



ALPINE CITY PLANNING COMMISSION MEETING

NOTICE is hereby given that the **PLANNING COMMISSION** of Alpine City, UT will hold a **Regular Meeting at Alpine City Hall**, 20 North Main, Alpine, Utah on **Tuesday, February 21, 2017 at 7:00 pm** as follows:

I. GENERAL BUSINESS

- | | |
|-----------------------------|---------------|
| A. Welcome and Roll Call: | Steve Cosper |
| B. Prayer/Opening Comments: | Jason Thelin |
| C. Pledge of Allegiance: | By Invitation |

II. PUBLIC COMMENT

Any person wishing to comment on any item not on the agenda may address the Planning Commission at this point by stepping to the microphone and giving his or her name and address for the record.

III. ACTION ITEMS

- A. T-Mobile Wireless Telecommunication Upgrade and Collocation – Approximately 694 Rocky Mtn. Dr. – Crown Castle**
The Planning Commission will review a site plan that would include the installation of (3) antennas, (3) RRUs, (3) TMAs, (2) 7/8 COAX cable, (1) 1-5/8" HYBRID cable and (6) New 2-1/2" pipes to the existing mount.
- B. "The Ridge at Alpine" PRD Subdivision Cul-de-sac Exception – 1100 North Grove Drive – Paul Kroff**
The Planning Commission will discuss an aspect of the road design, for the subdivision previously referred to as Alpine Ridge, that requires an exception from the Planning Commission and approval from the City Council. The proposed roadway design is a result of a request from the Planning Commission.
- C. General Plan Update – Public Facilities Element**
The Planning Commission will discuss an update of the Alpine City General Plan, specifically as it pertains to the Public Facilities Element.

IV. COMMUNICATIONS

V. APPROVAL OF PLANNING COMMISSION MINUTES: February 7, 2017

ADJOURN

Chairman Steve Cosper
February 17, 2017

THE PUBLIC IS INVITED TO ATTEND ALL PLANNING COMMISSION MEETINGS. If you need a special accommodation to participate in the meeting, please call the City Recorder's Office at 801-756-6347 ext. 5.

CERTIFICATION OF POSTING. The undersigned duly appointed recorder does hereby certify that the above agenda notice was posted at Alpine City Hall, 20 North Main, Alpine, UT. It was also sent by e-mail to The Daily Herald located in Provo, UT a local newspaper circulated in Alpine, UT. This agenda is also available on the City's web site at www.alpinecity.org and on the Utah Public Meeting Notices website at www.utah.gov/pmn/index.html.

PUBLIC MEETING AND PUBLIC HEARING ETIQUETTE

Please remember all public meetings and public hearings are now recorded.

- All comments **must** be recognized by the Chairperson and addressed through the microphone.
- When speaking to the Planning Commission, please stand, speak slowly and clearly into the microphone, and state your name and address for the recorded record.
- Be respectful to others and refrain from disruptions during the meeting. Please refrain from conversation with others in the audience as the microphones are very sensitive and can pick up whispers in the back of the room.
- Keep comments constructive and not disruptive.
- Avoid verbal approval or dissatisfaction of the ongoing discussion (i.e., booing or applauding).
- Exhibits (photos, petitions, etc.) given to the City become the property of the City.
- Please silence all cellular phones, beepers, pagers or other noise making devices.
- Be considerate of others who wish to speak by limiting your comments to a reasonable length, and avoiding repetition of what has already been said. Individuals may be limited to two minutes and group representatives may be limited to five minutes.
- Refrain from congregating near the doors or in the lobby area outside the council room to talk as it can be very noisy and disruptive. If you must carry on conversation in this area, please be as quiet as possible. (The doors must remain open during a public meeting/hearing.)

Public Hearing vs. Public Meeting

If the meeting is a **public hearing**, the public may participate during that time and may present opinions and evidence for the issue for which the hearing is being held. In a public hearing there may be some restrictions on participation such as time limits.

Anyone can observe a **public meeting**, but there is no right to speak or be heard there - the public participates in presenting opinions and evidence at the pleasure of the body conducting the meeting.

ALPINE PLANNING COMMISSION AGENDA

SUBJECT: T-Mobile Wireless Telecommunication Tower Collocation & Upgrade

FOR CONSIDERATION ON: 21 February 2017

PETITIONER: Crown Castle - Craig Chagnon

ACTION REQUESTED BY PETITIONER: Approve the Site Plan

APPLICABLE STATUTE OR ORDINANCE: Article 3.27 (Wireless Telecommunications)

PETITION IN COMPLIANCE WITH ORDINANCE: Yes

BACKGROUND INFORMATION:

Crown Castle has submitted a site plan for review that would include the installation of (3) antennas, (3) RRUs, (3) TMAs, (2) 7/8 COAX cable, (1) 1-5/8" HYBRID cable and (6) New 2-1/2" pipes to the existing mount. The site is located at 694 Rocky Mountain Drive (Shepherd's Hill).

State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. For purposes of this subsection, the term "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves:

- (A) collocation of new transmission equipment;
- (B) removal of transmission equipment;
- (C) replacement of transmission equipment;

(Article 3.27.3 of the Alpine City Development Code)

RECOMMENDED ACTION:

The Planning Commission review the proposed site plan for the T-Mobile Collocation and Upgrade and make a recommendation to the City Council.



T-MOBILE SITE NUMBER: SL01122A
T-MOBILE SITE NAME: ALPINE SHEPHERD HILL
SITE TYPE: MONOPOLE
TOWER HEIGHT: 22'-0"

CROWN CASTLE BU #: 822343
SITE ADDRESS: 651 S BATEMAN
ALPINE, UT 84004
COUNTY: UTAH
JURISDICTION: CITY OF ALPINE

T-Mobile
121 W. ELECTION RD.
SUITE 330
DRAPER UT. 84020

CROWN CASTLE
116 INVERNESS DR. EAST STE# 280
ENGLEWOOD, CO 80112

SITE INFORMATION

SITE NAME: ALPINE_SHEPHERD_HILL
SITE ADDRESS: 651 S BATEMAN, ALPINE, UT 84004
COUNTY: UTAH
MAP/PARCEL #: 11-023-0117
AREA OF CONSTRUCTION: EXISTING
LATITUDE: 40° 26' 39.30"
LONGITUDE: -111° 46' 46.30"
LAT/LONG TYPE: NAD83
JURISDICTION: CITY OF ALPINE
OCCUPANCY CLASSIFICATION: U
TYPE OF CONSTRUCTION: VB
A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER: CLYDE SHEPHERD
694 ROCKY MOUNTAIN DR
ALPINE, UT 84004-1540
TOWER OWNER: CCTMO LLC
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
APPLICANT/CARRIER: CROWN CASTLE
116 INVERNESS DR. EAST STE# 280
ENGLEWOOD, CO 80112
CROWN CASTLE APPLICATION ID: 369829
ELECTRIC PROVIDER: ROCKY MOUNTAIN POWER
(877) 548-3768
TEL.CO PROVIDER: CENTURY LINK
(281) 359-9519

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	SITE PLAN
C-1.2	EXISTING AND FINAL EQUIPMENT LAYOUTS
C-2	EXISTING AND FINAL ELEVATIONS
C-3	ANTENNA PLAN AND SCHEDULE
C-4	EQUIPMENT SPECIFICATIONS
C-5	PLUMBING DIAGRAM
C-6	RFDS
G-1	ANTENNA GROUNDING DETAILS
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR FULL SIZE. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO PROPOSE AN ANTENNA MODIFICATION ON AN EXISTING WIRELESS SITE.

- INSTALL (3) ANTENNAS
- INSTALL (3) RRUs
- REMOVE (3) TMAs
- INSTALL (2) 7/8" COAX CABLE
- INSTALL (1) 1-5/8" HYBRID CABLE
- INSTALL (6) NEW 2-1/2" HORIZONTAL PIPES W/ Crossover HARDWARE TO (5) MOUNT

DESIGN PACKAGE BASED ON APPLICATION
ID: 369829
REVISION: 0

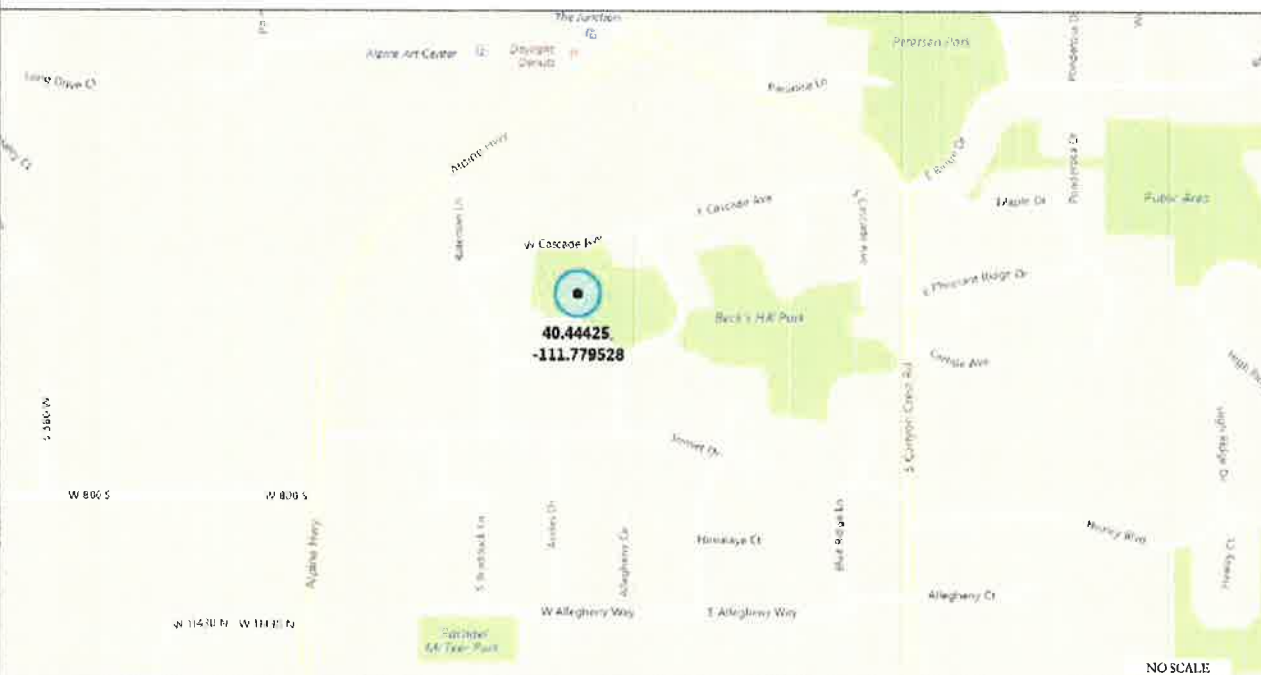
DESIGN PACKAGE BASED ON RF DATA SHEET
VERSION: 1.1
ISSUED: 8/4/16



CALL UTAH ONE CALL
(800) 862-4111
CALL 3 WORKING DAYS
BEFORE YOU DIG!



LOCATION MAP



DRIVING DIRECTIONS FROM T-MOBILE LOCAL OFFICE (121 W. ELECTION RD., SUITE 330 DRAPER UT. 84020):
HEAD WEST ON S ELECTION RD TOWARD LONE PEAK PKWY.
TAKE I-15 S, TIMPANOGOS HWY COMMUTER LN AND UT-92 E TO SUNSET DR IN ALPINE.
CONTINUE ON SUNSET DR AND TAKE BATEMAN LN TO W CASCADE AVE.

APPLICABLE CODES/REFERENCE DOCUMENTS

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

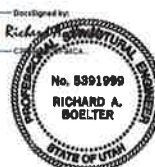
CODE TYPE	CODE
BUILDING	UTAH STATE CONSTRUCTION CODE/2015 IBC
MECHANICAL	UTAH STATE CONSTRUCTION CODE/2015 IMC
ELECTRICAL	UTAH STATE CONSTRUCTION CODE/2014 NEC

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS: CROWN CASTLE
DATED JANUARY 9, 2017

MOUNT ANALYSIS: BY OTHERS

SITE PHOTO:



1/26/2017 | 10:24:49 AM EST

Richard A. Boelter, P.E.
Professional Engineer License: #5391999
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.

SHEET NUMBER:

T-1

REVISION:

0

T-MOBILE SITE NUMBER: SL01122A

BU #: 822343
ALPINE_SHEPHERD_HILL

651 S BATEMAN
ALPINE, UT 84004

EXISTING 22'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	01/11/17	NJI	PRELIMINARY	CTR
0	01/26/17	NJI	CONSTRUCTION	RAB

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.
3. ALL SITE WORK TO COMPLY WITH QAS-STD-1006B "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE TOWER SITE" AND LATEST VERSION OF TIA 1019 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
4. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS.
5. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
6. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
7. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
11. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE PROJECT SPECIFICATIONS.
12. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
13. NOTICE TO PROCEED- NO WORK TO COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED AND THE ISSUANCE OF A PURCHASE ORDER.
14. ALL CONSTRUCTION MEANS AND METHODS, INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA 1019 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-1019 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4") CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
3. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
4. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WIT-OUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. SLAB FOUNDATION DESIGN ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH.....3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 AND LARGER.....2 IN.
#5 AND SMALLER & WWF.....1 1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
SLAB AND WALLS.....3/4 IN.
BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

MASONRY NOTES:

1. HOLLOW CONCRETE MASONRY UNITS SHALL MEET A.S.T.M. SPECIFICATION C90, GRADE N, TYPE 1, THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F'm) SHALL BE 1500 PSI.
2. MORTAR SHALL MEET THE PROPERTY SPECIFICATION OF A.S.T.M. C270 TYP. "S" MORTAR AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
3. GROUT SHALL MEET A.S.T.M. SPECIFICATION C475 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI.
4. CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND.
5. WALL SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL GROUT IS FULLY CURED.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR- GENERAL CONTRACTOR (CONSTRUCTION)
SUBCONTRACTOR- T-MOBILE
CARRIER- CROWN CASTLE
TOWER OWNER- ORIGINAL EQUIPMENT MANUFACTURER
DEM-
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR AND CROWN CASTLE.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

ABBREVIATIONS AND SYMBOLS:

ABBREVIATIONS:

AGL ABOVE GRADE LEVEL
BTS BASE TRANSCIVER STATION
(F) EXISTING
MIN. MINIMUM
REF REFERENCE
RF RADIO FREQUENCY
T.B.D. TO BE DETERMINED
T.B.R. TO BE RESOLVED
TYP TYPICAL
REQ REQUIRED
EGR EQUIPMENT GROUND RING
AWG AMERICAN WIRE GAUGE
MGB MASTER GROUND BAR
EGR EQUIPMENT GROUND
BCW BARE COPPER WIRE
SIAD SMART INTEGRATED ACCESS DEVICE
GEN GENERATOR
IGR INTERIOR GROUND RING (HALO)
RBS RADIO BASE STATION

SYMBOLS:

—S/G— SOLID GROUND BUS BAR
—S/N— SOLID NEUTRAL BUS BAR
— SUPPLEMENTAL GROUND CONDUCTOR
— 2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
— SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
● CHEMICAL GROUND ROD
⊗ TEST WELL
— DISCONNECT SWITCH
⊞ METER
■ EXOTHERMIC WELD (COWELD) (UNLESS OTHERWISE NOTED)
● MECHANICAL CONNECTION
— GROUNDING WIRE

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC. HILTI EPOXY ANCHORS ARE REQUIRED BY CROWN CASTLE.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (I.E. PANEL BOARD AND CIRCUIT ID'S).
8. PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
10. POWER, CONTROL AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET & DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION WITH OUTER JACKET LISTED OR LABELED FOR THE LOCATION USED UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT) OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
21. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER).
22. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHIN ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL; SHALL MEET OR EXCEED UL 50 AND RATED NEMA 1 (OR BETTER) INDOORS OR NEMA 3R (OR BETTER) OUTDOORS.
24. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
27. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
28. INSTALL PLASTIC LABEL ON THE METER CENTER TO SHOW "T-MOBILE".
29. ALL CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 AWG SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 FT. OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS, WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS. NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 TINNED SOLID IN 3/4" LIQUID TIGHT CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE LIQUID TIGHT CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).

