

Development Review Committee

1020 East Pioneer Road Draper, UT 84020 (801) 576-6399

STAFF REPORT

May 28, 2020

To: Jennifer Jastremsky, AICP, Zoning Administrator

Approved

Date

From: Travis Van Ekelenburg, Planner II Planning Division Community Development Department (801) 576-6522 or <u>travis.vanekelenburg@draper.ut.us</u>

| Re: | AT&T LTE 5C Gla | d Property <u>– Permitted Use Permit</u> |
|-----|-------------------|--|
| | Application No.: | USE-1002-2020 |
| | Applicant: | Craig Chagnon |
| | Project Location: | 1661 E 13200 S |
| | Current Zoning: | RA1 (Residential Agricultural, 40,000 sq. ft. lot minimum) |
| | Acreage: | 0.05 Acres; 23,280 Sq. ft. (Wireless Site Only) |
| | Request: | Request for approval of a Permitted Use in the RA1 (Residential |
| | | Agricultural) zone regarding an existing wireless facility equipment |
| | | Upgrade. |

SUMMARY and BACKGROUND

This application is a request for approval of a Permitted Use for approximately 0.05 acres located on the west side of Highland Dr., at approximately 1661 E 13200 S. The property is currently zoned RA1 (Residential Agricultural, 40,000 square foot lot minimum). The applicant is requesting that a Permitted Use be approved to allow for an equipment upgrade on an existing Wireless Facility.

To keep up with the changes in wireless communication technology, AT&T is upgrading many of its facilities throughout the valley. The current application pertains to the existing Wireless Facility known as UTL02013 located at approximately 1661 E 13200 S. The parcel is owned by Glad Rev Trust, currently used as a single family residence that was built in 1983 and backs to the Porter Rockwell Trail. A map showing the general area of the Wireless Facility is shown below (Exhibit B).

The subject monopole was approved by the Draper Planning Commission on February 4, 1993. Monopoles are allowed within the residential zones only if a conditional use permit is obtained. The application was Conditional Use Permit #92-131 with Cellular One as the applicant. The monopole has been in continuous use since that approval.



ANALYSIS

<u>General Plan and Zoning</u>. The Land Use Map of the General Plan calls for the Residential Low/Medium Density land use designation for the subject property (Exhibit C). This category is characterized as follows:

Residential Low-Medium Density

| LAND USE DESCRIPTIC | N | | | |
|---------------------|--|---|--|--|
| CHARACTERISTICS | Very large lot single-family neighborhoods or ranch allows for enhancement of Draper's rural character | | | |
| | Environmentally designed clustered housing with the Suncrest and South Mountain projects being the exceptions | | | |
| | Some natural features and cultivated vegetation is apparent and special care is required in order to preserve those features and areas | | | |
| | Equestrian uses and p | rivileges may exist in certain areas | | |
| LAND USE MIX | Primary • Single-family detached homes | Secondary • Parks • Open space • Churches • Schools | | |
| DENSITY | Density range: up to 2 dwelling units per acre Reduction for non-buildable areas | | | |
| COMPATIBLE ZONING | Residential Agricultural (RA1) Residential Agricultural (RA2) Single-family Residential Hillside (RH) Master Planned Community (MPC) | | | |
| OTHER CRITERIA | R CRITERIA Increased densities within equestrian areas may be allowed only with compliance to specified performance standards and impact mitigation measures Buffers and transitions around existing low-density single-family residences may consist of open space/retention areas, lots that are pie-shaped or otherwise larger than standard sized lots or a combination of these and other appropriate design techniques | | | |
| | | | | |

The property is currently zoned the RA1 zoning designation (Exhibit D). Per the Draper City Municipal Code (DCMC) Section 9-8-020, "The purpose of the RA1 and RA2 zones is to foster low density development with little impact on its surroundings and municipal services; to generally preserve the character of the city's semirural areas; and to promote and preserve conditions favorable to large lot family life, including the keeping of limited numbers of animals and fowl. The predominant use in these zones is intended to be detached single-family dwellings, protected from encroachment by commercial and industrial uses."

RA1 is a compatible zoning designation for the Residential Low/Medium Density land use designation. The subject property is surrounded by the RA2 (Residential Agricultural, 20,000 sq. ft. lot minimum) zone.



<u>Requested Modification</u>. The applicant is requesting to upgrade the equipment on the existing facility. There are no plans to modify the monopole's height or footprint. Any change to height or footprint would need approval through Draper City Planning Commission. Since no additional monopole height is being requested, this request may be approved at staff level and without a public hearing. The proposal consists of the following changes:

- Remove 3 remote radio heads
- Remove 5 amplifiers
- Install 6 remote radio heads
- Install 3 antennas
- Install 1 Surge Protector
- Install 3 Radio Head Mounts
- Install 3 DC Trunks and 1 Fiber Trunk
- Ground scope of work:
 - Install 4 components in the rack
 - Remove 6 diplexers
 - Run Diagnostic Tests

<u>Criteria for Approval</u>. Section 9-41-050(E) of the Draper City Municipal Code contains the development standards for wireless communications facilities:

E. Monopoles with Antennas And Antenna Support Structures: The following provisions shall apply to monopoles with antennas and antenna support structures:

- 1. Monopoles shall be located as follows:
- a. Monopoles shall not be located in residential or agricultural zones.
- b. Monopoles may be located in commercial, public facility, or industrial zones so long as they are not within a required landscaping, buffering, or parking area.
- c. Monopoles are preferred in the rear yard area of a lot or parcel.
- d. Monopoles shall be set back as follows:

(1) A minimum of two feet (2') for every foot of pole height from the closest line of any property in an adjacent residential zone in which a residential use is located or may be located. The planning commission may reduce the required setback from a residential zone if practical difficulties are demonstrated by the carrier (i.e., city park location, public buildings, etc.).

(2) In addition to the minimum setbacks required by the zone and other locational restrictions of this subsection, monopoles shall be set back from all public rights of way the greater of one hundred feet (100') or one and one-fourth feet (1.25') for every one foot (1') of monopole height, as defined in this subsection.

(3) A monopole shall not be located within five hundred (500) linear feet from another monopole.

2. The height of monopoles shall be as follows:

a. The maximum height of a monopole with antennas and antenna support structures shall be sixty feet (60') unless additional height is necessary to accommodate a permitted use.

b. Height shall be measured from the average finished grade at the base of the monopole to the top of the highest portion of the facility.

3. The maximum visible width of antennas and antenna mounting structures on a monopole shall not exceed ten feet (10') in height or fifteen feet (15') in width as viewed looking directly at the monopole at the same elevation as the antennas and antenna mounting structure.

4. Monopoles shall be fenced for security purposes as required in this section.

5. There shall be no climbing pegs located on the lower twenty feet (20') of any monopole.

6. Antennas may be collocated on a single monopole subject to the development standards of this section.



REVIEWS

<u>Planning Division Review</u>. The Draper City Planning Division has completed their review of the request and has issued a recommendation for approval. Comments, if any, can be found in Exhibit A.

<u>Draper City Fire Review</u>. The Draper City Fire Marshal has completed their review of the request. Comments, if any, can be found in Exhibit A.

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 findings for approval as are follows:

- 1. That the proposed changes will have no perceptible visual impact.
- 2. That the proposed changes are compliant with Section 9-41-050(E) of the DCMC.
- 3. The applicant shall obtain all applicable permits from Draper City Fire and the Building Division for this upgrade.



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.



Matthew T. Symes DN: C-US, E-Matt.symes@draper.ut.us, O-Draper City, CI-Matthew T. Symes Dete: 2020.08.18 20:07:31-06'00'

Draper City Building Division

Jennifer Jastremsky Delially signed by Jornifer Jastremsky Delially Security Calls, E-Jennifer Jastremsky Delially 2020.06.18 11.45.07.05 00'

Draper City Planning Division

Mike Barker DN: cn=Mike Barker, o=Draper City, ou=City Attorney, email=mike.barker@draper.ut.us, c=US Date: 2020.08.19 09:09:07 -06'00'

Draper City Legal Counsel

EXHIBIT A DEPARTMENT/DIVISION COMMENTS

<u>Planning Division Review</u> No comments received.

Draper City Fire 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 AERIAL MAP

