTION	02/27/20	ISB	4

THESE REQUIREMENTS ARE CONFIDENTIAL AND ARE THE PROPERTY OF AMERICAN TOWER AND ARE TO BE REPRODUCED, DISSEMINATED OR DISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF T-MOBILE.

WIDEFIELD - ATC

SITE NAME: **WIDEFIELD - ATC**

T-MOBILE SITE #: **DN04166E**

370609

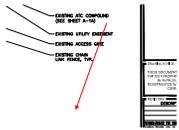
SITE ADDRESS: **509 WIDEFIELD DRIVE
COLORADO SPRINGS, CO 80911**

SHEET DESCRIPTION: **PROPOSED SITE
GROUNDING DIAGRAM**

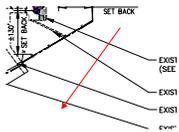
SHEET NUMBER: **EG-1**

Site Development Plan_v1.pdf Markup Summary

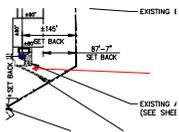
Arrow (5)



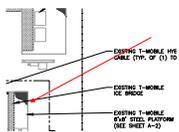
Subject: Arrow
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:52:52 AM
Color: ■



Subject: Arrow
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:54:10 AM
Color: ■



Subject: Arrow
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:54:51 AM
Color: ■

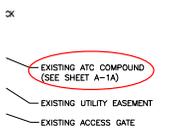


Subject: Arrow
Page Label: [3] DN04166E_CD_09.11.19-A-1A
Author: dsdrangel
Date: 10/3/2019 9:55:21 AM
Color: ■

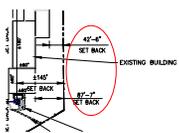


Subject: Arrow
Page Label: [1] DN04166E_CD_09.11.19-T-1
Author: dsdrangel
Date: 10/3/2019 9:59:11 AM
Color: ■

Ellipse (2)



Subject: Ellipse
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:52:45 AM
Color: ■



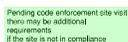
Subject: Ellipse
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:54:04 AM
Color: ■

Rectangle (1)



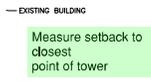
Subject: Rectangle
Page Label: [1] DN04166E_CD_09.11.19-T-1
Author: dsdrangel
Date: 10/3/2019 9:58:32 AM
Color: ■

Text Box (5)



Subject: Text Box
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:52:37 AM
Color: ■

Pending code enforcement site visit there may be additional requirements if the site is not in compliance



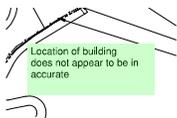
EXISTING BUILDING

Measure setback to closest point of tower

EXISTING ATC COMPOUND

Subject: Text Box
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:54:30 AM
Color: ■

Measure setback to closest point of tower



Subject: Text Box
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:54:39 AM
Color: ■

Location of building does not appear to be in accurate



Subject: Text Box
Page Label: [3] DN04166E_CD_09.11.19-A-1A
Author: dsdrangel
Date: 10/3/2019 9:55:11 AM
Color: ■

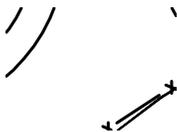
Pending code enforcement site visit there may be additional requirements if the site is not in compliance



Subject: Text Box
Page Label: [1] DN04166E_CD_09.11.19-T-1
Author: dsdrangel
Date: 10/3/2019 9:59:08 AM
Color: ■

Upload aerial map as vicinity map

Typewritten Text (1)



Subject: Typewritten Text
Page Label: [2] DN04166E_CD_09.11.19-A-1
Author: dsdrangel
Date: 10/3/2019 9:53:09 AM
Color: ■