NEC INSULATOR COLOR CODE		
DESCRIPTION	PHASE/CODE LETTER	WIRE COLOR
240/120 1Ø	LEG 1	BLACK
	LEG 2	RED
AC NEUTRAL	N	WHITE
GROUND (EGC)	G	GREEN
VDC POS	+	*RED-POLARITY MARK AT TERMINATION
VDC NEG	-	*BLACK-POLARITY MARK AT TERMINATION
240V OR 208V, 3Ø	PHASE A	BLACK
	PHASE B	RED(ORG. IF HI LEG)
	PHASE C	BLUE
	PHASE A	BROWN
480V, 3Ø	PHASE B	ORANGE
	PHASE C	YELLOW

* SEE NEC 210.5(C)(1) AND (2)

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SL01122A

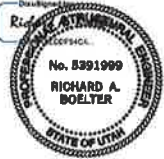
BU #: 822343
ALPINE_SHEPHERD_HILL

651 S BATEMAN
ALPINE, UT 84004

EXISTING 22'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	01/11/17	NJH	PRELIMINARY	CTR
B	01/26/17	NJH	CONSTRUCTION	RAB



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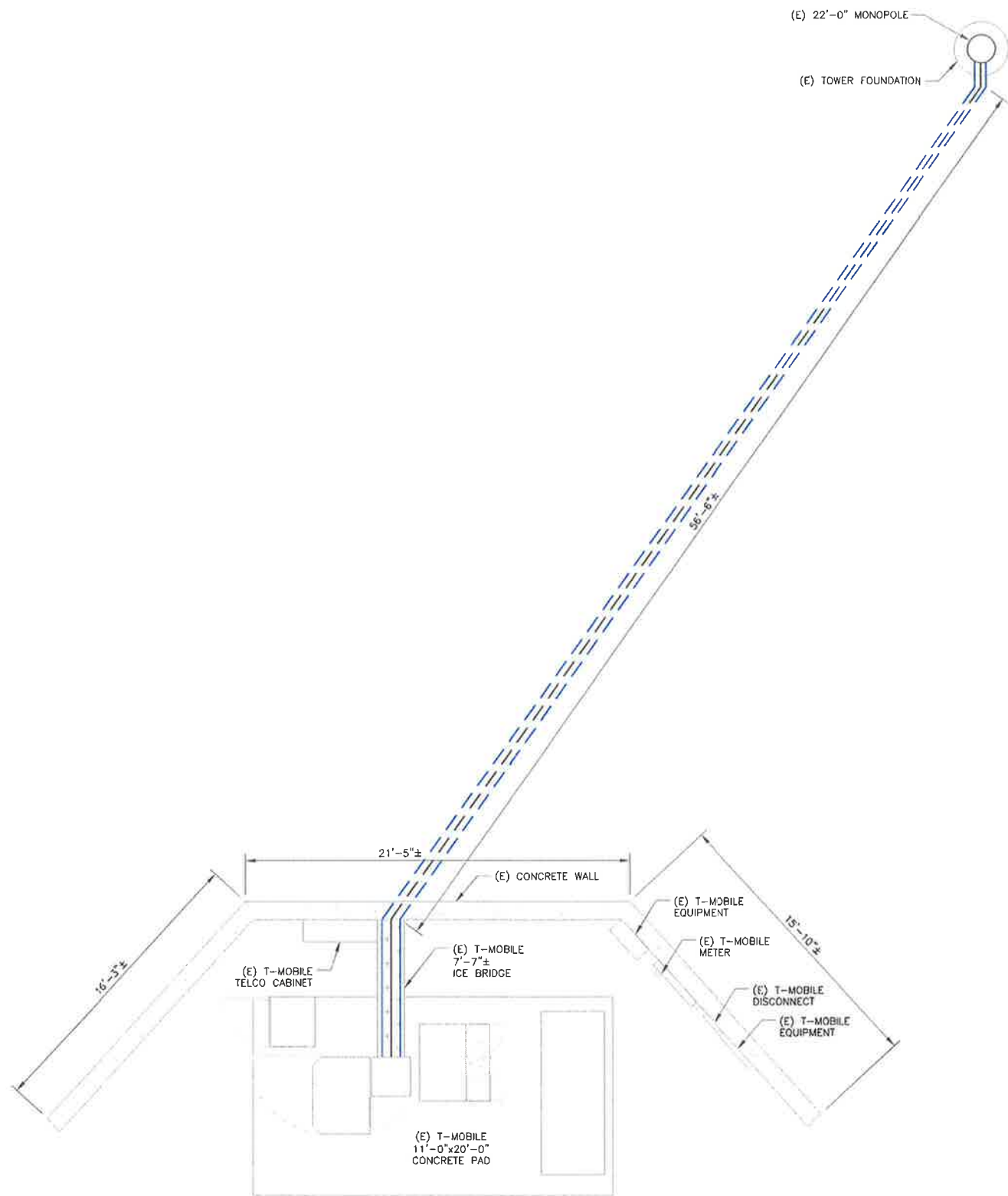
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T-2

REVISION:

0



1 SITE PLAN
SCALE: 1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)



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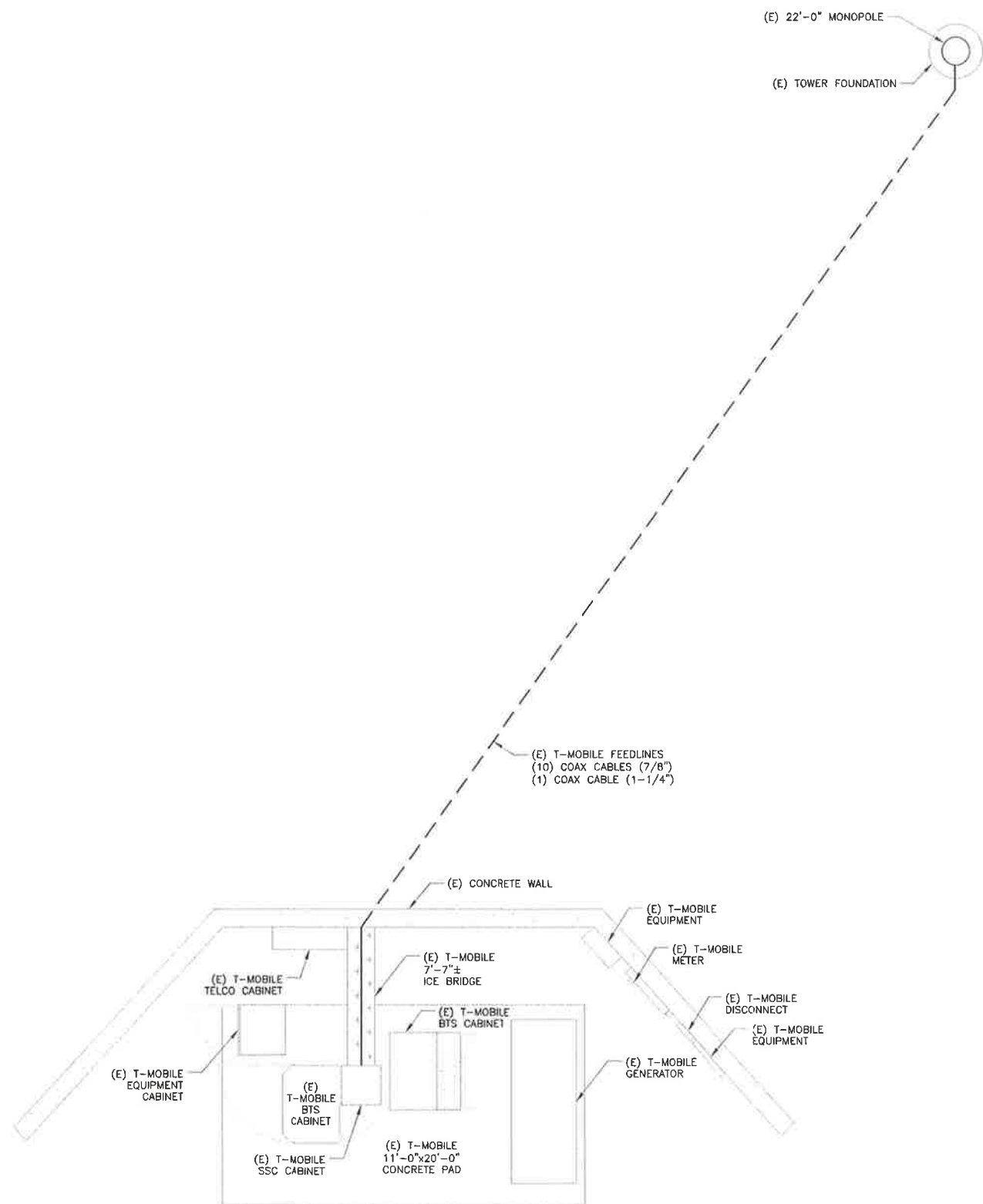
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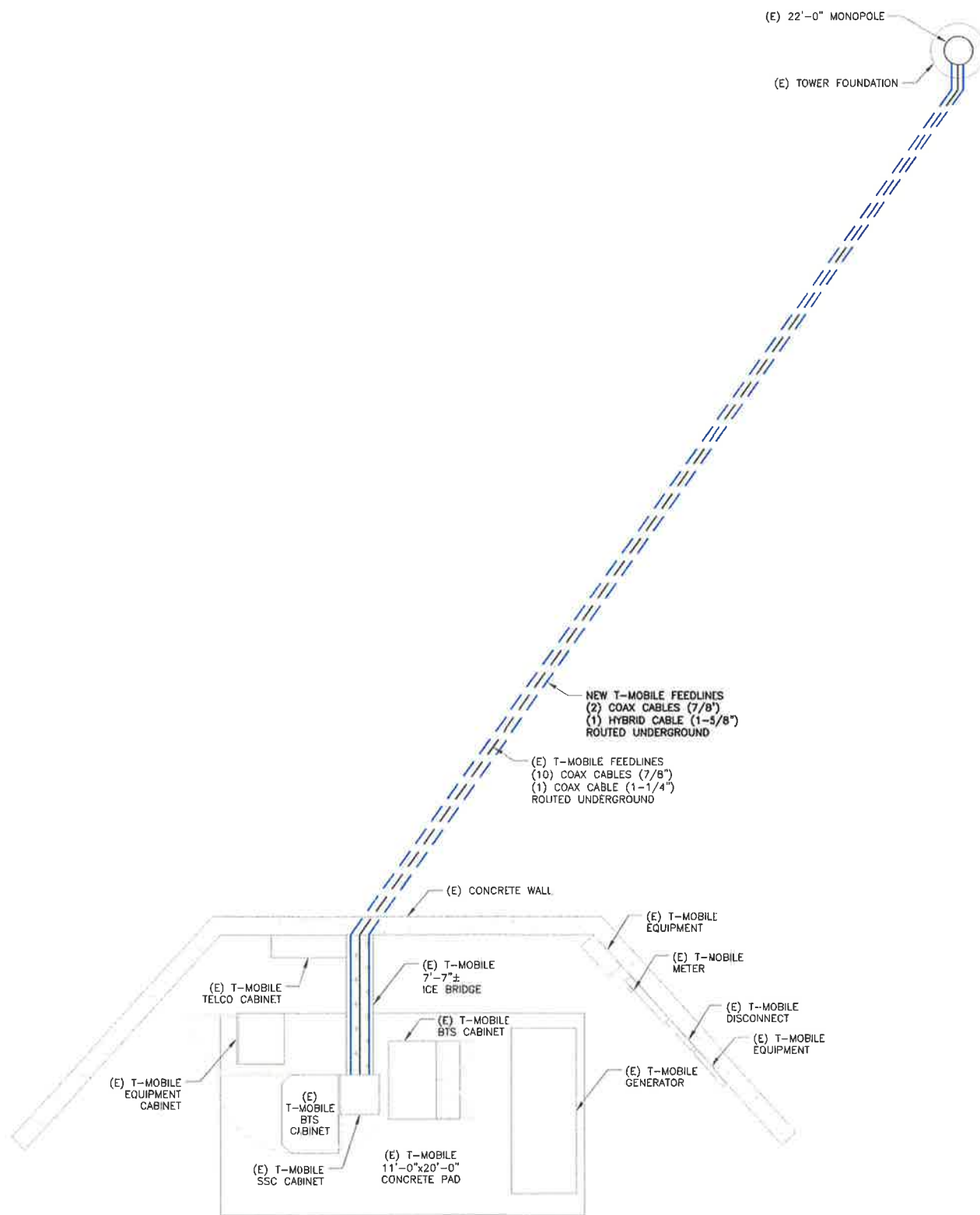
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1 EXISTING EQUIPMENT LAYOUT PLAN

SCALE: 1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)



2 FINAL EQUIPMENT LAYOUT PLAN

SCALE: 1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)