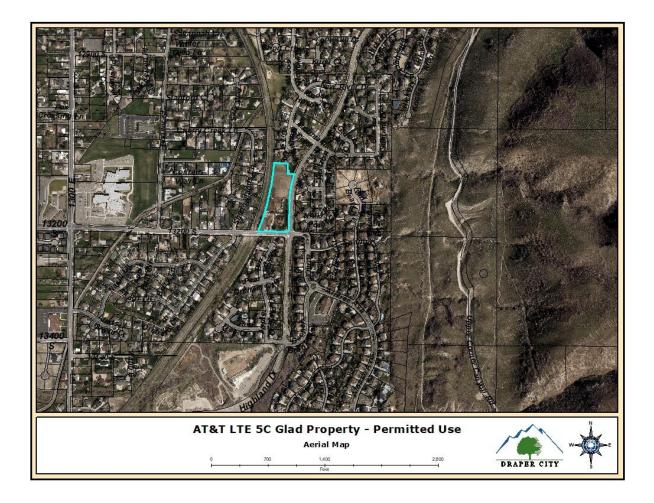




EXHIBIT C LAND USE MAP

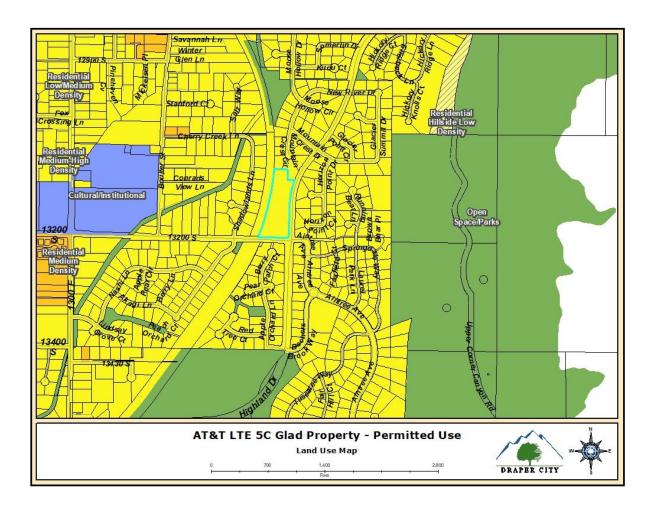




EXHIBIT D ZONING MAP

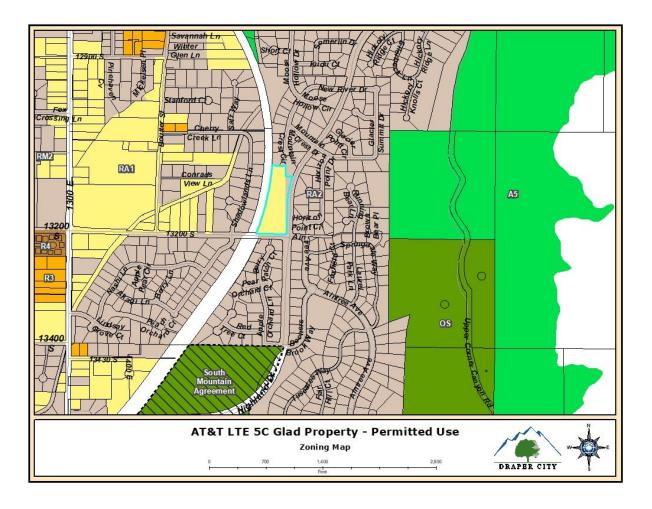
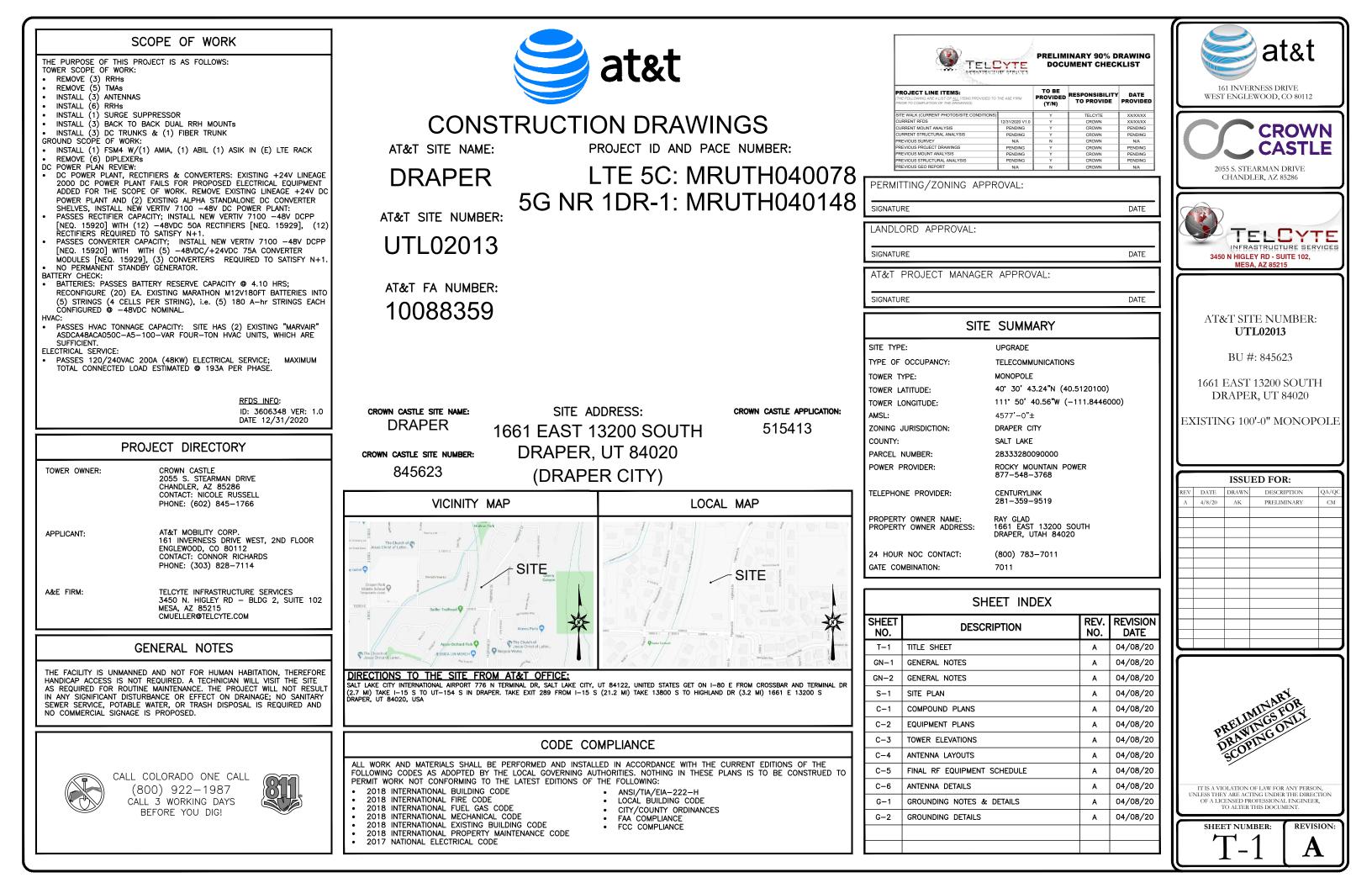




EXHIBIT E DRAWINGS





GENERAL NOTES:

- 1. EVERY EFFORT HAS BEEN MADE IN THE CONSTRUCTION DOCUMENTS TO PROVIDE A COMPLETE SCOPE OF WORK. MINOR DISCREPANCIES IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE CONTRACTORS FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- 2. ALL REFERENCES TO OWNER HEREIN SHALL BE CONSTRUED TO MEAN THE CARRIER OR TS DESIGNATED REPRESENTATIVE.
- 3. BIDDING REQUIREMENTS
 - PRIOR TO THE SUBMISSION OF BIDS. VISIT THE JOB SITE TO BECOME FAMILIAR WITH a. ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. VISIT THE SITE WITH THE CONSTRUCTION DOCUMENTS TO VERIFY FIELD DIMENSIONS AND CONDITIONS TO CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN.
 - PROVIDE NOTIFICATION TO OWNER IN WRITING OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF PRICE PROPOSAL. IN THE EVENT OF DISCREPANCIES, PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
- WHEN TOWER IS OWNED BY A THIRD PARTY, CONTACT TOWER OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WALK.
- WHERE ANCHORING TO A CONCRETE ROOF SLAB, CONFIRM (PRIOR TO SUBMITTING d. BID) THE PRESENCE OF POST TENSION TENDONS. INCLUDE PROVISIONS FOR X-RAY PRÓCEDURES TO LOCATE THE TENDONS PRIOR TO CONSTRUCTION.
- DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE. CONSTRUCTION DOCUMENTS ARE INTENDED FOR DIAGRAMMATIC PURPOSES ONLY, UNO.
- 5. FIELD VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. BRING ANY DISCREPANCIES IMMEDIATELY TO THE ATTENTION OF THE OWNER AND RESOLVE BEFORE PROCEEDING WITH THE WORK.
- 6. FURNISH ALL MATERIALS, EQUIPMENT, LABOR, AND ANY REQUIREMENTS NECESSARY TO COMPLETE PROJECT AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS.
- SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONSTRUCTION DOCUMENTS. PROVIDE ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS. AND LOCAL AND STATE JURISDICTIONAL CODES APPLICABLE TO THE WORK.
- 9. CONSTRUCTION COORDINATION REQUIREMENTS
- a. NOTIFY OWNER OF ANY DISCREPANCIES PRIOR TO START OF WORK
- OBTAIN ALL PERMITS. SCHEDULE AND COORDINATE ALL INSPECTIONS. ь.
- PROVIDE, AT THE PROJECT SITE, A FULL, CURRENT SET OF CONSTRUCTION DOCUMENTS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT. с.
- RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO d. STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DOCUMENTS.
- PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
- PROVIDE FALL PROTECTION IN ACCORDANCE WITH FEDERAL, STATE, LOCAL, AND OWNER REQUIREMENTS.
- IF FAA LIGHTING AND MARKING IS PRESENT ON SITE AND IS POWERED BY ELECTRICAL SERVICE THAT IS TO BE INTERRUPTED, MAINTAIN THE NECESSARY LIGHTS DURING CONSTRUCTION AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A DISRUPTION.
- PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
- STRUCTURAL COMPONENTS OF ADJACENT FACILITIES SHALL NOT BE ALTERED BY THIS CONSTRUCTION PROJECT, UNO. ENSURE THAT EXCAVATION DOES NOT AFFECT ADJACENT STRUCTURES.
- SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL-APPROVED MATERIALS, IF APPLICABLE.
- BURIED UTILITIES MAY EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- COORDINATE ALL POWER INSTALLATION WITH POWER COMPANY AS REQUIRED. REPORT POWER INSTALLATION COORDINATION SOLUTION(S) TO OWNER.
- m. PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- MAINTAIN THE INTEGRITY OF THE BUILDING ENVELOPE AND CONSTRUCT BARRIERS IN THE AREA OF WORK TO PREVENT DAMAGE FROM WEATHER AS WELL AS FROM CONSTRUCTION DUST AND DEBRIS.
- 10. INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S SPECIFICATIONS, UNO, OR WHERE LOCAL CODES OR ORDINANCES DIRECT OTHERWISE.
- 11. PROPOSED CELLULAR EQUIPMENT AND FIXTURES WILL BE FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR, UNLESS NOTED OTHERWISE

12. ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY OWNER.

- 13. DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP THE APPROVED CONSTRUCTION DRAWINGS AND SUBMITTING THE REDLINED SET TO OWNER UPON COMPLETION. DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS TO BE SUBMITTED WITH REDLINED CONSTRUCTION DRAWINGS.
- 14. PROVIDE SUPPORTS FOR CABLES TO THE ELEVATION OF ALL INITIAL AND FUTURE ANTENNAS IN ACCORDANCE WITH ALL MANUFACTURER'S REQUIREMENTS.