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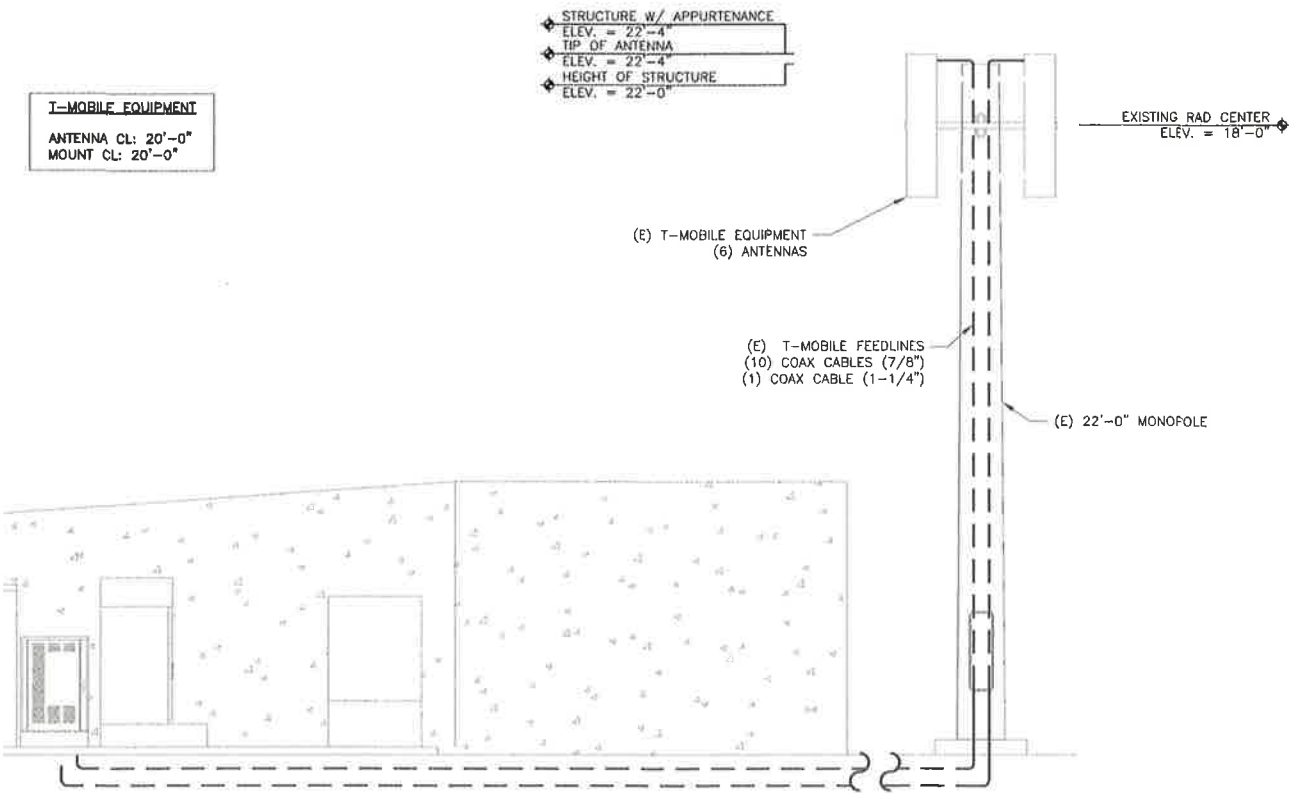
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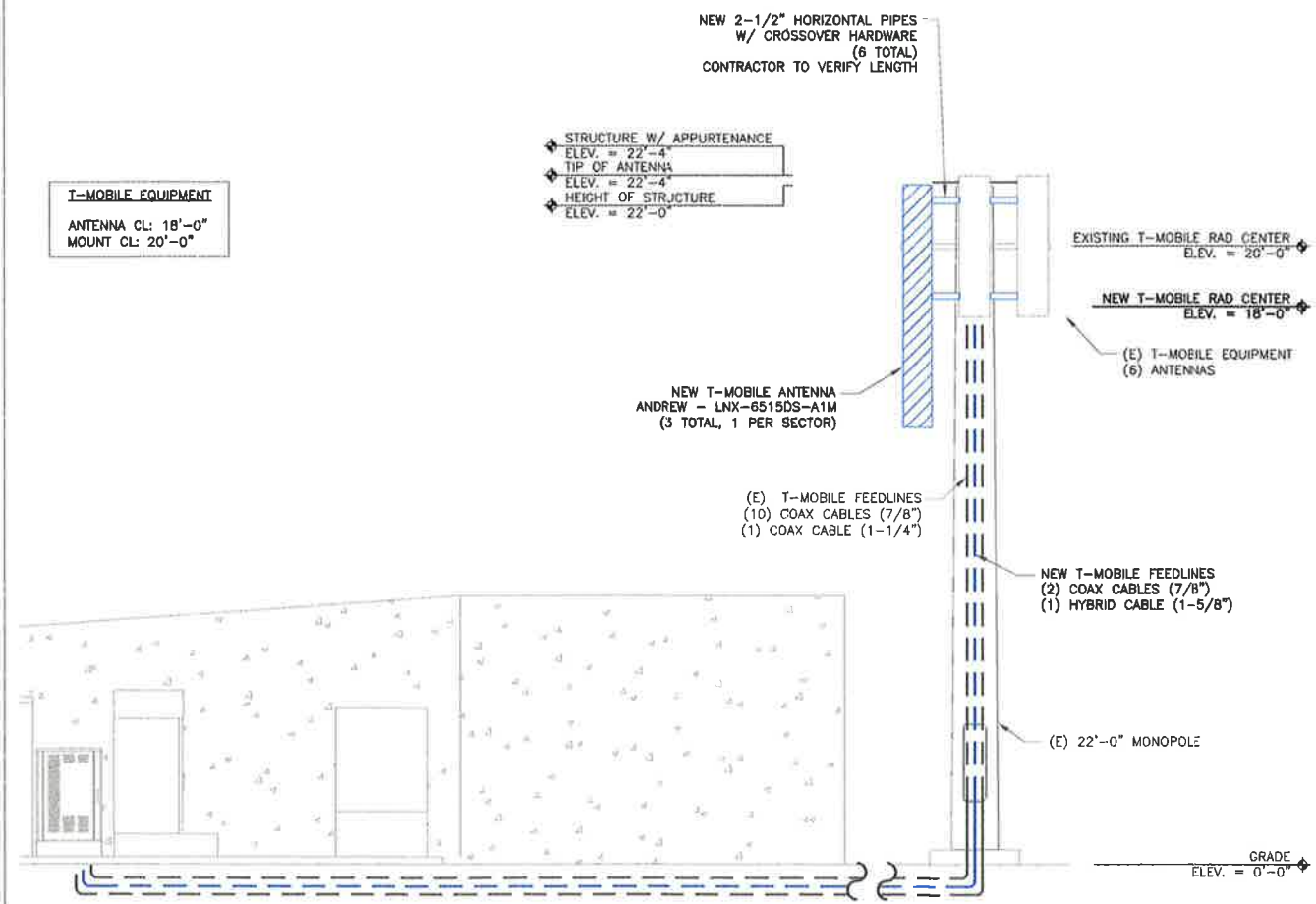
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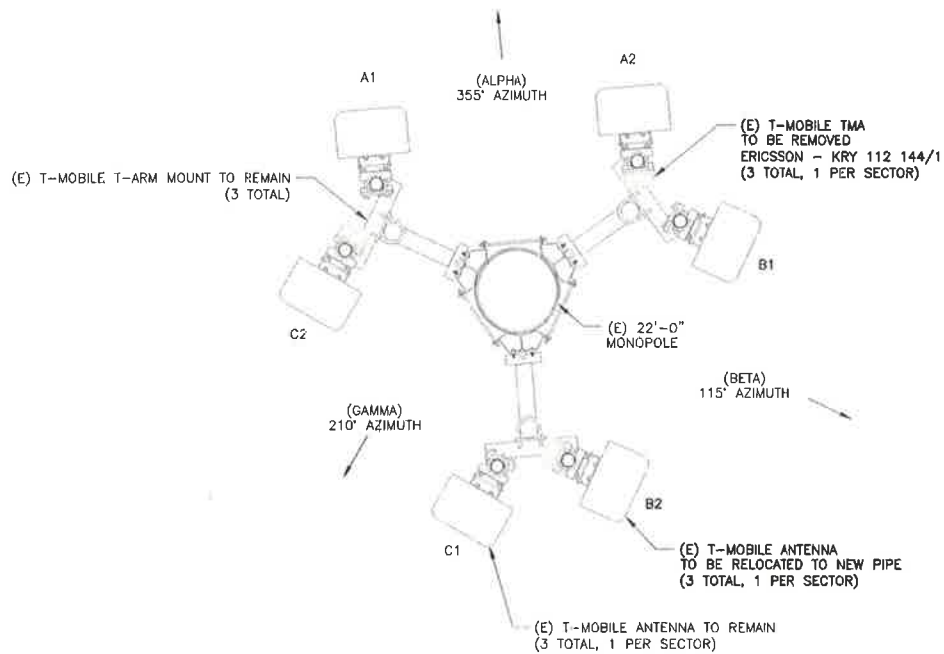
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1 EXISTING ELEVATION
SCALE: NOT TO SCALE



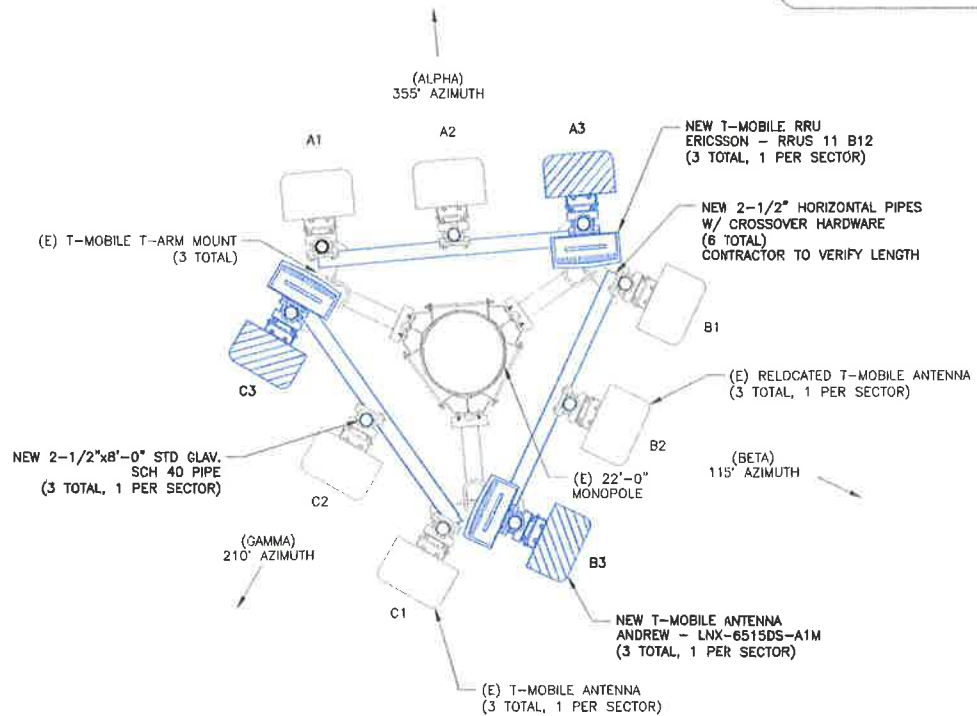
2 FINAL ELEVATION
SCALE: NOT TO SCALE



1 EXISTING ANTENNA LAYOUT
SCALE: NOT TO SCALE



3 ANTENNA PHOTO
SCALE: NOT TO SCALE



2 NEW ANTENNA LAYOUT
SCALE: NOT TO SCALE

ANTENNA SCHEDULE										
SECTOR	POS.	TECHNOLOGY	RAD CENTER	AZIMUTH	ANTENNA MANUFACTURER	ANTENNA MODEL	MECH. TILT	ELECT. TILT	TOWER MOUNTED EQUIPMENT	FEEDLINE TYPE
ALPHA	A1	(UMTS/GSM) PCS	20'-0"	355°	ERICSSON	AIR 21 B2A B4P	0°	1°		COAX/HYBRID
ALPHA	A2	LTE AWS	20'-0"	355°	ERICSSON	AIR 21 B2A B4P	0°	1°		HYBRID
ALPHA	A3	LTE 700	18'-0"	355°	ANDREW	LNX-6515DS-A1M	0°	1°	(1) ERICSSON - RRUS 11 B12	COAX/HYBRID
BETA	B1	(UMTS/GSM) PCS	20'-0"	115°	ERICSSON	AIR 21 B2A B4P	0°	0°		COAX/HYBRID
BETA	B2	LTE AWS	20'-0"	115°	ERICSSON	AIR 21 B2A B4P	0°	0°		HYBRID
BETA	B3	LTE 700	18'-0"	115°	ANDREW	LNX-6515DS-A1M	0°	0°	(1) ERICSSON - RRUS 11 B12	COAX/HYBRID
GAMMA	C1	(UMTS/GSM) PCS	20'-0"	210°	ERICSSON	AIR 21 B2A B4P	0°	4°		COAX/HYBRID
GAMMA	C2	LTE AWS	20'-0"	210°	ERICSSON	AIR 21 B2A B4P	0°	6°		HYBRID
GAMMA	C3	LTE 700	18'-0"	210°	ANDREW	LNX-6515DS-A1M	0°	6°	(1) ERICSSON - RRUS 11 B12	COAX/HYBRID

4 ANTENNA SCHEDULE
SCALE: NOT TO SCALE

INSTALLER NOTE:

REPLACE EXISTING PIPE MOUNTS WITH NEW 2-1/2" STD (2-7/8" O.D.) GALV. SCH 40 PIPE AS REQ'D.

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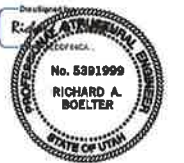
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EXISTING 22'-0" MONOPOLE

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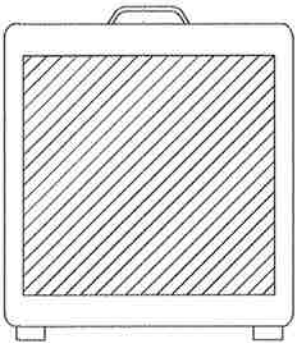
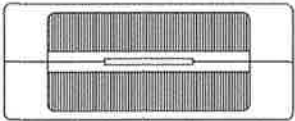
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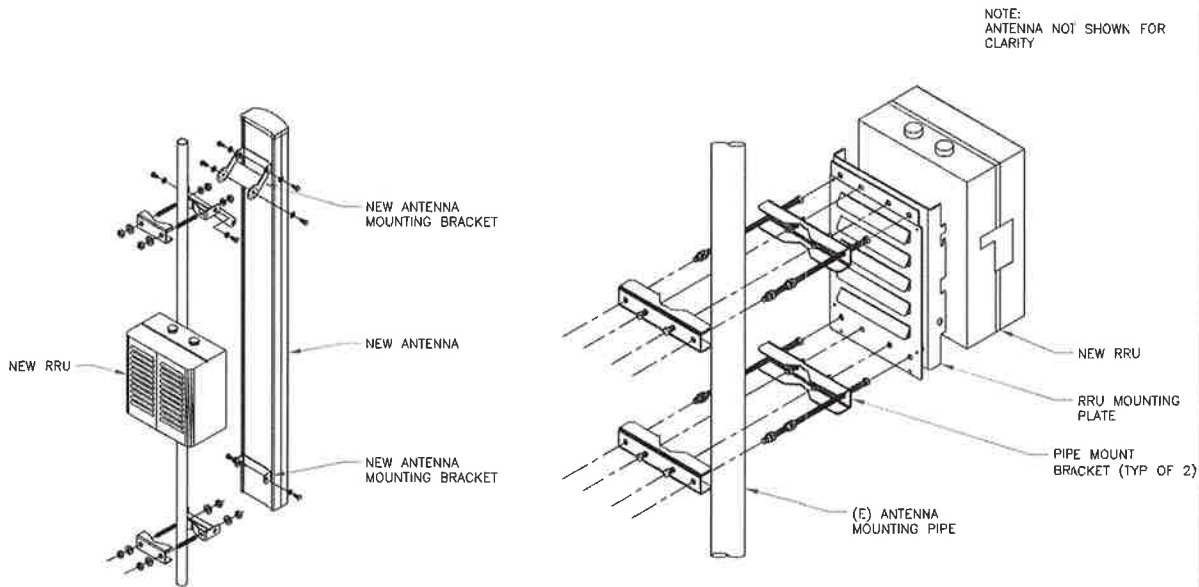
ANDREW - LNX-6515DS-A1M
WEIGHT (WITHOUT MOUNTING HARDWARE): 43.7 LBS
SIZE (HxWxD): 96.60x11.90x7.10 IN.
MOUNTING HARDWARE P/N: DB380-3 & DB5063D
RATED WIND VELOCITY: 149.8 MPH

1 ANDREW - LNX-6515DS-A1M
SCALE: NOT TO SCALE



ERICSSON - RRUS 11 B12
WEIGHT (FULLY EQUIPPED): 50.7 LBS
SIZE (HxWxD): 19.7x17x7.2 IN.