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15. CONFIRM THAT THE REQUIREMENTS OF THE STRUCTURAL ANALYSIS, MOUNT ANALYSIS AND ANY ASSOCIATED MODIFICATIONS HAVE BEEN FOLLOWED AND COMPLETED AS REQUIRED TO SUPPORT THE EQUIPMENT ASSOCIATED WITH THIS PROJECT.

ABBREVIATIONS

| AIR CONDITIONING | MGR | MANAGER |
|------------------------------|------|-----------------------------------|
| ABOVE FINISHED FLOOR | MIN | MINIMUM |
| ABOVE GROUND LEVEL. | MISC | MISCELLANEOUS |
| ABOVE GRADE LEVEL | NA | NOT APPLICABLE |
| ADVANCED WIRELESS SERVICE | NIC | NOT IN CONTRACT |
| BATTERY BACKUP UNIT | NO | NUMBER |
| BUILDING | NTS | NOT TO SCALE |
| | OC | ON CENTER |
| BLOCKING | OD | OUTSIDE DIAMETER |
| CEILING | | PERSONAL COMMUNICATION SERVICE |
| CLEAR | | |
| CONCRETE | PDU | POWER DISTRIBUTION UNIT |
| CONTINUOUS | PROJ | |
| DEPTH | PROP | |
| DOUBLE | PT | PRESSURE TREATED |
| DEGREE | PVC | POLYVINYL CHLORIDE |
| DIAMETER | REQ | REQUIRED |
| DIAGONAL | RF | RADIO FREQUENCY |
| DOWN | RM | ROOM |
| DETAIL | RO | ROUGH OPENING |
| DRAWING | RRH | REMOTE RADIO HEAD |
| EXISTING | SHT | SHEET |
| EACH | SIM | SIMILAR |
| EL ELEVATION | SPEC | SPECIFICATION |
| ELECTRICAL | SF | SQUARE FOOT |
| EQUAL | SS | STAINLESS STEEL |
| EQUIPMENT | STL | STEEL |
| EXTERIOR | SUSP | SUSPENDED |
| FIBER INTERFACE FRAME, | TMA | TOWER MOUNTED AMPLIFIER |
| FACILITY INTERFACE FRAME | TND | TINNED |
| FINISH | TYP | TYPICAL |
| FLUORESCENT | UMTS | UNIVERSAL MOBILE |
| FLOOR | 00 | TELECOMMUNICATION SERVICE |
| FOOT, FEET | UNO | UNLESS NOTED OTHERWISE |
| GAUGE | VERT | |
| GAUGE | W/ | WITH |
| | , | |
| GENERAL CONTRACTOR GROUND | W/0 | WITHOUT |
| GLOBAL SYSTEM MOBILE | WCS | WIRELESS COMMUNICATION SERVICE |
| | WP | WATER PROOF |
| GYPSUM BOARD | WP | WATER PROOF |
| HORIZONTAL | | |
| HOUR | | |
| HEIGHT | | |
| INSIDE DIAMETER | | |
| INCH, INCHES | | |
| INSULATION | | |
| INTERIOR | | |
| LENGTH | | |
| POUNDS | | |
| LONG TERM EVOLUTION | | |
| MAXIMUM | | |
| MECHANICAL | | |
| METAL | | |

| а. | SITE | LAYOU | T INFO | ORMATIC | AN AN | ١D | 0 |
|------|-------|---------|--------|-----------------------------|-------|----------|----|
| b. | EXIST | TING TO | OWER, | MOUNT | ANE |) E(| וע |
| c. | DESI | GN PAC | KAGE | BASED | ON | THE | Ξ |
| THIS | PROP | OSED E | | S TO D MENT W ROJECT. | AS P | | |
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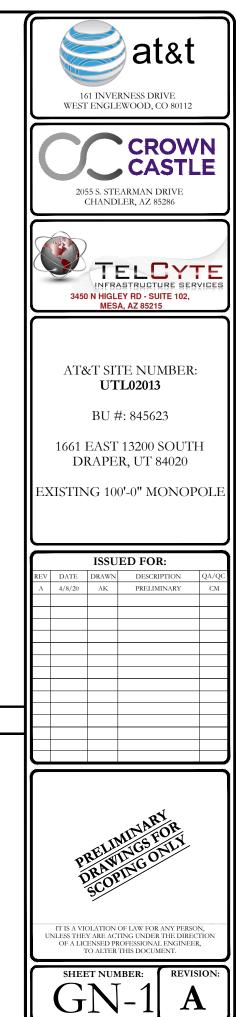
3. SCOPE OF THIS PROJECT.

PROJECT.

2.

| а. | MOUNT ANALYSIS BY: | 01 |
|----|--------------------|----|
| ь. | DATED: | PE |
| c. | RESULTS: | PE |
| | | |

ASSOCIATED MODIFICATIONS HAVE BEEN FOLLOWED AND COMPLETED AS REQUIRED TO SUPPORT THE EQUIPMENT ASSOCIATED WITH THIS PROJECT



PROJECT NOTES

THE FOLLOWING INFORMATION HAS BEEN PROVIDED BY CROWN CASTLE FOR THIS PROJECT AND HAS NOT BEEN FIELD VERIFIED AS PART OF THIS

> RIENTATION UIPMENT ELEVATIONS APPLICATION #: PENDING v0

THE TOWER CAPACITY TO SUPPORT DRMED FOR CROWN CASTLE OUTSIDE

HERS IDING IDING

> MOUNT CAPACITY TO SUPPORT THIS FOR CROWN CASTLE OUTSIDE THE

OTHERS ENDING FNDING

CONFIRM THAT THE REQUIREMENTS OF THE STRUCTURAL ANALYSIS AND ANY

SITE NOTES:

WHEN SITE WORK IS INCLUDED IN SCOPE:

a. CLEAR AND GRUB SITE OF ALL VEGETATION, PAVING, GRAVEL BASE AND OTHER DEBRIS NOT TO REMAIN. SUBGRADES ARE TO BE SET PRIOR TO LANDSCAPE INSTALLATION. b. PROVIDE ELEVATION OF SUBGRADE WITHIN 0.10 FOOT OF ELEVATIONS SHOWN ON PLAN MINUS DEPTH OF TOPSOIL, FILL, AND MULCH.

- C. ROUGH GRADE ALL AREAS WITHIN 1 FOOT OF ELEVATIONS INDICATED BEFORE PLANTING. PROVIDE POSITIVE DRAINAGE AWAY FROM EQUIPMENT SLABS, BUILDINGS AND THROUGH ALL PLANTER AREAS TO AVOID LOW SPOTS AND STANDING WATER.
- d. BLEND NEW GRADES NATURALLY INTO EXISTING GRADES.
- e. MAINTAIN POSITIVE DRAINAGE ON THE SITE AT ALL TIMES.
- f. IF REQUIRED, MAINTAIN CONTINUOUS EROSION CONTROL ON THE DOWNSTREAM SIDE OF THE SITE.
- g. IN LANDSCAPE AREAS, FINISH GRADES ARE TO FOLLOW THE GRADES AND EDGE DETAILS INDICATED AND BE MOUNDED 6 INCHES IN THE CENTER OF THE BED ABOVE THE EDGE OF THE LANDSCAPE AREA.
- FROZEN MATERIALS, SNOW OR ICE IN ANY FILL OR EMBANKMENT.
- I. NOTIFY OWNER IF MODIFICATIONS TO THE PROPOSED GRADING SEEM NECESSARY AND OBTAIN APPROVAL PRIOR TO START OF WORK.
- FOOTINGS SHALL BEAR ON FIRM, NATURAL, UNDISTURBED SOIL, OR ON ENGINEERED FILL 2 (COMPACTED TO 95% ASTM D1557). ENSURE THAT EXCAVATIONS ARE FREE OF ORGANIC MATERIAL, DEBRIS, OR OTHER FOREIGN MATERIAL. NOTIFY OWNER IF ANY UNUSUAL CONDITIONS ARE ENCOUNTERED.
- 3. FILL AND SLAB BASE MATERIAL SHALL BE 3/4" MINUS CRUSHED ROCK PLACED IN 8" (MAXIMUM) LOOSE LIFTS AND COMPACTED TO 98% ASTM D1557.

CONCRETE NOTES:

1. CONCRETE AND REINFORCING SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

| CONCRETE CONSTRUCTION | ACI 318, f'c=4 KSI, UNO |
|------------------------|--|
| CEMENT | ASTM C150, PORTLAND CEMENT TYPE II, UNO |
| REINFORCING STEEL | ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy=60 KSI, UNO |
| WELDED WIRE FABRIC | ASTM A185 |
| SPIRAL REINFORCEMENT | ASTM A615, GRADE 60, fy=60 KSI |
| ANCHOR BOLTS | ASTM A307 |
| GRADE 60 REBAR WELDING | ASTM A706 |

NOTES: ANY BARS SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, fy=40 KSI. REINFORCING COMPLYING WITH ASTM A615(S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D14 ARE SUBMITTED.

2. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

| FOOTINGS AND OTHER UNFORMED | SURFACES, EARTH FACE | 3" |
|-----------------------------|----------------------|--------|
| FORMED SURFACES EXPOSED | (≥ #6 BARS) | 2" |
| TO EARTH OR WEATHER | (≤ # 5 BARS) | 1 1/2" |
| SLABS AND WALLS | (INTERIOR FACE) | 3/4" |

- 3. AIR ENTRAIN ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, C618, C989 AND C1017. AIR ENTRAIN CONCRETE EXPOSED TO FREEZING AND THAWING WHILE MOIST IN ACCORDANCE WITH ACI 318. SECTION 4.4.1.
- DETAIL REINFORCING STEEL (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH AC1 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS AT LEAST 30 BAR DIAMETERS OR A MINIMUM OF 2'-0". LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
- 5. PERFORM WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) USING LOW HYDROGEN ELECTRODES. PERFORM WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) USING E70 XX ELECTRODES. DO NOT WELD WITHIN 4" OF COLD BENDS IN REINFORCÍNG STEEL.
- 6. DO NOT FIELD BEND REINFORCING PARTIALLY EMBEDDED IN CONCRETE UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE ENGINEER.
- 7. SUPPORT BARS ON CHAIRS OR DOBIE BRICKS.
- 8. FURNISH NON-SHRINK GROUT BY AN APPROVED MANUFACTURER. MIX AND PLACE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (4 KSI, MINIMUM).
- 9. ALL EXPANSION ANCHORS TO BE HILTI BRAND, UNO. TEST ADHESIVE ANCHORS TO CONFIRM CAPACITY UNLESS WAIVED BY ENGINEER AND LOCAL JURISDICTION.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS: WIDE FLANGE SHAPES SHAPES, PLATES, ANGLES, & RODS SPECIAL SHAPES AND PLATES PIPE COLUMNS STRUCTURAL TUBING ANCHOR BOLTS

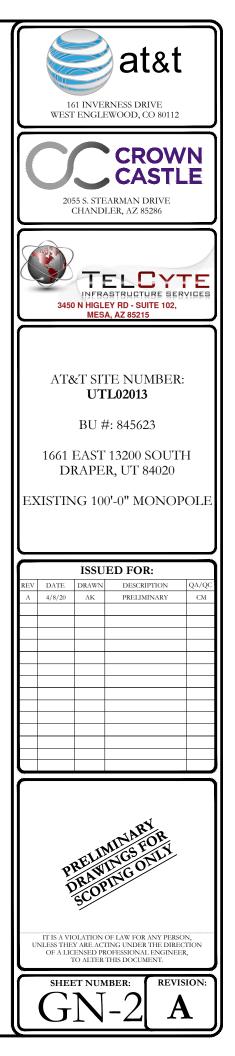
CONNECTION BOLTS

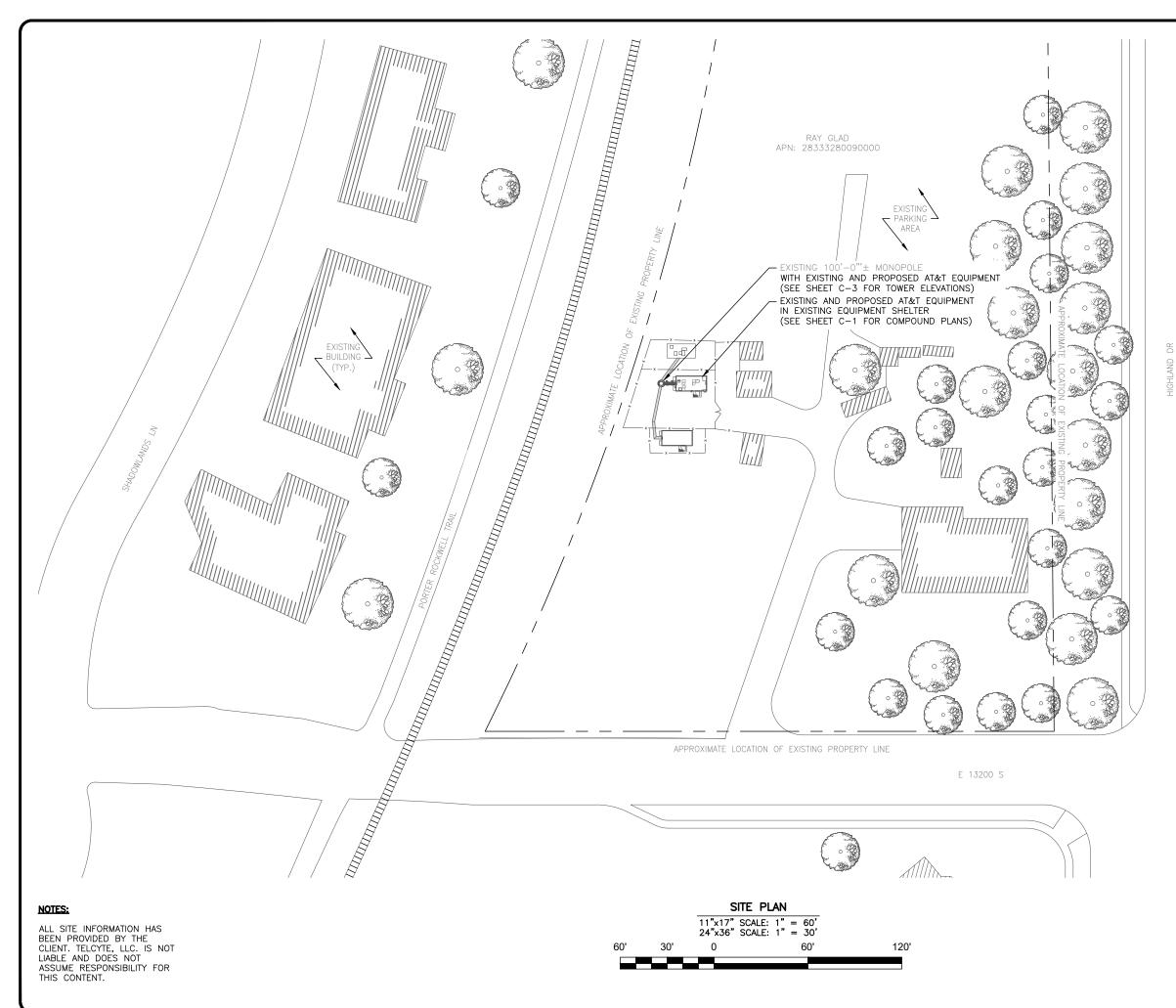
ASTM A992, GRADE 50 ASTM A36, Fy 36 KSI ASTM A572, Fy 50 KSI ASTM A53, GR B, Fy 35 KSI ASTM A500, GR B, Fy 46KSI ASTM A307 ASTM A325 TWIST-OFF

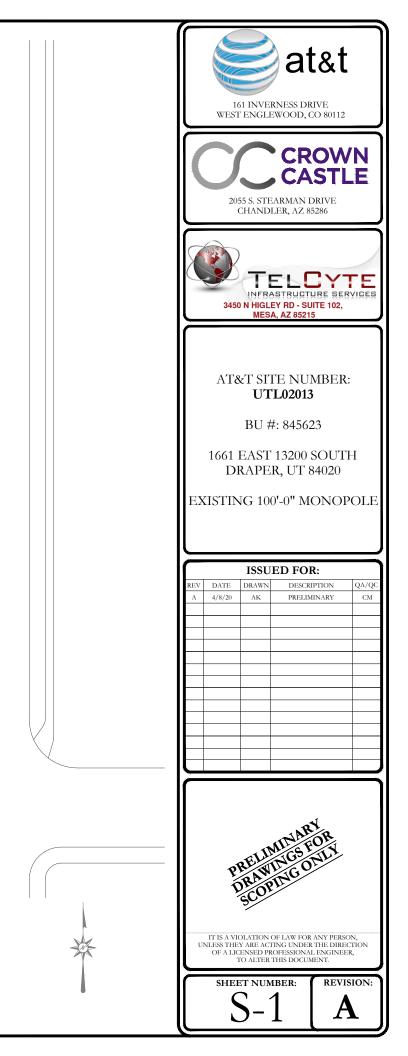
- 2. BASE STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION (INCLUDING FIELD WELDING, HIGH STRENGTH FIELD BOLTING, EXPANSION BOLTS, AND THREADED EXPANSION ANCHORS) ON THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.
- h. DO NOT PLACE FILL OR EMBANKMENT MATERIAL ON FROZEN GROUND. DO NOT PLACE 3. HOT DIP GALVANIZE AFTER FABRICATION PER A123/A123M-00 ALL STEEL EXPOSED TO WEATHER AND WHERE NOTED.
 - 4. CONFORM TO ALL AISC AND AWS STANDARDS FOR WELDING. PERFORM WELDING BY ANSI/AWS D1.1 CERTIFIED WELDERS USING E70 XX ELECTRODES. USE ONLY PRE-QUALIFIED WELDS AS DEFINED BY AWS.
 - 5. PROVIDE COLD-FORMED STEEL FRAMING MEMBERS OF THE SHAPE, SIZE, AND GAGE SHOWN ON THE PLANS. PROVIDE MINIMUM SECTION PROPERTIES INDICATED. ALL COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS.
 - 6. FOR BOLTED CONNECTIONS, USE 3/4" DIA., BEARING-TYPE, A325 BOLTS WITH A MINIMUM OF TWO BOLTS, UNO.
 - 7. FOR NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING, USE 5/8" DIA. A307 BOLTS, UNO.
 - 8. PREPARE AND PAINT IN ACCORDANCE WITH THE PAINT MANUFACTURERS WRITTEN INSTRUCTIONS. UNO
 - 9. TOUCH UP ALL FIELD DRILLING, WELDING AND CUT SURFACES WITH 2 COATS OF GALVACON (ZINC RICH PAINT) OR APPROVED EQUAL.

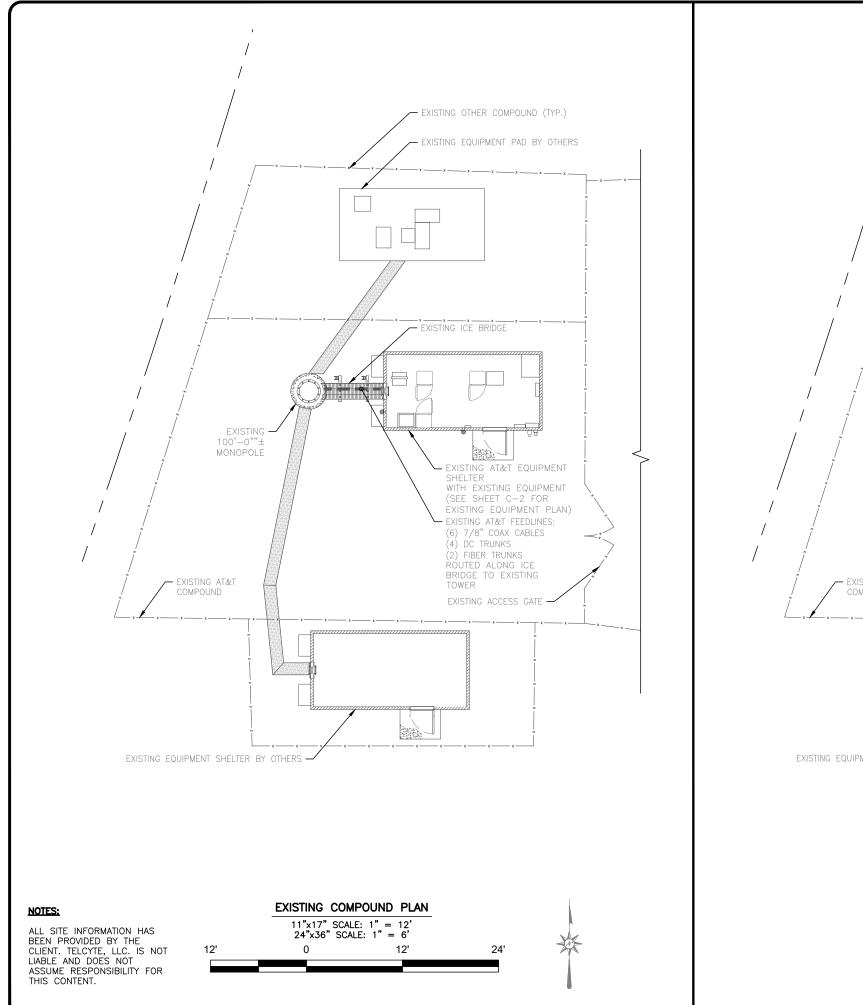
SPECIAL INSPECTIONS:

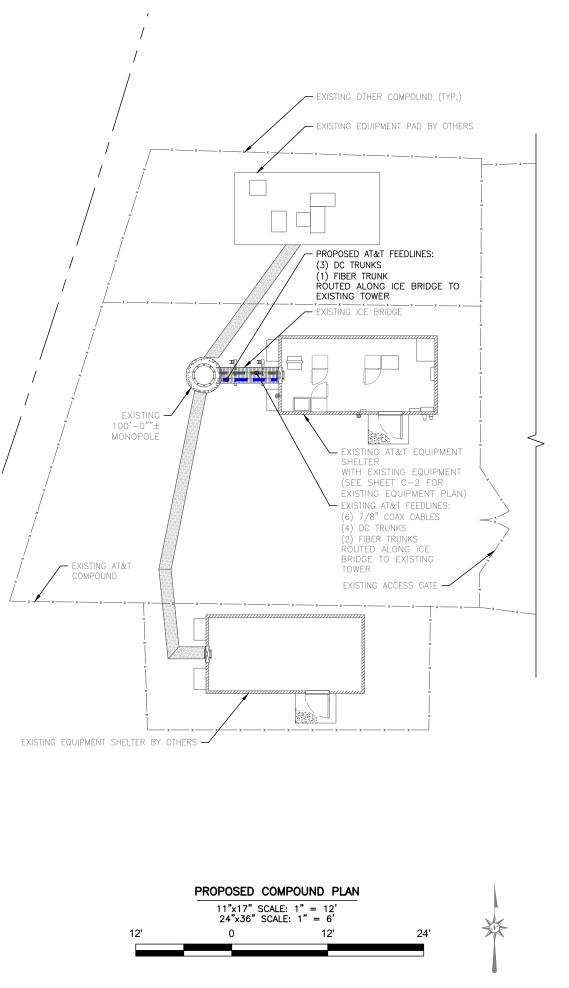
- 1. WHEN REQUIRED, PROVIDE SPECIAL INSPECTIONS PERFORMED BY AN INDEPENDENT INSPECTOR, APPROVED BY OWNER'S REPRESENTATIVE AND THE LOCAL JURISDICTION.
- 2. THE SPECIAL INSPECTOR SHALL PROVIDE A COPY OF THE REPORT TO THE OWNER'S REPRESENTATIVE, STRUCTURAL ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL.