2 ERICSSON - RRUS 11 B12
SCALE: NOT TO SCALE



NOTE:
ALL PIPES BRACKETS
AND MISCELLANEOUS
HARDWARE TO BE
GALVANIZED UNLESS
NOTED OTHERWISE

3 ANTENNA & RRU MOUNTING DETAIL
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE

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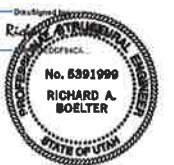
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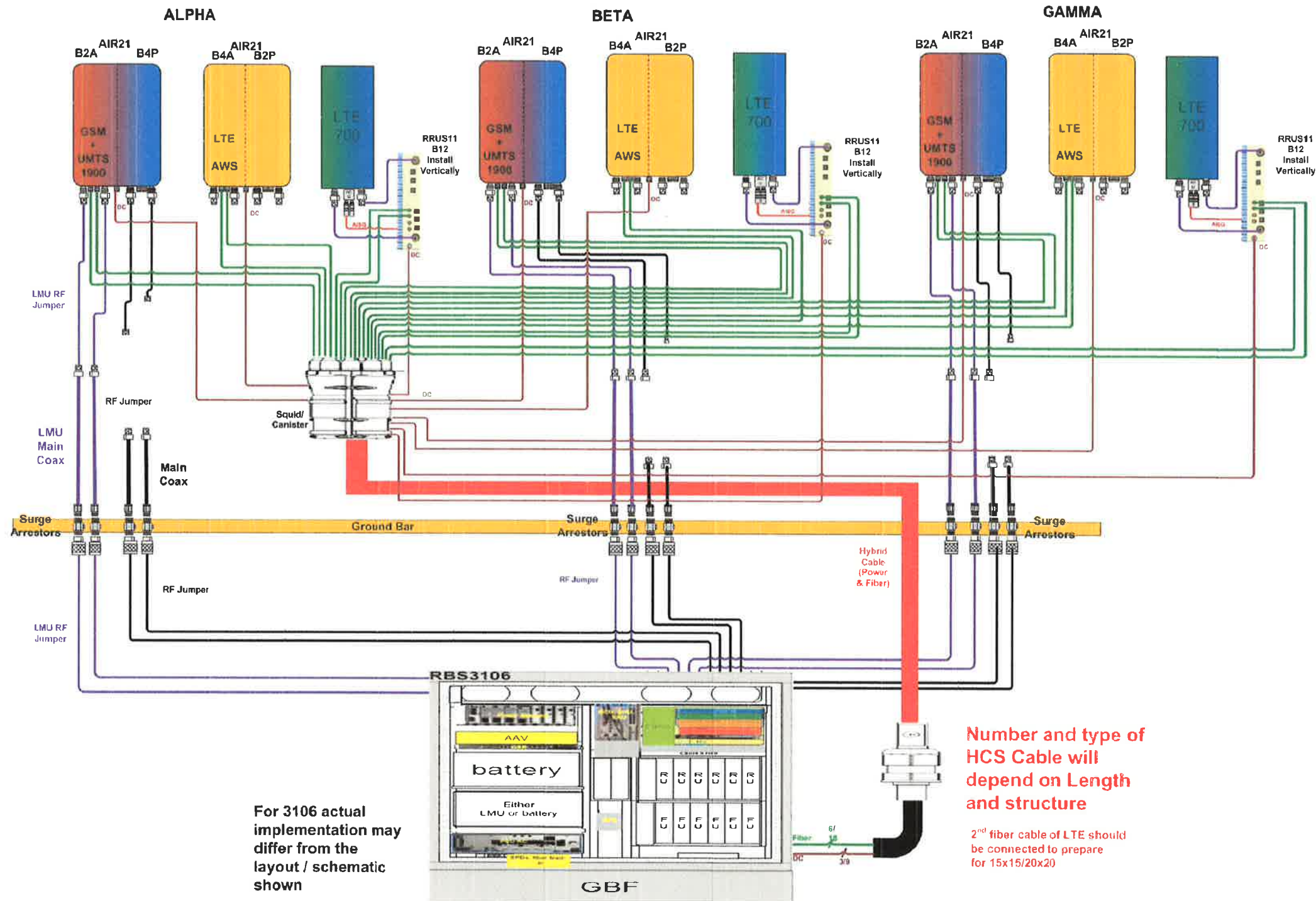
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Site Configuration 702Cu – AIR Based with RBS3106



1 PLUMBING DIAGRAM
SCALE: NOT TO SCALE

Section 1 - Site Information

Site ID: SL01122A
Status: Final
Version: 1.1
Project Type: L700
Approved: 8/4/2016 1:46:01 PM
Approved By: GSM1600SShahne
Last Modified: 8/4/2016 1:46:01 PM
Last Modified By: GSM1600SShahne

Site Name: Alpine_Shepherd_Hill
Site Class: Monopole
Site Type: Structure Non Building
Solution Type:
Plan Year:
Market: SALT LAKE CITY UT
Vendor: Ericsson
Location: Crown Castle-T3

Latitude: 40.44413936
Longitude: -111.77955800
Address: 651 S Bateman
City, State: Alpine, UT
Region: WEST

RAN Template: 702Cu Outdoor
Sector Count: 3
Antenna Count: 9
Coax Line Count: 12
TMA Count: 0
RRU Count: 3

AL Template: 702Cu

Proposed RAN Equipment

Template: 702Cu Outdoor

Enclosure	1		
Enclosure Type	RBS 6131		
Baseband	DUS41 (L2100)	DUA20 (U1900)	DUG20 (G1900)
Hybrid Cable System	Ericsson 9x18 HCS 40m		
Multiplier	XMU		

Sector 1 (Proposed) view from behind

Coverage Type	A - Outdoor Macro				
Antenna	1		2		3
Antenna Model	AIR21 B2A/B4P (Quad)		AIR21 B4A/B2P (Quad)		LNK-6515DS-A1M (Dual)
Azimuth	355		355		355
M.Tilt	0		0		0
Height	24		24		24
Ports	P1	P2	P3	P4	P5
Active Tech.	U1900	G1900	L2100		L700
Dark Tech.					
Restricted Tech.					
Decomm. Tech.					
E. Tilt	0		0		0
Cables	Fiber Jumper - 32 ft. Fiber Jumper - 32 ft. 7/8" Coax - 100 ft. 7/8" Coax - 100 ft.	7/8" Coax - 100 ft. 7/8" Coax - 100 ft.	Fiber Jumper - 32 ft.		Fiber Jumper - 32 ft. Fiber Jumper - 32 ft. Coax Jumper - 10 ft. Coax Jumper - 10 ft.
TMA's					
Diplexers / Combiners					
Radio					RRUS11 B12
Sector Equipment	TRX	TRX			

Unconnected Equipment:

Scope of Work:

Removal of AWS TMA's require that the main lines on P2 be weatherproofed

Sector 2 (Proposed) view from behind

Coverage Type	A - Outdoor Macro				
Antenna	1		2		3
Antenna Model	AIR21 B2A/B4P (Quad)		AIR21 B4A/B2P (Quad)		LNK-6515DS-A1M (Dual)
Azimuth	115		115		115
M Tilt	0		0		0
Height	24		24		24
Ports	P1	P2	P3	P4	P5
Active Tech.	U1900	G1900	L2100		L700
Dark Tech.					
Restricted Tech.					
Decomm. Tech.					
E. Tilt	0		0		0
Cables	Fiber Jumper - 32 ft. Fiber Jumper - 32 ft. 7/8" Coax - 100 ft. 7/8" Coax - 100 ft.	7/8" Coax - 100 ft. 7/8" Coax - 100 ft.	Fiber Jumper - 32 ft.		Fiber Jumper - 32 ft. Fiber Jumper - 32 ft. Coax Jumper - 10 ft. Coax Jumper - 10 ft.
TMA's					
Diplexers / Combiners					
Radio					RRUS11 B12
Sector Equipment	TRX	TRX			

Unconnected Equipment:

Scope of Work:

Removal of AWS TMA's require that the main lines on P2 be weatherproofed

Sector 3 (Proposed) view from behind

Coverage Type	A - Outdoor Macro				
Antenna	1		2		3
Antenna Model	AIR21 B2A/B4P (Quad)		AIR21 B4A/B2P (Quad)		LNK-6515DS-A1M (Dual)
Azimuth	210		240		240
M Tilt	0		0		0
Height	24		24		24
Ports	P1	P2	P3	P4	P5
Active Tech.	U1900	G1900	L2100		L700
Dark Tech.					
Restricted Tech.					
Decomm. Tech.					
E. Tilt	0		0		0
Cables	Fiber Jumper - 32 ft. Fiber Jumper - 32 ft. 7/8" Coax - 100 ft. 7/8" Coax - 100 ft.	7/8" Coax - 100 ft. 7/8" Coax - 100 ft.	Fiber Jumper - 32 ft.		Fiber Jumper - 32 ft. Fiber Jumper - 32 ft. Coax Jumper - 10 ft. Coax Jumper - 10 ft.
TMA's					
Diplexers / Combiners					
Radio					RRUS11 B12
Sector Equipment	TRX	TRX			

Unconnected Equipment:

Scope of Work:

Removal of AWS TMA's require that the main lines on P2 be weatherproofed

T-Mobile

121 W. ELECTION RD.
SUITE 330
DRAPER UT. 84020

CROWN CASTLE

116 INVERNESS DR. EAST STE# 280
ENGLEWOOD, CO 80112

T-MOBILE SITE NUMBER:
SL01122A

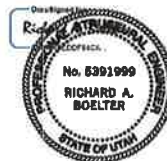
BU #: 822343
ALPINE_SHEPHERD_HILL

651 S BATEMAN
ALPINE, UT 84004

EXISTING 22'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	01/11/17	NJH	PRELIMINARY	CTR
0	01/26/17	NJH	CONSTRUCTION	RAB



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1 RFDS
SCALE: NOT TO SCALE

T-Mobile

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SUITE 330
DRAPER UT, 84020

**CROWN
CASTLE**

116 INVERNESS DR. EAST STE# 280
ENGLEWOOD, CO 80112

T-MOBILE SITE NUMBER:
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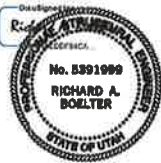
BU #: **822343**
ALPINE_SHEPHERD_HILL

651 S BATEMAN
ALPINE, UT 84004

EXISTING 22'-0" MONOPOLE

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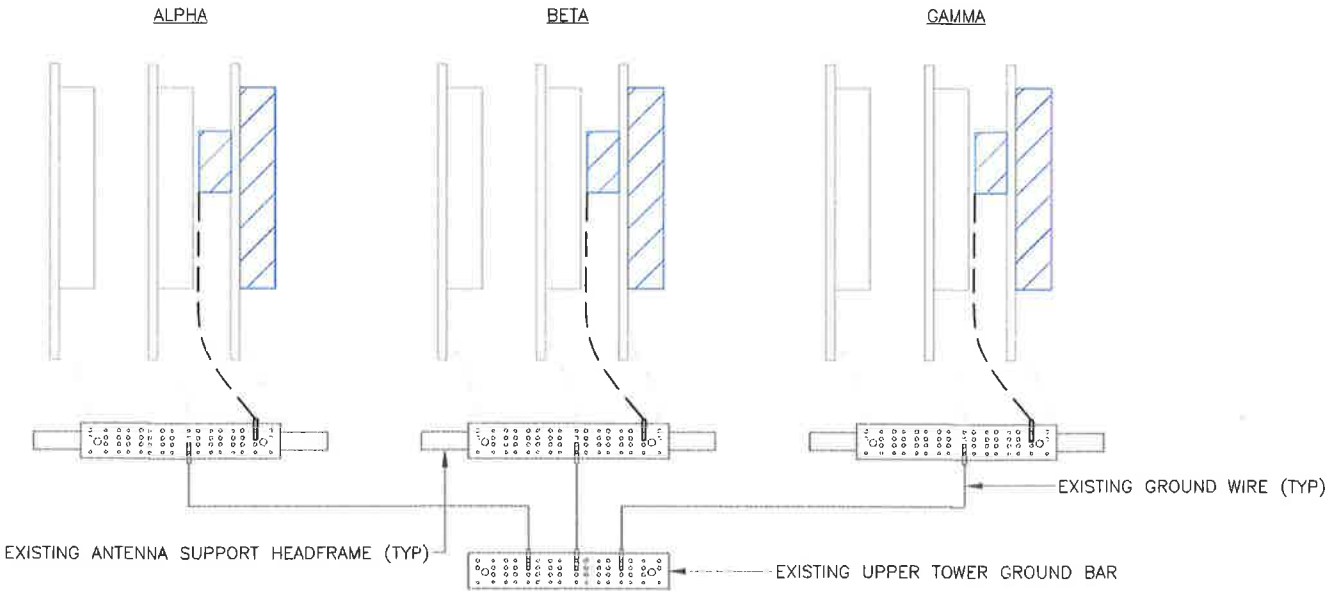
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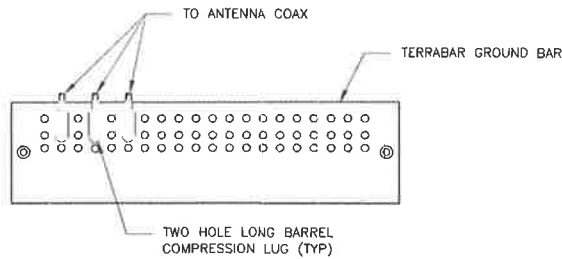
G-1

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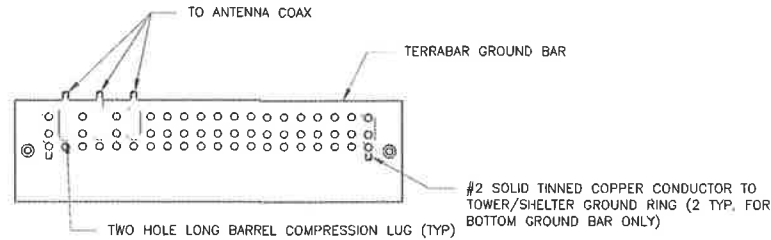


1 ANTENNA GROUND DIAGRAM
SCALE: NOT TO SCALE



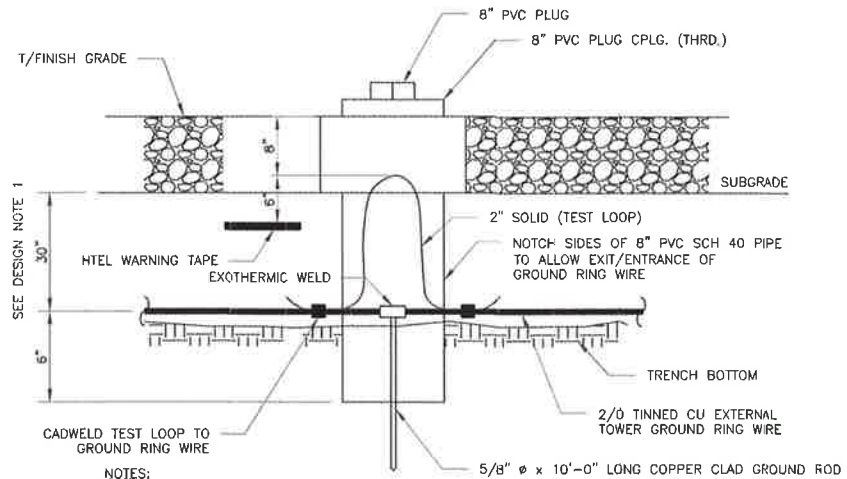
NOTES:

1. DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
3. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL.



NOTES:

1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
3. INSTALL GROUND BARS AT 75 FT. INTERVAL MAXIMUM.
4. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.