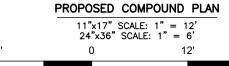


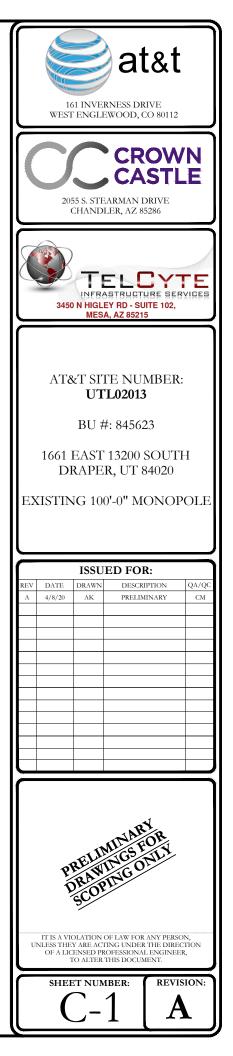


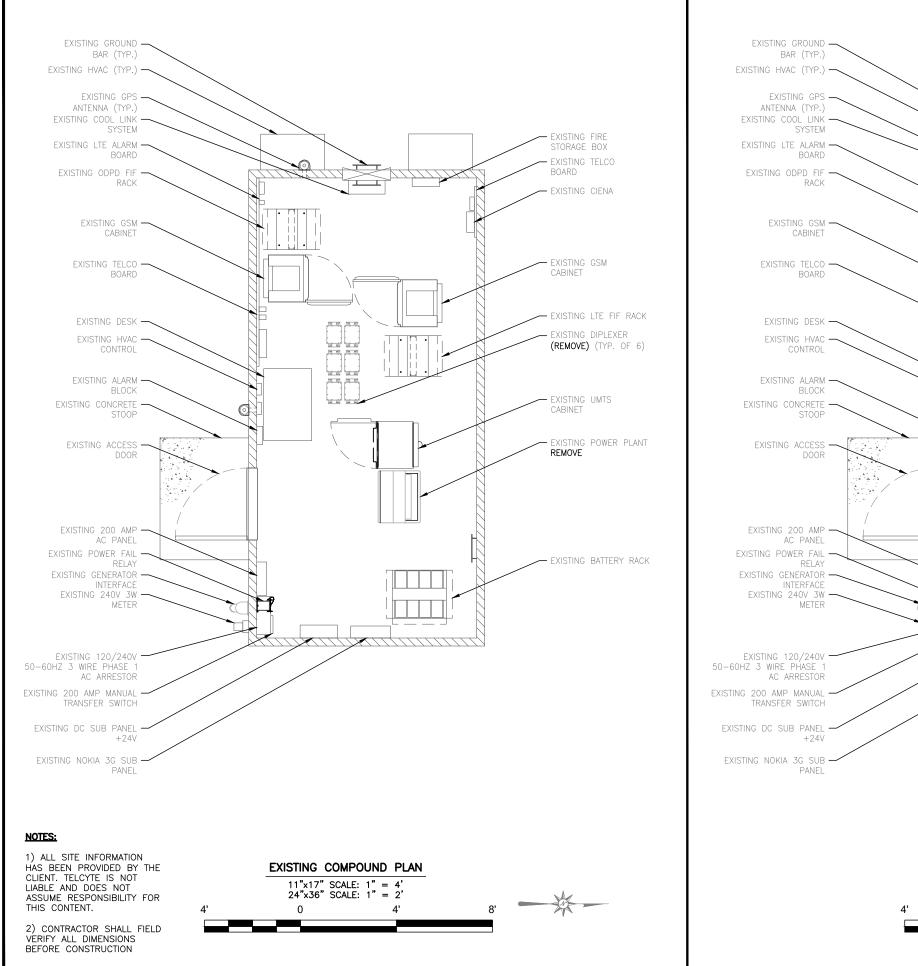


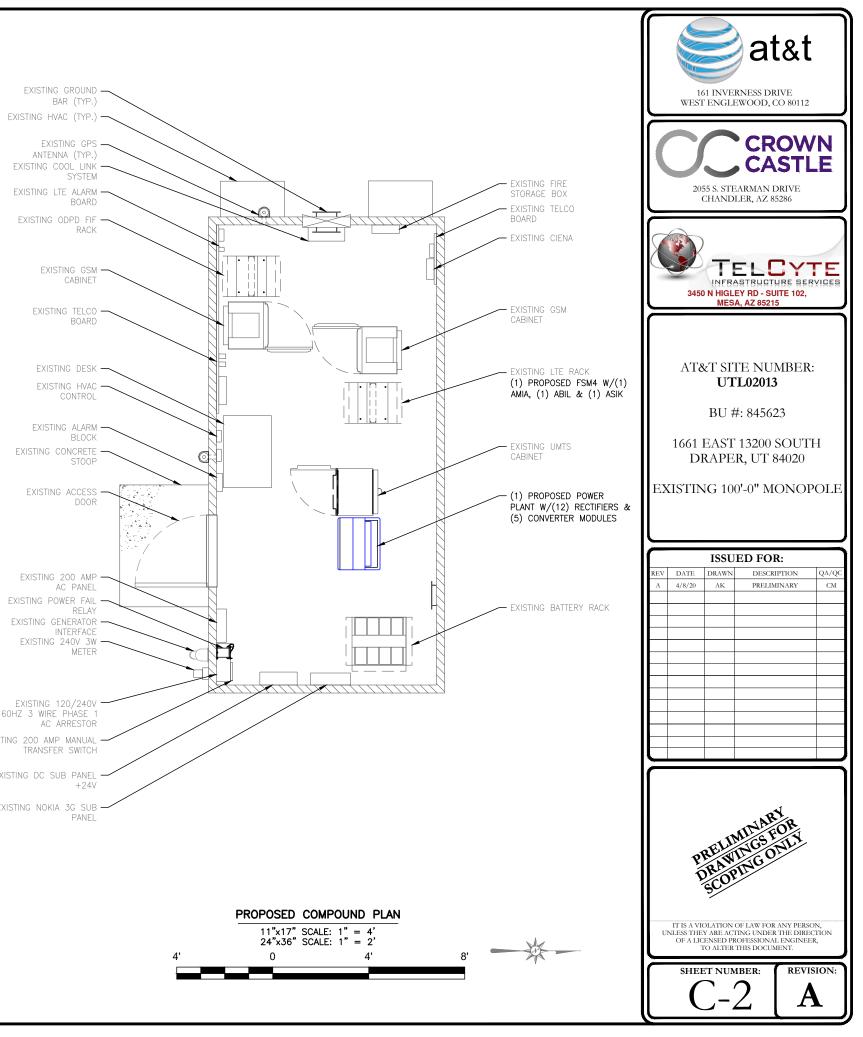


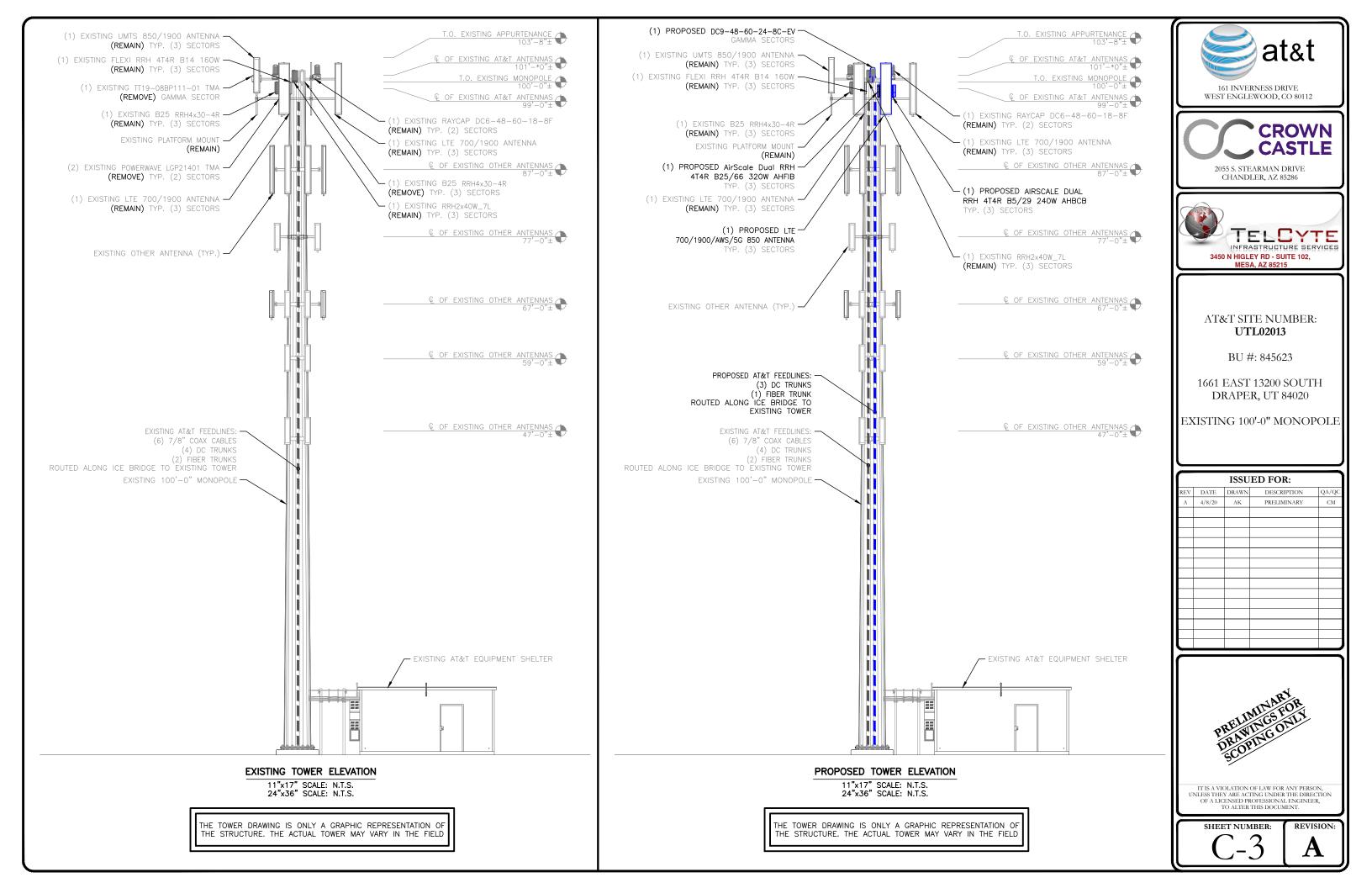


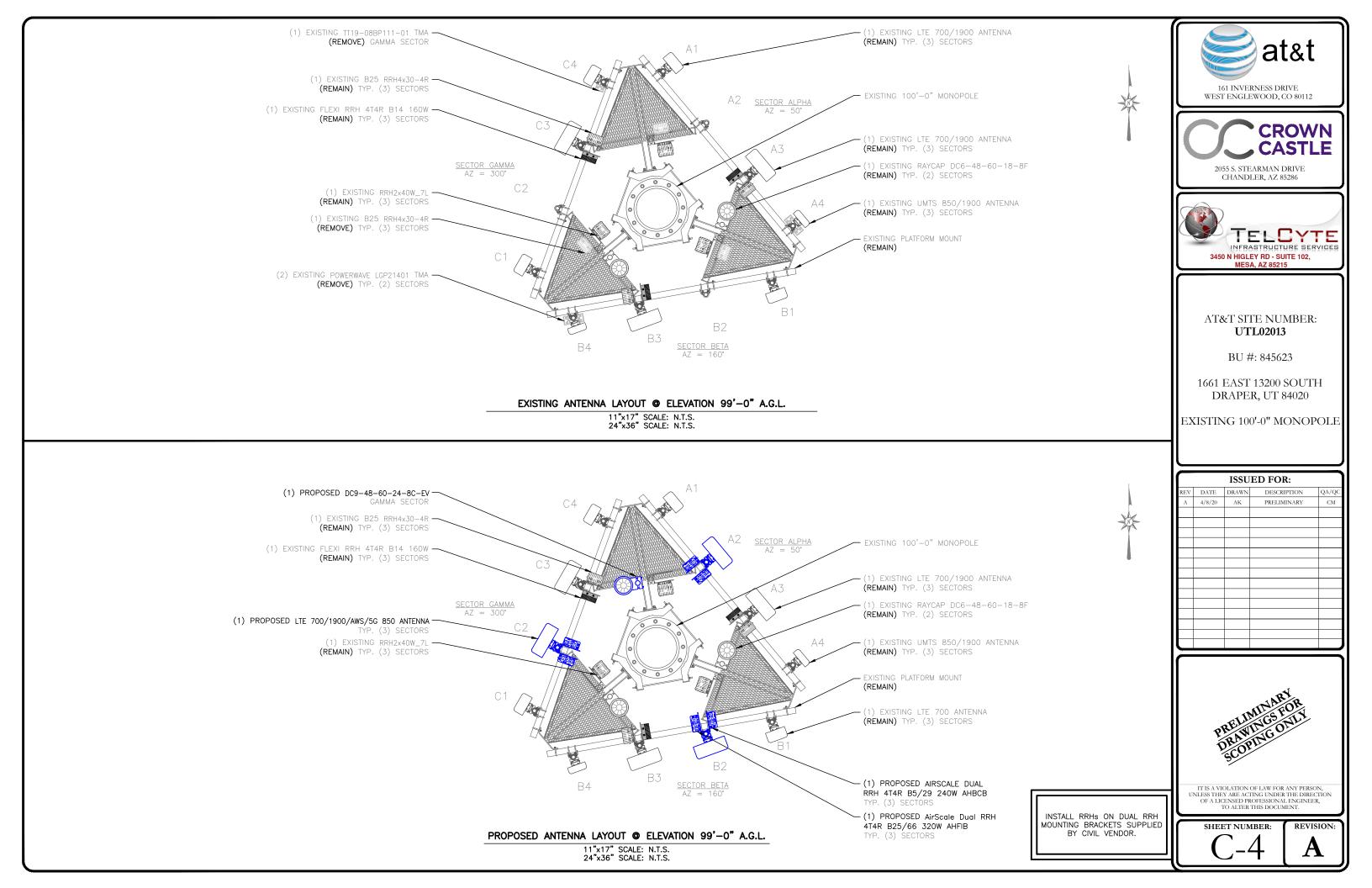




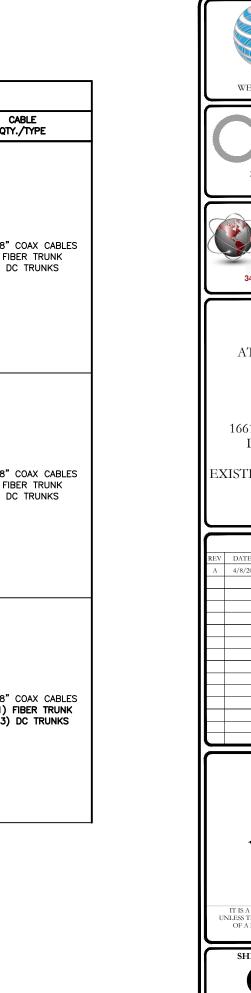


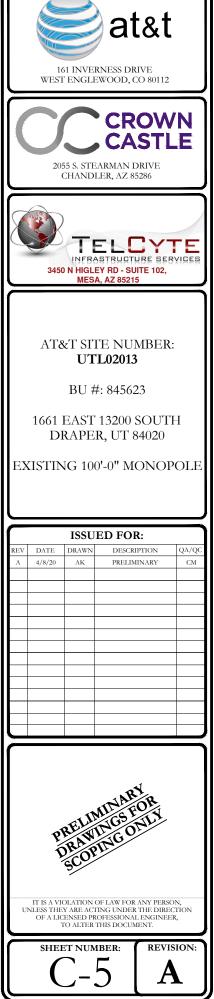


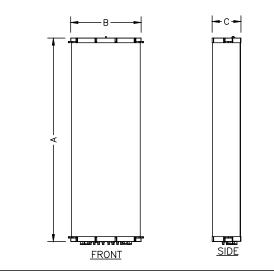




| (P) = F | P) = PROPOSED FINAL ANTENNA & CABLE SCHEDULE | | | | | | | | | | |
|---------|--|---------------------------------|---------------------------------|---------------------|--------------------|------------------|--|---|--|--------------------|------------|
| SECTOR | MARK | BAND | ANTENNA MAKE/MODEL | ANTENNA & HEIGHT | ANTENNA AZIMUTH | TMA QTY./TYPE | RADIO QTY./TYPE | SURGE PROTECTION QTY./TYPE | CA QTY. | | |
| | A1 | LTE 700 | KMW – ET-X-UW-70-16-70-18-IR-AT | | | _ | (1) RRH2x40W_7L | | | | |
| ALPHA | A2 | LTE 700/1900/AWS/ 5G 850/ | (P) COMMSCOPE - NNH4-65C-R6 | 99'-0" | | | (P) (1) AIRSCALE DUAL RRH 4T4R B5/29 240W AHBCB (P) (1) NOKIA DUAL RRH 4T4R B25/66 320W AHFIB | (1) DC6 49 60 19 95 | (2) 7/8" (| | |
| ALPHA | A3 | LTE 700/ 1900 | COMMSCOPE - NNH4-65C-R6 | | 50 | - | (1) FLEXI RRH 4T4R B14 160W FRBI (1) B25 RRH4X30–4R | (1) DC6-48-60-18-8F | (1) FIBE (2) DC | | |
| | A4 | UMTS 850 | POWERWAVE - 7750 | 101'-0" | | - | _ | | | | |
| | B1 | LTE 700 | KMW – ET-X-UW-70-16-70-18-IR-AT | 99'–0" | - | | - | (1) RRH2x40W_7L | | | |
| BETA B2 | B2 | LTE 700/1900/AWS/ 5G 850/ | (P) COMMSCOPE - NNH4-65C-R6 | | | 99'—0" | | | (P) (1) AIRSCALE DUAL RRH 4T4R B5/29 240W AHBCB (P) (1) NOKIA DUAL RRH 4T4R B25/66 320W AHFIB | | (2) 7/8" (|
| DEIA | B3 | LTE 700/ 1900 | COMMSCOPE - NNH4-65C-R6 | | | 160* | - | (1) FLEXI RRH 4T4R B14 160W FRBI (1) B25 RRH4X30–4R | (1) DC6-48-60-18-8F | (1) FIBE (2) DC | |
| | B4 | UMTS 850 | POWERWAVE - 7750 | 101'-0" | 101'-0" | _ | - | | | | |
| | C1 | LTE 700 | KMW – ET-X-UW-70-16-70-18-IR-AT | | | _ | (1) RRH2x40W_7L | | | | |