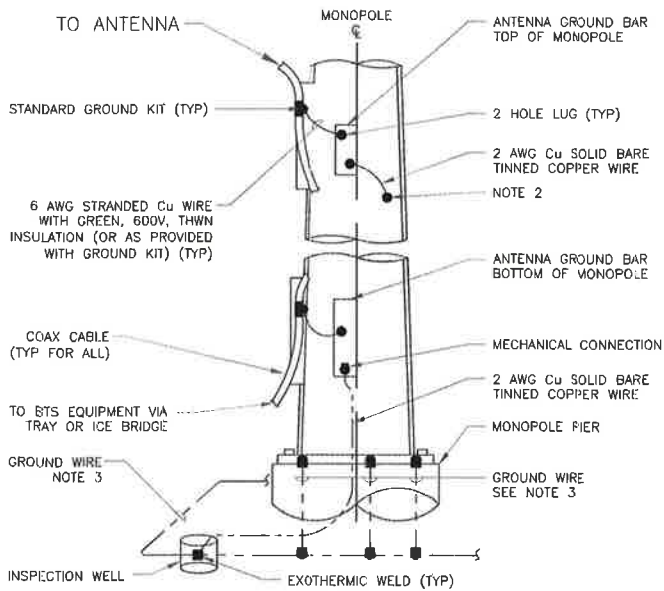
NOTES:

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.
2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D).

1 ANTENNA GROUND BAR DETAIL
SCALE: NOT TO SCALE

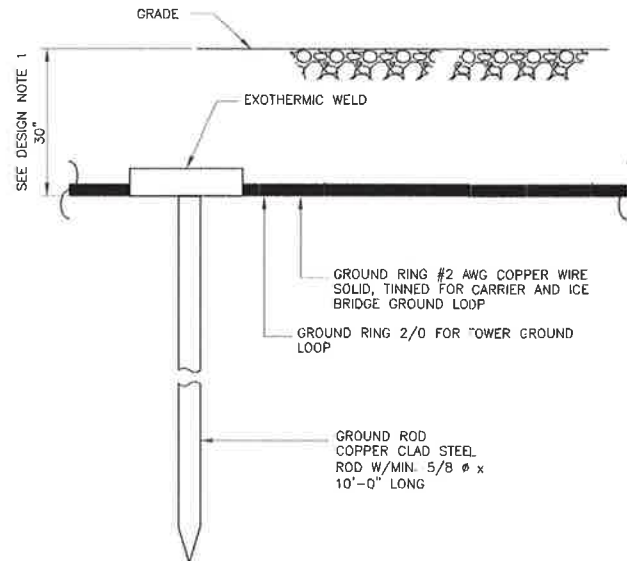
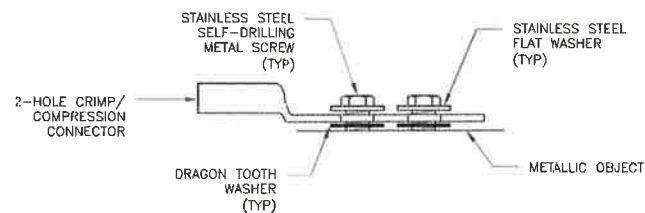
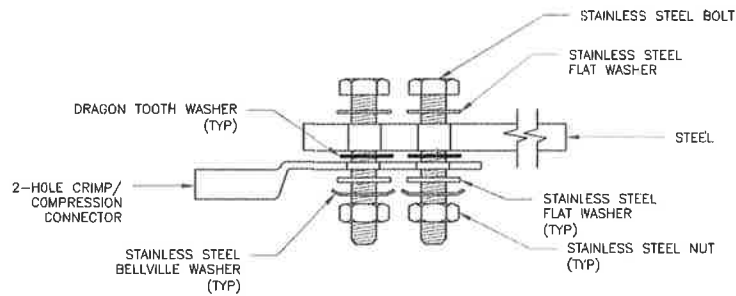
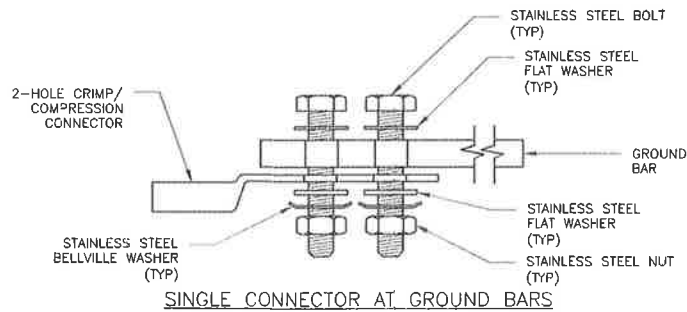
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE

3 INSPECTION PORT DETAIL
SCALE: NOT TO SCALE



NOTES:

1. NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF MONOPOLE, ANTENNA LOCATION AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET IN/ON THE POLE SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
2. ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
3. ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF ANSI/TIA 222. FOR TOWERS BEING BUILT TO REV G OF THE STANDARD, THE WIRE SIZE OF THE BURIED GROUND RING AND CONNECTIONS BETWEEN THE TOWER AND THE BURIED GROUND RING SHALL BE 2/0 AWG. STRANDED IN ADDITION, THE MINIMUM LENGTH OF THE GROUND RODS SHALL BE INCREASED FROM 8 FEET TO 10 FEET.



NOTES:

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.
2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D).

4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE

5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE

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T-MOBILE SITE NUMBER:
SL01122A

BU #: **822343**
ALPINE_SHEPHERD_HILL

651 S BATEMAN
ALPINE, UT 84004

EXISTING 22'-0" MONOPOLE

ISSUED FOR:

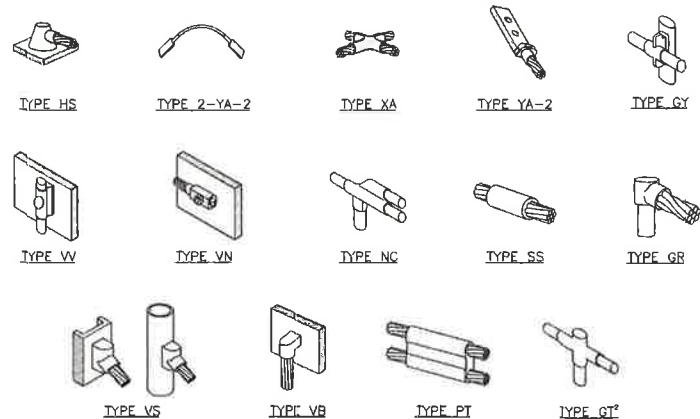
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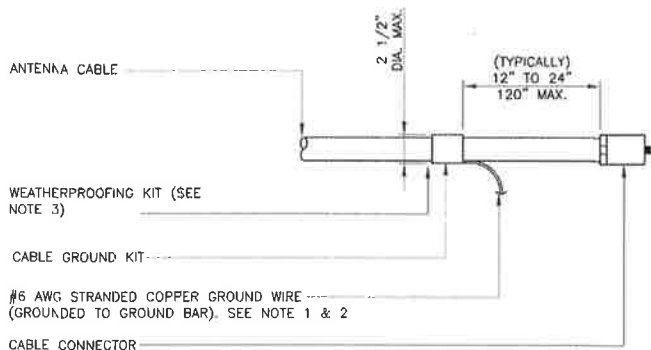
SHEET NUMBER: **G-2** REVISION: **0**



NOTE:

1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

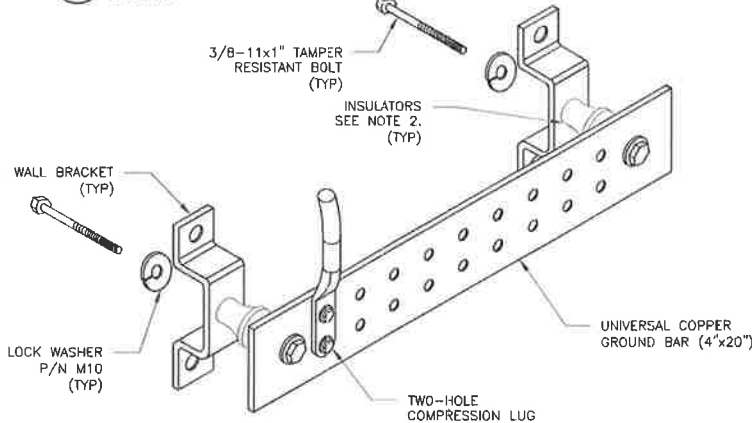
1 CADWELD GROUNDING CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

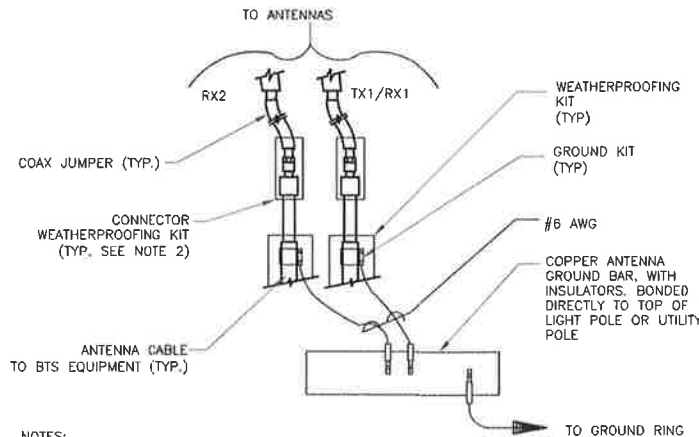
3 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



NOTES:

1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL. USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

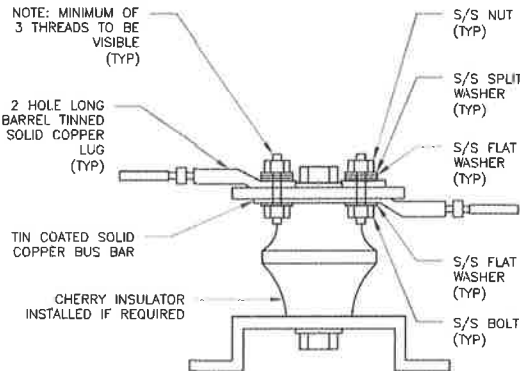
6 GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

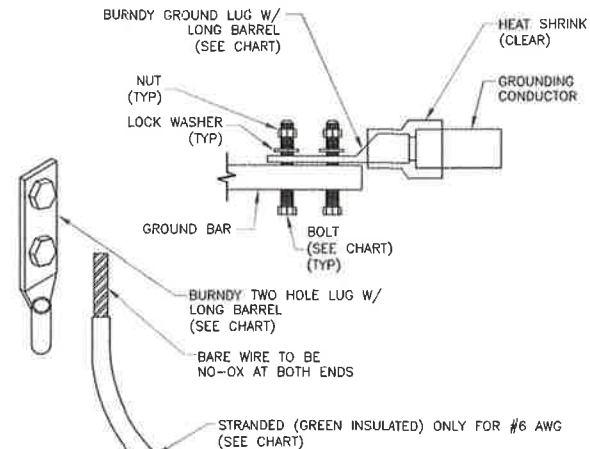
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

4 GROUND CABLE CONNECTION
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE

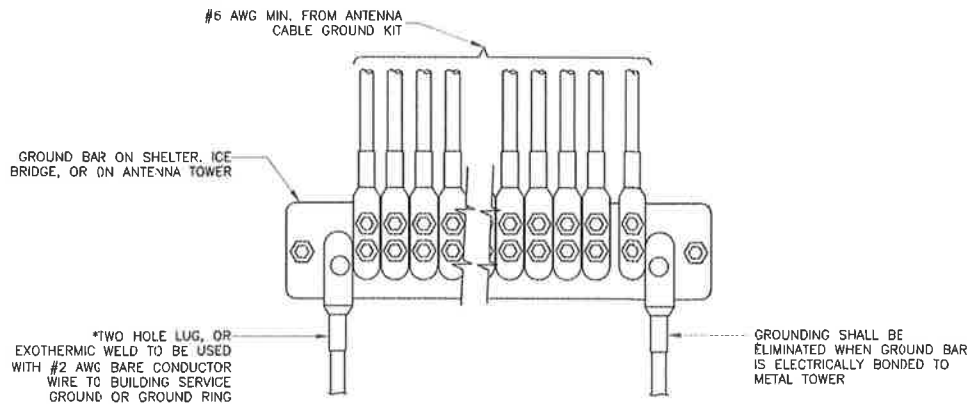
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA2B-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA2B-2N	1/2" - 16 NC S 2 BOLT



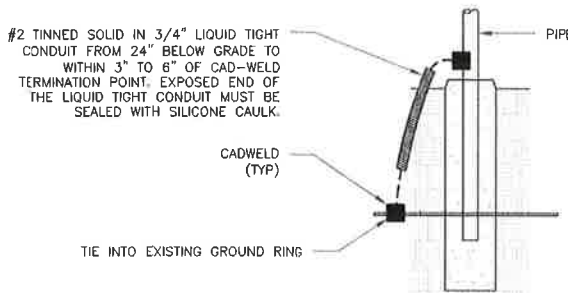
NOTES:

1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

2 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



5 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
SCALE: NOT TO SCALE

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ARTICLE 3.27

WIRELESS TELECOMMUNICATIONS ORDINANCE

(Ord. No. 2006-06, 4/25/06; Amended by Ord. No. 2012-05, 7/10/12;
Ord. No. 2014-15, 09/23/14)

3.27.1 GENERAL PROVISIONS

1. Title. This Ordinance shall be known as the Wireless Telecommunications Ordinance.
2. Purpose & Intent. The unique character, landscapes and scenic vistas of Alpine are among its most valuable assets. Preserving and promoting those assets are essential to the long-range social and economic wellbeing of the City and its inhabitants. Protecting these assets requires sensitive placement and design of wireless communication facilities so that these facilities remain in scale and harmony with the existing character of the community.
 - a. To amend Ordinance No. 2006-06 to accommodate new technology and develop regulations on the use and development of City property for new cell tower facilities.
 - b. To regulate personal wireless services antennas, with or without support structures, and related electronic equipment and equipment structures.
 - c. To provide for the orderly establishment of personal wireless services facilities in the City.
 - d. To minimize the number of antenna support structures by encouraging the co-location of multiple antennas on a single new or existing structure.
 - e. To establish siting, appearance and safety standards that will help mitigate the potential impacts related to the construction, use and maintenance of personal wireless communication facilities.
 - f. To comply with the Telecommunication Act of 1996 by establishing regulations that (1) do not prohibit or have the effect of prohibiting the provision of personal wireless services, (2) do not unreasonably discriminate among providers of functionally equivalent services, and (3) are not based on the environmental effects of radio frequency emissions to the extent that such facilities comply with the Federal Communications Commission's regulations concerning such emissions.
3. Findings.
 - a. Personal wireless services facilities (PWSF) are an integral part of the rapidly growing and evolving telecommunications industry, and present unique zoning challenges and concerns by the City.
 - b. The City needs to balance the interests and desires of the telecommunications industry and its customers to provide competitive and effective telecommunications systems in the City, against the sometimes differing interests and desires of others concerning health, safety, welfare, and aesthetics, and orderly planning of the community.
 - c. The City has experienced an increased demand for personal wireless services facilities to be located in the City, and expects the increased demand to continue in the future.
 - d. It is in the best interests of the City to have quality personal wireless services facilities available, which necessarily entails the erection of personal wireless services facilities in the City.
 - e. The unnecessary proliferation of personal wireless services facilities through the City creates a negative visual impact on the community.
 - f. The visual effects of personal wireless services facilities can be mitigated by fair standards regulating their siting, construction, maintenance and use.
 - g. A private property owner who leases space for a personal wireless services facility is the only one who receives compensation for the facility, even though numerous other property owners in the area are adversely affected by the location of the facility.