| GAMMA | C2 | LTE 700/1900/AWS/ 5G 850/ | (P) COMMSCOPE - NNH4-65C-R6 | 99'–0" | 99'-0" | _ | (P) (1) AIRSCALE DUAL RRH 4T4R B5/29 240W AHBCB (P) (1) NOKIA DUAL RRH 4T4R B25/66 320W AHFIB | | (2) 7/8" 0 | | |
| GAMMA | C3 | LTE 700/ 1900 | COMMSCOPE - NNH4-65C-R6 | | 300* | _ | (1) FLEXI RRH 4T4R B14 160W FRBI (1) B25 RRH4X30–4R | - (P) (1) DC9-48-60-24-8C-EV | (2) 7/8" ((P) (1) FI (P) (3) [| | |
| | C4 | UMTS 850 | POWERWAVE - 7750 | 100'–0" | | _ | - | | | | |



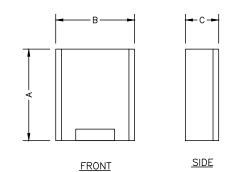




| ANTENNA SPECIFICATIONS | | | | | |
|-------------------------|------------|-----------|-----------|-------------|--|
| MODEL | LENGTH (A) | WIDTH (B) | DEPTH (C) | WEIGHT (Ib) | |
| COMMSCOPE - NNH4-65C-R6 | 96.0" | 19.6" | 7.8" | 99.2 | |

ANTENNA SPECIFICATIONS

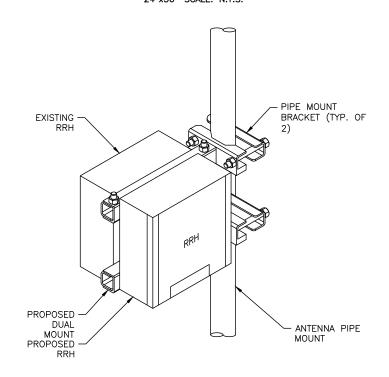
11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.



| RADIO SPECIFICATIONS | | | | | | |
|---|------------|-----------|-----------|----------|--|--|
| MODEL | LENGTH (A) | WIDTH (B) | DEPTH (C) | WEIGHT (| | |
| AIRSCALE DUAL RRH 4T4R B5/29 240W AHBCB | 11.8" | 15.7" | 4.7" | 32.6 | | |
| AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB | 28.74" | 15.35" | 9.45" | 88.19 | | |

RADIO SPECIFICATIONS

11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.

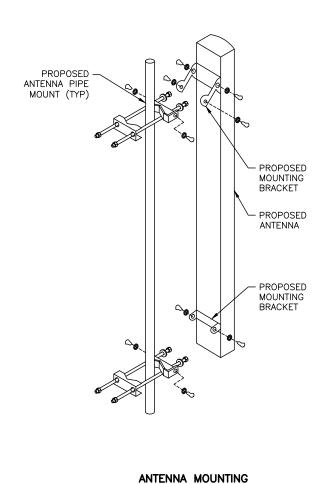


NOTES:

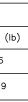
- RRH MANUFACTURER VIA AT&T SUPPLIES RRH, RRH PIPE-MOUNTING BRACKET. SUBCONTRACTOR SHALL SUPPLY PIPE AND INSTALL ALL MOUNTING HARDWARE 1. INCLUDING RRH PIPE-MOUNTING BRACKET.
- FOR PIPE DIAMETERS FROM 6" TO 15", AT&T CAN SUPPLY A PAIR OF PIPE MOUNTING METAL BANDS WITH BOLTING WELDMENT. 2.
- NO PAINTING OF THE RRH OR SOLAR SHIELD IS ALLOWED 3.

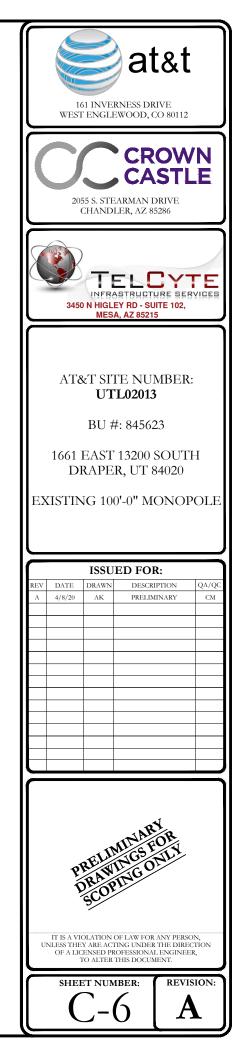
DUAL RRH MOUNTING BRACKET

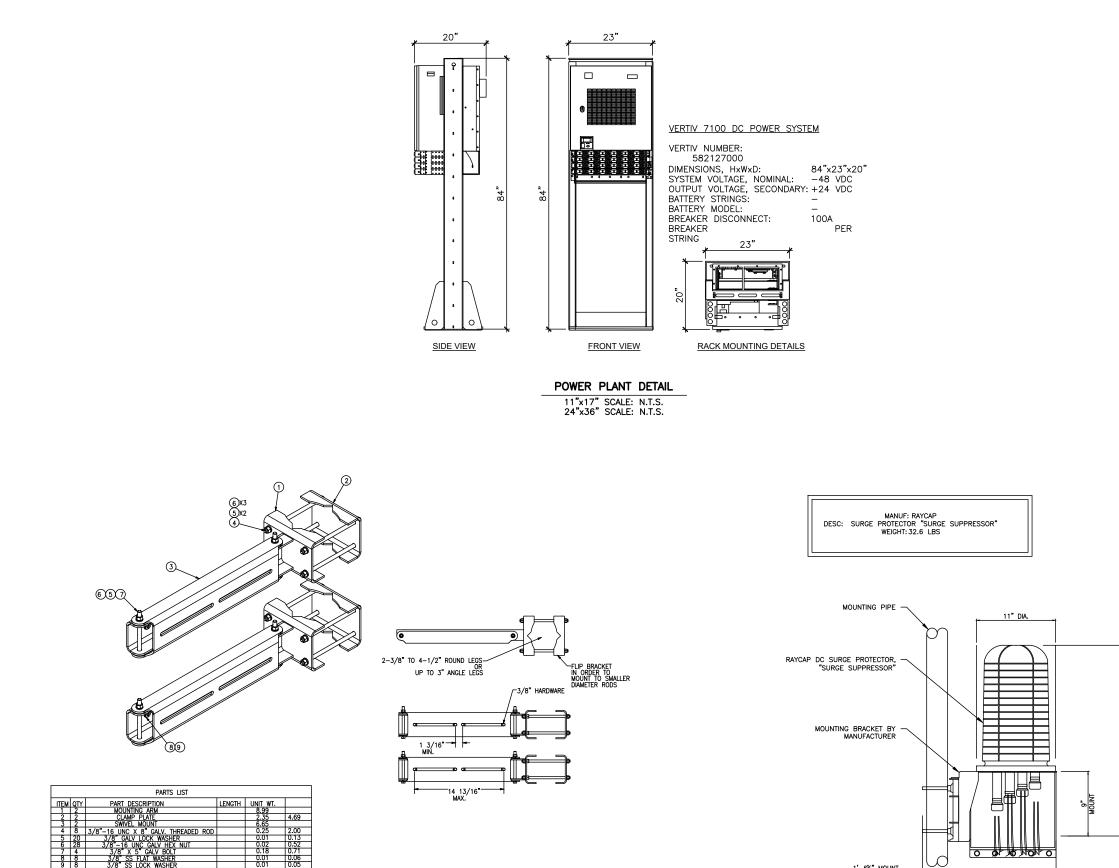
11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.



11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.