- h. Chapter 69-3, Utah Code Annotated, grants cities the authority to create or acquire sites to accommodate the erection of telecommunications tower in order to promote the location of telecommunication towers in a manageable area and to protect the aesthetics and environment of the area. The law also allows the City to require the owner of any tower to accommodate the multiple use of the tower by other companies where feasible and to pay the City the fair market rental value for the use of any City-owned site.
 - i. Telecommunications towers located on government property with the lease payments being paid to Alpine City instead of individual property owners evenly distributes the income from the lease payments to all citizens of Alpine through increased government services thus indirectly compensating all of the citizens of Alpine for the impact all citizens experience. The public policy objectives to reduce the proliferation of telecommunications towers and to mitigate their impact can be best facilitated by locating telecommunications and antenna support structures on property owned, leased or used by Alpine City as a highest priority whenever feasible.
4. Definitions. The following words shall have the described meaning when used in this ordinance, unless a contrary meaning is apparent from the context of the word.
- a. Antenna. A transmitting or receiving device used in telecommunications that radiates or captures radio signals.
 - b. Antenna Support Structure. Any structure that can be used for the purpose of supporting an antenna(s).
 - c. City. The City of Alpine, Utah.
 - d. City-owned property. Real property that is owned by the City.
 - e. Close to Tower Mount. Also known as slim mount, antennas on cell towers mounted very close to tower in order to appear less noticeable.
 - f. Co-location. The location of an antenna on an existing structure, tower or building that is already being used for personal wireless services facilities.
 - g. Monopole. A single, self-supporting, cylindrical pole that acts as the support structure for one (1) or more antennas for a personal wireless services facility.
 - h. Personal Wireless Services. Commercial mobile telecommunications services, unlicensed wireless communications services, and common carrier wireless telecommunications exchange access services.
 - i. Personal Wireless Services Antenna. An antenna used in connection with the provision of personal wireless services.
 - j. Personal Wireless Services Facilities (PWSF). Facilities for the provision of personal wireless services. Personal wireless services facilities include transmitters, antennas, structures supporting antennas, and electronic equipment that is typically installed in close proximity to a transmitter.
 - k. Private Property. Any real property not owned by the City, even if the property is owned by another public or government entity.
 - l. Quasi public use. Uses such as a school or church or other uses defined as quasi public uses in Section 3.1.11 of the Alpine City Zoning Ordinance.
 - m. Tower. A freestanding structure that is used as a support structure for antenna.
 - n. Whip antenna. An antenna that is cylindrical in shape. Whip antennas can be directional or omnidirectional and vary in size depending on the frequency and gain for which they are designed.
5. Applicability. This ordinance (the Wireless Telecommunications Ordinance) applies to both commercial and private low power radio services and facilities, such as "cellular" or PCS (personal communications system) communications and paging systems. This ordinance shall not apply to the following types of communications devices, although they may be regulated by other City ordinances and policies.

- a. Amateur Radio. Any tower or antenna owned and operated by an amateur radio operator licensed by the Federal Communication Commission.
- b. Amateur T.V. Any tower or antenna owned and operated by an amateur T.V. operator licensed by the Federal Communication Commission.
- c. Satellite. Any device designed for over-the-air reception of television broadcast signals, multichannel multipoint distribution service or direct satellite service.
- d. Cable. Any cable television head-end or hub towers and antennas used solely for cable television services.

3.27.2 LOCATION AND TYPES OF TOWERS/ANTENNAS

1. Personal Wireless Services Facilities Site Locations. The following are currently approved locations:
 - a. Co-location on an existing tower.
 - b. City owned property.
 - c. Property in conjunction with a quasi-public or public use.
 - d. Commercial property in the business commercial zone.

No new towers shall be located in Lambert Park.

New towers shall be located no closer than a one-quarter (1/4) mile radius from another tower and shall be no closer to a residence than two (2) times the height of the tower.

If the applicant desires to locate on a site other than the approved sites listed above, the applicant shall have the burden of demonstrating to the City why it cannot locate on an approved site. To do so, the applicant shall provide the following information to the City:

- a. The identity and location of any approved sites located within the desired service area.
 - b. The reason(s) why the approved sites are not technologically, legally, or economically feasible. The applicant must make a good faith effort to locate towers and antennas on an approved site. The City may request information from outside sources to justify or rebut the applicant's reason(s) for rejecting an approved site.
 - c. Why the proposed site is essential to meet the service demands of the geographic service area and the citywide network. If the applicant desires to construct a monopole, the applicant shall also submit a detailed written description of why the applicant cannot obtain coverage using existing towers.
2. Permitted and Non-Permitted Towers and Antennas.
 - a. Permitted. The following are permitted:
 1. Co-location on existing towers.
 2. Existing towers may be maintained, used, and upgraded or replaced. A replacement tower shall not exceed the height of the tower being replaced.
 3. Monopoles are permitted subject to the following:
 - a. A monopole shall not exceed eighty feet (80').
 4. Roof-mounted Antennas are permitted subject to the following:
 - a. A roof-mounted antenna shall be screened, constructed, and/or colored to match the structure to which it is attached.

- b. A roof-mounted antenna shall be set back from the building edge one (1) foot for every one (1) foot of antenna height and shall not exceed fifteen (15) feet in height.
- 5. All new antennas shall be slim-mounted or mounted to an existing array.
- b. Not Permitted. The following are not permitted:
 - 1. Lattice Towers. Lattice appearance is not permitted.
 - 2. Guyed Towers.
- 3. Co-location Requirement. Unless otherwise authorized by the approving authority for good cause shown, every new tower shall be designed and constructed to be of sufficient size and capacity to accommodate at least two (2) additional wireless telecommunications providers on the structure in the future.
- 4. Lease Agreement. The City has no implied obligation to lease any particular parcel of City-owned property to an applicant. The City shall enter into a standard lease agreement with the applicant for any facility built on City property. The Mayor or designee is hereby authorized to execute the standard lease agreement on behalf of the City. The lease shall contain the condition that the approving authority must first approve the site plan before the lease can take effect, and that failure to obtain such approval renders the lease null and void.

3.27.3 PROCEDURE (Amended by Ord. No. 2014-15, 9/23/14)

State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. For purposes of this subsection, the term "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves:

- (A) collocation of new transmission equipment;
- (B) removal of transmission equipment; or
- (C) replacement of transmission equipment.

- 1. Application Requirements. Any person desiring to develop, construct or establish a personal wireless services facility in the City shall submit an application for site plan approval to the City. A site plan shall be required for all new towers and antennas and any modification or replacement of a tower or antenna. The City shall not consider the application until all required information has been included. The application shall be submitted to the City Planner at least fourteen (14) days prior to the public meeting at which it will be presented to the Planning Commission. The applicant shall include the following:
 - a. Fee. The applicable fee shall be paid to the City Recorder, payable to Alpine City, as set forth in the Alpine City Consolidated Fee Schedule.
 - b. Site Plan. A site plan meeting the City's standard requirements for site plans.
 - c. Notification Letter. The applicant shall submit a list of all property owners within five hundred (500) feet of the boundaries of the property where the proposed tower or antenna is to be located. The applicant shall also submit envelopes that have been stamped and addressed to all property owners on the list. The City may require a greater distance if deemed necessary or appropriate. The City shall prepare a notification letter to be sent to the property owners on the list submitted by the applicant to be mailed out at

least seven (7) days prior to the public meeting at which the application will be presented to Planning Commission. The letter shall contain the following information:

1. Address or location of the proposed tower, co-location, tower modification, etc.
 2. Name of the applicant.
 3. Type of tower/antenna (e.g. monopole, roof antenna, etc.)
 4. Date, time, and place of the public meeting at which the application will be presented to the Planning Commission.
- d. Sign. The applicant shall erect a sign of sufficient durability, and print and size quality that is reasonably calculated to give notice to passers-by. The sign shall be posted at least fourteen (14) days prior to the public meeting at which the application will be presented to the Planning Commission. The sign:
1. Shall be 4 ft. (H) x 8 ft. (W)
 2. Shall not be more than six (6) feet in height from the ground to the highest point of the sign; and
 3. Shall be posted five (5) feet inside the property line in a visible location on the property where the tower/antenna is to be located. If the property is located in such a spot that the sign would not be visible from the street, the sign shall be erected in another location close by that will give notice to passers-by, or at Alpine City Hall. The applicant shall be responsible to obtain permission of the property owner to erect the sign. The sign shall include the following information:
 - a. Address of location of the proposed tower, co-location, tower modification, etc.
 - b. Type of tower/antenna (e.g. monopole, roof antenna, etc.)
 - c. Date, time, and place of the public meeting at which the application will be presented to the Planning Commission.
- e. Written Information. The following written information shall be submitted:
1. Maintenance. A description of the anticipated maintenance needs for the facility, including frequency of service, personnel needs, equipment needs, and traffic noise or safety impacts of such maintenance.
 2. Service Area. A description of the service area for the antenna or tower and a statement as to whether the antenna or tower is needed for coverage or capacity.
 3. Licenses and Permits. Copies of all licenses and permits required by other agencies and governments with jurisdiction over the design, construction, location and operation of the antenna.
 4. Radio Frequency Emissions. A written commitment to comply with applicable Federal Communications Commission radio frequency emission regulations.
 5. Liaison. The name of a contact person who can respond to questions concerning the application and the proposed facility. Include name, address, telephone number, facsimile number and electronic mail address, if applicable.
2. Approval Process. The application and site plan shall be reviewed by the City pursuant to its standard site plan approval process. The City shall process all applications within a reasonable time and shall not unreasonably discriminate among providers of functionally equivalent services. Any decision to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record. The application and site plan will be reviewed by Planning Commission for a recommendation to City Council. The City Council shall review the application and site plan and shall act as the land use authority in approving or denying the application and site plan.

The Planning Commission may, if it deems necessary, require each application to be reviewed independently by a certified radio frequency engineer, licensed to do such work in the State of Utah. The purpose of the review is to determine if other locations are available to achieve an equivalent signal distribution and not significantly affect the operation of the telecommunications facility. Such a review may be required when an applicant indicates that no other acceptable location exists. The costs of an independent review shall be borne by the applicant.

3. Building Permits.

- a. **General Requirements.** No tower or antenna support structure shall be constructed until the applicant obtains a building permit from the City. No building permit shall be issued for any project for which a site plan or amended site plan is required, until the site plan or amended site plan has been approved by the appropriate authority. If the design or engineering of the antenna support structure is beyond the expertise of the Building Official, the City may require third party review by an engineer selected by the City prior to the issuance of a building permit. The applicant shall pay an additional fee to cover the cost of the third party review.
- b. **Additional Requirements for New Towers.** If the applicant is constructing a new tower, the applicant shall, if requested by the City, submit a written report from a qualified structural engineer licensed in the State of Utah, documenting the following:
 1. Height and design of the new tower, including technical, engineering, economic, and other pertinent factors governing selection of the proposed design.
 2. Seismic load design and wind load design for the new tower.
 3. Total anticipated capacity of the new tower, including number and types of antennas which can be accommodated.
 4. Structural failure characteristics of the new tower and a demonstration that the site and setbacks are adequate size to contain debris.
 5. Soil investigation report, including structural calculations.

3.27.4 SAFETY

1. **Regulation Compliance.**
 - a. **Compliance with FCC and FAA Regulations.** All operators of personal wireless services facilities shall demonstrate compliance with applicable Federal Communication Commission (FCC) and Federal Aviation Administration (FAA) regulations, including FCC radio frequency regulations, at the time of application and periodically thereafter as requested by the City. Failure to comply with the applicable regulations shall be grounds for revoking a site plan.
 - b. **Other Licenses and Permits.** The operator of every personal wireless services facility shall submit copies of all licenses and permits required by other agencies and governments with the jurisdiction over the design, construction, location and operation of the facility to the City, shall maintain such licenses and permits in good standing, and shall provide evidence of renewal or extension thereof upon request by the City.
2. **Protection Against Climbing.** Towers shall be protected against unauthorized climbing by removing the climbing pegs from the lower 20 feet of the towers.
3. **Fencing.** Towers shall be fully enclosed by a minimum 6-foot tall fence or wall, as directed by the City, unless the City determines that a wall or fence is not needed or appropriate for a particular site due to conditions specific to the site.

4. Security Lighting Requirement. Towers shall comply with the FAA requirements for lighting. The City may also require security lighting for the site. If security lighting is used, the lighting impact on surrounding residential areas shall be minimized by using indirect lighting, where appropriate.
5. Emergency. The City shall have the authority to move or alter a personal wireless services facility in case of emergency. Before taking any such action, the City shall first notify the owner of the facility, if feasible.

3.27.5 ADDITIONAL REQUIREMENTS

1. Regulations for Accessory Structures.
 - a. Storage Areas and Solid Waste Receptacles. No outside storage or solid waste receptacles shall be permitted on site.
 - b. Equipment Enclosures. All electronic and other related equipment and appurtenances necessary for the operation of any personal wireless services facility shall, whenever possible, be located within a lawfully pre-existing structure or completely below grade. When a new structure is required to house such equipment, the structure shall be harmonious with, and blend with, the natural features, buildings and structures surrounding such structure.
 - c. Accessory Buildings. Freestanding accessory buildings used with a personal wireless services facility shall not exceed 450 square feet and shall comply with the setback requirements for structures in the zone in which the facility is located.
2. Parking. The City may require a minimum of one (1) parking stall for sites containing a personal wireless services facility and/or accessory buildings, if there is insufficient parking available on the site.
3. Maintenance Requirements. All personal wireless services facilities shall be maintained in a safe, neat, and attractive manner.
4. Landscaping. A landscaping plan shall be submitted to the Planning Commission who will make a recommendation to the City Council who will approve the landscape plan.
5. Site Restoration Upon Abandonment. All sites shall be restored to the original configuration upon abandonment.
6. Fencing. The City will determine the type of fencing used on wireless telecommunications sites on a case by case basis. In the case of the Rodeo Grounds, the fencing shall match the existing fencing. Fencing will recommend by the Planning Commission and approved by the City Council.
7. Color and material standards. The City shall make an administrative decision as to the color. To the extent the personal wireless services facilities extend above the height of the vegetation immediately surround it, they shall be painted in a nonreflective light gray, light blue or other hue, which blends with the skyline and horizon or a brown to blend in with the surrounding hillside.
8. Facility Lighting and Signage Standards. Facility lighting shall be designed so as to meet but not exceed minimum requirements for security, safety and/or FAA regulations. Lighting of antennas or support structures shall be prohibited unless required by the FAA and no other alternatives are available. In all instances, the lighting shall be designed so as to avoid glare and minimize illumination on adjacent properties. Lighting shall also comply with any applicable City lighting standards.
9. Facility Signs. Signs shall be limited to those needed to identify the numbers to contact in an emergency, public safety warnings, certifications or other required seals. These signs shall also comply with the requirements of the City's sign regulations.
10. Utility Lines. All utility lines serving new cell towers shall be located underground.
11. Business License. Each facility shall be considered as a separate use; and an annual business license shall be required for each facility.

ALPINE PLANNING COMMISSION AGENDA

SUBJECT: “The Ridge at Alpine” Cul-de-sac Exception

FOR CONSIDERATION ON: 21 February 2017

PETITIONER: Paul Kroff

**ACTION REQUESTED BY PETITIONER: Recommend Approval of the
Exception to the City Council**

APPLICABLE STATUTE OR ORDINANCE: Section 4.7.4.9 (Cul-de-sac Streets)

PETITION IN COMPLIANCE WITH ORDINANCE: Yes

BACKGROUND INFORMATION:


See attached memo from the City Engineer.

RECOMMENDED ACTION:

The Planning Commission review the proposed cul-de-sac street and make a recommendation to the City Council.

Memo



To: Alpine City Planning Commission & City Council
From: Jed Muhlestein, P.E. 
Date: February 16, 2017
Subject: The Ridge at Alpine (Alpine Ridge) – Cul-de-sac Length

December 6, 2016, the Planning Commission made the following recommendation for Alpine Ridge:

1. The Developer consider modifying or eliminating "Lot 71".
2. The Developer change the name of the subdivision.
3. The Developer consider changing roads and how they exit so close to the Russon property.
4. The Developer consider the soccer park and parking.
5. The Developer consider the placement and alignment of the trails.
6. The Developer consider adding trail access in Phase 1.

The Developer is preparing to submit for Preliminary approvals. Construction drawings, at Preliminary, are required to be 100% complete. Before that can be accomplished some of the items mentioned above need some clear direction.

This Memo is written to give an Engineering recommendation regarding item 3. The Planning Commission asked the developer to consider changing how the roadway exits near the Russon property. The Developer has proposed a solution that will create a cul-de-sac which measures approximately 965 feet in length. As proposed, there could be a total of 17 lots that would access via this street with no alternate route. The maximum length of cul-de-sac mentioned by ordinance is 450 feet.

Section 4.7.4.9 reads as follows:

"Cul-de-sac Streets. (Ord 96-08 amended 5/28/96) Cul-de-sacs (dead end streets) shall be used only where unusual conditions exist which make other designs undesirable. Each cul-de-sac street shall have a minimum right-of-way width of fifty-four (54) feet and must be terminated by a turn-around having a radius of not less than sixty (60) feet to the property line. The maximum length of a cul-de-sac shall be four hundred and fifty (450) feet as measured from the center of the turn-around to the point of connection to the next intersecting street..."

Section 3.7.9.4 of the Development Code also discusses cul-de-sacs and specifically mentions *"the design of the road system shall provide for continuous circulation throughout the project."*

The proposed design creates double fronted lots (lots 50 & 51). Double fronted lots are not allowed

Alpine City Engineering
20 North Main • Alpine, Utah 84004
Phone/Fax: (801) 763-9862
E-mail: jed@alpinecity.org

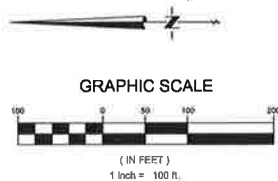
unless recommended by the Planning Commission and approved by the City Council (4.7.3.4).

Engineering recommends the design be changed back to what was originally proposed or provide another option that will 1) adhere to the maximum cul-de-sac length and 2) provide for continuous circulation throughout the project "to the maximum extent possible." Doing so would potentially eliminate the double fronted lots as well.

Alpine City Engineering
20 North Main • Alpine, Utah 84004
Phone/Fax: (801) 763-9862
E-mail: jed@alpinecity.org



ALPINE CITY
SERIAL NO. 55-521-0056
N 88°33'09" E 2716.90'(R)
N 88°33'07" E 2717.05'(W)



ALPINE RIDGE SUBDIVISION

LOCATED IN
NORTHWEST 1/4 OF SECTION 18, TOWNSHIP 4 SOUTH, RANGE 2 EAST,
SALT LAKE BASE AND MERIDIAN
PREPARED FOR:
SBP HOLDINGS INC.

LEGEND

- SECTIONAL MONUMENTATION (FOUND: TYPE, DATE, AGENCY AND LOCATION ETC. AS SHOWN ON THE PLAT)
- ALL BOUNDARY AND PROPERTY (LOT) CORNERS TO BE SET WITH 5/8" REBAR AND CAP STAMPED BUSH & GUDGELL, UNLESS OTHERWISE SPECIFIED ON THE PLAT.
- EXISTING FENCE
- EXISTING EDGE OF DIRT ROAD
- EXISTING CONCRETE
- EXISTING POWER LINE
- EXISTING POWER POLE
- EXISTING WATER VALVE
- EXISTING IRRIGATION VALVE
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING SEWER MANHOLE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN MANHOLE
- EXISTING TRANSFORMER
- EXISTING TELEPHONE PEDESTAL

ALPINE RIDGE SUBDIVISION

LOCATED IN
NORTHWEST 1/4 OF SECTION 18,
TOWNSHIP 4 SOUTH, RANGE 2 EAST,
SALT LAKE BASE AND MERIDIAN
PREPARED FOR:
SBP HOLDINGS INC
SHEET 3 OF 6

SURVEYOR'S SEAL	NOTARY PUBLIC SEAL	CITY ENGINEER'S SEAL	CLERK-RECORDER SEAL
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BUSH & GUDGELL, INC.
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Phone (801) 885-6194 / Fax (801) 885-6195
www.bushandgudgell.com

ALPINE PLANNING COMMISSION AGENDA

SUBJECT: General Plan Update – Public Facilities Element

FOR CONSIDERATION ON: 21 February 2017

PETITIONER: Staff

**ACTION REQUESTED BY PETITIONER: Provide Direction for
Updating the General Plan**

APPLICABLE STATUTE OR ORDINANCE: Article 2.1 (General Plan)

BACKGROUND INFORMATION:

Attached is the currently adopted Public Facilities Element of the General Plan.

The current language should be reviewed and discussed by the Planning Commission and a direction should be given regarding the Public Facilities Element. Staff will also be reviewing the language and will present their suggestions at the meeting

Public Facilities Element

Public facilities represent the public's investment in the development of the complex, urban infrastructure that is necessary to support the physical operation of the City. The Public Facilities Element is a plan for municipal utilities, public structures, properties, and measures required to meet the infrastructure needs of the community. The annual capital budget provides for financing the construction of immediate projects for the current fiscal year; the five-year Capital Improvements Plan (CIP) sets priorities for establishing and financing projects during the five (5) succeeding fiscal years; and the Public Facilities Element of the General Plan presents a longer term, more comprehensive view that addresses the existing infrastructure of the community and addresses projected needs over the next 30-50 years.

Planning for future capital expenditures is very important. It provides citizens, developers, and landowners with information about the timing and funding for infrastructure investments of the City. The location, size, timing, and financing of major streets, water, sewer, drainage systems, and parks and playgrounds must be planned in advance of their construction as a way to minimize their cost, optimize their usefulness, and maximize their public benefits and private sector support. This element is also necessary for the imposition and collection of impact fees used to provide the financing of infrastructure to new developments in the community.

The Vision Statement of the Public Facilities Element is:

Alpine City desires to continue to provide superb infrastructure and utility services; and will consider the construction of new public use facilities.

The Goals of the Public Facilities Element are:

Goal 1 Continue to provide superb infrastructure and utility services.

Objective: Continue to provide safe, efficient culinary water and sewer systems, making improvements as needed.

Objective: Increase the capacity of the pressurized irrigation system as the City grows.

Objective: Continue to provide adequate fire and police protection as Alpine's population grows.

Objective: Minimize potential future flood damage by maintaining and expanding the City's storm drain system and by minimizing/controlling development in flood zones.

Objective: Continue to provide recycling services to promote sustainability and reduce garbage disposal costs.

Goal 2 Consider the construction of new public use facilities.

Objective: Consider the construction of a City library.

Objective: Consider the construction of a swimming pool/recreation center within the City or within a larger recreational district.

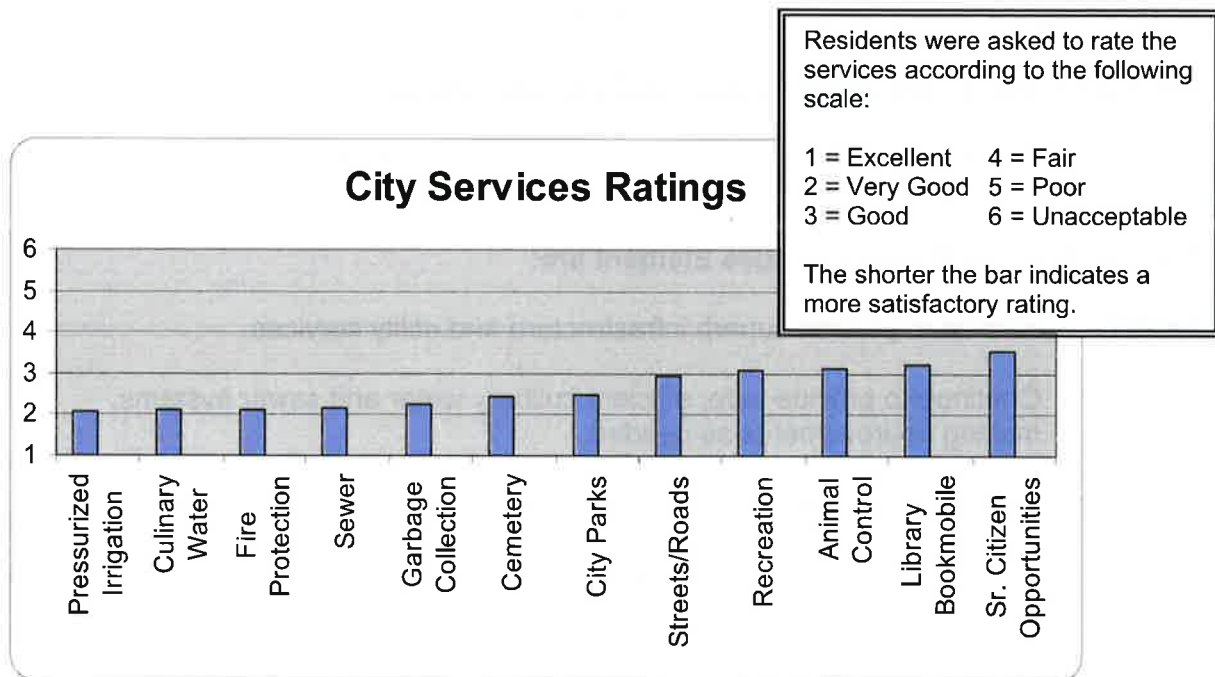
Objective: Consider the construction of a City Parks Maintenance Facility.

Objective: Consider the construction of a senior center.

Objective: Consider areas surrounding the cemetery for expansion.

BACKGROUND

The 2005 community survey asked residents various questions regarding public facility issues. The following charts summarize some of the key findings of the survey in regards to public facilities. Respondents indicated their perception of the City's performance in a variety of areas. The following chart illustrates the mean responses for each service area.



CULINARY & PRESSURIZED IRRIGATION WATER SYSTEMS

The Alpine City Culinary Water System provides for the safe and efficient delivery of water to the community. The City provides for and controls the extraction, storage, and distribution facilities for its culinary water system. Alpine City has several sources of culinary water, including Grove Springs, 300 East Well, Busch Well, and Silverleaf Well; as well as six water storage tanks. The City also has sufficient water rights to drill additional wells if necessary.

The Alpine City Pressurized Irrigation System provides for the efficient delivery of irrigation water to serve the outdoor water needs of residents. The City has entered into an agreement with the Alpine Irrigation Company to use and manage their water sources as part of the pressurized irrigation system. The City manages the various sources, storage facilities, and distribution system to provide irrigation irrigation water to its residents. Water from Dry Creek, Fort Creek, Box Elder Springs, and five wells provides water for the system. The surface water is used when available, with well water being pumped to supplement the system when surface water flows begin to diminish.



Pressurized irrigation tank in Lambert Park

CULINARY & PRESSURIZED IRRIGATION WATER SYSTEM GUIDELINES

1. Private development should provide all internal distribution facilities and water shares necessary to serve their projects.
2. Development should be contingent upon available resources, infrastructure, and the transfer of water shares to the City based upon the development's annual water demand.
3. The locations and capacities of future reservoirs, water lines, and pumping stations should be guided by the City's Water Capital Facilities Plan, as well as other considerations, such as disruption to the natural environment.

SEWER SYSTEM

Alpine City's sewer system provides for the safe and efficient collection and conveyance of wastewater to the Timpanogos Special Service District, where it is treated. Alpine City's sewage lines were first constructed in 1978, and range in size from 8 to 18 inches and have an average flow of 122 million gallons. The City's sewage connects to an 18-inch outfall line at 800 South 750 West.

SEWER SYSTEM GUIDELINES

1. Private development will continue to participate in improvements to the municipal sewer system through sewer development impact fees, construction of selected facilities, and by providing additional resources.
2. Private development shall continue to provide all internal collection facilities necessary to serve individual projects.
3. Development projects within the City shall connect to the municipal sewer system.
4. Private sewer system improvements shall be constructed to all applicable City standards and specifications.
5. Existing septic systems on lots in newly annexed areas shall be required to connect to the City sewer system.

RECYCLING

Alpine City currently contracts with a disposal company to provide curbside recycling collection. The City funds the program and participation is voluntary.

RECYCLING GUIDELINES

1. City recycling services may be required in the future, so the City should plan to meet any future standards.
2. The City should continue to promote recycling and encourage its residents to participate.

STORM DRAINAGE/FLOOD CONTROL

Alpine City has 14.5 miles of storm water pipelines and 25 detention basins and relies upon ditches and canals for its storm drainage. The irrigation ditches are especially vital to the City in the event of a 25, 50, or 100-year flood. Some ditches are still used for irrigation and conveyance of storm water runoff. Most private ditches will eventually be filled in since a citywide pressurized irrigation system has been constructed.

There are two areas along the Fort Creek and Dry Creek located in the 100-year flood zone. The Clean Water Act (CWA) of 1987 requires municipalities to control storm runoff pollution. By updating the Storm Water Master Plan every five years, enforcing proper storm water activities, and participating in the Utah County Storm Water Coalition, Alpine City can meet the CWA requirements.

STORM DRAINAGE/FLOOD CONTROL GUIDELINES

1. The municipal storm drainage and flood control system should provide for the safe and efficient collection of storm water generated within the community.
2. New development projects should be designed to minimize potential damage from storm waters and flooding to the site and other properties.
3. Private development will participate in improvements to the major system through storm drainage and flood control development impact fees, construction of selected facilities, and by providing additional resources.
4. Remaining irrigation ditches should be regularly maintained and kept clear of debris.
5. Storm drain pollutants, such as salt and antifreeze, should be monitored. Best Management Practices should be developed and implemented in the storm drain system to help reduce pollution from storm drain runoff.

CITY BUILDINGS

The Alpine City Hall and Police Department are located at 20 N. Main Street. The Public Works facility is located on 200 North 180 East. The City cemetery is located at about 400 North Grove Drive. The Alpine Fire House is located at 50 E. 100 North.

CITY BUILDINGS GUIDELINES

1. City Hall should be the primary location for city administration.
2. City facilities should incorporate water and energy conservation measures and meet ADA accessibility requirements.
3. Alpine City shall develop and enforce reservation and use standards for the use of City Hall.

**ALPINE CITY PLANNING COMMISSION MEETING AT
Alpine City Hall, 20 North Main, Alpine, Utah
February 7, 2017**

I. GENERAL BUSINESS

A. Welcome and Roll Call: The meeting was called to order at 7:00 pm by Chairman Steve Cosper. The following Commission members were present and constituted a quorum.

Chairman: Steve Cosper

Commission Members: Bryce Higbee, Jason Thelin, David Fotheringham, Steve Cosper, Jane Griener, Carla Merrill, John Gubler

Staff: Jason Bond, Jed Muhlestein

Others: Mayor Sheldon Wimmer, Councilmen Ramon Beck, Roger Benett and Lon Lott, Loraine Lot, Will Jones Richard Hartvigsen, Ethan Ellsworth, Collin Lovelady, Lucas Marion Dan Clark, Marco Sarco, Jake Day, Treyden Pettey, Bradley Irving, Brying Irving, Lance Ellsworth, Mark Wells, Taylor Smith, Ron Beckstrom, Sylvia Christiansen, Colleen Sartos, Mike Marion

A. Prayer/Opening Comments: Bryce Higbee

B. Pledge of Allegiance: By Invitation

II. PUBLIC COMMENT

Mayor Sheldon Wimmer spoke about a proposed water shed protection area map and said it was basically all of the open areas in Alpine that are in the possession of Alpine City properties. He said there are some private lands that are not included in this. He said he spoke with representatives from Draper City and talked about some open area to the west of us.