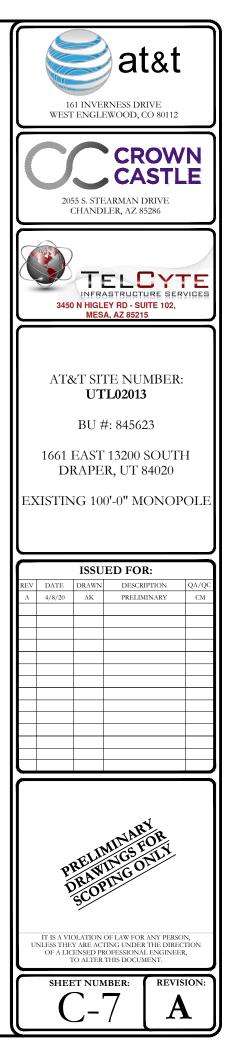


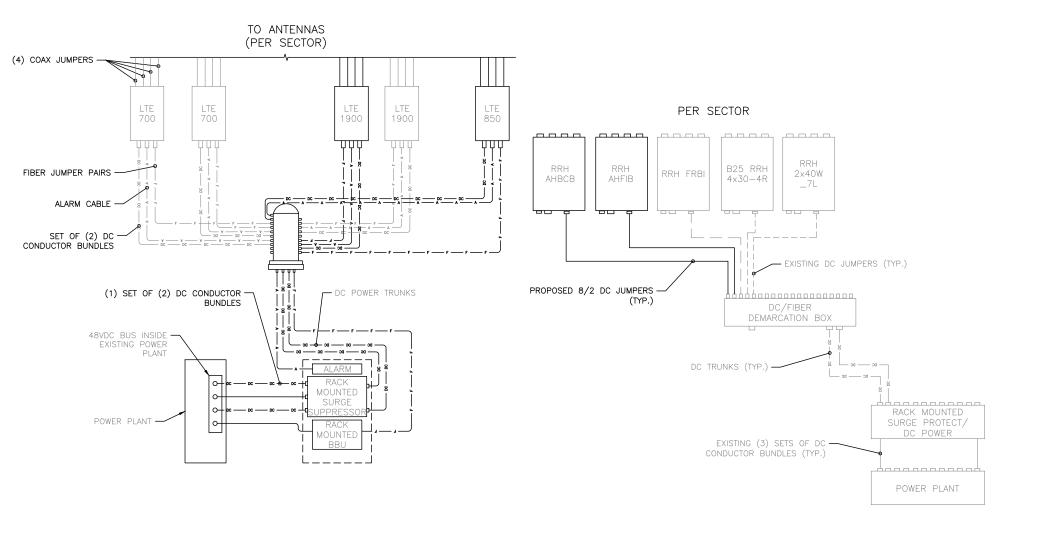
1'-6½" MOUNT

DC9-48-60-24-8C-EV DETAIL 11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.

DUAL BACK TO BACK RRH MOUNT DETAIL 11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.

TOTAL WT. # 39.43





DC & FIBER SYSTEM SCHEMATIC

11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.

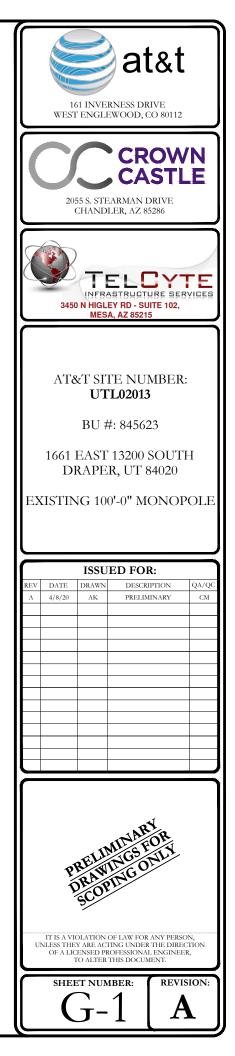
DC WIRING DIAGRAM 11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.

CABLE LENGTH TABLE TOTAL DISTANCE & DISTANCE & DISTANCE & FINAL SECTOR CABLE CABLE TYPE CABLE TYPE CABLE TYPE VOLTAGE LENGTH #12 AWG 139' (2) #8 AWG #8 AWG ALPHA 6' 5' 150' 41.48 PDF SQUID DC-6 RRH BETA 6' #12 AWG 139' (2) #8 AWG 5' #8 AWG 41.48 150' 6' #12 AWG (2) #8 AWG 5' #8 AWG 41.48 GAMMA 139' 150' LTE CONDUCTOR SIZES 11"x17" SCALE: N.T.S. 24"x36" SCALE: N.T.S.

| CABLE COUNT | | | | |
|-------------|-------------|--|--|--|
| QTY. | CABLE TYPE | | | |
| 3 | FIBER TRUNK | | | |
| 7 | DC TRUNK | | | |

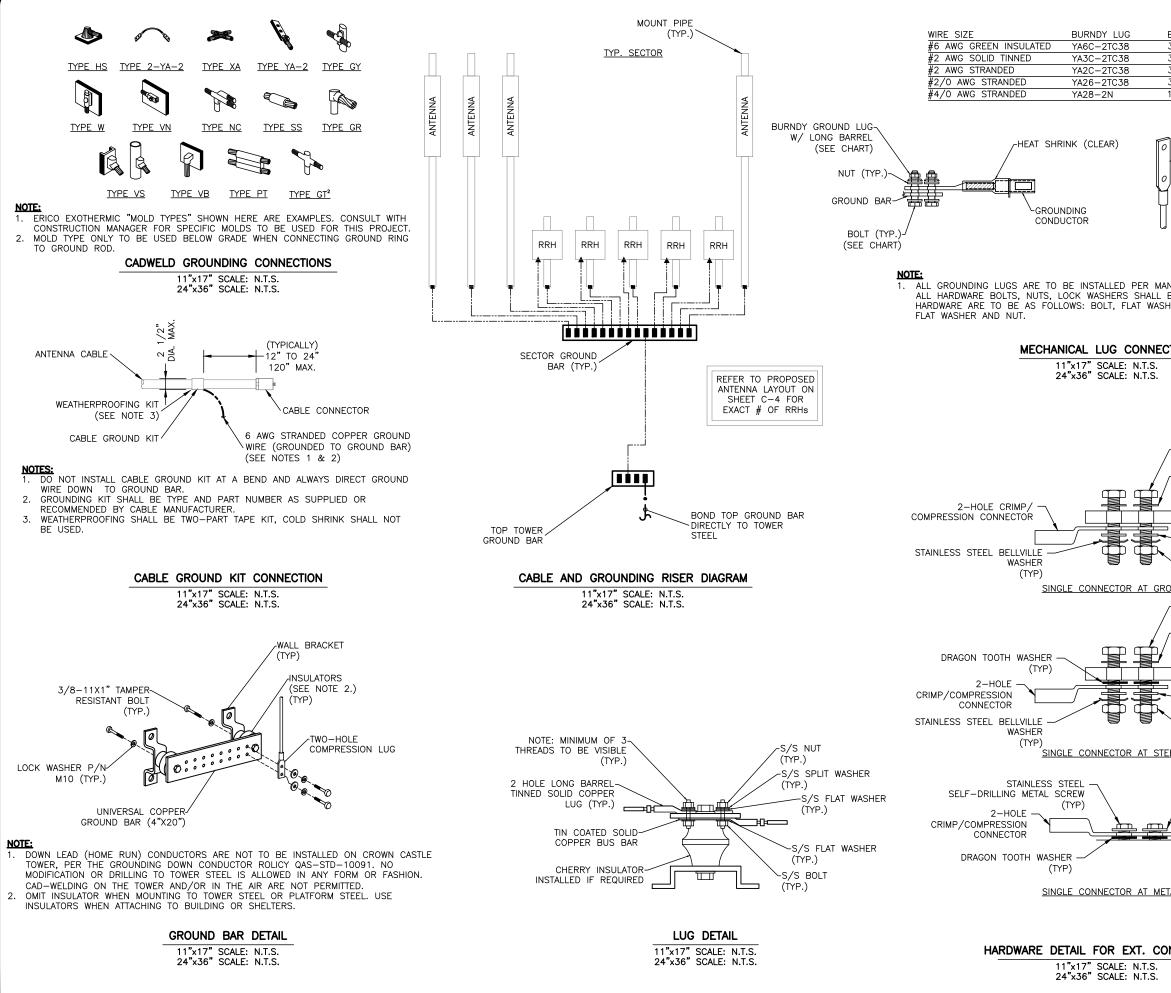
NOTES:

8-AWG.



1. REFER TO CHART FOR CABLE QUANTITIES, SIZES AND LENGTHS.

2. CABLE LENGTH CALCULATIONS ASSUMES TRUNK CABLE SIZE OF



| BOLT SIZE 3/8" - 16 NC S 2 BOLT 3/8" - 16 NC S 2 BOLT 1/2" - 16 NC S 2 BOLT | 161 INVERNESS DRIVE WEST ENGLEWOOD, CO 80112 |
|---|---|
| BURNDY GROUND LUG W/ LONG BARREL (SEE CHART) BARE WIRE TO BE NO-OX AT BOTH ENDS | CROWN CASTLE 2055 S. STEARMAN DRIVE CHANDLER, AZ 85286 |
| ANUFACTURER'S SPECIFICATIONS. BE STAINLESS STEEL. ALL SHER, GROUND BAR, GROUND LUG, | TELCYTE INFRASTRUCTURE SERVICES 3450 N HIGLEY RD - SUITE 102, MESA, AZ 85215 |
| CTION | AT&T SITE NUMBER: UTL02013 BU #: 845623 |
| STAINLESS STEEL BOLT (TYP) STAINLESS STEEL FLAT WASHER (TYP) GROUND BAR | 1661 EAST 13200 SOUTH DRAPER, UT 84020 EXISTING 100'-0" MONOPOLE |
| | |
| STAINLESS STEEL FLAT WASHER (TYP) | ISSUED FOR: REV DATE DRAWN DESCRIPTION QA/QC |
| STAINLESS STEEL NUT (TYP) | A 4/8/20 AK PRELIMINARY CM |
| R <u>OUND_BARS</u> / | |
| / (TYP) STAINLESS STEEL | |
| / FLAT WASHER (TYP) | |
| STEEL | |
| STAINLESS STEEL FLAT WASHER (TYP) | |
| STAINLESS STEEL NUT (TYP) | |
| EEL OBJECTS | |
| STAINLESS STEEL FLAT WASHER (TYP) METALLIC OBJECT | PRELIMINARY PRELIMINGS FOR DRAWING ONLY SCOPING ONLY |
| ETALLIC/STEEL_OBJECTS | 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. |
| DNNECTIONS | SHEET NUMBER: REVISION: A |