Mayor Wimmer said the proposal is to identify the areas that could be protected for water shed values. He said if there are erosion issues on these sites we would stop further erosion and protect the hillsides from unraveling in some ways. He said we've had issues with this in the higher elevations when we have had high amounts of water.

Mayor Wimmer said the second part would be to provide a stable trail system through there for recreational purposes. He said he would like to see this connect with Draper City and along the top by the Bonneville Shoreline Trail.

The third element would be a vegetative plan because these areas have been subject to fires in the past. Mayor Wimmer said we would have seed mixtures identified and in case of a fire or vegetation wiped out, we would have a plan to enact and be able to get the vegetation species established again and re-establish our water shed to protect it. He said our aquifers are recharged off of these sites and said he will talk to the Forest Service to see if they will include part of the wilderness area as part of the protection area.

Steve Cosper asked the Mayor if this is something he thought should be in the General Plan and the Mayor said he thought it should be.

III. ACTION ITEMS

A. Summit Pointe Subdivision Preliminary Plan – Mark Wells and Taylor Smith

The proposed Summit Pointe subdivision includes a total of 4 lots ranging in size from 4.14 acres to 11.95 acres on a site that is approximately 32.9 acres. Three lots are new while Lot 3 of Plat A of the Falcon Ridge PRD subdivision located at the southeast corner of the proposed development will be vacated and added to the Summit Pointe subdivision. The site is located in the CR-40,000 zone.

The adjacent property owner, Rich Hartvigsen, has hired an engineer to show the feasibility of building a public road through the proposed Summit Pointe subdivision to his property to the north. The developers are proposing a solution to the access concerns that would include the dedication of a public right-of-way on the same alignment of the private shared driveway that eventually veers off and goes through the northeast corner of the proposed subdivision to the adjacent property to the north. The developers also propose that any upgrades of the proposed private shared driveway to a public road and construction of a new public road that is not on the same alignment as the private shared driveway be the responsibility of the adjacent property owner.

The Planning Commission has also asked that the City Attorney offer some clarification on some of the legal questions that have arisen. A letter from the City Attorney was provided.

Jed Muhlestein said there are only two differences with this plan and the last one and the first difference is how they terminate their shared driveway. He said they now have a hammerhead instead of a turn-around because a hammerhead is more conducive for the fire trucks to turn around in. The second change is where the proposal of the right-of-way for the future access is for the Hartvigsen property.

Jed Muhlestein read a couple of lines from Attorney David Church's letter regarding the access for the Hartvigsen property. "The City has an obligation to not put the neighboring property in a worse condition by approving this subdivision". And, "The City should attempt to put the neighboring property in a better condition if it is possible to do so without violating the rights of the Developer". He goes on to say, "If a landlocked parcel already exists, then we should try to remedy the situation if it can be remedied without destroying the subdivision of the applicant".

Jed Muhlestein said we received letters from both the Hartvigsen's and the Developers talking about the feasibility of two different right-of-ways through the property. He said basically, it boiled down to what David Church wrote when he said, "If the City Engineer decides a road is feasible, then the Planning Commission should require the proposed plat to include the stub street right-of-way and determine who should pay to have the right-of-way improved". He goes on to say, "Those that benefit pay for the road including right-of-way costs in proportion to the received benefit". His last sentence says, "If it's not feasible, then you can approve without the stub street".

1 Jed Muhlestein said we've been shown a couple of alignments proposed for the development. One
2 alignment is from the Developers themselves and he showed this plan on the overhead. This plan
3 shows a right-of-way using the same alignment as the private road and then veering off to the
4 Hartvigsen property. The other option from Mr. Hartvigsen shows the road coming up between
5 lot one and lot three. Jed Muhlestein showed how a road could be feasible coming off Lakeview
6 up north to Mr. Hartvigsen's property but said it would need twenty to thirty feet of fill to make a
7 twelve percent grade and that's not going to be cheap.

8 Jed Muhlestein said it comes down to two options for the Planning Commission to recommend.
9 The Stub Street Ordinance asks the Planning Commission to make a recommendation to the City
10 Council regarding whether or not they would require Summit Pointe to provide a fully improved
11 street to the Hartvigsen property or just a right-of-way. And number two is that the Planning
12 Commission has to decide which one of these plans they want to recommend. He said they are
13 both feasible but they both impact the property in different ways.

14 The Planning Commission had a discussion about the road and which option they should choose.
15 They also talked about whose responsibility it was to pay for the road.

16 Mark Wells said in a traditional subdivision, you have public roads that are expensive and in this
17 terrain, you would need retaining walls and a secondary access. He said that's why a private
18 driveway works so well in this situation. Steve Cospers said the cost for the road and the secondary
19 access would be on Mr. Hartvigsen and asked Mr. Wells if his objection was aesthetics. Mr. Wells
20 said it would be the economics because of the four large lots on a private driveway. He said if a
21 public road were put through here with a secondary access, you would need retaining walls and all
22 of that would change the layout of the subdivision. He said if you do that, they might as well go
23 back to the full subdivision with fourteen lots.

24 Mr. Wells said their design for the right-of-way has been fully designed by their engineer and
25 reviewed by the City Engineer and does meet the ordinance and does not put a huge economic
26 burden on their subdivision.

27 Mr. Hartvigsen said he would like to go back to the ordinance where it talks about providing access
28 for the logical development of the adjacent property. He said the reason Mr. Wells abandoned his
29 previous proposal was because of the prohibitive costs of putting in a road across the ravine and
30 running it out the other side.

31 Mr. Hartvigsen said it would cost millions of dollars for him to build the road with all the fill dirt
32 all the way up and around to where there's a development possibility. He said that is not what the
33 statute calls for and not the logical development.

34 Mr. Hartvigsen said the problem with the Summit Pointe Development is that it meets the letter of
35 the requirement as far as a private drive but it's only because they have access to the through street.
36 He said this is not real access, it is essentially a very long and dangerous cul-de-sac. He said if

1 there is a fire and it comes up the hill and cuts off access, all of the people in the development
2 would be out of luck and the firefighters would be out of luck.

3 Mr. Hartvigsen said he's been trying to work this out so it benefits both parcels and said he's not
4 going to be able to develop unless he can work out a secondary road that goes out of the property.
5 He said he's talked with the property owner to the west to work out a secondary access through
6 Draper City and that road could be used as an emergency egress road in case of a fire and it would
7 protect the homeowners and firefighters. He said it would really be a condition of him being able
8 to develop his property and it would be a max of two or three lots. He said if he has to pay millions
9 of dollars to put in a road, he won't be able to develop his property.

10 The Planning Commission had a discussion about Mr. Hartvigsen's property developing based off
11 his assumption that he will get an access road through Draper City. Jason Thelin said it's a pretty
12 big burden for the developers to cut their property in half when the likelihood of connecting into
13 Draper, based on precedence, is pretty low.

14 Jason Bond mentioned that Draper City is under contract to sell their property next to the
15 Hartvigsen's to a developer. Jane Griener said that Draper City has surplus open space they want
16 to sell to raise money for the City.

17 Mark Wells said the reason they are putting in the right-of-way is to comply with the stub street
18 ordinance. He said they don't benefit in any way from the right-of-way because they have frontage
19 down on a public street. Mr. Wells said none of their houses will front on the right-of-way or on
20 Mr. Hartvigsen's preferred route and it takes property away from them and creates a remnant piece
21 which they will likely give to the city as open space.

22 Mr. Wells said his proposal will be about 900 feet and Mr. Hartvigsen's route will be about 1800
23 feet. He said both plans are very significant in terms of dollars which could be a million dollars.
24 Steve Cospier asked Mr. Wells what this road would do to his property values. Mr. Wells said the
25 road will not benefit their subdivision in any way; in fact it's hurting us.

26 The Planning Commission had a discussion on whether joining on to a private driveway meets the
27 ordinance for an access. Jed Muhlestein said the Fire Marshall has signed off on that road being
28 an emergency access.

29 Taylor Smith said a private right-of-way across their property is a private matter and not the City's
30 responsibility to direct that. He said Mr. Hartvigsen property is landlocked and he has no access
31 to it period. Mr. Smith said they are anxious to meet the ordinance but running a road up through
32 their property will substantially devalue their property. He said what they have proposed meets
33 the ordinance and it comes down to what is convenient to them or convenient to Mr. Hartvigsen.
34 Mr. Smith said it's their property, they have met the ordinance, and they would appreciate the
35 approval.

MOTION: Jane Griener moved to approve the Summit Pointe Subdivision Preliminary Plan with the following conditions:

1. The Developer work with the City concerning the trail indicated on the Trails Master Plan going through the proposed subdivision.
2. The Planning Commission make a recommendation to the City council regarding access to the adjacent property to the north and that this decision be made by the City Council before a Final Plat is submitted to the City.
3. Building Permits are not released until the stated off-site improvements are complete.

The motion failed due to the lack of a second.

MOTION: Jason Thelin moved to delay approval of the Summit Pointe Subdivision Preliminary Plan until we can see the layout of the trail system in this subdivision and evaluate it.

Mark Wells said this subdivision is not a PRD and they are under no obligation to provide a trail. He said they are providing a trail out of their own generosity.

John Gubler seconded the motion. The motion failed with 1 Ayes and 6 Nays. Jason Thelin voted Aye. Bryce Higbee, David Fotheringham, Steve Cosper, Jane Griener, Carla Merrill, and John Gubler all voted Nay.

MOTION: Jason Thelin moved that the proposed Summit Pointe Subdivision Preliminary Plan be approved with the following conditions:

1. The Developer work with the City concerning the trail indicated on the Trails Master Plan going through the proposed subdivision.
2. The Planning Commission recommends the option (first option) presented by the Summit Pointe Developer for access to the property to the north.
3. Building Permits are not released until the stated off-site improvements are complete.

Jane Griener seconded the motion. The motion passed with 7 Ayes and 0 Nays. Bryce Higbee, Jason Thelin, David Fotheringham, Steve Cosper, Jane Griener, John Gubler and Carla Merrill all voted Aye.

MOTION: Bryce Higbee moved that the access stay as a right-of-way easement and that the property owner to the north bear that cost.

Carla Merrill seconded the motion. The motion passed with 7 Ayes and 0 Nays. Bryce Higbee, Jason Thelin, David Fotheringham, Steve Cosper, Jane Griener, John Gubler and Carla Merrill all voted Aye.

B. Parks Maintenance Building Rendering Review

A new Alpine City parks maintenance building is proposed to be located on city-owned property at approximately 545 East 300 North. The site plan reflects input from staff and from the public.

Also provided are some proposed renderings of the building that have been prepared by Curtis Miner Architecture. Different options include different roof styles and exterior materials.

These renderings are before the Planning Commission so that they can offer their suggestions and make a recommendation to the City Council.

Jason explained that the first option is a hip style roof and the intention is to have it blend in with the residential neighborhood. The hip roof is taller and will probably be seen more. The second option is a flat roof which does not feel residential but will be about ten feet shorter.

Jason Bond said there is also the proposed building materials. The first is a concrete masonry unit like a cinderblock building. The other option would be to use the concrete masonry unit on the bottom and a firehouse looking brick on the top.

Ron Beckstrom said the hip roof will look much nicer and the flat roof will look industrial. He said the whole problem from the beginning was putting an industrial building in the middle of a residential neighborhood. He said the more stylish you can make it look to fit in with the neighborhood, the better.

Jed Muhlestein said there is about a \$40,000 difference between the CMU material and the brick option with the brick being more expensive.

MOTION: Carla Merrill moved to recommend to the City Council approval of option 2 which consists of a hip roof and the use of concrete masonry unit (CMU) for the exterior finish.

Jane Griener seconded the motion. The motion passed with 5 Ayes and 2 Nays. David Fotheringham, Steve Cosper, Jane Griener, John Gubler and Carla Merrill voted Aye. Jason Thelin and Bryce Higbee voted Nay.

C. Salt Shed Site Plan, Public Works Department

The Alpine City Public Works Department needs a salt shed structure to cover the pile of salt that is used for snowy roads in the winter time. This would be in compliance with EPA requirements.

The shed will be 900 square feet (30' x 30') and it is proposed to be put near the south west corner of the property where the public works building is located. Because of the adjacent legal non-conforming commercial buildings that sit right on the property line, this salt shed structure would be better tucked away from the residential property owners to the west if it is placed closer to the property line. It is proposed that the salt shed structure have a 10 foot setback from the south property line. The Gateway/Historic Zone allows the City to grant an exception to be made to the setback requirements if it finds that the plans proposed better implement the design guidelines (Section 3.11.3.3.5). This exception requires a recommendation from the Planning Commission and approval from the City Council. The Planning Commission was informed of the proposal at the January 17th meeting but they were not able to act on it because it was not an agenda item.

The Public Works Department has received bids for the steel portion of the structure of the salt shed and they suggest that the approval process be expedited to avoid a price increase that is expected to happen on February 1st. The chosen vendor is CO Building Systems and the price for the steel structure is \$9,582.

The City Council conditionally approved the site plan on January 24th with a condition that the Planning Commission review the site plan. If there are any recommendations made by the Planning Commission, they will be taken to the City Council for further consideration.

Steve Cosper said he would prefer the shed to be in the corner and Bryce Higbee asked why it couldn't be in the corner. Jed Muhlestein said the reason it's proposed to be where it's at is because the trucks that deliver salt usually have two trailers and are very large. They need to have the space to turn around and back into the shed and it's too hard if the shed is in the corner.

MOTION: Bryce Higbee moved to recommend approval of the Salt Shed Site Plan as proposed.

David Fotheringham seconded the motion. The motion passed with 7 Ayes and 0 Nays. Bryce Higbee, Jason Thelin, David Fotheringham, Steve Cosper, Jane Griener, John Gubler and Carla Merrill all voted Aye.

D. General Plan Update

Jason Bond asked the Planning Commission to review the Public Facilities Element to see if they had any ideas or suggestions. He said he will work with Jed Muhlestein because this is right up his alley. He said he will work on this and come prepared next time with some new language to go over.

Jason Bond said his intention is to take out unnecessary language and Steve Cosper said he agreed. He said he would like to see the five pages boiled down to just one outline because there is just way too much stuff in here that's not necessary.

IV.COMMUNICATIONS

Bryce Higbee said he would like to see the manholes fixed on Grove Drive. Jed Muhlestein said this project was scheduled but the man who was supposed to do it forgot and left town and then it snowed. So now the project is pushed off until Spring but said the Canyon Crest project was completed.

V. APPROVAL OF PLANNING COMMISSION MINUTES: January 17, 2017

MOTION: David Fotheringham moved to approve the Planning Commission Minutes for January 17, 2017, as written.

Carla Merrill seconded the motion. The motion passed with 7 Ayes and 0 Nays. Bryce Higbee, Jason Thelin, David Fotheringham, Steve Cosper, Jane Griener, Carla Merrill, and John Gubler all voted Aye.

1 **Adjourn**

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3 Steve Cospers stated that the Planning Commission had covered all of the items on the agenda and
4 adjourned the meeting at 8:40 p.m.

DRAFT